

Appendix A



Peterborough County Watershed Plan (Equivalent): Phase 1 Engagement Summary (March 2025)

Highlights

What is this summary?	It is a summary of the engagement opportunities being provided as part of this project and what was heard during the first phase (i.e., Phase 1) of community engagement on the County's first Watershed Plan.
When was Phase 1?	March 2025
Who did we reach out to?	The County, with the support of the Montrose Environmental team, reached out to County Council, the Williams Treaties First Nations and representatives from governmental agencies, utilities companies, academic institutions, lake associations, land trusts and other environmental organizations from within and around the County. A Technical Advisory Committee (TAC) consisting of representatives from the County, all eight local area municipalities, the City of Peterborough, four local conservation authorities and two First Nations with reservation lands in the County is also being engaged for this project.
Why is the County undertaking a Watershed Plan?	To provide (1) a framework for sustainable and science-based planning that will support the protection of the County's valued natural heritage and water resources, and (2) high-level guidance to inform updates to the County's and local municipality Official Plans in accordance with current Provincial direction.
Who was engaged and how?	• A project web page for the Watershed Plan was created in February 2025 and is being maintained for all interested parties. • County Council was engaged with a presentation on March 19, 2025. • The TAC was first engaged with a virtual session held November 27, 2024 and again on March 20, 2025. • A virtual session for governmental agencies, utilities companies, academic institutions, lake associations, land trusts and other community and environmental organizations was held March 25, 2025. • A virtual session for First Nations was held March 26, 2025.
Where can I get more information?	See the project web page for the Watershed Plan for a copy of the Phase 1 slide deck and additional information as it becomes available.

What can we expect next?	The next opportunities for engagement are expected to be in the Fall of 2025.
Who can we contact?	Please reach out to the County at planning@ptbocounty.ca with questions or comments about this project at any time.

1 Introduction and Background

This project is to develop the first Watershed Plan for Peterborough County. A watershed plan is a tool that helps municipalities and other interested parties (a) understand the current condition of water and land resources in the study area and (b) plan for the future health of the watershed.

This Watershed Plan will (at a high level and using available desktop sources):

- assess the extent and condition of forests, wetlands, streams and groundwater in the study area
- consider anticipated environmental stressors and land use changes (such as climate change and urbanization)
- identify high-level strategies and tools to help maintain, and in some cases improve, environmental conditions in the watershed in the face of these stressors and land use

Watersheds in Ontario are categorized as primary, secondary, tertiary and quaternary. Peterborough County is responsible for watershed planning at the tertiary and quaternary level. There are five tertiary and 26 quaternary watersheds that overlap with the County's boundaries.

The intent of this Watershed Plan is to:

- address the requirements of the Provincial Planning Statement related to watershed planning
- provide a basis and framework for more detailed priority-based subwatershed studies in the future
- inform sustainable growth, infrastructure planning, and restoration efforts on a County-wide scale

Montrose Environmental Group (Montrose) is leading a multi-disciplinary team who is working closely with the County and a Technical Advisory Committee (comprised of representatives from the local First Nations, municipalities and conservation authorities) to develop this Watershed Plan on behalf of the County.

1.1 Project Phasing and Who Was Engaged in Phase 1

This project was initiated in the fall of 2024 and is to be completed over 2025 in the following three phases:

- Phase 1 - Project Launch and Background Review
- Phase 2 - Watershed Characterization and Draft Planning Strategies
- Phase 3 - Watershed Planning and Management Recommendations

Montrose, on behalf of the County, will be reaching out to and seeking input from interested individuals and organizations as part of each of the three phases of the Watershed Plan project. We have just completed Phase 1 and are starting Phase 2.

Phase 1 included outreach to all of the agencies, governmental and non-governmental organizations, institutions and associations listed below. Those who participated in the Phase 1 engagement are indicated with an asterisk.

In total, in addition to County Council, 40 individuals were engaged who represented over 30 different organizations and / or agencies and / or associations as part of the Phase 1 engagement.

Notably, many of those listed have also shared data and / or mapping, and some were not able to attend the Phase 1 sessions but indicated interest in future engagement.

It is anticipated that there will be some additions to this list as the project advances.

Phase 1 engagement included outreach to all listed here. Those able to participate in a virtual session are indicated with an asterisk (*). Those who shared information / insights but were unable to attend a Phase 1 session are noted with two asterisks ().**

County Council*

Includes representatives from all eight local area municipalities

Technical Advisory Committee (TAC)

- Municipality of Trent Lakes*
- Township of Asphodel-Norwood
- Township of Cavan Monaghan*
- Township of Douro-Dummer*
- Township of Havelock-Belmont-Methuen*
- Township of North Kawartha*
- Township of Otonabee-South Monaghan*
- Township of Selwyn*
- City of Peterborough*
- Crowe Valley Conservation*
- Ganaraska Conservation*
- Otonabee Region Conservation Authority*

- Kawartha Conservation*
- County of Peterborough (Project Lead)*

Williams Treaties First Nations

- Alderville First Nation**
- Beausoleil First Nation
- Chippewas of Georgina Island First Nation
- Chippewas of Rama First Nation
- Curve Lake First Nation (also on TAC)*
- Hiawathas First Nation (also on TAC)*
- Mississaugas of Scugog Island First Nation*

Agencies, Institutions, and Utilities

- Ontario Ministry of Natural Resources (Peterborough)**
- Ontario Ministry of Environment, Conservation and Parks (Peterborough)**
- Ontario Waterpower
- Peterborough Public Health
- Peterborough Utilities Inc.*
- Trent Severn Waterway at Parks Canada
- Trent University, various departments**

Lake and Cottage Associations

- Big Cedar Lake Road Committee (South Shore)
- Big Cedar Lake Stewardship Association*
- Birchcliff Property Owners Association of Douro-Dummer, Inc.
- Buckhorn Sands Property Owners Association
- Coon Lake Cottagers
- Chandos Lake Property Owners Association*
- Eels Lake Cottagers
- Federation of Ontario Cottagers' Associations (Peterborough)*
- Jack's Lake Association
- Julian Lake Cottagers
- Juniper Point Cottage Owners' Association**
- Kawartha Park Cottagers Association
- Long and Loucks Lake Cottager's Association*
- Looncall Lake Cottagers Association*
- Lovesick Lake Association (LLA)*
- North Kawartha Lakes Association*
- Sandy Point Road Association

- Stoney Lake Cottagers
- Upper Stoney Lake Association*
- Wolf Lake Cottage Association*

Other Local Organizations

- Baxter Creek Watershed Alliance*
- Coalition for Equitable Water Flow (CEWF)*
- Environment Council for Clear, Stony and White Lakes (ECCSWL)*
- Ontario Woodlot Association**
- Peterborough County Federation of Agriculture (PCFA)
- Peterborough Field Naturalists*
- Kawartha Conservation and Climate Partnerships*
- Kawartha Lake Stewards Association (KLSA)*
- Kawartha Land Trust (KLT)*
- Mun. of Trent Lakes Environmental Advisory Committee (EAC) - Shoreline Sub-Committee*
- Rice Lake Tourism Association
- Shoreline Conservation: Peterborough County
- Watersheds Canada*

2 Phase 1 Feedback

Participants of the Phase 1 engagement session were invited to ask any questions or provide any comments related to the project. They were also specifically asked if they had:

1. Any comments or concerns related to the background review / key findings to date?
2. Any concepts or words they think should be included in the vision and /or goals for the Watershed Plan?

The following sub-Sections 2.1 and 2.2 summarize what we heard grouped into responses to the two questions above. Additional questions, along with answers to questions, are summarized in Section 2.3 and additional comments are summarized in Section 2.4.

2.1 Additional Sources of Potentially Useful Data and / or Mapping

From County Council:

- Studies done for quarry projects may include useful data (e.g., floodplain mapping)
- Coalition for Equitable Waterflow [Ed. note: Added to the outreach list and participated in Phase 1]

From the TAC:

- Source Water Protection Areas mapping including the Trent Source Protection Plan. Data available from the Conservation Authorities at: <https://trentsourceprotection.on.ca/>
- Provincial Water Quality Monitoring Sites
- Data that supports the development of Conservation Authority Watershed Report Cards and Lake/Subwatershed Background Reports (e.g., Pigeon Lake Plan)
- Some/many of the Oak Ridges Moraine Groundwater Program collection points may actually be or include surface water data
- Professor of Aquatic Science at Trent University
- Lake Partner Program, administered by the Ministry of Environment, Conservation and Parks (i.e., reach out to the Assistant Coordinator of Lake Partner Program)
- Federation of Ontario Cottagers' Associations (FOCA) [Ed. note: FOCA was already on the outreach list]
- There is lake line mapping (e.g., high water levels, hazard limits) in progress by Ganaraska Conservation and Otonabee River Conservation Authority.
- Southern Ontario Land Resource Information System (SOLRIS) mapping may inform natural heritage system mapping.

