Township of Admaston/Bromley First Monthly Meeting Thursday, August 7th, 2025 @ 7:30 p.m.

<u>AGENDA</u>

- 1. Call Meeting to Order
- 2. Moment of Silence
- 3. Approval of Agenda
- 4. Disclosure of Pecuniary Interest
- 5. Minutes

5a Resolution to adopt Minutes of Council Meetings June 19, 2025

- 6. Delegations and Guests
 - **6a** Rosebank Cemetery Board Heritage Designation Request
- 7. Planning and Economic Development Committee Chair Keith Gourley, Committee Member Kevin LeGris
 - 7a Consent Application B182/24
 - i) i. Planning Report
 - **7b** Consent Application B04/25
 - i) i. Planning Report
 - 7c Consent Application B40/25
 - i) i. Planning Report
 - 7d Communication Honourable Robert Black Soils at Risk
 - i. i) Critical Ground Report
 - **7e** Encroachment Request Report
 - i) i. Request
 - ii) ii. Draft Encroachment Agreement
- 8. <u>Community Service Committee</u> Chair Angela Field, Committee Member Brian Hamilton

None.

9. **Operations Committee** – Chair Brian Hamilton, All of Council

None.

10. <u>Waste Management Committee</u> – Chair Michael Donohue, All of Council

- **10a** Resolution from the Township of Tweed Blue Box Ineligible Sources
- 11. Finance and Administration Committee Chair Michael Donohue, All of Council
 - 11a OMPF Q3 Payment Notice
 - 11b Updated 2024 Final Reserve Balances Report
 - 11b i) Reserve Balances 2024 & 2025
 - 11c June YTD Financials report
 - **11c i)** June YTD Financials
 - 11d June Cheque Register
 - 11d Osceola Expansion Total Cost Report
 - 11e Heritage Designation Request Rosebank Church Report
 - i) i. Heritage Designation Request
- 12. <u>Protective Services Committee</u>- Chair Kevin LeGris, Committee Member Angela Field
 - **12a** Fire Chief's Update Report April to July 2025
 - **12b** Fire Department Monthly Report April to July 2025
 - **12c** Fire Hall Tower Report
 - i) i. Frontline Communications Quote
 - ii) ii. Bearcom Quote
 - iii)iii. RComm Radio Quote
 - iv)v. Rental Quote
- 13. **County of Renfrew** Mayor Michael Donohue
 - 13a County of Renfrew Council Summary Report June 2025
 - 13b Eastern Ontario Regional Network (EORN) Cell Gap Project Monthly Update June 2025
- 14. **By-Laws**
 - **14a** 2025-29 Encroachment Agreement 2025-30 Committee of Adjustment Appointment
- 15. Old Business
 - **15a** Action Tracking List
- 16. New Business
- 17. Closed Session
 - 17a Committee of Adjustment Appointment

As per Section 239 2 (b) personal matters about an identifiable individual, including municipal or local board employees.

More specifically as it relates to the applications received for the Committee of Adjustment

18. Confirmatory By-Law

18a 2025-31 being a by-law to confirm proceedings of Council Meeting

- 19. Question Period
- 20. Adjournment

<u>PLEASE NOTE</u> "Submissions received by the public, either orally or in writing may become part of the public record/package".

Council Information

Township of Admaston/Bromley Only Monthly Meeting

Council met for their only monthly meeting on Thursday June 19, 2025. Present were Mayor Michael Donohue, Councilors Brian Hamilton, Keith Gourley, Kevin LeGris and Deputy Mayor Angela Field.

Staff Members present were CAO/Clerk Jennifer Charkavi, Treasurer-Deputy CAO/Clerk Coughlin, Public Works Superintendent Visinski, Fire Chief McHale, Chief Building Official Coulas and Finance Clerk Amy Fraser.

Also present was Audio/Video System Specialist Nate MacIsaac.

Delegations and Guests - Erik Lockhart virtual Strategic Plan Presentation

Agenda Items 1 and 2 - Call Meeting to Order and Moment Silence

Mayor Donohue called the Meeting to Order at 7:39pm. A moment of silence followed.

Agenda Item 3 – Approval of Agenda

Resolution No. 01/06/25

Moved by Brian Hamilton, seconded by Keith Gourley.

BE IT RESOLVED that Council approve the agenda of June 19, 2025, Regular Council Meeting.

Carried

Agenda Item 4 - Disclosure of Pecuniary Interest

None.

Agenda Item 5 – Minutes

5a Resolution to adopt Minutes of Council Meetings May 15 & May 29 (Special), 2025

Resolution No. 02/06/25

Moved by Brian Hamilton, seconded by Keith Gourley.

BE IT RESOLVED that Council adopt the following Meeting Minutes:

- May 15, 2025, Regular Council Meeting
- May 29, 2025, Special Council Meeting

Carried

<u>Agenda Item 7 – Planning and Economic Development Committee</u> – Chair Keith Gourley, Committee Member Kevin LeGris

7a Consent Application B176/24 Report

Resolution No. 03/06/25

Moved by Keith Gourley, seconded by Brian Hamilton.

BE IT RESOLVED that Admaston/Bromley Council accept in principle Consent Application B176/24 submitted by applicant Enright Dairy Farms Inc., 1455 Barr Line, so long as requirements of commenting agencies are satisfied.

Carried

1

7b Building & Sewage Reports

Resolution No. 03/06/25

Moved by Keith Gourley, seconded by Brian Hamilton.

BE IT RESOLVED THAT Council receive the Building and Sewage Reports for the following months:

- November December 2024
- January May 2025

Carried

<u>Agenda Item 8 – Community Service Committee</u> – Chair Angela Field, Committee Member Brian Hamilton

8a Admaston/Bromley Public Library Board

Resolution No. 05/06/25

Moved by Angela Field, seconded by Kevin LeGris.

BE IT RESOLVED THAT Council receive the following from the Admaston/Bromley Public Library Board:

- Minutes
 - April 8, 2025
 - May 13, 2025
- CEO's Report
 - April 2025
 - May 2025
- Treasurer's Report May 2025

Mayor Donohue highlighted a concern noted in the Library Treasurer's Report. He gave background of the initial grant request from the library and the budget process; he further stated that the library was to receive some unbudgeted revenue from a Connectivity Grant and an HST Refund for 2024. Absolutely correct the township has provided a grant that is less then requested but unbudgeted revenue makes up the difference for the library's collections budget.

Carried

8b Financial Statements – Admaston/Bromley Public Library Board

Resolution No. 06/06/25

Moved by Angela Field, seconded by Kevin LeGris.

BE IT RESOLVED THAT Council receive the Financial Statements for the Admaston/Bromley Public Library Board provided from the Township's Auditor Welch LLP.

Carried

Agenda Item 9 - Operations Committee - Chair Brian Hamilton, All of Council

9a Public Works Report – May 2025

Resolution No. 07/06/25

Moved by Keith Gourley, seconded by Brian Hamilton.

BE IT RESOLVED THAT Council receive the Public Works May Report as information.

Carried

Agenda Item 6 - Delegations and Guests

Erik Lockhart - Strategic Plan Presentation 8:00 pm

Strategic Plan

Resolution No. 08/06/25

Moved by Keith Gourley, seconded by Brian Hamilton.

BE IT RESOLVED THAT Council adopt the Strategic Plan 2025 – 2029, presented on June 19, 2025 by Erik Lockhart.

Carried

<u>Agenda Item 10 – Waste Management Committee</u> – Chair Michael Donohue, All of Council

10a Waste Management By-Law Report

Resolution No. 09/06/25

Moved by Brian Hamilton, seconded by Keith Gourley.

BE IT RESOLVED THAT Admaston/Bromley Council adopt By-Law 2025-23, being a by-law to regulate the disposing of waste and recyclables at the Waste Disposal Sites within the Township.

Carried

Resolution No. 10/06/25

Moved by Angela Field, seconded by Kevin LeGris.

BE IT RESOLVED THAT the expenditures to roll out the program in 2025 for waste management advertising, education and training of staff, approximately \$20,000, be financed through any surpluses realized at 2025 year end (ex. Excess landfill tipping fees received over budget) and the waste capital reserve.

Carried

10b Amend Fees & Charges By-Law Report

Resolution No. 11/06/25

Moved by Brian Hamilton, seconded by Keith Gourley.

BE IT RESOLVED THAT Council adopt By-Law 2025-27, being a by-law to amend the Fees & Charges By-Law for the Township.

Carried

<u>Agenda Item 11 – Finance and Administration Committee</u> – Chair Michael Donohue, All of Council

11a YTD Financial Overview May 2025 Report

Treasurer-Deputy Clerk/CAO Coughlin started off her presentation with a summary of the notable receipts from the month of May summarizing the year-to-date financial overview. She also had to opportunity to review the trial balance line by line and provide additional information for council in addition to the year-to-date financials that were submitted.

Resolution No. 12/06/25

Moved by Keith Gourley, seconded by Brian Hamilton.

BE IT RESOLVED THAT Council accept the May 2025 Year to Date Financial Overview Report (attached) as information as submitted and circulated.

Carried

11b Cheque Register – May 2025

Resolution No. 13/06/25

Moved by Keith Gourley, seconded by Brian Hamilton.

BE IT RESOLVED that Council approves the Payment Register for May 2025.

Carried

11c Transfer to Reserve – 2024 Year End Surplus

Resolution No. 14/06/25

Moved by Keith Gourley, seconded by Brian Hamilton.

BE IT RESOLVED THAT the Finance & Administration Committee recommend to Council to direct staff to allocate the 2024-year end surplus to the reserves as follows:

THAT staff allocate \$76,148 to the Reserve – Fire Building Reserve;

That staff allocate \$265,000 to the Working Fund Reserve..

Carried

11d Appoint Auditors

There was much discussion on the increase in the quote provided by Welch LLP for auditing services beginning in 2026.

Resolution No. 15/06/25

Moved by Keith Gourley, seconded by Brian Hamilton.

BE IT RESOLVED THAT Council accept the Appointment of Auditors Report as information as submitted and circulated;

AND FURTHER THAT Council to appoint the firm of Welch LLP as the auditor for the Corporation of the Township of Admaston/Bromley for a five year term starting in 2026 through to an including 2030.

Recorded Vote

Councillor Gourley – For Councillor Hamilton – For Councillor LeGris – Against Deputy Mayor Field – For Mayor Donohue - Against

Carried

11e Amend Final Tax Rates By-Law

Resolution No. 16/06/25

Moved by Keith Gourley, seconded by Brian Hamilton.

BE IT RESOLVED that Council adopt By-Law 2025-26, being a By-law to provide for the adoption of the 2025 Tax Rates and to further provide for penalty and interest in default of payment thereof for 2025.

Carried

11f Attendance at AMO Conference Request

Resolution No. 17/06/25

Moved by Kevin LeGris, seconded by Angela Field.

BE IT RESOLVED THAT Council approve Councillor Hamilton attending the 2025 AMO Conference.

Carried

<u>Agenda Item 12 – Protective Services Committee</u> – Chair Kevin LeGris, Committee Member Angela Field

12a Fire Hall Garage Expansion ICIP Grant Report

Resolution No. 18/06/25

Moved by Angela Field, seconded by Kevin LeGris.

BE IT RESOLVED THAT Council enter into an Amending Transfer Payment Agreement By-Law 2025-24, through the Investing in Canada Infrastructure Program – COVID-19 Resilience Stream, for the scope change for the Fire Hall Garage Expansion Project to purchase a tower.

Carried.

Agenda Item 13 - County of Renfrew - Mayor Michael Donohue

13a County of Renfrew Council Summary – May 2025

Resolution No. 19/06/25

Moved by Angela Field, seconded by Kevin LeGris.

BE IT RESOLVED that Council receive the County Council Summary Report for May 2025.

Carried.

Agenda Item 14 - By-Laws

14a By-laws

Resolution No. 20/06/25

Moved by Brian Hamilton, seconded by Keith Gourley.

BE IT RESOLVED that Council approve the following By-laws:

•	2025- 23	Waste Management By-Law
•	2025-24	Amend ICIP Grant – Fire Hall Garage Expansion
•	2025-25	Appointment of Auditor
•	2025-26	Amend Final Tax Rates

• 2025-27 Amend Fees & Charges By-Law

Carried.

Agenda Item 15 - Old Business

15a Action Tracking List

Resolution No. 21/06/25

Moved by Brian Hamilton, seconded by Keith Gourley.

BE IT RESOLVED that Council receive the Action Tracking List as information.

Carried

Agenda Item 16 – New Business

None.

Agenda Item 17 - Closed Session

17a Canada Day Awards

As per Section 239 2 (b) personal matters about an identifiable individual, including municipal or local board employees.

More specifically as it relates to the Canada Day Awards

Resolution No. 22/06/25

Moved by Brian Hamilton, seconded by Keith Gourley.

BE IT RESOLVED that Council move into a Closed Session, as per Section 239 2 (b) – personal matters about an identifiable individual, including municipal board or local board employees.

More specifically to discuss the Canada Day Awards.

Carried

Council rose from Closed Session at 9:24pm and had nothing to report.

Agenda Item 18 – Confirmatory By-Law

18a 2025-28 Being a by-law to confirm proceedings of Council Meeting

Resolution No. 23/06/25

Moved by Kevin LeGris, seconded by Angela Field.

BE IT RESOLVED that By-law 2025-28, being a By-law to Confirm the Proceedings of the Council of the Township of Admaston/Bromley at the meeting held June 19, 2025, be now numbered, deemed read three times and passed.

Carried

Agenda Item 19 - Question Period

None.

Agenda Item 20 - Adjournment

Resolution No. 24/06/25

Moved by Kevin LeGris, seconded by Angela Field.

BE IT RESOLVED that the Thursday, June 19, 2025, Township of Admaston/Bromley Council meeting be adjourned at 9:27 p.m.

Carried

Mayor	CAO/Clerk





TOWNSHIP OF ADMASTON/BROMLEY

Request for Delegation
Name of Person(s) to Make Delegation/Presentation:
REV INGRID CONDIE - BENNETT
Organization (if applicable):
ROSEBANK CEMETERY BOARD
Contact Information: Tel # N/A Cell # (613) 433 - 4550
revingride gozoom.ca
Meeting Date Requested: JUHE 19, 2025 Alternate Date: AUGUST 7, 2025
Subject Matter: HERITAGE DESIGNATION
Brief Description of Purpose of Delegation:
WE ARE REQUESTING THE ROSEBANK CHURCH, LOCATER
ON THE GROUNDS OF THE ROSEBANK CEMETERY, BE
DESIGNATED A HERITAGE BUILDING.
Please check the appropriate box:
I have never spoken on this issue before.
I have spoken on this issue before and have specific new information to submit.
Have you been in contact with a member of staff in regard to this matter? X Yes No
If Yes, please provide Name and Department: MAYOIZ MICHAEL DONOITUE
I will have a presentation

For Handout at Meeting * Yes No

Township of Admaston/Bromley 477 Stone Road, R.R. #2 Renfrew, ON K7V 3Z5

E-Mail Address - info@admastonbromley.com

613-432-2885 Stone Road Office 613-432-4052 Fax

613-432-3175 Stone Road Garage 613-646-7918 Cobden Road Garage

REPORT

Date: August 7, 2025

To: Council

From: Jennifer Charkavi

Re: Consent Application B182/24

Background:

A Consent application has been submitted. The Applicant is proposing to sever a vacant residential lot that is 1.5 hectares in area with 178.3 metres of road frontage along Hass Road. The retained lands will be 8.6 hectares in area with 178.3 metres of road frontage along Hass Road and contains an existing dwelling and shed.

The Township indicated that this portion of the roadway is considered a forced road. The Township would request the entire length of the road along the entire frontage of the lot to be severed to be surveyed to a width of 66' to be deemed to the Township for future road improvements. This is completed at no cost to the Township.

County records indicate that there are properties with barns within 750 metres. If these barns contain or are capable of containing livestock, or there is manure storage on the property, an MDS 1 form must be completed for each livestock facility and/or manure storage and returned to our office to determine the minimum separation distance for the proposed lot. Prior to a decision, favourable MDS calculations are required.

The severed and retained lands fall within areas that pose a wildland fire risk, prior to a decision, a completed Wildland Fire Risk Assessment Form must be submitted.

A preliminary survey including parts required by the Township related to the road and a Registered Plan of Survey will be a condition of consent.

Financial Implications:

None at this time.

People Consulted:

County of Renfrew – Development and Property Department Chief Building Official Public Works Superintendent Drainage Superintendent

Recommendation for Council:

BE IT RESOLVED that Admaston/Bromley Council accept in principle Consent Application B182/24 submitted by applicant John & Janet Fitchett, 2705 Hass Road, so long as requirements of commenting agencies are satisfied.



Development & Property Department CONSENT PLANNING REPORT

PART A - BACKGROUND

1. FILE NO.: B182/24

2. APPLICANTS: John & Janet Fitchett Agent: Zion Lekovic

3. MUNICIPALITY: Township of Admaston/Bromley

(Geographic Township of Admaston)

4. LOT: Part Lot 15 CON.: 10 STREET: 2705 Hass Road

5. PURPOSE: Creation of a new lot

6. DESCRIPTION OF The owners are proposing to sever a vacant residential lot that is APPLICATION: 1.5 hectares in area with 178.3 metres of road frontage along Hass

Road. The retained lands will be 8.6 hectares in area with 178.3 metres of road frontage along Hass Road and contains an existing

dwelling and shed.



7. LOT DIMENSIONS AND USE OF LANDS

	Frontage	Area	Structures
Existing Lot	178.3 m	10.1 Ha	Dwelling and shed
Severed	178.3 m	1.5 Ha	None
Retained	178.3 m	8.6 Ha	Dwelling and shed

8. SEVERANCE HISTORY

Number of new lots from original holding (1971)

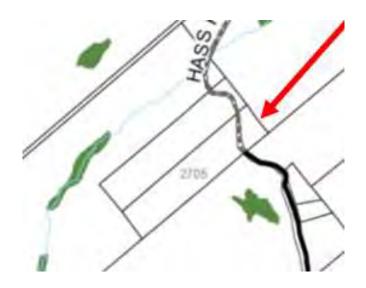
no previous severances

9. OFFICIAL PLAN OF THE COUNTY OF RENFREW

Official Plan Designation(s):

Severed Rural

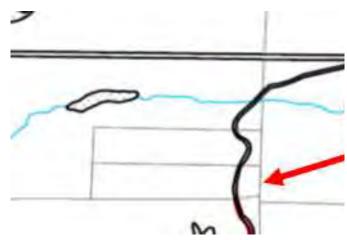
Retained Rural



10. ZONING BY-LAW OF THE TOWNSHIP OF ADMASTON/BROMLEY (2004-13) Zone(s):

Severed Rural (RU)

Retained Rural (RU)



Zone Requirements:

	<u>Proposed</u> <u>Lot Frontage</u>	<u>Minimum</u> <u>Required</u>	<u>Proposed</u> <u>Lot Area</u>	<u>Minimum</u> <u>Required</u>
Severed	178.3 m	45 m	1.5 Ha	4047 m ²
Retained	178.3 m	45 m	8.6 Ha	4047 m ²

PART B - COMMENTS

1. PROVINCIAL PLANNING STATEMENT and MUNICIPAL PLAN REVIEW DATA

Policies Considered:

- 2.6.1 On *rural lands* located in municipalities, permitted uses are: c) residential development, including lot creation, where site conditions
- are suitable for the provision of appropriate sewage and water services;
- 4.3.2.3 New land uses in *prime agricultural areas*, including the creation of lots and new or expanding livestock facilities, shall comply with the *minimum distance separation formulae*.
- 5.2.9 Development shall generally be directed to areas outside of lands that are unsafe for development due to the presence of hazardous forest types for wildland fire.

Development may however be permitted in lands with hazardous forest types for wildland fire where the risk is mitigated in accordance with wildland fire assessment and mitigation standards.

2. OFFICIAL PLAN

Policies Considered:

- 2.2(2) Minimum Distance Separations (MDS)
- 2.2(9)(d) Wildland Fire Hazard
- 5.3(1) Permitted Uses in the Rural Designation
- 5.3(2) Residential Development in the Rural Designation
- 13.3(3) Municipal Roads
- 14.3(1)-(3) Consent Policies

3. **ZONING BY-LAW**

Provisions Considered:

- 3.25(a)i) Separation Distances MDS1
- 21.1 Rural (RU) Zone permitted uses
- 21.2 Rural (RU) Zone zone provisions

4. SUBMITTED STUDIES

None

5. <u>AGENCY COMMENTS</u>

Twp. of Admaston/Bromley

The Township indicated that this portion of the roadway is considered a forced road. The Township would request the entire length of the road along the entire frontage of the lot were expected to be severed to be surveyed to a width of 66' to be deemed to the Township for future road improvements.

All new septic and buildings to comply with OBC standards/requirements, and municipal By-Laws.

6. GENERAL PLANNING COMMENTS

The purpose of the severance application is to split the subject property into two separate lots, as shown on the Key Map. Hass Road crosses through the subject property and bisects the property into two, the severed and the retained lands. Section 14.3(2) of the Official Plan states that consents will granted only when all parcels involved, including all retained parcels, abut and have direct access to an existing public road maintained on a year-round basis and of a standard of construction acceptable to the relevant road authority. Hass Road is considered to be an open, municipal road, maintained year round by the Township. Currently, the lands over which it travels are still owned by the applicant. Further to discussions with Township staff, the Township has indicated they will require the entire length of the road along the entire frontage between the severed and retained lands to be surveyed to a width of 66' and to be conveyed to the Township and accepted into the municipal road system. As a condition of consent, the applicant must satisfy the requirements of the Township regarding the conveyance of Hass Road. Once Hass Road is part of the municipal road network, the severed and retained lands will have frontage on a municipal road.

Minimum Distance Separation

Any new residential lots must meet Minimum Distance Separation 1 (MDS 1) requirements from existing livestock facilities on the retained lands and neighbouring properties. MDS 1 must be calculated for all livestock facilities within 750 metres of the proposed severed lot. Our records indicate that the following properties have barns within 750 metres: 2451 & 2591 Hass Road, and the property located in Lot 17, Concession 10.

If these barns contain or are capable of containing livestock, or there is manure storage on the property, an MDS 1 form must be completed for each livestock facility and/or manure storage and returned to our office to determine the minimum separation distance for the proposed lot. Prior to a decision, favourable MDS calculations are required.

Wildland Fire Hazard

The severed and retained lands fall within areas that pose a wildland fire risk, as identified on Schedule B-Map 1-Hazards, to the County of Renfrew Official Plan. Under Section 2.2(9)(d) development may be permitted in an area with a wildland fire risk, provided the risk is mitigated in accordance with Ministry of Natural Resource and Forestry (MNRF) assessment and standards.

Prior to a decision, a completed Wildland Fire Risk Assessment Form will need to be submitted. This form is available on the County of Renfrew Website, alongside a short guide on mitigating wildland fire risks. https://www.countyofrenfrew.on.ca/en/business-and-development/wildland-fire.aspx.

An information guide and risk assessment form for mitigating wildland fire is available on the County of Renfrew Website at https://www.countyofrenfrew.on.ca/en/business-and-development/wildland-fire.aspx.

7.	RECO	<u>OMMENDATIONS</u>			
(a)		iing concerns have ent can be granted		tified in this report. Therefore,	
(b)	There are some planning concerns that must be dealt with as follows, before determining whether the consent can be supported or not. - Favourable MDS1 Calculation - Favourable Wildland Fire Hazard Assessment form				
(c)		oroposal may be ac esolved:	cceptable when	the following matters are addressed	
(d)	Conditions to the giving of consent should be considered for the following:				
	X	Registered Plan o	of Survey:	Preliminary survey including parts rethe Township related to the road	equired by
		Zoning By-law Ar	mendment:		
		Minor Variance:			
		Private Road Agr	eement:		
		Development Agi	reement:		
		Site Plan Control	Agreement:		
		Notice on Title:			
		Shoreline Road A Acquisition:	llowance Closur	e /	
	\times	Other: Conve	eyance of the ro	ad to the satisfaction of the Township	

FILE NO. B182/2	FILE	. NO.	B182/2
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(e)	There are se	erious planning concerns, refusal is recommended.	
(f)	Other Recor	mmendations:	
Date:		June 27, 2025	
Prepar	red by:	Lindsey Bennett-Farquhar, MCIP, RPP Senior Planner	

OCT/2024

Township of Admaston/Bromley 477 Stone Road, R.R. #2 Renfrew, ON K7V 3Z5

E-Mail Address - info@admastonbromley.com

613-432-2885 Stone Road Office 613-432-4052 Fax

613-432-3175 Stone Road Garage 613-646-7918 Cobden Road Garage

REPORT

Date: August 7, 2025

To: Council

From: Jennifer Charkavi

Re: Consent Application B04/25

Background:

A Consent application has been submitted. The Applicant is proposing to sever a vacant residential lot that is 8.5 hectares in area with 301.69 metres of road frontage along Chris Ruddy Road. The retained lands will be 31.16 hectares in area with 20 metres of road frontage along McNulty Road and it is vacant.

County records indicate that there are properties with barns within 750 metres. If these barns contain or are capable of containing livestock, or there is manure storage on the property, an MDS 1 form must be completed for each livestock facility and/or manure storage and returned to our office to determine the minimum separation distance for the proposed lot. MDS1 calculations were completed for the properties within 750 metres and the results were favourable.

Both the proposed severed and retained lands are impacted by significant valleylands. This is a natural feature that is required to be protected from negative impacts from development. Proposed development that occurs in or within 120 meters of this feature is typically required to be supported by an Environmental Impact Study (EIS) that demonstrates there will be no negative impacts on the valleylands. In this case, both the severed and retained lots have large amounts of land outside of the lands impacted by the significant valleylands; therefore an EIS would not be required for the proposed consent.

The severed lands have frontage on Chris Ruddy Road which is a municipal road. The retained lands have frontage on Stone Road which is a County Road, and McNulty Road which is a municipal road. In the municipal comments, the Township indicated that an entrance would be granted for both the severed and retained lands. The applicant provided a letter from the Township that an entrance permit has been granted

for the severed lot off of Chris Ruddy Road. The Township has confirmed there is an existing entrance for the retained lands off of McNulty Road.

The severed and retained lands are primary zoned Rural (RU) in the Township Zoning By-law. The minimum lot frontage required in the Rural (RU) is 45 metres. The severed lands meet the lot frontage requirement; however, the retained lands would have approximately 20 metres of road frontage on McNulty Road and would not meet the requirement of 45 metres. A minor variance is required to be submitted as a condition of consent to address the reduced lot frontage. This is required as the existing entrance for this property is currently on Chris Ruddy Road, once the parcel is approved for a severance, a new entrance for the retained portion will be required.

A Registered Plan of Survey will be also be a condition of consent.

Financial Implications:

None at this time.

People Consulted:

County of Renfrew – Development and Property Department Chief Building Official Public Works Superintendent Drainage Superintendent

Recommendation for Council:

BE IT RESOLVED that Admaston/Bromley Council accept in principle Consent Application B04/25 submitted by applicant Bert Welten, 2113 Stone Road, so long as requirements of commenting agencies are satisfied.



Development & Property Department CONSENT PLANNING REPORT

PART A - BACKGROUND

1. FILE NO.: B04/25

2. APPLICANT: Bert Welten

Agent: Doug Schultz

3. MUNICIPALITY: Township of Admaston/Bromley

(Geographic Township of Admaston)

4. LOT: Part Lot 24 CON.: 8 STREET: 2113 Stone Road

5. PURPOSE: Creation of a new lot

6. DESCRIPTION OF The owners are proposing to sever a vacant residential lot that is APPLICATION: 8.85 hectares in area with 301.69 metres of road frontage along

Chris Ruddy Road. The retained lands will be 31.16 hectares in area with 20 metres of road frontage along McNulty Road and it is

vacant.



7. LOT DIMENSIONS AND USE OF LANDS

	Frontage		Area		Structures
Existing Lot	301.69 Chris Ruddy Rd 20 McNulty Rd		40.01	На	None
Severed	301.69 Chris Ruddy Rd	m	8.85	На	None
Retained	20 McNulty Rd	m	31.16	На	None

8. SEVERANCE HISTORY

Number of new lots from original holding (1971)

no previous severances

9. OFFICIAL PLAN OF THE COUNTY OF RENFREW

Official Plan Designation(s):

Severed Rural

Environmental Protection

Retained Rural

Environmental Protection



10. ZONING BY-LAW OF THE TOWNSHIP OF ADMASTON/BROMLEY (2004-13) Zone(s):

Severed Rural (RU)

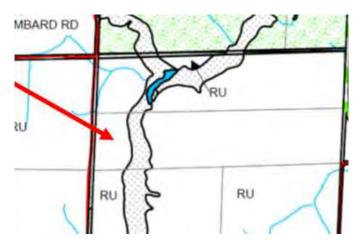
Environmental Protection

(EP)

Retained Rural (RU)

Environmental Protection

(EP)



Zone Requirements:

	<u>Proposed</u> <u>Lot Frontage</u>	<u>Minimum</u> <u>Required</u>	<u>Proposed</u> <u>Lot Area</u>	<u>Minimum</u> <u>Required</u>
Severed	301.69 m	45 m	8.85 Ha	4047 m ²
Retained	25 m	45 m	31.16 Ha	2 ha

PART B - COMMENTS

1. PROVINCIAL PLANNING STATEMENT and MUNICIPAL PLAN REVIEW DATA

Policies Considered:

- 2.6.1 On rural lands located in municipalities, permitted uses are:
- c) residential development, including lot creation, where site conditions are suitable for the provision of appropriate *sewage and water services*:
- 4.1.1 Natural features and areas shall be protected for the long term.
- 4.3.2.3 New land uses in *prime agricultural areas*, including the creation of lots and new or expanding livestock facilities, shall comply with the *minimum distance separation formulae*.

2. OFFICIAL PLAN

Policies Considered:

- 2.2 (2) Minimum Distance Separations (MDS) relating to agriculture
- 2.2 (8)(f) Significant Valleyland
- 2.2(23) Environmental Impact Study(EIS)
- 5.3.1 Uses permitted in the Rural Designation
- 5.3.2 Residential Development in the Rural Designation
- 8.2(1)-(2) uses permitted in the Environmental Protection designation
- 14.3(1) Consent Conformity
- 14.3(2) Consent and road access
- 13.3(2) County Roads

3. **ZONING BY-LAW**

Provisions Considered:

- 3.25(a) Separation distances from livestock
- 3.26(b) County Roads setback
- 3.26(c) Township Roads setback
- 3.26(d) Water Setback
- 21.1 Permitted Uses in the RU zone
- 21.2 Provisions of RU zone
- 24.1 Permitted Uses in the EP zone
- 24.2 Provisions of FP zone.

4. <u>SUBMITTED STUDIES</u>

none

5. <u>AGENCY COMMENTS</u>

Twp. of April 11, 2025

Admaston/Bromley Favourable comments were received.

All new septic and buildings to comply with OBC standards/requirements, and municipal By-Laws.

County Public Works

March 27, 2025

& Engineering

No comments or concerns

6. GENERAL PLANNING COMMENTS

As indicated in Part B, Section 1, the Provincial land use planning matters to be addressed include: Minimum Distance Separation 1 (MDS1) of a new sensitive (residential) land use existing livestock and manure operations and significant valleylands.

Minimum Distance Separation 1 (MDS1)

The Provincial Planning Statement, the County of Renfrew Official Plan and the Township of Admaston/Bromley Zoning By-law require compliance with Minimum Distance Separation 1 (MDS1). MDS1 must be calculated for all livestock facilities within 750 metres of the proposed severed lot. Our records indicate that the following properties have barns within 750 meters: 2145 Stone Road, 643 McNulty Road and 99 Labombard Road.

MDS1 calculations were completed for the properties listed above, and the results were favourable.

Significant Valleylands

Both the proposed severed and retained lands are impacted by significant valleylands, as identified on Official Plan Schedule B-Map 4-Natural Heritage Features and Sections 2.2(8)(f). This is a natural feature that is required to be protected from negative impacts from development. Proposed development that occurs in or within 120 meters of this feature is typically required to be supported by an Environmental Impact Study (EIS) that demonstrates there will be no negative impacts on the valleylands.

In this case, both the severed and retained lots have large amounts of land outside of the lands impacted by the significant valleylands; therefore an EIS would not be required for the proposed consent

Transportation

The severed lands have frontage on Chris Ruddy Road which is a municipal road. The retained lands have frontage on Stone Road which is a County Road, and McNulty Road which is a municipal road.

In the municipal comments, the Township indicated that an entrance would be granted for both the severed and retained lands. The applicant provided a letter from the Township that an entrance permit has been granted for the severed lot off of Chris Ruddy Road. The Township has confirmed there is an existing entrance for the retained lands off of McNulty Road.

Zoning By-law

The severed and retained lands are primary zoned Rural (RU) in the Township Zoning By-law. The minimum lot frontage required in the Rural (RU) is 45 metres. The severed lands meet the lot frontage requirement; however, the retained lands would have approximately 20 metres of road frontage on McNulty Road and would not meet the requirement of 45 metres. A minor variance is required to be submitted as a condition of consent to address the reduced lot frontage.

Environmental Protection Areas

The subject lands contain low lying/wetlands areas and streams, which are designated Environmental Protection in the County of Renfrew Official Plan. Development and/or site alteration is not permitted in these areas.

According to the Section 3.26(d) of the Zoning By-law, a minimum of 30 meters water setback shall be provided for lakes and rivers. For all other water bodies a minimum water setback of 15 metres from the high water mark shall be provided.

7. <u>RECOMMENDATIONS</u>

		SIVIIVIEI (B) (III OI (O					
(a)		ning concerns have NOT been ident ent can be granted.	ified in this report. Therefore,	\boxtimes			
(b)		e are some planning concerns that must be dealt with as follows, before mining whether the consent can be supported or not.					
(c)	The proposal may be acceptable when the following matters are addressed and resolved:						
(d)	Cond	itions to the giving of consent show	uld be considered for the following:				
	X	Registered Plan of Survey:					
		Zoning By-law Amendment:					
	\boxtimes	Minor Variance:	To reduce the lot frontage requirement in RU zone	ı the			
		Private Road Agreement:					

		Development Agreement:	
		Site Plan Control Agreement:	
		Notice on Title:	
		Shoreline Road Allowance Closure / Acquisition:	
		Other:	
(e)	There	e are serious planning concerns, refusal is recommended.	
(f)	Other	Recommendations: [
Date:		June 27, 2025	
Prepared by:		: Lindsey Bennett-Farquhar, MCIP, RPP Senior Planner	

OCT/2024

Township of Admaston/Bromley 477 Stone Road, R.R. #2 Renfrew, ON K7V 3Z5

E-Mail Address - info@admastonbromley.com

613-432-2885 Stone Road Office 613-432-4052 Fax

613-432-3175 Stone Road Garage 613-646-7918 Cobden Road Garage

REPORT

Date: August 7, 2025

To: Council

From: Jennifer Charkavi

Re: Consent Application B40/25

Background:

A Consent application has been submitted. The Applicant is proposing to sever 1.405 hectares of land with no road frontage to add it to the abutting property owned by Steven, Maisie and Randal.

The owners are proposing a lot addition to enlarge the abutting property located at 58 Lower Lane. The lot addition will increase the property in size from 0.01 hectares to 0.415 hectares. There is no change to lot frontage. As a result of the lot addition, the final retained lands will be 34.7 hectares in area.

The parcel to be severed and the retained parcel currently owned by Michael Kelly and Tina Phillippe are currently zoned Rural (RU). The parcel receiving the lot addition is currently zoned Limited Services Residential (LSR). As a result of the lot addition, the newly enlarged lot will be split zoned: RU and LSR. As a condition of consent, a zoning by-law amendment is required to rezone the severed lands from RU to LSR to ensure the entire enlarged lot is in the same zone. The enlarged and retained lots have frontage on Colton Lake is designated as an At Capacity Lake and zoned as a Sensitive Lake. The policies of Section 3.29 of the Zoning By-law are applicable to the retained parcel and the parcel created through the lot addition.

Natural Heritage Features found in the County of Renfrew Official Plan indicates that the northern boundary of the severed parcel contains a large wet area that is designated and zoned Environmental Protection. No development or site alteration is permitted in these areas.

A Registered Plan of Survey will be also be a condition of consent.

Financial Implications:

None at this time.

People Consulted:

County of Renfrew – Development and Property Department Chief Building Official Public Works Superintendent Drainage Superintendent

Recommendation for Council:

BE IT RESOLVED that Admaston/Bromley Council accept in principle Consent Application B40/25 submitted by applicants Michael Kelly and Tina Philippe, Dragonfly Way, so long as requirements of commenting agencies are satisfied.



Development & Property Department CONSENT PLANNING REPORT

PART A - BACKGROUND

1. FILE NO.: B40/25

2. APPLICANTS: Michael Kelly & Tina Philippe

3. MUNICIPALITY: Township of Admaston/Bromley

(Geographic Township of Admaston)

4. LOT: Part Lots 17 & 18 CON.: 8 STREET: Dragonfly Way

5. PURPOSE: Lot addition to abutting property at 58 Lower Lane

6. DESCRIPTION OF The owners are proposing to sever 0.405 hectares of land with no APPLICATION: road frontage to add it to the abutting property owned by Steven,

Maisie and Randal.



7. LOT DIMENSIONS AND USE OF LANDS

	Frontage Area		Structures	
Existing Lot	550 m	35.105 Ha	Cabin and shed	
Severed	0 m	0.405 Ha	None	
Lot to be enlarged	12 m	0.01 Ha	Cottage and sleep cabin	
Retained	550 m	34.7 Ha	Cabin and shed	

8. SEVERANCE HISTORY

Number of new lots from original holding (1971)

2 Previous severances: B147/10(1) & B148/10(2) Lot additions: B46/1977, B281/1992, B446/1993, B146/1997, B166/14(1), B167/14(2), B168/14(3), B1/15, B6/15(1), B7/15(2) & B29/24

Refused: B205/91 & B41/93

9. OFFICIAL PLAN OF THE COUNTY OF RENFREW

Official Plan Designation(s):

Severed Rural

Environmental Protection

At Capacity Lake

Lot to be Rural

Enlarged At Capacity Lake

Retained Rural

Environmental Protection

At Capacity Lake



10. ZONING BY-LAW OF THE TOWNSHIP OF ADMASTON/BROMLEY (2004-13) Zone(s):

Lot to be Limited Service Enlarged Residential (LSR)

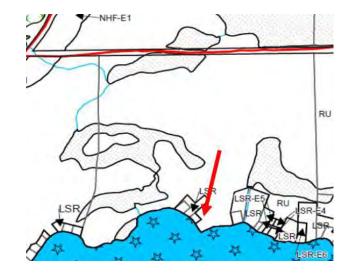
Rural (RU)

Retained Rural (RU)

Severed

Environmental Protection

(EP)



Zone Requirements:

	<u>Proposed</u> Lot Frontage	<u>Minimu</u> Require		<u>Propos</u> Lot Are		<u>Minimun</u> Required	
Severed	0 n	45 (RU)	m	0.405	На	4047 (RU)	m^2
Total, if Lot Addition	12 m	45 (LSR)	m	0.415	На	4047 (LSR)	m ²
Retained	550 m	45 (RU)	m	34.7	На	4047 (RU)	m^2

PART B - COMMENTS

1. PROVINCIAL PLANNING STATEMENT and MUNICIPAL PLAN REVIEW DATA

Policies Considered:

Section 1.1.4 Rural Areas in Municipalities

Section 1.1.5 Rural Lands in Municipalities

Section 2.2 Water - Planning authorities shall protect, improve or restore the quality and quantity of water.

2. OFFICIAL PLAN

Policies Considered:

- 2.2(9)(d) Wildland fire risk
- 2.2(11) Water Setback and Protection of Shoreline Integrity
- 2.2(12) Servicing policies

- 5.3(1),(2) Permitted uses and provisions for residential development in the Rural designation
- 8.3(1) Permitted uses in the Environmental Protection designation
- 9.3(2) Provisions for At Capacity Lakes
- 13.3(4) Private roads
- 14.0 Land Division Policies
- 14.3(2) Consents Policies
- 14.3(14) Lot Addition

3. ZONING BY-LAW

Provisions Considered:

- 3.29 Sensitive Lake
- 3.30 Temporary construction uses permitted
- 7.1 & 7.2 Permitted uses and zone provisions for Limited Service Residential (LSR) Zone
- 21.1 & 21.2 Permitted uses and zone provisions for Rural (RU) Zone
- 24.1 & 24.2 Permitted uses and zone provisions for Environmental Protection (EP) Zone

4. <u>SUBMITTED STUDIES</u>

None

5. <u>AGENCY COMMENTS</u>

Twp. of Favourable comments were received from the Admaston/Bromley Township.

Additional comments include that all new septic and buildings to comply with OBC standards/requirements, and municipal By-Laws.

6. GENERAL PLANNING COMMENTS

The owners are proposing a lot addition to enlarge the abutting property located at 58 Lower Lane. The lot addition will increase the property in size from 0.01 hectares to 0.415 hectares. There is no change to lot frontage. As a result of the lot addition, the final retained lands will be 34.7 hectares in area.

Section 14.3(1) of the Consent policies of the Official Plan require that both the severed and retained lots meet the requirements of the Official Plan and the local Zoning By-law. Consents may be granted for lot additions provided the lot to be added to, together with the lot addition, or any retained parcels of land, are not undersized or irregularly shaped for the purpose for which they are to be used. The newly enlarged lot was previously undersized at 0.01 hectares. As a result of the lot addition, it will meet the Official Plan minimum lot area requirements of 4000 square metres.

Zoning by-law:

The parcel to be severed and the retained parcel currently owned by Michael Kelly and Tina Phillippe are currently zoned Rural (RU). The parcel receiving the lot addition is currently zoned Limited Services Residential (LSR). As a result of the lot addition, the newly enlarged lot will be split zoned: RU and LSR. As a condition of consent, a zoning by-law amendment is required to rezone the severed lands from RU to LSR to ensure the entire enlarged lot is in the same zone.

At Capacity lakes Policies:

The enlarged and retained lots have frontage on Colton Lake is designated as an At Capacity Lake and zoned as a Sensitive Lake. The policies of Section 3.29 of the Zoning By-law are applicable to the retained parcel and the parcel created through the lot addition.

Environmental Protection Area:

Acquisition:

Schedule "B" - Map 4 - Natural Heritage Features found in the County of Renfrew Official Plan indicates that the northern boundary of the severed parcel contains a large wet area that is designated and zoned Environmental Protection. No development or site alteration is permitted in these areas.

7.	REC	<u>OMMENDATI ONS</u>						
(a)		nning concerns have NOT been identified in this report. Therefore, sent can be granted.						
(b)		ere are some planning concerns that must be dealt with as follows, before termining whether the consent can be supported or not.						
(c)		The proposal may be acceptable when the following matters are addressed and resolved:						
(d)	d) Conditions to the giving of consent should be considered for the following:							
	X	Registered Plan of Survey:						
	X	Zoning By-law Amendment:	Rezone the severed lands from RU to	LSR				
		Minor Variance:						
		Private Road Agreement:						
		Development Agreement:						
		Site Plan Control Agreement:						
		Notice on Title:						
		Shoreline Road Allowance Closure /						

	\boxtimes	Other:	Standard lot consolidation requirements	
(e)	There	are serious	s planning concerns, refusal is recommended. [
(f)	Other	Recommer	ndations: [
Date:		July	23, 2025	
Prepar	red by:		sey Bennett-Farquhar, MCIP, RPP ior Planner	

OCT/2024

THE HONOURABLE ROBERT BLACK SENATOR – ONTARIO



L'HONORABLE ROBERT BLACK SÉNATEUR – ONTARIO

June 13, 2025

Mayor Michael Donohue Township of Admaston/Bromley 477 Stone Rd. R.R. 2 Renfrew Ontario K7V 3Z5

Dear Mayor Donohue,

I am writing you to raise an important issue impacting provinces, territories and municipalities across Canada that requires your immediate attention and action.

In June 2024, the Standing Senate Committee on Agriculture and Forestry (AGFO) tabled a report on soil health in Canada that was completed over an 18-month period. This report examined the state of soil health across Canada, the effects of soil pollution and contamination, as well as domestic and international practices in place to protect, preserve and conserve soil.

Our report found that <u>soil is at risk</u>. Canada, along with other countries around the world, are losing substantial amounts of healthy, useable soil that is needed to grow food to feed our nation. In addition, there are over 20 million contaminated sites around the world, and more than 30 per cent of the world's soil is already degraded, meaning it has significantly lost its ability to grow food, hold water or support plants and animals. The Food and Agriculture Organization of the United Nations (FAO-UN) estimates that 90 per cent of the world's soil will be degraded by 2050, <u>if something is not done</u>.

Climate change is causing extreme weather events and unpredictable weather that causes soil degradation. Farmers may not have the financial means or resources to use sustainable methods to preserve their soil and agricultural lands full of rich soil are being paved over to build infrastructure and housing. While the agriculture sector faces these issues, there is little being done to ensure that soil is being protected.

If Canada continues down this path and does not prioritize the protection of farmlands and the conservation of soil health, we will find ourselves lacking the agricultural land we need to sustain our ever-growing country. We will lose the ability to not only feed Canadians but the world!

The preservation of Canadian soil requires a whole of government approach. While many recommendations in the report specifically call on action by federal and provincial governments, municipal governments are equally as equipped to assist in this endeavor. With your support, we can work to keep this issue front of mind for all government officials, so that soil protection and conservation is taken seriously and met with meaningful action.

In April 2025, I had the pleasure of presenting our soil report and recommendations to the Township of Amaranth Council in Dufferin County. The response I received from this visit was tremendous, with the Council putting forward a resolution that supports all the recommendations outlined in the AGFO soil report. This initiative pushes us forward in the fight to save our soil and reiterates to all levels of government the urgency of this issue.

Subsequently, the Township of North Wellington Council passed a similar motion of support.

Enclosed, you will find a QR Code to access the AGFO soil report, and copies of the Township of Amaranth and Township of Wellington North resolutions. I implore you to read the report, the 25 recommendations on how to best protect, preserve and conserve our soils, the federal government's response, as well as the municipal resolutions put forward this spring. And hopefully you will consider supporting the resolution and pass a similar one at a future council meeting.

I am committed to continue advocating for soil health in the Red Chamber, and I hope that the agriculture sector has your support in this endeavor. It is important that we work together to ensure we will have the land we need to continue feeding our country now and for years to come.

Sincerely,

The Hon. Robert Black, P. Ag. (Hon) Senator (Ontario)

c.c.: All Municipal Councils across Ontario

Attachments (3)



374028 6TH LINE • AMARANTH ON • L9W 0M6

April 16, 2025

The Standing Senate Committee on Agriculture and Forestry The Senate of Canada Ottawa, Ontario K1A 0A4

Re: Critical Ground: Why Soil is Essential to Canada's Economic, Environmental, Human and Social Health

Following a presentation and discussion from The Honourable Robert Black at the regular meeting of Council held on April 16, 2025, the Township of Amaranth Council passed the following motion:

Resolution #: 3

Moved by: G. Little Seconded by: A. Stirk

Whereas the Township of Amaranth 2023 Strategic Plan included a vision statement "To grow a strong, vibrant rural and agricultural community" and a goal to "Protect our agricultural land and promote the farming economy"

And Whereas the Standing Senate Committee on Agriculture and Forestry published a report in 2024 titled "Critical Ground: Why Soil is Essential to Canada's Economic, Environmental, Human and Social Health" that contained twenty five (25) recommendations in total for the federal government, two of which also provided recommended actions for provincial and territorial governments.

And Whereas, Recommendation 7 of Critical Ground stated that "The Government of Canada encourage provinces, territories, and municipalities to develop measures—as a form of land use planning—that best preserve and protect agricultural land in their iurisdictions."

Therefore be it resolved that the Township of Amaranth fully support all of the Recommendations included within Critical Ground and will consider how to implement the Recommendations contained within Critical Ground when completing a review of the Township of Amaranth Official Plan.

And further that the Township of Amaranth urge the Government of Canada and the Province of Ontario to implement all the recommendations contained within Critical Ground and commit to recognizing a sense of urgency and act accordingly in order to protect and conserve soil as per Recommendation 25.

And further that this motion be circulated to the following parties:

- All local municipalities within the County of Dufferin
- MPP Hon. Sylvia Jones
- Hon. Todd McCarthy, Ministry of Environment, Conservation and Parks
- Hon. Trevor Jones, Minister of Agriculture, Food and Agribusiness
- Hon. Lisa Thompson, Minister of Rural Affairs
- MP Hon. Kyle Seeback
- Federal Ministry of Environment and Climate Change
- Federal Minister of Agriculture and Agri-Food and Rural Economic Development
- Rural Ontario Municipal Association
- Association of Municipalities of Ontario
- Federation of Canadian Municipalities
- Dufferin Federation of Agriculture
- Ontario Federation of Agriculture
- Senate Standing Committee on Agriculture and Forestry
- Premier of Ontario
- Prime Minister of Canada

CARRIED

Please do not hesitate to contact the office if you require any further information on this matter.

Yours truly.

Nicole Martin, Dipl. M.A.

CAO/Clerk



Township of Wellington North Council meeting of June 2, 2025

RESOLUTION

Whereas the Standing Senate Committee on Agriculture and Forestry published a report in 2024 titled "Critical Ground: Why Soil is Essential to Canada's Economic, Environmental, Human and Social Health" (the Report) that contained twenty five (25) recommendations in total for the federal government;

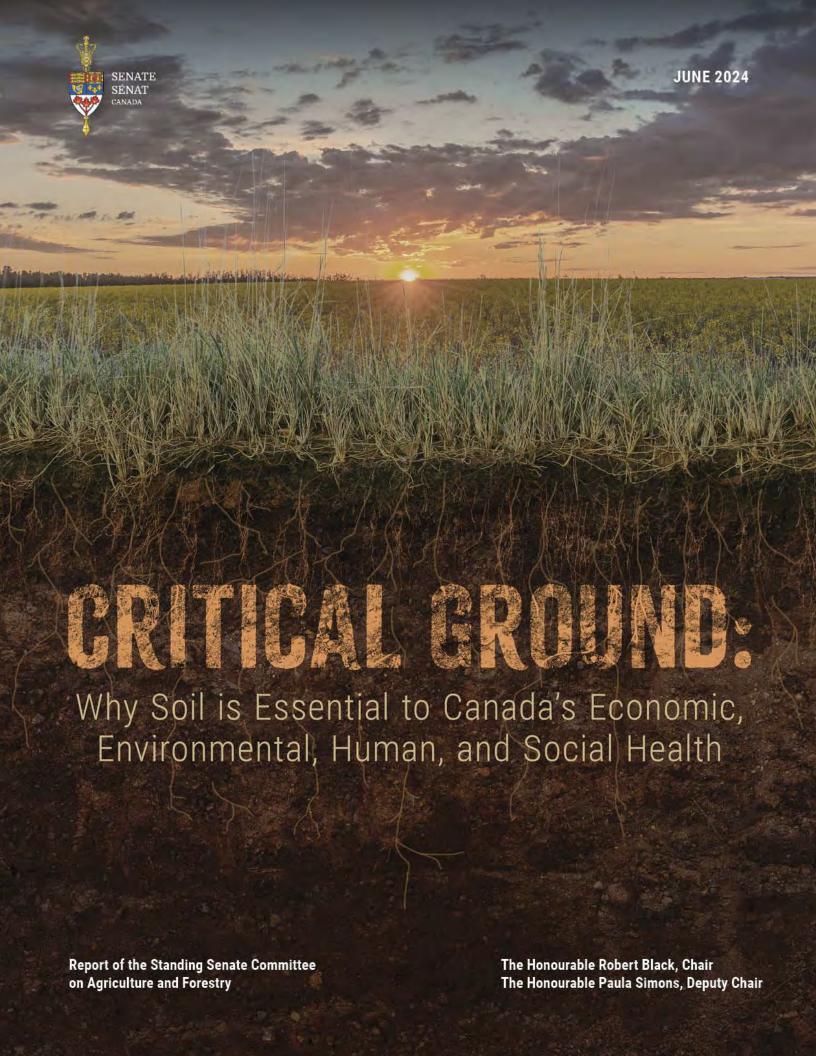
And whereas the work that Senator Black has done to bring not only the importance of soil to the forefront for the federal government, but Canadian agriculture - in specific Ontario agriculture, food security and how much the Ontario agricultural industry contributes to the federal and provincial Gross Domestic Product, is of critical significance to Wellington North - indeed all of Wellington County.

Therefore be it resolved that the Township of Wellington North fully supports all of the recommendations included in the Report;

And that the Township of Wellington North urge the Government of Canada and the Province of Ontario to implement all the recommendations contained within the Report and commit to recognizing a sense of urgency and act accordingly in order to protect and conserve soil as per Recommendation 25;

And further that this motion be circulated to the following parties:

- Rob Black, Senator
- John Nater, MP Perth Wellington
- Senate Standing Committee on Agriculture and Forestry
- All municipalities within the County of Wellington
- Wellington Federation of Agriculture
- Ontario Federation of Agriculture





Cover page photo credit: Keith Moore Photography (Edmonton, Alberta)

For more information, please contact us:

by email: AGFO@sen.parl.gc.ca

by mail: The Standing Senate Committee on Agriculture and Forestry, The Senate of Canada,

Ottawa, Ontario, Canada, K1A 0A4.

This report can be downloaded at: https://sencanada.ca/en/committees/AGFO/Reports/44-1

The Senate is on Twitter: @SenateCA,

follow the committee using the hashtag #AGFO

Ce rapport est également offert en français.

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CRITICAL GROUND: WHY SOIL IS ESSENTIAL TO CANADA'S ECONOMIC, ENVIRONMENTAL, HUMAN, AND SOCIAL HEALTH

FOREWARD

We acknowledge that our work takes place on the ancestral lands of Indigenous peoples who have stewarded these territories since time immemorial. We honour their enduring relationship with the land and commit to fostering mutual respect and collaboration as we move forward together.

As we stand on the dawn of a new era defined by environmental challenges and agricultural innovation, the importance of soil health in Canada has never been more profound. This report on the status of soil health in Canada is a testament to our continued commitment to understanding, preserving, and enhancing the very foundation of our country.

Soil is, and always has been more than mere earth beneath our feet; it is the lifeblood of our nation's growth, sustenance, and prosperity. From the vast prairies of the West to the resiliency of the North to the fertile valleys of the East, Canada's soils have sustained generations of farmers, nurtured diverse ecosystems, and supported a thriving agricultural sector that is the envy of the world.

Yet, the health of our soils is facing unprecedented challenges. Climate change, land degradation, and evolving agricultural practices necessitate a comprehensive understanding of soil dynamics, resilience, and management strategies.

This report delves deep into these issues, offering insights, analyses, and recommendations that are vital for safeguarding our soil resources for generations to come.

