



T14 Murray Street, R.R. 1, Trenton, Ontario K8V 0N1 ■ Tel: 613-394-4829 ■ Fax: 613-394-5226 ■ Website: www.ltc.on.ca ■ Email: information@ltc.on.ca Registered Charitable Organization No. 107646598RR0001

### NOTICE OF REGULAR MEETING OF THE LOWER TRENT CONSERVATION BOARD OF DIRECTORS

Board of Directors refers to the General Membership as set out in the Lower Trent Conservation Administrative By-Law No. 2023-01

### Administration Office, 714 Murray Street, Trenton Virtually <u>Join Meeting HERE</u>

AGENDA

Thursday, May 9, 2024

Time: 1:00 p.m.

- 1. Meeting called to order by the Chair
- 2. First Nations Acknowledgement
- 3. Disclosure of pecuniary interests
- 4. Approval of the Agenda RECOMMENDED:

THAT the agenda be approved as presented.

- **5. Delegations** There are no requests for delegations received for this meeting.
- 6. Public Input (3 minutes per speaker)
- 7. Adoption of the Minutes:
  - a. Board Meeting Minutes of April 11, 2024

### **RECOMMENDED:**

THAT the Regular Board Meeting Minutes of April 11, 2024 be adopted.

8. Business arising from these minutes

### CORRESPONDENCE

9. Correspondence

Page # 4

There is no correspondence received for this meeting.

### STAFF REPORTS

10.	Monthly Payments Issued – Kelly Vandette, Manager, Corporate Services RECOMMENDED:	Page # 16
	THAT the list of payments issued in the total amount of \$397,908.29 for the montl 2024 be received as information.	n of April
11.	March 31, 2024 LTC Quarterly Financial Report – Kelly Vandette RECOMMENDED:	Page # 18
	THAT March 31, 2024 LTC Quarterly Financial Report be received as information.	
12.	Watershed Management, Planning and Regulations Reports – Gage Comeau, Manage Watershed Management, Planning and Regulations	٤r,
	a. Summary of Permits for Period March 29 – April 26, 2024	Page # 22
	b. Planning and Regulations Update c. Flood Forecasting and Warning (FFW) / Ontario Low Water Response (OLWR) Update	Page # 23 date
		Page # 27
	RECOMMENDED:	
	THAT the Watershed Management, Planning and Regulations Reports be received information.	as
13.	Karst Guidelines – Gage Comeau	Page # 29
	RECOMMENDED: THAT the Unstable Bedrock (Karst) Investigation Guidelines be approved and adopted.	
14.	Bay of Quinte Remedial Action Plan Program	
	a. April 2024 Newsletter	Page # 44
	RECOMMENDED:	
	THAT the Bay of Quinte Remedial Action Plan Newsletter for April 2024 be received as information.	
15.	<b>CAO's Report</b> – Rhonda Bateman, CAO/Secretary-Treasurer	Page # 47
	THAT the CAO's Report be received as information.	
OTHER	BUSINESS	
16.	Closed Session	

RECOMMENDED:

THAT the Lower Trent Conservation Board of Directors move to closed session to

discuss labour relations or employee negotiations under Municipal Act (s. 239(2)(d)).

### **17.** Members Inquiries/Other Business

18. Adjournment

### PLEASE CONTACT THE OFFICE IF YOU ARE UNABLE TO ATTEND THIS MEETING Kelly Vandette at 613-394-3915 extension 215 or Email: kelly.vandette@ltc.on.ca



# LOWER TRENT CONSERVATION

714 Murray Street, R.R. 1, Trenton, Ontario K8V 0N1

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### **BOARD OF DIRECTORS**

Board of Directors refers to the General Membership as set out in the Lower Trent Conservation Administrative By-Law No. 2023-01

### **REGULAR BOARD MEETING MINUTES**

### **MEETING # 2024-03**

**DATE:** April 11, 2024

**TIME:** 1:06 PM

LOCATION: Administration Office, 714 Murray Street, Trenton / Virtually

### PRESENT:

REMOTE SITE (R)	ON SITE						
Lynda Reid	Bob Mullin (Chair)	Sherry Hamilton					
	Mike Ainsworth	Jim Alyea					
	Jeff Wheeldon	Gene Brahaney (Vice-Chair)					
	Bobbi Wright	Rick English					
	Eric Sandford						

### **ABSENT/REGRETS:**

**STAFF:** Anne Anderson, Rhonda Bateman, Gage Comeau, Chris McLeod, Marcus Rice, and Kelly Vandette

GUESTS:

### 1. Meeting called to order by the Chair

The meeting was called to order by Chair Mullin at 1:06 p.m.

### 2. First Nations Acknowledgement

"This land is located on the traditional territories of the Anishnabek, Huron-Wendat, and Haudenosaunee (Iroquois) peoples. We acknowledge our shared responsibilities and obligations to preserve and protect the land, air and water. We are grateful to have the privilege to meet, explore, and connect here on these shared lands. In the spirit of friendship, peace and respect, we extend our thanks to all the generations that came before us and cared for these lands - for time immemorial."

### **3.** Disclosure of pecuniary interests

There were no pecuniary interests declared.

### 4. Approval of the Agenda

RES: G39/24

Moved by: Eric SandfordSeconded by: Rick EnglishTHAT the agenda be approved as presented and with the additions toItem 8 and Item 9.

<u>Carried</u>

### 5. Delegations

There were no delegations received for this meeting.

6. Public Input (3 minutes per speaker) There was no public input at this meeting.

### 7. Adoption of the Minutes:

- a. Board Meeting Minutes of March 14, 2024
- RES: G40/24 Moved by: Sherry Hamilton Seconded by: Jeff Wheeldon THAT the Regular Board Meeting Minutes of March 14, 2024 be adopted.

**Carried** 

### 8. Business arising from these minutes

- a. 2023 Year End Audit Report Financial Note 17 Addition Welch LLP
- RES: G41/24 Moved by: Jim Alyea Seconded by: Sherry Hamilton THAT the Note 17, Contingent Liability as provided in the agenda package be accepted and included in the Lower Trent Conservation Financial Statements for the period ended December 31, 2023.

### **Carried**

- b. January 30 March 1, 2024 Watershed Management, Planning and Regulations Report Revision
- RES: G42/24 Moved by: Gene Brahaney Seconded by: Mike Ainsworth THAT the revised January 30 – March 1, 2024 Watershed Management, Planning and Regulations Update report be accepted and received as information.

### **Carried**

 c. 2023 Year End Audit Report Financial Note 13 Revised – Welch LLP (Handout- Attachment 1)
 <u>RES: G43/24</u> Moved by: Sherry Hamilton Seconded by: Jeff Wheeldon THAT the Note 13 revision be accepted and included in the final Lower Trent Conservation Financial Statements for the period ended December 31, 2023; and THAT with the inclusion of Note 17 and revision of Note 13, the Lower Trent Conservation Financial Statements for the period ended December 31, 2023 be adopted for circulation.

<u>Carried</u>

### CORRESPONDENCE

### 9. Correspondence

- a. 2024-03-22 Letter to Jennifer Keyes, Ministry of Natural Resources and Forestry from Mississaugas of Scugog Island First Nation
   Director Alyea commented on the content of the letter in that it should have been distributed to include City of Quinte West. CAO Bateman said that none of our municipal partners were on the distribution list, only the counties. CO is expected to respond to the letter.
- b. 2024-04-05 Email from MNRF re: Proposed regulation regarding Minister's Permit and Review powers under the CA Act (Handout – Attachment 2).
   CAO Bateman spoke to the email and provided overview to clarify the proposed authority of the Minister of Natural Resources and Forestry regarding the issuance of permits.

RES: G44/24Moved by: Rick EnglishSeconded by: Jim AlyeaTHAT the correspondence be received as information.Carried

### STAFF REPORTS

### **10. Monthly Payments Issued**

<u>RES: G45/24</u>

Moved by: Lynda Reid Seconded by: Eric Sandford THAT the list of payments issued in the total amount of \$202,306.21 for the month of March 2024 be received as information.

<u>Carried</u>

### **11. Community Stewardship Reserve Fund**

<u>RES: G46/24</u> Moved by: Jeff Wheeldon Seconded by: Sherry Hamilton THAT the staff report be received as information; and

THAT the Board approve the establishment of a Community Stewardship Fund.

**Carried** 

### 12. Admin Office – Furniture Redesign Single Source Purchase

RES: G47/24Moved by: Jeff WheeldonSeconded by: Gene BrahaneyTHAT LTC enter into agreement with Grand & Toy (aka: Simcoe Office<br/>Products) to purchase three office desks for an upset limit of \$15,000.00<br/>(HST included) from the capital buildings reserve.

<u>Carried</u>

### 13. 2023 Surplus Allocation

Rhonda Bateman spoke to the 2023 Surplus Allocation report as provided in the agenda package.

Director English asked if there are other areas within the current budget that may fund the position and asked if the \$34K would be bringing LTC back to a recurring situation of drawing from surplus/reserves to fund this position annually again for next budget period. CAO Bateman responded yes, that for a number of years, this position has not been funded in the base budget and continues to be needed to support Conservation Lands work plans during peak periods.

Director Wheeldon asked if this position was the one presented in the initial draft 2024 budget that was to be converted to permanent full-time and removed at final budget decision. CAO Bateman responded it was partially; however, modified to support 6 months due to amount of surplus ending 2023.

Director Hamilton commented that the position was not made permanent and understands reasons why; however, it was commented during the budget process that LTC would possibly bring back the request for permanent funds in the next budget year. She feels the request is reasonable and grateful the funds are available from the year end surplus to support the hire for this year.

Director Ainsworth shared his support of not taking funds from reserve or surplus as the decision was determined during the 2024 budget process.

Director Wheeldon commented that the funds are not being drawn from existing reserves. The funds are requested as a result of the surplus balance at year ending December 31, 2023.

Director Alyea commented that it is not that the position is not supported, his concern is the municipal and public perception of using funds designated for previous year that are then being used for unbudgeted items in the following year.

Chair Mullin commented that whether LTC has surplus or not at the end of a year is unknown in advance of the budget process for the upcoming year. The budget decision is made in advance of the knowledge of the current year end financial statements balance.

RES: G48/24Moved by: Sherry HamiltonSeconded by: Bobbi WrightTHAT the 2023 annual operating surplus of \$78,581 be allocated to the<br/>following reserves and expenses:

\$18,164 to the Community Stewardship Reserve; and

\$15,000 to the Building, Structures, Bridges Reserve; and

\$34,000 be allocated for a six-month contract Conservation Lands Maintenance Assistant position to be funded from the 2023 year end operating surplus.

