LOWER TRENT
CONSERVATION

714 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 Join Meeting HERE
Thursday, May 14, 2026
Time: 1:00 p.m.

AGENDA

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. Regular and Closed Session Meeting minutes April 9, 2026 Page # 4
   RECOMMENDED:
   THAT the Regular and Closed Session Meeting minutes of April 9, 2026 be adopted.

8. **Business arising from these minutes**

CORRESPONDENCE

9. **Correspondence** – Rhonda Bateman, CAO/Secretary-Treasurer Page # 9
   a) 2026-04-15 – Lower Trent Conservation Letter to MECP – Jim Hunt

b) 2026-04-28 – Interim Reply from MECP – Jim Hunt
c) 2026-04-29 – LTC Letter to Premier, MECP and AG - Road Salt Liability
d) 2026-05-01 – MECP Letter – Guardrails

RECOMMENDED:

THAT the correspondence as provided in the agenda package be received as information.

STAFF REPORTS

10. **List of Monthly Payments Issued –** Chitra Gowda Page # 24

RECOMMENDED:

THAT the list of payments issued in the total amount of $296,484.83 for the month of April 2026 be received as information.

11. **Watershed Management, Planning and Regulations Update** – Scott Robertson, Development and Regulations Lead Page # 25

a) Summary of Permits for Period March 28 – April 30, 2026
b) Planning and Regulations
c) Flood Forecasting and Warning (FFW) and Ontario Low Water Response (OLWR)

RECOMMENDED:

THAT the Watershed Management, Planning and Regulations Update be received as information.

12. **Monitoring Report** – Massimo Narini, Watershed Services Specialist Page # 31

RECOMMENDED:

THAT the Lower Trent Conservation (LTC) 2025 Annual Monitoring Program report be received as information.

13. **Bay of Quinte Remedial Action Plan Program** – Anne Anderson Page # 76

a. April 2026 Newsletter

RECOMMENDED:

THAT the Bay of Quinte Remedial Action Plan Newsletter for April 2026 be received as information.

14. **Provincial Offences Officer Appointment** – Rhonda Bateman Page # 79

RECOMMENDED:

THAT Mike Wilson be appointed as a Provincial Offences Officer for the purpose of performing enforcement and offence related functions under Part VII of the *Conservation Authorities Act,* Section 28.5 and 29 Regulations and the *Trespass to Property Act* within the area of jurisdiction for Lower Trent Conservation, effective during his employment with Lower Trent Conservation.

15. **Transition Committee** – Rhonda Bateman

RECOMMENDED:

THAT Chair Sherry Hamiton and CAO Rhonda Bateman be appointed as the members on the Transition Committee

16. **CAO's Report** – Rhonda Bateman Page # 80

RECOMMENDED:

THAT the CAO's Report be received as information.

17. **Closed Session**

RECOMMENDED:

THAT the Board go in to Closed Session under Section 239(2)(b) and (2)(c) of the *Municipal Act, 2001* regarding Personal matters about an identifiable individual, including (municipal) employees; and a proposed or pending acquisition or disposition of land by the municipality or local board.

18. **Members Inquiries/Other Business**

19. **Adjournment**

PLEASE CONTACT THE OFFICE IF YOU ARE UNABLE TO ATTEND THIS MEETING

Chitra Gowda 613-394-3915 ext. #215 chitra.gowda@ltc.on.ca

LOWER TRENT CONSERVATION

714 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
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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 # 2026-03

DATE: April 9, 2026

TIME: 3:20 PM

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

DIRECTORS PRESENT:

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

ABSENT/REGRETS: Eugene (Gene) Brahaney

STAFF: Rhonda Bateman, Chitra Gowda

GUESTS: None

1. **Meeting called to order by the Chair**
   The meeting was called to order by Chair Hamilton at 3:20 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 as amended

RES: G37/26 Moved by: Jim Alyea Seconded by: Lynda Reid

THAT the agenda be approved as presented.

Carried

5. Closed Session

RES: G38/26 Moved by: Bob Mullin Seconded by: Eric Sandford

THAT the Board go in to Closed Session under Section 239(2)(b) of the Municipal Act, 2001 regarding Personal matters about an identifiable individual, including (municipal) employees

Carried

Time: 3:23 p.m.

RES: G39/26 Moved by: Jim Alyea Seconded by: Lynda Reid

THAT the Lower Trent Conservation Board of Directors return to the regular meeting session.

Carried

Time: 4:01 p.m.

RES: G40/26 Moved by: Jim Alyea Seconded by: Lynda Reid

THAT the Lower Trent Conservation Board of Directors meet with Templeman LLP at a board meeting to be held at the call of the Chair to seek advice and consultation. The Chair is directed to fulfill the closed session direction of the Board of Directors.

Carried

6. Delegations

There were no delegations received for this meeting.

7. Public Input (3 minutes per speaker)

There was no public input at this meeting.

8. Adoption of the Minutes:

RES: G41/26 Moved by: Mike Ainsworth Seconded by: Jim Alyea

THAT the Regular and Closed Session Meeting minutes of March 12, 2026 be adopted.

Carried

9. Business arising from these minutes

None.

CORRESPONDENCE

10. Correspondence

RES: G42/26 Moved by: Jeff Wheeldon Seconded by: Eric Sandford

THAT the correspondence as provided in the agenda package be received as information.

Carried

STAFF REPORTS

11. List of Monthly Payments Issued

RES: G43/26 Moved by: Bobbi Wright Seconded by: Lynda Reid

THAT the list of payments issued in the total amount of $326,084.15 for the month of March 2026 be received as information.

Carried

12. Watershed Management, Planning and Regulations Update

RES: G44/26 Moved by: Jeff Wheeldon Seconded by: Bobbi Wright

THAT the Watershed Management, Planning and Regulations Update be received as information.

Carried

13. LTC Annual Report

RES: G45/26 Moved by: Bobbi Wright Seconded by: Eric Sandford

THAT the Lower Trent Conservation 2025 Annual Report be received as information; and
THAT the audited financials be added to the 2025 Annual Report; and
THAT the 2025 Annual Report then be circulated to LTC's member municipalities.

Carried

14. Conservation Lands Report - March 31, 2026

Director Mullin asked if Sager Conservation area was open. CAO Rhonda Bateman responded that it is open. Director Wheeldon asked if the closed trail at Goodrich Loomis impacts school visits. Rhonda Bateman responded that the trail closure does not impact school visits.

RES: G46/26 Moved by: Rick English Seconded by: Bob Mullin

THAT the Conservation Lands Report for the period January 1 – March 31, 2026 be received as information.

Carried

15. Education and Outreach Activities Report – March 31, 2026

RES: G47/26 Moved by: Lynda Reid Seconded by: Bobbi Wright

THAT the Summary of Education and Outreach Activities Report for the period January 1 – March 31, 2026 be received as information.

Carried

16. Summary of Risk Management Official Activity Report – March 31, 2026

RES: G48/26 Moved by: Jim Alyea Seconded by: Bobbi Wright

THAT the Risk Management Official Activity Report pursuant to Part IV of the Clean Water Act report for the period of January 1 to March 31, 2026 be received as information.

Carried

17. Bay of Quinte Remedial Action Plan Program

RES: G49/26 Moved by: Lynda Reid Seconded by: Bobbi Wright
THAT the Bay of Quinte Remedial Action Plan Newsletter for March 2026 be received as information.

Carried

18. CAO's Report

Rhonda Bateman summarized the letter received from the Minister directing that fees remain frozen at 2022 levels and that fees not approved between January 1 and March 10, 2026 remain frozen. The LTC Board of Directors approved the updated fees in November 2025, therefore the updated fees are in effect.

Rhonda Bateman also updated the members about Bill 97, which passed second reading at the time of the board meeting. Existing boards will remain in place until a new board is appointed. Budgets will be developed sooner than usual. Director Sandford said that more guidance and information is needed from the province on how the consolidation is to happen, in order to develop a budget where there is no representation of lower tier municipalities. Director Wheeldon indicated that there could be more frontline staff, but not all things would change. The business should remain the same and would be predictable. Director Alyea said that the funds received from the sale of the Water Street property should be used within the current watershed boundaries and not used elsewhere. Rhonda Bateman noted that the funds are restricted and could be used towards floodplain mapping studies. It is not known if the funds would be used within the Lower Trent watershed area.

The project executive of each region will be appointed by the agency for 2.5 years. Following that transition period, the new Regional Board will select the CAO. Transition Committees begin work in the summer of 2026 and end by February 2027 on the statutory amalgamation date. Director Wheeldon said that the mayors of Hamilton and Brampton have written letters to the province raising concern over the amalgamation.

RES: G50/26 Moved by: Rick English Seconded by: Mike Ainsworth
THAT the CAO's Report be received as information.

19. Members Inquiries/Other Business

Director English said that the Municipality of Trent Hills passed a resolution objecting to the ALTO high speed train proposal's southern route. Director Ainsworth indicated that the province has proposed changes to the Heritage Act to remove the need for archaeological assessments in certain circumstances.

20. Adjournment

There being no further business, the meeting was adjourned.

RES: G51/26 Moved by: Rick English Seconded by: Bob Mullin
THAT the meeting be adjourned.

Carried

Time: 4:37 P.M.

Sherry Hamilton, Chair

Rhonda Bateman, CAO/ST

DRINKING WATER SOURCE PROTECTION
ACT FOR CLEAN WATER

TRENT CONSERVATION COALITION
SOURCE PROTECTION REGION

The Honourable Todd McCarthy
Minister of the Environment, Conservation and Parks
College Park 5th Floor
777 Bay Street
Toronto On, M7A 2J3

April 15, 2026

Subject: Re-appointment of Jim Hunt as Chair of the Trent Conservation Coalition Source Protection Committee

Dear Minister McCarthy,

On April 9, 2026, at the meeting of the Lower Trent Source Protection Authority, the Lead Source Protection Authority for the Trent Conservation Coalition (TCC) Source Protection Region, there was a resolution passed unanimously by the Board of Directors that correspondence be sent to express their concern in Jim Hunt not being reappointed as Chair of the TCC Source Protection Committee. The Board of Directors is requesting an explanation as to why Mr. Hunt was not re-appointed. Mr. Hunt has been the Trent Conservation Coalition Chair since the beginning of the program and brings a wealth of knowledge and experience to the table. He was a lawyer actively involved in the Walkerton Inquiry and his expertise and leadership are unparalleled. He had indicated to the Ministry his desire to continue as Chair.

As we progress towards a new framework for Conservation Authorities, Source Protection Authorities and participating municipalities we must remember that the learning curve for the Source Protection Program is long and steep, and our Board strongly feels that this is not the time to install a new Chair.

We would appreciate the re-appointment of Jim Hunt as Chair of the TCC Source Protection Committee to allow him to continue his excellent work in Source Protection.

Yours very truly,

Rhonda Bateman
CAO, Lower Trent Source Protection Authority

DRINKING WATER SOURCE PROTECTION
ACT FOR CLEAN WATER

TRENT CONSERVATION COALITION
SOURCE PROTECTION REGION

Cc: Conservation Ontario – Angela Coleman
Lower Trent Region Conservation Source Protection Authority Board members
Trent Conservation Coalition GMs/CAOs
Director of the Conservation and Source Protection Branch – Kirsten Service
Trent Conservation Coalition Source Protection Committee Members

c/o Lower Trent Conservation
714 Murray St, R.R. #1, Trenton, Ont. K8V 0N1

Outlook

Interim reply from the Ministry of the Environment, Conservation and Parks

From CCU, MECP <mecpccu@ontario.ca>
Date Tue 2026-04-28 9:55 AM
To Rhonda Bateman <rhonda.bateman@ltc.on.ca>; Jim Alyea <jim.alyea@quintewest.ca>

357-2026-1095

Good morning,

Thank you for your email to the Ministry of the Environment, Conservation and Parks regarding the former chair of the Trent Conservation Coalition Source Protection Committee, Mr. Jim Hunt.

On behalf of the ministry, we are pleased to acknowledge receipt of your email. The information you have shared will be reviewed carefully by the appropriate staff.

Sincerely,

Corporate Correspondence Unit
Ministry of the Environment, Conservation and Parks

If you have any accommodation needs or require communication supports or alternate formats, please let me know.

Si vous avez des besoins en matière d’adaptation, ou si vous nécessitez des aides à la communication ou des médias substituts, veuillez me le faire savoir.

DRINKING WATER SOURCE PROTECTION
ACT FOR CLEAN WATER

TRENT CONSERVATION COALITION
SOURCE PROTECTION REGION

The Honourable Doug Ford – Premier of Ontario
The Honourable Todd McCarthy - Minister of the Environment, Conservation and Parks
The Honourable Doug Downey - Attorney General

April 23, 2026

Subject: Encouraging Legal Reform to Limit Liability for Road Salt Application

Dear Premier Ford, Minister McCarthy and Attorney General Downey,

The Board of Directors of the Lower Trent Source Protection Authority would like to encourage the Provincial Government to enact legal reforms that would limit liability for contractors who apply road salt as part of their winter maintenance activities.

Using road salt to keep roads, parking lots and sidewalks safe in the winter is standard practice in Ontario. However, the road salt applied to these surfaces eventually drains to either surface water or groundwater and can degrade the quality of drinking water and cause other environmental and ecological issues.

Some contractors tend to use much more salt than is required to ensure that they do not increase their legal liability if there is a slip and fall or a vehicular accident in areas being maintained. This excessive use of salt can drastically increase environmental impairment and threats to drinking water.

One practical solution would be to pass legislation in Ontario that would limit liability for contractors who are trained and certified in best practices related to road salt application and set standards for road salt use. The Board of Directors encourages your government to adopt this approach to help reduce the impact excessive road salt entering our surface water courses and groundwater sources .

This idea is used in other jurisdictions in North America, such as New Hampshire and is supported in Ontario by many municipalities, Conservation Authorities and Landscape Ontario.

Sincerely,

Sherry Hamilton,
Chair Lower Trent Source Protection Authority

DRINKING WATER SOURCE PROTECTION
ACT FOR CLEAN WATER

TRENT CONSERVATION COALITION
SOURCE PROTECTION REGION

Cc: Conservation Ontario – Angela Coleman
Lower Trent Region Conservation Authority Board members
Trent Conservation Coalition GM/CAO – Rhonda Bateman
Director of the Conservation and Source Protection Branch – Kirsten Service
Joe Salemi, Landscape Ontario
The Trent Conservation Coalition Source Protection Committee Members

Agenda item #9d.

Ministry of the Environment, Conservation and Parks

Office of the Minister

777 Bay Street, 5th Floor
Toronto ON M7A 2J3
Tel.: 416 314-6790

Ministère de l'Environnement, de la Protection de la nature et des Parcs

Bureau du ministre

777, rue Bay, 5e étage
Toronto ON M7A 2J3
Tél. : 416 314-6790

Ontario

357-2026-1281

May 1, 2026

TO: Conservation Authorities Chairs, GMs/CAOs, and municipalities

SUBJECT: Minister's direction under section 1.14 of the *Conservation Authorities Act* (re: temporary restrictions)

I am writing with regards to the transition of Ontario's conservation authority system to a consolidated regional model. The *Plan to Protect Ontario Act* (Budget Measures), 2026 received Royal Assent on April 24, 2026 and pursuant to my authority under section 1.14 of the *Conservation Authorities Act* (CAA), I am issuing a direction to conservation authorities – please see attached to this letter as Attachment A (the "Direction").

The intention of this Direction, which is effective from May 1, 2026 to the transition date under the CAA (i.e., February 1, 2027 or such later date as may be prescribed by the regulations), is to apply temporary restrictions on significant financial, asset or employment decisions to mitigate risk and ensure a stable transition to the new regional structure.

This Direction applies to certain conservation authority decisions related to: governance, organizational or staffing changes; the acquisition and disposition of lands; significant capital transactions; and the provision or acquisition of goods or services. For the decisions specified in this Direction, conservation authorities will be required to seek authorization from the chief executive officer of the Ontario Provincial Conservation Agency (or the Chief Conservation Executive of the Ministry of the Environment, Conservation and Parks if the chief executive officer has not yet been appointed), before the authority can make the decision. This Direction applies to all current conservation authorities, as listed in Appendix A to the attachment. Further guidance on the process to obtain authorization is set out in Appendix B to the attachment. The CAA provides that if an authority makes a decision in contravention of a direction issued under clause 1.14 (1) (a), the authority's decision has no effect and any agreement that the authority enters into that is in contravention of the direction is void.

…2

These measures are not intended to interfere with the regular day-to-day business and operations of conservation authorities. If you are contemplating whether or not this Direction applies to a conservation authority decision under consideration, if you have any questions regarding this Direction, or if you are looking to request authorization for a conservation authority decision that may be covered under this Direction, please contact the Chief Conservation Executive at CCEO@ontario.ca and copy the Conservation Authorities Section at the Ministry of the Environment, Conservation and Parks at ca.office@ontario.ca.

Continuity for communities is a core principle of this transition. These time-limited measures are intended to ensure there aren't any service disruptions during transition and to ensure that the transition to consolidation is smooth and successful with minimal disruptions to conservation authorities' governance, programs and services.
Thank you for your continued leadership and collaboration as we work to improve the conservation authority system in Ontario.

Sincerely,

Todd McCarthy
Minister of the Environment, Conservation and Parks

Enclosures

c: The Honorable Rob Flack, Minister of Municipal Affairs and Housing

Attachment A

Minister's Direction Issued Pursuant to Section 1.14 of the *Conservation Authorities Act*

(this "Direction")

Section 1.14 of the Conservation Authorities Act provides the Minister of the Environment, Conservation and Parks with the authority to issue a direction to a conservation authority in relation to various matters for the purpose of facilitating the transition to a regional watershed-based framework for conservation authorities. The types of directions that can be issued by the Minister are set out in clauses 1.14 (1) (a) to (d):

(a) prohibiting the authority from making a decision in relation to its exercise of any of its powers under this Act or any other Act in the circumstances specified in the direction and subject to any specified conditions;
(b) requiring the authority to give notice, in accordance with the direction, of a decision that it has made;
(c) requiring the authority to send notices under subsection 25 (2), 27 (3) or 27.2 (3) by the date specified in the direction;
(d) governing budgetary and apportionment matters relating to the authority that are otherwise addressed in a regulation made under clause 40 (1) (c), (e) or (f) or clause 40 (3) (k).

Section 1.14 further provides that an authority that receives such a direction shall comply with the direction within the time specified in the direction.

If an authority makes decision in contravention of a direction issued under clause 1.14 (1) (a), the authority's decision has no effect and any agreement that the authority enters into that is in contravention of the direction is void.

