



**Agenda**  
**The Township of Cavan Monaghan**  
**Sustainability Advisory Committee Meeting**

Friday, December 13, 2024

1:00 p.m.

Council Chambers - Hybrid Room

Members in attendance are asked to please turn off all electronic devices during the Meeting. Any special needs requirements pertaining to accessibility may be directed to the Clerk's Office prior to the meeting. Please be reminded meeting are livestreamed and recorded. Members may be participating remotely.

**Pages**

**1. Call to Order**

**2. Land Acknowledgement**

We respectfully acknowledge that the Township of Cavan Monaghan is located on the Treaty 20 Michi Saagiig territory, in the traditional territory of the Michi Saagiig Anishnaabeg. We offer our gratitude to First Nations for their care for and teachings about these lands. May we honour these teachings.

**3. Approval of the Agenda**

**4. Disclosure of Pecuniary Interest and the General Nature Thereof**

**5. Minutes**

**5.1 Minutes of the meeting held September 20, 2024**

2 - 5

**6. Presentations**

**6.1 Norm Lamothe - Soil Regeneration and Agricultural Biochar Processing**

6 - 11

**6.2 Amanda Newell - 30 by 30 Nature Conservation Initiative**

12 - 26

**7. General Business**

**7.1 Work Plan**

27 - 27

**7.2 2025 Meeting Schedule Discussion**

28 - 28

**8. Adjournment**



**Minutes**  
**The Township of Cavan Monaghan**  
**Sustainability Advisory Committee Meeting**  
**Friday, September 20, 2024**  
**1:00 p.m.**  
**Council Chambers – Hybrid Room**

**Those members in attendance:**

Leslie Bilcox                      Chair (remotely)  
 Amanda Newell  
 Craig Onafrychuk  
 Lisa Crawford  
 Ryan Huntley                      Deputy Mayor

**Those members absent:**

Manny Borges  
 Joanne Key

**Staff members in attendance:**

Mark Froment                      Deputy Clerk  
 Kyle Phillips                      Chief Building Official/By-law Enforcement Officer  
 Chris Allison                      Parks and Facilities Manager

**1. Call to Order**

Chair Leslie Bilcox called the meeting to order at 1:02 p.m.

**2. Land Acknowledgement**

Chair Leslie Bilcox recited the land acknowledgement.

**3. Approval of the Agenda**

Moved by: Huntley

Seconded by: Newell

That the agenda for the Sustainability Advisory Committee be approved as presented.

<b>Recorded</b>	<b>For</b>	<b>Against</b>
Bilcox	X	
Newell	X	
Huntley	X	
Onafrychuk	X	
Crawford	X	
<b>Results</b>	<b>5</b>	<b>0</b>

**Carried**

**4. Disclosure of Pecuniary Interest and the General Nature Thereof**

There were no pecuniary interests noted.

**5. Minutes**

**5.1 Minutes of the meeting held July 19, 2024**

Moved by: Newell

Seconded by: Huntley

That the minutes of the Sustainability Advisory Committee meeting held July 19, 2024, be approved as presented.

<b>Recorded</b>	<b>For</b>	<b>Against</b>
Crawford	X	
Onafrychuk	X	
Bilcox	X	
Newell	X	
Huntley	X	
<b>Results</b>	<b>5</b>	<b>0</b>

**Carried**

**6. General Business**

**6.1 2025 Budget Discussion**

Kyle Phillips provided the Committee with a financial report.

**6.1.1 Community Tree Planting Project Samples**

Moved by: Crawford

Seconded by: Newell

That the Sustainability Advisory Committee request for the 2025 Budget \$10,000 for Sustainable Community Initiatives and the addition of one (1) new initiative for 2025 being the Rain Barrel Program requesting \$5,000.

<b>Recorded</b>	<b>For</b>	<b>Against</b>
Huntley	X	
Crawford	X	
Onafrychuk	X	
Bilcox	X	
Newell	X	
<b>Results</b>	<b>5</b>	<b>0</b>

**Carried**

**6.2 2024 Work Plan**

Moved by: Huntley  
 Seconded by: Crawford  
 That the Sustainability Advisory Committee approve the additional materials for the work plan.