From First Nations:

- The Plan should note the limitations of the mapping and desktop data clearly and up front recognizing that most / all of the data is both incomplete (e.g., not all wetlands or significant wildlife habitats captured) and needs to be supplemented by area and site-specific studies.
- In addition, Indigenous perspectives are largely lacking in what is considered "significant" by the Province and County.

From lake associations and other community / environmental organizations:

- [The Land Between](#)
- Kawarthas Naturally Connected (KNC) work done in 2011 to identified a preferred Natural Heritage System (NHS) for the broader area. It included extensive analysis of desktop data and mapping but no field verification. I focussed on priority areas but excluded some natural features and areas. So, it may not be entirely appropriate as an NHS map but may be a valuable reference for identifying linkages.

- Species data from: NHIC, iNaturalist, eBird
- Ontario Woodlot Association (e.g., recent LiDAR analysis) [Ed. note: contact information provided following the engagement session]
- Surface water quality – see [Kawartha Lake Stewards Association \(KSLA\) website](#) (e.g., 2021 - 2024 reports)
- Detailed shoreline mapping for some lakes from Kawartha Land Trust
- Professor of Aquatic Science at Trent University / Kawartha Highlands water quality testing [Ed. note: contact information provided following the engagement session]
- Lake Plans – like [Lovesick Lake Plan](#)

2.2 Ideas/Concepts for the Watershed Vision and / or Goals

From the TAC:

- Support for building / drawing on some of the language from the County’s 2023-2026 Strategic Plan which was developed collaboratively with all local area municipalities.

From all engagement sessions:

- Lake shorelines are very high priority areas; protection and restoration of shoreline health
- Water quality (including shoreline naturalization / health, septic health)

From First Nations:

- See the [First Nations in Ontario Water Declaration](#); water is the “bloodline” of the people.
- The UN Declaration on the Rights of Indigenous Peoples (UNDRIP) should guide Indigenous engagement in land use planning. [Ed. note: e.g., Article 25: *Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard.*]

2.3 Other Questions and Answers Provided

From all engagement sessions:

- Q: Will this study recommend priorities for further work such as floodplain studies?
- A: Yes, at the quaternary watershed scale
- Q: Will the slide deck be shared?
- A: Yes, a generic and accessible slide deck will be made available. Please note this will include draft materials and should be considered part of a “working document”.
- Q: Will minutes be taken and shared?
- A: Yes, a consolidated and accessible summary of the engagement feedback will be made available following each phase of engagement.

From lake associations and other community / environmental organizations:

- Q: What is meant by natural heritage? Natural Heritage System?
- A: For this project it means identifying and protecting the natural features and areas as defined in the Provincial Planning Statement and the County's Official Plan. Specifically, this includes Provincially Significant Wetlands (PSW) and other non-PSW wetlands, Significant Woodlands, Significant Valleylands, Significant Wildlife Habitat (SWH), Areas of Natural and Scientific Interest (ANSIs) plus habitat for Endangered and Threatened Species and fish habitat. To create an NHS these various layers are to be defined, identified and then layered on top of each other to form a system with additional linkages identified where appropriate and needed. Notably, we do not have complete or accurate data / mapping for a number of these features and there still needs to be discussion about how to define some of them.
- Q: Will agricultural systems be considered through this project.
- A: They will not be the focus but will be considered peripherally (e.g., land cover assessments).
- Q: How will the results of the Watershed Planning process be used, and by what governments and agencies?
- A: The results of this plan will include:
 - An assessment (including County-wide mapping where possible) of available groundwater, surface water and watercourse, aquatic habitat and terrestrial habitats at the tertiary watershed scale (e.g., Kawartha Lakes Watershed, Otonabee River Watershed)
 - Summary of quaternary subwatershed characteristics (constraints, opportunities, considerations) for those subwatersheds that are directly or indirectly affected by urban development
 - An identification of key gaps to be filled as part of future studies (i.e., at the quaternary watershed scale)
 - High-level recommendations for protection and management of the water and natural heritage resources in the County in a context of urbanization pressures in the south, shoreline pressures across the county, and climate change

It is anticipated that this information and guidance will be primarily be used by the County and local area municipalities to help them sustainably manage growth and intensification pressures, and as a basis for future more detailed subwatershed studies.

- Q: Will the Plan provide data on what water bodies have reached, or are about to reach, their capacity to absorb new development and/or re-development without significant negative environmental impacts?
- A: No, it will not. However, it could potentially recommend Official Plan policies to encourage or require such studies and/or related monitoring be done.
- Q: Will the County and Townships use the Plan to help determine where future waterfront development and/or re-development should be prohibited, restricted, or allowed?

- A: Not specifically. However, it is expected to recommend Official Plan policies as well as management approaches that support sustainable waterfront/shoreline development.
- Q: Will the Plan be used to help guide management of water levels on the TSW (Trent-Severn Waterway) and feeder lakes? Greatly fluctuating water levels have significant impacts on fish spawning habitat and contribute to shoreline erosion.
- A: No. This study will not go into sufficient detail to be able to guide management of water levels. The Plan could, however, raise this as an item requiring further study (e.g., to understand erosion hazards, to protect the natural environment, etc.).
- Q: Would it be possible to have a more detailed project schedule and task list?
- A: Yes – see Table 1 below

Table 1 Outline of the Project Objectives and Relevant Tasks and Deliverables by Project Phase

Project Objectives	Relevant Task/Deliverable
Phase 1: Project Launch (including Background Review and Work Plan Confirmation)	
Conduct an in-depth review and technical summary of existing information and studies and undertake a process to create a Watershed Plan that aligns the County with policies and direction of Provincial Planning Statement (PPS) and Oak Ridges Moraine Conservation Plan.	Task 1-1 Data Compilation and Organization/Review Task 1-2 Watershed and Sub-watershed Delineation Task 1-3 Data Gap Analysis Task 1-4 Confirm Technical Work Plan and Engagement Process Task 1-5 Technical Advisory Committee (TAC) Start-up meeting Task 1-6 Phase 1 Technical Memo Task 1-7 Phase 1 Engagement Meetings – Project Launch
Collaborate with local First Nations, municipalities, Conservation Authorities and the City of Peterborough to identify available background materials.	• Task 1-7.a Presentation to Council • Task 1-7.b TAC • Task 1-7.c First Nations • Task 1-7.d External Parties • Task 1-7.e Phase 1 Targeted Interviews
Undertake a comprehensive and effective engagement process with all stakeholders.	Task 1-8 Phase 1 Feedback Record and Comment Dispositioning
Phase 2: Watershed Characterization and Planning (including Development of Vision, Goals, Objectives and Targets)	
Develop and conduct an in-depth review and technical summary of Watershed Planning elements as outlined in the PPS which include: water quantity and water budgets, water quality assessments, natural hazards, climate change, natural systems, cumulative effects, and land use and management scenarios.	Task 2-1 Watershed Existing Conditions, Issues/Constraints Task 2-2 Policy Review for Watershed Planning Task 2-3 Establish Vision, Goals, and Objectives Task 2-4 Develop Preliminary Natural Heritage System (NHS) Task 2-5 Develop Preliminary Water Resources System (WRS) Task 2-6 Integration considerations for NHS and WRS Task 2-7 Phase 2 Technical Memo
Prepare input for and gain approval for Municipal policies which implement the Vision, Goals, Objectives and Targets of the Watershed Plan.	Task 2-8 Phase 2 Engagement Meetings– Input to Vision, Goals, Objectives, Targets • Task 2-8.a TAC • Task 2-8.b First Nations • Task 2-8.c External Parties

Project Objectives	Relevant Task/Deliverable
	- Task 2-8.d Phase 2 Targeted Interviews - Task 2-9 Phase 2 Feedback Record and Comment Dispositioning
Phase 3: Watershed Management and Monitoring (e.g., Recommended Policies, Guidelines, Prioritizing Next Studies)	
Create general guidelines for development and infrastructure projects that incorporate watershed protection and climate change scenarios in accordance with the Watershed Plan.	Task 3-1 Water Management Guidance (Quantity/quality) Task 3-2 Climate Change Guidance and Natural Hazards Task 3-3 Cumulative Impact Guidance Task 3-4 Land Use Impact Management Task 3-5 Future Subwatershed Studies / Priorities
Provide recommended policy updates to the County's Official Plan based on the findings of the Watershed Plan.	Task 3-6 Recommend Policy Updates for County Official Plan Task 3-7 Monitoring and Adaptive Management Task 3-8 Guidance on local Outreach and Stewardship
Identify and prioritize subwatersheds based on existing or planned development pressures. Priority listing would be used for the development of subwatershed plans.	Task 3-9 Draft Watershed Plan Document and Geodatabase Task 3-10 Phase 3 Engagement – Input to Draft Watershed Plan - Task 3-10.a TAC - Task 3-10.b First Nations - Task 3-10.c External Parties
Create guidance and procedures for ongoing watershed monitoring.	Task 3-11 Final Watershed Plan, GIS and Phase 3 Comment
Further local stewardship, education, and outreach initiatives focused on watershed protection and climate adaptation.	Disposition Task 3-12 TAC Meeting - Final Watershed Plan Task 3-13 Presentation to Council

2.4 Other Comments

From County Council and lake associations and other community / environmental organizations:

- Recognize there is a lot of data to assemble and sift through. Pleased to see this Plan being advanced.