Pursuant to the authority of the Minister of the Environment, Conservation and Parks under clauses 1.14 (1) (a) and (b), the conservation authorities set out under Appendix "A" to this Direction (the "**authorities**" or each, an "**authority**") are hereby directed as follows:

Decisions prohibited unless authorization obtained (direction issued under clause 1.14 (1) (a))

1. Commencing on the Effective Date and until the transition date, an authority is prohibited from making a decision to do any of the following unless the authority obtains written authorization from the chief executive officer of the Ontario Provincial Conservation Agency ("OPCA CEO") in accordance with the conditions set out in paragraph 4:

i. Amending an authority's by-laws made under section 19.1 of the CAA, unless the amendment is administrative in nature and does not affect the substance or legal effect of the by-law (e.g. updating references, dates, and terminology; name or title changes; and making obvious corrections where the intended meaning is clear).

ii. Any of the following related to employment:

   a. Terminating the employment of a permanent or temporary employee who serves in a senior leadership position, including the authority's chief administrative officer or general manager, its secretary treasurer, and any departmental directors if applicable.
   b. Filling a vacancy for (i.e. temporarily or permanently) or making any changes to the terms and conditions of employment for any senior leadership position as referred to in sub-subparagraph a.
   c. Terminating the employment of any employee who serves in a leadership position related to or who are essential to the provision of the following mandatory programs and services described in the following provisions of O. Reg. 686/21 made under the CAA: flood forecasting and warning (section 2), ice management (section 4), infrastructure (section 5), plan reviews (sections 6 and 7) and the administration and enforcement of Parts VI and VII of the CAA (section 8).
   d. Increasing the total number of employees of the authority unless the increase was already included in the authority's approved final budget for the 2026 calendar year.

iii. Changing the organizational structure of the employees of the authority, including creating, merging, or eliminating departments.

iv. Acquiring, by purchase, lease or otherwise, any land or to sell, lease or otherwise dispose of any land owned by the authority.

v. Acquiring services from a person or body where:

   a. the duration of the provision of the service exceeds 2 years in length, or
   b. the total cost of the service exceeds the lesser of $500,000 and 5% of the authority's operating expenses, as reported in the authority's most recent audited financial statement.

   This does not include a decision to renew or extend an agreement for a service that a person or body was providing to the authority prior to the Effective Date.

vi. Providing a service to a person or body where:

a. the duration of the provision of the service exceeds 2 years in length, or
b. the total amount to be charged for the service exceeds the lesser of $500,000 and 5% of the authority's revenues, as reported in the authority's most recent audited financial statement.

This does not include a decision to, renew or extend an agreement for a service that the authority was providing to the person or body prior to the Effective Date.

vii. Incurring a capital cost in connection with a project or purchasing, leasing or otherwise acquiring personal property, including materials, equipment and vehicles, where:

a. in the case of a lease, the duration of the term of the lease exceeds 2 years in length,
or
b. the total amount of the capital cost or purchase, lease or other acquisition would exceed the lesser of $500,000 and 5% of the authority's tangible capital assets, as reported in the authority's most recent audited financial statement.

This direction does not apply if the capital cost or acquisition is contemplated for a particular program or service identified in the authority's approved final budget for the 2026 calendar year and the total capital cost or acquisition amount is within the budgeted amount for the program or service.

viii. Selling, leasing, or otherwise disposing of or dealing with personal property, including materials, equipment and vehicles, where:

a. in the case of the lease, the duration of the term of the lease exceeds 2 years in length,
or
b. the total amount of the lease or other disposition or dealing would exceed the lesser of $500,000 and 5% of the authority's tangible capital assets, as reported in the authority's most recent audited financial statement.

2. Despite paragraph 1, sub-paragraphs 1. v to viii do not apply to a decision of an authority that is made for the purpose of alleviating an immediate danger to human life, the health of any persons, or to property.

3. For greater certainty, paragraph 1 does not apply to a decision of an authority to execute an agreement that has the effect of implementing a decision made by the authority before the Effective Date.

4. The following conditions must be satisfied before an authority is authorized to make a decision that is subject to paragraph 1:

    i. The authority must request authorization from the OPCA CEO to make the decision, in accordance with paragraph 5 of this Direction.
    ii. The authority must receive written authorization from the OPCA CEO to make the decision. If authorization for the request is granted only in part, the authority must ensure that its decision does not exceed the scope of the authorization.

5. For the purposes of paragraph 4, the authority must request authorization to make a decision that is subject to paragraph 1 by submitting the following information to the OPCA CEO:

    i. A description of the decision that the authority is seeking authorization to make, including details of the proposed decision and why the proposed decision is a decision that is subject to paragraph 1.
    ii. A resolution of the authority supporting the proposed decision.
    iii. An explanation for why authorization should be granted, including any risks associated with deferring the proposed decision until after the transition date.
    iv. Any information about relevant dates for the proposed decision, including any considerations around urgency or the time-sensitive nature of the proposed decision.

6. The authority must provide any additional information about the request to the OPCA CEO at the OPCA CEO's request.

Notice of a decision that an authority has made to address an emergency (direction issued under clause 1.14 (1) (b))

7. Commencing on the Effective Date and until the transition date, where the authority makes a decision that is not subject to paragraph 1 by reason that the decision is made for the purpose of alleviating an immediate danger to human life, health, or property, the authority must give notice to OPCA CEO within 3 business days after making the decision.

8. The notice mentioned in paragraph 7 must describe the decision that was made and explain how the decision that was made for the purpose of alleviating an immediate danger to human life, the health of any persons, or to property.

General

9. In this Direction, a reference to the OPCA CEO means the Chief Conservation Executive of the Ministry of the Environment, Conservation and Parks, if a chief executive officer of OPCA has not yet been appointed.

10. In this Direction, a reference to an authority's approved final budget for the 2026 calendar year means the authority's final budget for the 2026 calendar year that was approved prior to the Effective Date. For greater certainty, if an authority has not yet approved its final budget for the 2026 calendar year prior to the Effective Date, the authority does not have an approved final budget for the 2026 calendar year for the purposes of this Direction.

11. The authority must ensure that any employee of the authority who is responsible for or involved in making a decision that is subject to this Direction is made aware of this Direction, and the authority must require these employees to take all steps necessary to ensure the authority complies with this Direction.

12. This Direction applies to the conservation authorities listed in Appendix "A" to this Direction.

13. For greater certainty, this Direction also applies to the conservation authorities listed in Appendix "A" to this Direction when such conservation authorities are meeting as a source protection authority under the *Clean Water Act, 2006*.

14. This Direction is effective from May 1, 2026 (the "**Effective Date**") to the transition date, within the meaning of the *Conservation Authorities Act* (i.e., February 1, 2027 or such later date as may be prescribed by the regulations).

15. This Direction may be amended in writing from time to time at the sole discretion of the Minister.

Todd McCarthy
Minister of the Environment, Conservation and Parks
May 1, 2026

Appendix A

LIST OF CONSERVATION AUTHORITIES TO WHICH THE DIRECTION APPLIES

Ausable Bayfield CA

Cataraqui Region CA

Catfish Creek CA

Central Lake Ontario CA

Credit Valley CA

Crowe Valley CA

Essex Region CA

Ganaraska Region CA

Grand River CA

Grey Sauble CA

Halton Region CA

Hamilton Region CA

Kawartha Region CA

Kettle Creek CA

Lake Simcoe Region CA

Lakehead Region CA

Long Point Region CA

Lower Thames Valley CA

Lower Trent Region CA

Maitland Valley CA

Mattagami Region CA

Mississippi Valley CA

Niagara Peninsula CA

Nickel District CA

North Bay-Mattawa CA

Nottawasaga Valley CA

Otonabee Region CA

Quinte Region CA

Raisin Region CA

Rideau Valley CA

Saugeen Valley CA

Sault Ste. Marie Region CA

South Nation River CA

St. Clair Region CA

Toronto and Region CA

Upper Thames River CA

Appendix B

GUIDANCE DOCUMENT FOR THE MINISTER'S DIRECTION ISSUED UNDER SECTION 1.14 OF THE CAA

The following sets out additional information and guidance for authorities in relation to the Minister's Direction issued May 1, 2026 under s. 1.14 of the CAA.

The ministry strongly encourages conservation authorities to contact the Ontario Provincial Conservation Agency (OPCA) at CCEO@ontario.ca if an authority is uncertain about the scope, application or requirements of this direction. OPCA can help clarify whether a proposed decision is subject to this Direction and how the authority can ensure it complies with this Direction.

As paragraph 11 of the Direction provides, if any decisions covered by the Direction are made by employees of the authority, the authority has the obligation to ensure that their employees are aware of this Direction and that the authority seeks prior authorization in accordance with the Direction before the decision is made.

The CAA provides that, if an authority makes a decision in contravention of a direction issued under clause 1.14 (1) (a), the authority's decision has no effect and any agreement that the authority enters into that is in contravention of the direction is void.

Request and OPCA CEO Decision Process

Making a Request

After a conservation authority determines that a proposed decision requires authorization from the OPCA CEO, the authority may make a request for authorization via email to CCEO@ontario.ca containing the following required information:

- A description of the decision that the authority is seeking authorization to make, including details of the proposed decision and why the proposed decision is a decision that is subject to paragraph 1 of the Direction.
- A resolution of the authority supporting the proposed decision.
- An explanation for why authorization should be granted, including any risks associated with deferring the proposed decision until after the transition date.
- Any information about relevant dates for the proposed decision, including any considerations around urgency or the time-sensitive nature of the proposed decision.

Any notices of decisions required to be given to OPCA CEO under paragraph 7 of the Direction should also be sent via email to CCEO@ontario.ca.

Confirmation of Receipt

Once the OPCA (or Office of the Chief Conservation Executive (OCCE) if the OPCA CEO has not yet been appointed), receives a request from the authority that includes the required information, the authority will be notified by OPCA that the request has been received and the timeline for a decision. The OPCA will also inform the Ministry's Conservation Authorities Section (CAS) (via ca.office@ontario.ca) that a request for written authorization has been received. In addition, if the authority provides notice under paragraph 7 of the Direction of a decision made for the purpose of alleviating an immediate danger to human life, health, or property, the OPCA will inform the CAS.

If, upon review by the OPCA CEO, it is determined that a decision is not subject to the requirement for prior written authorization, the authority will be notified as soon as possible that the decision is not subject to this Direction.

Consideration of Request

The OPCA CEO will endeavour to make a decision on the request in a timely manner and not more than 30 calendar days from the day of receiving the request that is accompanied with the required information. Where the complexity of the request or the need for additional information necessitates, written notice will be provided to the authority by the OPCA of any additional time needed to issue a decision.

The OPCA CEO may consult on an authority's request with the relevant transition committee and project executive that has been appointed by OPCA for that authority. . The OPCA CEO may also require the authority to provide additional information if needed to support their consideration of the request.

Decision

The OPCA CEO may make the following types of decisions on a request for written authorization:

- Grant authorization to the authority to proceed with making the decision that was the subject of the request, in whole or in part (i.e., authorize the authority to proceed in a more limited manner than what was requested).
- Deny authorization, including in circumstances where, in the opinion of the OPCA CEO, the decision would not be in the best interest of the future regional conservation authority, or it would be more appropriate to defer the decision to the future regional conservation authority.

The decision of the OPCA CEO on the request will be given in writing to the authority and will include a rationale for the decision if the decision is to deny authorization or only grant authorization in part. The Ministry's CAS will also be notified of the OPCA CEO's decision.

Where an authority's proposed decision is authorized by the OPCA CEO, or where the proposed decision has been authorized but only in part, this in no way compels the authority to proceed with the decision. In all cases, the authority retains the sole power to determine whether to proceed with any decision that has been authorized by the OPCA CEO.

Reconsideration

There is no process for reconsideration of an OPCA CEO decision on a request for authorization under the Direction.

An authority whose request for authorization is denied or granted only in part may request authorization again in accordance with the Direction at a later date if the circumstances have changed and the authority believes that these changes in circumstances would support the granting of authorization.

Agenda item #10.

Lower Trent Conservation
Payments LOG - APRIL 2026

CHEQUE # / EFT #	PAYEE	DETAILS	AMOUNT
	Staff Payroll	Apr/26 Payroll Period #7 and #8 and #9	207,317.42
EFT 83341874	OMERS	Apr/26 Pension Contributions	38,114.66
EFT 83342083	Nesda Technologies Ltd	Monthly IT services, project and tickets fees	2,025.71
EFT 83341837	Sun Life Assurance Company of Canada	May/26 Group Benefits Premium	9,594.66
EFT 83341934	Workplace Safety Insurance Board (WSIB)	Apr/26 WSIB Premium	6,522.68
EFT 83341958	CIBC VISA	Apr/26 Payment	10,247.74
EFT 83342210	Staff	Staff Expenses - Reimbursed	313.56
17538	Legacy Collision & Refinish Centre	Vehicle body repairs	1,480.30
17539	DS Fire Safety Plans	Fire safety plans - Admin building and GLCC	1,130.12
17540	Brighton Springs	Drinking water for admin building	49.75
17541	Earl Rosebush Fuels	Propane - bulk - Goodrich-Loomis Conservation Centre	490.93
17542	Ganaraska Region Conservation Authority	Shared Engineering Services	1,650.00
17543	City of Quinte West	Utilities - water/sewer - workshop	79.72
17544	Seymour Mechanical Services	Snow plowing - Seymour CA	1,017.00
17545	WM. J. Thompson Farm Supply Ltd.	Equipment maintenance and supplies	2,095.38
17546	Chitra Gowda	Staff expenses - reimbursed	141.74
17547	Kim Stephens	Staff expenses - reimbursed	182.26
17548	Telizon Inc	Monthly telephone lines	565.37
17549	Staples Commercial	Stationery supplies, 2026 Native Plant Sale supplies	570.88
17550	Renshaw Power Products	Equipment maintenance	279.90
17551	Pesce & Associates Inc.	Organizational and salary review	5,424.00
17552	OT Group - DCB Business Systems Group Inc	Monthly copier usage service fees	248.79
17553	Office Central	Stationery supplies	197.50
17554	*PAYMENT STOPPED*	*Counterfeit cheque detected and managed with bank*	-
17555	Hydro One Networks Inc.	Utilities - hydro - admin building and workshop	1,001.24
17556	Emerald Cleaners	Cleaning services - admin building and workshop	1,378.60
17557	Crowe Valley Conservation	DWSP - SPC advertisement	150.00
17558	*PAYMENT STOPPED*	*Counterfeit cheque detected and managed with bank*	-
17559	B&T Sales	Janitorial supplies	157.32
17560	*PAYMENT STOPPED*	*Counterfeit cheque detected and managed with bank*	-
17561	Capstone DT	Search Warrant training	73.45
17562	Obsentia	Vehicle maintenance	333.71
17563	Free Flow Petroleum	Vehicle and equipment fuel	1,107.94
17564	*VOIDED*	*Misprinted therefore voided*	-
17565	Nicholas Peat o/a EcoStrategyPEC	RX-100 Low Complexity Prescribed Burn Training	2,542.50
		Total of Payments	**296,484.83**

Agenda item #11a.

Summary of Permits Approved by Staff

Part VI of the Conservation Authorities Act and Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits

Prepared by: Scott Robertson, Development and Regulations Lead, Planning and Regulations
For Period: March 28, 2026 to April 30, 2026

Permit #	Municipality	Ward	Geographic Township	Concession	Lot	Street Address	Regulated Area	Permitted Activity
RP-23-247	Trent Hills	Seymour	Seymour	11	3	229 Edgar Road	Unevaluated wetlands (allowance), Trent River tributary (allowance)	To Conduct the Placement of Fill Material across a Watercourse Crossing
RP-25-153	Quinte West	Sidney	Sidney	7	6	416 Glen Ross Road	Unevaluated wetland (allowance)	Construct an approximately 145m^2 (1564 ft^2) Pole Barn
RP-26-019 (compliance)	Trent Hills	Seymour	Seymour	7	7	6400 County Road 30	Field-verified wetlands and unevaluated wetlands (allowance)	To Conduct Recreational Management on the property noted above within Wetlands and associated Regulatory Setbacks According to the following specifics; Dig drainage Swale to guide seasonal runoff; Maintain existing low impact recreational trails; Install a culvert crossing for the swale; and,Perform vegetation management to control weeds, tick habitat, and hazard trees.
RP-26-035	Alnwick/Haldimand	Haldimand	Haldimand	B	23	157 North Shore Road	Lake Ontario dynamic beach hazard (allowance), Lake Ontario flood hazard (allowance)	Reconstruction of an Existing Dwelling and Attached Garage with an Addition and Second Story
RP-26-036	Brighton	Brighton Town	Murray	B	33	86-88 Sharp Road	Lake Ontario tributary (allowance)	To Conduct Site Grading activities for Site Preparation and the Installation of a dry pond, and the Construction of Commercial Structures
RP-26-037	Brighton	Brighton Town	Murray	C	35	49 Harbour Street	Lake Ontario flood hazard (allowance)	Reconstruction of an Existing Deck
RP-26-039 (minor)	Trent Hills	Campbellford	Seymour	6	10	Saskatoon Ave/Front St/Bridge St/Park Way	Trent River floodplain	To Conduct Replacements of approximately 800 metres of Adyl-A mains with new NPS 2 and 1 1/4 PE IP Gas Mains and Service Relay and Reconnects
RP-26-042	Quinte West	Murray	Murray	B	18	191 English Settlement Road	Unevaluated wetland (allowance)	Construction of two buildings, including a biosecurity room between three existing barns
RP-26-044	Cramahe	Cramahe Township	Cramahe	10	17	4240 County Road 25	Salt Creek Valleylands (allowance)	Construction of a Single-family Dwelling and Installation of a Septic System
RP-26-047	Brighton	Brighton Township	Murray	C	30	341 Stoney Point Road South	Lake Ontario tributary (allowance), Presqu'ile Bay Marsh PSW (allowance), and unevaluated wetlands (allowance)	To Decommission the existing Septic System and Install a new Septic System in the same location as the existing Septic System.
RP-26-049	Quinte West	Trenton	Sidney	1	13	Whites Road	Trenton Airport Approach Complex Wetland (allowance), Meyers Creek floodplain	To Replace Existing approach Light Towers, Conduct Geotechnical Studies and Install Tower Servicing
RP-26-059	Trent Hills	Seymour	Seymour	13	9	270 Cedarshores Drive	Trent River floodplain (allowance)	To Construct an Addition onto the Existing Dwelling

Agenda Item #11b.

LOWER TRENT CONSERVATION

STAFF REPORT

Date: April 30, 2026
To: LTC Board of Directors
Re: Planning and Regulations UPDATE
Prepared by: Scott Robertson, Development & Regulations Lead, 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 new files and deliverables in 2026 and compared to similar numbers for previous years. Highlighted boxes indicate that 2026 has MORE files to date than previous years.

Table 1. File review – New files and deliverables in 2026 versus previous years

	# Files for 2026 (as of April 30, 2026)	**Dates for Similar Number for Previous Years (Total for Year)**			
		2025	**2024**	**2023**	**2022**
Permits	**62**	April 16 (246)	Mar 26 (283)	Mar 17 (320)	Mar 16 (398)
Planning	**56**	April 14 (188)	Mar 18 (204)	April 12 (213)	Mar 18 (310)
Complaints	**12**	Mar 20 (90)	Mar 1 (96)	Mar 3 (74)	Apr 23 (66)
Enforcement	**2**	Jan 28 (38)	Jan 5 (39)	Jan 11 (39)	Jan 5 (63)
Online Inquiries	**308**	April 16 (1162)	Mar 20 (1435)	June 9 (1003)	May 2 (738)
Legal Requests	**6**	Feb 21(29)	Jan 8 (49)	April 19 (58)	Mar 22 (36)
Clearance Letters	**18**	Mar 31(61)	May 2 (102)	June 14 (52)	Sept 22 (25)
Site Visits	**28**	Feb 7 (287)	Feb 22 (303)	April 11 (246)	Mar 21 (363)

Online Inquiries
Since the last reporting period, staff have received and actioned **104** inquiry submissions and inquiries are continuing to be received at a steady pace. Several complex files and properties are appearing, and 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. As usual, to ensure a timely response time, we are asking that people continue to use our online inquiry service and avoid directly contacting staff unless they are following up on a pre-existing file.