<b>Recorded</b>	<b>For</b>	<b>Against</b>
Crawford	X	
Newell	X	
Huntley	X	
Onafrychuk	X	
Bilcox	X	
<b>Results</b>	<b>5</b>	<b>0</b>

**Carried**

Moved by: Crawford  
 Seconded by: Onafrychuk  
 That the Sustainability Advisory Committee approve the updates for the work plan and add one new item being the Community Tree Planting Project.

<b>Recorded</b>	<b>For</b>	<b>Against</b>
Bilcox	X	
Crawford	X	
Newell	X	
Huntley	X	
Onafrychuk	X	
<b>Results</b>	<b>5</b>	<b>0</b>

**Carried**

**7. Adjournment**

Moved by: Huntley

Seconded by: Newell

That the Sustainability Advisory Committee adjourn at 2:12 p.m.

<b>Recorded</b>	<b>For</b>	<b>Against</b>
Onafrychuk	X	
Bilcox	X	
Crawford	X	
Newell	X	
Huntley	X	
<b>Results</b>	<b>5</b>	<b>0</b>

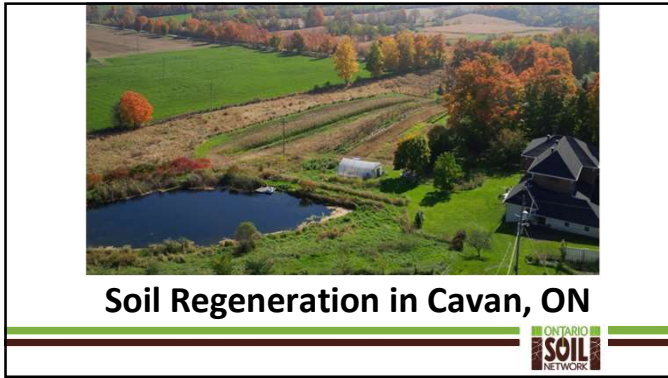
**Carried**

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**Leslie Bilcox**  
**Chair**

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**Mark Froment**  
**Deputy Clerk**



1

- Established 1902, 6<sup>th</sup> generation family farm
- Formerly 900 sow hog operation (farrow-wean)
- 500-acre Diverse Operation
  - Market Garden
  - Cash Crop (Corn, Soy, Wheat, Oats, Barley)
  - Forages, Hay, Woodlots, Grasslands
  - Compost Facility
  - Commercial Passive Solar Greenhouse
  - Livestock
  - Organic Maple Syrup

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**Norm Lamothe**

- **Full-Time Farmer**
- **Entrepreneur**
  - Co-founder: Deveron Corp. (TSXV: FARM)
    - Leading North American Ag Tech Startup
  - Aviation Background
    - International Aircraft Brokerage & Flight School
- **Educator**
  - Food and Farming Program (Durham College)
  - Community Involvement
  - Agriculture Advocate

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**Our Journey**

2015      2018      2020

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**Soil Regeneration**

- Our Philosophies Include:
  - Increased Rotations
  - Minimum Tillage\*
  - Extensive Use of Cover Crops
  - Organic Soil Amendments
  - Rotation Grazing (New)
  - 3D - Data Driven Decisions

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**Soil Testing**

6

### Soil Testing

ONTARIO SOIL NETWORK

7

### Off-Farm Amendments

ONTARIO SOIL NETWORK

8

### Compost

ONTARIO SOIL NETWORK

9

### Cover Crops

ONTARIO SOIL NETWORK

10

### Cover Crops

ONTARIO SOIL NETWORK

11

### Precision Agriculture

ONTARIO SOIL NETWORK

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## Pushing The Limits




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## Learning as we go

- There are no quick fixes in ag
- Set realistic expectations
- Embrace technology - data is your friend
- Accept failures as learning opportunities
- Measure, measure, measure




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## Research Farm





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## Climate Legacy

- Our Philosophies Include:
  - Carbon Footprint Reduction
  - Carbon Sequestration Program
  - Conversion of Waste to Energy
  - Journey to Net Negative
  - Electrify Everything
  - Promotion of Diversity




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### Our Partners

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### Our Future

- Circular Economies
- Conversion of Waste to Energy Biproducts
- Forest Biomass Recovery Program
- Fertilizer Substitutes and Commercial Biproducts

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### 2019 – Phase 0.0

#### Biochar Feasibility Study

- Goal: determine the financial feasibility of commercial production of biochar for use in agriculture
- Result: not feasible
- Launch of "Catching Carbon"

