



District of Powers Lake NEWSLETTER

Published for all those who use and love Powers Lake

A P R I L

2 0 1 4

JANUARY DPL QUARTERLY BOARD MEETING

Not surprisingly, the DPL joined all the groups who have had to cancel their meetings due to severe weather. Icing on the roads around 4 p.m. led us to cancel. By the next day, reports were myriad of cars sliding into various ditches in Kenosha and Walworth Counties. Since we had no pressing issues and several board members were heading south, we simply decided to cancel the meeting and wait until April for our next meeting. We are hoping for "better" weather then.

TOWN OF RANDALL CONSIDERING CHANGES TO CHAPTER 20

Chapter 20 is Randall's water ordinances. Chapter 30 is the Wisconsin State Statutes. The Randall Town Board (RTB) had a discussion at their board meeting in February and presented an outline comparing Chapter 20 to Chapter 30. Most involved would be ordinances regarding piers, mooring buoys, and swim rafts. Randall ordinances can be more stringent than state ordinances but not less stringent. Also included are the 2008 changes in WI state law and administrative code regarding grandfathering and registering piers on Powers, Benedict and Tombeau Lakes.

The RTB also wants to review the existing ski pattern. They would maintain the existing counter clockwise "bird's eye view" path with the following modifications:

Route the ski path across the entrance to Jefferson Bay eliminating ski path into the bay thereby creating a ski "staging" area for launching and dropping skiers in Jefferson Bay.

They would consider the same staging area for Honey Bear Bay.

"Staging" areas will be open to normal boat traffic. They are thinking of an area for kids learning to ski and a drop off would keep a lot of that traffic out of the main ski pattern. Their

thought is that Jefferson Bay could be used to get new skiers up and drop those who are tired. They would like the DPL's input on these and any other ideas we may have. RTB Chairman Bob Stoll will be attending our April meeting to present this and receive input. The time and date of the meeting is below. It would be important for any input from our residents to be soon or at this meeting The RTB would like to pass this for this 2014 boating season.

Audrey Green requested we add the following article to our newsletter. She is currently working on putting together a workshop for anyone that is interested in learning more about monitoring for aquatic invasive species (Citizen Lake Monitoring Network). When she gets dates, she will let us know.

Citizen Lake Monitoring for the Future of Your Lake

The Citizen lake Monitoring Network (CLMN), formerly Self-Help Lake Monitoring, is collaboration between citizen volunteers and the Wisconsin Lakes Partnership (Wisconsin DNR and UW-Extension and Wisconsin lakes) that began in 1986 as a means to involve citizens and increase lake protection. There are currently over 1200 CLMN volunteers in Wisconsin collecting information about their lakes. The work is unpaid, but the results are invaluable. As monitors work on their lakes, they acquire knowledge that helps them become more effective at protecting their lakes. They also collect data that very likely would not be collected without them, because there is simply not enough DNR staff available.

CLMN volunteers may choose to monitor for water clarity using a Secchi disk or they might be interested in collecting water chemistry data. Some monitors decide they would rather

learn to identify and map native aquatic plants, while others prefer to look for one or more of the aquatic invasive species (AIS) that threaten their lake. The decision is totally up to the volunteer but whatever their choice, or choices, the DNR and UW-Extension CLMN staff provide the equipment and training.

There are currently 23 lakes in Walworth County that have water quality data on the DNR website thanks to volunteer monitors. Depending on the lake, this data may go back for more than 20 years. Anyone that is interested and has access to a computer can easily find all water quality monitoring data on the by visiting the DNR website lakes page at <http://dnr.wi.gov/topic/Lakes/> and then clicking on "Lakes A-Z".

In recent years many CLMN volunteers have started monitoring their lake for new AIS introductions or tracking existing populations of AIS to protect their lakes. It is well known that AIS can cause large problems on lakes. Aquatic invasive plants can clog boating lanes and diminish recreational opportunities. Aquatic invasive plants and animals reduce essential habitat and out compete native species. The economic damage to taxpayers for management of the AIS that are currently in Wisconsin waterways is currently several million dollars per year. New AIS will mean higher costs, however, finding new populations of AIS before they become established has been shown to lower control costs and provides a much higher possibility of eradication.

Through the CLMN training, volunteers are taught to monitor their lake for one or more of a variety of AIS. They will learn where and when to look for the species they decide to monitor and what steps to take if they discover a suspicious plant or animal.

Volunteers do not need to have any previous experience or knowledge of AIS. They also do not have to devote a huge amount of time. An hour or two once a month through the boating season is more than enough for most species and several species require considerably less time than that. Some monitors look for AIS by checking at boat ramps and beaches. Others look in deeper water areas. It is entirely up to the volunteer to decide what they want to do.

