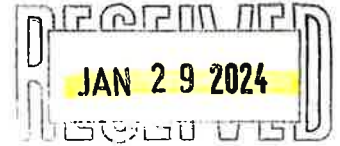


Appendix "C"  
28 Pages

From: Samantha, Steve and Anne Mills, 86 Deer Foot Trail, Spring Bay, P0P 2B0



To Whom It May Concern,

First of all, I'd like to apologize for my absence at this meeting but my family and I would be present if we could. I hope this letter will suffice to make my point.

We moved to Manitoulin Island five years ago and we, like so many others here, fell in love with the lakes, the forests and the wildlife on this Island.

Manitoulin Island is ecologically significant on a global scale, hosting 75 species at risk and 40 globally concerned species. It also is home to endemic species such as the Lakeside daisy. In 2021, the Manitoulin Island-Simcoe region was deemed a highly threatened ecoregion in Canada due to Manitoulin Island's significance for conservation.

Despite the role this island has for biodiversity, only 4% of the island's land is conserved, the rest of our beautiful forests are on private properties such as the property set for development.

So many people look at these forests and see land that is wasted, land that isn't doing anything. But this couldn't be further from the truth. Wild spaces like these store carbon, filter water, reinforce the shoreline, cool the water for aquatic wildlife, support pollinators, act as a buffer against extreme weather and serve as a haven for genetic diversity. Our truly wild spaces have diminished over these past few decades, with Northern Canada being one of the last safe havens for wildlife and wild spaces left in the world. Last summer, we lost 18.5 million hectares of Canadian forest to wildfires, with more chaotic seasons expected in the future. We need to protect what wild spaces we have left in a world that is constantly saying 'just a little bit more' without ever putting enough back. How will you offset the deforestation that will occur as a result of this development?

We are also deeply concerned about the pressure 39 new lots will have on the lake. Mindemoya has already been experiencing blue-green algae outbreaks. While algae is a common presence in surface water ecosystems, blue-green algae are brought about through the presence of excess nitrogen and phosphorus in the water, most commonly caused by human activity such as agricultural runoff and sewage. The Hydrogeological assessment performed on the site, states that phosphorus may exceed Provincial Water Quality Objectives, compounding the issue and increasing the time the lake will be inaccessible during the summer. Besides, why is the conversation 'How much more can the lake take?' When the conversation should be, 'How do we make the lake cleaner? How do we fix the blue-green algae in the lake and the invasive mussels' to improve the longevity and quality of the lake? We ask that you do your duty to protect our wildlife and the ecosystem of Lake Mindemoya.'

People don't come to Manitoulin Island for its thriving nightlife. They come to enjoy the pristine beaches and walk through their magnificent forests. Mindemoya Lake is at the heart of the Mindemoya community. It provides drinking water to our community, we boat, fish and swim in those waters. Our tourists come to the lake for its prized fishing and its beautiful blue colour. It defeats the purpose, therefore, if you cut down the forest and further degrade the lake to make

1 of 2

room for them. The houses that will be built won't serve our community, as they will be summer cottages that won't address the housing crisis. Our property taxes will be increased, our streets will be filled with traffic and construction, our hospital will experience an increase in capacity, and our lake, the beating heart of our community, will suffer as a result of it.

Lastly, the people of M'Chigeeng were not consulted on this project and a recent archeological survey confirmed the existence of historical indigenous habitation on the proposed development site. We share the lake with our Indigenous neighbours and the Lake's ecosystem should be protected to ensure their traditional hunting and fishing rights are preserved.

We need to be stewards of this land, we have a responsibility not just to the current residents but future generations to come. We want our grandchildren and great-grandchildren to be able to swim in Mindemoya Lake, catch its fish and marvel at its beauty. What will be left for them if we take it all now for the sake of profits? To push the lake more and more until it's filled with blue-green algae every summer and no one can go near it? Until everything that made Manitoulin Island special and beautiful is gone and the tourists with it?

I ask you, I beg you, to reconsider this proposal to move forward on this development. We, as the community, do not want this and you are supposed to represent us.  
Thank you for your time.

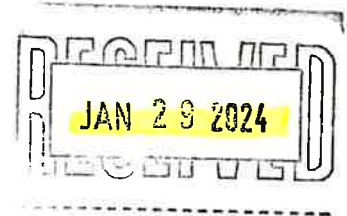
Steve, Anne and Samantha Mills



Manitoulin  
Nature Club

7 Lakeshore Road  
Kagawong, ON  
POP 1J0

January 28, 2024



Manitoulin Planning Board  
40 Water Street, Unit 1  
Gore Bay, ON  
POP 1H0

Attention: Ms. Theresa Carlisle, ACST

**RE: File #SUB2023-01, 18 Tracey Road**

As a community group whose mandate is to share knowledge and protect the flora, fauna and natural environment here on Manitoulin Island, the Manitoulin Nature Club would like to express the members' concerns regarding this proposed development on Lake Mindemoya.

Lake Mindemoya is a relatively densely populated lake with numerous cottages, seasonal residences and a large trailer park. How will the addition of 39 lots affect the water quality and the riparian zones of the lake? Riparian zones carry out critical functions on waterways such as: filter storm runoff; remove pollutants; provide habitat and food for a diverse group of animals; prevent shoreline erosion; provide shade that cools air and water temperatures; and, create a greenbelt forest with diverse tree and plant communities for outdoor enthusiasts. The more development that occurs, the greater the impact on all ecosystems around the lake and its residents, visitors, wildlife and vegetation.

We feel certain that the Manitoulin Planning Board will adhere to all best practices when it comes to ensuring that an Environmental Impact Statement (EIS) will be completed by the developer and that a comprehensive review of infrastructure needs or potential impacts on farmland and wild, natural areas will be carried out and made available to all stakeholders and residents on the lake.

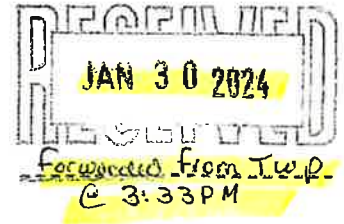
We understand that this is the beginning of your approval process, with many steps along the way, but the Manitoulin Nature Club would respectfully request that we be kept notified of any decisions made by the MPB as well as the outcome of the EIS, any potential adverse environmental effects and the proposed measures to mitigate those effects.

Sincerely,

Phyllis Cacciotti  
President, MNC

January 29, 2024

Re: SUB 2023-1  
Split Crow Partners Ltd C/O Lee Kieswetter  
39 lot development, Lake Mindemoya



Dear Mayor & Members of Council Central Manitoulin and Planning Board Members,

I am writing to express my many concerns regarding the proposed development at 18 Tracy Road on Lake Mindemoya.

I own the property at 6 Tracy Road, directly next to this proposed development. I was not given notice by the planning board but rather heard about it from a concerned neighbour. When I called the planning board they cited a wrong mailing address being the reason that I wasn't notified. I receive my property tax bills from MPAC faithfully every year so it's puzzling to me how my address was not on record.

The original sketch of the development that was sent out from the planning board also didn't even show my property. My property was completely gone and in its place was the Deerfoot Trail Subdivision. How can a planning board plan properly when they're not aware which properties about the proposed development? They corrected this and sent me a new one but I noticed that the same one that doesn't show my property existing is back in circulation.

