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## **Municipal Council Meeting Agenda**

**Tuesday, March 28, 2023 – 9:00 a.m.**

**MODL Council Chambers – 10 Allée Champlain Drive, Cookville**

|             |  |               |
|-------------|--|---------------|
| <b>1.</b>   | <b>Call to Order</b>   |               |
| 1.1         | Mi'kma'ki Territorial Acknowledgement  |               |
| <b>2.</b>   | <b>Announcements, Acknowledgements, Recognition</b>  |               |
| 2.1         | Proclamation – World Autism Month and Day  |               |
| <b>3.</b>   | <b>Public Input (15 Minutes)</b>   |               |
| <b>4.</b>   | <b>Changes/Approval of Agenda (as circulated)</b>  |               |
| <b>5.</b>   | <b>Approval of Minutes – March 14, 2023</b>  |               |
| <b>6.</b>   | <b>Business Arising from Minutes</b>   |               |
| <b>7.</b>   | <b>Awarding of Tenders/RFPs</b>  |               |
| 7.1         | Award of RFP #2022-05-404 Cookville Wastewater Treatment Facility Phase 3 Upgrade Design, Construction & Contract Administration Services..... | 1             |
| 7.2         | Award of RFP #2022-01-403 Legal Services Contract.....   | 5             |
| 7.3         | Award of RFP #2022-01-402 Scanning Services Phase II .....   | 8             |
| <b>8.</b>   | <b>Presentations/Scheduled Times</b>   |               |
| 8.1         | Sherbrooke Lake 2022 Water Quality Monitoring Program<br>Blake McNeely, Coastal Action, & Robin McAdam, SLSC Member .....                      | 9:15 a.m. 11  |
| 8.2         | Plastic Pollution & Municipal Action<br>Natasha Tucker & Michelle Brake, Mind Your Plastic .....   | 10:15 a.m. 75 |
| <b>9.</b>   | <b>Consideration of Correspondence - Nil</b>   |               |
| <b>10.</b>  | <b>Recommendations from Committees &amp; Boards</b>  |               |
| <b>10.1</b> | <b>Policy &amp; Strategy Committee</b>   | <b>96</b>     |
| 10.1.1      | MODL Policy 006 Loan Guarantees for Community Organizations<br>Amendments.....   | 98            |
| 10.1.2      | Proposed Regional Anti-Racism & Anti-Discrimination Committee.....   | 102           |
| 10.1.3      | MODL Policy 065 Divestiture of Surplus Land – Repeal & Replace .....   | 110           |
| 10.1.4      | MODL Policy 043 Community Grants Program - Amendments.....   | 119           |
| 10.1.5      | Riverport & District Community Park Association – Management Agreement .....   | 141           |
| 10.1.6      | Letter to Province re Coastal Protection Act Regulations   |               |

|             |   |            |
|-------------|---|------------|
| <b>10.2</b> | <b>Fire &amp; Emergency Services Committee</b>                          | <b>144</b> |
| 10.2.1      | 2023-2024 Fire Department Grants  |            |
| 10.2.2      | Regional Fire Training Station.....                                     | 145        |
| <b>10.3</b> | <b>Nominating Committee</b>   |            |
| 10.3.1      | Appointment of Provincial Volunteer Representative, Allen Sullivan..... | 147        |
| <b>11.</b>  | <b>Staff Reports</b>  |            |
| <b>11.1</b> | <b>Administration Department</b>  |            |
| 11.1.1      | Extension of Medical Leave – Councillor K. DeLong                       |            |
| <b>11.2</b> | <b>Engineering Department</b>   |            |
| 11.2.1      | Grub Control, Repair & Maintenance - MARC Ballfields .....              | 148        |
| <b>12.</b>  | <b>Mayor’s/Deputy Mayor’s/Councillors’ Matters</b>                      |            |
| 12.1        | Deputy Mayor’s Update   |            |
| 12.2        | Mayor’s Update  |            |
| <b>13.</b>  | <b>Added Items</b>  |            |
| <b>14.</b>  | <b>In Camera</b>  |            |
| 14.1        | Personnel Matter under section 22(2)(c) of the MGA                      |            |
| <b>15.</b>  | <b>Adjournment</b>  |            |

**Council**  
Item: #7.1  
Date: March 28, 2023  
Authorization: T. MacEwan



## Municipality of the District of Lunenburg

### Request for Decision

**Report to:** Mayor and Council

**Submitted by:** Larry Feener, P.Eng., Municipal Engineer

**Date:** March 28, 2023

**Re:** RFP Award 2022-05-404  
Cookville Wastewater Treatment Facility Phase 3 Upgrade-  
Design, Construction and Contract Administration Services

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### Recommendation

Council authorize staff to award RFP 2022-05-404 Cookville Wastewater Treatment Facility Phase 3 Upgrade – Design, Construction and Contract Administration Services, and resident inspection to **exp** Services Inc. for an amount of up to \$1,097,800 including a 15% contingency and net HST.

### Executive Summary

The Osprey Village development has quickly become a major retail and service hub with a mix of occupants with several larger residential developments, some currently under construction. There is undeveloped land in Osprey Village located to the north of Pinegrove Road and to the east of Highway 10. The Municipality of the District of Lunenburg (MODL) wishes to improve existing servicing and encourage further economic development in the area by ensuring there is adequate wastewater services.

Due to the high level of development scheduled for Osprey Village (approximately 800 residential units plus commercial development), the Wastewater Treatment Plant is expected to exceed its operational capacity within the next few years requiring the Municipality to proceed with the next phase of upgrades. In addition to supporting the planned 800 units, there are various lots within the service area with the ability to support additional residential and commercial development. To ensure MODL can provide sufficient wastewater service for the Osprey Village area, both future and present, **exp** Services Inc. conducted a capacity review of the Cookville WWTP and concluded that the Cookville WWTP will require upgrades.

On March 13, 2023, the province of Nova Scotia partnering with the federal government, and the Municipality of the District of Lunenburg announced funding through the Investing in Canada Infrastructure Program (ICIP) for the Cookville Wastewater Treatment Plant Capacity Upgrade, contributing up to \$6,679,933 towards the estimated \$15,750,000 project.

## Discussion

The Cookville WWTP-Phase 1 consisted of a recirculating sand filter (RSF) and was constructed and commissioned in 2004. The RSF was intended to serve the early stages of development in the Cookville area and was replaced in 2007 with the existing plant (Phase 2). It is important to plan and have in place wastewater services that support future development for the Cookville area.

A Request for Proposal (RFP) was issued February 3, 2023 and closed March 9, 2023 for the Phase 3 Upgrade to the existing plant. The RFP requested Proposals from qualified consultants to complete a design, construction and contract administration services, resident inspection and cost estimating to expand the Cookville Wastewater Treatment Plant Phase 3. Members of the RFP Evaluation Committee included staff from the Engineering Department.

The RFP requested Proponents provide the following deliverables as part of the Proposal:

- Preliminary and detailed design to expand the wastewater facility to Phase 3;
- Preparation of Tender Documents including Engineering drawings for the construction; and
- Construction Oversight and Contract Administration.

Two (2) proposals were received from **exp** Services Inc. and ABLE Engineering Services Inc. before the closing date and time. ABLE Engineering did not meet the mandatory criteria section in the RFP. After consultation with legal, the submission was deemed non-compliant and was disqualified. The remaining technical proposal was evaluated based on the criteria outlined in the RFP including Design Team Experience & Qualifications, Key Personnel assigned, Management of Services, and Approach and Methodology for a total available score of 80 percent. Since there was only one compliant proposal, the proponent received 20 percent for the financial score.

Results of the scoring are shown in the table below:

| Criteria/Element        | % of Score Available | % Achieved  |
|-------------------------|----------------------|-------------|
| Proposal Submitted By   | NA                   | exp         |
| Average Technical Score | 80                   | 71.7        |
| Financial Score         | 20                   | 20          |
| <b>TOTAL</b>            | <b>100</b>           | <b>91.7</b> |

Financial details were as follows:

| Financial Proposal Submitted By  | exp          |
|--|--------------|
| Project Admin, Preliminary and Detailed Design, Tender Services, Construction Admin, Resident Inspection | \$915,353.00 |

Note: Prices exclusive of HST.

### Budget Implications

The 2022/23 approved Capital Budget included \$9,500,000 over two years. The total estimated cost of the Cookville Wastewater Treatment Facility Upgrade for Phase 3 is \$15,750,000, including Engineering, distributed over three years (2023/24 to 2025/26). The proposed 2023/24 Capital Budget includes \$750,000 of which the Engineering design fees are included, the remaining Engineering costs during construction were included in the 2024/25 and 2025/26 proposed capital budget.

The Federal and Provincial Government is contributing \$6,679,933 of funding (73.3% of \$9,109,000) and the remaining costs are included in the 2023/24 proposed capital budget. Our Grant Coordinator will continue to explore opportunities for additional funding.

### Strategic Plan

Osprey Village Growth Centre is one of the 2023-2025 Strategic Priorities of Council.

### Work Plan

The Cookville Wastewater Treatment Plant Upgrades are included in the 2022/23 approved Capital Budget and 2023/24 proposed Capital Budget.

**Alternatives**

N/A

**Conclusion**

The Phase 3 upgrade of the Cookville Wastewater Treatment Facility will ensure there is adequate wastewater treatment capacity for the next number of years depending on the rate of development. The original plant design allowed for a future Phase 4 expansion, when required, to accommodate future developments for Osprey Village and surrounding area.

| <b>Report Preparation</b>      |                              |
|--------------------------------|------------------------------|
| <b>Department</b>              | Engineering & Public Works   |
| <b>Report Prepared by</b>      | Larry Feener, P.Eng.         |
| <b>Report Approved by</b>      | Stephen W. Pace, MBA, P.Eng. |
| <b>Date Reviewed by C.A.O.</b> |                              |

**Council**  
Item: #7.2  
Date: March 28, 2023  
Authorization: T. MacEwan



## **Municipality of the District of Lunenburg**

### **Request for Decision**

**Report to:** Council  
**Submitted by:** Alex Dumaresq, Deputy CAO  
**Date:** March 28, 2023  
**Re:** Award of Legal Services Contract

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#### **Recommendation**

**“that Municipal Council award the Request for Proposal 2022-01-403 Legal Services Contract to PLRR Law for a five-year term with the option to extend for a further two years”.**

#### **Executive Summary**

The Municipality’s Legal Services Contract is currently held by PLRR Law. With the agreement set to expire, MODL issued a call for proposals for legal services. Seven bids in total were received and 5 were complete submissions seeking to fulfill the Municipality’s legal needs. PLRR Law received the highest overall score, including the lowest average annual rates, and staff recommend entering into a new contract for legal services with the firm.

#### **Discussion**

The Municipality issued an RFP for Legal Services for a 5-year period, with the option of a 2-year extension at the Municipality’s discretion. Seven firms made some form of submission to the Municipality. Of those seven, two were not complete and independent submissions. Stewart McKelvey submitted a non-compliant bid indicating they were seeking to provide any specialized legal services beyond the scope of MODL’s normal legal services. Cox and Palmer also submitted a letter indicating they were confirming their partnership with PLRR to provide backup and specialized services in conjunction with PLRR. The remaining five bids were all compliant and were scored according to the technical and pricing criteria established in the RFP document.

Proponent names and quotes are described in the table below.

| Proponent                   | Average Technical Score | Cost Proposal     |             | Total Score | Overall Rank |
|-----------------------------|-------------------------|-------------------|-------------|-------------|--------------|
|                             |                         | Avg. Annual Price | Price Score |             |              |
| PLRR Law                    | 62                      | \$215             | 30          | 92          | 1            |
| Burchell & MacDougall       | 60                      | \$243             | 27          | 87          | 2            |
| Patterson Law               | 60                      | \$248             | 26          | 86          | 3            |
| McInnes Cooper              | 65                      | \$320             | 20          | 85          | 4            |
| Burchell, Wickwire & Bryson | 59                      | \$253             | 26          | 85          | 4            |

All of the proposals received had sufficient quality to provide adequate legal services to the Municipality. PLRR Law received the highest overall score including the lowest average cost. McInnes Cooper received the highest score on the technical elements of their proposal, however they also had the highest hourly rate of the proposals.

The evaluation committee reached a consensus that the proposal from PLRR offered the best value to the Municipality. PLRR has indicated that due to the smaller size of their firm, they have made arrangements for Cox and Palmer to provide additional legal services, should the Municipality require specialized service, require a higher volume of legal work completed or a conflict arises.

**Budget implications**

The recommended proposal from PLRR represents a 77% increase on the hourly rate in the final year of the existing contract (the previous contract had almost no cost escalation over the life of the 7-year contract). Staff have adjusted department legal services cost projections to accommodate the anticipated increase.

**Alternatives**

The Provincial Procurement Act limits Council’s ability to pursue alternatives once a procurement call has been published. Should Council have concerns with the staff recommendation, further discussion and direction to staff on the areas of concern would be required.

**Conclusion**

The Municipality requires regular legal services for its operations. With the current contract expiring, multiple competent firms submitted proposals to provide legal services. Based on the quality of services and cost effectiveness staff are recommending that the RFP 2022-01-403 should be awarded to PLRR Law who received the highest overall score.

| <b>Report Preparation</b>      |                           |
|--------------------------------|---------------------------|
| <b>Department</b>              | Administration            |
| <b>Report Prepared by</b>      | Alex Dumaresq, Deputy CAO |
| <b>Report Approved by</b>      |                           |
| <b>Date Reviewed by C.A.O.</b> |                           |

**Council**  
Item: #7.3  
Date: March 28, 2023  
Authorization: T. MacEwan



## **Municipality of the District of Lunenburg**

### **Request for Decision**

**Report to:** Council

**Submitted by:** April Whynot-Lohnes, Municipal Clerk

**Date:** March 28, 2023

**Re:** Award of Document Scanning Services (Phase II) RFP 2022-01-402

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#### **Recommendation**

**“that Municipal Council award the Request for Proposal 2022-01-402 Document Scanning Services (Phase II) to DOCUdavit for \$106,636.95 inclusive of taxes.**

#### **Executive summary**

The Municipality in 2021 undertook the scanning of building permit applications, permits inspection reports, and engineering plans, known as Phase 1. There remains a significant amount of paper records which are housed in a large file storage area within the administration building. It is estimated that there are approximately 240 banker boxes filled with MODL records.

Scanning these remaining documents will allow for that space to be utilized for other needed purposes, but more importantly will provide access to all of MODL records within an electronic system. This will also provide retrieval from remote work environments.

#### **Discussion**

The Municipality issued an RFP for document scanning services to scan the remaining engineering files, minutes and agendas of all committees and the remaining subdivision plans and planning records. Three proposals were received by the deadline. The evaluation team included Jeff Merrill, Director of Planning & Development Services, Tina Robichaud-Bond, Executive Assistant, and April Whynot-Lohnes, Municipal Clerk

Proponent names and quotes are described in the table below:

| Proponent                               | Average         | Cost Proposal      |             | Total Score | Overall  |
|---|-----------------|--------------------|-------------|-------------|----------|
|   | Technical Score | Price              | Price Score |             | Rank     |
| DOCUdavit Solutions                     | <b>73.7</b>     | \$106,636.95       | 9.5         | <b>83.2</b> | <b>1</b> |
| Precision Digital Imaging Services Inc. | 47.2            | \$103,852.66       | 11.4        | 58.6        | 2        |
| Perimeter Group                         | 27.1            | <b>\$50,715.00</b> | <b>20</b>   | 47.1        | 3        |

Note that the price includes tax.

The top proposal overall was from DOCUdavit with an overall score of 83.2, followed by Precision Digital Imaging Services Inc., and Perimeter Group at second and third, respectively. The DOCUdavit proposal received the highest technical score, being 73.7, followed by 47.2 for Precision Digital Imaging Services Inc., and 27.1 for Perimeter Group.

Perimeter Group had the lowest price, however, also had the lowest technical score and ranked third for the overall score. The Perimeter Group proposal did not provide detailed descriptions on the quality control and quality assurance processes for the project.

The evaluation committee reached a consensus that the DOCUdavit proposal offered the best value to the Municipality. The DOCUdavit proposal described in detail the methodology, work plan, quality control and quality assurance processes. They will pick up the boxes in one shipment; they will provide a sample box prior to going into production; they can handle large volumes of records; they have systems in place to track the records and keep them secure; have processes in place to ensure a high level of quality control and quality assurance; will provide the optical character recognition (OCR) service; and will provide electronic back-up storage of the files for 10 years at no additional charge.

### **Budget implications**

The budget for this second phase of scanning would come from the Safe Restart Grant. Scanning these remaining files will make the records accessible from remote work environments and create efficiency in retrieval of records under Freedom of Information and Protection of Privacy requests.

### **Alternatives**

Council can decide not to accept the recommendation as presented.

### Conclusion

The better efficiency in the retrieval of records and eliminating the storage of paper records will provide for the existing space to be utilized as workspaces. The committee is recommending that the RFP 2022-01-402 be awarded to DOCUdavit who received the highest technical score for their proposal and the highest overall score.

| Report Preparation      |                                      |
|-------------------------|--------------------------------------|
| Department              | Administration                       |
| Report Prepared by      | April Whynot-Lohnes, Municipal Clerk |
| Report Approved by      | Alex Dumaresq                        |
| Date Reviewed by C.A.O. |                                      |



**Council**

Item: #8.1

Date: March 28, 2023

Authorization: T. MacEwan

# Sherbrooke Lake 2022 Water Quality Monitoring Program

Blake McNeely  
Blake@coastalaction.org

# Sherbrooke Lake

## 2022 Overview



- This is a 5-year water quality monitoring program, started in 2017 that aims to establish a baseline of the lake and its tributaries.
- The program is jointly funded by the Municipality of the District of Lunenburg (MoDL) and the Municipality of Chester (MOC).
- Most of the fieldwork is carried out by a dedicated group of volunteers.
- 2023 is the final year of the project.

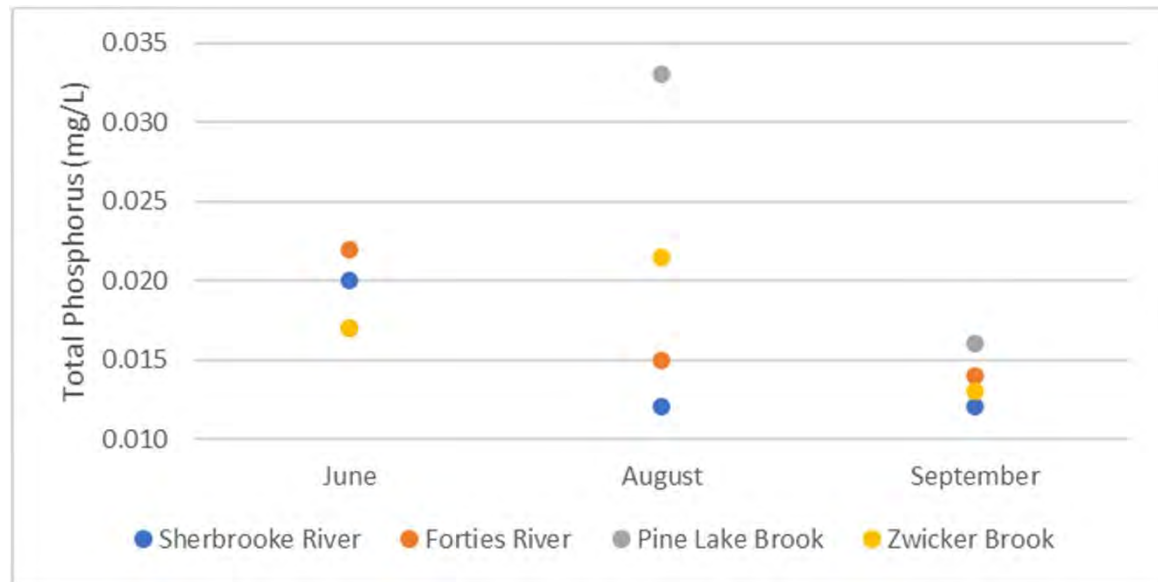
# Sherbrooke Lake

## Total Phosphorus & Nitrogen

Phosphorus and Nitrogen are essential nutrients required by aquatic plants and algae for growth, but excessive levels of either can lead to eutrophication, which is a process by which water bodies become overgrown with algae and other aquatic plants.

Excessive levels of TP can lead to:

- Algae blooms
- Reduced oxygen
- Fish kills
- Changes in plant community



- Phosphorous levels exceeded guidelines (0.20 mg/L in lakes, and 0.30 mg/L in rivers) in Pine Lake Brook in August.
- Nitrogen guideline (0.90 mg/L) not exceeded in 2022.

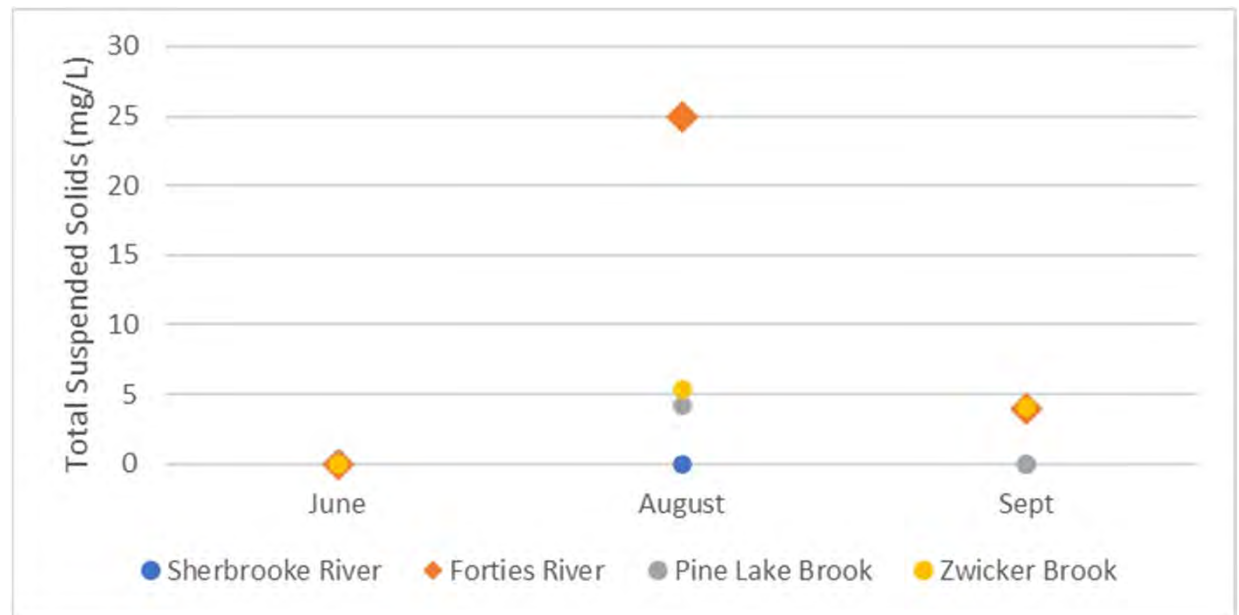
# Sherbrooke Lake

## Total Suspended Solids

TSS refers to the amount of suspended particles, such as silt, sediment, and organic matter, in water bodies. Excessive TSS can have negative impacts on aquatic life and water quality.

Excessive levels of TSS can lead to:

- Reduced water clarity
- Reduced light penetration
- Sedimentation



- Total Suspended Solids guideline (10 mg/L increase in bodies of water with <100 mg/L) not exceeded in 2022.

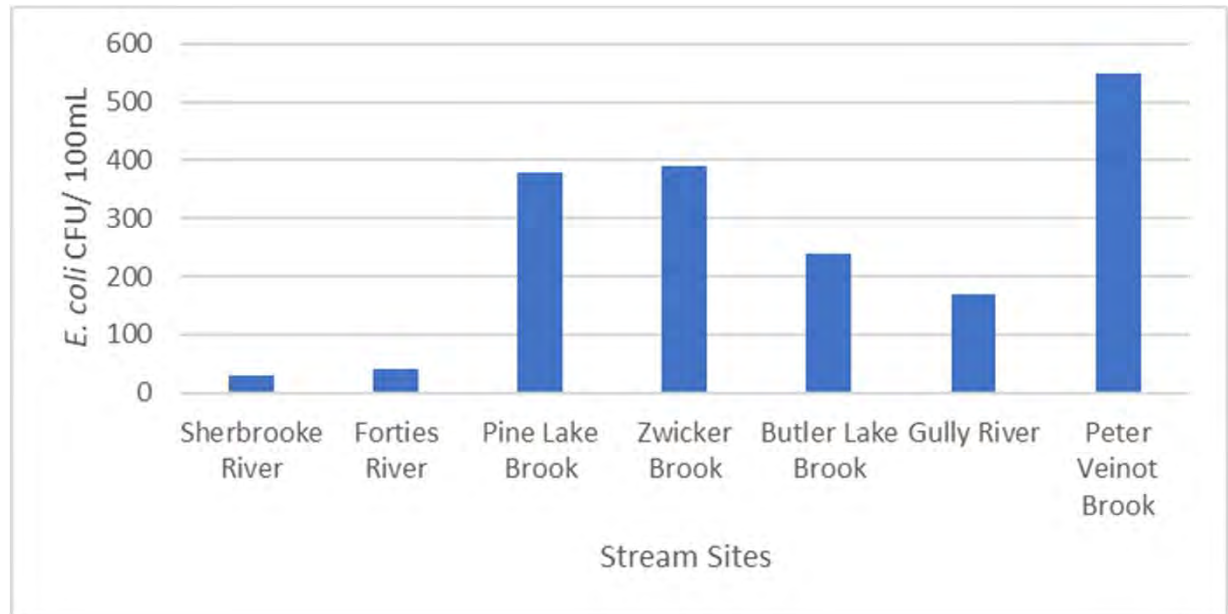
# Sherbrooke Lake

## *E. coli*

*E. coli* (Escherichia coli) is a type of bacteria that is commonly found in the intestines of warm-blooded animals. It is often used as an indicator of fecal contamination, which can be a health risk to humans and aquatic life.

Excessive levels of *E. coli* can lead to:

- Human health risks
- Aquatic life impacts



- *E. coli* levels exceeded guidelines (400 CFU/100 mL) in Peter Veinot Brook during the rainfall dependant sample in 2022.

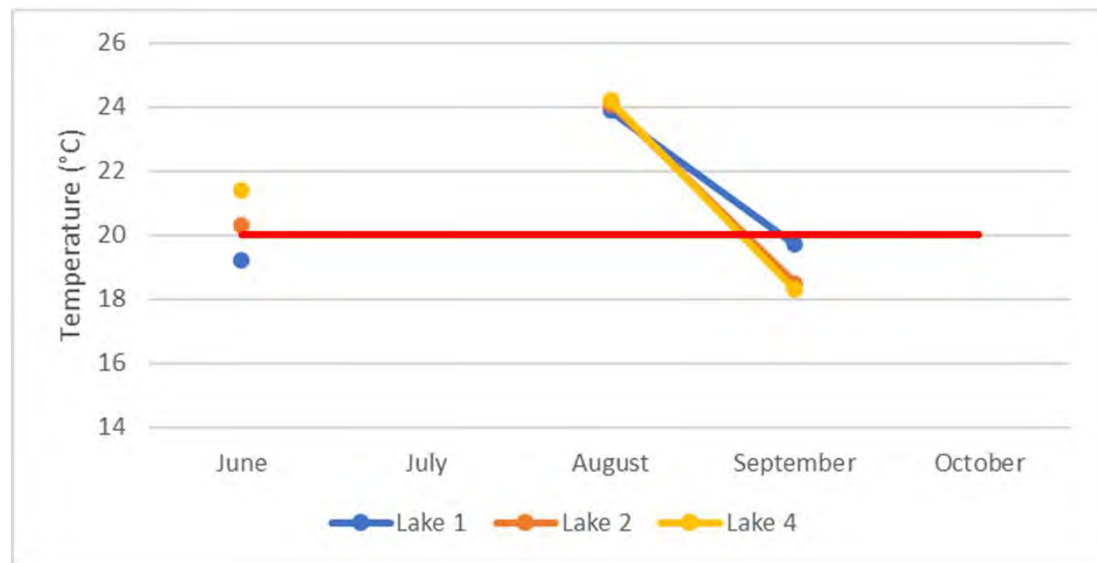
# Sherbrooke Lake

## Water Temperature

Water temperature can have a significant impact on aquatic life, as it can affect the growth, metabolism, behaviour, and reproduction of aquatic organisms.

Excessive temperature can have an impact on:

- Oxygen levels
- Growth and development
- Metabolism
- Habitat
- Migration



- Water temperature guidelines (20°C) were exceeded at Lake sites 2 & 4 in June and all lake sites in August.
- The guideline was also exceeded at Sherbrooke River in June and all sites except Pine Lake Brook in August.

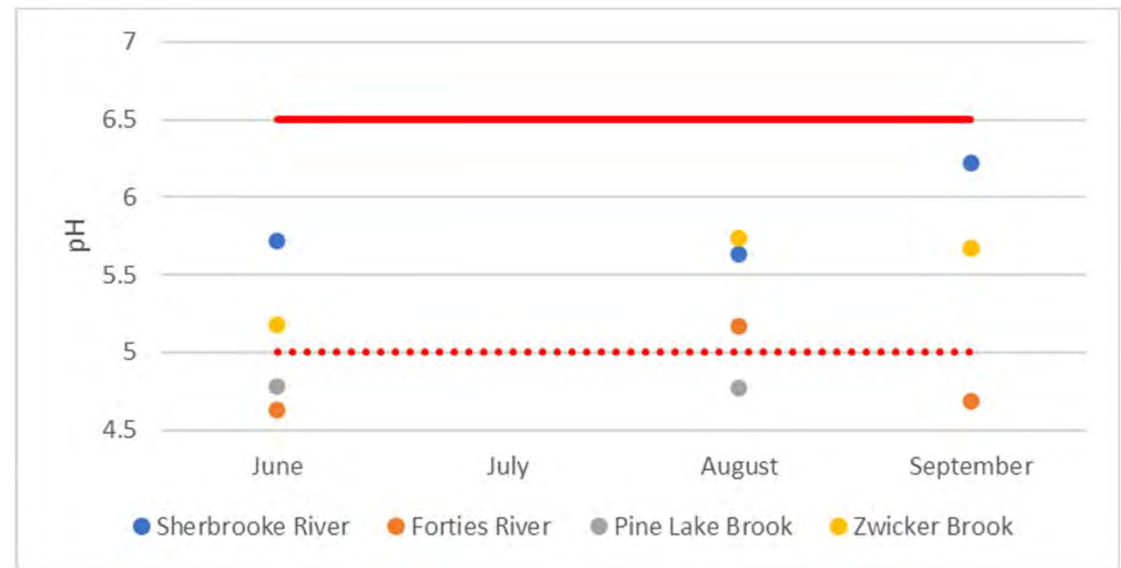
# Sherbrooke Lake

## pH

The pH level, or acidity of water, can have significant impacts on aquatic life. Different aquatic organisms have different tolerances to pH levels, and even small changes in pH can affect their survival, growth, and reproduction.

pH levels can have an impact on:

- Acidification
- Alkalinity
- Reproduction
- Food web



- pH levels did not meet CCME guidelines (6.5 pH) at any site, except Lake sites 1 & 2 in August.
- pH levels met NSSA guidelines (5.0 pH) at all lake and stream sites, except Forties River in June and September, and Pine Lake Brook in June and August.

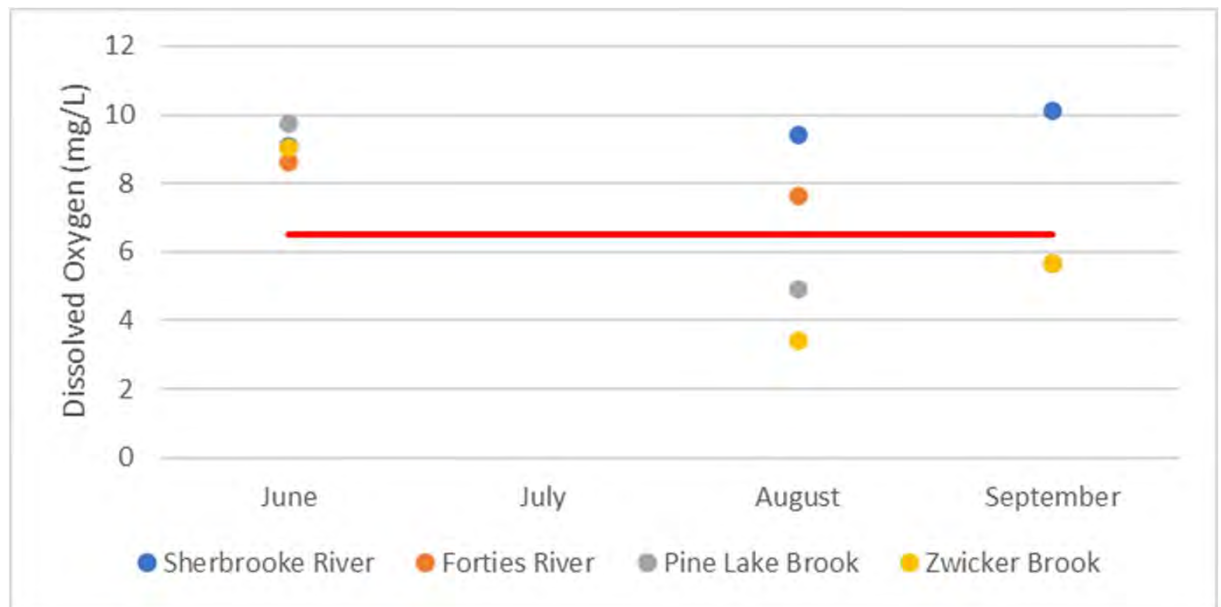
# Sherbrooke Lake

## Dissolved Oxygen

Dissolved Oxygen (DO) refers to the amount of oxygen that is dissolved in water, and it is measured in milligrams per litre (mg/L) or as a percentage of saturation (% SAT).