Permitting:
Ongoing Permit files:

- Staff have issued **12** permits since the previous reporting period.
- Staff are currently reviewing and commenting on **24** open 2026 permit files and **40** files from previous years as well.

Agenda Item #11b.

Planning:

- LTC Staff reviewed and commented on **23** Subdivision and Condominium Files in 2026 (new and ongoing). Since the last reporting period, LTC Staff reviewed and commented on **7** Subdivision and Condominium files. Many of these files are ongoing and staff expect to work on these continuously throughout the year.
- Since the last reporting period, LTC Staff reviewed and commented on **16** Planning Act Applications (Severances, Zoning By-law amendments, Official Plan amendments, Site Plan Control applications and/or Minor Variances). There are currently **8** technical reports in our queue for review.

Lastly, a 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.

RECOMMENDATION:

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

Agenda Item #11c.

LOWER TRENT CONSERVATION

STAFF REPORT

Date: April 30, 2026
To: LTC Board of Directors
Re: Flood Forecasting and Warning UPDATE
Prepared by: Scott Robertson, Development & Regulations Lead

PROPOSED RESOLUTION:
THAT the Flood Forecasting and Warning Update be accepted as information.

BY THE NUMBERS:
Here are the number of flood communications issued and compared to the total number of statements issued in previous years.

Table 1. Number of flood communications issued by Staff.

Statements	Flood Communications Issued (as of April 30, 2026)	Total Number for Previous Years						
		2025	2024	2023	2022	2021	2020	2019*
Water Safety	**1**	3	5	4	2	2	3	8
Flood Outlook	**2**	3	2	8	4	4	5	5
Flood Watch	**3**	3	2	2	0	0	3	6
Flood Warning	**3**	4	0	2	0	0	0	13
Total (System)	**9**	13	9	15	6	6	11	32

*Lake Ontario water levels were highly elevated during 2019, which led to a high volume of flood warning statements and updates.

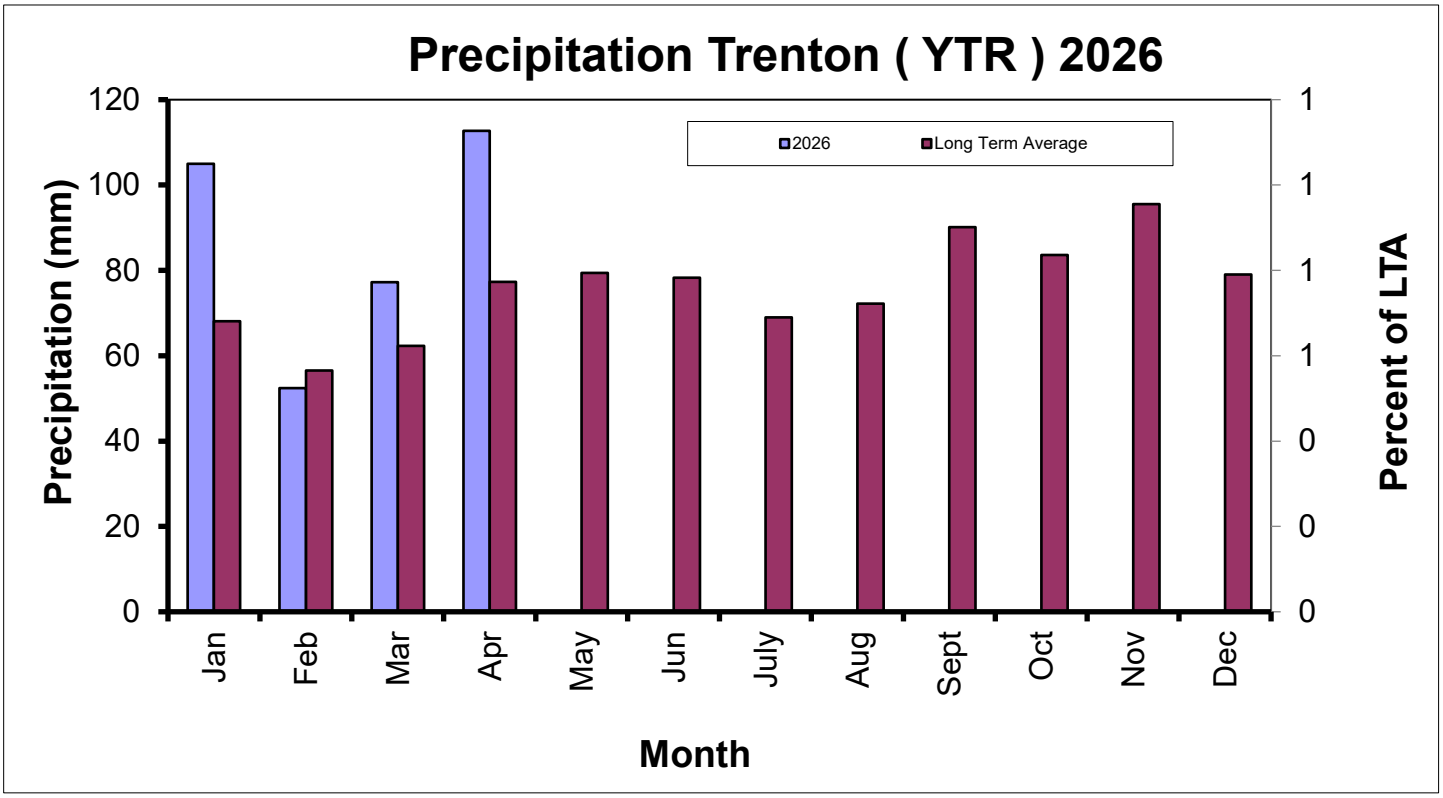
Summary of Current Conditions (since last report)
The month of April had several precipitation events, with recorded volumes exceeding the established long-term average (LTA). Specifically, the month of April has recorded 112.7 mm of precipitation (145.8 % of the long-term average). As a result of the warmer temperatures and precipitation received, the Trent River and our Local Creeks and Streams have had extended periods of increased flows and elevations. In the last week or so these conditions have since improved. Local Creeks and Streams have returned to normal for this time of year while the Trent River is slowly receding to normal conditions following spring freshet. Heading into May, the two week forecast shows that May is expected to have some minor precipitation events with temperatures remaining cool but above freezing. Although there is precipitation expected over the next few weeks, it is not expected to impact the slow and steady recession of the Trent River. LTC staff will continue meeting with Parks Canada on a regular basis to ensure that we are prepared for any sudden changes in the Trent River system.

A monthly comparison of the precipitation volumes observed in 2026 can be seen in Table 2.

LTC staff will continue to review the weather and stream conditions to report further if there appears to be any potential flood or drought issues.

Agenda Item #11c.

Table 2. Observed Monthly Precipitation (mm) in 2026 compared to the monthly long-term average.



Local Creeks

Due to the warmer temperatures and precipitation events experienced throughout April, two flood communication statements were issued for LTC's local creeks and streams. A number of creeks reached concern levels or 2-year flows and peaked in early April. Since then, the creeks have receded and are back to the seasonal average for streamflow and water levels for this time of year. Staff will continue to review the conditions and forecast updates to ensure the safety of our municipal stakeholders and the general public.

Trent River

Due to the warming temperatures and snowmelt throughout LTC and the greater Trent River system, Trent River flows are in full spring freshet while being managed by Parks Canada. The Trent River has had multiple flood statements issued and flows appear to have peaked on April 19. Throughout the freshet and beyond, staff have continued to meet with Parks Canada multiple times a week to monitor conditions and expected changes. In the past week or so flows and elevations have started to recede and are expected to continue to do so over the next few weeks. LTC staff will continue to monitor the system closely while we work with Parks Canada staff on any expected changes or messaging.

If there are any concerns or issues with the water levels on the Trent River system, owners are advised to contact Parks Canada-Trent Severn Waterway.

Lake Ontario

Lake Ontario Water levels have recently risen above normal levels for this time of year. This is in response to significant precipitation received throughout the Lake Ontario basin, high inflows from Lake Erie and spring freshet flows from local inputs. A statement will be issued, and the conditions will continue to be monitored.

Agenda Item #11c.

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 recommend that the Flood Forecasting and Warning Update be received as information.

Agenda Item 12.

LOWER TRENT CONSERVATION

STAFF REPORT

Date: May 14, 2026
To: LTC Board of Directors
Re: LTC 2025 Annual Watershed Monitoring Program Report
Prepared by: Massimo Narini, Watershed Services Specialist

PROPOSED RESOLUTION:

THAT the Lower Trent Conservation (LTC) 2025 Annual Monitoring Program report be received as information.

BACKGROUND:

The Annual Monitoring Program report has been developed at LTC for several years and it provides a detailed summary of the results collected from four environmental monitoring programs carried out across the watershed:

- Aquatic benthic invertebrates
- Baseflow
- Water temperature
- Water quality monitoring (surface water and groundwater).

These watershed wide monitoring programs are conducted annually, overseen by the Watershed Services Specialist and assisted by two summer contract staff. Specifically, this report provides a summary of the watershed conditions on an annual basis and provides staff reference information for initiating stewardship, monitoring or pilot projects.

Many external agencies and individuals rely on our annual report for various initiatives including universities and research bodies, and it provides a detailed look at the overall health of our watershed on a year-to-year basis. Furthermore, it helps provide the groundwork for our Watershed Report Card that is issued every 5-years.

Attached is the 2025 Annual Monitoring Program report that outlines the current programs that are undertaken each year to monitor the health of the LTC Watershed.

RECOMMENDATION:

THAT the LTC 2025 Annual Monitoring Program report be received as information.

LOWER TRENT CONSERVATION

2025 Annual Watershed Monitoring Program Report

May 2026

Contents

List of Tables

List of Figures

1. Introduction

The Lower Trent Region Conservation Authority or Lower Trent Conservation (LTC) was formed in 1968 to protect, restore and manage water and other natural resources within the Lower Trent Conservation watershed region. Conservation Authorities are watershed-based, non-profit organizations in Ontario, formed under the Conservation Authorities Act.

The LTC watershed region includes the furthest downstream section of the Trent River watershed, encompassing 2,070 square kilometers. It includes the Trent River, which flows out of Rice Lake to the Bay of Quinte at Trenton, and the watersheds of eight main tributaries. The watershed region also includes a number of smaller watercourses that flow directly into Lake Ontario and the Bay of Quinte from Grafton to Quinte West.

The LTC Strategic Plan (2018-2028) establishes our vision, mission, and values. It is available at: https://ltc.on.ca/wp-content/uploads/2023/01/Strategic-Plan-2018-reduced.pdf?x32069. Our strategic vision is: Healthy Watersheds for Healthy Communities, and this exemplifies the link between a healthy environment and the economic and social health of our communities, as well as the physical and mental health of the people who live here. One of the main goals of the LTC Strategic Plan is 'Advance Watershed Knowledge', including key actions of:

- Invest in monitoring programs to track and report on changes in our environment to support adaptive resource management.
- Acquire additional watershed data and increase use of analytical tools to facilitate a greater understanding of the watershed, enhance data analyses, and guide program development.

Aligned with the Strategic Plan, LTC has established a suite of aquatic monitoring programs to monitor the health of our watershed over time. These monitoring programs include LTC funded programs and Ontario Ministry of the Environment, Conservation and Parks (MECP) funded programs, which are: Benthic invertebrate monitoring, Baseflow monitoring, long-term water Temperature monitoring, Surface Water Quality Monitoring (Provincial Water Quality Monitoring Network (PWQMN) & LTC Surface Water Monitoring Stations) and Provincial Groundwater Monitoring Network (PGMN). The monitoring programs help establish a background of information that is needed to understand the health of our region and inform program development to protect and improve water quality.

LTC prepares a Watershed Report Card every 5 years in conjunction with Conservation Ontario following their guidelines and participating in working groups. The information found within this report will help support the information published in our 2026 Report Card, which will include data for 2022-2026.

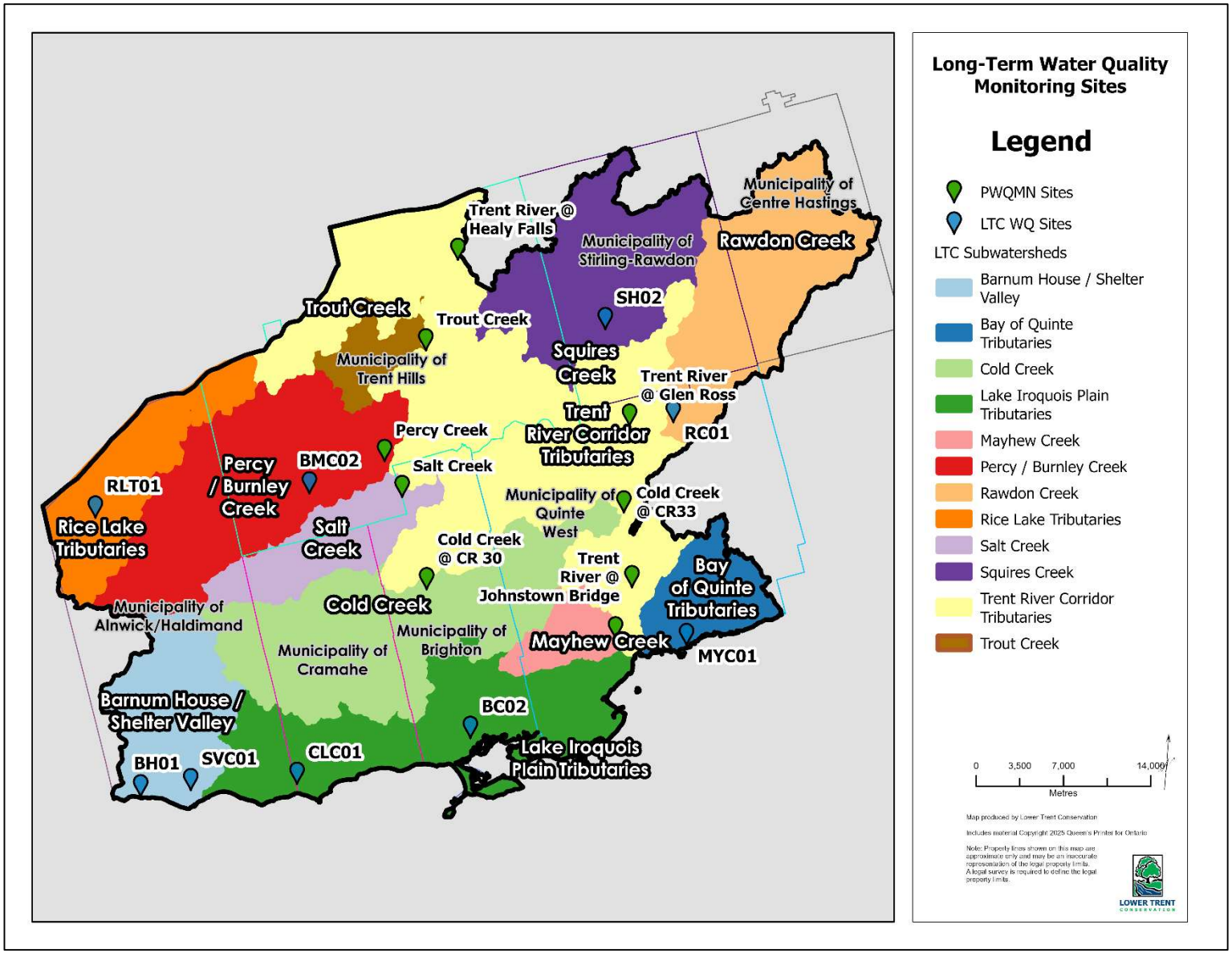


Figure 1: 2025 LTC Water quality monitoring site

2. Purpose

This report is an update of LTC's aquatic monitoring programs for the year of 2025. Each monitoring program section will provide the highlights of this year's data, site conditions, and recommendations for the 2026 sampling season and beyond. This report also identifies components of our monitoring programs that may need to be updated, altered or improved for the future success of LTC's monitoring goals.

3. Benthic Invertebrate Monitoring Program

3.1 Introduction and methods

LTC first initiated a benthic invertebrate monitoring program in the spring of 2003 in association with the Ontario Benthos Biomonitoring Network (OBBN). The OBBN program is an Ontario wide network of sampling sites that have a standardized method of data and sample collection, allowing for comparisons across watersheds and across the province to be made. Benthic invertebrates are also an important part of LTCs monitoring programs as they can be indicators of longer-term trends in water quality and potential impairment in comparison to monthly water quality monitoring, where grab samples are simply an instantaneous measurement at a single point in time in a watercourse, benthic invertebrates inhabit a location for longer periods of time.

The results are comprised of the species composition at each site and insight into the degree of organic pollution and possible stream impairment can be determined with high levels of confidence. Multiple parameters and metrics can be calculated using the benthic invertebrate data collected, allowing for a more comprehensive picture to be made than simply collecting water samples on their own.

The Watershed Report Card utilizes the benthic invertebrates that Conservation Authorities collect annually and illustrate key issues related to water quality and ecological concern within their watershed. The report itself is a simple document that grades the health of individual subwatersheds based on 5 years of data from benthic communities and surface water quality indicators such as, phosphorus and *E. Coli*. The report card is an informative tool that helps document watershed health and can be used as part of a comprehensive watershed monitoring program to identify future focus areas for monitoring initiatives and restoration/ stewardship projects.

3.2 2025 Benthic Invertebrate Monitoring Season in Perspective

Benthic monitoring was carried out by two summer technicians during the month of May, a shift from previous years when sampling typically occurred in June-July, as it was recommended in previous reports that sampling in May will provide more consistent data year-over-year. 2025 was also the first year since 2019 that all 26 of the benthic sampling sites had samples collected at them, a steady improvement since 2023 (see Table 1).

Starting in 2017, LTC has calculated 4 metrics (Species Richness, Hilsenhoff Index and %EPT,) for the benthic invertebrate data collected at each site and this will be the established protocol until such a time that the OBBN program is updated. Species richness relates to the total number of different species that were identified at each site. In general, the more diverse a sampling site is, the healthier this site is, but it must be used in conjunction with other metrics to determine if the species present are pollution tolerant or intolerant. The Hilsenhoff Index is the only index used for reporting watershed health using benthic invertebrates within the standardized Watershed Report Card. This index is associated with a letter grade similar to what would be seen on a student's report card and standardized *tolerance value* for each species identified, allowing for a relationship between the abundance of each species and its tolerance to pollution. For example, sites that have a higher number of pollution intolerant species will score lower, suggesting the water quality is excellent, whereas a site that has a higher number of pollution tolerant species will score higher in the index, suggesting the water quality is poor. The final metric used to evaluate stream health is %EPT, or % of *ephemeroptera, plecoptera, trichoptera*. This metric is comprised of the total number of three important groups of benthic invertebrates and the percentage of the overall diversity they make up. These three groups are considered important groups in river ecosystems, as they live mainly in clean, well-oxygenated water and are intolerant of pollution. All 4 index values can be viewed in Table 2, while the historical and current letter grades for the sites can be viewed in Table 3.