The short notice provided for the upcoming planning meeting on January 30th is also a matter of concern. By the time I notified the planning board and got my mailing address updated along with an updated map showing my property, it was well into the month of January. The property I own at 6 Tracy Road is a seasonal property. I also winter away so how is one expected to make plans to attend a meeting on Manitoulin Island with such short notice in the dead of winter and notice was sent out over the holiday season when most people are away. The developer has been advertising his proposed subdivision on social media for a couple years now so clearly a plan has been in place for many years.

In addition to the procedural errors and lack of transparency outlined above, I have concerns about the water quality. The water quality in a small lake that has extensive, existing development seems to have been overlooked. For example, Lake Manitou is sparsely developed but has a development freeze in place over water quality. Lake Mindemoya has experienced harmful algae blooms and beach closures and issued health warnings in the past so I don't see how further development won't exasperate the situation. A proper water quality analysis and fish habitat study must be done in order to properly address the limit of capacity for development.

Recent development on Monument Road is already an issue. Many hidden driveways, pedestrians walking their pets and people out biking has led to this being a treacherous stretch of road. No sidewalks, no street lights, sharp corners. And more than once now I've encountered loose cows just running down the road. More traffic will only make this worse.

As far as the argument being made that these are seasonal homes, how are "seasonal homes" going to help the housing shortage on Manitoulin? On the topic, what defines a seasonal property? Who will be monitoring the "seasonal" use? We are already stretched thin on essential services on our island so how will 39 more lots being developed assist in someone getting a family doctor?

In conclusion, I strongly recommend providing residents and the planning committee with more time to thoroughly examine this proposed development.

Sincerely,  
Meredith Morris  
President #1753479 Ontario Limited  
6 Tracy Road, Spring Bay

Curt Beggs  
80 Deerfoot Trail  
Spring Bay, On, POP 1B0  
(705) 507 5484

Manitoulin Planning Board  
40 Water Street Unit 1  
Harbour Centre Bld.  
PO Box 240  
Gore Bay  
Ontario  
POP 1H0



Re: SUB2023-001

Good Evening Board Members and the many concerned residents that are in attendance tonight.

My name is Curt Beggs, I am here representing myself and the other property owners within Deerfoot Subdivision with relation to the matter of the new 39 lot proposed development referred to as SUB2023-001. We are here for the following reasons:

1. We are here to express our opposition to this project and reasons why we believe the project should not be approved.
2. We are here to ensure that all provisions of Ontario Law in respect to planning and Environment are met.
3. We are here to request that the area for giving notice of this project be given to a wider group of people than is specified under the *Ontario Planning Act*.
4. We are here to express our concerns about health, safety and infrastructure needs

#### Our Opposition

Many of us are convinced that this development will destroy or adversely affect our local ecosystem and infrastructure. For example, EXP, the developer's third-party engineering firm, in its Hydrology report of the area indicated that the Lake Mindemoya ecosystem is already under threat. These threats include excessive E. Coli and Total Coliform at several locations also showing excessive hardness and aluminum. We note that since 2009 the MNR has placed Lake Mindemoya on watch and published key findings of pollution and decline in fish population. Environmental studies beyond what the developer has provided need to be conducted by proper agencies, to ensure there is no negative change in our ecosystem.

We are also concerned with the construction mitigation plan set out in the documents submitted by Split Crow Partners on March 23 2023. While this document appears to show the plan process and construction protocol to safely redevelop the subject lands, there appears to be no effective enforcement method to ensure compliance with the mitigation plan. Even if the development plan is approved, we believe that this issue of compliance must be ensured through effective enforcement measures. We note in passing that construction of the roadway has already begun despite the fact that the development has not yet been approved. This gives us cause for

concern as to how effective the planned construction protocol set out by the Split Crow partners will be.

The Archeological Assessment of the area dated January 8, 2024 called for stage three assessments to be conducted in the areas referred to as BkHn-9 and BkHn-10. We are concerned with how and when these assessments would be undertaken and who will supervise to ensure that they are completed in accordance with the appropriate protocols. We assume that the UCCM had been made aware of the Archeological assessments finding of artifacts.

For the reasons stated in this brief we believe that approval of this development should not be given, or should be delayed until our concerns are addressed.

#### Provisions of Ontario Law

We do not intend to set out in any detail the provisions of Ontario Law that may apply to this project, but, if it is approved the agreement should specifically state who is responsible for ensuring compliance with that law.

#### Notice Requirements

Under the Planning Act people within 120m of the development are to be notified of new developments. We are concerned that the 120m rule does not take into account the fact that this is a very rural area and people beyond the 120m limit will be seriously affected by the proposed development. Their view will not be heard or considered in the approval process. We have already noted some of the impacts on the local ecosystem. Furthermore, it is going to have a definite impact on the provision of health care, not only to the people within 120m but to people well beyond this limitation.

#### Health, Safety and Infrastructure

1. The development will impose new burdens on an already severely over-burdened health care system within the community. Most significantly the Mindemoya Hospital is already taxed to the point where there are threats of temporary closures.
2. The proposed development will also impose additional burdens on an already overwhelmed garbage transfer system as discussed on January 4 during a meeting of our municipal council. We are concerned that the cost of any improvements to garbage transfer will be imposed on existing ratepayers while leaving the developers to reap the benefit they have not paid for.
3. In terms of road safety, council is well aware that Tracey Road is not up to standard. It is an unlit roadway that will see a major increase in traffic. In Spring of 2023 the road became impassible resulting in residents becoming stuck. Thankfully there were no emergencies during this timeframe. Furthermore, there are residents along the road that will be subjected to more dust from the traffic.
4. In respect to our Environment, Part 1 of the Planning Act it states that the Planning Board must protect the ecological system, including natural areas, feature and functions and the

protection of agricultural resources of the Province. Environmental studies beyond what the developer has provided need to be conducted by the appropriate agencies, to ensure there is no negative change in our ecosystem.

#### Financial Security

We are concerned that the development agreement may not contain sufficient provision for monetary payments if the developer fails to complete the construction of any new infrastructure, or improvements to existing infrastructure, that may be required under the development agreement. In our opinion, the developer should be required to post a bond of sufficient value to ensure that all municipal costs are recuperated by the end of the construction of the new development.

#### Conclusion

In conclusion, we do not feel a development this size in the best interests of our community and environment. It will impact the entire lake and therefore the development plans must be treated with the due diligence it deserves. As noted above, it is our preference that the development agreement not be approved, however, if it is to be approved, then that approval should not be given until all of the concerns set out in our brief are addressed.

Thank you for allowing us the opportunity to address you tonight.

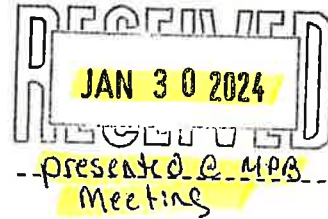
**Curt Beggs**  
**80 Deerfoot Trail**  
**Spring Bay, On, P0P 1B0**  
**(705) 507 5484**

January 30, 2024

Manitoulin Planning Board (revised Jan 27/24)

Re: SUB 2023-01

Split Crow Partners Ltd c/o Lee Kieswetter  
39 Lot Development Mindemoya Lake



Members of Planning Board

As you all are aware of the proposed subdivision development as mention above, I have the following response on behalf of the Deer Foot Trail and area Residents.

1. First of all no one is apposed to economic development, I for one agree. But any development should fit the criteria of the authorities, the public which Council represents needs to take the lead and do a proper analysis to see if it fits the municipalities needs for now and in the future, and keep the public informed with the whole process. The analysis should be conducted independently, and report on existing density, existing lot availability, existing water quality all Ministry requirements be it environmental and fisheries and review and recommend were development should or should not take place. The subdivision agreement will not cover this type of information and must be conducted prior to entertaining this development.

