



**SEVERN SOUND ENVIRONMENTAL ASSOCIATION  
JOINT MUNICIPAL SERVICE BOARD (JMSB)  
2021 Second Quarter (2) Meeting**

**Monday July 26, 2021  
9:30am – 12:00pm  
Via video & telephone conference**

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**1. WELCOME AND CALL TO ORDER**

**2. ADOPT AGENDA**

**3. DECLARATION OF PECUNIARY INTEREST**

**4. APPROVAL OF PAST MINUTES**

**4.1** Minutes of 2021 First Quarter (Q1) meeting of the SSEA Joint Municipal Service Board held April 26, 2021

**4.2** Minutes of the SSEA Board Executive Committee held July 8, 2021

**4.3** Business arising from the minutes

**5. SEVERN SOUND SOURCE PROTECTION AUTHORITY MEETING**

**5.1** Suspend the SSEA meeting to allow the SS SPA to meet

**5.2** Severn Sound Source Protection Authority Meeting

**5.3** Re-convene the SSEA joint municipal service board meeting

**6. SSEA SECOND QUARTER 2021 REPORT**

**7. PRESENTATIONS**

**7.1** Microfiber pollution in waterways – David Sweetnam, Executive Director & Georgian Baykeeper, Georgian Bay Forever

**7.2** Citizen Science program update – Emily Edgley, Environmental Field Tech & Citizen Science Program Assistant

**8. SSEA FINANCIAL REPORTS**

**8.1** Staff Report 23-21-SSEA - 2021 2nd Quarter Draft Financials

**8.2** Staff Report 24-21-SSEA – 2022 Draft Budget

**9. SSEA CORPORATE ADMINISTRATION UPDATES**

9.1 Staff Report 25-21-SSEA - Sustainable Severn Sound (SSS) Special Project Update  
– 2nd quarter 2021

9.2 Staff Report 26-21-SSEA – Severn Sound Inland Lakes Sampling Update

9.3 Staff Report 27-21-SSEA – SSEA Healthy Soils = Healthy Watersheds Project Update

9.4 Staff Report 28-21-SSEA – Impact of Lab Load Reductions on Water Quality Monitoring

9.5 Staff Report 29-21-SSEA – SSEA Citizen Science Program Update

9.6 Staff Report 30-21-SSEA – Review of 2021 Canada Ontario Great Lakes Agreement

9.7 Staff Report 31-21-SSEA - SSEA Invasive Species Program Update

9.8 Staff Report 32-21-SSEA – SSEA Grant Application Update

9.9 Staff Report 33-21-SSEA - County of Simcoe Municipal Comprehensive Review

9.10 Staff Report 34-21-SSEA - Service Delivery Agent Agreement with Depave Paradise Program

9.11 Staff Report 35-21-SSEA – Municipal Survey of Ldd Moth BTK Aerial Spray Programs



**10. EXECUTIVE DIRECTOR UPDATE**

10.1 Staff Report 36-21-SSEA – Executive Director Q2 Report (On Table)

**11. ANNOUNCEMENTS**

**12. CORRESPONDENCE**

**13. CLOSED SESSION**

There are no closed session items for this agenda.

**14. OTHER BUSINESS**

**15. ADJOURN**



**SEVERN SOUND ENVIRONMENTAL ASSOCIATION  
JOINT MUNICIPAL SERVICE BOARD (JMSB)  
2021 First Quarter (Q1) Meeting**

**Monday April 26, 2021  
9:29 am – 12:05 pm  
Via video & telephone conference  
Draft Minutes**

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**Present via zoom video:**

SSEA Chair, Deputy Mayor Steffen Walma  
SSEA Vice Chair, Councillor Paul Wiancko  
SSEA Past Chair, Councillor Ron Stevens  
Councillor Carole McGinn  
Councillor Ian Veitch  
Deputy Mayor Anita Dubeau  
Councillor Perry Ritchie  
Councillor Paul Raymond

Township of Tiny  
Township of Georgian Bay  
Township of Severn  
Town of Midland  
Township of Oro-Medonte  
Town of Penetanguishene  
Township of Springwater  
Township of Tay

**Staff present via zoom video:**

Julie Cayley  
Lex McPhail  
Judy Limoges  
Melissa Carruthers  
Aisha Chiandet  
Tamara Brincat  
Michelle Hudolin  
Tracy Roxborough  
Paula Madill  
Nikki Priestman  
Morgan Gillies

Executive Director  
IT Manager/GIS Applications Specialist  
Treasurer  
Risk Mgmt. Official/Risk Mgmt. Inspector  
Water Scientist  
Invasive Species Program Coordinator  
Wetlands & Habitat Biologist  
Sustainability & Climate Action Coordinator  
Ecosystem Technologist  
Watershed Health Monitoring Technician  
Healthy Soils = Healthy Watersheds Program  
Coordinator

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**1. WELCOME AND CALL TO ORDER**

Vice Chair Wiancko called the meeting to order at 9:29 am

**2. ADOPT AGENDA**

MOTION: 2021-026

Moved By: C. McGinn

Seconded By: R. Stevens

RESOLVED THAT: the SSEA Joint Municipal Service Board approve the Meeting Agenda dated April 26, 2021

Carried;

**3. DECLARATION OF PECUNIARY INTEREST**

None declared.

**4. APPROVAL OF PAST MINUTES**

**4.1** Minutes of 2020 fourth Quarter (Q4) meeting of the SSEA Joint Municipal Service Board held January 29, 2021  
MOTION: 2021-027  
Moved By: A. Dubeau Seconded By: P. Raymond  
RESOLVED THAT: the SSEA Joint Municipal Service Board approve the minutes of the Fourth Quarter (Q4) meeting of the SSEA Joint Municipal Service Board held January 29, 2021

Carried;

**4.2** Minutes of the SSEA Board Executive Committee held March 15, 2021  
MOTION: 2021-028  
Moved By: P. Ritchie Seconded By: R. Stevens  
RESOLVED THAT: the SSEA Joint Municipal Service Board approve the minutes of the SSEA Joint Municipal Service Board Executive Committee held March 15, 2021

Carried;

**4.3** Business arising from the minutes

MOTION: 2021-029

Moved By: I. Veitch

Seconded By: C. McGinn

RESOLVED THAT: the SSEA Joint Municipal Service Board approve that when an SSEA employee is requested by the Board or the Executive Director to fill a position, other than her/his own, which has a higher pay grade, for more than three (3) business days, the employee is entitled to step-up pay that is equivalent to:

- The pay grade of the position being filled, at the employee's current step, to a maximum increase of 10%.
- Step-up pay commences on the first hour worked
- The step-up must be more than three (3) days to qualify for step-up pay
- The step-up pay rate ends with the end of the step-up position and the employee returns to their home position pay rate

Carried;

**4.4** DRAFT Minutes of the SSEA Agriculture Advisory Committee Meeting February 25, 2021 (including Crop Heat Unit Attachment)

MOTION: 2021-030

Moved By: P. Ritchie

Seconded By: A. Dubeau

RESOLVED THAT: the SSEA Joint Municipal Service Board approve the minutes of the SSEA Agriculture Advisory Committee Meeting held on February 25, 2021

Carried;

## **5. SEVERN SOUND SOURCE PROTECTION AUTHORITY MEETING**

**5.1** Suspend the SSEA meeting to allow the SSSPA to meet

MOTION: 2021-031

Moved By: R. Stevens

Seconded By: A. Dubeau

RESOLVED THAT: the SSEA Joint Service Board meeting be suspended to allow the Severn Sound Source Protection Authority meeting to proceed at 9:45 a.m.

Carried;

**5.2** Severn Sound Source Protection Authority Meeting

*Chair Walma joined the meeting.*

*Chair Dolin and Project Manager Thompson left the meeting*

- 5.3** Re-convene the SSEA joint service board meeting  
MOTION: 2021-032  
Moved By: P. Ritchie Seconded By: I. Veitch  
RESOLVED THAT: the SSEA 2021 Joint Service Board meeting reconvene at 10:22 a.m  
Carried;

*Chair Walma commenced chairing the meeting*

**6. SSEA 2019 ANNUAL REPORT**

- MOTION: 2021-033  
Moved By: R. Stevens Seconded By: A. Dubeau  
RESOLVED THAT: The 2019 Annual Report presented by Julie Cayley, Executive Director be received and approved for information  
Carried;

**7. SSEA FIRST QUARTER 2021 REPORT**

- MOTION: 2021-034  
Moved By: P. Raymond Seconded By: C. McGinn  
RESOLVED THAT: The First Quarter 2021 report presented by Julie Cayley, Executive Director be received for information  
Carried;

**8. PRESENTATIONS**

- 8.1** Invasive Species program update – Tamara Brincat, SSEA Invasive Species Coordinator  
MOTION: 2021-035  
Moved By: I. Veitch Seconded By: R. Stevens  
RESOLVED THAT: The Invasive Species program update presentation by Tamara Brincat, Invasive Species Coordinator be received for information  
Carried;

**Action Items:**

- Ms. Brincat to work with Ms. Cayley to determine feasibility of hosting a gypsy moth webinar within Oro-Medonte, similar to the one held with the Township of Tiny.
- Invasive Species Program Update presentation to be sent to local farm groups. To be done through the SSEA Agricultural Advisory Committee.
- Gypsy moth factsheet to be shared with the board.

- 8.2** Citizen Science program update – Aisha Chiandet, SSEA Water Scientist  
MOTION: 2021-036  
Moved By: P. Raymond Seconded By: P. Ritchie  
RESOLVED THAT: The Citizen Science program update presentation by Aisha Chiandet, Water Scientist be received for information  
Carried;

**Action item:**

- SSEA to work with communications staff of Midland and Penetanguishene to encourage better buy-in from both municipalities and find solutions for all three to share materials on social media.

A short break was called for.

Moved by: R. Stevens      Seconded by: A. Dubeau

RESOLVED THAT: the meeting of the SSEA Board of Directors held on April 26, 2021 go into recess at 11:01 am

Moved by: R. Stevens      Seconded by: A. Dubeau

RESOLVED THAT: the meeting of the SSEA Board of Directors held on April 26, 2021 come out of recess at 11:11 am

## 9. SSEA FINANCIAL REPORTS

### 9.1 Staff Report 12-21-SSEA - 2020 Draft Financials and Audit

MOTION: 2021-037

Moved By: P. Raymond

Seconded By: P. Wiancko

RESOLVED THAT: Staff Report No. 12-21-SSEA regarding the 2020 fourth quarter draft financials and audit be received as information

Carried;

### 9.2 Staff Report 13-21-SSEA - 2021 1st Quarter Draft Financials

MOTION: 2021-038

Moved By: C. McGinn

Seconded By: I. Veitch

RESOLVED THAT: Staff Report No. 13-21-SSEA regarding the 2021 first quarter draft financials be received as information

Carried;

### 9.3 Staff Report 14-21-SSEA - 2021 Insurance Costs

MOTION: 2021-039

Moved By: P. Ritchie

Seconded By: R. Stevens

RESOLVED THAT: Staff Report No. 14-21-SSEA regarding the 2021 commercial insurance costs be received as information

Carried;

### 9.4 2021 Core Operations Budget Invoicing – verbal update

MOTION: 2021-040

Moved By: A. Dubeau

Seconded By: R. Stevens

RESOLVED THAT: the verbal update by Judy Limoges, Treasurer, regarding the 2021 core operations budget invoicing be received for information

Carried;

#### **Action Item:**

- Friendly reminder emails to be sent to all municipalities with outstanding invoices

### 9.5 Staff Report 15-21-SSEA – 2022 Draft Budget

MOTION: 2021-041

Moved By: A. Dubeau

Seconded By: P. Raymond

RESOLVED THAT: Staff Report No. 15-21-SSEA regarding the SSEA 2022 Draft Budget be received; and

FURTHER THAT: If necessary, the Executive Director be authorized to find savings through appropriate adjustments, including payroll, while maintaining efficient operations with a target of 2% for 2022.

Carried;

## 10. SSEA CORPORATE ADMINISTRATION UPDATES

- 10.1** Staff Report 16-21-SSEA - Sustainable Severn Sound (SSS) Special Project Update – 1<sup>st</sup> quarter 2021

MOTION: 2021-042

Moved By: R. Stevens

Seconded By: C. McGinn

RESOLVED THAT: Staff Report No. 16-21-SSEA, regarding the SSEA's SSS special project update for the 1<sup>st</sup> quarter of 2021 be received for information; AND

FURTHER THAT: The SSEA Board supports the staff recommendation to approve the revised ad-hoc Climate Resilience Advisory Committee Terms of Reference, 2020, now the *Municipal Climate Leadership Committee* Terms of Reference, 2021.

Carried;

- 10.2** Staff Report 17-21-SSEA - SSEA Community Tree Planting & Tree Seedling Distribution Program Update.

MOTION: 2021-043

Moved By: C. McGinn

Seconded By: P. Ritchie

RESOLVED THAT: Staff Report No. 17-21-SSEA regarding the SSEA Community Tree Planting & Tree Seedling Distribution Programs, be received for information

Carried;

- 10.3** Staff Report 18-21-SSEA – SSEA Healthy Soils = Healthy Watershed Project

MOTION: 2021-044

Moved By: C. McGinn

Seconded By: P. Wiancko

RESOLVED THAT: Staff Report No. 18-21-SSEA, regarding the SSEA HEALTHY SOILS = HEALTHY WATERSHED project be received for information

Carried;

- 10.4** Staff Report 19-21-SSEA - Credit Card purchasing policy (ON TABLE)

MOTION: 2021-045

Moved By: A. Dubeau

Seconded By: P. Ritchie

RESOLVED THAT: Staff Report No. 19-21-SSEA, regarding the SSEA Credit Card for SSEA Corporate Purchases Policy be approved by the board

Carried;

- 10.5** Staff Report 20-21-SSEA – SSEA Great Lakes & St Lawrence Cities Initiative proposed resolution (ON TABLE)

MOTION: 2021-046

Moved By: P. Wiancko

Seconded By: R. Stevens

RESOLVED THAT: Staff Report No. 20-21-SSEA, regarding the proposed resolution to the Great Lakes St. Lawrence Cities Initiative be received for information, AND

FURTHER THAT: SSEA staff are directed to draft a resolution based on the information in the report to submit to GLSLCI Director Mayor Cornell.

Carried;

Action item

- Submit resolution to all municipalities for council support

- 10.6** Staff Report 21-21-SSEA – SSEA Grant Applications Update (ON TABLE)

MOTION: 2021-047

Moved By: P. Raymond

Seconded By: I. Veitch

RESOLVED THAT: Staff Report No. 21-21-SSEA regarding SSEA grant applications update, be received for information.

Carried;

Action Item:

- Include grants amounts in meeting highlights

## 11. EXECUTIVE DIRECTOR UPDATE

11.1 Staff Report 22-21-SSEA (on table)

MOTION: 2021-048

Moved By: P. Ritchie

Seconded By: C. McGinn

RESOLVED THAT: the SSEA Board of Directors Receives the Executive Director's Report for information

Carried;

## 12. ANNOUNCEMENTS

## 13. CORRESPONDENCE

## 14. CLOSED SESSION

There are no closed session items for this agenda.

## 15. OTHER BUSINESS

## 16. ADJOURN

MOTION: 2021-049

Moved By: I. Veitch

Seconded By: A. Dubeau

RESOLVED THAT: this meeting of the SSEA Board of Directors held on April 26, 2021 adjourn at 12:05 p.m. to meet again on July 26, 2021 or at the call of the chair.

Carried;

\_\_\_\_\_  
Chair Steffen Walma

\_\_\_\_\_  
Executive Director, Julie Cayley

Approved this \_\_\_\_\_ day of \_\_\_\_\_, 2021





**SEVERN SOUND ENVIRONMENTAL ASSOCIATION  
JOINT MUNICIPAL SERVICES BOARD  
EXECUTIVE MEETING  
July 8, 2021 9:00 a.m.  
Draft Minutes**

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**Present:**

SSEA Chair, Deputy Mayor Steffen Walma	Township of Tiny
SSEA Vice Chair, Councillor Paul Wiancko	Township of Georgian Bay
SSEA Past Chair, Councillor Ron Stevens	Township of Severn

**Staff:**

Julie Cayley	SSEA Executive Director
Judy Limoges	SSEA Treasurer

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This meeting was called by the Chair to discuss 2022 revised draft budget.

Staff revised the 2022 Budget to reflect the Board direction (April 26, 2022) to reduce the increase from 2021 to 2022 to 2%. Staff emphasized that any reduction in 2022 budget will impact all following budgets.

Staff shared a summary of changes made to reduce the 2022 increase from 4.1% to 2%, a budget reduction of \$17,846. These changes included adjusting wages and benefits ( $\approx$  \$13,000), increasing external funding commitments ( $\approx$ \$23,000), and a contribution from reserves to cover pay equity and compensation review and employee manual and contract updates ( $\approx$ \$78,000). The SSEA Executive Committee supported staff bringing the new draft 2022 SSEA budget (2% increase) forward to the SSEA Board on July 26, 2022.

Meeting Adjourned 9:30 am



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## Severn Sound Environmental Association 2021 2<sup>nd</sup> Quarter (Apr. 1 – Jun. 30) Report/Update

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### Staffing/HR

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*Administration, Staffing, Training and Volunteers*

#### Administration

- SSEA offices remain closed due to COVID-19. Staff continue to work remotely with the exception of IT/GIS Manager and staff accessing the office as needed
- 1 SSEA Board meeting – 1st Quarter 2021, 1 SS SPA Board Meeting, 1 Agricultural Advisory Committee meeting

#### Staffing

- Welcomed Morgan Gillies as Program Coordinator for the Healthy Soils = Healthy Watershed Program

#### *Seasonal staff*

- Canada Summer Jobs - Nicole (Invasive Species Mgmt Tech.), Emily (Environmental Field Tech & Citizen Science Program Assistant), & Shannon (Environmental Program Coordinator)
- Ontario Federation of Anglers and Hunters (OFAH) Invasive Species Tech. - Cameron
- Pathways to Employment program - Ben (Environmental Internship)



*Seasonal Staff Field training - 2021*

#### Volunteers – THANK YOU!

- Invasive Species Spotters citizen science participants for submitting LDD (Gypsy) Moth observations
- Shore and Stream Watch participants for a successful start to the monitoring season

#### Training/Professional Development

- HS=HW staff completed 4R Nutrient Stewardship Training from Fertilizer Canada

### Education, Engagement, Outreach

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*Presentations, Articles, Media, School Involvement and Events*

#### Virtual Presentations

- April 20 [Earth Day presentation](#) in partnership with the Midland Library featuring climate change, citizen science, stewardship and invasive species programming

- Hosted a [Healthy Soils in Simcoe County](#) webinar, in collaboration with Ontario Soil and Crop Improvement Association (OSCIA), LSRCA, and NVCA for Certified Crop Advisors and Professional Agrolgists in Simcoe County
- Presented to [Township of Georgian Bay Council April 13](#) on the Township's Partners for Climate Protection program membership and Climate Action Plan progress

#### Articles/Publications/News

- SSEA's SSS project April article [With Earth Day Here, It's Time to Take Action](#), June article (1) [The Town of Midland and SSEA are All About the Buzz](#), and (2) [Native Plants Help Pollinators](#)
- Press release [Invasive Mussel Larvae Detected in Little Lake](#) and public notice [Invasive Mussel Substrates Installed in Little Lake](#)

#### Social Media

*Disclaimer: TWITTER, TWEET, RETWEET and the Twitter logo are trademarks of Twitter, Inc. or its affiliates*

- @severnsoundea Instagram activity second quarter: 48 posts, 66 profile visits, & 374 total followers
- @SSEA\_SSRAP Twitter activity Q2: 35 tweets, 3651 profile visits, & 356 total followers
- Post topics included: Invasive Species (Ldd Moth & Giant Hogweed), Tree Distribution Program, Citizen Science: Shore Watch & Invasive Species spotters, Healthy Soils=Healthy Watershed Program, Drinking Water Source Protection, links to resources
- Web Site Activity: 2,545 users visited [www.severnsound.ca](http://www.severnsound.ca)
- [YouTube Channel](#): 29 total subscribers
- 2 new SSEA informational videos uploaded to SSEA YouTube channel: [How to Identify Giant Hogweed](#) & [Collecting Aquatic Plants Through Rake Tosses](#)
- Updating draft social media strategy



*Installing invasive mussel artificial substrates, Little Lake, Midland*

#### Events/Meetings/Conferences

- Virtual meeting with Simcoe North MP Bruce Stanton
- Meeting with Georgian Bay Forever - services updates
- Kick off meeting with FS Partners regarding Healthy Soils & weather station partnership
- Providing administrative & hosting support for the Midland Bee City Team meetings (2)

- Staff attended the following meetings: Midland Technical Review Committee (4), County of Simcoe Municipal Comprehensive Review, Georgian Bay Biosphere Integrated Community Energy and Climate Action Plans (ICECAP), Climate Change Exchange (1), Climate Change Charter Working Group (2), Official Plan Review Session #2 (Township of Severn), Georgian Bay Township, Sustainability Department Team (4), WCS Canada information session on Ontario Key Biodiversity Areas, Midland Penetanguishene Field Naturalist Club 'Murder at Misery Bay' presentation on Blanding Turtles, Ontario Municipal Invasive Species Community of Practice and Starry Stonewort Partner meetings.