Director Ainsworth requested a recorded vote.

Board of Director	Municipality	Vote
Mike Ainsworth	Alnwick-Haldimand	No
Jeff Wheeldon	Brighton	Yes
Bobbi Wright	Brighton	Yes
Eric Sandford	Centre Hastings	Yes
Sherry Hamilton	Cramahe	Yes
Jim Alyea	Quinte West	Yes
Lynda Reid	Quinte West	Yes
Gene Brahaney	Trent Hills	Yes
Rick English	Trent Hills	Yes

**Carried** 

### 14. Watershed Management, Planning and Regulations Update

- a. Summary of Permits for Period March 2 March 28, 2024
- **b.** Planning and Regulations
- c. Flood Forecasting and Warning (FFW) and Ontario Low Water Response (OLWR)

Gage Comeau said a water safety statement will be issued for the Lake Ontario shoreline due to predicted winds increasing wave action.

<u>RES: G4924</u>

Moved by: Jim Alyea Seconded by: Lynda Reid THAT the Watershed Management, Planning and Regulations Update be received as information.

<u>Carried</u>

### 15. Wetland Offsetting Policy

Gage Comeau spoke to the *Wetland Offsetting Policy* report revisions as provided in the agenda package.

Director Alyea commented on broad definitions of wetlands and asked for clarification on unevaluated wetlands and whether changes in the regulations will change the way LTC deals with them.

The CAO indicated that although there were changes to the CA Act and regulations, LTC has not changed their policy on unevaluated wetlands. If the mapping shows as unevaluated, LTC still need to verify whether there is wetland.

Gage spoke to the Policy and discussed the basic wetland compensation requirements. Provincial regulation has changed the regulated areas around Provincially Significant Wetlands (PSW). There is a 30m setback for all wetlands regardless of size or type. Previously, PSWs had a regulatory 120m setback.

There was further discussion regarding the policy and where it would be used and how it could be applied.

Director Wheeldon asked if staff feel more confident in applying the policy with the ability to use their expertise in their evaluations.

Gage responded in the affirmative.

RES: G50/24Moved by: Jim AlyeaSeconded by: Sherry HamiltonTHAT the Wetland Offsetting Policy document revisions be approved<br/>and adopted.

**Carried** 

### 16. Conservation Lands Report - March 31, 2024

RES: G51/24Moved by: Jeff WheeldonSeconded by: Jim AlyeaTHAT the Conservation Lands Report for the period January 1 – March<br/>31, 2024 be received as information.

Carried

17. Community Outreach, Education and Stewardship Programs Report – March 31, 2024 Anne Anderson, Manager, Community Outreach and Special Projects spoke to the staff report as provided in the agenda package.

Director Ainsworth requested links to the LTC webpage for upcoming events could be shared with Alnwick/Haldimand.

Director Wright asked about the attendance at a recent Brighton Library event. Anne responded that they are strategizing with library staff as there is usually good attendance at LTC events.

Links to LTC website notices will be shared to all municipalities.

RES: G52/24Moved by: Rick EnglishSeconded by: Mike AinsworthTHAT the Community Outreach, Education and Stewardship ProgramsReport for the period January 1 – March 31, 2024 be received as<br/>information.

**Carried** 

### 18. Summary of Risk Management Official Activity Report – March 31, 2024

<u>RES: G53/24</u> Moved by: Bobbi Wright Seconded by: Mike Ainsworth THAT the summary of the Risk Management Official Activity pursuant to Part IV of the Clean Water Act report for the period of January 1 to March 31, 2024 be received as information.

Carried

### 19. Bay of Quinte Remedial Action Plan Program

- a. March 2024 Newsletter
- b. BQRAP Annual Report Year Ending March 31, 2024
- Seconded by: Jeff Wheeldon Moved by: Eric Sandford RES: G54/24 THAT the Bay of Quinte Remedial Action Plan Newsletter for March 2024; and THAT the BQRAP Annual Report for year ending March 31, 2024 be received as information.

Carried

### 20. Ratify March 25, 2024 Email Poll – Interim Policy Guidelines

- Moved by: Sherry Hamilton RES: G54/24 Seconded by: Mike Ainsworth THAT the Board of Directors March 25, 2024 eMail poll to approve the adoption of the Interim Policy Guidelines for the Administration and Implementation of Ontario Regulation 41/24 (Prohibited Activities, Exemptions and Permits) be accepted effective April 1, 2024 be ratified. Carried
- 21. Ratify March 28, 2024 Email Poll Delegation of Powers under the Conservation Authorities Act and O. Reg. 41/24

<u>RES: G55/24</u>	Moved by: Jeff Wheeldon THAT the Board of Directors March 2 Designation of Powers under Section Authorities Act and O. Reg. 41/24 be	Seconded by: Jim Alyea 28, 2024 eMail poll to approve the n 28.4 of the <i>Conservation</i> e accepted; and
	THAT the CAO/Secretary-Treasurer I to five years, to cancel permits and t and	be delegated to approve permits up to conduct administrative reviews;
	THAT the Manager, Watershed Man be delegated to approve permits up	agement, Planning and Regulations to five years, to cancel permits; and
	THAT the CA Board members are de <u>Carried</u>	legated as the Hearing Board.

### 22. CAO's Report

<u>RES: G56/24</u>	Moved by: Rick English	Seconded by: Jeff Wheeldon
	THAT the CAO's Report be rec	eived as information.
	Carried	

### 23. Members Inquiries/Other Business

CAO Bateman, announced that Kelly Vandette will be leaving LTC to take early retirement as of June 1, 2024.

The Directors expressed their gratitude and admiration for Kelly. All of the Directors wished her well and commented favourably on her accomplishments in bringing LTC forward and keeping the Board engaged.

An inquiry was raised as to the affect of Bill 185 on Conservation Authorities. Chair Mullin responded that there are not many details available yet as to any effects at the CA level.

In relation to the changes in regulations and powers of the Minister to issue permits and the number of process routes available to proponents for appeals, the CAO indicated that there will likely be more Ontario Land Tribunal (OLT) Hearings, more complaints and non-compliance issues.

Gage discussed some of the appeal mechanisms and Ministers powers. Appeals that go to OLT will result in increased costs due to legal fees and staff time and increase the overall financial burden for LTC. There are no mechanisms to recover funds from any appeal process.

Director Wheeldon inquired as to the affect the change in regulation has on files in progress.

Gage indicated that files received before April 1, 2024 are being evaluated under the old regulations and those received after April 1, 2024 will be subject to the new regulations.

Director Ainsworth mentioned that CN is planning on conducting pesticide spraying along the rail tracks and asked for MSD sheets on chemicals they are using because of local streams and ponds. The CAO indicated that under the new regulations, pollution is no longer part of LTC mandate. Gage spoke to having some information that he could share with Director Ainsworth.

Director English asked the width of a CN right of way. Gage commented that it depends on the track approach and location.

### 24. Adjournment

There being no further business, the meeting was adjourned.

<u>RES: G57/24</u> Moved by: Jim Alyea Seconded by: Rick English THAT the meeting be adjourned.

### **Carried**

Time 2:05 p.m.

Bob Mullin, Chair

Rhonda Bateman, CAO/ST

### THE LOWER TRENT REGION CONSERVATION AUTHORITY NOTES TO FINANCIAL STATEMENTS YEAR ENDED DECEMBER 31, 2023

#### **13. PENSION AGREEMENTS**

The Authority makes contributions to the Ontario Municipal Employees Retirement Fund (OMERS), which is a multi-employer plan, on behalf of the members of its staff. This plan is a defined benefit plan which specifies the amount of the retirement benefit to be received by the employees based on the length of service and rates of pay. Contributions are split equally between the employees and the Authority.

The Authority's share of contributions to OMERS for 2023 was \$129,889 (2022 - \$132,258) for current service costs, of which \$19,399 (2022 - \$22,575) related to Partnership Programs and \$109,683 (2022 - \$109,683) relates to Authority programs that are included in the statement of operations.

The OMERS plan has a reported \$4.2 billion going concern actuarial deficit at the end of 2023 (2022 - \$6.7 billion), and \$136.2 billion of going concern actuarial liabilities at the end of 2022 (2022 - \$130.3 billion).

## 14. UNCERTAINTY DUE TO IMPACT OF CHANGES TO THE CONSERVATION AUTHORITIES ACT AND REGULATIONS

In November 2022, the Provincial government passed Bill 23 that included amendments to the Conservation Authorities Act ("the Act") that have altered the role of Conservation Authorities ("CAs") in reviewing municipal planning applications for natural heritage. Additional pending Bill 23 amendments may further limit the role of CAs in planning and permitting. The Province has frozen CA user fees for 2023 and into 2024.

In December 2020, the Provincial government passed Bill 229, which made changes to the Act that made changes to the role of CAs and providing more control to municipalities over what programs and services of CAs that the municipalities will fund. These changes gave the Provincial government power to implement new regulations. Phase 1 of the regulations were finalized in October 2021 while phase 2 of the regulations were finalized in April 2022. These regulations required CAs to develop and inventory of programs and services and categorize them into three categories:

Category 1 - Mandatory Programs and Services

Category 2 - Municipal Programs and Services

Category 3 - Other Programs and Services

### Agenda Item #9.b. Correspondence - Handout 2024-04-11 Minutes - ATTACHMENT 2

# Proposed regulation regarding Minister's Permit and Review powers and er the Conservation Authorities Act

### ca.office (MNRF) <ca.office@ontario.ca>

Fri 2024-04-05 4:00 PM

To:dheinbuck@abca.ca <dheinbuck@abca.ca>;tbeaubiah@crca.ca <tbeaubiah@crca.ca>; generalmanager@catfishcreek.ca <generalmanager@catfishcreek.ca>;cdarling@cloca.com <cdarling@cloca.com>; quentin.hanchard@cvc.ca <quentin.hanchard@cvc.ca>;tim.pidduck@crowevalley.com <tim.pidduck@crowevalley.com>;tbyrne@erca.org <tbyrne@erca.org>;llaliberte@grca.on.ca <llaliberte@grca.on.ca>;slawson@grandriver.ca <slawson@grandriver.ca>;t.lanthier@greysauble.on.ca <t.lanthier@greysauble.on.ca>;hbasit@hrca.on.ca <hbasit@hrca.on.ca>;Lisa.Burnside@conservationhamilton.ca <Lisa.Burnside@conservationhamilton.ca>;mmajchrowski@kawarthaconservation.com <mmajchrowski@kawarthaconservation.com>;elizabeth@kettlecreekconservation.on.ca <elizabeth@kettlecreekconservation.on.ca>;r.baldwin@lsrca.on.ca <r.baldwin@lsrca.on.ca>;Tammy Cook <tammy@lakeheadca.com>;jmaxwell@lprca.on.ca <jmaxwell@lprca.on.ca>;pbeard@mvca.on.ca <pbeard@mvca.on.ca> Cc:Keyes, Jennifer (MNRF) <jennifer.keyes@ontario.ca>;ca.office (MNRF) <ca.office@ontario.ca>

\* This email is being sent on behalf of Jennifer Keyes, Director, Resources Planning and Development Policy Branch \*

### Good afternoon:

I am writing to you today to notify you of a regulation proposal that is available for public comment on the Environment Registry of Ontario at posting #<u>019-8320</u>.