The urge to authorize this development based on tax revenue can be difficult to appose, but when a full picture is revealed the urge should disappear. When we lose the fishery and the lake water quality the economic impact will become evident when fisherman and recreational users abandon the lake including poor resales values. This also affects the down stream river to Providence Bay, one of the largest spawning rivers in Central Manitoulin.

Central Manitoulin needs to develop the bylaw requirements for larger scale developments.

2. Notification by the planning board and Central Council was extremely poor IE: planning board missed some residents within there 120 m notification zone and Central Manitoulin's notification was non existent.

- for a project of this size planning should have notified all persons on the lake not just the minimum distance that is required under normal circumstances. No planning board postings were evident in front of the property in question until January 11,2024

- Central Manitoulin should have advised all residents, be it by newsletter via the tax roll addresses, news paper adds etc.

In both cases transparency by all was extremely poor.

10f6



- why is this project looking for approvals when a large percentage of people are gone, makes me wonder was it a planned process to remove potential objections. Transparency again an issue

Central should have recognized this and had the process delayed until summer.

3. Once the property sold to the existing Group, and rumours and statements from the owner circulated I spoke to the Municipality.

Statement was made its zoned Agricultural and one home is allowed and the farm house is it.

4. The M'Chigeeng First Nation didn't receive notice, maybe due to Planning standards regarding distance to the development but should have done so in respect, nor did the Lake Mindemoya Stewardship group, a very important group who work tirelessly to bring lake water quality to us all.

5. Once I was made aware of the proposal by neighbours I decide to visit the planning office early January to ask about the development. The process was explained and I was shown planning documents one being the agricultural zoning for the property in question. I mentioned to the gentleman that it appeared the agricultural zone was wrong, it wasn't showing the actual extent of the active farmed area.

I have provided the drawing of the proposed development and a sketched that shows actual active farmed area. As you can see the better half of the proposed development is in the active farmed area.

The sketch I provided was verified on areal photos of the property that is part of the Mitigation report provided by the developer on Page 19..

The Agricultural Zone on its own should affect this application in a negative way. Why are we encouraging development on agricultural lands. I have provided photographic proof of the active farming operation, the development obviously is encroaching.

6. Central Manitoulin cannot continue to allow new development on lake Mindemoya other than on existing lots, until an analysis is done as far as quality of water and the determination of the limit capacity for development. The Lake Mindemoya Stewardship Group must be consulted.

7. Allowing this development will set the benchmark for further agricultural and rural lands surrounding the lake, this is precedence setting. A number of property splits have been allowed along Monument road over the very recent past I believe approximately 10 in total. Some of these properties slope severely to the lake with all drainage flowing unhindered to the lake. Why are we continuing to pollute the lake with added development. Proper development plans are a must to establish how much development should be allowed before its to late.

8. The existing lake development is at capacity and until a comprehensive study is done with all the authorities including the public no new development should be entertained, just as it was stated a short time ago development would be allowed on existing lots only. The study should also include the affect on the salmon and the trout spawning river that outlets at Providence Bay, the levels of contamination is significant and consequently will affect the spawning grounds and again the economic impact with the continued loss or reduction of the fishery.

9. Central Manitoulin must develop a master plan for development in the Mindemoya area that would designate areas that are suitable for all types of uses including lake front residential, commercial and urban residential. Without a plan there is no sense to a knee jerk response to development that will come to haunt everyone in the future. Once the lake goes bad demand and property values will go down and so will taxes.

10. The extra traffic, will add to the maintenance effort of the municipality and the affect it will have to the public. Tracey Road and Monument Road will take the brunt of the traffic.

11. The proposal will not build out over night and according to Central Manitoulin bylaw will allow for trailers on the lots. These trailers could be there indefinitely, that would deflate values of the existing neighbourhood, all for the sake of profits to a developer.

12. The following excerpts from the Official Plan are very relevant to this development:

- Goal is to increase agriculture uses over the long term.
- Discourage the fragmentation and abandonment of existing agricultural uses.
- Expansion of shoreline areas, only permitted via an Official Plan Amendment.
- Expansion of Shoreline Area may be permitted as long as it does not result in fragmentation of designated Rural or Agricultural lands.
- Expansion to shoreline areas that promote strip development where it results in the fragmentation of Rural or Agricultural areas will generally not be permitted.

13. The studies that have been provided by the developer are self serving and do not address the impact to the broader public and the lake. As the consultant indicated "the report is based on limited investigation" and was to "perform there work within limits prescribed by there client",.

The report did indicate "several health related exceedances were noted in surface water sampling".General comments by the consultant like "should be acceptable" is troubling!

14. The latest fishery report for Lake Mindemoya 2017 indicates a large reduction in the fish population, and has been declining for a number of years.

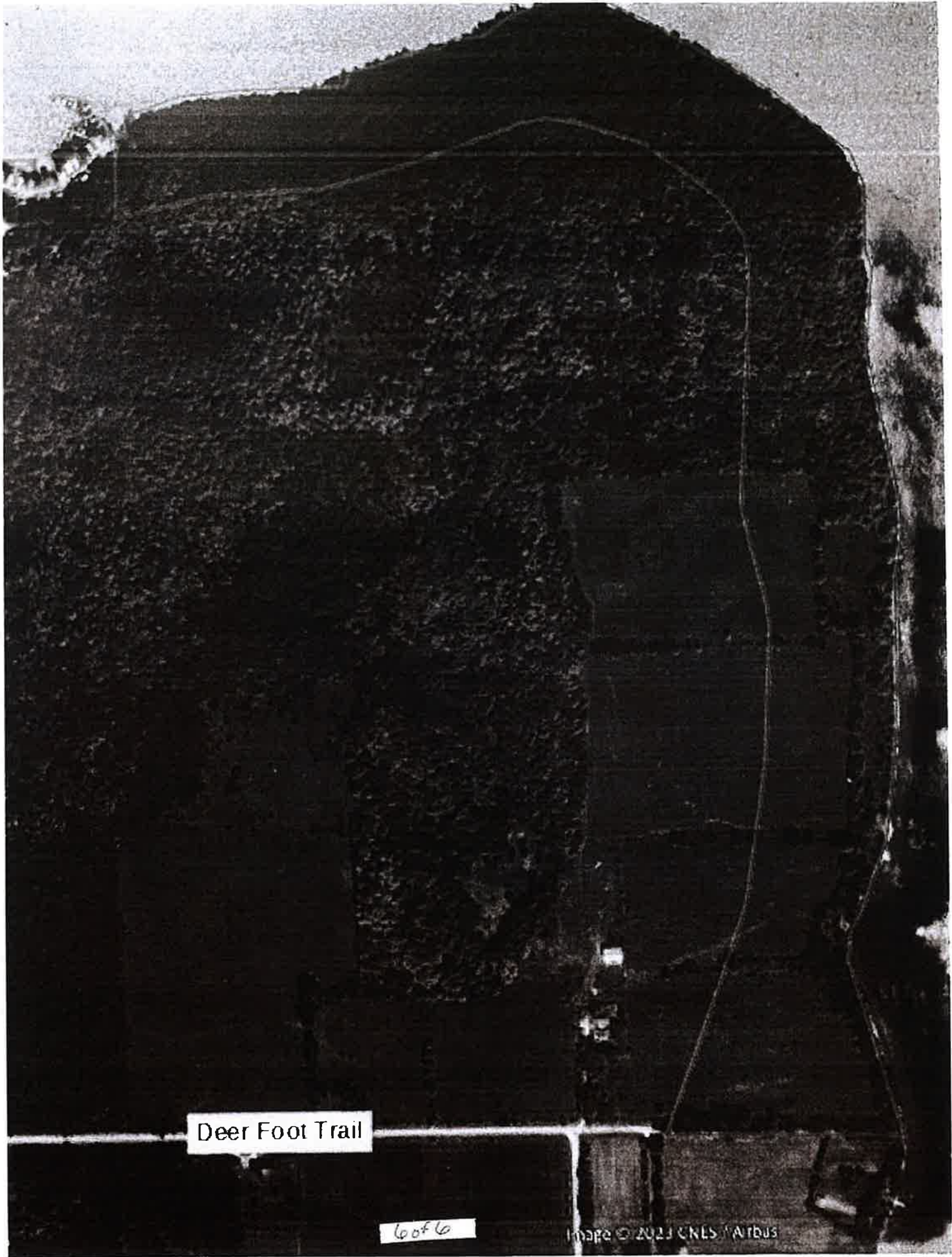
Who knows what the status is now, do we want to have the fishery decline to a point that again has an economic impact to Mindemoya.