Overall, the majority (12) of the benthic sampling sites have scored at a lower letter grade (less healthy) when comparing data from 2024 to 2025 (see Table 3). The largest change in grade occurred at MC01, where the grade dropped from a *B* to a *D* grade. This site is located within agricultural fields, is quite small and could be more susceptible to fluctuations in precipitation and temperature, as evident in the fluctuating grades from the previous 4 years. In addition, 2025 had a similar number of sites with a *D* grade as 2019 and 2022, whereas 2023 and 2024 had lower number of poor scoring sites (5 and 3 sites respectively). With 2025 being the first year since 2019 where all sites were sampled, comparisons between the 2 sampling years show similar scores at each site. With the implementation of recommendations that will allow more consistent data to be collected with regards to timing, as well as addressing site specific issues that prevented sampling from occurring in previous years, consistency will help eliminate outlier sampling years, allowing for a better understanding of the overall health of the watercourses sampled within the benthic invertebrate program.

Table 1. 2025 Benthic Invertebrate Sampling Locations

Subwatershed	Site	Coordinates	
		Latitude	Longitude
Barnum House Creek & Shelter Valley	**BH01**	43.9692787	-78.055378
	BH02	44.00611064	-78.04852955
	SVC01	43.9765702	-78.0061602
	SVC03	44.04228879	-78.00190396
Percy-Burnley Mill Creek	**BM02**	44.1967677	-77.91120155
	BM03	44.15764773	-78.00197991
	PC01	44.22441128	-77.83931598
	PC02	44.25680878	-77.95194261
Lake Iroquois Plain Tributaries	**CLC01**	43.9869896	-77.9007222
	BC02	44.03024482	-77.73116962
	SC01	44.00415203	-77.83755564
	SMC01	44.04087289	-77.67091451
Cold Creek	**CC01**	44.19812403	-77.59731852
	CC02	44.12813863	-77.81933157
Trent River Corridor	**KC01**	44.30516612	-77.95239709
	MC01	44.29968329	-77.57684698
Bay of Quinte Tributaries	**MYC01**	44.109042	-77.5229587
Mayhew Creek	**MAC01**	44.10985477	-77.59467346
Rawdon Creek	**RC01**	44.26877931	-77.55324277
	RC02	44.4060605	-77.43668541
Rice Lake Tributary	**RLT01**	44.1667325	-78.1237706
Salt Creek	**SAC01**	44.199623	-77.818467
Squires-Hoards Creek	**SH01**	44.35857195	-77.60210868
	SH02	44.33195	-77.628719
Trout Creek	**TC01**	44.30604886	-77.80640886
	TC02	44.302018	-77.83153
Total Sampled	**26**		

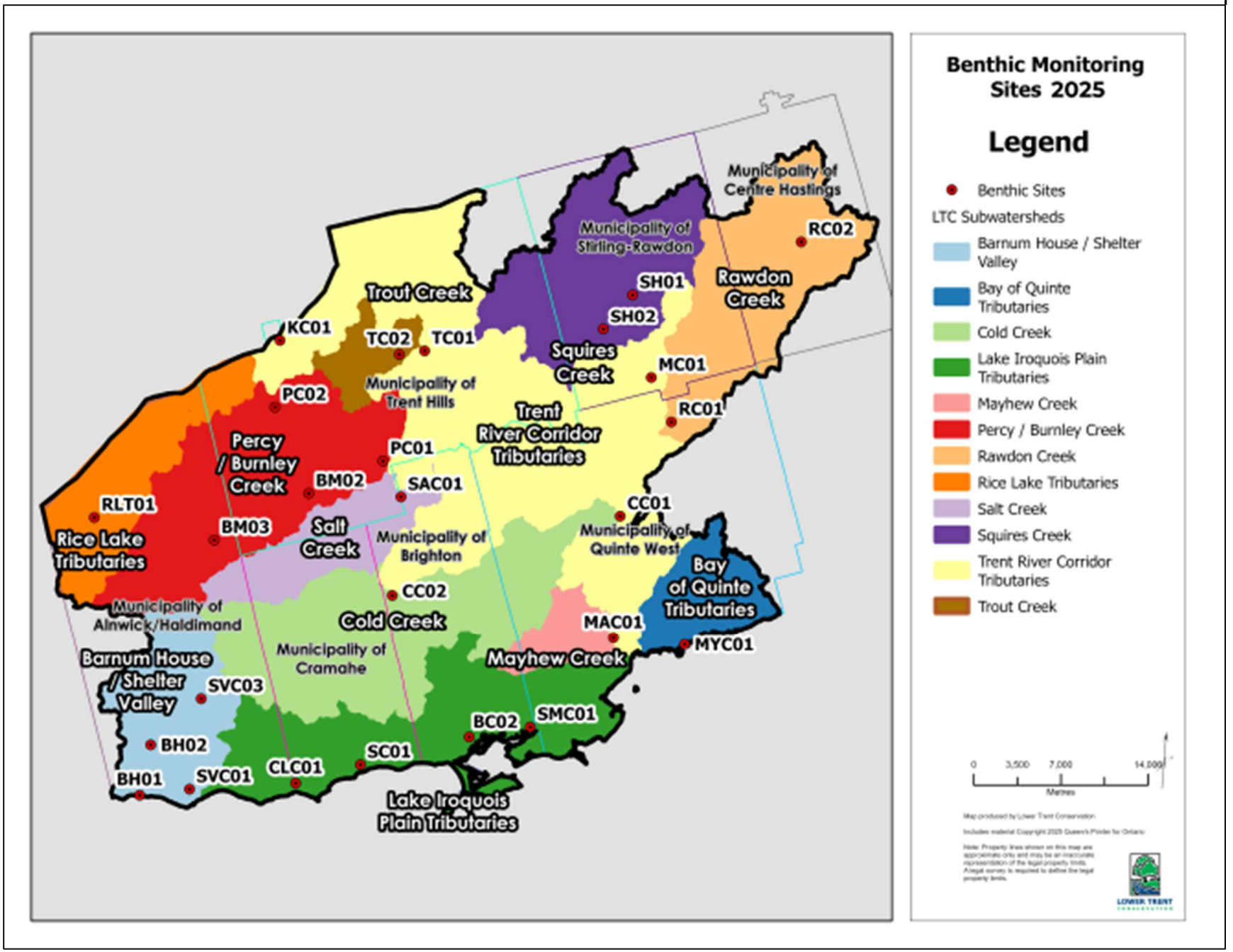


Figure 2. 2025 LTC Benthic Invertebrate Monitoring Sites

Table 2. Index Values for all Benthic Invertebrate monitoring sites. H' Index= Hilsenhoff Index. Higher values are indicators of healthier systems for all 3 metrics.

Subwatershed	Watercourse	Site Code	Species Richness	H' Index	%EPT
Barnum House-Shelter Valley Creek	Barnum House Creek	**BH01**	19	2.00	24.53
		BH02	20	1.71	11.64
	Shelter Valley Creek	**SVC01**	18	2.30	32.53
		SVC03	22	2.20	28.29
Bay of Quinte Tributaries	Meyer's Creek	**MYC01**	16	1.82	8.71
Cold Creek	Cold Creek	**CC01**	14	1.80	19.08
		CC02	17	1.97	72.58
Lake Iroquois Plain Tributaries	Colborne-Lakeport Creek	**CLC01**	14	1.24	16.32
	Butler (Proctor) Creek	**BC02**	14	1.59	4.73
	Salem Creek	**SC01**	19	2.04	17.70
	Smithfield Creek	**SMC01**	17	2.19	21.71
Mayhew Creek	Mayhew Creek	**MAC01**	20	1.88	29.57
Percy/ Burnley Creek	Burnley (Mill) Creek	**BMC02**	27	2.38	34.19
		BMC03	24	2.37	17.07
	Percy Creek	**PC01**	26	2.45	26.50
		PC02	27	2.12	71.02
Rawdon Creek	Rawdon Creek	**RC01**	22	2.07	11.40
		RC02	28	2.47	44.92
Rice Lake Tributaries	Rice Lake Tributaries	**RLT01**	28	2.46	45.13
Salt Creek	Salt Creek	**SAC01**	17	1.90	23.05
Squire-Hoards Creek	Squire-Hoards Creek	**SH01**	22	1.88	10.24
		SH02	18	1.71	11.25
Trent River Tributaries	Kiloran Creek	**KC01**	11	1.69	18.65
	Marsh Creek	**MC01**	15	1.94	40.39
Trout Creek	Trout Creek	**TC01**	21	1.93	24.06
		TC02	17	2.01	17.79

Table 3. Hilsenhoff values and site grades for the 26 sites over the past 5 sampling years. 2025 is highlighted in light blue to represent the current year. N/A= Missing data. 2020 and 2021 were not sampled.

Subwatershed Name	Site ID	2019	2022	2023	2024	2025
Barnum House/Shelter Valley	BH01	C	D	D	B	C
	BH02	C	*N/A*	*N/A*	D	D
	SVC01	C	C	C	C	C
	SVC03	D	C	C	B	C
Bay of Quinte Tributaries	MYC01	F	D	D	C	D
Cold Creek	CC01	C	C	C	C	D
	CC02	B	A	C	B	A
Lake Iroquois Plain Tributaries	CLC01	D	D	C	C	C
	BC02	C	B	A	C	C
	SC01	C	C	B	C	C
	SMC01	C	C	D	*N/A*	C
Mayhew Creek	MAC01	C	B	C	A	C
Percy/Burnley Creek	BMC02	C	*N/A*	B	A	B
	BMC03	C	*N/A*	B	B	C
	PC01	C	C	C	C	C
	PC02	C	*N/A*	*N/A*	B	C
Rawdon Creek	RC01	D	C	C	B	B
	RC02	B	C	B	B	B
Rice Lake Tributaries	RLT01	B	B	B	B	B
Salt Creek	SAC01	C	C	*N/A*	*N/A*	C
Squires-Hoards Creek	SH01	C	D	D	C	D
	SH02	D	B	D	B	C
Trent River Corridor Tributaries	KC01	D	D	*N/A*	D	D
	MC01	C	D	A	B	D
Trout Creek	TC01	D	B	C	C	D
	TC02	D	D	C	D	C

3.3 Issues, Recommendations and Improvements

- The site specific issues identified in the 2024 Annual Monitoring Report were all put into practice, which led to sample collection at all 26 benthic invertebrate sampling sites in 2025.
- Methodology improvements for sample collection were continued from 2024 into 2025, continuing the trend of higher quality benthic invertebrate samples, allowing for correct identification with limited difficulties by our contracted taxonomist.

Future improvements to the benthic invertebrate monitoring program have been identified and are to be implemented on a rolling basis, such as:

- Additional metrics can be calculated, such as functional feeding groups, for better identification of future focused monitoring within areas where site degradation may be occurring and for long-term trend analysis. With the data quality improving consistently since 2019, analysis using multiple years of data will help better understand the changing health of the Lower Trent Watershed.
- With the intention of updating the program when the next Watershed Report Card cycle starts in 2027, LTC staff are exploring a rotating watershed approach be used for site selection, similar to what was tried in 2016. The changes were not kept from the 2016 changes due to a lack of ground-truthing that locations would be viable sampling locations, which would be improved for future changes. The intention would be that the total number of sites sampled each year remains the same, but more locations throughout each subwatershed can be sampled multiple times over a 5-year period. This type of sampling efforts would allow for a broader picture of overall health of each subwatershed, whereas the consistent sites used annually under the current methods may only providing information on a small section of the area.

4. Long-Term Temperature Monitoring Program

4.1 Introduction/ Methods

The temperature of a stream has a considerable influence on the health of aquatic organisms and is often a deterministic factor in a species presence. The collection of temperature data allows staff to observe changes in thermal regimes over time and assist in assessing the health of local watercourses in conjunction with other LTC monitoring programs. Although, LTC does not have a fish monitoring program, measuring temperature changes over time can help assess the health of a watercourse and the presence of specific freshwater fish, mainly important cold-water fisheries species.

The LTC long-term temperature monitoring program is completed on an annual basis where temperature is recorded every hour from the deployment date in June until Fall, when the loggers are collected from the watercourse. For 2025, LTC installed a total of 34 temperature loggers across the watershed, an increase from 32 in 2024, as older loggers that were not in circulation were able to be refurbished in-house to be deployed at additional sites. As well, an additional 4 water temperature loggers were deployed by the Cold Creek Fly Fishers (CCFF) within a short section of Cold Creek downstream of Goodrich Loomis Conservation Area and they have shared the data to contribute to our overall analysis of the watershed (Figure 3). LTC and the CCFF use various types of Onset HOBO in-water temperature loggers, deployed in a similar fashion to allow consistent data comparisons.

4.2 2025 Temperature Monitoring Season in Perspective

Unfortunately, after the success of the temperature logger program in 2024, 2025 saw 6 temperature loggers damaged (i.e. uncharacteristic battery drain causing data loss, water damage) and 2 loggers were unable to be retrieved (Table 4). It is unclear why the battery was drained from the loggers or why water was able to infiltrate the damaged loggers, but the replacement of O-ring seals was not completed on loggers that have been used for multiple years (as recommended in the 2024 annual report), which may highlight the need for yearly maintenance on this equipment. The addition of a Bathyscope (purchased through external funding for the *Watershed Habitat Assessment and Brook Trout Monitoring Initiative Pilot Project* in 2024), an underwater viewer that allows for better visualisation of the stream bed through the water column, was imperative for the effective recovery of the loggers again in 2025. Multiple loggers had shifted and were not within the noted areas of deployment, making them more difficult to find. Traditionally, LTC staff must mainly go by feel to attempt to find the loggers, which in many cases can prevent their recovery, especially in areas where there is high sediment within the water column. The improvements to both using the equipment available and improvements to documentation of logger locations were both important factors to retrieval of a high percentage of the deployed loggers in 2025.

The refurbishment of 2 loggers allowed for a closer look into the temperatures within Hoards Creek, as previously the temperatures downstream of the Kings Mill Conservation Area dam

were anecdotally suspected to be increased by the retention of water within the dam pond. The loggers were named in a similar fashion to the additional loggers in Cold Creek, with **SH01-HW** denoting "headwaters" of the dam pond on the LTC property and **SH01-KM** denoting the logger placed just downstream of the "King's Mill" dam. The 4 temperature loggers installed by the CCFF were named CCFF-A to CCFF-D to denote their location continuing further downstream within Cold Creek.

4.3 2025 Temperature Monitoring Data Analysis

Due to the high number of sites where data is missing from 2025, there is a reduction in the analysis that could occur to compare previous years to the data collected in 2025 (Table 4). 9 of the sites remained within the same temperature regime as the last previous year with data, whereas 10 sites changed to a warmer temperature regime and only 2 sites changed to a cooler temperature regime. In addition, of the 10 sites that increased in temperature, 6 of those sites can be categorized as "warmwater" systems using the 2025 data. Generally, the cooler the water temperature/ temperature regime classification, the better the overall health of the stream is for the LTC watershed in particular, as increases in temperature often are accompanied by reductions in water quality. With the lack of precipitation and warm air temperatures through the summer of 2025 causing drought conditions, 2025 is potentially an outlier and that water temperatures will return to previous normals in 2026. If these warmer conditions over the summer months become more consistent, sensitive species found within the LTC watershed may become scarcer.

When comparing data between the newly created CC02-HW and CC02-DS sites found within Goodrich Loomis CA within Cold Creek, there is a similar pattern of overall temperature profile cooling travelling downstream as seen in 2024, which remains consistent when comparing this data to the CCFF sites further downstream. There appears to be a more drastic reduction in temperature in 2025 throughout the Goodrich Loomis property, further solidifying its importance in the local landscape to protect aquatic ecosystem health.

4.4 Issues and Recommendations

With the improvements that the temperature monitoring program saw for the 2023 and 2024 seasons, the following recommendations will be utilized in 2026 and future years:

- Yearly maintenance in the form of replacement O-rings and batteries will be completed on all previously deployed loggers to reduce the chance of failure of these components, with new loggers being purchased to replace the damaged or lost ones in 2025. Previously those loggers that were working at the start of the field season with 75%+ battery percentage and no visual issues with their O-rings would be deployed. This should reduce the chances of damage to the loggers or loss of battery over the sampling season.
- After discussions with the equipment supplier about the issues that occurred in 2025, all loggers will be installed on a flat surface to prevent deforming of the seal, reducing the change of water infiltration into the electronics and to prevent premature data logger

stopping, we will place each logger in an anti-statice bag before installation to prevent electronic issues.

- Due to the consistency in temperature regimes at the current locations, it is recommended to create a rotating subwatershed site list, coinciding with the sites that will be used for the benthic invertebrate rotating subwatershed program, so that more of the watershed has data, while also getting multiple years of data in a 5-year cycle. Implementation is proposed for the 2027 temperature monitoring program.