From the County:

- There are currently three Natural Heritage System (NHS) currently “out there” for Peterborough County: the 2021 NHS mandated by the Province (but no longer mandated), the 2022 Refined NHS put forward by the County (still draft) and the Kawartha's Naturally Connected (KNC) Preferred NHS based on work done in 2011 (generally supported by the County but with some reservations). All of these are being considered at this time.

From the TAC:

- There are examples of planning tools for shoreline protection from other jurisdictions that should be considered. For example, Lake Simcoe Protection Plan, jurisdictions in the Muskokas. This is currently a gap in the County Official Plan.

From all engagement sessions:

- There is more intensive development pressure in the southern part of the County, but there is also more diffuse development / redevelopment pressure on a number of lake shorelines elsewhere in the County.

From First Nations:

- Williams Treaties First Nations never gave up their treaty rights related to having access to clean water. Planning /development in and near water is becoming more of a concern.
- Provincially Significant Wetland (PSW) mapping and mapping of unevaluated wetlands is incomplete. This should be acknowledged in the Plan. This mapping system also fails to incorporate Indigenous perspectives which consider all wetlands “significant” irrespective of their size. Wetlands are generally of high ecological and cultural significance to Indigenous communities for many reasons including:
 - They support plants and wildlife that are a “medicine chest” and food source for the community;
 - Having multiple wetlands in the landscape allows the community to rotate among them from year to year and not overharvest in any one area; and
 - Wetlands, even if unevaluated, hold ecological and cultural significance for First Nations.
- Similarly, Species at Risk in Ontario mapping / knowledge is incomplete and fails to incorporate Indigenous perspectives and knowledge. They have their own species of concern such as Black Ash (used for basket making), Maples and Birch trees (for tapping), etc.
- Cumulative effects of land use changes are a key concern. Key concerns include:
 - Land development affecting Indigenous archaeological sites and traditional plant species,
 - Expansion of quarries and aggregate operations threatening groundwater filtration systems and cultural heritage sites
- Indigenous communities assert that treaties protect wetlands, water access, and beaver dams.
- A Friendship Accord was signed by the First Nations, county and two area municipalities.

From lake associations and other community / environmental organizations:

- Invasive plant species are a concern in some lakes (e.g., Big Cedar Lake, Eurasian milfoil).
- Watersheds Canada has funding to support naturalization / restoration on private lands on a first come first serve basis in the County. Do a range of applied projects (e.g., have restored more than 40 km of shorelines across Canada, completed more than 55 fish habitat creation projects, etc.).
- It might be helpful to see the coverage of the different NHS compared.
- The County often focuses on southern part of County because that is where the most intensive development pressures are being felt; but there is also a need for some stronger policies and / or regulations for shorelines in the northern part of the County.

Peterborough County Watershed Plan (Equivalent)

Phase 2: Watershed Characterization and Phase 3: Watershed Planning and Management Recommendations

Engagement Summary (July 2026)

Highlights

What is the purpose of the County's Watershed Plan?	1. To address the requirements of the 2024 Provincial Planning Statement (PPS) related to watershed planning and provide guidance related to natural heritage and water resource planning that aligns with current provincial direction. 2. To provide a framework for sustainable and science-based planning that local Municipalities, Conservation Authorities and others can use to support targeted growth while also protecting the County's valued and diverse natural heritage and water resources. 3. To provide high-level planning and watershed management guidance to inform updates to the County's and local Municipality Official Plans, as well as the scope and scale of studies needed to inform and support growth.
How does the Watershed Plan support this purpose?	1. It consolidates and illustrates the most current available information on the extent and condition of natural heritage and water resources in the County (e.g., forests, wetlands, streams and groundwater) and identifies key gaps in these data. 2. It provides high-level guidance and technical recommendations related to the policies and studies needed to advance sustainable growth with consideration for the County's unique and extensive biodiversity in a context of a changing climate.
What was the purpose of the Phase 2/3 Engagement?	The County's Watershed Plan has been divided into two volumes: • Volume 1: Characterization, and • Volume 2: Planning and Management Guidance. The Phase 2/3 engagement was focussed on sharing key findings from Volume 1 and seeking input on the draft directions and guidance from Volume 2, including feedback on the draft vision, objectives and high-level recommendations for advancing watershed-based planning in the County.
What is in this summary?	This summary provides: • An overview of who was invited to engage and the engagement opportunities provided • A summary what was heard through the engagement, and • The formal written comments submitted by Curve Lake First Nation and Shoreline Conservation: Peterborough County (SCPC) (attached).

When did the engagement for this project take place and why were Phases 2 and 3 combined?	Phase 1: Project Launch and Background Review engagement focussed on project initiation to ensure the consulting team had all the potentially relevant data, mapping and technical information to inform the Watershed Plan. Phase 1 engagement took place over March 2025. Although this study originally anticipated separate engagement processes for Phase 2: Watershed Characterization and Phase 3: Watershed Planning and Management Recommendations, the consulting team and County later agreed that it would be more useful to present the characterization (Volume 1) in conjunction with the draft directions and guidance (Volume 2). Therefore, Phases 2 and 3 of the engagement were combined. The Phase 2/3 engagement occurred in April 2026.
Who was invited to engage?	The County reached out to the seven Williams Treaties First Nations, governmental agencies, utilities companies, academic institutions, lake associations, land trusts and other environmental organizations from within and around the County. (A complete list is provided in this summary). A Technical Advisory Committee (TAC) consisting of representatives from the County, the eight local area municipalities, the City of Peterborough, the four local conservation authorities⁽¹⁾ and the two First Nations with reservation lands in the County were also engaged throughout this project.
What engagement took place as part of the Watershed Plan project?	• A project web page for the Watershed Plan was created in February 2025 and is being maintained by the County. • An overview of the Watershed Plan project process and intent was presented to Council on March 19, 2025. • The TAC was engaged through virtual sessions on November 27, 2024, as part of project initiation, on March 20, 2025, as part of the Phase 1 engagement and on April 9 and June 19, 2026, as part of the Phase 2/3 engagement. • Virtual sessions for governmental agencies, utilities companies, academic institutions, lake associations, land trusts and other community and environmental organizations were held March 25, 2025 (Phase 1) and April 15, 2026 (Phase 2/3). • Virtual sessions for Williams Treaties First Nations were held March 26, 2025 (Phase 1) and April 16, 2026 (Phase 2/3). • An overview of the Watershed Plan outcomes and feedback received was presented to Council on June 24, 2026. The final Watershed Plan is being presented to Council on August 5, 2026.
Where can I get more information?	See the County's Watershed Plan page or reach out to the County at planning@ptbocounty.ca with any questions or comments.

⁽¹⁾ On March 10, 2026, the Province announced a revised framework to merge Ontario's 36 Conservation Authorities (CAs) into 9 Regional CAs. The transition to this framework is targeted for early 2027. For the County, this will mean there will be one Regional CA for the southern part of the County (i.e., Eastern Lake Ontario Regional Conservation Authority) instead of the current four watershed-based CAs. However, for the purposes of this project, all references to the former CAs have continued to be to the four current CAs, as appropriate. Notably, the northern part of the County remains outside the jurisdiction of any CA, and activities that may impact key environmental resources (e.g., water, fisheries, wildlife and forests) continue to be managed by Ontario's Ministry of Natural Resources (OMNR).

1 Introduction and Background

A watershed plan is a tool that helps municipalities and other interested parties (a) understand the current condition of water and land resources in the study area and (b) plan for the future health of the watershed. This project developed Peterborough County's first Watershed Plan.

This Watershed Plan (at a high level, using available desktop sources):

- Assessed the extent and condition of forests, wetlands, streams and groundwater in the study area (i.e., across the County, including lands in Ecoregion 5E and Ecoregion 6E)
- Considered current and anticipated environmental stressors and land use changes such as climate change and urbanization, and
- Identified high-level strategies and tools to help maintain, and in some cases improve, environmental conditions in the watershed in the face of these stressors and land use.

