

LAKE STEWARDSHIP AND ENVIRONMENTAL COMMITTEE OF MCKELLAR TOWNSHIP

Agenda

THURSDAY, March 9th, 2023

7:30 PM

Zoom Link Jennifer Ghent-Fuller is inviting you to a scheduled Zoom meeting.

Topic: Lake Stewardship and Environmental Committee Meeting

Time: Mar 9, 2023 07:30 PM Eastern Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/89771425618?pwd=WGNZVDhZWldjTlZtT3lzN0Z3bUFWdz09>

Dial by your location

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+1 647 558 0588 Canada

Meeting ID: 897 7142 5618

Item	Time	
1.	x	In the spirit of reconciliation and co-operation, we wish to acknowledge that the land on which we gather is the traditional territory of the Anishinaabe and Mississauga people. Its boundaries fall within the Robinson-Huron Treaty of 1850 and the Williams Treaty of 1923. We are grateful to live here and we thank all the generations of people who have taken care of this land for thousands of years. To honour the suffering of Indigenous people and the love and wisdom they have carried for thousands of years, we pledge to work in community and harmony with each other and the environment we inhabit and work towards Truth and Reconciliation.
2.	x	Roll Call: Tony Best (N) ; Jennifer Ghent-Fuller () ; Melanie Jeffrey () ; Al Last () ; Axy Leighl () ; Carl Mitchell () ; Suzanne Poff () ; Nick Ryeland () ; Lynda Taylor (). We need 5 committee members to have a quorum () Declarations of pecuniary and/or personal interest and general nature thereof - none
3.	x	Motion to accept the minutes of December 8th, 2022. (attached). Moved: Seconded: Approved: () Amendments:
4. Goals		General Updates on Current Issues.
4.1	x	Waterfront/ Shoreline protection – Axy /Carl updates From Oct 13/22 minutes on planning: “We will try to propose a waterfront guideline or bylaw which will give guidance for waterfront vegetation. As part of this we will also look at set back for new buildings. (Axy, Tony and Jennifer)” <i>(these two agenda items have been amalgamated)</i> Axy will give an update at the next meeting.

		<p>Dec 8/22 Axy updated us on his research and conversations with staff. The Council is reviewing the zoning bylaw.</p> <p>Note: The Short Term Rental Committee, which was disbanded in the fall, originated from a concern on this committee on the effects of short term tenants on the environment.</p> <p>*Jennifer and Axy have been working on expanding the Tree Canopy Policy to include Shorelands.</p> <p>Axy -</p>
4.2	x	<p>Water Sampling – Jennifer is making plans with MLCA to continue E. coli sampling and add in regular phosphorus sampling for about six lakes in McKellar Township in May and August (Jennifer will consult with Carl about scheduling).</p> <p>*MLCA has purchased new equipment to facilitate gathering samples from deep water and collecting data in deep water*. A lab will be sought that will give results for phosphorus in mcg/L in order to compare LPP data. Samples will be taken at LPP sites simultaneously with LPP data and results compared as different sampling techniques are used.</p>
4.3	x	<p>Septic Education – concern relayed to Watersheds Canada re: lakeside residents using too much water on a daily basis possibly causing a rapid exit to the lake with leakage of bacteria before they can be broken down and processed in the septic bed and before phosphorus can be absorbed by shoreline plants. *Propose that we make education on reduced water usage a priority for 2023*</p> <p>Dec 8 – We may want to print the new edition of the Septic Smart booklet for distribution at the market and at the library next summer.</p> <p>March 7th – We should print a limited number of copies of the Septic Smart booklet and have them available at the library and the Township office for new residents.</p> <p>*Resolution 2023 #1 The LSEC will print 100 copies of the Septic Smart booklet distributed last year and make them available at the Township office and the Library for new residents</p> <p>Moved: Seconded: Approved?</p>
		<p>Presentations - YouTube videos from this committee are posted here: https://www.mckellar.ca/en/township-services/resources/Links-to-YouTube-Videos.pdf along with other videos</p>
4.5		Microplastics/Microfibres/ Washing Machine Filters – video on YouTube
4.6	x	<p>Earth Day / Clean Up Our Lakes – schedule for end of April to end of May – suggestion was made to include roads and add it to the slogan – “Clean up our Lakes, Rivers and Roads” for publicity this spring. Have emailed Greg Gostic to ask him to book the container for the transfer station and he is in favour of including roads in our publicity.</p>
4.7		<p>Fishing - <u>Draft Fisheries Management Plan Highlights Proposal Summary - Seeking Indigenous Community Feedback - October 25, 2022</u> received from Steve Scholten, MNRF – posted on Township web site under Environment and FB as publicity was requested – committee members agreed to review it</p>
4.8		Fish Catch reporting signs for Armstrong Lake - are up at Armstrong Lake beach.