I commend and thank the dedicated efforts of all the researchers, scientists, policymakers, farmers, ranchers, foresters, and stakeholders whose contributions have greatly enriched this report. Their expertise, passion, and commitment to soil health serve as a beacon of hope and progress in our journey towards a more sustainable and resilient agricultural future.

May this report inspire action, foster collaboration, and ignite a renewed sense of stewardship towards our precious soils. Together, let us embark on a transformative journey towards a greener, healthier, and more prosperous Canada, rooted in the timeless legacy of our soils.

I wish to acknowledge our former colleagues who spearheaded the 1984 Senate report... the first report of its kind and still in high demand today; those early adopters who took up the challenge of improving soil health in Canada; and those men and women who encouraged this committee to undertake an updated report on the status of soil health in Canada. This report is for you.

Sincerely,

The Honourable Robert Black
Senator – Ontario
Chair, Senate Standing Committee on Agriculture and Forestry

THE COMMITTEE MEMBERSHIP



The Honourable Robert
BLACK
Chair



The Honourable Paula SIMONS Deputy Chair

The Honourable Senators



Sharon Burey



Brent Cotter



Pierre J. Dalphond



Mobina Jaffer



Marty Klyne



John M. McNair



Donald Neil Plett



Victor Oh



Chantal Petitclerc

Ex-officio members of the committee:

The Honourable Senator Gold and/or the Honourable Senator LaBoucane-Benson

The Honourable Senator Plett and/or the Honourable Senator Martin

The Honourable Senator Saint-Germain and/or the Honourable Senator Clement

The Honourable Senator Tannas and/or the Honourable Senator Patterson

The Honourable Senator Dalphond and/or the Honourable Senator White

Other Senators who have participated in the study:

The Honourable David M. Arnot

The Honourable Michèle Audette

The Honourable Diane Bellemare

The Honourable Andrew Cardozo

The Honourable Jean-Guy Dagenais

The Honourable Colin Deacon (Nova Scotia)

The Honourable Marty Deacon (Ontario)

The Honourable Pat Duncan

The Honourable Renée Dupuis (retired)

The Honourable Margo Greenwood

The Honourable Sabi Marwah (retired)

The Honourable Marnie McBean

The Honourable Percy Mockler (retired)

The Honourable Mary Robinson

The Honourable Larry W. Smith

The Honourable Karen Sorenson

The Honourable Pamela Wallin

The Honourable David M. Wells

The Honourable Howard Wetston (retired)

The Honourable Yuen Pau Woo

Research and Education, Library of Parliament:

Joanne Markle LaMontagne, Analyst

Senate Committees Directorate:

Ferda Simpson, Clerk

Elda Donnelly, Administrative Assistant

Senate Communications Directorate:

Ben Silverman, Communications Officer

ORDER OF REFERENCE

Extract from the *Journals of the Senate* of Tuesday, April 26, 2022:

The Honourable Senator Black moved, seconded by the Honourable Senator Downe:

That the Standing Senate Committee on Agriculture and Forestry be authorized to examine and report on the status of soil health in Canada with the purpose of identifying ways to improve soil health, enable Canadian forest product and agricultural producers to become sustainability leaders, and improve their economic prosperity;

That in particular, the committee should examine:

- (a) current soil conditions in Canada;
- (b) possible federal measures that would support and enhance agricultural and forest soil health, including in relation to conservation, carbon sequestration and efforts to address the effects of climate change;
- (c) the implications of soil health for human health, food security, forest and agricultural productivity and prosperity, water quality and air quality; and
 - (d) the role of new technologies in managing and improving soil health; and

That the committee report to the Senate no later than December 31, 2023, and that the committee retain all powers necessary to publicize its findings for 180 days after the tabling of the final report.

The question being put on the motion, it was adopted.

Interim Clerk of the Senate

Gérald Lafrenière

Extract from the Journals of the Senate of Thursday, September 28, 2023:

The Honourable Senator Black moved, seconded by the Honourable Senator Smith:

That, notwithstanding the order of the Senate adopted on Tuesday, April 26, 2022, the date for the final report of the Standing Senate Committee on Agriculture and Forestry in relation to its study on the status of soil health in Canada be extended from December 31, 2023 to December 31, 2024; and

That the committee be permitted, notwithstanding usual practices, to deposit with the Clerk of the Senate its report relating to this study, if the Senate is not then sitting, and that the report be deemed to have been tabled in the Senate.

The question being put on the motion, it was adopted.

Interim Clerk of the Senate

Gérald Lafrenière

EXECUTIVE SUMMARY

The Standing Senate Committee on Agriculture and Forestry (the committee) completed a new study on the status of soil health in Canada. The committee learned that soil delivers ecosystem services that enable all—plant, animal, human—life on Earth, such as water purification and storage; climate and flood regulation; nutrient cycling; carbon sequestration; the provision of food, fibre, fuel, and construction materials; habitat for organisms; and the foundation for human infrastructure and cultural heritage.

Soil is as critical as the air we breathe and the water we drink. Soil health is human health is *One Health*. Yet, soil is still at risk in Canada and around the world. Since the 1984 Senate report, the committee heard that while soil management has improved and crop yield has increased with enhanced plant genetics and cultural practices, these gains have also masked the effect of continued soil degradation and loss of agricultural land in every region of Canada. This is the result of climate change and more frequent extreme weather events (drought, fires, floods), urbanization, and misread outcomes of soil management practices. We do not have another 40 years to protect and conserve soil. We must act now.

"The sense of urgency is the evidence that we have of the degradation of soils worldwide being exacerbated by intense weather events and climate factors."

Penny Wensley³

The report explores many themes and presents recommendations to understand soil health, build soil-based incentives and initiatives, and promote soil health and agricultural and forestry land preservation for a better future. Through witness testimony and fact-finding missions, the committee learned about the valuable work that farmers, ranchers, growers, foresters, agronomists, researchers, and government officials are doing in every province and territory in Canada to improve soil degradation. We thank them for their time and the knowledge they shared about beneficial soil management practices, as well as the barriers to implementing them.

¹ According to the World Health Organization, *One Health* is an integrated approach that aims to balance and optimize the health of people, animals, and the environment in a sustainable manner by recognizing that they are closely linked and interdependent.

² AGFO, *Evidence*, 22 September 2022 (Don Lobb, Farmer, As an individual).

³ AGFO, <u>Evidence</u>, 29 February 2024 (Penny Wensley, Former National Soils Advocate, Government of Australia, As an individual).

Soil is a valuable natural resource. The Government of Canada should designate soil as a strategic national asset. Other countries such as Australia have appointed a national soils advocate; the committee believes that the Government of Canada should do the same.

The committee heard that while organizations such as the Soil Conservation Council of Canada have been developing a national soil strategy, there is no overarching federal strategy currently in place to protect and conserve agricultural and forestry soils in this country. Another issue facing the sector, and all Canadians, is the lack of available data on soil health. The Government of Canada must take a lead and collaborate with the provinces, territories, Indigenous governments, academia, and agricultural and forestry producers to collect, analyze, and share data on soil productivity, so that we can better understand and improve strategies to enhance our soils' capabilities.

Given the range of soil types and climates throughout Canada, the committee was repeatedly told that a 'one-size-fits-all-approach' to soil health does not work and that policymakers must consider regional differences. In Canada's North, melting permafrost—and the unknown amount of carbon it stores and releases—poses risks for agriculture and forestry in all three territories. The creation of a national permafrost assessment centre would enhance coordination and representation of these issues. The committee also heard that soil contamination is widespread in Canada. A national strategy for remediating contaminated soils throughout the country is imperative.

To protect and conserve farmland soil throughout Canada, the committee heard that all levels of government—federal, provincial, territorial, municipal—should work together to plan agriculture into, and not out of, communities. Witnesses also said that building soil-based incentives (tax credits for farmers, enhanced crop insurance, a viable carbon market), as well as sustained funding for soil research initiatives is imperative for producers' prosperity. Finally, witnesses suggested that the Government of Canada provide funding for peer-to-peer soil networks, extension services, soil science programs, and encourage the development of programming in elementary and high schools to enhance awareness and understanding of the economic, environmental, and social contributions that agriculture brings to this country.

The committee believes that a new path forward is needed; one that is based on collaboration between federal, provincial, territorial, municipal, and Indigenous governments, to ensure that the economic prosperity of agricultural and forestry producers is at the forefront of soil-related policymaking.

RECOMMENDATIONS

To Better Understand the State of Soil Health and Its Evolution, the Committee Recommends That:

- 1. The Government of Canada designate soil as a strategic national asset.
- 2. The Government of Canada appoint a national soils advocate.
- 3. The Government of Canada support the development of a long-term overarching strategy to protect and conserve soil throughout Canada and that this strategy include targets, timetables, and provisions for review.
- 4. That the Government of Canada collaborate with the provinces and territories to support the development of a consensus on how to measure, report, and verify soil health.
- 5. The Government of Canada collaborate with provinces, territories, Indigenous governments, academia, and agricultural and forestry producers to create a national soils institute and database; that this data be shared with provinces, territories, Indigenous governments, academia, and agricultural and forestry producers; and, that this data be collected at different points in time to adequately measure change over time.
- 6. The Government of Canada create a national permafrost assessment program.

To Build Soil-Related Incentives and Initiatives, the Committee Recommends That:

- 7. The Government of Canada encourage provinces, territories, and municipalities to develop measures—as a form of land use planning—that best preserve and protect agricultural land in their jurisdictions.
- 8. The Government of Canada collaborate with the provinces and territories to create and deliver a crop insurance model that incentivizes the ecological goods and services carried out by farmers, growers, and ranchers.
- 9. The Government of Canada help to facilitate and encourage the creation of viable and valuable carbon markets for farmers, ranchers, and growers.
- 10. The Government of Canada implement tax credits for farmers, ranchers, and growers who have adopted, or are adopting, innovation and technology that support soil health, and that the Government of Canada does not leave the early adopters behind.
- 11. The Government of Canada collaborate with the provinces and territories to expand and deliver higher quality broadband internet access in rural areas to promote a wider adoption of precision agriculture techniques to enhance soil health.
- 12. The Government of Canada enhance funding for public/private partnerships for research and development with respect to agricultural and forestry soils.

- 13. The Government of Canada collaborate with the provinces and territories to provide long-term funding for:
 - agricultural and forest soil mapping throughout the country, as well as for data aggregation;
 - o a national topsoil sampling program; and,
 - o flood mapping near agricultural lands.
- 14. The Government of Canada collaborate with the provinces and territories to:
 - o extend the Living Laboratories Initiative to all parts of the agriculture sector;
 - update the agri-environmental indicators annually; and,
 - invest further in the AgriScience Program clusters.
- 15. The Government of Canada reinstate the Prairie Farm Rehabilitation Administration.

To Promote Soil Health, Human Health, and a Better Future, the Committee Recommends That:

- 16. The Government of Canada enhance funding for peer-to-peer soil networks that extends to all provinces and territories.
- 17. The Government of Canada collaborate with the provinces and territories to enhance long-term funding for soil extension services.
- 18. The Government of Canada collaborate with provinces, territories, and Indigenous governments to develop a national strategy for remediating contaminated soils throughout the country.
- 19. The Government of Canada collaborate with provinces, territories, and Indigenous governments to conduct more research on soil pollution to examine its impacts on human health.
- 20. The Government of Canada address policy gaps that fail to create opportunities for Indigenous communities that will be effective in supporting soil health.
- 21. The Government of Canada collaborate with the provinces and territories to enhance long-term funding for soils programming at post-secondary institutions and that this funding be sustained.
- 22. The Government of Canada provide financial support for and encourage the development of programming in elementary and high schools to enhance awareness and understanding of the environmental, social, and economic contributions that agriculture brings to our country.
- 23. The federal, provincial, and territorial governments, the national soils advocate, and relevant interested parties should commit to holding an annual national summit on soil health, and that the issue of soil health be the subject of each agriculture minister's agenda, leading to an annual report on soil health for the country.

- 24. The federal, provincial, and territorial governments give special consideration to the economic viability of agricultural and forestry producers in the development and implementation of all its future policies and programs related to soil health to ensure that producers are able to invest in soil health.
- 25. The Government of Canada recognize a sense of urgency and act accordingly. We do not have another 40 years to protect and conserve soil.

GLOSSARY

Agroforestry – a land management approach that intentionally blends agriculture and forestry to enhance productivity, profitability, and environmental stewardship.

Beneficial management practices – any on-farm management practices that reduces or eliminates an environmental risk.

Biodiversity – the variety and variability of life on Earth including animals, plants, fungi, and microorganisms such as bacteria.

Carbon sequestration – the capture, removal, and storage of carbon dioxide (CO₂) from the Earth's atmosphere by plants and trees in soils through the process of photosynthesis.

Compaction – the pressing together of soil particles, which reduces the space available for water and air.

Conservation tillage (including minimum-, no-, and zero-till(age) farming) – a method of planting crops with minimal disturbance of the soil. Planters or seeders insert seeds into the soil in a slot made by a disc opener.

Cover cropping – plants that are planted for the purpose of covering the soil rather than being harvested. Cover crops manage soil erosion, soil fertility, water, weeds, pests, diseases, biodiversity, and wildlife in agricultural systems.

Degradation – the physical, chemical, and biological decline in soil function and quality.

Early Adopters – the farmers, growers and ranchers who first adopted cultivation tillage, and other regenerative agriculture and carbon sequestration practices.

Ecological, or Ecosystem, Goods and Services (EG&S) – the benefits that humans receive from their ecosystems that are essential for healthy, functioning, and sustainable agricultural landscapes. EG&S are achieved through farm management practices (e.g., cover cropping) and that encourage the establishment and maintenance of natural habitats (e.g., forests, native prairie, wetlands) and semi-natural habitats (e.g., buffer strips, woodlots).

Erosion – the wearing away of topsoil by the natural physical forces of water and wind and through human activity such as tillage practices on agricultural land.

Food security –the physical, social, and economic access to sufficient, safe, and nutritious food that meets peoples' dietary needs and food preferences.⁴

Food sovereignty – the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems.

Grasslands – the vast prairie grasses that stretch across Alberta, Saskatchewan, and Manitoba.

Greenhouse gas emissions – gases such as carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O) that are emitted by human activity into the atmosphere and that raise Earth's surface temperature.

Intercropping – sowing two, or more, crops simultaneously in alternate rows in the same field.

Permafrost – ground (soil or rock) that remains at a temperature of 0°C or lower for at least two years. Most permafrost in Canada also contains water in the form of ice.

Regenerative agriculture – a land management approach that considers the land's ecological system including the soil, water, and diversity of plant life, ensuring that every part of the ecosystem is healthy and working well together while increasing biodiversity and the land's resilience to climate change.

Salinization – the excessive accumulation of water-soluble salts in agricultural soils.

Soil cover days – amount of time in Canada that agricultural soils are covered by a crop, crop residues, or snow.

Soil health – the capacity of soils to function and deliver ecosystem services.

Soil organic carbon – the solid carbon that is stored in soils; a measurable component of soil organic matter.

Soil organic matter – the living microorganisms in soils and material from plants and organic compounds that have been formed through the decomposition of organic materials.

⁴ World Health Organization [WHO], "Food Security & Nutrition: Essential Ingredients to Build Back Better," Newsroom, 18 October 2022.

Introduction

Canada is an agricultural country. In 2022, the whole agriculture and agri-food system employed 2.3 million people, provided 1 in 9 jobs in Canada, and generated \$142.8 billion (approximately 7%) of the country's gross domestic product (GDP). Agricultural and food product exports totaled nearly \$92.8 billion.⁵

Primary agriculture—work that is carried out within the boundaries of a farm, greenhouse, nursery, or ranch—is an economic driver and highly diversified throughout the country. In 2022, Canadian primary agriculture comprised 189,874 farms, provided 249,000 jobs in Canada, and generated \$36.3 billion (1.8%) of the GDP. Farms covered 62.2 million hectares, or 6.2% of Canada's total land base.⁶

"Soils are a valuable and fragile asset. We know that a healthy fertile soil provides significant biodiversity and increased availability of nutrients, which improves crop yields and profitability."

Benoit Legault⁷

Soil is the foundation of Canada's agriculture and agri-food system and is as important as the air we breathe and the water we drink. Soil health is critical to human health. Soil health is human health is *One health*. All soils in Canada are located on the traditional territories of Indigenous peoples. The vastness of our country suggests an abundance of soil, yet only 6.7% of Canada's land is suitable for agricultural use. Farmers, ranchers and growers depend on healthy soil to feed Canadians and the world sustainably while faced with the growing pressures of climate change.

⁵ Government of Canada, *Overview of Canada's agriculture and agri-food sector*.

⁶ Ihid

⁷ AGFO, <u>Evidence</u>, 8 June 2023 (Benoit Legault, Director General, Producteurs de grains du Québec).

⁸ Agriculture and Agri-Food Canada, <u>Report #4 - Agri-Environmental Indicator Report Series: Environmental Sustainability of Canadian Agriculture</u>, 2016.



Hands holding dark, rich soil from Wray Ranch near Irricana, Alberta.

"Climate change is one of the greatest challenges of the 21st century. Farmers and foresters are on the frontline of this change as the lives and livelihoods of those who feed, clothe and fuel the world are directly affected by a changing climate and weather extremes."

World Farmers' Organisation⁹

Healthy soils play a crucial role in addressing the urgent global challenges of climate change, biodiversity loss, and food security. Canada has international commitments, including reporting obligations under the following agreements, all of which relate to soil:

- Intergovernmental Panel on Climate Change (IPCC);
- United Nations Framework Convention on Climate Change (UNFCC);
- United Nations Convention on Biological Diversity (CBD) (to halt and reverse biodiversity loss);

⁹ World Farmers' Organisation, *Policy on Climate Change and Agriculture*, 2019.

- United Nations Convention to Combat Desertification (UNCCD) (in countries experiencing serious drought and/or desertification);
- Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar, Iran) (Canada has one quarter of the world's total wetlands);
- Global Methane Initiative (GMI); and,
- Arctic Council.

Soil health is a cross-cutting issue. Soil is a valuable natural resource and a strategic national asset, which is at risk and must be conserved and protected. Soil should be seen as a natural resource and as a national policy priority.

"Soil is a non-renewable resource, generated slowly over a millennium or so to generate a centimetre of good-quality soil."

Subhasis Ghoshal¹⁰

Between May 2022 and February 2024, the committee conducted an in-depth study to explore the status of soil health conditions in Canada, and to identify ways to improve soil health, enable agricultural and forestry producers to become sustainability leaders, and improve their economic prosperity. Over two years of hearings, the committee heard from 153 witnesses, and received over 60 briefs, from soil science researchers, agronomists, farmers, ranchers, foresters, environmental organizations, agri-businesses, and industry groups and federal, provincial, and territorial governments.

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¹⁰ AGFO, <u>Evidence</u>, 15 February 2024 (Subhasis Ghoshal, Professor, Civil Engineering and Director, Trottier Institute for Sustainability in Engineering and Design, McGill University, As an individual).



Members of the Senate Committee on Agriculture and Forestry stand outside the Canada Agriculture and Food Museum in Ottawa. From left, Senator Mobina S.B. Jaffer, museum director general Kerry-Leigh Burchill, and senators Pat Duncan, Victor Oh, Brent Cotter, Rob Black and Paula Simons.

In summer 2022, the committee attended the World Congress of Soil Science 2022 in Glasgow, Scotland. In fall 2022, the committee visited the Soil Lab at the Canada Agriculture and Food Museum in Ottawa, Ontario. In 2023, it travelled to Guelph, Ontario, Saskatoon, Saskatchewan, Calgary, Alberta, and towns/villages near these cities, to meet directly with soil researchers, farmers, ranchers, growers, and other stakeholders. The committee attended the Eleventh Global Soil Plenary Partnership Assembly hosted by the Food and Agriculture Organization (FAO) of the United Nations in Rome, Italy and also met with the World Farmers' Organisation.

The committee wishes to thank the many witnesses who appeared before this committee. This report is informed by their testimony. Hopefully, this report informs readers and offers a road map for the future of sustaining and improving soil health in Canada.

Chapter 1: The Current State of Agricultural and Forest Soils in Canada



Soil mixed with leaves from the soil lab at the Canada Agriculture and Food Museum.

What is healthy soil?

There are more living organisms in a tablespoon of soil than there are people on Earth. One cubic metre of healthy soil can retain over 250 litres of water. Ninety-five percent of our food comes from soils, yet the FAO estimates that 33% of the earth's soils are already degraded and over 90% could become degraded by 2050.¹¹

Soils deliver a variety of ecosystem services that enable all—plant, animal, human—life on Earth, including carbon sequestration, nutrient and energy (carbon and organic matter) cycling, water storage and cycling, climate regulation, habitat for organisms, among others as shown in Figure 1.

¹¹ Food and Agriculture Organization of the United Nations, Global Symposium on Soil Erosion, 2019.

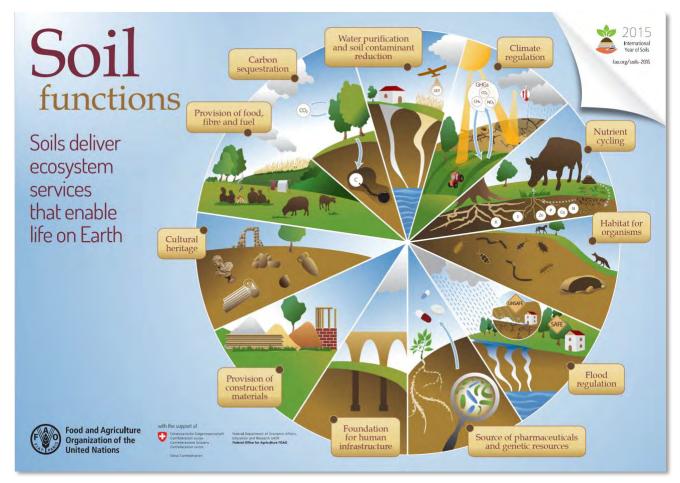


Figure 1 – Soil Functions and Ecosystem Services

Source: Food and Agriculture Organization of the United Nations, "Soil Infographics," Global Soil Partnership, 2015.

Soil is the foundation of a living ecosystem with dynamic interactions between physical, chemical, and biological properties. The committee learned that soil health is an evolving concept whose definition varies in each sector and requires different management strategies. ¹² In agriculture, a healthy soil produces food for people, feed for animals, and fiber and fuel for national and global consumption. ¹³ The concept, however, does not apply equally to forest soils because ecosystem services do not always work in concert. ¹⁴ For example, large areas of peat soils in Northern Canada have high organic matter content, but are not productive in terms of timber yield. ¹⁵ The topic of

¹² AGFO, *Evidence*, 7 December 2023 (Derek MacKenzie, Associate Professor, Department of Renewable Resources, University of Alberta, As an individual).

¹³ AGFO, *Evidence*, 27 September 2022 (Laura L. Van Eerd, Professor, Sustainable Soil Management, University of Guelph, As an individual).

¹⁴ AGFO, *Evidence*, 25 October 2022 (Sean Thomas, Research Professor, University of Toronto, As an individual). ¹⁵ Ibid.

forest soil health is not often heard of, yet 35% of Canada is covered by forest, representing 9% of the world's forest area. 16

Soil degradation prevents all soils from providing ecosystem services. It negatively affects the livelihoods of millions of people and poses a serious threat to food security. Figure 2 presents the main drivers, types, and consequences of soil degradation, as well as sustainable soil care and management solutions.



Figure 2 – Drivers, Types and Consequences of Soil Degradation

Source: Food and Agriculture Organization of the United Nations, "Soil Infographics," Global Soil Partnership, 2015.

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¹⁶ AGFO, <u>Evidence</u>, 14 February 2023 (Dominic St-Pierre, Director General, Laurentian Forestry Centre, Natural Resources Canada).

Laura L. Van Eerd, Professor, Sustainable Soil Management, University of Guelph, told the committee the first approach to protect and enhance soil health is to minimize threats to degradation; the second is to adopt practices that build or maintain soil health. Degradation threats must be identified and mitigated and are farm- and field-specific.¹⁷

Throughout Canada, beneficial soil management, or soil care, practices such as soil compaction reduction, crop and animal diversity, conservation tillage, using compost and amendments, and continuous living plants and cover crops can help build or maintain soil health. However, witnesses told the committee there is no "one-size-fits-all-approach" to soil care practices as soils and climates vary throughout the country.



Senators Rob Black and Pat Duncan participate in an experiment at the University of Guelph's Soil Health Interpretive Centre as part of a fact-finding mission.

Section 95 of the <u>Constitution Act, 1867</u> establishes agriculture as a concurrent or shared jurisdiction between the federal government and the provinces. Provinces may enact laws relating to agriculture if they do not contravene federal legislation in the area. In practice, the federal, provincial, and territorial governments negotiate five-year funding agreements—the recent \$3.5 billion, five-year <u>Sustainable Canadian Agricultural Partnership</u> (Sustainable CAP)—for cost-shared agricultural initiatives such as business risk management programs for farmers. Collaboration is

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¹⁷ AGFO, <u>Evidence</u>, 27 September 2022 (Laura L. Van Eerd, Professor, Sustainable Soil Management, University of Guelph, As an individual).

required to make the agriculture and agri-food sector stronger, more powerful, and more responsive to the environmental and economic challenges that farmers, ranchers, growers, and all Canadians face. In its hearings, the committee heard from witnesses representing every province and territory in Canada. Witnesses described:

- the soil conditions and main threats to soil degradation in their regions;
- the valuable work they are doing to improve and protect soils through beneficial soil management practices; and,
- the barriers they face to entry, financing, accessing programs, soils data collection, and technology.

Northern Canada

Climate change frames the context for the state of soil in Canada's northern territories: Yukon, Northwest Territories, and Nunavut.

The committee learned that many northern soils are founded in permafrost. Cryosols—a specifically Canadian order and the dominant soil type throughout most of the territories—are classified by the presence of permafrost in the top two metres of the ground. Christopher Burn, Professor, Chancellor's Professor of Geography, Carleton University, told the committee that "the most pressing soil condition concerns the large amount of carbon that is currently frozen and stored in our Cryosols. [...] [T]he effects from thawing of ice in the ground are one of the risks northern farmers assume." 18

The prospects for agriculture and forestry have increased in the North as a direct result of climate change and settlement of land claims.

"I regret to say that Canadian attention to this problem is not what it should be. There is no coordinated national initiative to determine the extent of carbon storage in permafrost, the rate of emissions, the rate of carbon being released from permafrost into thawing ground, the conditions that accelerate such emission or actions that could be taken to mitigate release of carbon from the permafrost soils."

Christopher Burn¹⁹

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¹⁸ AGFO, *Evidence*, 29 September 2022 (Christopher Burn, Chancellor's Professor of Geography, Carleton University, As an individual).

¹⁹ Ibid.

Overall, the committee learned there are regional differences throughout the three territories, yet a significant cost and threat to all three territories is melting permafrost. There is also a significant gap in coordination and representation nationally on these issues.

Yukon

Randy Lamb, Agrologist, Department of Energy, Mines and Resources, Government of Yukon, informed the committee that there are approximately 140 titled farm properties in Yukon: 50% produce a commercial crop and 50% are smaller, subsistence-type operations that "fall below the radar of Statistics Canada."²⁰

Historically, Yukon's biggest agricultural sector was hay production; however, Lamb reported that, in the last decade, commercial production of government-inspected red and white meat, graded eggs, vegetable, grains, and berries has increased. Yukon currently produces 4% to 7% of the food it consumes; its agricultural goals focus on food security versus exports. Yukon's transportation system is fragile; washouts and landslides cut off southern supply routes in 2012 and 2022.²¹

While climate change represents challenges, it also represents the opportunity to grow more food in the North. In Yukon, for example, more people are taking up the activity of food production in backyards and community gardens:

"Over the last 50 years, the growing season in Whitehorse – in southern Yukon –has increased by one week, and in the last 50 years, it's increased by two weeks in central Yukon. That creates a much greater opportunity to grow additional crops and to have better crop harvests [...] Now there are farmers who are reliably maturing wheat and barley crops and producing a commercial flour mill with retail products."

Randy Lamb²²

Lamb said that Yukon's agricultural soils "are relatively young and undeveloped throughout most of the territory. The last ice sheets retreated from southern Yukon about 10,000 years ago, except the unglaciated areas near Dawson City and northwards, in the north-central area known as Beringia. Generally, soils in southern Yukon are dryer, slightly alkaline silty loams with very low organic

²⁰ AGFO, *Evidence*, 23 March 2023 (Randy Lamb, Agrologist, Department of Energy, Mines and Resources, Government of Yukon).

²¹ Ibid.

²² Ibid.

matter. In the central Yukon region near Dawson City, soils are wetter, more acidic and have higher levels of organic matter."²³

Brandon Drost, Forester, Department of Energy, Mines and Resources, Government of Yukon, said that forest soil health is also important to Yukon. "The Yukon makes up about 8% of the boreal forest in Canada. It holds approximately 5.5 billion tons of carbon," said Drost.²⁴ Forest soils are the foundation of this forest, which supports the local forest industry and provides ecosystem services for the local population, as well as others around the world.

There is an interchange between forestry and agricultural land in Yukon, especially in the valleys. Drost explained that Yukon is currently dealing with water, landslide, and erosion issues likely due to changes in climate, which impact soil health. Permafrost changes, in both agricultural and forest soils, may release more carbon and soil stability will decrease. "There may be impacts to aboveground forest resources, including those ecosystem services that we rely on." ²⁵

The main threats to soil function and productivity in Yukon are cold soils, lack of soil organic matter (2 to 5% average), short growing seasons, and intermittent permafrost towards the north. "Soil health in Yukon depends on the living organisms in soil that include limited amounts of microflora and microfauna as compared to southern soils," which Lamb said requires help from federal partners at Agriculture and Agri-Food Canada (AAFC). ²⁶

The Government of Yukon's projects are now starting to consider soil health including a three-year marginal crop trial with AAFC's research centre in Newfoundland and Labrador. Yukon has also started the third year of a farm-scale mulching trial near Whitehorse, which includes an annual sampling program of soil fungi from the forested stage through to field crop stages: "Mycorrhizal species are a key component of soil health in the boreal forest where our agriculture is developed," noted Lamb.²⁷ The project involves soil sampling assistance by Yukon University and microbiological analyses by AAFC, otherwise Lamb said, "we would not be able to carry out mycorrhizal research on our own." ²⁸

The committee learned that First Nations are focusing on regenerative agriculture and organic agriculture, even though they are not certified, said Lamb. Of the seven or eight First Nations that Lamb had recently visited, they all had the common interest of farming or gardening naturally and switching from synthetic pesticides and instead to organic practices. "That's fully embraced," said

²³ Ibid.

²⁴ AGFO, *Evidence*, 23 March 2023 (Brandon Drost, Forester, Department of Energy, Mines and Resources, Government of Yukon).

²⁵ Ibid.

²⁶ AGFO, *Evidence*, 23 March 2023 (Randy Lamb, Agrologist, Department of Energy, Mines and Resources, Government of Yukon).

²⁷ Ibid.

²⁸ Ibid.

Lamb, "and we're providing soil testing to them, encouraging them and providing smaller amounts of funding for projects through our five-year funding programs to help these activities." ²⁹

Regarding forestry, Drost said there is not a good understanding of the current forest soil health conditions across the Yukon. "There's a lack of data and we don't have a good database of soil records. We need a reliable baseline and monitoring data to ensure evidence-based decisions are made for sustainable forest management."³⁰

Currently, Yukon follows sustainable forest management practices and has <u>soil conservation</u> standards and guidelines for minimizing disturbance to forest soils during harvesting of timber.

Drost said: "We are collaborating with the Canadian Forest Service to deliver the National Forest Inventory program. Under this program, soils are analyzed to determine soil carbon and carbon change over time. This data is used to support various projects, such as developing soil carbon accounting models, climate change-related soil studies, soil mapping, remote sensing and supporting other forest research projects that have a soil health component."³¹

Northwest Territories

Janet Dean, Executive Director, Territorial Agrifood Association, informed the committee that the Northwest Territories has an active land-based agriculture sector that requires constant soil management. A variety of soil types are found on the regional scale; the best soil for agriculture is in southern areas of the Taiga Plains and ecoregions in the southern and northwest parts of the territory. Soil requires amendments, such as manure, but Dean said amending the soil is costly.³²

²⁹ Ihid

³⁰ AGFO, *Evidence*, 23 March 2023 (Brandon Drost, Forester, Department of Energy, Mines and Resources, Government of Yukon).

³¹ Ibid.

³² AGFO, Evidence, 23 March 2023 (Janet Dean, Executive Director, Territorial Agrifood Association).



Vegetables grow inside a greenhouse in Inuvik, Northwest Territories.

Remote communities are impacted by limited access to good soil for food production, particularly the Tłįchǫ communities in the Canadian Shield geologic region. Dean said the soil there is thin and low in essential nutrients. This region also experiences food insecurity; 55% of residents are food insecure.³³

The committee learned Paradise Valley is the most fertile and accessible private land in the Northwest Territories. According to Dean, "it is an asset that must be protected" because of its agricultural potential. In 2022, a devastating flood damaged most of the valley's farms. When farmers leave, there is no restriction on conversion of farmland. Dean reported that the flood ceased operations in seven of the eight titled farms in that region.³⁴

³³ Ibid.

³⁴ Ibid.

"The Northwest Territories stores a lot of soil carbon and the conversion of boreal forest to agricultural land for greater food production has the potential to result in large carbon losses to the atmosphere, impacting climate change. Soil carbon and soil fertility for agriculture are inversely related in southern Northwest Territory soils."

Janet Dean³⁵

Dean explained that areas with lots of soil carbon are potentially less suited for crop production than areas with less soil carbon. Dean said this has implications for land management decisions in that areas with high fertility and low soil carbon for agricultural land use could be targeted. This could limit the magnitude of carbon losses due to agriculture. However, there is little private land available in these areas and there are no agricultural reserves in the Northwest Territories: 95% of farming happens within municipal boundaries.³⁶

Dean told the committee that a recent University of Guelph research project evaluated how effective commonly used Northwest Territories agricultural soil management practices were at improving soil fertility and soil carbon stocks. The results showed that no-till sites and sites that used compost improved soil fertility. No-till sites also improved soil carbon stocks. The study compared sites that were currently used for agriculture to sites that were once cultivated, but now abandoned. The study found that soil fertility in abandoned agricultural sites increased over time since abandonment while soil fertility in actively farmed sites declined over time since cultivation. Dean said this highlights that current agricultural management practices are not effective at building fertile soils in the Northwest Territories, and that innovative means are necessary.³⁷

Dean requested more research on agricultural management practices, and a focus on partnering with farmers and Indigenous communities of the Northwest Territories to develop practices targeted to the North, as well as sequestering carbon.

As for forestry, Mike Gravel, Director, Forest Management, Northwest Territories Environment and Climate Change, Government of the Northwest Territories, told the committee that the territory does not have an intensive forestry sector. The government's focus is instead to minimize any impact on forest soils such as ensuring minimal compaction while forest activities take place. Forest

³⁵ Ibid.

³⁶ Ibid.

³⁷ Ibid.

activities take place during the winter while the ground is frozen thereby causing minimal disturbance.³⁸

Gravel said that the emerging issue in recent years is permafrost thawing and slumping. The territorial government is focused on drought conditions of the soil for impacts on fire, as 2023 brought the worst fire season and droughts ever in the Northwest Territories.³⁹

Gravel said there is no dedicated staff to monitor soils from a forest perspective in Northwest Territories. Gravel stressed the importance of understanding the effects of drought and the recovery from drought—for example, how much moisture-specific soils may need to recover—understanding soil stability with respect to the changing climate and as northern soils warm, as well as understanding the impact this has on permafrost and on soil productivity in general.

"We have over 80 million hectares of forest. We have a large land base to cover and a very small team of forest professionals to manage that land base. Remote technology that could support soil mapping with respect to productivity, potential productivity, or forest health would be beneficial."

Mike Gravel⁴⁰

Nunavut

Michelle Blade, Permafrost Scientist, Government of Nunavut and member of the Canadian Permafrost Association, informed the committee that agriculture and forestry are "southern terms" that describe a "southern relationship with the land" and do not necessarily apply in Nunavut.

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³⁸ AGFO, <u>Evidence</u>, 30 November 2023 (Mike Gravel, Director, Forest Management, Northwest Territories Environment and Climate Change, Government of the Northwest Territories).

³⁹ Ibid.

⁴⁰ Ibid.

"In Nunavut, we harvest a relationship with the land defined in the Nunavut Agreement forming the territory of Nunavut. Harvesting in Nunavut is equally if not more so dependent on soil health considering Nunavut has the highest rate of food insecurity of any province or territory in Canada."

Michelle Blade⁴¹

Twenty-five percent of Nunavummiut (Inuktitut word for 'inhabitants of Nunavut') are severely food insecure, yet Blade reported that Nunavut is food abundant: "Inuit over generations have developed unique tools and technologies for a sovereign food system by harvesting caribou, Arctic char, berries, birds, and marine mammals. For many Inuit, winter represents an important time of year to harvest, along with the summer, with no need for in-territory agriculture or animal husbandry."⁴²

The committee learned that long-range atmospheric transport of contaminants from around the globe is impacting Nunavut's soil health. This has resulted in bioaccumulation and magnification of heavy metals, plastics and organic pollutants in harvested foods and soils. Blade reported that harvested food is tested in collaboration with hunters. Most contaminants found in marine mammals are not found in caribou, yet health advisories limit the consumption of caribou livers and kidneys due to the presence of mercury, which has been linked to neurodevelopmental problems, especially in fetuses and young children. Blade noted that one of the research priorities of the Government of Canada's Northern Contaminants Program is to better understand the biogeochemical mercury cycle in Arctic soils. ⁴³

The committee also heard that climate change is impacting harvesting in Nunavut. Blade explained all of Nunavut is underlain by permafrost and each summer, the top portion of the soil profile thaws and refreezes the following winter. This seasonal thaw depth is expected to increase by three to five metres throughout much of Nunavut within the next 50 years.⁴⁴

Blade told the committee that Nunavut would benefit from:

 the collection and analysis of Nunavummiut observations to understand how and to what degree permafrost change impacts are affecting Nunavut soil health and food sovereignty; and

⁴¹ AGFO, *Evidence*, 23 March 2023 (Michelle Blade, Permafrost Scientist, Nunavut, Canadian Permafrost Association).

⁴² Ibid.

⁴³ Ibid.

⁴⁴ Ibid.

 a territorial permafrost assessment program to analyze and predict how quickly soil health will change, and what impacts are more likely to occur near one Nunavut community compared to another.⁴⁵

According to Blade, frozen land and soil assessments often fall between government jurisdictions in Nunavut. For example, Crown-Indigenous Relations and Northern Affairs Canada has a Nunavut water quality monitoring program; however, Blade said the program does not assess permafrost, even though permafrost directly controls how water flows on and through Nunavut land and soils.⁴⁶

Blade stated, "surficial geology in Northwest Territories and Yukon is more sediment rich than it is in Nunavut." Most permafrost work in academia—including Dr. Burn's—and government, occurs in the Northwest Territories and Yukon, and not in Nunavut. "It speaks to a discrepancy in funding and research priorities between the western Arctic and the eastern Arctic." ⁴⁷ Blade emphasized the need for research in Nunavut, as well as pan-territorial collaboration.

Western Canada

British Columbia

The committee learned that British Columbia is home to diverse soil types and soil zones. Agriculture is one of the biggest economic drivers in the province—comprising 5% of the total land base as set out in the <u>Agricultural Land Reserve</u>—and is important to local rural and Indigenous economies. Agriculture systems, though small, are productive and diverse, and face increasing pressures from urbanization. British Columbia has more than 200 commodities. According to AAFC, between 2018 and 2022 the top three crop and livestock commodities by average farm cash receipts for British Columbia were: dairy (\$701 million), vegetables (\$633 million), and floriculture, nursery and sod (\$543 million).

⁴⁵ Ibid.

⁴⁶ Ibid.

⁴⁷ Ibid.

⁴⁸ The Agricultural Land Reserve is British Columbia's provincial zone that preserves agricultural land for the future.

⁴⁹ Government of Canada, Overview of Canada's agriculture and agri-food sector.



Apple trees line an orchard at the Mission Hill Family Estate Winery in West Kelowna, British Columbia.

Mark Raymond, Executive Director, Extension and Support Services Branch, British Columbia Ministry of Agriculture and Food, Government of British Columbia, told the committee that recent extreme weather events—flooding, wildfires, drought, and extreme heat—have severely disrupted and, in some cases, devastated local food production.⁵⁰

According to the 2021 Census of Agriculture, no-till has been adopted up to 30% in British Columbia, as shown in Figure 3. The percentage of hectares prepared for no-till is calculated by agricultural region within the agricultural ecumene from the 2021 Census of Agriculture.⁵¹

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⁵⁰ AGFO, <u>Evidence</u>, 30 March 2023 (Mark Raymond, Executive Director, Extension and Support Services Branch, British Columbia Ministry of Agriculture and Food, Government of British Columbia).

⁵¹ The term "ecumene" refers to the geographic areas where Canada's main agricultural activities take place.

Percentage of all prepared seeding area that is not tilled (by agricultural region within the agricultural ecumene, 2021)

20.01–30
30.01–40
Suppressed/ confidential

BRITISH COLUMBIA

Figure 3 – Percentage of Hectares Prepared for No-Till Seeding: British Columbia (2021)

Sources: Map prepared in 2024 using data obtained from Statistics Canada, "<u>Table 32-10-0367-01: Tillage and seeding practices, Census of Agriculture, 2021</u>," Database, accessed 28 November 2023; and Statistics Canada, <u>2021 Census – Boundary files</u>. The following software was used: Esri, ArcGIS Pro, version 3.2.2. Contains information licensed under <u>Statistics Canada Open Licence</u>.

According to AAFC's Agri-Environmental Indicator – Soil Cover Days dataset, from 1981 to 2016, the amount of time that agricultural soils were covered by a crop, crop residues, or snow increased in central and northern areas of the province, as shown in Figure 4. There is a patchwork of changes across the agricultural lands. Few areas exhibit decreases in soil cover days.

Change in Soil Cover Days Change in soil cover days from 1981 to 2016 Large decrease Moderate decrease Little or no change BRITISH Moderate increase COLUMBIA Large increase Not assessed Canada Lambert Conformal Conic, NAD83 1:11,000,000

Figure 4 – Change in Soil Cover Days: British Columbia (1981 to 2016)

The committee heard that the main causes of soil degradation in British Columbia are soil compaction, soil salinization and its impact on irrigation water, loss of soil organic carbon and water retention in soils, soil erosion, and run-off (debris) from wildfires.

Dieter Geesing, Provincial Soil Specialist, British Columbia Ministry of Agriculture and Food, Government of British Columbia, explained that soil degradation happens differently throughout the province's diverse landscapes and climate. For example, along the coast, "prolonged periods of high water tables reduce the time that farmers can work their fields, making soils more vulnerable

to compaction. In the fertile delta of the Fraser River ocean waters are moving further and further upstream, impacting irrigation and soil salinity. In rural crops like blueberries, soil erosion is expected to increase because of more intense precipitation."⁵²

The map in Figure 5 illustrates the change in estimated risk of soil erosion from the combined effects of wind, water, and tillage for agricultural areas in British Columbia from 1981 to 2016. Large decreases in soil erosion risk appear in and to the east of the Okanagan Valley.

⁵² AGFO, <u>Evidence</u>, 30 March 2023 (Dieter Geesing, Provincial Soil Specialist, British Columbia Ministry of Agriculture and Food, Government of British Columbia).

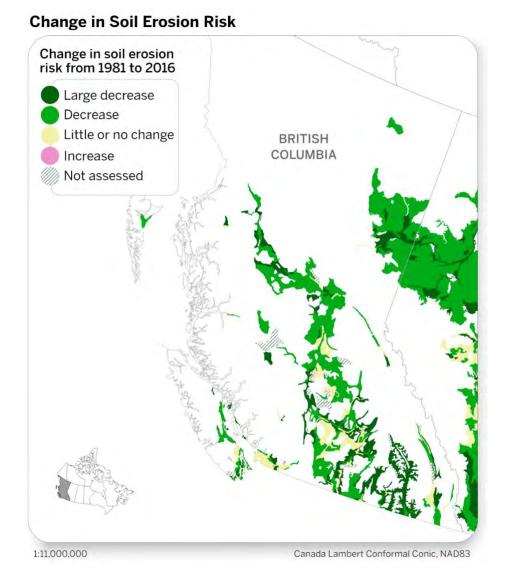


Figure 5 – Change in Estimated Risk of Soil Erosion: British Columbia (1981 to 2016)

Paul Pryce, Director of Policy, B.C. Agriculture Council, added that because of rising sea levels in the city of Delta in the Lower Mainland region—an important area of agriculture production for the province—there is an increased risk of soil salinity, as well as reduced access to irrigation water during the typical growing season."⁵³

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⁵³ AGFO, *Evidence*, 4 May 2023 (Paul Pryce, Director of Policy, BC Agriculture Council).

The other major concern is the loss of soil organic carbon. Sean Smukler, Associate Professor, Applied Biology and Soil Science, University of British Columbia, told the committee that his research lab had recently published an analysis of the trajectory of soil health in the province:

"Using sampling and a modelling approach, we showed that from 1984 to 2018, in one of the most intensive agricultural landscapes in the province, there was an alarming decrease in soil organic matter across 61% of the landscape."

Sean Smukler⁵⁴

Figure 6 shows that, in 2016, most agricultural areas in British Columbia exhibited low or moderate levels of risk of soil organic carbon degradation.

⁵⁴ AGFO, <u>Evidence</u>, 29 September 2022 (Sean Smukler, Associate Professor, Applied Biology and Soil Science, University of British Columbia, As an individual).

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Soil Organic Carbon Degradation Risk

Soil organic carbon degradation risk (2016)

Very low
Low
Moderate
High

BRITISH
COLUMBIA

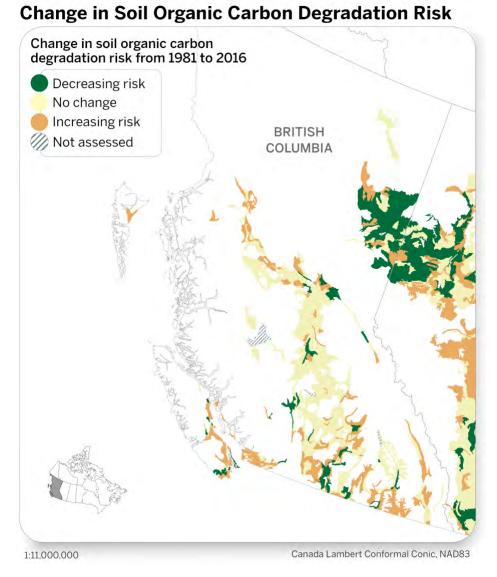
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Canada Lambert Conformal Conic, NAD83

Figure 6 – Soil Organic Carbon Degradation Risk: British Columbia (2016)

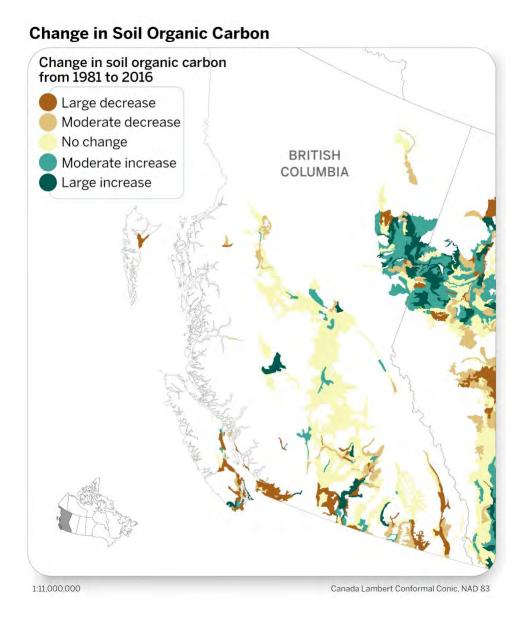
As for the change in risk of soil organic carbon degradation over time, Figure 7 shows that the northeast region of the province and parts of the Okanagan Valley as having decreased risk from 1981 to 2016. No change is noted in the central regions while some increasing risk can be seen along the east coast of Vancouver Island, the southwest mainland, and parts of the Kootenays.

Figure 7 – Change in Soil Organic Carbon Degradation Risk: British Columbia (1981 to 2016)



The map in Figure 8 illustrates the change over time of the estimated amount of CO₂ that has been removed from the atmosphere and sequestered as soil organic carbon in British Columbia's agricultural soils. A patchwork of changes has occurred from 1981 to 2016 with areas of no change across central British Columbia. Decreases appear in the south while increases appear in the northeast.

Figure 8 – Estimated Change in Soil Organic Carbon: British Columbia (1981 to 2016)



Runoff from wildfires and other natural disasters can also have an impact on soil health. For example, Pryce explained if macronutrients from a wildfire enter a river, and a farmer who lives downstream of that river and sources some of the water from it for their operation, that will affect

soil health. "Aerosolized debris from a wildfire can carry these macronutrients far and wide, so you don't even need to be downstream to experience these adverse effects." ⁵⁵

To improve soil health and soil care practices throughout the province, the Minister of Agriculture's Advisory Group on Regenerative Agriculture and Agritech was formed in 2022 to provide strategic advice to government on opportunities for innovation, technology, adoption, and sustainable practices to create more resilient farms and food systems. Soil health and a resilient food system are two main priorities of B.C.'s Ministry of Agriculture and Food.

The committee heard the Ministry of Agriculture and Food and the Ministry of Forests have been collaborating on soil health and soil carbon, specifically on the soil health of the forestry sector and how that impacts water infiltration and its downstream effects on agriculture and irrigation levels, as well as fish and aquaculture habitats. "It is a very integrated system and we are working closely together on that," said Mark Raymond. 56

Cindy Prescott, Professor, Department of Forest and Conservation Science, University of British Columbia, told the committee: "The importance of soil biota and carbon inputs from living roots in building healthy soils has been recognized in agriculture and has spurred the rapid development of regenerative agriculture. No such recognition has happened in forestry, despite evidence that carbon inputs from living roots are just as important for soil health in forest ecosystems." ⁵⁷

Indigenous participation in agriculture has been an increasing priority for the ministry. Within the B.C. Government's Soil Health Working Group, an Indigenous Advisory Committee was created.

⁵⁵ AGFO, Evidence, 4 May 2023 (Paul Pryce, Director of Policy, BC Agriculture Council).

⁵⁶ AGFO, *Evidence*, 30 March 2023 (Mark Raymond, Executive Director, Extension and Support Services Branch, British Columbia Ministry of Agriculture and Food, Government of British Columbia).

⁵⁷ AGFO, <u>Evidence</u>, 25 October 2022 (Cindy Prescott, Professor, Department of Forest Conservation Science, University of British Columbia, As an individual).

Despite these efforts, Jacob Beaton, Owner of Tea Creek Training and Employment, an award-winning Indigenous-led training farm and food sovereignty movement in Gitxsan Territory on the northwestern coast of British Columbia, told the committee that Indigenous farmers face ongoing financial barriers:

"We heard that 80% of the world's biodiversity rests in Indigenous-controlled lands, which is 20% of the world's landmass. Indigenous peoples are currently contributing to 32% of the world's climate goals on less than 1% of financial resources. One farm loan from Farm Credit Canada has been given to an Indigenous farmer in B.C. ever, so financial resources are a huge barrier for us."

Jacob Beaton⁵⁸

Regarding other barriers, Paul Pyrce underscored the need for updated soil mapping. "In B.C., the most recent soil mapping was completed around 1980. The Government of British Columbia's current manual on land capability classification for agriculture was published 40 years ago this April. As an aside, you can find that manual online, but it's not a searchable PDF." ⁵⁹

Pryce added that today, only about 3% of the total land in B.C. is used for agriculture: "There are many factors that likely contribute to this gap — not least of all the sheer cost of land in B.C. Soil maps could help find out why." ⁶⁰

The Prairies

The Prairies—Alberta, Saskatchewan, and Manitoba—are home to 80% of Canada's farmland. The region was once also home to vast expanses of native grasslands. The Northern Great Plains are now one of the world's most threatened ecosystems. The Nature Conservancy of Canada estimates that more than 80% of Canada's prairie grasslands have been lost to cultivation, urbanization, and industrial development.⁶¹

According to Statistics Canada, no-till has been adopted throughout the Prairies at rates between 40% and 75% of cropland hectares prepared for seeding in Alberta, greater than 75% in most of Saskatchewan and up to 90% in some regions of the province, and between 40 to 50% in

⁵⁸ AGFO, Evidence, 9 February 2023 (Jacob Beaton, Owner, Tea Creek Training and Employment).

⁵⁹ AGFO, *Evidence*, 4 May 2023 (Paul Pryce, Director of Policy, BC Agriculture Council). ⁶⁰ Ibid.

⁶¹ AGFO, <u>Evidence</u>, 23 November 2023 (Reynold Bergen, Science Director, Beef Cattle Research Council, Canadian Cattle Association); <u>Evidence</u>, 13 February 2024 (Melanie Bos, Agriculture Policy Manager, Nature Conservancy of Canada).

southwestern Manitoba, as illustrated in Figure 9 for 2021. David Burton, Distinguished Research Professor, Faculty of Agriculture, Dalhousie University, summed up this approach: "Diversify our rotations and reduce our disturbance. That's one of the things that Western Canada has succeeded in doing. That helps the soil retain that organic matter." However, some witnesses cautioned the committee that no-till practices in the Prairies were moving backwards and that more acres are reverting to tillage. 63

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⁶² AGFO, *Evidence*, 20 October 2022 (David Burton, Distinguished Research Professor, Faculty of Agriculture, Dalhousie University, As an individual).

⁶³ AGFO, <u>Evidence</u>, 22 September 2022 (Cedric Macleod, Executive Director, Canadian Forage and Grassland Association); and <u>Evidence</u>, 27 September 2022 (David Lobb, Professor, Department of Soil Science, Faculty of Agricultural and Food Sciences, University of Manitoba, As an individual).

Percentage of No-Till Seeding Percentage of all prepared seeding area 0 that is not tilled (by agricultural region within the agricultural ecumene, 2021) 1-20 50.01-75 20.01-30 Greater than 75 30.01-40 Suppressed/ 40.01-50 confidential SASKATCHEWAN **MANITOBA** 1:10,000,000 Canada Lambert Conformal Conic, NAD83

Figure 9 - Percentage of Hectares Prepared For No-Till Seeding: Prairies (2021)

Sources: Map prepared in 2024 using data obtained from Statistics Canada, "<u>Table 32-10-0367-01: Tillage and seeding practices, Census of Agriculture, 2021</u>," Database, accessed 28 November 2023; and Statistics Canada, <u>2021 Census – Boundary files</u>. The following software was used: Esri, ArcGIS Pro, version 3.2.2. Contains information licensed under <u>Statistics Canada Open Licence</u>.