The lakes in this county are some of our most precious natural resources and they need the best protection we can give them. Educating lake users about AIS and prevention methods has increased protection but we can always go one step more. Please consider becoming a

CLMN for AID monitor on your lake. If you have questions or would like more information please contact Audrey Greene at (262) 741-7902 or agreen@co.walworth.wi.us.

ICE FISHING

Throughout Wisconsin during the cold winter months, frozen lakes are dotted with fishermen and ice houses. Ice fishing in Wisconsin dates back well before the arrival of European settlers to when American Indians chopped holes in the ice in order to spear fish to supplement their winter diets.

But as any ice fisherman knows, the season with ice thick enough to walk on is short, and can end suddenly and unpredictably with the onset of warm weather. With climate change models predicting warmer temperatures, we can expect to see a trend towards fewer days of ice-covered lakes as each year passes. In fact, with the aid of a remarkable dataset from Madison's lakes, scientists infer that a change in ice duration has already taken place.

University of Wisconsin-Madison researchers have collected data beginning in 1855 recording the dates on which Lakes Monona and Mendota have frozen ("ice in") and thawed ("ice out"). While the dates vary greatly from year to year, the overall trend for shorter ice seasons is clear. The record for Lake Mendota shows that the five longest ice-cover seasons on record all occurred between 1855 (the beginning of the dataset) and 1880. Four of the five shortest ice-cover seasons have occurred since 1980. The average number of days the lake stays frozen has dropped from 122 for the first 20 years of the record to just 91.5 for the last 20.

An important property of water is its high specific heat, or the amount of energy a substance absorbs for every degree that its temperature rises. For this reason, water temperature changes more slowly than air temperature. Records of the freezing and thawing of lakes thus serve to average out the day-to-day variations of air temperatures and provide a good picture of broader trends. This makes them a powerful tool for teasing out small climatic changes from a noisy record. Taken as a whole, the data from lakes Mendota and Monona suggest that the winters around Madison have, on average, gotten warmer over the past 150 years. But other local factors, such as changes in land use, are the reason scientists are careful not to put too much weight on a single piece of evidence, but instead look for patterns in multiple places. Thus, University of Wisconsin-Madison lakes researcher John Magnuson scoured the globe for other ice

records. He was able to find 39 records from the Northern Hemisphere with 150 years of data or more. What they showed was striking: In all but one of the records, the ice in date has become later, and the ice-out date earlier, with the average ice cover season becoming almost 18 days shorter.

These data support what the climate models predict - that the earth is warming. Looking to the future, average winter temperatures in Wisconsin are expected to rise some 7-9 °F (4-5 °C) by 2055, a change which would have dramatic impacts on ice cover on its lakes. The extent of these changes is uncertain, but one thing is clear: both scientists and ice fishermen will be watching with interest. This article was obtained from:

<http://climatewisconsin.org/story/ice-fishing>

Wetlands

Wetlands are areas of land that are covered with fresh water or saltwater and feature species adapted to life in a saturated environment. They are shallow and allow the growth of rooted or anchored plants such as water lilies but also free floating plants like duckweed.

Wetlands represent the meeting of two habitats (land and water) and are therefore some of the most biodiverse areas in the world (some say more than rainforests) with many land and water species, and some that are unique only to the wetlands.

Currently, wetlands exist on all the world's continents except Antarctica, but because of increasing pollution and a reduction in open land, they are all threatened. Examples include the Mahavavy-Kinkony Wetlands in Madagascar, and the Everglades in Florida.

Wetland formation:

Wetlands begin with the saturation of a land habitat. Many were formed at the end of the last ice age when glaciers retreated and the shallow depressions left over filled with water. Over time, sediment and organic debris collected in the depressions and the water became shallower until the accumulated sediment and debris filled in the water and left behind shallow wetland ponds surrounded by dry land. Wetlands can also form when a river overflows its banks or when changes in sea level make once dry areas saturated. Additionally, climate can impact wetland formation as high rainfall in normally dry areas with poor drainage causes the ground to become saturated.

Once wetlands form, they are constantly changing. Just as growing sediment and debris levels cause the wetlands to form, they along with roots and dead plant matter, can cause the wetland to

become more shallow, eventually to the point where the upper layers rise above the water table and dry out. When this happens, terrestrial plant and animal species can colonize the area.

Types of wetlands: There are two main types of wetlands - the coastal tidal wetlands and salt marches, and inland freshwater wetlands and ponds.

Coastal wetlands are along the coastlines of mid to high latitude areas worldwide, but they are most common along the Atlantic, Pacific, Alaskan and Gulf Coasts. Coastal wetlands form near estuaries, the area where a river meets the sea, and are prone to varying levels of salinity and water levels because of tidal action. Because of the varying nature of these locations, most tidal wetlands consist of unvegetated mud and sand flats.