		<p>3. Al suggested that we may be eligible for beautification grants from the Township and also from some companies such as MacDonald's who are looking for non-profit donations to make.</p> <p>Dec 8 – The Township will provide us with a map of Township properties. We will need to get approval from staff on placement of pollinator patches/butterfly gardens. The David Suzuki program is interested in our work as they have no “ranger” in this area. Sue is researching Pollinator Patches and putting together a list of plants that are Suitable for our zone, and that are considered not in invasive or that could be a problem with being toxicity especially to farm animals.</p> <p>March 2023 While we had permission to have pollinator patches on township property their location is being reviewed by Council. David Suzuki program has approved our work.</p> <p>Sue, Axy</p> <p>Resolution 2023 #3 The LSEC approves the spending of no more than the \$2000 budgeted for plants for the pollinator patches.</p> <p>Moved - Seconded - Approved?</p>
4.16	x	<p>ICECAP – Nick and Tony tracking</p> <p>Nick plans to organize a meeting to iron out some issues about our ICECAP participation.</p> <p>On Feb 7 2023, a deputation from Dr. Rebecca Pollock, Executive Director of the Georgian Bay Biosphere was made to Council on behalf of the Integrated Communities Energy and Climate Action Plans (ICECAP) partnership.</p> <p>Nick -</p>
4.17	x	<p>EV Chargers – A review of the current need for an EV charger by committee members earlier this year (2023) resulted in a decision of the majority of the LSEC members not to support a proposal that Council fund the installation of an EV charger in McKellar at this time.</p>
4.18		<p>Organic Waste Planning investigate the possibility of a processing facility shared with other townships in the future</p>
4.19		<p>From Oct 13/22 minutes on planning:</p> <p>Jennifer will start to research the background on Drinking Water Source Protection with a view to eventually having McKellar Township included in such a program. This will likely be a multi-year project as it involves working with other townships and communities in the local watersheds and finding a Conservation Association willing to manage the program.</p> <p>March – Greg Gostic inquired whether we could test the water at the public tap</p>
5.		<p>Our postings on the township are under “Residents/Environment.” Jennifer has been gradually updating the page. Listings and a table of contents is uploaded on the township web page. https://www.mckellar.ca/en/living-in-our-community/environment.aspx</p>

6.	X	Budget – for LSEC was approved at the December LSEC meeting.

7.	X	<p>Next meeting date and time is Thursday March 9th , 7 pm on zoom We need a committee member to attend in the community centre, please.</p> <p>LSEC meetings will continue at 7 pm on the second Thursday of the month in 2023:</p> <table><tr><td>January 12th</td><td>July 13th</td></tr><tr><td>February 9th</td><td>August 10th</td></tr><tr><td>March 9th</td><td>September 14th</td></tr><tr><td>April 13th</td><td>October 12th</td></tr><tr><td>May 11th</td><td>November 9th</td></tr><tr><td>June 8th</td><td>December 14th</td></tr></table> <p>Motion: To cancel January and February meetings to have a winter break. Moved: Tony, Seconded: Sue. Carried with one abstention. Project work will continue.</p>	January 12th	July 13 th	February 9th	August 10th	March 9 th	September 14th	April 13 th	October 12 th	May 11 th	November 9 th	June 8 th	December 14 th
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8.	X	<p>Motion to adjourn.</p> <p>Moved: Seconded: Approved: ()</p> <p>Time: PM</p>												

