Vilas County Lakes and Rivers Association (VCLRA) News

P.O. Box 494 Eagle River, WI 54521-0494

WINTER 2017

Presidential Pebbles and Pearls

As I write these words in early December it's easy to look back on 2017 and realize that most news out of Madison was decidedly unfriendly to Wisconsin Lakes and conservation practices in general.

Legislation passed earlier in the year reduced DNR oversight on high capacity wells and made the permitting process easier. A bill passed this fall made short term and weekend rentals permissible, thereby placing even more pressure on Vilas County lakes.

Two additional bills circulating as of this writing would continue this practice of relaxing environmental standards. A proposed property rights bill would pretty much permit a property owner to do whatever they please with their property regardless of how that action might affect other properties on a given lake. Another bill being proposed would restrict the DNR from determining some impoundments as navigable waters thereby restricting access and potentially running afoul of the states public trust doctrine.

The state budget process was not completed until late September which condensed the fall legislative sessions and periods where new bills could be introduced. The Wisconsin Shoreline Initiative has one and possibly two bills being readied as this is written, which could possibly roll back some of the bad legislation passed since Act 55 back in 2015.

Because of this toxic political climate, VCLRA continues to believe that education will be the key moving forward. We're excited to announce that we are working on a scholarship for Vilas County high school seniors going into a natural science field. Our joint multi-county lakes conference with our OCLRA counterparts, will again take place in June of 2018. Look for the complete agenda in the May Newsletter.

Please take the time to renew your VCLRA membership at your earliest opportunity. The form is in this newsletter and can be printed off our website. VCRLA will continue to act as a conduit for pertinent info as becomes available in 2018.

CONTAINED IN THIS ISSUE:

VCLRA Merchandize Information

Prevention Strategies to Reduce Risk

Blue Heron Nominations Open

Membership Benefits

Membership Form

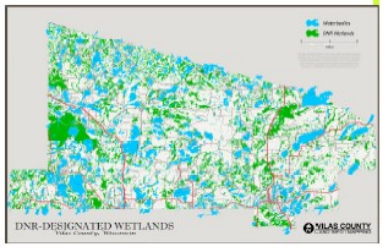
Economic Values of Vilas County's Water Resources

Steve Budnik
President VCLRA

Economic Values of Vilas County's Water Resources

Adapted from the Vilas County Land & Water Conservation Brochure Ver.7.21.17

Vilas County's MOST IMPORTANT Natural Resource is WATER.

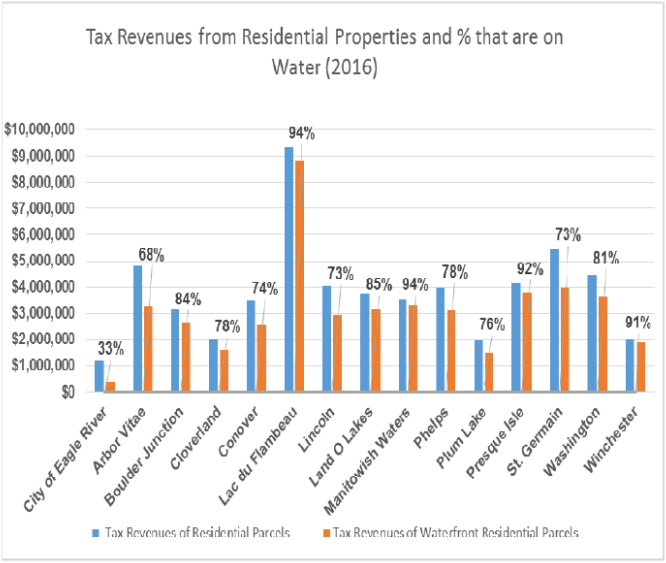


Vilas County is one of the wettest counties in Wisconsin because of our geography. One third (34%) of the Vilas County landscape is either open water or wetlands.

- Wetlands = 121,258 acres (18.5% of the land base)
- Lakes and streams = 102,276 acres (15.6% of the land base).

Protecting these water resources is important to our way of life and our economy.

- All drinking water in Vilas County comes from groundwater.
- In 2016 visitors spent $212.5M in Vilas County.
- Water front property generates 75% of property tax revenues.
- Second home owners spend $74/day when visiting.