Low levels of DO can have an impact on:

- Respiration
- Growth and reproduction
- Habitat quality
- Nutrient cycling



- Dissolved Oxygen guidelines (6.5 mg/L) were not met by Pine Lake Brook and Zwicker Brook in August, and again by Zwicker Brook in September.

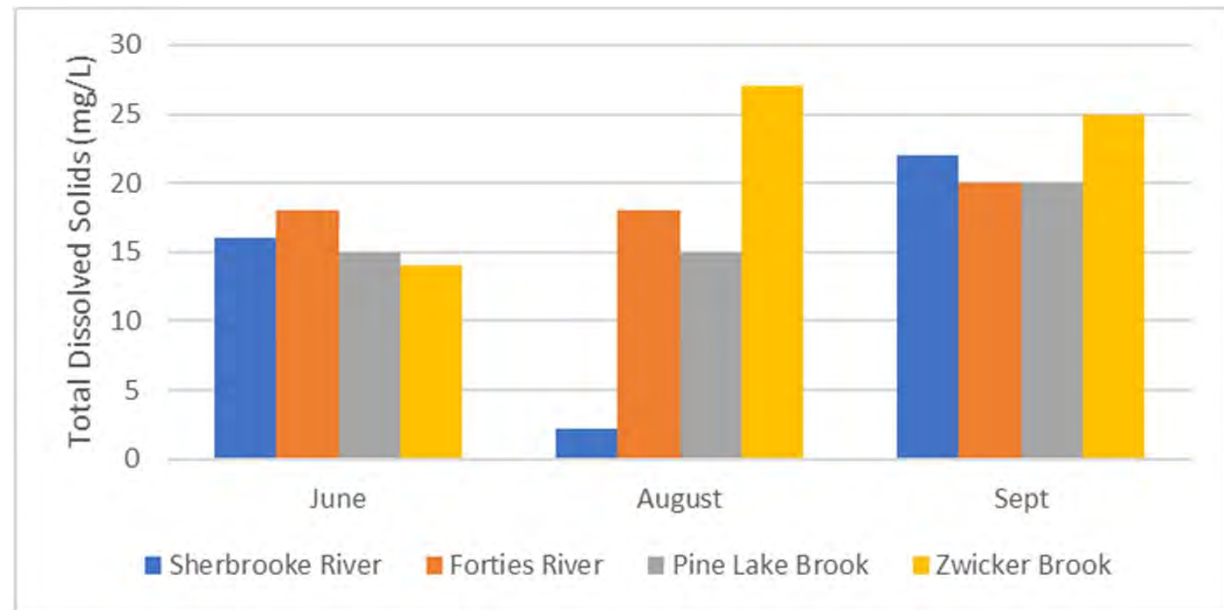
# Sherbrooke Lake

## Total Dissolved Solids

Total dissolved solids (TDS) is a measurement of the total amount of dissolved solids, including salts and minerals, present in water. High levels of TDS can be an indicator of poor water quality and can have a number of impacts on aquatic life.

High levels of TDS can have an impact on:

- Dissolved oxygen levels
- Water chemistry
- Habitat quality
- Water taste and odor



- There are no guidelines for Total Dissolved Solids. See the 2022 report for more information.

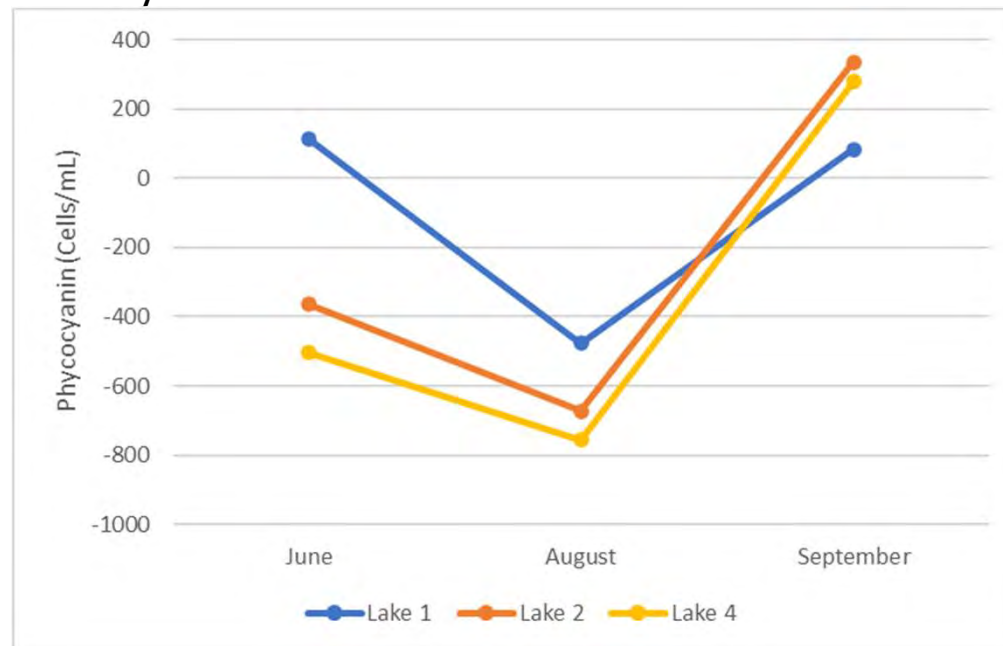
# Sherbrooke Lake

## Chlorophyll- $\alpha$ & Phycocyanin

Chlorophyll- $\alpha$  and Phycocyanin are pigments found in photosynthetic organisms, such as algae and cyanobacteria. Chlorophyll- $\alpha$  is an important indicator of primary productivity in aquatic ecosystems, and Phycocyanin can be an indicator of the presence and abundance of cyanobacteria.

Chlorophyll- $\alpha$  and Phycocyanin levels can have an impact on:

- Productivity & growth
- Oxygen levels
- Turbidity
- Changes in water chemistry
- Harmful algae blooms



- Phycocyanin guidelines (Level 1 20,000 cells/mL; Level 2 100,000 cells/mL) were not exceeded in 2022.
- There are no guidelines for Chlorophyll- $\alpha$ .

# Sherbrooke Lake

## Sediment Samples

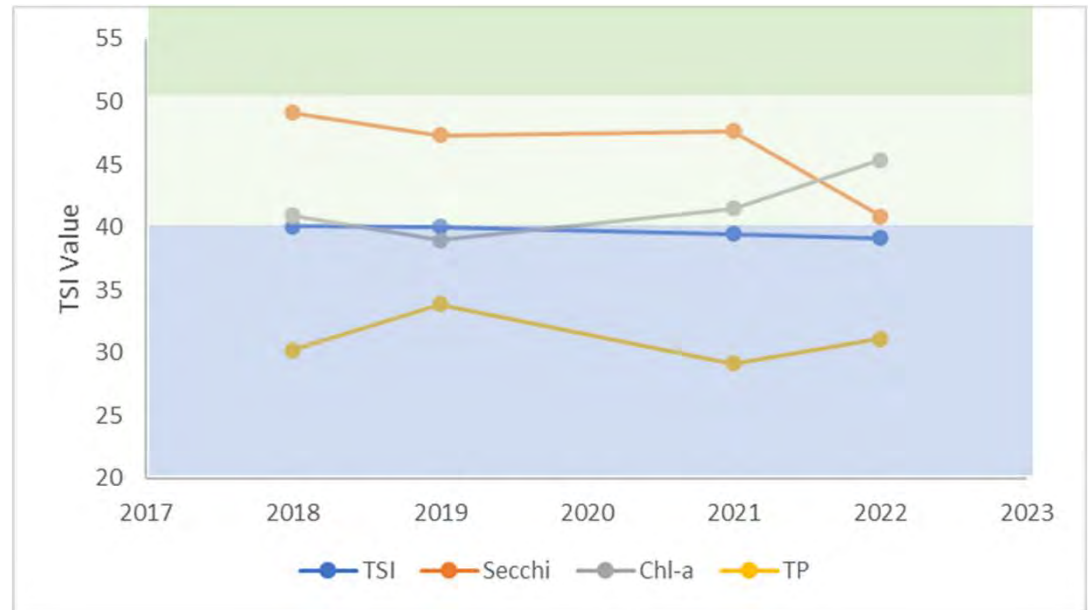
Sediment samples show no exceedances at any of the stream sites. The samples from the lake sites show increased levels of most previous exceedances at Lake sites 1, 2 & 4. Generally, the sediment quality has improved since 2019 but has decreased compared to 2021.

|                               | UNITS | Lake 1 |      |      | Lake 2 |      |      |      | Lake 3 | Lake 4 |      |      |
|-------------------------------|-------|--------|------|------|--------|------|------|------|--------|--------|------|------|
|                               |       | 2019   | 2021 | 2022 | 2018   | 2019 | 2021 | 2022 | 2018   | 2019   | 2021 | 2022 |
| <b>Metals</b>                 |       |        |      |      |        |      |      |      |        |        |      |      |
| Acid Extractable Arsenic (As) | mg/kg | 8.4    | 4.8  | 6.8  | 16     | 12   | 6.8  | 12   | 8.3    | 8.1    | 9.8  | 8.3  |
| Acid Extractable Cadmium (Cd) | mg/kg | 0.76   | 0.31 | 0.69 | 1      | 0.99 | 0.46 | 0.81 | 1.5    | 0.76   | 0.63 | 0.66 |
| Acid Extractable Lead (Pb)    | mg/kg | 34     | 8.8  | 30   | 49     | 24   | 8    | 43   | 13     | 13     | 8.9  | 17   |
| Acid Extractable Mercury (Hg) | mg/kg | 0.27   | 0.15 | 0.25 | 0.27   | 0.2  | 0.12 | 0.21 | 0.16   | ND     | 0.12 | 0.14 |

# Sherbrooke Lake

## Trophic State Index

Annual Trophic State Index assessments show that the Lake is consistently straddling the line between oligotrophic and mesotrophic. In 2022 the TSI score was 39.1, technically classifying the lake as oligotrophic (low productivity).



# Sherbrooke Lake

## Conclusion and Recommendations

Sherbrooke Lake has generally good water quality. The trophic state index assessment demonstrates an unproductive system that is unfavourable for algae growth. However, the threat of algae blooms does still exist in Sherbrooke Lake and the surrounding streams. The sediment quality also appears to be improving since 2019. However, there were slightly higher levels of heavy metals in 2022 compared to 2021.

Coastal Action is recommending that this project be continued in its final year at the same capacity as 2022.

March, 15, 2023

To MODL, and MODC,

Our year four report on Sherbrooke Lake water quality continues our work on establishing a baseline understanding of the water quality conditions in this lake. There are two things that I would like to emphasize: first, our commitment four years ago (actually five due to COVID) to establish a scientifically reliable baseline knowledge on the state of Sherbrooke Lake is now near completion. This summer's water quality monitoring will be the last step in declaring success and for this we are thankful to Councils for their continued support.

Second, the new knowledge gained on the health of one of NS largest lakes will be an important base on which to guide any future decisions related to changing land use around the lake and its surrounding watershed.

Already we are seeing changes in lake water levels and temperatures related to climate change. These changes are not directly under our control and make our collective responsibility to manage the effects we can influence that much more important.

Over the past year we have continued to engage with the province to provide staff or \$, but without any real success. We attended the Cyanobacteria workshop organized to share knowledge of the scientific community here in Atlantic Canada on this emerging water quality problem. We have also had a number of meetings with scientists at Dalhousie University to encourage them to focus some of their research on blue-green algae/ cyanobacteria on Sherbrooke Lake. Decisions are still pending.

It is our intention this year to provide a better response to the periodic growth of algae blooms by training a number of lake residents in sampling procedures such that we can more effectively sample any algae blooms reported. This will help provide some assurance to property owners that we are taking this threat seriously. It will also help us to understand if these blooms should be a concern to lake users.

Finally, we will continue to keep property owners on Sherbrooke Lake and other residents of Lunenburg County apprised of our work and urge them to be responsible for their own actions which could contribute to reduced water quality. Thank you, for your continued interest and support.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Garth Bangay', written in a cursive style.

Garth Bangay,  
Chair, Sherbrooke Lake Stewardship Committee

# Sherbrooke Lake 2022 Water Quality Monitoring Report

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Prepared for:

Municipality of the District of Lunenburg

Municipality of Chester

Sherbrooke Lake Stewardship Committee

# Sherbrooke Lake 2022 Water Quality Monitoring Report

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## Executive Summary

This report outlines the activities and results of the 2022 Sherbrooke Lake (SL) water quality monitoring program. This project began in response to the planned development of a municipal public access site at Sherbrooke Lake. The program's goal was to determine a baseline understanding of water quality conditions within SL before construction of the public access site, monitor water quality during and after the construction, and provide evidence-based advice to MODL and MOC regarding ways to address water quality changes and concerns within the lake.

In June, August and September 2022, volunteers collected water samples at three lake sites and three stream sites. Lake 3, a site that has previously been sampled, was not included in the 2022 sample schedule except for *Escherichia coli* (*E. coli*). On December 1, 2022, Coastal Action staff collected samples at seven stream sites following a rainfall event (rain >25 mm). Sediment samples were also taken at the lake and one stream site once in the season. An at-depth sample, taken below the thermocline at lake sites, was analyzed for total phosphorus and total nitrogen.

Factors measuring or contributing to the production of algae in freshwater, including phycocyanin, total phosphorus and total nitrogen, did not exceed guidelines set by the World Health Organization or Ontario's Ministry of Environment and Climate Change guidelines, except for Pine Lake Brook, which exceeded the threshold of 0.03 mg/L for total phosphorus in rivers and streams in August.

Surface water temperatures of all lake and stream sites exceeded or approached the 20°C temperature threshold for cold-water fish species (NSSA 2014) during August.

Dissolved oxygen at all lake sites stayed above the minimum threshold of 6.5 mg/L set by the Canadian Council of Ministers of the Environment (CCME) for cold-water species (CCME 1999). Some of the stream sites fell below this threshold in both August and September.

pH measurements for most sites fell below the 6.5-pH threshold set by the CCME (2002); however, the acidity of SL waters is not uncommon for southwest NS lakes, which generally have lower pH values than the 6.5 threshold. It appears that most of the time, the acidity of the waters at SL poses minimal threat to organisms, except for some stream sites.

*E. coli* levels in the lake sites did not exceed or approach recreational guidelines. Sherbrooke River approached the primary recreational guideline of *E. coli* (400 CFU/100 mL) in August. In the rainfall-dependent sample, Pine Lake Brook and Zwicker Brook approached the primary guideline, while Peter Veinot Brook exceeded it.

Arsenic, cadmium, and mercury levels were elevated at all lake sites in the sediment samples. Lead levels were low at most lake sites, except Lake 2 which exceeded Interim Sediment Quality Guideline (ISQG). Metal concentrations in the stream site did not approach any of the guidelines.

The water quality of Sherbrooke Lake and its tributaries did not identify any significant water quality issues in 2022.

Based on the mean depth of transparency (Secchi disk), and mean concentrations of chlorophyll- $\alpha$  and phosphorus, a Trophic State Index (TSI) score has been calculated annually to assess biological productivity. Trophic states range from oligotrophic (low productivity and minimal biomass) to hypereutrophic (high productivity and maximum biomass). The trophic state of SL in 2018 and 2019 was oligotrophic-mesotrophic. The transition from oligotrophic to mesotrophic is a TSI score of 40. In 2018 and 2019, the TSI was less than a 10<sup>th</sup> of a decimal over 40, therefore classifying the lake as mesotrophic. In 2021, the TSI score was 39.4, putting the lake into an oligotrophic state. The trophic state remained oligotrophic in 2022, with a TSI score of 39.11. SL appears to be maintaining a steady TSI score over the four years this data has been collected.

Coastal Action recommends that the project continues in 2023, following the same program structure as 2022, with bi-monthly monitoring of lake and stream sites; sediment sampling; sampling regular stream sites and rainfall-dependent stream sites after rainfall exceeding 25 mm; and volunteers supplied with algae sampling equipment.

## 1.0 Introduction

The following report summarizes the results of the 2022 Sherbrooke Lake Water Quality Monitoring Program. Monitoring activities were conducted at Sherbrooke Lake (SL) by trained volunteers with support from Coastal Action in June, August and September 2022.

This marks the fourth year of the monitoring program, which began in 2018. Monitoring activities did not occur in 2020 due to COVID-19 restrictions.

This program receives financial support from both the Municipality of the District of Lunenburg (MODL) and the Municipality of Chester (MOC).



Figure 1. Sherbrooke Lake Water Quality Monitoring Program 2022 monitoring sites.

## **1.1 Monitoring Program Background**

Following several years of consultations regarding the development of a municipal public access site at Sherbrooke Lake, the Sherbrooke Lake Stewardship Committee (SLSC) was formed. The SLSC, a joint commitment between MODL and MOC, is comprised of one Coastal Action staff, two residents of MODL, two residents of MOC, a water quality expert, and supporting municipal staff.

The SLSC was tasked with developing and implementing a water quality monitoring program to: determine a baseline understanding of water quality conditions within SL before construction of the public access site, monitor water quality during and after the construction, and provide evidence-based advice to MODL and MOC regarding ways to address water quality changes and concerns within the lake.

Coastal Action acts as technical support for a group of trained volunteers, who conduct the monthly sampling, and Coastal Action collect samples at seven stream sites following rainfall exceeding 25 mm within 24 hours. Sampling after a significant rainfall monitors the potential effect of runoff from land (i.e., nutrients, bacteria, sediment), which may impact water quality. Following preliminary ground-truthing activities in 2017, the full Sherbrooke Lake Water Quality Monitoring Program was conducted in 2018, 2019, 2021 and 2022.

Further details on the program can be found in the *Sherbrooke Lake Water Quality Monitoring Program*, and the *Sherbrooke Lake Water Quality Monitoring Report (2018, 2019 & 2021)*; all are available upon request from either MOC or MODL.

## **1.2 Review of the 2021 Sherbrooke Lake Water Quality Monitoring Report**

In 2018 and 2019, the overall trophic state of Sherbrooke Lake was oligotrophic-mesotrophic, indicating that the biological productivity of the lake did not change during that period. In 2021, the trophic state of the lake was oligotrophic. The overall trophic state index (TSI) scores have remained relatively steady over the three years this data has been collected. The monitoring program did not identify any significant issues with the water quality of SL in 2018, 2019 and 2021.

An algal bloom was detected at the outlet to Gully Lake on July 7, 2021. Volunteers collected and submitted a water sample to BV Labs. No Microcystin-LR was detected in the sample.

None of the SL sites exceeded the phosphorus guideline of 0.02 mg/L in 2021. All stream sites remained under the 0.03 mg/L MOECC stream guidelines for phosphorus.

Sediment was sampled at Lake sites 1, 2, and 4, and at the mouth of Sherbrooke River to test for metal concentrations. At Lake 2 and 4, arsenic exceeded the ISQG (Interim Sediment Quality Guidelines). At Lake 4, arsenic and cadmium exceeded the ISQG. Lake 1 had no metals exceeding ISQG; however, mercury was approaching the ISQG. Sherbrooke River displayed low concentrations of metals with no parameter exceeding or approaching any of the sediment guidelines.

## **2.0 2022 Water Quality Monitoring Results**

### **2.1 Physical Water Quality Parameters**

#### **2.1.1. Chlorophyll- $\alpha$ , and Phycocyanin**

In 2021, a ProDSS Total Algae PC Sensor was purchased by MODL to use on the ProDSS YSI unit owned jointly by MOC and MODL. This probe measures concentrations of chlorophyll- $\alpha$  and phycocyanin present in water. Phycocyanin is a pigment found in cyanobacteria, or blue-green algae, and provides an estimate of total cyanobacteria production. Chlorophyll- $\alpha$  is a pigment produced by all types of algae and provides an estimate of total algae production.

Collecting this data over multiple seasons will provide baseline concentrations of phycocyanin in SL, which can vary across waterbodies. Long-term monitoring with this probe, paired with the collection of Microcystin-LR water samples during blooms, will help to identify spikes in phycocyanin concentrations and build a predictive curve for the relationship between the concentrations of these algal pigments and the occurrence of algal blooms in SL.

Algal concentrations are measured as Relative Fluorescence Units (RFU). Phycocyanin RFU units were converted to the total number of cells (Genzoli and Kann 2016). World Health Organization (WHO) provides two guideline levels, 'alert level 1' is reached when 20,000 phycocyanin cells/mL are observed, and 'alert level 2' is reached when 100,000 phycocyanin cells/mL are observed. At no point were the WHO guidelines exceeded or approached (Figure 2, Figure 3, Figure 4). The data was not collected before, during, or immediately after any known algae blooms.

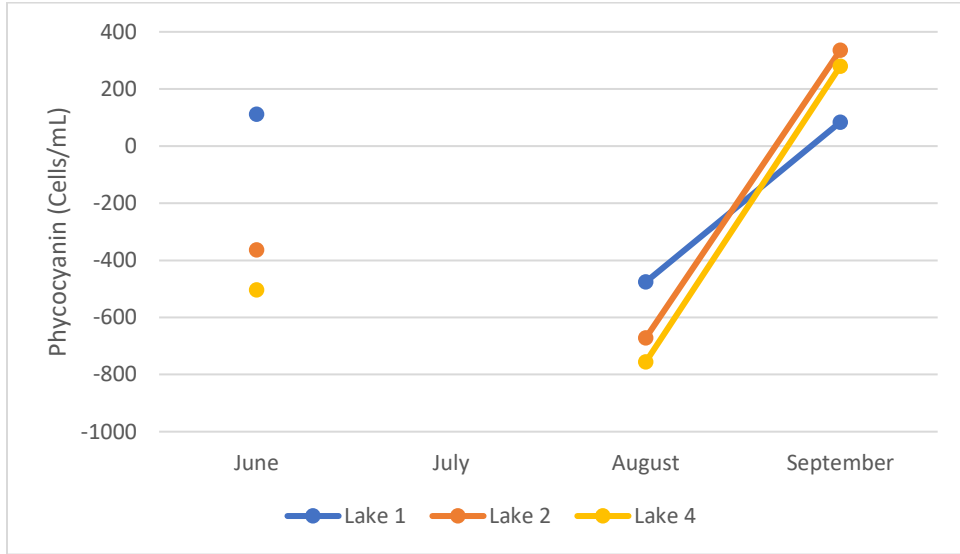


Figure 2. Phycocyanin (cells/mL) levels from the 2022 monthly sampling events at the lake sites. The WHO provides two guidelines; Alert level 1 at 20,000 cells/mL, and Alert level 2 at 100,000 cells/mL.

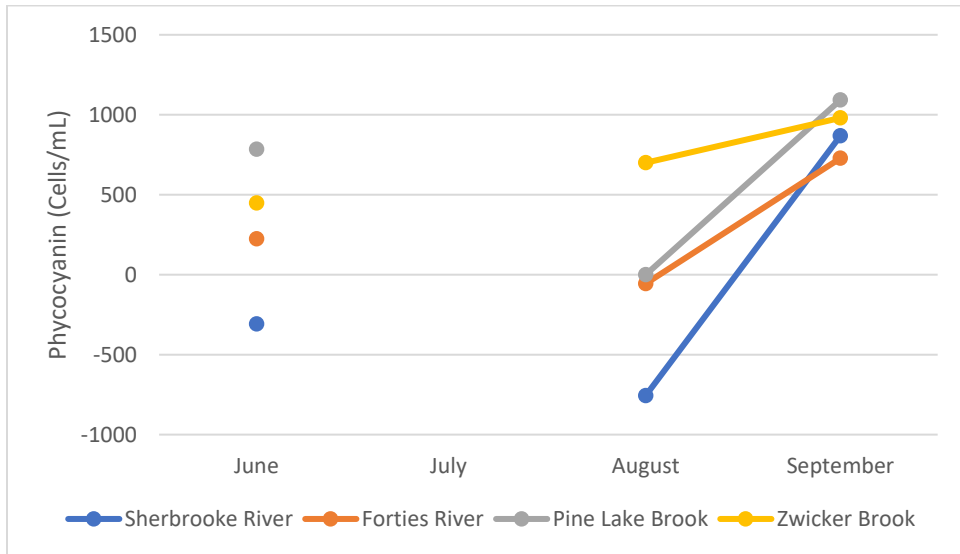


Figure 3. Phycocyanin (cells/mL) levels from the 2022 sampling events at the stream sites. The WHO provides two guidelines; Alert level 1 at 20,000 cells/mL, and Alert level 2 at 100,000 cells/mL.

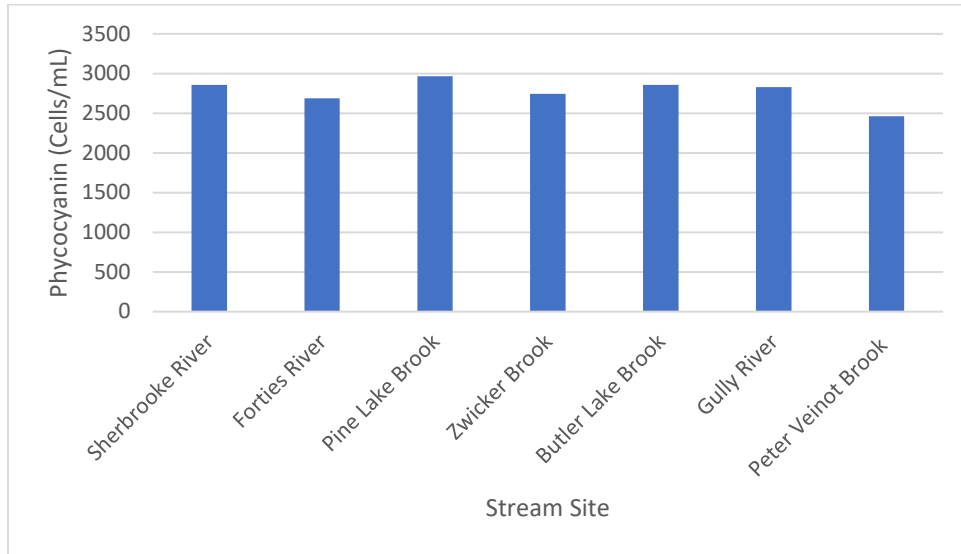


Figure 4. Phycocyanin (cells/mL) levels from the 2022 rainfall dependent sampling event at the stream sites, including the additional, rainfall-specific sites. The WHO provides two guidelines; Alert level 1 at 20,000 cells/mL, and Alert level 2 at 100,000 cells/mL. Rainfall dependent samples were taken December 1, 2022.

### 2.1.2. Surface Water Temperatures

Water temperatures were recorded in June, August and September at all lake sites, except Lake 3 which was only sampled for *Escherichia coli* (*E. coli*) in the 2022 field season. The stream sites were sampled in June, August, and September. Temperature readings were also taken during a rainfall dependent event in December at all stream sites, including the additional rainfall-specific sites. Temperatures at the lake sites ranged from 18.3°C to 24.2°C (Figure 5). The highest temperature recorded was at Lake 4 in August, but all other lake sites had similar temperatures during this time. Lake sites 2 and 4 exceeded the 20°C temperature threshold for cold-water fish species in June, while all lake sites exceeded this threshold in August (Nova Scotia Salmon Association [NSSA] 2014). All sites were below the threshold in September.

The stream sites showed cooler temperatures than the lake, ranging from 12.5°C to 22.5°C (Figure 6). The highest temperature recorded was at Sherbrooke River in August. Sherbrooke River exceeded the 20°C temperature threshold for cold-water fish species in June and August. Forties River and Zwicker Brook both exceeded the threshold in August, while Pine Lake Brook was just below at 19.9°C.

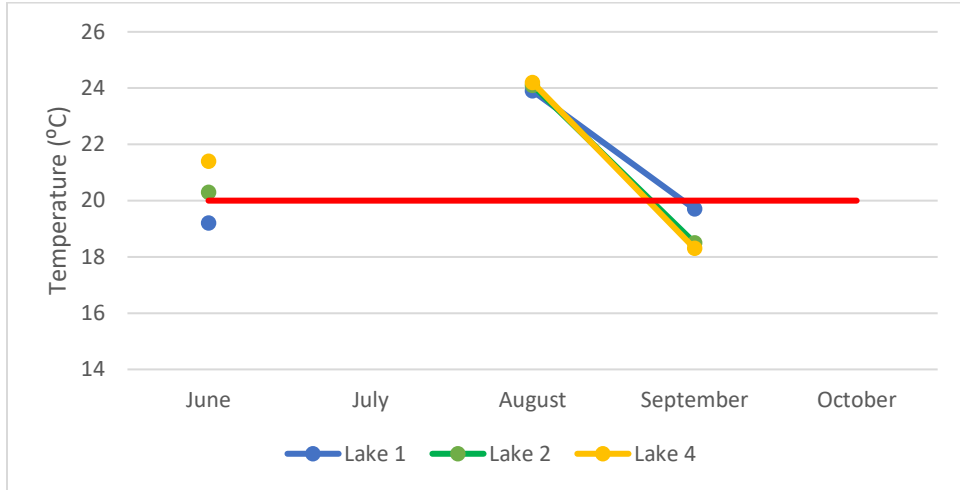


Figure 5. Temperature (°C) readings from the 2022 monthly sampling events at the lake sites. The red line indicates the 20°C threshold for cold-water fish set by NSSA. In August Lake 2 was 24.1°C and Lake 4 was 24.2°C; in September Lake 2 was 18.5°C and Lake 4 was 18.3°C.

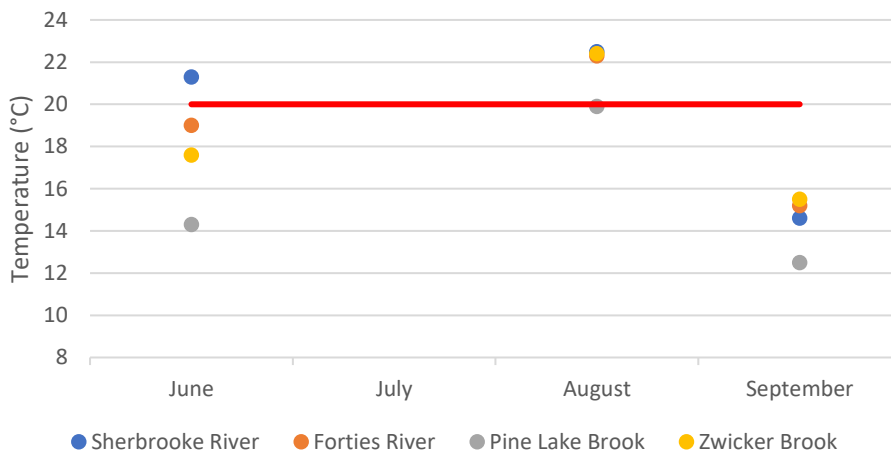


Figure 6. Temperature (°C) readings from the 2022 sampling events at the stream sites. The red line indicates the 20°C threshold for cold-water fish set by NSSA.

Surface water temperature readings were taken during the rainfall dependent sampling on December 1, 2022, at each of the stream sites, including three additional sites not included in the regular monthly samples. These samples were taken later than usual in the year due to a lack of significant rainfall during the summer and fall months which led to low water

flow following rainfall events and staff safety for sampling following significant rainfall from Hurricane Fiona. Temperatures from the rainfall sampling range from 5°C to 7.3°C (Figure 7).

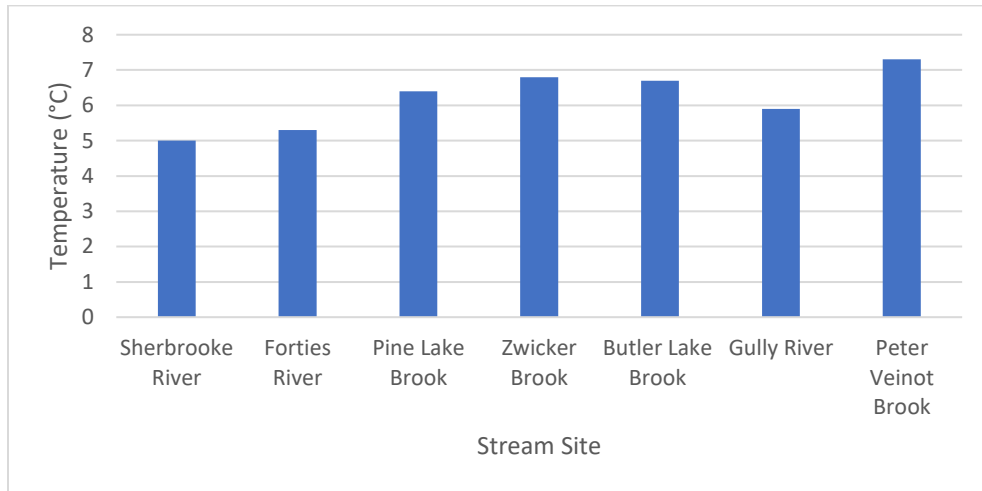


Figure 7. Temperature (°C) readings from the 2022 rainfall dependent sampling at the stream sites, including the additional, rainfall-specific sites.

### 2.1.3 Surface Dissolved Oxygen

Dissolved oxygen (DO) was recorded in June, August and September at all lake and stream sites, except Lake 3 which was not sampled. DO readings were also taken during the rainfall dependent sampling in December at all stream sites, including the additional rainfall-specific sites. DO readings at the lake sites ranged from 8.18 mg/L to 9.94 mg/L (Figure 8). The lowest reading was taken at Lake 4 in August. DO is a requirement for the survival of aquatic organisms, with a minimum threshold of 6.5 mg/L set by the Canadian Council of Ministers of the Environment (CCME) for cold-water species (CCME 1999). No readings below this threshold were recorded at any regularly monitored lake site in 2022.

DO readings at the stream sites ranged from 3.42 mg/L to 10.10 mg/L (Figure 9). Forties River and Pine Lake Brook were below the 6.5 mg/L threshold in both August and September. Forties River was below the threshold in September.