The intent of this Watershed Plan is to:

- Address the requirements of the Provincial Planning Statement related to watershed planning
- Provide a basis and framework for more detailed subwatershed studies in the future in the identified growth areas associated with Lakefield (in the Township of Selwyn), Millbrook (in the Township of Cavan Monaghan), Norwood (in the Township of Asphodel-Norwood), and Havelock (in the Township of Havelock-Belmont-Methuen), and
- Inform and guide sustainable growth, infrastructure planning, and restoration efforts on a County-wide scale (i.e., in both Ecoregion 5E and 6E).

The County's Watershed Plan has been documented in two volumes:

- Volume 1: Characterization, and
- Volume 2: Planning and Management Guidance.

The Phase 2/3 engagement was focussed on sharing key findings from Volume 1 and seeking input on the draft directions and guidance from Volume 2, including feedback on the draft vision, objectives and high-level recommendations for advancing watershed-based planning in the County. This summary provides:

- An overview of the who was invited to engage and the engagement opportunities provided
- A summary of what we heard through the engagement, and
- The formal written comments submitted by Curve Lake First Nation and Shoreline Conservation: Peterborough County (SCPC) (attached).

As part of this project over 50 figures showing the various biophysical data layers and some high-level land use planning within the County boundaries were developed.

These figures were originally split between the two volumes but have been compiled into a Map Book to accompany the finalized Volumes 1 and 2. The Map Book file is too large to email or post, but a link can be provided by the County to interested parties on request.

1.1 Project Phasing and Who Was Engaged in Phase 2/3

This project was initiated in the fall of 2024 and was completed June 2026. Engagement took place in the following two phases:

- Phase 1 - Project Launch and Background Review
- Phase 2/3 - Watershed Characterization and Watershed Planning and Management Guidance

Phase 1 engagement focussed on launching the project and ensuring the consulting team had all the potentially relevant data, mapping and technical information to inform the Watershed Plan. Phase 1 engagement took place over March 2025.

Although this study originally anticipated separate engagement processes for Phases 2 and 3, the consulting team and County later agreed that it would be more useful to present the characterization (Volume 1) in conjunction with the draft directions and guidance (Volume 2). Therefore, Phases 2 and 3 of the engagement were combined. The Phase 2/3 engagement occurred in April 2026.

Phase 2/3 included outreach to the First Nations, agencies, governmental and non-governmental organizations, institutions and associations listed below. Those who participated in the Phase 2/3 engagement are indicated with an asterisk (*).

In total, 35 individuals were engaged who represented nearly 30 different organizations and / or agencies and / or associations as part of the Phase 2/3 engagement.

County Council*

Composed of the Mayors and Deputy Mayors from the County's eight local Area Municipalities.

Technical Advisory Committee (TAC)

- Municipality of Trent Lakes*
- Township of Asphodel-Norwood*
- Township of Cavan Monaghan*
- Township of Douro-Dummer*
- Township of Havelock-Belmont-Methuen*
- Township of North Kawartha*
- Township of Otonabee-South Monaghan*
- Township of Selwyn*
- Crowe Valley Conservation Authority*
- Ganaraska Conservation*
- Otonabee Conservation*
- Kawartha Conservation*
- City of Peterborough
- County of Peterborough (Project Lead)*

Williams Treaties First Nations

- Alderville First Nation*
- Beausoleil First Nation
- Chippewas of Georgina Island First Nation
- Chippewas of Rama First Nation
- Curve Lake First Nation (also on the TAC)*
- Hiawathas First Nation (also on the TAC)*
- Mississaugas of Scugog Island First Nation

Agencies, Institutions, and Utilities

- Ontario Ministry of Natural Resources (Peterborough)
- Ontario Ministry of Environment, Conservation and Parks (Peterborough)
- Ontario Waterpower
- Parks Canada*
- Lakelands Public Health* / Peterborough Public Health
- Peterborough Utilities*
- Trent Severn Waterway at Parks Canada
- Trent University and Fleming College*

Lake and Cottage Associations

- Big Cedar Lake Road Committee (South)
- Big Cedar Lake Stewardship Association
- Birchcliff Property Owners Association of Douro-Dummer, Inc.
- Buckhorn Sands Property Owners Association
- Coon Lake Cottagers

- Chandos Lake Property Owners Association*
- Eels Lake Cottagers
- Federation of Ontario Cottagers' Associations (Peterborough)*
- Jack's Lake Association

Lake and Cottage Associations (continued)

- Julian Lake Cottagers
- Juniper Point Cottage Owners' Association
- Kawartha Park Cottagers Association
- Long and Loucks Lake Cottager's Association
- Looncall Lake Cottagers Association*
- Lovesick Lake Association (LLA)*
- North Kawartha Lakes Association
- Sandy Point Road Association
- Stoney Lake Cottagers
- Upper Stoney Lake Association
- Wolf Lake Cottage Association

Other Local Organizations

- Baxter Creek Watershed Alliance
- Coalition for Equitable Water Flow (CEWF)*
- Environment Council for Clear, Stony and White Lakes (ECCSWL)*
- Ontario Woodlot Association
- Peterborough County Federation of Agriculture (PCFA)
- Peterborough Field Naturalists
- Kawartha Conservation and Climate Partnerships

- Kawartha Lake Stewards Association (KLSA)
- Kawartha Land Trust (KLT)*
- Mun. of Trent Lakes Environmental Advisory Committee (EAC) - Shoreline Sub-Committee*
- Rice Lake Tourism Association
- Shoreline Conservation: Peterborough County (SCPC)*
- Watersheds Canada*

2 Phase 2/3 Engagement Feedback

As part of the Phase 2/3 engagement the following virtual sessions were held in April 2026:

- The TAC was engaged on April 9, 2026.
- A session for governmental agencies, utilities companies, academic institutions, lake associations and other community and environmental organizations was held April 15, 2026.
- A session for Williams Treaties First Nations was held April 16, 2026.

At each of these sessions, following the welcome by the County and introductions of all participants, the consulting team presented:

- An overview of the project.
- Highlights of the local planning context.
- The Draft Vision, Goals and Objectives for the Watershed Plan.
- Highlights and examples of the characterization of natural heritage and water resources with a focus on examples from the identified growth areas.
- An overview of key draft watershed planning and management guidance provided in the Watershed Plan.

Participants of the Phase 2/3 engagement session were invited to ask any questions or provide any comments related to the project. They were also specifically asked if they had:

1. Any comments on the Draft Vision, Goals and Objectives for the Watershed Plan, and
2. Any comments on the draft watershed planning and management guidance provided in the Watershed Plan as presented.

Following the engagement sessions, links to the draft Watershed Plan Volume 1 and Volume 2, including all related mapping, was shared with those engaged for this project. Participants were invited to provide additional feedback by April 30, 2026.

The verbal feedback received is summarized in Section 2.1, Section 2.2, and Section 2.3 below. Notably, no participants from any groups expressed any concerns or shared any comments related to

the draft Vision, Goals and Objectives. However, there were many comments on a range of other topics, as outlined below.

Comments have been ascribed to organizations, not to individuals, to respect the privacy of participants.

Written feedback provided subsequently by Curve Lake First Nation (CLFN) and Shoreline Conservation: Peterborough County (SCPC) is appended to this summary (see Attachment 1 and Attachment 2). Notably, responses to these comments are appended to the final Volume 2 of the Watershed Plan so that this feedback remains on record and can be referenced, as appropriate, as the Watershed Plan is implemented going forward.

2.1 Feedback from the Technical Advisory Committee

Curve Lake First Nation

- Asked if the Plan speaks to the adoption of municipal infiltration targets by subwatershed. (Consultants responded that yes this is becoming the standard across the Province, but that the specifics need to be determined as part of future subwatershed studies. Conservation Authority staff pointed to Section 3 of the 'Low Impact Development Stormwater Management Guidance Manual' online).
- Inquired how this Plan recognizes the biophysical gradient from Ecoregion 5E or Ecoregion 6. (Consultants confirmed that Volume 1 outlines these differences from a biophysical perspective and Volume 2 outlines these differences from a planning perspective).
- Suggested natural heritage ecological integrity be respected by not permitting development in Provincially Significant Wetlands (PSW) or Areas of Natural and Scientific Interest.
- Asked how unevaluated wetlands are treated? (County confirmed they are aware the mapping is not complete or accurate hence required to treat them like PSW until they are evaluated to confirm status).
- Suggested watershed constraints be considered before confirming growth areas. (Consultants shared that the 2022 Growth Study by Hemson prioritized based on leveraging / building on existing settlements that are already serviced. County added that this work was done at a high level and that subwatershed and area-specific studies which will feed into decision-making are still required to advance these growth areas).
- Noted subwatershed planning should be a pre-condition before approving growth. (Consultants agreed).