*Virtual meeting with MP Bruce Stanton*

Inquiry Responses (excluding SSS, invasive species, and source water inquiries)

- Responded to 13 inquiries from municipal partner representatives
- Responded to 27 inquiries from members of the public or contractors working on behalf of landowners and external organizations/agencies

**Tree Planting**

*Planting and Distribution*

Community Tree Planting

- Program impacted by pandemic, limited community tree planting occurred in spring 2021
- SSEA facilitated the planting of 780 native seedlings by a small number of volunteers
- Seedlings costs (\$837.48) covered by a County of Simcoe Forestry department grant

Tree Seedling Distribution

- Program was adapted to a curbside contactless pick-up model with Covid-19 safety protocols in place to comply with public health guidance and restrictions
- 282 participants – the most we’ve had in one year – planted 11,200 native trees and shrubs
- THANK YOU to municipal staff and councils that promoted and supported the program



## Fish and Wildlife Habitat / Natural Heritage

*Natural Heritage Assessments, Invasive Species, Wetlands, Habitat and Stewardship*

### Invasive Species

- Hosting municipal invasive species working group with 23 attendees
- Responded to 59 new invasive species inquiries (15 from municipal partnerships and 44 from member of the public; excluding inquiries from volunteers and previous inquirers)
- Monitored 30 municipally-owned sites for invasive species
- Co-hosted Invasive 101 webinar with Southern Georgian Bay Chamber of Commerce
- Worked with the Town of Midland to install artificial substrates in Little Lake to detect adult invasive mussels
- Produced an [Invasive Mussels in Midland Little Lake](#) factsheet
- Contributed content to the [Engaging Midland Invasive Species Page](#)
- Assisted the Township of Severn in identifying Giant Hogweed along the Uthoff Trail
- Submitted comments to [ERO 019-3465](#) (Regulating 13 invasive species and watercraft as a carrier of invasive species under Ontario's Invasive Species Act, 2015) and [ERO 019-3468](#) (Ontario's Strategy to Address the Threat of Invasive Wild Pigs)
- Interviewed City of Toronto, City of Hamilton & the Town of Pelham re: Ldd (Gypsy) Moth aerial spray programs

### Species at Risk

- Initiated turtle study in Matchedash Bay wkg with Georgian Bay Forever's Save Matchedash Bay project
- Provided input into public consultation on development of a provincial protection & recovery approach for Black Ash (*Fraxinus nigra*), a tree species that is widespread in the SSEA area that has been newly assessed as Endangered

### Wildlife

- Prepared [Goose Management Framework](#) to assist municipalities with consideration of management options for reducing goose usage of selected public areas



*Monitoring turtles, Matchedash Bay*

## Land Use Planning & Policy Input

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*Input and Review*

### Plan Input

- Commented on 18 applications, reports and Environmental Impact Studies
- This is a 200% increase in the number of land use planning reviews over Q2 of 2020

### Policy Input

- Participating in County of Simcoe Municipal Comprehensive Review (MCR) process
  - Provided natural heritage and climate change input
  - Reached out to SSEA municipal partners to optimize value of SSEA in this process and reduce duplication of input
- Participated in Official Plan Review for Springwater and Severn
- Participated in the MECP stakeholder engagement monetary penalties review
- Commented on 2022-2026 Lake-wide Action & Management Plan for Lake Huron

## Drinking Water Source Protection

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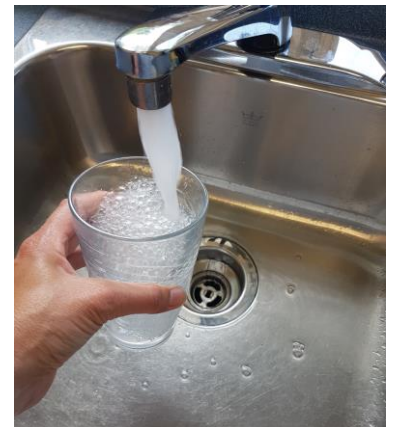
*Drinking Water Source Protection, Risk Management Services*

### Drinking Water Source Protection

- Continuing to support municipalities in updating Assessment Reports for new or changing water systems in Oro-Medonte, Severn, and Midland
- Attended 3 regional & provincial meetings (assessment report update requirements, risk management topics specific to the drinking water source protection program)
- Signed 2021/22 Provincial/Regional funding agreement

### Risk Management

- Commented on 9 development applications, answered 16 inquiries, signed 2 Risk Management Plans, and attended 1 pre-consultation meeting



## Monitoring Programs

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*Field/data collection: Open Water, Inland Lakes, PGMN, PWQMN/Tributaries, Stream Temperature, Stream Invertebrates and Climate*

### Adapting to COVID-19 Challenges

Update: The MECP labs in Rexdale and Dorset remain open to accept samples. Monitoring programs continued over this quarter as per MECP reduced lab load request and with all necessary precautions

### Open Water/Intakes

- 4 water quality sampling events - raw water intakes in Tay Area and Rope Subdivision
- 3 open water sampling events
- Assisted coordinating University of Toronto sediment sampling in Honey Harbour
- Revised open water monitoring program to meet MECP request to reduce lab load requirements while maintaining continuity of datasets at long-term stations



*Open water sampling Severn Sound*

### Inland Lakes

- 3 Orr Lake sampling events
- 3 Little Lake sampling events

### Climate

- 1 air temperature logger installed at Huronia Airport
- 5 rain gauges installed (Huronia Airport, Midland Waste Water Treatment Center, Pinegrove, Ingram Sideroad and SSEA Office)
- 4 weather station checks completed and 3 months of data downloaded from the Midland Waste Water Treatment Center Weather Station (a partnership between SSEA, Midland, Tay and Penetanguishene.)



*Secchi depth measurement, Orr Lake*

### Stream Temperature

- 40 stream temperature loggers installed throughout the Severn Sound watershed

### Stream Invertebrates (“bugs”)

- 6 samples analyzed from Sturgeon River and Silver Creek
- 1,749 bugs identified

### Provincial Water Quality Monitoring Network (SSEA Rivers/Streams)

- 2 sampling runs completed at 14 sites throughout the watershed
- Field parameters, chemistry and metal samples collected



*Temperature logger in the Township of Springwater*

### Provincial Groundwater Monitoring Network

- Downloaded water level loggers and manually measured water levels at 9 well sites

## Citizen Science

- 2020 [data report for Shore Watch and Stream Watch](#) released
- Social media promo and e-blast for Stream and Shore Watch programs
- Developed training videos for: [Invasive Species Spotters](#), [Measuring Stream Velocity](#), and [Installing a Stream Temperature Logger](#)
- Hosted training webinars for [Shore & Stream Watch](#) and [Invasive Species Spotters](#), with a total of 14 participants
- Recruitment of 11 new volunteers in the Invasive Species Spotter program
- Hosted virtual Invasive Species Spotter volunteer check-in for Ldd (Gypsy) Moth
- Recruitment of 9 new volunteers in the Shore and Stream Watch programs
- Distribution of monitoring kits to volunteers (Stream Watch, Shore Watch, and Invasive Species Spotters)
- Installed water level gauges at Farlain Lake boat launch for Water Level Watch program
- *New Volunteers Welcome! Contact [citizenscience@severnsound.ca](mailto:citizenscience@severnsound.ca)*



*Water level gauge install at the Farlain Lake, boat launch*

## Healthy Soils=Healthy Watershed

- Took soil samples across more than 200 acres of corn fields within the Severn Sound Watershed to test for nitrate.

## **Sustainable Severn Sound Special Project**

*Climate Change Action Plans, Partners for Climate Change Protection (PCP) Program*

- Submitted application/completed the Federation of Canadian Municipalities (FCM) Building Climate Resilience with Asset Management Certificate Program, [FCM's Guide to Integrating Climate Change Considerations into Municipal Asset Management](#)
- Presented to 85+ attendees at Lake Simcoe Region Conservation Authority's [Climate Change Webinar Series](#), sharing details/lessons-learned and the progress by SSEA's PCP program municipal members
- Produced and distributed pre-meeting '[Climate Change Priority](#)' survey and scheduled first SSEA Municipal Climate Leadership Committee (MCLC) meeting for July 22 ([see MCLC Terms of Reference, 2021](#))
- Reviewed and analyzed all received energy and greenhouse gas (GHG) data information requests for 6 municipalities (21 staff), 5 external energy service providers and 1 Ontario government agency, summary report in development
- Entering GHG results/analysis into Partner for Climate Protection (PCP) program online tool to acquire 3<sup>rd</sup> party review (ongoing)
- Provided summary report to County of Simcoe (MCR) [Municipal Comprehensive Review \(MCR\) in relation to 'Climate Change Research'](#), summary of SSS project to-date, and the sustainability and climate change action efforts by SSEA and our municipal partners



- Provided Bee City Team administration services to the Town of Midland and facilitated 3 Bee City Team meetings
- No Mow/Strategic Mow - native species and invasive species site monitoring of 6 parks in the Town of Midland, representing 9 total sites and 19,394 square meters of No-Mow/Strategic Mow areas. Management recommendations forthcoming by SSEA in Q3
- Produced [No Mow signage](#) and [Pollinator Habitat](#) signage to allow for installation of said signage in 6 of the Town of Midland's No-Mow/Strategic Mow locations
- Pollinator Week social media campaign June 21-27, produced 56 posts over 7 days across 3 platforms, including Facebook (@sustainablesevernsound), Twitter (@sustainsevnsound), and Instagram (@severnsoundea), resulting in: total weekly Facebook reach of 2,681; total weekly Twitter impressions of 7,142; 25 tweets, 308 profile visits, 721 followers.
- Responded to 4 municipal partner requests for best management practice review, funding opportunities, partnership development, climate action plan/PCP program and/or GHG information, and 7 requests from external municipalities, organizations, persons and/or agencies
- Produced/submitted 3 articles for posting on the SSS website, municipal partner use, and on social media, including: ['With Earth Day Here, It's Time to Take Action'](#), ['The Town of Midland and SSEA are All About the Buzz'](#) and ['Native Plants Help Pollinators'](#)

## Healthy Soils= Healthy Watershed *Special Project*

*Soil and Watershed health BMPs, agriculture nutrient management*

- Signed one-year Healthy Soils = Healthy Watershed TPA \$50,000
- Agriculture partners improving soil health, reduce nutrient loss & improve & protect water quality (BMPs ex. increased soil sampling & cover crops)
- Hired Coordinator, 4R Nutrient Stewardship Training completed
- Draft landowner survey/application developed
- Two (2) webinars (approx. 35 participants)
  - Target area eligible farmers (10 participants)
  - [Healthy Soils in Simcoe County](#) webinar for Certified Crop Advisors (CCA) & Professional Agrologists (PAGs) in Simcoe County with guest speakers from Ontario Soil and Crop Improvement Association (OSCIA), LSRCA, and NVCA (25 participants)
- 5 new partnerships developed - AAFC (Keith Reid, soil expert advisor to program), FS Partners (Elmvale), OSCIA (complimentary BMP cost share program in Simcoe County), NVCA & LSRCA (neighbouring agriculture BMP programs)
- Draft HS=HW Program website developed –a resource toolkit for famers & advisors.
- Exploring potential collaboration with FS Partners Elmvalle including weather stations (and data sharing) for both Elmvalle and Lafontaine.
- Completed “zone” soil sampling on over 200 acres in Tiny and Oro-Medonte, 23 soil samples analyzed for nitrate nitrogen to create variable rate plan for nitrogen application.

### Healthy Soils = Healthy Watersheds



Enhanced Soil Sampling to Assist with Grid or Zone Sampling



## Data Analysis and Reporting

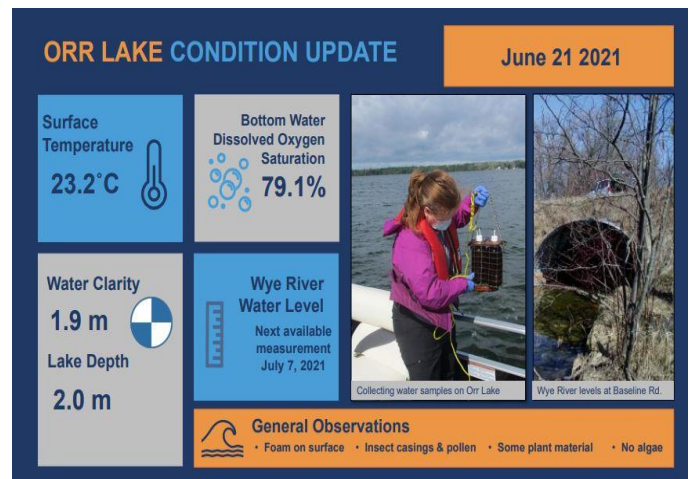
Statistics, Data Management & Analysis, Stream Invertebrate ID, and GIS/Mapping

### Reporting

- *Water Quality Targets for Non-Residential Development* Report to Twp. of Georgian Bay
- Development of near real-time reporting template for [Orr Lake](#)

### Statistics/Data Management & Analysis

- Compilation of monthly Georgian Bay water levels, and regional climate data
- PWQMN data management
- Processing open water & inland lake field data
- Compile 2020 Little Lake zooplankton data
- Compile final 2020 open water inland lake & tributary chemistry dataset from MECP
- Analysis of water chemistry, temperature and stream invertebrate data for Wye River
- Analysis of trends in Honey Harbour physical, chemical, and biological characteristics



*New near real-time reporting for Orr Lake*

## Partnerships

New/Updated NGO partners and MOU's

- Supporting Beausoleil First Nations groundwater curriculum development
- Drafting renewed MOU between Twp. of Springwater, SSEA and NVCA
- Exploring Green Communities Canada partnership to become Depave Paradise program delivery partner
- Supported Township of Tiny Depave Event
- SSEA ED continues as Director on Huronia Community Foundation, appointed member to Muskoka Watershed Advisory Group & member of Healthy Great Lakes Advisory Committee
- SSEA Sustainability & Climate Action Coordinator & Water Scientist are members of GBB's ICECAP & SMDHU's Climate Change Exchange & Climate Change Charter Working Group

### Academia

- Exploring partnering with Lakehead University to deliver a youth-oriented master naturalist program
- Mentoring 2 student projects for Georgian College Environmental Technology Applied Research course (Source of Sodium & Chloride in the Severn Sound Watershed, Climate Evaluation in Nottawasaga and Severn Sound watersheds)



*Staff supported Depave Event in Tiny Township*

## Financial

*Donations, Grants, Budget, Invoicing and Revenue (fee for service)*

### Grants

- HCF grant for \$1,500 to support stream temperature monitoring
- Canada Summer Jobs grant for \$26,944 to support seasonal staff
- Orillia CDC Pathway to Employment grant \$12,740 to support Environmental Intern
- MOU (2 year) with Georgian Bay Forever \$34,200 to support Matchedash Bay Turtle Study
- Invasive Species Center grant \$1,000 to support Citizen Science Invasive Species Spotters
- Lake Huron-Georgian Bay Community Action Initiative - \$7,500 for Shore Watch & Open Water Monitoring
- TD Friends of Environment Foundation - \$8,000 for Shore/Stream Watch & Invasive Species Spotters
- Farlain Lake Community Association - \$18,142 (2 yrs) Farlain Lake Eurasian Water-Milfoil project

### Budget

- 2022 draft budget revised as per April 2021 Board direction to target increase to 2%

### Invoicing

- 2 cost recovery invoices issued

### Donations – THANK YOU!

- Newmarket-Tay Power Distribution Ltd
- In memoriam donations to tree program
- BinCity, JNS Blundell Roofing & Elmvale Home Building Centre (*Invasive Species Spotters*)

### ***Thank you from Team SSEA***

- Julie Cayley - Executive Director
- Lex McPhail - IT Manager/GIS Applications Specialist
- Paula Madill - Ecosystem Technologist
- Michelle Hudolin - Wetlands & Habitat Biologist
- Aisha Chiandet - Water Scientist
- Melissa Carruthers – Risk Mgmt. Official/Risk Mgmt. Inspector
- Judy Limoges –Treasurer (p/t)
- Nikki Priestman – Watershed Health
- Tracy Roxborough – Sustainability & Climate Action Coordinator
- Tamara Brincat – Invasive Species Program Coordinator
- Morgan Gillies – Healthy Soils=Healthy Watersheds Program Coordinator

### ***2021 All-Star Seasonal Staff!***

- Emily Edgely – Environmental Tech & Citizen Science Program Assistant
- Camron Epp – Invasive Species Management Technician
- Ben Lehan – Environmental Intern
- Shannon Mawhinney – Environmental Program Coordinator
- Nicole Stott – Invasive Species Management Technician



*TD Friends of the Environment supporting SSEA Citizen Science*



# Diverting and Capturing Microfibre pollution in Georgian Bay?

Severn Sound Environmental Association  
July 16<sup>th</sup>, 2021

**David Sweetnam**  
Executive Director & Georgian Baykeeper



GEORGIAN BAY  
**FOREVER**



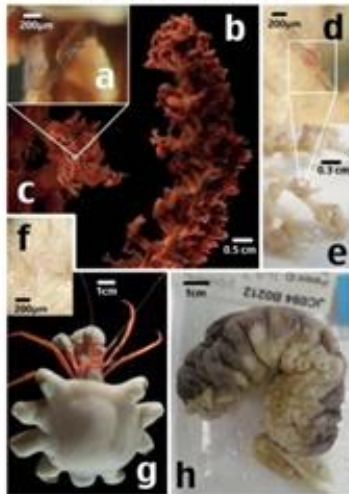
David Sweetnam  
Executive Director & Georgian Baykeeper