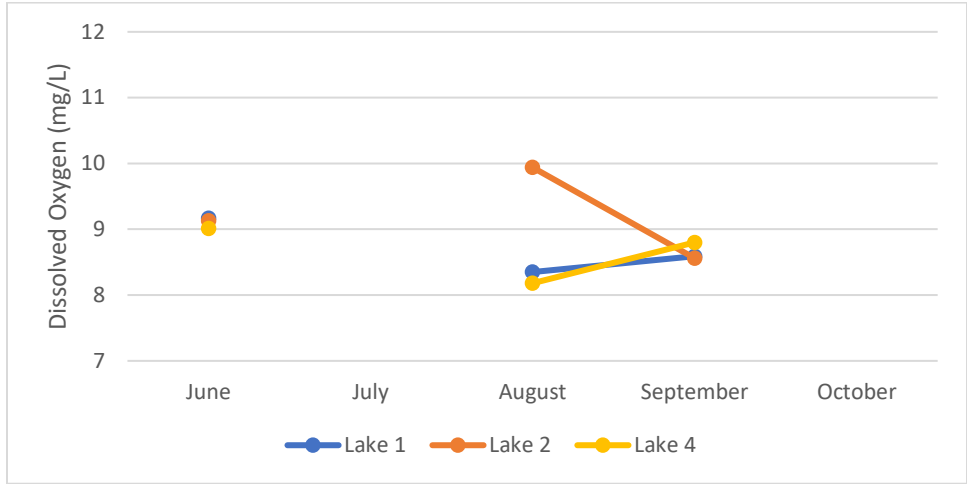


Figure 8. Dissolved Oxygen (mg/L) readings from the 2022 monthly sampling events at the lake sites.

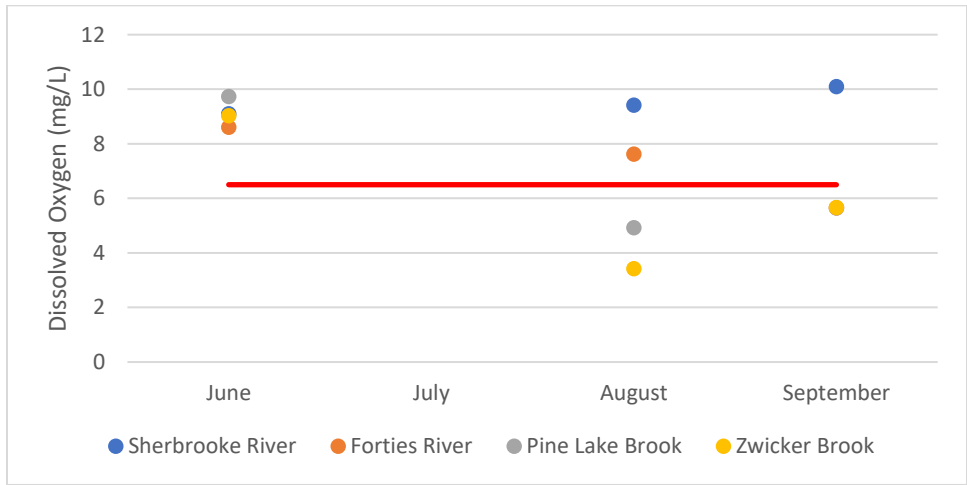


Figure 9. Dissolved Oxygen (mg/L) readings from the 2022 sampling events at the stream sites.

Dissolved oxygen readings were taken during the rainfall dependent sampling event on December 1, 2022, at each of the stream sites, including three additional sites not included in the regular monthly samples. DO levels ranged from 10.55 mg/L to 12.56 mg/L (Figure 10). None of the readings were below the 6.5 mg/L threshold.

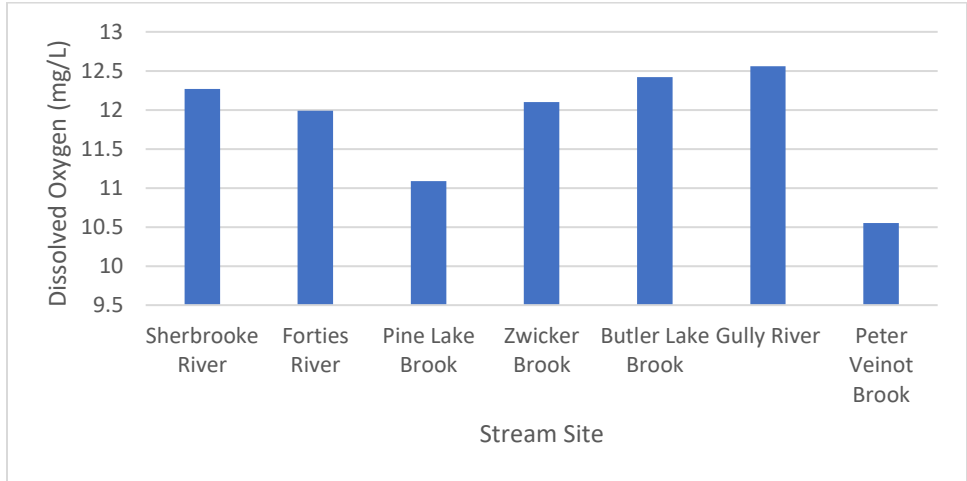


Figure 10. Dissolved Oxygen (mg/L) readings from the 2022 rainfall dependent sampling event at the stream sites, including the additional, rainfall-specific sites.

### 2.1.4 pH

pH, a measurement of the acidity of a liquid, was recorded in June, August and September at all lake and stream sites, except Lake 3 which was not sampled. pH readings were also taken during a rainfall dependent sampling event in December at all stream sites, including the additional, rainfall-specific sites. Although the pH measurements for most sites fell below the 6.5-pH threshold set by the CCME (CCME 2002), the acidity of SL waters is not uncommon for southwest NS lakes. As Nova Scotia has experienced high amounts of acid precipitation in the past, and its geology limits the replenishment of base cations to soils (NSSA 2015), surface waters in southwest Nova Scotia are generally lower than the 6.5-pH threshold. In addition, though the Sherbrooke Lakes' pH values are lower than 6.5 pH, many fish species can survive in waters >5.0-pH (NSSA 2014) and therefore it appears that most of the time, the acidity of the waters at SL poses minimal threat to organisms, except for some stream sites.

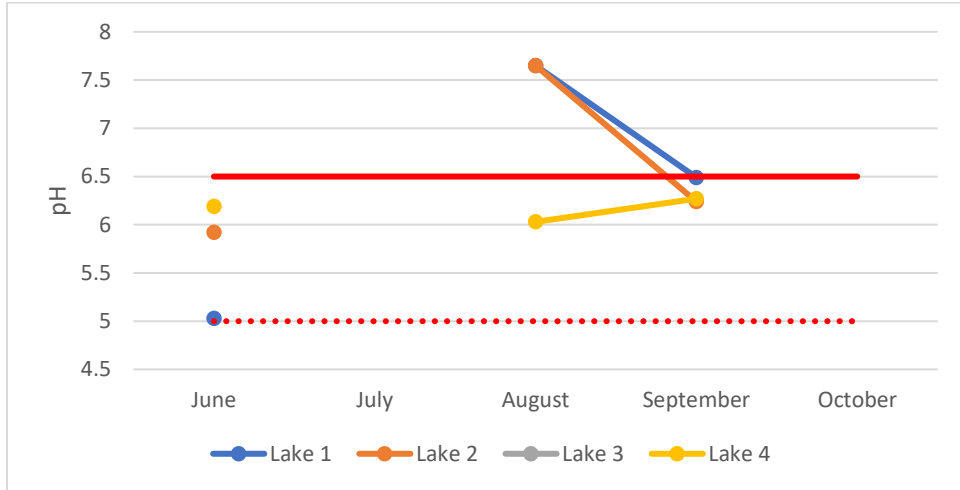


Figure 11. pH readings from the 2022 monthly sampling events at the lake sites. The solid red line indicates the 6.5 pH threshold set by CCME, and the dotted red line indicates the 5.0 pH threshold identified by NSSA.

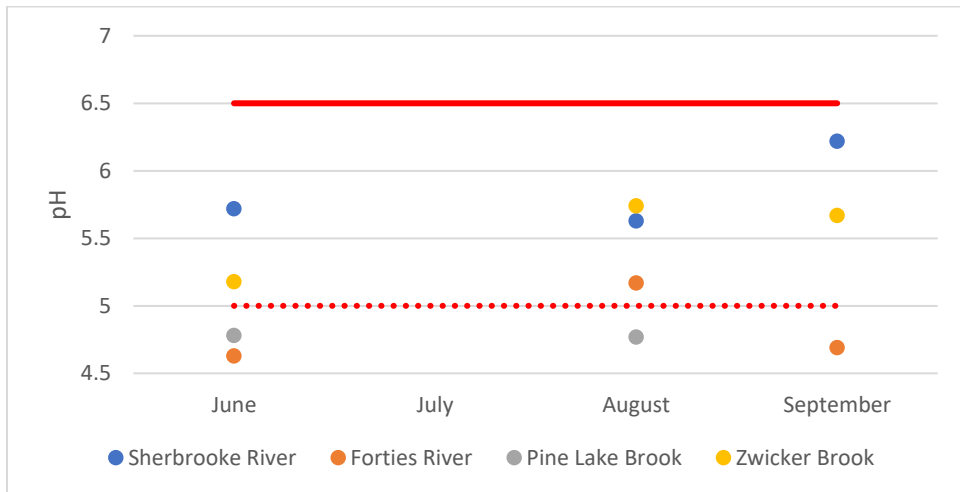


Figure 12. pH readings from the 2022 sampling events at the stream sites. The solid red line indicates the 6.5 threshold set by CCME, and the dotted red line indicates the 5 threshold identified by NSSA.

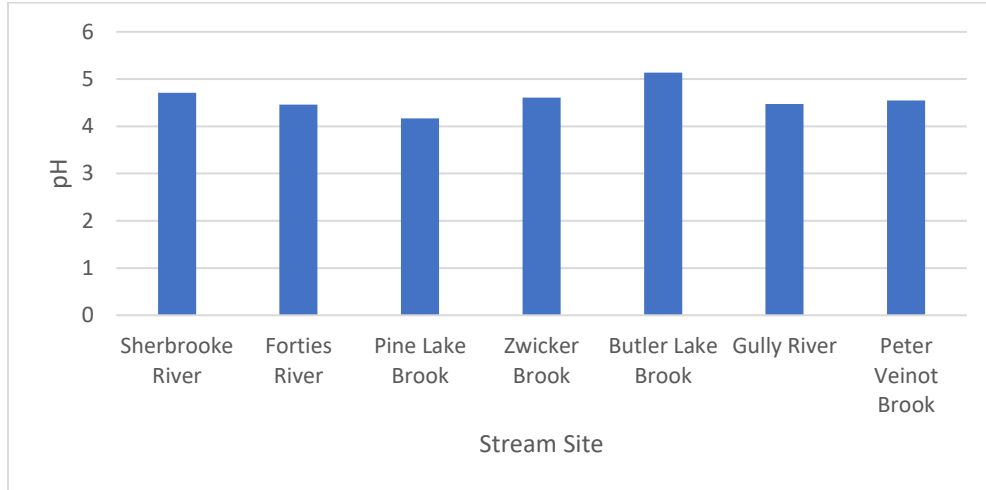


Figure 13. pH readings from the 2021 rainfall dependent sampling event at the stream sites, including the additional, rainfall-specific sites.

### 2.1.5 Total Dissolved Solids

Total Dissolved Solids (TDS) were recorded in June, August and September at all lake and stream sites, except Lake 3 which was not sampled. TDS readings were also taken during a rainfall dependent sampling event in December at all stream sites, including the additional, rainfall-specific sites. TDS readings at the lake sites ranged from 14 mg/L to 16 mg/L (Figure 14), and 2 mg/L to 27 mg/L at the stream sites (Figure 15). The highest reading of all lake sites was taken in August, and the highest reading of the stream sites was taken at Zwicker Brook in August.

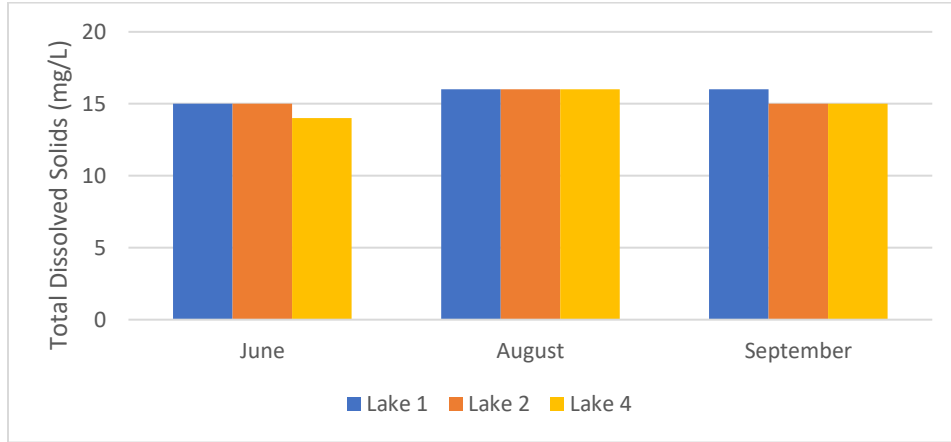


Figure 14. Total Dissolved Solids (mg/L) readings from the 2022 monthly sampling events at the lake sites.

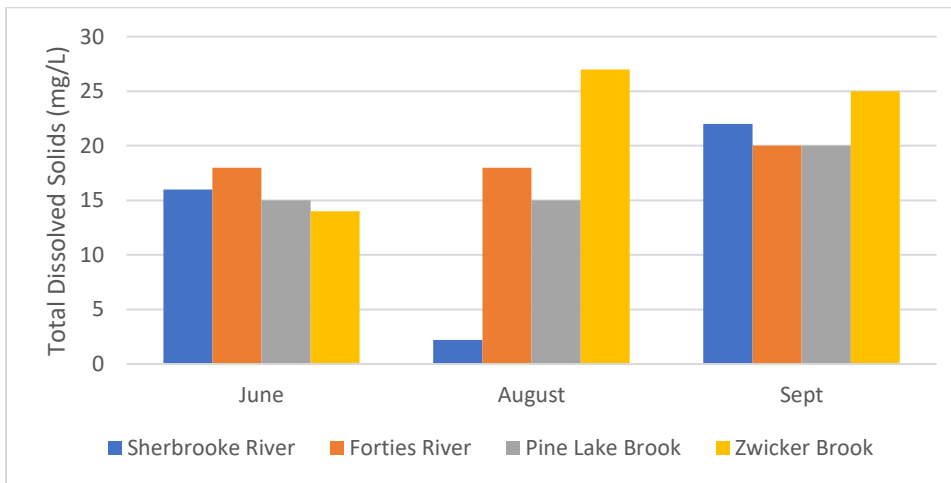


Figure 15. Total Dissolved Solids (mg/L) readings from the 2022 sampling events at the stream sites.

Total Dissolved Solids readings were taken during a rainfall dependent sampling event on December 1, 2022, at each of the stream sites, including three additional sites not included in the regular monthly samples. TDS levels ranged from 19.5 mg/L to 27.3 mg/L (Figure 16).

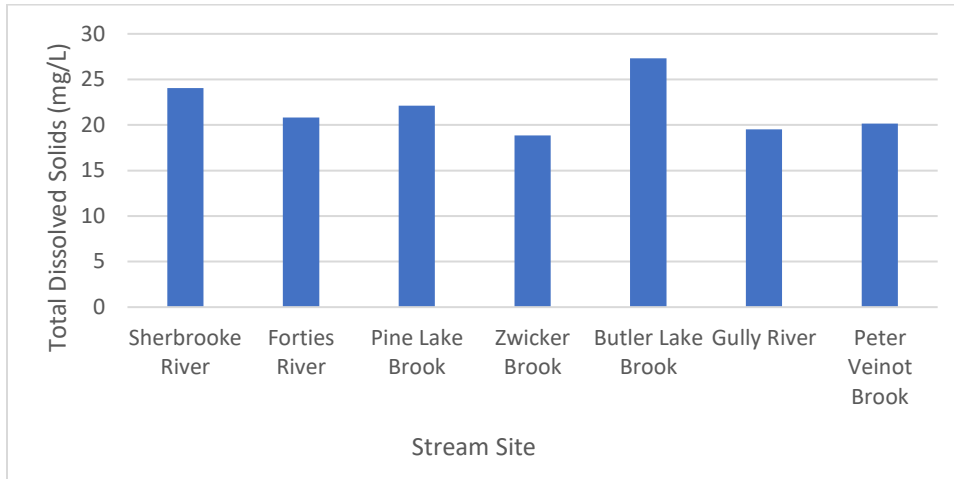


Figure 16. Total Dissolved Solids (mg/L) readings from the 2022 rainfall dependent sampling event at the stream sites, including the additional, rainfall-specific sites.

There is no guideline for TDS set by the CCME for the protection of aquatic health; however, Hinch and Underwood (1985) found that pristine Nova Scotian lakes had an average of 20 mg/L. The presence of high TDS is not necessarily harmful as dissolved materials can be from both anthropogenic and natural sources. As TDS does not have a guideline for the protection of aquatic organisms, TDS concentrations do not appear to be detrimental to Sherbrooke Lake.

## 2.2 Chemical Water Quality Parameters

### 2.2.1 Total Suspended Solids

Total Suspended Solids (TSS) were measured as the value of solids suspended in a water column that do not pass through a 45 µm glass fibre filter. Samples were recorded in June, August, and September at all lake sites, except Lake 3 which was not sampled (Figure 17). The stream sites were also sampled in June, August, and September (Figure 18). TSS samples were also taken during a rainfall dependent sampling event in December at all stream sites, including the additional, rainfall-specific sites. In some cases, TSS concentrations were so low that lab results displayed a 'not detected' (ND) reading. The TSS samples from the lake sites ranged from ND to 1.2 mg/L, and from ND to 25 mg/L at the stream sites.

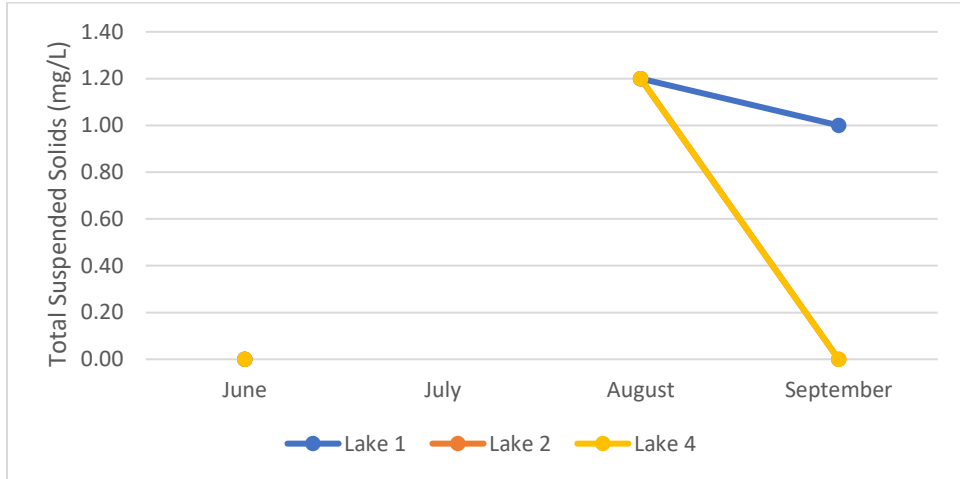


Figure 17. Total Suspended Solids (mg/L) readings from the 2022 monthly sampling events at the lake sites. Lake 1, Lake 2 and Lake 4 had readings of 1.2 mg/L in August. Values of 0 are not detected.

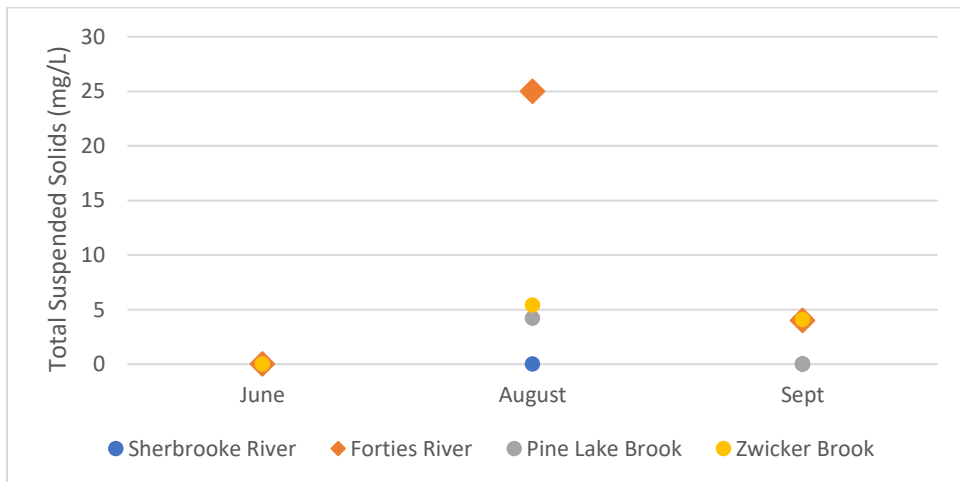


Figure 18. Total Suspended Solids (mg/L) readings from the 2022 sampling events at the stream sites. Values of 0 are not detected.

Total Suspended Solids samples were taken during a rainfall dependent sampling event on December 1, 2022, at each of the stream sites, including three additional sites not included in the regular monthly samples. TSS levels ranged from ND to 2.4 mg/L (Figure 19).

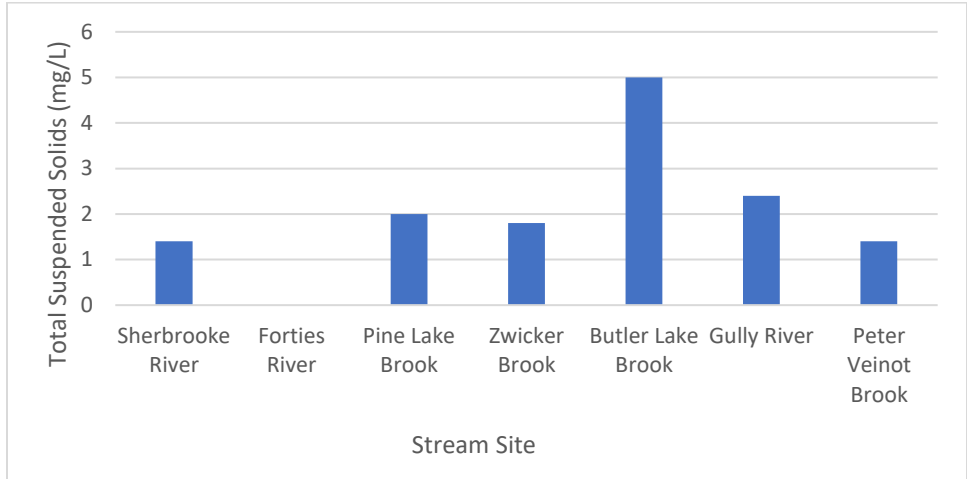


Figure 19. Total Suspended Solids (mg/L) readings from the 2021 rainfall dependent sampling event at the stream sites, including the additional, rainfall-specific sites. TSS was not detected at Forties River.

As the CCME has a guideline of a 10 mg/L allowable increase from baseline in waterbodies with TSS ≤ 100 mg/L (CCME 2002), the levels observed in 2022 are not a threat to aquatic organisms.

### 2.2.2 Total Phosphorus

Total phosphorus (TP) levels were recorded in June, August and September at all lake and stream sites, except Lake 3 which was not sampled. TP readings were also taken during a rainfall dependent sampling event in December at all stream sites, including the additional, rainfall-specific sites. TP readings at the lake sites ranged from not detected (ND) to 0.008 mg/L, and 0.012 mg/L to 0.033 mg/L at the stream sites. The highest lake concentration was observed at all lake sites in August, and the highest concentration of the stream sites was observed at Pine Lake Brook in August. Compared to the previous years, TP levels in the Lake sites have been less varied, and lower in 2022; however, data from May, July, September and October are missing for 2022 (Figure 20).

Ontario’s Ministry of Environment and Climate Change (MOECC) has established two guidelines for phosphorus in water bodies: ≤ 0.02 mg/L for lakes, and ≤ 0.03 mg/L for rivers and streams (Ontario’s Ministry of Environment [MOE] 1979). TP concentrations in the lake did not exceed the MOECC guidelines. Pine Lake Brook exceeded the threshold of 0.03 mg/L in August.

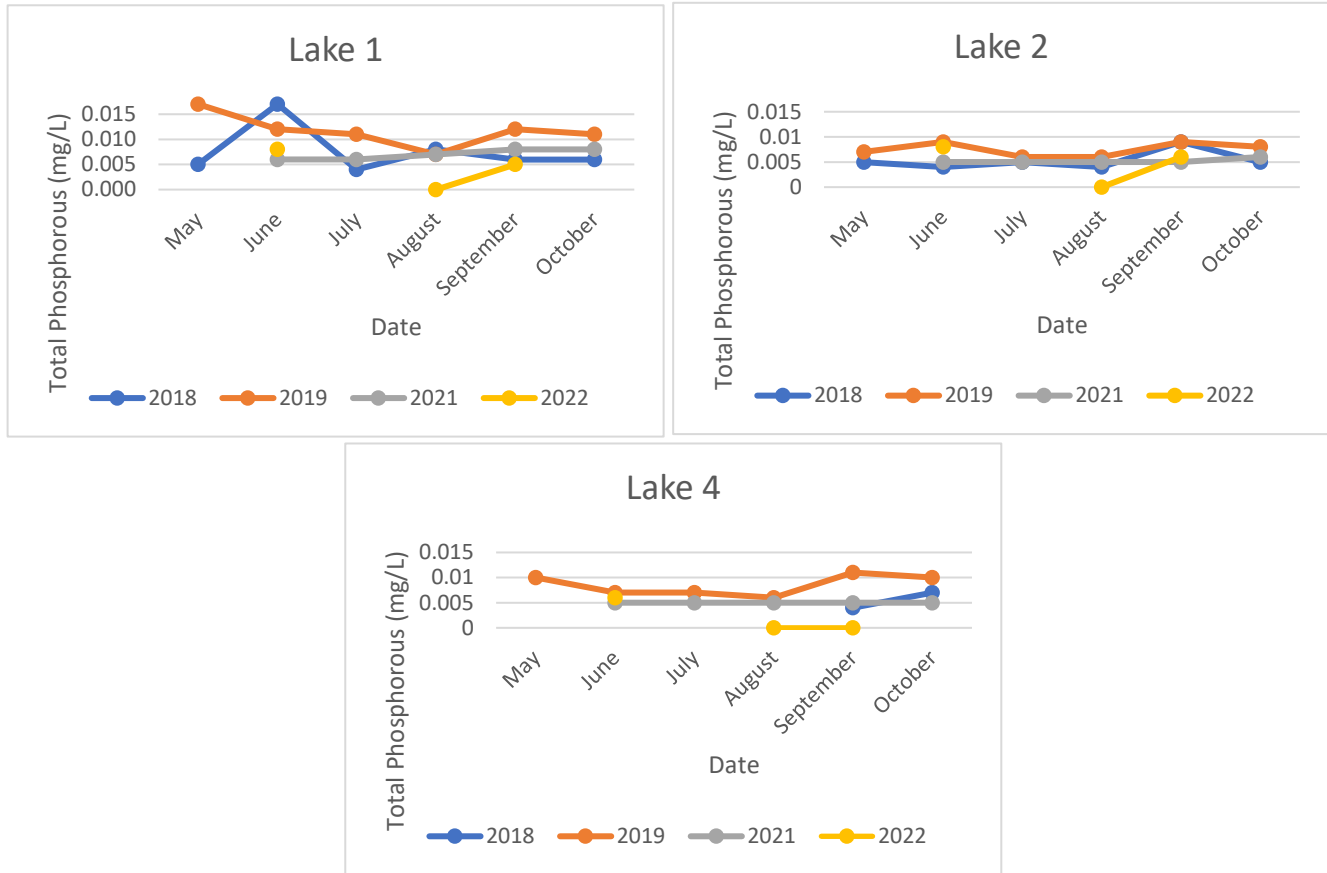


Figure 20. Total Phosphorus (mg/L) levels from Lake 1, 2, and 4 from 2018, 2019, 2021, and 2022.

Total phosphorus samples were taken during a rainfall dependent sampling event on December 1, 2022, at each of the stream sites, including three additional sites not included in the regular monthly samples. TP levels ranged from 0.007 mg/L to 0.015 mg/L (Figure 22).

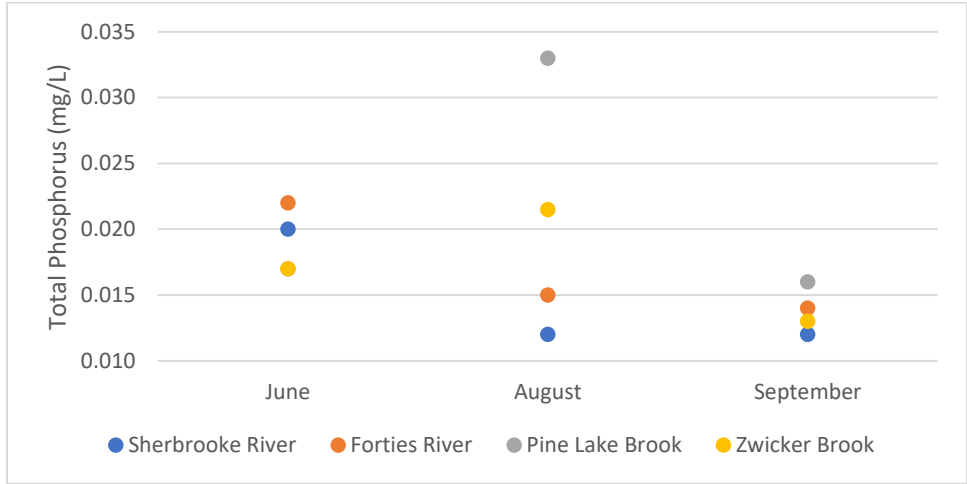


Figure 21. Total Phosphorus (mg/L) readings from the 2022 sampling events at the stream sites.

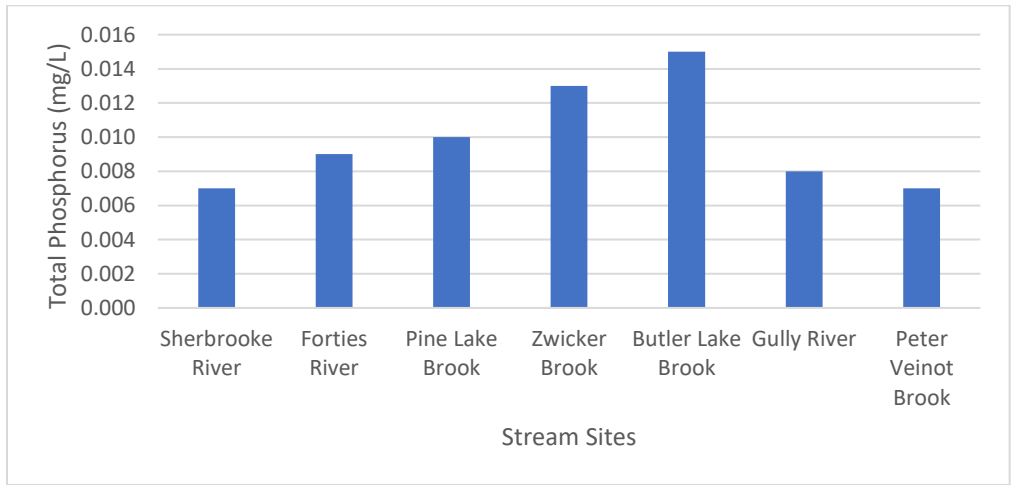


Figure 22. Total Phosphorus (mg/L) readings from the 2022 rainfall dependent sampling event at the stream sites, including the additional, rainfall-specific sites.

In September, Total Phosphorus samples were taken below the thermocline at Lake 1 and Lake 2. Results show 0.008 mg/L at Lake 1, and 0.006 mg/L at Lake 2. These results do not exceed the MOECC guidelines and are similar to the surface Total Phosphorus levels.

### 2.2.3 Total Nitrogen

Total Nitrogen (TN) levels were recorded in June, August and September at all lake and stream sites, except Lake 3 which was not sampled. TN readings were also taken during a rainfall dependent sampling event in December at all stream sites, including the additional, rainfall-specific sites. TN readings at the lake sites ranged from 0.201 mg/L to 0.238 mg/L (Figure 23), and 0.396 mg/L to 0.781 mg/L at the stream sites (Figure 24). The highest concentration at the lake sites occurred at Lake 2 in August, and the highest stream concentration occurred at Pine Lake Brook in August.

Total Nitrogen samples were taken during a rainfall dependent sampling event on December 1, 2022, at each of the stream sites, including three additional sites not included in the regular monthly samples. TN levels ranged from 0.386 mg/L to 0.510 mg/L (Figure 25). Dodds and Welch (2000) have established a guideline for nitrogen in waterbodies of 0.9 mg/L. This guideline was not approached or exceeded by any sites.