The map in Figure 10 illustrates the change in soil cover days for the Prairies from 1981 to 2016. Many agricultural areas in Alberta and Saskatchewan exhibit large increases, whereas Manitoba exhibited moderate increases in soil cover days.

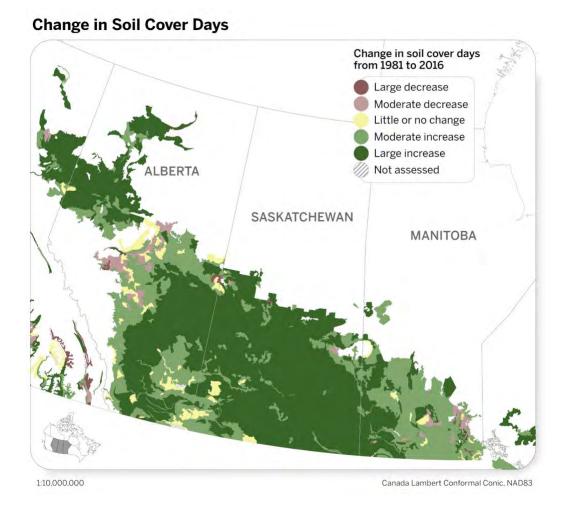


Figure 10 – Change in Soil Cover Days: Prairies (1981 to 2016)

From 1981 to 2016, large decreases in soil erosion risk appeared in southern Alberta and Saskatchewan, with little or no change in southern Manitoba, and mostly a decrease in all other areas, as shown in Figure 11.

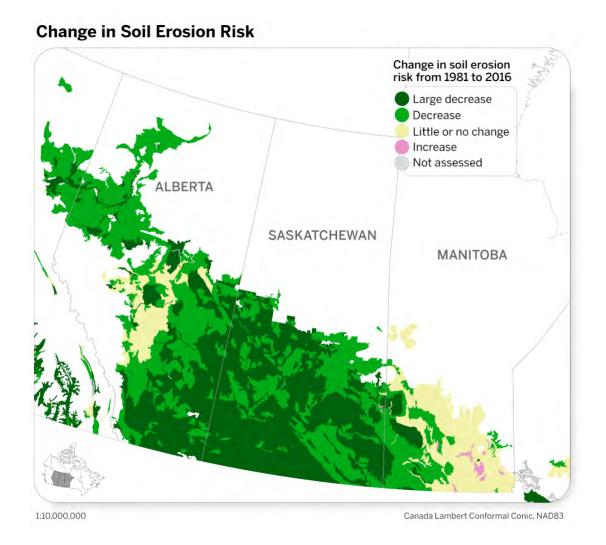


Figure 11 – Change in Estimated Risk of Soil Erosion: Prairies (1981 to 2016)

As mentioned by several witnesses, no-till stops soil degradation from decreasing soil health and also increases soil organic carbon. Figure 12 presents the estimated risk of soil organic carbon degradation for the Prairies in 2016. Areas in northern Alberta and eastern Manitoba appear to be at highest risk while southeastern Alberta, south-central Saskatchewan and southwestern Manitoba were at lowest risk.

Soil Organic Carbon Degradation Risk

Soil organic carbon degradation risk (2016)

Very low
Low
Moderate
High

ALBERTA

SASKATCHEWAN

MANITOBA

Canada Lambert Conformal Conic, NAD83

Figure 12 – Soil Organic Carbon Degradation Risk: Prairies (2016)

With respect to the estimated change in the overall level of risk of soil organic carbon degradation from 1981 to 2016, a large swath of southern Alberta and Saskatchewan, as well as northwestern Alberta, were classified as having decreasing risk, southern Manitoba as mostly experiencing no change and central Alberta as having some increasing risk, as shown in Figure 13.

Change in Soil Organic Carbon Degradation Risk

Change in soil organic carbon degradation risk from 1981 to 2016

Decreasing risk No change Increasing risk Not assessed

ALBERTA

SASKATCHEWAN

MANITOBA

Figure 13 – Change in Soil Organic Carbon Degradation Risk: Prairies (1981 to 2016)

Regarding the change in soil organic carbon over time, Figure 14 shows a patchwork of changes throughout the Prairies from 1981 to 2016, with areas of moderate and large decrease and no change in central Alberta and southern Manitoba. Areas of moderate and large increase are shown in Alberta, southern Saskatchewan, and southwestern Manitoba.

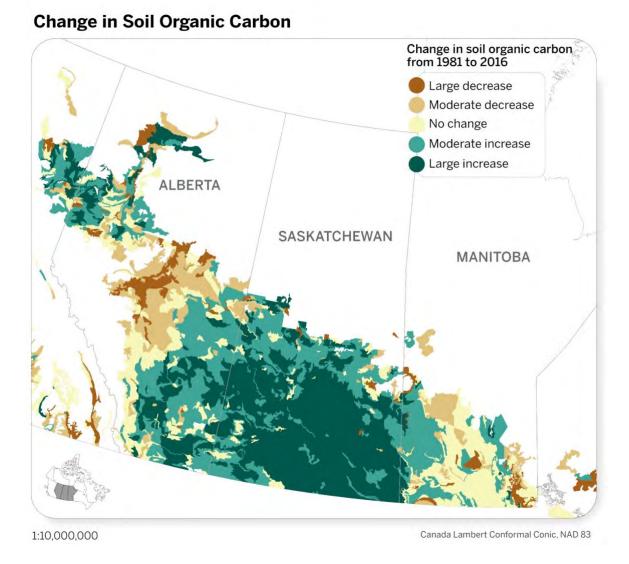


Figure 14 – Change in Soil Organic Carbon: Prairies (1981 to 2016)

Figure 15 illustrates the change over time in the estimated risk of the accumulation of soluble salts on agricultural lands in the Prairies from 1981 to 2016. At high levels, the accumulation of these salts in soil and groundwater can inhibit the growth of many crop species. Agricultural areas in southern Saskatchewan exhibit moderate to large decreases. Alberta and Manitoba exhibit decreases and little or no change relatively equally. One small area in southwest Manitoba exhibits an increased risk of salinization.

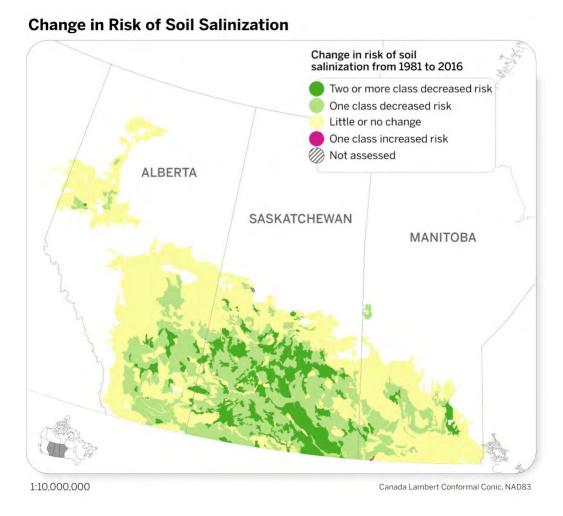


Figure 15 - Change in Risk of Soil Salinization: Prairies (1981 to 2016)

On its fact-finding mission in Saskatchewan at Discovery Farm Langham, the committee saw first-hand how salinity-affected soils were vulnerable to salt-tolerant weeds such as kochia and foxtail barley. During its hearings, the committee heard that soil salinity is generally stable in Manitoba, but that it can also fluctuate.⁶⁴ It also heard that, in Alberta, soil salinity is forgotten in many areas, especially in a wet cycle, and that it becomes an issue as soon as a dry cycle comes.⁶⁵ Witnesses

⁶⁴ AGFO, <u>Evidence</u>, 20 April 2023 (Marla Riekman, Land Management Specialist – Soils, Manitoba Agriculture, Government of Manitoba).

⁶⁵ AGFO, *Evidence*, 20 April 2023 (Trevor Wallace, Provincial Nutrient Management Specialist, Natural Resource Management Branch, Alberta Agriculture and Irrigation, Government of Alberta).

said that putting in forages, collaborating, and looking at research, the economics and the regionality of the issues is where they can do the most work for managing salinity.

Alberta

Alberta has approximately 49 million acres of farmland, or one-third of Canada's total. This includes 1.8 million irrigated acres, more than 70% of the country's total. The province is home to about 22 million acres of forage and 27 million acres of annual crop production. According to AAFC, between 2018 and 2022 Alberta's top three crop and livestock commodities by average farm cash receipts were: cattle and calves (\$5.5 billion), canola (\$3.1 billion), and wheat (\$2.5 billion).



Tall grass grows in a field in Alberta with rolling hills in the backgroud.

Trevor Wallace, Provincial Nutrient Management Specialist, Natural Resource Management Branch, Alberta Agriculture and Irrigation, Government of Alberta, informed the committee that Alberta's soils are "well-functioning," less susceptible to erosion, and more resilient to stress. Wallace explained that farmers have reduced summer fallow; adopted reduced tillage, including livestock in production systems; implemented intensive and rotational grazing practices; and diversified rotations by including legumes and perennials.⁶⁷

⁶⁶ Government of Canada, <u>Overview of Canada's agriculture and agri-food sector</u>.

⁶⁷ AGFO, <u>Evidence</u>, 20 April 2023 (Trevor Wallace, Provincial Nutrient Management Specialist, Natural Resource Management Branch, Alberta Agriculture and Irrigation, Government of Alberta).

These practices have helped to increase soil organic matter and soil carbon levels; however, Wallace cautioned that the work is far from complete as some soils are eroding and becoming more saline, acidic, or compacted. For example, soils such as the Gray Luvisols require more careful management and are at greater risk of degradation. Gray Luvisols typically occur under boreal or mixed forest vegetation and in forest-grassland transition zones in a wide range of climatic areas. Weather, disease, pests, oil and gas-related activities, and evolving production practices impact the soil's ability to function. "Without thoughtful management," said Wallace, "these factors will undermine our gains."

Wallace said that financial incentives such as those delivered by the Sustainable CAP must be supported, as well as applied on-farm testing of new practices; adoption and long-term maintenance of beneficial management practices; business risk management tools that provide operational risk protection when changing practices; and opportunities for ecological goods and services.⁷⁰

"But soil is represented by nobody. All the commodity groups depend on soil, but none of the commodity groups are directly soil focused. It's all part of the system, and there have been a lot of initiatives by them to maintain and improve our soils. But it is not like they have a voice at the table sometimes directly from soil on some of its needs — nor funding or checkoff dollars — to support programming like this. Right now, it is falling on the shoulders of individual producers. They are collecting data and improving their systems, and we are just not aggregating it up to provincial."

Trevor Wallace⁷¹

Saskatchewan

Saskatchewan holds over 40% of Canada's total cropland and one third of Canada's native grass and forage land. According to the 2022 National Inventory Report, Saskatchewan producers sequestered almost 13 million tons of carbon in 2020, almost 80% of the province's total

⁶⁸ Government of Canada, *Gray Luvisol (GL)*.

⁶⁹ AGFO, <u>Evidence</u>, 20 April 2023 (Trevor Wallace, Provincial Nutrient Management Specialist, Natural Resource Management Branch, Alberta Agriculture and Irrigation, Government of Alberta).

⁷⁰ Ibid.

⁷¹ Ibid.

agriculture emissions. Recent research commissioned by the Global Institute for Food Security found that Saskatchewan's net carbon footprint for canola and wheat production was more than 60% lower than competitive jurisdictions and for dry field peas, it was 95% lower.

According to AAFC, between 2018 and 2022 the top three crop and livestock commodities by average farm cash receipts for Saskatchewan were: canola (\$5.8 billion), wheat (\$4.0 billion), and cattle and calves (\$1.5 billion).⁷²



From left, senators David M. Arnot, Sharon Burey, Paula Simons, Rob Black and Brent Cotter tour the Glacier FarmMedia Discovery Farm in Langham, Saskatchewan.

Rick Burton, Deputy Minister of Agriculture, Government of Saskatchewan, told the committee that about 95% of the province's land seeded to annual crops is done using zero or minimum tillage, representing a major increase from 36% in 1991.⁷³ This is a higher percentage than any other province or territory. Burton said Saskatchewan producers have also adopted a diverse crop rotation, including oilseeds, pulses, and cereals. Growing a rotation of crops fertilized with balanced nutrients contributes to producing optimum yields, thereby helping to optimize carbon sequestration, nutrient cycling, and soil structure.

Jocelyn Velestuk, Farmer, Grain Growers of Canada, highlighted that long-term studies, such as the Prairie Soil Carbon Balance Project, have reported that there is still incremental positive carbon

⁷² Government of Canada, Overview of Canada's agriculture and agri-food sector.

⁷³ AGFO, *Evidence*, 30 March 2023 (Rick Burton, Deputy Minister of Agriculture, Government of Saskatchewan).

change, even 30 years after Saskatchewan farmers switched to no-till/continuous cropping practices: "The gains occur even deeper in the soil profile than originally thought. Saskatchewan farmers sequester enough carbon in the soil every year to be equivalent to removing 10 million cars from the roads."

Rick Burton also said Saskatchewan is investing more than \$35 million annually in agriculture research and innovation, with \$6.4 million directly impacting soil health and research into soil health and an additional \$22 million indirectly supporting soil health through breeding and other related activities.

"Our producers are contributing to soil conservation and management, and they are making substantial contributions to global food security. Yet, federally, producers are not always recognized for these contributions."

Rick Burton⁷⁵

Jocelyn Velestuk mentioned that most soil survey mapping and data collection occurred in the 1980s in the Prairies and that it has been tabulated into an online mapping platform in Saskatchewan:

"Specific agricultural areas can build and improve on the soil survey digital maps with improved LiDAR data and other layers of data to get a better understanding of soil properties, such as soil organic carbon, and to help direct sample points for soil fertility measurements in the field. Ground truthing the data is also important to improve these maps." ⁷⁶

In terms of barriers, Candice Pete-Cardoso, Director, Indigenous Land Management Institute, University of Saskatchewan, informed the committee that, traditionally, First Nations vary widely in the number and capacity of staff involved in making land management decisions, with implications for caretaking of soil health:

"For many First Nations across the Prairies, there may be a single land manager who is responsible for an expansive range of duties, one of which may be negotiating and administering permits and leases with producers to rent reserve farmland. However, if the land manager leadership or

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⁷⁴ AGFO, *Evidence*, 9 March 2023 (Jocelyn Velestuk, Farmer, Grain Growers of Canada).

⁷⁵ AGFO, *Evidence*, 30 March 2023 (Rick Burton, Deputy Minister of Agriculture, Government of Saskatchewan).

⁷⁶ AGFO, *Evidence*, 9 March 2023 (Jocelyn Velestuk, Farmer, Grain Growers of Canada).

members of a land advisory committee don't have a strong foundation in agriculture, including soil management, soils have the potential to be degraded."⁷⁷

Rick Burton mentioned that the province had recently hired a senior Indigenous adviser and set up an Indigenous unit to help engage with First Nations and Métis communities in Saskatchewan: "We have a team of regional specialists, called the Building and Strengthening Indigenous Supports group, which is trying to build relationships to help Indigenous communities take advantage of the agriculture opportunities that exist for them and where they are seeing interest in expanding those." ⁷⁸

Manitoba

Agricultural production in Manitoba occurs primarily within the black soil zone, a highly productive soil that is more resilient in the face of degradation. Manitoba also has a high rate of minimum- and zero-till adoption. The western part of the province has clay loam soils, a drier climate, and is well-suited to a no-till production system. In recent years, Manitoba has experienced moisture extremes ranging from extreme drought in 2021 to excess moisture from spring storms in 2022.

According to AAFC, between 2018 and 2022 the top three crop and livestock commodities by average farm cash receipts for Manitoba were: canola (\$1.7 billion), wheat (\$1.3 billion), and hogs (\$1.2 billion).

Marla Riekman, Land Management Specialist – Soils, Manitoba Agriculture, Government of Manitoba, told the committee that the most critical degradation issues affecting soil health in the province right now are soil salinity and soil compaction, both of which have a direct impact on soil productivity and are a major challenge for farmers. Riekman pointed out that managing these soil health problems often requires a shift in how farmers manage the landscape. For example, farmers might seed saline areas with salt-tolerant forage or minimize traffic over the field to reduce soil compaction.⁸⁰

Jake Ayre, Vice President, Keystone Agricultural Producers of Manitoba, said: "Manitoba farmers recognize the benefits of enhancing and preserving soil health. This is done mainly through crop rotation, grazing management, zero-till practices, soil sampling, nutrient management, the 4Rs, prevention of soil compaction, and planting cover crops."⁸¹

⁷⁷ AGFO, <u>Evidence</u>, 9 February 2023 (Candice Pete-Cardoso, Director, Indigenous Land Management Institute, University of Saskatchewan, As an individual).

⁷⁸ AGFO, *Evidence*, 30 March 2023 (Rick Burton, Deputy Minister of Agriculture, Government of Saskatchewan).

⁷⁹ Government of Canada, <u>Overview of Canada's agriculture and agri-food sector</u>.

⁸⁰ AGFO, <u>Evidence</u>, 20 April 2023 (Marla Riekman, Land Management Specialist – Soils, Manitoba Agriculture, Government of Manitoba).

⁸¹ AGFO, Evidence, 4 May 2023 (Jake Ayre, Vice President, Keystone Agricultural Producers of Manitoba).

For some of these management strategies Riekman said there is a lack of information on the economic impact on the farm: "As an extension specialist who encourages farmers to adopt soil health practices, this is often one of my biggest struggles. Do we have enough research that not only demonstrates the environmental benefit of these practices, but also the agronomic and economic benefit of these practices?" 82

"Farmers need to realize a return on investment when they are adopting new practices. If practices are known to provide a return, it is more likely that adoption will increase based on peer-to-peer knowledge sharing. When there is not a return to the farmer, but the public sees a great benefit to the practice, this is when funding programs are needed to drive adoption."

Marla Riekman⁸³

Riekman noted that adoption of soil health practices may also be slower on rented acres in Manitoba, a trend that is also increasing throughout the country. The National Farmers Union confirmed that 40% of farmland in Canada is currently rented.⁸⁴

In northern Manitoba, soil health practices are often practiced within the forestry industry, looking at how to maintain or manage peatlands and dealing with carbon sequestration. For example, there is a small Manitoba Agriculture project currently looking at carbon stocks, throughout the agricultural sector, as well as in peatlands and forested areas. The committee heard that Manitoba is the third-largest producer of peat in Canada, following Quebec and New Brunswick, respectively.⁸⁵

Riekman highlighted the importance of documenting change over time and not just a number at one period. Riekman said Manitoba is one of the few provinces and territories that continues to provide extension services to its farming community: "Extension offers a critical link between researchers and farmers, acting as an information conduit between these groups. We have an opportunity to connect with local producer groups to identify key research gaps, including the long-

⁸² AGFO, <u>Evidence</u>, 20 April 2023 (Marla Riekman, Land Management Specialist – Soils, Manitoba Agriculture, Government of Manitoba).

⁸³ Ibid.

⁸⁴ AGFO, Evidence, 29 February 2024 (Stuart Oke, Co-Owner of Rooted Oak Farm, National Farmers Union).

⁸⁵ AGFO, Evidence, 14 December 2023 (Asha Hingorani, President, Canadian Sphagnum Peat Moss Association).

term economic impact of soil health practices, as well as indicators that farmers can use to identify if they're making a difference."86

"There are a lot of behavioural changes that come with soil health BMPs [beneficial management practices], especially when we're dealing with managing fields on a soil basis as opposed to a section or quarter section basis. That is something that I think we haven't looked at enough: the behavioural changes and the social idea of how we encourage more of the adoption of those practices. A lot of it will come down to the economic decision-making and the drivers for those farmers," said Riekman.⁸⁷

Witnesses told the committee that neither Alberta nor Manitoba has had the same working relationship with the federal government since the loss of the Prairie Farm Rehabilitation Administration (PFRA) Shelterbelt Centre, which was a federal entity on the ground in the Prairies. The PFRA opened in Indian Head, Saskatchewan in 1935 and operated for 77 years until it closed in 2012. The PFRA was funded by AAFC. Witnesses said its closure shifted how the Prairie provinces interact with the federal government. As a result, the Prairie provinces are working more closely with the producers on the extension side. 88

Marla Riekman reported that Manitoba's soil surveys date back to the 1950s and that they only have a reconnaissance-scale soil survey, which is a very broad kind of scale that is not appropriate to be used on a field scale decision-making level: "Unfortunately, at this current time, we don't have detailed scale or that farm field-level scale soil survey across all of Manitoba Agriculture. We're still trying to get that done." 89

Trevor Wallace said there is a need for financial support to bring the regions together, while Marla Riekman added that it was time to recognize whom soil health benefits: "I think the big thing around soil health, we have that private benefit to the farmer, obviously, by protecting the soil and being able to create that, but there are also benefits from farmers managing soil health that are seen to the public as well." ⁹⁰

⁸⁶ AGFO, *Evidence*, 20 April 2023 (Marla Riekman, Land Management Specialist – Soils, Manitoba Agriculture, Government of Manitoba).

⁸⁷ Ibid.

⁸⁸ AGFO, *Evidence*, 20 April 2023 (Patti Rothenburger, Assistant Deputy Minister, Manitoba Agriculture, Government of Manitoba).

⁸⁹ AGFO, <u>Evidence</u>, 20 April 2023 (Marla Riekman, Land Management Specialist – Soils, Manitoba Agriculture, Government of Manitoba).

⁹⁰ Ibid.

Central Canada

In Central Canada no-till has been adopted at around 20% to 40% of hectares prepared for seeding in Ontario and up to 30% in Quebec, as illustrated in Figure 16. Witnesses explained that wetter climatic conditions in the East increase soil compaction and, thus, the need for tilling. Also, witnesses said that differences in the size and type of agricultural production systems between Central and Western Canada may also explain these trends.

Percentage of No-Till Seeding

QUEBEC

ONTARIO

Percentage of all prepared seeding area that is not tilled (by agricultural region within the agricultural ecumene. 2021)

1-20
20.01-30 Suppressed/confidential
30.01-40

Canada Lambert Conformal Conic. NAD83

Figure 16 – Percentage of Hectares Prepared for No-Till Seeding: Central Canada (2021)

Sources: Map prepared in 2024 using data obtained from Statistics Canada, "<u>Table 32-10-0367-01: Tillage and seeding practices, Census of Agriculture, 2021</u>," Database, accessed 28 November 2023; and Statistics Canada, <u>2021 Census – Boundary files</u>. The following software was used: Esri, ArcGIS Pro, version 3.2.2. Contains information licensed under <u>Statistics Canada Open Licence</u>.

Regarding change in soil cover days, most areas in Ontario and Quebec exhibit moderate increases from 1981 to 2016, as shown in Figure 17. There are moderate decreases in the Sudbury area and larger decreases the Montréal area and along the banks of the lower St. Lawrence River.

Change in Soil Cover Days

ONTARIO

Change in soil cover days from 1981 to 2016

Large decrease
Moderate decrease
Little or no change
Moderate increase
Large increase
Not assessed

1:12,000,000

Canada Lambert Conformal Conic, NAD83

Figure 17 – Change in Soil Cover Days: Central Canada (1981 to 2016)

Large increases in soil erosion risk for the period 1981 to 2016 appear in the region of Sudbury, Ontario and in Quebec between Montréal and Trois-Rivières, while large decreases appear around Algonquin Provincial Park and Kawartha Lakes in Ontario, and in the Laurentian Mountains in Quebec, as shown in Figure 18.

Change in Soil Erosion Risk

ONTARIO

Change in soil erosion risk from 1981 to 2016

Large decrease
Decrease
Little or no change
Increase
Large increase
Not assessed

Large increase
Not assessed

Figure 18 – Change in Soil Erosion Risk: Central Canada (1981 to 2016)

In 2016, large areas of Ontario and Quebec exhibited moderate to high levels of risk of soil carbon degradation, as shown in Figure 19. Land management and land-use changes, most notably the conversion from perennial crops — which provide year-round coverage of soils — to annual crops, may explain this trend in Central Canada.

Soil Organic Carbon Degradation Risk

ONTARIO

ONTARIO

Soil organic carbon degradation risk (2016)

Very low
Low
Moderate
High

1:12.000,000

Canada Lambert Conformal Conic, NAD83

Figure 19 – Soil Organic Carbon Degradation Risk: Central Canada (2016)

Regarding change in soil carbon degradation risk for the period 1981 to 2016, Figure 20 shows that most regions in Ontario and Quebec are classified as having increasing risk, with pockets in northern and central Ontario showing decreasing risk. Many areas in western Ontario showed no change.

Change in Soil Organic Carbon Degradation Risk

ONTARIO

Change in soil organic carbon degradation risk from 1981 to 2016

Decreasing risk
No change
Increasing risk
Not assessed

1:12,000,000

Canada Lambert Conformal Conic, NAD83

Figure 20 – Change in Soil Organic Carbon Degradation Risk: Central Canada (1981 to 2016)

Figure 21 illustrates the change in carbon sink over time for Central Canada from 1981 to 2016, with a moderate decrease in western and central Ontario, and large decreases in southern Quebec. A moderate increase is observed in Ontario, with large increases in most of Quebec.

Change in Soil Organic Carbon

ONTARIO

Change in soil organic carbon from 1981 to 2016

Large decrease
Moderate decrease
No change
Moderate increase
Large increase

Canada Lambert Conformal Conic, NAD 83

Figure 21 – Change in Soil Organic Carbon: Central Canada (1981 to 2016)

Ontario

According to AAFC, between 2018 and 2022 the top three crop and livestock commodities by average farm cash receipts for Ontario were: dairy (\$2.3 billion), vegetables (\$2.2 billion), and soybeans (\$2.0 billion).⁹¹

⁹¹ Government of Canada, Overview of Canada's agriculture and agri-food sector.



A red barn with blue silos on a farm in Guelph, Ontario.

Christine Brown, Field Crops Sustainability Specialist, Agriculture Development Branch, Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), Government of Ontario, told the committee that Ontario soils, both owned but especially those that are rented, are increasingly vulnerable to erosion, compaction and decreasing soil organic matter levels. Intense rainstorms and snowmelt have increased soil erosion in some areas, but soil erosion is site-specific in certain regions. ⁹²

Daniel Saurette, Land Resource Specialist — Soil, Environmental Management Branch, OMAFRA, Government of Ontario, explained that while Ontario has an inherently higher risk of soil erosion, it has not increased over time. Saurette said that the province is doing a good job of managing that erosion despite many farmers having converted from perennial systems to annual crops, adding that annual cropping systems are more susceptible to erosion because they have more exposed soil. Saurette said that beneficial management practices are key to mitigating soil erosion.⁹³

Brodie Berrigan, Director of Government Relations, Canadian Federation of Agriculture, noted that where there has been adoption of many of beneficial management practices in some parts of the

⁹² AGFO, <u>Evidence</u>, 30 March 2023 (Christine Brown, Field Crops Sustainability Specialist, Agriculture Development Branch, Ontario Ministry of Agriculture, Food and Rural Affairs, Government of Ontario).

⁹³ AGFO, <u>Evidence</u>, 30 March 2023 (Daniel Saurette, Land Resource Specialist — Soil, Environmental Management Branch, Ontario Ministry of Agriculture, Food and Rural Affairs, Government of Ontario).

country, there are other competing trends in Ontario.⁹⁴ For example, dairy farmers have also become much more efficient at producing more milk with fewer cows, so they need less acreage to support their herds. Farmers have also seen increasing — and more stable — prices on a lot of cash crops. Berrigan explained it is more profitable to farm corn and soybeans in eastern Ontario.⁹⁵

The committee learned about OMAFRA's topsoil sampling program, which started in 2019 and has tested 500 farms across the province to date. OMAFRA is building a baseline to try to understand what soil health looks like across Ontario's agricultural soils. OMAFRA also offers a field-scale program, ONFARM (On-Farm Applied Research and Monitoring) that looks at paired sites where beneficial management practices are applied on one side of the field and not on the other to then compare soil health metrics. ⁹⁶

Brandon Heung, Associate Professor, Faculty of Agriculture, Dalhousie University, said that OMAFRA "has done an exceptional job in terms of leading investments toward advancing digital soil mapping research and doing soil surveying."⁹⁷

When asked about funding soil management programs through an equity lens, the committee learned that OMAFRA has hired more staff members from Indigenous backgrounds in their extension group, which Christine Brown said is helping with inclusivity and working with these communities.

The Ontario Federation of Agriculture has suggested that the province is losing 319 acres of arable farmland per day. 98 To halt the loss of arable land, Dean Orr, Farmer, from King City, Ontario, suggested that federal, provincial, and municipal governments implement "gentle-density growth policies" and that "agriculture should be planned into and not out of communities." 99 Orr, who farms close to Toronto, has a particular interest in urban growth and planning and what it means for the future of agriculture in Canada.

96 AGE

⁹⁴ AGFO, *Evidence*, 16 February 2023 (Brodie Berrigan, Director of Government Relations and Farm Policy, Canadian Federation of Agriculture).

⁹⁵ Ibid.

⁹⁶ AGFO, *Evidence*, 30 March 2023 (Daniel Saurette, Land Resource Specialist — Soil, Environmental Management Branch, Ontario Ministry of Agriculture, Food and Rural Affairs, Government of Ontario).

⁹⁷ AGFO, <u>Evidence</u>, 20 October 2022 (Brandon Heung, Associate Professor, Faculty of Agriculture, Dalhousie University, As an Individual).

⁹⁸ Tyler Brooks, "Ontario Farmland Under Intense Pressure," News, Ontario Federation of Agriculture, 10 June 2022.

⁹⁹ AGFO, *Evidence*, 9 November 2023 (Dean Orr, Farmer, As an individual).

"It is the great irony of the lifespan of our farm that we have been practising good crop rotation, no-till and cover cropping for decades, vastly improving the soil health in our fields and limiting the environmental impact of our operation, only for that work to be destroyed within the next 50 years, unless something changes in how our society thinks about the worth of land — and how we go about planning for its use."

Dean Orr¹⁰⁰

The committee also heard from Cheyenne Sundance who has been farming for four years and who represents Sundance Commons – an Ontario non-profit organization that provides land leases, equipment, and supportive mentorship to new farmers across southwestern Ontario's Golden Horseshoe. Sundance Commons believes that a new farming model is needed and would like to see support for the legal designation of community land trusts regarding agricultural land in Canada. The organization is inspired by models that offer farmers equity for land-based improvements to soil health such as shares or bonds that are tied to organic matter increases in the soil, or an improvement for the soil microbiome for developing hedgerows.¹⁰¹

When asked about how easy it was to access funds from the federal <u>AgriDiversity</u> program, Sundance told the committee that she did not know that the program existed. AgriDiversity is a \$5-million program under the Sustainable CAP. One of the objectives of the program is to support projects aimed at helping Indigenous Peoples and other underrepresented and marginalized groups in Canadian agriculture — including women, youth, persons with disabilities, racialized persons, visible minorities, 2SLGBTQI+ communities, and official language minority communities — to fully participate in the sector by helping these groups address the key issues and barriers they often face for sector participation. 103

Quebec

According to AAFC, between 2018 and 2022 the top three crop and livestock commodities by average farm cash receipts for Quebec were: dairy (\$2.6 billion), hogs (\$1.6 billion), and poultry (\$898 million).¹⁰⁴

¹⁰⁰ Ihid

¹⁰¹ AGFO, *Evidence*, 9 November 2023 (Cheyenne Sundance, Farmer, Sundance Commons).

¹⁰² Ihid

¹⁰³ Government of Canada, "AgriDiversity Program: Step 1. What this program offers."

¹⁰⁴ Government of Canada, Overview of Canada's agriculture and agri-food sector.



A harvest harrow tractor moving through a cranberry bog in Plessisville, Quebec.

Several witnesses told the committee the main threats to soil degradation in Quebec are soil erosion, low soil organic carbon, decline in agricultural land, and water resource management.

The Union des producteurs agricoles (UPA) and the Producteurs du grains de Québec said agricultural soils in Quebec are under stress from factors that can jeopardize their medium- or long-term fertility. Martin Caron, President and CEO, UPA, cited problems with soil erosion and loss of organic matter, but also said that a growing number of producers are implementing solutions. 106

Caron stated the federal government has a role to play in fostering the adoption of best practices in soil conservation. Caron explained that while intense and specialty production systems have many benefits, especially in terms of volumes produced, these same systems also present challenges when it comes to sustainability. For example, Caron said a long rotation with several types of crops has many advantages over a rotation with only two crops, such as corn and soybeans in Quebec; however, the short-term profitability of these two crops is more attractive to farmers who specialize in growing them. Other crops that can be introduced are usually less lucrative. ¹⁰⁷

¹⁰⁵ AGFO, *Evidence*, **16** February **2023** (Martin Caron, President and CEO, Union des producteurs agricoles).

¹⁰⁶ AGFO, *Evidence*, 8 June 2023 (Benoit Legault, Director General, Producteurs du grains de Québec).

¹⁰⁷ AGFO, Evidence, 16 February 2023 (Martin Caron, President and CEO, Union des producteurs agricoles).

Caron added that practices which provide long-term benefits for soil health and the environment—such as green manures and cover crops—pose short-term profitability issues for producers. Green manures are field crops that are planted within a rotation to add nutrients and organic matter to the soil and can include legumes and non-legumes. The barrier to change for producers in Quebec is that during the transition period revenues are lower, expenses are higher, and the benefits of healthier soils have not yet been reaped. Another constraint for producers is learning how to manage greater complexity on farm such as acquiring new knowledge, trial, and error experimentation, and adjusting practices to specific situations. ¹⁰⁸

Caron told the committee that the UPA is carrying out various soil-health initiatives, including collaborating with AAFC, to promote the adoption of better farming practices in Quebec. ¹⁰⁹

Caron also mentioned that the Research and Development Institute for the Agri-Environment conducted a study at the request of the Government of Quebec's Ministry of Agriculture, Fisheries and Food (MAPAQ). The final report will provide a diagnosis of the health of agricultural soils in Quebec. The UPA submitted requests to the MAPAQ for an assessment/overview of the condition of soil health throughout the province, specifically a carbon neutral assessment. With the clay soils in Quebec, soil compaction must be considered, and more research is needed on this aspect.

Catherine Lefebvre, President, Association des producteurs maraîchers du Québec, said that climate change is causing increased costs and decreased productivity for vegetable producers. 110

Catherine Lessard, Deputy General Manager, Association des producteurs maraîchers du Québec, told the committee that over 50 different vegetable crops are grown in Quebec, most of which production occurs in the Montérégie and Lanaudière regions, where the climate and soils are favourable. Both regions, however, are located near Montréal and subject to urban pressure. Recent projections show a 22% population increase in the municipality of Jardins-de-Napierville, and 18% in the Montcalm regional county municipality. Lessard said that "measures to preserve agricultural land are essential to ensure that exceptional soil is not used for other purposes." 112

Annual sales of vegetables in Quebec reached \$500 million in 2020, which is similar in value to Quebec maple syrup, yet Lessard said that research in the vegetable sector is underfunded in comparison to other sectors. For example, Lessard said that while soil health is one of the subjects of the Living Labs Quebec project, jointly funded by AAFC and the UPA, it does not include the vegetable sector: "Due to the diversity of crops and production models, soil health improvement

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

¹¹⁰ AGFO, Evidence, 8 June 2023 (Catherine Lefebvre, President, Association des producteurs maraîchers du Québec).

¹¹¹ AGFO, *Evidence*, 8 June 2023 (Catherine Lessard, Deputy General Manager, Association des producteurs maraîchers du Québec).

¹¹² Ibid.

techniques for vegetable production are less documented, and our producers do not know the techniques that are documented very well." ¹¹³

Lessard said that public funding is essential to meet this challenge, and to improve soil health in general. In this respect, restoring financial support for the AgriScience clusters research projects to 75% would be a step in the right direction. For the time being, Lessard said only soil health projects focusing on carbon sequestration are eligible for subsidies of more than 50%. 114

Atlantic Canada

In Atlantic Canada, no-till is practiced on up to 20% of hectares prepared for seeding in parts of New Brunswick, up to 20% in all of Prince Edward Island, and between 30% to 40% in parts of Nova Scotia, as shown in Figure 22. Derek Lynch, Professor, Faculty of Agriculture, Dalhousie University, said: "In recent work across very diverse farms, the benefits of amendments and reduced tillage to increase soil health in Atlantic Canada have been shown." 115

¹¹³ Ibid.

¹¹⁴ Ibid.

¹¹⁵ AGFO, *Evidence*, 20 October 2022 (Derek Lynch, Professor, Faculty of Agriculture, Dalhousie University, As an individual).

Percentage of No-Till Seeding NEWFOUNDLAND AND LABRADOR PRINCE EDWARD Percentage of all prepared seeding area that is not tilled (by agricultural region within the agricultural ecumene, 2021) 1-20 20.01-30 SCOTIA 30.01-40 NEW Suppressed/ BRUNSWICK confidential 1:10,000,000 Canada Lambert Conformal Conic, NAD83

Figure 22 -Percentage of Hectares Prepared for No-Till Seeding: Atlantic Canada (2021)

Sources: Map prepared in 2024 using data obtained from Statistics Canada, "<u>Table 32-10-0367-01: Tillage and seeding practices, Census of Agriculture, 2021</u>," Database, accessed 28 November 2023; and Statistics Canada, <u>2021 Census – Boundary files</u>. The following software was used: Esri, ArcGIS Pro, version 3.2.2. Contains information licensed under <u>Statistics Canada Open Licence</u>.

Figure 23 presents the change in soil cover days in Atlantic Canada from 1981 to 2016. Most areas in Atlantic Canada exhibit moderate increases, with large increases in Newfoundland and Labrador. There are decreases in eastern Prince Edward Island, northwest New Brunswick and south of Halifax, Nova Scotia.

Change in Soil Cover Days NEWFOUNDLAND AND LABRADOR Change in soil cover days from 1981 to 2016 Large decrease Moderate decrease Little or no change NOVA Moderate increase SCOTIA Large increase BRUNSWICK Not assessed 1:10,000,000 Canada Lambert Conformal Conic, NAD83

Figure 23 – Change in Soil Cover Days: Atlantic Canada (1981 to 2016)

Sources: Map prepared in 2024 using data obtained from Agriculture and Agri-Food Canada, <u>Agri-Environmental Indicator – Soil Cover Days</u>, 16 December 2020; and Statistics Canada, <u>2021 Census – Boundary files</u>. The following software was used: Esri, ArcGIS Pro, version 3.2.2. Contains information licensed under <u>Open Government Licence – Canada</u> and <u>Statistics Canada Open Licence</u>.

As for soil erosion risk over time for the period 1981 to 2016, Figure 24 shows that in Atlantic Canada most coastal agricultural lands exhibit moderate to large decreases, while the area west of Halifax, Nova Scotia indicates a large increase.

Change in Soil Erosion Risk

NEWFOUNDLAND
AND LABRADOR

Change in soil erosion risk from 1981 to 2016

Large decrease
Decrease
Little or no change
Increase
Large increase
Not assessed

Large increase
Not assessed

Figure 24 – Change in Soil Erosion Risk: Atlantic Canada (1981 to 2016)

Sources: Map prepared in 2024 using data obtained from Agriculture and Agri-Food Canada, <u>Agri-Environmental Indicator – Risk of Soil Erosion</u>, 18 January 2021; and Statistics Canada, <u>2021 Census – Boundary files</u>. The following software was used: Esri, ArcGIS Pro, version 3.2.2. Contains information licensed under <u>Open Government Licence – Canada</u> and <u>Statistics Canada Open Licence</u>.

With respect to soil organic carbon degradation risk, Figure 25 shows that most of Atlantic Canada exhibits a patchwork of risk. Western Prince Edward Island is at high risk while eastern Prince Edward Island is at moderate risk.

Soil Organic Carbon Degradation Risk

NEWFOUNDLAND
AND LABRADOR

PRINCE EDWARD
ISLAND
Soil organic carbon degradation risk (2016)
Very low
Low
Moderate
SCOTIA
NEW
BRUNSWICK

Liowoo,000

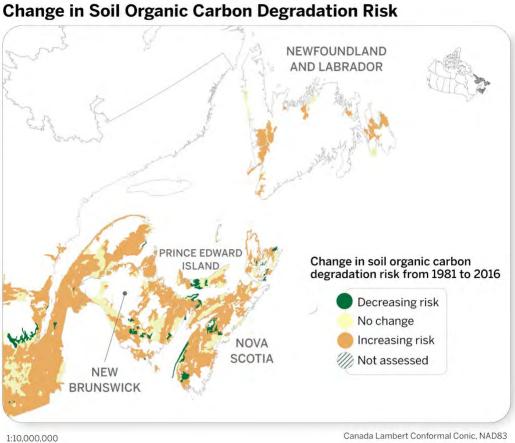
Canada Lambert Conformal Conic, NAD83

Figure 25 – Soil Organic Carbon Degradation Risk: Atlantic Canada (2016)

Sources: Map prepared in 2024 using data obtained from Agriculture and Agri-Food Canada, <u>Agri-Environmental Indicator – Soil Organic Matter</u>, 18 January 2021; and Statistics Canada, <u>2021 Census – Boundary files</u>. The following software was used: Esri, ArcGIS Pro, version 3.2.2. Contains information licensed under <u>Open Government Licence – Canada</u> and <u>Statistics Canada Open Licence</u>.

From 1981 to 2016, most of the agricultural lands in Atlantic Canada were classified as having an increasing risk of soil carbon degradation, as shown in Figure 26.

Figure 26 – Change in Soil Organic Carbon Degradation Risk: Atlantic Canada (1981 to 2016)



Sources: Map prepared in 2024 using data obtained from Agriculture and Agri-Food Canada, Agri-Environmental Indicator — Soil Organic Matter, 18

January 2021; and Statistics Canada, 2021 Census - Boundary files. The following software was used: Esri, ArcGIS Pro, version 3.2.2. Contains

information licensed under <u>Open Government Licence – Canada</u> and <u>Statistics Canada Open Licence</u>.

Figure 27 shows a patchwork of changes from 1981 to 2016 in the amount of soil organic carbon that is sequestered across the agricultural lands of Atlantic Canada, showing mostly large decreases across all provinces, with very small areas showing moderate or large increases.

Change in Soil Organic Carbon

NEWFOUNDLAND
AND LABRADOR

Change in soil organic carbon from 1981 to 2016

Large decrease
Moderate decrease
No change
Moderate increase
Large increase
Large increase

Canada Lambert Conformal Conic, NAD 83

Figure 27- Change in Soil Organic Carbon: Atlantic Canada (1981 to 2016)

Sources: Map prepared in 2024 using data obtained from Agriculture and Agri-Food Canada, <u>Agri-Environmental Indicator – Soil Organic Matter</u>, 18 January 2021; and Statistics Canada, <u>2021 Census – Boundary files</u>. The following software was used: Esri, ArcGIS Pro, version 3.2.2. Contains information licensed under <u>Open Government Licence – Canada</u> and <u>Statistics Canada Open Licence</u>.

New Brunswick

In a brief submitted to the committee, the Government of New Brunswick, Department of Agriculture, Aquaculture and Fisheries, described the province's agricultural landscape as highly diversified. For instance, wild blueberry production occurs in the northeastern and southeastern parts of the province, cranberry production in the east, and potato production in the northwest in the Upper Saint John River Valley. Horticulture crops, including apples, small fruit, and vegetables, are mainly grown in the lower Saint John River Valley and in the southeastern part of the province.

The dairy and livestock industries are scattered around the province, primarily located in the south-central region around the town of Sussex. 116

According to AAFC, between 2018 and 2022 the top three crop and livestock commodities by average farm cash receipts for New Brunswick were: cannabis (\$239 million), potatoes (\$178 million), and dairy (\$124 million).

Only 5% of New Brunswick's land base is used for agriculture. The total farm area in production from 2016 to 2021 fell by 18% to 685,378 acres. In comparison, the total average farm area in production throughout Canada decreased by 3% during the same period. The Government of New Brunswick stated that several factors led to this decrease, including poor suitability for growing, domestic and international market fluctuations, urban sprawl, competing land use, lack of farm succession planning, and increased farm-input costs. 118

Like much of Atlantic Canada, New Brunswick has naturally acidic soils. Many soil types and textures are found across the province. Most soils are noncalcareous, meaning they are lime deficient. The Department of Agriculture, Aquaculture and Fisheries reported that the continuous cultivation of annual crops in the province has increased soil compaction and soil erosion from wind and water, and lowered soil organic matter content and nutrient and water-holding capacity in some fields. The need for soil acidity neutralizing amendments in Atlantic Canada region has been well documented. 119

Opportunities exist for crop and livestock production to improve soil health and increase carbon sequestration. For example, the Department of Agriculture, Aquaculture and Fisheries recently conducted an evaluation of the province's soil health to identify opportunities and sources of residual amendments. The status of soil health was evaluated in 15 counties with soil data from the Prince Edward Island (PEI) and Ontario laboratories. The evaluation consisted of reviewing close to 125,000 soil test results collected from 2010 and 2021. The results showed that 100% of the soil had below-recommended pH levels for optimal field crop and vegetable production, and only 40% of the soil samples were at optimum pH levels for potato production. Soils with low pH levels create challenges in terms of overall yield reduction and increased fertilizer use. 120

Soils were also low in calcium, a common deficiency in noncalcareous soils, especially in soils with low pH levels. Soil phosphorus levels were at optimum levels for field crops, wild blueberries, and vegetables, but would not meet the optimum levels required for potato production. Aluminum, which is naturally present and found at high levels in New Brunswick's soils, affects the availability

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¹¹⁶ AGFO, <u>Brief</u>, 31 March 2023 (Government of New Brunswick, Department of Agriculture, Aquaculture and Fisheries). ¹¹⁷ Government of Canada, *Overview of Canada's agriculture and agri-food sector*.

¹¹⁸ AGFO, <u>Brief</u>, 31 March 2023 (Government of New Brunswick, Department of Agriculture, Aquaculture and Fisheries). ¹¹⁹ Ibid.

¹²⁰ Ibid.

of phosphorus for the crop. Potassium was also below optimum levels for field crops, vegetables, and potatoes, which can lead to a higher incidence of disease and insect damage. Optimal potassium rates are important for many crops grown in the province, but excessive potassium levels decrease calcium and magnesium uptake. Sulfur levels were optimum for wild blueberries, potatoes, field crops and vegetables. In addition, soil structure degradation from continuous production is a challenge throughout the province.¹²¹

For several years, New Brunswick's Department of Agriculture, Aquaculture and Fisheries has collaborated with other provincial departments, AAFC, agricultural associations, various stakeholders, and producers to increase awareness and support producers with the adoption of business management programs (BMPs). The Environmental Farm Plan has been delivered by the province since 1996 and has been a key program to increasing on-farm environmental sustainability, including a focus on soil management. Financial support for BMPs associated with the environment, climate change and soil health from the federal, provincial, and territorial cost-shared framework are a focus area for New Brunswick under the new Sustainable CAP. 122

¹²¹ Ibid.

¹²² Ibid.

Nova Scotia

According to AAFC, between 2018 and 2022 the top three crop and livestock commodities by average farm cash receipts for Nova Scotia were: dairy (\$156 million), fruit (\$73 million), and eggs (\$46 million). 123

Sean Thomas, Research Professor, University of Toronto, told the committee: "I have an impression that Nova Scotia is doing pretty well. It has a pretty long legacy of degradation, but they have put in some real investments given the smaller forest area." 124

The committee learned that Dalhousie University's Centre for Sustainable Soil Management brings together 35 soil scientists and academics in related disciplines across six provinces. The centre's mission is to advance scholarship and research in soil science; to provide a focal point for soil science, education, and training in Atlantic Canada; and to serve as a national data hub for data-intensive mapping, understanding and use of soil landscape information and the impact of management on those landscapes.

Prince Edward Island

According to AAFC, between 2018 and 2022 the top three crop and livestock commodities by average farm cash receipts for Prince Edward Island were: potatoes (\$253 million), dairy (\$94 million), and cattle and calves (\$34 million). 125

Carla Millar, Manager, Sustainable Agriculture, Department of Agriculture, Government of Prince Edward Island, informed the committee that while the province's rich red soil is known to grow some of the highest-quality food, its sandy texture coupled with the rolling topography of its fields can lead to soil health challenges. Under annual crop production systems, soil is easily lost to wind and water erosion, and organic matter is hard to maintain.¹²⁶

The committee learned that in 1998, PEI started a long-term province-wide soil quality monitoring project to routinely assess and monitor fluctuations in soil organic matter and nutrient levels. The sample sites, located on agricultural land, were selected on a grid covering the entire province, in partnership with landowners. Samples were taken on a three-year cycle per site. Between 1998 and 2012, Millar reported the project sample results showed a general decline in soil organic matter. During the last three cycles, covering the years 2013-2021, the soil organic matter levels

¹²³ Government of Canada, <u>Overview of Canada's agriculture and agri-food sector</u>.

¹²⁴ AGFO, *Evidence*, 25 October 2022 (Sean Thomas, Research Professor, University of Toronto, As an individual).

¹²⁵ Government of Canada, <u>Overview of Canada's agriculture and agri-food sector</u>.

¹²⁶ AGFO, *Evidence*, 30 November 2023 (Carla Millar, Manager, Sustainable Agriculture, Department of Agriculture, Government of Prince Edward Island).

stabilized, with no further decline. The majority of the land sampled continues to be in the 2 to 3% range of soil organic matter. 127

Millar explained that compounding factors might have contributed to the loss of organic matter in the province's soil since 1998. For example, Millar said a decline in the livestock industry during that same period resulted in a reduction of manure inputs and in soil-building forage crops used to feed livestock. Millar added that agronomic factors—crop rotation, tillage intensity and soil erosion—have also had a cumulative effect over time. 128

The PEI Department of Agriculture is focused on three key areas to address soil degradation in the province:

- measuring and monitoring (e.g., a soil health testing service through the PEI Analytical Laboratories; Soil Health Improvement Planning service);
- prioritizing programs and services for agricultural producers to implement beneficial farm management practices (e.g., specialized engineering services for constructing grassed terraces, berms, and waterways to slow and redirect water flow to reduce soil erosion; funding and extension support for conservation tillage, winter cover cropping and soilbuilding crops and perennials in rotations; a livestock strategy that targets soil health through improved grazing and increase manure amendments); and,
- working toward soil health objectives through partnerships, promotion, and collaboration, supporting and participating in soil health working groups, partnering on research projects, and planning soil health workshops (e.g., the 2021 Soil First Farming campaign).

Millar told the committee that the success of the program is the regional focus; the ability to regionally design and offer BMPs that are suitable for their own climate, producers and production systems is beneficial. Millar stressed that the regionality of an approach to programming and policies is crucial. 130

Finally, Millar said that more funding dollars would help PEI go further and would let participating producers do more because the province has strong uptake in programs: "I do think some funding helps. I also think the extension support helps as well. But funding isn't the only solution. Extension support is good too, as is coming at things with a broader kind of socio-economic lens. That is important because it just reflects that not all barriers are funding." ¹³¹

¹²⁷ Ibid.

¹²⁸ Ibid.

¹²⁹ Ibid.

¹³⁰ Ibid.

¹³¹ Ibid.

On the strength of PEI's soil collection program, Derek Lynch, Professor, Faculty of Agriculture, Dalhousie University, said:

"In particular, Prince Edward Island has, for the last 20 years, had a georeferenced 300-site soil-quality data monitoring network. It is absolutely invaluable when you have such intensive agriculture to track changes in soil quality and soil health and construct policy based on that"

Derek Lynch¹³²

Newfoundland and Labrador

According to AAFC, between 2018 and 2022 the top three crop and livestock commodities by average farm cash receipts for Newfound and Labrador were: dairy (\$48 million), eggs (\$20 million), and floriculture, nursery and sod (\$9 million).¹³³

Stephen Balsom, Assistant Deputy Minister, Agriculture and Lands, Department of Fisheries, Forestry and Agriculture, Government of Newfoundland and Labrador, told the committee that the province's landscape consists of complex topography, with shallow, stony and coarse to medium-textured soils which are vulnerable to water and wind erosion. Soils are acidic, naturally low in soil organic matter, and limited in nutrient retention and their ability to support crop growth. ¹³⁴

Erosion is one of the biggest soil degradation factors in Newfoundland and Labrador. Wind erosion in Newfoundland and Labrador is much less than in other provinces as many of its fields are smaller, fragmented and surrounded by forests. Balsom said recent increases in adverse weather events and various studies confirm that soil erosion is an increasingly important issue.¹³⁵

¹³² AGFO, *Evidence*, 20 October 2022 (Derek Lynch, Professor, Faculty of Agriculture, Dalhousie University, As an individual).

¹³³ Government of Canada, Overview of Canada's agriculture and agri-food sector.

¹³⁴ AGFO, *Evidence*, 30 November 2023 (Stephen Balsom, Assistant Deputy Minister, Agriculture and Lands, Department of Fisheries, Forestry and Agriculture, Government of Newfoundland and Labrador).

¹³⁵ Ibid.

Newfoundland and Labrador is one of the only provinces in Canada clearing land for agricultural use. Since land-clearing efforts may contribute to soil degradation, the province has promoted and adopted beneficial management practices to minimize this risk and mitigate the effects of climate change on its soils.¹³⁶

"One of the successes is providing our local farmers with a report card. We have what I would call a young agriculture industry, and we're still in land-clearing mode. We're still developing new land. Providing our new farmers with an understanding of how their practices impact the soil pH— the nutrients and the carbon and nitrogen — and the beneficial practices they can use to support soil health is really the success of the program so far."

Stephen Balsom¹³⁷

With funding from AAFC's Sustainable CAP and <u>Resilient Agricultural Landscape Program</u>, Newfoundland and Labrador has started researching and promoting the use of winter cover crops, such as alfalfa and oats, incorporating the use of legumes and green manures, and implementing crop rotation for building soil fertility. The province also conducts research on no-till farm practices to increase soil organic matter and decrease the amount of erosion. The use of wind breaks in soil erosion and wind damage is now part of their work with local farmers.¹³⁸

Balsom reported that subscription to federally funded programs is high, as is the provincially run soil testing service to agricultural producers. There are fewer than 200 producers in the province; the larger producers who make up most of the market are subscribed. Balsom said Newfoundland and Labrador, like Prince Edward Island, could always utilize more funding, but that some funding, programs, and technologies are not scalable for smaller farms.¹³⁹

Approximately 500 acres of forest land is cleared per year for other purposes, including agriculture. The province has considered or adopted beneficial management practices for sustainable forestry to mitigate the impacts of climate change and soil degradation. For example, Balsom said field staff and contractors assess harvested areas and strategically plan extraction trails. They also plan harvest activities and use of winter roads when harvesting in or around sensitive areas. Larger

¹³⁶ Ibid.