Moving forward together towards a greener more sustainable future. 21

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### 2024 – Phase 1.0

#### Forest Biomass Recovery Launch

- Partnership Discussions with Ontario Woodlot Association
- Testing/purchasing equipment
- Contracts
- Training/Licensing
- Rebranding/social media/ advertising
- Plan/schedule future harvest thinning operations with the OWA and participating landowners
- Planning/funding/equipment for Phase 2 – biochar production

Moving forward together towards a greener more sustainable future. 22

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### Harvester/Forwarder Vimek 404 T8 Duo

Vimek 404 T8 DUO unites the best of both worlds. It combines a harvester and a forwarder in one machine. **Efficiency in small-scale forestry is important.**

[Vimek-harvester-404T8DUO-en.pdf](#)

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### Harvester/Forwarder Vimek 404 T8 Duo

Professional and lightweight forestry equipment specifically for forest thinning since the 1980s. It is a job-specific piece of equipment for operating in tight spaces and ideally suited for smaller plantations and dense areas.

It is a dual-purpose compact, lightweight, and versatile machine designed specifically for thinning operations. Capable of cutting forest biomass up to 300mm (12 inches) in diameter, it is extremely fuel efficient and nimble for its size. It is capable of processing materials and within minutes can be fitted with a grapple and forwarding trailer for harvest collection.

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**Excavator Mecalac 8MCR**



Mecalac 8MCR, a compact, powerful, versatile, and fast maneuvering multi-use machine. Produced in France and distributed by a dealership in Ontario. Proven track record and very efficient fuel consumption. The Mecalac will be equipped with a rotator grapple used to pick up logs and debris in tight spaces, as well as a tree shear gatherer for quick removal and gathering of smaller trees and brush.

The machine will be equipped with a log trailer to act as a second forwarder for material removal. Lastly it will be used to gather up and stockpile unmarketable materials and subsequently be used as the primary feeding tool for the woodchipper.



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**Chipper – Vermeer 1800 XL**



The Vermeer 1800 XL is a highly productive 18" capacity drum-style chipper. Its powerful dual feed wheel system driven via (2) 32.3 CID hydraulic motors provides around 4,480 pounds of pulling power and the standard hydraulic lift cylinder enhances performance by providing additional down pressure reducing chainsaw work. 360-degree hand crank discharge chute with end chip deflector height adjustable.

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**Windrower Sittler Compost Windrow Turner 512**



Made in Canada, PTO driven beater, can operate on tractors in the 85-100 hp range. Water hookups standard. Ideal for medium to large farm, municipal and industrial composting

Reliable, efficient, economical, low-maintenance, and long-lasting. Extra-hardened, replaceable steel blades are uniquely positioned on the compost drum to allow for complete blending right to the base of the windrow. Material from the outside is brought inward and from the bottom to the top forming a peak position, allowing the windrow to have a chimney effect for ideal CO<sub>2</sub>/oxygen flow.



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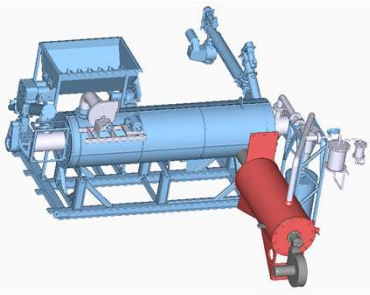
**Compost Extractor Hiwassee Continuous Flow Bio-Extractor 700 GPL**



Durable casters make this unit easily movable, and the compact frame conveniently fits through any standard door. Unlike other extractors requiring an industrial grade 230-volt electrical connection, a single 115/120-volt electric feed is all that is needed to power our Bio-Extractor. The stainless-steel construction and high-quality components combined with expert workmanship, provide unmatched strength and durability. Every component of the Bio-Extractor has been designed to protect microbiology during the extraction and liquid transfer processes. Best of all, there is no waste from the extraction process as the solid byproducts can be recycled into a composting system or used for high-quality potting soil.  
 -Continuous Flow Rate: 700 GPH.  
 -Electrical: Single 120-volt outlet, UL Listed Control Panel  
 -Dimensions: 30W x 48L x 70H inches, Fits through a standard door, 340 pounds

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**2025 – Phase 2.0**



**Biochar Production**

- Design/Engineering Spring 2024
- Fabrication Summer 2024
- 2 tonne/day biochar production
- Pyrolygneous acid production
- CHP opportunities
- Anticipated production 2025
- 2025-2026 field trials and research with OSCIA
- Annual CO<sub>2</sub>e sequestration potential = 1,400 tonnes/year

Moving forward together towards a greener more sustainable future.

