



PIKE CHAIN OF LAKES EWM MONITORING & CONTROL

November 2017 Update by Todd Hanke, Onterra, LLC

With Onterra's assistance and input from the Wisconsin Department of Natural Resources (WDNR), the Iron River Pike Chain of Lakes Association (IRPCLA) developed a multi-year Eurasian watermilfoil (EWM) control and monitoring strategy for the Pike Chain of Lakes. Following discussions between the project partners, the final EWM control program for 2017 included whole-lake herbicide treatments on four lakes in the Chain (Lake Millicent, Buskey Bay, Hart Lake, and Twin Bear Lake) as well as professional hand-harvesting in Eagle Lake.

Field studies and activities conducted during 2017 included:

- Spring Pre-treatment Confirmation & Refinement Survey (Onterra)
- Pre-treatment temperature profiles in Twin Bear Lake, Lake Millicent, Hart Lake, Buskey Bay (IRPCLA volunteers)
- Herbicide Treatment Application (D. Dressel – Northern Aquatic Services)
- Post-treatment herbicide concentration monitoring (IRPCLA volunteers)
- Early Season AIS Survey of Eagle & Flynn Lakes (Onterra)
- Professional Hand-Harvesting on Eagle Lake (TSB Lakefront Restoration & Diving)
- Point-Intercept Surveys on all Pike Chain lakes (Onterra)
- Chain-wide late-summer EWM peak biomass survey (Onterra)
- McCarry Lake EWM mapping survey (Onterra)

Because of the wealth of data that were collected just within the past few months, much of the data analysis has yet to be completed. This update intends to bring the IRPCLA up-to-speed on the scientific studies that have occurred and provide some initial observations. This document is not a complete evaluation of the 2017 control plan and should not be treated as such as an annual report will be completed during winter 2018.

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2018 BOARD OF DIRECTORS

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PIKE CHAIN EWM UPDATE

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Volunteers from the IRPCLA contributed a significant amount of time and effort in collecting water temperature readings prior to the herbicide treatments and water samples following the treatment. These efforts are instrumental in being able to monitor and assess the large-scale herbicide treatments. All of the herbicide concentration monitoring samples collected in association with the 2017 whole-lake treatments on the Pike Chain have been received and tested at the Wisconsin State Lab of Hygiene in Madison. These data are in the process of being compiled and analyzed by Onterra in order to understand the observed concentrations during the weeks following the whole-lake treatments. A preliminary look at the results show that actual average concentrations were near the target concentrations in Buskey Bay and Twin Bear Lakes and somewhat above the target concentration in Hart and Millicent Lakes. These data, in combination with other available data, including lake temperature profiles, flow rate data, and environmental variables will be further analyzed and reported on in the forthcoming 2017 Monitoring and Control Report.

Quantitative assessments of the native and non-native aquatic plant community of the lakes were completed utilizing point-intercept survey methodology. Point intercept surveys completed in 2016 prior to treatment were replicated in 2017 (year of treatment) and will be completed again in 2018 (one year after treatment) to evaluate the plant community's response to the active management that occurred on the Pike Chain of Lakes during 2017. Qualitative assessments of the EWM community were completed through mapping the EWM populations in the late-summer of 2016 and again in the late-summer of 2017 to understand the year-of-treatment impacts. The survey will be replicated in 2018 to assess the EWM population 1-year after treatment. A decline in EWM frequency of occurrence was observed in all of the lakes that received active management in 2017. Understanding the EWM population during the *year of treatment* (2017) is important, but an insufficient time has passed to make official judgements if EWM control occurred or if the plants were simply injured for that season and quickly recover. As mentioned above, the surveys will be repeated in late-summer 2018 to determine actual effectiveness of the treatments at controlling EWM.

The hand-harvesting strategy for 2017 was developed fol-

lowing the Early Season AIS survey conducted by Onterra in early July. Following this survey, five sites in Eagle Lake were recommended for hand-harvesting by a professional harvesting firm. The EWM population in Flynn Lake did not warrant professional harvesting control efforts and instead the population was monitored throughout the summer. The initial results indicate a reduction of EWM in several of the Eagle Lake harvest sites following the removal efforts. A more detailed assessment will be made in the 2017 annual report.

The chain-wide EWM population was assessed during a late-summer EWM peak biomass mapping survey on August 29-31, 2017. The late-summer EWM mapping survey found a decrease in EWM in each of the treated lakes. No EWM was located in Lake Millicent or Hart Lake during the survey whereas a relatively low amount of EWM was mapped in some locations of Twin Bear Lake and Buskey Bay. Initial observations in the treated lakes suggest highly effective control was achieved during at least the year of treatment (2017). Surveys in 2018 will allow for a better understanding of the long-term control success. Native plant impacts are expected to occur to some degree in large scale treatment scenarios and this important component of the 2017 control actions will be evaluated in the forthcoming report. An overall reduction of EWM was observed in Eagle Lake in 2017, likely in part due to the professional hand-harvesting efforts.