15. In summary, I ask that the Planning Board in the best interest of Lake Mindemoya and its residents put a hold on this application including any other current and future development proposals. As in the recent past development for the time being be allowed only on existing lots. This policy should be followed until proper land development plans, review the existing occupancy load on the lake and determine if the lake can sustain the existing development we have including the diminishing fish habitat.

I would like to be advised of the outcome of submission SUB 2023-01

Thank You  
Ken Rautiainen  
70 Deer Foot Trail  
deerfoot2021@gmail.com





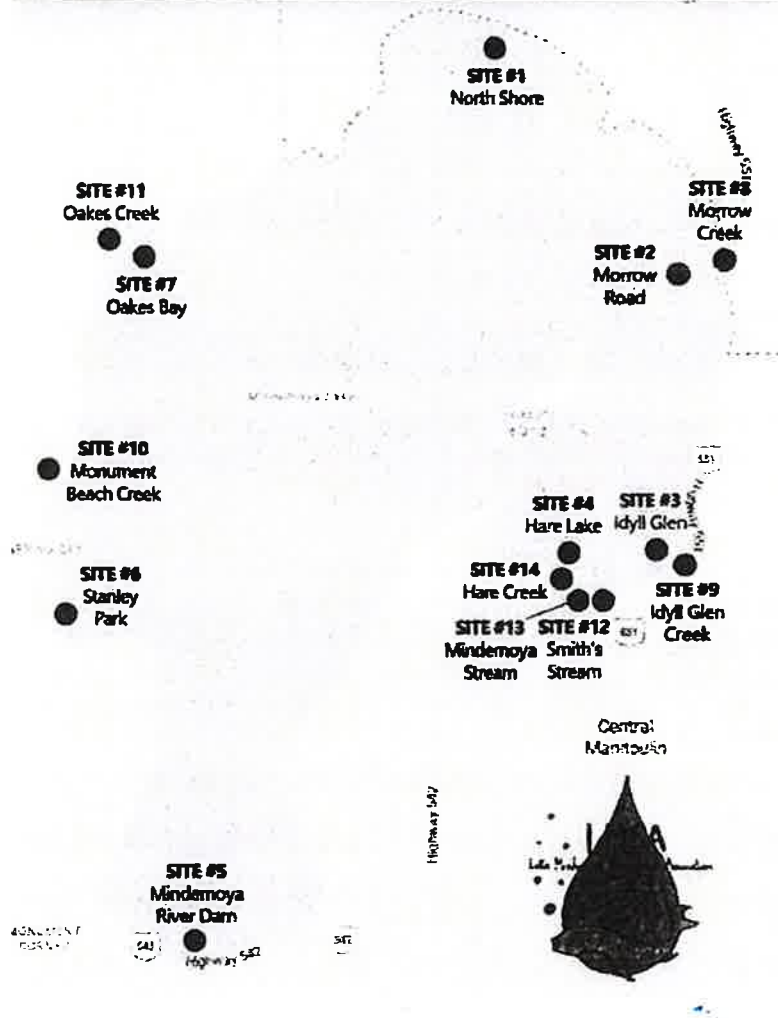
Deer Foot Trail

6 of 6

Image © 2013 CNLS Airbus

## 2023 Lake Mindemoya Water Testing Full Summary Report

### Lake Mindemoya Stewardship Association Water Sampling Locations



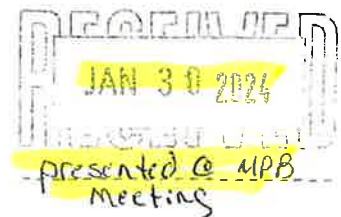
Lake Mindemoya Water Testing by the LMSA (Lake Mindemoya Stewardship Association) consisted of water sampling conducted at fourteen specific locations in all areas of the lake.

All water sampling bottles and instructions were provided by Wahl Water in Mindemoya.

Using GPS technology, LMSA volunteers Stan Drystek, Bill Blackwood and Jeff MacKenzie used their boats and /or snowmobiles to collect the necessary samples.

Water samples were then sent off to Testmark Laboratories in Garson via Wahl Water transport directly for analysis. All sample sites, sample collection and processes followed the same protocols for proper collection of water samples as provided by the Laboratory.

Water samples were collected and tested 5 times (May 31st, June 27th, July 18th, August 30th and October 4th). See the specific test results for each location and at each testing date in the "Water Sampling Results Summarized" which is attached. Also attached is a brief summary of the 6 variables that were tested and overall resulting trends over the testing year.



## **Summary of Observed Trends over the 2023 Lake Mindemoya Testing Period:**

### **Nitrate/Nitrite :**

Can be present in water from natural processes, like plant decay. Also present in many fertilizers used on yards, golf courses and crops. Other sources include discharge from sewage systems and animal wastes. High levels in water can be from runoff in the spring or after periods of heavy rainfall and the absence of a "soft shoreline" (a shoreline where there is an absence of natural vegetation to intercept and absorb the runoff water before it flows directly into a water body).

Our test results for Nitrate and Nitrite levels in Lake Mindemoya were consistently low (<0.05) over the 5 testing periods except for the slightly higher Nitrate and Nitrite results at Site's 12, 13 & 14.. This is good news for Lake Mindemoya and a very important "benchmark" to keep track of for the future.

### **Phosphorus:**

Phosphorus is an important nutrient for plant growth. In lakes and streams, phosphorus can be dissolved in the water, attached to particles floating in the water and found in the bodies of all living organisms. Things like sewage, agricultural runoff and fertilizers can contribute to higher levels of phosphorus in water bodies.

Our test results for Phosphorus in Lake Mindemoya were mostly low (between 0.002 and 0.003) over the testing periods except for five locations which registered values in exceedance of the guideline of <0.01 mg/L. This is a change from the 2022 testing values reported. It is an indication that phosphorus is entering the lake through the streams tested or other springs which feed directly into lake Mindemoya.

### **Total Dissolved Solids (TDS):**

There are four categories of TDS: minerals, salts, dissolved metals and organic matter. Materials may leach into water from sewage, water treatment chemicals, agricultural runoff or industrial wastewater. Natural sources, like soils and rocks may also contain TDS. Runoff or the flow of rainwater directly into a waterbody can carry TDS, and even the pipes and plumbing materials used to carry water to a home from a lake may be a TDS source.