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**Our Partners – Catching Carbon**



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## Contact Info

### Woodleigh Farms Ltd. – Norm Lamothe

Twitter: @woodleighfarms  
Facebook: woodleighfarms  
Instagram: woodleighfarms

[www.cavanfresh.ca](http://www.cavanfresh.ca)  
[woodleighfarms@gmail.com](mailto:woodleighfarms@gmail.com)  
705-761-2063





# KLT and The Path to Whole Landscape Conservation



**Amanda Newell,**  
*Partners in Conservation Coordinator*



KAWARTHA LAND TRUST  
**PARTNERS**  
IN CONSERVATION

## What is KLT?

**A charitable organization that works to sustain and enrich life through abundant natural and productive lands that are embraced, protected and conserved by the people of the Kawarthas.**





KAWARTHA LAND TRUST

**PARTNERS**  
IN CONSERVATION

## How?

1. Protection and management of **donated and purchased lands**
2. Stewardship and monitoring of lands protected through legal **Conservation Easement Agreements**
3. Support through **Partners in Conservation**





KAWARTHA LAND TRUST  
**PARTNERS**  
IN CONSERVATION

## How?

1. Fostering nature connection and learning through **land access, workshops, guided tours, etc.**
2. Building community and resilience through **volunteer relationships**
3. Building regional capacity through **strong, active, diverse partnerships**