Assessment of Benthic Evaluation in McKellar Township following the completion of the initial three year sampling in McKellar Township and reporting by Georgian Bay Biosphere

(Prepared for the Lake Stewardship and Environmental Committee, March 2023)

Benthic macroinvertebrates are aquatic, bottom-dwelling animals without backbones, that include worms, crustaceans, molluscs and the larval stages of many insects. Sampling can be done in the littoral (from the shoreline to the furthest penetration of light), sub-littoral or profundal (deepest) zones of a lake or river. Both zooplankton and phytoplankton (small animals and plants) can be monitored. In Canada, the research focuses on zooplankton, or macroinvertebrates, small animals without a spine that can be seen by the naked eye.

Macroinvertebrate communities have many advantages as biological indicators:

- They reflect conditions at specific locations and show cumulative impacts
- They are sensitive to a variety of disturbances
- They are present in all freshwater ecosystems
- They are a key part of aquatic food webs
- Their assessment methods are well-developed

Additionally, biological monitoring complements testing water for chemicals (chemical monitoring) because aquatic life can be affected by:

- the effects of chemicals interacting with each other
- contaminant releases are not always detected
- unknown contaminants
- introduction of exotic species
- habitat degradation in the water or surrounding land
- climate change
- changes in water levels, flows, and timing (ice formation and spring thaw)([Science of aquatic biomonitoring - Canada.ca](https://scienceofaquaticbiomonitoring.ca))

Sampling of the benthos to evaluate the health of waterways takes place in all seven continents including Antarctica. Guidelines for assessment exist throughout the

world and are based on the established premise that the effects of human activity on aquatic ecosystems can be reliably monitored by regular evaluation of the benthos. In Europe, the Water Framework Directive has shifted the focus from chemical monitoring for safety of human consumption of water to viewing the water system as a natural heritage. In Canada, The Canadian Aquatic Biomonitoring Network (CABIN) oversees the collection of benthic macroinvertebrates at site locations and uses their counts as an indicator of the health of that water body, maintaining data banks and ongoing analysis. In order to use the Canadian Aquatic Biomonitoring Network and the analysis tools, researchers must complete required training and certification.

The site being sampled is compared to a reference site, undisturbed by human activity, in order to evaluate whether there have been any anthropomorphic changes. "Reference sites represent habitats that are closest to "natural" before any human impact. The data from these sites are used to create reference models. CABIN partners use these models to evaluate their test sites in an approach known as the Reference Condition Approach (RCA)." ([CABIN training and certification - Canada.ca](https://www.cabin.ca/training-and-certification))

This is similar to practices elsewhere in the world. The European Institute for Environment and Sustainability has established criteria for high ecological status in lakes:

- the taxonomic composition and abundance correspond totally or nearly totally to the undisturbed conditions
- the ratio of disturbance sensitive taxa shows no signs of alteration from undisturbed levels
- the level of diversity of invertebrate taxa shows no sign of alteration from undisturbed levels

Using the RCA models, CABIN partners match their test sites to groups of reference sites on similar habitats and compare the observed macroinvertebrate communities. The extent of the differences between the test site communities and the reference site communities allows CABIN partners to estimate the severity of the impacts at those locations.

This is similar to practice elsewhere.

In Northern Ontario, the Freshwater Invertebrate Reference Network of Northern Ontario (FIRNNO) sets the pace for benthic monitoring.