Hiawatha First Nation

- Inquired if Indigenous water responsibilities are influencing the outcomes of this Plan, not just the process, and highlighted how there are many small wetlands that have not been mapped and that a primary concern is that these wetlands will be lost. (The County indicated the current Official Plan affords protection to PSW and non-PSW wetlands, and that the County always tries to direct development outside of and away from these features.)

Otonabee Region Conservation Authority

- Commended the County and consultants for undertaking this project and highlighted the importance of collaborating with the local Conservation Authorities (CAs) to advance and implement this Plan, especially because the CA mandate overlaps so much with the objectives of this Watershed Plan.
- Indicated as an example that the CA could provide hydrologic modelling for the County and its local Municipal partners.

Ganaraska Region Conservation Authority

- Emphasized the importance of and need for partnerships to implement this Plan. Noted both natural heritage and water resource system mapping and data are essential for CAs.

2.2 Feedback from the Williams Treaties First Nations

Mississaugas of Scugog Island First Nation

- Noted in the County's Land Acknowledgement "First Nation" should be plural "First Nations."
- Commended the County on this project.
- Inquired if the County would be considering an Archaeological Master Plan. (County indicated there is some interest but no funding for one at this time).

Hiawatha First Nation

- Katchiwanoog (often spelled Gichi-waanong / Kichi-waanong / Katchewanooka, depending on spelling system and era) is an Anishinaabemowin place name associated with what is now known as Katchewanooka Lake translated "Great rushing water" or "Big water with strong current."
- Expressed concern about improperly sized culverts resulting in roads destroyed downstream during flooding. (County indicated they are aware of their flooding "pinch points" and "hot spots" and are trying to work with local landowners to address some of these challenges.
- Inquired about runoff from development. (Consultants indicated objective is to ensure runoff remains the same as before development, or lower).

Curve Lake First Nation

- Inquired about how differing watershed boundaries from the CAs and Province were reconciled. (Consultants indicated discrepancies were relatively minor and that where there were differences Provincial boundaries were used for this project).
- Inquired if all mapped unevaluated wetlands are treated as significant until they are evaluated. (The County confirmed yes).
- Suggested all wetlands should have ecological buffers. Ideally at least 30 m for all wetlands and 60 m for PSW. (County noted the current Official Plan requires 30 m for PSW and includes a

120 m adjacent lands distance. They also confirmed unevaluated wetlands are treated as PSW until they are evaluated and their status is confirmed).

- Suggested addition of watershed constraints mapping to inform development, as well as a County-wide cumulative effects monitoring after development (e.g., to track any changes to phosphorus levels, groundwater flows/levels and recharge).
- Noted water is a being with its own rights – not a resource – from the Indigenous perspective.
- Asked if the Plan will prohibit discharge to sensitive Lakes? (Consultants indicated no because this is a high-level study; this would need to be dealt with at the more area-specific scale).
- Asked if data gaps identified limit the County's ability to assess climate change impacts? (Consultants indicated yes there are some limitations and that more integration and data gap filling is needed to complete such analyses with some degree of confidence).

The meeting concluded with mutual appreciation for the discussion and reaffirmation of continued engagement between municipal planners and Indigenous representatives.

2.3 Feedback from Local Agencies, Institutions, and Community Organizations

Coalition for Equitable Waterflow

- Asked for clarification on the distinction between the northern and southern parts of the County with respect to the 6E and 5E requirements for an NHS. (Consultants explained the difference between the zones being primarily on and off the Canadian shield and elaborated that the Shield generally has more natural cover and less concentrated development pressures).
- Indicated surprise there was no reference to over a decade of water quality data collected and analyzed by Fleming College and Trent University for many lakes in Ecoregion 5E. (Consultants acknowledged they are aware of these data and recognize the contributions of these organizations / institutions. However, analysis of these datasets was outside the scope of this project).

Lakelands Public Health

- Asked for consideration of a Nutrient Management Plan and possible by-law relating to algae blooms, Connection to Source Water Protection, Connection to Emergency Management inclusion of climate change, harmful algae blooms into HIRA (i.e., the provincial Hazard Identification and Risk Assessment Framework). (Consultants indicated many of these elements have been identified as areas to be addressed in subwatershed or other subsequent studies).

Shoreline Conservation

- Suggested for shorelines that vegetated buffers be kept least 75% in a natural state.
- Despite less concentrated development pressure in Ecoregion 5E, concerned about the increasing diffuse pressures on many lakes and shorelines and that these are inadequately considered in County/local Official Plans. (Consultants indicated there are recommendations to update / enhance policies with respect to environmental protections in Ecoregion 5E. County added that the County has tried to include policies to address these concerns).

Kawartha Land Trust

- Noted the recommendation to develop natural heritage system mapping at the County-wide scale, and how much effort that might be for the entire County. Inquired if the Plan provides recommendations for how to prioritize subwatersheds for more detailed study? (Consultants indicated that yes, this is included. They added that these are data heavy studies so recommendations for collaboration with other organizations/partners, including private landowners, is expected to be needed to facilitate these studies. The County added they need to collaborate with different agencies and organizations to get these studies done including funding).

Lovesick Lake Association

- Inquired if the project considered the Kawarthas Naturally Connected data? (Consultants indicated yes, and that the Watershed Plan recommends it be considered to inform ecological linkages and broader systems-level planning. However, the report is based on data that are no longer current and hence many components of the natural heritage mapping will need to rely on other sources).

The full written comments from Curve Lake First Nation and Shoreline Conservation: Peterborough County are attached at the end of this summary.

3 Watershed Plan Finalization

Following the Phase 2/3 Engagement outlined in this summary, the Conservation Authorities submitted a comprehensive set of consolidated written comments. These comments did not result in any changes to the overall direction of the Watershed Plan but did identify some errors to be corrected and also added some local technical insights that resulted in the enhancement and refinement of some of the recommendations, particularly those related to lake assessment and management.

A record of all written comments received as part of the Phase 2/3 Engagement, including the consolidated comments from the Conservation Authorities, with responses from the consulting team, are provided as Appendix A to Volume 2 of the Watershed Plan as transparent record of the feedback and to facilitate the carry forward of some of the comments, as appropriate, for consideration in future more detailed subwatershed studies.

A final workshop with the TAC was held on June 19, 2026, to present an overview of the comments received and how the consulting team proposed to address them. This was followed by an overview presentation to County Council on June 24, 2026.

The final Watershed Plan is being presented to Council on August 5, 2026.

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April 22, 2026

SENT VIA EMAIL

Subject: Submission of Curve Lake First Nation Recommendations – Peterborough County Watershed Plan

Dear County Staff and Partners,

Thank you again for the constructive meeting regarding the Peterborough County Watershed Plan. Curve Lake First Nation (CLFN) appreciates the County's commitment to a collaborative, watershed-based approach and the opportunity to contribute technical and rights-based perspectives.

As requested, CLFN is pleased to submit a consolidated set of recommendations arising from our review of the Watershed Plan mapping series, technical materials, and Growth Area implications. These recommendations reflect:

- Watershed science and hydrologic constraints
- Groundwater vulnerability and Source Protection considerations
- Natural heritage system integrity
- Climate resilience and flood protection
- Cumulative-effects awareness
- CLFN's responsibilities to protect water, ecological systems, and Treaty Rights

The attached briefing and policy appendix (see Appendix B and C) outline recommendations that we believe will strengthen the Watershed Plan and support long-term watershed health, responsible growth management, and intergovernmental alignment.

CLFN offers these recommendations in a spirit of partnership and shared stewardship. We look forward to continued collaboration with the County, municipalities, and Conservation Authorities as the Watershed Plan advances.

If helpful, CLFN would be pleased to participate in follow-up discussions, technical working sessions, or governance table development.

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Thank you again for your time, openness, and commitment to this important work.
Sincerely,

A handwritten signature in black ink that reads 'David Rewniak'.

David Rewniak,
Consultation Lead, Developments, CLFN

CC:

Delaney Jacobs, Director of Lands and Consultation, CLFN

Paige Williams, Manager of Consultation, CLFN

Derek Paauw, Consultation Lead, Archaeology, CLFN

Kayla Wright, Supporting Curve Lake First Nation, Director – Francis Chua Consulting Inc.

Francis Chua, Supporting Curve Lake First Nation, Director - Francis Chua Consulting Inc.

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APPENDIX A – Michi Saagiig Historical/Background Context – as prepared by Elder Gitiga Migizi (Doug Williams)

The traditional homelands of the Michi Saagiig (Mississauga Anishinaabeg) encompass a vast area of what is now known as southern Ontario. The Michi Saagiig are known as “the people of the big river mouths” and were also known as the “Salmon People” who occupied and fished the north shore of Lake Ontario where the various tributaries emptied into the lake. Their territories extended north into and beyond the Kawarthas as winter hunting grounds on which they would break off into smaller social groups for the season, hunting and trapping on these lands, then returning to the lakeshore in spring for the summer months.