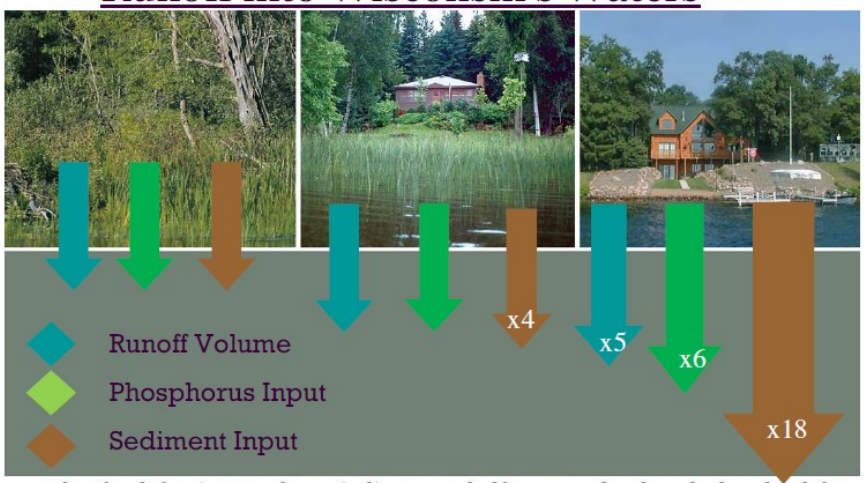
Vilas County contains the headwaters of 4 rivers. All of our water starts out as rain or snow—so we are dependent on capturing and holding that precipitation here when it hits the ground.

Our Northern Highlands Ecological Landscape has one of the highest concentrations of the natural lakes <u>IN THE WORLD.</u>

<u>What threatens our waterways and ground water?</u>

- When natural plant buffers are removed due to the development of shorelines, erosion and sediment runoff degrade water quality of lakes and streams.
- Aquatic Invasive Species infestations damage fish habitat and obstruct boat traffic.
- Damaged or destroyed wetlands can no longer clean and store water.
- Because of our sandy soils and shallow groundwater table, the potential for contamination is high.

Runoff into Wisconsin's Waters



The far left picture above indicates a half-acre undeveloped shoreland lot characterized by minimal runoff, phosphorus, and sediment inputs. The middle picture portrays a typical 1940's shoreland development, with approximately 8% impervious surface coverage. The picture to the right has approximately 20% impervious surface coverage. Notice how sediment inputs drastically increase with impervious surface coverage. (John Panuska, adapted from Wisconsin DNR memo, Nov. 6, 1994)

Continued on Page 3

Everyone can protect our Water Quality

- Homeowners can install rain gardens and use phosphorus-free lawn fertilizer.
- Shoreland owners can protect or restore native shoreline buffers.
- Recreationists and anglers can avoid moving Aquatic Invasive Species around.
- Landowners can avoid filling in wetlands or altering groundwater flow patterns.
- Communities can place culverts correctly.
- Everyone can avoid polluting groundwater.

"Halt the depletion of the county's soil resources; protect surface & groundwater from non-point source pollution; and provide education and financial assistance to Vilas County citizens"

Vilas County Land & Water Conservation Dept. Mission

Vilas COUNTY WISCONSIN LAND & WATER CONSERVATION

Photos by Celeste Hockings

Blue Heron Stewardship Award Nominations Now Open

BLUE HERON

Shoreland Stewardship

Award Program

Do you know someone who makes a conscious effort to preserve an outstanding natural shoreline?

We want to recognize them for their effort! The Blue Heron Award was created for exactly this reason.

It also creates awareness, educate lake property owners on the importance of shoreland stewardship, and showcases good examples of lake-friendly waterfront development.

To nominate someone, please visit our website:

http://www.vclra.us/home/blue-heron-shoreline-stewardship-award-program

Or call **Carol Warden** at **715-356-9494**.

VCLRA Merchandize Available

VCLRA has established a storefront at Lands' End that permits ordering logo gear (e.g., tote bags and polo shirts) with the VCLRA logo embroidered on the item.