- The invertebrate groups have varying degrees of tolerance to human impacts; if a sample contains mainly midges, worms, and snails, the water quality in that sampling area is probably poor. If, on the other hand there are mostly stoneflies, caddisflies and mayflies, you can infer good water quality

(see [Laurentian University | The Freshwater Invertebrate Reference Network of Northern Ontario \(FIRNNO\)](#))

In a paper Valois et al., description is given of the comparison of two common RBP's (rapid bioassessment protocols) used in Canada, a standard approach (Reynoldson et al., 2003), adopted by the federal CABIN (Canadian Aquatic Biomonitoring Program) and EEM (Environmental Effects Monitoring) programs and a live-sort approach (David et al., 1998) used by watershed and provincial organizations.

The report on the monitoring of benthos done by the Georgian Bay Biosphere for McKellar Township and Manitouwabing Lake Community Association bases its research on the Ontario Benthos Biomonitoring Network (OBBN), operated on the principles of partnership, free data sharing, and standardization. Comparisons are presented of lakes in the area, notably Muskoka. The statement is made in the report that researchers are certified in data collection and analysis. It would be good to know where the data from Lake Manitouwabing are stored on this data base, as only the Muskoka lakes could be seen.

However, based on this assessment, the research and report completed by Georgian Bay Biosphere seems to meet expectations in terms of being scientifically conducted and a part of a valued scientific database. Continuation of this research is recommended as long-term data bases are valued for monitoring the health of the Manitouwabing Lake ecosystem.

Resources and References

Solimini, Angelo G. et al., (2006) Using Benthic Macroinvertebrates to Assess Ecological Status of Lakes Current Knowledge and Way Forward to Support WFD Implementation, European Commission Directorate-General Joint Research Centre, Institute for Environment and Sustainability. Pp 1-49.

Joint Nature Conservation Committee (2015) Common Standards Monitoring Guidance for Freshwater Lakes, Prepared by the Lakes Monitoring Sub group of the Iteragency Freshwater Group Comprising representatives of Natural England, Natural Resources Wales, the Northern Ireland Environment Agency and Scottish Natural Heritage.

Muskoka Water Web [Muskoka Water Web](#)

National CABIN Science Forum, Agenda and Abstracts (2017) Environment and Climate Change Canada.

Ontario Benthos Biomonitoring Network [The Ontario Benthos Biomonitoring Network | Publications | SRS \(usda.gov\)](#) /

Vander Zanden, Jake and Vadeboncoeur, Yvonne (2002) Fishes as Integrators of Benthic and Pelagic Food Webs in Lakes, Ecology, 83(8), 2002, pp. 2152–2161 q 2002

Amanda VALOIS,^{1*} Keith SOMERS,² Chantal SARRAZIN-DELAY,³ Wendel (Bill) KELLER^{3J}. Are bioassessments based on the reference condition approach affected by rapid approaches to sample collection and processing? *Limnol.*, 2016; 75(2): 392-402 ORIGINAL ARTICLE DOI: 10.4081/jlimnol.2015.1388