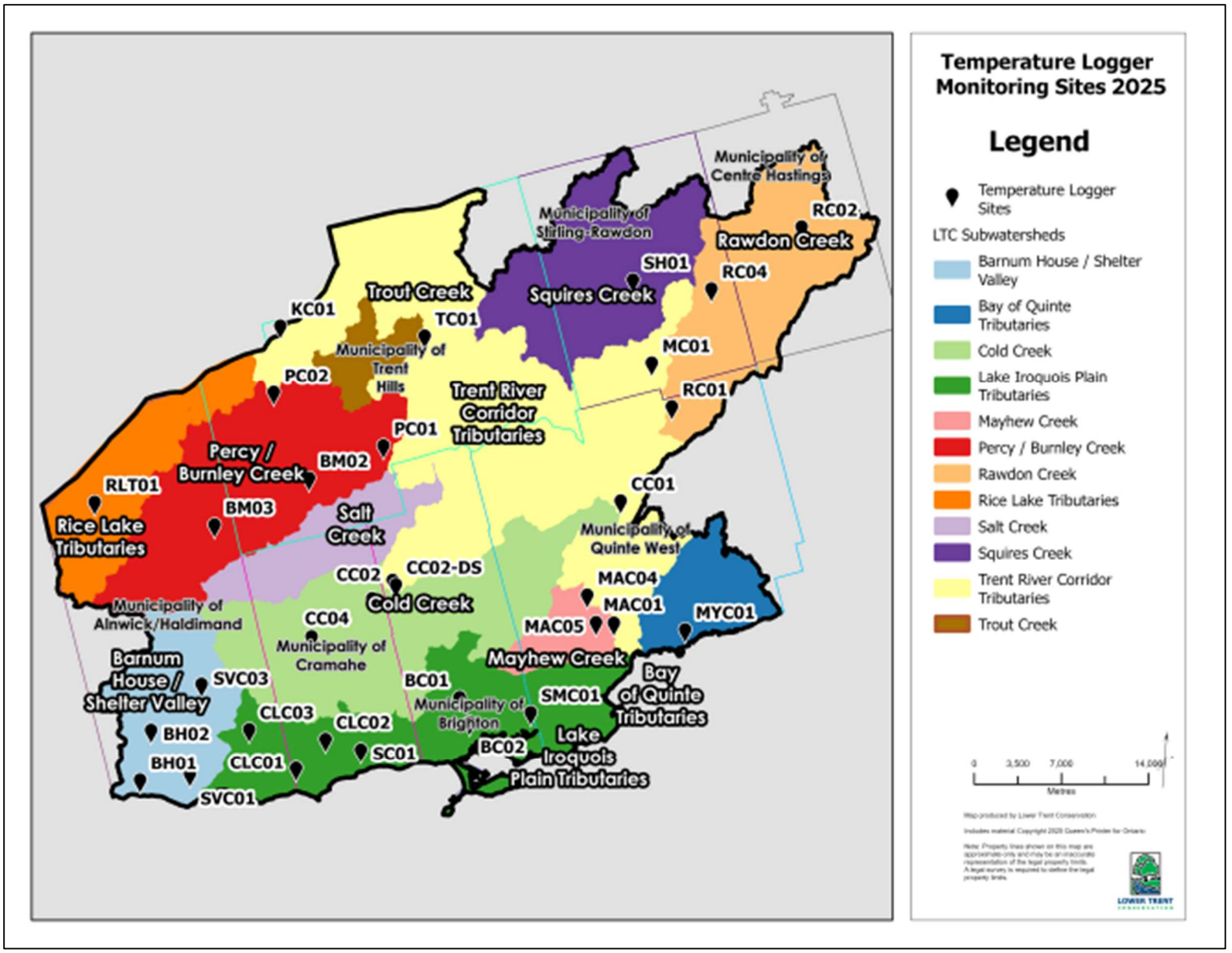


Figure 3. 2025 LTC Long-Term Temperature Monitoring Sites

Table 4. Thermal Regimes at LTC Temperature monitoring Sites from 2019-2025. (Note: Temperature loggers were not deployed in 2020 & 2021). ***New sites for 2025 are bolded.**

Site Code	Subwatershed	Watercourse	2019	2022	2023	2024	2025
BH01	Barnum House- Shelter Valley Creek	Barnum House Creek		Cool-Warm	Cool-Warm		Cool-Warmwater
BH02				Cold-Cool	Cool	Cold-Coolwater	
SVC01		Shelter Valley Creek	Cool		Cool		
SVC03					Cool	Cool-Warmwater	Coolwater
BM02	Percy/ Burnley Creek	Burnley (Mill) Creek	Cool-warm	Cool-Warm		Cool-Warmwater	
BM03					Cool	Cold-coolwater	Coolwater
PC01		Percy Creek	Warm	Warm	Warm	Warmwater	Warmwater
PC02					Cool-Warm	Cool-warmwater	Cool-Warmwater
CLC01	Lake Iroquois Plain Tributaries	Colborne-Lakeport Creek	Cool-warm	Cool-Warm	Cool-Warm	Cool-warmwater	Cool-Warmwater
CLC02				Cold	Cold-Cool	Cold-Coolwater	
CLC03				Cool	Cool	Coolwater	Cool-Warmwater
BC01		Butler (Proctor) Creek	Cold		Cold-Cool	Cold-coolwater	Cold-coolwater
BC02					Cool	Coolwater	
SC01		Salem Creek		Cool	Cool	Coolwater	Cool-Warmwater
SMC01		Smithfield Creek	Cool-warm	Warm	Cool-Warm	Cool-warmwater	
CC01	Cold Creek	Cold Creek		Warm	Warm	Warmwater	Warmwater
CCFF-A							Coolwater
CCFF-B							Coolwater
CCFF-C							Coolwater
CCFF-D							Coolwater
CC02			Cool-warm	Cool-Warm	Cool	Coolwater	Coolwater
CC02-HW						Cool-warmwater	Warmwater
CC02-DS						Coolwater	Cool-Warmwater
CC04			Warm	Cool-Warm	Cool-Warm	Cool-warmwater	Warmwater
MC01	Trent River Tributaries	Marsh Creek		Cool	Cool	Coolwater	Coolwater
KC01		Kiloran Creek	Warm	Cool-Warm			Coolwater
MYC01	Bay of Quinte Tributaries	Meyer's Creek	Warm			Coolwater	Warmwater
MAC01	Mayhew Creek	Mayhew Creek	Warm	Warm	Warm	Cool-warmwater	Warmwater
MAC04			Cool		Cool	Cool-warmwater	Coolwater
MAC05			Warm				Warmwater
RC01	Rawdon Creek	Rawdon Creek		Cool-Warm	Cool-Warm	Coolwater	Warmwater
RC02			Cold-cool		Cool	Warmwater	Coolwater
RC04					Cool-Warm	Cool-warmwater	
RLT01	Rice Lake Tributaries	Rice Lake Tributaries	Cold		Cold-Cool	Coolwater	
SH01-HW	Squire-Hoards Creek	Squire-Hoards Creek					Warmwater
SH01-KM							Coolwater
SH01				Cool-Warm	Cool-Warm	Cool-warmwater	Cool-warmwater
TC01	Trout Creek	Trout Creek				Cold-coolwater	Warmwater

Colour	Thermal Regimes
	Cold, cold-cool
	Cool, cool-warm
	Warm
	Logger Information
	Logger Lost
	Logger Not Deployed
	Logger Error/ Data Lost

Table 5. 2025 Temperature monitoring sites, thermal regimes and seasonal (July-August) maximums/ minimums. (The highest maximum is highlighted in red and the lowest maximum is highlighted in green.)

Site Code	Subwatershed	Watercourse	Max (°C)	Min (°C)	Thermal Regime (July-August)
BH01	Barnum House- Shelter Valley Creek	Barnum House Creek	24.71	16.26	Cool-warmwater
BH02			-	-	
SVC01		Shelter Valley Creek	-	-	
SVC03			23.1	23.1	Coolwater
BM02	Percy/ Burnley Creek	Burnley (Mill) Creek	-	-	
BM03			21.951	13.558	Coolwater
PC01		Percy Creek	31.37	18.236	Warmwater
PC02			26.25	16.17	Cool-warmwater
CLC01	Lake Iroquois Plain Tributaries	Colborne-Lakeport Creek	26.21	16.21	Cool-warmwater
CLC02			-	-	
CLC03			25.125	15.855	Cool-warmwater
BC01		Butler (Proctor) Creek	20.25	13.68	cold-coolwater
BC02			-	-	
SC01		Salem Creek	23.72	15.87	cool-warmwater
SMC01		Smithfield Creek	-	-	
CC01	Cold Creek	Cold Creek	31.676	20.329	warmwater
CCFF-A			25.14	15.44	coolwater
CCFF-B			25.65	15.87	coolwater
CCFF-C			25.01	15.44	coolwater
CCFF-D			24.58	15.36	coolwater
CC02			23.004	14.038	coolwater
CC02-HW			28.159	17.284	warmwater
CC02-DS			24.931	15.664	cool-warmwater
CC04			28.159	16.903	warmwater
MC01	Trent River Tributaries	Marsh Creek	24.158	14.9	coolwater
KC01		Kiloran Creek	23.004	15.378	coolwater
MYC01	Bay of Quinte Tributaries	Meyer's Creek	28.18	18.62	warmwater
MAC01	Mayhew Creek	Mayhew Creek	29.152	18.711	warmwater
MAC04			24.545	16.046	coolwater
MAC05			31.472	20.138	warmwater
RC01	Rawdon Creek	Rawdon Creek	29.252	17.094	warmwater
RC02			21.282	16.713	coolwater
RC04			-	-	
RLT01	Rice Lake Tributaries	Rice Lake Tributaries	-	-	
SH01-HW	Squire-Hoards Creek	Squire-Hoards Creek	30.066	16.618	warmwater
SH01-KM			23.593	16.618	coolwater
SH01			27.862	17.284-	cool-warmwater
TC01	Trout Creek	Trout Creek	28.754	17.665	warmwater

Colour	Thermal Regimes
	Cold, cold-cool
	Cool, cool-warm
	Warm
	Logger Information
	Logger Lost
	Logger Not Deployed
	Logger Error/ Data Lost

5. Baseflow Monitoring Program

5.1 Introduction/ Methods

The baseflow of a stream is a measure of the groundwater recharge contributing to the overall flow. During the summer months it is baseflow that sustains a stream, preventing it from drying up. The constant supply of groundwater is also typically cold and clean which contributes to a steady thermal regime and overall stream health.

At LTC, baseflow has historically been measured on an annual basis to characterize the streams under a variety of conditions (e.g., wet vs dry years) and to track any changes that occur. A typical trend found through such monitoring is that development near a watercourse will decrease the relative contribution of baseflow vs surface water runoff, increase the flashiness of the stream (the time it takes to respond to rainfall events), decrease water quality, and increase temperature fluctuations/variability within the stream.

5.2 2025 Baseflow Monitoring Season in Perspective

The 2025 Baseflow Monitoring program was successful in completing 2 rounds of measurements across the watershed in the month of July and August (Table 6). Measurements were able to be collected at the majority of the sites, with issues in the 2024 sampling season addressed.

A total of 29 sites were assessed (Figure 4) with stream flow measurements collected at 26 sites for 1 or more measurements. 2024 saw a large quantity of precipitation events during the July-August sampling period, whereas 2025 had extreme drought conditions, which lead to some of the sites having water velocity below the minimum threshold for the equipment to detect the flow of water.

5.3 Issues, recommendations and improvements

The following issues occurred in 2025, preventing sampling to occur at the following sites:

- Site **BM01, BM03** and **MAC02** had insufficient water velocity to have measurements taken for either of the sampling events. This was due to the extreme drought conditions and depending on how weather conditions are during the 2026 sampling season, Baseflow monitoring may be completed earlier in the summer at these locations to ensure that flow values can be collected at this sites.
- **MC01** and **PC02** had only 1 set of values collected due to a lack of flow when attempting to complete a second round of sampling. These sites will also be taken into consideration for early sampling in the schedule if drought conditions are found during the 2026 sampling season.

Data collection will continue to be improved through the use of updated digital data collection surveys, as well as improvements in data analysis. Due to the variability of weather during the summer months, it is difficult to determine if the data collected is accurately reflecting the baseflow conditions across the watershed, so weather conditions will more strictly be taken into consideration when completing baseflow sampling.

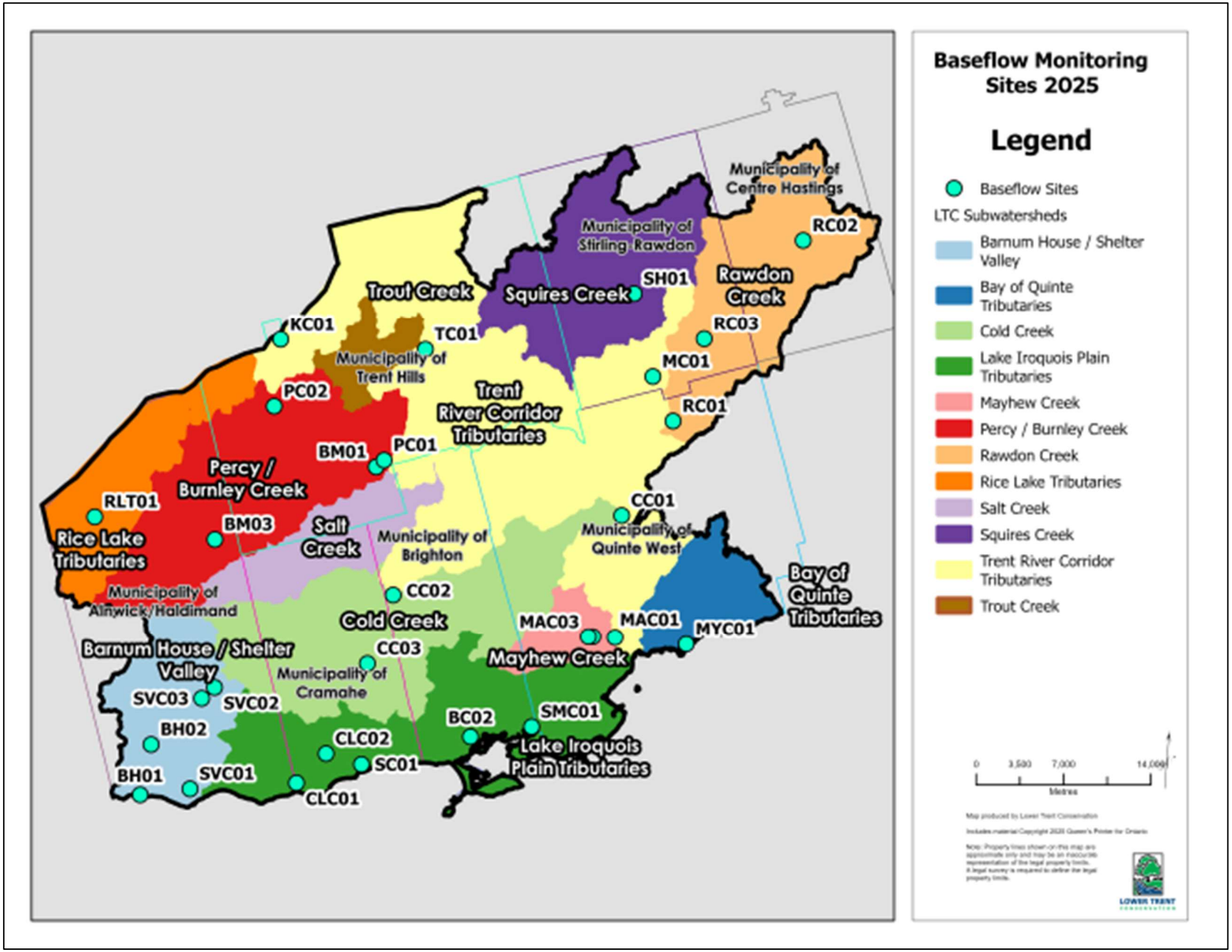


Figure 4. 2025 LTC Baseflow Monitoring Sites

Table 6. 2025 Average discharge measurements at LTC Baseflow monitoring sites.

Subwatershed	Stream Name	Site Codes	Sampling Date (dd/mm/yyyy)	Discharge (m3/s)	Average Discharge (m3/s)	Average Depth (cm)
Barnum House Creek & Shelter Valley	Barnum House Creek	BH01	10-07-2025	15.15	**13.86**	17.60
			21-07-2025	12.57		
		BH02	10-07-2025	12.70	**13.73**	6.56
			17-07-2025	14.76		
	Shelter Valley Creek	SVC01	10-07-2025	77.59	**71.38**	14.40
			17-07-2025	65.17		
		SVC02	10-07-2025	12.09	**13.34**	15.75
			17-07-2025	14.58		
		SVC03	17-07-2025	27.50	**29.77**	10.45
			24-07-2025	32.05		
Percy-Burnley (Mill) Creek	Burnley Mill Creek	BM01	-	-	**-**	-
			-	-		
		BM03	-	-	**-**	-
			-	-		
	Percy Creek	PC01	08-07-2025	86.56	**85.38**	10.50
			21-07-2025	84.21		
		PC02	16-07-2025	-	**-**	-
			-	-		
Lake Iroquois Plain Tributaries	Colborne-Lakeport Creek	CLC01	10-07-2025	29.10	**33.42**	14.40
			21-07-2025	37.75		
		CLC02	11-07-2025	19.76	**20.54**	14.33
			21-07-2025	21.31		
	Butler (Proctor) Creek	BC02	17-07-2025	18.94	**16.02**	8.60
			23-07-2025	13.10		
	Salem Creek	SC01	11-07-2025	25.35	**25.15**	14.38
			24-07-2025	24.94		
	Smithfield Creek	SMC01	11-07-2025	11.86	**11.49**	8.10
			23-07-2025	11.12		
Cold Creek	Cold Creek	CC01	07-07-2025	179.09	**185.22**	21.58
			23-07-2025	191.35		
		CC02	11-07-2025	34.75	**24.65**	11.92
			01-08-2025	14.56		
		CC03	11-07-2025	8.34	**7.37**	20.60
			23-07-2025	6.40		
Trent River Corridor	Marsh Creek	MC01	04-07-2025	-	**-**	-
			-	-		
	Kiloran Creek	KC01	08-07-2025	0.16	**0.08**	5.10
			21-07-2025	-		
Bay of Quinte Tributaries	Meyers Creek	MYC01	07-07-2025	0.59	**0.30**	12.69
			23-07-2025	0.00		
Mayhew Creek	Mayhew Creek	MAC01	07-07-225	26.86	**24.94**	13.77
			16-07-2025	23.03		
		MAC02	-	-	**-**	-
			-	-		
		MAC03	04-07-2025	101.68	**51.22**	13.20
			16-07-2025	0.76		
Rawdon Creek	Rawdon Creek	RC01	04-07-2025	101.68	**89.17**	8.35
			18-07-2025	76.65		
		RC02	04-07-2025	30.59	**22.55**	4.46
			18-07-2025	14.51		
		RC03	04-07-2025	19.72	**10.59**	9.55
			18-07-2025	1.46		
Rice Lake Tributary	Rice Lake Tributary	RLT01	16-07-2025	8.34	**7.58**	7.10
			24-07-2025	6.81		
Squire Hoards Creek	Squires-Hoards Creek	SH01	04-07-2025	22.81	**12.24**	6.70
			18-07-2025	1.68		
Trout Creek	Trout Creek	TC01	08-07-2025	20.91	**14.67**	9.70
			18-07-2025	8.42		

6. Surface Water Quality Program- Provincial Water Quality Monitoring Network (PWQMN) and Lower Trent Conservation Water Quality

6.1 Introduction/ Methods

The Provincial Water Quality Monitoring Network (PWQMN) is an Ontario Ministry of the Environment, Conservation and Parks (MECP) funded program that helps provide Conservation Authorities with water quality information across Ontario. The Conservation Authorities conduct the field work and collect samples monthly, sending all samples to the MECP laboratory in Etobicoke, Ontario for analysis. Once the lab samples are analyzed, all data is sent to LTC for data exploration and analysis, as well as integrated into the provincial water quality data set.

6.2 2025 Water Quality Monitoring Season in Perspective

Water quality samples for the PWQMN sampling program occurred from March- October, as per the guidance of the MECP. All PWQMN sample locations can be viewed in Figure 4. In 2025, a total of 5 samples were taken at each sampling location including: 2 general chemistry, 1 phosphorus, 1 metal sample and 1 *E. Coli* sample. Samples were collected using in-stream "grab" techniques following the MECP PWQMN protocol and in-situ measurements using a hand-held water quality probe (In-situ Aqua TROLL 600) to collect parameters such as, Dissolved Oxygen (DO), Field Turbidity, pH, Conductivity, and Temperature. All information was recorded, and copies sent to the MECP once sampling was completed.