Sections of the *Conservation Authorities Act* coming into effect on April 1, 2024 include provisions enabling the Minister of Natural Resources and Forestry (the Minister) to i) issue an order to prevent a conservation authority from issuing a permit and decide on a permit application in the place of the conservation authority, and ii) to review a conservation authority permit decision at the request of an applicant.

This proposed regulation would set out the limited circumstances under which the Minister may use these powers as circumstances where the proposed development activity or other activity pertains to specified matters of provincial interest. Additionally, it proposes a transparent process for individuals to request the use of these powers and sets out the information that would be submitted to the Minister as part of such a request.

If you have any questions, please reach out to the Ministry of Natural Resources and Forestry at <u>ca.office@ontario.ca</u>.

Sincerely,

Jennifer Keyes Director, Resources Planning and Development Policy Branch Ministry of Natural Resources and Forestry



Taking pride in strengthening Ontario, its places and its people

**Please Note:** As part of providing <u>accessible customer service</u>, please let me know if you have any accommodation needs or require communication supports or alternate formats

### Lower Trent Conservation PAYMENTS LOG - APRIL 2024

CHEQUE # /			
EFT #	PAYEE	DETAILS	AMOUNT
	Staff Pavroll	Apr/24 Pavroll Period Mar 16/24 - Apr 12/24	127.177.95
		· +··=· · · · · · · · · · · · · · · · ·	,
70371856	Sun Life	Apr/24 Group Benefits Premium	8.141.66
70759611	Sun Life	May/24 Group Benefits Premium	7.879.94
70759562	Workplace Safety Insurance Board	Apr/24 WSIB Premium	4.116.83
70759580	OMERS	Apr/24 Pension Contributions	22,373,32
70759553	Jani-King of Eastern	Apr/24 Cleaning - Admin and Workshop	1.357.82
70759645	K. Stephens	Staff Expenses - Reimbursed	66.42
70759540	CIBC VISA	Apr/24 Statement	2,854.40
16534	Deluxe Canada	Finance supplies - cheques	1,109.03
16535	Hitchon Pumps Inc.	Water Supplies - UV bulbs	248.60
16536	OT Group - DCB Business Systems Group Inc	Monthly Photocopier Usage Services	309.78
16537	Quinte Conservation	BQRAP - Stewardship & Monitoring	6,000.00
16538	The Napanee Beaver	BQRAP - Stewardship	264.42
16539	Trenton Home Hardware Building Centre	Property Maintenance Supplies	790.53
16540	JKN Consulting	Engineering Reviews	637.50
16541	Quinte Broadcasting Company Ltd.	BQRAP - Stewardship	1.762.80
16542	Templeman LLP	Legal - Wielenga	3.955.00
16543	Peterborough Fire Extinguishers Inc.	Annual Inspection	169.50
16544	Trenton Glass & Windows Ltd.	Window repairs - Admin Building	348.72
16545	WorkCabin	Employment Jobs - 10 postings	497.20
16546	A. Boulton	Mar 26/24 Source Protection Committee Mtg	200.00
16547	A. Hukowich	Mar 26/24 Source Protection Committee Mtg	200.00
16548	B. Clark	Mar 26/24 Source Protection Committee Mtg	200.00
16549	D. Workman	Mar 26/24 Source Protection Committee Mtg	200.00
16550	F. Langmaid	Mar 26/24 Source Protection Committee Mtg	200.00
16551	G. Offshack	Mar 26/24 Source Protection Committee Mtg	200.00
16552	G. Milne	Mar 26/24 Source Protection Committee Mtg	200.00
16553	J. Ferri	Mar 26/24 Source Protection Committee Mtg	200.00
16554	M. Gibbs	Mar 26/24 Source Protection Committee Mtg	200.00
16555	P. Niblett	Mar 26/24 Source Protection Committee Mtg	200.00
16556	R. Gagnon	Mar 26/24 Source Protection Committee Mtg	200.00
16557	R. Straka	Mar 26/24 Source Protection Committee Mtg	200.00
16558	R. Lake	Mar 26/24 Source Protection Committee Mtg	200.00
16559	T. Rees	Mar 26/24 Source Protection Committee Mtg	200.00
16560	T. Tavlor	Mar 26/24 Source Protection Committee Mtg	200.00
16561	B&T Sales	Janitorial Supplies	157.23
16562	Marsh Canada Limited	Apr/24 - Mar/25 Insurance Premiums	67.951.04
16563	Snap360 Ltd.	Apr/24 - Mar/25 Web Support & Maintenance	1.326.62
16564	Waste Management of Canada Corporation	Monthly Waste Services - Conservation Lands	92.69
16565	City of Quinte West	Monthly Water/Wastewater - Workshop	74.71
16566	Crowe Valley Conservation	Mar/24 Source Water Protection TCC	25.492.88
16567	Otonabee Region Conservation Authority	Mar/24 Source Water Protection TCC	30,667,60
16568	Kawartha Region Conservation Authority	Mar/24 Source Water Protection TCC	27,462,14
16569	Ganaraska Region Conservation Authority	Mar/24 Source Water Protection TCC	40.322.76
16570	Bell Mobility Inc.	Monthly Cellular Phones - Service	205.86
16571	Brighton Springs	Water Supply - Admin Bldg	74.00
16572	CDW Canada Corp.	Annual Renewal - VEEAM Backup software	525.24
16573	Cogeco Connexion Inc.	Monthly Internet Services - Workshop	90.34
16574	Cormier Autopro - Obsentia	5 Vehicles - Maintenance	379.65
16575	Enbridge - Uniongas	Monthly Utilities - Admin Bldg and Workshop	347 50
16576	Free Flow Petroleum	Monthly Vehicle and Equipment Fuel	618.15

#### Lower Trent Conservation PAYMENTS LOG - APRIL 2024

CHEQUE # /			
EFT #	PAYEE	DETAILS	AMOUNT
16577	Hydro One Networks Inc.	Monthly Utilities	1,051.15
16578	Purolator Inc.	Courier Services	31.74
16579	Staples Commercial	Office Supplies	677.89
16580	Telizon Inc	Monthly Telephone Lines	465.93
16581	Welch LLP	Audit Balance YE Dec 31/23	5,085.00
16582	Hastings County Plowmen's Association	2024 Exhibitor Space	330.00
16583	M. Frenkel	Refund Deposit - Coastal Engineer	880.00
16584	T. and S. Lowe	BQRAP - Stewardship Septic	367.25
16585	Janbar Electric Ltd.	Electrical Service - Admin Bldg	169.50

Total of Payments April 2024 397,908.29

2024	LTC FINANCIAL REPORT - Q	1 (Jan-I	Ma	r)					
	FXPENDITURES			2023 BUDGET		ACTUAL		BUDGET TO	% of
			-			MAR 31/24	AC	TUAL VARIANCE	Budget
	NATURAL HAZARD MGMT								
	S	taffing	\$	547,843	\$	118,574	\$	429,269	22%
	qO	erating	Ś	146.338	Ś	28.120	Ś	118.218	19%
		Capital	\$	-	\$	-	\$	-	
	PROV WATER QUALITY-QUANTI		NITC	DRING					
	S	taffing	Ś	24.284	Ś	6.520	Ś	17.764	27%
	qO	erating	Ŧ	, :	Ŧ	-,	Ś		
	·	Capital					\$	-	
	LOCAL/REGONAL DRINKING WA	TER SO	URC	E PROTECTION					
	S	taffing	\$	307,374	\$	76,100	\$	231,274	25%
	Op	erating	\$	83,747	\$	20,937	\$	62,810	25%
	CORE WATERSHED-BASED RESO	URCE M	1GN	IT STRATEGY					
	S	taffing	\$	-	\$	-	\$	-	
	Ор	erating	\$	500	\$	-	\$	500	0%
۲	CA LANDS AND ARFAS								
ō		to ff:	÷	242 600	÷	F2 C4F	ć	100.055	220/
AT	3	taming	ې د	242,600	ې د	53,645	ې د	188,955	22%
Ą	Op	Conitol	Ş ¢	121,009	ې د	20,988	ې د	94,081 177 000	22%
A		capitai	Ļ	177,000	ç	-	ç	177,000	070
Σ	ENABLING SERVICES								
÷	S	Staffing	\$	601,368	\$	138,468	\$	462,900	23%
≿	Op	erating	\$	284,869	\$	36,867	\$	248,002	13%
<b>N</b> O		Capital	\$	42,400	\$	8,225	\$	34,175	19%
Ц Ц С	TOTAL EXPENDITURES (	CAT 1 =	\$	2,579,992	\$	514,443	\$	2,065,549	20%
, A									
J	INCOME			2024 BUDGET		ACTUAL		BUDGET TO	
			<u>,</u>		~	MAR 31/24	AC		00/
	Provincial	l Funds	ې د	68,831	ې د	-	Ş	68,831	0%
	Federal Municipal Concern	Funas	ې د	13,902	ې د	-	ې د	13,902	0%
	Municipal - General	Levies	ې د	1,235,238	ې د	989,997	ې د	245,242	80%
	Municipal - Capital	Levies	၃ ၄	96,105 22 167	ې د	70,404	၃ ၄	19,021	00%
	Legal inquiries / Perm	it Foos	γ ¢	180.000	ې خ	29 020	ې خ	150 980	0% 16%
	Plan Review	N Fees	ς ς	130,000	ς ς	21,020	ې د	108 600	16%
	CL Fees and Leases I	ncome	Ś	30.333	Ś	10.040	Ś	20,293	33%
	Administered Pro	ograms	Ś	256.000	Ś	41.897	Ś	214.103	16%
	DW Source Pro	tection	\$	391.121	\$	97.037	\$	294.084	25%
	Miscellaneous Re	evenue	\$	30,000	\$	15,001	\$	14,999	50%
	Donations /	Grants	\$	3,000	\$	165	\$	2,835	6%