LAKE STEWARDSHIP AND ENVIRONMENTAL COMMITTEE OF MCKELLAR TOWNSHIP

Draft Minutes

THURSDAY, December 8th, 2022

7:00 PM

Item	Time	
1.		<p>In the spirit of reconciliation and co-operation, the (LSEC) wishes to acknowledge that the Wausauksing ancestral lands upon which we gather are the traditional territories of the Anishinaabek - Ojibway, Odawa and Potawatomi peoples - ceded and conveyed to the Crown, in the Robinson-Huron Treaty, 1850.</p> <p>To honour the suffering of Indigenous people and the love and wisdom they have carried for thousands of years, we pledge to work in community and harmony with each other and the environment we inhabit.</p>
2.		<p>Roll Call: Tony Best (X) ; Jennifer Ghent-Fuller (X) ; Melanie Jeffrey (X) ; Al Last (N) ; Axy Leighl (X) ; Carl Mitchell (N); Suzanne Poff (Y); Nick Ryeland (Y); Lynda Taylor (N).</p> <p>We need 5 committee members to have a quorum (Y)</p> <p>Declarations of pecuniary and/or personal interest and general nature thereof - none</p>
3.		<p>Motion to accept the minutes of November 10, 2022. (attached). Moved: Sue Seconded: Axy Approved: (Y) Amendments: None</p>
4. Goals		General Updates on Current Issues.
4.1	x	<p>Waterfront/ Shoreline protection – Axy /Carl updates From Oct 13/22 minutes on planning: “We will try to propose a waterfront guideline or bylaw which will give guidance for waterfront vegetation. As part of this we will also look at set back for new buildings. (Axy, Tony and Jennifer)” <i>(these two agenda items have been amalgamated)</i> Axy will give an update at the next meeting. Dec 8/22 Axy updated us on his research and conversations with staff. The Council is reviewing the zoning bylaw.</p>
4.2		<p>Water Sampling – Jennifer is making plans with MLCA to continue E. coli sampling and add in regular phosphorus sampling for about six lakes in McKellar Township in May and August (Jennifer will consult with Carl about scheduling). A lab will be sought that will give results for phosphorus in mcg/L in order to compare LPP data. Samples will be taken at LPP sites simultaneously with LPP data and results compared as different sampling techniques are used.</p>
4.3		<p>Septic Education – concern relayed to Watersheds Canada re: lakeside residents using too much water on a daily basis possibly causing a rapid exit to the lake with leakage of bacteria before they can be broken down and processed in the septic bed and before phosphorus can be absorbed by shoreline plants.</p>

		<p>From the Oct 13/22 minutes on planning.</p> <p>3. Septic – there may be an increase in the apron size required outside the septic bed. Nick will investigate this. We will also continue septic system education especially in regard to limiting water flow into the system. Nick, Tony and Jennifer.</p> <p>Dec 8 – We may want to print the new edition of the Septic Smart booklet for distribution at the market and at the library next summer.</p>
4.4		<p>Presentations - YouTube videos from this committee are posted here: https://www.mckellar.ca/en/township-services/resources/Links-to-YouTube-Videos.pdf along with other videos</p>
4.5		Microplastics/Microfibres/ Washing Machine Filters – video on YouTube
4.6		Earth Day / Clean Up Our Lakes – schedule for end of April to end of May
4.7		<p>Fishing - <u>Draft Fisheries Management Plan Highlights Proposal Summary - Seeking Indigenous Community Feedback - October 25, 2022</u> received from Steve Scholten, MNRF – posted on Township web site under Environment and FB as publicity was requested – committee members agreed to review it</p>
4.8		Fish Catch reporting signs for Armstrong Lake - are up at Armstrong Lake beach.
4.9		<p>Catch and Release Signs are up at township launch sites. Copies of the Catch and Release sign are on the back of the Safe Boating flyer and will be printed for distribution by the Township (with tax mailing)</p>
4.10	x	<p>Benthic Study –</p> <p>Dec 2022 The Draft report was received. We will leave this expenditure in the budget for now and confer whether there is benefit in continuing this annual sampling at a later meeting. We should do some knowledge translation with the actual study, like what we're measuring and what it means, so that we can answer why we are doing this, what is the added value.</p>
4.11		<p>Pesticides/Fertilizers – (would be included in any Drinking Water Source Protection)</p> <p>From Oct 13/22 minutes on planning:</p> <p>4. Pesticides – we will fold a discussion of pesticide use on lawns into the work/education on waterfront vegetation. Melanie and Jennifer.</p>
4.12	x	<p>Invasive Species – Signs are up at boat launch sites; additional signs are available from FOCA</p> <p>Dec 8 - Jennifer picked up 16 newer road signs for boat launches on Invasive Species from FOCA (on behalf of MLCA) – they are designed to educate people who are launching their boats about prevention of transfer of invasive species from one water body to another.</p> <p>Not all the lakes in the township have signs – the suggestion is to leave the older ones up and use the newer ones to add new locations. Then we can slowly replace when we take stock of what we need.</p> <p>We received the agreement of staff and Council to go ahead with making copies of the Boating Safety / Catch and Release flyer and the Invasive Species flyer (each double-sided). The estimate from staff is that we will need 2000 of each and we will investigate having them folded by the printer.</p> <p>Resolved that we increase the amount previously decided upon because of the increase in the number –</p>