TDS readings are reported in parts per million (ppm) values. The Canadian Drinking Water Quality Guidelines (CDWQG) acceptable values range from about 200 to 300 ppm levels with an acceptable recommended maximum value of 500 ppm. Once TDS values reach or exceed 1,000 ppm the water is not recommended for human consumption. As indicated below, our testing results indicate a wide range of TDS levels at different times and locations on the lake, with some getting very close to exceeding "acceptable values" according to the CDWQG.

### **Our test results for (TDS) in Lake Mindemoya had a Wide Range of Results\***

(\* at various sites and testing dates. See the test results in the Water Sampling Results Summarized chart).

Site 1 had a low reading of 110 in May and a high of 200 in June. The values remained fairly consistent with the testing over the five samples taken.

Site 2 had a low reading of 140 in August and a high of 240 in June & October. The values remained fairly consistent with the testing over the five samples taken.

Site 3 had a low reading of 130 in May and a high of 230 in June. The values remained fairly consistent with the testing over the five samples taken.

Site 4 had a low reading of 160 in August and a high of 220 in June. The values remained fairly consistent with the testing over the five samples taken.

Site 5 had a low reading of less than 90 in May and a high of 190 in June. The values remained very consistent with the testing over the five samples taken.

Site 6 had a low reading of 190 in May and a high of 260 in October. The values remained very consistent with the testing over the five samples taken.

Site 7 had a low reading of 100 in May and a high of 220 in June. The values remained very consistent with the testing over the five samples taken.

Site 8 had just one reading of 230 in May which was the only sample taken.

Site 9 had just one reading of 210 in May which was the only sample taken.

Site 10 had just one reading of 220 in May which was the only sample taken.

Site 11 had a low reading of 100 in May and a high of 240 in June. The values remained fairly consistent with the testing over the three samples taken.

Site 12 had a low reading of 130 in July and a high of 310 in June. The values changed significantly over the testing for the two samples taken.

Site 13 had a low reading of 300 in July and a high of 340 in June. The values remained very consistent with the testing over the five samples taken. These were the highest levels tested for TDS of all sites.

Site 14 had a low reading of 180 in June and a high of 250 in July. The values remained fairly consistent with the testing over the two samples taken.

#### **Test Results over this One Year Period Seem to Indicate the Following:**

There is a wide range of TDS readings at different sites and at different times of the testing period. The values had more consistency as compared to the 2022 results. They did fluctuate significantly with a high of 340 ppm recorded at Site #13 and the lowest value of 90 ppm recorded at Site #5.

The overall results would suggest that TDS elements do not come from the lake, but come into the lake from the surrounding environment. The highest values were recorded in June (a high runoff month) at Sites 1, 2, 3, 4, 5, 7, 11 and 13. The stream testing had higher TDS levels than the lake sites.

The general lower readings this summer due to very dry summer conditions and run off unlike 2022 once again suggest that total dissolved solids inflow into Lake Mindemoya is related to surface runoff during the Spring and high rain events and some parts of the Lake are more vulnerable to these occurrences than others. Once again, perhaps the importance of a "soft shoreline" around the lake.

#### **pH:**

pH is a measure of how acidic/basic water is. The range goes from 0 to 14, with 7 being neutral. pH readings of less than 7 indicate acidity, whereas a pH of greater than 7 indicates a base (non-acidic water condition).



Our test results for Lake Mindemoya were consistently between 7.54 and 8.33 at all test sites over the 5 rounds of testing. These results reflect the fact that Lake Mindemoya has a limestone (which is basic) geology and there is no acidic leaching into the lake. Once again good news.

**Note for Bacterial Testing:**

**NDOGT (No Data: Overgrown with Target)**

This is a classification where water with a NDOGT test result is unsafe to drink. When there is a NDOGT result, the test has a large number of bacteria present and Total Coliforms and/or E.coli are visible to the analyst, but it is difficult to determine exactly how much.

**Coliform Bacteria:**

Coliform bacteria are organisms that are present in the environment and in the feces of all warm-blooded animals and humans. Coliform bacteria will not likely cause illness. However, their presence in drinking water indicates that disease-causing organisms (pathogens) could be in the water system.

Our test results for Lake Mindemoya Coliform results have come up with results over our 14 testing periods that suggest some concerns. All 7 lake test site results are higher than the acceptable parameter levels of the Canadian Drinking Water Quality levels. Furthermore, lake testing sites recorded a NDOGT result in June for Site #2 & #7, May for Site #4, August for Site #6 & #7 as well as October for Site #7.

All Seven stream/creek locations tested for NDOGT for all samples taken in this round of testing. This is significant as it means Coliform and e.Coli bacteria are entering the lake via the streams and creeks tested.

**Escherichia coli (E. Coli):**

Bacteria found in the environment, foods, and intestines of people and animals. E. coli are a large and diverse group of bacteria. Although most strains of E. coli are harmless, others can make you sick or be fatal. Some kinds of E. coli can cause diarrhea, with others causing urinary tract infections, respiratory illness, pneumonia and other illnesses.

Our test results for Lake Mindemoya E.Coli have come up with results over our 14 testing periods that suggest some concerns. 5 of the 7 Lake Sites and all 7 stream/creek test site results are higher than the acceptable parameter levels of the Canadian Drinking Water Quality levels.

The CDWQG parameter for E. coli is 0 per 100 CFU's.

None of the 14 tested locations met the 0 / 0 guideline specified in the Canadian Drinking Water Quality Guidelines. All of the stream/creek locations had an overgrown bacterial status for the entire May to October testing season.



NDOGT - No Data: Overgrown with Target Bacteria  
 Water with a NDOG T test result is unsafe to drink  
 When there is a NDOG T result, the test has a large number of bacteria present and Total Coliforms  
 and/or E. coli are visible in the testing, but it is difficult to determine exactly how much.  
 CDWQG - Canadian Drinking Water Quality Guidelines

NT - Parameter Not Tested  
 Value Exceeds Parameter Level set in Canadian Drinking Water Quality Guidelines

LMSA	Units	Site #1		Site #2		Site #3		Site #4		Site #5		Site #6		Site #7		CDWQG
		Sept 8th 2021	March 19th 2022	June 1st 2022	July 15th 2022	Aug 10th 2022	Oct 4th 2022	May 31st 2023	June 27th 2023	July 18th 2023	Aug 30th 2023	Oct 4th 2023				
Nitrite	mg/L	<0.05	<0.05	<0.05	NT	NT	NT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<3.0 mg/L
Nitrate	mg/L	<0.05	<0.05	<0.05	NT	NT	NT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<10.0 mg/L
Phosphorus	mg/L	NT	NT	NT	0.018	0.002	0.003	0.003	0.006	0.008	0.002	0.002	0.002	0.002	0.002	<0.01 mg/L
TDS	mg/L	180	150	400	180	180	270	110	200	130	160	160	130	130	130	<500 mg/L
pH		8.34	7.78	8.19	8.37	8.18	8.11	7.88	8.14	8.22	8.24	8.24	8.12	8.12	8.12	7.0 - 10.5
Total Coliform	CFU/100mL	21	189	35	26	NDOGT	1	5	15	14	45	45	18	18	18	0 CFU/100ml
Escherichia coli	CFU/100mL	1	2	0	15	NDOGT	0	0	0	8	2	2	12	12	12	0 CFU/100ml
Temperature	Degrees Celsius							18.5	20.8	20.5	19.4	22.2	22.2	22.2	22.2	