Photo Credit: MNR, Eric McIntyre



## Microfibers: among the most common plastic debris in invertebrates, fish and marine mammals

Deep sea organisms



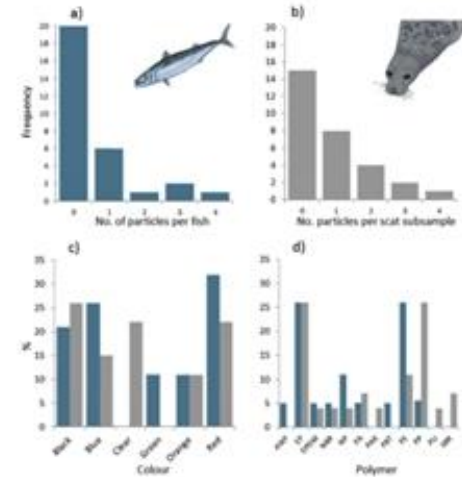
Taylor et al., 2016

Seafood



Rochman et al., 2015;  
Van Cauwenberghe and Janssen, 2014

Trophic transfer in marine life



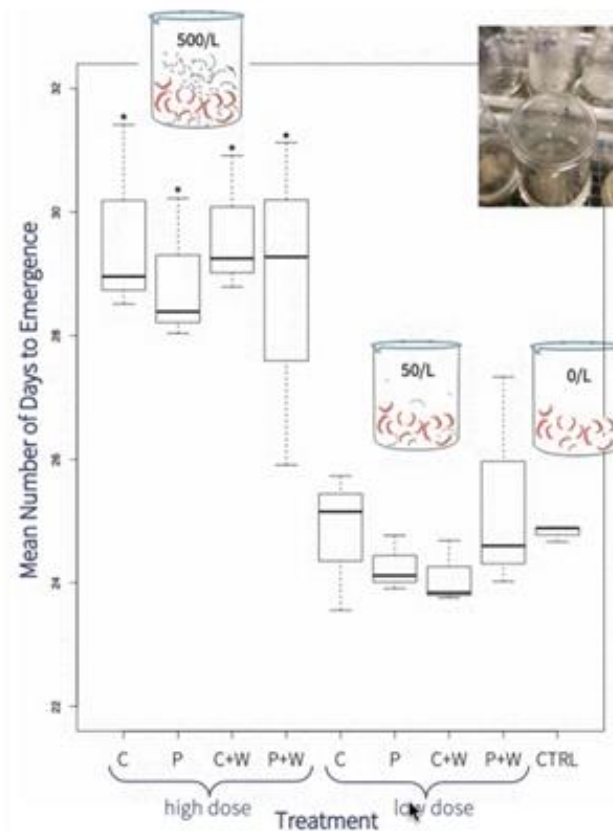
Nelms et al., 2018





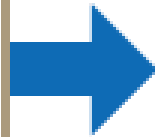
## Laboratory experiments *Chironomus dilutus*

- High microfiber doses impaired time to emergence.
- Material type and addition of chemicals did not appear to impact endpoints.
- Microfibers may be acting as a physical stressor (rather than a chemical one)

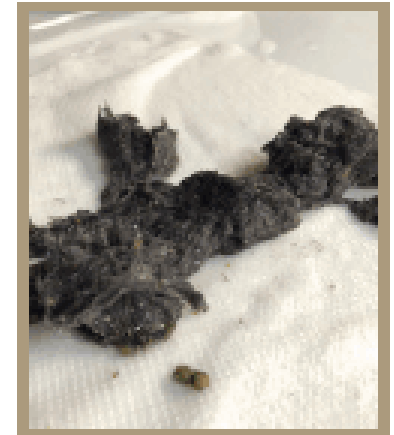




Clothing made from synthetic fibres.



Wash loads can release up to 700,000 fibres less than 5 mm in size. Adding a filter captures fibres.



Close-up of fibres removed after one month of washing.



In 2018, Georgian Bay Forever started a study in Parry Sound to prove that filters affixed to 100 household washing machines could meaningfully divert microplastic waste from getting into Georgian Bay.

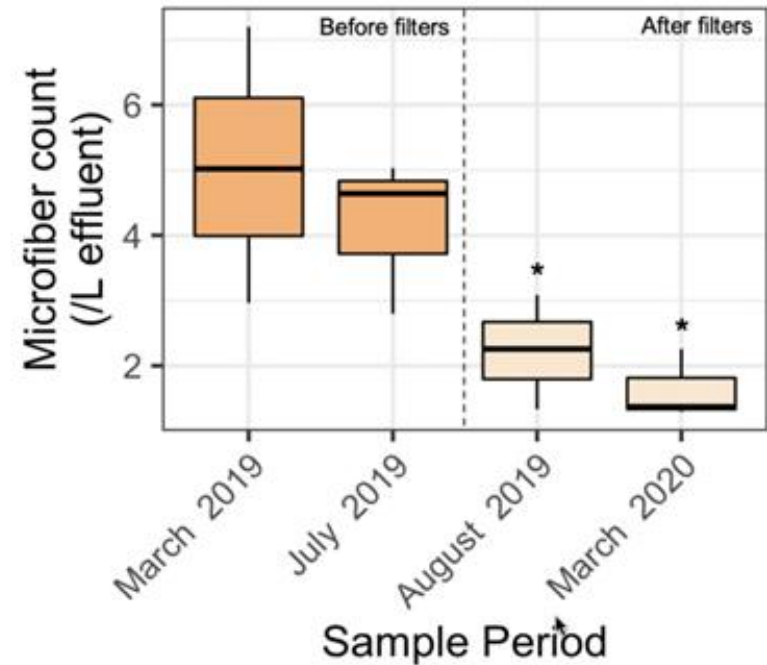
The study had a particular focus on microfiber pollution, which is the most prolific microplastic form found in waters - much of it comes from washing your clothes. Furthermore, a lot of it is plastic (worldwide purchasing shows that about 60% of clothes are made with plastic).





## Washing machine filters

- Washing machine filters reduce microfibers in washing machine effluent by 87% (McIlwraith, et al., 2019)
- 97 households in Parry Sound, approximately 10% of community connected to WWTP
- Reduce microfibers at the community-scale



## Summary

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- Textiles release microfibers & chemicals into water when laundered
- Microfibers are abundant in Great Lakes fish (95% of anthropogenic particles)
  - Trophic level differences
- Microfibers are a stressor – significantly impact time to emergence for *C. Dilutus*.
- Microfiber filters on washing machines are effective at capturing microfibers







# Citizen Science Program Update

Emily Edgley, Environmental Field Tech & Citizen Science Program Assistant

SSEA Board Meeting - July 26, 2021





# Shore Watch



- Done from shore, dock or boat
- Measurements: air & water temperature, weather & wave conditions, water clarity & conductivity, environmental observations

## This Season

- 22 volunteers
- 21 monitoring sites across the shoreline of Severn Sound and on inland lakes



Measuring Secchi depth







# Stream Watch



- Done from streambank or bridge
- Measurements: air & water temperature, weather & flow conditions, water clarity & conductivity, environmental observations

## **This Season**

- 13 volunteers
- 13 monitoring sites in streams across watershed



Observation site on Copeland Creek



# Invasive Species Spotters



Completing a Rake Toss

Implemented to identify and monitor terrestrial (land) and aquatic (water) invasive species

- 2 focus species for this year:
- Ldd (Gypsy) moth (*Lymantria dispar dispar*)
  - Report: date of caterpillar emergence, tree defoliation, caterpillar mortality, and re-foliation of trees.
- Starry Stonewort (*Nitellopsis obtusa*)
  - Report: presence/absence

## This Season

- 16 Starry Stonewort volunteers
- 18 Ldd Moth volunteers






# Program Details

- 26 Citizen Science Kits
- Individual volunteer Google folders and datasheets
- Conducted 2 virtual training sessions, 14 participants




Shared with me > Citizen Science > Shore/Stream Watch Data Entry >

Files



X SSEA006\_Rain Gauge Dat...



X STW017\_Stream Watch D...



Shore Watch & Stream Watch  
Volunteer Training Webinar

Stream Watch Shore Watch

2021 Field Season

0:00 / 1:07:10 • Follow appropriate field safety measures, select a monitoring site, and en...





# Citizen Science Volunteers by Municipality

	Shore Watch (number from 2020)	Stream Watch (number from 2020)	Invasive Species Spotters (Starry Stonewort + Ldd Moth)	Total
Tiny	5 (2)	2 (2)	3	8
Penetanguishene	0 (0)	0 (0)	0	0
Midland	2 (2)	1 (1)	1	2
Springwater	0 (1)	1 (0)	0	1
Oro-Medonte	1 (2)	3 (3)	1	5
Tay	5 (2)	5 (0)	6	12
Severn	2 (3)	2 (0)	5	8
Georgian Bay	5 +2* (3 +3*)	0 (0)	11 +2*	15
<b>Total**</b>	<b>22</b>	<b>13</b>	<b>29</b>	<b>43</b>

\*Outside Watershed

\*\*Note that the total numbers reflect the number of unique volunteers; Some programs have volunteers participating in multiple programs or at multiple sites that may be in different municipalities.



# Thank You to our Funders in 2021!



**TD Friends of the Environment Foundation**

\$8,000

Invasive Species Centre



Centre des espèces envahissantes

\$1,000



**Lake Huron - Georgian Bay Watershed**  
*A Canadian Framework for Community Action*

\$7,500

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\$16,500 Total



TOWNSHIP OF/CANTON DE  
**Tiny**





**Severn Sound Environmental Association  
Joint Service Board Meeting  
2021 Second Quarterly Meeting (Q2) – July 26, 2021  
STAFF REPORT**

**No:** 23-21-SSEA  
**Date:** July 19, 2021  
**To:** Chair and Members of the SSEA Board of Directors  
**From:** Judy Limoges, Treasurer

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**SUBJECT: 2021 2<sup>nd</sup> Quarter Draft Financials**

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**Applicable Strategic Plan Goals:**

**Goal 4: An Exceptional Organization**

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**RECOMMENDATION:**

**RESOLVED THAT: Staff Report No. 23-21-SSEA regarding the 2021 second quarter draft financials be received as information.**

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Purpose of Staff Report

The purpose of this report is to provide the board with up to date 2021 financials.

Background and Analysis

Please be advised that the 2021 financial report reflects that finances are trending favourably year to date June 30, 2021. We are in a net revenue position as expected. This is in part due to issuing the majority of our invoices in the first half of the year. This is also due to a reduced amount of core spending. With June representing half of the year completed, core expenses are tracking at or lower than 50%. This is due to reduced payroll expenses due to unfilled staff vacancies as well as savings in travel expenses, supplies/materials and training.

Projects are also tracking favourably and reflect that some have been invoiced and others are invoiced later in the year (for eg. after the field season). Note that as previously indicated, the funding for the SSS project in 2021 is expected to be short by \$11,155 due to only six confirmed municipal partners where the budget included seven. Measures will be taken to keep expenses to a minimum and external funding sources will be explored to minimize this project shortfall. We continue to monitor this expected shortfall.

In addition, DWSP currently reflects zero and will throughout 2021. This is due to the provincial funding agreement being signed after the 2021 budget was set. The municipal DWSP funding for 2021 will be dealt with at a future board meeting.

Items not included in the attached are planned transfers to reserve, Canada Summer Jobs funding (not received in the quarter), various utilities and insurance paid later in the year.

The SSEA team continues to monitor revenues and expenses in line with the 2021 budget.

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Prepared by:

Approved for Submission by:

*Original signed by*

*Original Signed by*

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Judy Limoges, Treasurer SSEA

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Julie Cayley, Executive Director

Attachment: SSEA Financial Report ending June 30, 2021

SEVERN SOUND ENVIRONMENTAL ASSOCIATION (SSEA)  
FINANCIAL REPORT  
For the Six Months Ending June 30, 2021

	2021			2020	
	YTD Actual	Annual Budget	Variance \$	Actual/Budget %	Actual
<b>SSEA CORE OPERATIONS</b>					
GENERAL REVENUE	(917,710)	(958,557)	(40,847)	96.0%	(883,432)
UNDISTRIBUTED PAYROLL EXPENSE	86,567	370,832	284,265	23.0%	71,971
ADMINISTRATION/OVERHEAD	49,556	163,080	124,601	30.0%	67,563
GIS BASE COVERAGES	46,880	90,412	43,532	52.0%	47,581
REQUESTS & REVIEWS	6,468	34,454	27,986	19.0%	5,655
MONITORING & SURVEILLANCE	52,160	111,355	59,195	47.0%	36,912
MONITORING SUPPORT	4,013	22,440	18,427	18.0%	143
WATER SCIENTIST	29,135	62,523	33,388	47.0%	31,218
INVASIVE SPECIES	16,414	56,181	39,767	29.0%	18,100
SOURCE WATER IMPLEMENTATION	(0)	47,280	47,280	(0.0%)	18,379
<b>TOTAL SSEA CORE OPERATIONS</b>	<b>(626,517)</b>	<b>0</b>	<b>637,594</b>	<b>0.0%</b>	<b>(585,910)</b>
<b>SSEA IMPLEMENTATION PROJECTS</b>					
GROUND WATER PROJECT					
Revenues	0	(2,550)	(2,550)	0.0%	0
Expenses	0	2,550	2,550	0.0%	0
FARLAIN LAKE PROJECT					
Revenues	0	0	0		0
Expenses	1,131	0	(1,131)	0.0%	0
HONEY HARBOUR SURVEY					
Revenues	0	(15,240)	(15,240)	0.0%	(14,941)
Expenses	1,494	15,240	13,746	10.0%	2,109
WYE MARSH PROJECT					
Revenues	(626)	0	626	0.0%	0
Expenses	931	0	(931)	0.0%	0
INLAND LAKES					
Revenues	0	(16,328)	(16,328)	0.0%	(18,588)
Expenses	4,996	16,328	11,332	31.0%	5,403
TREE DISTRIBUTION PROJECT					
Revenues	(29,789)	(20,154)	9,635	148.0%	397
Expenses	23,698	20,154	(3,544)	118.0%	5,902
RMO PROJECT					
Revenues	(69,114)	(68,708)	406	101.0%	(74,587)
Expenses	30,847	68,708	37,861	45.0%	32,464
VICTORIA HARBOUR WTP SURVEY					
Revenues	0	(8,323)	(8,323)	0.0%	0
Expenses	0	8,323	8,323	0.0%	0
CITIZEN SCIENTIST					
Revenues	(13,000)	0	13,000	0.0%	(4,625)
Expenses	10,599	0	(10,599)	0.0%	3,402
SUSTAINABLE SEVERN SOUND					
Revenues	(53,868)	(78,085)	(24,217)	69.0%	(32,256)
Expenses	30,640	78,085	47,445	39.0%	149
HEALTHY SOILS = HEALTHY WATERSHED PROJECT					
Revenues	(30,000)	0	30,000	0.0%	0
Expenses	7,872	0	(7,872)	0.0%	0
SPECIES AT RISK					
Revenues	0	0	0		0
Expenses	2,625	0	(2,625)	0.0%	0
<b>TOTAL SSEA IMPLEMENTATION PROJECTS</b>	<b>(81,564)</b>	<b>0</b>	<b>81,564</b>	<b>0.0%</b>	<b>(95,171)</b>
<b>TOTAL SSEA OPERATING (SURPLUS)/DEFICIT</b>	<b>(708,081)</b>	<b>0</b>	<b>719,156</b>	<b>0.0%</b>	<b>(681,081)</b>

NOTE: The financial report received from the Township of Tay has been adjusted for several items to reflect a more accurate DRAFT report at the end of the second quarter 2021. Judy Limoges, SSEA Treasurer.



**Severn Sound Environmental Association  
Joint Service Board Meeting  
2021 Second Quarterly Meeting (Q2) – July 26, 2021**

**STAFF REPORT**

**No:** 24-21-SSEA  
**Date:** July 19, 2021  
**To:** Chair and Members of the SSEA Board of Directors  
**From:** Judy Limoges, Treasurer and Julie Cayley, Executive Director

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**SUBJECT: 2022 Draft Budget**

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**APPLICABLE STRATEGIC PLAN GOALS:**

**Goal 4: An Exceptional Organization**

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**RECOMMENDATION:**

**RESOLVED THAT:** Staff Report No. 24-21-SSEA regarding the 2022 Draft Budget be received; and

**FURTHER THAT:** The board approve the 2022 budget as presented, representing a 2% increase over the 2021 final budget for the municipal contributions portion of the core 2022 budget.

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Purpose of Staff Report

The purpose of this report is to provide the board with the 2022 revised budget information in order to finalize the 2022 budget.

Background and Analysis

On April 26, 2021, the SSEA board of directors passed a resolution directing the ED to reduce the 2022 *approved in principle* budget from an increase of 4.1% in the core municipal share to a 2% increase over the approved 2021 budget.

The Executive Director and the SSEA team reviewed and adjusted for various known and/or anticipated changes and challenges to arrive at the current draft of the 2022 budget, reflecting a 2% increase in the core municipal share as presented herein. Please see attached “2022 Budget Summary” and “Highlights – change in municipal core operations”. The current draft 2022 budget represents an increase in municipal core funding of \$17,494 over the 2021 approved budget. This is a reduction of \$18,301 from the 2022 budget *approved in principle* during the 2020-2024 budget process. The Highlights sheet provides details around these net reductions.

The SSEA Board of Directors Executive met on July 8 to review this budget and are in support of the 2022 draft budget as presented herein.

Please note that we are estimating a cost of \$78,000 to complete our long overdue staff pay equity and compensation review and finalize updates to our employee manual to further reduce corporate financial risk in 2022. We are proposing that the funds to cover these two items come from our contingency reserve and our employee benefits reserve. The contingency reserve currently includes some funding for the pay equity and compensation review, which was transferred to reserve in 2019 for this purpose. The employee benefits reserve was established for this purpose. This will use up 32% of the contingency reserve (leaving a balance of \$64,554 = municipal source water funding transferred to reserve in 2020, excluding Oro-Medonte) and 84% of our employee benefits reserve (leaving a balance of \$14,122). Completing these tasks will reduce our risk as an organization and, meet the requirements of the Pay Equity Act. Please see attached Reserve Schedule.

The effect of reducing the 2022 budget to a 2% increase over the 2021 budget will have a negative impact on the 2023 budget as reductions now will impact future years. The current 2023 *approved in principle* budget reflects a 2% over the 2022 *approved in principle* budget, however, the reduction in the 2022 budget will result in a 4.1% increase in 2023.

Conclusion:

The 2022 draft budget presented represents the core component discussed above as well as implementation projects. For 2022, we have several new projects that we are able to include as a result of signed agreements; FLCA, Wye Marsh, GBF Matchedash Bay Turtle study. The more implementation projects we have, the more staff costs are covered by other sources than core, which reduces the municipal share. Depending on the signed agreements in place when we set the 2023 (and future) budget, this could have a negative affect on the 2023 (and future) budget as well.