121,295 \$

2,579,992 \$

\$

-

1,283,041 \$

Surplus / Reserves \$

TOTAL INCOME CAT 1 = \$

50%

0%

121,295

1,296,951

2024	LTC FINANCIAL REPORT - Q1 (Jan-	M	ar)				
	EXPENDITURES		2024 BUDGET		ACTUAL MAR 31/24	AC	BUDGET TO
	NON-OWNED ECS/FCS INFRASTRUCTUR	RE					
	Staffing Operating	\$ \$	6,107	\$ \$	1,650 -	\$ \$	4,457 -
	LOCAL SP RMO/RMI & EDUC/OUTREAC	н					
RY	Staffing	\$	111,832	\$	27,032	\$	84,800
ATC	Operating	\$	26,818	\$	1,711	\$	25,107
AND/	ENVIRONMENTAL SIGNIFICANT LAND ACCQUISITIONS						
È	Staffing	\$	-	\$	-	\$	-
ż	Operating	\$	-	\$	-	\$	-
S	Capital	Ş	-	Ş	-	Ş	-
2	TOTAL EXPENDITURES CAT 2 =	\$	144,757	\$	30,394	\$	114,363
Ž							
09	INCOME		2024 BUDGET		ACTUAL MAR 31/24	AC	BUDGET TO
Ę	Provincial Funds					\$	-
2	Federal Funds					\$	-
	Municipal - Agreements	Ş	6,107	Ş	4,886	Ş	1,221
	Municipal - SP Agreements	Ş	138,650	Ş	110,920	Ş	27,730
		Ş	-	Ş	-	Ş	-
	Surplus or Reserves	Ş	-	Ş	-	Ş	-
	TOTAL INCOME CAT 2 =	Ś	144 757	Ś	115 806	Ś	28 951

### Page 19

LTC FINANCIAL REPORT - Q1 (Jan-	M	ar)					
EXPENDITURES		2024 BUDGET		ACTUAL MAR 31/24	A	BUDGET TO CTUAL VARANCE	
LOCAL WATER QUALITY MONITORING							
Staffing	\$	53 <i>,</i> 353	\$	7,244	\$	46,109	14%
Operating	\$	22,133	\$	2,611	\$	19,522	12%
YOUTH EDUCATION							
Staffing	\$	51,825	\$	10,306	\$	41,519	20%
Operating	\$	15,000	\$	1,227	\$	13,773	8%
COMMUNITY OUTREACH/STEWARDSH	IP						
Staffing	\$	-	\$	-	\$	-	
Operating	\$	25,000	\$	6,780	\$	18,220	27%
TOTAL EXPENDITURES CAT 3 =	\$	167,311	\$	28,167	\$	139,144	17%
INCOME		2024 BUDGET		ACTUAL MAR 31/24	A	BUDGET TO	
Provincial Funds	¢	_			¢	_	
Federal Funds	Ś	13,902	Ś	-	Ś	13,902	0%
Municipal Agrmts - Monitoring	\$	66,218	\$	52,974	\$	13,244	80%
Municipal Agrmts - Youth Educ	\$	38,431	\$	30,744	\$	7,687	80%
Stewardship-Outreach Funds	\$	25,000	\$	34,297	-\$	9,297	137%
Youth Education Funds	\$	23,760	\$	5,940	\$	17,820	25%
ΤΟΤΑΙ ΙΝΟΟΜΕ ΟΑΤ 3 -	ć	167 211	ć	122 055	ć	13 257	7/10/
	Ş	107,311	Ş	123,333	Ş	43,337	7470
	LTC FINANCIAL REPORT - Q1 (Jan- EXPENDITURES LOCAL WATER QUALITY MONITORING Staffing Operating YOUTH EDUCATION YOUTH EDUCATION COMMUNITY OUTREACH/STEWARDSH Staffing Operating COMMUNITY OUTREACH/STEWARDSH Staffing Operating INCOME INCOME Provincial Funds Federal Funds Municipal Agrmts - Monitoring Municipal Agrmts - Youth Educ Stewardship-Outreach Funds Youth Education Funds	LTC FINANCIAL REPORT - Q1 (Jan-Ma EXPENDITURES LOCAL WATER QUALITY MONITORING Staffing \$ Operating \$ YOUTH EDUCATION Staffing \$ Operating \$ COMMUNITY OUTREACH/STEWARDSHIP Staffing \$ Operating \$ Operating \$ Operating \$ Staffing \$ Operating \$ Staffing \$ Operating \$ Staffing \$ Operating \$ MUNICIPAL EXPENDITURES CAT 3 = \$ Nunicipal Agrmts - Monitoring \$ Municipal Agrmts - Monitoring \$ Municipal Agrmts - Monitoring \$ Municipal Agrmts - Youth Educ \$ Stewardship-Outreach Funds \$ Youth Education Funds \$	ITC FINANCIAL REPORT - Q1 (Jan-Warter QUALITY MONITORING Staffing \$ 2024 BUDGETLOCAL WATER QUALITY MONITORING Staffing \$ 53,353 Operating \$ 53,353 Staffing \$ 53,353 (Derating \$ 51,825 Operating \$ 51,825 Operating \$ 51,825 Operating \$ 51,825 (Derating \$ 167,311INCOMEINCOME <b>2024 BUDGET</b> (S 31,902 (S 31,902 (S 31,902 (S 31,902 (S 31,802) (S 31,802)	LTC FINANCIAL REPORT - Q1 (Jan-Warter QUALITY MONITORING Staffing \$ 2024 BUDGETLOCAL WATER QUALITY MONITORING Staffing \$ 53,353 \$ Operating \$ 22,133 \$YOUTH EDUCATION Staffing \$ 51,825 \$ Operating \$ 51,825 \$ Staffing \$ 51,825 \$ Staffing \$ 51,825 \$ \$ 0perating \$ 15,000 \$COMMUNITY OUTREACH/STEWARDSHIP Staffing \$ \$ Operating \$ 25,000 \$TOTAL EXPENDITURES CAT 3 = \$ 167,311 \$INCOMEProvincial Funds \$ Federal Funds \$ 13,902 \$ Municipal Agrmts - Monitoring \$ 66,218 \$ Municipal Agrmts - Youth Educ \$ 38,431 \$ Stewardship-Outreach Funds \$ 25,000 \$TOTAL INCOME CAT 3 = \$ 167,311 \$	LTC FINANCIAL REPORT - Q1 (Jan-War)EXPENDITURES2024 BUDGETACTUAL MAR 31/24LOCAL WATER QUALITY MONITORING Staffing\$ 53,353\$ 7,244 QperatingYOUTH EDUCATION\$ 22,133\$ 2,611YOUTH EDUCATION\$ 51,825\$ 10,306 QperatingStaffing\$ 51,825\$ 10,306 1,227COMMUNITY OUTREACH/STEWARDSHIP Staffing\$ -Staffing\$ 2,000\$ 6,780TOTAL EXPENDITURES CAT 3 =\$ 167,311\$ 28,167INCOME2024 BUDGETACTUAL MAR 31/24Provincial Funds\$Federal Funds\$ 13,902\$ -Municipal Agrmts - Monitoring\$ 66,218\$ 22,974Municipal Agrmts - Youth Educ\$ 38,431\$ 30,744Stewardship-Outreach Funds\$ 25,000\$ 34,297Youth Education Funds\$ 23,760\$ 5,940	LTC FINANCIAL REPORT - Q1 (Jan-Mar)         EXPENDITURES       2024 BUDGET       ACTUAL MAR 31/24       ACTUAL MAR 31/24       Actual Mar         LOCAL WATER QUALITY MONITORING Staffing       \$ 53,353       \$ 7,244       \$         Operating       \$ 22,133       \$ 2,611       \$         YOUTH EDUCATION       \$ 22,133       \$ 10,306       \$         Operating       \$ 51,825       \$ 10,306       \$         Operating       \$ 15,000       \$ 1,227       \$         COMMUNITY OUTREACH/STEWARDSHIP Staffing       \$ -       \$ -       \$         Operating       \$ 25,000       \$ 6,780       \$         TOTAL EXPENDITURES CAT 3 =       \$ 167,311       \$ 28,167       \$         Municipal Agrmts - Monitoring       \$ 66,218       \$ 52,974       \$         Municipal Agrmts - Youth Educ       \$ 38,431       \$ 30,744       \$         Stewardship-Outreach Funds       \$ 25,000       \$ 34,297       \$         Youth Education Funds       \$ 2,3760       \$ 34,297       \$	LTC FINANCIAL REPORT - Q1 (Jan-War)         EXPENDITURES       2024 BUDGET       ACTUAL MAR 31/24       BUDGET TO ACTUAL VARANCE         LOCAL WATER QUALITY MONITORING Staffing \$ 53,353 \$ 7,244 \$ 46,109 Operating \$ 22,133 \$ 2,611 \$ 19,522       \$ 46,109         YOUTH EDUCATION       \$ 22,133 \$ 2,611 \$ 19,522         YOUTH EDUCATION       \$ 51,825 \$ 10,306 \$ 41,519 Operating \$ 15,000 \$ 1,227 \$ 13,773         COMMUNITY OUTREACH/STEWARDSHP Staffing \$ - \$ \$ - \$ 6,780 \$ 18,220         YOUTH EDUCATION       \$ 167,311 \$ 28,167 \$ 139,144         INCOME       2024 BUDGET       \$ 400 \$ 13,902         Provincial Funds \$ 13,902 \$ - \$ 13,902       \$ 13,902         Provincial Funds \$ 13,902 \$ - \$ 13,902       \$ 13,902         Municipal Agrmts - Monitoring \$ 66,218 \$ 52,974 \$ 13,244         Municipal Agrmts - Youth Educ \$ 38,431 \$ 30,744 \$ 7,687         Stewardship-Outreach Funds \$ 25,000 \$ 34,297 - \$ 9,297         Youth Education Funds \$ 23,760 \$ 5,940 \$ 17,820

2024	LTC FINANCIAL REPORT - Q1 (Jan-	Ma	r)					
	TOTAL LTC EXPENSES	\$	2,892,060	\$	573,004	\$	2,319,056	20%
	TOTAL INCOME	\$	2,892,060	\$	1,522,802	\$	1,369,258	53%
	NET BALANCE			\$	949,797			
	Municipal General Levy	\$	1,235,238	\$	989,997	\$	245,242	80%
	Municipal Capital Levy	\$	98,105	\$	78,484	\$	19,621	80%
	Municipal Agreements	\$	249,406	\$	199,524	\$	49,882	80%
	Total Municinal Levies/Aareements	¢	1 582 749	¢	1 268 005	¢	314 745	80%
	Total manepar Levies, Agreements	Ŷ	1,502,745	Ŷ	1,200,000	<b>Y</b>	514,745	0070
	Wages & Benefits	\$	1,946,586	\$	439,538	\$	1,507,048	23%
	Operating	\$	726,074	\$	125,241	\$	600,833	17%
	Operating Total	\$	2,672,660	\$	564,779	\$	2,107,881	21%
	Capital Total	\$	219,400	\$	8,225	\$	211,175	4%
		\$	2,892,060	\$	573,004	\$	2,319,056	20%



### Agenda Item #12.b.



## **STAFF REPORT**

Date:	April 26, 2024
То:	LTC Board of Directors
Re:	Watershed Management, Planning and Regulations
	UPDATE
Prepared by:	Gage Comeau, Manager, Watershed Management,
	Planning and Regulations

### **PROPOSED RESOLUTION:**

THAT the Watershed Management, Planning and Regulations update be accepted as information.