Onterra ecologists also completed an EWM mapping survey of McCARRY Lake in August 2017 following the recent discovery of EWM in the lake by IRPCLA members. The 2017 mapping survey found colonized EWM present in the lake (Figure 1). Onterra will work with the IRPCLA and WDNR to determine the appropriate course of action in managing the EWM population in McCARRY Lake as well as to determine whether or not the lake qualifies for an AIS-Early Detection and Response Grant through the WDNR.

Over the coming months, further data analysis will lead to a formal report detailing the 2017 monitoring and control actions on the Pike Chain of Lakes. This in-depth report will include an EWM control and monitoring strategy for 2018.

See McCARRY LAKE EWM MAP
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www.facebook.com/PikeChainofLakes



www.pikechain.org

McCARRY LAKE EWM MAP

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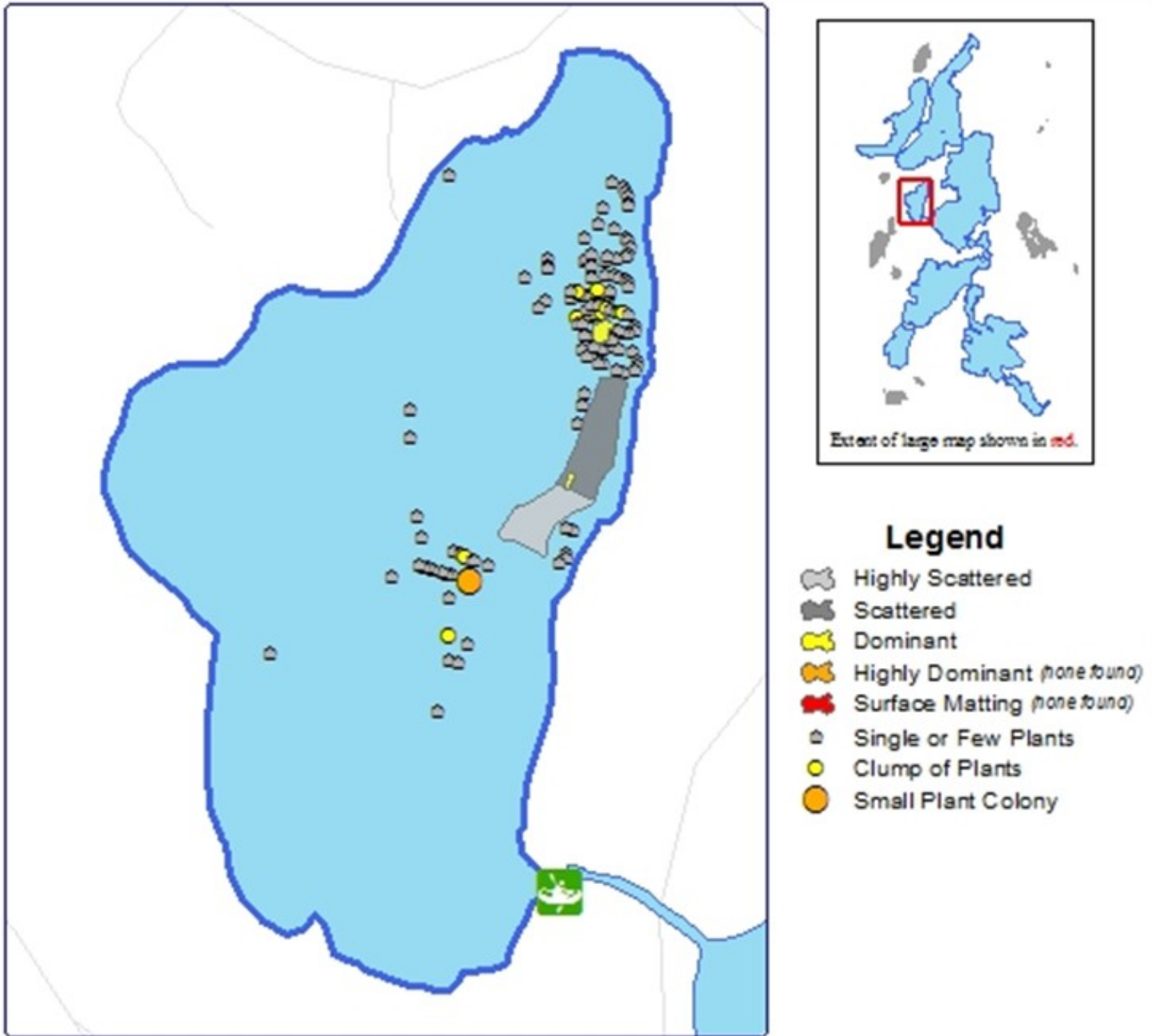


Figure 1. McCarry Lake August 2017 EWM Survey Results.