The MECP laboratory analyzes a suite of nutrients, metals and other conventional water quality parameters (see Table 7). As of 2018, LTC is obtaining *E. Coli* data, which is paid for by the Conservation Authority to obtain the appropriate information needed for a complete Watershed Report Card, having representative water quality samples from each subwatershed. A comprehensive review of these parameters allows our office to point out any natural or anthropogenic sources of pollution within the watershed.

As per the Watershed Report Card**, Phosphorus and *E. Coli*** are two of three components that are used to calculate a subwatershed grade.

6.3 2025 Water Quality Monitoring Data Analysis

Out of the 18 sites, 2 sites (MYC01 and RC01) showed *E. Coli* concentrations above the Recreational Water Quality guidelines for both 50th percentile and average *E coli* concentrations, while the *Cold Creek at County Road 33* site was above the guideline for average only. The first set of 4 sites are all within urban areas, including Trenton and Frankford, which can lead to increased *E.coli* concentrations. In 2024, the averages calculated for the 18 monitoring locations were highly influenced by outliers that were observed in the monitoring season. For this reason, the 50th percentile is a better and more reliable calculation since it is

not as heavily influenced by individual outliers. Further investigation should be completed to determine potential influences to the rural sites to ensure there is not any non-point sources of fecal contamination.

Out of the 18 water quality sites, 9 sites (Cold Creek at County Road 33, Trout Creek, Salt Creek, MYC01, CLC01, BH01, RLT01, SH02 and RC01) had Total Phosphorus concentrations (using the 75th percentile) that exceeded the Provincial Water Quality Objective (see Table 9). Of the 144 individual samples that were collected in 2024, 39 (27%) of them also exceeded the PWQO. With the level of current and historical agricultural activity across the LTC watershed, it is not surprising to see higher phosphorus levels, as runoff from agricultural lands can easily enter the water. This is evident in the trend seen previously within the Trout Creek subwatershed, which is one of the heavily agricultural dominated subwatersheds, which has scored low and continues in 2024 to be scored low with a grade of D in 2024.

6.4 Issues and recommendations

As the concurrent water quality monitoring programs are continued during 2026 and the future, good sampling practices will be continued to be followed, with a large influence occurring after heavy rainfall events on water quality samples. Short bursts of heavy rainfall have been observed through the LTC watershed more frequently in recent years and sampling events attempt to avoid the ensuing “flushing” of the aquatic systems to not capture contaminants present found in the flows.

Priority shipping was used for all samples shipped in 2025 and there were no delays significant enough to cause spoilage of samples. The increased shipping costs will need to be taken into account for future budgets for the water quality monitoring program.

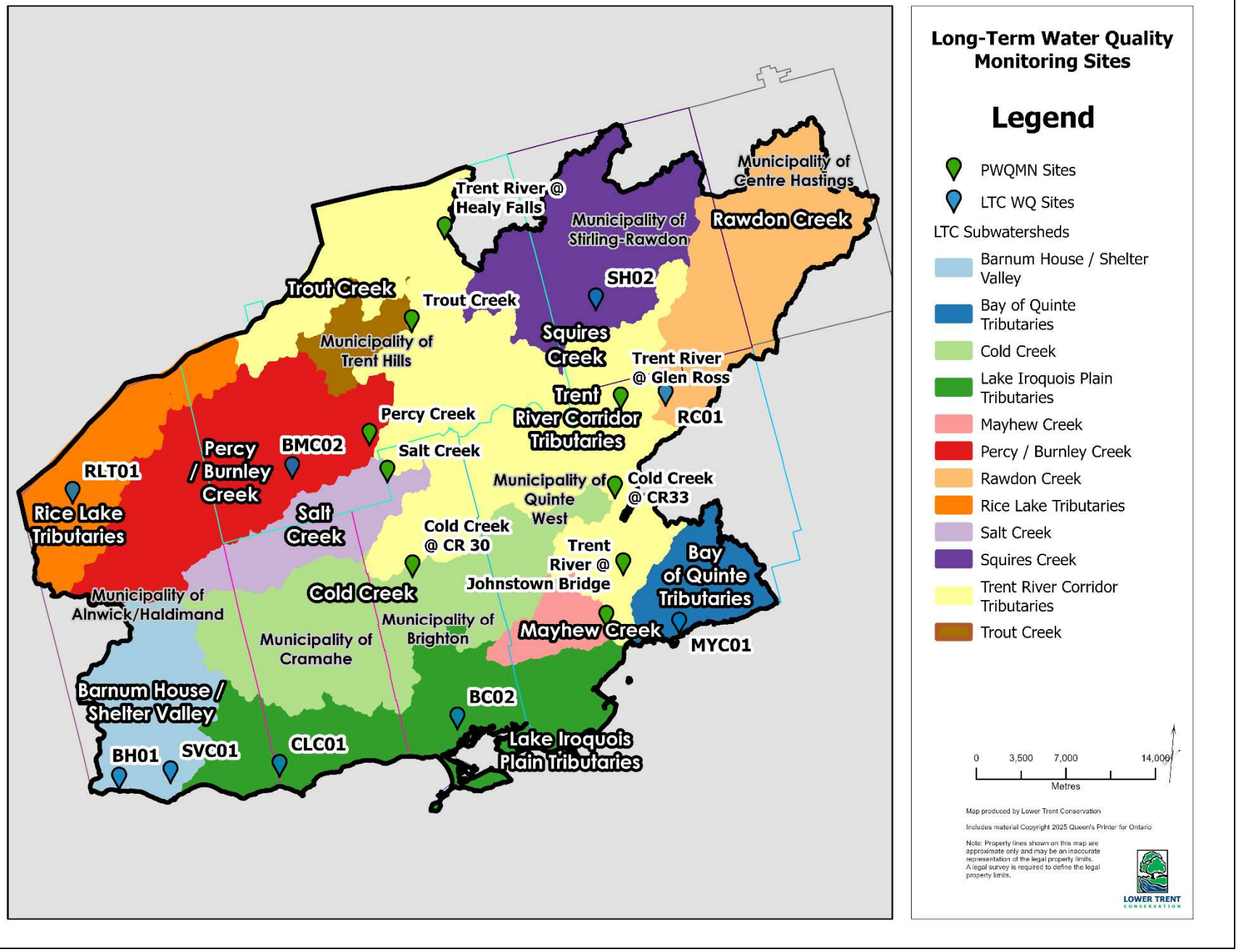


Figure 5. 2025 Surface Water Monitoring Sites

Table 6. Standard suite of water quality parameters analyzed by the MECP laboratories (left table) and Caduceon Laboratories (right). Black bolded parameters are the parameters that are included within the Watershed Report card. Red bolded parameters are important parameters that should be observed within our watershed.

General Chemistry	**Nutrients & Microbiological**	**Metals**
Alkalinity	Total Ammonia	Aluminum
Chloride	**Nitrate**	Arsenic
Conductivity	**Nitrite**	Barium
Dissolved Oxygen	Phosphate	Beryllium
Hardness	**Total Nitrogen**	Cadmium
Magnesium	**Total Phosphorus**	Cobalt
pH	***E. Coli***	Copper
Potassium		Iron
Sodium		Lead
Total Dissolved Solids		Manganese
Total Suspended Solids		Molybdenum
Turbidity		Nickel
Water Temperature		Strontium
		Vanadium
		Zinc

General Chemistry	**Microbiological**
Alkalinity	***E. Coli***
Total Ammonia	
Chloride	
Conductivity	
Nitrate	
Nitrite	
pH	
Total Phosphorus	
Total Suspended Solids	
Total Nitrogen	

Table 8. 2025 E. Coli (CFU/100 mL) point data, average and 50th percentiles for the PWQMN monitoring sites. Letter grades are given based on the Watershed Report Card Guidelines.

	Site								
Date	Mayhew Creek	Trent River at Johnstown Bridge	Cold Creek at County Road 33	Trent River at Glen Ross	Trent River at Healy Falls	Trout Creek	Percy Creek	Salt Creek	Cold Creek at County Road 30
March	18	2	4	8	0	6	3	3	5
April	15	2	20	3	0	8	3	2	5
May	71	7	39	6	1	52	23	21	25
June	151	12	122	1	3	125	93	113	68
July	196	5	137	11	19	197	82	61	86
August	1490	21	73	24	5	254	31	88	72
September	94	80	158	67	7	174	183	72	31
October	31	8	16	0	2	25	27	13	8
November	18	2	4	8	0	6	3	3	5
Average	258	17	71	15	5	105	56	47	38
Standard Deviation	469	24	57	21	6	90	57	40	31
50th Percentile	**83**	**8**	**56**	**7**	**3**	**89**	**29**	**41**	**28**
Recreational Water Quality Guideline	100								
Letter Grade	**B**	**A**	**B**	**A**	**A**	**B**	**A**	**B**	**A**

Table 7. 2025 E. Coli (CFU/100 mL) point data, average and 50th percentiles for the LTC surface water monitoring sites. Letter grades are given based on the Watershed Report Card Guidelines.

	Site								
Date	MYC01-Meyers Creek	BC02-Butler Creek	CLC01-Colborne Creek	SVC01-Shelter Valley Creek	BH01-Barnum House Creek	RLT01-Rice Lake Trib.	BMC02-Burnley Creek	SH02-Squires Hoards Creek	RC01-Rawdon Creek
March	3	23	14	10	35	2	0	2	6
April	42	63	25	7	12	2	2	10	107
May	91	73	44	26	75	17	12	15	154
June	188	87	156	56	60	12	73	50	122
July	144	72	122	75	91	91	59	36	175
August	141	68	91	32	52	37	15	1010	63
September	157	116	174	87	102	114	128	163	144
October	54	3	36	22	21	4	11	21	30
November	3	23	14	10	35	2	0	2	6
Average	103	63	83	39	56	35	38	163	100
Standard Deviation	61	33	58	28	30	41	42	324	57
50th Percentile	**116**	**70**	**68**	**29**	**56**	**15**	**14**	**29**	**115**
Recreational Water Quality Guideline	100								
Letter Grade	**C**	**B**	**B**	**A**	**B**	**A**	**A**	**A**	**C**

Figure 6. Comparison between Average *E. Coli* (CFU/ 100mL) and the 50th percentile of *E. Coli* at each site using data from 2022-2025. (Recreational WQ Guideline: 100 CFU/ 100mL).

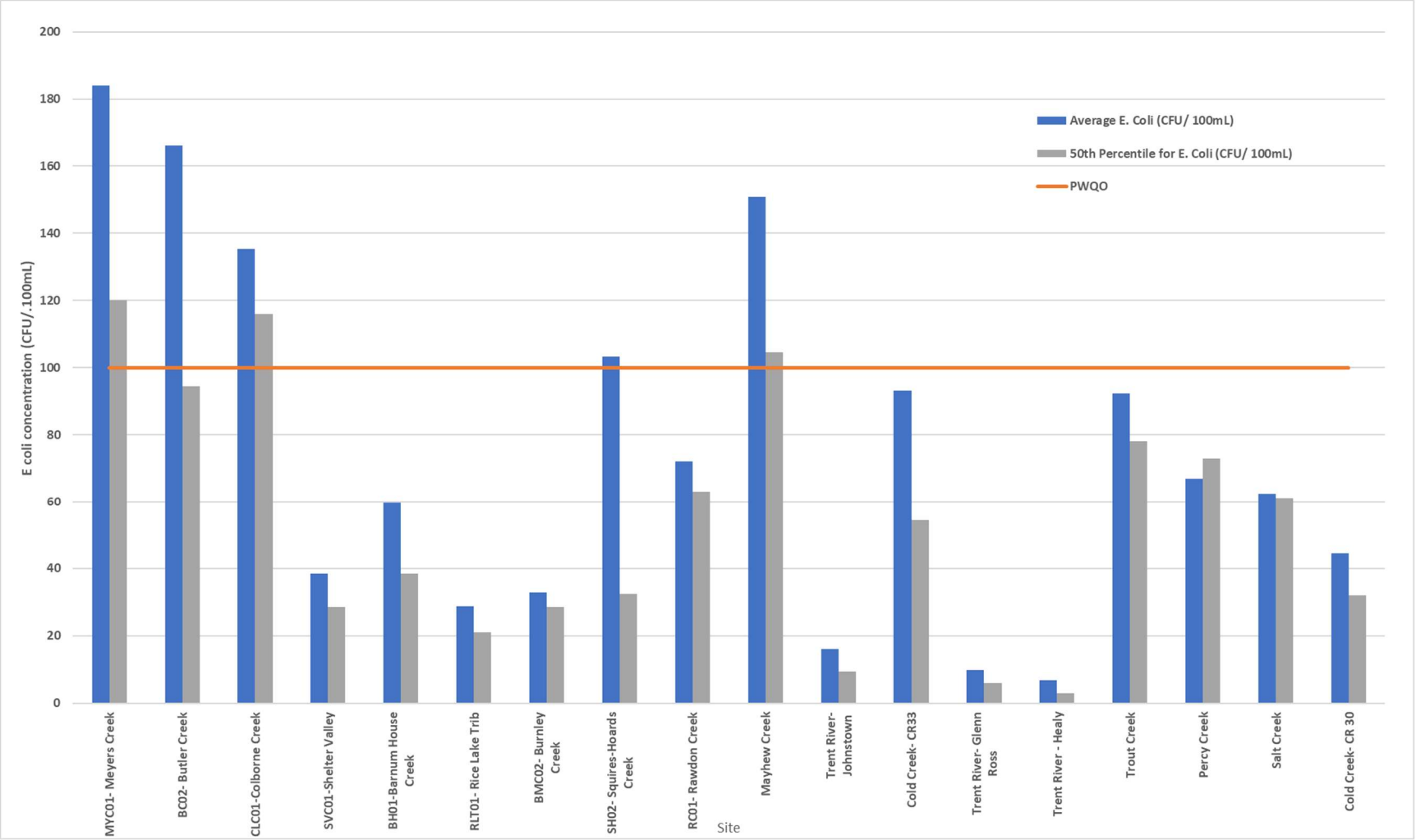


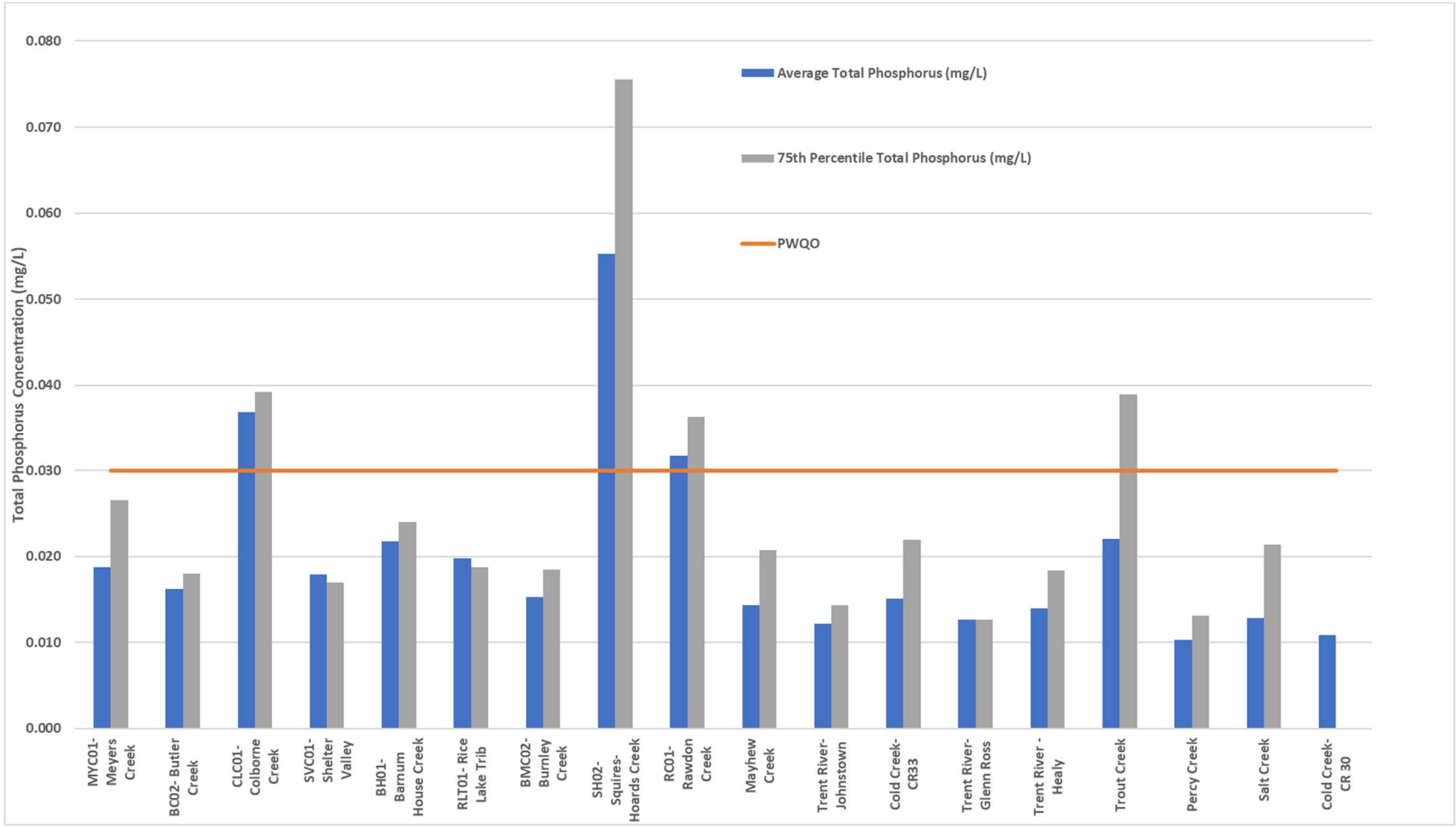
Table 8. 2025 Total Phosphorus (mg/L) point data, average and 75th percentiles for PWQMN sites. Letter grades are given based on the Watershed Report Card Guidelines. Highlighted red data exceeds the PWQO.

	Site								
Date	Mayhew Creek	Trent River-Johnstown	Cold Creek-County Road 33	Trent River-Glen Ross	Trent River - Healy Falls	Trout Creek	Percy Creek	Salt Creek	Cold Creek-County Road 30
March	0.0077	0.0095	0.0241	0.0079	0.0144	0.0175	0.0125	0.0159	0.0096
April	0.0075	0.0126	0.0059	0.0087	0.0066	0.004	0.0069	0.0024	0.0067
May	0.0097	0.0106	0.0062	0.0104	0.0088	0.0034	0.011	0.0035	0.0142
June	0.0189	0.013	0.0117	0.007	0.0179	0.0029	0.009	0.0221	0.019
July	0.0299	0.0203	0.0212	0.0195	0.0197	0.0393	0.015	0.0211	0.0044
August	0.0262	0.0184	0.0351	0.0302	0.0271	0.0605	0.0177	0.0258	0.0259
September	0.0102	0.0051	0.0069	0.0082	0.0081	0.0388	0.0069	0.011	0.0072
October	0.005	0.0081	0.0098	0.0093	0.0089	0.0101	0.0032	0.0006	0.0003
Average	0.0144	0.0122	0.0151	0.0127	0.0139	0.0221	0.0103	0.0128	0.0109
Standard Deviation	0.0088	0.0048	0.0099	0.0076	0.0067	0.0202	0.0044	0.0092	0.0078
75th Percentile	**0.0207**	**0.0144**	**0.0219**	**0.0127**	**0.0184**	**0.0389**	**0.0131**	**0.0214**	**0.0154**
Provincial Water Quality Guideline	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Letter Grade	B	A	B	A	A	C	A	B	A

Table 9. 2025 Total Phosphorus (mg/L) point data, average and 75th percentiles for the LTC surface water monitoring sites. Letter grades are given based on the Watershed Report Card Guidelines.