### **BY THE NUMBERS:**

Here are the numbers for <u>new files and deliverables</u> in 2024 and compared to similar numbers for previous years. Highlighted boxes indicate that 2024 has MORE files to date than previous years.

	# Files for 2024	Dates for S	Dates for Similar Number for Previous Years (Total for Year)						
(as of April 26, 2024)		2023	2022	2021	2020				
Permits	96	Apr 14 (305)	Apr 14 (398)	Apr 27 (383)	May 15 (351)				
Planning	71	May 9 (198)	Apr 7 (310)	Apr 7 (259)	Jul 7 (169)				
Complaints	19	May 12 (74)	May 10 (66)	Apr 22 (65)	Apr 27 (56)				
Enforcement	16	Aug 1 (35)	Apr 25 (63)	Jun 1 (45)	Aug 6 (32)				
Online Inquiries	471	Jul 27 (1003)	Jul 4 (738)	Apr 22 (1132)	Sep 17 (645)				
Legal Requests	26	Sept 12 (58)	Jul 14 (36)	Aug 3 (48)	Nov 19 (28)				
Clearance	14	Jun 2 (52)	Jun 23 (25)	n/a	n/a				
Letters									
Site Visits	64	Jun 21 (231)	Apr 28 (363)	May 25 (282)	Aug 10 (166)				

Table 1	File review –	New files and	deliverables in	2024 versus	previous v	<i>lears</i>
TUDIC 1.		New mes and			previous j	/ cui J

### Legal Cases:

- ENF-20-028 Status: ONGOING Update April 17, 2024 Courts did not get to the matter due to a number of other matters. The outstanding appeals for this case including the Kienapple Principle and argument regarding reasonableness on the sentence and restoration order will be heard on May 14, 2024. As such, the remainder of the issues will be heard and a decision will likely be given one further date after that to provide the Judge enough time to review the documents.
- ENF-21-005: Status: ONGOING Update Restorations works are almost complete and staff are hopeful this
  matter will be closed by late Spring.

### Watershed Management

It is important to note that wetland assessment list is open for 2024 and staff will be looking to schedule wetland
assessments in the growth season (i.e., potentially the start of May). There are currently over 50 wetland
assessments on the wait list, and the list is growing. Staff are currently looking to set a threshold that will
determine when a visit is guaranteed and when a visit may have to be rescheduled for the next growth season.

- Monitoring data analysis is complete and staff are finalizing an annual report. Staff are hoping to provide a presentation and update following completion of the report.
- LTC applied and were awarded grant funding through the Community Emergency Preparedness Grant for Flood Forecasting and Warning upgrades. Through this grant, staff will be upgrading/replacing rain gauges in the watershed and will be adding 4 new units (3 in areas to be determined; 1 for Mayhew Creek). Staff will be contacting Cramahe, Stirling-Rawdon and Alnwick/Haldimand staff to discuss good locations for the 3 new rain gauges.

### **Online Inquiries**

Below is a quarterly update of the current online inquiry numbers staff have received in comparison to previous years (Table 2). Staff are currently managing large volumes of inquiries that are consistent with numbers seen in 2021 when the housing market was experiencing large volumes of real estate sales. These files are taking staff long periods of time to manage as many of the properties are regulated and development may be restricted or require further review from staff. Additionally, properties with historical planning and permitting approvals are appearing that require staff time to review prior to providing formal responses. If the number of inquiries received continues on this trend, we are projected to exceed the numbers we saw in 2021. Through these inquiries staff have circulated and provided our permit application to a large portion of the proponents that have submitted inquiries. An important note to report is that online/general inquiries are a free service that LTC provides. Cost recovery is received through various items noted in our Board approved fee schedule including but not limited to clearance letters, legal requests, site visits, pre-consultation meetings and technical report reviews (prior to receiving formal circulation of applications). However, these cost recovery mechanisms are not always triggered by inquiries. Staff strongly encourage proponents to schedule pre-consultation meetings to reduce lengthy calls and walk-in style meetings to allow staff to manage workloads appropriately where questions/inquiries go beyond our generalized responses.

	1				. ,	1
	2019	2020	2021	2022	2023	2024
Q1	105	111	369	214	141	340
Q2	146	163	324	251	232	131*
Q3	116	228	269	142	408	
Q4	79	193	170	127	222	
Total	446	695	1132	734	1003	471

Table 2. Inquiry review - Annual and quarterly numbers for inquiries received (as of April 26,2024)

Bolded fond indicates record number of files for a specific quarter or year. Highlighted area indicates current calendar year. \*- Q2 numbers as of April 26, 2024

### Permitting:

Ongoing Permit files:

- Staff have issued **20** permits since the previous reporting period.
- Staff are currently reviewing and commenting on **34** open 2024 permit files and **42** files from previous years as well.
- As part of our annual policy review and the legislative changes that have taken effect on April 1, 2024 for the Conservation Authorities Act and Ontario Regulation 41/24, staff are updating the LTC Regulatory policies, permit application and LTC technical guidelines.

Below is a quarterly update of our current permit numbers in comparison to previous years. In the first quarter of 2023, LTC staff received 74 applications which is comparable to applications received in 2021 and 2022. The majority of the

### Agenda Item #12.b.

inquiries staff have received in the past few months are for projects in regulated areas and would require an LTC permit prior to the commencement of any on-site work. With the current cost of living and high interest rates, it is possible that volume of inquiries and permit applications we have sent to proponents may not translate to permit applications received. It is important to note that as of April 1, 2024, regulatory changes may impact the number of permit applications staff may receive.

		1						
Permitting								
Quarter/Year	2017	2018	2019	2020	2021	2022	2023	2024
Q1	40	48	32	52	71	78	82	74
Q2	81	81	88	94	127	125	81	22*
Q3	81	80	149	117	101	112	93	
Q4	56	40	69	88	84	83	64	
total	258	249	338	351	383	398	320	96

Table 3. Annual and quarterly numbers for permits received (as of April 26,2024	Table 3. Annual and	d quarterly number	rs for permits received	d (as of April 26,2024)
---	---------------------	--------------------	-------------------------	-------------------------

Bolded fond indicates record number of files for a specific quarter or year. Highlighted area indicates current calendar year. \*- Q2 numbers as of April 26, 2024

### Planning:

- LTC Staff reviewed and commented on **10** Subdivision and Condominium Files in 2024 (new and ongoing).
- LTC Staff reviewed and commented on 17 Planning Act Applications (Severances, Zoning By-law amendments, Official Plan amendments, Site Plan Control applications and/or Minor Variances). Additionally, we are reviewing several technical reports for pre-consultation files including but not limited to; 1 site plans and 8 Environmental Impact Studies.

Below is a quarterly update of our current planning numbers in comparison to previous years. In the first quarter of 2023, LTC staff received a number of planning files that surpassed the Q1 numbers from 2022 and 2023. We have seen a decrease in the number of new planning files received in the month of April as we are moving into Q2, but this decrease may be due to updates and proposed legislation changes that the Province has put forth for the Planning Act and other associated legislation. The bulk of staff's workload since the previous reporting period for Planning files are related to both new and historic subdivision files.

	una quarter	ly numbers		6 / pplicatic				1p111 20,201
Planning								
Quarter/Year	2017	2018	2019	2020	2021	2022	2023	2024
Q1	45	55	71	45	69	58	45	62
Q2	53	60	59	17	73	98	63	9*
Q3	61	69	59	57	68	83	45	
Q4	34	58	41	50	48	71	60	
total	193	242	230	169	258	310	213	71

Table 4. Annual and quarterly numbers for Planning Applications received for comment (as of April 26,2024)

Bolded fond indicates record number of files for a specific quarter or year. Highlighted area indicates current calendar year. \*- Q2 numbers as of April 26, 2024

Lastly, kind reminder to let your Municipal staff know that LTC is here to assist our Municipal partners where possible. LTC Staff can walk landowners through our permitting process, the planning process and other procedures/processes that may be applicable to their proposal or inquiries. LTC Staff are incredibly knowledgeable and we are here to help the residents of our Watershed.

It is important to note that Planning and Regulations staff are increasingly busy in all file categories and timelines for responses and deliverables for all file types may take longer than expected. Additionally, with recent legislative changes, staff workload may continue to increase due to misinformation that is present in the public, new directives from the Province and new administrative changes in the Conservation Authorities Act.

### **RECOMMENDATION:**

• Staff recommends to the Board of Directors that the Planning and Regulations Update be accepted as information.



## **STAFF REPORT**

Date:April 26, 2024To:LTC Board of DirectorsRe:Flood Forecasting & Warning UPDATEPrepared by:Gage Comeau, Manager, Watershed Management,<br/>Planning and Regulations

### **PROPOSED RESOLUTION:**

THAT the Flood Forecasting and Warning Update be received as information.

### **BY THE NUMBERS:**

Here are the number of flood communications issued and compared to the total of number of statements issued in previous.

	Flood Communications Issued		Total Number for Previous Years							
Statements	(as of April 26, 2024)	2023	2022	2021	2020	2019*	2018			
Water Safety	2	4	2	2	3	8	2			
Flood Outlook	1	8	4	4	5	5	5			
Flood Watch	2	2	0	0	3	6	7			
Flood Warning	0	2	0	0	0	13	0			
Total (System)	5	15	6	6	11	32	14			

### Table 1. Number of flood communications issued by Staff.

### Summary of Current Conditions

Precipitation volumes exceeded the monthly long-term average for the month of April and based on the longterm forecast for May, it appears that our watershed will continue to receive above normal precipitation. This trend appears to change moving into June where precipitation is expected to be less than the long-term average. Further, long term forecasts are showing that droughts could be an issue during late summer or early fall as below average rainfall is expected after the Spring period. It is important to note that these forecasts are subject to change over time. LTC staff will be continuing to review the weather and stream conditions and will report further if there appears to be any potential flood or drought issues.

