

District of Powers Lake

NEWSLETTER

Published for all those who use and love Powers Lake

october

2021

2021 Annual Meeting

The 2021 Annual Meeting was held on Friday, August 6th. Our guest speaker was Bridgett Manteufel, a Hydrologist from the U.S. Geological Survey, Upper Midwest Water Science Center.

USGS Water Quality Testing

What are we monitoring? The program we are in measures nutrients, algae, clarity, dissolved oxygen, specific conductance and pH 5 times per year {spring turnover, summer and fall turnover}. One of the benefits in participating in this program on Powers Lake is that we have a long term data set. We can see what is going on over decades i.e. wet years vs. dry years. This overview can indicate if better or bad conditions are developing and if that needs to be examined further. This long term data set is the key for seeing if what we are doing is helping the lake. An example might be that in a very wet year there would be increased runoff producing phosphorous which would increase increase the nutrient load.

Nutrients produce algae blooms while the clarity indicates how much algae is growing.

Total phosphorus is a measure of the amount of nutrients in the lake which is the source of the algae problem. We are in the range of greater than .05 mg per liter and that is consistent in our long term data that has been collected. Total phosphorus amounts also relate to the chlorophyll levels and can indicate a balanced system.

Chlorophyll is a measure of the amount of algae in the lake. Lower temperatures in the spring have lower values. A moderate amount of chlorophyll is healthy and adds to the ecosystem balance.

Clarity is measured by use of a secchi disc and is also an indication of how much algae is growing. It measures how far down you can see in the water and you will have more clarity in the spring readings. Measurements are taken at the deep hole/shady side of the boat so there is no glare from the sun.

Sampling is done in the spring when the water column is mixed so the temperature is the same top and bottom. Summer clime sampling is done when the temperature and conditions are gradual showing the dissolved oxygen.

Dissolved oxygen decreases as summer goes on. At the bottom of the lake nutrients degrade and take up oxygen therefore not a lot of fish in the bottom regions.

Readings vary so there is no actual answer to "what should the reading be", Lakes vary in depth, number of inlets and outlets and location in the state. Powers Lake has been consistent and has no red flag indicators in this large data set and indicates the stability of the lake.

The 3 types of lakes are oligotropic, mesotrophic and eutrophic. Powers Lake is classified as mesotrophic with a moderate nutrient content, increased productivity, an occasional algal bloom, a good fishery with a nice variety and some weed growth around the edges. USGS uses the total phosphorous, total chlorophyll and secchi data to indicate which type a lake is. Our data shows no sign of drastic change or activity. The consistency of our readings from 1986 to the present indicates that Powers Lake is in good shape for a lake in this part of the state. There are only a handful of lakes in the state with data sets this long. USGS wishes

they had a data set like this for all the lakes. Factors that could affect a lake negatively would include: changes in development, lawn treatments, and questionable activity upstream or agricultural changes. Attention should be paid to any of these factors but the fact that Powers Lake has been maintaining for so long it would take a huge/abrupt change to cause any problems.

Water Treatment/ Aquatic Invasive Species {AIS}:

Eurasian Water Milfoil and Curly Leaf Pondweed are down to 3 ½ - 5 acres. The invasives will never be eradicated but we have come a long way from the 79 plus acres we once had. We will continue with this successful initiative to control the invasives. The post treatment survey will once again be done this fall to create a map to indicate success and areas that will need treatment next year.

Lake Level

Low water levels are shown on the graph on the website. If you are boating, please trim your motors in shallow waters. If you are in a wakeboard boat, do not fill your ballast tank and do not go into Jefferson Bay. Stay in deeper waters.

In 2016, we installed an Electronic Measuring Device so we can more efficiently and accurately monitor the lake level and tie it to our web site so we can continue to create an accurate historical perspective. The last reading before we went to print showed a water level of 0.50 ft.

Updated graphs with the results will be on our website.

Boat Ramp Signage

The District is actively engaged in partnership with the Town of Randall to update the signage at both boat ramps in 2021. We are appreciative of the Town Board's willingness to assist and partner with us on this project and hope the new signage will create additional awareness on safe, proper boating signage at both boat ramps in 2021. We are appreciative of the Town Board's willingness to assist and partner with us on this project and hope the new signage will create additional awareness on safe, proper boating and best practices while enjoying Powers Lake.

In addition, the Town is also in the process of creating new Slow No Wake Flags for when the lake is closed due to high water. This is also a work in progress and a great way to help make everyone aware in case the lake or Jefferson Bay is closed. The intent will be to raise these flags at the two boat ramps and the Rock Bar II when appropriate.

Election

Lou Manfredini was re-elected as a commissioner and Ken Vesely was elected as a commissioner. Both will serve 3 year terms.

Fish Stocking

Dave Anstett met with personnel from Gollon Fish Farm on Wednesday, September 29th at 11 a.m. to stock 1,500 small mouth bass and 1,500 walleye. The fish were put in the lake at Jefferson Bay. Dave also spoke with Travis Motl, the DNR fisheries biologist. He confirmed 4,590 large fingerling walleyes are scheduled to be stocked near the end of the month. That makes over 6,000 walleyes in a combined effort for this year.

Reminder

Please remember to use phosphorous free lawn fertilizer. Most soils in Wisconsin naturally provide all the phosphorus your established lawn needs. Much of the phosphorus (phosphate) you apply actually runs off the lawn before penetrating the soil. Runoff into our lake could contribute to algae bloom and undesirable aquatic plants. Check the second number on the package formula. 15—0—10, for example, means zero phosphate. The first number is the nitrogen content, the middle number is the phosphorus content and the last number is the potassium content. Make sure the middle number on the bag is 0 indicating it is phosphorus free.



If you use a lawn service, ask your applicator service not to use phosphorus on your lawn. If they are unwilling to do this, contact another provider or consider applying the no-phosphorus fertilizer yourself.

Website Signup

If you have not already done so, **please** visit our website and sign up for notifications of lake events such as E. coli advisory/closure at the Knolls Beach or Slow No Wake.

www.districtofpowerslake.com



Quarterly Board Meeting

Our next quarterly meeting will be held in person on Friday, October 15, at 5 pm. This meeting will be held at the Randall Town Hall, 34530 Bassett Road, Bassett, WI The meetings are open to the public.

DISTRICT OF POWERS LAKE MISSION STATEMENT

Within the scope of the powers vested in it under Chapter 33 and in furtherance of the Public Trust Doctrine of Wisconsin, the mission of the District of Powers Lake is:

To support, protect, preserve and enhance the native ecosystem of the watershed, shoreline, and waters of Powers Lake as a natural resource for generations to come;

To be responsive to the interests and concerns of the district residents and the public; and

To proactively advocate when faced with potential damage to Powers Lake's environmental values, wildlife, natural beauty, peacefulness, safety and/or recreational value.