The Michi Saagiig were a highly mobile people, travelling vast distances to procure subsistence for their people. They were also known as the “Peacekeepers” among Indigenous nations. The Michi Saagiig homelands were located directly between two very powerful Confederacies: The Three Fires Confederacy to the north and the Haudenosaunee Confederacy to the south. The Michi Saagiig were the negotiators, the messengers, the diplomats, and they successfully mediated peace throughout this area of Ontario for countless generations.

Michi Saagiig oral histories speak to their people being in this area of Ontario for thousands of years. These stories recount the “Old Ones” who spoke an ancient Algonquian dialect. The histories explain that the current Ojibwa phonology is the 5th transformation of this language, demonstrating a linguistic connection that spans back into deep time. The Michi Saagiig of today are the descendants of the ancient peoples who lived in Ontario during the Archaic and Paleo-Indian periods. They are the original inhabitants of southern Ontario, and they are still here today.

The traditional territories of the Michi Saagiig span from Gananoque in the east, all along the north shore of Lake Ontario, west to the north shore of Lake Erie at Long Point. The territory spreads as far north as the tributaries that flow into these lakes, from Bancroft and north of the Haliburton highlands. This also includes all the tributaries that flow from the height of land north of Toronto like the Oak Ridges Moraine, and all of the rivers that flow into Lake Ontario (the Rideau, the Salmon, the Ganaraska, the Moira, the Trent, the Don, the Rouge, the Etobicoke, the Humber, and the Credit, as well as Wilmot and 16 Mile Creeks) through Burlington Bay and the Niagara region including the Welland and Niagara Rivers, and beyond. The western side of the Michi Saagiig Nation was located around the Grand River which was used as a portage route as the Niagara portage was too dangerous. The Michi Saagiig would portage from present-day Burlington to the Grand River and travel south to the open water on Lake Erie.

Michi Saagiig oral histories also speak to the occurrence of people coming into their territories

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sometime between 500-1000 A.D. seeking to establish villages and a corn growing economy – these newcomers included peoples that would later be known as the Huron-Wendat, Neutral, Petun/Tobacco Nations. The Michi Saagiig made Treaties with these newcomers and granted them permission to stay with the understanding that they were visitors in these lands. Wampum was made to record these contracts, ceremonies would have bound each nation to their respective responsibilities within the political relationship, and these contracts would have been renewed annually (see Gitiga Migizi and Kapyrka 2015). These visitors were extremely successful as their corn economy grew as well as their populations. However, it was understood by all nations involved that this area of Ontario were the homeland territories of the Michi Saagiig.

The Odawa Nation worked with the Michi Saagiig to meet with the Huron-Wendat, the Petun, and Neutral Nations to continue the amicable political and economic relationship that existed – a symbiotic relationship that was mainly policed and enforced by the Odawa people.

Problems arose for the Michi Saagiig in the 1600s when the European way of life was introduced into southern Ontario. Also, around the same time, the Haudenosaunee were given firearms by the colonial governments in New York and Albany which ultimately made an expansion possible for them into Michi Saagiig territories. There began skirmishes with the various nations living in Ontario at the time. The Haudenosaunee engaged in fighting with the Huron-Wendat and between that and the onslaught of European diseases, the Iroquoian speaking peoples in Ontario were decimated.

The onset of colonial settlement and missionary involvement severely disrupted the original relationships between these Indigenous nations. Disease and warfare had a devastating impact upon the Indigenous peoples of Ontario, especially the large sedentary villages, which mostly included Iroquoian speaking peoples. The Michi Saagiig were largely able to avoid the devastation caused by these processes by retreating to their wintering grounds to the north, essentially waiting for the smoke to clear.

Michi Saagiig Elder Gitiga Migizi (2017) recounts:

We weren't affected as much as the larger villages because we learned to paddle away for several years until everything settled down. And we came back and tried to bury the bones of the Huron but it was overwhelming, it was all over, there were bones all over – that is our story.

There is a misnomer here, that this area of Ontario is not our traditional territory and that we came in here after the Huron-Wendat left or were defeated, but that is not true. That is a big misconception of our history that needs to be corrected. We are the traditional people, we are the ones that signed treaties with the Crown. We

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are recognized as the ones who signed these treaties and we are the ones to be dealt with officially in any matters concerning territory in southern Ontario.

We had peacemakers go to the Haudenosaunee and live amongst them in order to change their ways. We had also diplomatically dealt with some of the strong chiefs to the north and tried to make peace as much as possible. So we are very important in terms of keeping the balance of relationships in harmony.

Some of the old leaders recognized that it became increasingly difficult to keep the peace after the Europeans introduced guns. But we still continued to meet, and we still continued to have some wampum, which doesn't mean we negated our territory or gave up our territory – we did not do that. We still consider ourselves a sovereign nation despite legal challenges against that. We still view ourselves as a nation and the government must negotiate from that basis.

Often times, southern Ontario is described as being “vacant” after the dispersal of the Huron-Wendat peoples in 1649 (who fled east to Quebec and south to the United States). This is misleading as these territories remained the homelands of the Michi Saagiig Nation.

The Michi Saagiig participated in eighteen treaties from 1781 to 1923 to allow the growing number of European settlers to establish in Ontario. Pressures from increased settlement forced the Michi Saagiig to slowly move into small family groups around the present-day communities: Curve Lake First Nation, Hiawatha First Nation, Alderville First Nation, Scugog Island First Nation, New Credit First Nation, and Mississauga First Nation.

The Michi Saagiig have been in Ontario for thousands of years, and they remain here to this day.

****This historical context was prepared by Gitiga Migizi, a respected Elder and Knowledge Keeper of the Michi Saagiig Nation.****

Publication reference:

Gitiga Migizi-ban and Julie Kapyrka
2015 Before, During, and After: Mississauga Presence in the Kawarthas. In *Peterborough Archaeology*, Dirk Verhulst, editor, pp.127-136. Peterborough, Ontario: Peterborough Chapter of the Ontario Archaeological Society.

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Technical Appendix Overview

The following appendices provide Curve Lake First Nation's detailed analysis and recommendations regarding the Peterborough County Watershed Plan. They include a Growth Area-specific assessment for Millbrook, Lakefield, Norwood, and Havelock, as well as a consolidated summary of watershed constraints, cross-cutting themes, and planning considerations across all four areas. Together, these appendices outline key hydrologic, ecological, groundwater, and cultural sensitivities, along with CLFN's recommended policy directions to support watershed-aligned growth, climate resilience, and the protection of rights-bearing landscapes. These materials collectively replace the need for a separate briefing note and are offered to support the County's refinement of the Watershed Plan in a collaborative and solutions-focused manner.

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Appendix B – Policy Recommendations (Expanded Rationale)

Purpose of This Appendix

This appendix provides **detailed policy recommendations** from Curve Lake First Nation (CLFN) to support the refinement of the Peterborough County Watershed Plan. Each recommendation includes:

- **What is being recommended**
- **Why it matters** (technical, ecological, hydrologic, or rights-based rationale)
- **How it supports watershed health, climate resilience, and Treaty Rights**

1. Watershed-Based Growth Management

1.1 Watershed Constraints Overlay

Recommendation:

The County is encouraged to adopt a **Watershed Constraints Overlay** that identifies areas where growth should be limited or redirected due to hydrologic, ecological, or cultural sensitivity.

Why:

Growth Areas intersect PSWs, HVAs, WHPAs, ANSIs, cold-water streams, and woodland corridors. These features are foundational to watershed function. An overlay ensures that growth boundaries and servicing strategies reflect real-world constraints rather than administrative lines.

1.2 Subwatershed Planning Prior to Growth

Recommendation:

Growth Areas should proceed only after **subwatershed-scale planning** is completed.

Why:

Parcel-level EIS cannot capture cumulative hydrologic changes. Subwatershed plans allow the County to set infiltration targets, phosphorus budgets, stormwater criteria, and natural heritage system refinements at the correct scale.

2. Water Resource Protection

2.1 Minimum Infiltration Targets

Recommendation:

The County is encouraged to establish minimum infiltration targets for all Growth Areas.

Why:

Infiltration protects groundwater recharge, maintains baseflow in streams, and reduces flooding. Growth Areas overlap HVAs, WHPAs, and drumlin fields where recharge is critical. Without infiltration targets, development can permanently alter watershed hydrology.

2.2 No-Net-Increase in Phosphorus

Recommendation:

A phosphorus budget approach should be adopted for all lakes and rivers.

Why:

Many Kawartha lakes are already phosphorus-sensitive. Even small increases from new development can trigger algal blooms, reduce water quality, and impact fish habitat and recreational use.