**KAWARTHA LAND TRUST**

## **Partners in Conservation**

**Supporting landowners in conservation of  
private lands**

**“Unlocking the good in your land”**

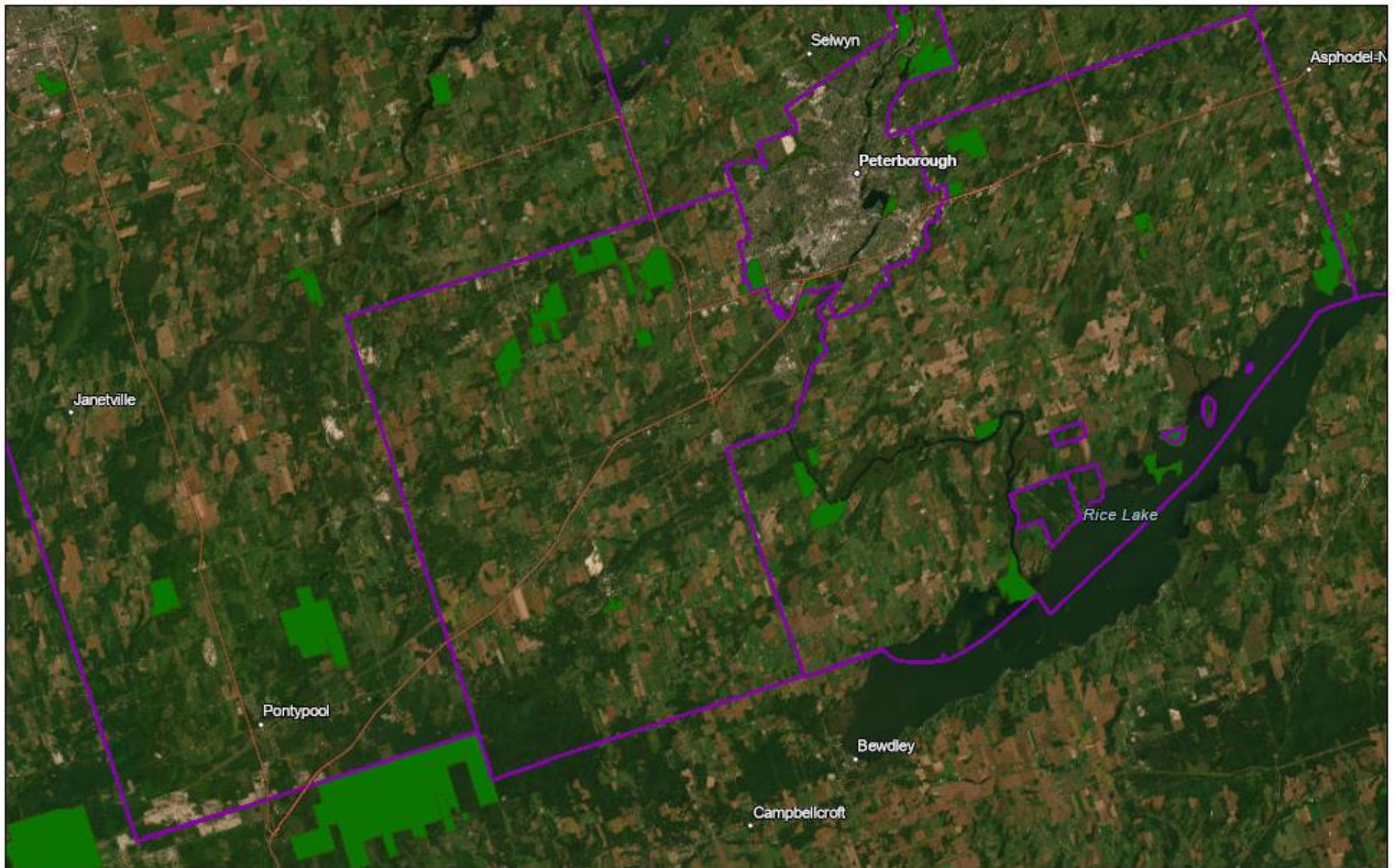


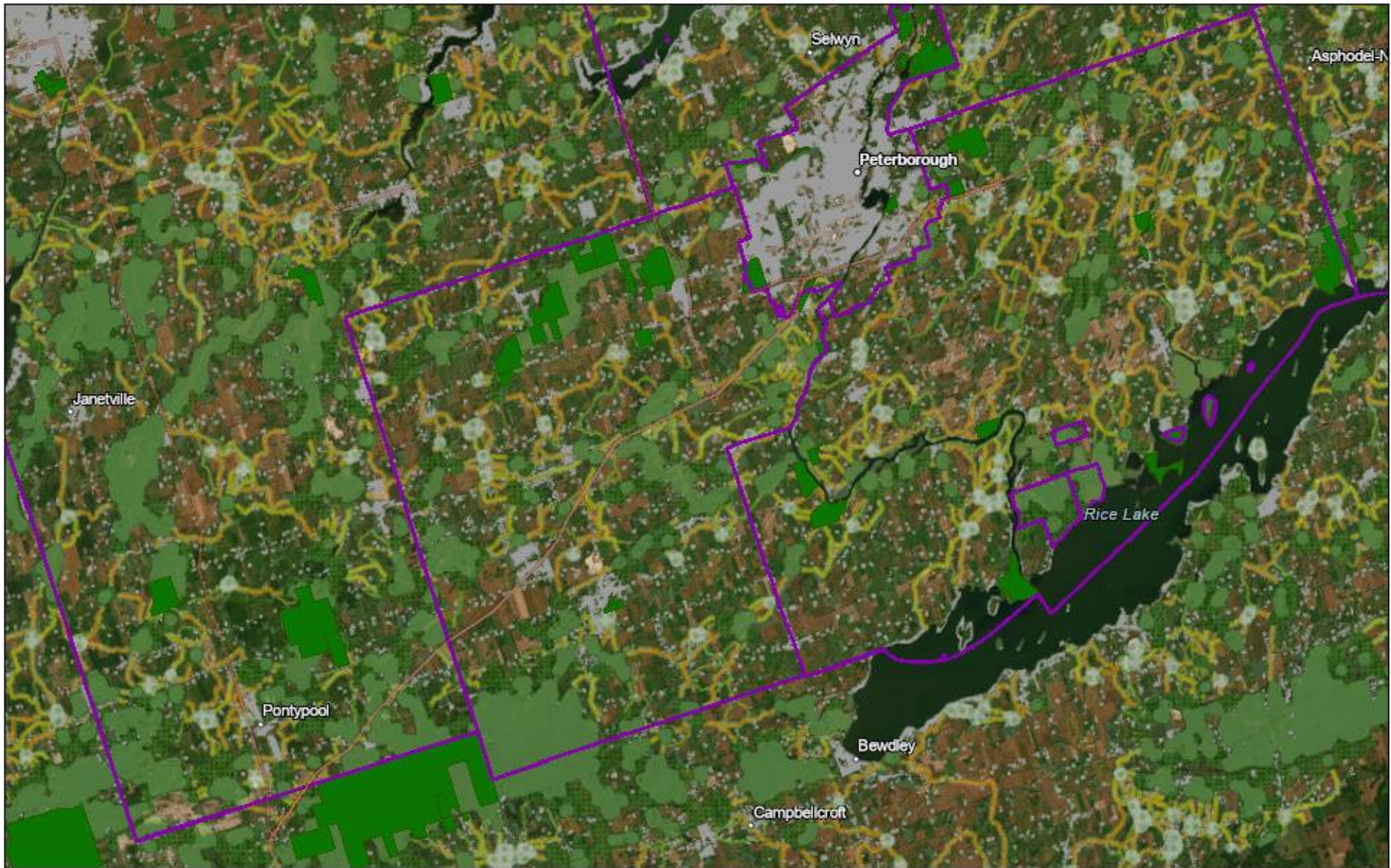


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IN CONSERVATION

30 x 30









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**PARTNERS**  
IN CONSERVATION

**Government protection  
is key, but how will the  
rest be managed for  
30x30?**

**Private landholders!**



- inventories and info sharing
- acknowledgment of role in conservation
- exploring and guidance around stewardship goals
- finding resources (funding, help through other agencies, contractors)





KAWARTHA LAND TRUST  
**PARTNERS**  
IN CONSERVATION

PIC is about the **process** of  
whole landscape  
conservation, not the  
result.





KAWARTHA LAND TRUST  
**PARTNERS**  
IN CONSERVATION

Landowners participate on a volunteer-basis, with no legal obligation

Landowners receive support and stewardship through staff/volunteer visits to conduct basic ecological inventory

Priority areas have been identified, but open to anyone within service area and accept referrals



**“Any landowner would benefit** from the stewardship report. They’re beautiful and informative.”





KAWARTHA LAND TRUST  
**PARTNERS**  
IN CONSERVATION

Success depends on protecting active and retired agricultural lands as well as forests, meadows, wetlands

AND



FOREST

strong, active relationships between KLT, First Nations & other landholders, government & conservation agencies, funders, volunteers, educational institutions & researchers



MEADOW



WETLAND

AND



AGRICULTURE

technologies that help us understand, organize and connect.



Supporting capacity and collaboration  
through the recently launched

## Regional Conservation and Climate Partnership

<https://kawarthalandtrust.org/regional-conservation-climate-partnership/>