In addition, the provincial funding for the Drinking Water Source Water Protection project for 2022 has not been considered in the budget – as previously discussed, this funding continues to be questionable. The “2020-2024 Budget Summary” and the “Municipal revenue shares 2020-2024” are also attached for your information.

The budget as presented reflects the actual cost of doing business for SSEA in conjunction with our strategic plan.

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Prepared by:

Approved for Submission by:

*Original signed by*

*Original Signed by*

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Judy Limoges, Treasurer SSEA

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Julie Cayley, Executive Director

Attachment: 2022 Budget Summary  
Highlights – change in municipal share core operations  
Municipal revenue shares 2020-2024  
Reserve Schedule

**SEVERN SOUND ENVIRONMENTAL ASSOCIATION  
HIGHLIGHTS - CHANGE IN MUNICIPAL SHARE CORE OPERATIONS  
2022 BUDGET DRAFT VS APPROVED IN PRINCIPLE  
MUNICIPAL SHARE INCREASE = 2.0%**

	Net Cost Savings	Net Cost Increases or Revenue decrease
<b>Where SSEA cut cost</b>		
Adjust wages and benefits - mainly due to reduced cost of living increase in 2021 \$	13,062	
Source water costs - reduction in contracted services & mileage	2,518	
Administration expenses - including meals/travel/office supplies	2,390	
legal fees	462	
<b>SSEA increased revenue</b>		
New project funding	23,578	
<b>Where SSEA costs increased in 2022 and/or revenues decreased</b>		
Administration expenses - including rent/utilites		(\$2,056)
Increase contribution to capital asset reserve to = annual amortization		(7,000)
IT costs		(10,182)
Insurance		(3,797)
Source water costs - consulting fees		(675)
		<i>Total</i>
	<i>Total Cost Saving/Reduced cost</i>	<i>Total Increased cost/reduced revenue</i>
TOTAL	42,010	(23,710)
	<b>CHANGES TO REDUCE MUNICIPAL SHARE FROM 4.1% TO 2%</b>	<b>\$18,301</b>
<b>Additional items to note:</b>		
Contribution from reserves		(78,000)
Pay Equity and compensation review/study, employee manual/contracts update,		78,000



**Severn Sound Environmental Association**  
**Municipal Sharing of SSEA Agreement for Core Operations**  
**Municipal revenue shares calculated for 2020-2024**

Municipality	Properties in W'shed	Assessment in W'shed	% Cost Share (8 Municipalities)	2020	2021	2022		2022	2023	2024
				APPROVED	APPROVED	DRAFT BUDGET	2022 VS 2021	APPROVED IN PRINCIPLE	APPROVED IN PRINCIPLE	APPROVED IN PRINCIPLE
Georgian Bay	2114	\$478,457,400	5.60	\$ 74,443	\$ 78,746	\$ 80,321	1,575 2.0%	\$ 81,914	\$ 83,534	\$ 85,271
Midland	6181	\$1,366,966,807	16.18	118,584	125,651	128,164	2,513 2.0%	130,822	133,408	136,187
Oro-Medonte	4256	\$1,112,902,900	12.20	101,979	108,006	110,166	2,160 2.0%	112,424	114,646	117,034
Penetanguisher	3446	\$734,452,100	8.85	88,003	93,154	95,017	1,863 2.0%	96,938	98,854	100,912
Severn	3358	\$687,466,543	8.45	86,334	91,381	93,209	1,828 2.0%	95,089	96,969	98,987
Springwater	2343	\$486,289,200	5.93	75,820	80,209	81,813	1,604 2.0%	83,439	85,089	86,859
Tay	6101	\$809,898,203	12.63	103,773	109,913	112,111	2,198 2.0%	114,412	116,673	119,103
Tiny	12303	\$2,392,111,202	30.16	176,911	187,630	191,383	3,753 2.0%	195,448	199,310	203,466
<b>Totals:</b>	<b>40102</b>	<b>\$8,068,544,355</b>	<b>100</b>	<b>\$825,847</b>	<b>\$ 874,690</b>	<b>\$ 892,184</b>	<b>17,494</b>	<b>\$ 910,485</b>	<b>\$ 928,484</b>	<b>\$ 947,819</b>
		INCREASE YEAR OVER YEAR \$		\$362,051	\$48,843	\$17,494		\$35,795	\$17,999	\$19,335
		INCREASE YEAR OVER YEAR %		78.1%	5.9%	2.0%		4.1%	2.0%	2.1%
		Total annual operating/core budget		\$908,069	\$958,556	\$977,726		\$996,029	\$1,015,739	\$1,036,819
		Base amount for each municipality		\$51,079	\$53,919	\$54,997	2.0%	\$56,027	\$57,135	\$58,321

Note: Determination of Cost Apportionment as of December 2007 for agreement using revised SSEA watershed boundary.

- 1.the number of properties within the watershed area of each municipality was determined and from that, a percentage for cost sharing was calculated
- 2.the assessment within the watershed area for each municipality was determined and from that, a percentage for cost sharing was calculated
- 3.the average of 1. and 2.was used as the %cost share
- 4.for calcualtions with 8 municipalities, a base amount of 5.625% of the total annual operating budget was added to each share and followed by the percent of the remainder of the municipal amount
- 5.2020-2024 include Invasive Species Project in core operations, previously an implementation project
- 6.Source Water Implementation Project funded by core in 2020-2024 due to potential lack of provincial funding

**SEVERN SOUND ENVIRONMENTAL ASSOCIATION (SSEA)  
RESERVE SCHEDULE  
2022 PROPOSED DRAFT BUDGET**

**CONTINGENCY RESERVE SCHEDULE**

OPENING BALANCE	88,075	88,075
CONTRIBUTION FROM RESERVE		(28,521)
CONTRIBUTION TO RESERVE	5,000	5,000
ENDING BALANCE	93,075	<b>64,554</b>

**EMPLOYEE BENEFITS RESERVE SCHEDULE**

OPENING BALANCE	58,601	58,601
CONTRIBUTION FROM RESERVE		(49,479)
CONTRIBUTION TO RESERVE	5,000	5,000
ENDING BALANCE	63,601	<b>14,122</b>

**CAPITAL ASSET RESERVE SCHEDULE**

OPENING BALANCE	10,000	10,000
CONTRIBUTION FROM RESERVE		
CONTRIBUTION TO RESERVE	5,000	12,000
ENDING BALANCE	15,000	<b>22,000</b>

**WELL DECOMMISSIONING RESERVE SCHEDULE**

OPENING BALANCE	3,600	3,600
CONTRIBUTION FROM RESERVE		
CONTRIBUTION TO RESERVE	1,800	1,800
ENDING BALANCE	5,400	<b>5,400</b>

**SEVERN SOUND ENVIRONMENTAL ASSOCIATION (SSEA)  
2022 DRAFT BUDGET SUMMARY**

	<b>2% Increase 2022</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2019</b>	<b>2018</b>	<b>2018</b>
	<b>DRAFT BUDGET</b>	<b>APPROVED IN PRINCIPLE BUDGET</b>	<b>BUDGET</b>	<b>BUDGET</b>	<b>ACTUAL</b>	<b>BUDGET</b>	<b>ACTUAL</b>	<b>BUDGET</b>
<b>SSEA CORE OPERATIONS</b>								
GENERAL REVENUE	(1,055,726)	(996,029)	(958,557)	(908,069)	(586,189)	(572,796)	(535,679)	(563,702)
UNDISTRIBUTED PAYROLL	367,341	422,938	370,832	320,646	216,791	138,960	128,018	140,481
ADMINISTRATION/OVERHEAD	261,238	163,056	163,079	156,965	109,792	139,192	103,910	134,436
GIS BASE COVERAGES	92,220	92,220	90,412	88,639	93,848	86,901	82,297	85,197
REQUESTS & REVIEWS	35,143	35,143	34,454	33,778	9,422	33,116	5,593	32,466
MONITORING & SURVEILLANCE	107,398	99,893	111,355	96,015	76,764	94,132	100,175	92,287
MONITORING SUPPORT	22,889	22,889	22,440	22,000	22,108	20,400	21,860	20,000
WATER SCIENTIST	63,773	63,773	62,523	61,297	58,887	60,095	51,119	58,835
INVAISVE SPECIES	57,305	57,305	56,182	55,080				
SOURCE WATER IMPLEMENTATION	48,419	38,812	47,280	73,649				
PSAB ADJUSTMENTS					(6,972)		10,763	
<b>TOTAL SSEA CORE</b>	<b>0</b>	<b>(0)</b>	<b>(0)</b>	<b>(0)</b>	<b>(5,549)</b>	<b>0</b>	<b>(31,944)</b>	<b>0</b>
<b>SSEA IMPLEMENTATION PROJECTS</b>								
GROUND WATER PROJECT								
Revenues	(2,601)	(2,601)	(2,550)	(2,500)	0	(2,500)	(4,453)	(2,500)
Expenses	2,601	2,601	2,550	2,500	20	2,500	1,501	2,500
FARLAIN LAKE PROJECT								
Revenues	(8,517)							
Expenses	8,517							
HONEY HARBOUR SURVEY								
Revenues	(6,195)	(15,545)	(15,240)	(14,941)	(15,088)	(13,926)	(15,396)	(17,224)
Expenses	6,195	15,545	15,240	14,941	15,225	13,926	15,743	17,224
WETLANDS EVALUATION PROJECT								
Revenues							(1,926)	(1,900)
Expenses					99		1,295	2,660
WYE MARSH PROJECT								
Revenues	(22,140)							
Expenses	22,140							
INLAND LAKES								
Revenues	(14,193)	(17,490)	(16,328)	(18,588)	(20,923)	(33,581)	(10,208)	(9,775)
Expenses	14,193	17,490	16,328	18,588	30,083	33,581	12,250	9,775
TREE DISTRIBUTION PROJECT								
Revenues	(21,307)	(21,307)	(20,154)	(20,004)	(19,073)	(17,000)	(15,614)	(13,155)
Expenses	21,307	21,307	20,154	20,004	21,629	17,000	17,468	13,155
RMO PROJECT								
Revenues	(46,434)	(70,039)	(68,708)	(74,191)	(73,104)	(90,780)	(75,128)	(92,000)
Expenses	46,434	70,039	68,708	74,191	77,013	90,779	102,641	92,000
SOURCE WATER IMPLEMENTATION								
Revenues					(57,572)	(119,193)	(105,710)	(119,193)
Expenses					57,396	119,193	105,918	119,193
VICTORIA HARBOUR WTP SURVEY								
Revenues	(8,862)	(8,490)	(8,323)	(7,855)	(8,504)	(7,691)	(7,662)	(8,000)
Expenses	8,862	8,490	8,323	7,855	8,126	7,691	7,662	8,000
INVASIVE SPECIES								
Revenues			0	0	(52,317)	(54,000)	(46,191)	(49,500)
Expenses			0	0	43,539	54,000	46,191	49,500
CITIZEN SCIENTIST								
Revenues					0	0	0	(4,000)
Expenses					0	0	837	4,000
FISH COMMUNITY EVALUATION								
Revenues					0	0	(2,600)	(3,000)
Expenses					0	0	5,326	3,000
HABITAT RESTORATION PROJECT								
Revenues			0	0	(174,863)	(10,013)	(2,973)	(10,013)
Expenses			0	0	173,863	10,013	2,973	9,253
SUSTAINABLE SEVERN SOUND								
Revenues	(68,871)	(90,385)	(78,085)	(106,756)	0	0	0	0
Expenses	68,871	90,385	78,085	106,756	0	0	0	0
SPECIES AT RISK								
Revenues	(13,680)							
Expenses	13,680							
HEALTHY SOILS=HEALTHY WATERSHEDS								
Revenues	(11,925)							
Expenses	11,925							
<b>TOTAL SSEA IMPLMENTATION PROJECTS</b>	<b>(0)</b>	<b>0</b>	<b>(0)</b>	<b>0</b>	<b>5,549</b>	<b>(1)</b>	<b>31,944</b>	<b>0</b>
<b>TOTAL SSEA</b>	<b>0</b>	<b>(0)</b>	<b>(0)</b>	<b>(0)</b>	<b>0</b>	<b>(1)</b>	<b>0</b>	<b>0</b>



**Severn Sound Environmental Association  
Joint Municipal Service Board  
2021 Second Quarterly Meeting (Q2) – July 26, 2021**

**STAFF REPORT**

**No.** 25-21-SSEA  
**Date:** July 26, 2021  
**To:** Chair and Members of the SSEA Board of Directors  
**From:** Tracy Roxborough, Sustainability and Climate Action Coordinator, SSEA, Sustainable Severn Sound (SSS) special project

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**SUBJECT: Sustainable Severn Sound (SSS) Special Project Update – 2<sup>nd</sup> Q 2021**

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**APPLICABLE STRATEGIC PLAN GOALS:**

**Goal 1: Sound Science, *Priority Actions: Build Resilience Across Severn Sound***  
**Goal 2: Supportive Partnerships, *Priority Actions: Build New Alliances***  
**Goal 3: An Engaged and Informed Community, *Priority Actions: Learn from Others***  
**Goal 4: An Exceptional Organization, *Priority Actions: Commit to a Culture of Continuous Improvement***

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**RECOMMENDATION:**

**RESOLVED THAT:** Staff Report No. 25-21-SSEA, regarding the SSEA's SSS special project update for the 2<sup>nd</sup> quarter of 2021 be received for information; AND

**FURTHER THAT:** The SSEA Board supports the staff recommendation to approve the use of the SSEA logo on the Simcoe Muskoka Climate Change Charter (Simcoe Muskoka Climate Change Exchange) to demonstrate and affirm the SSEA's commitment to collaborative climate change action within the Simcoe Muskoka region.

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**Purpose:**

The purpose of this report is to:

1. Provide a summary of the Q2 2021 SSS project work plan progress and achievements,
2. Acquire Board approval for use of the SSEA logo on the Simcoe Muskoka Climate Change Charter (Simcoe Muskoka Climate Change Exchange), to demonstrate and affirm the SSEA's commitment to collaborative climate change action within the Simcoe Muskoka region.

## **Discussion/Analysis:**

The objective of the SSS special project is to advance practices/policies within municipal operations to support implementation of their Municipal Climate Plans (see below for *Supporting Documents and Links*) to result in greenhouse gas (GHG) mitigation and sustainable communities. In 2018, six of SSEA's partner municipalities joined the Federation of Canadian Municipalities-ICLEI Local Governments for Sustainability [Partners for Climate Protection \(PCP\) program](#)<sup>1</sup>. Since 2018, SSS project staff have led each of our six PCP program member municipalities to Milestone 3 of the 5-Milestone PCP program Framework: (1) Measure municipal and community GHG emissions, (2) Select GHG reduction targets, (3) Prepare a Climate Action Plan, (4) Implement the Climate Action Plan and GHG reduction actions, and (5) Report on climate action progress and GHG reductions.

### **1. Sustainable Severn Sound Special Project Results, Q2 2021**

#### **Bee City Canada Program and Pollinator Week Activities**

Staff continue to support the Town of Midland through administrative and communication services to help meet their Bee City Canada membership commitments. Staff hosted three Bee City Team members with the Town's Communication, Tourism and Operations staff in Q2. National Pollinator Week occurred June 21-27, with the following completed by SSEA:

- Produced a declaration and secured the Mayor's [proclamation of Pollinator week in the Town of Midland](#),
- Created a [joint media release announcing Pollinator Week](#),
- Designed [No-Mow Signage](#) for six No-Mow sites in Midland, installed by Town staff during Pollinator Week,
- Created and posted 57 social media posts resulting in +5,000 views and interactions across three platforms (Facebook, Twitter and Instagram) as part of a social media campaign (*Meet the Pollinators*, *Native Plants Support Pollinators*, *How You Can Help Pollinators*), and
- Supplied the Township of Tay with a [Pollinator Week media release](#), [Pollinator Factsheet](#), and native wildflower seeds to distribute to residents.

SSEA staff are currently undertaking monitoring of each of the No-Mow/Strategic Mow sites and preparing a report for the Midland Bee City Team membership on site conditions (soil type, sun exposure, etc.), native and invasive species identification, and site-specific management suggestion to support the establishment of high-quality pollinator habitat.

#### **Partners for Climate Change Protection (PCP) Program Progress**

As the Associate Member to the [Federation of Canadian Municipalities PCP program](#), SSEA's Sustainability and Climate Action Coordinator is responsible for

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<sup>1</sup> Federation of Canadian Municipalities. 2021. Partners for Climate Protection program. Available from: <https://fcm.ca/en/programs/partners-climate-protection>



assisting our municipal PCP program members in meeting their membership requirements - including annual greenhouse gas (GHG) reporting representing both municipal operations (buildings, streetlighting, fleet, water/wastewater and solid waste) and community emissions (residential, commercial and industrial energy use, transportation and solid waste).

SSEA Staff are currently awaiting outstanding energy data from Tay-Newmarket Hydro, and have begun preparing a 5-year GHG analysis and report for each of the six PCP program municipalities.

### **Official Plan Review: Climate Change Considerations**

Staff continue to participate in meetings and sessions to review municipal plans, and to provide a climate change lens to those updated plans. Currently, staff are supporting the review of the Township of Severn's Official Plan and the County of Simcoe's Municipal Comprehensive Review, both of which are ongoing. This report is available here: [Municipal Comprehensive Review, Request for Information Report](#).

### **Municipal Partner Requests for Reports/Research and/or Written Materials**

Staff responded to one request for information/research report for the Township of Georgian Bay to provide the Township with information on the Federation of Canadian Municipalities Community Buildings Retrofit funding program, and to secure the Senior Management Team's approval for the Township to work with SSEA staff to prepare a funding application. Township staff and SSEA have now submitted a report to acquire Council approval to proceed with a full application for the [Study: GHG Reduction Pathway Feasibility grant](#). This report is available here: [FCM Community Building Retrofit \(CBR\) Funding](#).

### **\*Articles, Newsletter Contributions, Blog Posts**

- April: [With Earth Day Here, It's Time to Take Action](#)
- June: [The Town of Midland and SSEA are All About the Buzz](#)
- June: [Native Plants Help Pollinators](#)

*\*The Sustainability and Climate Action Coordinator encourages all SSEA Board members to share these and future articles via social media by visiting our website at [www.sustainablesevernsond.ca](http://www.sustainablesevernsond.ca). Requests for SSEA to produce newsletter content for your municipality as they relate to the implementation of your Municipal Climate Plan are welcome, but may require approval from the SSEA ED.*

### **Municipal Climate Leadership Committee Update**

The SSEA Municipal Climate Leadership Committee (MCLC) has been established and will include supporting the PCP member municipalities in the implementation of their Municipal Climate Plans and to continue to assist with the membership responsibilities of the PCP program. The SSEA's SSS project scope will be informed in part by the needs of the municipal PCP members of the MCLC. The MCLC members are six municipal staff and six Council representatives to the PCP program, previously designated by each municipality upon joining the PCP program. These members have the discretion to designate an alternate. These representatives are listed here: [MCLC Terms of Reference, 2021](#). The first MCLC meeting has been

scheduled for July 22. Staff distributed a pre-meeting survey to identify progress, challenges, and priorities for discussion by the MCLC at this and future meetings.