		Revised Resolution 2022 – 09 that we print 2000 copies of these two flyers (four sides) at an approximate cost of \$3,000.00. Moved: Axy Seconded: Nick Carried
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4.13		Dark Skies – From Oct 13/ minutes on planning: Sue and Jennifer will continue the work on Dark Skies.
4.14		Water Levels – paper on the web page
4.15	x	Butterflyways – From Oct 13/ minutes on planning: <ol style="list-style-type: none"> 1. Sue, Axy and Al will work on a program of <i>pollinator patches</i> in the township including applying to the David Suzuki butterfly ranger program. 2. Axy will schedule a meeting of this subcommittee and complete the application to the David Suzuki foundation program. 3. Al suggested that we may be eligible for beautification grants from the Township and also from some companies such as MacDonald's who are looking for non-profit donations to make. Dec 8 – The Township will provide us with a map of Township properties. We will need to get approval from staff on placement of pollinator patches/butterfly gardens. The David Suzuki program is interested in our work as they have no "ranger" in this area. Sue is researching Pollinator Patches and putting together a list of plants that are Suitable for our zone, and that are considered not in invasive or that could be a problem with being toxicity especially to farm animals.
4.16		ICECAP – Nick and Tony tracking Nick plans to organize a meeting to iron out some issues about our ICECAP participation. There was a reference at the Council meeting on Dec. 6 to David Bywater coming to speak to Council.
4.17		EV Chargers – Hinges on continued participation in Icecap
4.18		Organic Waste Planning investigate the possibility of a processing facility shared with other townships in the future
4.19		From Oct 13/22 minutes on planning: Jennifer will start to research the background on Drinking Water Source Protection with a view to eventually having McKellar Township included in such a program. This will likely be a multi-year project as it involves working with other townships and communities in the local watersheds and finding a Conservation Association willing to manage the program.
5.	x	Our postings on the township are under "Residents/Environment." Jennifer has been gradually updating the page. Listings and a table of contents is uploaded on the township web page. https://www.mckellar.ca/en/living-in-our-community/environment.aspx

6	X	Budget – attached – members will review and discuss at December meeting

Lake Stewardship and Environmental Committee budget estimate for 2023					
	Budget estimate 2021	Actual Expenditure 2021	Budget estimate 2022	Actual Expenditure 2022 as of Dec 8	Budget Estimate
E. Coli Sampling	\$ 4,248	\$4800.24	\$5,000.00	\$ 3,616.47	\$ 4,000.00
Phosphorus and calcium sampling				\$ 630.00	\$4,000.00
Microcystin (if there is a BGA bloom)	\$265	\$0	\$265	\$0	\$ 300.00
Standardizing solutions (q2yrs)	\$500	\$120	\$0	\$0	\$150
Benthic 4 sites	\$4420 (MLCA pays ¼)	\$3315	\$4915 Increased by \$1,600	3 – \$4915.20 Twp 1 - \$2320.00 MLCA	3 sites \$ 5,260
Educational Materials	Bookmarks and flyers - \$300	Bookmarks and Flyers \$300	Bookmarks and flyers \$500	Bookmarks and Flyers \$344.65	\$ 2,000
Educational Materials	Lake Protection Workbook \$3000.00	Lake Protection Workbook \$2,224.97		Presentation s \$947.50	\$1,500
Educational Materials			Septic Smart Booklet \$5000	Septic Smart Booklet \$4418.30 + \$207* = \$4,625.30 *added Dec 8 meeting	\$ 500
Educational Materials	Catch and Release Signs and Posts \$500	Catch and Release Signs and Posts \$1,028.30			
			Other educational materials plus new initiatives \$3,900 Decreased by \$1,600	Planned – 2 pamphlets – 1600 copies for mailing \$2500 est	\$2000