	Site								
Date	MYC01-Meyers Creek	BC02-Butler Creek	CLC01-Colborne Creek	SVC01-Shelter Valley Creek	BH01-Barnum House Creek	RLT01-Rice Lake Trib.	BMC02-Burnley Creek	SH02-Squires Hoards Creek	RC01-Rawdon Creek
March	0.016	0.018	0.014	0.016	0.02	0.004	0.01	0.007	0.029
April	0.006	0.006	0.019	0.004	0.006	0.012	0.005	<0.002	0.022
May	0.026	0.013	0.03	0.02	0.023	0.013	0.02	0.02	0.037
June	0.017	0.014	0.049	0.014	0.019	0.015	0.018	0.038	0.03
July	0.028	0.018	0.036	0.014	0.027	0.024	0.014	0.12	0.036
August	0.031	0.017	0.034	0.015	0.017	0.017	0.015	0.06	0.023
September	0.018	0.04	0.08	0.047	0.041	0.057	0.029	0.091	0.058
October	0.008	0.004	0.033	0.013	0.021	0.016	0.011	0.051	0.019
Average	0.019	0.016	0.037	0.018	0.022	0.020	0.015	0.055	0.032
Standard Deviation	0.008	0.010	0.019	0.012	0.009	0.015	0.007	0.037	0.012
75th Percentile	**0.027**	**0.018**	**0.039**	**0.017**	**0.024**	**0.019**	**0.019**	**0.076**	**0.036**
Provincial Water Quality Guideline	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Letter Grade	**B**	**A**	**C**	**A**	**B**	**A**	**A**	**D**	**C**

Figure 7. Comparison between Average Total Phosphorus (mg/L) and the 75th percentile of Total Phosphorus at each site using 2022-2025 data. (Provincial WQ Objective: 0.03 mg/L).



7. Groundwater Monitoring Program

7.1 Introduction/ Methods

The Provincial Groundwater Monitoring Network (PGMN) is a MECP funded program, a partnership between the Province and Conservation Authorities. The MECP is responsible for the direction of the program, data analysis and costs of the equipment. LTC collects data on ambient groundwater levels and water quality for 9 sites with 11 wells throughout our watershed (Figure 8.). The PGMN program has moved to an alternating water quality sampling period, with rotations through certain sites on an "odd-even" schedule to reduce the sampling effort for those wells that do not see large changes year over year. The data collected from the PGMN program is not currently used for Ontario Low Water Response for LTC; however, it would be beneficial to look at the long-term analysis. Furthermore, insufficient data replicates were collected for groundwater quality for the Watershed Report Card previously, but it may be used for the current 2022-2026 Watershed Report card for the 7 subwatersheds that have wells within them. This will be assessed closer to the completion of the 5-year reporting period, although the minimal number of wells and samples that will occur over the reporting period may hinder this analysis.

7.2 2025 Ground Water Quality Monitoring Season in Perspective

The 75th percentile is the suggested analysis method for Nitrite + Nitrate, chloride and sodium data for the watershed report card. As such, Table 10 shows the 75th percentile for Chloride, Nitrite + Nitrate and Sodium concentrations from 2022-2025, as well as the number of samples that have been collected under the sampling schedule provided by the MECP. One concern that has been brought up regarding the groundwater monitoring program and the watershed report card is the lack of data from year to year. A grade should not be calculated using such a small number of replicates of data since it would be misleading to anyone who reads the report card, as well as incorrect to calculate the 75th percentile of a single value in some cases. It is unclear which sites will be sampled in either Spring or Fall of 2026, which could leave some sites with very few data points to complete a 5-year trend analysis on for the Watershed Report Card at the end of 2026.

Table 10. 75th percentile for Chloride, Nitrite + Nitrogen and Sodium concentrations from 2022-2025 data, with associated letter grade where applicable.

Site Code	No. of Samples	Chloride (mg/L)	Nitrate+ Nitrate (mg/L)	Sodium (mg/L)
W122-1	4	5.64 (A)	(Below test resolution) (A)	3.455
W123-1	4	30.4 (A)	5.01 (C)	12.15
W212-1	2	25.6 (A)	0.37 (A)	13.5
W213-1	1	Insufficient data	Insufficient data	Insufficient data
W214-1	6	119 (A)	1.27 (A)	56.4
W411-2	1	Insufficient data	Insufficient data	Insufficient data

Table 11. Water quality data sampled for each well from 2022-2025. Sampling effort is directed by the MECP.

Site Code	Site Name	2022	2023	2024	2025
W122-1	Castelton		***X***	***X***	***X***
W123-1	Rice Lake		***X***	***X***	***X***
W172-1	Stirling				
W173-1	Ingram				
W174-1	Brighton				
W212-1	Douglas Springs		***X***		
W213-1	Sager				***X***
W214-1	Goodrich Loomis		**X**	***X (incl. duplicate)***	***X (incl. Bromide)***
W411-2	Northumberland Forest (A)			***X***	
W411-3	Northumberland Forest (B)				
W412-1	Northumberland Forest				

7.3 Issues and recommendations

Maintenance and equipment issues have long been an issue with the PGMN program, as aging equipment and limited LTC staff time to allocate towards troubleshooting have been continual issues. At the end of 2025, the MECP determined that a licenced well installer was not required for issues pertaining to repair and maintenance of equipment within the well casing, such as replacement of data read cables, pumps etc., which was a previous roadblock to completing work in a timely and efficient manner. This new information will allow LTC staff to complete repairs to aging equipment in 2026 that will allow the program to function better. In addition, LTC staff will be working to make data collection more efficient using digital surveys and more frequent attendance at monitoring wells.

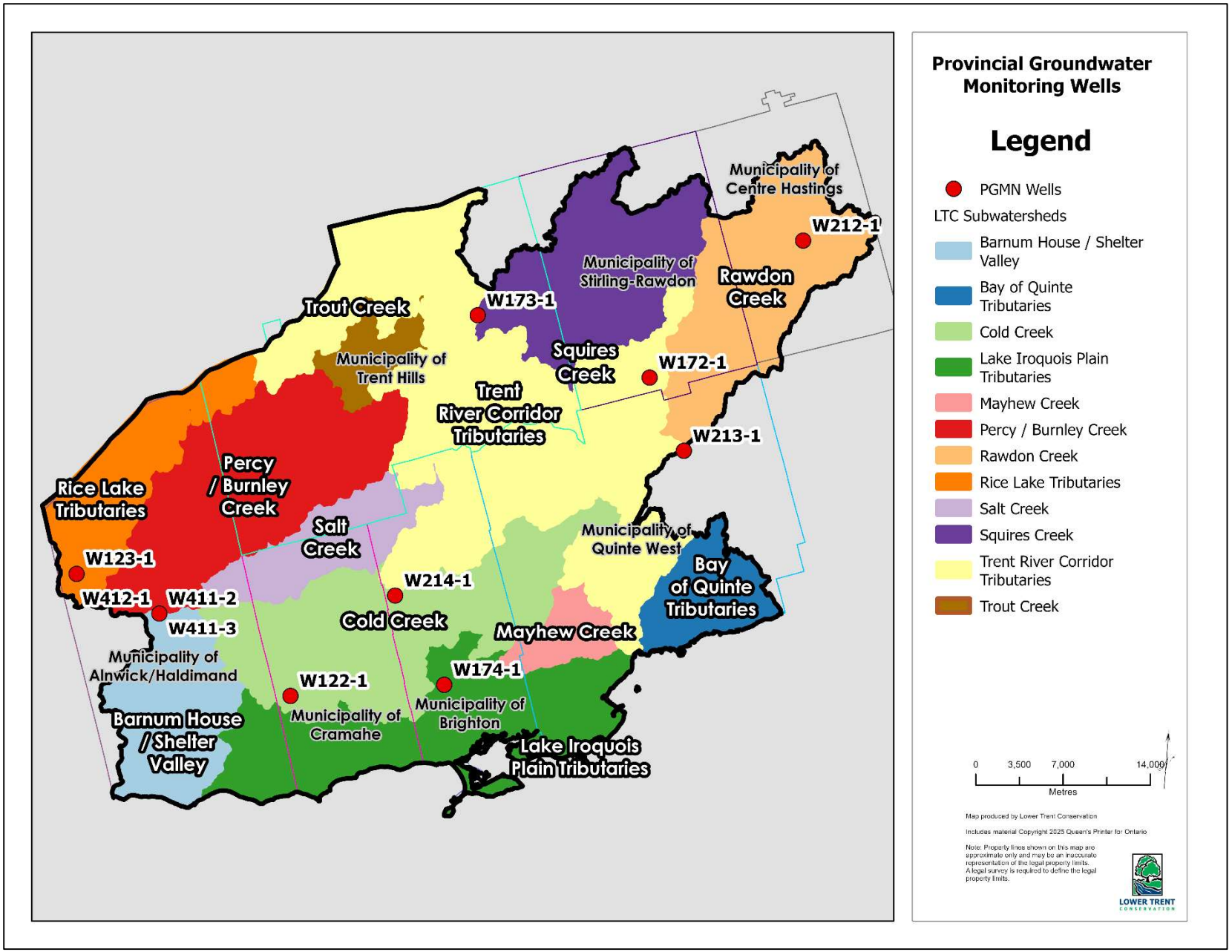


Figure 8. 2025 Groundwater Monitoring Well Sites

8. Watershed Report Card Status as of 2025

8.1 Introduction and Methods

The Watershed Report Card is a tool used by Conservation Authorities in Ontario to report on watershed health through the use of environmental indicators. In short, it is a tool used to better target specific monitoring programs and measure environmental change over time. The report card is an ongoing product that is created every 5 years using data the Conservation Authority collects throughout the 5-year reporting period.

The report card shows the watershed health on a subwatershed scale, which allows the conservation authorities to target specific subwatersheds when choosing to undergo further monitoring efforts or potential rehabilitation projects. Subwatershed scale was also chosen as the number of subwatersheds within an individual conservation authority should be practical to monitor long term. Generally, the number of subwatersheds in each conservation authority ranges from 10 to 20.

Watershed health indicators fall into 3 categories: surface water quality, forest conditions and groundwater quality. Of those three categories, LTC reports on two of these within the report card as our office only samples 5 wells for groundwater quality and this sampling occurs only once a year through the PGMN program. This report is only focusing on the information that is part of the monitoring programs and forest conditions is not included.

From the health indicator categories there are individual indicators within each category that are used to create a score and a grade. The individual indicators were chosen based on their relevance, understanding, responsiveness, applicability and long-term monitoring feasibility for each conservation authority. These indicators are total phosphorus, *E. coli* and benthic invertebrates for surface water quality, and nitrite + nitrate and chloride for groundwater quality. Each indicator has a methodology on how to calculate the indicator score and grade. The grading for the report card is something the public is familiar with since it is similar to the grading system seen within the public education system. The grades are defined from A- F, with A is excellent, B is good, C is fair, D is poor and F is very poor.

The surface water quality indicators that were chosen for the watershed report card are acceptable; however, they need to be updated and more indicators should be used to give a final subwatershed grade. The surface water quality working group for the report cards should discuss including more parameters such as chloride and total suspended solids as these parameters are seen in urban and disturbed sites more often.

Monitoring subwatersheds on a long-term basis is an important endeavor; however, without analysis and reporting it is pointless to collect. This section will report on the current scores and grades of the subwatersheds so far and our organization will continue to show these changes over time to see how the grades vary from year to year. This will allow LTC to work on the 2026

Watershed Report Card more easily and potentially integrate more information that we deem important.

8.2 Watershed Report Card Data Analysis 2022-2025

Data obtained through the aquatic monitoring programs showed some interesting trends from 2022-2025. The benthic invertebrate data for each subwatershed varied from *Good* (B) to *Poor* (D), with no subwatersheds scoring an *A* or *F* grade (see Table 12). All subwatersheds now have multiple years of data collected, allowing for a more robust picture of the long-term trends within the watershed, with the intention that all sites will be sampled again in 2026 to complete the final year of the Watershed Report Card cycle. The Meyers Creek subwatershed has consistently been the worst scoring subwatershed with regards to benthic invertebrate health (currently scored at a *D* grade from 2022-2025), which could be related to the development directly upstream of the sampling location (including Canadian Forces Base Trenton) or other factors that need to be explored. LTC Staff will be undertaking additional analysis upon completing the 5-year Watershed Report Card cycle in 2026 to better understand potential correlations in the data collected for watershed health. Cold Creek subwatershed was the only subwatershed that improved its grade when including the 2025 benthic data, moving from a *C* to *B* grade. The Rice Lake Tributaries subwatershed has been the most consistently scoring subwatershed, as well as one of the healthiest, with the lowest average value for the Hilsonhoff Index (lower equates to healthier) across the 2022-2025 data.

In comparison, the Phosphorus concentrations for each subwatershed varied from *very good* (A) to *poor* (D) (Table 13). Data collected in 2025 generally improved the overall grades associated with each subwatershed over the 2022-2025 data cycle, with only Squires Creek scoring a grade of *D* and multiple subwatersheds scoring a grade of *A,* whereas from 2022-2024 Trout Creek was the only subwatershed that scored a *D* grade and there were no subwatersheds that scored an *A* grade. Subwatershed *E. Coli* scores (Table 14) were consistent across all subwatersheds when taking into consideration the 2025 data, with scores ranging from *very good* (A) to *fair* (C).

The final grade of a subwatershed is obtained by calculating the average of the three grade values (benthic invertebrates, phosphorus and *E. coli* scores) for each site within the subwatershed. According to the data LTC Staff have collected so far (2022, 2023, 2024 & 2025), the subwatersheds scored between a grade of B and C. This indicates that the subwatersheds within LTC's jurisdiction are classified as having fair to good overall health. It is important to remember that this evaluation only uses 3 years of data, and these grades could change over the next 2 years. Additionally, 6 of the 12 subwatersheds within the LTC watershed as a whole are evaluated using a single sampling location within the subwatershed and LTC staff are calculating subwatershed health scores using this data, which may not be truly reflective of the overall health of the subwatershed as a whole. LTC staff are researching using a rotating

sampling site methodology, which would maintain the same number of sampling sites for each year but rotate through a larger overall number of sampling sites, with replicate samples occurring for each site over the 5 year Watershed Report Card cycle. This would allow for a more accurate representation of the subwatershed health as a whole, while also maintaining the same staff time and resources required for each sampling season.

Table 12. Watershed Report Card values for Benthic invertebrates from 2022-2025. This table is updated annually show the progression of the subwatershed. Red shaded grades have gotten worse since 2024 and green shaded grades have improved. N/A= Not sampled or missing data.

Subwatershed Name	Site ID	Hilsenhoff Biotic Index				Subwatershed Average	Current Grade	Previous Grade
		2022	2023	2024	2025			
Barnum House/Shelter Valley	Barnum House Creek					5.46	C	C
	BH01	6.09	5.86	4.97	5.15			
	BH02	N/A	N/A	5.94	5.92			
	Shelter Valley Creek							
	SVC01	5.61	5.36	5.06	5.22			
	SVC03	5.72	5.21	4.93	5.45			
Bay of Quinte Tributaries	Meyers Creek					5.81	D	C
	MYC01	6.17	6.05	5.01	6.02			
Cold Creek	Cold Creek					4.97	B	C
	CC01	5.33	5.16	5.69	5.86			
	CC02	4.22	5.10	4.98	3.43			
Lake Iroquois Plain Tributaries	Colborne-Lakeport Creek					5.38	C	C
	CLC01	5.85	5.71	5.68	5.68			
	Proctor Creek							
	BC02	4.84	3.97	5.23	5.71			
	Salem Creek							
	SC01	5.04	4.98	5.18	5.53			
	Smithfield Creek							
	SMC01	5.73	5.92	N/A	5.58			
Mayhew Creek	Mayhew Creek					4.91	B	B
	MAC01	4.94	5.47	3.97	5.27			
Percy/Burnley Creek	Burnley-Mill Creek					4.91	B	B
	BMC02	N/A	4.55	4.04	4.69			
	BMC03	N/A	4.84	4.92	5.10			
	Percy Creek							
	PC01	5.19	5.23	5.25	5.29			
	PC02	N/A	N/A	4.86	5.45			
Rawdon Creek	Rawdon Creek					4.94	B	B
	RC01	5.35	5.27	4.78	4.90			
	RC02	5.44	4.50	4.39	4.86			
	Rice Lake Tributary					4.86	B	B

Rice Lake Tributaries	RLT01	4.92	4.96	4.91	4.64			
Salt Creek	Salt Creek					5.23	C	C
	SAC01	5.34	N/A	N/A	5.11			
Squires-Hoards Creek	Squires-Hoards Creek					5.50	C	C
	SH01	5.90	5.83	5.23	5.90			
	SH02	4.80	5.85	4.97	5.52			
Trent River Corridor Tributaries	Kiloran Creek					5.51	C	C
	KC01	5.96	N/A	6.44	5.81			
	Marsh Creek							
	MC01	6.17	3.58	4.69	5.88			
Trout Creek	Trout Creek					5.60	C	C
	TC01	4.82	5.56	5.57	5.80			
	TC02	6.06	5.57	5.88	5.55			

Table 13. Table of the 75th Percentile concentrations of Phosphorus and associated grades for data from 2022-2025.

Subwatershed	Site	75th Percentile	Grade	Point Value	Watershed Grade
Barnum House/Shelter Valley	BH01	0.024	B	4	B (3.5)
	SVC01	0.017	A	5	
Bay of Quinte Tributaries	MYC01	0.027	B	4	B (4)
Cold Creek	Cold Creek at Frankford	0.0219	B	4	B (3.5)
	Cold Creek at Orland	0.0154	A	5	
Lake Iroquois Plain Tributaries	CLC01	0.039	C	3	B (4)
	BC02	0.018	A	5	
Mayhew Creek	Mayhew Creek at Front Street	0.0207	B	4	B (4)
Percy/Burnley Creek	Percy Creek at Skinkle Road	0.0131	A	5	A (5)
	BMC02	0.019	A	5	
Rawdon Creek	RC01	0.036	C	3	C (3)
Rice Lake Tributaries	RLT01	0.019	A	5	A (5)
Salt Creek	Salt Creek at County Road 30	0.0214	B	4	B (4)
Squires Creek	SH02	0.076	D	2	D (2)
Trent River Corridor Tributaries	Trent River at Johnstown Bridge	0.0144	A	5	A (5)
	Trent River at Glen Ross	0.0127	A	5	
	Trent River at Healy Falls	0.0184	A	5	
Trout Creek	Trout Creek at Simpson Street	0.0389	C	3	C (3)

Table 14. Table of the 50th Percentile Concentrations of E. coli and associated grades for 2022-2025.