Figure 1. Barriers to climate action identified by MCLC.

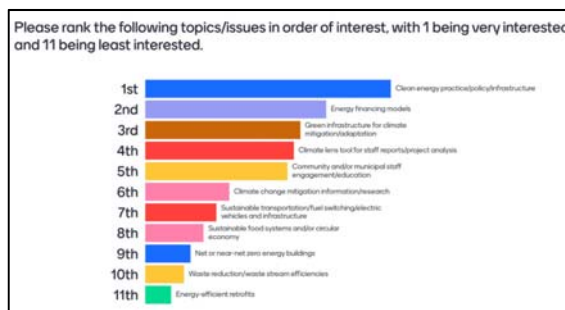


Figure 2. Areas of interest/priority identified by MCLC.

## 2. Simcoe Muskoka Climate Change Exchange and the Climate Change Charter

The Simcoe Muskoka Climate Change Exchange (CCE) was established by the Simcoe Muskoka District Health Unit to support local climate change mitigation and adaptation, build capacity, and explore new opportunities to address climate change across the Simcoe Muskoka region. The CCE is made up of representatives from organizations and municipalities across Simcoe Muskoka who are engaged in or interested in climate change action. This includes but is not limited to Simcoe Muskoka District Health Unit, watershed-based planning and environmental agencies, education and training institutions, Indigenous organizations and communities, regional, lower, single, and upper tier municipalities. As a member of the CCE and the Climate Change Charter Working Group (CWG), SSEA staff contributed to the development of the Climate Change Charter. The Climate Change Charter was developed to guide the activities of CCE by defining the CCE's vision, mission, guiding principles, and identifying the tools that the CCE will leverage to achieve that mission. The inclusion of the SSEA logo on the Climate Change Charter will:

- Acknowledge SSEA's contributions to the development of the charter,
- Build on the existing achievements of SSEA and our partner municipalities in our response to the climate challenge,
- Demonstrate SSEA's commitment to engage in collaborative, coordinated and transformative climate action, and
- Show SSEA's support for the charter vision and mission.

### Expected Impact on SSEA Workload:

Services by the SSEA's Sustainability and Climate Action Coordinator of Pollinator/Bee City Canada membership support, response to municipal requests for information (Climate Plan implementation, GHG analysis, funding support, etc.), and establishment of the Municipal Climate Leadership Committee will enhance the SSEA's ability to deliver on the SSS project 2021-2022 work plan commitments, including: *Deliverable 2: Implementation of corporate climate change action plans, driven by Council-approved municipal-level climate change action plans, and Deliverable 3: Monitoring and reporting (Milestone 5 of PCP program); re-inventory of GHG emissions (corporate and*

community) of the SSS project workplan. The collaborative approach of the MCLC will streamline the work for the SSEA's Sustainability and Climate Action Coordinator, thereby allowing staff to support municipal PCP program progress and Municipal Climate Plan implementation more effectively.

Staff will continue to participate on the quarterly CCE meetings, and the quarterly CWG, which will require approximately 25-35 annual work hours, and aligns with the SSS project 2021-2022 work plan commitments, specifically: *Deliverable 1: Participate as directed by the ED on external Boards and committees relevant to the Sustainability and Climate Action Coordinator role and the PCP program.* Any additional work requested by the CCE or CWG will require approval by the SSEA ED.

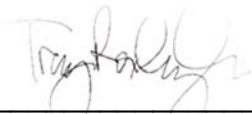
**Financial Implications:** N/A

**Conclusion/Recommendation:**

SSEA's Sustainability and Climate Action Coordinator continues to implement the SSS special project work plan to deliver on standing PCP program commitments to our 6 PCP member municipalities. The approval of the use of the SSEA logo on the Simcoe Muskoka Climate Change Charter demonstrates the support of the SSEA Board for the efforts of the collaborative Simcoe Muskoka Climate Change Exchange committee.

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Prepared by:



Tracy Roxborough, Sustainability and  
Climate Action Coordinator

Approved for Submission by:

Julie Cayley, Executive Director

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**Attachment A:** Simcoe Muskoka Climate Change Exchange: Climate Change Charter

**Supporting Documents and Links**

[Climate Change Exchange Presentation \(PDF\), Climate Change Charter Development Town of Midland, Municipal Climate Change Action Plan, 2019](#)  
[Town of Penetanguishene, Municipal Climate Change Action Plan, 2019](#)  
[Township of Georgian Bay, Municipal Climate Change Action Plan, 2019](#)  
[Township of Severn, Municipal Climate Change Action Plan, 2019](#)  
[Township of Tay, Municipal Climate Change Action Plan, 2019](#)  
[Township of Tiny, Municipal Climate Change Action Plan, 2019](#)  
[Local Climate Change Action Plan, 2018](#)





Climate  
Change  
Exchange

# CLIMATE CHANGE CHARTER

Simcoe Muskoka Climate Change Exchange



## OVERVIEW

Climate change is the greatest threat to health this century, and the greatest health opportunity (1, 2). Human-induced greenhouse gas emissions drive unprecedented changes to the global climate system, such as record-breaking average annual temperatures, more extreme heat, and more frequent, intense and severe extreme weather events. Climate change has the potential to impact all aspects of people's life, health, and wellbeing through changes to our interconnected natural, built, economic, and social environments. In Simcoe Muskoka, climate data has shown that the climate is already changing and will continue to pose threats to the health and wellbeing of people who live, work, and play in the Simcoe Muskoka region (3). Potential health impacts are varied and widespread and will affect some people more than others, especially children, seniors, individuals living with low income, people who are homeless and precariously housed, and individuals with pre-existing chronic conditions. While climate change presents many challenges for the region, it also offers opportunities to create a more sustainable, resilient, and equitable society that will benefit current and future generations.

Ambitious, coordinated, and transformative actions are needed now to reduce greenhouse gas emissions (mitigation) and enhance the resilience of human and natural systems to the impacts of climate change (adaptation) (4). These actions can offer many additional benefits to society, including improved physical and mental health, social justice and equity, environmental health, economic benefits, and more. The Simcoe Muskoka Climate Change Exchange (CCE) was established to support local climate change mitigation and adaptation, build capacity, and explore new opportunities to address climate change across the Simcoe Muskoka region. The CCE is made up of representatives from organizations and municipalities across Simcoe Muskoka who are engaged or interested in climate change action. This includes but is not limited to Simcoe Muskoka District Health Unit, watershed-based planning and environmental agencies, education and training institutions, Indigenous organizations and communities, regional, lower, single, and upper tier municipalities.



The CCE has created this Climate Change Charter to guide the activities of this collective by setting out the CCE's vision, mission, guiding principles, pillars where we will focus our activities, and tools that we will leverage to achieve our mission. The Charter acknowledges and affirms a commitment from the CCE, member organizations and the wider Simcoe Muskoka community to engage in collaborative, coordinated, and transformative climate action across the region. This includes meaningful engagement and collaboration with Indigenous communities, creating space for Indigenous knowledge and leadership, and engaging in efforts that support decolonization and reconciliation. We hope that this Charter will also help to inspire and guide others to take climate action within the Simcoe Muskoka community and beyond by increasing awareness, support, and consistency in messages relating to climate change, its risks and impacts, and how we can take action.

We recognize that climate change actions must be culturally relevant and be guided by social justice and equity principles. Health and equity are intended to be integrated into all aspects of this Charter to ensure that climate change actions appropriately and effectively respond to and reflect the needs of local communities to enable them to thrive under changing and uncertain future climate conditions. Climate change can affect people in different ways and can exacerbate existing inequities. By integrating health and equity, we are working to ensure that climate actions will help to improve health, well-being, and equity outcomes for all.

## VISION

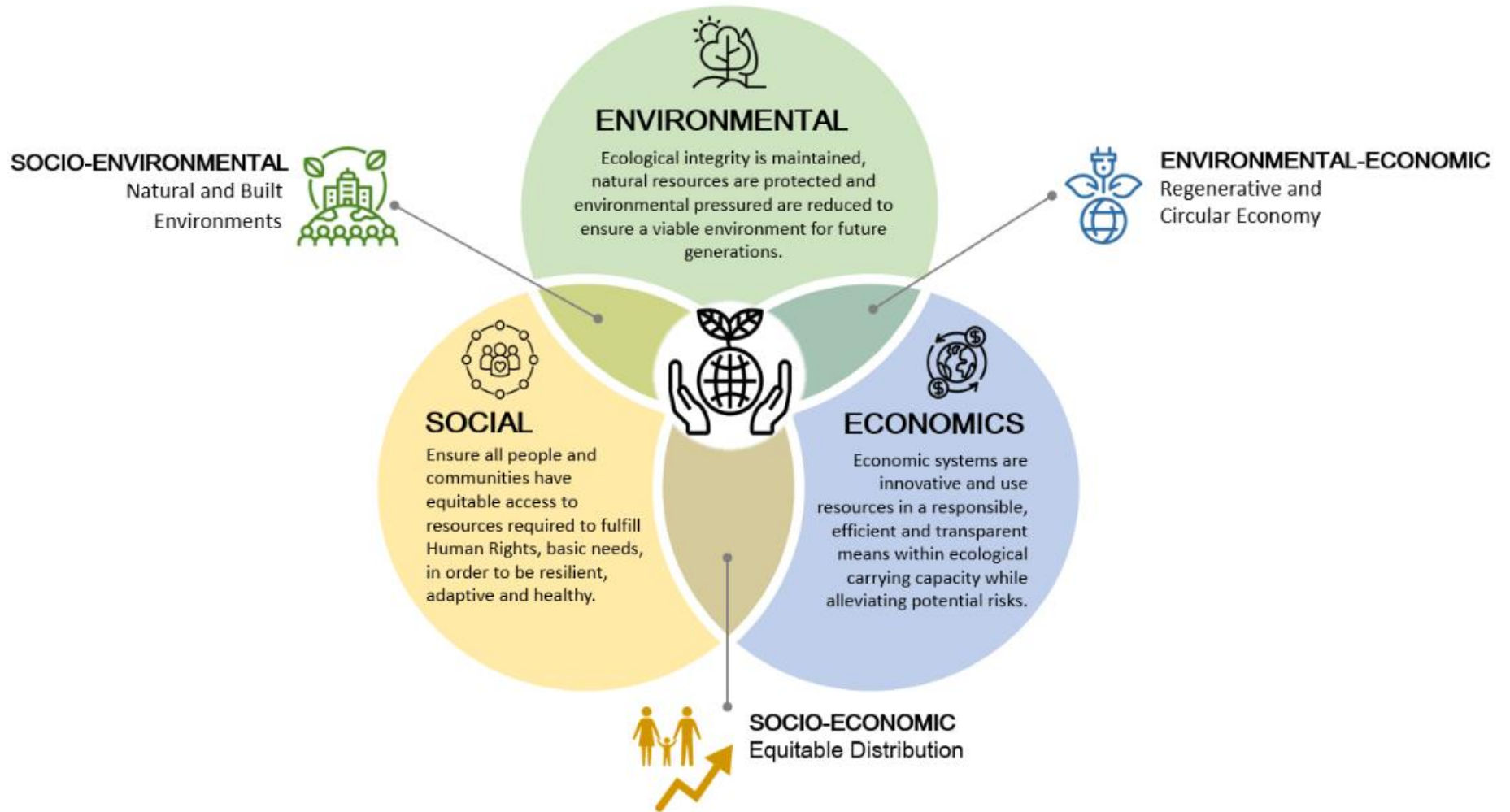
To be the current of transformation for a connected, sustainable community that is resilient to climate change

## MISSION

Take action together to propel climate mitigation and adaptation through awareness, innovation and action

## GUIDING PRINCIPLES

Guiding Principles are overarching themes of the Charter. They set the foundation for all action and initiatives. The guiding principles reflect the 3 pillars of sustainable development



## PILLARS

The following Pillars represent areas of action. While the Pillars are organized by theme, they are all interconnected. Health and equity are integrated throughout and thus are not presented as separate Pillars.

### Active Mobility

Encourage low carbon or carbon-neutral transportation modes that offer affordable, accessible and safe mobility for all, and that support active living and community connectedness. Support efforts to make it easy, safe and convenient to use active transportation (e.g., walking, biking, roller-blading etc.), transit, ride-sharing and electric vehicle options. Ensure that transportation systems are well-connected within and between cities, towns and regions, and that systems are resilient to the impacts of climate change.



### Housing and Development

Advocate for and support access to adequate and affordable housing as a human right to help reduce vulnerability and enhance resilience to climate change. Encourage low-carbon, efficient and resilient buildings through new builds and retrofits that improve housing and building quality. Support smart growth, complete communities and walkable neighbourhoods through progressive planning policies and zoning bylaws, which offer an appropriate range and mix of housing options and services to meet projected needs and future uncertainties related to climate change (e.g. extreme weather events).

## Infrastructure

Protect, restore, preserve and enhance natural and built infrastructure<sup>1</sup> that benefit climate change mitigation, adaptation and health. Work synergistically with nature to prioritize resilient nature-based solutions, reducing the cost and carbon footprint of infrastructure through sustainable lifecycle management. Recognize that natural systems are important infrastructure that provide many co-benefits such as flood protection, water resource management, improved air quality, and improved physical and mental health, and work to preserve ecological diversity and encourage further enhancement of these systems. Support the equitable distribution of nature-based solutions throughout the region on an integrated watershed basis. Encourage the innovative urban design of complete streets, communities, and neighbourhoods, which provide opportunities for people of all ages and abilities to conveniently live, work and play.



## Natural Environments, Greenspace and Parks

Protect, conserve and expand natural environments, greenspaces and parks to enhance benefits for climate change mitigation, adaptation, the physical and mental health of people, and healthy ecosystems, wildlife and biodiversity. Advocate and support equitable access to natural environments within and between urban, rural and suburban areas and the benefits that they provide. Encourage connectivity between natural areas so species and natural features can flourish and evolve, even in a changing climate. Promote and enhance awareness of the environmental and health benefits associated with thriving natural environments and resources and the negative impacts of anthropogenic environmental pressures, including loss of biodiversity, fragmentation, deforestation and climate change. Encourage initiatives that connect people to the natural environment and integrate spaces for recreational, cultural, spiritual and aesthetic services. Support the employment of natural resources and environmental stewardship activities to promote wellbeing, community identity, social activity and social participation.

<sup>1</sup> Built infrastructure refers to anything constructed, including bridges, roads, and sewers.





## Food Systems

Support and plan for a sustainable, equitable, and healthy food system<sup>2</sup> that is low-carbon and resilient to the impacts of climate change. Promote local food production with an emphasis on urban and regenerative agricultural practices. Support foraging opportunities of safe and edible wild plants, medicine and food, local community gardens and systems that reduce and/or divert waste.

## Energy

Encourage transition and divestment from fossil fuels towards low carbon, clean and renewable energy sources; and ensuring that energy systems (including generation, distribution and transmission) are resilient to the impacts of climate change. Promote energy efficient and low carbon retrofits and new construction and encourages district heating and cooling initiatives when possible. Advocate for energy rebate and efficiency or affordability programs at all government levels, to ensure equitable access to clean electricity and energy.



<sup>2</sup> Food systems encompass the entire lifecycle of food including production, processing, packaging, transportation, consumption, composting and waste.





## Education and Outreach

Promote and encourage a culture of transformative climate change mitigation and adaptation actions based on scientific knowledge and traditional ways of knowing. Enhance peoples’ understanding, and awareness of climate change’s cause, current and expected impacts of climate change, ways climate change can be addressed and the associated benefits of climate-action, based on a consistent narrative. Foster collaboration and shared learning opportunities. Support the development of more climate-related curriculum in our schools. Provide consistent, hopeful and action-oriented messages and tools to support the public in taking actions to combat climate change and climate-related impacts.

## TOOLS

Charter tools represent types of activities to facilitate progress on the areas of action (pillars). The charter tools are not mutually exclusive but often work together.

Charter Tools	Details
<b>Innovative Tools</b>	<ul style="list-style-type: none"> <li>▪ Creative or new ways of acting on climate change</li> <li>▪ The use of technology</li> </ul>
<b>Policy Tools</b>	<ul style="list-style-type: none"> <li>▪ Influence policy direction</li> <li>▪ Advocate for climate policies</li> <li>▪ Integrate climate change considerations into operational planning</li> </ul>
<b>Educational Tools</b>	<ul style="list-style-type: none"> <li>▪ Education about climate change</li> <li>▪ Awareness-raising of climate change mitigation and adaptation</li> </ul>
<b>Promotional/ Collaborative Tools</b>	<ul style="list-style-type: none"> <li>▪ Community-based marketing</li> <li>▪ Recognition and awards</li> <li>▪ Funding and grant opportunities</li> <li>▪ Team work and collaborative actions</li> </ul>

## Summary

The CCE has created this Climate Change Charter to support collaboration and unite the region in a common goal of climate action so that all people and communities are resilient and adaptive to the changing climate while simultaneously promoting health, wellbeing, equity, and sustainability. The Climate Change Charter is intended to be a living document that will continue to reflect the urgency, priorities, and climate action clues across the region. The CCE and member organizations will continue to work with a broad range of partners and stakeholders to advance the Charter's Pillars. CCE members commit to taking action against the threat climate change poses on the region and its communities. Stakeholders affirm their support towards the vision, principles and activities presented in the Charter.



INSERT LOGO's

## References

1. Costello A, Abbas M, Allen A, Ball S, Bell S, Bellamy R, et al. Managing the Health Effects of Climate Change. *The Lancet*. 2009; 373(9676): 1693-733.
2. Watts N, Adger WN, Agnolucci P. Health and climate change: Policy responses to protect public health. *Environnement, Risques et Sante*. 2015; 14(6): 466-8.
3. Levison M, Whelan, Marina., Butler, Ainslie. A Changing Climate: Assessing Health Impacts and Vulnerabilities Due to Climate Change Within Simcoe Muskoka [Internet]. Barrie, Ontario: Simcoe Muskoka District Health Unit; 2017.
4. Hoegh-Guldberg O, D. Jacob, M. Taylor, M. Bindi, S. Brown, I. Camilloni, A. Diedhiou, R. Djalante, K.L. Ebi, F. Engelbrecht, J. Guiot, Y. Hijjoka, S. Mehrotra, A. Payne, S.I. Seneviratne, A. Thomas, R. Warren, and G. Zhou,. Impacts of 1.5°C Global Warming on Natural and Human Systems. 2018. In: *Global Warming of 1.5°C An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* [Internet]. Intergovernmental Panel on Climate Change, 2018; Working Group I Contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Volume I, Chapter 3, 175-311. Available from: [https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15\\_Chapter3\\_Low\\_Res.pdf](https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Chapter3_Low_Res.pdf).