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2.3 Thermal Protection for Cold-Water Streams

Recommendation:

Stormwater systems should incorporate thermal mitigation measures.

Why:

Cold-water systems (e.g., Baxter Creek, Sawers Creek) are highly sensitive to warming. Urban runoff can raise stream temperatures, affecting brook trout and other species vital to ecological and cultural values.

3. Natural Heritage Protection

3.1 Treat Unevaluated Wetlands as Significant

Recommendation:

Unevaluated wetlands should be treated as significant until formally assessed.

Why:

Many unevaluated wetlands in Growth Areas are hydrologically connected to PSWs or headwater systems. Treating them as significant prevents premature loss of wetland function.

3.2 Maintain Ecological Connectivity

Recommendation:

Woodland corridors, wetland complexes, and riparian zones should be protected as connected systems.

Why:

Connectivity supports wildlife movement, climate resilience, and hydrologic stability. Fragmentation increases edge effects, reduces biodiversity, and disrupts natural drainage.

3.3 Protect ANSI Features

Recommendation:

Development should avoid Earth and Life Science ANSIs.

Why:

Drumlins, eskers, and delta formations are irreplaceable landforms that regulate groundwater movement and support unique ecological communities.

4. Groundwater Protection

4.1 WHPA Land-Use Restrictions

Recommendation:

Land-use permissions in WHPA-A/B/C/D should align with Source Protection Plan policies.

Why:

Growth Areas overlap municipal wellhead protection zones. Protecting these areas safeguards drinking water sources and reduces long-term servicing risks.

4.2 Hydrogeological Impact Assessments

Recommendation:

All Growth Areas should include hydrogeological assessments that evaluate recharge, contaminant pathways, and wellhead drawdown.

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Why:

Groundwater systems in the County are shallow and vulnerable. Growth without hydrogeologic analysis risks contamination, reduced recharge, and long-term servicing challenges.

5. Climate Resilience & Flood Protection

5.1 Climate-Adjusted Stormwater Standards

Recommendation:

Stormwater design should use **2050 climate rainfall intensities**.

Why:

Climate change is increasing rainfall intensity and frequency. Designing to historical rainfall data will under-size infrastructure and increase flood risk.

5.2 Protect Natural Flood Storage Areas

Recommendation:

Wetlands, floodplains, and riparian zones should be preserved as natural flood storage.

Why:

These areas reduce downstream flooding, protect infrastructure, and maintain water quality. Engineered systems cannot replicate their function.

6. Monitoring

6.1 Monitoring Network Expansion

Recommendation:

New climate, surface water, and groundwater monitoring stations should be installed in data-poor areas.

Why:

Monitoring gaps limit the County's ability to track hydrologic change, phosphorus loading, and climate impacts. Data is essential for adaptive management.

6.3 Post-Construction Verification

Recommendation:

Developers should provide post-construction verification of infiltration, water-quality performance, and baseflow protection.

Why:

Design intentions do not always match real-world performance. Verification ensures stormwater systems function as intended.

7. Rights-Based Recommendations

7.1 Distinctions-Based Engagement

Recommendation:

Engagement with CLFN should occur early and be distinctions-based.

Why:

CLFN is a rights-holder, not a stakeholder. Early engagement ensures watershed decisions respect Treaty Rights and cultural responsibilities.

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7.2 Rights Impact Assessments (RIA)

Recommendation:

Growth Areas should undergo RIAs assessing impacts to harvesting, medicines, fish habitat, water quality, and cultural landscapes.

Why:

Watershed changes directly affect rights-bearing landscapes and cultural continuity.

8. Summary

These recommendations support a watershed plan that is:

- Scientifically defensible
- Climate-resilient
- Ecologically grounded
- Culturally respectful
- Aligned with Treaty Rights
- Practical for implementation

CLFN offers these recommendations in the spirit of partnership, shared stewardship, and long-term watershed health.

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Appendix C – Briefing Notes: Peterborough County Watershed Plan

Subject: Recommendations from CLFN on the Peterborough County Watershed Plan

Prepared by: CLFN – Consultation Lead (Development)

Date: April 22, 2026

1. Purpose of This Briefing

This briefing consolidates all recommendations arising from CLFN's review of the Peterborough County Watershed Plan, including:

- Technical constraints identified across all map layers (Figures 29–46)
- Policy recommendations for watershed-aligned growth
- Rights-based governance expectations
- Recommendations for cumulative-effects assessment and monitoring
- Growth Area-specific considerations
- Implementation and enforcement needs

The intent is to support the County in refining the Watershed Plan so that it protects watershed health, upholds Treaty Rights, and ensures long-term ecological and servicing resilience.

2. Summary of Key Constraints Affecting Growth Areas

2.1 Hydrologic Sensitivity

Growth Areas intersect:

- High drainage density zones
- Cold-water streams
- Headwater wetlands
- Steep drumlin slopes
- Flood-susceptible lowlands

Implication: Growth must maintain infiltration, baseflow, and hydrologic connectivity.

2.2 Groundwater Vulnerability

Growth Areas overlap:

- Highly Vulnerable Aquifers (HVAs)
- Wellhead Protection Areas (WHPAs A–D)
- Significant Groundwater Recharge Areas (SGRAs)

Implication: Land-use restrictions and minimum infiltration targets are needed.

2.3 Natural Heritage Constraints

Growth Areas intersect:

- Provincially Significant Wetlands (PSWs)
- Unevaluated wetlands
- Life and Earth Science ANSIs
- Large woodland corridors

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Implication: Avoidance-first planning is required; unevaluated wetlands must be assessed.

2.4 Landform & Soil Constraints

- Drumlinized terrain
- Thin soils over bedrock
- Erosion-prone slopes
- Limited infiltration capacity

Implication: Stormwater design must be watershed-based, not subdivision-based.

2.5 Governance & Monitoring Gaps

- Four Conservation Authorities regulate different parts of the County
- Monitoring stations are unevenly distributed
- Limited long-term hydrologic and groundwater data

Implication: A coordinated governance and monitoring framework is required.

3. Policy Recommendations for the Watershed Plan

These recommendations are structured so the County can integrate them directly into the Watershed Plan, Official Plan updates, Secondary Plans, and development review processes.

3.1 Watershed-Based Growth Management

Recommendation 1 — Adopt a Watershed Constraints Overlay

Apply a constraints overlay to all Growth Areas that includes:

- PSWs
- Unevaluated wetlands
- ANSIs
- HVAs
- WHPAs
- Cold-water streams
- Woodland corridors
- Cultural landscapes

Purpose: Ensure growth boundaries and servicing strategies avoid high-constraint areas.

Recommendation 2 — Require Subwatershed Plans Before Growth Proceeds

Growth Areas must not advance without:

- Subwatershed-scale hydrologic modelling
- Cumulative-effects assessment
- Natural heritage system refinement
- Groundwater recharge analysis

Purpose: Parcel-level EIS is insufficient for watershed-scale impacts.

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3.2 Water Resource Protection

Recommendation 3 — Establish Minimum Infiltration Targets

To maintain recharge and baseflow:

- Maintain pre-development infiltration volumes
- Infiltrate the first 5–10 mm of rainfall
- Prohibit infiltration-reducing land uses in HVAs and WHPAs

Recommendation 4 — No-Net-Increase in Phosphorus

Apply phosphorus budgets to all lakes and rivers.

Recommendation 5 — Thermal Protection for Cold-Water Streams

Require:

- Thermal mitigation
- Shading
- Infiltration-based stormwater design

3.3 Natural Heritage Protection

Recommendation 6 — Treat Unevaluated Wetlands as Significant

Until evaluated, unevaluated wetlands must be treated as PSWs.

Recommendation 7 — Maintain Ecological Connectivity

Protect woodland corridors and wetland complexes through:

- 30–120 m buffers
- Wildlife passage design
- Avoidance of fragmentation

Recommendation 8 — Prohibit Development in ANSIs

Maintain landform integrity (drumlins, eskers, delta formations).

3.4 Groundwater Protection

Recommendation 9 — Enforce WHPA Land-Use Restrictions

- WHPA-A: prohibit new development
- WHPA-B: prohibit high-risk uses
- WHPA-C/D: require Risk Management Plans

Recommendation 10 — Require Hydrogeological Impact Assessments

All Growth Areas must demonstrate:

- No reduction in recharge
- No increase in contaminant loading
- No interference with wellhead drawdown

3.5 Climate Resilience & Flood Protection

Recommendation 11 — Update Stormwater Standards to 2050 Climate

Use future IDF curves for:

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- Peak flow control
- Floodplain mapping
- Stormwater design

Recommendation 12 — Protect Natural Flood Storage Areas

Wetlands, floodplains, and riparian zones must be preserved.