The VCLRA logo was redesigned shortly after VCLA evolved to VCLRA (to encompass rivers as well as lakes). With the addition of the new embroidered design, our logo usage is now consistent across the VCLRA exhibit display, brochures, website, and logo gear.

To purchase logo gear, you can be access the Store front from the VCLRA website, or reached directly at:
https://business.landsend.com/store/vclra/.

- There are no minimums, just a straight $5.95 embroidery fee in addition to the garment price for each item purchased with our logo.
- The logo can be applied to virtually any item in the Land's End catalog.
- You can sign up for emailed specials from Lands' End to receive coupon codes for free logo application, free shipping, plus other discounts that make it even easier to dress in comfort and style while promoting protection of our lakes!

VCLRA Membership Benefits

VCLRA is an informational education network that helps lake associations and individual citizens make wise decisions in their effort to preserve and protect the unique waterways of Vilas County, now and well into the future. From its inception, VCLRA has established and maintained strong cooperative relationships with the Wisconsin DNR, UW Extension, and Vilas County government. With the help of these partnerships, VCLRA is able to provide benefits to lake association members and individuals who do not have lake associations.

VCLRA provides the following to its member associations and individuals:

Providing information and assistance on lake related problems and issues,
Sponsoring and participating in educational programs,
Providing yearly Blue Heron Awards for recognition of individual property owners' shoreline stewardship,
Publishing newsletters for our membership,
Developing Shoreline Covenant Program for property owners,
Organize a yearly Lakes Day symposium for our members and partners to strengthen their partnerships and gain new knowledge,
Helping in the formation of new lake associations,
Assisting with direction to or interaction with partner agencies,
Assisting with grant applications when an association may not qualify,
And monitoring state and county government activities.

VCLRA is a constructive citizen group that has earned the respect of the local and state community. We encourage you to contact us with questions, concerns, or ideas. We will answer them to the best of our ability, or direct you to someone who can.

The purpose of the Vilas County Lakes and Rivers Association is to educate, communicate, and promote cooperation among organizations, individuals, governmental bodies and the general public of Vilas county; and to preserve, protect, and enhance our lakes and waterways for present and future generations

Anne Kretschmann

Treasurer

Vilas County Lakes and Rivers Association
MEMBERSHIP APPLICATION OR RENEWAL

Preserving, protecting and enhancing our Vilas County lakes and waterways for present and future generations

Type of Membership:

__ Individual/Family $25 __ Lake Organization $50 __ Associate/Supporting $75

Section A: Individual/Family or Associate/Supporting Membership

Name(s) _____

Permanent Mailing Address _____

City _____ State _____ Zip Code _____

Email Address: _____ Ph _____

Wish to receive newsletter via email? Yes No

Wish to receive occasional email alerts on lake issues? Yes No

Name of Lake of Residence: _____

Name of Lake Organization (*if established*): _____

Other affiliation (i.e. town chairman, county commissioner, etc.) _____

Section B: Lake Organization (Lake Associations and Districts) Membership

Please submit the names and contact information of organization officers/ board of directors/commissioners, each will receive the VCLRA newsletter. If person and contact information is the same as prior year write "NC" after name. Please indicate a Key Contact Person, ideally with email, this is used occasionally when legislative updates or call-to-actions occur.

Lake organization name_____

Website _____

Approximate number of individuals represented by lake organization _____

Please attach additional board members, directors, or commissioners, if needed.

President/Chairman

Name(s) _____

Permanent Mailing Address

_____

City _____ State ___ Zip Code _____

Email Address

_____

Wish to receive newsletter via email? Yes No

Name of Lake of Residence: _____

Receive occasional email alerts on lake issues? Yes No

Key Contact Person? Yes No

Vice-President

Name(s) _____

Permanent Mailing Address

_____

City _____ State ___ Zip Code _____

Email Address

_____

Wish to receive newsletter via email? Yes No

Name of Lake of Residence: _____

Receive occasional email alerts on lake issues? Yes No

Key Contact Person? Yes No

Secretary

Name(s) _____

Permanent Mailing Address

_____

City _____ State ___ Zip Code _____

Email Address

_____

Wish to receive newsletter via email? Yes No

Name of Lake of Residence: _____

Receive occasional email alerts on lake issues? Yes No

Key Contact Person? Yes No

Treasurer

Name(s) _____

Permanent Mailing Address

_____

City _____ State ___ Zip Code _____

Email Address

_____

Wish to receive newsletter via email? Yes No

Name of Lake of Residence: _____

Receive occasional email alerts on lake issues? Yes No

Key Contact Person? Yes No

Please make checks payable to: **Vilas County Lakes and Rivers Association (VCLRA)**
Return completed form with annual dues before **June 1st** to: VCLRA; PO Box 494; Eagle River, WI 54521