### Local Creeks

Currently, the majority of the creek systems are still experiencing slightly higher than average flows due to receiving above normal precipitation volumes this month. Water levels and flows are within the expected range for this time of year. Staff will be continuing to review the conditions and forecast for updates. The local creeks within our watershed are sensitive to local inputs of rainfall and are subject to quick increases and decreases in stream flow. Most of the local creeks see a peak in stream flow conditions within 24-48 hours after a rainfall event.



Table 2. Observed Monthly Precipitation (mm) in 2024 compared to the monthly long-term average.

### Trent River

The Trent River system is experiencing slightly above average water levels and flows compared to previous years. This is due to operations being conducted by Parks Canada-Ontario Waterways managing the large volume of water that is moving through the system. Owners may experience slight variability in the water levels and flows during peak navigation times. Waterfront landowners are advised to exercise caution while the higher than average water levels and flows are present.

### Lake Ontario

Currently, water levels are average for this time of year. Staff are continuing to review weather conditions for any high wind events that may result in storm surges with waves exceeding 1 metre.

### **RECOMMENDATION:**

Staff recommends to the Board of Directors that the Flood Forecasting and Warning Update be received as information.



## **STAFF REPORT**

Date:April 26, 2024To:LTC Board of DirectorsRe:Unstable Bedrock (Karst) Investigation GuidelinesPrepared by:Gage Comeau, Manager, Watershed Management,<br/>Planning and Regulations

### **PROPOSED RESOLUTION:**

THAT the Unstable Bedrock (Karst) Investigation Guidelines be approved and adopted.

### BACKGROUND:

With the changes to the *Conservation Authorities Act* and the addition of Ontario Regulation 41/24 coming into effect on April 1, 2024, the need for a set of guidelines for unstable bedrock (Karst) is required for staff to ensure that we are adequately equipped to properly administer our duties laid out in the Act and Regulations. Although, LTC has regulated development in areas of unstable soil and bedrock for several years, a set of guidelines for unstable bedrock (Karst) was not previously developed for use. As such, LTC has adapted a set of existing guidelines created by Quinte Conservation to meet our needs.

The adapted guidelines set out how staff will handle properties that are mapped as having potential, known or inferred karst present. In order to ensure that we are properly administering our duties under the Act and Regulations, staff will undertake a site visit at every property where the available mapping identifies any of the three mapping categories; potential, know and inferred. Although, this will add to staff's workload, we are duty bound to review the site and provide appropriate comments that reflect the legislation.

Following the approval and adoption of this document, training will be provided to staff to ensure that are able to identify potentially hazardous bedrock areas on a property and properly administer the guidelines.

### **RECOMMENDATION:**

Staff recommends to the Board of Directors that the Unstable Bedrock (Karst) Investigation Guidelines be approved and adopted.



### **Lower Trent Region**

### **Conservation Authority**

## **Karst (Unstable Bedrock) Investigation Guidelines**

May, 2024

Item XX. Karst (Unstable Bedrock) Investigation Guidelines

Motion #

Moved by:

### Seconded by:

THAT, the Unstable Bedrock Investigation Guidelines be approved.

### **1.0 INTRODUCTION**

Page 32 Karst topography is a unique landscape that is found throughout southern Ontario as well as in the Lower Trent Conservation watershed. In the context of human interaction, this landform can be considered as a natural hazard and is regulated by Lower Trent Conservation through Part VI of the *Conservation Authorities Act* and Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits. Karst topography is a landform that is not well understood and can present challenges when properties with this landscape are being considered for development. This document has been prepared in effort to improve the understanding of this hazard, how it is regulated, and what is required in terms of technical studies in support of land development applications. Karst topography also referred to as unstable bedrock can be described as follows:

Karst Non-limestone Karst window Cave entrance Sinkhole protective caprock valley Sinking stream Ridgetop nond Vertical shaft Sinkhole Base-level pond stream Base-level spring Limestone Bedded chert Water Siltstone table Cave Dry Producing passages hole well Base-level cave passage Vertical scale exaggerate

*"landscapes that display distinctive features from the physical erosion, and dissolution of bedrock by surface or ground water. This landscape can be exhibited in various forms such as illustrated below in Figure 1"* 

Figure 1: Illustration of Features of a Well-Developed Karst Terrain (Currens, 2001).

Hazards are associated with this type of bedrock because the dissolving and erosion can weaken the rock creating unstable conditions. Sink holes or collapse of the rock can occur potentially resulting in property damage as well as potential harm to human health. Groundwater in areas of karst topography is also at risk due to the potential rapid movement of contaminants near the ground surface into the underlying aquifers. The risk of contamination also increases when karst topography and land development are located near surface water features such as lakes, rivers, streams and springs.

The following report contains pertinent information regarding the following:

- 1.) The occurrence of karst in the Lower Trent Conservation watershed,
- 2.) Regulations and Policy regarding karst bedrock, &
- 3.) Technical study requirements for karst bedrock.

### 2.0 KARST TOPOGRAPHY IN THE LOWER TRENT WATERSHED

Karst topography is a unique landscape that is shaped by the dissolution of soluble bedrock (i.e. limestone) by mildly acidic groundwater and precipitation. This landscape that is formed can be characterized as exhibiting natural voids, solution openings (i.e. fissures), sinkholes, subsurface caverns, caves and/or, disappearing streams. A term "karren" is sometimes used to describe karst bedrock which is in the early stages of karstification. The karst process occurs over a very long period of time in the order of thousands to millions of years.

Page 33

Shallow limestone bedrock (minimal soil cover) is abundant throughout the Lower Trent Conservation watershed and some karst formations can be easily viewed at ground surface. Mapping of karst topography in southern Ontario has been completed by the Ontario Geological Survey – OGS (Brunton & Dodge, 2008). There is a significant portion of the Lower Trent Conservation watershed that is mapped as having karst topography, specifically, the Municipality of Trent Hills in Northumberland County, and the Township of Stirling-Rawdon and Municipality of Centre Hastings within Hastings County. These municipalities are mapped under to the following three categories:

- 1. Known Karst, directly observed, measured, or noted in published reports,
- 2. Inferred Karst, carbonate bedrocks that are vulnerable or susceptible to karst processes; and,
- 3. Potential Karst, bedrock that is susceptible to karst processes.

### 2.1 Living with Karst

Karst in itself may not actually be considered a problem as this landscape is a naturally occurring physical and ecological process that has shaped and re-shaped the landscape. The formations typically become a problem or a 'hazard" when human activities and structures are located within the area(s) that are directly impacted by these natural processes.

Such problems can be attributed to structural integrity of the bedrock and ability to support foundations and structures. Migration of soil into underlying cavities can occur resulting in solution openings; collapse or shifting of rock beneath a foundation can also occur resulting in structural damage. Sometimes such occurrences can be attributed to impacts after a site is developed due to increased stress caused by loadings from foundations, and changes in drainage patterns that may enhance water movement into karst areas.

Karst formations can also influence groundwater recharge and the movement of groundwater with enhanced rates of flow. This can present problems of contamination for the underlying groundwater where servicing may be provided by onsite septic systems or where sources of contamination may be stored or generated (i.e. fuel storage or runoff from parking lots) near open bedrock.

### 3. REGULATION AND POLICIES REGARDING KARST BEDROCK

Responsibility for the management of development in the vicinity of karst bedrock falls under Provincial Policy through the *Provincial Policy Statement 2020* (PPS) and regulations under the *Conservation Authorities Act, R.S.O. 1990, c.C.27* as well as Municipal Planning through zoning and official plans. A brief overview of the various policies and regulation is provided below.

### 3.1 Provincial Policy Statement (PPS) 2020

Page 34 Through the PPS (2020) section 3.1 (3.1.1) – Natural Hazards - the Province recommends that development be directed to areas outside of hazardous sites. In accordance with the PPS, hazardous sites are defined as follows:

Hazardous Sites: means property of lands that could be unsafe for development and site alteration due to naturally occurring hazards. These may include unstable soils (sensitive marine clays (leda), organic soils) or unstable bedrock (karst topography).

### **3.2 Conservation Authorities Act**

Natural hazards are regulated through the *Conservation Authorities Act, R.S.O. 1990, c.C.27* which indicates that development in areas of hazardous lands require a permit or permission for development from the Conservation Authority. Under the Conservation Authorities Act hazardous lands mean:

*"land that could be unsafe for development because of naturally occurring processes associated with flooding, erosion, dynamic beaches or unstable soil or bedrock;"* 

In the context of unstable bedrock this includes bedrock that has been subject to karst processes.

### 3.3 Part VI of the Conservation Authorities Act and O.Reg. 41/24

Lower Trent Conservation is responsible for regulating natural hazards by virtue of Part VI of the *Conservation Authorities Act* and Ontario Regulation 41/24. In areas of hazardous lands, permission to develop is required from Lower Trent Conservation through an application for a permit.

Lower Trent Conservation reviews these applications in respect of its obligations under the *Act* and compliance with the *Lower Trent Conservation Regulation Policy Manual*. Policies relevant to karst bedrock are contained in section 5.3.3 and generally indicate the following:

- Development is not permitted in areas of unstable bedrock,
- Mitigative measures to stabilize the bedrock to allow for new development are not permitted,
- Repair or replacement of an existing building or structure may be permitted in hazardous lands under certain conditions (see section 5.3.3 4) of the Lower Trent Conservation Policy Manual).
- Fill placement, excavation and or grade modifications associated with existing access roads, driveways and septic systems within areas of hazardous lands may be permitted under certain conditions (see sections 5.3.3 3) and 4)). Such development will require a technical study by a qualified professional to map the extent of hazardous lands.
- Septic systems and dug wells associated with new development are not permitted in areas of hazardous lands. Technical studies by a qualified professional will be required to establish appropriate setbacks from hazardous lands for development activities (i.e., single-family dwelling, septic system and well).
- In areas where development is permitted, drainage improvements shall be completed in a manner that will not affect the existing karst features and will not promote drainage into areas of karst topography.

In the cases where development may be permitted in accordance with Lower Trent Conservation Policies the identification of the hazard limit will be required through completion of a site-specific technical study by a

### **3.4 Municipal Zoning and Official Plans**

Some local municipalities contain polices through their zoning and official plans that address or raise awareness about the hazards associated with unstable bedrock – karst topography. An overview of the content of some of these official plans is provided as follows:

The Hastings County Official Plan (2018) also contains policies and Ontario Geological Survey Mapping of karst topography in regard to new development proposals in these areas. <u>Such policies outline that development</u> <u>should be directed to areas outside of karst topography</u>, and that technical studies and site evaluation reports may be required to define the hazard as well as identify potential mitigative solutions. The Township of Stirling-Rawdon and Municipality of Centre Hastings follow the Hastings County Official Plan for Planning Act applications.