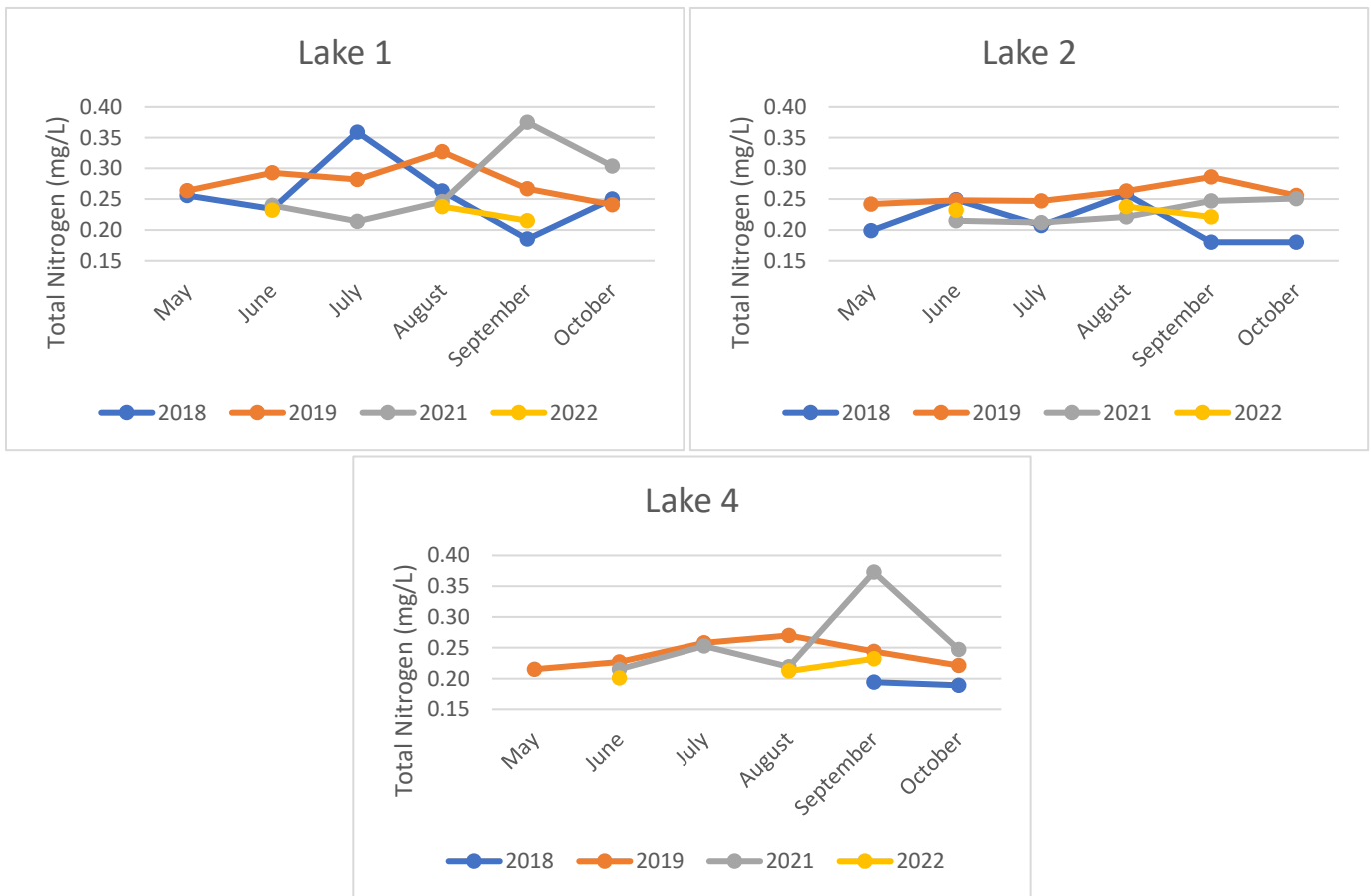


Figure 23. Total Nitrogen (mg/L) levels from Lake 1, 2, and 3 from 2018, 2019, and 2021.

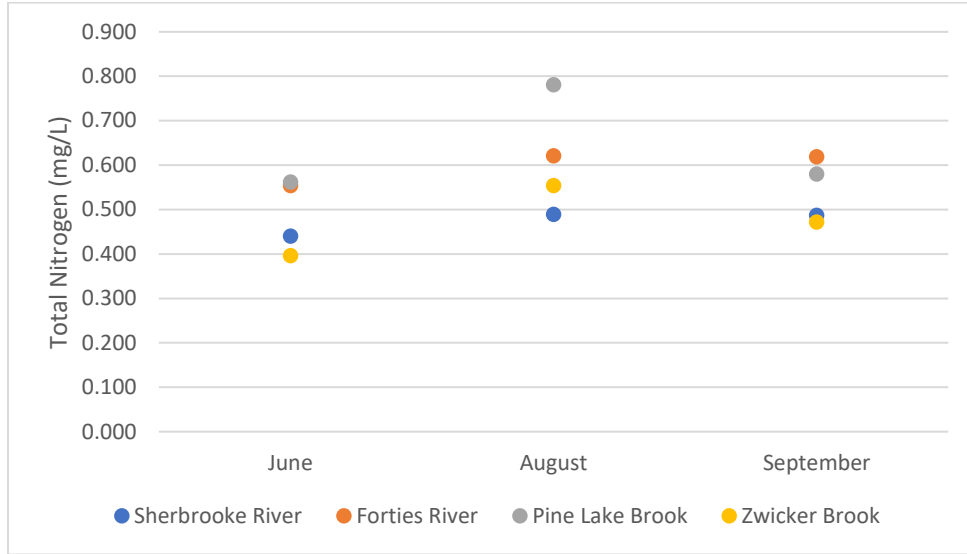


Figure 24. Total Nitrogen (mg/L) readings from the 2022 sampling events at the stream sites.

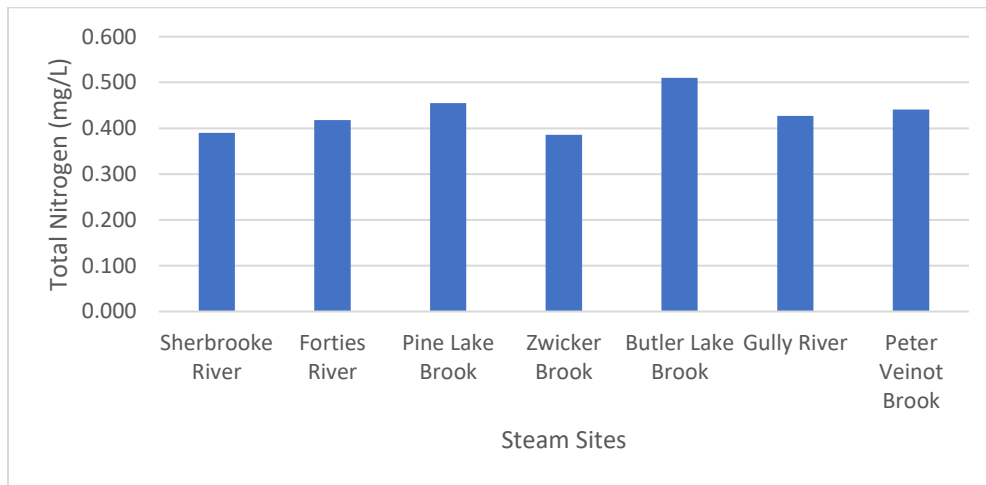


Figure 25. Total Nitrogen (mg/L) readings from the 2022 rainfall dependent sampling event at the stream sites, including the additional, rainfall-specific sites

Total Nitrogen concentrations were measured below the thermocline at Lake 1 and Lake 2. Results show 1.47 mg/L at Lake 1, and 0.361 mg/L at Lake 2. The results from Lake 1 exceeded the Dodds and Welch guideline of 0.9 mg/L. Higher nitrogen concentrations below the thermocline may indicate a possible nutrient-enrichment event during fall turnover, with a potential for eutrophication and algal blooms.

## 2.3 Biological Water Quality Parameters

### 2.3.1 Fecal Bacteria

*E. coli* samples were taken in June, August, and September at all lake and stream sites. Readings were also taken during a rainfall dependent sampling event in December at all stream sites, including the additional, rainfall-specific sites. *E. coli* readings at the lake sites ranged from not detected (ND) to 2 CFU/100 mL, and not detected to 370 CFU/100 mL at the stream sites (Figure 27). Of the 12 total *E. coli* samples taken at the lake sites, only four showed any detectable concentrations. The samples collected in August at Lake 1, Lake 3, and Lake 4, as well as Lake 4 in September, showed 2 CFU/100 mL. All other samples did not detect any *E. coli*. The highest concentration was observed at Sherbrooke River in August (Figure 26).

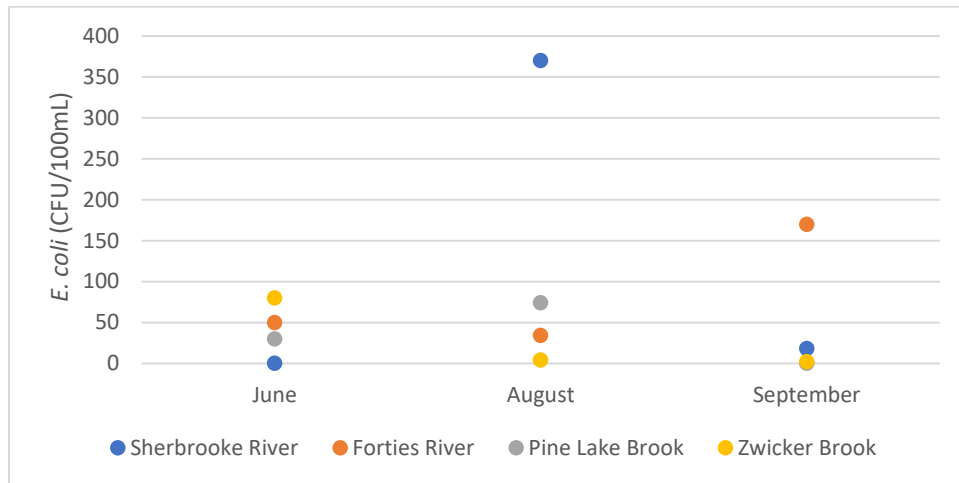


Figure 26. *E. coli* (CFU/100 mL) readings from the 2022 sampling events at the stream sites.

*E. coli* samples were taken during a rainfall dependent sampling event on December 1, 2022, at each of the stream sites, including three additional sites not included in the regular monthly samples. *E. coli* concentrations ranged from 30 CFU/100 mL to 550 CFU/100 mL (Figure 27).

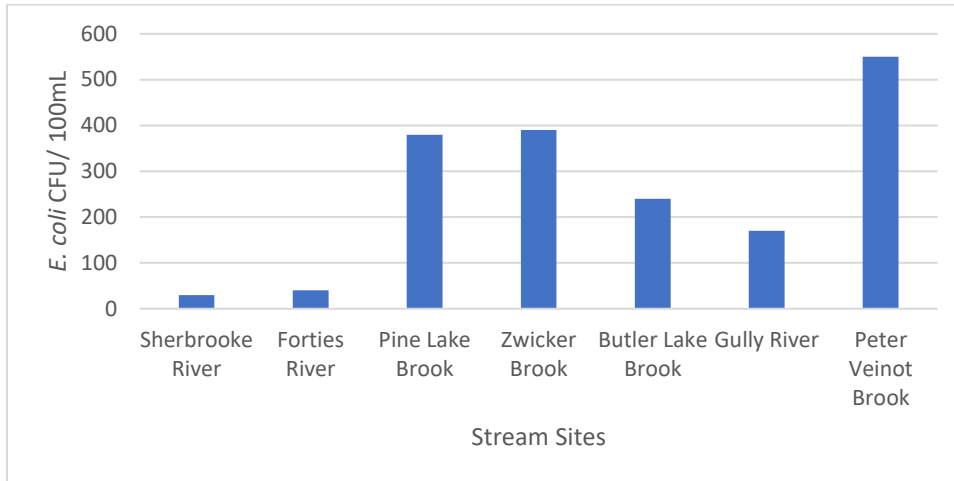


Figure 27. *E. coli* (CFU/100 mL) readings from the 2022 rainfall-dependent sampling event at the stream sites, including the additional, rainfall-specific sites.

Health Canada has set primary and secondary recreational contact guidelines for *E. coli* in freshwaters,  $\leq 400$  CFU/100 mL and  $\leq 1000$  CFU/100 mL, respectively (Health Canada 2012). Sherbrooke River approached this guideline in August. Pine Lake Brook and Zwicker Brook also approached this guideline in the rainfall dependent sample. Peter Veinot Brook exceeded the primary guideline of 400 CFU/100 mL in the rainfall-dependent sample.

### 2.3.2 Microcystin-LR & Algal Blooms

The recreational guideline for cyanobacterial toxins – Microcystin-LR is 10  $\mu\text{g/L}$  (Health Canada 2012). This guideline is meant to protect against exposure to microcystins and other toxins that may be present in an algal bloom. Microcystin-LR can persist in aquatic environments after a visible bloom has dissipated (Jones and Orr 1994).

Not all algal blooms are toxic cyanobacteria blooms, and Microcystin-LR is only one of the possible toxins in a cyanobacteria bloom. For this reason, every algal bloom should be treated with caution and reported to Nova Scotia Environment (NSE).

An algal bloom was reported at the North East section of the lake along the shoreline of Sherbrooke Forest in 2022. This bloom dissipated before volunteers could sample it.

## **2.4 Sediment Sampling**

Sediment sampling at sites Lake 1, 2, and 4 has occurred each year since 2018. Sediment samples are collected from one stream each year. In 2022, the bottom substrate was analyzed for metals, phosphorus, and orthophosphate, to assess the risk of internal nutrient loading within the lake and the potential risk from the accumulation of metals within the sediments.

### **2.4.1 Metals**

Three guidelines are used for sediment analysis; the CCME's recommended Interim Sediment Quality Guideline (ISQG), the CCME's Probable Effect Levels (PEL), and the Nova Scotia Environmental Quality Standards (NSEQS) contamination threshold. Sediment samples are collected annually from the lake sites and one stream site. In 2018, Lake 2, Lake 3, and Forties River were sampled. In 2019, and 2021 Lake 1, Lake 2, and Lake 4 were sampled. The 2019 stream was Zwicker Brook and the 2021 stream was Sherbrooke River.

Arsenic concentrations were noticeably high and exceeded the ISQG guidelines at all lake sites every year except at Lake 1 in 2021. In 2018 and 2019, Lake 2 had the highest recorded levels of arsenic, with 2018 levels approaching the PEL & NSEQS guidelines. Increased arsenic levels reduce the abundance of benthic invertebrates, the main food source for many aquatic species (CCME 2002). Of the four stream sites sampled, none have arsenic levels of concern, and no metal concentrations show levels approaching any of the guidelines. Arsenic levels increased from 2021 to 2022 at Lakes 1 and 2, whereas Lake 4 had a slight decrease of 1.5 mg/kg.

Cadmium levels exceeded the ISQG guidelines at all lake sites in all years except at Lake 1 and Lake 2 in 2021. The highest cadmium concentration recorded was 1.5 mg/kg at Lake 3 in 2018. Like arsenic, cadmium reduces the abundance of benthic invertebrates and damages aquatic species. However, cadmium levels are generally low at all sites and were not detected at any of the stream sites. The highest concentration recorded only exceeded the ISQG guidelines by 0.9 mg/kg.

Lead levels were low at all sites each year, with only the ISQG guideline being exceeded in 2018 and 2022 at Lake 2. At Lake 1 in 2019, the ISQG guideline was approached but not exceeded with a level of 34 mg/kg. Lead levels at the stream sites were very low in all years. Lead can reduce the abundance of benthic invertebrates, and depending on the physicochemical conditions, can be harmful to other aquatic organisms (CCME 2002).

Mercury levels are relatively high at all lake sites. The ISQG guideline was either exceeded or approached at each lake site each year except Lake 4 in 2019. The level of mercury increased at each site from 2021 to 2022. Mercury was not detected at any of the stream sites.

Selenium levels approached the NSEQ guideline at Lake 2 in 2018, 2021, and 2022, and at Lake 4 in 2021. Selenium was undetected at all stream sites.

Table 1. Concentrations of metals within Lake site sediment samples. Light yellow indicates parameters approaching one of the guidelines, orange indicates an exceedance of ISQG, and red indicates an exceedance of either the PEL or NSEQS guidelines.

|                                 | UNITS | Lake 1 |       |          | Lake 2 |       |       |          | Lake 3 | Lake 4 |       |          | Concentration Guidelines |     |        |
|---------------------------------|-------|--------|-------|----------|--------|-------|-------|----------|--------|--------|-------|----------|--------------------------|-----|--------|
|                                 |       | 2019   | 2021  | 2022     | 2018   | 2019  | 2021  | 2022     | 2018   | 2019   | 2021  | 2022     | ISQG                     | PEL | NS     |
| <b>Metals</b>                   |       |        |       |          |        |       |       |          |        |        |       |          |                          |     |        |
| Acid Extractable Aluminum (Al)  | mg/kg | 22000  | 12000 | 18000    | 22000  | 25000 | 16000 | 18000    | 6700   | 7200   | 22000 | 20000    |                          |     |        |
| Acid Extractable Antimony (Sb)  | mg/kg | ND     | ND    | <2 (ND)  | ND     | ND    | ND    | <2 (ND)  | ND     | ND     | ND    | <2 (ND)  |                          |     | 25     |
| Acid Extractable Arsenic (As)   | mg/kg | 8.4    | 4.8   | 6.8      | 16     | 12    | 6.8   | 12       | 8.3    | 8.1    | 9.8   | 8.3      | 5.9                      | 17  | 17     |
| Acid Extractable Barium (Ba)    | mg/kg | 49     | 26    | 42       | 42     | 50    | 30    | 35       | 26     | 17     | 35    | 33       |                          |     |        |
| Acid Extractable Beryllium (Be) | mg/kg | ND     | ND    | 1.5      | ND     | 2.1   | ND    | 1.6      | ND     | ND     | ND    | 1.5      |                          |     |        |
| Acid Extractable Bismuth (Bi)   | mg/kg | ND     | ND    | <2 (ND)  | ND     | ND    | ND    | <2 (ND)  | ND     | ND     | ND    | <2 (ND)  |                          |     |        |
| Acid Extractable Boron (B)      | mg/kg | ND     | ND    | <50 (ND) | ND     | ND    | ND    | <50 (ND) | ND     | ND     | ND    | <50 (ND) |                          |     |        |
| Acid Extractable Cadmium (Cd)   | mg/kg | 0.76   | 0.31  | 0.69     | 1      | 0.99  | 0.46  | 0.81     | 1.5    | 0.76   | 0.63  | 0.66     | 0.6                      | 3.5 | 3.5    |
| Acid Extractable Chromium (Cr)  | mg/kg | 15     | 8     | 13       | 14     | 14    | 8.7   | 11       | 4.6    | 5.1    | 14    | 12       | 37.3                     | 90  | 90     |
| Acid Extractable Cobalt (Co)    | mg/kg | 9      | 4.3   | 5.7      | 8.8    | 11    | 5.2   | 5.7      | 6.8    | 4.1    | 6.6   | 6.2      |                          |     |        |
| Acid Extractable Copper (Cu)    | mg/kg | 12     | 6     | 9.3      | 15     | 10    | 6.1   | 8.7      | 13     | 3.1    | 9.5   | 8.4      | 35.7                     | 197 | 197    |
| Acid Extractable Iron (Fe)      | mg/kg | 14000  | 6600  | 9300     | 14000  | 15000 | 9100  | 11000    | 10000  | 9400   | 9000  | 8400     |                          |     | 47,766 |

|                                  |       |      |      |           |       |       |      |           |      |      |      |           |      |       |       |
|----------------------------------|-------|------|------|-----------|-------|-------|------|-----------|------|------|------|-----------|------|-------|-------|
| Acid Extractable Lead (Pb)       | mg/kg | 34   | 8.8  | 30        | 49    | 24    | 8    | 43        | 13   | 13   | 8.9  | 17        | 35   | 91.3  | 91.3  |
| Acid Extractable Lithium (Li)    | mg/kg | 17   | 8    | 15        | 10    | 9.7   | 4.9  | 8.9       | 11   | 14   | 13   | 12        |      |       |       |
| Acid Extractable Manganese (Mn)  | mg/kg | 540  | 230  | 260       | 480   | 1300  | 430  | 380       | 1000 | 290  | 460  | 420       |      |       | 1,100 |
| Acid Extractable Mercury (Hg)    | mg/kg | 0.27 | 0.15 | 0.25      | 0.27  | 0.2   | 0.12 | 0.21      | 0.16 | ND   | 0.12 | 0.14      | 0.17 | 0.486 | 0.486 |
| Acid Extractable Molybdenum (Mo) | mg/kg | ND   | ND   | <2 (ND)   | ND    | 2     | ND   | <2 (ND)   | ND   | ND   | 2    | <2 (ND)   |      |       |       |
| Acid Extractable Nickel (Ni)     | mg/kg | 10   | 4.9  | 8         | 7.5   | 6.9   | 4.3  | 5.8       | 5.7  | 4.6  | 8.7  | 7.2       |      |       | 75    |
| Acid Extractable Phosphorus (P)  | mg/kg | 1900 |      | 1600      | 1900  | 2200  |      | 1600      | 400  | 490  |      | 1700      |      |       |       |
| Acid Extractable Rubidium (Rb)   | mg/kg | 11   | 5.9  | 9.5       | 6.3   | 6.2   | 3.5  | 5.2       | 4.7  | 5.5  | 7    | 6.5       |      |       |       |
| Acid Extractable Selenium (Se)   | mg/kg | 1.3  | 0.89 | 1.2       | 1.8   | 1.8   | 1.1  | 1.5       | ND   | ND   | 1.7  | 1.5       |      |       | 2     |
| Acid Extractable Silver (Ag)     | mg/kg | ND   | ND   | <0.5 (ND) | ND    | ND    | ND   | <0.5 (ND) | ND   | ND   | ND   | <0.5 (ND) |      |       | 1     |
| Acid Extractable Strontium (Sr)  | mg/kg | 13   | 6.1  | 9.3       | 13    | 13    | 8.1  | 9.6       | ND   | ND   | 8.7  | 7.8       |      |       |       |
| Acid Extractable Thallium (Tl)   | mg/kg | 0.26 | 0.13 | 0.18      | 0.26  | 0.24  | 0.13 | 0.17      | 0.34 | 0.11 | 0.31 | 0.21      |      |       |       |
| Acid Extractable Tin (Sn)        | mg/kg | 2.5  | ND   | 2         | 3     | 1.5   | ND   | 2.1       | 2    | ND   | ND   | 1.1       |      |       |       |
| Acid Extractable Uranium (U)     | mg/kg | 4.3  | 2.6  | 3.5       | 5.7   | 6.5   | 3.7  | 4.3       | 1.7  | 2    | 7.3  | 5.7       |      |       |       |
| Acid Extractable Vanadium (V)    | mg/kg | 23   | 12   | 17        | 30    | 34    | 21   | 25        | 11   | 12   | 24   | 22        |      |       |       |
| Acid Extractable Zinc (Zn)       | mg/kg | 87   | 46   | 71        | 93    | 89    | 48   | 70        | 96   | 66   | 110  | 100       | 123  | 315   | 315   |
| Orthophosphate (P)               | mg/kg | 0.15 | 0.39 | 0.51      | 0.067 | 0.086 | 0.27 | 0.24      | 0.26 | 0.24 | 0.24 | 0.26      |      |       |       |

Table 2. Concentrations of metals within stream site sediment samples.

|                                  | UNITS | Forties River | Zwicker Brook | Sherbrooke River | Pine Lake Brook | Concentration Guidelines |       |        |
|----------------------------------|-------|---------------|---------------|------------------|-----------------|--------------------------|-------|--------|
|                                  |       |               |               |                  |                 | ISQG                     | PEL   | NS     |
| <b>Metals</b>                    |       | 2018          | 2019          | 2021             | 2022            |                          |       |        |
| Acid Extractable Aluminum (Al)   | mg/kg | 4300          | 4700          | 3300             | 730             |                          |       |        |
| Acid Extractable Antimony (Sb)   | mg/kg | ND            | ND            | ND               | ND              |                          |       | 25     |
| Acid Extractable Arsenic (As)    | mg/kg | 2.7           | ND            | ND               | ND              | 5.9                      | 17    | 17     |
| Acid Extractable Barium (Ba)     | mg/kg | 26            | 18            | 18               | ND              |                          |       |        |
| Acid Extractable Beryllium (Be)  | mg/kg | ND            | ND            | ND               | ND              |                          |       |        |
| Acid Extractable Bismuth (Bi)    | mg/kg | ND            | ND            | ND               | ND              |                          |       |        |
| Acid Extractable Boron (B)       | mg/kg | ND            | ND            | ND               | ND              |                          |       |        |
| Acid Extractable Cadmium (Cd)    | mg/kg | ND            | ND            | ND               | ND              | 0.6                      | 3.5   | 3.5    |
| Acid Extractable Chromium (Cr)   | mg/kg | 4.7           | 4             | 4                | ND              | 37.3                     | 90    | 90     |
| Acid Extractable Cobalt (Co)     | mg/kg | 2.3           | 2.2           | 1.9              | ND              |                          |       |        |
| Acid Extractable Copper (Cu)     | mg/kg | ND            | 4.2           | ND               | ND              | 35.7                     | 197   | 197    |
| Acid Extractable Iron (Fe)       | mg/kg | 8300          | 6800          | 5800             | 1200            |                          |       | 47,766 |
| Acid Extractable Lead (Pb)       | mg/kg | 3.3           | 3.3           | 4.2              | 1               | 35                       | 91.3  | 91.3   |
| Acid Extractable Lithium (Li)    | mg/kg | 20            | 21            | 16               | 4.1             |                          |       |        |
| Acid Extractable Manganese (Mn)  | mg/kg | 200           | 110           | 150              | 40              |                          |       | 1,100  |
| Acid Extractable Mercury (Hg)    | mg/kg | ND            | ND            | ND               | ND              | 0.17                     | 0.486 | 0.486  |
| Acid Extractable Molybdenum (Mo) | mg/kg | ND            | ND            | ND               | ND              |                          |       |        |
| Acid Extractable Nickel (Ni)     | mg/kg | 2.3           | 3.1           | 2.2              | ND              |                          |       | 75     |
| Acid Extractable Phosphorus (P)  | mg/kg | 180           | 190           |                  | ND              |                          |       |        |
| Acid Extractable Rubidium (Rb)   | mg/kg | 17            | 7.8           | 11               | 3.1             |                          |       |        |
| Acid Extractable Selenium (Se)   | mg/kg | ND            | ND            | ND               | ND              |                          |       | 2      |

|                                 |       |      |      |      |      |     |     |     |
|---------------------------------|-------|------|------|------|------|-----|-----|-----|
| Acid Extractable Silver (Ag)    | mg/kg | ND   | ND   | ND   | ND   |     |     | 1   |
| Acid Extractable Strontium (Sr) | mg/kg | ND   | ND   | ND   | ND   |     |     |     |
| Acid Extractable Thallium (Tl)  | mg/kg | 0.12 | ND   | ND   | ND   |     |     |     |
| Acid Extractable Tin (Sn)       | mg/kg | ND   | ND   | ND   | ND   |     |     |     |
| Acid Extractable Uranium (U)    | mg/kg | 0.52 | 0.77 | 0.46 | 0.17 |     |     |     |
| Acid Extractable Vanadium (V)   | mg/kg | 11   | 9    | 7.3  | ND   |     |     |     |
| Acid Extractable Zinc (Zn)      | mg/kg | 20   | 34   | 20   | ND   | 123 | 315 | 315 |
| Orthophosphate (P)              | mg/kg | 0.28 | 0.38 | 0.36 | 0.79 |     |     |     |

Table 3. Summary of guideline exceedances of metals in sediment samples. Light yellow indicates parameters approaching one of the guidelines, orange indicates an exceedance of the ISQG, and red indicates an exceedance of either the PEL or NSEQS guidelines

| Metals                        | UNITS | Lake 1 |      |      | Lake 2 |      |      |      | Lake 3 | Lake 4 |      |      |
|-------------------------------|-------|--------|------|------|--------|------|------|------|--------|--------|------|------|
|                               |       | 2019   | 2021 | 2022 | 2018   | 2019 | 2021 | 2022 | 2018   | 2019   | 2021 | 2022 |
| Acid Extractable Arsenic (As) | mg/kg | 8.4    | 4.8  | 6.8  | 16     | 12   | 6.8  | 12   | 8.3    | 8.1    | 9.8  | 8.3  |
| Acid Extractable Cadmium (Cd) | mg/kg | 0.76   | 0.31 | 0.69 | 1      | 0.99 | 0.46 | 0.81 | 1.5    | 0.76   | 0.63 | 0.66 |
| Acid Extractable Lead (Pb)    | mg/kg | 34     | 8.8  | 30   | 49     | 24   | 8    | 43   | 13     | 13     | 8.9  | 17   |
| Acid Extractable Mercury (Hg) | mg/kg | 0.27   | 0.15 | 0.25 | 0.27   | 0.2  | 0.12 | 0.21 | 0.16   | ND     | 0.12 | 0.14 |

## 2.4.2 Sediment Phosphorus and Orthophosphate

Concentrations of both acid-extractable (total) phosphorus and bioavailable orthophosphate in sediment were analyzed from 2018 to 2022, with total phosphorus being excluded from the 2021 sample.

Table 4. Orthophosphate and Total Phosphorus levels from the annual sediment samples at the Lake and Stream Sites. FR = Forties River; ZB = Zwicker Brook; SR = Sherbrooke River; PLB = Pine Lake Brook.

| Parameter (Units)                               | Lake 1 |      |      | Lake 2 |       |      |      | Lake 3 | Lake 4 |      |      | FR   | ZB   | SR   | PLB  |
|---|--------|------|------|--------|-------|------|------|--------|--------|------|------|------|------|------|------|
|   | 2019   | 2021 | 2022 | 2018   | 2019  | 2021 | 2022 | 2018   | 2019   | 2021 | 2022 | 2018 | 2019 | 2021 | 2022 |
| Orthophosphate in sediment (mg/kg)              | 0.15   | 0.39 | 0.51 | 0.0067 | 0.086 | 0.27 | 0.24 | 0.26   | 0.24   | 0.24 | 0.26 | 0.33 | 0.38 | 0.36 | 0.79 |
| Acid extractable phosphorus in sediment (mg/kg) | 1900   |      | 1600 | 1900   | 2200  |      | 1600 | 400    | 490    |      | 1700 | 180  | 190  |      | ND   |

Orthophosphate levels increased at all sites in 2022, except for Lake 2, which had a decrease of 0.03 in 2022. The sample results from Pine Lake Brook showed higher levels of orthophosphate than the three other stream sites sampled in previous years. According to Ontario's provincial sediment quality guidelines, pollution can range from clean/marginally polluted ('lowest effect level') at 600 mg/kg of phosphorus to heavily contaminated ('severe effect level') at >2000 mg/kg of phosphorus in sediment (Ontario MOE 2008). These guidelines have previously been approached and exceeded at Lake 1, Lake 2, and Lake 4, but not Lake 3 or stream sites.

Orthophosphate is a bioavailable form of phosphorus that tends to be in lower concentrations due to high demand by plants; however, as plants decompose, orthophosphate is released back into the environment (CCME 2004). For phosphorus held into complexes with metals, anoxic conditions facilitate the dissolution of complexes and release of phosphorus from sediments (Hayes, Reid, and Cameron 1985). Increased levels of phosphorus released from sediments into the water (internal phosphorus loading) can cause nutrient-enrichment and potential eutrophication and algal blooms (Sondergaard, Jensen, and Jeppesen 2003) – this is particularly susceptible during a turnover when nutrient-rich bottom waters are mixed throughout the lake, providing new food sources for organisms.

### **3.0 Discussion**

Similar to 2018, 2019, and 2021 monitoring results, the water quality of Sherbrooke Lake and its tributaries did not identify any significant water quality issues in 2022. Only one bloom was reported in SL in 2022; however, sampling blooms and determining their toxicity remains a challenge. All visible blooms should be treated with caution and ongoing efforts will continue to improve the reporting and advisory process.

#### **3.1 Algae Blooms in Sherbrooke Lake**

NS Environment's current system of notifying lake residents of potentially harmful algae blooms is reactive and can be ineffective. NSE responds to reports of suspected blooms but inspectors are not always able to respond in time to witness the bloom. NSE rarely collects water samples for analysis and often has to post precautionary advisories based on the appearance of a bloom in photographs from residents. Lake closure advisories are posted via Twitter and other online locations.

Microcystin-LR is not the only toxin produced by cyanobacteria. Anatoxins, Cylindrospermopsins, Nodularins, Saxitoxins, Dermatotoxins, and other irritant toxins are also produced by cyanobacteria (Health Canada 2012). The majority of commercial labs in Canada do not test for these toxins. This means that the absence of Microcystin-LR in a water sample does not mean that a bloom does not contain other toxins. Because of this, lake residents should be made aware of all blooms and treat all blooms with the same level of caution.

As algal blooms can be induced and intensified by increases in nutrients to ecosystems (whether naturally from the mixing of waters or anthropogenically from pollution), trends in algal blooms are hard to predict and can vary spatially. The literature predicts increases in both size and frequency of blooms, globally, in the future (Michalak et al. 2013). Although nitrogen and phosphorus levels remain low, algal blooms should continue to be monitored and tested within Sherbrooke Lake, with residents made aware of algal bloom causes, health effects, precautions to take, and the reporting procedure if a bloom occurs.

