Greeting

Not IF but WHEN EWM appears in Ann Lake to our knowledge it is not yet present Township Board is actively supporting professional survey services to identify before invasive get a foothold and become difficult to treat. That is far from enough preparedness in the opinion of ALPOA Board. To help us answer that question we have invited incredibly well informed neighbors to share their experiences.

All these lakes are experiencing the WHEN of EWM that we envision and fear in our Lake association. We felt we could all benefit from their experience. This is not to scare us but rather to inform and prepare us for the task we will confront when intervention is required.

Dennis Wiand: Invasive Contractor with Long Lake and former board member from Long Lake Association

I am a member of that community. As a contractor I provide data collection for them. I served on the Long Lake Association Board for 9 years. I am speaking from notes prepared by other members of the association. EWM was first discovered in 1995 in Mickey Lake which connects to Long Lake. The consequences of this invasion have been many. Much money time has been spent learning about this problem and taking appropriate action There have been disagreements about treatments, use of a drone has changed how we treat making it possible to put chemicals precisely where they are needed. He first met Kent and learned about the ALPOA/ Almira Township collaborative proactive program.

Long Lake current remediation efforts. Long Lake works with two partners (someone was coughing while he said who the two are and I cannot make them out) A management committee provides notification and secures written permission from riparians about treatment in front of their property. Clear water lake Management secures permits from EGLE and necessary treatment. Herbicides are used, (he named the chemicals) which are determined by the location and depth of drinking wells for nearby properties. All of the chemicals are applied in granular pellet or liquid form which mandates swimming and irrigation restrictions dependent on the specific herbicide used. The cost is \$20,000.00 annually for the program they have. He does not think they have actually spent this but they have come close. Treatment has been effective and they are now in a maintenance mode. They only treat about 0.4% of the 3000 acres of the total surface area of Long Lake and Mickey Lakes which is about 8-12 acres total. The cost includes mapping services and volunteers help to keep the cost at about 1/2 what it would cost for comparably sized lakes with similar circumstance. Volunteers provide valuable oversight and accountability to insure the task is executed as expected. They have a committee of about 4-6 people within their lake association dedicated to treatment of EWM. They meet throughout the year to discuss strategy. They have co-chairship so they are always grooming the next person to lead the committee. He stated that being prepared ahead of time is essential to the success of their efforts. Sources of funding for Aerial surveillance and mapping portion of their program from Long Lake Township, Long Lake Association membership dues and cash donations are used for chemical treatment and nullification portion of the program. In hindsite they may have done differently is to get Mark Harrison through Water Lake Management involved in the program. In 2003-2007 they tried using weevils to treat the EWM, and the results were variable and unpredictable. They are glad they did it and we should not be afraid to try different treatment options. Every lake is different.

Kent asked Dennis: Given what he knows about Ann Lake, what does he feel we should be concentrating on right now. Dennis said that our best chance for successful treatment is to "know" our lake, monitor the lake, find problems early and institute treatment. Kent asked about how long they prohibited swimming after treatment. Dennis said that the choice of treatment chemical is usually based on the depth of area wells, sometimes on the depth of the EWM. Prohibited activities are not typically an issue except swimming which is usually 24 hours.

Lonnie Rademacher: Stewardship Chair from Lake Leelanau

In 2019 they discovered EWM in Lake Leelanau.

Lake Leelanau is a huge lake 18 miles long, 42 miles of shoreline and 11 public boat launches. This was all new to them and they weren't prepared for it, and they had to go into a crash mode and we got it done, progressing in a formal manner. We had to ask ourselves some questions. I am going to go over 5 areas that helped us along the way. It was like a two step forward and one step back process. I think I can help you understand what needs to take place once you find out you have milfoil in your lake. The first thing is education. Whats going on here today is huge. You are getting the word out that there is probability that not if but when an invasive species will enter your lake. IF there is awareness through your Riparians and the public that is a huge step to take. The second is prevention. What are you doing now before you have it to prevent the possibility or to slow that possibility of invasive species getting into your lake. Things that are going on at your boat launches, is there anything you could be doing now to prevent EWM. They just got their first CD3 machine which will be implemented into a lot of their launches. Detection. You have a program in place to find out if there is a problem. The sooner you can get started the sooner you will get control Eradication. There are different methods. Lake Leelenau is using divers to hand pick certain small areas. They have not used chemicals yet. They are using mats and burlap. They found some areas to be 600 feet long and 30 feet wide. Large pieces of weighted burlap are used to cover the growth and suppress the sunlight and that is working for them. This method is experimental, but remember every lake is different. Information is out there. They got the mats from Lake Tahoe. Funding. It costs a lot of money. Their budget calls for about \$150,000 a year and is creeping up to about \$200,000 a year for just the milfoil project. They sat down with the directors of the DNR and their invasive species program. They told the Leelanau association it was their problem to fix. They will help educate the public but there is no money to fight invasive species. There is no state money to help fight invasive species. IF we address the 5 points he addressed we will be well prepared to fight the problem when it comes.

Kent asked if they have a Special Assessment District. Lonnie replied that last year they started out by knocking on doors requesting money and they were able to raise \$150,000. This is not sustainable, so they are in the process of setting up a lake preservation board. This is a process the state set up many years ago. It assesses the Riparians x amount of dollars, it is a separate board from the lake association that will be in control. It assures yearly funding coming in for the program. There are all kinds of issues surrounding this type of plan. Kent asked what we should be doing now to prepare for EWM when it happens. Lonnie stated we are going about it the right way. We are educating the people this is an probability. He said their lake association has 14 members. They are working to increase their numbers. It will take everyone working together to control the problem and stop the spread. We should try to organize around each lake and between all the lakes in the area. The spread is due to boats traveling from lake to lake. If Lake Leelanau has it, he says Ann Lake will have it too.