LMSA	Units	Site #2		Site #2		Site #2		Site #2		Site #2		Site #2		Site #2		CDWQG
		Sept 8th 2021	March 19th 2022	June 1st 2022	July 15th 2022	Aug 10th 2022	Oct 4th 2022	May 31st 2023	June 27th 2023	July 18th 2023	Aug 30th 2023	Oct 4th 2023				
Nitrite	mg/L	<0.05	<0.05	<0.05	NT	NT	NT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<3.0 mg/L
Nitrate	mg/L	<0.05	<0.05	<0.05	NT	NT	NT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<10.0 mg/L
Phosphorus	mg/L	NT	NT	NT	<0.002	<0.002	<0.002	0.006	0.006	0.007	0.003	<0.004	<0.004	<0.004	<0.004	<0.01 mg/L
TDS	mg/L	170	50	280	80	310	470	170	240	170	140	240	240	240	240	<500 mg/L
pH		8.35	8.16	8.3	8.32	8.23	8.07	8.04	8.19	8.12	8.32	8.15	8.15	8.15	8.15	7.0 - 10.5
Total Coliform	CFU/100mL	11	27	3	20	NDOGT	27	3	NDOGT	30	33	13	13	13	13	0 CFU/100ml
Escherichia coli	CFU/100mL	3	0	0	0	NDOGT	4	0	NDOGT	2	0	9	9	9	9	0 CFU/100ml
Temperature	Degrees Celsius							17.5	20.1	20.2	18.8	21.8	21.8	21.8	21.8	

LMSA	Units	Site #3		Site #3		Site #3		Site #3		Site #3		Site #3		Site #3		CDWQG
		Sept 8th 2021	March 19th 2022	June 1st 2022	July 15th 2022	Aug 10th 2022	Oct 4th 2022	May 31st 2023	June 27th 2023	July 18th 2023	Aug 30th 2023	Oct 4th 2023				
Nitrite	mg/L	<0.05	<0.05	<0.05	NT	NT	NT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<3.0 mg/L
Nitrate	mg/L	<0.05	<0.05	<0.05	NT	NT	NT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<10.0 mg/L
Phosphorus	mg/L	NT	NT	NT	<0.002	<0.002	<0.002	0.002	0.005	0.008	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01 mg/L
TDS	mg/L	180	60	280	100	340	210	130	230	160	160	170	170	170	170	<500 mg/L
pH		8.38	8.1	8.28	8.32	8.26	7.79	8.08	8.19	8.21	8.27	8.12	8.12	8.12	8.12	7.0 - 10.5
Total Coliform	CFU/100mL	4	26	6	99	NDOGT	15	12	13	22	18	28	28	28	28	0 CFU/100ml
Escherichia coli	CFU/100mL	1	0	0	15	NDOGT	24	2	0	8	4	19	19	19	19	0 CFU/100ml
Temperature	Degrees Celsius							17.1	20.3	20.1	18.7	21.4	21.4	21.4	21.4	



NDOGT - No Data: Overgrown with Target Bacteria  
 Water with a NDOGT test result is unsafe to drink  
 When there is a NDOGT result, the test has a large number of bacteria present and Total Coliforms  
 and/or E. coli are viable in the testing, but it is difficult to determine exactly how much.

CDWQG - Canadian Drinking Water Quality Guidelines

NT - Parameter Not Tested

Value Exceeds Parameter Level set in Canadian Drinking Water Quality Guidelines

LMSA	Site #4		Site #4		Site #4		Site #4		Site #4		Site #4		Site #4	
	8 sept 8th 2021	March 15th 2022	June 1st 2022	July 13th 2022	Aug 10th 2022	Oct 4th 2022	May 31st 2023	June 27th 2023	July 16th 2023	Aug 30th 2023	Oct 4th 2023	CDWQG		
Units	Hare Creek													
Nitrite mg/L	<0.05	<0.05	<0.05	<0.05	NT	NT	<0.05	<0.05	<0.05	<0.05	<0.05	<3.0 mg/L		
Nitrate mg/L	<0.05	0.17	<0.05	<0.05	NT	NT	<0.05	<0.05	<0.05	<0.05	<0.05	<10.0 mg/L		
Phosphorus mg/L	NT	NT	NT	<0.002	<0.002	<0.002	0.002	0.008	0.008	0.002	<0.002	<0.01 mg/L		
TDS mg/L	180	50	370	140	180	180	180	220	190	180	170	<500 mg/L		
pH	8.35	7.86	8.32	8.36	8.27	8.11	8.02	8.21	8.24	8.27	8.12	7.0 - 10.5		
Total Coliform CFU/100mL	7	184	4	17	NDOGT	8	NDOGT	17	12	23	7	0 CFU/100ml		
Escherichia coli CFU/100mL	3	8	0	0	NDOGT	3	NDOGT	2	4	10	8	0 CFU/100ml		
Temperature Degrees Celsius							18.2	20.9	20.1	18.7	22.1			

LMSA	Site #5		Site #5		Site #5		Site #5		Site #5		Site #5		Site #5	
	8 sept 8th 2021	March 15th 2022	June 1st 2022	July 13th 2022	Aug 10th 2022	Oct 4th 2022	May 31st 2023	June 27th 2023	July 16th 2023	Aug 30th 2023	Oct 4th 2023	CDWQG		
Units	Mind. R. Dam													
Nitrite mg/L	<0.05	<0.05	<0.05	NT	NT	NT	<0.05	<0.05	<0.05	<0.05	<0.05	<3.0 mg/L		
Nitrate mg/L	<0.05	<0.05	<0.05	NT	NT	NT	<0.05	<0.05	<0.05	<0.05	<0.05	<10.0 mg/L		
Phosphorus mg/L	NT	NT	NT	<0.002	<0.002	0.003	<0.002	0.007	0.008	<0.002	<0.004	<0.01 mg/L		
TDS mg/L	180	<20	440	110	320	230	80	180	170	180	130	<500 mg/L		
pH	8.34	8.23	8.25	8.33	8.28	8.11	8.07	8.17	8.23	8.33	8.1	7.0 - 10.5		
Total Coliform CFU/100mL	10	0	NDOGT	7	NDOGT	15	1	43	4	36	8	0 CFU/100ml		
Escherichia coli CFU/100mL	5	0	NDOGT	3	NDOGT	1	0	8	2	18	5	0 CFU/100ml		
Temperature Degrees Celsius							15.0	21.0	20.0	18.6	21.4			

LMSA	Site #6		Site #6		Site #6		Site #6		Site #6		Site #6		Site #6	
	8 sept 8th 2021	March 15th 2022	June 1st 2022	July 13th 2022	Aug 10th 2022	Oct 4th 2022	May 31st 2023	June 27th 2023	July 16th 2023	Aug 30th 2023	Oct 4th 2023	CDWQG		
Units	Stanley Park													
Nitrite mg/L	<0.05	<0.05	<0.05	NT	NT	NT	<0.05	<0.05	<0.05	<0.05	<0.05	<3.0 mg/L		
Nitrate mg/L	<0.05	<0.05	<0.05	NT	NT	NT	<0.05	<0.05	<0.05	<0.05	<0.05	<10.0 mg/L		
Phosphorus mg/L	NT	NT	NT	0.002	<0.002	<0.002	<0.002	<0.002	0.004	0.017	0.007	<0.01 mg/L		
TDS mg/L	210	50	240	160	100	210	180	240	180	200	280	<500 mg/L		
pH	8.35	8.2	8.32	8.36	8.28	8.07	8.08	8.17	8.22	8.32	8.12	7.0 - 10.5		
Total Coliform CFU/100mL	8	11	44	18	NDOGT	13	11	22	18	NDOGT	15	0 CFU/100ml		
Escherichia coli CFU/100mL	4	0	0	2	NDOGT	12	1	3	4	NDOGT	2	0 CFU/100ml		
Temperature Degrees Celsius							17.0	22.5	19.9	18.5	21.4			





## Our Focus Areas

The water quality as well as the "lake experience" for waterfront property owners, local residents and tourists must be preserved. To this end, focus areas for this body will include such issues as:

Addressing unauthorized (without permits and approvals) shoreline modifications that encroach on the marine allowance land that surrounds the lake as per Municipality of Central Manitoulin By-Law 2015-10.