**Severn Sound Environmental Association  
Joint Municipal Service Board  
2021 Second Quarterly Meeting (Q2) – July 26, 2021**

**STAFF REPORT**

**No:** 26-21-SSEA  
**Date:** July 26, 2021  
**To:** Chair and Members of the SSEA Board of Directors  
**From:** Aisha Chiandet, Water Scientist

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**SUBJECT: Severn Sound Inland Lakes Sampling Update**

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**APPLICABLE STRATEGIC PLAN GOALS:**

**Goal 1: Sound Science**  
**Goal 3: An Engaged & Informed Community**

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**RECOMMENDATION:**

**RESOLVED THAT: Staff Report No. 26-21-SSEA regarding Severn Sound Inland Lakes Sampling Update, be received for information.**

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**Purpose of Staff Report**

To update the Board on 2021 Inland Lake sampling activities on Little and Orr Lakes, and present our new template for near real-time reporting for Orr Lake on SSEA's website.

**Background**

As part of the Inland Lakes Monitoring program, Little Lake (Midland) is sampled annually, and Orr Lake (Springwater) is sampled on a 5-year rotating schedule, with the last survey being done in 2015. So far in 2021, both lakes have been sampled three times. Up to this point, reporting is done at the end of the monitoring season when all data has been received from the lab and taxonomists. This can occur quite some time after sampling actually takes place, and this lag creates a disconnect for the public and municipal staff and council, who are interested in current conditions. SSEA is trialing a new reporting template which will incorporate data collected in the field, along with photos and observations that will be summarized online 1-2 days after sampling. The goal is to move towards more of this type of reporting for other inland lakes, tributaries and Severn Sound open waters.

**Analysis/Discussion**

A new [Results](#) section was created on SSEA's website, which will house updates for the current field year. Reports on long term data analysis will still be found under the [Reports and Publications](#) section.


The new reporting template appears as follows on our website:

## ORR LAKE CONDITION UPDATE

July 7 2021

**Surface Temperature**

**24.7°C**



This is considered warm, but less than the max. recorded in 2015.

**Bottom Water Dissolved Oxygen**

**7.51 mg/L**



This is sufficient for cold and warm water fish species.



View from Orr Lake boat launch.



Wye River levels at Baseline Rd.

**Water Clarity**

**1.6 m**




**Lake Depth**

**2.0 m**

Water clarity is low and likely related to algae in the water and lake sediments getting stirred up.

**Wye River Water Level**

**40 cm**



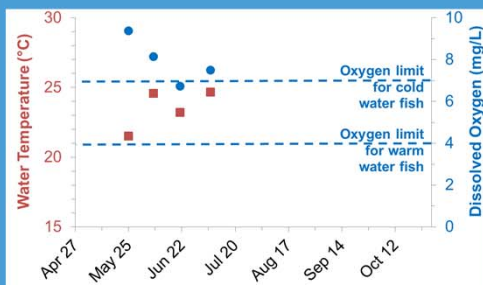
This is higher than Jun 21, and is likely related to recent rainfall.

**General Observations**

- Foam on surface (wind caused)
- Green water colour, large & small flecks of algae
- Some floating plant material, high turbidity

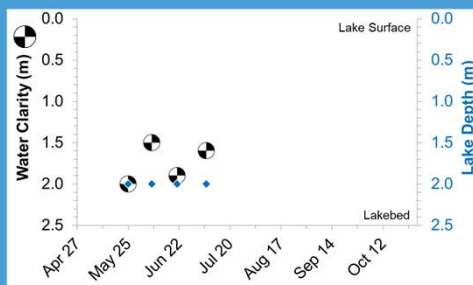
## ORR LAKE SUMMARY GRAPHS

### Surface Temperature & Bottom Water Dissolved Oxygen



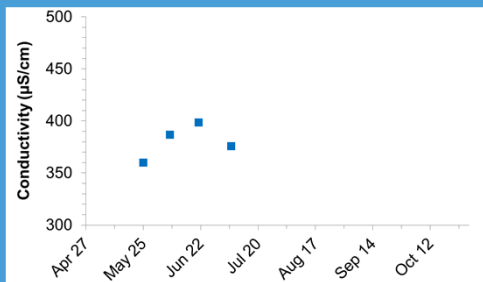
Oxygen levels have mostly remained above the requirement for coldwater fish species.

### Water Clarity & Lake Depth



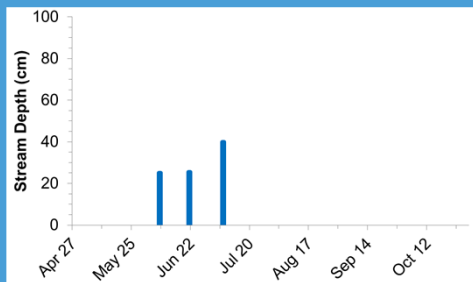
Water clarity is considered good if the lakebed is visible. This was the case only on May 25<sup>th</sup>.

### Surface Water Conductivity



Conductivity indicates the amount of dissolved material in the water. Values are considered high.

### Wye River Stream Depth (Baseline Rd.)



Wye River levels are closely linked to recent rainfall and the number logs in at the Orr Lake dam.



**Expected Impact on SSEA budget/workload**

The new reporting format will take some additional time in inputting and analyzing data during the field season, however this will save time when it comes to reporting at the end of the year. Overall, there will likely be slightly more time spent on reporting as a year-end report will still be produced. Depending on feedback received from the public and municipal staff in response to this online reporting, some staff time may be required in responding to inquiries.

**Conclusion/Recommendations**

Overall, the new reporting format is anticipated to increase knowledge of current conditions on Orr Lake, and eventually other waterbodies in the watershed, for both the public, municipal staff and elected officials. The new format will also allow for more rapid communication of concerning observations, if any occur. Increased awareness can lead to increased action on issues such as invasive species and stewardship actions to reduce nutrient inputs, which would benefit water quality.

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Prepared by:

Approved for Submission by:

*Original signed by*

*Original Signed by*

\_\_\_\_\_  
Aisha Chiandet, Water Scientist

\_\_\_\_\_  
Julie Cayley, Executive Director



**Severn Sound Environmental Association  
Joint Municipal Service Board  
2021 Second Quarterly Meeting (Q2) – July 26, 2021**

**STAFF REPORT**

**No:** 27-21-SSEA  
**Date:** July 16, 2021  
**To:** Chair and Members of the SSEA Board of Directors  
**From:** Morgan Gillies, Healthy Soils = Healthy Watersheds Program Coordinator

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**SUBJECT: SSEA Healthy Soils = Healthy Watersheds Program Update**

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**APPLICABLE STRATEGIC PLAN GOALS:**

**Goal 1: Sound Science**  
**Goal 2: Supportive Partnerships**  
**Goal 3: An Engaged & Informed Community**  
**Goal 4: An Exceptional Organization**

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**RECOMMENDATION:**

**RESOLVED THAT: Staff Report No. 27-21-SSEA regarding SSEA Healthy Soils = Healthy Watersheds Program Update be received for information.**

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**Purpose of Staff Report**

The purpose of this report is to provide an update on the activities that the Severn Sound Environmental Association Healthy Soils = Healthy Watersheds (HS=HW) Program staff have undertaken during the Second quarter of 2021.

**Background**

The objective of the Project is to promote and implement management actions that contribute to soil health in target areas of the Severn Sound watershed thereby improving overall soil health which is critical to improving water quality over the long term. Priorities include identifying and implementing Best Management Practices to improve soil health and reduce nutrient loss with Nitrogen as the primary target and Phosphorus as the secondary target.

The primary priority area for this funded phase of the project is the Nitrate Issue Contributing Area in the Township of Tiny. The priority area is limited at this point in the project due to limited funding, limited time (less than 12 months) to implement and an existing demonstrated water quality impact.

**Analysis/Discussion**

During the first quarter of 2021 SSEA HS=HW Program staff completed the following tasks:

- Drafted workplan, Goals & Deliverables to measure the success of the HS=HW program
- Drafted survey to collect data from participating farmers in order to assess the effectiveness of the program.

- 
- Drafted the HS=HW Program website - resource toolkit for local farmers
  - Met with representatives from FS Partners Elmvale to discuss the potential collaboration on the data sharing and weather stations (Elmvale and Lafontaine).
  - Hosted a [Healthy Soils in Simcoe County](#) webinar for Certified Crop Advisors and Professional Agrologists in Simcoe County, with guest speakers from Ontario Soil and Crop Improvement Association (OSCIA), LSRCA, and NVCA (approx.. 25 participants).
  - Sampled more than 200 acres (23 samples) of Corn Fields in the watershed to test for Nitrate Nitrogen. Results used to create variable rate plan for field fertilizer application.
  - Completed 4R Nutrient Stewardship Training from Fertilizer Canada
  - HS=HW Staff attended multiple meetings and webinars: the importance of cover crops, agriculture and climate change, and the importance of getting multiple perspectives from different stake holders in the watershed such as the First Nations and Metis communities.
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Prepared by:

Approved for Submission by:

*Original signed by*

*Original Signed by*

\_\_\_\_\_  
Morgan Gillies, HS=HW Program Coordinator

\_\_\_\_\_  
Julie Cayley, Executive Director



**Severn Sound Environmental Association  
Joint Municipal Service Board  
2021 Second Quarterly Meeting (Q2) – July 26, 2021**

**STAFF REPORT**

**No:** 28-21-SSEA  
**Date:** July 26, 2021  
**To:** Chair and Members of the SSEA Board of Directors  
**From:** Aisha Chiandet, Water Scientist

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**SUBJECT: Impact of Lab Load Reductions on Water Quality Monitoring**

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**APPLICABLE STRATEGIC PLAN GOALS:**

**Goal 1: Sound Science**  
**Goal 2: Supportive Partnerships**

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**RECOMMENDATION:**

**RESOLVED THAT: Staff Report No. 28-21-SSEA regarding Impact of Lab Load Reductions on SSEA Monitoring Programs, be received for information.**

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**Purpose of Staff Report**

To update the Board on changes made to sampling programs in 2021 due to reductions in lab load allocation from the Ministry of Environment Conservation and Parks (MECP) lab.

**Background**

SSEA sends samples for the Severn Sound Open Water, Tay Drinking Water Intakes, Inland Lakes, and Tributary Monitoring Programs to the MECP labs in Rexdale and Dorset. This lab support is crucial to the success of our monitoring programs. The SSEA was asked by MECP's Lab Services Branch to review SSEA's Water Quality Monitoring Program Study Design and Rationale, and the 2021-22 field year lab workload request (submitted Feb 4 2021 and Jan 29 2021, respectively) submitted to MECP to look for modifications that could be made to the programs to reduce lab load, while maintaining program integrity and ensuring program goals are still being met. After internal discussion among SSEA staff members and consultation with MECP scientists and lab staff, a revised sample request was submitted that reduced sample numbers by 28-46% for certain parameters. SSEA proposed that the changes be applied to the 2021/22 field year, after which time the impact of lab cut-backs on program deliverables should be evaluated.

**Analysis/Discussion**

The following table gives a summary of the changes made, rationale, and impacts to SSEA's monitoring programs that are affected. Note that the initial spring sampling run was postponed for Inland Lakes and Severn Sound Open Water due to COVID19, so this reduced the number of runs for each site by one.

Change	Inland Lakes (Orr & Little Lakes)	Open Water/Drinking Water Intakes	Tributaries (only applicable to 2 supplementary sites, not PWQMN sites)
Change in sample location or frequency	-dropped 3 tributary stations flowing into Orr L (W12, W20 and W21) -no change in frequency (biweekly)	-no change for 5 long term sites plus sites off Snake Island, in South Bay and Tay drinking water intakes -remaining stations to be sampled monthly instead of biweekly	-no change in location or frequency (~8x per year)
Change in parameter list requested	-dropped 2 parameters not being used (chlorophyll a [chla] and b [chlb])	-dropped 2 parameters not being used (chlorophyll a and b) -added metals for some sites	-better aligned parameter list with PWQMN program (dropped dissolved organic carbon/silica [DOC/Si], added metals)
Rationale for changes	W12, W20 and W21 are smaller tributaries with relatively lower discharge into Orr Lake that do not flow near major potential sources of nutrients. These stations can be dropped with relatively small impacts. Only total chlorophyll a is used to assess water quality conditions, so chla and chlb can be dropped.	Long term stations and those in more sensitive parts of Severn Sound should continue on a biweekly monitoring frequency. Additional stations can be done monthly. Continuing to sample a subset of stations on a biweekly basis will allow identification of seasonal patterns, which can be extrapolated to stations being monitored monthly. Only total chla is used to assess water quality conditions, so chla and chlb can be dropped. The addition of metals at sites prone to bottom water oxygen depletion and algae blooms will allow for assessment of conditions related to algae growth and potential exceedances of Provincial Water Quality Objectives.	Analysis of DOC/Si is not provided for PWQMN samples, so there is no benefit to having those results for the two supplementary tributary sites. The PWQMN program does provide results for metals, so it is recommended that these be added for comparison purposes.
Implications of changes	No water quality information would be collected on three of the five inflowing tributaries to Orr Lake aside from field measurements. This may result in sources of nutrients to the lake being missed.	Monthly sampling means that less information will be available to describe seasonal variability for open water stations. This would lead to less seasonal variability captured in annual statistics for each station. Since sampling has been conducted biweekly since monitoring began, annual statistics may be less comparable to historical values for those sites sampled monthly. This may have implications for comparisons to Remedial Action Plan targets for trophic status indicators.	The loss of DOC/Si is not expected to have any major implications in the ability to assess water quality at these sites. The addition of metals would be of benefit by allowing for comparison with other PWQMN sites. This could be done on a biennial basis as metals would not be expected to change dramatically from year to year.

**Expected Impact on SSEA budget/workload**

There will be minimal to no impact. SSEA also has a new arrangement with the Dorset lab whereby samples are being dropped off with a lab staff person who lives locally. This will significantly reduce shipping costs.

**Conclusion/Recommendations**

Overall, the changes are not expected to have a detrimental effect on SSEA’s ability to monitor and report on water quality status and trends. The main exception may be for open water



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locations that are now being sampled monthly. The impact of this change will be assessed once data is received from the lab.

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Prepared by:

Approved for Submission by:

*Original signed by*

*Original Signed by*

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Aisha Chiandet, Water Scientist

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Julie Cayley, Executive Director



**Severn Sound Environmental Association  
Joint Municipal Service Board  
2021 Second Quarterly Meeting (Q2) – July 26, 2021**

**STAFF REPORT**

**No:** 29-21-SSEA  
**Date:** July 26, 2021  
**To:** Chair and Members of the SSEA Board of Directors  
**From:** Aisha Chiandet, Water Scientist; Emily Edgley, Environmental Field Tech & Citizen Science Program Assistant

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**SUBJECT: SSEA Citizen Science Program Update**

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**APPLICABLE STRATEGIC PLAN GOALS:**

**Goal 1: Sound Science**  
**Goal 2: Supportive Partnerships**  
**Goal 3: An Engaged & Informed Community**

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**RESOLVED THAT: Staff Report No. 29-21-SSEA regarding an update on SSEA citizen science programs be received for information.**

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**Purpose of Staff Report**

To update the Board on SSEA's Citizen Science programs in 2021, and provide a link to the data report for the 2020 monitoring season.

**Background**

With support from three grants totaling \$16,500 (TD Friends of Environment Foundation, Lake Huron Georgian Bay Community Action Initiative, and the Invasive Species Center), SSEA is expanding our *Shore Watch* and *Stream Watch* citizen science programs and implementing a new program focusing on invasive species called *Invasive Species Spotters*. These programs are in addition to the *Ice Spotters* and *Water Level Watch* programs, the latter which currently only operates on Farlain Lake

**Shore Watch**

- Lake-focused, can be done from shore, dock or boat along the shores of the Severn Sound and inland lakes
- Measurements include air and water temperature, weather and wave conditions, water clarity and conductivity, observations of algae, water level impacts, plastic pollution, wildlife, invasive species, species at risk and human disturbances

**Stream Watch**

- Stream-focused, can be done from streambank or bridge across the Severn Sound watershed area

- 
- Measurements include air and water temperature, weather and flow conditions, water clarity and conductivity, observations of algae, water level impacts, plastic pollution, wildlife, invasive species, species at risk and human disturbances

### **Invasive Species Spotters**

- New program in 2021, focusing on targeted invasive species (IS) as well as general sightings within the watershed.
- Identify and monitor terrestrial (land) and aquatic (water) invasive species
- Target Species #1: Ldd (Gypsy) Moth monitoring
  - Monitor life cycle of the Ldd Moth
  - Report: date of caterpillar emergence, tree defoliation, caterpillar mortality, and re-foiliation of trees.
  - Observations will allow for better documentation of IS across the watershed.
- Reporting Aquatic Invasive Species (AIS)
  - Can be done from shore, dock or boat
  - Complete rake tosses and sift through sample looking specifically for:
  - Target Species #2: Starry Stonewort (*Nitellopsis obtusa*)
    - Report presence/absence from June to October
  - Invasive aquatic plants, fish and invertebrates

The objectives of all of these citizen science programs include:

- increasing community engagement and knowledge of local environmental issues
- increasing SSEA's capacity to observe environmental conditions across the watershed
- tracking relationships between nearshore algae growth and environmental factors such as wind direction and temperature
- collecting sightings of invasive species and species at risk
- identifying areas in need of beach clean-ups or habitat restoration
- tracking indicators of climate change, such as water temperature and wind speed
- determining thermal stability of streams, which provides rationale for protection of cool and cold water fish habitats

The SSEA provides training which, during COVID, has be done virtually. All citizen science programs are being operated using guidance from the Simcoe Muskoka District Health Unit and the Province to reduce the spread of COVID-19. Protocols include reminding participants to physically distance, sanitize their hands regularly, and avoid contact with those outside their household. SSEA protocols include arranging contactless pick-up /drop-off of monitoring kits, and encouraging submission of information electronically where possible.

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### **Analysis/Discussion**

For the 2021 citizen science season there are 51 volunteers participating across the 3 different programs. Participant breakdown per program is as follows:

<b>Program</b>	<b># Volunteers</b>	<b># Sites</b>
Shore Watch	22	21
Stream Watch	13	13
Invasive Species Spotters (Starry Stonewort+Ldd Moth)	29 total (16+18)	29 total (11+18)
Total	43	54

Note that there is some overlap in volunteers and sites between various programs, with some volunteers participating in multiple programs, or using the same site for multiple programs. Also, some sites are being monitored by more than one person (families). Combined participation in *Shore and Stream Watch* was 23 volunteers in 2020, and is 33 volunteers in 2021, representing a **43% increase** in participation.

In total in 2021, 14 volunteers attended between the two virtual training sessions. SSEA held two virtual training sessions for volunteers in May 2021. The [Stream/Shore Watch](#) and [Invasive Species Spotters](#) sessions were recorded and uploaded to SSEA's YouTube channel.

In 2021, SSEA distributed 26 citizen science kits to volunteers. Volunteers have been assigned an individual observer ID that is attached to a Google folder where they will find their site-specific datasheets. Volunteers can input their data as well as upload photos, and using an observer ID allows them to do so without sharing any personal information. This will simplify the data collection process at the end of the season and allows us to view data as it comes in, and act on any issues of concern in a timelier manner.

The water level gauge on Farlain Lake has been installed for the season, although observations have not yet been reported. This might be because water levels have come down and residents aren't as concerned. SSEA may need to work with the Farlain Lake Community Association and Township of Tiny to find an alternative method of gathering data, such as a webcam.