¹³⁷ Ibid.

¹³⁸ Ibid.

¹³⁹ Ibid.

infrastructure for water crossings, such as bridges and culverts, is incorporated to account for increased water runoff. 140

Newfoundland and Labrador's agriculture industry is small and, in many ways, not comparable to other provincial production systems. Balsom said that support, collaboration, and capacity building for local soil research is required to adopt practices applicable to the province's local environment. Balsom added that some federally based programming may not be applicable to Newfoundland and Labrador, as the province focuses on food self-sufficiency and not commodity-based, large-scale, or export-driven agriculture. 141

Soils Information Management

Measuring, Reporting and Verifying Soil Health

Though soil health is a topic of research around the world, the committee learned there is no global—let alone Canadian—consensus on how to measure, report and verify it.



Technicians at Environmental Material Science Ltd. show senators Mobina S.B. Jaffer and Rob Black how to assemble and install soil mapping sensors in Saskatoon, Saskatchewan.

¹⁴⁰ Ibid.

¹⁴¹ Ibid.

David Burton, Distinguished Research Professor, Faculty of Agriculture, Dalhousie University, shared: "One of the major challenges in measuring soil health is the expense of quantifying the many aspects of soil needed to provide a complete picture of soil health." Fortunately, added Burton, emerging technologies allow rapid and inexpensive spectral characterization of soil to provide a rich characterization of the state of soil.¹⁴²

According to David Lobb, Professor, Department of Soil Science, Faculty of Agricultural and Food Sciences, University of Manitoba, quantifying soil health as a simple index value is extremely challenging. While other witnesses said that a single measure of reporting was realistic for soil health—such as soil organic matter, or soil organic carbon—they also agreed that a set of measurements, parameters, or indicators be used.

"I'm very optimistic that if we measure the same set of parameters, depending on the station, we can pick and choose which one is important in that context while still being able to communicate and compare across regions and provinces and perhaps even internationally," said Dieter Geesing, Provincial Soil Specialist, British Columbia Ministry of Agriculture and Food, Government of British Columbia. 144

The <u>Soil Health Institute</u>, located in North Carolina, is doing just that. Based on recent studies, Cristine Morgan, Chief Scientific Officer, said the Institute recommends four soil health indicators:

- 1) soil organic carbon concentration;
- 2) carbon mineralization potential;
- 3) wet aggregate stability; and
- 4) available water-holding capacity.

Together with the <u>Greenbelt Foundation</u>, the Soil Health Institute is piloting an approach across the Golden Horseshoe region of Ontario to benchmark soil health using the above-mentioned measurements. In the pilot project, Morgan explained they provide a regional assessment of soil health, including its current state, improvements already being made with soil health practices and the potential for further improvement.¹⁴⁵

¹⁴² AGFO, *Evidence*, 20 October 2022 (David Burton, Distinguished Research Professor, Faculty of Agriculture, Dalhousie University, As an individual).

¹⁴³ AGFO, *Evidence*, 27 September 2022 (David Lobb, Professor, Department of Soil Science, Faculty of Agricultural and Food Sciences, University of Manitoba, As an Individual).

¹⁴⁴ AGFO, *Evidence*, 30 March 2023 (Dieter Geesing, Provincial Soil Specialist, British Columbia Ministry of Agriculture and Food, Government of British Columbia).

¹⁴⁵ AGFO, Evidence, 13 February 2024 (Cristine Morgan, Chief Executive Officer, Soil Health Institute).

By measuring soils and management, we will provide producers with insight on how healthy their soil is and empower them to generate a goal on how healthy they want their soil to become.

Cristine Morgan¹⁴⁶

Don Lobb, farmer, echoed Morgan, and added: "We must establish baselines so we can monitor trends in soil productivity, soil use and soil care. Water-stable soil aggregates should be identified as the base indicator of soil health." ¹⁴⁷

From a forestry perspective, Jerry V. DeMarco, Commissioner of the Environment and Sustainable Development, Office of the Auditor General of Canada, informed the committee that a more accurate, clear, and complete system for forest accounting for land use, land use change and forestry, including stored carbon in soil, would help inform decisions on what types of initiatives—including soil health—to support at the federal level.¹⁴⁸

Furthermore, Kumari Karunaratne, President, Canadian Permafrost Association, emphasized that Canada lacks national permafrost leadership as there is no one organization that oversees and coordinates permafrost issues and activities for the country. "The result is that research, data, funding, and expertise are not being used efficiently and opportunities are being missed," added Karunaratne.¹⁴⁹

¹⁴⁶ Ibid.

¹⁴⁷ AGFO, *Evidence*, 29 February 2024 (Don Lobb, Farmer, As an individual).

¹⁴⁸ AGFO, *Evidence*, 15 June 2023 (Jerry V. DeMarco, Commissioner of the Environment and Sustainable Development, Office of the Auditor General of Canada).

¹⁴⁹ AGFO, Evidence, 23 March 2023 (Kumari Karunaratne, President, Canadian Permafrost Association).

Finally, David Burton, Distinguished Research Professor, Faculty of Agriculture, Dalhousie University, suggested that reporting on the status of soil health occur annually:

"[...] We not only need to measure soil health but report on the state of soil health and track our impact of agriculture and forestry practices on soil health. In the past, Agriculture and Agri-Food Canada has published The Health of Our Soils, and their environmental branch has periodically reported on a series of agri-environmental indicators. We need to make that reporting an annual requirement of our government and we need to ensure that the indicators are based on measurements of the state of the soil resource and not a product of mathematical modelling based on census of agriculture data."

David Burton¹⁵⁰

Building Baseline Data and a National Soil Information Database

The committee heard that while a lot of soil data is being collected throughout the country, it is difficult to analyze and share this data because governments, academic institutions, organizations, and industry groups do not have a common format to collect or share soil data.¹⁵¹

Angela Bedard-Haughn, Professor and Dean, College of Agriculture and Bioresources, University of Saskatchewan, added: "We have no way to bring it together and we are losing out on major opportunities to leverage the power of big data." ¹⁵²

¹⁵⁰ AGFO, *Evidence*, 20 October 2022 (David Burton, Distinguished Research Professor, Faculty of Agriculture, Dalhousie University, As an individual).

¹⁵¹ AGFO, Evidence, 9 March 2023 (Rebecca Lee, Executive Director, Fruit and Vegetable Growers of Canada).

¹⁵² AGFO, <u>Evidence</u>, 27 September 2022 (Angela Bedard-Haughn, Professor and Dean, College of Agriculture and Bioresources, University of Saskatchewan, As an individual).

Derek MacKenzie, Associate Professor, Department of Renewable Resources, University of Alberta, suggested that the committee recommend the establishment of a national soil health data institute:

"This institute would serve as a centralized hub for the collection, analysis, and dissemination of soil health data across our nation. By working closely with research institutes across the country to collate diverse datasets and employ cutting-edge technologies, such as machine learning, this institute would facilitate a deeper understanding of soil function, enabling informed decision-making for producers, land managers, researchers, and policymakers. It would also allow Canada to calculate accurate inventories of soil health parameters nationally for global reporting."

Derek MacKenzie¹⁵³

In a <u>brief</u>, MacKenzie outlined how the proposed national soil health data institute would be governed and funded: "I have submitted a proposal outlining this institute as an endowed NGO operated by an executive committee that works in conjunction with a board of governors made up of senior representatives from agricultural producers, industry, government, and academics. The establishment of such an institute signifies our commitment to safeguarding the very foundation upon which our human health, food security and environmental sustainability depend." ¹⁵⁴

Bedard-Haughn made a call to action for the federal government to recognize soil as a national priority and establish a national soil information database or institute. But, where in government might those investments occur or come from? Bedard-Haughn said, historically, it should be AAFC, but also pointed out that soil information is collected through AAFC, Environment and Climate Change Canada (ECCC), and Natural Resources Canada, among other departments. Furthermore, most of the soil sampling that is currently being done in the North is part of environmental site assessments for mining and exploration. Data sharing is challenging because there is no one institute overseeing it.¹⁵⁵

¹⁵³ AGFO, *Evidence*, 7 December 2023 (Derek MacKenzie, Professor, Department of Renewable Resources, University of Alberta, As an individual).

¹⁵⁴ Ibid.

¹⁵⁵ AGFO, <u>Evidence</u>, 27 September 2022 (Angela Bedard-Haughn, Professor and Dean, College of Agriculture and Bioresources, University of Saskatchewan, As an individual).

"It has been really tough because it hasn't been the mandate of a federal organization — for example, Agriculture and Agri-Food Canada. We've had a loose collection of scientists, but we can't do it without funding. We need that support. We have folks with the capability, the skill, the interest, and the desire but without the resources to do it. Because it is a distributive problem, no one province wants to chip in for a national database.

Angela Bedard-Hahn¹⁵⁶

David Burton, Distinguished Research Professor, Faculty of Agriculture, Dalhousie University, suggested this approach: "a mix of government and academic institutions in some sort of a federation, led by a champion organization, perhaps the Soil Conservation Council of Canada or the Canadian Society of Soil Science — an organization that has multiple stakeholders in industry, government and academic." Burton added that ideally multiple academic and/or government institutions would be involved in "creating a data warehousing system that has redundancy. In that way, no one organization or institution is responsible for maintaining it. It's also maintained in multiple locations so it can persist for many years." 157

"It is something that needs to be central to the way we do agriculture and forestry from here on out. Who is going to fund that? I think governments have the role of funding these kinds of things, so government agencies need to be called upon to fund it. But it must be a federated approach."

David Burton¹⁵⁸

Melissa Arcand, Soil Biogeochemist, University of Saskatchewan, pointed out that, historically, First Nations have not had strong relationships with soil data collectors and holders such as universities, governments, and the agricultural industry.¹⁵⁹

"For many First Nations in Saskatchewan, the only soil data they might have access to are 60-yearold soil survey reports, which are useful for land-use planning but not for evaluating changes in soil

¹⁵⁶ Ibid.

¹⁵⁷ AGFO, *Evidence*, 20 October 2022 (David Burton, Distinguished Research Professor, Faculty of Agriculture, Dalhousie University, As an individual).

¹⁵⁸ Ibid.

¹⁵⁹ AGFO, *Evidence*, 9 February 2023 (Melissa Arcand, Soil Biogeochemist, University of Saskatchewan, As an individual).

health," said Arcand, who also emphasized that resources are needed to support soil data collection and management by First Nations for their own lands. "Initiatives and soil data management developed through a national soil health strategy could be modelled and applied for First Nations use." 160

Michelle Blade, Permafrost Scientist, Nunavut, and member of the Canadian Permafrost Association, told the committee that there is a lack of data coordination in Nunavut between Natural Resources Canada, the Government of Nunavut, and Inuit organizations who have been working on a long-term permafrost monitoring program in over 10 communities.¹⁶¹

Knowledge Transfer and Peer-To-Peer Soil Networks

The committee heard that it is not enough to collect soil data and house it, but that this data and research must be shared and made digestible for Canadians—especially farmers—so they can understand it and implement it.

As for that knowledge transfer, Brodie Berrigan, Director of Government Relations and Farm Policy, Canadian Federation of Agriculture, emphasized: "We need to support farmers sharing information with other farmers. It is not always the government's responsibility." ¹⁶²

The committee learned about the many peer-to-peer farmer-led soil networks that already exist throughout the country. For example, Ontario Soil Network, Ontario Soil and Crop Improvement Association and Sundance Commons are examples of grassroots organizations that have taken it upon themselves to test different beneficial soil management practices on farm and then share this information with other farmers in their regions, through events, webcasts and blogs. Regional conferences, such as the Western Canada Conference on Soil Health and Grazing held annually in Edmonton, Alberta, are another important way for farmers and ranchers to connect.

"Farmers need to see themselves — all ethnicities, races and genders across Canada — so it doesn't always look like such a homogenized group, which it's not. It's very diverse and increasingly more diverse."

Brodie Berrigan¹⁶³

¹⁶⁰ Ibid.

¹⁶¹ AGFO, *Evidence*, 23 March 2023 (Michelle Blade, Permafrost Scientist, Nunavut, Canadian Permafrost Association).

¹⁶² AGFO, *Evidence*, 16 February 2023 (Brodie Berrigan, Director of Government Relations and Farm Policy, Canadian Federation of Agriculture).

¹⁶³ Ibid.

Similar grassroots organizations, such as the Manitoba Zero Tillage Research Association, Manitoba-North Dakota Zero Tillage Farmers Association and the Reduced Tillage Linkages, no longer exist in the Prairies because their funding ran out. ¹⁶⁴ Marla Riekman, Land Management Specialist – Soils, Manitoba Agriculture, Government of Manitoba, said the benefit of these organizations is they are farm-based, farmer-based, and farmer-driven: "They usually have a good uptake by farmers because the information comes from peers as opposed to a top-down approach." ¹⁶⁵

The committee heard that the New Brunswick Agricultural Alliance pairs young farmers with mentors. In Quebec, the <u>Caravane Santé des sols</u>, which is linked to AAFC's Living Labs, travels to the regions and invites producers, including Indigenous producers, to collaborate and be part of the project. The program mobilizes researchers, advisors, and producers to move towards a common goal. The concept is often managed by organizations.

"In summary, at the Soil Health Institute, we have evidence that adoption of soil health systems improves on-farm profitability. Successful implementation of soil health management systems requires practice and learning from other farmers who have successfully adopted them."

Cristine Morgan¹⁶⁶

¹⁶⁴ AGFO, *Evidence*, 20 April 2023 (Marla Riekman, Land Management Specialist – Soils, Manitoba Agriculture, Government of Manitoba); and, *Evidence*, 20 April 2023 (Trevor Wallace, Provincial Nutrient Management Specialist, Natural Resource Management Branch, Alberta Agriculture and Irrigation, Government of Alberta).

¹⁶⁵ AGFO, *Evidence*, **20** April **2023** (Marla Riekman, Land Management Specialist – Soils, Manitoba Agriculture, Government of Manitoba).

¹⁶⁶ AGFO, Evidence, 13 February 2024 (Cristine Morgan, Chief Executive Officer, Soil Health Institute).

Chapter 2: Opportunities To Use Soil-Based Methods To Mitigate Climate Change

Early Adopters

Many witnesses told the committee that the early adopters—the farmers, ranchers, and growers who first implemented regenerative and beneficial soil management practices—must be compensated fairly and recognized for their practices.

"These producers did the heavy lifting and on-farm experimentation required to develop many of the best management practices that contributed to the increased soil carbon sequestration from 1981 to 2016. While offsets may not acknowledge these early adopters, we do need to acknowledge and support early adopters when creating future programs to identify further best management practices. We must also celebrate these trailblazers to showcase where early adoption of best practices provided meaningful, long-term benefits — not only environmentally, but also as sound business decisions."

Mary Robinson¹⁶⁷

Marco Valicenti, Director General, Innovation Programs Directorate, AAFC, told the committee that the On-Farm Climate Action Fund (OFCAF) allows early adopters to participate as long as it is on new land or a new piece of their property. 168

¹⁶⁷ AGFO, *Evidence*, 16 February 2023 (Mary Robinson, Past President, Canadian Federation of Agriculture).

¹⁶⁸ AGFO, <u>Evidence</u>, 14 February 2023 (Marco Valicenti, Director General, Innovation Programs Directorate, Agriculture and Agri-Food Canada).

Several witnesses disagreed with this criterion and said that incentive programs, such as OFCAF, leave farmers, ranchers and growers feeling left behind. Brodie Berrigan, Director of Government Relations and Farm Policy, Canadian Federation of Agriculture, emphasized the importance of and need for incentives by asking: "What incentive are you putting in place when you're not recognizing the efforts of those early adopters?" ¹⁶⁹

"Manitoba farmers have embraced innovative agricultural practices to reduce emissions and enhance soil health, such as 4R uptake and the uptake in the On-Farm Climate Action Fund, or OFCAF, programs. However, factors such as crop inputs, debt, market conditions and profitability may influence the decision-making around adopting these practices, so it is key to have an incentive-based model to increase adoption. At the end of the day, you can't be in the green if you're in the red."

Jake Ayre¹⁷⁰

Some witnesses urged the federal government to set the record straight on when the additionality principle starts, that is from what date should the early adopters be recognized and compensated for their regenerative and sustainable practices?' For example, Marty Seymour, Chief Executive Officer, CarbonRX, recommended that day zero should start at the Paris Agreement in December 2015: "All practices beyond 2015 and the signing of that accord would, for me, be the baseline for net zero." Rachel Hor, Chief Operating Officer, CarbonTerra, agreed with this date, but also suggested that the federal government go as far back as 2010. 172

¹⁶⁹ AGFO, *Evidence*, 16 February 2023 (Brodie Berrigan, Director of Government Relations and Farm Policy, Canadian Federation of Agriculture).

¹⁷⁰ AGFO, *Evidence*, 4 May 2023 (Jake Ayre, Vice President, Keystone Agricultural Producers of Manitoba).

¹⁷¹ AGFO, Evidence, 18 May 2023 (Marty Seymour, Chief Executive Officer, CarbonRX).

¹⁷² AGFO, *Evidence*, 18 May 2023 (Rachel Hor, Chief Operating Officer, CarbonTerra).

With respect to baselines and additionality, Kristjan Hebert, President, Hebert Group, from Saskatchewan, urged the federal government to incentivize the leaders to lead:

"Yes, they might have adopted zero-till 20 years ago, but they're still seeing incremental changes and they're adopting incremental practices that continue to improve. Let's incentivize the rest of the group with practice incentives to get to the point where the leaders are. You can't disincentivize the leaders to quit leading. We're trying to grow leaders in this country."

Kristjan Hebert¹⁷³

Some witnesses recommended the creation of a regenerative agriculture commission:

"By utilizing innovative practices on our farm, we have managed to achieve the following: healthier soils, crops, and livestock; supplied beef and pork to our local communities; lowered our synthetic fertilizer up to 75% and lowered our CO_2 equivalent footprint. Yet, farmers still struggle to get paid fairly for our stewardship efforts."

Colby Hansen¹⁷⁴

Crop Insurance

Furthermore, several witnesses told the committee that traditional crop insurance must be restructured to incentivize people for regenerative and sustainable practices rather than the current program that incentivizes people to, for example, plant canola on marginal land and then harvest the insurance.

Cedric MacLeod, Executive Director, Canadian Forage and Grassland Association, pointed out that: "[...] if we don't require some of that cross-compliance to access crop insurance, there is actually a reverse incentive toward conservation. Because if you can get crop insurance on Class 4 or Class 5

¹⁷³ AGFO, *Evidence*, 9 March 2023 (Kristjan Hebert, President, Hebert Group).

¹⁷⁴ AGFO, *Evidence*, 14 December 2023 (Colby Hansen, Owner/Operator, Hansen Beef).

land to grow canola or potatoes when it should actually be in permanent cover grassland, that has a very negative impact on the landscape as a whole."¹⁷⁵

Stuart Chutter, Senior Policy Analyst, Agriculture Financial Services Corporation, and livestock producer from Saskatchewan, explained that crop insurance is a business risk management program with goals of food security and economic risk management for producers. ¹⁷⁶ Chutter said that with risk management at the farm level and soil organic carbon as a metric, there is alignment in those incentives, so there is opportunity, without compromising the goal of primary financial risk management for the producer. ¹⁷⁷

For instance, in a soil analysis for crop insurance, Chutter used an aggregated data set of soil organic carbon across Alberta that was made available through funding by the Sustainable CAP, which then funded Food Water and Wellness in Calgary, to map soil organic carbon at the field level for the entire province of Alberta. Soil mapping was key for Chutter's analysis:

"My message today is that a key role for federal policy is funding that sort of soil mapping and data aggregation so we can run our analyses and make good data-driven decisions. We are dependent upon those sorts of data sets to complete our analyses."

Stuart Chutter¹⁷⁸

¹⁷⁵ AGFO, *Evidence*, 22 September 2022 (Cedric Macleod, Executive Director, Canadian Forage and Grassland Association).

¹⁷⁶ AGFO, *Evidence*, 9 November 2023 (Stuart Chutter, Senior Policy Analyst, Agriculture Financial Services Corporation). ¹⁷⁷ Ibid.

¹⁷⁸ AGFO, Evidence, 9 November 2023 (Stuart Chutter, Senior Policy Analyst, Agriculture Financial Services Corporation).

How would a lending institution look at an insurance program that bases insurance risk on soil health? Justine Hendricks, President and Chief Executive Officer, Farm Credit Canada (FCC), responded that FCC has been approaching it through the incentive to continue these best practices:

"[...] whether you're a livestock or crop producer and considering exactly what your unique requirements are to contribute to the best output, we customize those incentive programs to make sure that we can respect the level of every subsector. As a result, we'll give back a percentage against interest paid on their working capital facilities, which rewards the good behaviour."

Justine Hendricks¹⁷⁹

Todd Klink, Executive Vice-President and Chief Marketing Officer, Farm Credit Canada, added that FCC has tried to look for industry best practices, and where industry sees the opportunities within their subsector, whether that be crops, beef, or other commodities: "Then the question is how we work with those groups to partner and work with their growers who grow those crops to move forward this discussion that ultimately ends with best management practices and improving soil health." ¹⁸⁰

Creating A Viable Soil-Based Carbon Marketplace For Agriculture

While the 1984 report of the committee considered the economics of soil conservation, the idea that soil health is a commodity was not on the horizon in the 1980s as it is now. 181

Canada has a regulated/compliance and voluntary/non-compliance carbon marketplace. The <u>ISO</u> 14064 is the main standard, which is used by Alberta and ECCC when designing protocols.

Graham Gilchrist, Chief Executive Officer, Biological Carbon Canada, told the committee that soil health must be treated as a commodity and that "Canada needs a carbon regulator for the buying and selling of certificates, and a market regulator to keep Canada on pace with the people in our competition—the United States and our other trading partners around the world." The United States, for example, recently earmarked US\$300 million of new money on carbon measurement and verification in agriculture. "Soil-based Canadian carbon is already in our marketplace, [...], but it

¹⁷⁹ AGFO, *Evidence*, 9 November 2023 (Justine Hendricks, President and Chief Executive, Farm Credit Canada).

¹⁸⁰ AGFO, *Evidence*, 9 November 2023 (Todd Klink, Executive Vice-President and Chief Marketing Officer, Farm Credit Canada).

¹⁸¹ AGFO, Evidence, 23 November 2023 (Graham Gilchrist, Chief Executive Officer, Biological Carbon Canada).
¹⁸² Ibid.

is a[n unregulated] commodity. Canada's carbon marketplace deserves to have the legislation it needs to grow and thrive." 183

Marty Seymour, Chief Executive Officer, CarbonRX, suggested that the federal government step in to facilitate the growth of the voluntary carbon credit market in Canada:

"It might be counterintuitive that the government might help to support the voluntary market, but it allows private-sector money to flow into the Canadian food system. It's a great vehicle to help finance and move producers along that change curve. The federal and provincial government carbon schemes actually create market confusion. Global buyers want nature-based carbon credits, which Canada is rich in, and agriculture and forestry offer this great opportunity for carbon removal."

Marty Seymour¹⁸⁴

Furthermore, Seymour recommended the creation of "an industry-owned and industry-driven carbon economy—and I don't mean Canadian-industry-owned; I'm talking about international partners and members as well." ¹⁸⁵

Similarly, witnesses from CarbonTerra expressed their interest in developing a voluntary or compliance carbon credit market that could be endorsed by the federal government, where a carbon credit has value, even if it starts to trade in Canada and is then adopted globally:

¹⁸³ Ibid.

¹⁸⁴ AGFO, *Evidence*, 18 May 2023 (Marty Seymour, Chief Executive Officer, CarbonRX).

¹⁸⁵ Ibid.

"We need the federal government to work with the provinces instead of this mishmash of one province wants to do this, and the feds want to do something else. We need a coherent system that we can almost bank on, where we can say that now we have a path, let's build something. Right now we're guessing. We're trying to steer it, but we're just a small company. We need the government to step in and take some leadership."

Jason Mann¹⁸⁶

Marty Seymour added: "If we've been zero-tilling in Saskatchewan for 20 years, and we agree we will not convert that land to tilled land, there may be a carbon conversation in that. It's a nuance in the recipe. We've been so focused on rewarding for the practice. Maybe we're missing an obvious one to say, "Wait a minute, if we don't convert and release 20 tonnes of carbon, that's carbon credit by definition." Similarly, Jocelyn Velustuk said: "If there is a value to carbon and farmers know that, farmers will keep adding to that." 188

Witnesses pointed out additional barriers to widespread adoption of this type of market. For example, Robin Woodward, Director, Carbon Asset Solutions, mentioned the inability to measure anything, and to get to a place in a market where you can have confidence globally that what is being delivered to market has value. 189

Martin Caron, President and CEO of the Union des producteurs agricoles du Québec, suggested a compliance declaration, a practice that exists in Quebec, but that could be used at the federal level: "The producer declares how long he has been carrying out sequestration activities or other work that has been beneficial. Then the advisers can validate the farm's work. There are ways of simplifying things and recognizing those pioneers who have really contributed. I think of the organic producers, who have done a lot of work on this." Caron believes that monetizing soil carbon sequestration as a tool to mitigate global climate change could be implemented at a relatively low cost per tonne of CO_2 equivalent with co-benefits such as increased fertility, cleaner water and greater farm product profitability and productivity. 191

¹⁸⁶ AGFO, *Evidence*, 18 May 2023 (Jason Mann, Chief Executive Officer, CarbonTerra).

¹⁸⁷ AGFO, *Evidence*, 18 May 2023 (Marty Seymour, Chief Executive Officer, CarbonRX).

¹⁸⁸ AGFO, Evidence, 9 March, 2023 (Jocelyn Velestuk, Farmer, Grain Growers of Canada).

¹⁸⁹ AGFO, *Evidence*, 23 November 2023 (Robin Woodward, Director, Carbon Asset Solutions).

¹⁹⁰ AGFO, *Evidence*, **16** February **2023** (Martin Caron, President and CEO, Union des producteurs agricoles). ¹⁹¹ Ibid.

Chapter 3: The Ecological Goods and Services of Native Grasslands and Grazing Animals

The committee learned that nature-based climate solutions could help the Government of Canada achieve its climate change mitigation commitments by intentionally increasing carbon sequestration or reducing emissions from natural systems such as grasslands.



Grasslands and rolling hills at the South Porcupine Ranch in Willow Creek, Alberta.

"An important one to mention is the carbon that is sequestered and securely stored in the soil and root networks of Prairie grasslands. A 2021 study by several collaborators, including conservation organizations, academic institutions, Agriculture and Agri-Food Canada and Natural Resources Canada, indicates that protecting our native grasslands is the single most effective nature-based solution available to Canada for mitigating climate change over the next 20 years," said Melanie Bos, Agriculture Policy Manager, Nature Conservation of Canada. 192

Grasslands absorb and store carbon, provide protection from flooding and drought, purify water, and provide habitat for hundreds of species. ¹⁹³ Canada's grasslands play an important role in GHG reduction efforts and increasing carbon sequestration.

¹⁹² AGFO, *Evidence*, 13 February 2024 (Melanie Bos, Agriculture Policy Manager, Nature Conservancy of Canada). ¹⁹³ Ibid.

Al Mussell, Director, Research, Canadian Agri-Food Policy Institute told the committee: "Agriculture contributes about 8% of Canada's greenhouse gas emissions, split about evenly between cropping and animal agriculture systems, which both occur on soils — living, dynamic environments consisting of mineral fractions, degrading biomass and microbes. Agricultural plants are about 40% to 50% carbon, typically with equal growth above and below the soil surface." 194

"It's estimated that the roughly 14.3 million acres of native grassland in Saskatchewan are storing between 22 and 86 tonnes of carbon per acre. When you combine sequestration for annual crop land sequestration and the sequestration from grasslands, carbon sequestered by Saskatchewan soils largely offsets our agricultural emissions from cropping, livestock and on-farm fuel combined."

Rick Burton¹⁹⁵

¹⁹⁴ AGFO, *Evidence*, 25 October 2022 (Al Mussell, Director, Research, Canadian Agri-Food Policy Institute).

¹⁹⁵ AGFO, Evidence, 30 March 2023 (Rick Burton, Deputy Minister of Agriculture, Government of Saskatchewan).

Stuart Chutter, Senior Policy Analyst, Agriculture Financial Services Corporation, and rancher, explained the effects of grazing cattle on soil carbon stocks in grasslands:

"In spring, across the grasslands in Canada, plants are greening up and starting to photosynthesize, and they'll grow and photosynthesize and put carbon down into the ground while they're doing that. Then, like any species, they want to ensure the next generation, so they'll become reproductive, stop photosynthesizing and put their energy into forming a seed, and that life cycle is over.

But if at just that time, before grass is going to go to seed, we bring in a giant herd of cows, they're going to take a big bite of that grass. Then that plant, to go to seed and meet its goal, needs to photosynthesize again and put carbon in the ground again. If we take those cows off the land, that plant will do that, and once it's ready to go to seed, we can bring that big herd of cows back in to take another bite. That's how we can triple or quadruple that life cycle of photosynthesis and significantly increase our ability to sequester carbon on grazing lands."

Stuart Chutter¹⁹⁶

Andrea Brockelbank, Executive Director, Beef Research Council, said that rotational, or regenerative, grazing involves moving animals into a smaller area, usually with more fencing, and then intensely grazing and moving them off pasture to allow it to rest before moving them back on.¹⁹⁷: "This is the way the buffalo used to do it on the Prairies. [...] This is how grass responds well, really thrives and contributes to biodiversity and those other things." ¹⁹⁸

The committee also heard that extensification of the agricultural land base will generate episodic greenhouse gas emissions from land conversion to agriculture and exacerbate biodiversity concerns. A related worry is that high crop prices will stimulate conversion of grassland used for grazing animals to annual crops.

¹⁹⁸ Ibid.

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¹⁹⁶ AGFO, *Evidence*, 9 November 2023 (Stuart Chutter, Senior Policy Analyst, Agriculture Financial Services Corporation).

¹⁹⁷ AGFO, <u>Evidence</u>, 3 November 2022 (Andrea Brockelbank, Executive Director, Beef Research Council).

Al Mussell said that new research is improving the understanding that farm animals, especially ruminants such as cattle, sheep, and goats, are essential to the long-term health of soils:

Methane emissions from livestock sources have been a concern. However, recent research from Oxford and the University of California, Davis has shown that the methane emissions from ruminant animals are fundamentally different from the methane emissions due to the extraction and burning of fossil fuels. In fact, a stable ruminant population actually leads to a stable level of methane in the atmosphere.

This is an important finding, as grasslands are a critical carbon sink, are critical to biodiversity, and the economic retention of grasslands depends upon grazing animals."

Al Mussell¹⁹⁹

Ronald Bergen, Science Director, Beef Cattle Research Council, Canadian Cattle Association, added that grazing practices that work in one region may not work in another. "Research must be tested in a wide variety of different environments because cattle are raised throughout the country," said Bergen. "Long-term grazing research is critical, in case a project coincides with a three-year drought or heavy precipitation, which would not adequately reflect what happens over a 10, 15, 30-year time span." 200

Witnesses told the committee that extension research is needed, as well as infrastructure support for producers, including fencing and water systems.

On its fact-finding mission to Western Canada, the committee learned firsthand at South Porcupine Ranching Ltd. that ranchers in Alberta and Saskatchewan are trying to develop carbon credit trading markets for the preservation of natural grasslands and for turning marginal land back to forage under the Grasslands Capital X pilot program.

¹⁹⁹ AGFO, *Evidence*, 25 October 2022 (Al Mussell, Director, Research, Canadian Agri-Food Policy Institute).

²⁰⁰ AGFO, *Evidence*, 23 November 2023 (Ronald Bergen, Science Director, Beef Cattle Research Council, Canadian Cattle Association).

Bill Newton, Governor, Western Stock Growers Association and rancher, told the committee that it is possible to incentivize grassland conservation through a marketplace:

"If we have a market that rewards this balanced suite of ecological function, producing a variety of ecological goods and services — everything from biodiversity to food, carbon capture and water capture, as well as an effective energy cycle where the nutrients are cycling back onto the land —then I certainly think it's possible to incentivize the conservation of grasslands through a marketplace."

Bill Newton²⁰¹



Senator Rob Black, right, speaks with Bill Newton at Mr. Newton's South Porcupine Ranch in Willow Creek, Alberta.

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²⁰¹ AGFO, *Evidence*, 23 November 2023 (Bill Newton, Governor, Western Stock Growers Association).

Chapter 4: The Role of Agroforestry and Its Impacts on Soil Health

Introduction

Agroforestry is a unique land management approach that intentionally blends agriculture and forestry to enhance productivity, profitability, and environmental stewardship. The committee learned that agroforestry is a key tool for Canada's farmers, ranchers, woodland/woodlot owners, Indigenous communities, and others who want to use sustainable strategies that enhance agricultural practices and protect soil, water, and air.

Nadir Erbilgin, Professor and Chair, Department of Renewable Resources, University of Alberta, told the committee that agroforestry is a simple way of improving soil health. "[Agroforestry] really optimizes the numerous benefits arising from the biophysical and even biochemical interactions among the crops and livestock with the trees." ²⁰² Furthermore, E.P. (Ted) Taylor, Soil Resource Specialist, Soil Resource Group, explained that the main linkages of agroforestry to soil health are: long-term cover of soils, continuous and substantive additions of organic matter, and, carbon sequestration. ²⁰³

Overall, the committee heard that agroforestry has a positive long-term impact on soil health in Canada when properly planned and managed.

"Farmers Like Trees": Types of Agroforestry Systems in Canada

Agroforestry is practiced in different ways throughout Canada and varies according to region, climate, as well as the specific goals of landowners.

In a written brief, Raju Soolanayakanahally, Research Scientist, Agriculture and Agri-Food Canada (AAFC), outlined the five most common agroforestry practices in Canada:

- 1. **shelterbelts/windbreaks**: Rows of trees or shrubs planted around or within fields and livestock facilities to protect crops, livestock and soil from wind and snow accumulation while also improving biodiversity.
 - British Columbia (Peace River region), Prairies (Alberta, Manitoba, Saskatchewan) and Great Lakes region.

²⁰² AGFO, *Evidence*, 27 September 2022 (Nadir Erbilgin, Professor and Chair, Department of Renewable Resources, As an individual).

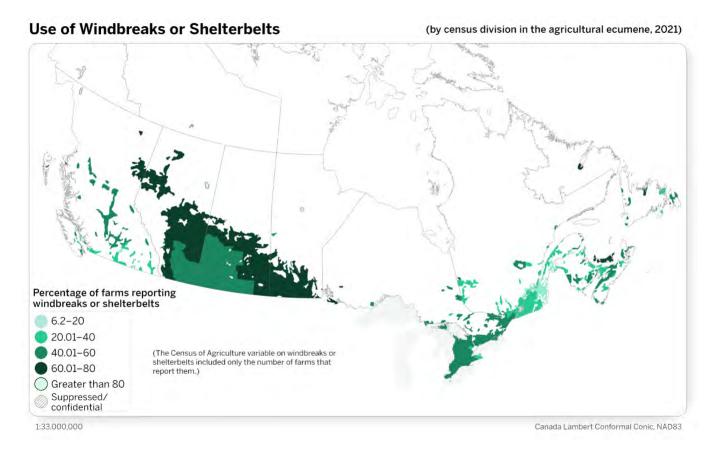
²⁰³ AGFO, Evidence, 2 November 2023 (E.P. (Ted) Taylor, Soil Resource Specialist, Soil Resource Group).

- 2. **riparian tree buffers**: A strip of forested land adjacent to a flowing body of fresh water (e.g., stream, lake, wetland). Physically separates agricultural activities from sensitive aquatic areas.
 - Nova Scotia, Ontario, Prince Edward Island, Quebec.
- 3. **alley cropping/tree intercropping**: A practice in which crops and trees are interplanted throughout a field. Arable crops are grown between rows of high-value trees to maximize benefits and productivity per unit area of land.
 - New Brunswick, Ontario, Quebec.
- 4. **silvopasture**: The intentional integration of pasture, livestock, and trees. Provides shade and winter shelter for livestock; increases pasture acreage and diversity, use of existing farm woodland, forage availability during droughts; diversifies livestock diet; and improves animal welfare.
 - British Columbia (interior) and Quebec.
- **5. farm woodlands or woodlots**: Private enterprises use this farming practice to grow non-timber forest products on private lands, supplement family income, and allow biodiversity to re-establish within woodlands.
 - Ontario, Quebec.²⁰⁴

According to Statistics Canada Census of Agriculture, in 2021, the most significant areas with windbreaks or shelterbelts are in the Prairies, exhibiting between 40% and 80% with two small pockets in the northern part of the provinces having more than 75%. Central and Atlantic Canada range between 6.2% and 60% with the lowest numbers in southern Quebec, the higher numbers mostly in southern Ontario and the highest in Prince Edward Island (see Figure 28).

²⁰⁴ Raju Soolanayakanahally, Research Scientist, Agriculture and Agri-Food Canada, <u>Brief</u> submitted to AGFO, 2 November 2023.

Figure 28 – Percentage of Farms Reporting the Use of Windbreaks or Shelterbelts in Canada

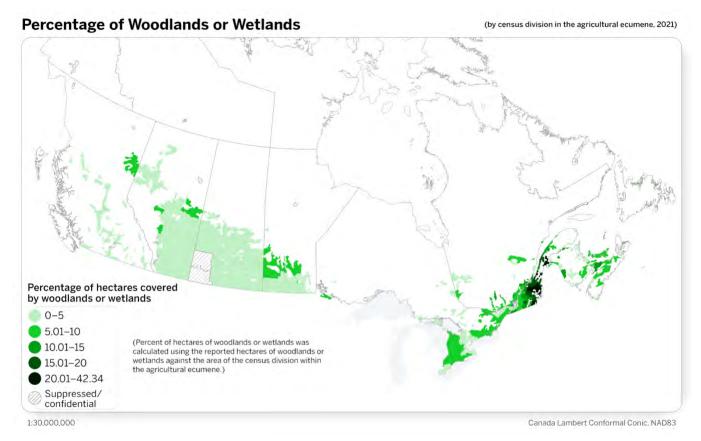


 $Note: The \ Census \ of \ Agriculture \ variable \ on \ windbreaks \ or \ shelter belts \ included \ only \ the \ number \ of \ farms \ that \ reported \ them.$

Sources: Map prepared in 2024 using data obtained from Statistics Canada, "<u>Table 32-10-0369-01: Land practices and land features, Census of Agriculture, 2021,</u>" Database, accessed 12 March 2024; and Statistics Canada, <u>2021 Census – Boundary files</u>. The following software was used: Esri, ArcGIS Pro, version 3.2.2. Contains information licensed under <u>Statistics Canada Open Licence</u>.

The 2021 Census of Agriculture reported that British Columbia, the Prairies, and Ontario exhibit 10% or less of hectares covered by woodlands or wetlands, while data in Atlantic Canada reveal one region in Nova Scotia on the border of New Brunswick with up to 15%. Southern Quebec, south of the St. Lawrence, exhibits some of the highest values up to 42.34%, as illustrated in Figure 29.

Figure 29 – Percent of Hectares Covered by Woodlands or Wetlands in Canada



Note: Percent of hectares was calculated using the reported hectares of woodlands or wetlands with only the area of the census division within the agricultural ecumene.

Sources: Map prepared in 2024, using data obtained from Statistics Canada, "Table 32-10-0249-01 Land use, Census of Agriculture, 2021," Database, accessed 12 March 2024; and Statistics Canada, 2021 Census – Boundary files. The following software was used: Esri, ArcGIS Pro, version 3.2.2. Contains information licensed under the Statistics Canada Open Licence.

Economic and Environmental Benefits

In terms of economic benefits, the committee learned that agroforestry practices can help farmers and ranchers increase their crop yields and reduce energy, fertilizer, heating, and snow removal costs.

Agroforestry also allows farmers and ranchers to develop specialty agricultural and wood products, which can provide diverse income streams and increased wealth in rural communities. Witnesses listed many examples of specialty agricultural products such as honey, maple syrup products, medicinal herbs, mushrooms, nuts, and wild berries.

Witnesses also highlighted examples of specialty wood products, including biomass for energy; firewood, sawlog timber, veneer, utility hardwoods for pallets; conifers for fence posts; on-farm use woods for corrals, fences, wagon building; and recreational use woods for decks or fences, among others.

In a written brief, Raju Soolanayakanahally reported that a recent quantification of carbon stocks with agroforestry systems in central Alberta from hedgerows, shelterbelts, and silvopastures revealed that 699.9 million tons (Mt) of carbon were stored across 9.5 million hectares (Mha) of land and valued at \$102.7 billion based on a Canadian carbon tax rate of \$40 per ton of CO₂ equivalent in 2021."²⁰⁵

The committee also heard about the many environmental benefits and essential ecosystem services that agroforestry and woody vegetation offer, including:

- clean air and water;
- climate change mitigation by sequestering carbon dioxide from the atmosphere and reducing GHG emissions;
- soil rehabilitation;
- crop diversification which reduces risks associated with monoculture soil degradation, pests, and disease; and,
- improved biodiversity by providing wildlife habitat, nesting sites for birds, refuge for beneficial insects and pollinators, and habitat protection for fish and other aquatic ecosystems.

Specifically, agroforestry systems such as shelterbelts increase crop yields by providing wind protection and improving water-use efficiency. Riparian buffers help to stabilize eroding banks and shorelines; reduce sediment flow into water bodies to protect water quality; and absorb nutrients

²⁰⁵ Raju Soolanayakanahally, Research Scientist, Agriculture and Agri-Food Canada, <u>Brief</u> submitted to AGFO, 2 November 2023.

(nitrogen, phosphorous) and pesticide compounds. Silvopasture can offset methane emissions from cattle through the carbon-capture capabilities of trees and shrubs.²⁰⁶

Raju Soolanayakanahally added that through the integration of agroforestry, we can further enhance the physical, chemical, and biological properties of our soils, providing essential environmental services such as:

- using trees with deep roots to bring up vital nutrients for crops and vegetation, and,
- adding organic matter to the soil through litter to support soil biodiversity and functions such as nutrient cycling, soil health and land productivity.²⁰⁷

Several witnesses told the committee that farmers and ranchers face many barriers to adopting agroforestry practices such as: accessing suitable tree species, costs for equipment, implementation, and planting; and, weed management.

Witnesses also described the barriers that stem from the lack of government funding for agroforestry such as:

- lack of crop insurance for growing trees;
- lack of a viable carbon market for trees sequestrating carbon;
- lack of government funding and research for agroforestry;
- lack of a strategic framework or policy for agroforestry; and,
- lack of Indigenous knowledge transfer on agroforestry practices.

The committee also heard that there is a jurisdictional dilemma with regards to who is responsible for agroforestry on agricultural land in Canada. Ken Van Rees, Professor Emeritus, Forest Soils, University of Saskatchewan, said that a clear outline for agroforestry is needed.

²⁰⁶ Ibid.

²⁰⁷ Ibid.

"During my 20 years of doing this research, no one at Agriculture Canada and Natural Resources Canada wanted to take responsibility for growing trees on agricultural land. We need to sort this out. That is why the PFRA [Prairie Farm Rehabilitation Administration] Shelterbelt Centre was a key piece to doing that."

Ken Van Rees²⁰⁸

The PFRA produced millions of trees onsite and provided them for free to landowners across the prairies for planting.

In a similar vein, Kevin Boon, General Manager, B.C. Cattlemen's Association, pointed out a jurisdictional dilemma regarding agroforestry in British Columbia:

"In essence, we utilize it and need to manage it as agroforestry. But the responsibility for that, because it is Crown land, falls on the provincial government, and much of it is managed by regulation and not necessarily by science. We see some problems with that." 209

"The problem is everybody is looking for a quick fix. Trees take a while to grow and be established. We need to move out of this mentality of a quick fix and look at agroforestry's long-term value. Agriculture Canada has not been funding agroforestry nearly to the extent that it should be."

Paul Renaud²¹⁰

Paul Arp said that soil mapping at one-metre resolution is the solution as better maps allows people to plan better: "[...] mapping the land at the one-meter resolution allows you to see where to place what parts of the agroforestry component that you wish. You would know beforehand if you have land that is suitable for this and suitable for that."²¹¹

²⁰⁸ AGFO, *Evidence*, 2 November 2023 (Ken Van Rees, Professor Emeritus, Forest Soils, University of Saskatchewan, As an individual).

²⁰⁹ AGFO, *Evidence*, 2 November 2023 (Kevin Boon, General Manager, B.C. Cattlemen's Association).

²¹⁰ AGFO, *Evidence*, 2 November 2023 (Paul Renaud, Chief Executive Officer, The Lanigan Group).

²¹¹ AGFO, *Evidence*, 2 November 2023 (Paul Arp, Professor, Forest Soils, Forestry and Environmental Management, University of New Brunswick, As an individual).

Paul Arp explained further: "If you know where to grow which trees and where to establish which crops for agriculture production, and not only that but also how to deal with the wetland issue — not so much the protection of the wetland but more generally the protection of biodiversity or the expansion into biodiversity goals — it would be fundamental to keep us sustainable and self-sufficient." ²¹²

Paul Renaud agreed about the need for enhancing soil mapping:

"Hold AAFC and ECCC accountable for answering this question: Why is it that we do not know the net carbon footprint of agriculture in Canada? That would require them to understand the amount of land covered by trees, possibly to expand the wonderful program that Dr. Arp is doing in terms of mapping land use across Canada, not just in New Brunswick, so that we can get facts that we can put on the table to understand and make informed decisions."

Paul Renaud²¹³

Renaud also suggested that the Government of Canada redirect the carbon tax revenue that is collected from carbon emitters and use it to incentivize those who sequester carbon.

"Can you imagine if we started paying that dairy farmer in Perth \$100,000, how his neighbours and other dairy farmers in Canada would react? They would jump on board. They would want more trees; they would look at ways to cut their emissions. This would generate such an amazing transformative effect that it would be astounding."

Paul Renaud²¹⁴

²¹² Ibid.

²¹³ AGFO, *Evidence*, 2 November 2023 (Paul Renaud, Chief Executive Officer, The Lanigan Group).

²¹⁴ Ibid.

Chapter 5: Soil Pollution and Contamination

Introduction

The committee learned that soil pollution affects the food we eat, the water we drink and the air we breathe, and that most people do not understand how significant a problem soil pollution is.

"There are 20 million contaminated sites across the world. On average, there are 1.72 contaminated sites per 100,000 inhabitants. [...] In Canada, there are approximately 20,000 normal industrial sites and about 250,000 sites that arise out of abandoned oil and gas wells. Whether or not you consider those true contaminated sites is another issue."

Steven D. Siciliano²¹⁵

Ravi Naidu, Chief Executive Officer and Managing Director, *crcCARE*, explained to the committee that healthy soils act as a natural buffer against the spread of pollutants and disease.²¹⁶ Biodiverse soils form a resilient barrier against pathogens, preventing their transmission to plants, animals and humans. Healthy soils are also more resilient and able to retain and immobilize agrochemical pollutants entering the ecosystem.

As Figure 30 illustrates, soils act as a sponge by holding and filtering water, directly influencing the quality of water resources, and protecting communities from waterborne diseases and pollution. Any pollutants entering the soil system impact soil health, and ultimately the environment, food, and human health.

²¹⁵ AGFO, *Evidence*, 7 December 2023 (Steven D. Siciliano, Professor, Department of Soil Science, University of Saskatchewan, As an individual).

²¹⁶ AGFO, Evidence, 6 February 2024 (Ravi Naidu, Chief Executive Officer and Managing Director, crcCARE).

HEAVY METALS: INDUSTRIAL Arsenic (As), Lead (Pb), Chromium (Cr). WASTES Mercury (Hg), Cadmium (Cd) contaminant But when soils are overloaded, these contaminants can be released FOOD More than 70% of the collutants are carcinogenic Plants may absorb contaminants through their roots, producing unsafe food. 1 in 10 people in the world soil or 200 thousand litres of water fall ill after eating contaminated food and 420 000 die every year Food and Agriculture GLOBAL SOII Organization of the **United Nations**

Figure 30 – The Effects of Soil Contamination on the Environment, Food and Human Health

Source: Food and Agriculture Organization of the United Nations, "Communication material," Global Soil Partnership.

Naidu told the committee that while Canadian soils are generally well maintained with minimal tillage, challenges remain, including cadmium and diffused pesticide contamination.²¹⁷ Steve Siciliano, University of Saskatchewan, added that human activities impact ecosystems and

²¹⁷ AGFO, *Evidence*, 6 February 2024 (Ravi Naidu, Chief Executive Officer and Managing Director, crcCARE).

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these ecosystems, in turn, impact human health primarily through the release of direct pollutants such as hydrocarbons or excess fertilizer, and through compaction and sealing off the surfaces.²¹⁸

Federal Initiatives

The committee learned that, over the last 30 years, the federal government has undertaken some strong initiatives regarding soil pollution. For example, the soil health group at ECCC is a world-leading institute for the development of soil ecotoxicity testing species and the frameworks for it. Health Canada's contaminated soils advisory group provides expert support in human health assessment arising from soil pollutants. However, Steven D. Siciliano, Professor, Department of Soil Science, University of Saskatchewan, also said some emerging policy gaps are challenging Canada's existing policy framework, one of which has to do with contaminated sites. Siciliano explained that contaminated soils are a provincial jurisdiction, unless they are on federal lands or other territories, or they impact waterways. The policies and frameworks that were developed never envisioned situations where contaminated soils would be impacting the atmosphere.²¹⁹

Siciliano said: "Over the last 20 years, a scientific consensus has emerged about the importance of contaminated systems in methane and nitrous oxide release and mitigation. This is currently living in a policy no-man's-land. Nobody knows who should be managing that." ²²⁰

Siciliano suggested that the federal government take the following steps to benefit the health of Canadians from contaminated soils:

- paving roads throughout Canada;
- updating the guidelines for polycyclic aromatic hydrocarbons (PAHs) such as pyrene and phenanthrene, so that owners of contaminated sites can manage the ecosystem to better restore it (earthworms, etcetera); and,
- re-envision the current chemical criteria to restore and enhance ecosystem health.²²¹

²¹⁸ AGFO, *Evidence*, 7 December 2023 (Steven D. Siciliano, Professor, Department of Soil Science, University of Saskatchewan, As an individual).

²¹⁹ Ibid.

²²⁰ Ibid.

²²¹ Ibid.

Mining and Oil/Gas Industries



An overhead view of Meadowbank Mine in Nunavut.

Witnesses told the committee about problems stemming from the mining and oil/gas industries. For instance, decommissioned gas stations, lead paint and lead in gasoline can pollute soil and, because they are persistent pollutants, they still cause issues even when they have been banned. Remediation technology is available; however, Subhasis Ghoshal, Professor, Civil Engineering and Director, Trottier Institute for Sustainability in Engineering and Design, McGill University, said there is a lack of awareness and a lack of data on where contaminated sites are located. ²²² Overall, there is no data on, nor a uniform definition of, contaminated soils.

On the reclamation of contaminated agricultural sites in Alberta from oil and gas leaching, the committee learned that disrupting the site can bring on other contagions or pathogens. Trevor Wallace, Provincial Nutrient Management Specialist, Natural Resource Management Branch, Alberta Agriculture and Irrigation, Government of Alberta said: "There are a lot of other issues other than soil health that we have to deal with on a regular, annual basis — things like weeds and invasives, et cetera, and moving them off sites. There's also the movement of pathogens like

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²²² AGFO, *Evidence*, **15** February **2024** (Subhasis Ghoshal, Professor, Civil Engineering and Director, Trottier Institute for Sustainability in Engineering and Design, McGill University, As an individual).

clubroot, which is a soil-borne pathogen that can move off-site. Those are the activities that we need to work more on, and on a regular, everyday basis, too."²²³

Francis Zvomuya, Professor, Department of Soil Science, Faculty of Agricultural and Food Sciences, University of Manitoba, told the committee that high levels of lead have been found in the urban soils that Canadians use for their vegetable gardens. Lead pollution comes from the legacy source of leaded gas: "For most root crops like carrots or potatoes, it's stuck on the outside or the skin of the carrot. It's always good practice to peel carrots and potatoes before you consume them. For green vegetables, a lot of it is not coming from the ground through the roots. It's coming from the dust that's contaminated with lead. Making sure that you wash those green vegetables thoroughly will also help reduce the risk of lead poisoning."²²⁴

Agriculture

In agriculture, the committee heard that pesticides, nutrients, chemicals, and antibiotics are well regulated by the Pest Management Regulatory Agency. Daniel Alessi, Professor and Encana Chair in Water Resources, Department of Earth and Atmospheric Sciences, University of Alberta, said that support for education for farmers on the application of herbicides, pesticides, natural amendments, as well as proper management of fertilizer use, is a worthy endeavour to explore and expand.²²⁵

Gordon Price, Professor, Department of Engineering, Faculty of Agriculture, Dalhousie University, added: "We put a lot of responsibility on farmers to be environmental stewards, and that's not a mantle they necessarily started with. They are business people and are generational families that are practising the production of food. We put a lot of responsibility on their shoulders." 226

Two significant sources of materials with potential benefits to soil health originate from the management of urban organic wastes, specifically food wastes and biosolids. Price stated that, many organic residues entering soils originate from outside of agriculture. As a result, these residues carry "the footprint of Canadians' daily activities, and can have a direct effect on the health of soils, good and bad, and ultimately on human health." ²²⁷

²²³ AGFO, *Evidence*, 20 April 2023 (Trevor Wallace, Provincial Nutrient Management Specialist, Natural Resource Management Branch, Alberta Agriculture and Irrigation, Government of Alberta).

²²⁴ AGFO, *Evidence*, **15** February **2024** (Francis Zvomuya, Professor, Department of Soil Science, Faculty of Agricultural and Food Sciences, University of Manitoba, As an individual).

²²⁵ AGFO, <u>Evidence</u>, 15 February 2024 (Daniel Alessi, Professor and Encana Chair in Water Resources, Department of Earth and Atmospheric Sciences, University of Alberta, As an individual).

²²⁶ AGFO, *Evidence*, 15 February 2024 (Gordon Price, Professor, Department of Engineering, Faculty of Agriculture, Dalhousie University, As an individual).

²²⁷ Ibid.

Zvomuya told the committee about emerging contaminants such as antibiotics: "Some of the research we did in Alberta was looking at the antibiotics that are fed to animals. Then, we apply the manure on agricultural land as a good source of nutrients — what happens to those antibiotics in light of the superbugs or the development of antibiotic resistance?" ²²⁸

Witnesses advocated for more research on and awareness of:

- nano fertilizers, which have less adverse effects on soil;
- the overall risks caused by microplastics on human health;
- the origins of microplastics from domestic wastes;
- the overuse of plastic mulch in fruit and vegetable production, and how banning plastic bags would decrease microplastic pollution;
- alternatives to conventional pesticides such as biochar, a carbon-negative soil amendment, which has been shown to improve soil health and fertility;
- the proper management of waste, sewage, and water; and,
- the impacts of pharmaceutical product pollution and per- and polyfluorinated substance compounds on soil.