### 3.2 Trophic State of Sherbrooke Lake

The biological productivity of SL has been assessed and monitored for changes over time by identifying its trophic state annually. Based on the mean depth of transparency (Secchi disk), and mean concentrations of chlorophyll- $\alpha$  and phosphorus, a Trophic State Index (TSI) score can be calculated using the Carlson (1977) equations (Equations 1, 2, and 3). Trophic states range from oligotrophic (low productivity and minimal biomass) to hypereutrophic (high productivity and maximum biomass). The following information was based on data collected from Lake sites 1, 2, and 4 in June, August and September of 2022.

$$\text{Equation 1: } TSI (\text{Secchi disk}) = 60 - 14.41 \times \ln(\text{Mean Secchi disk [m]})$$

$$\text{Equation 2: } TSI (\text{Chlorophyll A}) = 30.6 + 9.81 \times \ln(\text{Mean Chlorophyll a } \left[ \frac{\mu\text{g}}{\text{L}} \right])$$

$$\text{Equation 3: } TSI (\text{Total Phosphorus}) = 4.15 + 14.42 \times \ln(\text{Mean Total Phosphorus } \left[ \frac{\mu\text{g}}{\text{L}} \right])$$

Table 5. TSI values for all lake sites in 2022 for three parameters.

| Parameter                  | Calculated TSI Value |
|----------------------------|----------------------|
| Secchi disk (transparency) | 40.85                |
| Chlorophyll- $\alpha$      | 45.37                |
| Total Phosphorus           | 31.11                |
| <b>TSI Value</b>           | <b>39.11</b>         |

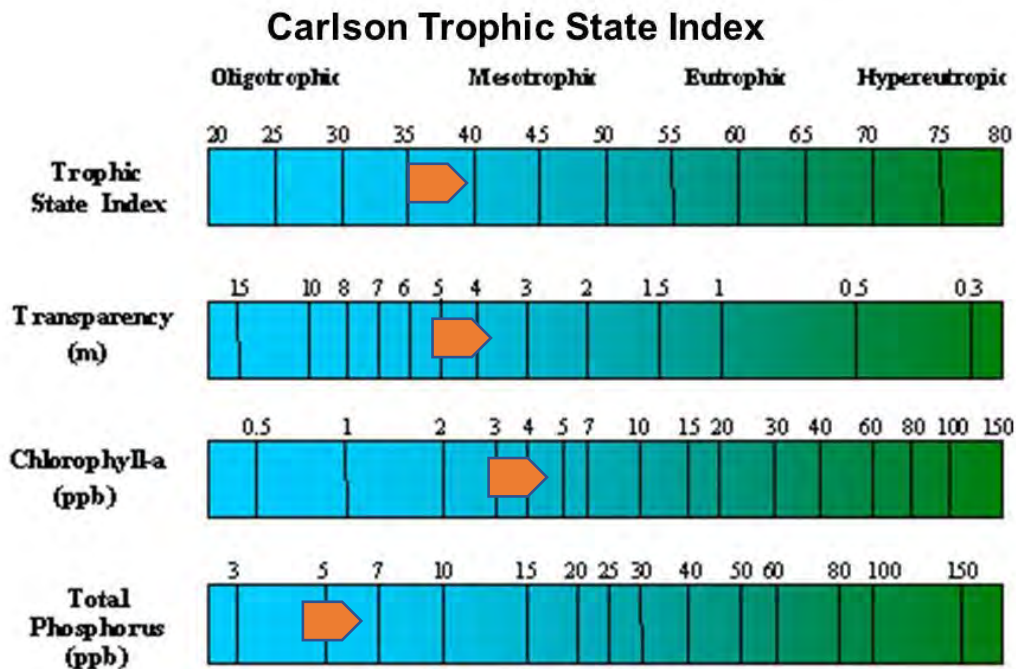


Figure 28. Carlson TSI for Sherbrooke Lake in 2022 using the mean Secchi disk depth (transparency), mean chlorophyll  $\alpha$  concentration and mean total phosphorus concentration. (Carlson 1977)

The trophic state of SL in 2018 and 2019 was oligotrophic-mesotrophic. The transition from oligotrophic to mesotrophic is a TSI score of 40. In 2018 and 2019, the TSI was less than a 10<sup>th</sup> of a decimal over 40, therefore classifying the lake as mesotrophic. In 2021, the TSI score was 39.4, putting the lake into an oligotrophic state. The trophic state has remained oligotrophic in 2022, with a TSI score of 39.11. SL appears to be maintaining a steady TSI score over the four years this data has been collected (Figure 29). The Total Phosphorus remains the lowest of all TSI scores every year, while the Chlorophyll-a TSI score is the highest. Secchi depth readings are highly influenced by several factors; therefore, the TSI score for Total Phosphorus should be considered the most accurate reflection of biological productivity in SL, resulting in an oligotrophic status.

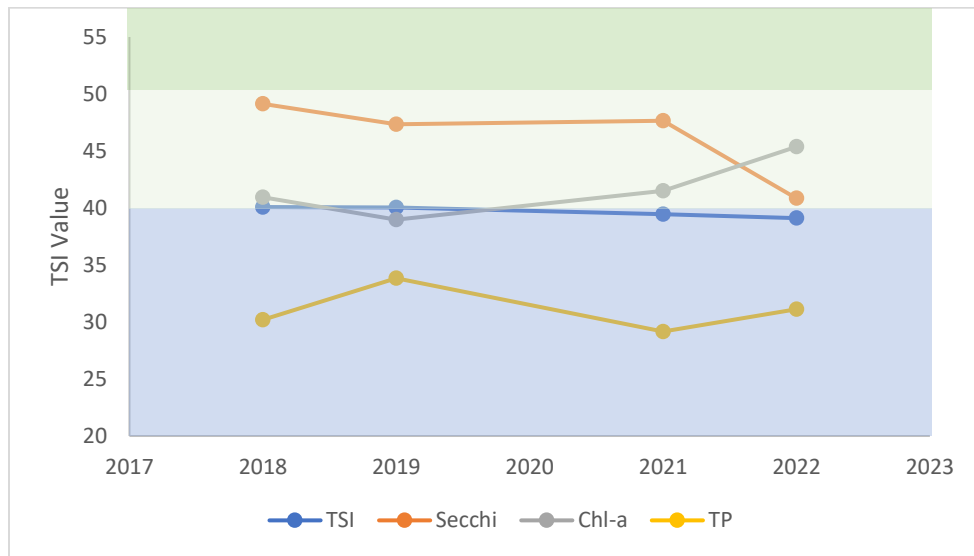


Figure 29. Comparison of Lake site TSI scores from 2018 to 2022 using the Carlson (1977) trophic equations for total phosphorus, chlorophyll  $\alpha$ , and Secchi disk (2020 excluded).

## 4.0 Recommendations

The following recommendations are suggested for the Sherbrooke Lake Water Quality Monitoring Program:

1. The Sherbrooke Lake Water Quality Monitoring Program should continue in 2023 as this program was developed to establish a water quality baseline to aid in evidence-based decisions concerning the development of the public access property acquired by MODL for public use. Development at this site has yet to begin, meaning that further monitoring will continue to establish a baseline understanding of SL water quality before the potential impacts of this development start. The 2023 monitoring program will be the 5<sup>th</sup> and final year of baseline monitoring, as outlined in the initial project proposal.
2. When MODL decides to move forward with the park development and if they decide to re-establish the public access site planning committee, this committee should meet with the SLSC members to receive an update on the water quality program that was managed by SLSC and to discuss future monitoring activities that should be conducted. Any recommendations from these two committees would need to be presented to both the MODL and MODC councils.
3. Attempts should be made to identify a lake resident willing and able to host the SL weather station. The station should be installed as early as possible in the monitoring season and checked monthly to ensure it is working properly.
4. Monitoring of the seven inlet streams should continue during rainfall-dependent events, to determine how rainfall is affecting inlet streams.
5. Volunteer monitors should continue to be supplied with bottles for Microcystin-LR sample collection.
6. Algae blooms should continue to be monitored, recorded, and reported to Nova Scotia Environment. Efforts should continue to improve the reporting and advisory process between the NS Department of Environment and Climate Change, municipal units, and SL cottage associations.
7. Depth profiles at all lake sites should be continued during regular monitoring activity given the varying strength and depth of the thermocline observed at these sites in previous years and considering the elevated nutrient concentrations observed in deeper waters.
8. Sediment total phosphorus should be included in the final year of sampling. BV labs now require a separate analysis for this parameter.

## **5.0 Acknowledgements**

This project is funded by the Municipality of the District of Lunenburg (MODL) and the Municipality of Chester (MOC). Coastal Action would like to thank the volunteers and Sherbrooke Lake Stewardship Committee for their contributions that made for a successful 2022 field season.

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Table 1. Proposed Budget for 2023 Sherbrooke Lake Water Quality Monitoring Program.

| Expenditure   | Cost Breakdown  | Total Cost         | Responsible Party               |
|---|---|--------------------|---------------------------------|
| Lake Sampling<br>- Early June<br>- Late July<br>- Early September   | Lake 1, Lake 2, Lake 4:<br>\$215.30/site x 3 sites x 3 months = \$1,937.70<br><br>Lake 3 ( <i>e. coli</i> only):<br>\$41.50/site x 3 months = \$124.50<br><br>QA/QC:<br>\$215.30/replicate + \$215.30/blank x 3 months = \$1,291.80   | \$3,354.00         | Garth & his team                |
| Stream Sampling<br>- Early June<br>- Late July<br>- Early September | Stream sites:<br>\$256.80/site x 4 sites x 3 months = \$3,081.60<br><br>QA/QC:<br>\$215.30/replicate + \$215.30/blank x 3 months = \$1,291.80   | \$4,373.40         | Garth & his team                |
| Sediment Sampling<br>- Early September                              | Lake 1, Lake 2, Lake 4, chosen stream:<br>\$174.1/ site x 4 sites = \$696.40  | \$696.40           | Garth & 1 CA staff member       |
| Depth Nutrient Sampling<br>- Early September                        | Lake 1, Lake 2:<br>\$62.00/site x 2 sites + disposal fee= \$132.50  | \$132.50           | Garth & 1 CA staff member       |
| Rainfall Sampling<br>- TBD  | All stream sites:<br>\$256.80/site x 7 sites = \$1,797.60   | \$1,797.60         | CA staff members                |
| Microcystin sampling<br>- As needed                                 | \$207.38/sample x 5 samples = \$829.52  | \$1,036.90         | Garth, and potential volunteers |
| Coastal Action Services   | Committee Meetings: \$100/meeting x 5 meetings<br>Sediment/Depth Sampling: \$350/person x 1 day<br>Rainfall Sampling: \$350/person x 2 people x 1 day<br>Project Management: \$400/day x 5 days<br>Mileage for Rainfall Sampling: 255 km @ \$0.56/km = \$142.80<br>New Volunteer WQ Training day: \$350/person x1 day | \$4,042.80         | Coastal Action                  |
| Water Quality Report – 5-year review                                | \$400/day x 8 days  | \$3,200.00         | Coastal Action                  |
| Water Quality Booklet (2-page report card)                          | \$400/day x 2 days  | \$800.00           | Coastal Action                  |
| <b>Sub-total</b>  |   | <b>\$19,433.60</b> |                                 |
| 15% HST (HST #: 14067 2106 RT 0001)                                 |   | <b>\$2,915.04</b>  |                                 |
| <b>Total</b>  |   | <b>\$22,348.64</b> |                                 |



## Roles & Responsibilities

### **Monthly Samples**

- Three monthly samples will be taken at lake and stream sites by Garth and his team of volunteers. These samples should be taken in early June, late July and early September.
  - Coastal Action staff will be responsible for arranging bottle orders, and preparing the WQ sampling 'kit'. The staff member(s) will arrange a time and place with Garth to deliver the Kit.
- Garth and his team will be responsible for sample collection and submission to BV labs.
- Coastal Action staff member(s) will arrange and time and place to pick up the kit from Garth after sample submission.

### **Sediment & at-depth Samples**

- A total of four sediment samples will be taken at lake sites 1,2 & 4, and one additional stream site (different each year).
- An at-depth sample of Total Nitrogen and Total Phosphorous will be taken from lake sites 1 & 2 during the same sampling event.
  - Coastal Action staff will ensure that phosphorous is included in the sediment sample.
  - One Coastal Action staff member will accompany Garth for this sample.
  - Coastal Action staff will organize and bring the correct sampling equipment for the sediment and at-depth samples. This includes either a gravity corer or dredge for the sediment sample and a Van Dorne sampler for the at-depth samples.
- A depth profile will be taken at lake sites 1 & 2 using the YSI ProDSS.

### **Rainfall Samples**

- Coastal Action staff will take samples at all rainfall stream sites following a substantial rainfall of >25mm. Staff will aim to take this sample in the late summer/early fall depending on staff availability, OH&S standards, the timing of rainfall, and environmental conditions.
  - Sherbrooke Lake is one of four Coastal Action water quality sampling projects that require a rainfall sample. Staff will do their best to accommodate all projects within this time frame, but samples may need to be taken later in the year.
  - Coastal Action staff will not attempt to take rainfall samples following extreme weather events (e.g hurricanes) that damage infrastructure or that pose a risk to staff health and well-being.

### **Microcystin-LR Samples**

- Microcystin-LR samples will be taken and submitted to BV Labs by Garth and his team, if they are available, following the report of an Algae bloom on the lake. Coastal Action staff will train new volunteers on how to identify and sample algae blooms before the 2023 season.
  - A total of five samples may be taken in 2023. Additional samples will need to be approved by MOC & MODL staff.

### **Water Quality Report & 2-Page Booklet**

- Coastal Action will write a report summarizing the results from the entirety of the Sherbrooke Lake monitoring program. A 2-page booklet will also be completed as it has in each year of the project.
  - Both the report and 2-page booklet will be submitted to both MOC and MODL in Q4 of 2024.

# Sherbrooke Lake 2022 Water Quality Report Card

## Sherbrooke Lake STEWARDSHIP Committee

Monitoring of Sherbrooke Lake's water quality is led by the Sherbrooke Lake Stewardship Committee (SLSC). This committee is comprised of citizen representatives appointed by the Municipality of Chester, and the Municipality of the District of Lunenburg, in addition to a water quality expert, and officials from both Municipalities. The group receives technical support from Coastal Action, who have been monitoring water quality throughout the LaHave River Watershed since 2007. Both municipalities provide funding to support the program, while trained property-owners around the lake conduct the monitoring activities with support from Coastal Action.

## Sherbrooke Lake Sampling

Water samples are collected from lake and stream sites bimonthly and tested for total suspended solids, total nitrogen, total phosphorus, E. coli, and chlorophyll- $\alpha$ . Additionally, seven streams around the lake are tested after a large rain event to monitor water quality changes related to high runoff events. Bottom sediment samples are also collected at three lake sites and one river site, to assess the long-term accumulation of nutrients and metals which can also influence the lake's water chemistry. In 2021, the Municipality of the District of Lunenburg purchased a Total Algae Probe which was fixed to the YSI sampling device used to obtain on-site water quality readings. This additional probe measures Phycocyanin and Chlorophyll- $\alpha$ . Phycocyanin is a pigment found in cyanobacteria, or blue-green algae, and provides an estimate of total cyanobacteria production. Chlorophyll- $\alpha$  is a pigment produced by all types of algae and provides an estimate of total algae production.

## How is Sherbrooke Lake's water quality?

### Bacteria

All lake sites are consistently below Health Canada's 400 CFU/100 mL recreational limits for E. coli – the highest lake concentration was 2 CFU/100 mL, well below the threshold. Lake sites were consistently lower than stream sites. Health Canada guidelines were also not exceeded for stream samples, except one – 550 CFU/100 mL at Peter Veinot Brook on December 1st, 2022. Associated with this exceedance, and spikes in bacteria concentrations at other streams, was a large rainfall event. A spike in bacteria after rainfall is common and was also observed in last year's 2021 Sherbrooke Lake data. Although it does not appear to affect the lake quality, swimming in rivers should be avoided for 24-hours after a rainfall event. Water from the lake and the rivers should always be treated prior to consumption (i.e., bathing, washing, drinking).

### Nutrients

During the 2022 sampling season, nitrogen and phosphorus

concentrations fell within their respective guidelines for freshwater rivers and lakes; however, both nutrients have the potential to spike during rainfall events. The increase in nutrients comes from rain washing nutrients into nearby waterbodies from surrounding sources, including roads, lawns, gardens, manure, fertilizers, etc. Currently, Sherbrooke Lake's nutrient status is at the low end for freshwater lakes. This is encouraging news, but only through continued vigilance will that situation continue in the face of increasing development and alteration of the lake's shoreline and surrounding watershed. Nutrient inputs from human activities should be minimized as much as possible.

### Algal Blooms

One algae bloom was reported in 2022 at Sherbrooke Lake, at the North-East section of the lake, along the shoreline of Sherbrooke Forest. The bloom dissipated before volunteers could sample it. All blooms should be treated with caution. Blooms are caused by a complex interaction of biological, chemical, atmospheric, and hydrographic conditions; many of which are uncontrollable. However, excessive nutrient inputs are one of the most influential factors in promoting a bloom and one of the most controllable.



Figure 1: 2022 map of Sherbrooke sampling sites.

## Overall Lake Health

Overall, the 2022 sampling program indicates that Sherbrooke Lake is healthy but vulnerable to the same pressures as other lakes such as climate change and development. Activities such as fertilizing lawns, removing shoreline vegetation, and improper management of septic fields and greywater can all impact the lake's water quality. A more detailed report on the 2022 sampling program is available upon request from the Municipality of Chester and the Municipality of the District of Lunenburg.

### Did you know?

Algal blooms are a natural part of lake ecology but can be enhanced in size and frequency if pollution sources add extra nutrients into the environment. In a balanced ecosystem, algae and other organisms' growth is limited by the availability of nutrients; however, if nutrients become available in excess (both naturally through fall and spring turnover and sediment resuspension, or from human-caused pollution), algal blooms can occur. Not all blooms are algae (i.e., pine tree pollen forms a film on the water's surface), and not all algae blooms are toxic. Blooms should be treated with caution and should be reported with a photo to the Nova Scotia Environment Office in Bridgewater (902-543-4685).

### Take Charge of your Environment!

Limit your footprint with these at-home tips:

**Try this**

**Avoid this**

#### Vegetated Buffers

Leave a section of natural vegetation between any lawns and the lake to filter runoff.

#### Pick Up Pet Waste

Put pet waste in its place: the garbage bin.

#### Fenced Livestock

Keep livestock out of the water with fences (provide livestock with alternate sources of drinking water).

#### Manure Liners

Line manure piles to prevent bacteria and nutrients from leaching into adjacent waterways.

#### Straight Pipes

Replace illegal straight pipes with septic systems and keep your systems properly maintained.

#### Fertilizing Before Rain

Avoid fertilizing your lawn before a storm, as excess nutrients will be washed into nearby waterways.

#### Dish Soaps With Phosphate

Avoid using dish soaps with phosphates, as the nutrients can cause harmful algal blooms in the water.



Coastal Action is a charitable organization on the south shore of Nova Scotia that believes in safeguarding a healthy environment for future generations. For over 25 years, our goal has been to promote the restoration and conservation of our environment through research, education, action, and community engagement. We work in five core areas: Watersheds & Water Quality, Species at Risk & Biodiversity, Climate Change, Environmental Education, and Coastal & Marine.

Council  
Item: #8.2  
Date: March 28, 2023  
Authorization: T. MacEwan

# **THE CIRCULAR ECONOMY, PLASTIC POLLUTION, AND MUNICIPAL ACTION**

**Natasha Tucker, Executive Director**  
**Michelle Brake, Environmental Policy Analyst**  
**Mind Your Plastic**

# OUR MISSION

Mind Your Plastic is a registered Canadian charity dedicated to **solving plastic pollution in Canada.**

We create change by **advocating for Canadian businesses to take impactful steps towards eliminating their plastic pollution footprint, driving towards implementation of changes with government, producers, recyclers and consumers and supporting and implementing programs to promote the circular economy.**

# THE ISSUE



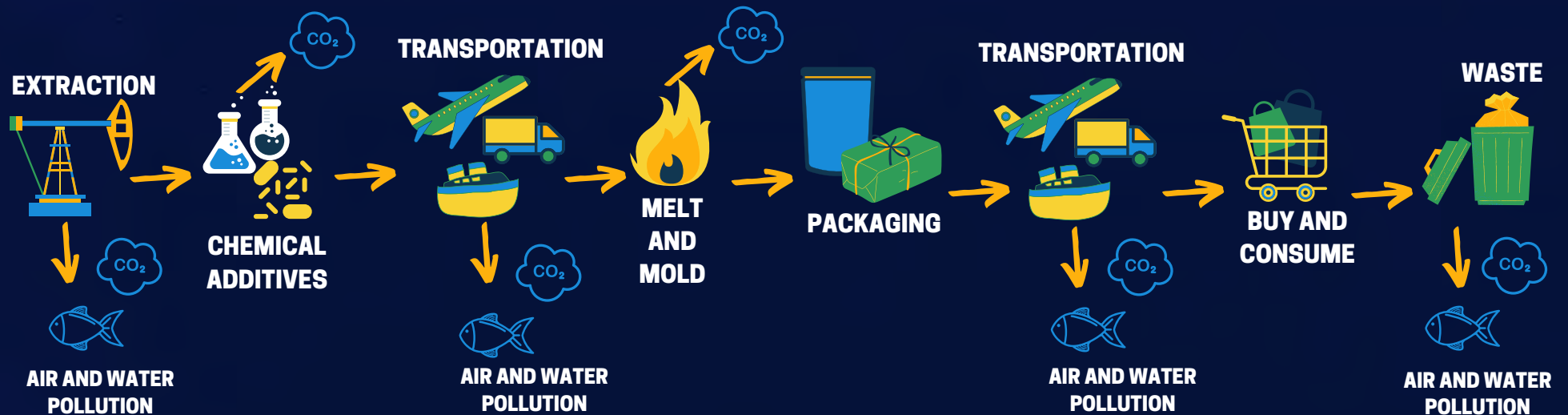
**Less than 9%** of the plastic produced around the world is recycled.

By 2050, there will be **more plastic in the ocean than fish.**

Every minute, **1 dump truck of plastic** enters the ocean.

# LINEAR ECONOMY VS CIRCULAR ECONOMY

**LINEAR ECONOMY:**  
an economic system based on  
"TAKE-MAKE-WASTE"



# LINEAR ECONOMY VS CIRCULAR ECONOMY

## CIRCULAR ECONOMY:

an economic system based on using renewable resources, eliminating waste, and reusing and recycling material goods

- Uses waste as a resource to produce new materials / products
- Decreases and eliminates waste
- Prioritizes the value of materials based on the waste hierarchy
- Circular Economy Ambassador Program



A sea turtle is shown swimming underwater, with a piece of clear plastic in its mouth. The water is dark blue and filled with various pieces of plastic waste, including bottles and bags, some of which are floating near the surface. The overall scene is one of environmental pollution.

# **A MUNICIPALITY'S ROLE IN PLASTIC POLLUTION REDUCTION**

## **ADVOCACY and COLLABORATION**

**Working with local partners and advocating for change at municipal level and beyond**

## **LEADERSHIP**

**Taking bold action and leading the way to reduce plastic pollution in your region**

## **POLICY**

**Adopting policy to ensure that businesses and residents in your municipality are partaking in important measures to prevent plastic waste**

**MUNICIPALITIES are CHANGEMAKERS and LEADERS in plastic waste reduction**

# **POLICY ACTION BY MUNICIPALITIES**

**Municipalities across Canada have taken action against plastic pollution:**

- **Bans on single-use plastic items**
- **Plastic-free procurement strategies**
- **Investment in public plastic-free initiatives**
- **Plastic-free event policies\***

# PLASTIC POLLUTION PROBLEM AT LOCAL EVENTS

Local events such as food festivals, outdoor concerts, and other community gatherings are **MAJOR** contributors to plastic waste

Municipalities often host many different community events throughout the year with thousands of attendees

The result? Festival and event season can generate **more than 20,000 tonnes of waste** annually per municipality

# MUNICIPAL PLASTIC-FREE EVENTS POLICY

The potential solution? A **Single-Use Plastic-Free Event Policy**

Adopt a policy to encourage plastic waste reduction and hold event planners accountable for the plastic waste produced

May include the prohibition of single-use plastic items such as: cups and serviceware, sachets, plastic wraps, balloons, and more!

# REUSABLE ALTERNATIVES

A **Single-Use Plastic-Free Event Policy** is an opportunity to promote **reusable alternatives**

There are so many effective and innovative reusable systems that work well for community events:

- reusable cup and serviceware systems
- deposit-refund systems
- BYO containers



# THANK YOU!



# Municipal Plastic-Free Event Policy

**Mind Your Plastic is a registered Canadian charity that started in 2016 with a mission to eliminate plastic pollution in Canada.**

We collaborate with municipal government to implement policies that better regulate materials used in our economy, work alongside Canadian businesses to give consumers better plastic-free choices, and provide direct action programming through our Circular Economy Ambassador Program for youth. As an organization, we are moving towards a plastic pollution-free future for #PlasticFreeLandAndSeas.

In our work with municipalities, we focus on eliminating plastic waste in Canadian cities and towns by introducing single-use plastic (SUP) free event policies. Zero plastic event policies can provide guidelines for event holders looking to hold events in their municipality. Working with event holders, municipalities can use the policy to request a plan that demonstrates how the event will be planned to prevent the use of single-use plastic and emphasize reusables, particularly for food and beverage. **Mind Your Plastic is looking to work with municipalities to develop policy to mandate SUP-free events. This is a beneficial opportunity for municipalities to demonstrate their commitment to going plastic-free and work with local stakeholders to encourage further plastic waste reduction in the events hosted in their communities.**

We have seen many event holders around the world take the initiative to ban single-use plastic at their events. For example, the Osheaga music festival in Montreal stopped serving plastic straws and began requiring food vendors to use recyclable containers, cups and utensils in 2018. Additionally, Osheaga has been using reusable Ecocup in concessions for the last 8 years. In Surrey, BC, styrofoam and non-recyclable/non-compostable items were also banned from the Fusion Festival in 2018. More recently, Glastonbury music festival in England has banned the sale of single-use plastic, including plastic bottles, and the Glasgow Coffee Festival in Scotland has banned single-use plastic cups in favour of reusable alternatives.

Municipalities are well-known leaders in the plastic waste reduction space. They have led the charge in developing progressive policy and taking local action to make significant change in their communities.



With event holders in cities taking a plastic-free approach to planning with their vendors and patrons, it is a fantastic opportunity for local governments to further embrace the wave of plastic waste reduction and look to reusability as a solution. It is a progressive and innovative next step for cities and towns to embrace going SUP-free at local events, and encourage event-holding partners to do the same through municipal policy.

Our goal for communities is to eliminate plastic waste altogether, and we see that happening largely through reusable systems. Although it is important to reduce plastic waste wherever possible, we also recognize the need for time and capacity-building to allow smaller businesses and events the opportunity to go plastic-free before they can go waste-free with a suite of reusable alternatives. As a result, there are additional considerations that must be taken into account when drafting plastic-free event policy.

A SUP-free event policy could include specific exemptions that mandate better materials for community events where reusables are not an option. Where financial and capacity limitations exist preventing an event holder from going completely reusable, events may use backyard compostable materials ideally, but also recyclable materials that are more sustainable options to replace single-use plastic. Event holders may swap a single-use plastic cup for a fully recyclable paper cup or plastic takeout containers with backyard compostable paperboard.

We do not promote a one-for-one switch of single-use items as a plastic waste reduction end goal, as single-use materials will never help us achieve total circularity, but we understand this may be a necessary stepping stone for some with financial or capacity restraints. We also see an opportunity for municipalities to develop their own system of reusable alternatives, to be rented out to events and vendors as a part of their event fee.

In terms of implementation, it will largely depend on the makeup of the policy adopted by the municipality and the level of engagement the Council would like to take on. If a municipality adopts a policy that requires event holders to present a plastic-free plan for approval, it is a relatively low initial cost, high impact policy for the Council. Staff would need to be assigned to review the submitted plans for approval or denial. Municipalities may also need to make decisions about whether they want to approve single-use compostable or recyclable alternatives.



But largely, the responsibility would fall to event holders to ensure they are sourcing non-plastic packaging and materials at municipal events, while the local government acts more as a mechanism to hold event planners accountable for waste management and plastic waste reduction.

For municipalities that want to have a larger role in plastic-free events, there is an opportunity to establish their own system of reusables provided to local events for a fee. Mind Your Plastic would be more than willing to assist municipalities in connecting with reusable rental companies and identifying reusable alternatives for typical packaging and materials at commonly held events. We are also happy to work with municipalities and find backyard compostable solutions so that municipalities can keep a resource of approved suppliers for their event holders. Depending on the level of a municipality's involvement in the implementation and sourcing of non-plastic alternatives, Mind Your Plastic can provide the specific resources and support to guide municipalities in finding their solution to plastic pollution.

We would love the opportunity to collaborate with your municipality to adopt policy that has a real impact on waste reduction at the community level. Plastic pollution is a problem requiring urgent action and reusable alternatives are a promising zero-waste solution. We believe that municipalities can be changemakers by implementing innovative policy and preventing plastic waste in their cities. If you want to be a part of the change, we would love to hear from you!

Michelle Brake, *Environmental Policy Analyst*  
michelle@mindyourplastic.ca

Natasha Tucker, *Executive Director*  
natasha@mindyourplastic.ca



# Example Plastic-Free Event Policy

## Single-Use Plastic-Free Event Policy

### PURPOSE

The purpose of this policy is to set out the municipal government's commitment to work with event holders to promote reusables and eliminate single-use plastic at local events.

### OBJECTIVE

The Single-Use Plastic-Free Event Policy has been developed in response to the amount of plastic pollution created by local events. It is meant to mandate and encourage planning to eliminate single-use plastic items and promote reusable systems used at all locally held events, including but not limited to music and food festivals, formal sports and recreational events, markets, and other events held by local organizers and by the Council.

Plastics are present in every area of our lives. It is a vast and pervasive problem that has significant environmental, social and health impacts. More than 3.3 million tonnes of plastic waste is produced every year in Canada, with approximately half of that waste coming from plastic packaging. Canadians recycle only 9 percent of that plastic waste each year.

The Single-Use Plastic-Free Event Policy reaffirms the City's commitment to protecting our waterways from plastic pollution and preventing plastic from entering landfills and the environment. Through this policy, the Council is supporting the transition to reusable packaging and better material alternatives to plastic.

### SCOPE

This policy applies to local event organizers, contractors, Council staff, and all other individuals or organizations seeking approval from the Council to plan, organize, and run events in the municipality.

This policy includes, but is not limited to all indoor or outdoor civic, commercial or community events, workshops, markets, festivals, fairs, conferences and sport events hosted in the City that require municipal approval.



# Example Plastic-Free Event Policy

This policy covers single-use plastic items that are used in purchasing, packaging, and distribution associated with local events. The policy makes exemptions for single-use plastic items that are necessary to meet health and safety standards or where there are no other practical alternatives available. All exemptions for plastics require written approval from the Council prior to the start of the event.

## DEFINITIONS

*Backyard compostable:* Material that can break down easily at home in a backyard compost within six to twelve months and do not require industrial composting under specific conditions.

*Better material alternatives:* Alternative materials to plastic and single-use plastics that are designed to either be longer-lasting or more sustainable (e.g. more recyclable, more compostable, derived from materials other than oil, not as resource intensive to manufacture).

*Deposit-refund system:* A system of handing out and collecting reusable packaging (e.g. cups or takeout containers) through a surcharge on the product when purchased by the consumer, which gets rebated when the product is returned.

*Plastic-Free Event Plan:* Document outlining how the event holder intends to prevent and reduce plastic waste throughout their event, their plan for plastic alternatives, and their plan for waste collection.

*Reusables:* An item or a system of items that are designed to be used and then reused multiple times by consumers (reusables can be owned by the consumer or collected for a fee through a deposit-refund system– see Definition: Deposit-refund system)

*Single-use plastics (SUPs):* Plastics that are designed to be used once, or for a short period of time, before being thrown away.



# Example Plastic-Free Event Policy

## POLICY

### *Requirements:*

- Organizations, businesses, and contactors running events must submit a Plastic-Free Event Plan to ensure the following requirements are met:
  - Single-use plastic bags are not used, sold, or distributed (for transporting items or for promotional purposes).
  - Single-use plastic plates, bowls, cups, straws, cutlery and plastic beverage and food containers are not used, sold, or distributed.
  - Single-use and single-serve condiment sachets and disposable plastic packets are not used, sold, or distributed.
  - Single-use plastic water bottles are not provided, sold, or distributed where there are alternative water sources. The Council will take into consideration the accessibility of free access to water in surrounding buildings, public fountains, and other nearby sources.
  - Single-use disposable cups and lids, including those lined with plastic that render the cup non-recyclable or non-compostable, are not to be used, sold, or distributed.
  - All avoidable plastic packaging, including cling wrap, plastic bags, other plastic wraps, or similar must not be used, sold, or distributed (for transporting items or for promotional purposes).
  - As a first alternative to single-use plastics, reusable packaging and containers should be considered. In cases with financial and capacity constraints, the Council will consider better material alternatives to plastic as a viable strategy to reduce single-use plastic.
  - Balloons and plastic balloon sticks are not to be used, sold or distributed.
  - Event materials, including signage, promotional banners and flags, and decorations should be reused where possible.
  - The event site or venue must be left in pre-event conditions with no residual litter. Sorted waste receptacles must be provided or sourced for the event to provide event-goers with clearly marked bins for recycling and composting, as well as landfilled waste. On-site staff for the event must guide event-goers on single-use plastic-free practices, and how to properly dispose of the waste created at the event.



# Example Plastic-Free Event Policy

## EXEMPTIONS

Exemptions to this policy may be made for health and safety reasons or where there is no other available alternative. All exemptions must receive written approval prior to the start of the event.

The Council supports the transition to reusable packaging systems and will therefore place emphasis on reusable alternatives to single-use plastics. Better materials, such as recycled paper or backyard compostable wooden materials, may be considered in cases where the event holder has specific financial or capacity restraints that prevent the event holder from implementing a system of reusables. The Council will support and assist organizations or individuals organizing an event in complying with this policy. However, lack of compliance or refusal to submit a Plastic-Free Event Plan will result in the event not being approved by Council.

Events are permitted to provide, sell or distribute single-use bottled water where there is no alternative water source. However, they must consider using and supplying reusable options to event goers. For example providing pitchers of water and reusable glasses, or selling reusable/refillable water bottles. Event holders can also consider providing a discount to event goers that supply their own reusable drinkware or maybe implement a deposit-refund system to promote reusability.

