Dear Members and Friends,

Given the growing threat to our Door County ground and surface waters from increasing levels of phosphorus, the spreading of untreated animal waste, and the pending approval of sulfide mining operations adjacent to the Menominee River, among other threats, your DCEC Board of Directors decided last fall to focus exclusively on protecting our waters here in Door County during 2018. In addition to the above threats, recent easing of state environmental regulations and decreases in Wisconsin Department of Natural Resources staffing and budgets have also significantly reduced protections formerly provided by the Wisconsin DNR, making our efforts to protect our waters even more critical.

During 2018, we will be presenting a series of “It’s Our Water” speaker programs, including “The Waters of Green Bay”; “Impact of Water Pollution on Door County Tourism, Property Values, and Business”; “It’s Our Water: Speaker Panel”; “Health Effects from Water Polluted with Pesticides, Insecticides, Fertilizers, Hormones, and Antibiotics”; and “High Capacity Wells.”

In addition to emphasizing the protection of our waters in this year’s DCEC speaker program series, we are also focusing this, our first newsletter of 2018, on the protection of our waters. To help members and friends best understand the task we face in protecting our waters here in Door County and Northeastern Wisconsin, we have included six Wisconsin DNR color maps, each including a brief commentary highlighting the most salient issues conveyed by the map. As they say, a picture is worth a thousand words!

As required by Clean Water Act (CWA) Section 303(d), every two years the Wisconsin DNR publishes a list of waters considered impaired. Impaired waters are those bodies of water...
that do not meet water quality standards and may not support fishing, swimming, recreation, or public health and welfare.

The six maps included in this newsletter are derived from the Surface Water Data Viewer (https://dnrmaps.wi.gov/H5/?Viewer=SWDV), a Wisconsin DNR data delivery system that provides interactive web mapping tools for a wide variety of datasets including chemical (water, sediment), physical, and biological (macroinvertebrate and fish) data.

The comprehensive 2018 list of impaired Wisconsin waters contains 1,533 waterbodies, of which 240 are newly added for 2018. Because a large number of these waters had not been assessed for phosphorus prior to 2018, the majority of the new listings are waters exceeding the total phosphorus criteria (see map on page 7). The remaining new listings are due to biological impairment, elevated temperature, levels of bacteria or chloride, or concentrations of mercury in fish tissue.

We hope the maps provide you with a greater understanding of the threats to our Door County ground and surface waters.

Menominee Nation Rallies to Stop Metal Sulfide Mine

On Tuesday, January 23, 2018, the people of the Great Menominee Nation invited the public and all interested parties to join them in solidarity against the proposed Back 40 Mine project in Upper Michigan. The Menominee Indians gathered together at the Menominee Casino in Keshena, Wisconsin, to drive up to Stephenson, Michigan. Here the Michigan Department of Environmental Quality (MDEQ) was holding a public hearing about the Wetland Mining Permit application submitted by the Canadian mining firm, Aquila Resources of Toronto. This hearing was being held to collect public input towards this fourth and final permit to approve the construction of an open pit sulfide mine located in an important and complex wetland 150 feet from the banks of the Menominee River. Three of the four required permits have already been approved.

The proposed Back 40 Mine will be an open pit mine covering about 83 acres of the Earth’s surface and will be approximately 750-800 feet deep. The ore processing area will cover about 500 acres of complex wetland property and threaten the surface and groundwater of the surrounding wetlands. The mining process would dislodge over 65,000,000 tons of sulfide ore. The sulfide from the ores, when mixed with water, form sulfuric acid (battery acid) in the air, water, and ground of the surrounding wetlands.

To process the sulfide ores over a 16 year period, it is estimated that 1.24 billion pounds of cyanide will be brought in by railroad and used to separate waste materials from the precious

Cartoon by Susan C. Marks
metals. One million gallons of “degraded“ water would be discarded into the Menominee River every day, affecting all life downstream and the bay of Green Bay. As shown by every other sulfide mine in the world, acid mine drainage (AMD) will persist for hundreds, if not thousands, of years to come that taxpayers would have to clean up. In 1988 alone, the overall cost for AMD cleanup cost U.S. taxpayers an estimated $30 billion.