Ghosal said that there is lack of federal guidance on how to clean up agricultural soils, especially with emerging contaminants such as pharmaceuticals and the per- and polyfluoroalkyl substance compounds.²²⁹

²²⁸ AGFO, *Evidence*, **15** February **2024** (Francis Zvomuya, Professor, Department of Soil Science, Faculty of Agricultural and Food Sciences, University of Manitoba, As an individual).

²²⁹ AGFO, *Evidence*, **15** February **2024** (Subhasis Ghoshal, Professor, Civil Engineering and Director, Trottier Institute for Sustainability in Engineering and Design, McGill University, As an individual).

Daniel Alessi, Professor and Encana Chair in Water Resources, Department of Earth and Atmospheric Sciences, University of Alberta, described the opportunities, such as resource recovery pathways, that exist in the face of challenges related to soil contamination:

"For example, legacy sources of soil contamination such as produced water from oil and gas wells, or fly ash piles from coal combustion to generate electricity contain critical minerals. Researchers in government, industry and academia are developing methods to extract these metals, turning what was a liability to soil and water health into a resource."

Daniel Alessi²³⁰

²³⁰ AGFO, *Evidence*, 15 February 2024 (Daniel Alessi, Professor and Encana Chair in Water Resources, Department of Earth and Atmospheric Sciences, University of Alberta, As an individual).

Chapter 6: Supporting Soil Science and Technology

Advances in Precision Agriculture



Woodrill Ltd. agronomist Caleb Niemeyer shows senators Pat Duncan, centre, and Paula Simons how hydrochloric acid reacts to different types of soil.

During its hearings and fact-finding missions, the committee learned about the critical role of new technologies in managing and improving soil health. For farmers, precision agriculture/"smart" farming is part of the solution when it comes to protecting and preserving soil resources in Canada. Curtis Rempel, Vice-President of Crop Production and Innovation, Canola Council of Canada, told the committee: "Canadian farmers have been early adopters of innovation, including precision ag tools. This has translated into profitability, largely from improving soil health." The committee also heard from several witnesses that precision farming technology is large and diverse in number.

²³¹ AGFO, <u>Evidence</u>, 9 March 2023 (Curtis Rempel, Vice-President of Crop Production and Innovation, Canola Council of Canada).

"While more work needs to be done, the adoption of precision agriculture technologies is also improving input efficiency and contributing to improved soil health over time. For example, digital technologies, extensive soil testing, satellite imagery and sectional shutoff controls ensure the right amount of nutrients are placed exactly where they are needed by the crop. Adoption of 4R Nutrient Stewardship ensures our producers are using nutrients as effectively as possible while minimizing emissions."

Rick Burton²³²

Jake Ayre, Vice President, Keystone Agricultural Producers of Manitoba, told the committee that his farm has become heavily involved in precision agriculture: "Variable rate, or VR, fertilization; grid soil sampling; moisture probes; electrical conductivity, or EC, mapping; and data tracking are currently some of the most important tools on our farm. As a result, we can effectively track and map seed and fertilizer placement across our farm, and correlate it with yield data after harvesting." ²³³

The committee heard about the importance of precision agriculture techniques to minimize fertilizer waste and water use. For example, precision agriculture technology can perform variable rate and nitrogen application to ensure a farmer is not over spraying a field. This means less seed waste and reduces the needs for chemical fertilizer, which in turn, protects agricultural soils by minimizing compaction caused by fertilizer overuse.

On its fact-finding mission to Guelph, Ontario, the committee visited Woodrill Ltd.—a crop input supply company and grain elevator business—to learn about its soil analysis program, <u>GroundWork</u>. In five steps, GroundWork creates a soil map of a given field by layering topography and electrical conductivity maps, extracts deep soil cores using a hydraulic soil probe, analyzes the soil cores using soil classification systems, implements soils-based decision-making, and helps growers achieve higher returns with their crop yields. GroundWork's agronomists told the committee that it can take up to three years for farmers to adopt this program.

On its fact-finding mission to Western Canada, the committee toured Environmental Material Science Inc. (EMS) in Saskatoon, Saskatchewan. EMS is a soil science startup that develops cuttingedge technology such as soil sensors to manage, monitor and clean up soil contaminated sites

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²³² AGFO, *Evidence*, 30 March 2023 (Rick Burton, Deputy Minister of Agriculture, Government of Saskatchewan).

²³³ AGFO, *Evidence*, 4 May 2023 (Jake Ayre, Vice President, Keystone Agricultural Producers of Manitoba).

throughout Canada. The committee saw how the sensors were made and how they give farmers and ranchers real-time data about moisture, salinity, and yields.

In Alberta, the committee visited Kevin Auch's farm near Carmangay and learned how he grows peas, cereals, canola, and flax across 5,000 acres using no-till and a centre-pivot irrigation sprinkler system. Auch explained how a seed drill places seeds at the correct depth and then presses soil back in the hole, limiting soil erosion and keeping vital nutrients and carbon in the soil.

The committee also visited the <u>Olds College Smart Farm</u> in Olds, Alberta, and learned about its research activities. Old College leads the <u>Pan-Canadian Smart Farm Network</u>.

Several witnesses, both in committee and on-the-ground, told the committee that long-term investments in soil science including university studies, applied research or infrastructure, are key.

How important are additional financial incentive programs in managing and improving soil health in Canada?

"Anything we can do to increase the adoption of better approaches to building soil organic matter is very important to Canadian producers," said Mary Robinson, Past President of the Canadian Federation of Agriculture. We do see some regulations that – kind of — push us away from being able to do that. I think it would be fair to say it's young farmers in particular. Here, I'm thinking of Bill C-244, the right to repair, if you're buying high-tech equipment." 235

Bill C-244, <u>An Act to Amend the Copyright Act (diagnosis, maintenance and repair)</u>, is currently at third reading in the Senate.

Brodie Berrigan, Director of Government Relations and Farm Policy, Canadian Federation of Agriculture, agreed that farmers need the incentive to continue to adopt precision agriculture technology. "If they do not have that incentive because they are not able to repair it — when they have that small weather window to fix their machinery — then it acts as a disincentive toward the adoption of that technology and, ultimately, soil health." ²³⁶

The committee heard that precision agriculture technology is expensive for farmers to purchase and that some of it relies on a good Wi-Fi broadband and access to connectivity, which is quite often not available in rural areas.

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²³⁴ AGFO, *Evidence*, 16 February 2023 (Mary Robinson, Past President, Canadian Federation of Agriculture).

²³⁶ AGFO, *Evidence*, 16 February 2023 (Brodie Berrigan, Director of Government Relations and Farm Policy, Canadian Federation of Agriculture).

Chapter 7: International Perspectives on Soil Legislation and Policies

Introduction



From left, senators Paula Simons, Victor Oh and Rob Black participate in a panel discussion with Qu Dongyu, Director General of the Food and Agriculture Organization of the United Nations, in Rome, Italy. (Photo credit: ©FAO/Pier Paolo Cito, Giuseppe Carotenuto)

The committee learned about international perspectives on soil health, including policies and legislation, while attending the Eleventh Global Soil Plenary Partnership Assembly hosted by the Food and Agriculture Organization of the United Nations, as well as meeting with the World Farmers' Organization, in Rome, Italy.

Penny Wensley, former National Soils Advocate for the Government of Australia, urged the committee to consider the issue of legislation and whether changes are needed to provide for greater protection of soil resources in Canada:

"In my view, this is an underused tool. No one likes sticks rather than carrots, but a lot of countries are looking at this, most notably, the EU with its new EU soil health law, and the UK." 237

European Union

Over 60% of European soils are unhealthy and scientific evidence shows that soils are further degrading due to unsustainable management of the land, sealing (the destruction or covering of soils by buildings, constructions, and layers of impermeable artificial materials such as asphalt and concrete), contamination and overexploitation, combined with the impact from climate change and extreme weather events.

The European Union (EU) is one of few jurisdictions to use legislation to provide for greater protection of soil resources. For example, under the EU biodiversity strategy for 2030, which is part of the <u>European Green Deal</u>, the European Commission presented a new <u>EU soil strategy for 2030</u>, with the aim of having all EU soil ecosystems in a healthy condition by 2050.

To achieve this objective, on July 5, 2023, the European Commission tabled a proposal for a Directive on Soil Monitoring and Resilience (Soil Monitoring Law). The Soil Monitoring Law lays down measures for monitoring and assessing soil health, based on a common definition of what constitutes healthy soil, for managing soils sustainably, and for tackling contaminated sites. The proposal aligns with the <u>EU Zero Pollution Action Plan</u>.

United Kingdom

Jacqueline Hannam, President, British Society of Soil Science, informed the committee that the United Kingdom is transitioning from the EU's Common Agricultural Policy to their own Environmental Land Management schemes. The schemes are currently still under development and in pilot to different nations within the United Kingdom. Hannam explained that the scheme being developed in England, for example, is linked to targets in the Environmental Improvement Plan to improve sustainable soil management by 2028 and, thus, incentivizes farmers to provide public goods for public services. Some schemes are specifically related to soils and beneficial management practices, as well as a "whole host of different things."²³⁸

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²³⁷ AGFO, *Evidence*, 29 February 2024 (Penny Wensley, Former National Soils Advocate, Government of Australia, As an individual).

²³⁸ AGFO, Evidence, 29 February 2024 (Jacqueline Hannam, President, British Society of Soil Science).

Australia

The Australian government's <u>National Soil Strategy</u> (the Strategy) is the country's first national policy on soil. It was released in May 2021 and sets out how Australia will value, manage and improve its soil for the next 20 years. The Strategy was developed in collaboration with state and territorial governments, the National Soils Advocate and other major stakeholders in soil science and land management.

The Strategy's main goals are: 1) prioritize soil health; 2) empower soil innovation and stewards; and 3) strengthen soil knowledge and capability.

Furthermore, Australia's <u>National Soil Action Plan 2023 to 2028</u> is the first of four action plans to be developed under the Strategy. It was endorsed by the Minister for Agriculture, Fisheries and Forestry on November 28, 2023 with the support of all state and territorial jurisdictions. All priority actions are linked to the three broader goals of the Strategy.

United States of America

In December 2023, the United States government announced a program, <u>Vision for Adapted Crops and Soils (VACS)</u>, in partnership with FAO and the African Union, to invest in mapping, conserving, and building healthy soils. The United States has committed \$150 million to this program so far and is asking other countries around the world to assist in this work, with the goal of mapping soils around the world, classifying them, and working to make them healthier to produce better yields and mitigate climate change.

In 2022, the United States Department of Agriculture (USDA) launched the <u>Partnerships for Climate-Smart Commodities</u>, a \$3-billion initiative that finances partnerships to support the production and marketing of major commodities through pilot projects lasting one to five years. The initiative supports over 200 practices including soil health testing, soil residue and no-till management, carbon sequestration and GHG mitigation assessment, among others. The aim is to expand markets for the United States' climate-smart commodities, leverage the GHG benefits of climate-smart commodity production, and provide direct, meaningful benefits to production agriculture, including for small and underserved producers.

New Zealand

On soil, carbon and GHG emissions, Mel Poulton, Owner/operator of a sheep and beef farm business, and the Former Special Agricultural Trade Envoy, Government of New Zealand, told the committee that the focus of New Zealand's government and New Zealand agriculture "has been more on enteric methane emissions from ruminant livestock rather than gains in soil carbon per

se." ²³⁹ Poulton explained that in New Zealand, there is not a lot of cropping: "When we undertake pasture renewal, it's normally without tillage using direct drills. That protects the carbon we've got. We're bracing for a greenhouse gas levy on all farmers, which puts a price on enteric methane as well as nitrous oxide and carbon dioxide." ²⁴⁰

²³⁹ AGFO, *Evidence*, 6 February 2024 (Mel Poulton, Owner/operator of a sheep and beef farm business, New Zealand, As an individual).

²⁴⁰ Ibid.

Chapter 8: Raising Soil's Profile

Introduction



Senator Victor Oh takes a closer look at the roots of a plant at the Canada Food and Agriculture Museum.

<u>World Soil Day</u> (WSD) is held annually on December 5 to highlight the importance of healthy soil and promote the sustainable management of soil resources. An international day to celebrate soil was first recommended by the <u>International Union of Soil Sciences</u> in 2002. Under the leadership of Thailand, and within the framework of the <u>Global Soil Partnership</u>, the <u>Food and Agriculture</u> <u>Organization of the United Nations</u> supported the formal establishment of WSD as a global awareness-raising platform.

Bob Turnock, Senior Science Advisor, Science and Partnerships – International, Science and Technology Branch, AAFC, affirmed that while WSD has been effective in raising an understanding of and interest in the importance of soils, it has not resulted in specific results as far as domestic legislation or action in Canada.²⁴¹ Bob Turnock is also the Canadian focal point for the Global Soil Partnership of the Food and Agriculture Organization of the United Nations.

²⁴¹ AGFO, <u>Evidence</u>, 30 November 2023 (Bob Turnock, Senior Science Advisor, Science and Partnerships – International, Science and Technology Branch, Agriculture and Agri-Food Canada).

"Although soil is moving up policy agendas, there is still insufficient understanding or appreciation of its importance and value right across government, community, industry and the private sector — certainly, low media attention," emphasized Penny Wensley, Former National Soils Advocate, Australia. To better raise the profile of soil, Wensley recommended that the Government of Canada establish a National Soils Advocate position, as Australia used to have, as well as a Parliamentary Friends of Soils group, which Australia currently has.

Classrooms

Carolyn Wilson, Director, Canadian Young Farmers' Forum, believes education is crucial to changing current perceptions of farming in Canada:

"We need to be changing the perception of farmers in our children and youth. Some of the initiatives that Agriculture in the Classroom is doing include bringing young farmers into high schools or elementary schools — where the students are able to see that face, and think, "This could be me. It's not just my grandfather, my uncle or what have you."

Carolyn Wilson²⁴³

Agriculture in the Classroom Canada (AICC) is a national organization that creates bilingual programs and resources to support its member organizations in each of the 10 provinces who are the "boots on the ground" delivering AICC's programs and resources to elementary and high school teachers. Mathieu Rouleau, Executive Director, AICC, said the organization's mission is to "cultivate a more meaningful connection to agriculture and food for students and educators." Many of its resources focus on or feature soil health. For example, agriculture flipbooks and videos are animated to show students how soil is formed. Also, the book Alex's First Seed shows how worms play an important role in maintaining healthy soil. AICC has a partnership with Canadian Cattle Association.

On its fact-finding mission to the <u>Canada Agriculture and Food Museum</u> in Ottawa, Ontario, the committee learned about the different educational programs that the museum offers to elementary and secondary schools, both in-person and virtually. Topics include: <u>Meet Wonder</u>

²⁴² AGFO, *Evidence*, 29 February 2024 (Penny Wensley, Former National Soils Advocate, Government of Australia, As an individual).

²⁴³ AGFO, *Evidence*, 16 February 2023 (Carolyn Wilson, Director, Canadian Young Farmers' Forum).

²⁴⁴ AGFO, Evidence, 7 December 2023 (Mathieu Rouleau, Executive Director, Agriculture in the Classroom).

Worm, <u>A Handful of Soil</u>, <u>AgVenture: Soil Science</u>, <u>Agriculture and the Environment</u>, **among many** others.

Emmett Sawyer, Member, 4-H Canada, and a grain and cattle farmer, stated that Canada's youth are tasked with the responsibility of mitigating the effects of climate change and are looked to for solutions to this important issue.²⁴⁵ 4-H Canada has contributed to this conversation, said Sawyer, by creating a hands-on outreach program called *Dig into Soil*, which is one of six outreach initiatives offered by the organization.²⁴⁶ The program teaches youth how healthy soils contribute to addressing climate change, empowers them to be champions of soil conservation within their own communities, and shows them why soil can contribute to achieving some of the UN's Sustainable Development Goals.²⁴⁷

Regarding educational barriers, Melissa Arcand, Soil Biogeochemist, University of Saskatchewan, told the committee: "Indigenous peoples have historically been left out of soil science and agricultural education. First Nations students are under-represented in the soil science and agricultural fields at the undergraduate and graduate levels across Canada, and thus Indigenous professionals in these fields are incredibly rare." ²⁴⁸

Other witnesses told the committee that there has been a disinvestment in soil science throughout Canada and insisted that more education about soil is needed.

²⁴⁵ AGFO, *Evidence*, 7 December 2023 (Emmett Sawyer, Member, 4-H Canada).

²⁴⁶ Ibid.

²⁴⁷ Ibid.

²⁴⁸ AGFO, Evidence, 9 February 2023 (Melissa Arcand, Soil Biogeochemist, University of Saskatchewan, As an Individual).

Consumers



Senators Paula Simons and Rob Black take a closer look at a pile of vermicompost at the Canada Food and Agriculture Museum, in Ottawa, Ontario.

<u>Farm and Food Care Ontario</u>, a registered charity that aims to provide credible information on food and farming in Canada, is primarily funded by farmers, farm organizations and agribusinesses. The organization works closely with its sister groups in Saskatchewan and PEI on a variety of national projects focused on connecting consumers with their food. Kelly Daynard, Executive Director, Farm and Food Care Ontario, revealed that in working with consumers, soil — and its critical importance to everyone — is never top of mind to non-farming Canadians.²⁴⁹

²⁴⁹ AGFO, *Evidence*, 7 December 2023 (Kelly Daynard, Executive Director, Farm & Food Care Ontario).

On a bus tour a few years ago, a farmer was speaking to my guests about the challenges related to his farm's soil type. One guest on the bus raised her hand to ask, "If farmers don't like their soil type, why don't they just change it?" And that led to a fascinating conversation about soil types, soil health and the challenges farmers face when growing crops in a variety of soil conditions.

Kelly Daynard²⁵⁰

The committee heard that organizations such as Farm and Food Care Ontario and Saskatchewan, AICC and 4-H Canada "spend a lot of time with our hands out in the agricultural community, looking for funding to do our amazing projects." Daynard explained that Farm and Food Care's flagship project, *The Real Dirt on Farming*, is an expensive booklet to produce. The organization is also collaborating with Agriculture in the Classroom Canada on an educator guide, and with 4-H Canada on a 4-H resource to go with the guide.

"I'm proud that I work with farmers' dollars, but we could use more. Certainly, talking about soil health is really critical, and the audiences that the three of our groups reach need to know that information. We could use help," said Daynard.²⁵²

²⁵⁰ Ibid.

²⁵¹ Ibid.

²⁵² Ibid.

For Clinton Monchuk, Executive Director, <u>Farm and Food Care Saskatchewan</u>, one of the biggest challenges is consumer disconnect on modern technologies in agriculture, including the use of genetically modified crops or spraying herbicides that have been vetted through and approved by Health Canada and the Canadian Food Inspection Agency:

When we talk to consumer groups, dieticians, doctors and people in health and wellness, we explain that what we're doing through these new technologies is a huge positive, and they're amazed. They didn't know. I think that is one of the biggest hurdles, and that's what we're trying to overcome.

Clinton Monchuk²⁵³

Rebecca Lee, Executive Director, Fruit and Vegetable Growers of Canada, cautioned: "We're losing farmland not only because of development but also because of a lack of ability or interest in that [farmland]. That's something else that needs to be considered. There's an urgency there." ²⁵⁴

Some of the easiest ways to better engage consumers in soil health are "u-pick" programs that help people get their hands dirty, ²⁵⁵ and visiting farms to get to know farmers and their operations better. ²⁵⁶

The committee heard that consumer disconnect also extends to the circular economy. Colby Hansen, Owner/Operator, Hansen Beef, stated: "One challenge, I suppose, is the garbage that is in the compost. It's polluted with garbage, and there is a huge gap in educating the public. There's also a huge opportunity to reconnect the urban and rural people. One of our goals in doing these soil studies and compost trials is to show the benefits." Hansen continued, "[...] For example, if we say, "Hey, if you divert your food waste in a responsible manner, I will grow you a pound of beef that is more nutrient dense." It connects people back to the soil, and from there, I feel everyone will be incentivized to do a better job of sorting their organics." 258

Consumer misperceptions also extend to soil health and organic farming in Canada. Derek Lynch, Professor, Faculty of Agriculture, Dalhousie University: "Organic farming is leading the charge, really, in looking at ways of linking to urban sources of phosphorus and closing that loop because

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²⁵³ AGFO, *Evidence*, 7 December 2023 (Clinton Monchuk, Executive Director, Farm & Food Care Saskatchewan)

²⁵⁴ AGFO, <u>Evidence</u>, 9 March 2023 (Rebecca Lee, Executive Director, Fruit and Vegetable Growers of Canada).

²⁵⁵ AGFO, *Evidence*, 7 December 2023 (Hugh Maynard, Interim Chief Executive Officer 4-H Canada).

²⁵⁶ AGFO, *Evidence*, 7 December 2023 (Kelly Daynard, Executive Director, Farm & Food Care Ontario).

²⁵⁷ AGFO, *Evidence*, 14 December 2023 (Colby Hansen, Owner/Operator, Hansen Beef).

²⁵⁸ Ibid.

organics cannot rely, at the moment, on phosphorus fertilizer. So, there's an incentive in organic systems to look at closing those urban-rural nutrient flows."²⁵⁹

Antonius Petro, Executive Director, Regeneration Canada, insisted: "The government must ensure that our fellow consumers realize the critical role that soil plays in public health, economic development, food, adaptation, and climate change mitigation. This would be achieved with the support of organizations like Regeneration Canada and ALUS, which work tirelessly to bring together and connect producers and consumers on a national scale." ²⁶⁰ The committee also heard that, in 2022, the Canadian Cattle Association provided input on a proposed project to develop a Canadian soil health network that looks at the overall benefits of soil health for both farmers and consumers:

"Proven societal benefits include cleaner water, enhanced biodiversity and reduced threats from flooding, and, more specifically, farmers benefit from increasing productivity, greater resilience in the face of a changing climate, reduced environmental liability and better overall profitability, while consumers gain in terms of greater food security, fewer environmental concerns and healthier, more nutrient-dense food."

Duane Thompson²⁶¹

²⁵⁹ AGFO, *Evidence*, 14 December 2023 (Derek Lynch, Professor, Faculty of Agriculture, Dalhousie University, As an individual).

²⁶⁰ AGFO, *Evidence*, 27 October 2022 (Antonius Petro, Executive Director, Regeneration Canada).

²⁶¹ AGFO, *Evidence*, 23 November 2023 (Duane Thompson, Environment Committee Co-Chair, Canadian Cattle Association).

Conclusion

After 2 years of digging deep, the committee learned that soil is at risk and that soil degradation occurs in every region of Canada. The committee also heard about and saw firsthand the valuable work that Canadian farmers, ranchers, and growers are doing—supported by agronomists, academia, industry, and the provinces and territories—to improve soil health and be sustainability leaders. We believe that Canadian agriculture and agricultural soils offer solutions for mitigating the effects of climate change and addressing food security in this country.

"Testimony during the past 18 months effectively brought into focus every element of soil health as it contributes to human health, environmental health, urban soil management, forest productivity, water and air quality and our capacity to produce food. The interaction among these elements has been shown to be real and to be important. We live in a holistic environment."

Don Lobb²⁶²

In line with AAFC's What We Heard Report: Sustainable Agriculture Strategy, the soil study witnesses urged the Government of Canada to:

- acknowledge regional differences related to climates, soil types, and beneficial management practices;
- apply an economic and social lens for policies and programs;
- better recognize and compensate the early adopters for their sustainable practices;
- encourage scientific and technical innovation; and,
- enhance soil data collection, soil data management, and soil knowledge transfer throughout the country.²⁶³

Enhancing, protecting, and preserving agricultural soil now and for the future must be a priority of the Government of Canada and all Canadians and it must be built into land use planning policies. At our final hearing, Don Lobb, farmer, and life-long soil advocate, reminded the committee—and all Canadians—that "The most important thing that would be of value to this report is to have ethics embedded in it based on the use of foodland soil as a privilege that comes with responsibilities." ²⁶⁴

²⁶² AGFO, *Evidence*, 29 February 2024 (Don Lobb, Farmer, As an individual).

²⁶³ Government of Canada, "1. Executive Summary," What We Heard Report: Sustainable Agriculture Strategy.

²⁶⁴ AGFO, *Evidence*, 29 February 2024 (Don Lobb, Farmer, As an individual).

With its work in the preparation of this report, your Senate committee has tried to fulfill its responsibilities, and we hope that the recommendations we make will enable others to do the same.

APPENDIX A – Witnesses

Thursday, September 22, 2022

Don Lobb, Farmer, As an individual

Cedric MacLeod, Executive Director, Canadian Forage and Grassland Association

Tuesday, September 27, 2022

Laura L. Van Eerd, Professor, Sustainable Soil Management, University of Guelph, As an individual

David Lobb, Professor, Department of Soil Science, Faculty of Agricultural and Food Sciences, University of Manitoba, As an individual

Nadir Erbilgin, Professor and Chair, Department of Renewable Resources, University of Alberta, As an individual

Angela Bedard-Haughn, Professor and Dean, College of Agriculture and Bioresources, University of Saskatchewan, As an individual

Thursday, September 29, 2022

Joann K. Whalen, James McGill Professor of Soil Science, McGill University, As an individual

Marie-Élise Samson, Agronomist and Assistant Professor in Soil Science, Laval University, As an individual

Christopher Burn, Chancellor's Professor of Geography, Carleton University, As an individual

Sean Smukler, Associate Professor, Applied Biology and Soil Science, University of British Columbia, As an individual

Tuesday, October 4, 2022

Kier Miller, Chair, Soil Conservation Council of Canada

Tim Nerbas, Past Chair, Soil Conservation Council of Canada

Susan Antler, Executive Director, Compost Council of Canada

Glenn Munroe, Manager, Special Projects, Compost Council of Canada

Paul Thoroughgood, National Manager, Sustainable Agriculture, Ducks Unlimited Canada

Thursday, October 6, 2022

Jason Lenz, Chair, Canadian Roundtable for Sustainable Crops

Susie Miler, Executive Director, Canadian Roundtable for Sustainable Crops

Asim Biswas, Chair, Canadian Society of Soil Science

Amanda Diochon, President-Elect, Canadian Society of Soil Science

Thursday, October 20, 2022

David Burton, Distinguished Research Professor, Faculty of Agriculture, Dalhousie University, As an individual

Brandon Heung, Associate Professor, Faculty of Agriculture, Dalhousie University, As an individual

Derek Lynch, Professor, Faculty of Agriculture, Dalhousie University, As an individual

Tuesday, October 25, 2022

Cindy Prescott, Professor, Department of Forest and Conservation Sciences, University of British Columbia, As an individual

Sean Thomas, Research Professor, University of Toronto, As an individual

Al Mussell, Director, Research, Canadian Agri-Food Policy Institute

Marc-André Viau, Director, Government Relations, Équiterre

Carole-Anne Lapierre, Analyst, Agriculture and Food Systems, Équiterre

Thursday, October 27, 2022

Bryan Gilvesy, Chief Executive Officer, ALUS

Antonious Petro, Executive Director, Regeneration Canada

Thursday, November 3, 2022

Andrea Brocklebank, Executive Director, Beef Cattle Research Council

Reynold Bergen, Science Director, Beef Cattle Research Council

Pierre Petelle, President and Chief Executive Officer, CropLife Canada

Ian Affleck, Vice President, Biotechnology, CropLife Canada

Cassandra Cotton, Vice President, Policy and Programs, Fertilizer Canada

Thursday, February 9, 2023

Melissa Arcand, Soil Biogeochemist, University of Saskatchewan, As an individual

Candice Pete-Cardoso, Director, Indigenous Land Management Institute, University of Saskatchewan, As an individual

Kenneth Bear, First Nation Professional Agrologist, Agriculture Development Manager, Pasqua First Nation Group of Companies

Jacob Beaton, Owner, Tea Creek Training and Employment

Tuesday, February 14, 2023

Gilles Saindon, Assistant Deputy Minister, Science and Technology Branch, Agriculture and Agri-Food Canada

Marco Valicenti, Director General, Innovation Programs Directorate, Agriculture and Agri-Food Canada

Edward G. Gregorich, Research Scientist, Science and Technology Branch, Agriculture and Agri-Food Canada

Heather McNairn, Research Scientist, Science and Technology Branch, Agriculture and Agri-Food Canada Dominic St-Pierre, Director General, Laurentian Forestry Centre, Natural Resources Canada

Thursday, February 16, 2023

Mary Robinson, Past President, Canadian Federation of Agriculture

Brodie Berrigan, Director of Government Relations and Farm Policy, Canadian Federation of Agriculture

Carolyn Wilson, Director, Canadian Young Farmers' Forum

Martin Caron, President and Chief Executive Officer, Union des producteurs agricoles

Daniel Bernier, Agricultural Research and Policy Advisor – Environment, Union des producteurs agricoles

Thursday, March 9, 2023

Erin Gowriluk, Executive Director, Grain Growers of Canada

Jocelyn Velestuk, Farmer, Grain Growers of Canada

Rebecca Lee, Executive Director, Fruit and Vegetable Growers of Canada

Kristjan Hebert, President, Hebert Group

Curtis Rempel, Vice-President of Crop Production and Innovation, Canola Council of Canada

Denis Tremorin, Director, Sustainability, Pulse Canada

Thursday, March 23, 2023

Randy Lamb, Agrologist, Department of Energy, Mines and Resources, Government of Yukon

Brandon Drost, Forester, Department of Energy, Mines and Resources, Government of Yukon

Kumari Karunaratne, President, Canadian Permafrost Association

Michelle Blade, Permafrost Scientist, Nunavut, Canadian Permafrost Association

Janet Dean, Executive Director, Territorial Agrifood Association

Thursday, March 30, 2023

Rick Burton, Deputy Minister of Agriculture, Government of Saskatchewan

Mark Raymond, Executive Director, Extension and Support Services Branch, British Columbia Ministry of Agriculture and Food, Government of British Columbia

Dieter Geesing, Provincial Soil Specialists, British Columbia Ministry of Agriculture and Food, Government of British Columbia

Christine Brown, Field Crops Sustainability Specialist, Agriculture Development Branch, Ontario Ministry of Agriculture, Food and Rural Affairs, Government of Ontario

Daniel Saurette, Land Resource Specialist, Soil, Environmental Management Branch, Ontario Ministry of Agriculture, Food and Rural Affairs, Government of Ontario

Thursday, April 20, 2023

Trevor Wallace, Provincial Nutrient Management Specialist, Natural Resource Management Branch, Alberta Agriculture and Irrigation, Government of Alberta

Patti Rothenburger, Assistant Deputy Minister, Manitoba Agriculture, Government of Manitoba

Marla Riekman, Land Management Specialist – Soils, Manitoba Agriculture, Government of Manitoba

Thursday, May 4, 2023

Ian Boxall, President, Agricultural Producers Association of Saskatchewan

Jake Ayre, Vice President, Keystone Agricultural Producers of Manitoba

Paul Pryce, Director of Policy, BC Agriculture Council

David Rourke, Farmer, As an individual

Thursday, May 11, 2023

Donald Killorn, Executive Director, Prince Edward Island Federation of Agriculture

Thursday, May 18, 2023

Jason Mann, Chief Executive Officer, CarbonTerra

Rachel Hor, Chief Operating Officer, Carbon Terra

Marty Seymour, Chief Executive Officer, Carbon RX Inc.

William Greuel, Chief Executive Officer, Protein Industries Canada

Nate Kelly, Chief Executive Officer, Miraterra

Kim Haakstad, Vice President, Stakeholder Relations, Miraterra

Thursday, June 1, 2023

Angela Straathof, Program Director, Ontario Soil and Crop Improvement Association (OSCIA)

Tori Waugh, Executive Director, Ontario Soil Network

Thursday, June 8, 2023

Benoit Legault, Director General, Producteurs de grains du Québec

Catherine Lefebvre, President, Association des producteurs maraîchers du Québec

Catherine Lessard, Deputy General Manager, Association des producteurs maraîchers du Québec

Thursday, June 15, 2023

Jerry V. DeMarco, Commissioner of the Environment and Sustainable Development, Office of the Auditor General of Canada

Marie-Pierre Grondin, Director, Office of the Auditor General of Canada

Nathan Basiliko, Professor of Forest Soils, Faculty of Natural Resources Management, Lakehead University, As an individual

Mohamad Yaghi, Agriculture & Climate Policy Lead, Climate Action Institute, Royal Bank of Canada

Lara O'Donnell, Executive Director, Weston Family Foundation

Thursday, November 2, 2023

E.P. (Ted) Taylor, soil Resource Specialist, Soil Resource Group

Paul Renaud, Chief Executive Officer, The Lanigan Group

Kevin Boon, General Manager, BC Cattlemen's Association

Paul Arp, Professor, Forest Soils, Forestry and Environmental Management, University of New Brunswick, As an individual

Ken Van Rees, Professor Emeritus, Forest Soils, University of Saskatchewan, As an individual

Thursday, November 9, 2023

Megan Sipos, Manager, Research and Policy, Greenbelt Foundation

Paul Smith, Consultant, Research and Policy, Greenbelt Foundation

Cheyenne Sundance, Farmer, Sundance Commons

Justine Hendricks, President and Chief Executive Officer, Farm Credit Canada

Todd Klink, Executive Vice-President and Chief Marketing Officer, Farm Credit Canada

Stuart Chutter, Senior Policy Analyst, Agriculture Financial Services Corporation

Dean Orr, Farmer, As an individual

Thursday, November 23, 2023

Catherine Stewart, Ambassador for Climate Change, Environment and Climate Change Canada

Vincent Ngan, Assistant Deputy Minister, Climate Change Branch, Environment and Climate Change Canada

Judy Meltzer, Director General, Carbon Market Bureau, Environmental Protection Branch, Environment and Climate Change Canada

Kelly Torck, Acting Director General, Biodiversity Policy and Partnerships, Environment and Climate Change Canada

Lindsay Pratt, Director, Pollutant Inventories and Reporting, Science and Technology Branch, Environment and Climate Change Canada

Jackie Mercer, Program Manager, Offsets & Emissions Trading, Environment and Climate Change Canada

David MacMillan, President and Chief Executive Officer, Deveron

Robin Woodward, Director, Carbon Asset Solutions

Simon Lafontaine, Co-Founder, Écoboeuf

William Newton, Governor, Western Stock Growers' Association

Duane Thompson, Environment Committee Co-Chair, Canadian Cattle Association

Reynold Bergen, Science Director, Beef Cattle Research Council, Canadian Cattle Association

Don McCabe, Chair, Biological Carbon Canada

Graham Gilchrist, Chief Executive Officer, Biological Carbon Canada

Thursday, November 30, 2023

Stephen Balsom, Assistant Deputy Minister, Agriculture and Lands, Department of Fisheries, Forestry and Agriculture, Government of Newfoundland and Labrador

Mike Gravel, Director, Forest Management, Northwest Territories Environment and Climate Change, Government of the Northwest Territories

Carla Millar, Manager, Sustainable Agriculture, Department of Agriculture, Government of Prince Edward Island

David Lobb, Vice Chair, Intergovernmental Technical Panel on Soils, Food and Agriculture Organization of the United Nations

Bob Turnock, Senior Science Advisor, Science Partnerships – International, Science and Technology Branch, Agriculture and Agri-Food Canada

Pascal Michel, Director General, Ontario – Quebec Region, Science and Technology Branch, Agriculture and Agri-Food Canada

Thursday, December 7, 2023

Mathieu Rouleau, Executive Director, Agriculture in the Classroom

Hugh Maynard, Interim Chief Executive Officer, 4-H Canada

Emmett Sawyer, Member, 4-H Canada

Kelly Daynard, Executive Director, Farm & Food Care Ontario

Clinton Monchuk, Executive Director, Farm & Food Care, Saskatchewan

Steven D. Siciliano, Professor, Department of Soil Science, University of Saskatchewan, As an individual

Derek MacKenzie, Associate Professor, Department of Renewable Resources, University of Alberta, As an individual

Thursday, December 14, 2023

Jo-Anne St. Godard, Executive Director, Circular Innovation Council

Colby Hansen, Owner/Operator, Hansen Beef

Asha Hingorani, President, Canadian Sphagnum Peat Moss Association

Tia Loftsgard, Executive Director, Canada Organic Trade Association

Roger Chevraux, Chair, Canadian Canola Growers Association

Dave Carey, Vice President, Government and Industry Relations, Canadian Canola Growers Association

Greg Donald, General Manager, Prince Edward Island Potato Board

Ryan Barrett, Research and Agronomy Specialist, Prince Edward Island Potato Board

Derek Lynch, Professor, Faculty of Agriculture, Dalhousie University, As an individual

Tuesday, February 6, 2024

Hugh Harley, Professor of Practice, Global Economy, University of Sydney, As an individual

Ravi Naidu, Chief Executive Officer and Managing Director, crcCARE

Mel Poulton, Owner/operator of a sheep and been farm business, New Zealand, As an individual

Alec Mackay, Principal Scientist, Digital Agriculture, AgResearch

Tuesday, February 13, 2024

Alan White, Vice President and Climate Change Adaption Chair, Canadian Nursery and Landscape Association

Phil Paxton, Past-President, Canadian Ornamental Horticulture Alliance

Cristine Morgan, Chief Scientific Officer, Soil Health Institute

Melanie Bos, Agriculture Policy Manager, Nature Conservancy of Canada

David Hiltz, Director, Global Regulatory Affairs, Acadian Plant Health

Thursday, February 15, 2024

Daniel Alessi, Professor and Encana Chair in Water Resources, Department of Earth and Atmospheric Science, University of Alberta, As an individual

Gordon Price, Professor, Department of Engineering, Faculty of Agriculture, Dalhousie University, As an individual

Subhasis Ghoshal, Professor, Civil Engineering and Director, Trottier Institute for Sustainability in Engineering and Design, McGill University

Francis Zvomuya, Professor, Department of Soil Science, Faculty of Agricultural and Food Sciences, University of Manitoba

Thursday, February 29, 2024

Stuart Oke, Co-Owner of Rooted Oak Farm, National Farmers Union

Robert Andjelic, Chief Executive Officer, Andjelic Land Inc.

Katherine Aske, Farmer, Researcher, University of British Columbia, As an individual

Don Lobb, Farmer, As an individual

Penny Wensley, former National Soils Advocate, Government of Australia, As an individual

Jacqueline Hannam, President, British Society of Soil Science

APPENDIX B – Fact-Finding Missions

July 31 to August 5, 2022 | Glasgow, Scotland

World Congress of Soil Science 2022

Penny Wensley, National Soils Advocate, Government of Australia

December 1, 2022 | Ottawa, Ontario

Canada Agriculture and Food Museum

Christina Tessier, Ingenium Chief Executive Officer

Kerry-Leigh Burchell, Director General

Nadine Dagenais-Dessaint, Manager, Education and Exhibition Interpretation

April 24 to April 26, 2023 | Guelph, Ontario

University of Guelph

Nancy Brown Andison, Chair, Board of Governors

Malcolm Campbell, Professor, Vice-President Research

Kari Dunfield, Professor, Soil Microbiologist

Richard Heck, Professor, School of Environmental Sciences

Paul Sibley, Professor, Director of the School of Environmental Sciences

Laura L. Van Eerd, Professor, Sustainable Soil Management

Claudia Wagner-Riddle, Professor Agrometeorologist

Heather White, Knowledge Mobilization and Communications Coordinator, Soils at Guelph

Agri-Businesses and Private Sector Companies

Mike Buttenham, Manager, Sustainability, Syngenta Canada

Greg Hannam, Owner, Woodrill Ltd.

Brett Israel, Co-Owner, Farmer, 3Gen Organics

Carl Israel, Co-Owner, Farmer, 3Gen Organics

Jamie Israel, Co-Owner, Farmer, 3Gen Organics

Nathan Klages, Biologicals Business Manager, Syngenta Canada

Tara McCaughey, Head, Technology Solutions and Sustainable Ag, Syngenta Canada

Nevin McDougall, President, Side Road 13 Investments Inc.

Caleb Niemeyer, Agronomist and Precision Ag Specialist, Woodrill Ltd.

Fernando Olea, Head, Marketing, Syngenta Canada

Ravi Ramachandran, Head, Research and Development for Crop Protection, Syngenta Canada

Lynn Schmidt, Lead Council, Syngenta Canada

Anna Shulkin, Head, Regulatory and Stewardship, Syngenta Canada

Christine Stroud, Head, Corporate Affairs, Syngenta Canada

E.P. (Ted) Taylor, Soil Resource Specialist, Soil Resource Group

Matt Wallenstein, Chief Soil Scientist, Syngenta Canada

Soil Associations

Harry Stoddart, Executive Director, Ontario Soil and Crop Improvement Association

Woody Van Arkel, Chair, Board of Directors, Ontario Soil Network; Farmer

As Individuals

Dan Breen, Farmer

Don Lobb, Farmer

Lillie Ann Morris, Farmer

July 10 to July 18, 2023 | Rome, Italy

Food and Agriculture Organization (FAO) of the United Nations (UN)

Qu Dongyu, Director General

Beth Bechdol, Deputy Director General

Alex Jones, Director, Resources Mobilization and Private Sector Partnership Division

Lifeng Li, Director, Land Water Division

Lauren Phillips, Deputy Director, Inclusive Rural Transformation and Gender Equality Division

Maria Helena Semedo, Deputy Director General

Máximo Torero Cullen, Chief Economist

Ronald Vargas, Secretary, Global Soil Partnership

Marcela Villareal, Director, Partnerships and UN Collaboration Division

Zhimin Wu, Director, Forestry Division

Jingyuan Xia, Director, Plant Production and Protection

Kaveh Zahedi, Director, Climate Change, Biodiversity and Environment Division

Agricultural Producer Organizations

Francesco Brusaporco, Policy Officer, Advocacy, Policy and Partnerships, World Farmers' Organisation

Cristina Chirico, Head of International Office, Italian Farmers' Confederation, CIA Agricoltori italiani

Valeria Di Marzo, Practice Leader, Communications, World Farmers' Organisation

Albina Gerxhaliu, Executive Assistant, World Farmers' Organisation

Arianna Giuliodori, Secretary General, World Farmers' Organisation

Peter Haussman, Markets and Controls, Fondazione Campagna Amica

Ambra Raggi, Engagement Manager, World Farmers' Organisation

Industry Associations

Paola De Santis, Soil Scientist, Consultative Group on International Agricultural Research

Michael Haywood, Consultative Group on International Agricultural Research

Manoj Kaushal, Soil Scientist, Consultative Group on International Agricultural Research

Job Kihara, Soil Scientist, Consultative Group on International Agricultural Research

Javier Mateo-Vega, Global Director of Partnerships and Communications, Consultative Group on International Agricultural Research

Agri-Businesses and Private Sector Companies

Claudio Destro, CEO, Maccarese Farm

Hilary Lanzi, Livestock Sector, Maccarese Farm

August 27 to September 1, 2023 | Saskatoon, SK and Calgary, Carmangay, Olds, AB Olds College of Agriculture and Technology

Joy Agnew, Vice President, Research

Ben Curtis, President

Todd Ormann, Vice President, Development

University of Calgary

Renate Weller, Dean, Veterinary Medicine

University of Saskatchewan

Melissa Arcand, Soil Biogeochemist Associate Professor, Department of Soil Science
Angela Bedard-Haughn, Professor and Dean, College of Agriculture and Bioresources
Kate Congreves, Associate Professor, Department of Plant Sciences
Bobbi Helgasson, Soil Microbial Ecologist, Assistant Professor
Candice Pete-Cardoso, Director, Indigenous Land Management Institute
Baljit Singh, Vice-President Research
Jeff Schoneau, Professor and Ministry of Agriculture Strategic Research Program
Chair in Soil Nutrient Management

Agricultural Producer Organizations

Kevin Auch, Chair, Alberta Pulse Growers; Farmer

Ian Boxall, Agricultural Producers Association of Saskatchewan; Farmer

Fred Lozeman, Finance Chair, Board of Directors, Alberta Beef Producers; Rancher

Mark Lyseng, Lead, Government and Policy, Alberta Beef Producers; Rancher

Lindsye Murfin, Head, Western Stock Growers' Association, Grasslands Capital X

Bill Newton, Western Stock Growers' Association, Grasslands Capital X; Rancher,

South Porcupine Ranching Ltd.

Norm Ward, Western Stock Growers' Association, Grasslands Capital X

Environmental and Soil Associations

Kimberly Cornish, Director, Food Water Wellness Foundation

Kristine Nichols, Lead Soil Scientist, Food Water Wellness Foundation

Industry Associations

Jeff English, Vice-President, Marketing and Communications, Pulse Canada

Jeff Nielson, Past President, Grain Growers of Canada; Farmer

Denis Tremorin, Director, Sustainability, Pulse Canada

Agri-Businesses and Private Sector Companies

Frank Hart, Board Chair, Protein Industries Canada

Justine Hendricks, President and CEO, Farm Credit Canada

Todd Klink, Executive Vice-President, Farm Credit Canada

Jason McNamee, Chief Operations Officer and Senior Biogeoscientist, Lucent Biosciences

Rob O'Connor, Farm Show Director, Ag in Motion

Steven Siciliano, Professor, Department of Soil Science, University of Saskatchewan; CEO, Environmental Material Sciences Inc.

Blake Weiseth, Director of Research and Demonstration, Glacier FarmMedia Discovery Farm

As Individuals

Doug Wray, Wray Ranch; Rancher

APPENDIX C – List of Briefs

A complete list of the briefs and follow-up information received during the study can be found at: https://sencanada.ca/en/committees/AGFO/briefs/44-1.

- Follow-up information provided by Agriculture and Agri-Food Canada
- Briefs from Agriculture Carbon Alliance
- Brief from Doug Aspinall, Woodrill Farms, As an individual
- Follow-up information from Jacob Beaton, Owner, Tea Creek Training and Employment
- Follow-up information from Michelle Blade, Permafrost Scientist, Canadian Permafrost Association
- Follow-up information from Melanie Bos, Agriculture Policy Manager, Nature Conservancy of Canada
- Brief from Chuck Broughton, General Manager, Canada, Pivot Bio
- Brief from the Canadian Council of Academies
- Follow-up information from Dave Carey, Vice President, Canadian Canola Growers Association
- Follow-up information from Roger Chevraux, Chair, Canadian Canola Growers Association
- Brief from Cassandra Cotton, Vice President, Policy and Program, Fertilizer Canada
- Follow-up information from Jerry V. DeMarco, Commissioner of the Environment and Sustainable Development, Office of the Auditor General of Canada
- Fact Sheet from Équiterre
- Report from Équiterre
- Follow-up information from Basia Florio, Executive Advisor to the Deputy Minister,
 Government of Ontario
- Brief from Graham Gilchrist, Chief Executive Officer, Biological Carbon Canada
- Follow-up from Justine Hendricks, President and Chief Executive Officer, Farm Credit Canada
- Brief from J.L. (Les) Henry, Professor Emeritus Soil Science, University of Saskatchewan, As an individual
- Brief from Brandon Heung, Associate Professor, Dalhousie University, As an individual
- Brief from Asha Hingorani, President, Canadian Sphagnum Peat Moss Association
- Brief from Blain Hiertaas, Regenerative Farmer, Hiertaas Farms in Saskatchewan

- Briefs from Rachel Hor, Chief Operating Officer, CarbonTerra
- Follow-up information from Rachel Hor, Chief Operating Officer, CarbonTerra
- Brief from Pari Johnston, Vice President, Genome Canada
- Brief from Gord Kurbis, Senior Associate, T. Bjornson and Associates Consulting Inc.
- Follow-up information from Rebecca Lee, Executive Director, Fruit and Vegetable Growers
 of Canada
- Follow-up information from Benoit Legault, Director General, Producteurs de grains du Québec
- Brief from David Lobb, Vice Chair, Food and Agriculture Organization of the United Nations
- Supplementary information from Don Lobb, Farmer, As an individual
- Follow-up information from Don Lobb, Farmer, As an individual
- Follow-up information from Donald Lobb, Farmer, As an individual
- Follow-up information from Tia Loftsgard, Executive Director, Canada Organic Trade Association
- Brief from Derek MacKenzie, Associate Professor, University of Alberta, As an individual
- Letter from Don McCabe, Chair, Biological Carbon Canada
- Brief from Don McCabe, Chair, Biological Carbon Canada
- Brief from Clinton Monchuk, Executive Director, Farm & Food Care Saskatchewan
- Brief from Medha Muhunthan, A Voice to Save Soil from Canada, As an individual
- Brief from Rick Munroe, National Farmers Union
- Brief from New Brunswick Department of Agriculture, Aquaculture and Fisheries
- Follow-up information from Lara O'Donnell, Executive Director, Weston Family Foundation
- Brief from Ontario Soil and Crop Improvement Association
- Briefs from Dean Orr, Farmer, As an individual
- Brief from Keith Reid. As an individual
- Brief from Karen Ross, Director, Farmers for Climate Solutions
- Brief from David Rourke, Farmer, As an individual
- Follow-up information from Troy Sherman, Director, Canola Council of Canada
- Follow-up information from Steven D. Siciliano, Professor, University of Saskatchewan
- Supplementary Information from the Soil Conservation Council of Canada
- Brief from Raju Soolanayakanahally, Research Scientist, Agriculture and Agri-Food Canada

- Follow-up from Christina Stroud, Head, Syngenta Canada
- Follow-up from Paul Thoroughgood, National Manager, Ducks Unlimited Canada
- Follow-up from Jim Tokarchuk, Executive Director, Soil Conservation Council of Canada
- Brief from the University of Guelph
- Brief from George Wamala, Director, RBC Climate Action Institute
- Correspondence from Penelope Wensley, Former National Soils Advocate for Australia, National Soil Strategy of Australia, As an individual
- Brief from Canada Organic Growers



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Township of Admaston/Bromley 477 Stone Road, R.R. #2 Renfrew, ON K7V 3Z5

E-Mail Address - info@admastonbromley.com

613-432-2885 Stone Road Office 613-432-4052 Fax

613-432-3175 Stone Road Garage 613-646-7918 Cobden Road Garage

REPORT

Date: August 7, 2025

To: Council

From: Jennifer Charkavi

Re: Request for Encroachment

Background & Discussion:

The owner of 5197 Queen Street has requested an encroachment agreement with the Township. They are wanting to add a garage to their property. Our Chief Building Official (CBO) met with them to assist in understanding how to apply for a building permit. Being a commercial/residential property a designer is required by the Ontario Building Code. As well, the property owners noted that they were very close to the property lines and would be encroaching as they would not meet the setbacks, however, this is permitted in the Zoning By-Law 2004-13:

Section 3.16.5.

Where a building has been erected prior to the date of passing of this By-law and where such building has less than the minimum required side yard, front yard, rear yard, or setback, said building may be enlarged, reconstructed, repaired or renovated provided that:

- (a) such enlargement, reconstruction, repair or renovation does not further contravene any *other setbacks* provisions of this By-law;
- (b) where the development is on private services the enlargement, reconstruction, repair or renovation satisfies the requirements of the applicable approval authority for the subject private services; and
- (c) all other applicable provisions of this By-law are complied with.

However, when the CBO met with the property owners onsite and they provided their survey of their property, they admitted that the proposed garage would be over 6' beyond their property line and onto Township property. The CBO noted to the property owners that he cannot issue a building permit for a building not on the applicant's property. Our CBO advised that they perhaps shift the property over so that they would be up to the property line, which would be permitted. They then believed that they could apply for a minor variance and were told that was not a possibility either, as they can

only have a minor variance on their own property. The garage is required for better accessibility for the property owners.

Since then the property owners have sent in a request to the Township for consideration of an encroachment.

They have been the owners at that property for over 22 years, however the shed has been in place for almost 39 years which was prior to any Township Zoning By-laws or building by-laws. They are requesting that if they remove the walk-in freezer and shed and build the new garage in that same space and towards the back of the property still maintaining the encroachment would they be permitted to do this. This actually does not change anything, they are still encroaching on municipal property. The owners have been advised that the CBO nor any staff can make this decision but that this request must be presented to Council.



Financial Implications:

The Township currently has no fees associated with an encroachment agreement; however, it is noted that the cost for the use of the land being encroached is \$1. It is also note worthy that the City of Pembroke did have legal review of their encroachment by-law.

People Consulted:

Dwayne Coulas, CBO City of Pembroke Planning & Building Department Steve Visinski, Public Works Superintendent Bill McHale, Fire Chief

Recommendation for Council:

BE IT RESOLVED THAT Admaston/Bromley Council approve By-Law 2025-29, being a By-Law to authorize the Mayor and Clerk to execute an encroachment agreement with Donna Brisbin, 5197 Queen Street, Douglas, Township of Admaston/Bromley in relation to the encroachment of a portion of Public Highway known as Mary Street.

Admaston Bromley Township Office 477 Stone Road Renfrew, Ontario K7V 3Z5 Jennifer Charkavi C.A.O.

I am contacting you to see if you can help me with an issue that has come up.I am the owner and operator of Douglas Grocery and I would like to build a garage attached to the back of my store. The building also has my residence in it. The garage would include a ramp inside so as to allow me to enter more easily. I have severe arthritis which is making it harder and harder to do stairs. Short steep ramps which are outside during the winter months are too dangerous. The proposed size of the garage would be 24ft X 28ft.

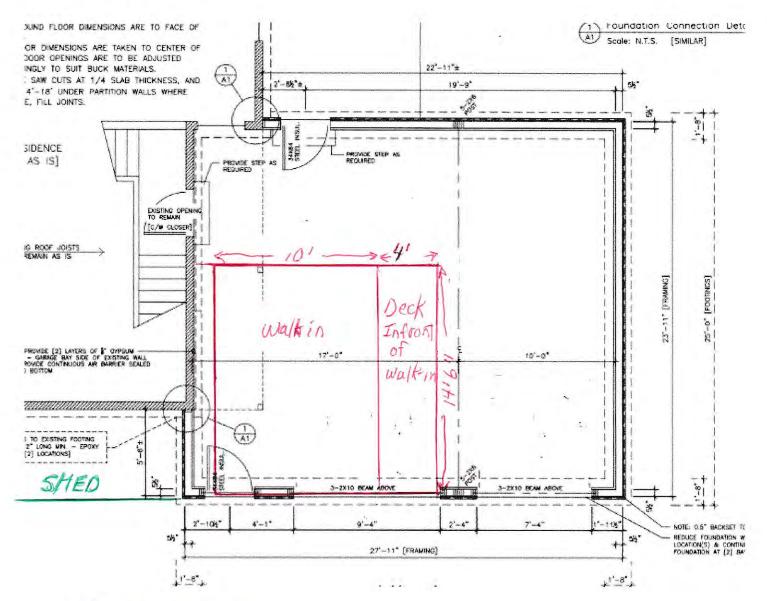
I have been the owner for 22 years as of this August. I understand that most of the properties in Douglas have encroachments on adjacent properties. My property being on a corner lot has some on township property. The original building is pretty much on the property line but there is a side shed and a walk-in fridge/freezer that are over the property line by 5 ft 6in. The shed has been in place for at least 39yrs and the walk-in would have been put in place a little later. Neither have caused an issue that I am aware of.