				Remedial Plantings \$2500	0	\$ 2,500.00	
		Total		\$22,080			
		PLUS GBB ICECAP	\$ 8500	\$8500	\$8500	\$ 8,000	\$8,000
		Grand Total		\$30,580	Est. \$25,509.12* *with added \$207	\$ 30,210	

		Motion: The LSEC budget be presented to Council as submitted Moved: Tony Seconded: Melanie Carried.
		Motion: Moved that we pay MLCA for 50% of the incidental expenses of \$414 for passing out the Lake Protection Workbook and Septic Smart environmental packages this summer for the amount of \$207. Moved: Tony. Seconded: Melanie. Carried.
7.	X	Next meeting date and time is Thursday March 9 th , 7 pm on zoom We need a committee member to attend in the community centre, please. LSEC meetings will continue at 7 pm on the second Thursday of the month in 2023: January 12 th July 13 th February 9 th August 10th March 9 th September 14th April 13 th October 12 th May 11 th November 9 th June 8 th December 14 th Motion: To cancel January and February meetings to have a winter break. Moved: Tony, Seconded: Sue. Carried with one abstention. Project work will continue.
8.	X	Motion to adjourn. Moved: Sue Seconded: Melanie Approved: (Y) Time: 8:37 PM

Township of McKellar
2023 Benthic Monitoring Program

December 5, 2022

Township of McKellar
Attn: Ina Watkinson, Clerk/Administrator

The Georgian Bay Biosphere (GBB) is pleased to provide the Township of McKellar with the following quote to conduct benthic monitoring in 2023. The services and deliverables for this quote are outlined below.

Benthic Monitoring

- GBB staff (1 OBBN certified, 2 support staff) will lead the collection and processing of samples at three sampling sites on Manitouwabing Lake
- GBB staff will follow OBBN protocols (<https://desc.ca/programs/obbn>)
- The Manitouwabing Lake Community Association will make any arrangements in terms of ratepayer association involvement
- The Manitouwabing Lake Community Association will provide assistance in gaining access to the sampling sites

Reporting

- GBB staff will update the Manitouwabing Lake Environment Report with results from 2023 monitoring and provide analysis of benthic monitoring data

The cost of conducting benthic monitoring at three sites on Manitouwabing Lake and reporting on findings is \$5,260.

Invoicing and Payment

This quote is subject to GBB funding and staff availability. GBB invoices as per the following schedule: 50% upon acceptance of a quote and 50% upon delivery of services.

Thank you for the opportunity to provide the Township of McKellar with this quote. Please get in touch if you have any questions or require clarifications.

Sincerely,

David Bywater
Director of Lands and Waters Programs
Georgian Bay Biosphere

Signed and accepted on behalf of
Township of McKellar

Name (printed)	Name (signature)	Date
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HELP PROTECT OUR LAKES

Clean any plants, mud, mussels or debris from your boat and equipment.

Drain all standing water from your bilge, motor and livewell.

Dry your boat for 2-7 days or disinfect it with hot or pressurized water.

Here are common places aquatic invasive species may be hiding:



Here are some species to look out for:



Zebra/Quagga Mussels



Spiny Waterflea



Eurasian Watermilfoil

Report sightings of invasive species:



Invading Species Hotline
1-800-563-7711



EDDMapS Website
eddmaps.org



EDDMapS App
iPhone/Android



Invasive
Species
Centre

www.invasivespeciescentre.ca
www.foca.on.ca

F O C A
Federation of Ontario Cottagers' Associations

Township of McKellar
2023 Benthic Monitoring Program

December 5, 2022

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