A record related to allowable exemptions will be established by the Sustainability/Events team following adoption of this policy.

This policy does not apply to private events and other events hosted on private property.

## TRANSITION PERIOD AND POLICY REVIEW

This policy will come into effect upon approval by the Council.

A transition period of six months will apply to establish positions within the Council assigned to review plastic-free event proposals from businesses and organizations as well as training for enforcement. This Policy is to be reviewed by the Sustainability/Events Team every two years following adoption by the Council. During the review process, additional single-use plastic items may be added to the policy for consideration.



# Common Questions

## ON STORAGE:

- How much of an inconvenience would storage be for municipalities?
  - For municipalities that own the reusables and choose to rent them out to event holders, they can potentially be stored in municipal facility storage such as local community centre kitchens (where they can be utilized for non-outdoor/offseason events such as cooking classes, indoor weddings, meetings, and conferences).
  - In speaking with Ecology North, an NGO that offers a Rent-a-Plate service to provide reusable plates and serviceware at local events in Yellowknife, storage has been more of a perceived barrier than an actual barrier to being able to offer a reusable alternative.
    - They are currently using a cabinet (not a lot larger footprint than an average refrigerator) that pretty comfortably stores about 200 place settings with mugs, large and small plates, large and small bowls, clear cups and utensils, as well as large bins for packing rental orders for clients.
    - They state that you don't necessarily need a lot of storage space, as the serviceware stacks well and is pretty reliable/resistant to damage and would be manageable for many, if not most, municipalities or NGOs in other regions to have similar initiatives with minimal space requirements.
    - There are other groups that already offer similar services, such as church and community groups.
  - For larger municipalities that see thousands of patrons attend events on municipal property, and do not see ownership of the reusable materials as a viable option, collaborating with businesses that have established deposit-refund systems for reusables is likely a better option.

## ON PRICE:

- How much would the reusables cost to purchase or in a deposit-refund system?
  - As an example, vendors can rent reusable cups from Canadian company EcoCup at a price of \$0.25 per unit, which includes washing service upon return (\$35.00 shipping outside Quebec).
    - This is equal to \$50.00 per box of 200 16oz cups (a typical size for serving beverages like beer or soft drinks).



# Common Questions

- To purchase EcoCups reusable cups outright, it's approximately \$0.70 per unit for blank cups, and runs closer to \$1.40 per cup for cups with personalized branding.
  - The cups are made of PET, which is estimated to have a break-even point of 5 uses. This means every time the cup is used beyond the fifth time, there is an environmental benefit compared to a disposable. PET cups can be washed and reused hundreds of times.
- Regular, single-use plastic "solo" style cups are priced at about \$0.14 per unit (16oz), but generates far more waste than a reusable cup that can be washed and reused hundreds or thousands of times (depending on the material).
- There is also an opportunity to recuperate the funds invested into purchasing reusables by enacting a reusability fee on municipal event permits, or even adding an extra \$1.00 per ticket for the event.

## ON WASHING AND SANITIZING:

- How difficult is it to acquire washing facilities? What is the cost for on-site washing? Off-site washing?
  - The Canadian reusable cup company, Cupko, offers off-site washing services for reusables (they have washing facilities in Toronto, Vancouver, and Montreal).
    - \$0.25 each for under 1000 cups
    - \$0.20 each for up to 5000 cups
    - \$0.15 each for more than 5000 cups
  - Portable dishwashers are also available to purchase or rent to wash the reusables. It can cost approximately \$25/week to rent a smaller standard portable dishwasher.
  - Ecolabs equipment rentals supplies commercial dishwashers for anywhere between \$100-\$300/month (these are suited more to professional kitchens/operations).
  - Mobile dishwashing rental trailers are also available in most of Canada (starting at \$3,950/month).
    - Renting dishwashing trailers does tend to be more expensive because they are much larger and act essentially as a mobile kitchen.
  - Another possibility is using nearby community centres/city-owned facilities with kitchens to wash the reusables from events.
    - If vendors have storefronts, they can transport their reusables back to their storefront locations as well to be washed as normal.



# Common Questions

## ON OTHER JURISDICTIONS:

- Has this type of policy been adopted in any other jurisdictions?
  - Ajax, Ontario has adopted a Corporate Ban on Single-Use Plastics.
    - In a five phase approach to implementation, the ban will eliminate unnecessary single-use plastics for all meetings, festivals and events by 2023.
    - Despite a delay in progress caused by COVID-19, Ajax has been very successful at phasing in the ban.
      - As part of Phase III, they have completed research on best practices across Canada to provide recommendations on external enforcement of the ban.
      - They have also started developing educational website targeted towards residents, youth and business owners.
      - Additionally, they have prepared competitive bid documents to tender a contract for a Vendor of Record for compostable/re-usable serviceware for corporate events.
  - Their work to fully enact the ban is still ongoing and very promising.
  - We are currently working on behalf of the Town of Ajax to produce a Plastic-Free Event Toolkit, which will provide valuable information and resources to residents and businesses on how to avoid single-use items in event planning.





## Municipality of the District of Lunenburg

10 Allée Champlain Drive, Cookville, Nova Scotia, Canada, B4V 9E4  
Phone: 902.543.8181 Fax: 902.543.7123 Web Site: [www.modl.ca](http://www.modl.ca)

March 21, 2023

To Her Worship, Mayor Bolivar-Getson, and Councillors  
of the Municipality of the District of Lunenburg

Dear Mayor and Councillors:

The Policy & Strategy Committee, in session on Tuesday, March 21, 2023, made the following recommendations to Council:

1. That Municipal Council accept the changes to MODL Policy 006 as presented, and hereby gives seven (7) days' notice of its intention to approve the proposed amendments at the March 28, 2023, Council meeting.
2. That Municipal Council approves in principle the Terms of Reference for a Regional Anti-Racism & Anti-Discrimination Committee as presented.
3. That Municipal Council authorize staff to begin the recruitment process for a two-year term shared position with the partner municipal units based on the funding formula and budget presented, with the Municipality of Lunenburg's share being \$67,165.
4. That Municipal Council give direction for the CAO's to develop a Memorandum of Understanding to be presented to each municipality for approval.
5. That Municipal Council repeal and replace MODL Policy 065 Divestiture of Surplus Land as presented, and hereby gives seven (7) days' notice of its intention to approve the proposed amendments at the March 28, 2023, Council meeting.
6. That Municipal Council approves the proposed amendments to MODL Policy 043, Community Grants Program, as presented, and hereby gives seven (7) days' notice of its intention to approve the proposed amendments at the March 28, 2023, Council meeting.

7. That Municipal Council approves the extension of the deadline for the Annual Operating and Major Recreation Capital grant to April 28, 2023, for this fiscal year only.
8. That Municipal Council enter into a 5-year Management Agreement with the Riverport & District Community Park Association for the purposes of establishing a park for community use on PID's 60456506 and 60193802; and further that the Agreement will include, but not be limited to, the following conditions:
  - The Agreement will be for a 5-year term with a review period by year 5; and
  - There will be no financial commitment by the Municipality for the concept plan, capital costs or ongoing operating costs; and
  - There is no guarantee of any financial assistance from the Municipality, which does not preclude the Association from applying for Municipal funds through its grant program.
9. That Municipal Council direct the Mayor to send correspondence to the Provincial Government (Premier and All Ministers) demanding that the Province approve and adopt the Coastal Protection Act Regulations immediately.

Respectfully submitted,

Chairperson and Members  
Policy & Strategy Committee

/jp

## Municipality of the District of Lunenburg

| Policy Details               |  |
|------------------------------|--|
| <b>Name</b>                  | Loan Guarantees for Qualifying Organizations           |
| <b>Number</b>                | 006  |
| <b>Legislative Authority</b> | MGA 294, 296 and Private Acts under Provincial Statute |
| <b>Effective Date</b>        | April 1, 1999  |

### Eligibility

- 1 (1) For the purpose of this policy, a qualifying organization includes the following:
  - a) Fire and emergency services providers registered with the Municipality under Policy MDL 036; or
  - b) Riverport Electric Light Commission.
- (2) The qualifying organizations must be incorporated by the Rural Fire District Act, The Societies Act, or a private Act of the Provincial Legislature.
- (3) The qualifying organizations must provide a current financial statement with its application.

### Maximum Amounts of Loan Guarantee

- 2 (1) Loan guarantees to all qualifying organizations will not exceed one million dollars (\$1,000,000) at any one time.
- (2) A loan guarantee to a qualifying organization shall not exceed two hundred and fifty thousand dollars (\$250,000).
- (3) A guaranteed amount will not exceed sixty (60%) percent of the capital assets of a qualifying organization including any assets being bought with loan funds.

### Loan Guarantee Terms

- 3 (1) The Municipality will not provide a loan guarantee exceeding ten (10) years.
- (2) A qualifying organization will provide security as determined by the Municipality by way of a first mortgage on its real or personal property.

(3) A qualifying organization for which the Municipality has provided a loan guarantee must provide a statement from its lender not later than April 15 in each year showing the balance as of December 31 of the preceding year.

(4) A qualifying organization must insure, at its expense, the assets that the Municipality has determined as a security, in accordance with section 3(2) herein, for not less than the amount of the loan guarantee. The Municipality must be shown as a named insured on the insurance policy and a Certificate of Insurance be provided to the Municipality no later than April 15 of each year that the loan remains outstanding.

(5) All expenses incurred by the Municipality to facilitate a loan guarantee including legal, appraisal, or other costs, must be paid by the qualifying community organization.

| Policy Adoption   |                |
|---|----------------|
| Date of Original Passage  | April 1, 1999  |
| Date of Notice of Intent to Amend   | March 21, 2023 |
| Date of Council Approval  | March 28, 2023 |
| Date of Effective Date  | April 1, 1999  |
| I certify that this Policy 006 was adopted by Municipal Council as indicated above. |                |
| Signature of Municipal Clerk  | Date           |

| Version     | Amendment Description   | Approval Date  |
|-------------|---|----------------|
| Original V1 | Policy 006 Loan Guarantees to Community Organizations   | April 1, 1999  |
| V2          | Revised "community" to "qualifying", removed charities and non-profit, added Riverport Electric Light, increase total loan amounts and individual loan amounts. | March 28, 2023 |
|             |   |                |



## Municipality of the District of Lunenburg

### Request for Decision

**Report to:** Policy & Strategy Committee

**Submitted by:** Elana Wentzell

**Date:** March 21, 2023

**Re:** Revisions to Policy 006 – Loan Guarantees for Community Organizations

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#### Recommendation

That the Policy and Strategy Committee recommend that Municipal Council accept the changes to Policy 006 as presented and hereby gives seven (7) days' notice of its intention to approve the proposed amendments at the March 28, 2023 Council Meeting.

#### Executive summary

At their February 28, 2023 Council reviewed a request for financing from the Riverport Electric Light Commission and made the following motion:

*“that Municipal Council direct staff to draft amendments to MODL Policy 006 Loan Guarantees for Community Organizations to include Riverport Electric Light Commission as an organization eligible for funding under the Policy, and to bring amendments back to Council for consideration”.*

The Loan Guarantee Policy has been amended to address this motion. Because the policy has not been reviewed since 1999, staff are suggesting multiple changes. Please refer to the attached proposed policy revisions which are detailed below.

#### Discussion

1. The old policy referred to loan guarantees for community organizations such as registered charities and non-profits. There is no authority in the MGA to provide loan guarantees for these types of organizations. The Municipality supports these organizations through tax exemptions and operating and capital grants. Thus, the word

“Community” in the policy has been replaced by the word “Qualifying” in the policy title and throughout sections 1 and 2.

2. Section 1 has been titled “Eligibility”
3. “Fire Departments” in Section 1(a) has been replaced with “Fire and emergency services providers registered with the Municipality under Policy MDL 36”
4. Section 1 (b) has been added: “Riverport Electric Light Commission”
5. Section 2 has been titled “Maximum Amounts and Terms”
6. Section 2 1 (a) the total of all loan guarantees has been increased from \$500,000 to \$1 million. Staff feel that this is required to accommodate the number of qualifying organizations. Based on experience with past loan guarantees, MODL’s risk exposure is low as each qualifying organization is subject to a maximum amount based on the policy.
7. Section 2 1 (b) the loan guarantee maximum amount per qualifying organization has been increased from \$100,000 to \$250,000. Staff feel that the cost of capital projects has increased substantially since the inception of this policy, and an increase to the loan guarantee amount is warranted. The policy is clear that qualifying organizations must provide asset security to MODL by way of a first mortgage and prove that the loan is in good standing. As well, the asset purchased with the guarantee must be insured for at least the value of the guarantee, and the loan guarantee will not exceed 10 years.

### **Budget implications**

There are no budget implications unless a qualifying organization defaulted on a loan. A note to the audited financial statements is required for each loan guarantee provided.

### **Alternatives**

The Committee can accept the staff recommendations, can suggest other changes, or can leave the policy unchanged.

### **Conclusion**

Based on the loan guarantee authority in the MGA and the Provincial legislated authority for Riverport Electric Light Commission, staff are recommending the changes as noted.



## REQUEST FOR DECISION

**Council**  
Item: #10.1.2  
Date: March 28, 2023  
Authorization: T. MacEwan

**REPORT TO:** Regional CAOs  
**SUBMITTED BY:** Tara Maguire, Deputy CAO, Chester  
**SUBJECT:** Regional EDI Shared Position  
**ORIGIN:** Mayors and Wardens

### CURRENT SITUATION

The Mayors and Wardens and the CAOs have been working with a consultant to explore a potential regional initiative to address racism and discrimination. At the January 2023 meeting of the mayors and warden's direction was given to the CAOs to provide a terms of reference for a regional Anti-Racism and Anti-Discrimination Committee and to provide a model and budget for hiring a regional coordinator to lead this work. Currently some, but not all, municipal units have active committees to address racism, discrimination, and/or equity, diversity and inclusion.

### RECOMMENDATION

It is recommended that Council approve the terms of reference for a regional committee as presented and authorize staff to begin the recruitment process for a two year term shared position with the other five municipal units based on the funding formula and budget presented. Further, it is recommended that Direction be given to the CAOs to develop a memorandum of understanding to be presented to each municipality for approval.

### BACKGROUND

Municipalities across the south shore have experienced a number of racist and discriminatory incidents. Some communities have moved ahead with work to address this, but it is recognized that a regional approach would be beneficial and provide diverse representation and perspectives and allow us to share our experiences and knowledge. Municipal governments, as well as other levels of government in Canada, along with local and national organizations, share responsibility and have an important role to play in combating racism and discrimination and fostering equality and respect for all citizens.

Currently a regional approach and shared position is being employed for Accessibility work. The position is hosted by the District of Chester, and the term of the position is a twenty-month term position.

### DISCUSSION

The role of the Lunenburg County Anti-Racism & Anti-Discrimination Advisory Committee (ARADAC) would be to advise the respective administrations and elected bodies of the Town of Lunenburg, Municipality of the District of Lunenburg, Municipality of Chester, Town of Bridgewater and the Town of

# Terms of Reference

## The Lunenburg County Anti-Racism & Anti-Discrimination Committee

Municipality of Chester

Municipality of the District of Lunenburg

Town of Lunenburg

Town of Bridgewater

Town of Mahone Bay

Copy



## Section 1 - Purpose

The Lunenburg County Anti-Racism & Anti-Discrimination Advisory Committee (ARADAC) is established to advise the respective administrations and elected bodies of the Town of Lunenburg, Municipality of the District of Lunenburg, Municipality of Chester, Town of Bridgewater and Town of Mahone Bay to advance, strengthen, support, and unify the five municipal units in adopting and implementing Anti-Racism and Anti-Discrimination initiatives throughout the Region.

The ARADAC works with partners and communities to help lead and support anti-racism and anti-discrimination initiatives and promote equity, diversity and inclusion initiatives. They would work to identify and address systemic racism and inequity in government policy, legislation, programs and services.

## Section 2 - Authority

The ARADAC shall be appointed by each Council upon recommendation of Mayors and Wardens by application process via the Regional Coordinator and advise the Councils, the Coordinator and Chief Administrative Officers (CAOs) for each respective organization.

The ARADAC is an advisory body and is an opportunity to provide valuable perspectives and recommendations for consideration of each respective Council. The ARADAC is supported by a Regional Coordinator who will directly report to the CAO of the host unit and will also be responsible to the CAOs of each of the five (5) Councils when working for each municipal unit.

ARADAC may submit proposed amendments or updates to the Terms of Reference to the Regional Coordinator for consideration by the five (5) Councils.

The ARADAC may be dissolved by way of resolution of majority of participating Councils.

## Section 3 - Responsibilities

*The ARADAC is responsible to:*

- Provide ongoing advice, education, information and recommendations to the five Municipal Councils and staff on internal and external projects, initiatives, or policy via the Regional Coordinator.
- Develop and recommend to municipalities a regional action plan which will provide regional-level guidance and coordinated approaches and strategies on actions to be taken by the municipalities.
- Support the Regional Coordinator for Anti-Racism and Anti-Discrimination initiatives.
- Develop and propose an annual budget to the Regional Coordinator, to be reviewed and proposed to the five (5) Municipal Councils for consideration.
- Provide advice, when requested, on projects and policies undertaken by municipalities including municipal plans, development, human resource policies and other projects.



- Remain apprised and connected to new municipal, provincial and federal directives, regulations and initiatives that impact or intersect with Anti-Racism and Anti-Discrimination or funding opportunities.
- Collaborate with the Lunenburg County Accessibility Advisory Committee and Regional Accessibility Coordinator.
- Liaise with community members through regular engagement, maintain transparency, and provide a framework and platform for reporting back to the community.
- Collaborate and build relationships with community members and organizations that address Anti-Racism and Anti-Discrimination through events, programming, training and other forms of support.
- The Regional Coordinator may speak on behalf of the ARADAC and provide updates to respective councils. During the first year of the initiative, the Committee shall report to Councils once per quarter and thereafter, at least twice per year.

*Municipalities are responsible to:*

- Recruit and retain a Regional Coordinator.
- Adopt a cost-sharing model to assign budgetary commitments to each participating organization based on proposed budget from the Regional Coordinator.
- Identify and prioritize requests and recommendations and provide timelines for implementation, where applicable.
- Support and invest in the work of the ARADAC through staff and political participation.
- Consider and potentially implement recommendations from the ARADAC.
- Contribute ongoing budget and resources to the work of the ARADRC, as described in this Terms of Reference.
- Upon annual budget approval via municipalities, each CAO will work with the Regional Coordinator to identify projects that will need to be reviewed or require input from the ARADRC.



## Section 4 - Membership

The ARADAC should reflect the diversity of the region, where possible, having first voice and diverse representation from youth, elders, Indigenous Mi'kmaq, African Nova Scotian, members of 2SLGBTQ+ community as well as Immigrants and Newcomers and others on the ARADRC.

With an emphasis on accessibility, it must include authentic strategic engagement – through public channels and known networks physically and digitally, via media, emails, engagements and social media and displayed on municipal websites.

The appointment process will consist of an intake document/questionnaire, to assess for alignment with the work.

The ARADAC will consist of up to fifteen (15) voting members.

- Five (5) Political Representation through appointment of one councillor from each municipality or community. Council/Commission appointments shall be for two- (2) year terms.
- Councils shall appoint each of six (6) community representatives' members, with a priority on members who live, work or are connected to the region. The appointments shall be made as follows:
  - Two (2) members to a three- (3) year term;
  - Two (2) members to a two-(2) year term; and
  - Two members to a one- (1) year term.
- Once a member has completed their term, all new terms will be for three (3) years. If a community member vacates the Committee for any reason at any time before that member's term would normally expire, the Councils shall promptly appoint a new member to the Committee to hold office for the unexpired term.
- If a Council/Commission member vacates the Committee for any reason at any time before that Council/Commission member's term would normally expire, the Council/Commission that the member represents shall promptly appoint a new member for the remainder of the term.
- The Committee will be supported by the Regional Equity, Diversity, and Inclusion Coordinator (the job description says Diversity, Equity, and Inclusion, so we should be consistent) and the Regional Staff Accessibility Coordinator and (Non-Voting)
- Two positions (voting) will also be designated for representation from Acadia and Sipekne'katik First Nation, and an invitation shall be extended to each Nation to appoint a member.

Applications will be received by the Regional Coordinator. The Regional Coordinator may request and hold interviews, after which they submit recommendations for committee members to Mayors and Wardens, or their designate, for Council consideration and appointment.

Membership to conduct annual check-in and review of status, capacity and intent to continue into the following year. This is to ensure there is enough lead time to recruit and promote for the seat to be filled.

*ARADAC Chair*



The Committee will be chaired by one municipal councillor from one of the municipalities. Vice Chairs will be appointed through vote of the ARADAC at the inaugural meeting. The Chair will facilitate the meetings with support from the Regional Coordinator, who will organize logistics, take minutes and support agenda development.

#### *Membership Changes*

- Members may resign at any time by giving written notice to the ARADRC Chair and the Regional Coordinator.
- Missing three consecutive meetings a year without prior discussion and approval from the ARADRC Chair is deemed equivalent to a resignation.
- Membership may be terminated by the ARADAC Chair for violating the terms of reference, if recommended by the Committee.
- Meetings will be held at a frequency that is necessary to conduct the business of the ARADAC (approximately once per month) until such time as the ARADAC is dissolved. A meeting schedule will be discussed by the Committee at the first meeting and subsequent meetings will be confirmed at each meeting. Advance notice will be provided as soon as possible. In addition to regular meetings, additional means of communication, such as email or phone calls will be necessary to conduct the business of the Committee.

#### **Section 5 Committee Procedures**

- Committee meetings will be called by the Chair, as required, to fulfill the duties outlined.
- Subject to Section 22 of the Municipal Government Act, meetings of the committee are open to the public and advertised no less than one week in advance.
- A majority of the appointed voting members of the Committee constitutes a quorum.
- Subject to the principles set out in the Municipal Conflict of Interest Act, all committee members present including the person presiding shall vote on a question.
- The Committee may receive presentations from the public upon the approval of the Chair.
- The Committee may establish Working Groups to explore specific issues related to their workplan and/or other responsibilities. Members of a Working Group may consist of additional members of the community. A member of the ARADAC shall chair Working Groups. The Committee will be supported by municipal staff and consulting resources as required.

#### *Membership Remuneration*

Recognizing that this is a first voice, lived experience committee membership, Members will be compensated, in accordance with the approved budgeted amount.

#### *Policy Review*

- These Terms of Reference will be reviewed by each of the five (5) Councils and the Commissions at least every four years from the effective/amended date.



## 2 Request for Decision

Mahone Bay to advance, strengthen, support, and unify the five municipal units in adopting and implementing Anti-Racism and Anti-Discrimination initiatives throughout the Region. The ARADAC would work with partners and communities to help lead and support anti-racism and anti-discrimination initiatives and promote equity, diversity and inclusion initiatives. They would work to identify and address systemic racism and inequity in government policy, legislation, programs, and services. The work of the committee would be supported by a shared position between the five municipal units. Currently the work that is being done in each municipal unit is supported by staff in each unit but there is no one person identified to champion the work.

It is proposed that MOC host the shared position and funding for the position would be based on uniform assessment. Initially, the position would be for a twenty-four-month period. Staff will prepare a MOU for a three-year term, although the position would be proposed for a two-year term. The three-year term recognizes that the approval of the position and hiring process will take a few months. A two-year MOU would not allow enough time for a two-year term position. MOC would develop a budget for the next two fiscal years, taking the Regional work into account. Recommendation for future budgets would be made to the CAOs of the participating units who would then bring the recommendations forward to their respective councils. The funding formula and budget for 2023-24 is based on 23-24 uniform assessment as follows:

### Annual Budget

|   |                  |
|---|------------------|
| <b>Staff Member</b>   |                  |
| Salary  | \$85,000         |
| Benefits (CPP, WCB, EI, vacation)                                     | \$15,300         |
| Mileage   | \$2,500          |
| Training/PD certification   | \$2,000          |
| Admin & Overhead  | \$10,480         |
| <b>Total</b>  | <b>\$115,280</b> |
| <b>Regional Support</b>   |                  |
| Meeting pay<br>• 6 members, \$55 per meeting, 8 meetings              | \$2,640          |
| Room Rental etc   | \$500            |
| Mileage<br>• 6 members, Estimated \$20 per meeting/event, 10 meetings | \$1,200          |
| Committee Training & facilitation                                     | \$5,000          |
| Training for Staff & Council  | \$10,000         |
| <b>Total</b>  | <b>\$19,340</b>  |
| <b>Total</b>  | <b>\$134,620</b> |

### 3 Request for Decision

|   | <b>23-24 Uniform Assessment</b> | <b>%</b>       | <b>23-24 Total Contribution</b> |
|---|---------------------------------|----------------|---------------------------------|
| Town of Mahone Bay                        | \$145,777,562                   | 2.52%          | \$3,390                         |
| Town of Lunenburg                         | \$298,368,092                   | 5.15%          | \$6,939                         |
| Town of Bridgewater                       | \$715,142,664                   | 12.35%         | \$16,632                        |
| Municipality of the District of Chester   | \$1,741,116,861                 | 30.08%         | \$40,493                        |
| Municipality of the District of Lunenburg | \$2,887,963,821                 | 49.89%         | \$67,165                        |
| <b>TOTAL</b>                              | <b>\$5,788,369,000</b>          | <b>100.00%</b> | <b>\$134,620</b>                |

#### OPTIONS

1. Approve the terms of the MOU as presented and authorize staff to begin the recruitment process for a two-year term shared position with the other five municipal units based on the funding formula presented and direct staff to prepare an MOU for Council approval .
2. Do not approve the MOU and provide direction to staff.

#### ATTACHMENTS

## Municipality of the District of Lunenburg

| Policy Details               |  |
|------------------------------|--|
| <b>Name</b>                  | Divestiture of Surplus Land                            |
| <b>Number</b>                | 065  |
| <b>Legislative Authority</b> | Municipal Government Act s. 50; 51; 51A; 218; 271; 273 |
| <b>Effective Date</b>        |  |

### Purpose

- 1 To provide guidance to the Municipality of the District of Lunenburg Council when proposing to divest of surplus land that is no longer required for the purposes of the municipality and to ensure an open and transparent process.

### Definitions

- 2 In this Policy:
  - a) **Appraisal** means an opinion of the fair market value of the surplus land provided by an Accredited Land Appraiser or such other qualified person as council deems suitable.
  - b) **Divestiture** means the sale, exchange or transfer any portion of the Municipality's surplus land.
  - c) **Land Exchange** means the act of trading municipal land for private and/or public land that the Municipality deems to have value.
  - d) **Land** means the lands owned by the Municipality of the District of Lunenburg, whether vacant or not, or any other proprietary interest in lands owned by the Municipality, and, without limiting the generality of the foregoing, includes easement, rights-of-way, leaseholds, and an interest in lands under an agreement of purchase of sale.
  - e) **Market Value** means the amount that the land might be expected to realize if sold in the open market by a willing seller to a willing buyer.
  - f) **Municipality** means the Municipality of the District of Lunenburg.

- g) **Notice** means the notification published in a local newspaper or on municipal social media circulating for at least fourteen days prior to council meeting at which a decision to divest will be made.
- h) **Surplus Land** means land declared surplus by the Council of the Municipality of the District of Lunenburg that is no longer required for the purposes of the Municipality.
- i) **Immediate Family Member** means the spouse of a council member or employee of the Municipality, and any son, daughter, father, mother, brother or sister of a council member or employee or the council members' or employee' spouse; or any other person who normally resides in the same home as a council member or employee of the Municipality.

### General

- 3 (1) If the provisions of this Policy are inconsistent with the provision of the **Municipal Government Act (the MGA)**, its Regulations or any other Act, the provisions of the Act or Regulations shall prevail.
- (2) This Policy shall be consistent with the Municipality's objectives, bylaws, and approved policies as well as all Provincial and Federal legislation governing the operation of the Municipality.
- (3) All reports to Committee(s) and/or Council dealing with the sale price and/or negotiations related to any Municipal property shall be dealt with in-camera in accordance with Section 22(2)a of the **MGA**.
- (4) The Municipality may refuse any offer of purchase that does not meet its previously established reserved bid.
- (5) The Municipality may refuse any offer of land exchange if they deem it not in the best interest of the Municipality.
- (6) Divesting of surplus land will be subject to any pre-existing benefits, burdens and/or interests including, but not limited to easements of title.

- (7) To avoid Conflict of Interest:
  - a) a council member; or
  - b) an employee of the municipality; or
  - c) an immediate family member; or
  - d) a company in which a person referred to in clause (a), (b) or (c) has an interest are precluded from purchasing municipal surplus property.

### **Requests for Municipal Property**

- 4 (1) The Municipality may consider divesting of its surplus lands upon the Municipal Clerk's receipt of a written request prepared by a prospective purchaser or their agents.
  - (2) There may be incidents whereby Council may deem properties surplus without a request if the property is no longer required for the purposes of the Municipality.

### **Determination of Surplus Land**

- 5 (1) Prior to divesting any land, Council shall, by resolution, declare the land to no longer be required for Municipal purposes and deemed surplus.
  - (2) Before declaring a property to be surplus, a report and recommendation will be submitted for Council's consideration.
  - (3) The evaluation criteria in Appendix A will be used to create a land profile prior to considering divesting of land and will form part of the report referred to in subsection 5(2).
  - (4) Council determines the method of divestiture, as per Section 6 of this Policy.

### **Method of Divestiture**

- 6 (1) Council will decide on the method of divestiture. The standard practice for undertaking a public call will follow the procedure as set out in Policy MDL-33, Purchasing and Tendering. Only under special circumstances, Council may deviate as per the **MGA**, which may include, but is not limited to:
  - a) Properties that have been deemed surplus, as per the **MGA** may be divested through any of the following processes:

- b) Selling to any member of the public per Section 50 and 51 of the **MGA**.
  - c) Notifying residents of the subdivision and selling to a member of the public per Section 273 of the **MGA**.
  - d) Selling to an abutting landowner per Section 51A of the **MGA** to consolidate the property with an existing, abutting lot.
  - e) Selling to a non-profit organization at a price less than market value that Council considers to be performing an activity that is beneficial to the Municipality. For an activity to be deemed beneficial to the municipality, the organization must ensure that the property remain accessible to the public at large.
  - f) Land exchange
  - g) Real Estate Firm or broker
- (2) Prior to divesting any surplus land, the Municipality may wish to obtain or require:
- a) an appraisal; or
  - b) letter of opinion of the fair market value; and
  - c) a legal survey plan of the land

### **Notice**

7. (1) For divestiture of lands that have been acquired outside of the open space provisions of the Subdivision By-law and later deemed surplus by Council, the Municipality shall give notice per Section 51 of the **MGA**.
- (2) For divestiture of surplus lands acquired through the open space provisions of the subdivision by-law, the Municipality shall give notice as per Section 273 (13) of the **MGA**.
- (3) For divestitures of lands of insufficient size or dimensions to be capable of any reasonable use as per Section 51A of the **MGA** no public notice is required.

### **Property Exempt from Policy**

8. (1) There may be situations whereby the Municipality may divest of land and therefore would be exempt from this Policy, which may include, but is not limited to;
- a) The sale of lands for tax arrears which are subject to the procedures set out in Section 134 of the **MGA**;

- b) The sale of lands under the **Exploration Act**;
- c) Divesting land for economic development purposes.

**Public Open Space Subdivision Acquisition Requirements**

- 9. Funds from open space provisions of the Subdivision Bylaw will return to the Municipality’s Public Open Space reserve, as per section 273 of the **MGA**.

**Repeal**

- 10. Policy MDL-65 approved on March 24, 2015 is hereby repealed and replaced with new MODL Policy 065.

| Policy Adoption   |                |
|---|----------------|
| Date of Original Passage  |                |
| Date of Notice of Intent to Repeal  | March 21, 2023 |
| Date of Council Approval  |                |
| Date of Effective Date  |                |
| I certify that this Policy 065 was adopted by Municipal Council as indicated above. |                |
| Signature of Municipal Clerk  | Date           |
|   |                |

| Version          | Amendment Description  | Approval Date |
|------------------|--|---------------|
| Repeal & Replace | Updated for accessible formatting and a complete review of the policy. |               |
| V2               |  |               |
|                  |  |               |
|                  |  |               |

## Appendix A

### Appendix A Surplus Land Policy Land Profile Evaluation Tool

1. Specify the location of the land (i.e., civic address, GPS Coordinates, survey)
2. Specify the monetary value of the land (assessed/appraised value)
3. Are there any restrictive covenants on the property?
4. Is the Municipality holding the property in trust?
5. What form of access is there to the property? (Public road, private road, easement)
6. Does the property have any contamination/environmental concerns based on previous environmental studies or does an environmental assessment need to be conducted?
7. What was the intended use of the property when acquired?
8. What is the size of the property?
  - a) Does the size inhibit development?
9. Does the property have any architectural, historical, or recreational interest?
10. Does the property have any ecological/conservation value?
11. Do stakeholders such as nearby landowners, subdivision lot owners, community associations, and/or members of the public need to be consulted?
12. Is expert knowledge required to provide an evaluation of the property?
13. Is the land adjacent or nearby water (river, lake, ocean)?
14. What is the current condition of the land?
15. Is or could there be a special purchaser for the property?
16. How was the municipal land acquired e.g., open space provisions of the Subdivision Bylaw, land donation, purchased?
17. Is the land already in use?
  - a) Is there a management agreement in place?
18. Does the current use duplicate an existing service already in the area?
19. What is the estimated cost associated with divesting?
20. Are staff aware of any public concerns relating to the divestiture of the property?
21. Is there development potential?
22. Might the property be useful to the municipality in the future?
23. Are there any known environmental hazards on the property that may inhibit development e.g., flood risk, erosion?