Prevention Strategies to Reduce Risk

By:
Eric Lindberg and Dick Osgood

Adapted from Lakelines article from Fall 2007

Lake managers understand that Aquatic Invasive Species (AIS) are harmful for lakes. Unfortunately, there still exists an educational and compliance gap and the spread of AIS continues. We have investigated the habits of boaters and found a significant percentage transport AIS, but more importantly, we have demonstrated a cost-effective prevention strategy for AIS.

The AIS rogues gallery in the northern lakes area of Minnesota and Wisconsin most often includes Eurasian Water-milfoil, curly-leaf pondweed, zebra mussels, quagga mussels, spiny water flea, and other nasty plants, animals, and viruses.

In 1987, Eurasian water-milfoil was first discovered in Lake Minnetonka (MN), which is a mesotrophic to eutrophic lake with 132 miles of shoreline. In the past 20 years it has spread to every bay on this heavily trafficked lake. Growing in depths up to 35 feet at a rate of two inches per day, it overtakes native vegetation and forms heavy mats at the surface. Management includes private and organized control treatments, and a public harvesting program costing over $300,000 each year. Besides removing diversity in native aquatics needed for healthy fisheries, milfoil has choked off bays, ruined engines by clogging water intakes, and was responsible for a drowning. Eurasian water-milfoil has “trampolined” to over 190 lakes in Minnesota to date and continues to spread.

Zebra mussels are a more recent occurrence in Minnesota. Their propagation upstream in the Mississippi and St. Croix rivers have created over 50 boat launches from which watercraft can potentially transport to inland lakes. A study performed in Michigan showed the primary vector of zebra mussel introduction was by boats carrying aquatic vegetation with mature mussels attached. The long-term impacts for a lake with zebra mussels are devastating. They reproduce rapidly, they are razor sharp, cling to any surface, clog water intakes, and they have caused tens of millions of dollars in damage annually in the Great Lakes. There is no control for zebra mussels in inland lakes and rivers.

Because the cost of management is usually high and the prospect for eradication is low, preventing introductions in the first place ought to receive the highest priority. Many individuals are well intentioned in inspecting and cleaning their boats; unfortunately, statistics show that on average 14-17 percent of boaters in Minnesota and Wisconsin are leaving boat launches with aquatic weeds attached to their trailer or boat. Relying on “highway clean-off” is not an acceptable method in Minnesota, where the law holds that it is illegal to transport aquatic macrophytes on public roads. It’s also an ineffective approach for boaters. The Minnesota DNR noted that the number of boats bringing aquatics to the launch increased from 0.7 percent to 1.2 percent in 2006. In Wisconsin, Clean Boats Clean Waters volunteers identified five percent of the boats coming to the launch with attached aquatics.

The Lake Minnetonka Conservation District is concerned about boaters introducing new AIS to the lake. At a cost of over $25,000 annually, DNR interns are hired to staff and inspect heavily used public launches. While this effort addresses peak use times, this leaves many usage hours at the 11 public boat landings unstaffed. Recognizing this need to continually educate and monitor boat launches, Environmental Sentry Protection, LLC developed a tool that could provide this ongoing diligence needed to protect lakes through education, monitoring, and information gathering.

A New Tool to Help Prevent AIS Introductions

In June of 2006, the Lake Minnetonka Conservation District (LMCD) approved a grant for a demonstration project to explore new methods and strategies to prevent zebra mussels and other AIS from being introduced to Lake Minnetonka by using an automated boat inspection system at a heavily used public boat launch, Grays Bay. The main goal of the study was to determine how video inspection of boats prior to launch may affect boat and trailer clean off activities by boaters which would reduce the risk of additional aquatic invasive species being introduced to the lake.