Increased water testing to confirm that all "high density" and residential developments around the lake are compliant with current Federal, Provincial and Municipal water quality requirements and standards.

Preservation of current fish populations by increased enforcement of fish quotas, fishing seasons and support of any fish restocking programs.

Supporting and encouraging the enhanced development of several public beach locations on the lake to ensure that local residents and visiting tourists have an opportunity to enjoy the waters of Lake Mindemoya.

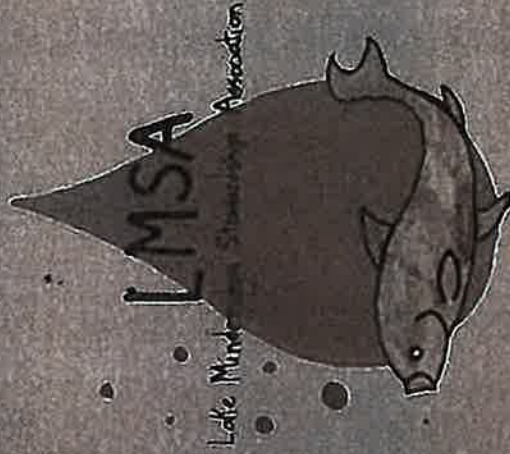
Promoting educational information on responsible land/water use by both local residents and tourists to minimize the "ecological footprint" that our actions and activities have on Lake Mindemoya.

Preventing excessive shoreline erosion due to high water levels as well as excessive fluctuations in lake level controls.

## What is the LMSA?

It is a group of Lake Mindemoya property owners who are caring for the lake by undertaking water testing of Lake Mindemoya throughout the year with funds provided by the Municipality of Central Manitoulin.

The Association was formed in the summer of 2021, and is working in partnership with Central Manitoulin Council as well as Billings Township to protect and look after the water quality of Lake Mindemoya, now and in the future.



## How to Become a Member

Membership is \$20.00 per Year to Join our Association

Mail: Cheque payable to LMSA  
81 John Street, Spring Bay, ON, P0P 2B0  
Interac Transfer: lakemindemoya@gmail.com  
(Auto Deposit Enabled)

## Lake Mindemoya Stewardship Association

Are you a property owner on Lake Mindemoya?  
Are you passionate about the lake?

Are you concerned about water quality?

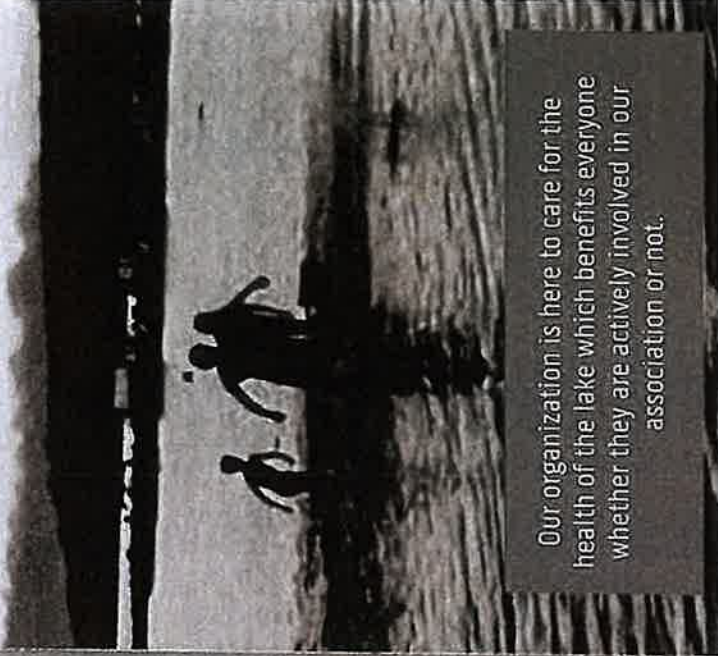
Are you worried about the lake's environment?

Do you own a business on Lake Mindemoya?

Looking to help preserve the "lake experience"?

Are you a frequent visitor to the lake?

The Lake Mindemoya Stewardship Association (LMSA) is inviting you to become a member and share in caring for the quality of the lake water and protecting the environment.



Our organization is here to care for the health of the lake which benefits everyone whether they are actively involved in our association or not.

Our Association is conducting water testing on a regular basis at multiple locations around the lake. The purpose is to monitor the water quality of the lake from season to season in order to determine if there is impact on water quality as a result of shoreline development and/or land uses.

## Lake Water Testing

The current water testing that is being conducted consists of 4 main parameters: Total Dissolved Solids (TDS) such as road salts, nitrate, Nitrate & Phosphorus to monitor potential impacts of septic & agricultural leaching, pH to monitor the acidity/alkalinity which helps to identify the stability of the water, sulphur, and e. Coli Bacteria as a result of surface runoff, septic leaching, or natural causes.

### Our Mission Statement

To protect and look after the present and future water quality of Lake Mindemoya by addressing and ensuring that the quality of the lake water will not be compromised as a result of any additional pollution or development without necessary approvals or permits

We are actively working to achieve our focus areas by providing relevant and educational information for property owners with regard to water quality, recommended practices, building and maintaining lakefront property in accordance with present bylaws. In addition, we are also advocating for strengthened bylaws that affect lakeshore development.

If you are interested in becoming involved or finding out more about the Lake Mindemoya Stewardship Association (LMSA), we encourage you to join the Association on Facebook to learn more, to join our organization and follow our activities.

Contact Us



### Shoreline Allowances

The Marine Allowance in front of Lake Mindemoya or any other lake on the island for that matter, is still considered to be public land. Notwithstanding this, the adjacent property owners do have 'Customary Care' of the shoreline in front of their property. This gives property owners the right to put a dock out into the lake.

The destruction of the natural vegetation on any other shoreline alterations is not allowed without proper approvals or permits. There are many advantages in the preservation of a natural shoreline.

A well maintained lawn right to the water's edge increases runoff and TDS (Total Dissolved Solids) into the lake, encourages geese to come ashore as well as uninvited public to use the shoreline.

Any permits or approvals must be obtained from the Municipality of Central Manitowish before the MNR/EC alterations are to occur in the water.

### Municipal Bylaws

Central Manitowish Council now owns the 66 foot Marine Allowance of all waterfront lands in its jurisdiction. This was the result of a rezoning and motion in 2003 whereby the Council of the Township of Central Manitowish that it shall retain ownership of all subject lands released under the Ontario Manitoba Lands Claims Settlement dated Dec. 5, 1999, being the land within the boundaries of the unopened shoreline allowances only.

To that end Central Manitowish Council has passed two By-Laws that clarify their ownership and adjacent property owners' responsibilities of the Central Manitowish owned Marine Allowance.

By-Law 2003-05 to Adopt a Custodial Care Shoreline Policy and Regulatory Activities on all Lands Released Under the Ontario Manitoba Land Claims Settlement December 5, 1999.