I called the Admaston Bromley Building Official, Dwayne Coulas, he came over and looked at what we were planning. He said it looked good, that there might be an issue with the extension toward the back of the property. He later talked with my son who is going to be doing the work, and said there was no problem, it could be built. He said to go ahead and get the plans made up. When the plans were done, I called Dwayne and asked how to proceed. He said I would have to take some measurements and he would bring over the forms I needed for the building permit. I got out the survey like drawing I had to help. When he came over, he looked at the plans and said we could not build where we were planning because it would be over the property line. He said we would have to push the building back to the property line (about 5 ft.)

I am proposing that we remove the walk-in and shed and build on the same land as the walk-in and 14ft toward the back of the property. We would be encroaching by the same amount just shifted toward the back of the property. I am hoping this encroachment can be over looked so we can build my garage with a ramp to make my life a little more comfortable.

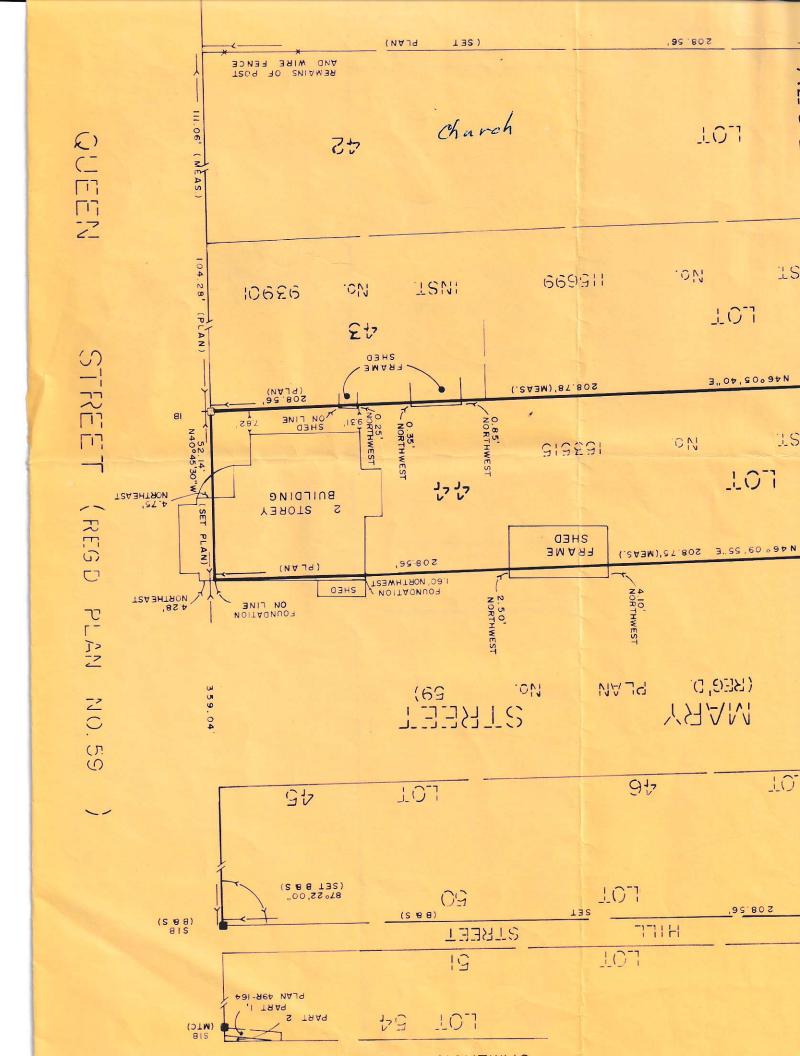
I am including the building plans that I have already paid for, and copy of the survey as well as an overlay of where the walk-in is situated. I will also include a couple of pictures of what is in place now. I hope this is enough for you to make a decision.

Yours sincerely Donna Brisbin 613-649 2349



Existing Structures.

Shed and Walk in are over the property line refer to servey showing shed. (Page)



THIS AGREEMENT made in duplicate the day of August, 2025.

BETWEEN:

The Corporation of the Township of Admaston/Bromley

(hereinafter called "The Township")

Of the First Part;

AND:

Donna Brisbin

(hereinafter called "Brisbin")

Of the Second Part.

WHEREAS The Township of Admaston/Bromley is the owner of land situated in the Township of Admaston/Bromley, more particularly described in Schedule "A" attached hereto (the "Township Lands"), which abuts the boundary of land situated in the Township of Admaston/Bromley, more particularly described in Schedule "B" (the "Brisbin Lands");

AND WHEREAS Brisbin has requested permission from The Township to occupy and maintain subsurface, surface and aerial encroachments for eaves, flashing and any portion of the building constructed on the Brisbin Lands that encroaches onto The Township Lands as shown on Schedule "C" and hereinafter referred to as the "**Encroachment**";

AND WHEREAS The Township is prepared to grant permission, subject to the terms and conditions hereinafter contained;

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the premises and the sum of One Dollar (\$1.00) and other good and valuable consideration, the Township agrees to permit and hereby authorizes Brisbin to occupy and maintain the Encroachment on the lands shown on Schedule "C" attached hereto on the terms and conditions provided in this Agreement.

PROVIDED that Brisbin hereby covenants and agrees with The Township that:

- 1. This Agreement applies to the Township Lands in order to permit the Encroachment on the lands. The encroachments consist of eaves, flashings and any portion of the building constructed on the Brisbin Lands that encroaches into Mary Street, as further shown on Schedule "C" attached hereto.
- 2. It is agreed between the Township and Brisbin that the permission being extended by the Township is permissive only, and that Brisbin shall, at the request of the Township, remove, at their own expense, the said encroachment, without undue delay, when requested to do so by the Township.
- 3. Brisbin shall maintain the Encroachment in a good and safe condition at its own expense.
- 4. Brisbin shall indemnify, keep indemnified, and save The Township harmless from all claims, loss, damages, costs, and expenses of every nature and kind whatsoever arising from or in consequence of the Encroachment and its presence on the Township Lands, whether such claim, loss, damages, costs, or expenses are incurred by Brisbin or by any third party and whether such claim, loss, damages, costs, or expenses are sustained by the Township, Brisbin, or their several and respective employees, workmen, servants and agents, or any other person or persons, corporation, or corporations whatsoever.

- 5. For certainty, Brisbin waives the right to make any claim against The Township, its contractors, or agents relating in any way to the Encroachment for any losses or damage incurred by Brisbin as a result of the actions or omissions of The Township, its contractors or agents, whether or not those actions or omissions arise from the negligence of the Township, its contractors or its agents.
- 6. Brisbin or its contractors, subcontractors, or agents will be responsible for the full cost of any necessary maintenance and restoration of the Encroachment, where Brisbin or its contractors, subcontractors, or agents damage the Encroachment or any other property during maintenance of the Encroachment required under this Agreement.
- 7. Nothing herein shall create the relationship of landlord and tenant between the Township and Brisbin.
- 8. This Agreement shall, at the expense of Brisbine, be registered on title on the Brisbin Lands.
- 9. Wherever used in this Agreement, The Township and Brisbin shall include the successors and assigns of The Township and Brisbin.
- 10. All words in this Agreement whether singular or plural shall be read in the singular or plural as the context may require.

IN WITNESS WHEREOF the parties have by their duly authorized representatives executed this Agreement.

DATED at Admaston/Bromley, this	day of August, 2025.		
Witness	Township of Admaston/Bromley Per: Jennifer Charkavi, CAO/Clerk		
	Tell Jennifer Charkavi, CAO, Clerk		
Witness	Donna Brisbin		

Schedule "A"

Township Lands

Mary Street; Registered Plan No. 59; TOWNSHIP OF ADMASTON/BROMLEY PIN: 57237-0198



Brisbin Lands

BROM PLAN 59 LOT 44, .025AC 52.14FR 208.56D, 5197 QUEEN STREET DOUGLAS ON

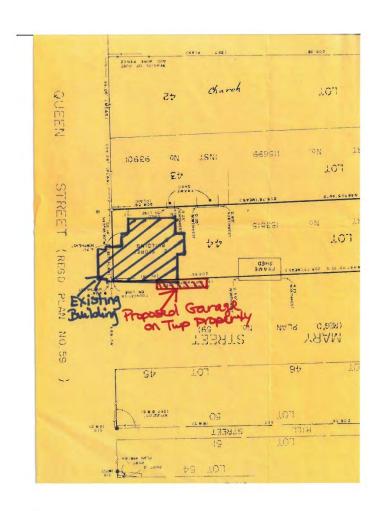
PIN: 57237-0113

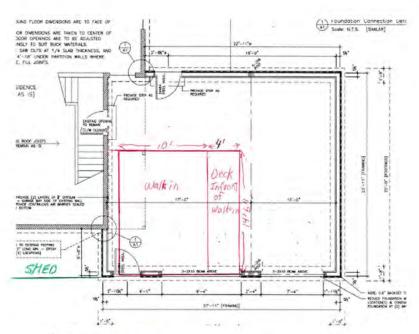




Schedule "C"

Encroachment





Existing Structures.

Shed and Walk in are over the property line refer to servey showing shed (Page)

Municipality of Tweed Council Meeting Council Meeting

Resolution No. 274

Title: Notices of Motion

Date: Tuesday, June 10, 2025



Moved by D. DeGenova
Seconded by J. Palmateer

BE IT RESOLVED THAT:

WHEREAS under Ontario Regulation 391/21:Blue Box producers are fully accountable and financially responsible for their products and packaging once they reach their end of life and are disposed of, for 'eligible' sources only;

AND WHEREAS 'ineligible' sources, which producers are not responsible for, include businesses, places of worship, daycares, campgrounds, public-facing and internal areas of municipal-owned buildings, and not-for-profit organizations, such as shelters and food banks;

AND WHEREAS failure to include 'ineligible sources under the Ontario Regulation 391/21:Blue Box program is in essence a provincial tax on ineligible sources;

AND WHEREAS should a municipality continue to provide services to the 'ineligible sources, the municipality will be required to oversee the collection, transportation, processing of the recycling, assuming 100% of the cost which amounts to yet another provincial municipal download; NOW THEREFORE IT BE RESOLVED THAT the Municipality of Tweed Council hereby request that the province amend Ontario Regulation 391/21:Blue Box so that producers are responsible for the end-of-life management of recycling product from all sources;

AND FURTHER THAT Council hereby request the support of all Ontario Municipalities; AND FURTHER THAT this resolution be forwarded to the Honourable Doug Ford, Premier of Ontario, the Honourable Todd McCarthy, Minister of the Environment, Conservation, and Parks, Mike Harris, Minister of Natural Resources and Forestry, Ric Bresse, Member of Provincial Parliament for Hastings-Lennox and Addington, Minister of Affairs and Housing, Rob Flack and all Ontario Municipalities.

Carried

Ministry of Finance

Provincial-Local Finance Division

Ministère des Finances

Division des relations provinciales municipales en matière de finances

Frost Building North 95 Grosvenor Street Toronto, ON M7A 1Y7 Édifice Frost Nord 95 rue Grosvenor Toronto, ON M7A 1Y7



July 15, 2025

Dear Treasurer/Clerk Treasurer:

I am pleased to inform you that the third quarterly payment of your 2025 Ontario Municipal Partnership Fund (OMPF) allocation will be processed later this week. The payment will be made by electronic funds transfer through the Transfer Payment Ontario (TPON) system and is in respect of the period July through September 2025.

Please find enclosed a *Payment Notice* providing details of your 2025 OMPF third quarterly payment.

If you have any questions regarding the processing of this payment, please contact Marc Sharrett at Marc.Sharrett@ontario.ca or (416) 892-0399.

Sincerely,

Christopher Pearce Assistant Deputy Minister (A)

Provincial-Local Finance Division

Ontario Municipal Partnership Fund (OMPF)

2025 Third Quarter Payment Notice



Township of Admaston-Bromley County of Renfrew

4742

A. Total 2025 OMPF (2025 Allocation Notice, Line A) \$463,200

В.	B. 2025 OMPF Quarterly Payments Schedule			
	1.	2025 OMPF First Quarter Payment	Issued January 2025	\$115,800
	2.	2025 OMPF Second Quarter Payment	Issued April 2025	\$115,800
	3.	2025 OMPF Third Quarter Payment	Issued July 2025	\$115,800
	4.	2025 OMPF Fourth Quarter Payment	Scheduled October 2025	\$115,800

C. Payment Issued in July		nt Issued in July		\$115,800		
	1.	2025 OMPF Third Quarter Payment	Issued July 2025	\$115,800		

Ontario Ministry of Finance Provincial-Local Finance Division Issued: July 2025

Township of Admaston/Bromley 477 Stone Road, R.R. #2 Renfrew, ON K7V 3Z5

E-Mail Address - info@admastonbromley.com

613-432-2885 Stone Road Office 613-432-4052 Fax

613-432-3175 Stone Road Garage 613-646-7918 Cobden Road Garage

REPORT

Date: August 7, 2025

To: Council

From: Kelly Coughlin

Re: Final Reserve Balances 2024 & 2025 Reserve Balance Forecast

Background:

Upon conclusion of the 2024 year end audit, it was confirmed that the township realized a surplus of \$341,148.35. Council provided staff direction as to how to allocate the surplus at the June 19, 2025 council meeting. In consultation with the auditors, the entry to allocate the surplus to reserves was processed effective January 1, 2025.

Discussion:

Attached are copies of the Final reserve balances for 2024. The amounts reflect in this schedule match the balances outlined in the financial statements that were adopted by council.

In addition, staff have included updated the 2025 Forecast for Discretionary and Obligatory reserves for council information.

Financial Implications:

Due to additional costs incurred to finalize the landfill expansion there was greater amount withdrawn from the Reserve – Capital than was originally anticipated or budgeted for. Original projections included a provision of \$100,000 to come from reserves to help finance that project. However, a total of \$224,213.65 was required to fully finance the project. Unfortunately, this cost overrun has now left the Reserve - Capital depleted considerably with implications on how some of the 2025 capital projects are to be financed.

Included in the 2025 Capital Budget was a provision of \$132,500.00 to withdrawn from the Reserve - Capital. The projects to be financed are as follows:

- i) \$50,000 Community Sport and Recreation Infrastructure Fund
- ii) \$75,000 Fire Hall Expansion feasibility study / drawings etc
- iii) \$7,500 photocopier

However, there is only carry forward balance from 2024 is \$59,620.58. Given that the township realized a surplus in 2024, staff recommend that the funding deficit for the 2025 capital projects be financed through the Working Fund.

In addition, original carry forward balances estimates used to finance capital projects from the Canada Community Building Fund were slightly higher than what actual year end balances are from 2024. Therefore, there may be a funding deficit if the Stone Road Sand / Salt Shed comes in on budget. Staff recommend any financing deficits be financed from the Working Fund Reserve.

People Consulted:

Jennifer Charkavi - CAO/Clerk

Council Recommendation:

BE IT RESOLVED THAT Council receive the Final Reserve Balances 2024 & 2025 Reserve Balance Forecast report as information as submitted and circulated,

AND FURTHER THAT Council direct staff to withdraw any costs associated with the Fire Hall Feasibility study project from the Working Fund Reserve,

AND FURTHER THAT Council direct staff to finance any financing deficits related to the Stone Road Sand / Salt Shed from the Working Fund Reserve.

TOWNSHIP of ADMASTON/BROMLEY RESERVES & DEFERRED REVENUE - 2024 - FINAL

Updated: 7/30/2025

ISCRETIONARY F	RESERVES				
GL Acct #	Description	Balance as of 12/31/2023	Additions	Withdrawals	Estimate Balance as 0 12/31/202
1-2-0250-0700	Working Fund	85,193.44	20,000.00		105,193.44
1-2-0250-0701	Reserve - Municipal Election	7,000.00	7,000.00		14,000.00
1-2-0250-0707	Reserve - Weather Contingency Reserve	20,000.00	20,000.00		40,000.00
1-2-0250-0711	Reserve - Waste Capital	29,425.00			29,425.00
1-2-0250-0714	Reserve - Paved / Gravel Roads	83,171.96	35,000.00		118,171.96
1-2-0250-0715	Roads Reserve - Vehicles / Equipment	63,079.50	10,000.00		73,079.50
1-2-0250-0717	Reserve - CWIP	139,417.64	6,250.00	(25,917.64)	119,750.00
1-2-0250-0718	Reserve - Capital	283,834.23		(224,213.65)	59,620.58
1-2-0250-0719	Fire - Capital	9,858.21	-		9,858.2
1-2-0250-0724	One Time Funding	4,203.89			4,203.89
	Fire Reserve - Vehicles / Equipment	-	25,000.00		25,000.0
OTAL DISCRETION	NARY RESERVES	725,183.87	123,250.00	(250,131.29)	598,302.58
		•			
DEFERRED REVEN	IUE		ı		
GL Acct #	Description	Balance as of 12/31/2023	Additions	Withdrawals	Estimate Balance as o 12/31/202
1-2-0250-0723	Cannabis Reserve Fund	19,414.88			19,414.88
1-2-0250-0725	Safe Restart	29,000.00			29,000.0
OTAL DEFERRED	REVENUE	48,414.88	-		48,414.8
BLIGATORY RES	ERVES				
GL Acct #	Description	Balance as of 12/31/2023	Additions	Withdrawals	Estimate Balance as o 12/31/202
1-2-0260-0750	Canada Community Building Fund (CCBF)	129,206.79	100,771.90	(109,383.30)	120,595.3
1-2-0260-0751	Ontario Community Infrastructure Fund (OCIF)	307,490.05	521,604.26	(343,631.49)	485,462.82
OTAL OBLIGATO					
	RY RESERVES	436,696.84	622,376.16	(453,014.79)	606,058.2°
	RY RESERVES	436,696.84	622,376.16	(453,014.79)	606,058.2

TOWNSHIP of ADMASTON/BROMLEY 2025 RESERVES & DEFERRED REVENUE - Forecast v3

Updated: 7/30/2025

DISCRETIONARY RESERVES

GL Acct #	Description	Balance as of 12/31/2024	2024 Surplus / (Deficit)	Additions	Withdrawals	Estimated Balance as o 12/31/202
1-2-0250-0700	Working Fund	105,193.44	265,000.35	8,500.00	(52,271.00)	326,422.79
1-2-0250-0701	Reserve - Municipal Election	14,000.00		7,000.00		21,000.00
1-2-0250-0705	Reserve - Accessibility	-		1,000.00		1,000.00
1-2-0250-0707	Reserve - Weather Contingency Reserve	40,000.00		20,000.00		60,000.00
1-2-0250-0708	Reserve - Municipal Development Reserve	-		8,500.00		8,500.00
1-2-0250-0711	Reserve - Waste Capital	29,425.00				29,425.00
1-2-0250-0712	Reserve - Building (Fire)	-	76,148.00	8,500.00		84,648.00
1-2-0250-0713	Reserve - Building (Public Works)	-		8,500.00		8,500.00
1-2-0250-0714	Reserve - Paved / Gravel Roads	118,171.96		37,000.00		155,171.96
1-2-0250-0715	Reserves - PW Vehicles / Equipment	73,079.50		34,000.00		107,079.50
1-2-0250-0716	Reserve - Fire Vehicles / Equipment	25,000.00		25,000.00		50,000.00
1-2-0250-0717	Reserve - CWIP	119,750.00				119,750.00
1-2-0250-0718	Reserve - Capital	59,620.58			(132,500.00)	(72,879.42
1-2-0250-0719	Fire - Capital	9,858.21				9,858.21
1-2-0250-0724	One-Time Funding	4,203.89			(174.00)	4,029.89
TOTAL DISCRETION	NARY RESERVES	598,302.58	341,148.35	158,000.00	(184,945.00)	912,505.93
DEFERRED REVEN	UE					
GL Acct #	Description	Balance as of 12/31/2024		Additions	Withdrawals	Estimate Balance as o 12/31/202
1-2-0250-0723	Cannabis Reserve Fund	19,414.88				19,414.88
1-2-0250-0725	Safe Restart	29,000.00			(29,000.00)	-
TOTAL DEFERRED	REVENUE	48,414.88		-	(29,000.00)	19,414.88
OBLIGATORY RESE	ERVES					Estimate
GL Acct #	Description	Balance as of 12/31/2024		Additions	Withdrawals	Balance as c 12/31/202
1-2-0260-0750	Canada Community Building Fund (CCBF)	120,595.39		103,286.63	(225,000.00)	(1,117.98
1-2-0260-0751	Ontario Community Infrastructure Fund (OCIF)	485,462.82		428,473.00	(710,000.00)	203,935.82
TOTAL OBLIGATOR	Y RESERVES	606,058.21		531,759.63	(935,000.00)	202,817.84
TOTAL RESERVES		1,252,775.67	341,148.35	689,759.63	(1,119,945.00)	1,134,738.65

Township of Admaston/Bromley

477 Stone Road, R.R. #2 Renfrew, ON K7V 3Z5

E-Mail Address - info@admastonbromley.com

613-432-2885 Stone Road Office 613-432-4052 Fax

613-432-3175 Stone Road Garage 613-646-7918 Cobden Road Garage

REPORT

Date: August 7, 2025

To: Council

From: Kelly Coughlin

Re: June 2025 YTD Financial Overview

Background: n/a

Discussion:

During the month of May notable receipts include:

- 1) Tax Certificate Revenue \$300.00
- 2) Miscellaneous Revenue \$627.00 (\$600.00 rental income election)
- 3) Fire Protection Grant \$361.92
- 4) Building Permits \$5,114.00
- 5) Sewage Permits \$500.00
- 6) Entrance Fee \$100.00
- 7) Sales of Used Culvert \$50.00
- 8) 911 Civic Addressing \$162.00
- 9) Landfill Tipping Fees Stone Road \$25.00
- 10) Landfill Tipping Fees Osceola \$3,360.00
- 11) Zoning Certificates \$240.00

Financial Implications:

n/a

People Consulted:

Jennifer Charkavi - CAO/Clerk

Recommendation for Council:

BE IT RESOLVED THAT Council accept the June 2025 Year to Date Financial Overview Report (attached) as information as submitted and circulated.

2025 Fiscal Year :

1-3-????-???? To 1-4-????-????

Period :

Account:

To 6



GL5030 (T) Page : **Date:** Jul 30, 2025 **Time**: 3:23 pm

CC1	CC2	ССЗ	Account Name	Balance	Budget Amt - BV
1					
3		RE	EVENUES		
1000		М	unicipal Taxation		
			Municipal - Residential (RT)	41.32	-3,672,881
			Municipal - Supplementaries	-13,519.71	-20,000
			Municipal - Write-offs	6,901.72	0
	Category Total			-6,576.67	-3,692,881
1010		Co	 ounty Taxation		
			County - Residential (RT)	0.00	-1,545,714
			County - Supplementaries	-6,175.33	0
			County - Write-off's	3,306.03	0
			County - Payment in Lieu	0.00	-1,340
	Category Total			-2,869.30	-1,547,054
1020		Er	 nglish Public School Taxation		
			Eng Pub - Residential (RT)	0.00	-583,873
			Eng Pub - Supplementaries	-1,612.88	0
			Eng Pub - Write-Off's	1,144.36	0
	Category Total			-468.52	-583,873
1030		Er	nglish Separate School Taxation		
			Eng Sep - Residential (RT)	0.00	-193,790
			Eng Sep - Supplementaries	-434.36	0
			Eng Sep - Write-Off's	107.51	0
	Category Total			-326.85	-193,790
1040		Fr	ench Public School Taxation		
			Fre Pub - Residential (RT)	0.00	-7,518
	Category Total			0.00	-7,518
1050		Fr	ench Separate School Taxation		
			Fre Sep - Residential (RT)	0.00	-15,820
			Fre Sep - Supplementaries	-131.58	0
	Category Total			-131.58	-15,820
1060		No	o Support		
			No Support - Supplementals	-378.64	0
	Category Total			-378.64	0
1200		Pa	ayment in Lieu's		
			PIL - Grants In Lieu - Canada	0.00	-850
			PIL - Grants in Lieu - Ontario	0.00	-5,805
			PIL - Power Dams	0.00	-5,000
			FIL - FOWEI Dailis	0.00	-5,000
			PIL - Landfill Site (mun. enterprises)	0.00	-3,700
	1000 1010 1020 1030 1040	Category Total 1010 Category Total 1020 Category Total 1030 Category Total 1040 Category Total 1050 Category Total 1060 Category Total	Category Total	1000 Municipal Taxation Municipal - Residential (RT) Municipal - Supplementaries Municipal - Write-offs Category Total 1010 County Taxation County - Residential (RT) County - Supplementaries County - Write-offs County - Payment in Lieu Category Total 1020 English Public School Taxation Eng Pub - Residential (RT) Eng Pub - Supplementaries Eng Pub - Write-Offs Category Total 1030 English Separate School Taxation Eng Sep - Residential (RT) Eng Sep - Supplementaries Eng Sep - Write-Offs Category Total 1040 French Public School Taxation Fre Pub - Residential (RT) Category Total 1050 French Separate School Taxation Fre Sep - Residential (RT) Fre Sep - Residential (RT) Fre Sep - Supplementaries Category Total 1060 No Support No Support - Supplementals Category Total 1200 Payment in Lieu's PIL - Grants In Lieu - Canada	1000

Fiscal Year: 2025

Account: 1-3-???? To 1-4-????????

Category Total

Category Total

Period: 1 To 6

Township of

IB

ADDITACTION

IF

OVERSE & UNITED

-17,150

-104,274

0.00

-25,719.82

Account Code CC1 CC2 CC3 Account Name Balance Budget Amt - RV

Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FUND	1					
CLASS	3		R	EVENUES		
CATEGORY	1200		Pa	ayment in Lieu's		

CATEGORY	1300	Penalty & Interest		
1-3-1300-1300		Penalty/Interest - Current	-8,684.94	-27,000
1-3-1300-1301		Penalty/Interest - 1 Year	-8,262.84	0
1-3-1300-1302		Penalty/Interest - 2 Year	-1,777.38	0
1-3-1300-1303		Penalty/Interest - 3 Year	-981.06	0
1-3-1300-1304		Interest - A/R	-677.20	0
1				

	Category Total	-20,383.42	-27,000
CATEGORY 1400	Municipal Revenue		
1-3-1400-5140	Lottery Licenses/Fees	-72.00	-100
1-3-1400-5141	Tax Certificates	-1,950.00	-2,500
1-3-1400-5142	Sale of Maps	0.00	-24
1-3-1400-5143	Backyard Chicken Fees	0.00	-500
1-3-1400-5145	Administration Fees - NSF	-180.00	-450
1-3-1400-5147	Other Service Charges	0.00	-200
1-3-1400-5148	Rental Income - BLCC	-931.16	0
1-3-1400-5150	Sale of Land/TCA	0.00	-60,000
1-3-1400-5152	Bank Interest Income	-21,289.66	-40,000
1-3-1400-5154	Miscellaneous	-1,297.00	-500

	Category Total		-275,587.73	-1,009,171
1-3-1510-1527		Recycling Grant	-1,207.84	-30,000
1-3-1510-1525		Aggregate Resources	0.00	-37,000
1-3-1510-1524		Police Revenue	0.00	-2,500
1-3-1510-1523		R.I.D.E. Grant	0.00	-8,700
1-3-1510-1522		Drains Superintendent Grant	0.00	-1,000
1-3-1510-1519		Tile Drain Loan	0.00	-10,298
1-3-1510-1517		Interest Income - OCIF Funding	-10,428.92	-10,000
1-3-1510-1516		Provincial Municipal Drainage Grant	0.00	-25,000
1-3-1510-1515		Other Provincial Grants	-32,350.97	0
1-3-1510-1514		Livestock Recovery	0.00	-3,000
1-3-1510-1511		OCIF Ont. Comm. Infrastructure Fur	0.00	-418,473
1-3-1510-1510		OMPF	-231,600.00	-463,200
CATEGORY	1510	Provincial Grants		

				.,,000,
CATEGORY	1520	Federal Grants		
1-3-1520-1518		Interest Earned - CCBF	-1,248.64	-5,200
1-3-1520-1520		CCBF Funding	0.00	-98,087
1-3-1520-1522		Canada Summer Jobs	0.00	-9,200
1-3-1520-1523		Canada Day Grant	-1,670.00	-500

Fiscal Year: 2025

1-3-8000-5801

CATEGORY

9000

Account: 1-3-???? To 1-4-???????

Township of

ADMASTON

B

ATMASTON

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GL5030 (T) Page :

Date : Jul 30, 2025 **Time :** 3:23 pm

-1,600.00

-3,960.00

0

-8,000

		_		DIVERSE & UNITED		
Period :	1	To 6		~		
Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
UND	1					
LASS	3		R	EVENUES		
ATEGORY	1520		F	ederal Grants		
		Category Total			-2,918.64	-112,987
ATEGORY	2000		F	ire Department		
-3-2000-5200				Fire - Standby Fees - NAW	-3,910.50	-7,803
-3-2000-5201				Fire - Calls	-28,682.75	-25,000
-3-2000-5202				Fire - Miscellaneous	-40.00	0
-3-2000-5203				Fire - MNR Fire Agreement	-361.92	0
-3-2000-5207				Fire - Grant	-500.00	0
		Category Total			-33,495.17	-32,803
ATEGORY	2100		B	uilding Department		
-3-2100-5210				Septic Usage Permits Fees	-200.00	-1,000
-3-2100-5211				Building Permits	-20,734.65	-50,000
-3-2100-5212				Sewage Permits	-2,500.00	-9,000
-3-2100-5213				Horton Township 60/40	-38,884.35	-79,846
-3-2100-5214				Whitewater Region CBO Reimburse	-431.04	0
		Category Total			-62,750.04	-139,846
ATEGORY	2300		A	nimal Revenue		
-3-2300-5230				Animal Control Dog Tags/Licenses	-880.00	-1,200
		Category Total			-880.00	-1,200
ATEGORY	3100		R	oads Revenue		
-3-3100-5310				Roads Revenue	-97.55	-1,000
-3-3100-5312				Entrance Fee	-200.00	-500
-3-3100-5313				Used Culvert	-50.00	-500
-3-3100-5314				911 Civic Addressing Revenue	-324.00	-200
		Category Total			-671.55	-2,200
ATEGORY	4000		ν	/aste Management		
-3-4000-5154				Waste Mngt - Misc Revenue	-8,000.00	0
-3-4000-5400				Landfill Tipping Fees - Stone Road \$	-795.00	-2,300
-3-4000-5401				Landfill Tipping Fees - Osceola Site	-12,710.00	-27,000
3-4000-5402				Recycling Grant	-303.00	0
-3-4000-5403				Sale Blueboxes	-6.00	-50
		Category Total			-21,814.00	-29,350
ATEGORY	8000		P	lanning Revenue		
-3-8000-5302				Zoning Certificate	-210.00	0
-3-8000-5800				Other Planning Fees & Charges	-2,150.00	-8,000
						· _

Consents

Transfer from Reserves

Category Total

Fiscal Year: 2025

Account: 1-3-???? To 1-4-????????

Period: 1 To 6



GL5030 (T) Page :

Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FUND	1					
CLASS	3		F	REVENUES		
CATEGORY	9000		T	Fransfer from Reserves		
1-3-9000-9000				Trf from CCBF Reserve	0.00	-126,913
1-3-9000-9001				Trf from OCIF Reserve	0.00	-291,527
1-3-9000-9004				Trf from Working Fund Reserve	0.00	-142,271
1-3-9000-9009				Fire - Capital Reserve	0.00	-132,500
1-3-9000-9010				Fire - from 1x funding reserve	0.00	-174
1-3-9000-9011				Fire - Transfer from Reserve	0.00	-29,000
		Category Total			0.00	-722,385
ATEGORY	9100		F	Proceeds from Debt		
1-3-9100-9100				Debt	0.00	-175,000
		Category Total			0.00	-175,000
	F	REVENUES Total			-458,931.93	-8,422,302
CLASS	4		E	EXPENDITURE		
CATEGORY	1100		E	Election		
1-4-1100-2255				ELECTION - Courses & Training	895.48	1,800
I-4-1100-9000				ELECTION - Transfer to Reserves	0.00	7,000
		Category Total			895.48	8,800
CATEGORY	1400		Α	Administration Overhead		
I-4-1400-1010				ADM - Salaries & Wages	189,781.24	388,530
I-4-1400-1110				ADM - Benefits	57,167.14	119,034
-4-1400-1113				ADM - Asset Mngt Coordinator	0.00	5,000
-4-1400-2011				ADM - Office Supplies	5,598.13	7,000
-4-1400-2012				ADM - Computer Supp/Small Equip/	1,565.76	1,000
-4-1400-2090				ADM - Miscellaneous	-2,769.22	1,000
-4-1400-2100				ADM - Postage	4,379.87	5,500
1-4-1400-2116				ADM - Printing (photocopier)	0.00	2,700
I-4-1400-2118				ADM - Freight & Delivery Charges	48.61	200
-4-1400-2240				ADM - Mileage	633.01	2,000
-4-1400-2250				ADM - Conventions/Meetings	8,384.94	7,500
I-4-1400-2255				ADM - Courses & Training	2,506.54	5,000
I-4-1400-2260				ADM - Dues & Memberships	5,360.20	6,460
-4-1400-2300				ADM - Advertising	918.88	2,000
-4-1400-2325				ADM - Public Relations	50.00	0
-4-1400-2430				ADM - Insurance	12,737.88	11,116
-4-1400-2720				ADM - Telephone	958.07	2,100
-4-1400-2721				ADM - Fax	544.61	1,406
-4-1400-2730				ADM - Cell	300.00	480
1-4-1400-3050				ADM - Legal Fees	3,561.60	3,000
-4-1400-3055				ADM - Audit	11,531.35	27,000
I-4-1400-3065				ADM - IT Services & Support	24,307.54	36,210

Fiscal Year: 2025

Account:

1-4-1410-2010

1-3-????-???? To 1-4-????-????

Period: 1 To 6



GL5030 (T) Page :

Date: Jul 30, 2025 **Time**: 3:23 pm

Period :	1	10 6				
Account Code	CC1	CC2	ССЗ	Account Name	Balance	Budget Amt - BV
UND	1					
CLASS	4		Е	XPENDITURE		
ATEGORY	1400		Α	dministration Overhead		
-4-1400-3070				ADM - Human Resources	0.00	3,000
-4-1400-3071				ADM - Accessibility Compliance	59.09	1,000
-4-1400-3080				ADM - Office Equip Mtce Contract	2,994.45	5,000
-4-1400-4800				ADM - Bank Service Charges	963.90	1,700
-4-1400-8000				ADM - Capital	53,702.99	91,674
-4-1400-9000				ADM - Transfer to Reserves	0.00	33,200
-4-1400-9999				ADM - Penny Rounding Clearing Ac	0.06	0
		Category Total			385,286.64	769,810
ATEGORY	1401		Т	ownship Office		
-4-1401-1110				Township Office - Benefits	208.25	0
-4-1401-2017				Twp Office - Bldg Supplies	243.73	1,000
-4-1401-2430				Twp Office - Insurance	1,015.20	2,652
-4-1401-2520				Twp Office - Bldg Mtce/Repair	1,320.29	1,800
-4-1401-2521				Twp Office - Cleaning Services	1,843.20	5,550
-4-1401-2600				Twp Office - Furnace Fuel	1,070.15	3,500
-4-1401-2601				Twp Office - Propane	555.87	1,000
-4-1401-2610				Twp Office - Hydro	1,129.82	3,750
-4-1401-3200				Twp Office - Contracted Services	228.96	200
-4-1401-8000				Twp Office - Trf to Capital	788.64	5,200
		Category Total			8,404.11	24,652
ATEGORY	1402		В	arr Line Community Centre		
-4-1402-1110				BLCC - Benefits	275.84	0
-4-1402-2017				Barr Line Comm Centre- Bldg Suppl	278.04	500
-4-1402-2430				Barr Line Comm Centre - Insurance	836.95	773
-4-1402-2520				Barr Line Comm Centre - Bldg Mtce	0.00	500
-4-1402-2521				Barr Line Comm Centre - Cleaning §	2,430.74	3,350
-4-1402-2600				Barr Line Comm Centre - Furnace F	2,218.90	3,800
-4-1402-2610				Barr Line Comm Centre - Hydro	438.61	2,000
-4-1402-8000				Barr Line Community Centre- Capita	0.00	5,000
		Category Total			6,479.08	15,923
ATEGORY	1403		0	sceola Historical Society Building		
-4-1403-2017				Osceola Historical - Bldg Supplies	0.00	250
-4-1403-2430				Osceola Historical - Insurance	423.80	392
-4-1403-2520				Osceola Historical - Bldg Mtce/Repa	0.00	3,500
-4-1403-2610				Osceola Historical - Hydro	115.56	450
-4-1403-4040				Osceola Historical - Rentals	0.00	750
		Category Total			539.36	5,342
ATEGORY	1410		H	ealth & Safety		·
				1100 0 "	000.04	

H&S - Supplies

298.61

800

Fiscal Year: 2025

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Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FUND	1					
CLASS	4		I	EXPENDITURE		
CATEGORY	1410		ı	Health & Safety		
1-4-1410-2255				H&S - Courses and Training	0.00	1,000
1-4-1410-3200				H&S - Contracted Services	192.73	3,000
		Category Total			491.34	4,800
CATEGORY	1600			 Council		
1-4-1600-1010				COUNCIL - Salaries & Wages	41,686.64	83,548
I-4-1600-1110				COUNCIL - Benefits	7,366.16	14,714
-4-1600-2090				COUNCIL - Miscellaneous	1,176.85	1,500
-4-1600-2100				COUNCIL - Postage	0.00	3,250
-4-1600-2240				COUNCIL - Mileage	558.26	3,500
-4-1600-2250				COUNCIL - Conventions & Meetings	7,837.37	9,000
-4-1600-2325				COUNCIL - Public Relations	909.94	2,500
-4-1600-2326				COUNCIL - Special Occassions	814.11	3,000
-4-1600-2430				COUNCIL - Insurance	1,996.07	2,115
-4-1600-3065				COUNCIL - IT Svcs & Support	3,362.33	6,000
-4-1600-5100				COUNCIL - Donations & Grants	6,900.00	7,000
		Category Total			72,607.73	136,127
ATEGORY	2000		I	Fire Overhead Costs		
-4-2000-1010				Fire - Wages	75,793.77	139,412
-4-2000-1110				Fire - Benefits	13,326.40	35,178
-4-2000-1111				Fire - Standby	11,500.00	20,500
-4-2000-2011				Fire - Office Supplies	212.45	1,000
-4-2000-2012				Fire - Computer Supplies	0.00	700
-4-2000-2090				Fire - Miscellaneous Supplies	0.00	1,000
-4-2000-2091				Fire - Food	285.83	500
-4-2000-2092				Fire - Christmas Dinner	0.00	1,000
-4-2000-2100				Fire - Postage/Freight / Delivery	0.00	250
-4-2000-2240				Fire - Mileage	950.53	4,000
-4-2000-2250				Fire - Courses & Training	107.40	58,542
-4-2000-2251				Fire - Prevention (ex. Fire Prev Wee	457.92	4,500
-4-2000-2260				Fire - Membership Dues	125.00	150
-4-2000-2430				Fire - Insurance (VFF)	10,412.38	11,762
-4-2000-2730				Fire - Cell Phone	0.00	480
-4-2000-2740				Fire - Radio Licenses	614.66	600
-4-2000-2741				Fire - Radio pagers / maintenance	1,134.01	4,000
-4-2000-2832				Fire - Medical / License Expenses	263.75	800
-4-2000-2833				Fire - Uniforms	337.81	3,000
-4-2000-2834				Fire - Agreements	5,996.67	50,997
-4-2000-2836				Fire - Fluent MS	1,119.36	1,400
-4-2000-2839				Fire - Call Taking / Alerting	0.00	2,500
-4-2000-3065				Fire - IT Services	0.00	500
-4-2000-4800				Fire - Bank Charges	25.00	0

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Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FUND	1					
CLASS	4		EΣ	(PENDITURE		
CATEGORY	2000		Fir	re Overhead Costs		
1-4-2000-7300				Fire - Loan Principle Repayment	0.00	41,094
1-4-2000-8000				Fire - Capital	208.30	0
1-4-2000-9002				Fire - Trf to Reserves - Buidling	0.00	8,500
1-4-2000-9003				Fire - Trf to Reserves - Vhcl / Equip	0.00	25,000
		Category Total			122,871.24	417,365
CATEGORY	2001		 Do	ouglas Fire Hall		
1-4-2001-1010				Fire Hall - Support Wages	0.00	2,000
1-4-2001-2017				Fire Hall - Building Supplies	0.00	1,000
1-4-2001-2430				Fire Hall - Insurance (building)	2,428.56	1,104
-4-2001-2520				Fire Hall - Building Maintenance	1,572.83	5,000
-4-2001-2522				Fier Hall - Supplies	102.87	100
-4-2001-2600				Fire Hall - Oil Furnace	5,056.30	10,500
-4-2001-2601				Fire Hall - Propane (generator)	0.00	500
-4-2001-2610				Fire Hall - Hydro	749.68	1,600
-4-2001-2720				Fire Hall - Telephone	1,233.53	2,600
-4-2001-2733				Fire Hall - Internet	366.00	1,480
-4-2001-8000				Fire Hall - Capital	0.00	75,000
		Category Total			11,509.77	100,884
CATEGORY	2002		Fir	re Equipment		
-4-2002-2101				Fire Equip - Small Tools	1,403.47	13,200
-4-2002-2102				Fire Equip - Test'g (ex. SCBA, ladde	5,002.14	8,000
-4-2002-2104				Fire Equipment - Safety Equipment	7,320.50	15,800
-4-2002-2105				Fire Equipment - Rental	0.00	2,000
I-4-2002-2106				Fire Equip - Extrication	0.00	2,500
-4-2002-2107				Fire Equip - Maintenance	116.28	0
1-4-2002-8000				Fire Equip - NEW Equipment Capita	16,190.02	10,000
		Category Total			30,032.41	51,500
CATEGORY	2003		Dr	y Hydrants		
1-4-2003-2510				Dry Hydrant - Repairs / Maintenance	0.00	2,000
1-4-2003-8000				Dry Hydrants - Capital	0.00	2,000
		Category Total			0.00	4,000
CATEGORY	2004		Tr	uck 1 - 2009 Freightliner		
1-4-2004-2430				Fire - Truck 1 - Insurance	1,233.00	1,371
I-4-2004-2500				Fire - Truck 1 - Repairs / Maintenand	18,479.26	4,500
1-4-2004-2621				Fire - Truck 1 - Clear Diesel Fuel	1,187.63	1,000
		Category Total			20,899.89	6,871
CATEGORY	2005		Tr	 uck 2 - 1980 GMC		
1-4-2005-2430				Fire - Truck 2 - Insurance	1,233.00	1,371
				-	,	-,

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Account : Period :	1-3-??? 1	?-???? To 1-4-??? To ₆	??-????	DIVERSE & UNITED		
Account Code	CC1	CC2	ССЗ	Account Name	Balance	Budget Amt - BV
FUND	1					
CLASS	4		E	EXPENDITURE		
CATEGORY	2005		7	Гruck 2 - 1980 GMC		
1-4-2005-2500				Fire - Truck 2 - Repairs / Maintenand	370.30	1,500
1-4-2005-2620				Fire - Truck 2 - Gasoline	123.38	500
		Category Total			1,726.68	3,371
CATEGORY	2006		٦	 Гruck Т2 - 2008 Dodge Stirling		
1-4-2006-2430				Fire - Truck T2- Insurance	1,233.00	1,371
1-4-2006-2500				Fire - Truck T2- Repairs / Maintenar	3,679.33	4,000
1-4-2006-2621				Fire - Truck T2 - Clear Diesel Fuel	435.71	1,000
		Category Total			5,348.04	6,371
CATEGORY	2007		٦	 Гruck 4 - 1998 Freightliner		
1-4-2007-2430				Fire - Truck 4 - Insurance	1,233.00	1,371
1-4-2007-2500				Fire - Truck 4 - Repairs / Maintenand	0.00	5,000
1-4-2007-2621				Fire - Truck 4 - Clear Diesel Fuel	712.84	0
		Category Total			1,945.84	6,371
CATEGORY	2100		E	Building Department		
-4-2100-1010				CBO - Wages	49,210.54	96,753
I-4-2100-1110				CBO - Benefits	16,003.48	30,474
1-4-2100-2011				CBO - Office Supplies	172.98	500
I-4-2100-2090				CBO - Miscellaneous	77.53	0
-4-2100-2116				CBO - Printing	0.00	400
-4-2100-2240				CBO - Mileage	1,291.57	4,500
1-4-2100-2250				CBO - Conventions	1,067.46	2,800
1-4-2100-2255				CBO - Training & Courses	0.00	2,300
1-4-2100-2260				CBO - Dues & Memberships	100.00	750
1-4-2100-2730				CBO - Cell	120.00	240
1-4-2100-4800				CBO - Bank Service Charges	25.00	0
		Category Total			68,068.56	138,717
CATEGORY	2201		F	 Fence Viewers		
1-4-2201-3090				Fence Viewing Fees	0.00	100
		Category Total			0.00	100
CATEGORY	2202		L	ivestock Valuer		
1-4-2202-2240				Livestock Valuer - Mileage	16.21	500
1-4-2202-3090				Livestock Valuer - Remuneration	759.48	1,000
		Category Total			775.69	1,500
CATEGORY	2300		<i>F</i>			
1-4-2300-2010				Animal & By-law - Dog Tags/Equip	161.05	0
1-4-2300-2090				Animal & By-law - Miscellaneous	122.11	0
1-4-2300-2116				Animal & Bylaw - Printing	81.41	250
1-4-2300-3142				Animal Control - Poundkeeper Fees	1,781.00	1,000
				, -	,	,

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Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FUND	1					
CLASS	4			EXPENDITURE		
CATEGORY	2300			Animal & By-Law		
1-4-2300-3200				Animal & Bylaw - Contract	4,212.87	10,000
		Category Total			6,358.44	11,250
CATEGORY	2400			Policing		
1-4-2400-3125				Policing Costs	197,999.05	403,422
1-4-2400-3126				R.I.D.E. Duty Expenditures	0.00	7,000
		Category Total			197,999.05	410,422
CATEGORY	2401			Police Services Board		
1-4-2401-1115				Police Services Board - Committee I	0.00	16,377
1-4-2401-2240				Police Services Board - Mileage	0.00	200
		Category Total			0.00	16,577
CATEGORY	2900			Emergency Management		
1-4-2900-2010	_000			CEMC - Emergency Equip/Supplies	0.00	500
1-4-2900-2240				CEMC - Mileage	0.00	300
1-4-2900-2255				CEMC - Courses/Training	0.00	2,000
		Category Total			0.00	2,800
 CATEGORY	3001			Brushing/Tree Trim		_,
1-4-3001-1010	3001			Brushing/Tree Trim - Wages	4,816.39	15,379
1-4-3001-1110				Brushing/Tree Trim - Benefits	1,514.29	5,939
1-4-3001-2010				Brushing/Tree Trim - Materials/Supp	2,875.69	4,500
		Category Total			9,206.37	25,818
CATEGORY	3002			Cold Patch		
1-4-3002-1010	3002			Cold Patch - Wages	9.770.68	33,219
1-4-3002-1010				Cold Patch - Benefits	3,060.33	12,829
1-4-3002-1110				Cold Patch - Materials/Supplies	11,300.75	25,000
		Category Total		···	24,131.76	71,048
 CATEGORY	3003			Culvert Maintenance	, , , , , , , , , , , , , , , , , , , ,	,
1-4-3003-1010	5005			Culvert Maintenance - Wages	1,050.73	5,844
1-4-3003-1010				Culvert Maintenance - Wages Culvert Maintenance - Benefits	324.76	2,257
1-4-3003-2010				Culvert Maintenance - Materials/Sur	162.82	2,000
		Category Total			1,538.31	10,101
	2004			Diahi		
CATEGORY	3004			Ditching Wages	4 475 22	0.535
1-4-3004-1010 1-4-3004-1110				Ditching - Wages Ditching - Benefits	1,475.33 459.54	9,535
1-4-3004-1110 1-4-3004-2010				Ditching - Materials/Supplies	0.00	3,682 500
1 -T-000 -T-2 010		Catogory Total		Ditoring - Materials/Oupplies		
		Category Total			1,934.87 	13,717
CATEGORY	3005			Dust Control		

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Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
UND	1					
CLASS	4		Е	XPENDITURE		
CATEGORY	3005		D	ust Control		
1-4-3005-1010				Dust Control - Wages	335.70	1,230
1-4-3005-1110				Dust Control - Benefits	112.39	475
1-4-3005-2010				Dust Control - Materials/Supplies	32,218.27	55,000
		Category Total			32,666.36	56,705
CATEGORY	3006		F	lood Control		
1-4-3006-1010				Flood Control - Wages	5,415.97	2,461
1-4-3006-1110				Flood Control - Benefits	1,711.38	950
-4-3006-2010				Flood Control - Materials / Supplies	1,595.96	500
		Category Total			8,723.31	3,911
CATEGORY	3007		G	 rading/Scarifying		
1-4-3007-1010				Grading/Scarifying - Wages	12,141.91	20,301
1-4-3007-1110				Grading/Scarifying - Benefits	3,324.64	7,840
		Category Total			15,466.55	28,141
CATEGORY	3008		G	rass & Weeds		
-4-3008-1010				Grass & Weeds - Wages	991.55	5,844
I-4-3008-1110				Grass & Weeds - Benefits	323.80	2,257
-4-3008-2010				Grass & Weeds - Materials/Supplies	985.60	1,500
1-4-3008-3200				Grass & Weeds - Contracted Service	0.00	4,300
		Category Total			2,300.95	13,901
CATEGORY	3009		G	ravel Contract		
1-4-3009-1010				Gravel Contract - Wages	55.00	4,921
I-4-3009-1110				Gravel Contract - Benefits	18.59	1,901
I-4-3009-2010				Gravel Contract - Materials/Supplies	65,558.07	150,000
		Category Total			65,631.66	156,822
CATEGORY	3010		P	atching & Washouts		
I-4-3010-1010				Patching & Washouts - Wages	4,591.47	5,537
-4-3010-1110				Patching & Washouts - Benefits	1,511.05	2,138
1-4-3010-2010				Patching & Washouts - Materials/Su	6,385.02	53,000
		Category Total			12,487.54	60,675
CATEGORY	3011		S	anding/Salting		
-4-3011-1010				Sanding/Salting - Wages	21,772.97	25,530
-4-3011-1110				Sanding/Salting - Benefits	5,170.32	9,859
I-4-3011-2010				Sanding/Salting - Materials/Supplies	0.00	125,000
		Category Total			26,943.29	160,389
CATEGORY	3012		In	tersection Signs		
1-4-3012-1010				Intersection Signs - Wages	3,421.03	7,382

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Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
UND	1					
CLASS	4		E	XPENDITURE		
CATEGORY	3012		lr	ntersection Signs		
-4-3012-2010				Intersection Signs - Materials/Suppli	648.65	5,000
		Category Total			5,133.14	15,233
ATEGORY	3013		9	 11 Signs (Civic)		
-4-3013-1010				911 Signs (Civic Signs) - Wages	374.99	1,538
I-4-3013-1110				911 Signs (Civic Signs) - Benefits	90.76	594
-4-3013-2010				911 Signs (Civic Signs) - Material/Sı	172.00	1,000
		Category Total			637.75	3,132
ATEGORY	3014		C	entre Line Marking		
-4-3014-1010				Centre Line Marking - Wages	0.00	1,230
-4-3014-1110				Centre Line Marking - Benefits	0.00	475
-4-3014-2010				Centre Line Marking - Materials / Su	383.22	500
-4-3014-3200				Centre Line Marking - Contract Srvc	0.00	7,000
		Category Total			383.22	9,205
ATEGORY	3015		G	Guide Rails		
-4-3015-1010				Guide Rails - Wages	0.00	1,538
-4-3015-1110				Guide Rails - Benefits	0.00	594
-4-3015-2010				Guide Rails - Materials/Supplies	0.00	1,000
		Category Total			0.00	3,132
ATEGORY	3016		S	now Plowing		
-4-3016-1010				Snow Plowing - Wages	55,101.53	57,211
-4-3016-1110				Snow Plowing - Benefits	12,274.04	22,095
-4-3016-2090				Snow Plowing - Misc Supplies	0.00	3,000
-4-3016-3200				Snow Plowing - Contracts	305.28	900
		Category Total			67,680.85	83,206
CATEGORY	3017		S	treet Lights		
-4-3017-2010				Street Lights - Materials / Supplies	0.00	5,000
-4-3017-2610				Street Lights - Hydro	1,174.07	5,000
		Category Total			1,174.07	10,000
CATEGORY	3018		S	treet Maintenance		
-4-3018-1010				Street Maintenance- Wages	2,084.80	3,076
-4-3018-1110				Street Maintenance - Benefits	651.18	1,188
-4-3018-2010				Street Maintenance - Materials/Supr	704.69	2,000
-4-3018-3200				Street Maintenance - Contracted Se	2,396.45	6,000
		Category Total			5,837.12	12,264
CATEGORY	3019		C	atch Basins		
1-4-3019-2010				Catch Basins - Materials/Supplies	0.00	200
1-4-3019-3200				Catch Basins - Contracted Services	0.00	2,000

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Account Code	CC1	CC2	ССЗ	Account Name	Balance	Budget Amt - BV
FUND	1					
CLASS	4			EXPENDITURE		
CATEGORY	3019			Catch Basins		
		Category Total			0.00	2,200
CATEGORY	3020			Snow Fence/Culvert Thaw		
1-4-3020-1010				Snow Fence/Clvrt Thaw - Wages	540.49	1,230
1-4-3020-1110				Snow Fence/Clvrt Thaw - Benefits	172.44	475
1-4-3020-2010				Snow Fence/Clvrt Thaw - Materials	0.00	500
		Category Total			712.93	2,205
CATEGORY	3100			Roads Overhead		
1-4-3100-1010				Rds OHD - Wages	69,063.22	152,984
1-4-3100-1110				Rds OHD - Benefits	26,639.31	27,643
1-4-3100-1111				Rds OHD - PW wages to Waste Mn	0.00	-12,122
1-4-3100-2011				Rds OHD - Office Supplies	2,562.03	250
1-4-3100-2090				Rds OHD - Misc Supplies	0.00	500
1-4-3100-2240				Rds OHD - Mileage	639.31	0
1-4-3100-2255				Rds OHD - Courses & Training	5,486.63	9,500
1-4-3100-2260				Rds OHD - Dues & Memberships	1,199.68	1,360
-4-3100-2300				Rds OHD - Advertising	972.32	2,500
1-4-3100-2430				Rds OHD - Insurance	29,580.74	28,398
I-4-3100-2730				Rds OHD - Cell	800.00	1,680
1-4-3100-2740				Rds OHD - Radio License /Repeate	1,024.81	6,000
-4-3100-2742				Rds OHD - Standby Wages & On Ca	7,099.23	19,730
I-4-3100-2830				Rds OHD - Safety Equipment/Clothi	202.00	3,500
I-4-3100-2831				Rds OHD - Safety Boots	629.07	1,750
1-4-3100-2832				Rds OHD - Medical Expenses	0.00	660
1-4-3100-2837				Rds OHD - DZ/AZ License renewals	0.00	125
I-4-3100-2840				Rds OHD - License - Gravel Quarry	0.00	1,200
1-4-3100-3065				Rds OHD - IT / Subscriptions	3,103.68	4,000
1-4-3100-4800				Rds OHD - Bank Service Charges	49.42	0
1-4-3100-4900				Rds OHD - Interest on Debt	50,314.87	98,931
1-4-3100-7300				Rds OHD - Loan Principle Repayme	124,399.90	249,877
I-4-3100-8000				Rds OHD - Capital	93,957.83	911,000
1-4-3100-9002				Rds OHD - Trf to Reserves - Buildir	0.00	8,500
1-4-3100-9003				Rds OHD - Trf to Reserves - Vehicle	0.00	17,000
1-4-3100-9004				Rds OHD - Trf to Reserves - Equipr	0.00	17,000
1-4-3100-9006				Rds OHD - Trf to Reserve from Ros	0.00	37,000
1-4-3100-9011				Rds OHD - Trf to Weather Control C	0.00	20,000
		Category Total			417,724.05 	1,608,966
CATEGORY	3101			Stone Road Garage		
1-4-3101-1010				Stone Road Garage - Wages	5,056.80	7,690
1-4-3101-1110				Stone Road Garage - Benefits	1,795.29	2,970
1-4-3101-2016				Stone Road Garage - Parts & Suppl	1,497.77	4,000

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ADMASTOR AXA

Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV			
FUND	1								
CLASS	4		E	XPENDITURE					
CATEGORY	3101 Stone Road Garage								
1-4-3101-2017				Stone Road Garage - Bldg Supplies	54.93	0			
1-4-3101-2430				Stone Road Garage - Insurance	1,314.81	392			
1-4-3101-2501				Stone Road Garage - Equip Testing	333.26	500			
1-4-3101-2520				Stone Road Garage - Bldg Mtce/Re	186.39	5,000			
1-4-3101-2521				Stone Road Garage - Cleaning Serv	483.84	560			
1-4-3101-2601				Stone Rd Garage - Propane	5,072.06	6,000			
I-4-3101-2610				Stone Road Garage - Hydro	1,129.82	4,000			
I-4-3101-2720				Stone Road Garage - Telephone	958.09	1,500			
I-4-3101-3200				Stone Road Garage - Contracted S€	76.32	0			
-4-3101-8000				Stone Road Garage - Capital	95,370.70	410,000			
		Category Total			113,330.08	442,612			
CATEGORY	3102		В	 fromley Garage					
I-4-3102-1010				Bromley Garage - Wages	3,899.30	7,690			
I-4-3102-1110				Bromley Garage - Benefits	1,044.23	2,970			
1-4-3102-2016				Bromley Garage - Parts & Supplies	1,683.15	4,000			
1-4-3102-2430				Bromley Garage - Insurance	2,351.83	2,708			
-4-3102-2501				Bromley Garage - Equipment Testin	0.00	200			
-4-3102-2520				Bromley Garage - Bldg Mtce/Repair	477.67	4,000			
-4-3102-2521				Bromley Garage - Cleaning Services	184.32	560			
-4-3102-2600				Bromley Garage - Furnace Fuel	4,776.57	4,000			
-4-3102-2601				Bromley Garage - Propane	1,355.84	0			
-4-3102-2610				Bromley Garage - Hydro	1,476.04	3,000			
-4-3102-2720				Bromley Garage - Telephone	474.96	1,500			
I-4-3102-8000				Bromley Garage - Capital	9,601.36	10,000			
		Category Total		-	27,325.27	40,628			
CATEGORY	3103		R	Rds Overhead - Inspection					
I-4-3103-1010				Rds Overhead - Inspection - Wages	4,336.90	16,280			
I-4-3103-1110				Rds Overhead - Inspection - Benefit	1,340.24	5,831			
		Category Total			5,677.14	22,111			
CATEGORY	3200		V						
-4-3200-1010				V23 Excavator - Wages	155.66	3,691			
I-4-3200-1110				V23 Excavator - Benefits	51.95	1,425			
-4-3200-2430				V23 Excavator - Insurance	960.10	934			
-4-3200-2500				V23 Excavator - Repairs	43.84	7,000			
-4-3200-2622				V23 Excavator - Colour Diesel	1,415.33	10,000			
		Category Total			2,626.88	23,050			
CATEGORY	3201		V						
1-4-3201-1010				V28 Tandem - Wages	2,864.24	4,306			
				V28 Tandem - Benefits	954.28	1,663			

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Account: 1-3-???? To 1-4-????????