I chose to accompany the Menominee Indian Tribe of Wisconsin and represent the members of the Door County Environmental Council who oppose this proposed destructive mine. Knowing that I was in for a very long day, I drove to the Menominee Casino Resort in Keshena, Wisconsin, and arrived there about noon.

Inside, I attended an already-in-progress rally in the casino’s Five Clans Ballroom Hall to prepare for the important hearing in Stephenson that evening. The rally included speakers Gary Besaw, chairman of the Menominee Indian Tribe of Wisconsin and Guy Reiter, an organizer for the Wisconsin Menominee Indians. I was inspired by the things they had to say and by the tribal youth who spoke about their feelings towards the impacts that such a mine would have on their lives and their ancestral lands. I was happy to see the love and value placed upon the young people of the Menominee tribe.

As we left the ballroom and prepared to board the awaiting buses outside, we were accompanied by the beat of tribal drums and tribal song. We loaded the school buses at 1:00 p.m., preparing for a two hour drive to Stephenson. While on the bus, I could sense the passion in the conversations about the importance of this hearing and the importance of protecting their sacred Menominee River.

We arrived in Stephenson, Michigan, at about 3:00 p.m. where we gathered in the public library for the Menominee tribal “Water Ceremony” carried out by the tribal youth and observed by the elders. At the end of the ceremony, tribal youth led the observers and tribal drummers out into the streets to march in solidarity to the Stephenson High School where the hearing would be held at 6:00 p.m. The march for WATER, the most important resource on our planet, was calm and peaceful while being monitored by a strong showing of law enforcement. We marched to the high school and there we were met by the news media for interviewing sessions. At 5:00 p.m. we were allowed into the school and the gymnasium where the hearing was to be held.

The Wetlands Permit Hearing began at 6:00 p.m. with the MDEQ officials explaining the hearing’s rules of engagement to a crowd of about 500 people. The first to speak was Gary Besaw, chairman of the Menominee Indian Tribe of Wisconsin. He spoke to the fact that the hearing was illegal and shouldn’t be happening at all. The reason being is that the proposed mine affects not only the state Michigan, but Wisconsin as well, which falls under federal jurisdiction and not Michigan’s alone.

Over a decade ago, the United States Environmental Protection Agency (EPA) had passed jurisdiction (allegedly illegally) of the mine permitting process solely onto the MDEQ. Evidently, when environmental issues arise that seem to be interstate related, the law says they are to be handled by United States EPA. Mr. Besaw further stated that the Menominee Indian Tribe had filed a lawsuit against the EPA and the United States Army Corps of Engineers, citing that they had broken the law and that they were legally responsible for the fate of the proposed mine, not Michigan alone.

About 80 people gave verbal testimony during the hearing with about 95% of the comments
being opposed to the proposed mine. Most comments cited were environmental concerns over the pollution of the river, fishing quality, cost for cleanup, and the destruction of pristine wetlands. It was explained that, in 2010, metal sulfide mining was responsible for 41% of all toxins released into the environment.

There was technical opposition to the mine as well. Many of the statements referred to the recent rewriting of the Wetlands Permit application by Aquila Resources. Aquila made alterations in an updated application that caused a “red flag review” that found “big holes” in the sulfide mine’s Wetland Permit, as reviewed by the Center for Science in Public Participation (CSPP).

Summarizing the CSPP’s review, they found that the Mining Permit and the Wetlands Permit are inextricably linked and that the location and size of the proposed mine site facilities, as presented in the November 2017 application for Wetlands Permit, are different from those facilities presented in the Mining Permit and pose new risks to the wetlands that have not been analyzed. Kathleen Heideman, member of the Michigan Mining Action Group (MAG), commented, “This red flag review underscores our existing concerns. Aquila’s Wetland Permit application is shoddy. It is mired in untested assumptions about wetland hydrology, and the whole scheme hinges on a facility design which nobody has reviewed, much less approved.”