## Municipality of the District of Lunenburg

### Request for Decision

**REPORT TO:** Policy & Strategy Committee  
**SUBMITTED BY:** Elizabeth Carr, Planner I  
**DATE:** March 21, 2023  
**RE:** Repeal & Replace MODL Policy 065 Divestiture of Surplus Land

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### Recommendation

That the Policy & Strategy Committee recommend to Council to hereby repeal and replace MODL Policy 065 Divestiture of Surplus Land as presented, and hereby gives seven (7) days' notice of its intention to approve the proposed amendments at the March 28, 2023 Council Meeting.

### Background

#### Policy Purpose

The purpose of Policy 065 is:

“To provide guidance for the Municipality of the District of Lunenburg Council when proposing to divest of surplus land that is no longer required for the purposes of the municipality and to ensure an open and transparent process”.

Policy 065 is authorized by several sections of the Municipal Government Act (MGA) including sections 50; 51; 51A; 218; 271; and 273 all of which relate to the municipality's ability to acquire and sell land.

#### Problem

Clarity issues within MODL Policy 065 pertaining to the acceptable methods of surplus land divestiture were highlighted when Council rejected a bid on a parcel of municipal surplus land that was to be sold in accordance with Policy 065.

## **Reason for Rejection**

Section 51A of the MGA was referenced specifically in relation to the divestiture of the property in question, and states:

“Where a municipality holds land that is of insufficient size or dimensions to be capable of any reasonable use, in the opinion of the council, all or part of the land may be sold to the owner of any lot abutting that land and may be consolidated with such lot and, notwithstanding Section 51, the sale price of the land so sold may be set by council at a price that is less than market value at the time of the sale”.

Council rejected the bid citing confusion over the definition of ‘abutting property’ as the bidder’s property did not share a common boundary with the municipal surplus property. To rectify the issue, staff was directed by Council to add a definition for the term ‘abutting property’ to Policy 065.

## **Discussion**

Council directed staff to incorporate a definition for ‘abutting property’ to Policy 065. However, staff determined that the issue with the policy had to do with the overall clarity of the policy, and specifically, the available methods of divestiture. Staff focused on clarifying the options for divesting of municipal surplus lands rather than adding a definition for ‘abutting property’ because the MGA already outlines the criteria for selling municipal surplus land to an abutting property owner.

After reviewing Policy 065, staff drafted a recommendation to repeal and replace the existing Policy 065 with an updated version that is clearer and more concise than the original policy. Changes include clearly outlining the acceptable methods of divestiture and the corresponding sections of the MGA. The MGA already permits municipalities to divest of surplus land in multiple ways depending on the size and quality of land or how it was acquired by the municipality. The issue with the bid being rejected highlighted that there was room for misinterpretation within Policy 065.

## **Recommendation Justification**

Repealing the existing MODL Policy 065 for a new, clearer policy will reduce the risk of misinterpretation in the future and will enable the divestiture process for surplus municipal lands to be streamlined. The new policy is consistent with relevant policies of the MGA and other municipal policies.

Furthermore, the MODL2040 Project has provided opportunities for staff to investigate ways to increase diversity in the types of housing being offered across MODL. Permitting bidders outside of the abutting property owners to bid on municipal properties in the future will

increase the likelihood of new residential development, which benefits the housing market in MODL and will also increase municipal revenue from property taxes.

Increasing density in residential areas prevents sprawl and the need to build additional roads or expand municipal services. MODL should prioritize the infilling of existing residential areas rather than expanding outward to create more compact and complete communities.

### **Conclusion**

Clarity issues within Policy 065 Divestiture of Surplus Land arose after Council rejected a bid on a municipal surplus property citing confusion over the definition of the term ‘abutting property’. Council directed staff to add a definition for ‘abutting property’ to the existing policy, but, after reviewing the policy in detail, staff drafted a recommendation to repeal and replace the existing policy in favour of a clearer and more concise version that clearly outlines the acceptable methods of divestiture and the corresponding sections of the MGA. Staff’s recommendation to the Policy and Strategy Committee is to recommend to Council to hereby repeal MODL Policy 065 and replace it with the newly drafted MODL Policy 065 and provide 7 days’ notice to Council.

Copy

| <b>Report Preparation</b>      |                           |
|--------------------------------|---------------------------|
| <b>Department</b>              | Planning and Development  |
| <b>Report Prepared by</b>      | Elizabeth Carr, Planner I |
| <b>Report Approved by</b>      |                           |
| <b>Date Reviewed by C.A.O.</b> |                           |

## Municipality of the District of Lunenburg

| Policy Details               |  |
|------------------------------|--|
| <b>Name</b>                  | Community Grants Program/Sponsorship Request |
| <b>Number</b>                | 043  |
| <b>Legislative Authority</b> | MGA 2, 47, 48(3) 65C                         |
| <b>Effective Date</b>        | January 10, 2023                             |

### Purpose

- 1 (1) The purpose of this Policy is to set guidelines for Council Member and Municipal Staff for the distribution of funds to not-for-profit and charitable organizations in the community.
- (2) The Municipality recognizes and supports the efforts of community organizations to provide cultural, social, heritage, economic and/or recreation programs, facilities and events to the benefit of Municipal residents.

### Authority

- 2 (1) Authority is provided under Sections 2, 47, 48(3) and 65C, Municipal Government Act, as amended.

### Eligibility

- 3 The following types of organizations are eligible for funding
  - (1) Charitable organizations (e.g., foundation and charities);
  - (2) Global community service organizations (e.g., VON, United Way);
  - (3) Community-based organizations (e.g., community halls, sports halls, recreation groups, social groups;
  - (4) Any funding requests from community groups who have management agreements with the Municipality and any adjacent municipal units requesting funding to support their municipally owned recreation facilities will be processed through the budget and not through grant policy.
  - (5) For grant applications, organizations should ensure that any outstanding grant approvals from the previous fiscal year should be completed, unless an extension to the funding has been approved by MODL.

### Grant Categories

- 4 (1) **Annual Operating** – See Schedule A for criteria

To help with an organization's annual operating costs.

- (2) **Community Economic Development** – See Schedule B for criteria  
To help with the development of projects, events or initiatives that promote the area and foster community economic growth.
- (3) **Community Event** – See Schedule C for criteria  
To help with the hosting and/or delivery of a Community Event.
- (4) **Community Recreation Capital** – See Schedule D for criteria  
To help with the expansion or improvement of an indoor or outdoor cultural, social, heritage and/or recreation facility, and/or equipment, for projects under \$10,000.
- (5) **Community Recreation Program** – See Schedule E for criteria  
To help with the delivery of a new or expanded cultural, social, heritage and/or recreation program.
- (6) **Elite Athlete Travel** – See Schedule F for criteria  
To help elite athletes in Lunenburg County with travel costs when competing at National or International events.
- (7) **Leadership Training** - See Schedule G for criteria  
To help with training costs for individuals or community organizations that will continue to expand the programs, services and activities provided by community organizations.
- (8) **Major Events** – See Schedule H for criteria  
To encourage new or expand existing large-scale events that create a positive economic impact for the Municipality. The Major Events grant is to support operating, marketing, or promotional expenses for events that will attract visitors to the area.
- (9) **Major Recreation Capital** – See Schedule I for criteria  
To help with the development, expansion or improvement of an outdoor cultural, social, heritage and/or recreation facility and/or equipment for capital projects \$10,000 or more.
- (10) **Pro Kids Program** – See Schedule J for criteria  
To help individuals, who live in the Municipality, who due to lack of financial support, would not be able to benefit from recreational, sport or cultural activities.

- (11) **Sponsorship Ad/Donation of Prize(s) Request** – See Schedule K for criteria  
To help with sponsorship of local, not-for-profit organization’s projects, events or initiatives that help residents of the Municipality, or to supply prize(s) to enhance the project, event or initiative.
- (12) **Youth Travel** – See Schedule L for criteria  
To help individuals, teams or youth groups with travel costs when competing in provincial, national or international competitions in sport or cultural events.

### **General Information**

- 5 (1) Municipal Council sets funding limits and annual budget allotments for each grant category.
- (2) Applicants will complete the proper Municipal application form and provide the requested information.
- (3) Application deadlines and expiry periods may apply.
- (4) Funding frequency is limited within each grant category.
- (5) Applicants should show community support, fundraising efforts and efficient use of resources, sound business practices and development of volunteers.
- (6) A financial statement and pertinent document must be filed with the Municipality following completion of the project.
- (7) The Municipality reserves the right to deny any application believed not within its mandate.
- (8) All proposed work must follow Municipal, Provincial and Federal regulations.
- (9) Applicants must agree to recognize the Municipality for its contribution (e.g., banner, public announcement, sign, brochures, programs, advertisements).
- (10) The municipality will publish to the public a list of recipients of grants and the amounts given as stated in Section 65C of the Municipal Government Act.

### **Approval Process**

- 6 (1) Municipal Council approves the following grants
  - a) Annual Operating

- b) Major Recreation Capital
- c) Major Events Grant (request more than \$2,500)

(2) Applications for all other grants under this Policy, and grants under the specified amounts in 6(1) c) are reviewed and approved/denied by the responsible staff person, with notification to Municipal Council.

(3) Applicants will be notified in writing of approval or denial. This communication will explain any terms and conditions that apply to the grant approval.

### **Evaluation Criteria**

- 7 (1) The evaluation may include but is not limited to the following criteria
- a) Project/program fits within the mandate (vision/mission) of the Municipality.
  - b) Organization is a not-for-profit group.
  - c) Program, event, facility is for public community use.
  - d) A financial need is proved.
  - e) The organization is sourcing other funding partners.
  - f) The grant proposal is practical.
  - g) The funding provided by the Municipality will enable the organization to use dollars from other funding partners.
  - h) The application has showed that they will recognize the Municipality's contribution.
  - i) The organization shows long-term sustainability.
  - j) The applicant has proved its own commitment to the project (i.e. financial, in-kind donations).
  - k) The percentage of users from MODL.
  - l) The breakdown of staff (volunteer, paid, externally funded).
  - m) Funding is being looked for from host Municipality if organization located outside MODL.

### **Repeal**

- 8 1) Policy MDL-43 approved on June 10, 2008 and amended in subsequent years from 2008 to 2018 is hereby repealed and replaced with new policy MODL 043.

| Policy Adoption   |                  |
|---|------------------|
| <b>Date of Original Passage</b>   | January 10, 2023 |
| <b>Date of Notice of Intent to Amend</b>  | March 21, 2023   |
| <b>Date of Council Approval</b>   | March 28, 2023   |
| <b>Effective Date if Different from Council Approval</b>  | March 28, 2023   |
| <b>I certify that this Policy 043 Community Grants Program/Sponsorship Program was adopted by Municipal Council as indicated above.</b> |                  |
| <b>Signature of Municipal Clerk</b>   | <b>Date</b>      |

| Version                     | Amendment Description  | Approval Date |
|-----------------------------|--|---------------|
| <b>Repeal &amp; Replace</b> | Update for accessible formatting, and a complete review of the policy.   | Jan. 10, 2023 |
| <b>V2</b>                   | Removed the “Membership based, not-for-profit organizations having an annual adult membership of \$125 or less and for Youths or Seniors” from the eligibility criteria. | Mar. 28, 2023 |

### Schedule A – Annual Operating

#### Grant Purpose

- 1 a) To help with an organization's annual operating costs.

#### Funding Use

- 2 a) To be used for operational costs of organization, including, but not limited to, items such as wages and benefits, rent, insurance, utility bills, office expenses, routine maintenance and upkeep.

#### Eligible Applicants

- 3 a) Registered charity or not-for-profit organization, with active registration, serving residents of the Municipality.  
b) Registered charity or not-for-profit organization in other Municipal units, located in Lunenburg County providing regional facilities or services to residents to the Municipality.  
c) Municipally, Provincially or Federally registered Heritage Property, within MODL, used for community purposes.  
d) Churches / Church Halls that serve a community hall purpose (beyond congregational uses) or have an outdoor space used for public recreational purposes.

#### Ineligible Applicants

- 4 a) For-profit organizations.  
b) Fire Departments / Fire Halls, regardless of not-for-profit status.  
c) Schools / Private schools, regardless of not-for-profit status.

#### Application Deadline

- 5 a) Complete application to be received by March 1<sup>st</sup>.  
b) Late applications will be reviewed only after the regular review of those applicants that have applied on time.

**Note** Each year the Municipality receives more applications than it can fund, so it is important for the application to be in on time and contain correct information.

#### Completion Requirements & Grant Extensions

- 6 a) N/A for this grant type.

#### Funding Frequency

- 7 a) Only one application can be submitted by an organization per fiscal year.  
b) Applicants who have received funding in previous years should not assume funding each year.

#### Endorsement / Special Conditions

- 8 a) N/A for this grant type.

#### Funding Amount Limit

- 9 a) Funding will not exceed 50% of the total operating budget, to a maximum of \$5,000.

#### Approval Process and Procedures

- 10 a) Applications require Council's approval.  
b) If approved, 75% of the approved amount will be released (usually by June 30<sup>th</sup>).  
c) Final 25% of the approved amount will be released once final report claim submitted by the organization, showing sufficient expenditure. This information should be provided to the Municipality no later than March 15<sup>th</sup> of the year following approval. If this information is not received by this date, applicants may be ineligible to be considered for the Annual Operating Grant in the following fiscal year.  
d) Insufficient expenditure will require pay-back of unspent funds, or a reduced final amount released.

#### Documents Required for Application to be considered complete

- 11 a) Completed and signed application form  
b) Organizational Profile  
c) Proof of Ownership or copy of Lease (if applicable)  
d) Financial information  
(i) An audited financial statement from the previous operating year (as provided to the Registry of Joint Stocks) or if not available at time of application, balance sheet/income statement as at December 31<sup>st</sup> of previous year.  
(ii) Proposed Income & Expense Budget (including income from all sources)  
(iii) The need for financial assistance must be demonstrated.

### Schedule B – Community Economic Development Grant

#### Grant Purpose

- 1 a) To help with the development of projects, events or initiatives that promote the area and foster community economic growth.

#### Funding Use

- 2 a) To be used for projects, events or initiatives that will improve or grow and contribute to the economy or community in the Municipality.

#### Eligible Applicants

- 3 a) Registered charity or not-for-profit organization, with active registration, serving residents of the Municipality of the District of Lunenburg.  
b) Registered charity or not-for-profit organization in other Municipal units, located in Lunenburg County providing regional facilities or services to residents to the Municipality.

#### Ineligible Applicants

- 4 a) For-profit organizations.  
b) Churches / Church Halls, regardless of not-for-profit status.  
c) Fire Departments / Fire Halls, regardless of not-for-profit status.  
d) Schools / Private schools, regardless of not-for-profit status.

#### Application Deadline

- 5 a) Complete applications will be received throughout the year but should be received at least 1-2 months before anticipated start date for processing.

#### Completion Requirements & Grant Extensions

- 6 a) Projects, events or initiatives commenced prior to application will not be considered.

#### Funding Frequency

- 7 a) Only one application can be submitted by an organization per fiscal year.  
b) Applicants are eligible to receive a grant, provided that a clear 24 (twenty-four) months has passed between any previous grant application under this program.

#### Endorsement / Special Conditions

- 8 a) N/A for this grant type.

#### Funding Amount Limit

- 9 a) Funding will not exceed 50% of the total cost of the project, event or initiative to a maximum of \$1,000.

#### Approval Process and Procedures

- 10 a) Applications will be reviewed and approved/denied by the responsible staff person, with notification to Municipal Council.  
b) If approved, 75% of the approved amount will be released upon approval.  
c) Final 25% of the approved amount will be released once final report claim submitted by the organization, showing sufficient expenditure. This information should be provided to the Municipality no later than March 15th of the year following approval.  
d) Insufficient expenditure will require pay-back of unspent funds, or a reduced final amount released.  
e) 100% of the grant may be released upon approval with sufficient documentation.

#### Documents Required for Application to be considered complete

- 11 a) Completed and signed application form  
b) Organizational Profile  
c) Proof of Ownership or copy of Lease (if applicable)  
d) Financial information  
(i) Proposed Income & Expense Budget (including income from all sources)  
(ii) The need for financial assistance must be demonstrated

### Schedule C – Community Event

#### Grant Purpose

- 1 a) To help with hosting and/or delivery of a public Community Event.

#### Funding Use

- 2 a) To be used for a community event that will attract participants from both inside and outside the Municipality.

#### Eligible Applicants

- 3 a) Registered charity or not-for-profit organization, with active registration, serving residents of the Municipality.  
b) Registered charity or not-for-profit organization in other Municipal units, located in Lunenburg County providing regional facilities or services to residents to the Municipality.  
c) Municipally, Provincially or Federally registered Heritage Property, within MODL, used for community purposes.  
d) Churches / Church Halls that serve a community hall purpose (beyond congregational uses) or have an outdoor space used for public recreational purposes.  
e) Fire Departments / Fire Halls with active, not-for-profit registration.

#### Ineligible Applicants

- 4 a) For-profit organizations.  
b) Schools / Private schools, regardless of not-for-profit status.

#### Application Deadline

- 5 a) Complete applications will be received throughout the year but should be received at least 1-2 months before anticipated start date for processing.

#### Completion Requirements & Grant Extensions

- 6 a) Approved funding can be carried over to an alternate date for the same event, within the same fiscal, in the case of bad weather.

#### Funding Frequency

- 7 a) Only one application can be submitted, *per event*, by an organization per fiscal year.  
b) Applicants may apply more than once in the same fiscal year, provided that the applications are not for the same event.  
c) Applicants are not eligible to receive additional Municipal grant funding for the same event.

- d) Applicants who have received funding in previous years should not assume funding each year.

#### Endorsement / Special Conditions

- 8 a) N/A for this grant type.

#### Funding Amount Limit

- 9 a) Funding will not exceed 50% of the event budget, to a maximum of \$2,000.

#### Approval Process and Procedures

- 10 a) Applications will be reviewed and approved/denied by the responsible staff person, with notification to Municipal Council.  
b) If approved, 75% of the approved amount will be released following approval.  
c) Final 25% of the approved amount will be released once final report claim submitted by the organization, showing sufficient expenditure. This information should be provided to the Municipality no later than March 15th of the year following approval. If not received by this date, applicants may be ineligible to be considered for the Community Event Grant in the following fiscal year.  
d) Insufficient expenditure will require pay-back of unspent funds, or a reduced final amount released.  
e) 100% of the grant may be released upon approval with sufficient documentation.

#### Documents Required for Application to be considered complete

- 11 a) Completed and signed application form  
b) Organizational Profile  
c) Proof of Ownership or copy of Lease (if applicable)  
d) Financial information  
(i) Proposed Income & Expense Budget (including income from all sources)  
(ii) The need for financial assistance must be demonstrated

#### Schedule D – Community Recreation Capital

##### Grant Purpose

- 1 a) To help with the expansion or improvement of an indoor / outdoor cultural, social, heritage and/or recreation facility, and/or equipment, for projects under \$10,000.

##### Funding Use

- 2 a) To be used for an expansion or improvement of a facility or for equipment that will improve the capacity of the organization.  
b) Items of a permanent, non-consumable *capital* nature are eligible, as are improvements and maintenance items that extend the life of a facility (e.g., external painting, roofing).  
c) General operating activities are *not* eligible (e.g., cleaning, minor repairs).

##### Eligible Applicants

- 3 a) Registered charity or not-for-profit organization, with active registration, serving residents of the Municipality.  
b) Registered charity or not-for-profit organization in other Municipal units, located in Lunenburg County providing regional facilities or services to residents to the Municipality.  
c) Churches / Church Halls that serve a community hall purpose (beyond congregational uses) or have an outdoor space used for public recreational purposes.  
d) Fire Departments/Fire Halls that serve a community hall purpose (beyond firefighting services) or have an outdoor space used for public recreational purposes.  
e) Municipally, Provincially or Federally registered Heritage Property, within MODL, used for community purposes.

##### Ineligible Applicants

- 4 a) For-profit organizations.  
b) Schools / Private schools, regardless of not-for-profit status.

##### Application Deadline

- 5 a) Complete applications will be received throughout the year but should be received at least 1-2 months before anticipated start date for processing.

##### Completion Requirements & Grant Extensions

- 6 a) Projects or initiatives commenced prior to application will not be considered, except in emergency repair situations.  
b) Projects or initiatives not completed by end of fiscal year following approval, may apply for an extension. This request should be made to the Municipality no later than March 15th of the year following approval. If this request is not received by this date, applicants may not be able to extend the grant award period and may be ineligible to be considered for the Community Recreation Capital Grant in the following fiscal year.

##### Funding Frequency

- 7 a) Only one application can be submitted by an organization per fiscal year.  
b) Applicants who have received funding in previous years should not assume funding each year.

##### Endorsement / Special Conditions

- 8 a) Applicants operating several facilities must be endorsed by the sponsoring organization.  
b) Proposed scope of work must comply with all municipal, provincial and federal regulations.  
c) Approval of funding does not confirm compliance with regulations, the applicant is responsible for obtaining required permits and approvals.

##### Funding Amount Limit

- 9 a) Funding will not exceed 75% of the total capital cost of the project, to a maximum of \$2,000.

##### Approval Process and Procedures

- 10 a) Applications will be reviewed and approved/denied by the responsible staff person, with notification to Municipal Council.  
b) If approved, 75% of the approved amount will be released.  
c) Final 25% of the approved amount will be released once final report claim submitted by the organization, showing sufficient expenditure. This information should be provided to the Municipality no later than March 15th of the year

following approval. If this information is not received by this date, applicants may be ineligible to be considered for the Community Recreation Capital Grant in the following fiscal year.

- d) Insufficient expenditure will require pay-back of unspent funds, or a reduced final amount released.

**Documents Required for Application to be considered complete**

- 11 a) Completed and signed application form
- b) Organizational Profile
- c) Proof of Ownership or copy of Lease (if applicable)
- d) Financial information
  - (i) An audited financial statement from the previous operating year (as provided to the Registry of Joint Stocks) or if not available at time of application, balance sheet/income statement as of December 31<sup>st</sup> of previous year.
  - (ii) Proposed Income & Expense Budget (including income from all sources)
  - (iii) The need for financial assistance must be demonstrated

**Schedule E – Community Recreation Program**

**Grant Purpose**

- 1 a) To help with the delivery of a new or expanded cultural, social, heritage and/or recreation program.

**Funding Use**

- 2 a) To be used for a new program, including associated equipment; or an improvement or expansion of an existing program and associated equipment; or the development and/or training of local leadership.
  - b) Maintenance programs such as equipment repair or replacement are ineligible.

**Eligible Applicants**

- 3 a) Registered charity or not-for-profit organization, with active registration, serving residents of the Municipality.
- b) Registered charity or not-for-profit organization in other Municipal units, located in Lunenburg County providing regional facilities or services to residents to the Municipality.

**Ineligible Applicants**

- 4 a) For-profit organizations.
- b) Churches / Church Halls, regardless of not-for-profit status.
- c) Fire Departments / Fire Halls, regardless of not-for-profit status.
- d) Schools / Private schools, regardless of not-for-profit status.

**Application Deadline**

- 5 a) Complete applications will be received throughout the year but should be received at least 1-2 months before anticipated start date for processing.

**Completion Requirements & Grant Extensions**

- 6 a) Programs commenced prior to application will not be considered.
- b) Programs not completed by end of fiscal year following approval, may apply for an extension. This request should be made to the Municipality no later than March 15th of the year following approval. If this request is not received by this date, applicants may not be able to extend the grant award period and may be ineligible to be considered for the Community Recreation Program Grant in the following fiscal year.

**Funding Frequency**

- 7 a) Only one application can be submitted by an organization per fiscal year.

- b) Applicants who have received funding in previous years should not assume funding each year.

**Endorsement / Special Conditions**

- 8 a) For organizations that offer multiple programs, any application for a program grant must be endorsed by the sponsoring organization.
- b) The program must have a direct link to the organization applying. The Municipality will not consider applications in which a not-for-profit group is “sponsoring” the project/program.

**Funding Amount Limit**

- 9 a) Funding will not exceed 75% of the total cost of the program, to a maximum of \$1,000.

**Approval Process and Procedures**

- 10 a) Applications will be reviewed and approved/denied by the responsible staff person, with notification to Municipal Council.
- b) If approved, 75% of the approved amount will be released.
- c) Final 25% of the approved amount will be released once final report claim submitted by the organization, showing sufficient expenditure. This information should be provided to the Municipality no later than March 15th of the year following approval. If this information is not received by this date, applicants may be ineligible to be considered for the Community Recreation Program grant in the following fiscal year.
- d) Insufficient expenditure will require pay-back of unspent funds, or a reduced final amount released.

**Documents Required for Application to be considered complete**

- 11 a) Completed and signed application form
- b) Organizational Profile
- c) Proof of Ownership or copy of Lease (if applicable)
- d) Financial information
  - (i) Proposed Income & Expense Budget (including income from all sources)
  - (ii) The need for financial assistance must be demonstrated

**Schedule F – Elite Athlete Travel**

**Grant Purpose**

- 1 a) To help elite athletes in Lunenburg County with travel costs competing at national or international events.
- b) Elite athlete is defined as a person who commits significant time to training and competing in their sport as either an individual or a team member and is recognized by their National Sporting Association as a representative of Nova Scotia/Atlantic Canada or Canada eligible to compete at the highest level nationally or internationally.

**Funding Use**

- 2 a) To be used only towards travel costs (e.g., flights, accommodations, meals etc.)
- b) Funds cannot be used to attend training.
- c) Funds cannot be used towards travel costs for persons accompanying the applicant.
- d) Funds cannot be used towards travel that occurred before the application was submitted.

**Eligible Applicants**

- 3 a) An Elite Athlete; and
- b) A resident of Lunenburg County; and
- c) A member of a National Sporting Association; and
- d) Travelling to compete at a national or international event.

**Ineligible Applicants**

- 4 a) Any applicant who is under suspension, sanction or investigation for any rule violation relating to the sport.

**Application Deadline**

- 5 a) Complete applications will be received throughout the year but should be received at least 1-2 months before anticipated start date for processing.

**Completion Requirements & Grant Extensions**

- 6 a) N/A for this grant type.

**Funding Frequency**

- 7 a) Only one application can be submitted per athlete per fiscal year.
- b) Applicants who have received funding in previous years should not assume funding each year.

**Endorsement / Special Conditions**

- 8 a) A letter from their National/Provincial Association confirming the eligibility of the athlete.

**Funding Amount Limit**

- 9 a) Funding will not exceed 75% of the total travel budget, to a maximum of \$1,000 for national competitions and \$2,000 for international competitions.

**Approval Process and Procedures**

- 10 a) Applications will be reviewed and approved/denied by the responsible staff person, with notification to Municipal Council.  
b) If approved, 75% of the approved amount will be released following approval.  
c) Final 25% of the approved amount will be released once final report claim submitted by the organization, showing sufficient expenditure. This information should be provided to the Municipality no later than March 15th of the year following approval. If this information is not received by this date, applicants may be ineligible to be considered for the Elite Athlete Travel Grant in the following fiscal year.  
d) Insufficient expenditure will require pay-back of unspent funds, or a reduced final amount released.  
e) Successful applicants are encouraged to provide a report to Council, in person, virtually, or in writing following their participation in the sponsored event.

**Documents Required for Application to be considered complete**

- 11 a) Completed and signed application form  
b) Financial information  
(i) Proposed trip Income & Expense Budget including copies of receipts will be required to confirm the actual expenditure and showing income from all sources.  
(ii) The need for financial assistance must be demonstrated  
c) A letter from their National/Provincial Association confirming the eligibility of the athlete and how the proposed travel and competition will assist their progression through the elite pathway in their sport.

**Schedule G – Leadership Training**

**Grant Purpose**

- 1 a) To help with training costs for individuals or community organizations that will continue to expand the programs, services and activities provided by community organizations.

**Funding Use**

- 2 a) To be used to pay for training of individuals or community groups that develops leadership skills in the areas of physical activity, sport, recreation, volunteerism, safety and leadership.  
b) Eligible training may include courses, workshops or seminars that will develop skills and knowledge for coaches, instructors, leaders and volunteers.  
c) The applicant must be willing to use the skills learned with the citizens of the Municipality.  
d) Hotel, travel costs, fire ground operations and/or medical first response training are not eligible for this grant.

**Eligible Applicants**

- 3 a) **Individual**  
(i) Must be a resident of the Municipality.  
b) **Community Organization**  
(i) Registered charity or not-for-profit organization, with active registration, serving residents of the Municipality.  
(ii) Registered charity or not-for-profit organization in other Municipal units, located in Lunenburg County providing regional facilities or services to residents to the Municipality.  
(iii) 50% of the participants on the application must be residents of the Municipality.

**Ineligible Applicants**

- 4 a) **Individual**  
(i) Non-MODL Resident.  
(ii) Firefighters or Associate Fire Department Members.  
b) **Community Organization**  
(i) For-profit organizations.  
(ii) Churches / Church Halls, regardless of not-for-profit status.  
(iii) Fire Departments / Fire Halls regardless, of not-for-profit status.  
(iv) Schools / Private schools, regardless of not-for-profit status.

**Application Deadline**

- 5 a) Complete applications will be received throughout the year but should be received at least 1-2 months before anticipated start date for processing.

**Completion Requirements & Grant Extensions**

- 6 a) Training commenced or completed prior to application will not be considered.

**Funding Frequency**

- 7 a) Only one application can be submitted by an individual/community organization, for the same training, per fiscal year.  
b) Applicants who have received funding in previous years should not assume funding each year.

**Endorsement Special Conditions**

- 8 a) Hotel, travel costs, fire ground operations and/or medical first response training are not eligible for this grant.

**Funding Amount Limit**

- 9 a) Funding will not exceed 50% of the total cost of the training, to a maximum of \$500.

**Approval Process and Procedures**

- 10 a) Applications will be reviewed and approved/denied by the responsible staff person, with notification to Municipal Council.  
b) If approved, the applicant will receive communication confirming the amount awarded.  
c) Applicants are responsible to pay for the initial training costs and are required to submit a copy of receipts and certifications for funding to be released. This information should be provided to the Municipality no later than March 15th of the year following approval. If this information is not received by this date, applicants may be ineligible to be considered for the Leadership Training Grant in the following fiscal year.  
d) Upon receipt of required information, a reimbursement cheque will be issued for the approved amount of funding.

**Documents Required for Application to be considered complete**

- 11 a) Completed and signed application form  
b) Financial information  
(i) Proposed Income & Expense Budget (including income from all sources)  
(ii) The need for financial assistance must be demonstrated

**Schedule H – Major Events**

**Grant Purpose**

- 1 a) To encourage new or expand existing large-scale events that create a positive economic impact for the Municipality. The Major Events Grant is to support operating, marketing, or promotional expenses for events that will attract visitors to the area.

**Funding Use**

- 2 a) To be used for operational costs associated with delivering a new, or expanding an existing, large-scale event held in, or near the Municipality.

**Eligible Applicants**

- 3 a) Registered charity or not-for-profit organization, with active registration, serving residents of the Municipality.  
b) Registered charity or not-for-profit organization in other Municipal units, located in Lunenburg County providing regional facilities or services to residents to the Municipality.  
c) Other municipal units near the Municipality.  
d) Municipal corporations near the Municipality.  
e) Municipally, Provincially or Federally registered Heritage Property, within MODL, used for community purposes.  
f) Churches / Church Halls that serve a community hall purpose (beyond congregational uses) or have an outdoor space used for public recreational purposes.  
g) Fire Departments / Fire Halls that serve a community hall purpose (beyond firefighting services) or have an outdoor space used for public recreational purposes.

**Ineligible Applicants**

- 4 a) For-profit organizations.  
b) Schools / Private schools, regardless of not-for-profit status.

**Application Deadline**

- 5 a) Complete applications will be received throughout the year but should be received at least 1-2 months before anticipated start date for processing.

**Completion Requirements & Grant Extensions**

- 6 a) N/A for this grant type.

**Funding Frequency**

- 7 a) Only one application can be submitted, per event, by an organization per fiscal year.  
b) Applicants may apply more than once in the same fiscal year, provided that the applications are not for the same event.  
c) Applicants are not eligible to receive additional Municipal grant funding for the same event.  
d) Applicants who have received funding in previous years should not assume funding each year.

**Endorsement / Special Conditions**

- 8 a) N/A for this grant type.

**Funding Amount Limit**

- 9 a) Funding will not exceed 33% of the total project cost, to a maximum of \$20,000.

**Approval Process and Procedures**

- 10 a) Applications requesting more than \$2,500 require Council's approval.  
b) Applications requesting \$2,500 or less will be reviewed and approved/denied by the responsible staff person, with notification to Municipal Council.  
c) If approved, 75% of the approved amount will be released following approval.  
d) Final 25% of the approved amount will be released once final report claim submitted by the organization, showing sufficient expenditure. This information should be provided to the Municipality no later than March 15th of the year following approval. If this information is not received by this date, applicants may be ineligible to be considered for the Major Events Grant in the following fiscal year.  
e) Insufficient expenditure will require pay-back of unspent funds, or a reduced final amount released.  
f) 100% of the grant may be released upon approval with sufficient documentation.

**Documents Required for Application to be considered complete**

- 11 a) Completed and signed application form  
b) Organizational Profile  
c) Proof of Ownership or copy of Lease (if applicable)  
d) Financial information  
(i) Proposed Income & Expense Budget (including income from all sources)  
(ii) The need for financial assistance must be demonstrated

**Schedule I – Major Recreation Capital**

**Grant Purpose**

- 1 a) To help with the development, expansion, or improvement of an outdoor cultural, social, heritage and/or recreation facility, and/or equipment, for projects \$10,000 or more.

**Funding Use**

- 2 a) To be used for the development, expansion, or improvement of a facility or for equipment that will improve the capacity of the organization.  
b) Items of a permanent, non-consumable *capital* nature are eligible as are improvements and maintenance items that extend the life of a facility (e.g., external painting, roofing).  
c) General operating activities are not eligible (e.g., cleaning, minor repairs).