Period: 1 To 6



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Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FUND	1					
CLASS	4			EXPENDITURE		
CATEGORY	3201			V28 - WStar Tandem Plow Truck (2014)		
1-4-3201-2430				V28 Tandem - Insurance	815.97	840
1-4-3201-2500				V28 Tandem - Repairs	16,105.08	16,000
1-4-3201-2621				V28 Tandem - Clear Diesel	11,750.44	18,000
1-4-3201-2900				V28 Tandem - Licenses	2,989.50	2,990
-4-3201-3065				V28 - Tandem - IT Subscription	207.34	300
		Category Total			35,686.85	44,099
ATEGORY	3202			V29 - LS Tractor (2014)		
-4-3202-1010				V29 Tractor- Wages	1,253.65	615
-4-3202-1110				V29 Tractor- Benefits	367.81	238
-4-3202-2430				V29 - Insurance	154.61	133
-4-3202-2500				V29 Tractor - Repairs	835.96	3,000
-4-3202-2622				V29 Tractor - Coloured Diesel	324.92	1,000
		Category Total			2,936.95	4,986
ATEGORY	3203			V31 - Volvo Grader (2011)		
-4-3203-1010				V31 Grader - Wages	369.95	1,230
-4-3203-1110				V31 Grader - Benefits	91.49	475
-4-3203-2430				V31 Grader - Insurance	758.45	739
-4-3203-2500				V31 Grader - Repairs	425.28	10,000
-4-3203-2622				V31 Grader - Colour Diesel	4,001.86	15,500
		Category Total			5,647.03	27,944
ATEGORY	3204			V33 - WStar Tandem Plow Truck (2016)		
-4-3204-1010				V33 Tandem - Wages	3,324.84	3,076
-4-3204-1110				V33 Tandem - Benefits	1,157.11	1,188
-4-3204-2430				V33 Tandem - Insurance	816.00	840
-4-3204-2500				V33 Tandem - Repairs	9,067.84	15,000
-4-3204-2621				V33 Tandem - Clear Diesel	12,635.28	15,000
-4-3204-2900				V33 Tandem - Licenses	2,144.00	2,144
-4-3204-3065				V33 Tandem - IT Subscription	207.32	300
		Category Total			29,352.39	37,548
CATEGORY	3206			V35 - JBC Backhoe (2018)		
-4-3206-1010				V35 Backhoe - Wages	910.70	1,230
-4-3206-1110				V35 Backhoe - Benefits	310.04	475
-4-3206-2430				V35 Backhoe - Insurance	188.07	267
-4-3206-2500				V35 Backhoe - Repairs	7,384.66	8,000
-4-3206-2622				V35 Backhoe - Colour Diesel	2,424.75	5,000
		Category Total			11,218.22	14,972
ATEGORY	3207			V36 - Chevy 1/2 ton Silverado (2018)		
-4-3207-1010				V36 Chevy 1/2 ton - Wages	160.69	308

Fiscal Year: 2025

Account: 1-3-????-???? To 1-4-????-????

Category Total

CATEGORY

1-4-3212-1010

1-4-3212-1110

3212



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453.67

2,731.10

555.68

4,353

2,153 832

Period :	1	7-???? 10 1-4-? To 6		DIVERSE & UNITED		
Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FUND	1					
CLASS	4		E	XPENDITURE		
CATEGORY	3207		V	36 - Chevy 1/2 ton Silverado (2018)		
1-4-3207-1110				V36 Chevy 1/2 ton - Benefits	50.13	119
-4-3207-2430				V36 Chevy 1/2 ton - Insurance	522.66	260
I-4-3207-2500				V36 Chevy 1/2 ton - Repairs	1,494.54	500
-4-3207-2620				V36 Chevy 1/2 ton - Gasoline	2,537.39	1,000
		Category Tota	al		4,765.41	2,187
ATEGORY	3208		V	37 - JBC Backhoe (2018)		
-4-3208-1010				V37 BAckhoe - Wages	457.85	1,846
-4-3208-1110				V37 Backhoe - Benefits	137.02	713
-4-3208-2430				V37 Backhoe - Insurance	248.91	244
-4-3208-2500				V37 Backhoe - Repairs	532.22	4,000
-4-3208-2622				V37 Backhoe - Colour Diesel	1,743.05	3,500
		Category Tota	al		3,119.05	10,303
ATEGORY	3209		V	38 - WStar Tandem Plow Truck (2020)		
-4-3209-1010				V38 Tandem - Wages	3,157.42	2,461
-4-3209-1110				V38 Tandem - Benefits	1,044.68	950
-4-3209-2430				V38 Tandem - Insurance	816.00	840
-4-3209-2500				V38 Tandem - Repair Parts	6,928.00	15,000
-4-3209-2621				V38 Tandem - Clear Diesel	12,634.71	15,000
-4-3209-2900				V38 Tandem - Licenses	2,144.00	2,144
-4-3209-3065				V38 Tandem - IT Subscription	207.30	300
		Category Tota	al		26,932.11	36,695
ATEGORY	3210		V	39 - GMC 4x4 Sierra (2021)		
-4-3210-1010				V39 GMC Sierra - Wages	786.22	1,230
-4-3210-1110				V39 GMC Sierra - Benefits	249.44	475
-4-3210-2430				V39 GMC Sierra - Insurance	165.33	521
-4-3210-2500				V39 GMC Sierra- Repairs	5,119.34	3,500
-4-3210-2620				V39 GMC Sierra- Gasoline	3,861.49	8,500
-4-3210-2900				V39 GMC Sierra - Licenses	361.00	361
		Category Tota	al		10,542.82	14,587
CATEGORY	3211		V	40 - Ammamma 66" Roller (2021)		
-4-3211-1010				V40 Roller - Wages	159.90	615
1-4-3211-1110				V40 Roller - Benefits	55.54	238
I-4-3211-2500				V40 Roller - Repairs	84.53	2,500
1-4-3211-2622				V40 Roller - Colour Diesel	153.70	1,000

V41 - Western Star Tandem Plow (2022)

V41 Tandem - Wages

V41 Tandem - Benefits

Fiscal Year: 2025

Account: 1-3-???? To 1-4-???????

Period: 1 To 6



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Period :	1	10 6		Ť		
Account Code	CC1	CC2	ССЗ	Account Name	Balance	Budget Amt - BV
UND	1					
LASS	4			EXPENDITURE		
ATEGORY	3212			V41 - Western Star Tandem Plow (2022)		
-4-3212-2430				V41 Tandem - Insurance	815.99	840
-4-3212-2500				V41 Tandem - Repair Parts	11,344.64	6,000
-4-3212-2621				V41 Tandem - Clear Diesel	12,633.84	15,000
-4-3212-2900				V41 Tandem - Licenses	2,144.00	2,144
-4-3212-3065				V41 Tandem - IT Subscription	207.31	300
		Category Total			30,432.56	27,269
ATEGORY	3213			V27-2023 John Deere Grader		
-4-3213-1010				V27-2023 Grader - Wages	609.86	615
-4-3213-1110				V27-2023 Grader - Benefits	217.32	238
-4-3213-2430				V27-2023 Grader - Insurance	1,155.61	1,180
-4-3213-2500				V27-2023 Grader - Repairs	3,808.19	6,000
-4-3213-2622				V27-2023 Grader - Colour Diesel	4,779.80	15,000
		Category Total			10,570.78	23,033
ATEGORY	3214			CH#1 - Chipper (1999)		
-4-3214-2430				CH#1 Chipper - Insurance	80.56	79
-4-3214-2500				CH#1 Chipper - Repairs	0.00	500
-4-3214-2622				CH#1 Chipper - Coloured Diesel	0.00	500
		Category Total			80.56	1,079
ATEGORY	3215			S#2 Steamer (1996)		
-4-3215-1010				S#2 Steamer - Wages	51.60	0
-4-3215-1110				S#2 Steamer - Benefits	17.92	0
-4-3215-2500				S#2 Steamer - Repair Parts	0.00	500
-4-3215-2601				S#2 Steamer - Propane	0.00	500
		Category Total			69.52	1,000
ATEGORY	3216			Remediation		
-4-3216-1010				Remediation - Wages	3,873.49	9,843
-4-3216-1110				Remediation - Benefits	1,264.55	3,801
-4-3216-2010				Remediation - Materials	0.00	41,357
		Category Total			5,138.04	55,001
ATEGORY	3217			Culvert Replacement Program-Capital		
-4-3217-1010				Culvert Replace. t Prog - Wages	459.10	24,915
-4-3217-1110				Culvert Replace. Prog - Benefits	155.11	9,622
-4-3217-2010				Culvert Replace. Prog - Materials	19,477.68	20,464
-4-3217-3200				Culvert Replace. Prog-Contract Srvc	0.00	10,000
		Category Total			20,091.89	65,001
ATEGORY	3218			Capital Maintenance Program		
4 0040 4040				Capital Mtce Program - Wages	0.00	9,843
-4-3218-1010				Oapital Mice i Togram - Wages	0.00	0,040

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Account: 1-3-???? To 1-4-????????

Period: 1 To 6



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Period :	1	10 6		*		
Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
UND	1					
LASS	4			EXPENDITURE		
ATEGORY	3218			Capital Maintenance Program		
-4-3218-2010				Capital Mtce Program - Materials	0.00	2,664
-4-3218-3200				Capital Mtce Prgm - Contracted Ser	0.00	33,693
		Category Total			0.00	50,001
ATEGORY	3219			 V30 - 2015 Float Trailer		
4-3219-1010				V30 - 2015 Float Trailer - Wages	66.20	308
4-3219-1110				V30 - 2015 Float Trailer - Benefits	20.76	119
4-3219-2430				V30 - 2015 Float Trailer - Insurance	113.67	358
4-3219-2500				V30 - 2015 Float Trailer - Repairs	261.08	2,000
		Category Total			461.71	2,785
ATEGORY	3220			2024-34 Chevy 1-ton (2024)		
4-3220-1010				2024-34 Chevy 1-ton - Wages	723.45	923
4-3220-1110				2024-34 Chevy 1-ton - Benefits	221.04	356
-4-3220-2430				2024-34 Chevy 1-ton - Insurance	522.66	521
-4-3220-2500				2024-34 Chevy 1-ton - Repairs	1,820.14	2,000
4-3220-2620				2024-34 Chevy 1-ton - Gasoline	5,547.11	8,500
4-3220-2900				2024-V34 Chev 1 ton - License	361.00	361
-4-3220-3065				2024-34 Chevy 1 ton- IT Subscriptio	207.31	300
		Category Total			9,402.71	12,961
ATEGORY	3221			2025-V29 Tractor (2025)		
-4-3221-1010				2025-V29 Tractor - Wages	630.25	1,846
-4-3221-1110				2025-V29 Tractor - Benefits	180.81	713
4-3221-2430				2025-V29 Tractor - Insurance	216.67	134
-4-3221-2500				2025-V29 Tractor - Repairs	58.34	1,000
-4-3221-2622				2025-V29 Tractor - Coloured Diesel	466.95	3,000
		Category Total			1,553.02	6,693
ATEGORY	3222			2025-V36 1/2 Ton (2025)		
4-3222-1010				2025-V36 1/2 Ton - Wages	0.00	923
4-3222-1110				2025-V36 1/2 Ton - Benefits	0.00	356
4-3222-2430				2025-V36 1/2 Ton - Insurance	0.00	261
-4-3222-2500				2025-V36 1/2 Ton - Repairs	0.00	500
-4-3222-2620				2025-V36 1/2 Ton - Gasoline	0.00	4,000
		Category Total			0.00	6,040
ATEGORY	4000			Waste Management		
-4-4000-1010				Waste Management - Wages	28,748.39	60,746
4-4000-1110				Waste Management - Benefits	4,743.37	9,836
-4-4000-1111				Waste Management - Wages f/ PW	0.00	5,725
-4-4000-2016				Waste Management - Materials/Sup	17.98	1,000
4 4000 2010						

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Period: 1 To 6



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	•					
Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
FUND	1					
CLASS	4		ŀ	EXPENDITURE		
CATEGORY	4000		1	Waste Management		
1-4-4000-2240				Waste Management - Mileage	772.14	0
1-4-4000-2255				Waste Management - Training	0.00	500
1-4-4000-2260				Waste Management - Dues & Memt	0.00	310
1-4-4000-2300				Waste Management - Advertising	0.00	750
1-4-4000-2430				Waste Management - Insurance	854.84	1,411
1-4-4000-2730				Waste Management - Cell Phone	360.00	960
1-4-4000-2830				Waste Management - Safety Clthng	0.00	800
1-4-4000-2980				Waste Management - PIL landfill site	2,441.09	4,300
		Category Total			37,937.81	97,338
CATEGORY	4010			Recycling		
1-4-4010-2116				Recycling - Printing	0.00	1,000
1-4-4010-2301				Recycling - Promotion/Education	0.00	1,500
1-4-4010-3203				Recycling - Renfrew HHHW	0.00	1,500
		Category Total			0.00	4,000
CATEGORY	4011		I	 Recycling - Stone Rd		
1-4-4011-3200				Recycyling - Stone Rd - Contracted	17,019.31	12,000
		Category Total			17,019.31	12,000
CATEGORY	4012		 I	 Recycling - Douglas		
1-4-4012-3200				Recycling - Douglas - Contracted S ϵ	6,457.37	3,500
		Category Total			6,457.37	3,500
CATEGORY	4013		ا	 Recycling - Osceola		
1-4-4013-3200				Recycling - Osceola - Contracted Sε	6,538.44	4,000
		Category Total			6,538.44	4,000
CATEGORY	4020			Stone Road Transfer Station		
1-4-4020-1010				Stone Rd Trf Station - Wages	856.71	1,230
1-4-4020-1110				Stone Rd Trf Station - Benefits	156.79	475
1-4-4020-2520				Stone Rd Tfr Station - Build Mtce/Rε	0.00	2,000
1-4-4020-2600				Stone Rd Trf Station - Furnace Oil	401.90	1,249
1-4-4020-3200				Stone Rd Tfr Station - Contract Srvc	20,895.44	37,200
1-4-4020-4500				Stone Rd Tfr Station - Well test/Mon	2,116.87	14,714
		Category Total			24,427.71	56,868
CATEGORY	4025			Douglas Transfer Station		
1-4-4025-1010				Douglas Trf Station - Wages	2,380.05	308
1-4-4025-1110				Douglas Trf Station - Benefits	733.69	119
1-4-4025-2520				Douglas Tfr Station - Buildg Mtce/Re	0.00	1,500
1-4-4025-2601				Douglas Tfr Station - Propane heate	23.41	200
1-4-4025-3200				Douglas Tfr Station - Contracted Srv	6,007.44	23,000
1-4-4025-4500				Douglas Tfr Station - Well test/Monto	3,658.27	4,325

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Account :

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To 6 Period :

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Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV

FUND	1	
CLASS	4	EXPENDITURE

FUND		I			
CLASS	4	1	EXPENDITURE		
CATEGORY	4025		Douglas Transfer Station		
		Category Total		12,802.86	29,452
CATEGORY	4030		Osceola Landfill		
1-4-4030-1010			Osceola Landfill Stie - Wages	466.93	3,076
1-4-4030-1110			Osceola Landfill Site - Benefits	119.11	1,189
1-4-4030-2520			Osceola Landfill Site-Build Mtce/Rep	40.87	4,000
1-4-4030-2524			Osceola Landfill Site - Site Mtce	0.00	5,000
1-4-4030-2610			Osceolo Landfill Site - Hydro	264.68	850
1-4-4030-3200			Osceoloa Landfill - Contracted Servi	26,985.61	68,200
1-4-4030-3436			Osceola Landfill Site - Grinding	0.00	35,000
1-4-4030-3451			Osceola Landfill Site - Expansion	10,228.29	10,000
1-4-4030-4500			Osceola L'fill Site - Well Test/Monito	7,622.47	33,433
1-4-4030-7130			Osceola Landfill Site - Scale Maint.	0.00	500
		Category Total		45,727.96	161,248
CATEGORY	5000		Agriculture Veterinary		
1-4-5000-2240			Agriculture Veterinary - Mileage	0.00	100
1-4-5000-3090			Agriculture Veterinary - Compensation	0.00	750
		Category Total		0.00	850
CATEGORY	5001		Drains		
1-4-5001-2100			Drainage - Postage	0.00	100
I-4-5001-2255			Municipal Drains - Training	0.00	2,500
1-4-5001-2522			Tile Drainage	11,660.00	10,297
1-4-5001-2523			Municipal Drain Maintenance	590.21	25,000
1-4-5001-3600			Drainage Superintendant fees	0.00	1,000
1-4-5001-4910			Interest Paid on Tile Drain	418.67	0
		Category Total		12,668.88	38,897
CATEGORY	7000		Recreation Overhead		
1-4-7000-2326			REC OHD - Special Occassions	1,783.03	750
1-4-7000-2430			REC OHD - Recreation Insurance	4,825.05	4,773
I-4-7000-4500			REC OHD - Water Test'g - Douglas	0.00	500
1-4-7000-8000			REC OHD - Capital	0.00	50,000
		Category Total		6,608.08	56,023
CATEGORY	7100		Recreation User Agreements		
1-4-7100-7100			Douglas Recreation	10,000.00	10,000

CATEGORY	7100	Recreation User Agreements		
1-4-7100-7100		Douglas Recreation	10,000.00	10,000
1-4-7100-7101		ARC Recreation	0.00	10,000
1-4-7100-7103		Northcote Community Centre	0.00	1,650
1-4-7100-7104		BV Rec User Agreement	0.00	2,080
1-4-7100-7105		Cobden User Fees	0.00	2,000
1-4-7100-7106		Recreation User Fees - Renfrew	0.00	26,100

Fiscal Year : 2025

Account :

1-3-????-???? To 1-4-????-????

REPORT TOTAL

To 6 Period :



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Period :	1	To ₆				
Account Code	CC1	CC2	CC3	Account Name	Balance	Budget Amt - BV
UND	1					
LASS	4		E.	XPENDITURE		
ATEGORY	7100		R	ecreation User Agreements		
		Category Total			10,000.00	51,830
ATEGORY	8000		P	 lanning & Zoning		
-4-8000-2090				Planning & Zoning - Misc Supplies	14.91	0
-4-8000-2240				Planning & Zoning - Mileage	0.00	500
-4-8000-2300				Planning & Zoning - Advertising	0.00	750
-4-8000-3600				Planning & Zoning - Professional Fe	2,652.35	7,000
-4-8000-8000				Planning & Zoning - Capital	0.00	15,000
		Category Total			2,667.26	23,250
ATEGORY	8001		E-	cononmic Development		
-4-8001-2240				Economic Development - Mileage	0.00	250
-4-8001-2300				Economic Development - Advertising	315.18	0
-4-8001-2325				Economic Development - Public Rel	181.54	6,000
-4-8001-3200				Economic Development - Consultinç	0.00	2,500
-4-8001-3600				Economic Development - Prof. Serv	25,000.00	25,000
		Category Total			25,496.72	33,750
ATEGORY	8002		Li	brary		
-4-8002-1010				Library - Wages	373.31	0
-4-8002-1110				Library - Benefits	0.11	0
-4-8002-2240				Library - Mileage	25.94	0
-4-8002-2430				Library - Insurance	152.10	0
-4-8002-8002				Renfrew Library User Fees	160.00	500
-4-8002-8003				Bromley St. Michael Library	30,820.00	30,820
-4-8002-8200				Library - Clearing Account	5,518.00	0
		Category Total			37,049.46	31,320
ATEGORY	8050		Le	 evies		
-4-8050-8050				County of Renfrew Levy	832,393.00	1,545,714
-4-8050-8051				English Public School Levy	297,196.24	583,873
-4-8050-8052				English Separate School Levy	95,944.66	193,790
-4-8050-8053				French Public School Levy	3,825.38	7,517
-4-8050-8054				French Separate School Levy	8,047.00	15,820
		Category Total			1,237,406.28	2,346,714
		EXPENDITURE To	tal		3,482,776.25	8,422,302
	OPER	RATING FUND To	tal		3,023,844.32	0

3,023,844.32

0

Cheque Register - Summary-Supp.

 Vendor :
 0011722001 To YOUNJ001

 Trans. Date :
 01-Jun-2025 To 30-Jun-2025

 Cheque Date :
 01-Jun-2025 To 30-Jun-2025

Cheque No : All Batch No : All

Township of

ADMIASTION

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Date : Jul 30, 2025 **Time :** 3:36 pm

Bank: Bank: 1 To 9

Status : All Medium :

M=Manual C=Computer R=Credit E=EFT-PAP T=EFT-File

Batch No :	All						
Chq/Ref#	Cheque Date	Vendor	Vendor Name	Status	Batch	Medium	Amount
00000-0114	02-Jun-2025	HYDRO001	HYDRO ONE	Issued	137	E	149.27
00000-0115	01-Jun-2025	TELUS001	TELUS	Issued	138	E	101.08
00000-0117	02-Jun-2025	BELLC001	BELL CANADA	Issued	151	E	110.94
00000-0118	08-Jun-2025	RBC0001	RBC LIFE INSURANCE COMPANY	Issued	152	E	9832.15
00000-0119	15-Jun-2025	CRA001	CRA-CANADA REVENUE AGENCY	Issued	153	E	615.17
00000-0120	15-Jun-2025	EHT001	MINISTRY OF FINANCE EHT	Issued	153	E	1666.58
00000-0121	15-Jun-2025	OMERS001	OMERS	Issued	153	Е	14067.88
00000-0122	15-Jun-2025	RECEG001	RECEIVER GENERAL CANADA REVENUE	Issued	153	E	22877.72
00000-0123	04-Jun-2025	BMO001	BANK OF MONTREAL	Issued	160	E	4442.30
00000-0124	06-Jun-2025	BELLC001	BELL CANADA	Issued	161	E	229.04
	19-Jun-2025	HOLLT001	HOLLY TRANSPORTATION SERVICE	Cancelled	167	R	0.00
00000-0125	23-Jun-2025	BELLC001	BELL CANADA	Issued	169	E	387.23
00000-0126	24-Jun-2025	HYDRO001	HYDRO ONE	Issued	170	Е	1263.43
00000-0128	24-Jun-2025	BMO001	BANK OF MONTREAL	Issued	172	Е	637.08
00000-0130	24-Jun-2025	BMO001	BANK OF MONTREAL	Issued	183	Е	220.23
1025	04-Jun-2025	ABLIB001	ADMASTON/BROMLEY PUBLIC LIBRARY	Issued	154	С	1362.39
1026	04-Jun-2025	AJSTO001	A.J. STONE COMPANY LTD.	Issued	154	С	364.69
1027	04-Jun-2025	ANTRW001	ANTRIM WESTERN STAR INC	Issued	154	С	1245.86
1028	04-Jun-2025	BENSA001	BENSON AUTO PARTS	Issued	154	С	296.90
1029	04-Jun-2025	BLACK006	Black, Derek	Issued	154	С	120.00
1030	04-Jun-2025	BRIDG001	BRIDGECAST INC.	Issued	154	С	127.13
1031	04-Jun-2025	CAMBI001	CAMBUIM INC	Issued	154	С	3390.00
1032	04-Jun-2025	CAVAC001	CAVANAGH CONSTRUCTION LTD	Issued	154	С	1992.28
1033	04-Jun-2025	COUGK001	COUGHLIN, KELLY	Issued	154	С	120.00
1034	04-Jun-2025	DICKR015	Dick, Ron	Issued	154	С	320.00
1035	04-Jun-2025	EGANL001	EGANVILLE LEADER LTD.	Issued	154	С	84.75
1036	04-Jun-2025	FRAAM001	FRASER, AMY	Issued	154	С	119.74
1037	04-Jun-2025	GIESR001	GIESLER, RAY	Issued	154	С	120.00
1038	04-Jun-2025	HOLLT001	HOLLY TRANSPORTATION SERVICE	Cancelled	154	С	678.00
1038	04-Jun-2025	HOLLT001	HOLLY TRANSPORTATION SERVICE	Cancelled	167	С	-678.00
1039	04-Jun-2025	JP2GC001	JP2G CONSULTANTS	Issued	154	С	13078.88
1040	04-Jun-2025	KERRR001	KERR, RANDY	Issued	154	С	120.00

Cheque Register - Summary-Supp.

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Township of

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ADMASTION

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AP5100 Page: 2
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Chq/Ref#	Cheque Date	Vendor	Vendor Name	Status	Batch	Medium	Amount
1041	04-Jun-2025	LAS001	LOCAL AUTHORITY SERVICES LTD.	Issued	154	С	19306.40
1042	04-Jun-2025	MAYB0001	MAY, BRAD	Issued	154	С	120.00
1043	04-Jun-2025	MCHAM001	MCHALE, MICHAEL	Issued	154	С	120.00
1044	04-Jun-2025	MCHAW001	MCHALE, WILLIAM	Issued	154	С	261.12
1045	04-Jun-2025	MILLK001	MILLER, KIRK	Issued	154	С	80.00
1046	04-Jun-2025	MLES001	MUNICIPAL LAW ENFORCEMENT	Issued	154	С	762.75
1047	04-Jun-2025	OPP001	MINISTRY OF FINANCE O.P.P. PMT PRO(Issued	154	С	33618.00
1048	04-Jun-2025	PETRO001	PETRO-CANADA FUELS INC	Issued	154	С	1793.83
1049	04-Jun-2025	PURDJ001	PURDIE, JAMES	Issued	154	С	2065.44
1050	04-Jun-2025	QUADI001	QUADIENT CANADA LTD.	Issued	154	С	103.96
1051	04-Jun-2025	RENHH001	RENFREW HOME HARDWARE	Issued	154	С	60.36
1052	04-Jun-2025	RYANA001	RYAN, AMANDA	Issued	154	С	12.96
1053	04-Jun-2025	SCHUC001	SCHULTZ, CURTIS	Issued	154	С	120.00
1054	04-Jun-2025	UOVOB001	Upper Ottawa Valley Chapter Ontario Buildir	Issued	154	С	200.00
1055	04-Jun-2025	VISIS001	VISINSKI, STEVE	Issued	154	С	120.00
1056	04-Jun-2025	WALTE002	Walters, Heather	Issued	154	С	45.20
1057	04-Jun-2025	WHITE005	WHITE'S WEARPARTS LTD.	Issued	154	С	2772.23
1058	12-Jun-2025	BILME002	BILMER, LUCILLE	Issued	159	С	20.00
1059	12-Jun-2025	CANAD004	16000053 CANADA INC.	Issued	159	С	2661.15
1060	12-Jun-2025	COUGK001	COUGHLIN, KELLY	Issued	159	С	54.14
1061	12-Jun-2025	DEDOB001	DEDO, BRIAN	Issued	159	С	4862.39
1062	12-Jun-2025	OTTAW004	OTTAWA VALLEY TOURIST ASSOCIATIO	Issued	159	С	350.00
1063	12-Jun-2025	PT0000018	ONeil, Patrick Joseph	Issued	159	С	421.62
1064	12-Jun-2025	SCOTH001	SCOTT & SONS HARDWARE	Issued	159	С	11.30
1065	12-Jun-2025	SECUC001	THE SECURITY COMPANY	Issued	159	С	169.50
1066	12-Jun-2025	TFCUS001	TF CUSTOM SIGNS	Issued	159	С	62.15
1067	12-Jun-2025	WELCH001	WELCH LLP	Issued	159	С	22035.00
1068	30-Jun-2025	CONSP001	CONSIEL DES ECOLES PUBLI QUE DE L'I	Issued	167	С	1912.69
1069	30-Jun-2025	CONSS001	CONSEIL SCOLAIRE CATHOLI QUE DE D	Issued	167	С	4023.50
1070	30-Jun-2025	COUNR001	COUNTY OF RENFREW	Issued	167	С	445964.00
1071	30-Jun-2025	RCCSB001	RENFREW COUNTY CATHOLIC DISTRIC1	Issued	167	С	47972.33
1072	30-Jun-2025	RCDSB001	RENFREW COUNTY DISTRICT SCHOOL E	Issued	167	С	148598.12

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Batch No :	All						
Chq/Ref#	Cheque Date	Vendor	Vendor Name	Status	Batch	Medium	Amount
1073	19-Jun-2025	AALTT001	AALTO TECHNOLOGIES	Issued	168	С	124.02
1074	19-Jun-2025	ANTRW001	ANTRIM WESTERN STAR INC	Issued	168	С	1215.89
1075	19-Jun-2025	BARRD001	BARRON DISPOSAL SYSTEM	Issued	168	С	3616.00
1076	19-Jun-2025	BEARC001	BEARCOM CANADA CORP C/O T45502	Issued	168	С	203.40
1077	19-Jun-2025	BENSA001	BENSON AUTO PARTS	Issued	168	С	265.86
1078	19-Jun-2025	BRAND001	BRANDT TRACTOR	Issued	168	С	567.94
1079	19-Jun-2025	BROMF001	BROMLEY FARM SUPPLY	Issued	168	С	67913.76
1080	19-Jun-2025	BUSKE001	BUSKE OFFICE EQUIPMENT	Issued	168	С	229.25
1081	19-Jun-2025	CAVAC001	CAVANAGH CONSTRUCTION LTD	Issued	168	С	1554.78
1082	19-Jun-2025	COUNR001	COUNTY OF RENFREW	Issued	168	С	949.91
1083	19-Jun-2025	DALEC001	DALE, CATHY	Issued	168	С	53.86
1084	19-Jun-2025	EMTEE001	EMTERRA ENVIRONMENTAL	Issued	168	С	6283.21
1085	19-Jun-2025	GREAT001	TOWNSHIP OF GREATER MADAWASKA	Issued	168	С	4996.67
1086	19-Jun-2025	JANOT001	JANOTEC	Issued	168	С	1163.90
1087	19-Jun-2025	LAS001	LOCAL AUTHORITY SERVICES LTD.	Issued	168	С	556.55
1088	19-Jun-2025	LEACK001	LEACH & KUEHL PROFESSIONAL CORPC	Issued	168	С	40.00
1089	19-Jun-2025	PETRO001	PETRO-CANADA FUELS INC	Issued	168	С	2016.00
1090	19-Jun-2025	QUADI001	QUADIENT CANADA LTD.	Issued	168	С	109.61
1091	19-Jun-2025	RENFP001	RENFREW PRINTING LTD.	Issued	168	С	90.40
1092	19-Jun-2025	RYANA001	RYAN, AMANDA	Issued	168	С	80.00
1093	26-Jun-2025	COULD001	COULAS, DWAYNE	Issued	179	С	120.00
1094	26-Jun-2025	CURRS001	CURRENT SYSTEM SERVICE INC.	Issued	179	С	370.08
1095	26-Jun-2025	GIESR001	GIESLER, RAY	Issued	179	С	132.48
1096	26-Jun-2025	HOLLY002	Holly's Garage & Towing	Issued	179	С	678.00
1097	26-Jun-2025	RCCTA001	RENFREW COUNTY CLERKS AND TREAS	Issued	179	С	429.60
1098	26-Jun-2025	SCOTH001	SCOTT & SONS HARDWARE	Issued	179	С	8.48
1099	26-Jun-2025	WEBE001	WEBER, LEVI	Issued	179	С	180.80
1100	26-Jun-2025	WWREG001	TOWNSHIP OF WHITEWATER REGION	Issued	179	С	77.53

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Chq/Ref#	Cheque Date	Vendor	Vendor Name	Status	Batch	Medium	Amount
Total Co	mputer Paid :	857,570.74	Total EFT PAP :	56,600.10		Total Paid :	914,170.84

Total Manually Paid: 0.00 Total EFT File Transfer: 0.00

Township of Admaston/Bromley

477 Stone Road, R.R. #2 Renfrew, ON K7V 3Z5

E-Mail Address - info@admastonbromley.com

613-432-2885 Stone Road Office 613-432-4052 Fax

613-432-3175 Stone Road Garage 613-646-7918 Cobden Road Garage

REPORT

Date: August 7, 2025

To: Council

From: Kelly Coughlin

Re: Landfill Expansion – Total Cost Report

Background:

In August 2023, the township submitted their application for the expansion of the Osceola Landfill to the Ministry of Environment, Conservation and Parks (MECP). MECP added the requirement for the township to conduct another Indigenous Consultation s the previous one was completed in 2012/2013. That consultation was related to the expansion north of the existing landfill. The new consultation requirement was for the southwest side of the landfill.

The land was purchased in April 2024.

In June 2024 the township received confirmation that the application to expand the landfill had been approved.

Since 2022, costs associated with the landfill expansion have been accrued until the landfill expansion was completed in 2024.

Discussion:

n/a

Financial Implications:

Each year the budget included a provision of \$50,000 towards the Osceola Expansion. In March 2024, Council directed staff to finance the purchase of the land through discretionary reserves. The total project came in higher than anticipated and the cost overrun were financed as follows:

CWIP Reserve \$16,917.64

Capital Reserve \$224,213.65 Total \$291,131.29

Outlined below is a summary of the total costs incurred related to the Osceola Landfill Expansion:

Vendor	Desciption	Total
ALGONQUIN OPPORTUNITY (NO.2) CORPORATION Total	Archeological Monitoring	3,977.11
BANK OF MONTREAL - M/C Total	Registered Letter	11.01
CAMBIUM INC Total	Project Management	73,427.77
CAMERON HERITAGE CONSULTING Total	Archeological Asssessments	6,517.63
CONSEIL DE LA NATION HURONNE-WENDT Total	Archeological Asssessments	4,585.79
CUNNINGHAM, SWAN, CARTY, LITTLE & BONHAM LLP;R	Legal Fees	5,980.85
EGANVILLE LEADERS Total	Advertising - Notice of Expropriating Land	1,666.83
JP2G CONSULTANTS INC Total	Monitoring / MECP Consultation	2,367.24
KASPRZAK SURVEY Total	Survey	10,176.02
LANDSHARK DRILLING INC Total	MOE Well Tag Cluster Installation	27,319.08
MINISTRY OF FINANCE Total	MECP Application Fee	22,700.00
OSCEOLA LF EXPANSION PURCHASE Total	Land Purchase incl. legal & disbursements	121,717.14
RIVINGTON ASSOCIATES Total	Appraisal Fee	4,579.21
SHORE - TANNER & ASSOCIATES Total	Appraisal Fee	6,105.61
Grand Total		291,131.29

People Consulted:

Jennifer Charkavi - CAO/Clerk

Recommendation for Council:

BE IT RESOLVED THAT Council accept the Landfill Expansion – Total Cost Report as information.

Township of Admaston/Bromley 477 Stone Road, R.R. #2 Renfrew, ON K7V 3Z5

E-Mail Address - info@admastonbromley.com

613-432-2885 Stone Road Office 613-432-4052 Fax

613-432-3175 Stone Road Garage 613-646-7918 Cobden Road Garage

REPORT

Date: August 7, 2025

To: Council

From: Jennifer Charkavi

Re: Heritage Designation Request

Discussion:

The Rosebank Cemetery Board has put forth a request to designate the church that is on the property as a Heritage Building.

There is a process that must be followed when designating a property as heritage. Council must decide first if they are proceeding with the designation or not.

There are factors that can affect a municipality approving a heritage designation. The property, once designated may have difficulties with renovations, specifically for accessibility purposes. Difficult to maintain as each project must ensure that the heritage aspects are not affected. High costs as heritage buildings do not necessarily have all of the energy efficiency as new builds.

This building in question is within a cemetery and should the cemetery become the responsibility of the municipality, the building then becomes municipal property.

Township staff are recommending that a consultant be hired to review the heritage elements of the church and prepare a report on the cultural aspects that should be protected and to prepare the by-law for Council consideration. Staff are also recommending that the Rosebank Cemetery Board must pay for the consultant.

The building itself is not large; however, it should not matter on the size of the building, each heritage request on private property should follow the same process as identified in this report.

Financial Implications:

Staff reached out to a former clerk who had completed a Heritage Designation in the County of Renfrew and they assisted with providing staff with an understanding of the complexities of a Heritage Designation request and the name of a consultant who would review the request and provide a quote for the review and to draft the required by-law.

Staff met with the Consultant and they have reviewed the request and provided a quote of \$6500 + applicable taxes for the review and drafting of the required by-law.

People Consulted:

Kim Bulmer, Retired Clerk Marcus Letourneau, President M.R. Letourneau & Associates Inc.

Recommendation for Council:

BE IT RESOLVED THAT Admaston/Bromley Council receive the Heritage Designation Request from the Rosebank Cemetery Board;

AND BE IT FURTHER RESOLVED THAT Admaston/Bromley Council requests that the Rosebank Cemetery Board agree to paying for a consultant to review and provide a report on the cultural aspects and prepare a by-law, if necessary, for consideration by Admaston/Bromley Council.

Proposal to
Admaston-Bromley Township
Municipal Council
to request the
Heritage Designation of
Rosebank Church
by the
Rosebank Board of Directors

'Our cultural heritage is what we value from the past, and what we want to preserve for future generations.'

Description of Property: Rosebank Church, 288 Haley Rd, Haley Station, ON.,

K0J 1Y0

Lot 1, Concession 22

Admaston- Bromley Township, Renfrew County.

Lat: 45.5245° (45° 31' 28") Lon: -76.7825° (-76° 46' 56")

Statement of Cultural Heritage Value or Interest:

Rosebank's cultural heritage lies with it's designation as the very first religious sanctuary in Admaston-Bromley township, then just Admaston Township. It stands as the earliest and most picturesque example of primitive architecture in all of Renfrew County. Significantly, the plans, implementation of same and construction was completed by forefathers whose names still populate the county today, Brisco, Bromley, Crozier, and MacLean to name a few. The names on the gravestones in the cemetery around the building are a further indication that not only the building, but the land it stands, on are exemplary examples of the cultural heritage carved out by the founding families of Admaston-Bromley Township. That these families still call Renfrew County home after 179+ years is remarkable.

As well, the individuals who contributed to the work of maintaining and advancing this early spiritual community, which was vital to the cultural heritage of Renfrew County at the time, are ones whose bloodlines still run strong here. Rev. A Knapp was the first Methodist minister, while J.M. Briscoe was Chairman of the Official Board, which is the governing body of the church. The Sunday School was run by Mr. Henry Hutton, Elisha Francis and Xavier Plaunt. The congregation included early settlers from the areas of Haley's, Rosebank and Bromley, their names including Peever, Jackson, Luker, Atkinson, Webster, Halpenny and Bishop.

Designation of Heritage Attributes:

Earliest available records indicate that the Rosebank Methodist church was built in approximately 1846 (making it 179 years old) in Admaston Township on an area of Henry Hutton's farm, on land he donated. The great pine logs which form the building walls were donated by Rowland Crozier, however the building was not completed until some ten years later when a roof was laid. Before that time, worship services were held with only the shade of the tall pine trees that surrounded the walls as protection from the elements. The original shingles were hand shaven by Mr. Hanawel and Miles Brown and protected the church until a galvanized roof was installed to preserve the structure's integrity. The original pews were simple wooden planks laid on sturdy blocks of wood. Over many years, the building has been lovingly maintained by volunteers who work diligently to preserve it's history. The founding neighbours in the community had responded to the need for a spiritual gathering place and came together to build the church. Peter Dalgleish, a Scottish immigrant, named the church "Rosebank" after the

ship on which he had crossed the ocean from Scotland. In 1925, with the union of some Presbyterian, Congregational and Methodist congregations in the township, the United Church of Canada was formed. The congregation of the Rosebank church migrated to other congregations and the Rosebank Methodist Church was decommissioned and worship services ended. While presently not in use as a Sanctuary, it is the first, and now the last, designated structure of it's kind in Renfrew County, and as such, the Board of Directors of Rosebank believe it is worthy of the heritage designation, as that:

- 1. Recognizes the importance of a property to the local community;
- 2. Protects the property's cultural heritage value;
- 3. Encourages good stewardship and conservation, and
- 4. Promotes knowledge and understanding about the property.

 "The Ontario Heritage Act." 2021.

Board of Directors

President: Brian Stokes
Secretary: Joanne Thom
Members: Daryl Thom

Trevor Stokes Kim David Mary Crozier Adam Brisco Garry Brisco Jason Smith

Ingrid Condie-Bennett

irst church in county

known — Canada.

One hundred and twelve years graves lend a sharp contrast to the state that 1839 is a nearer fact when later, those who travel Highway II green end brown picture. The first it is considered that it was not see a vivid reminder of the his-pine logs were shellacked sometime until 1829 that one Coyne, a cortical journey. The smallpin cuts through the years and a lough lumber jobber, was the first white through the crick forest a few of yellow on the gable ends of the man to settle in Renfrew He was miles east of Haley's Station light-roof blend nicely.

(continued on page 12) bank Church Est, 1846". Inside the as the earliest and the most Mathodist the carly 1809's, a hardy gate stands the brown log church picturesque bit of architecture in spiritual to boarded his sailing vessel tion to another for 160 years or listory of the Rosebank Women's you can Rosebank" and headed out more, the ocean into the great un- In the north kept plot of land state, and he great un- In the north kept plot of land state, and he great un- In the north kept plot of land state, and he great un- In the north kept plot of land state, and he described the country to the ocean into the great un- In the north, kept plot of land state, and he described the country to the ocean into the great un- In the north, kept plot of land state, and he observent it stands the state of the country to the ocean into the great un- In the north, kept plot of land state, and he observent it stands the most way to be successed to the ocean into the great un- In the north, kept plot of land state and he observent it stands the most way to be successed to the country to the ocean into the great un- In the north, kept plot of land state and he observent it stands and he observent it stands and he can be successed to the country to the ocean into the great un-

orates a trip across the Atlantic in the early 1800's by Peter Dalgleish and his family in his sailing vessel, "The Rosebank."

Photo by Ruth Gordon The Rosebank Church, the first church built in Renfrew County, commem-

ted by Christopher Crozier but blocks, Nothing day. In fact

and the Women's Institute, the iresses and big straw hats. dasses in their homespun son received by Miss Anni-scoe of Northcote and Mrs merva Webster, RH 3, Renfrew children were not con-with eliquette in carefree

Eishn Francis and the latter carried on the responsibilities of superintendent for many years. Outstanding leaders of the school were Miss Eizar Hutton and John Hutton. Others who participated in the work were John Peever. George Jackson, William Luker and John Atkinson. The first Sunday organized by Henry School was

co-operation between the two early congregations. For several years, Xavier Plannt of Northcole was superintendent of the Boss-benk Sunday School. J. Curtis, a co-speciation between the two terings began holding services in Years passed and the Presby-

Probyterian, was an active sup-porter of the church.

The first minister was Rev. A.

Krupp who was followed by Rev.
Carl Altun, Both men had their homes in Reinfrew and travelled to their pastorate on horseback or at times, on foot, will the parten-age was built at Haley's Station. Their congregations inch J. M. Briscoe

that they

church union was Rev. Mr. Boom

Following union in 1925, Rose

Our Loved Ones at Rosebank

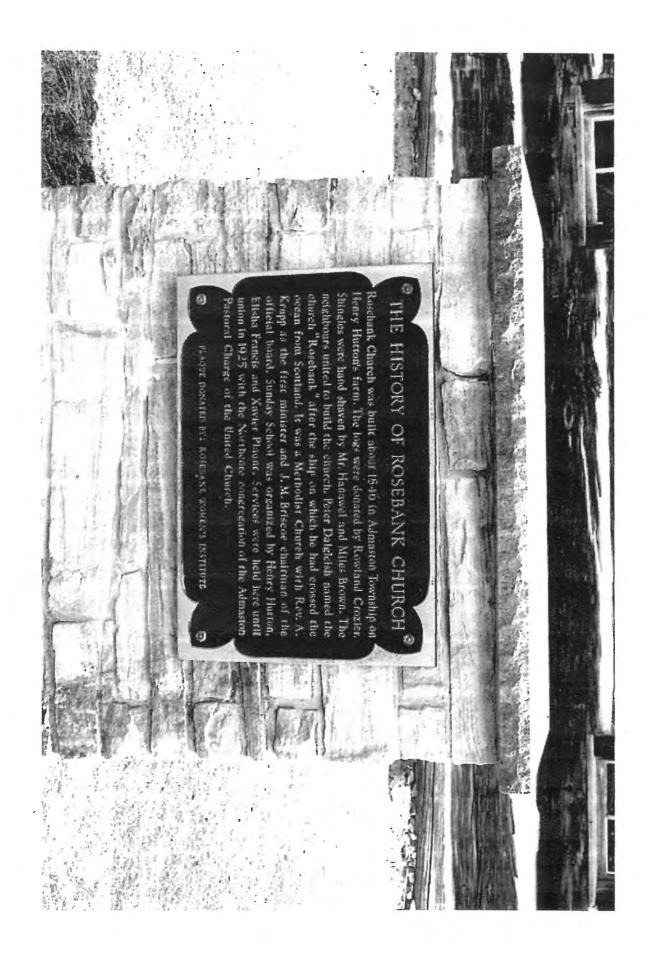
We have gathered at the Church at Rosebank
Where our ancestors once knelt to pray
We come to pay tribute to our fathers
Who toiled in this land all day

We have come back to the land of our fathers
To the church fashioned by pioneer hands
Watch for awhile before the old alter
Rest for a while where the old oak stands

We have come to the church and the graveyard behind it Which God has touched with his eternal peace Francis, Ferguson, Guiney, Briscoe, and Kaddatz Toner and Dunlop, where life's labours cease.

McMullen, Dewar, Smith, Fricker and James, Peever, Phillips, and Simpson, all lying in rest, Stone after stone revealing their names Waiting their call to the courts of the blest

We've come back to the Church of our Fathers
Where the old oak shades their eternal rest
May we long remember also our mothers
Who we cherish in our hearts as the best.





Rosebank Church

by Harry Hinchley Photo: Ontario Government
Rosebank is the last of Renfrew County's log churches. At one

time all the churches were built of logs but the others havelong ago disappeared. Rosebank Church was established in 1846 before even a village was thought of at Renfrew.

The old building is still in close to original condition. The roof and the gable ends have been replaced and some years ago the logs were treated with shellac. But the general appearance has never been altered.

The interior is much the same as when the church was used. The old plaster is still on the walls. The pulpit stands at the front behind a low railing and in the corner is the old reed organ. The hand-made pine benches are still in place on the old plank floor. But gone is the box stove that at one time was the source of heat.

The church was regularly used until 1925. Rosebank was a Methodist Church and after Church Union services were discontinued. Then there was even talk of tearing the building down and selling the logs.

This idea did not go with the descendants of the pioneers who had given the land, cut the logs and built the church. They said the church had to be preserved. So a committee was set up to look after it. The committee has done a good job in caring for the property. Repairs have been made as required and the old building has never been neglected.

The church was used as late as 1973. That year when a sudden rain came on Decoration Day at the cemetery the service was held in the old church much the same as used to be done on Sunday afternoons of long ago.



Designation by Municipal Bylaw

(Section 29 of the Ontario Heritage Act)

Designation proposed Council consults with MHC Council Decision: Property not designated Proceed with designation? Notice of Intention to Designate: 1. Served on property owner 2. Served on OHT 3. Published in newspaper Objection referred to Notice of Hearing Objections within 30 days? CRB for hearing published in newspaper CRB hearing and report Council Decision: Council considers CRB Report Designate property? Designating bylaw passed & Notice of Withdrawal of registered on title Intention to Designate: 1. Served on property owner 2. Served on OHT 3. Published in newspaper Notice of Designation: 1. Served on property owner 2. Served on OHT 3. Published in newspaper Property not designated Property listed on municipal and provincial registers Property listed on Canadian Register

Township of Admaston Bromley 477 Stone Road, R.R. #2 Renfrew, ON K7V 3Z5

E-Mail Address—info@admastonbromley.com

613-432-2885 Stone Road Office 613-432-4052 Fax

613-432-3175 Stone Road Garage 613-646-7918 Cobden Road Garage

<u>REPORT</u>

Date: July 28 2025 To: Council

From: Fire Chief Bill McHale

RE: Update Report – April to July 2025

Background:

This report is for information purposes only, to provide an update of Fire Department and members for the months of April, May, June and July 2025

- Douglas fire has moved from the first quarter of a soft launch with the Central Ambulance Communication Centre, CACC, into full services for call alert and call dispatch. Although we did incur some unforeseen costs in regards to radios and programming, the system in a definite upgrade. Responders are getting much more concise information when on route to a call, and the logistic printouts after the call are time stamped and recorded making the follow up incident reports that much more precise.
- 2. Six members of the Department spent a day travelling in Eastern Ontario looking at four new fire hall builds. We visited Maitland, Prescott, Toledo and Lombardy. All beautiful buildings with plenty of new design and technology in regards to how new fire hall's could be laid out with the incoming protocols of cancer prevention zoning.
- 3. Attended a Farm Safety Day at Ottawa Valley Farm to Fork and talked to high school students from area schools regarding fire and farm safety.
- 4. Douglas Fire completed a joint training exercise, where we invited Horton Fire Department to the farm of Travis and Melanie Smith on Foy Road. Here with the assistance of Travis and his grain trailers, we were able to demonstrate in real life situation our grain extraction tool.
- 5. We are fully immersed in our Fire Fighter 1 certification training. Our learning contract was delayed at the beginning, due to backlogs at the OFM, but all members are now beyond the 50% complete mark of the on-line portion and we are continuing practical evolutions at regular meetings and specially organized week-end practices.