Board members are welcome to participate in any of our programs, and are encouraged to spread the word about the program to their networks within the watershed. Interested participants can contact Aisha Chiandet by email at [achiandet@severnsound.ca](mailto:achiandet@severnsound.ca) or Emily Edgley by email at [citizenscience@severnsound.ca](mailto:citizenscience@severnsound.ca). Additional program information can be found at <http://bit.ly/sseacit-sci>. The [data report](#) from the 2020 monitoring season is available online, and provides a summary page for each water body and tributary subwatershed monitored.

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Prepared by:  
*Original signed by*

Aisha Chiandet, Water Scientist;  
Emily Edgley, Environmental Field Tech &  
Citizen Science Program Assistant

Approved for Submission by:  
*Original Signed by*

Julie Cayley, Executive Director



**Severn Sound Environmental Association  
Joint Municipal Service Board  
2021 Second Quarterly Meeting (Q2) – July 26, 2021**

**STAFF REPORT**

**No:** 30-21-SSEA  
**Date:** July 26, 2021  
**To:** Chair and Members of the SSEA Board of Directors  
**From:** Aisha Chiandet, Water Scientist

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**SUBJECT: Review of 2021 Canada Ontario Great Lakes Agreement**

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**APPLICABLE STRATEGIC PLAN GOALS:**

**Goal 1: Sound Science**  
**Goal 2: Supportive Partnerships**  
**Goal 3: An Engaged & Informed Community**

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**RECOMMENDATION:**

**RESOLVED THAT: Staff Report No. 30-21-SSEA regarding a Review of 2021 Canada Ontario Great Lakes Agreement, be received for information.**

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**Purpose of Staff Report**

To provide the Board information on the updated 2021 Canada Ontario Great Lakes Agreement (COA), summarize implications for SSEA and identify gaps in the new COA.

**Background**

COA is an agreement between the Provincial and Federal governments that outlines specific priorities and target results that both governments commit to with the goal of advancing action on key challenges facing the Great Lakes. The agreement includes guiding principles, priority areas, and 13 Annexes (areas of focus) that outline how both governments respond to existing or emerging priorities over the five-year span of the agreement. Priorities include: Protecting waters, Improving coastal areas, Protecting habitat and species, Enhancing understanding and adaptation, and Engaging communities – from awareness to action. Each Annex identifies results to achieve and commitments for Canada and Ontario.

In 2019, the Provincial and Federal governments undertook a renegotiation of the previous COA, seeking input from stakeholders around the Great Lakes, and SSEA submitted comments through this process. A [summary of the 2021 COA](#) is available along with the [full COA document](#).

**Analysis/Discussion**

The following are elements from the 2021 updated COA that have particular relevance for SSEA. In the list below, the terms “commitment” and “support” come from the agreement and indicate that one or both levels of government will deliver results on a particular action. In some cases, a commitment or support refers to one or both levels of governments making investments (noted



where applicable) or committing to undertake work on a given topic; however in other cases, the specifics of commitments/support are unspecified.

#### Annex 1: Nutrients

- Recognition that there has been a resurgence of algae blooms in all the Great Lakes, and that stressors like invasive species, agricultural production system changes, increased urbanization and climate change can all contribute to nuisance algae growth.
- Complementary initiatives to reduce harmful and nuisance algae blooms and hypoxia in the Great Lakes include: federal and provincial investments made in nutrient related research and monitoring; green infrastructure, wastewater technologies and facilities upgrades addressed in the Wastewater and Stormwater Annex; and improvements in urban and rural land use and land management practices.
- Specific commitments to enhance the scientific understanding of nutrient dynamics, develop phosphorus targets and action plans, and increase the efficiency of agricultural nutrient use consistent with a healthy Great Lakes ecosystem and economy
- Commitment to **funding** for agri-food sector to increase adoption of environmental farm planning and beneficial management practices

#### Annex 2: Harmful Pollutants

- Support for plastic pollution capture and clean-up projects, advancing research, surveillance and monitoring on plastic and microplastic pollution, and enhancing awareness and education

#### Annex 3: Wastewater/Stormwater (new Annex)

- Specific commitments relating to: reducing excess nutrient and contaminant loadings from stormwater and wastewater collection and treatment systems; conducting research and monitoring that advance understanding of contaminant concentrations; promoting best management practices in road salt application, certification and alternatives
- Investment in **funding** for green infrastructure (e.g., *Investing in Canada Infrastructure Program* and *Ontario Community Infrastructure Fund*), and wastewater treatment upgrades that support the reduction of contaminants from point and non-point sources
- Work with municipalities to reduce nutrient loads through improvements to stormwater management systems and supporting the use of green infrastructure

#### Annex 4: Discharge from Vessels

- Commitment to limit and control vessel (both cargo and cruise ships) discharges that are harmful to water quality including a focus on preventing release of invasive species.

#### Annex 5: Areas of Concern

- [SSEA comment] No mention of support for delisted AOCs like SSEA. SSEA urged both governments to re-establish the COA funding required to ensure beneficial uses remain unimpaired.

#### Annex 6: Lakewide Management

- Specific commitments related to: using science-based ecosystem indicators to assess and report on the status of each of the Great Lakes and addressing lakewide issues through

Lakewide Action and Management Plans; completing an assessment of the Canadian Great Lakes nearshore waters; engaging the Great Lakes community in decision making and acting on lake-specific issues; identifying and assessing potential risks to the Great Lakes as a safe drinking water source

#### Annex 7: Aquatic Invasive Species (AIS)

- Focus on working with other jurisdictions when managing invasive species
- Support for research into the effect of climate change on the distribution and introduction of new AIS
- Public education and awareness on invasive species prevention and impacts

#### Annex 8: Habitat and Species

- High priority on protection of species at risk, native species, and their habitat
- Recognition of the importance of wetlands for providing habitat for fish, birds and other wildlife, and their role in hydrology, water quality and quantity, phosphorus reduction capabilities, and carbon sequestration
- Focus on assessment of coastal wetlands and their vulnerabilities to climate change

#### Annex 9: Groundwater Quality

- Support research on groundwater-surface water interactions and how this can impact the water quality and ecosystem health of the Great Lakes

#### Annex 10: Climate Change Impacts and Resilience

- Specific commitments that will: improve our understanding of climate change impacts on Great Lakes water quality and ecosystem health; assess existing and future climate change vulnerabilities and risks; advance the integration of climate change considerations into Great Lakes management strategies; share climate change information with the Great Lakes community; help communities build resilience and adapt to climate change
- Commitment to improving understanding of climate change impacts by **investing** in regional scale climate change projections
- Maintain Provincial networks for monitoring stream water quality and groundwater quantity and quality

#### Annex 11: From Awareness to Action

- Encourage and support community projects and initiatives to help restore, protect and conserve the Great Lakes through the delivery of the **Great Lakes Protection Initiative** and the **EcoAction Community Fund**
- [SSEA comment] Funding that is provided through COA at a watershed scale is critical to ensure that progress made in improving water quality and habitat in the Great Lakes is maintained. Past COA funding has supported water quality, ecosystem and habitat monitoring in Severn Sound, and public engagement through Citizen Science programs.

#### Annex 12: Métis and the Great Lakes & Annex 13: First Nations and the Great Lakes

- Support for engagement with First Nations and Métis in taking action, decision-making processes, considering traditional ecological knowledge, when offered, to restore, protect and conserve Great Lakes water quality and ecosystem health.

**Outstanding issues or gaps identified by SSEA in the 2021 COA include:**

- Continued emphasis on Lake Erie and Lake Ontario to the exclusion of hot spots in other lakes; there is a need to prevent algae blooms as much as mitigate them
- Need to support delisted AOCs to prevent recurrence of conditions that led to listing
- Recognition that ongoing monitoring like that done in Severn Sound by SSEA provides valuable input into Lakewide Action and Management Plans and requires support
- Commitment was given to maintain but not expand existing streamflow monitoring through the Ontario Hydrometric Network – several monitoring gauges in the Severn Sound watershed have been removed and these sites should be re-established
- Support for the protection, restoration, enhancement and valuation of Ontario’s natural capital as part of a resilience to climate change approach
- Additional policies to protect natural features, as well as committing funding and support to stewardship projects that contribute to climate change mitigation and adaptation
- Enhancement of the use of municipal planning tools (official plan and zoning by-law) to adapt to and mitigate the potential increased flood risks
- Funding support for collaborative actions that reflect understanding of both traditional ecological knowledge and western science knowledge

**Expected Impact on SSEA budget**

The agreement acts as a roadmap for funding priorities for both governments. After delisting, and up until the 2017-18 fiscal year, SSEA continued to receive support from COA that ensured monitoring, water quality improvement and habitat projects could be implemented. These funds have been critical in enabling SSEA to continue the work that was outlined in the Stage 3 RAP delisting document. SSEA has not received any direct funding for these activities from the Provincial government since 2017. While there was no specific mention of support for delisted AOCs in the 2021 COA, numerous commitments in the agreement address areas SSEA is actively working on, and linkages can be made in future funding applications.

**Conclusion/Recommendations**

COA, and the commitments it includes, is critical to the conservation, protection and restoration of the Great Lakes basin ecosystem and to funding the associated actions. The 2021 COA contains numerous commitments that align with the work SSEA is doing on water quality monitoring, habitat and invasive species and climate change. Making linkages between SSEA’s strategic priorities and those in COA will be critical in securing funding from Canada and Ontario to move forward with actions that improve conditions in Severn Sound and its watershed.

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Prepared by:

Approved for Submission by:

*Original signed by*

*Original Signed by*

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Aisha Chiandet, Water Scientist

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Julie Cayley, Executive Director



**Severn Sound Environmental Association  
Joint Municipal Service Board  
2021 Second Quarterly Meeting (Q2) – July 26, 2021**

**STAFF REPORT**

No: 31-21-SSEA  
Date: July 26, 2021  
To: Chair and Members of the SSEA Board of Directors  
From: Tamara Brincat, Invasive Species Program Coordinator  
Michelle Hudolin, Wetlands & Habitat Biologist

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**SUBJECT: SSEA Invasive Species Program Update**

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**APPLICABLE STRATEGIC PLAN GOALS:**

**Goal 1: Sound Science**  
**Goal 2: Supportive Partnerships**  
**Goal 3: An Engaged & Informed Community**  
**Goal 4: An Exceptional Organization**

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**RESOLVED THAT: Staff Report No. 31-21-SSEA, regarding SSEA Invasive Species Program Update, be received for information.**

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**Purpose of Staff Report**

The purpose of this report is to provide an update on the key activities and accomplishments of the SSEA Invasive Species Program during the second quarter of 2021.

**Background**

The Invasive Species Program is a core program of the SSEA. The SSEA is working to address public and municipal concerns regarding non-native invasive species establishment within the Severn Sound watershed, and to reduce the ecological, economic and social impacts of invasive species, while fostering regional partnerships and community relations.

**Updates**

The SSEA was fortunate to receive support through the federal *Canada Summer Jobs* program; in the second quarter, two youth were hired on eight-week contracts to support the SSEA Invasive Species Program, increasing capacity for monitoring and communications.

**Monitoring & Technical Support**

- The SSEA led Invasive Species Working Group (ISWG) meeting in April had 23 attendees. The ISWG supports partner municipalities, and meetings are hosted on a bi-annual basis to provide an opportunity to share updates, information and resources on current invasive species initiatives. In addition to representatives from partner municipalities, SSEA invites other partner agencies to participate in meetings where appropriate (e.g., Georgian Bay Islands National Park). At the April meeting, the Invasive Species Centre presented on the economic impacts of invasive species to municipalities.

- A total of 30 municipally-owned sites were monitored and inventoried for invasive species, including municipal parks, trails, and public boat launches. Additional sites will be monitored for invasive species in the third quarter. Data and results of monitoring are still being processed.
- In 2020, the SSEA detected invasive mussel larvae in Little Lake (Midland) but no adult mussels have been detected to date. The SSEA worked with the Town of Midland to install 9 artificial substrates in Little Lake to detect for the presence of adult invasive mussels. Significant public communications were involved including social media posts and the production of a [factsheet](#), [press release](#) and [public notice](#).
- The SSEA invasive species team helped the Township of Severn identify Giant Hogweed along the Uthhoff Trail to target management. To help municipal staff and the public identify and report Giant Hogweed, SSEA produced a video on [How to Identify Giant Hogweed](#).
- The SSEA provided invasive species training to three municipal parks staff in the Township of Tiny to enable them to independently identify and report invasive species during their monitoring season.
- The SSEA facilitated municipal applications to the Invasive Species Centre for a funding opportunity that would support implementing Boot Brush Stations at trail heads to help prevent the spread of invasive species. Successful applicants have not yet been announced by the Invasive Species Centre.
- The SSEA submitted comments on two provincial proposals: Regulating 13 invasive species and watercraft as a carrier of invasive species under Ontario's Invasive Species Act, 2015; and Ontario's Strategy to Address the Threat of Invasive Wild Pigs.

#### Education & Outreach

- Through the Invasive Species Spotters Citizen Science Program, SSEA has recruited 11 volunteers to detect and identify aquatic invasive species in the inland lakes and open waters of Severn Sound. A [training webinar](#) was provided to volunteers along with a [training video](#) on how to do a rake toss. Detection kits were prepared and delivered to volunteers.
- Invasive Species Spotters submitted reports of their observations of Ldd Moth (formerly referred to as European Gypsy Moth). A virtual group check-in was held to answer questions and share observations, which was well received by participants.
- Invasive Species staff responded to a total of 59 new invasive species inquiries, across all eight partner municipalities, providing technical support to municipal staff and the public. In addition to these inquiries, there were a number of follow-ups to previous inquirers as well as responses to volunteers participating in the Invasive Species Spotters program. Many inquiries were related to management of Ldd Moth, but identification and management recommendations were also provided for other invasive/non-native species.
- The SSEA co-hosted the *Invasive Species 101* webinar with Southern Georgian Bay Chamber of Commerce. The invasive species team prepared content and presented to an audience on common invasive species in Severn Sound and their impact, to increase public awareness.
- The Invasive Species Program Coordinator participated and presented at the Canadian Starry Stonewort Partner meeting and the provincial Municipal Community of Practice meeting. These meetings are province-wide initiatives where the SSEA represents our



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partner municipalities and connects with other agencies and/or municipalities on invasive species topics and emerging issues.

- Assisted the Town of Midland in the development of the *Engaging Midland [Invasive Species Program page](#)* by providing content.

#### Funding & Donations

- Funding support for the Invasive Species Spotters program was provided by Bin City, JNS Blundell Roofing and Elmvale Building Centre to purchase equipment for use by volunteers to monitor invasive species.
- Two Invasive Species Management Technicians (contract seasonal staff) started in May to support the delivery of the Invasive Species Program, supported by a wage subsidy from the *Canada Summer Jobs* program. One position was directly funded to SSEA, and the second position is a partnership with the Ontario Federation of Anglers and Hunters (OFAH).

#### Special Projects

- The 2021-2022 Farlain Lake Eurasian-Water Milfoil (EWM) Management Project funding agreement was finalized – SSEA will provide technical advice and assistance to Farlain Lake Community Association with their planning and management of EWM.
- As part of the 2020-2024 funding agreement with Friends of Wye Marsh, the Wye Marsh Phragmites Management Project budget and work plan for 2021 were finalized.

#### **Conclusion**

The SSEA Invasive Species Program has successfully fostered relationships with municipalities, partner organizations and associations. Significant activities and tasks, including public and municipal outreach and education, were accomplished in the second quarter of 2021 benefitting the SSEA partner municipalities and residents.

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Prepared by:

Approved for Submission by:

*Original signed by*

*Original signed by*

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Tamara Brincat, Invasive Species Program Coordinator  
Michelle Hudolin, Wetlands & Habitat Biologist

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Julie Cayley, Executive Director



**Severn Sound Environmental Association  
Joint Municipal Service Board  
2021 Second Quarterly Meeting (Q2) – July 26, 2021**

**STAFF REPORT**

**No:** 32-21-SSEA  
**Date:** July 26, 2021  
**To:** Chair and Members of the SSEA Board of Directors  
**From:** Aisha Chiandet, Water Scientist; Michelle Hudolin, Wetlands & Habitat Biologist

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**SUBJECT: SSEA Grant Application Update**

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**APPLICABLE STRATEGIC PLAN GOALS:**

- Goal 1: Sound Science**
  - Goal 2: Supportive Partnerships**
  - Goal 3: An Engaged & Informed Community**
  - Goal 4: An Exceptional Organization**
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**RECOMMENDATION:**

**RESOLVED THAT: Staff Report No. 32-21-SSEA regarding SSEA grant application update, be received for information.**

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**Purpose of Staff Report**

To update the Board on funding applications that have been submitted or approved during the second quarter of 2021 and will impact budget and workload in 2021 and 2022.

**Background**

The following lists funding that has been approved, funding applications that are pending approval, partnership agreements that have been approved in principal, and those that have been signed during the second quarter of 2021.

**Approved Funding:**

- 1) Lake Huron-Georgian Bay Watershed Canadian Initiative for Community Action:**  
**Project Title:** *Citizen Science Shore Watch and Severn Sound Lower Food Web Conditions*  
**Programs Supported:** Shore Watch and Severn Sound Open Water and Inland Lakes Monitoring  
**Approved For:** \$7,500 for one year  
**Description:** Continue to develop and deliver Shore Watch program, and support monitoring of the lower food web of Severn Sound (algae and zooplankton).  
**Impact:** Increase SSEA resources (monitoring equipment, staff time and sample analysis cost) and recruit volunteers to gather data at lake sites across the watershed.
  
- 2) Huronia Community Foundation – Smart and Caring Grant:**  
**Programs Supported:** Severn Sound Stream Temperature Monitoring  
**Approved For:** \$1,500 for one year

**Description:** Monitor stream temperature in priority areas around Orr Lake and the headwaters of the Coldwater River to assess thermal classification in terms of fish habitat and trends in temperature.

**Impact:** Increase SSEA resources (monitoring equipment) to monitor stream temperature in priority areas.

**3) Orillia Community Development Corporation - Pathways to Employment:**

**Approved For:** \$12,740 for 2021

**Description:** Wage subsidy to hire local youth for Environmental Internship.

**Impact:** Increase staff resources, and provides youth with the opportunity to gain and develop valuable skills and experience.

*Funding Pending Approval – not applicable for this quarter*

Support Letters Provided

**4) Federal Climate Action and Awareness Fund:**

*Greenhouse Carbon Balance across an Ecosystem Management Gradient in South-Central Ontario*

**Project Lead:** Lakehead University

**Total Applied For:** \$989,520 over five years [pending approval]

**Description:** This project will help determine whether restored ecosystems are net sources of greenhouse gases or sinks of atmospheric carbon in a region that will include the Severn Sound watershed.

**Impact:** Research results and gain a better understanding of factors that influence the net balance of carbon from restoration projects will help to guide the design of future projects, and provide rationale for expanding restoration efforts.

**SSEA commitment:** SSEA to provide in-kind staff support up to approx. \$6,000 total over 5 years. Activities include assisting with study site selection, knowledge mobilization through outreach to municipal contacts and participation in stakeholder workshops.

*Partnership Agreements, Approved in Principal – not applicable for this quarter*

Partnership Agreements, Signed

**5) Georgian Bay Forever (GBF)**

*Matchedash Bay Turtle Study*

**SSEA Approved For:** \$34,200 over two years (2021-2022). A portion of the funding is through Eastern Georgian Bay Initiative on behalf of the Ganawenim Meshkiki.