**Eligible Applicants**

- 3 a) Registered charity or not-for-profit organization, with active registration, serving residents of the Municipality.  
b) Registered charity or not-for-profit organization in other Municipal units, located in Lunenburg County providing regional facilities or services to residents to the Municipality.  
c) Churches / Church Halls that serve a community hall purpose (beyond congregational uses) or have an outdoor space used for public recreational purposes.  
d) Fire Departments / Fire Halls that serve a community hall purpose (beyond firefighting services) or have an outdoor space used for public recreational purposes.  
e) Municipally, Provincially or Federally registered Heritage Property, within MODL, used for community purposes.

**Ineligible Applicants**

- 4 a) For-profit organizations.  
b) Schools / Private schools, regardless of not-for-profit status.

**Application Deadline**

- 5 a) Complete application to be received by March 1<sup>st</sup>.  
b) Late applications will be reviewed only after the regular review of those applicants that have applied on time.

**Note** Each year the Municipality receives more applications than it can fund, so it is important for an application to be in on time and contain correct information.

**Completion Requirements & Grant Extensions**

- 6 a) Projects or initiatives commenced prior to application will not be considered, except in emergency repair situations.
- b) Projects or initiatives not completed by end of fiscal year following approval, may apply for an extension. This request should be made to the Municipality no later than March 15th of the year following approval. If this request is not received by this date, applicants may not be able to extend the grant award period.

**Funding Frequency**

- 7 a) Only one application can be submitted by an organization per fiscal year.
- b) Applicants are eligible to receive a grant, provided that a clear 24 (twenty-four) months has passed between any previous grant application under this program.

**Endorsement / Special Conditions**

- 8 a) Applicants operating several facilities must be endorsed by the sponsoring organization.
- b) Proposed scope of work must comply with all municipal, provincial and federal regulations.
- c) Approval of funding does not confirm compliance with regulations, the applicant is responsible for obtaining required permits and approvals.

**Funding Amount Limit**

- 9 a) Funding will not exceed 50% of the total capital cost of the project, to a maximum of \$15,000.

**Approval Process and Procedures**

- 10 a) Applications require Council's approval.
- b) If approved, 75% of the approved amount will be released (usually by June 30<sup>th</sup>).
- c) Final 25% of the approved amount will be released once final report claim submitted by the organization, showing sufficient expenditure. This information should be provided to the Municipality no later than March 15th of the year following approval. If this information is not received by this date, applicants may be ineligible to be considered for the Major Recreation Capital Grant in the next award period.
- d) Insufficient expenditure will require pay-back of unspent funds, or a reduced final amount released.

**Documents Required for Application to be considered complete**

- 11 a) Completed and signed application form.
- b) Organizational Profile
- c) Proof of Ownership or copy of Lease (if applicable)
- d) Financial information
- (i) An audited financial statement from the previous operating year (as provided to the Registry of Joint Stocks) or if not available at time of application, balance sheet/income statement as of December 31<sup>st</sup> of previous year.
- (ii) Proposed Income & Expense Budget (including income from all sources)
- (iii) The need for financial assistance must be demonstrated

**Schedule J – Pro Kids**

**Grant Purpose**

- 1 a) To help individuals, who live in the Municipality, who due to lack of financial support, would not be able to benefit from recreational, sport or cultural, activities.

**Funding Use**

- 2 a) To be used for an activity associated with a recreation, sport or cultural program offered by recognized organizations or an individual.  
b) Registration fees will be given first priority, equipment, uniform costs and travel may also be considered.

**Eligible Applicants**

- 3 a) Any parent or guardian may apply on behalf of the individual participant, however the participant  
(i) Must be under 19 years old; and  
(ii) Must be a resident of the Municipality.

**Ineligible Participant**

- 4 a) Non-resident of the Municipality.  
b) No team applications.

**Application Deadline**

- 5 a) Complete applications will be received throughout the year but should be received at least 1-2 months before anticipated start date for processing.

**Completion Requirements & Grant Extensions**

- 6 a) N/A for this grant type.

**Funding Frequency**

- 7 a) One application can be submitted on behalf of each participant once per season (Spring, Summer, Fall, Winter) per fiscal year.  
b) Participants who have received funding in previous season(s) should not assume funding for each application.  
c) Priority will be given to new participants.

**Endorsement / Special Conditions**

- 8 a) N/A for this grant type.

**Funding Amount Limit**

- 9 a) No limit per individual and/or family

- b) Funds are available on a first come-first served basis, until the account is depleted.

**Approval Process and Procedures**

- 10 a) Applications will be reviewed, and provided references contacted, by the responsible staff person.  
b) If approved, the applicant will receive communication confirming the amount awarded.  
c) Approved amount will be forwarded directly to the program provider.  
d) Reimbursement of approved Equipment, uniform costs and travel will be made directly to the applicant (when applicable).

**Documents Required for Application to be considered complete**

- 11 a) Completed and signed application form  
b) Financial information  
(i) Applicant must provide a reference from a recognized agency or professional individual (clergy, teacher, coach, doctor, councillor) who is familiar with your personal and financial situation, who can verify financial assistant is required. This cannot be a relative or a friend.

**Note** The Municipality reserves the right to request additional proof of financial situation if needed.

**Schedule K – Sponsorship Ad Request / Donation of Prizes**

**Grant Purpose**

- 1 a) To help with sponsorship of local not-for-profit organization's projects, events or initiatives that benefit residents of the Municipality or to provide prize(s) to enhance the project, event or initiative.

**Funding Use**

- 2 a) To be used for advertising of a project, event, or initiative; or  
b) To be used as a prize to enhance a project, event, or initiative

**Eligible Applicants**

- 3 a) Registered charity or not-for profit organization, with active registration, serving residents of the Municipality.  
b) Registered charity or not-for-profit organization in other Municipal units, located in Lunenburg County providing regional facilities or services to residents to the Municipality.  
c) Municipally, Provincially or Federally registered Heritage Property, within MODL, used for community purposes.  
d) Churches / Church Halls with active, not-for-profit status.  
e) Fire Departments / Fire Halls with active, not-for-profit status.

**Ineligible Applicants**

- 4 a) For profit-organizations.  
b) Schools / Private schools, regardless of not-for-profit status.

**Application Deadline**

- 5 a) Complete applications will be received throughout the year but should be received at least 1-2 months before funds are needed, for processing.  
b) Requests shall be approved on a first-come, first-served bases as budget allows and upon availability of prizes.

**Completion Requirements & Grant Extensions**

- 6 a) Projects, events or initiatives commenced prior to application will not be considered.

**Funding Frequency**

- 7 a) Organizations can apply more than once per year to a maximum of \$500, which includes a combination of cash and prize value.

- b) Applicants who have received funding in previous years should not assume funding each year.

**Endorsement / Special Conditions**

- 8 a) N/A for this grant type.

**Funding Amount Limit**

- 9 a) Funding will not exceed \$500 in total, including prizes, per organization, per year.

**Approval Process and Procedures**

- 10 a) Applications will be reviewed and approved/denied by the responsible staff person, with notification to Municipal Council.  
b) If approved, 100% of the approved amount/prizes will be released.  
c) Collection of prizes will be arranged through the responsible staff person.

**Documents Required for Application to be considered complete**

- 11 a) Completed and signed application form (Applications under \$100 or less, can submit an email instead for review by staff).  
b) Organizational Profile  
c) Financial information  
(i) Proposed Income & Expense Budget (including income from all sources)  
(ii) The need for financial assistance must be demonstrated

#### Schedule L – Youth Travel

##### Grant Purpose

- 1 a) To help individuals, teams or youth groups with travel costs when competing in provincial, national or international competitions in sport or cultural events.
- b) Youth is defined as attending elementary, secondary or post-secondary educational institution.

##### Funding Use

- 2 a) To be used only towards travel costs (e.g., flights, accommodations, meals etc.)
- b) Funds cannot be used to attend training.
- c) Funds cannot be used towards travel costs for persons accompanying the applicant(s).
- d) Funds cannot be used towards travel that occurred before the application was submitted.

##### Eligible Applicants

- 3 a) **Individual**
  - (i) Youth attending elementary, secondary or post-secondary educational institution.
  - (ii) A resident of the Municipality.
  - (iii) Must be representing their club/organization in a provincial, national or international competition in sport or cultural event.
  - (iv) Must be travelling to compete at a provincial, national or international competition or event.
- b) **Team/Group**
  - (i) Youths attending elementary, secondary or post-secondary educational institution.
  - (ii) 50% of the participants must be residents of the Municipality.
  - (iii) Must be representing their club/organization in a provincial, national or international competition in sport or cultural event.
  - (iv) Must be travelling to compete at a provincial, national or international competition or event.

##### Ineligible Applicants

- 4 a) **Individual**
  - (i) Non-resident of Municipality.
- b) **Team/Group**
  - (i) Less than 50% of the participants are residents of the Municipality.

- (ii) Schools / Private schools, regardless of not-for-profit status.

##### Application Deadline

- 5 a) Complete applications will be received throughout the year but should be received at least 1-2 months before anticipated start date for processing.

##### Completion Requirements & Grant Extensions

- 6 a) N/A for this grant type.

##### Funding Frequency

- 7 a) Only one application can be submitted per individual or team/group per fiscal year.
- b) Applicants who have received funding in previous years should not assume funding each year.

##### Endorsement / Special Conditions

- 8 a) Confirmation of representation must be submitted from the sporting or competition body and/or school.

##### Recognition

- 9 a) Applicants must agree to recognize the Municipality for its contribution (e.g., banner, public announcement, sign, brochures, programs, advertisements).

##### Funding Amount Limit

- 10 a) **Individual**
  - (i) Funding will not exceed 50% of the total travel budget, to a maximum of \$75 for provincial events and \$200 for national and international events.
- b) **Team/Group**
  - (i) Funding will not exceed 50% of the total travel budget, to a maximum of \$500 for provincial events and \$1,000 for national and international events.

##### Approval Process and Procedures

- 11 a) Applications will be reviewed and approved/denied by the responsible staff person, with notification to Municipal Council.
- b) If approved, 100% of the approved amount will be released.

##### Documents Required for Application to be considered complete

- 12 a) Completed and signed application form
- b) Financial information

- (i) Proposed trip Income & Expense Budget including copies of receipts will be required to confirm the actual expenditure and showing income from all sources.
- (ii) The need for financial assistance must be demonstrated
- (iii) Confirmation of representation must be submitted from the sporting or competition body and/or school.

Proposed



## Municipality of the District of Lunenburg

### Request for Decision

**Report to:** Policy & Strategy Committee

**Submitted by:** Trudy Payne, Director, Recreation, Parks & Tourism  
Tissy Bolivar, Program Coordinator  
Ruth Wawin, Tourism & Event Development Officer

**Date:** March 21, 2023

**Re:** Change to Community Grants Program and Sponsorship Request Policy Eligible Applicant Criteria

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#### Recommendation

Staff recommend that the eligibility criterion stating, “**Membership based, not-for-profit organizations with an annual adult membership of \$125 or less**”, be removed from the Community Grants Program and Sponsorship Request Policy 043.

If approval is given to remove the above criterion from the Community Grants Program and Sponsorship Request Policy, staff recommends extending the Annual Operating and Major Recreation Capital deadline to April 28, 2023, for this fiscal only, to capture groups who may have applied but were excluded because of this eligibility criteria.

#### Executive summary

Staff is seeking approval to remove the eligible applicant criterion stating, “**Membership based, not-for-profit organizations with an annual adult membership of \$125 or less**,” from the Community Grants Program and Sponsorship Request Policy. The inclusion of this statement is inadvertently excluding several non-profit groups that the Municipality has traditionally supported.

#### Discussion

Including “**Membership based, not-for-profit organizations with an annual adult membership of \$125 or less**.” in the eligibility criteria deems organizations that charge adult yearly

membership fees above \$125 ineligible to apply unless they are youth or senior focused and excludes many organizations that the Municipality has traditionally supported.

The purpose of the Community Grant Program and Sponsorship Request Policy is to support community organizations that provide cultural, social, heritage, economic, and/or recreation programs, facilities, and events that benefit residents. However, with the current eligibility criteria, we are inhibiting the grant from fulfilling its intended purpose.

Organizations that the Municipality has traditionally supported through the Community Grants Program and Sponsorship Request Policy that now are ineligible to receive funding include, but are not limited to:

- Bridgewater Curling Club
- Seaside A Capella
- DMC Boxing
- Lunenburg County YMCA

These are just some of the groups that have recently come to our attention because of this policy change.

The rationale behind including this as part of the eligibility criteria was to award MODL grant funding to those groups that do not have memberships fees or charge limited memberships fees to assist with operating and capital costs. Those that charge memberships have a steady and reliable source of income as opposed to those that do not charge or have a minimal fee. An example would be a community hall facility that does not charge memberships and relies on fundraising and grants to maintain this community asset.

It is true that memberships fees often do prohibit some residents from being part of a group or facility which means they are not easily accessible by some members of the public. The same could be said about registration fees which many groups and municipal units charge when providing services or programs. Feedback that staff are receiving is that the membership fees are necessary to pay for costs to run the organization or facility and do not cover the true costs. An example would be a curling club that charges a membership fee above the \$125 but needs to in order to help cover the significant operating and capital costs. These non-profit groups apply for grant funding from all three levels of government to help offset costs. They understand that applying for a grant does not mean they may be successful but have expressed concerns over not even being able to apply.

It was noted by staff when an events grant application was submitted, that the Community Events and the Major Events Grant eligibility criteria does not align. This was an error made when presenting the policy to Council. It was always the intent that both the Community Events and Major Events Grant exclude the following: **“Membership based, not-for-profit organizations with an annual adult membership of \$125 or less.”** Mistakenly this criterion was included in the Major Events Grant. This means venues such as the Lunenburg County Lifestyle Centre (LCLC) will not be able to apply for funding to assist with large-scale events. Events that have been supported through this grant in the past include the Para Hockey Cup and The Esso

Cup. Events such as these no longer qualify to receive funding under the Major Event Grant as the LCLC charges an adult membership fee of more than \$125 per year. Leaving this criterion in the policy also excludes locations such as golf courses, yacht clubs, curling clubs, etc. that attract major events to our area that have significant economic spin-offs such international sailing events. Again, the purpose of this grant is to financially assist large-scale events that drive economic activity and increase overnight visitation in the area.

**Budget implications**

The change requested has no budget implications.

**Strategic plan**

Amending the eligible applicant criteria for the Community Grants Program and Sponsorship Request Policy 043 policy is in alignment with the Municipality’s mission of being sustainable community builders and collaborative engagers. To have sustainable communities it is necessary the Municipality provide opportunities for financial support to community organizations and events that fill gaps in programs and services within the Municipality and surrounding areas. As collaborative engagers, it is important to work with community organizations and amend our policies when they create unnecessary red tape.

**Alternatives**

- 1) Remove the eligible applicant criterion stating, “Membership based, not-for- profit organizations having an annual adult membership of \$125 or less.”
- 2) Do not remove the eligible applicant criterion
- 3) Remove the eligible applicant criterion stating, “Membership based not-for-profit organizations having an annual adult membership fee of \$125 or less” from the Major Events Grant only.

**Conclusion**

In conclusion staff recommends the criterion stating, “Membership based, not-for- profit organizations having an annual adult membership of \$125 or less,” be removed from the Community Grants Program and Sponsorship Request Policy 043 entirely. In addition, staff recommends extending the Annual Operating and Major Recreation Capital deadline to April 28, 2023, for this fiscal only to capture groups who may have applied but were excluded because of this eligibility criteria.

| <b>Report Preparation</b>      |  |
|--------------------------------|--|
| <b>Department</b>              | Recreation, Parks & Tourism  |
| <b>Report Prepared by</b>      | <b>Trudy Payne Director Recreation, Parks &amp; Tourism</b><br><b>Tissy Bolivar Program Coordinator</b><br><b>Ruth Wawin Tourism &amp; Event Development Officer</b> |
| <b>Report Approved by</b>      |  |
| <b>Date Reviewed by C.A.O.</b> |  |

**Council**

Item: #10.1.5

Date: March 28, 2023

Authorization: T. MacEwan



## Municipality of the District of Lunenburg

### Request for Decision

**Report to:** Policy and Strategy Committee

**Submitted by:** Trudy Payne, Director of Recreation, Parks, & Tourism

**Date:** March 21, 2023

**Re:** Riverport & District Community Park Association Management Agreement

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### Recommendation

That the Policy and Strategy Committee recommend to Council to enter into a 5-year management agreement pertaining to PID's 60456506 (5.07 acres) and 6019382 (3.21 acres), which is the former Riverport & District Elementary School property, with the Riverport & District Community Park Association for the purposes of establishing a park for community use; and that the agreement will include but not be limited to the following conditions: the agreement will be for a 5 year term with a review period by year 5; there will be no financial commitment for the concept plan, capital costs or ongoing operating costs in MODL's operating or capital budgets and that there is no guarantee of any financial assistance from MODL. This does preclude the Association from applying to the Municipality for funding through its grant program.

### Executive summary

At the March 14, 2023 Council meeting the Riverport & District Community Park Association made a presentation (attached to this report) and requested that MODL Council make a commitment via a motion, that the former school be kept for community use as per community feedback; that MODL Council provide funding for design work and for RDCPA basic operational costs; and that MODL provide long-term support to develop a park on the former school grounds.

## **Discussion**

One of the four strategic priorities of Council is to “Re-create Parks” which is about investing in our current parks to meet established standards and to make them more accessible. Council’s direction has been and continues to be that we are not creating new parks until we have addressed the needs of our current parks. Although the former Riverport & District Elementary School grounds did provide a recreation space in the Riverport area, it was not a space created by MODL but became one of MODL’s property when the school closed. The playground was deemed unsafe and thus, was removed.

To respond to the Riverport & District Community Park Association’s and the community’s request and to address the direction of Council which is to focus on investing in the parks MODL owns and manages, staff are recommending Council consider entering into a 5-year management agreement with the Park Association. The management agreement would include clauses that clearly states that MODL would not include an ongoing line item in their operating and capital budgets that would guarantee funding for the park concept plan, for the capital costs to develop the park or ongoing operating costs. This recommendation would enable the Park Association to move forward with their fund raising and in seeking grants to achieve their goal of a community park. This recommendation also enables MODL to address their strategic goal in investing in parks owned and managed by MODL. This recommendation would not preclude the Park Association from applying for grant funding through MODL’s grant program which is available to other non-profit groups.

## **Budget implications**

There would be no budget implications.

## **Strategic plan**

The Vision of the Municipality is “The breathtaking, natural beauty of the Municipality of the District of Lunenburg is home to thriving communities with unique cultural identities. Growth centres support our diversified economies, driven by our residents’ passion for the place they call home.

With our strong economy, we can live, work and raise families here. We are a destination for visitors, attracted to our vibrant parks, beaches, and hiking trails. As leaders in sustainability, we passionately protect our natural environment.”

Entering in a management agreement with the Riverport & District Community Park Association would align with MODL’s vision statement in that parks in communities does make MODL a place we can live, work and raise families. Parks help make MODL a destination as people are attracted to our parks and natural spaces. The Association spoke of creating high

impact and low maintenance park which will aid in the sustainability of the park and its volunteers.

### **Work plan**

Staff would work with MODL’s solicitor to draft the management agreement. They would continue to support this group as they would any other community group.

### **Alternatives**

The alternative is to not to enter into a management agreement with the Riverport & District Community Park Association.

### **Conclusion**

The recommendation being brought forth could help both the Riverport & District Community Park Association and MODL meet both of their goals.

| <b>Report Preparation</b>      |  |
|--------------------------------|--|
| <b>Department</b>              | Recreation, Parks, & Tourism                         |
| <b>Report Prepared by</b>      | Trudy Payne, Director of Recreation, Parks & Tourism |
| <b>Report Approved by</b>      |  |
| <b>Date Reviewed by C.A.O.</b> |  |

**Council**  
Item: #10.2  
Date: March 28, 2023  
Authorization: T. MacEwan



## Municipality of the District of Lunenburg

10 Allée Champlain Drive, Cookville, Nova Scotia, Canada, B4V 9E4  
Phone: 902.543.8181 Fax: 902.543.7123 Web Site: [www.modl.ca](http://www.modl.ca)

March 28, 2023

To Her Worship, Mayor Bolivar-Getson, and Councillors  
of the Municipality of the District of Lunenburg

Dear Mayor and Councillors:

The Fire & Emergency Services Committee, in session on Monday, March 13, 2023, made the following recommendations to Council:

- 1. That Municipal Council approve a 2% increase (totalling \$3,797.00) over the 2022/2023 amounts, with the 2023/2024 fiscal year grants being:**

|                                    |                           |
|------------------------------------|---------------------------|
| <b>Matching Grant</b>              | <b>\$44,998.00</b>        |
| <b>Municipal Grant</b>             | <b>\$68,032.00</b>        |
| <b>Training Grant</b>              | <b>\$11,570.00</b>        |
| <b>Insurance Grant</b>             | <b>\$57,430.00</b>        |
| <b>Personnel Insurance Grant</b>   | <b><u>\$11,570.00</u></b> |
| <b>For a total grant amount of</b> | <b>\$193,600.00</b>       |

- 2. That Municipal Council, explore a regional fire training station with the Town of Bridgewater and other regional municipal units for the local area; and further the Committee recommends that Council establish a reserve fund separate from other fire service grants and funds for the purposes of constructing a regional facility.**

Respectfully Submitted,

Chairperson and Members  
Fire & Emergency Services Committee

ck

**Council**  
Item: #10.2.2  
Date: March 28, 2023  
Authorization: T. MacEwan



## **Municipality of the District of Lunenburg**

### **Report to Council**

**Report To:** Mayor Carolyn Bolivar-Getson and Municipal Council  
**Submitted By:** Fire & Emergency Services Committee  
**Date:** March 28, 2023  
**Re:** Regional Fire Training Station

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#### **Background**

At the meeting of the Fire & Emergency Services Committee (FESC) held on March 13, 2023, the Fire Services Coordinator gave a slide deck presentation on the three workshops that were held, one in late 2022 and two more in early 2023. The purpose of the workshops was to discuss the direction and possible strategic projects for fire and emergency services.

The Committee also discussed previous priorities and major accomplishments of the Lunenburg Fire & Emergency Services (LRFES), the FESC, and Municipal Council's collaborative work, as well as current issues facing fire & emergency services.

Some of the topics of discussion were;

- the importance and vital role fire departments play within the municipality and their individual communities;
- volunteer Landscape changing;
- recruitment & retention;
- capacity and governance challenges;
- safety and personal protective equipment ; and
- training in several areas were discussed at some length (development of General Operating guidelines in these areas suggested).

#### **Discussion**

The Committee has approved a tentative draft of strategic areas of focus that include:

- increasing minimum equipment standards;
- increasing safety for volunteers;
- increasing volunteer capacity and improving governance and funding models; and
- further investments in recruitment and retention initiatives.

These proposed outcomes will be presented to the Fire Service at the upcoming Annual General Meeting (AGM) in April.

During the discussions, the proposal of developing a regional fire facility was raised. There was considerable excitement from among committee members about the possibility of a facility that would be focused on increasing safety and training for volunteers. This initiative may also address other issues in the future, such as lack of coverage when volunteer resources are scarce. Such a facility would be located centrally and would feature modern live fire training ground props and classrooms facilities. There could also be truck bays for apparatus, possible sleeping quarters for on -call volunteers who may be provided a stipend. Other concepts included the possibility of a hazmat team, leased space for dispatch and/or police joint operations, and partnerships with other organizations.

A motion was passed recommending that Council make a financial contribution to a reserve fund for a possible regional training facility. A regional facility would require much discussion with local partners and municipalities, and would be a long range project. The committee believed that establishing an annual contribution to reserves for such a project would signal the Municipality’s intent to work with potential partners to develop the concept.

| Report Preparation             |  |
|--------------------------------|--|
| <b>Department</b>              | Administration                           |
| <b>Report Prepared by</b>      | Chris Kennedy, Fire Services Coordinator |
| <b>Report Approved by</b>      | Alex Dumaresq, Deputy CAO                |
| <b>Date Reviewed by C.A.O.</b> |  |

**Tina Robichaud-Bond**

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**From:** Pam Hubley  
**Sent:** March 14, 2023 10:22 AM  
**To:** Tina Robichaud-Bond  
**Cc:** Tissy Bolivar  
**Subject:** Nomination Committee

The nomination committee met on March 14, 2023.

The following motion was moved by Councillor Statton and seconded by Councillor Whynot.

**That the Nominating Committee recommend Council appoint Allen Sullivan for the Provincial Volunteer Representative for the Municipality of the District of Lunenburg for 2023.**

Thanks,

**Pam Hubley**

**District 4 Councillor**

Municipality of the District of Lunenburg

10 Allée Champlain Drive

Cookville NS B4V 9E4



**Council**  
Item: #11.2.1  
Date: March 28, 2023  
Authorization: T. MacEwan



## **Municipality of the District of Lunenburg**

### **Request for Decision**

**Report to:** Council

**Submitted by:** Jamie Burgess, P.Eng., Municipal Engineer

**Date:** March 28, 2023

**Re:** Grub Control, Repair and Maintenance of the MARC Ballfields

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#### **Recommendation**

Council provide pre-budget approval for Grub Control, Repair, and Maintenance of the MARC Ballfields and use Alternative Procurement Practice to authorize staff to award this work to Elmsdale Landscaping Limited for a cost of \$163,118.43, including net HST.

#### **Executive summary**

The Municipality of the District of Lunenburg (MODL) maintains three (3) ballfields at the current Municipal Activity and Recreation Complex (MARC). These ballfields are in high demand with various ball groups. The MARC ballfields are suffering from an infestation of grubs, which has attracted a huge number of crows causing damage to all three ballfields which has left them in an unusable condition. In March of 2019 Council accepted the recommendation to make an exception and allow professionals to apply pesticide on the MARC ballfields (see attached documents). The Contractor being proposed to treat the grubs, repair, and maintain the ballfields is Elmsdale Landscaping Limited.

#### **Discussion**

Elmsdale Landscaping Limited has been approached, using alternative procurement as prescribed in MODL Policy No. 33 Section 19.1.1, to provide a cost to treat the grubs infesting the ballfields, repair the damage to the ballfields and provide a maintenance program for all three ballfields for the remainder of this season. The following price for the work was received and is summarized in the table below:

| Description  | Unit Price  | Units | Cost         |
|--|-------------|-------|--------------|
| Treatment of Ballfields and Surrounding Area per application | \$18,500.00 | 2     | \$37,000.00  |
| Repairs to Fields  | \$91,515.00 | 1     | \$91,515.00  |
| Maintenance of Ball Fields                                   | \$13,680.00 | 1     | \$13,680.00  |
| Contingency  | 10.00%      |       | \$14,219.50  |
| Subtotal   |             |       | \$156,414.50 |
| Net HST  |             |       | \$6,703.93   |
| Total  |             |       | \$163,118.43 |

**Budget implications**

Grub control, repair and maintenance of the MARC Ballfields is included in the 2023/24 Capital Budget.

This project will require pre-budget approval to ensure the work can be completed appropriately as quickly as conditions will allow to ensure two of the ballfields will be available for public use for part of this season.

**Strategic plan**

This project aligns well with Council’s Strategic Priorities. From priority #2 Re-Create Parks “the need for significant upgrades to existing parks and recreation facilities”.

**Work plan**

The grub control, repair and maintenance of the MARC Ballfields will be completed within the 2023 season.

**Alternatives**

Council may decide to defer pre-budget approval, alternative procurement, and the award of this work. However, there is a small window of time available when environmental conditions are right to apply the grub treatment. If we miss this window there will be further delays which will extend the closure of the ballfields.

**Conclusion**

Staff are making the recommendations to Council for pre-budget approval and to use the alternative procurement practice to ensure we are able to obtain the professional services required in a timely fashion to address the issues with the grubs this year, enabling two of the ballfields useable for part of the season. If not approved, this will mean the ballfields will be closed for the season.

| <b>Report Preparation</b>      |                            |
|--------------------------------|----------------------------|
| <b>Department</b>              | Engineering & Public Works |
| <b>Report Prepared by</b>      | Jamie Burgess              |
| <b>Report Approved by</b>      | Stephen W. Pace            |
| <b>Date Reviewed by C.A.O.</b> | Tom MacEwan                |



# Municipality of the District of Lunenburg

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## MEMORANDUM

TO: Trudy Payne, Director of Recreation Services

Cc: Stephen Pace, Director of Engineering & Public Works  
Elana Wentzell, Director of Finance  
Angela Veinot, Accounting Manager

FROM: Alex Dumaresq, Deputy Chief Administrative Officer

DATE: March 12, 2019

RE: **Pesticide Use on MARC Ballfields**

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Please be advised that, Municipal Council, in session on Tuesday, March 12, 2019, made the following motion:

**“that Municipal Council accept the recommendation of the Finance Committee and make an exception and engage the services of professionals to apply a pesticide on the MARC ballfields to address the issue of crows destroying the ballfields to get to grubs underneath the grass, and to receive professional advice on a long-term maintenance plan for the ballfields to help prevent this problem from reoccurring”.**

Please ensure the appropriate action is taken.

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Alex Dumaresq  
Deputy Chief Administrative Officer

/trb



## MUNICIPALITY OF THE DISTRICT OF LUNENBURG

**REPORT TO:** Finance Committee

**SUBMITTED BY:** Trudy Payne, Director of Recreation Services

**DATE:** March 5, 2019

**RE:** MARC Ballfields

**ORIGIN:** Staff

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### MOTION

**That the Finance Committee recommends to Council that Council make an exception and engage the services of professionals to apply a pesticide on the MARC ballfields to address the issue of crows destroying the ballfields to get to grubs underneath the grass, and to receive professional advice on a long-term maintenance plan for the ballfields to help prevent this problem from reoccurring.**

### BACKGROUND

The issue of crows digging at the ballfields started two summers ago. Each year the problem becomes worse. The first year the damage was limited to one section of field two. Staff were able to clean up the dead sod. The issue began in May and by the time June came around it appeared the problem was gone. Last summer however things got worse. The key times for this issue to appear is in the Spring and Fall. Last year, the crows caused more damage on field two and caused minor damage on the other two fields. They have also started to tear up the grass outside the ballfields and other areas on the MARC property. Our Park Supervisor has been investigating and doing research on what has caused this to happen and what some of the solutions may be. He was informed that one of the main reasons is climate change. With the lack of snow as well as extreme dry summers has caused a lack of moisture in the ground which causes the grubs to migrate closer to the surface where it is damper, causing them to be more detectable to predators, like crows. Another factor is the heavy usage and the need to do more

than mowing fields to better maintain the ballfields. There is a need to consistently top dress and overseed the ballfields.

Since this problem has began the Park Supervisor has tried several things to help deter the crows such as aeration, scare crows but nothing has worked. He has made inquiries with different landscaping companies and was informed about a product called nematodes which are essentially another type of bug that eat the grubs but do not damage the grass. Nematodes are very sensitive to heat and moisture and have a short shelf life. They need to be applied at the right time of year with the right weather conditions and temperatures, which can often be a costly and ineffective method. He also had the weed man in last year who did a test with a new organic product on the market that was said to be effective on grubs. The Weed man applied the product to field two and aerated the field. This was not effective.

We are certainly not the only ones with ballfields who have encountered this issue. Calls were made to other municipalities to see what they have done. In some cases, the municipal unit closed a field or delayed the opening of a field to allow enough time to repair the field in the Spring. One municipal unit tilled, scraped and reseeded which had a quick turnover. Another used a sod cutter, cut out the damaged sections, left uncovered for the crows to eat all the grubs, put topsoil back down and resodded. This method was recommended by a Horticulturist.

Others have used nematodes and been successful. It is best to apply them in the Spring. They only have a 7 – 10-day window to be applied after receiving them. They must be kept in a fridge. The soil needs to be at least 15 degrees to apply and applied with water (2 inches of water on the field, apply nematodes, apply 2 more inches of water).

Based on all the information gathered staff do not feel using nematodes would be a good solution for the MARC. The reasons being is that there are several factors that must align such as the temperature of the soil and the fact they need a great deal of water. The MARC does not have an irrigation system. Also grubs get worse every year as they reproduce, and they do not stray far from year to year. It appears from the research, that the organizations having the most success is the ones that are using a pesticide (Acelepryn).

A motion was made at the January 23, 2001 Council meeting that Council, in the interest of the health of our citizens and our environment, ask that all Municipal departments under the jurisdiction of the Municipality of the District of Lunenburg be urged to promote the usage of safe, non-toxic alternative methods for treatment of weed and insect problems on Municipal lands and properties. As staff's recommendation is to engage a professional to apply a pesticide on the MARC ballfields, a motion of Council would be required to proceed with this direction.

Attached is a picture of field two that was taken this past December.

**EXECUTIVE SUMMARY**

If staff can engage the services of a professional to apply a pesticide the plans for this year would involve closing field 2 down for the season to make the necessary repairs. Only allow fields one and three to be used until the end of September and in October have a pesticide applied again and till, scrape and reseed the fields so that all three fields are ready for next season.

**BUDGET IMPLICATIONS**

An expert will need to be brought in to determine a plan of action. There is \$20,000 being recommended for the ballfield repairs in the 2019-20 capital budget.

**STRATEGIC PLAN**

**ALTERNATIVES**

To not use a pesticide on the MARC ballfields and to try another option to try to resolve the issue.

**COMMUNICAITONS**

If the decision is made to apply a pesticide to the MARC ballfield the neighbors will need to be notified in advance. Also, the user groups will need to be notified of the closure of field two for the season and that the MARC will only have two operational fields this season and can only be used until the end of September 2019.

**CONCLUSION**

|   |
|---|
| Department:   __Recreation_____   |
| Report Prepared By: __Trudy Payne_____      Date __February 27, 2019_____ |
| Report Approved By: _____      Date _____                                 |
| Reviewed By CAO: _____      Date _____                                    |