- 6. CAO Charakvi and I had had many discussions with several specialists from the communication industry in relation to the replacement of the tower currently located at the Douglas Fire Hall. Several options have been presented to us, and we are grateful to these companies for their insight and patience with us.
- 7. All members of Douglas Fire have attended and passed the Accessibility Training required by the province.
- 8. Douglas Unit 9658 was away for major repairs on what are referred to as manifolds, which are main components of the pump operations. The truck is back in the hall and pumping perfectly. Battleshield Industries of Vars ON, not only completed the work, but were able to supply a rental pumper unit while ours was down.
- 9. Several members attended the Admaston Fun Fair with 2 units from our hall as well as some fire safety handouts and give a way's.
- 10. Fire drills were completed at all 3 of the schools in our area.
- 11. Firefighters have each received personal lapel flashlights. This was an ask, from our firefighters last year, in particular those on the initial entry teams. This was a budgeted item as well.
- 12. Douglas Fire once again attended the Canada Day celebrations hosted by Admaston Bromley in Douglas.
- 13. Annual pump testing was done on Douglas units 9658 and 9735. Both apparatus passed their performance testing.
- 14. Twelve members of the Department attended and passed their First Aid and CPR re-certification.
- 15. We have 2 new members who have joined with us to complete the FFI certification
- 16. Our new turnout gear has arrived. Of these, 3 were a capital purchase and 2 were funded through the Cancer Prevention Grant.
- 17. New 2 ½ hose been ordered to replace aging inventory on the trucks. 10x50 foot lengths

- 18. Douglas Fire recently received another shipment containing 72 FREE Smoke Detectors form Embridge Gas and Kidde. This is 2 years in a row we have been successful in obtaining this great gift through such generous companies. A large thank you from us.
- 19. An ADHOC Committee has been partially formed as directed by council to begin planning and reviewing possible refurbishment/addition at the existing fire hall, a new build of a fire hall, or possibly a new location along with a new build. All this comes of the heels of what the OFM is deciding with the cancer prevention awareness.
- 20. A new, used base radio has been installed in the fire hall. Previous to this we had no radio contact with the CACC from the fire hall. Only the units on route to a call were able to receive updates from CACC, then, would be switching channels to converse with the fire hall. A cost of \$2600 for the radio and installation.
- 21. The Douglas Fire Department will be taking advantage of training opportunity with the OFM in conjunction with other Renfrew County Fire Departments as the Multi Level Fire Training Unit (MLFTU) will once again be made available to our members. North Algona Wilberforce Fire Department will be hosting the MLFTU at the Eganville Race Track the last week of October. Douglas Fire is booked from 15:00-19:00 hours on Friday October 31st. This will allow us not only an unbelievable training exercise, but an opportunity to complete some of the extremely harder JPR's of the firefighter certification which need to happen under live fire training to be completed. Any members of council or the public that would like entry onto the grounds to spectate, must let the Chief know before October 10th.
- 22. A thank you to the Renfrew Fire Department and its members who continue to maintain the cleanliness of our turnout gear. After any major incident, and sometimes the small ones can be nasty, our gear must be cleaned. We do not have the proper washing machine, nor the room for one, so Renfrew Fire generously does our laundry. Thank you to Chief Guest and his crew.

Upcoming Events

- --Continuation of Certification Contract
- --AS&E Testing October 25th
- -- 1 drivers test for DZ endorsement
- --First Responders Olympics
- --Fit Testing for several members
- --Truck Safeties
- --Multi Level Fire Training Unit
- --purchase of 2 new nozzles
- --Looking in possibility to purchase a demo Thermal Imaging Camera
- --Pricing new battery operated positive pressure ventilation fan

- --Hopefully see second stage of the OFM cancer prevention grant
- --New forestry coveralls to replace worn and supply for new members

Financial Implications:

Other than the repairs to Douglas 9658 all costs have been budgeted for.

A slight overrun on communication costs, which is something we may have to look into making a change to in the next budget.

Recommendation To Committee:

BE IT RESOLVED that Council receive the Fire Chiefs report as information.

DOUGLAS FIRE DEPARTMENT MONTHLY REVIEW

April 2025:

Date 3	Description 441 McMahon Rd tree on hydro line	Total Hours
4	** 48 Gurlitz Rd fire alarm signal	6
4	Return rental truck and redress unit 9658	42
5	Fire hall tours	54
6	Weekly truck checks	6
11	Unit 9658 to Renfrew for tires	2
12	Weekly truck checks	6
13	297 Lynch Rd grass/brush fire	39
14	Fire Practice checking dry hydrants turnout gear measuring	32
16	60 Bonnechere Road portable pump and grass	14
19	Weekly truck checks	25
21	Fire Practice checking equipment placement on trucks	14
27	Weekly truck checks	6
28	Fire practice 9875 slide tray malfunction	22
May 20	D25:	
4	Truck checks	6
5	Practice Grain Extractor training Horton Fire Attended	41
7	5189 Queen St lock door rescue	16
8	155 Kunopaski Road false alarm	8

10	Weekend truck checks	6
12	Certification prep online setup	28
16	Highway 132 @ South McNaughton MVC	18
18	Weekend Truck Checks	8
19	**172 Visutski Lane House fire	64
24	4758 Highway 132 MVC	22
25	Weekend truck checks	6
27	Certification meeting Rob Painchaucd on safety plans and tips	34
31	Weekend truck checks	6
31	**454 Priest Camp Lane water rescue	30
June 20	025:	
2	Certification practical JPR's	28
3	159 Swamp Road foul smell in residence	10
5	**534 Priest Camp Lane fire alarm signal	16
5	Cobden Road @ Barr Line MVC	18
7	Weekend truck checks	21
9 and 10	Accessibility Training	56
10	Highway 60 @ Butler road MVC	18
12	18 McMahon Road vehicle fire	20
12	Admaston Fun Fair	9
13	53 Scotchbush Road stand-by for Bonnechere Valley Fire	18
15	Weekend truck checks	12
16	Certification training and water shuttle 9735	28
18	Breen Line MVC	12
21	Certification training	40

22	**547 Buldger Road out building and pool shed	36
22	602 McPeak Line garage and machine shed	96
22	Maintance 9658 on-spot chains	4
22	**48 Gurlitz Road false alarm	20
26	Highway 132 @ Hass Road MVC	26
29	Weekend truck checks	12
29	Butler Road @ South McNaughton grass and brush	12
July 2	025:	
3	**48 Gurlitz Road false alarm	6
6	2483 Highway 132 smoke alarms going off	14
6	896 Mount St Patrick Road MVC	22
7	Certification fire extinguishers	38
10	Certification Ladders	40
12	Weekend truck checks	10
14	Certification 9659 to river	28
15	OHS soccer night	6
16	Highway 132@ Opeongo Road MVC	18
18	5210 Queen Street burn complaint	8
18	**Bulger Road @ Cold Creek MVC	17
18	2890 Highway 60 MVC	26
19	First Aid training	72
20	Weekend truck checks	6
26	Weekend truck checks	8
26	Maintenance 9875	11
27	Cobden Road @ Camley Lane hydro lines down and grass fire	18
28	633 Pucker Street tree on hydro line hanging low over road	16

28	Certification	ropes	and knots	second team built doll house	30
29	61 Kunopaski R	Road	lift assist		12

^{**} indicates first response agreement with North Algona Wilberforce

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613-432-2885 Stone Road Office 613-432-4052 Fax

613-432-3175 Stone Road Garage 613-646-7918 Cobden Road Garage

REPORT

Date: August 7, 2025

To: Protective Services Committee

From: Jennifer Charkavi

Re: Douglas Fire Hall Communications Tower

Background and Discussion:

The Protective Services Committee and Council have provided direction for the Fire Chief and the CAO/Clerk to conduct a needs analysis of renovating or building a new Fire Hall. An Ad-Hoc Committee has been approved and staff hope to have their first meeting in the fall of 2025.

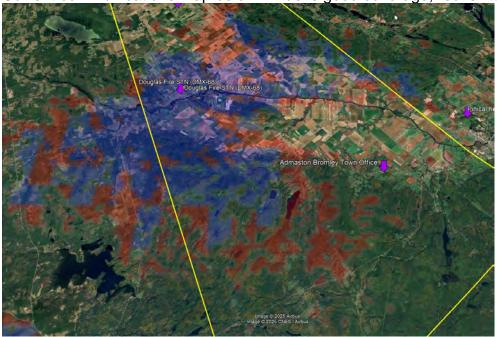
Additionally, the Township has been able to have their scope change approved for the Fire Hall Expansion ICIP Covid Grant that was to see a new Fire Hall Garage built. As Committee is aware, the grant funding would not build a garage expansion and the current Communications Tower was in the way of any new proposed building. The remainder of the funds can now be spent on the Communications Tower. It is important to note that with the signing of the new amended TPA for the ICIP Covid Grant at the last council meeting, the Township has now received monies that was spent on site preparation and drawings in 2022/2023.

Staff have been working with many communications experts and now know that the Tower can be anywhere and does not have to be adjacent to the Fire Hall. Currently, our Volunteer Firefighters radios are only viable in a very limited area, they have to rely on cellular for most of their communications. This has been an ongoing issue for many years. Now, with the proposed relocation of the tower, and a taller tower, the radio communications will be much better.

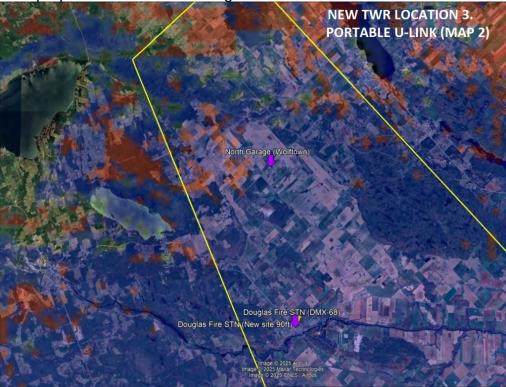
Studies were conducted to find the best township owned property for the tower to be placed. The North Garage (Cobden Road) and the Township Office locations were reviewed. However the property at the Douglas Fire Hall still provides the best coverage for a tower, with better coverage up higher on the closed-up road allowance.

The rental tower option was also reviewed.

Current communications map below. Blue is good coverage, red is little to no coverage.

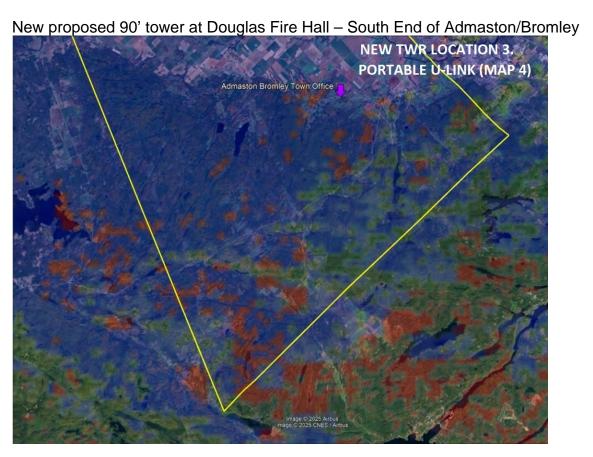


New proposed 90' tower at Douglas Fire Hall – North End of Admaston/Bromley

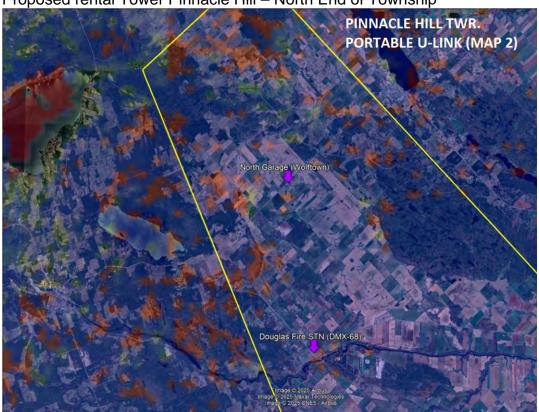


New proposed 90' tower at Douglas Fire Hall – Douglas

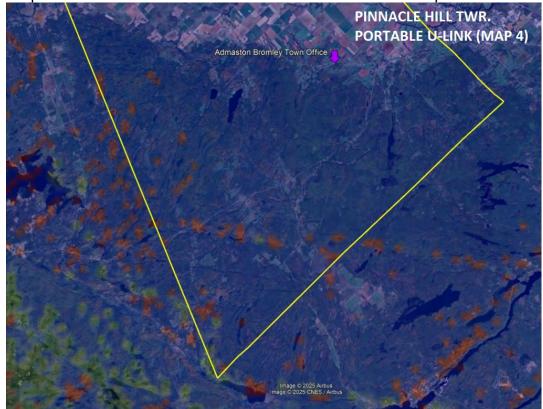




Proposed rental Tower Pinnacle Hill – North End of Township



Proposed rental Tower Pinnacle Hill – South End of Township



Staff are recommending to utilize the funding in reserves set aside for a Fire Hall Analysis. The existing tower is failing and needs to be replaced, a replacement can be placed where best to provide good coverage for the radios and can be placed out to the way to allow for the redevelopment of the existing fire hall or just to be a stand alone tower for communications for the township.

A quote from Frontline Communications for a used galvanized steel tower, installed, crane work and a 15' x 15' concrete engineered base and required equipment has been received for \$98,405. (attached)

A quote from BearCom for a new galvanized steel tower with required equipment, installed with a concrete base, no size identified and no crane work amount included, for \$87,244. (attached)

A quote from Rcomm Radio for an all-weld tower, installed has been received for \$65,306. Rcomm's quote was received in September 2024 and they would not provide an updated quote for this report but will provide us a cost once we are prepared to move ahead. (attached)

The main difference between a galvanized tower and an all-weld tubular tower lies in their construction and the way they are protected against corrosion. Galvanized towers use a process where steel is coated with zinc, offering corrosion resistance. All-weld towers, on the other hand, are constructed by welding steel sections together, and their corrosion protection often relies on other methods like painting or specialized coatings. A galvanized tower is a heavier tower due to the galvanizing process and as such would require a stronger base.

An equipment shed "dog house" is also needed to house the equipment for all quotes above as the tower will be placed away from the Fire Hall, estimated costs completed by staff are \$25,000. Currently there is no "dog house" as the tower is right next to the fire hall and the equipment is inside the building.

Staff are recommending that the Township complete the entire project this year, purchasing the used tower and installation provided by Frontline Communications and building the equipment shed utilizing the ICIP Covid funding and also the reserve of \$75,000 set aside for a fire hall analysis in 2025. The remaining funds from the ICIP Covid grant are \$61,840 + the reserve for the Fire Hall garage \$75,000 = \$136,840. Purchasing the used galvanized tower and building the shed would be an estimated total of \$123,405 (not including applicable taxes).

The study does also identify the coverage with the rental of a tower on Pinnacle Hill. A quote from BearCom the rental costs are estimated for the first 5 years to be \$22,500 / \$4500 annually. The cost of the equipment and installation required would be \$47,718, not including HST or shipping and handling charges for the next 5 year period. (attached) In forty (40) years, rental costs would be an estimated \$180,000.

Replacing and moving the tower allows for communications to be improved and to be taken out of the equation for the future of the Fire Hall. Should the fire hall be relocated, the tower will remain at this site providing the communications needed for the Township Fire Department.

Quotes Received:

RComm Radios Frontline Communications BearCom

Financial Implications:

The Township was successful in its scope change to purchase a new tower with the ICIP funds. Council may decide to just purchase the tower and install it next year. It is recommended that the used tower be installed next year at the latest. The quote for the new galvanized tower, next year could be a higher cost with the unknowns surrounding tariffs.

People Consulted:

Fire Chief McHale

Council Recommendation:

BE IT RESOLVED THAT Admaston/Bromley Council approve the purchasing of the used 90' Galvanized Communications Tower from Frontline Communications for \$37,667 + applicable HST;

AND BE IT RESOLVED THAT Admaston/Bromley Council approve the labour (installation, crane work, concrete and rebar (15' x 15' engineered stamped) to install the communications tower from Frontline Communications in the amount of \$60,738 + applicable HST;

AND BE IT RESOLVED THAT Admaston/Bromley Council approve the building of a shed to house the communications equipment at the tower for an estimated cost of \$25,000.

AND BE IT FURTHER RESOLVED THAT the project be funded through the ICIP Covid funding stream \$61,840 for the expansion of the Fire Hall garage tower and that the remainder of the funds required be financed through the reserve set aside for a Fire Hall Analysis in 2025 which was \$75,000.



Sales Quote

09062025-DFD-2

Frontline Communications

5490 Cedar Drive, Manotick, ON K4M1B4

Contact: Tim Van Winckle Phone: 613-793-7124

Douglas Fire Station

5226 Queen Street Douglas ON KOJ 1S0

Attention: Bill McHale

TO:

DATE 9-Jun-25

Sale Tim Van Winckle

Cust. PO#

SHIP TO: SAME AS

Acc #:					
Item	Description	Part Number	Qty	Unit Price	Extended Pric
1	Cable Tray	MISC	1	\$7,692.00	\$7,692.0
2	90 Foot Tower (Used) - Galvanized steel (CSA approved) Installation, crane work, concrete and rebar 15ft x 15ft area for base - incl. engineered stamped	TOWER-90 LABOUR-1	1	\$37,667.00 \$41,867.00	\$37,667.0 \$41,867.0
3	Sinclair 210 C2 Antenna	ANTENNA	1	\$3,462.00	\$3,462.0
4	Cable and ground kit (LMR 400)	MISC	1	\$2,917.00	\$2,917.0
5	Antenna sweep, installation, configuration (1 day)	LABOUR-2	1	\$4,800.00	\$4,800.0
CII V	WO#	POS#			
SILK	Attached Documentation	TX	ТС	TAL QUOTATION	\$98,405.0
TR	Frequency List PO	RX		HST (13.0%)	\$12,792.6
ONV	System Diagram SSD	TONE			
IMPLEX	Installation Instructions			TOTAL	\$111,197.6
	Delivery: 6 weeks From Date of Order Acceptance			PST & GST: E	EXTRA (as note
	Terms: Net 30	PER			
	F.O.B.:	Tim Van Winckle Managers Approval			inckle
	This proposal is valid for 30 days from date of submission Specified Delivery commences upon acc Industry Canada licensing and frequency assignments are beyond of You may indicate acceptance of this proposal by signing below and faxin We thank you for the opportunity of quoting on your radio requirements a	ceptance of order by Glentel Inc. our control and may require certain changes same to our local office as	inges to this	s proposal.	



Proposal

Quote Number: 672359 Quote Date: 2024-10-21 Branch: 40520 Printed On: 2024-11-21 15:45:11

Page:

Customer/Prospect Number - 1972076

DOUGLAS FIRE DEPARTMENT P.O. BOX 142 DOUGLAS ON -K0J 1S0

Ship To - 1972076

DOUGLAS FIRE DEPARTMENT P.O. BOX 142 DOUGLAS ON -K0J 1S0

Customer Contact:	BILL MCHALE	Customer Email:	firechief@admastonbromley.com
Phone Number:	(613) 649-2422	Delivery Instr:	

Quantity	Part Number	Unit Price	Extended Price
1	CSA APPROVED TOWER SUPPLY/INSTALL TOWER, ATENNA, Cable, Connectors/CSA APPROVED	80,000.00	80,000.00
1	VHF FOUR DIPOLE ANTENNA REPLACEMENT VHF ANTENNA - NEW	3,000.00	3,000.00
100	LDF4-50A AND 1/2" FOAM HELIAX CABLE/FT 429150 PRICING PER FOOT	5.00	500.00
1	INSTALLATION CONNECTORS, GROUND KIT	1,000.00	1,000.00
10	INSTALL INSTALLATION SERVICES ON-SITE, TWO TECH/ 5 HOURS	126.50	1,265.00
4	TRAVTRUCK TRAVEL FEE TO AND FROM SITE FIRST DRIVER	180.00	720.00
4	TRAVTRUCK SECOND TECH TRAVEL FEE	126.50	506.00
2	INSTALL LICENSING FEE	126.50	253.00

Quote valid until:	2024-11-21	Confidential and Proprietary	Sub Total	87,244.00	
			Shipping and Handling	TBD	Estimate
			Tax	11,341.72	Tax Estimate
			Total	98,585.72	
XCustomer Signature					-

PATRICK MAGUIRE **Account Executive** Pat.Maguire@BearCom.com OTTAWA Branch Office: 613-739-3636





DATE: September 23, 2024 Quote No: 22491

TO: Bill / Township of Admaston/Bromley

FROM: Alain Leduc / Rcomm Radio Inc.

RE: Fire Station budgetary 90ft tower

<u>ITEM</u>	DESCRIPTION	<u>PRICE</u>
1	Messenger cable (10ft)	\$173.00
2	Supply and install new CSA All-weld 90ft tower. Include engineering and foundation for soil having a bearing capacity equal or higher than 3000 psf. Also includes tower grounding, antenna mounts and climb shield.	\$54,740.00
3	Comprod 774-70-TM omni antenna (4 loop UHF)	\$2,055.00
4	LDF4-50 heliax cable (120ft) with connectors, grounding kit and lightning arrestor	\$825.00
5	Antenna / heliax cable installation and sweep (Included)	\$0.00

Sub Total	\$57,793,00
Sub Iulai	931.133.00

Notes: Delays beyond our control extra. Geotechnical survey and report by others. Foundation price subject to change depending on geotechnical report.

CREDIT: 30 days	HST/GST	\$7,513.09
DELIVERY: TBD	QST/PST	\$0.00
QUOTE: Valid 30 days	Total	\$65,306.09

Please call with any questions you may have and thank you for this opportunity to be of service

Alain Leduc Phone 613.678.5678
Technical Manager Fax 866.890.5679

alain@rcommradio.com



Proposal

Quote Number: 672359 Quote Date: 2024-10-21

14:24:33 Branch: 40520 Page:

Customer/Prospect Number - 1972076

DOUGLAS FIRE DEPARTMENT P.O. BOX 142 DOUGLAS ON -K0J 1S0

Ship To - 1972076

DOUGLAS FIRE DEPARTMENT P.O. BOX 142 DOUGLAS ON -K0J 1S0

Printed On:

2025-07-15

Customer Contact:	BILL MCHALE	Customer Email:	firechief@admastonbromley.com
Phone Number:	(613) 649-2422	Delivery Instr:	

Quantity	Part Number	Unit Price	Extended Price
1	SD212-HF2P2LDFD00 2 DIPOLE 5.0 DB BIDIRECTIONAL VHF ANTENNA 138-174 MHZ	1,600.00	1,600.00
1	426-70-R COMP UHF RADOME YAGI ANT 10DB FIBERGLASS	2,000.00	2,000.00
2	SMK-125-A3 SINC SIDE MOUNT KIT, ADJ ASSEM 3'-6" FOR SD SERIES	1,100.00	2,200.00
2	107-85 COMP CLAMP PIPE TO PIPE PARALL 1.50-3.50" DIA	225.00	450.0
4	L4TNF-PSA TES ANDREW N FEMALE FOR 1/2 307941	50.00	200.0
600	LDF4-50A AND 1/2" FOAM HELIAX CABLE/FT 429150 ***USE PRE-CUT SIZES***	3.50	2,100.0
4	241088-1 ANDREW STD GROUND KIT, 1/2 IN 444197	70.00	280.00
4	L4TNM-PSA ANDREW N MALE FOR 1/2" LDF4 TES 377273	50.00	200.0
2	VHF50-HN F-FEMALE BY POLYPHASHER	200.00	400.0
1	UGBKIT-0214-T GROUND PANEL	150.00	150.0
2	C2034-2-3.1 MULTICPLER C SER VHF 136-155MH REJECT 3.1 DB IL	3,140.00	6,280.0
2	RL10-38 38 RMU SPACE RELAY RACK, 72IN MIDDLE ATLANTIC	500.00	1,000.0
2	U2MS RACK SHELF MID MOUNT 19"W 3.5"H VENTED 2RU HEIGHT	250.00	500.0
1	PD-815R-PL POWER BAR W/SURGE 8 OUTLETS RACKMOUNT	250.00	250.0
1	AL0300 SINCLAIR LOAD DRY TERM 30W	100.00	100.0
2	RFN-1006-3F TES RFI N-MALE CRIMP CONNECTOR 80266	25.00	50.0
30	RG-214 BELDEN RG-214 COAX PER FOOT 50 OHM, 13AWG	8.50	255.0
2	RFN-1006-3F	25.00	50.0

f in 🖸





AlwaysOn			
Quantity	Part Number	Unit Price	Extended Price
	TES RFI N-MALE CRIMP CONNECTOR 80266		
1	00200 AAR10JCGANQ1AN MOT SLR 5700 136-174M 1-50W	5,750.00	5,750.00
1	136-174 *PMUD3327* HFD8461	550.00	550.00
	MOT SLR5700 PRESELECT 144-160		
1	PMKN4166 MOT BATTERY BACKUP CABLE	150.00	150.00
1	1810394 UPS BACK UP BATTERY 12V 100AH	850.00	850.00
1	SBS100F VLRA BATT M6 M TERMINL RFB-1106-2 RFI BNC MALE CRIMP-RG58/141-EA	15.00	15.00
13	88028 RG-142 BELDEN RG-142 COAX PER FOOT	8.00	104.00
1	CANADA ONLY (USA-MISRG142) RFN-1005-3C	17.50	17.50
6	TES RFI N-MALE CRIMP CONNECTOR 36421 RFN-1006-3F	17.50	105.00
	TES RFI N-MALE CRIMP CONNECTOR 80266		
40	RG-214 BELDEN RG-214 COAX PER FOOT 50 OHM, 13AWG	8.50	340.00
1	AAM01QNH9JA1AN MOT CM300D, 403-470 25W 99C AD	1,100.00	1,100.00
2	H AD SEC-R2 SAMLEX RACK MOUNT PWR SUPP	100.00	200.00
2	TES 565235 2880376E84_1 2880376E84_1 - MINI UHF	6.00	12.00
2	CONNECTOR RFN-1022-8-C1	20.00	40.00
1	TES RFI N FEMALE BULKHEAD CONN 57405 SEC-1235M	325.00	325.00
'	TES SAMLEX PWR SPLY, 30A 13.8V 321442		020.00
1	901-9486 ZETRON MODEL-37 MAX RPTR PANEL	1,000.00	1,000.00
1	950-0898 ZETRON DUAL RACK MNT ADAPT KIT	275.00	275.00
1	709-7394 ZETRON MOT INTERFACE CABLE	275.00	275.00
1	MISC	500.00	500.00
2	SHOP SUPPLIES INSTALL	126.50	253.00
8	ISEDC LICENSING APPLICATION INSTALL	126.50	1,012.00
32	IN-OFFICE STAGING INSTALL	126.50	4,048.00
8	ON-SITE INSTALL TRAVTRUCK TO AND FROM SITE DRIVER	180.00	1,440.00
8	PER HOUR TRAVTRUCK TO AND FROM SITE PASSENGER	126.50	1,012.00
3	PER HOUR INSTALL	126.50	379.50
5	SITE SURVEY TRAVTRUCK	180.00	900.00
1	SITE SURVEY TRAVEL INSTALL	9,000.00	9,000.00
·	RIGGING OF ANTENNAS ON TOWER	1,223.00	-,

I	Quote valid until:	2025-08-14	Confidential and Proprietary	Sub Total	47,718.00	
ſ				Shipping and Handling	TBD	Estimate
١				Tax	6,203.35	Tax Estimate
				Total	53,921.35	
	Y					

Customer Signature



PATRICK MAGUIRE Account Executive Pat.Maguire@BearCom.com OTTAWA Branch Office: 613-739-3636







Council and Committee Monthly Summary

June 2025

Below you will find highlights of the County of Renfrew County Council and Committee meetings held June 12 and June 25, 2025.

Please note that this summary does not constitute the official record of the meetings and approved minutes should be consulted for that purpose.

The full Council and Committee packages can be found online.

The June 12, 2025 and June 25, 2025 meetings are on YouTube.

Warden's Address

Key highlights

- On June 12, Warden Peter Emon welcomed Councillor Rob Tripp as an alternate member of Council representing Greater Madawaska; he congratulated Councillor Glenn Doncaster on his appointment to the FCM Board of directors; he congratulated Councillor Lori Hoddinott on receiving the Academic Excellence Award in Municipal Law at the recent AMCTO conference and he congratulated the Township of Greater Madawaska on the tremendous success of their inaugural Guitars and Gasoline Music Festival.
- The Warden acknowledged June as Pride Month, a time to celebrate the diversity, resilience, and contributions of 2SLGBTQI+ communities across our region and beyond; as National Indigenous History Month, which offers an opportunity to honour the rich history, heritage, and ongoing contributions of Indigenous peoples across Canada; as Seniors Month, a time to honour the amazing seniors and to recognize the hard work that they have done all their lives to make the County of Renfrew into the great place it is today.
- The 18th Annual Renfrew County Warden's Golf Tournament was held on June 20th at Dragonfly Golf Links. He shared that the event raised over \$8,500 in support of two local charities: the Family and Children's Services of Renfrew County Darlene Aikens Memorial Fund, and the County of Renfrew's Homelessness and Housing Fund. He thanked the generous sponsors and supporters, County of Renfrew staff, and staff at Dragonfly Golf Links for making this fundraiser a success. Congratulations to Team Sweetness on winning the tournament.
- The Warden also attended John Yakabuski's retirement dinner, where he had the opportunity to thank him for his 22 years of dedicated service representing the people of Renfrew–Nipissing–Pembroke and wish him all the best in his well-earned retirement.
- This summer he encouraged everyone to THINK about their activities and buying power and to support our local businesses, noting every dollar spent in Renfrew County helps sustain local jobs, strengthens our economy, and preserves the unique identity and vibrancy of our communities.



Delegations

- Michael Nolan, Director of Emergency Services/Chief, Paramedic Service, presented the Ontario Medal for Paramedic Bravery to retired Paramedic Brad Smith for his heroic actions on February 12, 2012. On that day, a snowmobiler had fallen through the ice on Calabogie Lake. Brad was among the first to respond. With no time to spare and no thought for his own safety, he located a nearby canoe, entered the icy waters, and paddled out using only his hands. Upon reaching the stranded individual who was being supported by another courageous citizen Brad worked to bring them to safety. During the rescue, Brad himself ended up in the freezing water. Despite this, he remained focused, resilient, and determined.
- Shanna Armstrong, member, and Jennifer Doelman, vice-chair, made a presentation on behalf
 of the Renfrew County Agriculture Economic Development Committee. This Committee provides
 guidance and feedback on the state of the agriculture sector within Renfrew County and
 recommends and assists with possible initiatives in support of agricultural economic and
 business development. They highlighted economic contributions of the local agricultural
 community and noted challenges and opportunities for the industry.
- Darren Waters and Ryan Vandenbert, from the Ministry of Transportation, provided an update on several MTO projects in Renfrew County, including the twinning of Highway 17, Highway 148 in the Township of Laurentian Valley and City of Pembroke, and the preliminary design of Highway 60 and County Roads 30 and 60 in North Algona Wilberforce Township.
- MPP Billy Denault made his first official visit to County Council. Looking forward to his role as the Parliamentary Assistant to the Ministry of Tourism, Culture and Gaming, a position that is applicable to the riding in terms of local economic development, working to build relationships with local councils necessary to assist where issues arise. He spoke about the Provincial Government's focus on health care with the Primary Care Action Plan headed by Dr. Jane Philpott. He acknowledged it has been a learning curve since taking office, but he called it a privilege and honour to advocate for the riding of Renfrew-Nipissing-Pembroke at Queen's Park.
- At the June 12 Community Services Committee, County of Renfrew Chief Administrative Officer Craig Kelley and Sabine Mersmann, CEO of Pembroke Regional Hospital, provided an update on the activities to date towards the establishment of the Renfrew County Mesa HART Hub in Pembroke. The HART Hub will provide low-barrier access to services, ensuring that clients can receive support regardless of their current stage of readiness for change; eliminate common barriers to care, such as rigid requirements or limited access points; offer immediate access to intensive wellness supports, such as stabilization services and onsite care for individuals with complex needs and lead comprehensive care planning by conducting physical and mental health assessments and delivering treatments based on those assessments.

Announcements

• County Councillor Jennifer Murphy stated her intention to run for Renfrew County Warden for 2026. She thanked Warden Peter Emon for his support in the past six months in helping her to prepare for the role, which she previously held from 2017-2019.



Development & Property Committee

Presented by: James Brose, Chair

- County Council adopted a by-law to enter into a lease agreement with the Ontario Addiction Treatment Centre (OATC), located at 156 John Street, Pembroke, Ontario, for a three-year term commencing May 1, 2025, for the purpose of a warming/cooling centre as part of the Renfrew County Mesa HART Hub.
- County Council approved the implementation of a regional incentive program, referred to as the Helping Your Place Excel (HYPE) program.
- County Council adopted a by-law to approve Official Plan Amendment No. 47, which allows the County to provide grants/loans to local municipalities that support their Community Improvement Plans (CIPs).
- County Council has approved moving forward with the new Pembroke Paramedic Base at 330
 Boundary Road. A consulting firm, Greenview Environmental Management, of Bancroft, Ontario,
 has been hired to help design and plan the project. The total cost for their services is \$227,970
 plus taxes. The County will apply to Infrastructure Ontario to help fund the renovations.
- County Council has approved the construction of a new paramedic base in the Township of Whitewater Region. The project will be led by R.K. Porter General Contracting Inc. (Perth), working with J.L. Richards and Associates (Ottawa) and Egis Group (Kanata). The total cost is \$3.25 million (plus rebatable taxes). Funding will come through a financing arrangement with Infrastructure Ontario.
- A total of 13 applications were received to fill the 7 available spots in the 2025 Summer Company program. The successful participants are Jazmin Clark (Whitewater Region) Pottery; Page Hodgson (Arnprior) Crochet products and clothing; Noah Obrien (Madawaska Valley) Apparel brand; Hunter Prince (Horton) 3D Printing; Minnah Rehn (Arnprior) Henna services and products; Nella Rosandic (Killaloe-Hagarty-Richards) Handmade stickers and buttons and Emmanuel Young (Arnprior) Lawn care business.
 - The Summer Company program supports students aged 15-29 who start and run their own summer business. Students are provided with business planning and operational guidance, in addition to a \$1,500 non-repayable grant at the start of the program. Upon program completion, students are awarded an additional \$1,500 non-repayable grant.

Operations Committee

Presented by: Glenn Doncaster, Chair

• County Council adopted a revised by-law to Regulate the Operation of Off-Road Vehicles on County of Renfrew Roads. The amendment permits Off-Road Vehicles on the following sections of County Roads in the Town of Petawawa: County Road 16 (Victoria Street), between Laurentian Drive and Petawawa Boulevard; County Road 25 (Laurentian Drive), between Victoria Street and Petawawa Boulevard; County Road 26 (Doran Road), between Petawawa Boulevard and Highway 17; County Road 37 (Murphy Road), between Petawawa Boulevard and Highway 17; County Road 51 (Petawawa Boulevard), between B-Line Road and civic address 2991 Petawawa Boulevard. Crossings of County Road 51 (Petawawa Boulevard) at the Fred Street/Norman Street and Victoria Street/Portage Road intersection is also permitted.



- The approved contracts/tenders were as follows:
 - For the purchase of a Boom Mower from Colvoy Enterprises 2012 Ltd., Courtland,
 Ontario, in the amount of \$49,998, plus applicable taxes.
 - o For rehabilitation of County Road 26 (Doran Road) from Black Bay Road to County Road 51 (Petawawa Boulevard), Town of Petawawa, as submitted by Greenwood Paving (Pembroke) Ltd., Pembroke, Ontario, in the amount of \$1,165,971.50, plus applicable taxes.
 - For supply and delivery of bulk coarse highway salt for a two-year period as submitted by Windsor Salt Ltd., Mississauga, Ontario, in the amount of \$3,918,915, plus applicable taxes.
 - For rehabilitation of both County Road 52 (Burnstown Road) from B123 (Burnstown Bridge) to Picket Hill Road and County Road 508 (Calabogie Road) from Stacey Drive to Civic Address 1803, Township of McNab/Braeside, as submitted by Thomas Cavanagh Construction Limited, Ottawa, Ontario, in the amount of \$1,044,335.53, plus applicable taxes
 - o For the rehabilitation of County Road 4 (Storyland Road), from Eady Road to Alex Lane, a distance of approximately 2.69km, Township of Horton awarded to Greenwood Paving (Pembroke) Ltd., Pembroke, Ontario, in the amount of \$1,390,750.40.
 - For supply and delivery of granular material on County Road 69 (Siberia Road), from River Road to Sunny Hill Road, a distance of approximately 4.46km, Township of Madawaska Valley awarded to Bonnechere Excavating Inc., Renfrew, Ontario in the amount of \$357,212.
 - For paving, shouldering and guide rail installation on County Road 69 (Siberia Road), from River Road to Sunny Hill Road, a distance of approximately 4.46km, Township of Madawaska Valley, awarded to Bonnechere Excavating Inc., Renfrew, Ontario in the amount of \$947,266.25.
 - For the rehabilitation of County Road 70 (Ruby Road), from Gorman Road to Wolfe Road, a distance of approximately 3.25km, Township of Bonnechere Valley, awarded to Bonnechere Excavating Inc., Renfrew, Ontario, in the amount of \$756,960.12.
 - For the rehabilitation of County Road 512 (Foymount Road), from Silver Lake Road to Highway 41, Township of Bonnechere Valley, as submitted by Greenwood Paving (Pembroke) Limited, Pembroke, Ontario, in the amount of \$3,022,967.80, plus applicable taxes.

Community Services Committee

Presented by: Anne Giardini, Chair

County Council authorized County of Renfrew staff to undertake all necessary actions to
implement the Renfrew County Mesa HART Hub project as outlined, including but not limited to
executing the Transfer Payment Agreement with the Ontario Ministry of Health, Ontario
Ministry of Municipal Affairs and Housing, Ontario Health, and any other designated ministry or
agency with responsibility for funding of the HART hub(s), fulfilling reporting obligations, hiring
or assigning staff as appropriate, entering into agreements with partner agencies, procuring
goods and services within approved budgets, and performing any other activities necessary to
bring the project to fruition.



- As part of the Renfrew County Housing Corporation Annual General Meeting, Jennifer Dombroskie, Manager of Community Housing, and Kevin Raddatz, Manager of Real Estate, highlighted aspects of the 2024 Renfrew County Housing Corporation Annual Report. Mr. Raddatz overviewed the RCHC portfolio, which includes 1,029 Residential Units across apartments, townhouses, and single/semi-detached homes. He highlighted some capital projects completed, noted some emergency repairs required for some units and in looking ahead noted the 2025 priority of long-term stability for the RCHC. Ms. Dombroskie highlighted the Collaborative Model of Care when it comes to Community Housing in Renfrew County from Community Housing Caseworkers, to maintenance staff and the Community Paramedic/RCHC collaboration towards improved health and wellness for tenants.
- A new Canada-Wide Early Learning and Child Care (CWELCC) Agreement was executed with Paradise Children's Programs Inc., myFM Centre Recreation Complex, Renfrew, Ontario. In accordance with the County of Renfrew's Directed Growth Strategy, the three non-CWELCC centres (Paradise Children's Programs Inc., myFM Centre Recreation Complex), Kinder Connection Nursery School, and Deep Roots Nature & Nursery School) were given the first opportunity to opt in, followed by an application-based process to determine the allocation of remaining spaces.

Health Committee

Presented by: Michael Donohue, Chair

- County Council directed staff to establish a volunteer-based Disaster and Emergency Local Team
 Activation (DELTA) Program within the County of Renfrew, including the development of
 operational supports necessary for implementation. This strategy aims to build a robust
 infrastructure of trained, skilled, and community-based volunteers who can respond effectively
 alongside professional emergency services during times of crisis.
- County Council authorized County of Renfrew to undertake all necessary actions to implement
 the Renfrew County Substance Use, Mental Health and Housing Mesa Systems Integrated
 Navigational Tool, including but not limited to executing the Transfer Payment Agreement with
 Health Canada, fulfilling reporting obligations, entering into agreements with partner agencies,
 procuring goods and services within approved budgets, and performing any other activities
 necessary to bring the project to fruition.
- County Council adopted a by-law authorizing the Warden and Chief Administrative Officer to sign the Lease Agreement between the County of Renfrew and Carefor Health and Community Services, 425 Cecelia Street, Pembroke, Ontario, for tenant office space for the Renfrew County Virtual Triage and Assessment Centre (RC VTAC) for a one-year term commencing April 1, 2025.

Corporate Services Committee

Presented by: Jennifer Murphy, Chair

 County Council approved the Audited Financial Statements for the County of Renfrew for the year ended December 31, 2024. At the beginning of the meeting, Lori Huber, Partner KPMG, provided a high-level overview of the clean audit report.



County Council approves the following Corporate Policies: Retirement and Early Retirement
(amended); Contract Employees (new); Hours of Work and Overtime (amended); Employee
Recognition Program (amended). Copies of the policies are available from Human Resources.

Additional Information

Craig Kelley, Chief Administrative Officer/Deputy Clerk 613-735-7288

EORN Cell Gap Project Monthly Update June 2025

Regional view

	Planned	Completed	New this month
Upgrades to existing towers	311	311	n/a
New towers in service	257	134	8
New co-locations	75	66	2
Land use authority	257	251	2

Please note that this information is collected monthly and is subject to change as the project moves forward.

Renfrew County

	Planned	Completed	New this month		
Upgrades to existing towers	25	25	n/a		
New towers in service	47	33	2		
New co-locations	10	8	0		
Land use authority	47	46	0		
Please note that this information is collect	Please note that this information is collected monthly and is subject to change as the project moves forward.				

Note: data is updated by Rogers on the 15th of each month. Data provided for this update was received on June 15, 2025.

Renfrew County Uplifts Build Schedule

Tower identifier	Site name	Municipality	In-service plan
C0367	Chalk River	Town of Laurentian Hills	In-service
C1911	Deep River	Town of Laurentian Hills	In-service
C1948	Petawawa	Town of Petawawa	In-service
C4723	Petawawa Blvd. and Festubert Blvd.	Town of Petawawa	In-service
C4724	Petawawa Blvd and Sharon St.	Town of Petawawa	In-service
C4820	Petawawa and Civic Centre	Town of Petawawa	In-service
C3434	Douglas	Township of Adamston-Bromley	In-service
C3425	Eganville	Township of Bonnechere Valley	In-service
C3439	Constant Lake	Township of Bonnechere Valley	In-service
C3049	Calabogie	Township of Greater Madawaska	In-service
C1910	Mackey	Township of Head, Clara and Maria	In-service
C1912	Bisset Creek	Township of Head, Clara and Maria	In-service
C2382	Renfrew Town	Township of Horton	In-service
C3437	Killaloe	Township of Killaloe, Hagarty and Richards	In-service

Renfrew County Uplifts Build Schedule

Tower identifier	Site name	Municipality	In-service plan
C0377	Cobden	Township of Laurentian Valley	In-service
C0414	Pembroke	Township of Laurentian Valley	In-service
C2706	Barry's Bay	Township of Madawaska Valley	In-service
C2914	Combermere	Township of Madawaska Valley	In-service
C3438	Wilno	Township of Madawaska Valley	In-service
C4077	Barry's Bay Town	Township of Madawaska Valley	In-service
C0410	Renfrew	Township of McNab-Braeside	In-service
C7844	Braeside	Township of McNab-Braeside	In-service
C3436	Golden Lake	Township of North Algona Wilberforce	In-service
C2569	Highway 17 and Haley Station	Township of Whitewater Region	In-service
C4088	Highway 17 and Cobden	Township of Whitewater Region	In-service



Renfrew County Co-location Build Schedule

Tower identifier	Site name	Municipality	In-service plan
C4084	Chalk River at Ottawa River	Town of Deep River	2026
C4087	Deep River Town	Town of Laurentian Hills	In-service
C6629	Meilleurs Bay	Town of Laurentian Hills	In-service
C8544	Janet Road at Granzies Lake	Township of Bonnechere Valley	In-service
C6623	Black Donald Lake	Township of Greater Madawaska	In-service
C8470	Highway 41 and Highway 71	Township of Greater Madawaska	2026
C8478	Trans Canada Highway and Brent Road	Township of Head, Clara and Maria	In-service
C8487	ON-60 and Cardinal Road	Township of Killaloe, Hagarty and Richards	In-service
C6619	Halfway Lake	Township of Madawaska Valley	In-service
C8265	Highway 41 and Greenlake Road	Township of North Algona Wilberforce	In-service



Tower identifier	Site name	Municipality	In-service plan
C8474	Trans Canada Highway at Orange Road	Town of Petawawa	2026
C8265	Colton Road and Quilty Road	Township of Adamston-Bromely	In-service
C8465	ON-60 and Haley Road	Township of Admaston-Bromley	In-service
C8625	Dunmore Road and Barr Line	Township of Admaston-Bromley	In-service
C8623	Opeongo Road West and Klondike Road	Township of Bonnechere Valley	In-service
C8704	O'Connor Road and Wolfe Road	Township of Bonnechere Valley	2026
C8705	Boldt Road and Donegal Road	Township of Bonnechere Valley	In-service
C8511	Perrault	Township of Bonnechere Valley	In-service
C8622	Corrigan Road and Silver Lake	Township of Bonnechere Valley	In-service
C8497	Hardwood Lake	Township of Brudenell, Lyndoch and Raglan	2026



Tower identifier	Site name	Municipality	In-service plan
C8533	Highway 28 and Little Ireland Road	Township of Brudenell, Lyndoch and Raglan	2026
C8620	Letterkenny Road and Lost Nation Road	Township of Brudenell, Lyndoch and Raglan	2026
C8621	Heins Road and Quadeville Road	Township of Brudenell, Lyndoch and Raglan	2026
C8702	Schutt Road and Wingle	Township of Brudenell, Lyndoch and Raglan	2026
C8706	Quadeville Road and Murk Lake	Township of Brudenell, Lyndoch and Raglan	2026
C8618	Oscar Boehme Road and River Bend Drive	Township of Brudenell, Lyndoch and Raglan	2025
C8619	Rochefort	Township of Brudenell, Lyndoch and Ragland	In-service
C8703	Gorman Lake	Township of Brudenell, Lyndoch and Ragland	In-service
C8713	Long Point Way and Inglis Road	Township of Greater Madawaska	In-service
C8498	Highway 41 and Doorley Creek Road	Township of Greater Madawaska	2026



Tower identifier	Site name	Municipality	In-service plan
C8668	Denzil Lane and Upper Spruce Hedge Road	Township of Greater Madawaska	In-service
C8532	ON-41 and Dunagans Road	Township of Greater Madawaska	In-service
C8711	Glenfield Road and Matawatchan Road	Township of Greater Madawaska	In-service
C8712	Holywell Road and Mt. St. Patrick Road	Township of Grater Madawaska	2025
C8501	Trans Canada Highway and Bissett Creek Road	Township of Head, Clara, Maria	2026
C8531	Trans Canada Highway 17 at Stonecliffe	Township of Head, Clara Maria	In-service
C8637	Jim Barr Road and Mullins Road	Township of Horton	In-service
C8627	Gunns Road and Round Lake Road	Township of Killaloe, Hagarty and Richards	In-service
C8696	Simpson Pit Road and Round Lake Road	Township of Killaloe, Hagarty and Richards	In-service
C6620	Doran and Round Lake Road	Township of Laurentian Valley	In-service
C8473	Forest Lea Road at Pembroke	Township of Laurentian Valley	In-service
C8628	Doran Road and Witt Road	Township of Laurentian Valley	In-service
C8616	Dafoe Road and Micks Road	Township of Madawaska Valley	2026



Tower identifier	Site name	Municipality	In-service plan
C8626	Etmanski Road and Paugh Lake Road	Township of Madawaska Valley	In-service
C8707	Stanley Olsheski Road and Hasanville Lane	Township of Madawaska Valley	2026
C8615	Kubesheski Road and Siberia Road	Township of Madawaska Valley	In-service
C4086	Highway 17 and Glasgow Station	Township of McNab-Braeside	In-service
C8515	White Lake Road and Mountain View Road	Township of McNab-Braeside	In-service
C8636	River Road and Lochwinnoch Road	Township of McNab-Braeside	In-service
C8512	Deacon	Township of North Algona Wilberforce	In-service
C8624	Connaught Road and Bulger Road	Township of North Algona Wilberforce	In-service
C8635	Kerr Line and Magnesium Road	Township of Whitewater Region	2026
C8630	Branch Trail and Nangor Trail	Township of Whitewater Region	In-service
C8631	Westmeath Road at Westmeath Provincial Park	Township of Whitewater Region	In-service
C8632	La Passe Road and Hawthorne Road	Township of Whitewater Region	In-service
C8633	Zion Line and Pappin Road	Township of Whitewater Region	In-service
C8634	Grants Settlement Road at Grants Settlement	Township of Whitewater Region	In-service



CORPORATION OF THE TOWNSHIP OF ADMASTON/BROMLEY

BY-LAW No. 2025-29

A BY-LAW TO AUTHORIZE THE MAYOR AND CLERK
TO EXECUTE AN ENCROACHMENT AGREEMENT
WITH DONNA BRISBIN 5197 QUEEN STREET, DOUGLAS,
TOWNSHIP OF ADMASTON/BROMLEY
IN RELATION TO THE ENCROACHMENT OF
A PORTION OF PUBLIC HIGHWAY KNOWN AS MARY STREET.

WHEREAS the Municipal Act, 2001, S.O. 2001, c.25, provides that a municipality may pass by-laws within the following spheres of jurisdiction: Highways, including parking and traffic on highways at section 11(3) 1; Culture, parks, recreation and heritage at section 11(3) 5 and Structures, including fences and signs at section 11(3) 7; and

AND WHEREAS section 8 (1) of the Municipal Act, 2001 provides that sections 8 and 11 shall be interpreted broadly so as to confer broad authority on municipalities to (a) enable them to govern their affairs as they consider appropriate, and (b) enhance their ability to respond to municipal issues;

AND WHEREAS the Owner of 5197 Queen Street, Douglas (hereinafter called "Brisbin") has requested the Council of the Corporation of the Township of Admaston/Bromley to permit the use of a portion of the public highway known as Mary Street.

NOW THEREFORE the Council of the Township of Admaston/Bromley enacts as follows:

- 1. <u>THAT</u> permission be granted to Brisbin to encroach upon that portion of the property as identified in the attached agreement, whereas lands may be used for a permanent structure and subject to the execution of the Agreement with regards to the said encroachment, a copy of which Agreement is attached hereto and forms part of this By- law.
- 2. THAT the Mayor and Clerk be and are hereby authorized to execute an Encroachment Agreement with Donna Brisbin, in the form as set out in Appendix "A" attached hereto.
- 3. <u>THAT</u> this By-law shall take effect and come into force immediately upon the passage thereof.

READ a first and second time this 7th day of	August 2025.			
READ a third time and finally passed this 7th day of August 2025.				
Mayor	CAO/Clerk	_		

CORPORATION OF THE TOWNSHIP OF ADMASTON/BROMLEY

BY-LAW NO. 2025-30

Being A By-Law to amend By-Law 2023-08, a by-law to Appoint a Committee of Adjustment for The Township of Admaston/Bromley

WHEREAS c. P13, Section 44 (1) of the Planning Act, R.S.O. 1990 provides that the Council of the municipality may by by-law constitute and appoint a committee of adjustment for the municipality composed of such persons, not fewer than three, as the council considers advisable.

AND WHEREAS Council deems it necessary to appoint such members for the purpose of granting minor variances from the provisions of any by-law of the municipality that implements an official plan.

AND WHEREAS the members of the committee who are not members of a municipal council shall hold office for the term of the Council that appointed them.

AND WHEREAS the committee of adjustment shall receive payment for such service provided.

NOW THEREFORE the Council of the Township of Admaston/Bromley hereby enacts as follows:

(1)

That Leonard Chamberlain be removed from the Committee of

	Mayor	C	AO/Clerk	
	and man and and a	0.7 tagaot 2020		
Read a third	and final time this 7 th day	of August 2025		
Read a first	and second time this 7 th o	ay of August 2025		
				_
(2)	(2) That the following individual is added and appointed to the Committee of Adjustment for the Municipality:			
	Adjustment;			

ACTION TRACKING LIST

				Updated Information
				NEW
Date	Item	Assigned To	Due Date	Current Status
October. 2020	Fencing By-Law	Clerk/CBO	continuing	Look into updating the fencing by-law.
November. 2020	LEG report to Committee	CAO/Clerk	continuing	The CAO/Clerk is provide Council with Regular updates.
				Staff are to investigate a policy for the assumption of forced
October 2021	Forced Roads	Clerk	continuing	roads.
Sept. 2023	Douglas Beach	CAO/Clerk	continuing	Investigate ideas to rejuvinate beach
		CAO/Clerk & Fire		Determine the needs and requirements of a Fire Hall for a
Jan. 2025	Fire Hall Needs Analysis	Chief	2025	Volunteer Fire Department
Jan. 2025	Barr Line Community Centre Review	CAO/Clerk	2025	Develop a recommendation of future of BLCC
		CAO/Clerk &		
		County Planning		Complete a review and revision of the Comprehensive
Jan. 2025	Comprehensive Zoning By-law Review	Division	2025	Zoning By-Law
Jan. 2025	Taste of the Valley	CAO/Clerk	2026	Taste of the Valley 2026

CORPORATION OF THE TOWNSHIP OF ADMASTON/BROMLEY

BY-LAW No. 2025-31

A BY-LAW TO CONFIRM PROCEEDINGS OF THE COUNCIL OF THE TOWNSHIP OF ADMASTON/BROMLEY AT THE COUNCIL MEETING HELD AUGUST 7th, 2025.

WHEREAS Subsection 5(1) of the Municipal Act, 2001, S.O. 2001, Chapter 25, as amended, provides that the powers of a municipal corporation are to be exercised by its Council;

AND WHEREAS Subsection 5(3) of the said Municipal Act provides that the powers of every Council are to be exercised by by-law;

AND WHEREAS it is deemed expedient and desirable that the proceedings of the Council of the Corporation of the Township of Admaston/Bromley at this meeting be confirmed and adopted by by-law;

THEREFORE the Council of the Township of Admaston/Bromley enacts as follows:

- 1. That the actions of the Council at its meeting held on the 7th day of August, 2025 and in respect of each motion, resolution and other action passed and taken by the Council at its said meetings, is, except where the prior approval of the Ontario Municipal Board or other body is required, hereby adopted, ratified and confirmed as if all such proceedings were expressly embodied in this by-law.
- 2. That the Head of Council and proper officers of the Corporation of the Township of Admaston/Bromley are hereby authorized and directed to do all things necessary to give effect to the said action or to obtain appropriate approvals where required, except where otherwise provided, and to affix the Corporate Seal of the Corporation of the Township of Admaston/Bromley to all such documents.
- 3. That this By-Law shall come into force and take effect upon the passing thereof.

READ a first and second time this 7 th day of August 2025.				
READ a third time and finally passed this 7 th day of August 2025.				
Mayor	CAO/Clerk			