Kent asked what a CD3 machine is. It is a solar powered dry vac that has 5 tools that allow the boater to clean, drain and dry the boat and trailer as the state slogan suggests. It will suck

water out of the boat, a pressurized air hose to blow debris away, a mop to scrub the boat, a pick to get at small places and it has a wrench to open drain plugs. They would have preferred a boat wash system but do not have a water source for that. They decided on a CD3 instead. Statistically about 88% of milfoil contamination comes from boats entering from other lakes. This tool allows boaters to clean their boats before and after using the lake.

Ed Dewey: President of Duck Lake Green lake Property Owners Association

Ed complemented ALPOA for getting ahead of this. Much like other lakes, his lake association was caught unawares. In 2015 Green Lake and Duck Lake joined forces, he was elected president of the association and then they discovered EWM in their lake. At the time Duck Lake had no money and was difficult to convince the Green Lake membership to use their existing funding to aid Duck Lake. The township board had no idea who this lake association was, which left them "gob smacked". At the 2015 Annual Meeting they did an EWM presentation to let the Duck Lake residents know it was there. They had been doing weed surveys and when one resident found a suspicious plant they sent it to Grand Valley State University to be DNA tested. It was confirmed to be EWM.. They then went to the township board for help, noting that Interlochen School and a State Park are on the Lake. Luckily their township is proactive and a special assessment district was established. This takes a lot of time and they had about 30 acres of milfoil in the south cove that looked like carpeting. Eventually the township agreed to share the cost. They identified a vendor, did a survey and managed to do a treatment without a SAD. Because there was no SAD, each property owner had to give written permission to treat the lake. In 2017 a SAD was passed and for the past 5 years they have been managing the program. The SAD is in place for 5 years then they will review the results and decide if it is a good program or not. The meeting was last Thursday and he presented a study on fish which showed there was no difference in types or quantity of fish, the south cove is clear. The chemical product they chose for treatment is 90% inert ingredients that make the active chemicals sink to the bottom and not move away from the EWM beds in the current. It may seems like a large volume of chemical when it is weighed but it is designed to be heavy and sink to the bottom. He attended a meeting for Cedar Hedge Lake which is an 80 acre lake with 50 acres of heavy EWM mat. The township is trying to pass a SAD but a local petition to have the state pay for treatment stopped it. This is not going to succeed and in the meantime the EWM continues to thrive. This lake is close to Green Lake so it is likely that fishermen will move to another nearby lake to fish. He is very active in trying to coordinate treatment efforts.

Kent asked what their annual budget. Initial budget was \$23,000 and with mailing and other added expenses it was an additional \$3500 per year. Lake Front Property Owners expense is about \$100 annually. Back lot owners paid about 15% of this. This year, due to the control efforts on Green and Duck Lake, it has dropped to about \$60 annually for the riparians.

Kent asked the audience what were some of the impressions the panelists gave that were common to all three. Response: we need to continue to be proactive, its going to cost money. Maggie asked Kent to review what we have done so far.

Kent stated that we created a fund to help cover the first year of remediation. As it takes a while for a funding program to get established. We have a \$10,000 fund sequestered in CDs for the first year cost. We have also established a Lake Management Fund for the purpose of paying 50% of the cost of bringing in professionals to survey the lake, the township pays the remaining 50%. This costs ALPOA \$650-\$700. We have determined that a boat wash is not possible at our launch because we have to water or power source. He states he is very interested in the CD3 described earlier.

Questions: Is there a preferred depth for EWM. A: It really likes the 10 foot depth in most lakes, where there are sandy sholls and a drop off. Many places also have native pond week in that area

Q: What does a CD3 cost: A: there are 3 different types and they place them according to the volume of boat launches for that site

\$26,000 for the model he described earlier, \$12,000, and \$5,000 which has a couple of the features of the more expensive models. He cautions that someone needs to be with the machine to talk to boaters and show them why and how to use it. Otherwise it is just a machine. He notes that in Minnesota it is required to have a Clean Drain Dry program at each launch. They are working to educate the public.

Q: Sven asks about mats and burlap treatment plan if there are a lot of lures in the fabric. A: They have a special relationship with the tribe on Lake Leelanau and that treatment form is in coordination with the tribe. He described a treatment with ultra violet light.

The weevils are indigenous to our area and eat Northern Milfoil. But there are few of them. They will also eat EWM. They were not affected by chemical treatment. But results from weevil treatment are not predictable. He is not sure if they are available any longer. He repeated that it is good to try different things.

Long Lake does not treat every area but they do observe them. They have learned that treated areas never mat out again. The EWM may return but doesn't mat out. He reassures that we will find what works for our lake.

Q: Dave asked what exactly had no effect on the fish. Ed stated that residents were concerned chemical treatment would affect fish population. EGLEs survey determined there was none. He added that where milfoil is matted it is a dead zone with no fish in the area at all.

Comment: Now would be a good time to raise money, especially from fishermen. We should make it clear that their sport is ruined if milfoil is not controlled.

Q: Does burlap have to be replaced? The burlap degrades over time. Large mats they use burlap. Its just like weeds in the garden. Scuba divers pull out smaller sections. EWM spreads by segmentation and it doesn't take a large piece of the plant to start a new growth. We all have to become stewards of our lakes because the day is over the lake takes care of itself.

Education and awareness are key to success.