WELCOME JIM BENDER TO PCLA BOARD OF DIRECTORS !

In 1954, Jim's parents bought the lake property on Twin Bear. Jim graduated from Central High School and UWS and retired in 2008 after working 38 years with Soo Line and Canadian Pacific Railroads in various positions:

- Locomotive Engineer
- Trainmaster
- Asst. General Superintendent
- Asst. Director of Labor Relations
- Director of Operations Control
- Asst. Chief Transportation Officer
- Director of Network Management Center
- Executive Director Interline Management

Currently he serves on 6 Board of Directors including Lake Superior Railroad Museum, Western Bayfield County Historical Society, Iron River Area Foundation, American Association of Railroad Superintendents and now Pike Chain of Lakes Association.



- **Thank you KARI WANGENSTEEN** for serving on the board these past 3 years and for your membership initiatives !

WATER QUALITY COMMITTEE UPDATE

This committee is co-chaired by Amy & Eddie Wangensteen. Volunteers do Secchi*(site readings) 3 to 6 times each year. The water clarity readings twice this year on Lake Millicent were a very impressive 28 feet. Buskey Bay, Millicent, Hart, and Twin Bear received whole lake chemical treatment this past summer for EWM as part of a 3 year matching grant from the WIDNR that we were awarded.

Volunteers are: Buskey Bay - Glen & Sue Viggiano; Millicent - Amy & Eddie Wangensteen; Hart - Gary Teigen; Twin Bear - Jay Johnson; Eagle/ Flynn - Gary Hagstrom who took over for Jack Bochler. We want to thank Jack for his years of service! The DNR donates one chemical water testing each year that is sent off to the DNR. In the past this was done by Jack and now will be done by Gary. Our phosphorous levels have remained stable

**The Secchi disk is used to measure water transparency in bodies of water. It is a 20 or 30 cm circular disk that is plain white or white with black quadrants that is lowered into the water until it can no longer be seen. The depth at which it is no longer visible is known as the Secchi depth. The Secchi disk was created in 1865 by Angelo Secchi, an astrophysicist and scientific advisor to the Pope, when asked by Commander Cialdo, head of the Papal Navy to measure the transparency of the Mediterranean Sea.*

REMINDER!

THERE IS STILL TIME TO PAY YOUR 2017 MEMBERSHIP DUES AND LAKE MANAGEMENT CONTRIBUTION. See page 7 for form.

WINTER CHECKLIST FOR YOUR LAKE HOME and PROPERTY

► DOES YOUR INSURANCE COMPANY REQUIRE YOU TO KEEP YOUR DRIVEWAY CLEARED ?

Homeowners on the Pike Chain should check their insurance policy to see what their coverage is when they leave their home or cabins vacant in the winter. Many insurance companies have a clause that requires you to keep your driveway clear for emergency vehicles. This may come as a surprise for many as there are at least as many driveways left unplowed in the winter as there are ones that are plowed. The same issue could arise if you have a gate or cable across your driveway which would hinder emergency vehicles.



► VACATION CHECK BY THE IRON RIVER POLICE DEPARTMENT

The Iron River Police Department will check on your property if it is in the Iron River Township while you're away for the winter or just on vacation. All that you need to do is complete the form that is available on the PCLA website and mail or fax it to the Iron River Police Department or contact the Iron River Police at williams@ironriverpolice.org / tele: 715-372-4285; fax: 715-372-4609.



LOOKING FOR THAT GIFT FOR YOUR LAKE LOVER? PIKE CHAIN LAKE APPARELL IS BACK!

We now have an online store for Pike Chain Lovers! All sizes from a baby onesie up to your Uncle Bob. Sweatshirts, t-shirts, hats, jackets and even a pillow case with "Sweet Dreams on The Pike Chain." The Online Store fills orders the 1st and 15th every month. With that in mind, December 1 and 15 should be on your calendars now. Shirts Unlimited is located in Superior WI. Your order can be picked up at the store or shipped to your home. Check us out on line at shirtsunlimitedonline.com We have a great selection with current styles as well as colors to meet everyone's needs. If you don't see what you were looking for, stop in the store and they'll add our logo to a shirt on the show floor.