3.6 Governance & Monitoring

Recommendation 13 — Establish a Watershed Governance Table

Include:

- CLFN
- County
- Municipalities
- Conservation Authorities
- Provincial ministries

Purpose: Coordinate watershed decisions and cumulative-effects tracking.

Recommendation 14 — Expand Monitoring Networks

Install new:

- Climate stations
- Surface water gauges
- Groundwater monitoring wells

Purpose: Fill data gaps in Growth Areas.

Recommendation 15 — Require Post-Construction Verification

Developers must demonstrate:

- Infiltration performance
- Water-quality performance
- Baseflow protection

4. Rights-Based Recommendations

These recommendations reflect CLFN's role as a rights-holder and Treaty partner.

4.1 Distinctions-Based Engagement

Engagement must occur **before**:

- Growth boundary decisions
- Secondary plans
- Servicing strategies
- Subwatershed plans

4.2 Rights Impact Assessments (RIA)

Every Growth Area must undergo an RIA evaluating impacts to:

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- Harvesting
- Medicines
- Fish habitat
- Water quality
- Cultural landscapes
- Cumulative effects on Treaty Rights

4.3 Indigenous-Led Monitoring

CLFN must co-lead:

- Water quality monitoring
- Groundwater monitoring
- Cultural landscape verification

5. Implementation Pathway for the County

Step 1 — Integrate constraints overlay into the Watershed Plan

Step 2 — Update Official Plan policies accordingly

Step 3 — Request subwatershed plans for all Growth Areas

Step 4 — Embed minimum infiltration targets and phosphorus budgets

Step 5 — Establish the Watershed Governance Table

Step 6 — Expand monitoring networks

Step 7 — Adopt Rights Impact Assessment recommendations

6. Conclusion

Curve Lake First Nation's recommendations are grounded in:

- Technical evidence
- Watershed science
- Treaty Rights
- Cultural responsibilities
- Long-term sustainability

Implementing these recommendations will ensure that the Watershed Plan protects:

- Water
- Ecological integrity
- Climate resilience
- Cultural landscapes
- Treaty Rights

And supports responsible, sustainable growth across Peterborough County.

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Appendix D – Growth Area–Specific Addendum

1. Millbrook Growth Area

Key Constraints

- Overlaps with Wellhead Protection Areas (WHPAs A–D).
- Highly Vulnerable Aquifers (HVAs) underlie much of the settlement area.
- Baxter Creek, a cold-water system, flows through the Growth Area.
- Drumlinized terrain creates steep slopes and erosion-prone soils.
- Significant Groundwater Recharge Areas (SGRAs) support municipal wells and baseflow.

Implications

Millbrook is the most groundwater-sensitive Growth Area. Protecting recharge and preventing thermal impacts to Baxter Creek are essential.

Recommendations

- Apply minimum infiltration targets to maintain recharge.
- Incorporate thermal mitigation into stormwater design.
- Avoid development on steep drumlin slopes.
- Align land-use permissions with Source Protection Plan policies.
- Consider phasing growth to ensure hydrologic function is maintained.

2. Lakefield Growth Area

Key Constraints

- Adjacent to Katchewanooka Lake, a phosphorus-sensitive waterbody.
- WHPAs and HVAs present in northern and central areas.
- Wetland complexes and riparian corridors drain directly to the Otonabee River.
- High recreational use increases water-quality sensitivity.

Implications

Even small increases in phosphorus or stormwater runoff can affect lake health, fish habitat, and recreational use.

Recommendations

- Apply a no-net-increase phosphorus policy.
- Maintain and enhance shoreline and riparian buffers.
- Treat unevaluated wetlands as significant until assessed.
- Use low-impact development (LID) stormwater approaches.
- Protect woodland corridors that maintain connectivity to the Otonabee River.

3. Norwood Growth Area

Key Constraints

- Intersects large Provincially Significant Wetlands (PSWs) and unevaluated wetlands.
- Contains headwater systems draining to the Ouse and Crowe Rivers.
- Shallow soils and high-water tables limit infiltration and septic suitability.
- Agricultural tile drainage increases nutrient transport risk.

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Implications

Norwood is a wetland-dominated hydrologic landscape. Altering drainage patterns could increase downstream flooding and nutrient loading.

Recommendations

- Treat unevaluated wetlands as significant until evaluated.
- Maintain hydrologic connectivity between wetland complexes.
- Avoid development in low-lying, flood-susceptible areas.
- Apply subwatershed-scale stormwater planning.
- Consider alternative servicing strategies where soils limit infiltration.

4. Havelock Growth Area

Key Constraints

- Located within Shield terrain with thin soils and exposed bedrock.
- High drainage density results in rapid runoff and erosion potential.
- Wetland complexes and headwater streams are highly sensitive.
- Limited infiltration capacity increases reliance on engineered stormwater systems.

Implications

Havelock is highly sensitive to grading, blasting, and stormwater changes. Runoff can quickly enter downstream systems.

Recommendations

- Use avoidance-first planning in thin-soil and bedrock areas.
- Apply enhanced erosion and sediment controls during construction.
- Maintain and enhance wetland buffers.
- Consider clustered development to preserve natural infiltration areas.
- Expand monitoring to track hydrologic changes in Shield terrain.

Comments on Peterborough County Watershed Plan Equivalent Volume 2: Planning and Management Guidance Draft

April 30, 2026

Shoreline Conservation: Peterborough County (SCPC) applauds the concept of a County Watershed Study focusing on the region's natural heritage and water resources systems and the cumulative impact of human development on these systems. Increasingly, the burden of planning and implementing best management practices to minimize risks to watersheds is falling on upper- and lower-tier municipalities. SCPC's willingness to assist efforts to safeguard the County watershed reflects its mandate to sustain healthy lakes and rivers through natural shoreline preservation.

SCPC is a volunteer, not-for-profit entity founded in 2021 by the Environment Council for Clear, Ston(e)y and White Lakes (EC). Its work with the EC stems from a request by Peterborough County Planning staff to raise stakeholder awareness of the challenges in sustaining healthy lakes. The County also wished policy developments to better protect natural shorelines to be monitored across neighbouring jurisdictions, informing the Townships of North Kawartha, Havelock-Belmont-Methuen, Trent Lakes, Selwyn and Douro-Dummer.

The Study's prioritization of natural shorelines is entirely appropriate, acknowledging their essential role in the natural hydrologic cycle and waterbodies' ecosystems. The shoreline planning guidance largely reinforces published best practice. In addition to a development and septic system setback from the highwater mark, the Study's recommendations include shoreline alteration controls to restrict shoreline damage such as natural vegetation removal, dredging, dumping fill and building hard engineering structures. The Study urges natural stabilization of shorelines, not the use of hard structures. It outlines related risks, such as densification and backlotting behind waterfront properties. The Central Lake Ontario region is referenced for incorporating future climate change impacts into its shoreline management plans. For a shoreland buffer, however, we recommend a more ambitious goal: retaining 75% of the buffer area in its natural state.

On the essential role of woodlands, greater attention is required to recognizing and preserving "old-growth" forests – a unique feature of Peterborough County deserving higher public visibility and protection.

Of real concern is the watershed Study's focus for future work, such as research at the quaternary watershed level, in Ecoregion 6E, with less highlighted for 5E. Admittedly, Ecoregion 6E, with its natural heritage already fragmented, faces a greater absolute rise in population and economic activity. But unchecked, development activity in 5E threatens substantive damage to its largely pristine waterbodies and natural ecosystems that anchor 5E's local economy and its economic prosperity. Compounding future ecological risk in Ecoregion 5E are less extensive

environmental data and the relatively small fraction of Ecoregion 5E under the jurisdiction of Conservation Authorities. Of note are the highly sensitive lake trout lakes in Ecoregion 5E judged to be at capacity alongside a number of moderately sensitive lake trout lakes with limited capacity for new development.

The lack of financial resources to pursue all the worthwhile watershed research is understood, but a slightly more balanced approach between Ecoregions 6E and 5E could result in stronger overall environmental and economic results. We strongly urge the County to explore the potential of existing resources to expand the work undertaken. These resources include existing, albeit slightly dated data, institutions such as Trent University and Fleming College and the active environmental non-profits with considerable knowledge and experience in the County.

We noted that Volume 2's examples of environmental non-profit entities did not include Shoreline Conservation: Peterborough County. SCPC stands out for its active education and advocacy efforts stretching across much of Ecoregion 5E where there are fewer champions working to sustain healthy lakes. Since 2021, SCPC and the EC have made a dozen deputations to the five Townships referenced above, ten submissions to Peterborough County and the Province of Ontario and at least 20 presentations to ratepayers and lake associations. We participate in a broad network of environmental groups across southern Ontario, and we strongly support further work on the County's watershed study.

If you wish additional information on our comments, please contact the undersigned. Our thanks for the opportunity to discuss Draft Volume 2.

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