The Internet Landing Installed Device Sensor (I-LIDS)

The I-LIDS (pronounced “eyelids”) is a stand-alone video capture system that is designed to provide unattended monitoring of boat launches (or other remote locations) and capture activities of interest that occur over the course of hours or days onto a searchable Web site by date, time, and venue. Positioned low to the ground, it is able to easily view below trailers and boats. It wirelessly transmits a compressed video to a nearby access point. Solar power removes the need to run power to the

Continued on Pg. 8

system. A circuit board monitoring the earth's magnetic field can detect activity 20 feet away and shift from low power consumption to operation of devices such as video, LED lighting for night video, and playback of educational messages.

A digital video camera detects motion and captures video for a preset duration. The I-LIDS uploads these "transactions" to a server along with launch name, date, and time information. A backend server program looks for new transactions and parses meta-data into searchable fields for the Web site and database. By capturing only events when there is motion at the launch, and limiting time of capture (e.g., 15-20-second videos) users can efficiently review and find events of interest. Use of pier footings, stainless steel housing, bullet proof glass, and keyed access for authorized users deters vandalism.

Over 1,500 30-second pre-launch video sequences from August 14 through October 6, 2006 were collected at Grays Bay, Lake Minnetonka. Video monitoring from August 10 through September 5 was done without posted signage. On September 6, two signs were posted at the launch to alert users that boats were being video inspected and that they were required by law to inspect and clean their boats/trailers prior to launch. This provided an opportunity to compare boat clean-offs before and after signage was posted at the boat launch. With the camera positioned 18 inches above the ground, we observed aquatic plants hanging on boats, trailers, and axles. Video captures showed license plate, registration numbers, and inspection/clean-off activities of boaters (or lack thereof). Storing images on an Internet accessible Web site created an ongoing history of launch activity available immediately to authorized participants in the project.

Initial Results

The percentage of boats launching with weeds dropped dramatically after the posting of video monitoring signage. Launching boats with attached vegetation dropped from 7.4 percent to 1.8 percent when comparing pre-signage to post signage periods at Grays Bay. On July 15, a third of the boat trailers in the Grays Bay parking lot had aquatics dangling from their trailer. On September 6, a similar walkthrough of the parking lot revealed not one trailer with weeds on it.

The percentage of boaters inspecting their boats or slowing for camera inspection increased after posting of video monitoring signage. It was observed that boaters seemed to inspect more carefully or rely on slowing their boat/trailer while proceeding past the I-LIDS to confirm they had cleaned their craft. Before signage was posted it was observed that 3.17 percent of boaters performed inspection. After posting signage, 13.4 percent inspected or relied on camera for inspection.

Boaters tended to focus on cleaning off and inspecting boats after pullout vs. before launch. DNR procedures focus on interns advising boaters to clean after pullout. People are just in a hurry to get in the water once at the lake. The issue is that some boaters are not cleaning off at other lakes and are unknowingly or indifferently launching attached vegetation as seen on video captures. The presence of a spray-off facility presents an attraction for boaters to clean their boats at Grays Bay.

The boating public accepted or endorsed video boat inspection. During the course of working on the I-LIDS unit, there were over 100 people who would approach and ask "What is that thing?", referring to the I-LIDS. The consistent response was that it was a demonstration project to perform video inspection of boats and trailers in an effort to understand if people are cleaning aquatics off of their boats prior to launch with a long term goal of keeping zebra mussels out of Lake Minnetonka. Most of the feedback was quite positive with "Great idea!", "Good to see something is being done", and "Wow, I hope you can keep them out."

There is a significant gap in launch coverage when boaters are not being reviewed in person for clean-off compliance. The I-LIDS showed heavy usage of the Grays Bay boat launch occurring on weekends starting at 4:15 a.m. and continuing to after midnight. The existing monitoring program had about 1,996 hours of documented coverage between 9:00 a.m. and 7:00 p.m. on Fridays, Saturdays, and Sundays. The total demand for launch monitoring for 11 Lake Minnetonka launches for six months of usage is 39,600 hours. Only five percent of these potential usage hours were staffed at launches in 2006, which presents a significant opportunity for boaters to introduce AIS into the lake.