2021 funding amount: \$17,100

Anticipated 2022 funding amount: \$17,100

**Description:** Collaborative project, including turtle monitoring (SSEA responsibility) and invasive phragmites removal (GBF responsibility) within Matchedash Bay area.

**Impacts:** Increase funding for staff resources, contribute to Severn Sound species at risk conservation and improve management of invasive species.

**SSEA commitment:** Expert turtle monitoring; in-kind support for phragmites management.

**6) Friends of Wye Marsh (FOWM)**

*Invasive Species Management - Phragmites*

**SSEA Approved For:** estimated \$96,230 over five years (2020-2024). Funding is through Eastern Georgian Bay Initiative on behalf of the Ganawenim Meshkiki.

2021 funding amount: \$17,280

Estimated 2022 funding amount: \$27,675

Estimated 2023 funding amount: \$27,675

Estimated 2024 funding amount: \$15,000

**Description:** Collaborative project to map, monitor and manage invasive Phragmites within the Wye Marsh Provincial Wildlife Area.

**Impacts:** Increase funding for and increased staff resources, contribute to management of invasive species.

**SSEA commitment:** Interpret drone footage to map Phragmites from remotely-sensed data; assist FOWM with field surveys to map and monitor Phragmites; prepare Phragmites management plan.

**7) Farlain Lake Community Association (FLCA)**

*Farlain Lake Eurasian Water-milfoil Project*

**SSEA Approved For:** \$18,142 over two years (2021-2022). Funding is through Ontario Trillium Foundation.

2021 funding amount: \$7,496

Anticipated 2022 funding amount: \$10,646

**Description:** Collaborative project to map, monitor and manage invasive Eurasian Water-milfoil within Farlain Lake, Township of Tiny

**Impacts:** Increase staff resources, contribute to management of invasive species.

**SSEA commitment:** Assist FLCA with planning, education/outreach, monitoring and evaluation of invasive Eurasian water-milfoil project.

**8) Ontario Federation of Anglers and Hunters (OFAH)**

*Invasive Species Hit Squad*

**SSEA Approved For:** Not applicable - OFAH receives funding directly through federal Canada Summer Jobs program. In-kind amount from OFAH is approximately \$4,566.

**Description:** Partnership initiative – OFAH received 2021 wage subsidy to hire youth for seasonal positions at various locations across the province. OFAH partners with groups to place youth with organizations undertaking Invasive Species education, outreach, monitoring and management; SSEA was approved for one eight-week placement.

**Impact:** Increase staff resources for the SSEA Invasive Species program at no cost to SSEA, provides youth with the opportunity to gain and develop valuable skills and experience.

**SSEA commitment:** SSEA provides youth placement experience, including daily supervision, directing tasks and mentoring; OFAH is the youth's employer and is responsible for payroll, Human Resources management and liability insurance/WSIB for the youth.

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**Analysis/Discussion**

SSEA works to secure external funding both independently and in partnership with numerous organizations, in order to support special projects and core operations that support the Strategic Plan. Note that some of the grants and partnerships are for more than one year. The current total funding amounts for the next four years (projected for all four quarters) are as follows:

- 2021 – \$142,499 (plus estimated in-kind value from OFAH of \$4,566)
- 2022 – approximately\* \$65,914
- 2023 – approximately\* \$27,675
- 2024 – approximately\* \$15,000

\*Note: amounts for some projects for 2022 onward may change, and have to be confirmed each year

**Expected Impact on SSEA budget/workload**

SSEA grant applications included budgeted amounts for staff resources, which may include funds to support existing positions and/or new hires depending on the project, and other costs such as equipment, mileage/vehicle expenses, materials and supplies, and goods and services that would support the projects, if approved. Where permitted by the fund, project budgets also included an amount to support SSEA overhead expenses. The expectation is that approved grant applications would offset existing staff and equipment resources and expand deliverables.

For partner agreements that would involve considerable contributions from SSEA, the applications included budgeted amounts to support existing staff positions, and an amount to support SSEA overhead expenses, where permitted by the fund.

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Prepared by:

*Original signed by*

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Aisha Chiandet, Water Scientist  
Michelle Hudolin, Wetlands & Habitat Biologist

Approved for Submission by:

*Original Signed by*

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Julie Cayley, Executive Director





**Severn Sound Environmental Association  
Joint Municipal Service Board  
2021 Second Quarterly Meeting (Q2) – July 26, 2021**

**STAFF REPORT**

**No:** 33-21-SSEA  
**Date:** July 26, 2021  
**To:** Chair and Members of the SSEA Board of Directors  
**From:** Michelle Hudolin, Wetlands & Habitat Biologist  
Tracy Roxborough, Sustainability & Climate Action Coordinator  
Aisha Chiandet, Water Scientist

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**SUBJECT: County of Simcoe Municipal Comprehensive Review**

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**APPLICABLE STRATEGIC PLAN GOALS:**

**Goal 1: Sound Science**  
**Goal 2: Supportive Partnerships**  
**Goal 3: An Engaged & Informed Community**

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**RECOMMENDATION:**

**RESOLVED THAT: Staff Report No. 33-21-SSEA regarding the County of Simcoe Municipal Comprehensive Review, be received for information.**

**FURTHER THAT: The staff be authorized to continue to engage with the County of Simcoe on the Municipal Comprehensive Review and explore options for SSEA to cover costs associated with participating.**

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**Purpose of Staff Report**

The purpose of this report is to provide background information on the County of Simcoe Municipal Comprehensive Review and implications for the SSEA.

**Background**

The County of Simcoe, has undertaken a Municipal Comprehensive Review (MCR) in accordance with the Provincial Growth Plan, *A Place to Grow: Growth Plan for the Greater Golden Horseshoe* (hereafter referred to as the Growth Plan). The MCR is being used to bring the County Official Plan (OP) into conformity with the Growth Plan, and applies to the local municipalities in the County of Simcoe, and therefore affects seven of the SSEA municipalities: Tiny, Penetanguishene, Midland, Tay, Severn, Oro-Medonte and Springwater. The Township of Georgian Bay is in the District of Muskoka and not subject to the County of Simcoe MCR.

The MCR has a number of components, some of which are of interest to the SSEA and have links SSEA work including: climate change, watershed management, and refinements to the provincial natural heritage system. The County indicated early in 2021 that they would be

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engaging the SSEA, as well as the applicable Conservation Authorities (CAs) and other stakeholders throughout the project. The MCR is a significant undertaking, and the County has engaged the services of several consultants to assist. More information available at: <https://www.simcoe.ca/mcr>.

### **Analysis/Discussion**

Engagement from the County and their consultants to date has been limited to initial communications and an introductory meeting with SSEA and the CAs. The County/consultants have also been in touch with SSEA municipalities, and in many cases, have asked for the same information as what is being requested from SSEA. The SSEA is working with relevant lower-tier municipal staff members (e.g., planning staff) to participate where appropriate, and to work together to facilitate and coordinate a response and minimize duplication of efforts for our partners and enhance the process where we can.

### ***Climate Change Strategy***

One component of the MCR is development of a Climate Change Strategy to support an update to the County OP by providing climate change policies to guide development and planning.

The SSEA has provided input related to the work by our partner municipalities on their *Partners for Climate Protection* program commitments, council-adopted climate plans, greenhouse gas (GHG) emissions inventories and GHG reduction targets, to ensure they are considered in the climate change strategy.

### ***Refinement of Provincial Natural Heritage System Mapping***

Prior to the County incorporating the provincial Natural Heritage System (NHS) mapping into the County OP, certain refinements (to address errors) of this mapping are permitted. The provincial NHS mapping does not apply to lands within settlement areas, thus in Severn Sound it does not apply to the Towns of Midland or Penetanguishene.

The consultants leading the technical study contacted the SSEA to request natural feature datasets. The consultants provided only three business days turn around for the request. The SSEA has conducted natural heritage evaluations for Tiny, Midland, Penetanguishene and portions of Tay in recent years. The SSEA confirmed that the Township of Tiny natural heritage information had already been provided; the studies for Midland and Penetanguishene are not relevant for this component of the MCR since the NHS does not apply in those municipalities. The SSEA anticipates future involvement in this aspect of the MCR project and has requested more than 3 days turn around.

### ***Watershed Plan***

An additional component of the MCR is Watershed Planning that is to be used to inform growth planning. It is to include development of a Water Resource System and also integrate the Natural Heritage System mapping, and develop policy.

It is the SSEA's understanding that the Watershed Planning component will include characterization of existing conditions, collecting available datasets and reports, and identification of gaps. The consultants contacted SSEA in late June to request available data and

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reports related to monitoring, watershed boundaries, Drinking Water Source Protection, watersheds, watercourses/drainage features and topography.

**Expected Impact on SSEA budget/workload**

The SSEA has commended the County on recognizing SSEA along with the local Conservation Authorities in the MCR process. The County has acknowledged that considerable work has been done by the SSEA on behalf of member municipalities, and also acknowledged that data and information requests may take some time to fulfill. Future involvement in the MCR process has the potential to require substantial work and input from a variety of SSEA staff members, impacting workload. At this point, it is not clear how the SSEA’s continued involvement in the MCR process will be funded, so there may be financial/budget implications.

**Conclusion/Recommendations**

The MCR process is expected to continue into 2022, with technical studies and material to be circulated to municipalities and stakeholders later in 2021. There is value to the SSEA participating in the above-noted components of the County MCR, however there is a need to explore options for how the SSEA’s continued involvement would be funded.

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Prepared by:

Approved for Submission by:

*Original signed by*

*Original Signed by*

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Michelle Hudolin, Wetlands & Habitat Biologist  
Aisha Chiandet Water Scientist  
Tracy Roxborough Sustainability & Climate  
Action Coordinator

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Julie Cayley, Executive Director



**Severn Sound Environmental Association  
Joint Municipal Service Board  
2021 Second Quarterly Meeting (Q2) – July 26, 2021**

**STAFF REPORT**

**No.** 34-21-SSEA  
**Date:** July 26, 2021  
**To:** Chair and Members of the SSEA Board of Directors  
**From:** Aisha Chiandet, Water Scientist; Tracy Roxborough, Sustainability and Climate Action Coordinator

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**SUBJECT: Service Delivery Agent Agreement with Depave Paradise Program**

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**APPLICABLE STRATEGIC PLAN GOALS:**

**Goal 1: Sound Science**  
**Goal 2: Supportive Partnerships**  
**Goal 3: An Engaged and Informed Community**  
**Goal 4: An Exceptional Organization**

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**RECOMMENDATION:**

**RESOLVED THAT:** Staff Report No. 34-21-SSEA regarding Service Delivery Agent Agreement with Depave Paradise Program, be received for information; **and**

**FURTHER THAT:** The SSEA Board supports the staff recommendation for SSEA to participate as a delivery agent in the Depave Paradise Program, a project of Green Communities Canada.

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**Purpose:**

The purpose of this report is to:

1. Provide a summary of the Depave Paradise program, and overview of the benefits of SSEA's participation as a delivery agent of that program,
2. Describe the opportunities that would be available to SSEA and our municipal partners as a delivery agent of the Depave Paradise Program, and
3. Acquire Board support for SSEA to enter into a delivery service agreement with the Depave Paradise program, a project of Green Communities Canada.

**Discussion/Analysis:**

With increasing urban development in the Severn Sound watershed area, the amount of hard or impervious land cover will increase. Hardened surfaces have negative impacts on local waterways due to the disruption of the natural water cycle and movement of contaminants through stormwater runoff. As summarized in SSEA's SSS Local Climate Change Action Plan, the projected rise in global temperatures is expected to result in intensification of the water cycle, causing more severe dry seasons and wetter rainy

seasons, along with the possibility of more frequent extreme weather events. Green infrastructure or Low Impact Development (LID) measures such as bioswales, permeable pavement, and rain gardens can help to minimize the impacts of hardened surfaces. Depave Paradise projects offer an engaging way to involve the local community and educate residents on the benefits of green infrastructure while improving the hydrological and ecological functioning of a publicly accessible urban site.

### **Summary of the Depave Paradise Program:**

Depave Paradise (Depave) is a program of Green Communities Canada (GCC) and has been ongoing since 2007. Depave projects are joint efforts between GCC and local delivery agents. A Depave project involves community volunteers manually removing unused asphalt from a highly visible urban site (an area of at least 100 m<sup>2</sup>), replacing it with soil and native vegetation. The resulting greenspace can be designed to provide specific co-benefits as well as improving infiltration (ie. attracting pollinators and providing habitat, and providing educational opportunities). Projects attract media and political attention and raise awareness of the issues surrounding the urban water cycle, while making measurable environmental impacts, reducing runoff and contamination, and increasing green space.

### **Opportunities:**

Committing to be a delivery agent to implement one Depave project in 2021/22 will further SSEA's Strategic Plan Priority Action of *Empowering Others to Take Action* through *Investigating opportunities for early intervention to support landowner and partner efforts designed to improve environmental quality (e.g. Stormwater management and Low Impact Design,)* (SSEA's Strategic Plan, p.8). In addition, involvement in the Depave program will deliver on SSEA's SSS Local Climate Change Action Plan (LCCAP) Focus Area of 'Engaging externally to support long-term climate action' and the action item '**Identify partners for a pilot project to explore low-impact development techniques (using nature as a model to manage rainfall at the source)** into new developments and infrastructure upgrades to better manage water run-off and to help moderate warmer local temperatures (LCCAP, p.25). The implementation of a Depave project in one of SSEA's partner municipalities would also align with each of SSEA's six Federation of Canadian Municipalities (FCM) Partners for Climate Protection (PCP) Program Municipal Climate Plan Municipal Climate Change Action plan action of '*Develop a 'low-mow' & pollinator policy with municipal commitments to **improve the environment for pollinators** & reduce corporate fuel use* (Table 6. Actions to mitigate GHG emissions, 2019-2028).

As a delivery agent, SSEA would receive the following from GCC:

- \$15,000 in funding to cover staff time and project costs (supplies/contractors),
- Coordinator training for SSEA staff (three staff have taken the training), and
- Program administration support, resources, and comprehensive health and safety procedures.



**Municipal Contribution(s):**

SSEA would require the following from one of our partner municipalities:

- Identification of one publicly accessible location (municipal or commercial property) that would be suitable for a Depave project, and
- In-kind contributions which could include staff time for meetings to discuss site suitability, site preparation and/or active involvement in project implementation, and support with communications activities (i.e., call for volunteers, media release, social media, etc.).

SSEA staff would present information on Depave to our partner municipalities and work to identify a suitable project. This would involve Parks, Operations, and Recreation supervisors and managers, as well as members of SSEA's Municipal Climate Leadership Committee (includes municipal FCM PCP Program members).

The implementation of this project in partnership with one of SSEA's municipal partners would also deliver on Strategic Plan commitments by our respective partners:

[Town of Midland, Council Strategic Planning Priorities, 2018-2022:](#) *Develop Vibrant Public Spaces and promote a Beautiful Midland; Take the lead on environmental stewardship through urban tree management, biodiversity and natural heritage preservation, water quality protection. Greening the "concrete jungle" downtown core.*

[Town of Penetanguishene, Priorities for Penetanguishene, Our Strategic Plan, 2019-2023:](#) *Direction 2.2: The Town will continue to implement the Climate Change Action Plan adopted by Council in 2019.*

[Township of Georgian Bay, Top 5 Priorities of Council, 2020-2022:](#) *Goal: Prioritize ongoing protection of the natural environment through the development of initiatives that enhance the quality the local environment and encourage sustainable development across the municipality.*

[Township of Springwater, Official Plan, 2018:](#) 7.4.2. Design with Nature 7.4.2.1. *Good community design should encourage development that where possible, is properly integrated and connected to Springwater's natural features and resources, while maintaining and, where necessary, enhancing the ecological and hydrological functions which create and maintain those features and resources.*

[Township of Oro-Medonte, Township of Oro-Medonte Draft Corporate Strategic Plan, 2021-2023:](#) *Develop an Environmental Sustainability Strategy; Action: Develop a long-term strategy that will identify actions to reduce the impact of service delivery on the environment.*

[Township of Severn, Strategic Plan, 2020-2022:](#) *Mission: The Township of Severn is a people-friendly municipality committed to providing public services that enhance our valued quality of life. We respond to community needs through fiscal responsibility, citizen engagement, effective management of our resources and infrastructure, the equitable delivery of services across all our communities, and **effective stewardship of our unique physical environment.***

[Township of Tiny, Strategic Plan Update, 2020-2025:](#) *Improve the Quality of Life for all Residents; Building Environmental Resilience and Mitigating the Impacts of Climate Change; Promote Environmental Responsibility and Stewardship.*

[Township of Tay, Corporate Strategic Plan, 2019-2022:](#) *Environmental Sustainability; Maintain initiatives and partnerships that are focused on reducing the impacts of climate change, thereby ensuring the environmental sustainability of Tay Township.*

**Expected Impact on SSEA Workload:**

In accordance with the Delivery Agent Agreement to be signed with GCC before project initiation, SSEA would be required to:

- Coordinate and implement one Depave project before June 2022 including securing at least \$5,000 in donations of goods and/or services, and/or in-kind support from our municipal partners and/or local businesses,
- Engage in education and outreach throughout the project (i.e. social media, media, signage, photo documentation, video to be posted on GCC's website)
- One SSEA staff member will be the main point of contact to coordinate the project, the grant will offset this cost and increase staffing resources. Depave coordinating staff are required to participate in a Depave event in another community (complete - two SSEA staff attended a June 2021 Depave event in the Township of Tiny).
- Additional staff time by SSEA's Sustainability and Climate Action Coordinator, Water Scientist, and Watershed Health Coordinator is estimated at 5 hours each per month maximum until June 2022.

**Financial Implications:**

SSEA would receive \$15,000 in total from GCC over the next year (July 2021-June 2022 approximately \$7,000 of this would be available for staff resources. SSEA will provide in-kind staff time contribution and no additional SSEA funds would be used for the implementation of the Depave project.

**Conclusion/Recommendation:**

SSEA staff recommend that SSEA participate as a delivery agent in the Depave Paradise Program, a project of Green Communities Canada in 2021-22.

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Prepared by:

Approved for Submission by:

Original signed by

Tracy Roxborough, Sustainability and  
Climate Action Coordinator  
Aisha Chiandet, Water Scientist

Original Signed by

Julie Cayley, Executive Director

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**Supporting Information:**

Information on the Depave Paradise Program

[Green Communities Canada](#)

Supporting SSEA Documents and Links

[Severn Sound Strategic Plan, 2019-2023, Building an Environmental Legacy](#)

[Local Climate Change Action Plan, 2018](#)

[Town of Midland, Municipal Climate Change Action Plan, 2019](#)

[Town of Penetanguishene, Municipal Climate Change Action Plan, 2019](#)

[Township of Georgian Bay, Municipal Climate Change Action Plan, 2019](#)

[Township of Severn, Municipal Climate Change Action Plan, 2019](#)

[Township of Tay, Municipal Climate Change Action Plan, 2019](#)

[Township of Tiny, Municipal Climate Change Action Plan, 2019](#)