At 10:00 p.m. the hearing adjourned. In subzero windchills we boarded the buses again for the ride home. The Menominee Tribe felt encouraged by the large turnout, the lawsuit, and the majority of opposing comments. They have great reverence for the Menominee River, as it is the area where they and their ancestors are buried which would be greatly disturbed by a sulfide mine invading the peace. They have great respect for nature and the natural processes that give all things life. It is of great importance that the balance between nature and the needs of humanity find overall harmony. It is important that we don’t allow the greed of a few to affect the health of the many. This fight for the Menominee River is not yet over, and there is still time for more people to let themselves be heard.

by Paul Leline
To stay up-to-date with the status of the Back 40 Mine and the Menominee River you can get involved in the following ways:

www.jointherivercoalition.org
jointherivercoalition@gmail.com
www.noback40.org
www.savethewildup.org
The Fox River is very important as a determinant of the water quality in lower Green Bay. The bottom materials of the lower bay consist of a very loose, flocculent sediment. As a result, the water clarity changes significantly over short periods of time due to the ease with which these materials become resuspended in the water. Chemically, Green Bay is a hard water alkaline basin which has a total alkalinity of 143 mg/l. Green Bay receives a large nutrient load from industrial, municipal, and agricultural sources.

The inner bay of Green Bay is an Area of Concern (AOC). The water is impaired due to one or more pollutants and associated quality impacts. It is listed for PCBs, total suspended solids, and total suspended phosphorus found in the bay. The water is part of the Lower Fox River Total Phosphorus (TP) and Total Suspended Solids (TSS) Total Maximum Daily Load (TMDL) analysis that was approved by the EPA in 2012. These 45 TMDLs address degraded habitats, low Dissolved Oxygen (DO), eutrophication, and turbidity impairments.

-dnr.wi.org
In accordance with requirements of the Federal Clean Water Act, the Wisconsin DNR biennially lists waterbodies that are not meeting water quality standards and which require the development of plans to restore water quality. In this map, impaired rivers, streams, and lakes in Northeastern Wisconsin, including Door County, are highlighted in red. Notice that a great portion of Door County’s shoreline is impaired.
The bay of Green Bay and Northeastern Wisconsin’s streams and rivers are being polluted by record amounts of phosphorus. Phosphorus is an essential element that allows all life forms to proliferate. The problem is the sheer quantity of phosphorus being introduced to our land and water, overwhelming the capacity of the environment to handle it. Phosphorus is entering our waters from a number of sources including failing septic systems, lawn over-fertilization, municipal sanitary waste discharges, and agriculture, including concentrated animal feeding operations (CAFOs). Manure from CAFOs is a significant and growing part of the problem. Note: red circles indicate areas where streams and rivers concentrate both CAFO and municipal sources of phosphorus.
Over the past 50 years, biologists, citizen monitoring teams, federal and state partners, and consultants have established over 60,000 monitoring sites at which data has been collected for an array of purposes. These stations are maintained through the Surface Water Integrated Monitoring System (SWIMS).
According to the Wisconsin DNR, “A high-capacity well is a well that has the capacity to withdraw more than 100,000 gallons per day, or a well that, together with all other wells on the same property, has the capacity to withdraw more than 100,000 gallons per day.” While we don’t know exactly how much water is in our local aquifer(s), we do know that the amount is finite. Some areas in central and northern Wisconsin, where the over-pumping of high capacity wells has outstripped the capacity of the area’s aquifer to provide clean water, have had residential wells go dry and inland lake levels diminish dramatically.
Wisconsin state legislators are moving closer to relaxing wetland development regulations that would allow developers to fill state wetlands without permits and scale back mitigation requirements.
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*Please mail with payment to: DCEC, P.O. Box 114, Fish Creek, WI 54212*
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