By-Law 2019-19 Being a By-Law to Prohibit Any Alterations of any Kind on Municipal Marine Allowances without Proper Approval or Permits.

### Shoreline Education

A "Natural Shoreline" is essential for lake water quality and the preservation of a healthy lake. The strip of native plants, shrubs, and trees with their extensive root systems forms a "green wall" of protection for waterfront properties says Dan Kraus, a conservation biologist for the Nature Conservancy of Canada.

The natural vegetation along a shoreline prevents shoreline erosion from waves and boat wakes and acts as a natural filter of heavy metals, nitrogen, potassium and phosphorus which are dissolved in runoff and ground water.

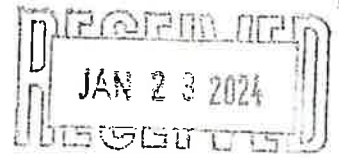
The root systems of this natural vegetation take in soil moisture and release clean moisture through the leaves in a process known as transpiration.

A healthy oak tree for example, can absorb and transpire as much as 150,000 liters of water in one growing season.

### Did you Know?

To find out more about our association visit the Lake Mindemoya Stewardship Association Facebook page.





I trust that all Manitoulin Planning Board members have received a copy of our concerns regarding the proposed plan of subdivision File No SUB2023-01. Since this document was drafted I have received a copy of the Plan of Subdivision Application Form as well as a Hydrological Assessment document prepared by exp Services Inc. Both documents have generated additional questions and concerns that I would like to bring to your attention at this time.

Regarding the Plan of Subdivision Application submitted to the Planning Board.

Questions and Concerns:

Item 12: Are there any easements or restrictive covenants affecting the subject lands and a description..... the response is "No". In fact there is a 66 foot Marine Allowance that belongs to the Municipality of Central Manitoulin and can not be turned over to private ownership as per the Ontario Manitoulin Land Claims Settlement signed on Dec. 5 1990.

Item 24

The proposed land use on the Application is indicated as residential. Why is this Proposed Plan of Subdivision for Seasonal Residential Development being discussed and considered.

Item 27

If this is in fact a seasonal development, why does this proposed development indicate a year round Municipal Road Maintenance request (ie winter maintenance).

Item 29

This proposes individual septic systems for each of the 39 properties. This may be an option on the southern part of this property which has deeper soil and has been used as agricultural land, but certainly not on the northern section where



there is "thin overburden atop hardpan and bedrock (fractured limestone). There is no question as to where the septic system effluent from these field beds will end up. Another question here is, why is more agricultural land which has been zoned "agricultural" now being changed to a residential designation?

#### Item 30

Methods of storm water management and construction mitigation to be used.

Ditches and Swales. Given the steep slopes down to the lake ditches and swales will result in surface runoff directly into Lake Mindemoya. This is a serious concern for the water quality and future health of Lake Mindemoya because it allows TDS as well as all other contaminants to flow directly into the lake. Based on our water testing TDS level results as well as other containments are already a concern as to Lake Mindemoya water quality. Increased surface runoff into the lake will only compromise the lake water quality.

#### Item 33

No other information that may be useful to the Manitoulin Planning Board was presented.

Would current levels of shoreline development as well as current water uses and water quality information be considered as "useful" information to the Planning Board??? You now have this information as gathered and presented to you in our written presentation.

#### Item 37

The question of "significant fish habitat" is NO but fails to identify the Mindemoya River which drains Lake Mindemoya and is a very important spawning stream for rainbow trout in the spring and salmon in the fall. In the Spring high levels to TDS (Total Dissolved Solids) are being drained out of the lake and in the fall high levels of bacteria which have accumulated over the high summer use are drained off into the Mindemoya River. This may be one of the explanations for the lower rainbow and salmon spawning runs over the last 10 or 15 years.

## Regarding the EXP Hydrogeologic Assessment Report

Executive Summary on page 1

Paragraph 4:

....."there is a low potential for sewage effluent to have a significant impact on Lake Mindemoya.. Although the requirement of tertiary treatment systems on septic systems is not anticipated (based on predictive loading estimates) the application of treatment systems could ensure groundwater and surface water quality does not exceed applicable ODWS/O and PWQO requirements respectively." This acknowledges that standard sewage septic systems will have an additional impact on Lake Mindemoya. The question is how significant?

Potential Impacts to Lake Mindemoya page 5

Paragraph 5:

Based on the proposed site plan, all thirty –nine lots are located adjacent to Lake Mindemoya. The location of the septic beds will depend on the final plan of the lot owner, but it can be assumed septic beds will be at least 15 meters from Lake Mindemoya and 3 m from the property line, per the Ontario Building Code Requirements. Thus, phosphorous loadings to the lake are assumed to be between 0% and 100% of the load originating from the septic bed. See the chart below this paragraph to look at the distance between the septic bed and the % Load to the surface water body (Lake Mindemoya). If located within 100 m of the lake it is 100%, at 100 to 200 m it is 66%. To reach a 0 impact load on the lake the septic bed must be more than 300 m from Lake Mindemoya, and this is under ideal soil depth conditions, and not on a thin soil overburden on top of a fractured limestone bedrock geology. This subdivision plan does not seem to indicate property boundaries that far from the lake and does acknowledge that there is only a thin layer of soil overburden in the northern section of this proposed development.

Page 6:

According to the Provincial Water Quality Objectives (PWQO) for total phosphorous, a concentration of 0.01 mg/l is required to provide a high level of protection against aesthetic deterioration in lakes (one such result is blue green Algae blooms during the warm summer months) with natural concentrations below 0.01 mg/l. Therefore, both Scenarios 1 and 2 (as shown in the chart on page 6) suggest effluent discharge will exceed the applicable PWQO standard into lake Mindemoya that already has phosphorous levels close to or already exceeding PWQO levels, as well as several blue green algae blooms over the last few summers.

Page 10

#### Water Quality

Overall, surface water (Lake Mindemoya) quality showed exceedances for three (3) health related standards, including for Total Coliform, E Coli and Turbidity. Total Coliform levels were noted to be significantly higher than both the Ontario Drinking Water Standard (ODWS) and Provincial Water Quality Objectives (PWQO), while E.Coli levels detected (exceeded ODWS) at a majority of locations.

Please refer to the table on page 11. The first columns indicate the ODWS (Ontario Drinking Water Standard) acceptable level. This is followed by the ODWO (Ontario Drinking Water Objective). Finally the PWQO (Provincial Water Quality Objective). Please note the exceedance levels at testing sites 1 to 8 in the following columns. These results tend to confirm our water testing results over the last two years. They also suggest that enough is enough.....Lake Mindemoya is already at it's tolerance levels as far as Provincial acceptable water quality standards are concerned.

The clear and logical conclusion here is simply that the Lake Mindemoya water quality levels based on our (LMSA) testing results over the last two years as well as the exp testing results indicate exceedances over the Ontario Drinking Water Quality Objectives. In addition, proposed effluent discharge from each of these 39 properties will exceed the applicable PWQO (Provincial Water Quality Standard). Simple question to be considered here is this. We already have a Lake with water quality levels that exceed the PWQO . Where is the logic and wisdom

to approve an additional 39 septic systems where the septic effluent discharge into Lake Mindemoya from each of the 39 properties will also exceed PWQO standards. Simply adding more contaminants that exceed PWQO to a lake that already has exceeded these Provincial Water Quality Objectives simply has no logic or wisdom.

S. Drystek

MLSA

\* TOTAL 15 PAGES