Municipalities in the Lower Trent Conservation watershed circulate planning applications to the Authority to identify potential hazards before the approval of new development. This process should help direct development outside areas of natural hazards; however, should a potential development be approved by a municipality in such areas, this does not guarantee that the Conservation Authority will provide a permit for such development.

### 4.0 TECHNICAL STUDY - KARST

The OGS mapping of Karst in the Lower Trent watershed is regional in nature and provides a good screening tool for identifying areas where karst may exist. Lower Trent Conservation staff use this mapping as a tool for screening development applications. However, one of the inherent problems of karst bedrock is the difficulty in precisely identifying the location or characteristics of the formation. Due to this unpredictability, it is necessary for Lower Trent Conservation staff to visit the site in question to verify mapping through observations of on-site surficial conditions. Staff will subsequently advise whether a technical study is not required at that time, or require a Phase 1 or Phase 2 karst hazard assessment (see Section 4.2) be completed to verify and identify any karst or karst related hazards. The available mapping is intended to assist in identifying the extent of the hazard such that appropriate setbacks can be to minimize risk from the natural hazard.

In view of increasing development pressure in the region, Lower Trent Conservation has seen a rise in the number of Karst technical studies being completed as lands that may contain natural hazards are considered for development. The review of these studies has initiated the development of these guidelines to provide property owners, consultants and municipalities with a better understanding of the submission requirements. Accurate site investigations by a qualified professional must be conducted to establish the limit of the hazard on individual properties.

The following sections provide an outline of technical study requirements and an overview of how Lower Trent Conservation regulates karst (unstable bedrock). These recommendations have been provided in reference to

existing Ontario Guidelines on karst which include:

- Project Unit 08-004. Karst and Hazards Lands Mitigation: Some Guidelines for Geological and Geotechnical Investigations in Ontario Karst Terrains, F.R. Brunton Ontario Geological Survey &,
- Hazardous Sites Technical Guide (V.1.0, December 1996) Ministry of Natural Resources.

### 4.1 Qualified Professionals for Technical Studies

Technical studies for karst must be undertaken by Qualified Persons (Brunton, 2013) including those professionals who possess either a *P.Geo.* or *P.Eng.* designation and having pertinent experience and knowledge with karst, for example:

- Paleozoic bedrock geologist (P.Geo.);
- Hydrogeologists and/or Hydrologists (P.Eng. or P.Geo);
- Geotechnical or Geological engineer (P.Eng.).

It is important to note that the qualified person should have proven experience in dealing with this hazard.

### 4.2 Technical Study Requirements

Technical studies may require different levels of review depending on the extent of the hazard on the subject property. The following sections provide an overview of the two main phases of work required to assess a subject property which are:

- **Phase 1**: Desktop Study and Site Visit to provide evidence regarding the presence or absence of karst on the subject property.
- **Phase 2**: If the potential for karst is identified from Phase 1, a field based subsurface investigation is required to map the extent of the hazard and to prepare a suitable building envelope site plan.

Some of the recommended minimum requirements of the various phases have been summarised below. Please note that these are suggested as minimum, as the qualified professional may require further detail and study in order to properly assess the hazard at a given site.

### 4.2.1 Phase 1: Desktop Study and Site Visit

A desktop evaluation and site visit, undertaken by a qualified professional with knowledge and experience in identification of karst topography, shall be undertaken to determine the potential for the presence of karst topography. The desktop study shall include but not be limited to the gathering and review of the following information.

a) Mapping that shows historic and present-day karst, ground and bedrock topography, physiography, hydrology, Quaternary and Paleozoic geology, and groundwater aquifers. This information could include maps, satellite imagery, air photos, and reports. The Ontario Geological Survey has a number of data sets to assist in this regard such as karst mapping, bedrock topography, physiography, quaternary and bedrock geology as well as hydrology and subsurface groundwater data;

- b) Existing engineering, scientific, geological (including oil/gas and geotechnical well records)
   hydrogeologic, hydrologic, geographic, agricultural studies, regional groundwater studies, and land use publications;
- c) Surface water and groundwater well record data to determine the position of the water table and seasonal fluctuations, rainfall records, river discharge data, water chemistry data;
- d) Comparison of historic and recent air photos and/or satellite imagery to determine changes in the landscape that may have resulted from karstification and subsurface drainage and/or anthropogenic changes;
- e) A visit to the property to provide comparison to historic air photo and/or satellite imagery to evaluate changes in the landscape. This visit would include a site inspection when the ground surface is visible (i.e. no snow) to record observations regarding the presence or absence of karst bedrock, sinkholes, fissures, solution openings, karren, caverns, depressions in the ground surface, drainage patterns, etc. A photo log of field observations is to be taken and reported (including GPS coordinates & locations on a map); and,
- f) Interview property owners or local contacts (i.e. residents and municipal roads staff) regarding potential locations of known karst formations, sinkhole occurrences, disappearing streams, etc. This could also include known sinkholes that have been filled or altered.

If the Phase 1 evaluation determines that karst is not present, no further study of karst is required. A report is to be prepared summarizing the results of the evaluation including a summary of the information review, site visit description, maps, photo log and summary of any interviews. Should the Phase 1 evaluation identify the presence of karst features and/or karst terrain characteristics, a Phase 2 evaluation will be required. Based on the results of the Phase 1 assessment a work plan can be prepared by the project consultants on how to assess the site. Following the completion of the Phase 2 work a report is to be prepared in summary of the assessment.

### 4.2.2 Phase 2 – Field Based Karst Investigation

In areas where a Phase 1 evaluation has identified the presence of karst features and/or karst formation characteristics, a Phase 2 field-based karst evaluation shall be undertaken by a qualified professional.

The type of field work to be undertaken will be determined based on the areal extent and complexity of the proposed development relevant to the risk or potential for impacts related to karst. If desired, a terms of reference may be prepared and submitted to Lower Trent Conservation for consultation prior to undertaking field work. A review of relevant background information indicates that there is no single method which is universally used for detection and mapping of karst features. The accurate assessment of a given site may require the use of a combination of methods to characterize and locate subsurface karst, as well as the professional judgment of the qualified professional.

The type of field work that may be required includes but is not limited to the following:

- a) Geophysical methods-for mapping of karst features
- b) Test pitting and soil-probing to assess the condition of the bedrock surface and any soil subsidence,
- c) Drilling to assess rock and groundwater conditions,

Page 38 d) Dye tracer studies to determine the sources, speed and direction of shallow potable water movement within bedrock.

Based on the various methods available for the assessment and mapping of karst a written rationale as to the sampling plan such as location and numbers of samples must be provided along with the study results in the final report.

For information purposes a brief description of some of the various methods is summarised below. Please note that this list is not exhaustive as there may be other methods and techniques that may be employed subject to industry standards, techniques, and technology.

### **Geophysical Methods**

Various types of geophysical instruments are available for conducting ground surveys without significant disturbance of the site. These include:

- Electromagnetic profiling (EM) assesses resistivity or conductivity of the subsurface to detect variations in the below grade conditions.
- Ground Penetrating Radar (GPR) a geophysical method that uses radar pulses to image what is below the ground surface. This method can aid in detecting voids and cracks in the rock. The depth of penetration of the signal can decrease with attenuation by deeper soil deposits.
- Gravity and microgravity- measures density contrasts to detect the presence of cavities.
- Seismic Refraction to send seismic waves through the ground for locating boundaries between various subsurface strata but not necessarily caves or voids which this method is not typically used for.
- Cross hole tomography- used to assess subsurface conditions at various depths using open onsite boreholes. This method can be expensive due to the requirement of onsite boreholes.

### Test Pitting – Soil probing

Where bedrock is not directly visible at surface, test pits and soil probing are sometimes used to assess subsurface conditions. A plan should be prepared to determine the number and location of test pits or soil probes to provide sufficient representative information about the site. Soil probing is often used to detect buried voids or solution openings in the bedrock and potential clues of where to perform test pit excavation. Test holes may be used with other forms of testing to assess the site such as geophysics, sounding, or penetration testing. Information to be considered in the test pit program includes the anticipated depth of the test pits, minimum base area of test pits and cleaning process to permit inspection of the rock surface.

### Drilling

Various drilling methods can also be used to assess subsurface conditions. Such methods include air percussion, air track probes or bedrock coring. The methods of detecting voids or cavities are to be evaluated and identified such as air loss, drilling speed, and rod drops. Boreholes can also permit the use of down hole cameras, geophysical borehole tools (optical and acoustic televiewer), 3-D tomography, packer and or pumping tests to examine drawdown responses between boreholes. Information to be provided from this work includes - the location and number of boreholes, anticipated depth, sampling interval, borehole

Page 39 techniques are to be provided including how such boreholes are to be sealed or decommissioned after testing is complete.

### **Tracer Studies**

Tracer studies involves the use of dyes, salts (chloride or bromide) and low conductivity or deuterated waters to trace speed and direction of water movement within bedrock. Field work is usually carried out where streams sink and where springs occur. Such studies can also be carried out between bedrock wells (see Ontario references by J. Hurley, F.R. Brunton, M.J. Buck, D.W. Cowell, C.C. Smart and S.R.H. Worthington).

### 4.2.3 Report

Following the completion of the Phase 1 and/or 2 studies, a report is to be prepared by the qualified person summarising the work that was completed and a description of the outcome of the study. The content of the report should include the following as a minimum:

- 1. Description of the background information review including what information was reviewed and the outcome of the review;
- 2. The background summary should include a summary of the information that was used to confirm the presence or absence of karst on the subject property;
- 3. Description of the site visit and observations made in the field. This would include observations or evidence suggesting the presence of karst conditions. If the site inspection confirms the presence of karst, a map of the karst hazard must be prepared and provided with the report. If further assessment is needed than a summary of the plan for subsurface investigations is to be provided. This plan should include the rationale for the type of subsurface investigation chosen as well as the location, pattern and frequency of sample locations;
- 4. Provision of site description and terrain analysis;
- 5. A map showing the site including locations of karst (exposed or covered), surface drainage features and patterns, testing locations and building envelope (house, septic and well) with setbacks from any relevant karst features or other applicable setbacks;
- 6. A <u>clear</u> statement that karst is either present or absent on the property and if present a map <u>clearly</u> showing the limits of the karst features;
- 7. If karst is mapped on the property and a potential building envelope is identified. <u>A building envelope site plan must be prepared which includes recommended setbacks for buildings, septic systems, wells, driveways etc. outside the area of hazardous lands.</u> Recommendations regarding well construction are also to be provided. An example of a typical building envelope site plan is provided on page 14;
- 8. Signature and stamp of the qualified professional who completed the work and report; and,
- 9. Lower Trent Conservation may require an independent peer review of any technical report. The cost of the peer review will be at the applicant's expense.