Some plants however, have been able to adapt to such conditions. These include the grasses and grass-like plants of the tidal salt marshes on the coasts of the United States. In addition, mangrove swamps consisting of salt loving trees or shrubs are common in tropical coastal areas.

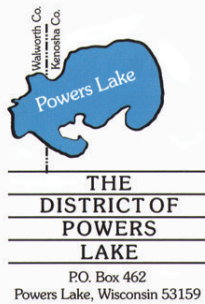
By contrast, inland wetlands are along rivers and streams (these are sometimes called riparian wetlands), in isolated depressions, along the edges of lakes and ponds, or in other low-lying areas where the groundwater meets the soil's surface or when runoff is significant enough to allow formation. Precipitation can also sometimes saturate the soil and create bogs or temporary wetlands called vernal pools.

Unlike coastal wetlands, inland wetlands are always comprised of freshwater. They include marshes and wet meadows that are filled with herbaceous plants and swamps dominated by shrubs and wooded swamps full of trees.

Significance of wetlands:

Because wetlands are among the most biologically productive ecosystems in the world, they are of extreme significance to scores of species, many of which are endangered. In the United States for example, one-third of the nation's threatened and endangered species live only in wetlands, while half use wetlands during a portion of their lives. Without the wetlands, these species would go extinct.

Estuarine and marine fish and shellfish, and some mammals must have wetlands to survive as they are breeding grounds and/or provide a rich source of food via decomposing plant matter. Some of the species that live in wetlands include wood ducks and muskrats. Other fish, mammals, reptiles and birds visit wetlands periodically because they provide food, water and shelter. Some of these are otters, black bears and raccoons.



Elected Commissioners:
 Jim Michels, Chair
 Nancy Michael, Sec.
 Brooke Jensen, Treas.
 Neal Kuhn
 Mary Adams

Appointed Commissioners:
 Judy Jooss, Kenosha Co.
 Michael Halvorson, Randall Twp.

In addition to being unique ecosystems, wetlands also act as a filter for pollution and excess sediment. This is important because rainwater runoff is normally laden with dangerous pesticides and other pollutants. By going through a wetland prior to reaching open water, this is filtered out and often, excess sediment naturally builds up in the wetland instead of in rivers or other water bodies.

Wetlands also aid in flood protection as they act as sponges that absorb rain and floodwater.

Furthermore, wetlands are significant to the reduction of coastal erosion as they can act as a buffer between land and the sea - an important thing to have in areas prone to storm surges and hurricanes. Inland wetlands also prevent erosion because the roots of the wetland's vegetation hold soil in place.

Human Impacts and Conservation Today, wetlands are incredibly sensitive ecosystems and because of human activities, they have been degraded considerably. Development along waterways and even draining of wetlands has caused increased pollution (to the extent that natural absorption cannot keep up), a decrease in available water and water quality. In addition, the introduction of nonnative species has changed the natural species composition and sometimes crowded out native species. Recently, many places have come to realize the importance of wetlands for their economic and biological benefits. As a result, efforts are now being made to protect existing wetlands, restore damaged ones, and even develop new, artificial wetlands in viable areas.

To view wetland locations across the United States, visit the National Wetlands Inventory.

2014 WISCONSIN LAKES PARTNERSHIP CONVENTION

Stevens Point, WI is this year's site for the annual convention and returns to the city of the first conventions. Dates selected are April 24th, Thursday through April 26th, Saturday.

The meaty "science and policy" part of the program will be focused on Friday, April 25th. This day will feature all the great research updates participants have come to expect, as well as discussions of local, state, and national lake management laws and policy.

Saturday will be geared more to the needs of lake district or lake association board members and lake-stakeholders, with a greater emphasis on organizational effectiveness and the basics of lake health and care. The organizing committee is really hoping that Saturday will attract a large number of "newbies" who have only heard about the convention, but until now have not been able to attend. In the center of Friday and Saturday is the Wisconsin Lakes partnership Stewardship Awards Banquet, a great cause for bringing everyone together at the same table. The main program will be sandwiched by half-day a la carte workshops and tours on Thursday and Saturday. Please join your lake-loving colleagues, friends and neighbors from around the state in April as we get "Back to the Point" in Stevens point.

Details about workshops, concurrent sessions and other speakers will be available in the Winter/Spring edition of Lake Tides, as well as on the 2014 Wisconsin lakes partnership Convention website:

www.uwsp.edu/uwexplakes/conventions/

QUARTERLY MEETING

Our next meeting will be held Friday, April 4th, at 5:00 p.m. The meeting is open to the public at the Randall Town Hall, 34530 Bassett Road, Bassett, WI.



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.