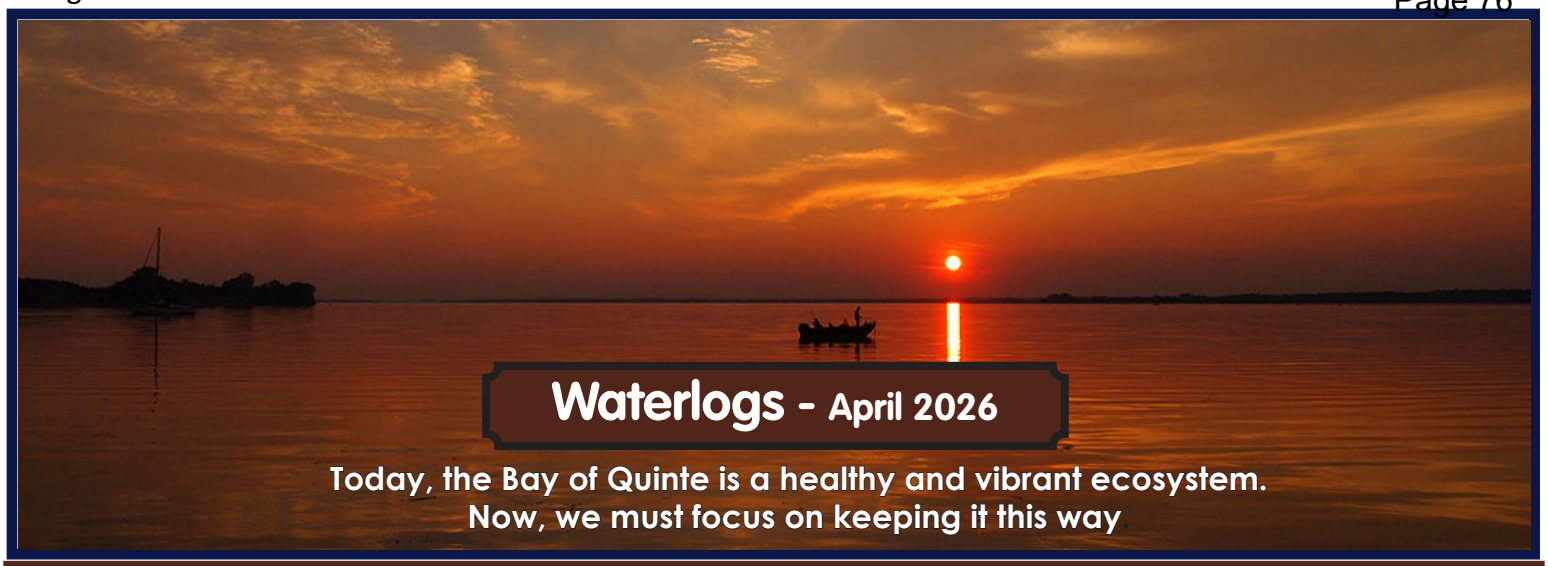
Subwatershed	Site	50th Percentile	Grade	Point Value	Watershed Grade
Barnum House/Shelter Valley	BH01	39	B	4	B (4)
	SVC01	29	B	4	
Bay of Quinte Tributaries	MYC01	120	C	3	C (3)
Cold Creek	Cold Creek at Frankford	55	B	4	B (4)
	Cold Creek at Orland	32	B	4	
Lake Iroquois Plain Tributaries	CLC01	116	C	3	C (3.5)
	BC02	95	B	4	
Mayhew Creek	Mayhew Creek at Front Street	105	C	3	C (3)
Percy/Burnley Creek	Percy Creek at Skinkle Road	73	B	4	B (4.5)
	BMC02	29	A	5	
Rawdon Creek	RC01	63	C	4	B (4)
Rice Lake Tributaries	RLT01	21	A	5	A (5)
Salt Creek	Salt Creek at County Road 30	61	B	4	B (4)
Squires Creek	SH02	33	B	4	B (4)
Trent River Corridor Tributaries	Trent River at Johnstown Bridge	10	A	5	A (5)
	Trent River at Glen Ross	6	A	5	
	Trent River at Healy Falls	3	A	5	
Trout Creek	Trout Creek at Simpson Street	78	B	4	B (4)

Table 18. Final Watershed Scores using data accumulated from 2022-2025

Subwatershed	Benthic Score	Phosphorus Score	E coli Score	Overall Score	Overall Grade
Barnum House/Shelter Valley	3	3.5	4	3.5	C
Bay of Quinte Tributaries	2	4	3	3.0	C
Cold Creek	4	3.5	4	3.8	C
Lake Iroquois Plain Tributaries	3	4	3.5	3.5	C
Mayhew Creek	4	4	3	3.7	C
Percy/Burnley Creek	4	5	4.5	4.5	B
Rawdon Creek	4	3	4	3.7	C
Rice Lake Tributaries	4	5	5	4.7	B
Salt Creek	3	4	4	3.7	C
Squires Creek	3	2	4	3.0	C
Trent River Corridor Tributaries	3	5	5	4.3	B
Trout Creek	3	3	4	3.3	C

9. Final Recommendations

The 2025 monitoring season was another successful monitoring year for LTC Staff and data quality will continue to incrementally improve in future years with the oversight of the Watershed Services Specialist. Yearly modifications to the programs should follow the direction of the recommendations outlined in this report, with large scale changes being brought forward to the board as separate reports, such as those that would require additional funding outside the scope of the current program. To continue to improve LTC's monitoring programs as a whole and to improve the knowledge that LTC has about the health of the watershed, additional projects and programs will be explored to determine how to best fill the knowledge gaps that exist, such as the *Watershed Health Assessment and Brook Trout Monitoring Pilot Project* completed in 2024. Using the existing long-term monitoring data available can allow LTC staff to determine where potential issues exist and how to better address issues on a subwatershed scale. Additional complex data analysis will be undertaken with the 2022-2026 data once collected at the end of the Watershed Report Card cycle to better understand the trends seen over the last 5 years in the Lower Trent watershed. Grants and external funding opportunities will continue to be explored and brought forward to management and the board when they can be leveraged to address key watershed issues.



A LITTLE HISTORY

For the Bay of Quinte, the RAP process started after 1985 when it was designated as an Area of Concern. A Stage One report was written in 1990 that defined the environmental conditions and problems. It outlined four ecosystem problem areas: excess nutrients, bacterial contamination, toxins, and loss of fish and wildlife habitat. In 1993, a Stage Two report was completed. This report outlined eleven Beneficial Use Impairments (A Beneficial Use Impairment is a condition that interferes with the enjoyment of water use) and made 80 recommendations for remedial actions to address these "BUIs". It also established delisting criteria (i.e. targets and measures) that need to be met to restore the BUIs. Today, only three BUIs are remaining for the bay. Restrictions on fish and wildlife consumption, eutrophication or undesirable algae, and degradation of phytoplankton and zooplankton populations.

Let's look back at BUI #1 – Restrictions on fish and wildlife consumption. It sounds ominous, I know. But it's not.

Let's break this down. First, wildlife was not identified as having any restrictions in the Bay of Quinte.

As for fish consumption, testing for contaminants in fish goes back to the 1970s, through the MECPs Fish Contaminants Monitoring Program. Fish collected from the bay were tested for variety of contaminants but the main contaminants of concern in the bay were PCBs, dioxins/furans. In the Stage Two Report (1993), this BUI was listed as impaired because consumption advisories in 1992 were in effect for three Bay of Quinte fish species: walleye(length greater than 55 cm), channel catfish (length greater than 45cm), and American eel (length greater than 45 cm).

It's important to note that while levels of contaminants like PCBs and other contaminants have declined over the past 30 years, improved analytical methods and the adoption of more stringent standards continue to identify issues with fish consumption for some of these legacy contaminants. In the Bay of Quinte, most fish consumption advisories are due to PCBs and dioxins and furans. These contaminants accumulated within the Bay of Quinte as a result of historic discharges from a variety of industrial sources, including three paper mills (Domtar Packaging in Trenton, Trent Valley Paperboard in Glen Miller, and Strathcona Paper in Strathcona), a chemical plant (Bakelite Thermosets Limited in Belleville), a wood preserving operation (Domtar Wood Preserving in Trenton), and a distillery (Corby Distilleries in Corbyville).

Although there are no specific sources of mercury identified within the Bay of Quinte, levels of mercury have also been analyzed in Bay of Quinte fish, as it is a major contributor to fish consumption advisories in North America. Similarly, Mirex, a legacy pesticide, with no known sources within the bay, has also been analyzed as a control. This was done to better understand consumption restrictions based on locally-controllable sources.

The Bay of Quinte is fortunate to have this long-term data set outlining the downward trend in contaminants in fish. It's important to note that some fish species migrate in and out of the bay over their life cycles and some are more residents of the bay. Not all contaminants are associated with sources in the Bay of Quinte.

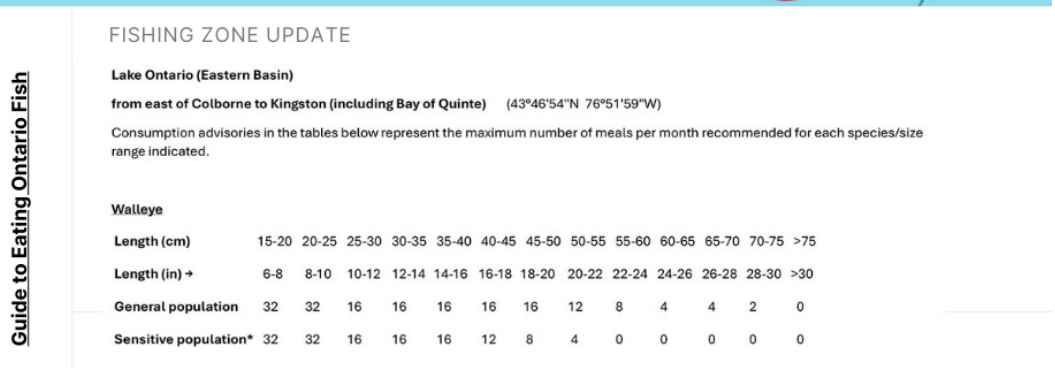
Refer to the Guide to Eating Ontario Fish for consumption advisories for both the general population and the sensitive population (for example, children under 15 years old and anyone who is pregnant or may become pregnant)
Today, Bay of Quinte fish are healthy, abundant and great eating

WALLEYE SEASON IS ALMOST HERE

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 2,700 fishing locations in Ontario including the Bay of Quinte. The guide was updated in 2024.

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 harmful contaminants 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 you choose fish species that will minimize exposure to toxins. Consumption advice in the guide is based on guidelines provided by Health Canada.



Guide to Eating Ontario Fish

FISHING ZONE UPDATE

Lake Ontario (Eastern Basin)

from east of Colborne to Kingston (including Bay of Quinte) (43°46'54"N 76°51'59"W)

Consumption advisories in the tables below represent the maximum number of meals per month recommended for each species/size range indicated.

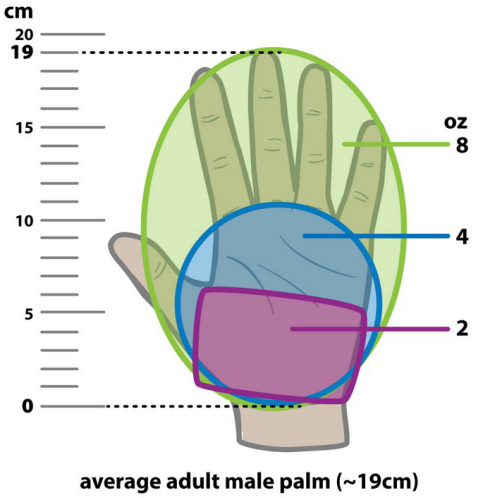
Walleye

Length (cm)	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	>75
Length (in) →	6-8	8-10	10-12	12-14	14-16	16-18	18-20	20-22	22-24	24-26	26-28	28-30	>30
General population	32	32	16	16	16	16	16	12	8	4	4	2	0
Sensitive population*	32	32	16	16	16	12	8	4	0	0	0	0	0

What is a fish meal?

The guide's consumption advice is based on an average fish meal of 227 grams (8 ounces, half a pound or approximately a fillet of dinner plate length) for an average-size adult weighing 70 kilograms (154 pounds).

A visual guide to fish serving sizes



average adult male palm (~19cm)

PLANNING FOR SPRING

Take Charge of Your Soil Health!

Protect Water Quality and Increase Yields

Livestock Fencing

- Install fencing to restrict livestock access to a waterway or wetland.

Grant rate - 75% - maximum up to $7,500

Alternate Watering Source

- To be eligible for funding, livestock must be fenced out of a waterway or wetland

Grant rate - 75% - maximum up to $7,500

Marginal Lands Buffer Strips

- Got marginal lands along a watercourse establish a riparian buffer strip.

Grant rate - 75% - maximum up to $7,500

Water Quality Improvement

- Stream bank stabilization · barnyard runoff control · manure storage improvements · constructed wetlands · erosion control structures

Grant rate - 75% - maximum up to $7,500

Prioritize Your Soil Health, Starting Today!

Free Soil Testing

Knowing what's going on with your soil is the first step in creating high yielding sustainable agriculture. **Book your site visit, Today.**

Cover Crops

We offer a cover crop seed grant of $30.00 per acre - **Grant maximum up to $2,500.**

Bay of Quinte Remedial Action Plan
Healthy Bay • Healthy Community

www.bqrap.ca

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Time to start planning those spring projects. Contact our stewardship techs to get the process underway. Book your free site visit, Today

Rural Stewardship Program

Agenda Item #14.

LOWER TRENT CONSERVATION

STAFF REPORT

Date: May 14, 2026
To: Board of Directors
Re: Provincial Offences Officer Appointment
Prepared by: Rhonda Bateman, CAO

PROPOSED RESOLUTION:

THAT Mike Wilson be appointed as a Provincial Offences Officer for the purpose of performing enforcement and offence related functions under Part VII of the *Conservation Authorities Act,* Section 28.5 and 29 Regulations and the *Trespass to Property Act* within the area of jurisdiction for Lower Trent Conservation, effective during his employment with Lower Trent Conservation.

BACKGROUND:

Lower Trent Conservation currently has the following two staff members designated as Provincial Offences Officers for the purpose of enforcing Part VII of the *Conservation Authorities Act*, Section 28.5 and 29 Regulations, and the *Trespass to Property Act*: Scott Robertson and Toby Farrell. In order to ensure appropriate coverage and workload volumes, we require a third staff member be appointed.

Mike Wilson was hired by Lower Trent Conservation (LTC) in December 2025 as the Senior Hydrogeologist. Prior to working at LTC, Mike worked at two other conservation authorities (Lake Simcoe Region and Kawartha Region) and for the private sector. Mike has been active in the LTC planning and permitting programs and applying hydrogeological expertise to planning and Drinking Water Source Protection program.

Section 30.1 of the *Conservation Authorities Act* provides for the appointment of officers for ensuring compliance with the *Act* and the regulations. In this regard, Conservation Ontario, in consultation with the Ministry of Natural Resources, has established a protocol to establish documentation requirements for designating staff as Provincial Offences Officers.

Mike has participated in the Provincial Offences Officer training and graduated. Mike will be asked to take an oath as part of the appointment process, declaring that they will serve Lower Trent Conservation as an Enforcement Officer and will administer the regulations in a fair and equitable manner.

RECOMMENDATION:

Staff recommends to the Board of Directors that Mike Wilson be appointed as a Provincial Offences Officer for the purpose of performing enforcement and offence related functions under Part VII of the *Conservation Authorities Act,* Section 28.5 and 29 Regulations and the *Trespass to Property Act*.

Agenda Item #16.

CAO REPORT

Date: May 4, 2026
To: Board of Directors
Prepared by: Rhonda Bateman, Chief Administrative Officer

FEDERAL GOVERNMENT

We are pleased to report that the federal government, through Canada Summer Jobs, has granted LTC partial funding for all five of our summer employment contracts. This year's announcement is a large increase over the number of positions funded in the previous five years of two summer positions.

A new funding announcement from the Canada Water Agency is expected shortly.

STAFFING

I am pleased to welcome Jaclyn Elliott, Planning Ecologist, who started with Lower Trent on April 13th. Jaclyn has a background in provincial and municipal planning and ecological restoration.

PROVINCIAL GOVERNMENT

In addition to the recent correspondence from the province, the Provincial Appointments Secretariat has announced the following members to the Board of the Ontario Provincial Conservation Agency. The Chair and two Vice-Chairs have not been identified to date.
The appointments are as follows:

David Wai – Deputy Minister of Colleges, Universities, Research Excellence and Security
Keith Palmer – Deputy Minister of Sport
Roda Muse – Deputy Minister (Bilingual) of Francophone Affairs & Commissioner of Public Service Commission
Maud Murray – Deputy Minister of Red Tape Reduction & Commissioner of Public Service Commission
Matthew Pegg – Deputy Minister, Emergency Preparedness and Response

EASTERN ONTARIO REGION CAs

The Eastern Region CAs continue to meet via teleconference monthly to share information and best practices. There was an in-person meeting on April 10th in Kingston at the Cataraqui Conservation office. The agenda was focussed on discussions around the amalgamations and the desire to continue our strong working relationships especially for staff collaborations on drinking water source protection, planning and regulations, flood forecasting and warning and many more program areas.

CONSERVATION ONTARIO

Conservation Ontario is holding weekly virtual meetings for general managers to have an open forum for discussion and share ideas.

The Annual General Meeting of CO Council was held in-person on April 27th with Chair Hamilton and Chitra Gowda, Manager of Corporate Services and Water Resources in attendance. The AGM elections saw the uncontested appointment of Dave Barton as Chair, and Pat Warren and Ed McGugan as Vice-Chairs. The elected Directors were Brad McNevin (Quinte Conservation), Rob Baldwin (Lake Simcoe) and Samantha Lawson (Grand River). A presentation from John Olah from Beard Winter, LLP was focussed on the amalgamation of CAs from a legal perspective.

There was a General Managers/CAO meeting at the Village of Black Creek following the Conservation Ontario's AGM and was attended by the CAO. Topics of discussion were focussed on the upcoming transition and messaging. Breakout groups were set regionally for discussion.

STEWARDSHIP

The Invasive Species Centre, through their Invasive Phragmites Control Fund, has confirmed that LTC will be receiving a grant for up to $10,000 for the coordination of the Phragmites Management Area (PMA) Working Group. This project is being spearheaded through Anne Anderson and Massimo Narini. In addition, the Invasive Species Centre has confirmed an additional $27,000 grant for the collection of phragmites mapping information across the Lower Trent Watershed, outreach and education opportunities and the development of a Phragmites Management Plan.

LTC's native plant sale, shrub and tree seedling pick up days are May 1st and May 4th. The shrub and tree species are:
Nannyberry, Highbush Cranberry, Red Osier Dogwood, Swamp Rose, Smooth Arrowood; and
Black Cherry, Black Walnut, Blue Beech, Butternut, Red Maple, Red Oak, Silver Maple, Tamarack, White Cedar, White Pine, White Birch.