Enforcement

In 2005 the Minnesota DNR reports that there were a total of five citations issued to boaters violating AIS laws in the state. During the course of 20 days we saw 14 potential violations at one launch, on one lake! It is clear from the behaviorin the videos that AIS clean-off needs to be elevated as a priority for all boaters. Boaters who were stopped carrying weeds claimed ignorance of the need to clean off their boats. There were also those that said it did not matter. Minnesota's AIS Enforcement Conservation Officer captured it best when at a recent meeting he shared, "There are three steps in soliciting compliance with the law: "1. laws must be understood and supported; "2. there must be an expectation of an enforcement; "3. then there must be a consequence for a violation."

Project Recommendations

To address the goal of reducing risk of zebra mussel introduction, the following recommendations were made to the LMCD: 1. Develop policies and procedures at the boat launches to ensure that boaters receive consistent messages to inspect, clean, and drain boats not just leaving but entering as well. 2. Identify tools to facilitate clean off compliance by boaters. After all, if we want compliance we have to make it convenient. 3. Convey message to people that violations of AIS clean-off laws will be enforced through conversations, warnings, citations, and posting of citations in publications. Have peace officers/conservation officer

presence to enforce violations. 4. Continue and expand usage of I-LIDS automated monitoring and posted signage to close gaps in monitoring coverage.

Based on the results of the study and after reviewing a proposal, the LMCD board voted to expand usage of the ILIDS at four Lake Minnetonka launches fulltime in 2007 to complement ongoing DNR intern presence.

Additionally, the Burnett County Lakes and Rivers Association (WI) was given a matching grant by the Wisconsin DNR for a program to implement I-LIDS monitoring at seven boat launches. On Lake Namakagon (WI), two I-LIDS were purchased to fill the void left by not receiving sufficient volunteer support to staff inspectors at the boat launches. In 2007, the I-LIDS will be educating and monitoring at 13 launches across Minnesota and Wisconsin lakes in an effort to stem the spread of Aquatic Invasive Species. Since becoming operational on May 12, 2007 on Lake Minnetonka, initial review of over 4,000 videos reveals only two boat launches with attached vegetation! In addition to launch presence, media attention, and onsite education efforts have clearly raised awareness of AIS among boaters.

Future development goals for the I-LIDS include automated license plate identification, and object recognition for dangling aquatics. Samples of video captures at Grays Bay can be seen at www.environmentalsentry.com.

Reference

Johnson, Ricciardi, Carlton. 2001. Overland Dispersal of Aquatic Invasive Species: A Risk Assessment of Transient Recreational Boating. Ecological Society of North America.

Editor's Note: There are two camera's in Lac du Flambeau, one on Fence Lake and one on Flambeau Lake.

Figure 3. I-LIDS Automated Launch Inspection System.

Figure 4. Sign posted at Lake 26, Burnett County Wisconsin.

Lake County Journal

Volume 24 Issue 1 Winter 2017
Vilas County Lakes and Rivers Association, Inc.
PO Box 494, Eagle River, WI 54521
Website: www.vclra.us

In This Issue

A membership renewal form

Benefits of Membership Summary

Blue Heron Stewardship Award Information

VCLRA Merchandize Information

Prevention Strategies to Reduce Risk

Economic Values of Vilas County's Water Resources

Other Lakes Related Information

Mark your Calendar

April 16, 2018 VCLRA Board Meeting. @ St. Germain @ 9am.

April 18-20, 2018 Wisconsin Lakes Partnership Convention @ Stevens Point, WI. www.uwsp.edu/uwexlakes Registration opens in February.

June 2018 (Date TBD-most likely June 9th) North Central Counties Lake Associations Conference @ Nicolet College Rhinelander, WI. Contact Steve Budnik 715-686-7852/skbudnik@centurytel.net, for more information.

June 16, 2018 Lake Fest in Lac du Flambeau, WI. Contact Celeste Hockings @ 715-588-4163/ Chockings@ldftribe.com for more information.

Join VCLRA Today! **Forget to Renew?**

See membership form inside this issue or go to our website at www.vclra.us and print the membership form.

Your support helps protect the lakes!