# **Definitions** – as taken from <u>Karst and Hazards Lands Mitigation</u>: Some Guidelines for Geological and Geotechnical Investigation in Ontario Karst Terrains. F.R. Brunton, 2013

**Aggressive groundwater** – unsaturated groundwater with respect to the local bedrock geochemistry, so the rock is susceptible to dissolution.

**Carbonate rocks** – sedimentary rocks (e.g., limestones, dolostones) composed mainly of calcium carbonate. Dolostones have magnesium and calcium within the carbonate rock.

**Cave** – a natural opening in rock large enough to be entered by man and extending to points where daylight does not penetrate.

**Cave system** – a cave or caves having a complex network of interconnected chambers and passages that constitute an underground drainage system.

**Disappearing streams** – areas of exposed bedrock or thin sedimentary cover where surface streams disappear into the ground; these locations are often referred to as sinkholes or sinks.

**Dissolution** or chemical solution – a chemical weathering process of bedrock in which the combination of water and carbonic acid slowly removes mineral compounds from bedrock and carries them away in solution; when waters become saturated or over saturated with dissolved elements then precipitation will happen.

**Dolines** or sinkholes – a closed surface depression draining underground in karst terrain. Dolines are usually "bowl-shaped" and can be a few to many hundreds of metres in diameter.

Groundwater – water below the level at which all voids in the rock are completely filled with water.

**Karren** – a complex group of small- to medium-scale karstic landforms, commonly found on limestone pavements, showing a variety of dissolution, sculpted features, such as sharp-ridged grooves, widely opened joints, horseshoe-shaped stepped structures.

**Karst** – a distinctive landform topography created by a combination of physical erosion and chemical dissolution of underlying soluble rocks (carbonates, gypsum, salts) by surface water or groundwater.

**Permeability** – a property of rock or unconsolidated soils and underlying sediments that permits water to pass through it via interconnected voids (spaces). Permeable bedrock makes a good aquifer, a rock layer that yields water to wells.

**Porosity** – a volume of void space in soils, unconsolidated surficial sediments or bedrock. When these voids are interconnected, water or air (or other fluids) can migrate through voids making the sediment or bedrock permeable.

**Sinkholes** or dolines – are closed surface depressions that allow rain and river waters to flow underground and help create subterranean karst features. Sinkholes are often "bowl-shaped" and can be a few to many hundreds of metres in diameter.

**Springs** or resurgence – the point where ground water reappears at the earth's surface and begins flowing downhill as a surface stream. It is the opposite of a sinking stream.

Page 42 Water table – the surface between the zone of pure water saturation and zone of pure aeration under the ground surface. In some low-lying areas, the water table can be above ground surface resulting in springs and/or groundwater discharge, usually into rivers.

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### THREAT TO BIODIVERSITY



Canada is a country rich in biodiversity with thousands of varieties of plants and animals. However, one of the greatest threats to the biodiversity of Canada's waters and woodlands is invasive species. Originating from other regions of the world, and in the absence of their natural predators or controls, invasive species can have devastating effects on native species, habitats and ecosystems. They arrive here often having hitched a ride with human travelers, in cargo, on the bottom of boats and in the ballast of ships.

After habitat loss, invasive species are the second most significant threat to biodiversity. In their new ecosystems, they become predators, competitors, parasites, hybridizers, and diseases of our

native and domesticated plants, animals and marine life. Their impacts on native ecosystems, habitats and species is severe and often irreversible, and can cost billions of dollars each year.

In the Great Lakes basin, more than 185 non-native species have become established. Such as the Zebra mussel, water soldier plant and round goby, all are aggressive, extremely adaptable, and have high reproduction rates enabling them to spread.

Zebra mussels and round gobies arrived here in ballast water but water soldier was introduced through the horticultural industry, as a water garden or aquarium plant.

Water soldier is a cold tolerant plant that grows in standing or slow flowing water bodies, and will establish in water depths up to 5 meters. It has a similar appearance to an aloe plant, spider plant or top of a pineapple with bright green leaves that can grow 40 cm long and are extremely sharp. The plant grows into thick colonies that interfere with recreational water activities, shades out native vegetation, can cut swimmers and people who handle the plant and is believed to change water chemistry harming phytoplankton and other organisms.

Unfortunately, water soldier has spread down the Trent River and invaded the Bay of Quinte.

In 2021, the original population found in the Bay was treated with a herbicide in an effort to stop its dispersal throughout the bay. Further monitoring in 2022 identified that the extent of the population was greater than originally thought and that it is spreading quickly. It was found in several locations along the Bay's north shore. In 2023, the plant was found further down the bay near Long Reach.

This plant has the potential to have devastating effects on the bay's ecosystem. As well, as impacting recreational uses, and costing municipalities and tourism operator's significant sums of money.

If you are out on the water and think you have seen Water Soldier, Please Report It.

Report any sightings to 1-800-563-7711 or visit **EDDMaps Ontario**. You can find out more about water soldier at,

http://www.invadingspecies.com/invaders/aquatic-plants/water-soldier/.

### www.bqrap.ca

In partnership locally with Lower Trent Conservation and Quinte Conservation

### **GUIDE TO EATING ONTARIO FISH**



You can use the Guide to Eating Ontario Fish and its interactive map to help you identify the types and amounts of fish that are safe to eat from more than 2,600 fishing locations in Ontario including the Bay of Quinte.

Fish can be an important part of a balanced diet. They are a great source of high-quality protein, beneficial omega-3 fats, and other nutrients. At the same time, there is a risk of exposing ourselves and our families to toxins in fish. Based on their size, type, and location, certain fish may be more suitable to eat than others.

The **Guide to Eating Ontario Fish** provides easy-to-use information to help choose fish species that will minimize exposure to toxins. Consumption advice in the guide is based on guidelines provided by Health Canada.

### WATER LEVELS AND FLOWS



Water Levels can be a touchy topic depending were you live on the Great Lakes System. Sometimes people feel levels are too high and others they are too low. It's a balancing act to keep the interests of the numerous parties, that rely on the system, taken into account.

The International Lake Ontario - Saint Lawrence River Board (ILO-SLRB) was established by the International Joint Commission (IJC) in its 2016 Order of Approval. The Board's main duty is to ensure that outflows from Lake Ontario meet the requirements of the IJC's Order implementing Plan 2014.

The Board also communicates with the public about water levels and flow regulation, and works with the Great Lakes – St. Lawrence River Adaptive Management (GLAM) Committee which monitors the performance of the regulation plans in the Great Lakes.

You can find weekly updates on levels and flow on the ILO-SLRB **Facebook page**.

### RAIN GARDENS AND SHORELINE PLANTINGS

Here are two great ways to provide habitat and improve water quality. Install a rain garden or modify your shoreline to include more native plant species.

By installing a **rain garden**, your lawn can provide a habitat for birds, butterflies, and bees, protect our streams rivers and lakes from pollutants, and beautify your neighbourhood.

**Shorelines** are a critical and sensitive link between land and water, often called "the ribbon of life". The land and shallow water that meet at the water's edge provide a nursery for the wildlife. Here, fish spawn, aquatic insects find mates, waterfowl nest, and turtles scramble ashore to lay their eggs.

For details contact -

Jason Jobin, BQRAP Environmental Technician, Lower Trent Conservation, P: 613-394-3915 ext. 225, E: jason.jobin@ltc.on.ca or

Kaitlin Maurer, BQRAP Environmental Technician, Quinte Conservation P: 613-968-3434 ext. 107, E: KMaurer@quinteconservation.ca







### IS YOUR RESIDENTIAL OR AGRICULTURAL PROPERTY ON A WATERFRONT?

YOU COULD BE ELIGIBLE FOR A COST-SHARING SHORELINE PLANTING PROGRAM. Grant rate - 75% - maximum up to \$1,000

Natural shorelines protect against erosion, support wildlife, and help to protect water quality.

The program includes a free site visit, and the creation of a customized shoreline-planting plan using native trees, shrubs and wildflowers.

## www.bqrap.ca



## **CAO REPORT**

Date:April 30, 2024To:Board of DirectorsPrepared by:Rhonda Bateman, Chief Administrative Officer

### STAFFING

LTC is currently advertising for a Regulation and Enforcement Officer position upon the departure of A. Moroni. He accepted a position with the provincial government.

The CAO is reviewing the applications received for the Manager of Corporate Services. Interviews will be scheduled for early to mid May.

Nicolas Peat will be starting his position as Conservation Lands Maintenance Assistant on May 6<sup>th</sup>.

Most of our students will begin work on May 6<sup>th</sup>. One of our returning students began on April 29<sup>th</sup>. The Canada Summer Jobs program allocated two student positions for 2024. LTC requested six positions. The positions granted were one Conservation Lands Field Assistant position and one Assistant Watershed Monitoring Technician. As CSJ funding was short, the funding for these positions will have to be found within the allocated program areas.

### **CONSERVATION ONTARIO**

Conservation Ontario's AGM was held on April 15, 2024 in Richmond Hill. The Chair, Chris White from the Grand River CA was re-elected. The Board of Directors includes Johnathan Scott, Vice-Chair, Nottawasaga Valley CA, Pat Warren, Vice-Chair, Kawartha Conservation, Rob Baldwin, Director, Lake Simcoe CA, Brad McNevin, Director, Quinte Conservation, and Chandra Sharma, Director, Niagara Peninsula CA.

The announcement for the annual Latornell Conservation Symposium has been released and is being held October 8-9 at the Paramount Eventspace in Woodbridge, ON.

Angela Coleman, General Manager of Conservation Ontario is available to attend Board meetings to discuss Conservation Ontario's role and advocacy. If the Board would like Ms. Coleman to attend an upcoming Board meeting, the invitation can be made.

### NATIVE PLANT SALE

The native plant sale orders of seedlings will be May 2<sup>nd</sup> and 3<sup>rd</sup>. Expected pick up time will be early June for saplings, wildflowers and Little Forest Kits.

### **VOLUNTEER TRAIL STEWARDSHIP ORIENTATION**

Two orientation sessions were held to introduce a trail stewardship program for volunteer participation. The volunteers are regular users of our conservation area trail networks and will be reporting instances of various trail issues such as tree falls across the trails, excessive garbage, vandalism, etc. There was good turnout at the events so far 17 people have signed up to volunteer and have already begun reporting issues. Staff look forward to interacting with these generous volunteers.