KAWARTHA LAND TRUST  
**PARTNERS**  
IN CONSERVATION

**Thank you!**



<b>Sustainability Advisory Committee Work Plan 2024</b>				
<b>Item</b>	<b>Budget</b>	<b>Sub-Committee</b>	<b>Tasks/ Progress</b>	<b>Completion Date</b>
#1. Sustainable Community Initiatives	\$5,000	Kyle Phillips Chris Allison	Weather stripping initiative has been added to Christmas in the Village.	Ongoing
#2. Data Analysis	\$30,000 Contracted services	Kyle Phillips Chris Allison	RFP for the Corporate and Community Data Analysis and Monitoring Program has been awarded to Aladaco Consulting Inc.. The consultant has now received all amended data requested for a more fulsome report. The report is now underway.	RFP issued, ongoing
#3. Energy Conservation Demand Management Plan Update		Committee	Staff will bring a draft plan back to the Committee. Next step to be completed once the consultant for the data analysis has finished their work.	Awaiting data analysis
#4. Communication Campaign		Brigid Ayotte	All communications materials for 2024 have now been completed.	Ongoing
#5. Rain Barrel Program		Leslie Bilcox Staff	The initial order of 50 rain barrels has been delivered and all have been sold. 50 more barrels have been ordered and delivered with 20 already sold. They will be available for sale at Christmas in the Village.	Initial order completed, second order ongoing
#6. Community Tree Planting Program		Leslie Bilcox Staff	Committee and staff to explore design and costs for a Community Tree Planting Program. The Committee's preference is for one similar to Douro Dummer's program. Staff have contacted Pine Needle Farms and they are sending some information.	Ongoing
#7. Earth Day 2025 (April 22, 2025)		Committee	Initiatives to be decided.	Ongoing

December 13, 2024



**Sustainability Advisory Committee  
Meeting Schedule for 2025**

**1:00 p.m. to 3:00 p.m.**

Thursday, January 30

Thursday, March 27

Thursday, June 26

Thursday, September 25