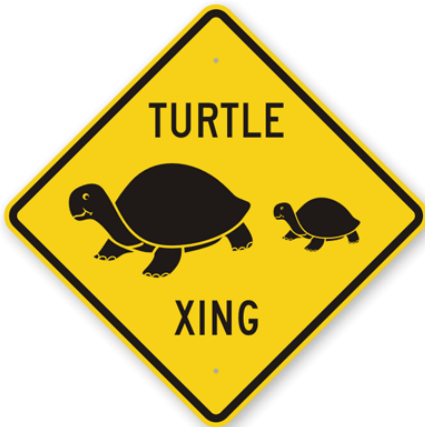
www.shirtsunlimitedonline.com
Online Store then click Pike Chain of Lakes
715-398-6276
310 Belknap Street
Superior WI 54880



Eddie Wangensteen's grandchildren Rylan and Adry



THE WISCONSIN TURTLE CROSSING INITIATIVE



Although once abundant, the turtle population world wide is declining. Road mortality is the leading cause of death for turtles in Wisconsin. A few years ago the Wisconsin Turtle Conservation Program (WTCP) , a citizen based turtle monitoring program, was designed and implemented through a Partnership Program grant from the WDNR. The WTCP created and maintains a turtle reporting data base as well works to enhance turtle safety through the road mortality project. Through this project, turtle crossing signs are installed on designated roadways based upon sightings from citizens who report where turtles are crossing and often getting killed.

Thanks to the effort of Jane Swenson 3 years ago, a 4 mile stretch on Highway H starting at the Scenic Drive cutoff going west past Mudd Lake was identified to be a Turtle Crossing Zone. You'll see 2 Turtle Crossing Signs posted along this stretch of highway from spring through fall thanks to the work of Karen/Bart Austin and Cynthia Samles. With monies no longer available, Cynthia took it upon herself to replace one sign that went missing last Fall. Thank you Jane, Cynthia, Karen & Bart!

HOW CAN YOU HELP?

- Don't remove turtles from the wild.
- If your safety isn't in jeopardy, help turtles cross the road by putting them on the side they are facing and walking toward.
- If you see a turtle in Wisconsin, report it to the WTCP at <http://wiatri.net/Inventory/WiTurtles/index.cfm>

SOME AWESOME FACTS ABOUT TURTLES:

- Considered the most threatened of vertebrate species
- 11 turtle species in WI
 - 1 endangered (Ornate Box Turtle)
 - 1 threatened (Wood Turtle)
 - 3 special concern (Blanding's Turtle, Smooth Soft Shell, and False Map Turtle)
- Active mainly from April through October
- Mating takes place in late spring and hatchlings begin to emerge and head for water and cover from August through September
- The sex depends on the incubation temperature: females warmer soil and males cooler
- Prior to the start of winter, turtles begin to hibernates beneath the soil, plant debris or soft muck in water
- The increased sighting of turtles on the road from mid May to early June is most likely females migrating to nest or lay eggs.



- **BOB and LINDA BURAN** for your 2016 contribution to lake management that was missed in the spring newsletter.

Iron River Pike Chain of Lakes Association, Inc.

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2017 Membership & Lake Management Donation Form

All information is confidential and used only by PCLA. Thank you for printing clearly.

Type of Membership (circle one): Individual/Family* Business** Trust**

Name(s) _____

MAILING ADDRESS _____

Lake address (if different from mailing address) _____

Lake Name _____ Email address _____

If a business membership, would you like your business listed on our website (circle one): yes no

*Two votes per membership ** One vote per membership

Please list voter's name(s) _____

Volunteer Opportunities:

PCLA Board Member

PCLA Committee (please circle)

Aquatic invasive species

Education and communications

Fishery

Water quality

Fundraising

Membership

Road-side clean-up "Adopt-a-Highway"

Other (please specify)



**Please make checks payable to
Iron River Pike Chain of Lakes Association and
mail form and check to:**

Iron River Pike Chain of Lakes Association
Attention: Treasurer
PO Box 602
Iron River, WI 54847

• 2017 Annual Membership Dues	\$20.00
<i>Tax Deductible</i>	
• 2017 Annual Donation for lake management	_____
<i>Tax Deductible</i>	
(Suggested donation \$1.00 per front foot. But any amount is greatly appreciated!)	
TOTAL (Thank you!)	_____

Iron River Pike Chain of Lakes Assoc., Inc.
P.O. Box 602
Iron River, WI 54847

PCLA Annual Meeting August 4, 2018



Warmest greetings and best wishes for the coming New Year!

Together we can work to protect our beautiful Pike Chain of Lakes.

Thank you for all you do!

From the Board of Director's of the Iron River Pike Chain of Lakes Association.