



NOTICE OF MEETING

DATE: September 19, 2024

TIME: 4:00 pm

LOCATION: Hybrid Meeting

AGENDA

MEETING:

BOARD OF DIRECTORS

MEMBERS:

Randy Barber, Bruce Buttar, Mark Lovshin, Vicki Mink, Miriam Mutton, Lance Nachoff, Tracy Richardson, Adam Pearson, Joan Stover, Willie Woo, Margaret Zwart

1. Welcome, Land Acknowledgement and Call to Order

Land Acknowledgement

The Ganaraska Region Conservation Authority respectfully acknowledges that the land on which we gather is situated within the traditional and treaty territory of the Mississauga's and Chippewa's of the Anishinabek, known today as the Williams Treaties First Nations. Our work on these lands acknowledges their resilience and their longstanding contribution to the area. We are thankful for the opportunity to live, learn and share with mutual respect and appreciation.

2. Disclosure of Pecuniary Interest
3. Minutes of Last Meeting – **June 20, 2024 – attached**
4. Adoption of the Agenda

5. Business Arising from Minutes:
None.
6. Delegations:
None.
7. Presentations:
None.
8. Correspondence:
07/24 Northumberland County Draft Growth Management Official Plan Amendment -
GRCA Comments – **note and file**
9. Applications under Ontario Regulation 168/06:
Permits approved by Executive - **schedule attached**

Permit applications requiring Board of Directors discussion:
None
10. Committee Reports:
a) Ganaraska Forest Recreational Users Committee minutes – September 5, 2024 -
attached
11. New Business:
a) Draft Watershed-Based Resource Management Strategy – **staff report attached**
b) Draft Conservation Lands Strategy Public Consultation Report - **staff report attached**
c) Conservation Land Strategy – **staff report attached**
d) Fees Policy and Schedules Update – **staff report attached**
e) 2025 Preliminary Budget Criteria – **staff report attached**
12. Other Business:
None.
13. Public Question Period - **Agenda Items Only**
 - All questions are to be submitted the day before by 4:00 pm in advance of the Board of Directors meeting in order to allow staff to prepare the answers to the questions. The Chair has discretion for questions on the day of the meeting.
 - A maximum of 10 minutes will be allotted for the Question Period. More time can be allocated at the discretion of the Chair.
 - Persons wishing to ask a question must state their name and address for the record.

- Questions will be restricted to only those items listed on the agenda.
- Questions cannot be asked on "In Camera" items.
- Questions cannot be asked with respect to minutes of Board of Directors meetings or committee meetings.
- All persons will speak respectfully when asking the question.
- The Chair may conclude the Question Period prior to the ten (10) minute time limit, where attendees are disobeying the Rules of Order, or a decision of the Chair, or where there are no questions.

14. In Camera:
None.

15. Adjourn

GANARASKA REGION CONSERVATION AUTHORITY

MINUTES OF THE BOARD OF DIRECTORS

June 20, 2024 (Hybrid)

GRCA 04/24

1. Welcome, Land Acknowledgement and Call to Order

The Chair called the Ganaraska Region Conservation Authority (GRCA) Board of Directors meeting to order at 4:00 p.m.

MEMBERS PRESENT: Vicki Mink, Chair - Municipality of Port Hope
Willie Woo, Vice-Chair - Municipality of Clarington
Randy Barber - Town of Cobourg
Mark Lovshin, Chair - Township of Hamilton
Miriam Mutton - Town of Cobourg
Joan Stover - Township of Alnwick/Haldimand
Margaret Zwart - Municipality of Clarington

ALSO PRESENT: Linda Laliberte, CAO/Secretary-Treasurer
Cory Harris, Watershed Services Coordinator
Ken Thajer, Planning and Regulations Coordinator
Pam Lancaster, Conservation Lands Coordinator

ABSENT WITH REGRETS: Adam Pearson - Municipality of Port Hope
Tracy Richardson - City of Kawartha Lakes

ALSO ABSENT: Bruce Buttar - Agricultural Representative
Lance Nachoff - Township of Cavan Monaghan

Land Acknowledgement

The Ganaraska Region Conservation Authority respectfully acknowledges that the land on which we gather is situated within the traditional and treaty territory of the Mississauga's and Chippewa's of the Anishinabek, known today as the Williams Treaties First Nations. Our work on these lands acknowledges their resilience and their longstanding contribution to the area. We are thankful for the opportunity to live, learn and share with mutual respect and appreciation.

2. Disclosure of Pecuniary Interest

None.

3. Minutes of Last Meeting

GRCA 29/24

MOVED BY: Randy Barber

SECONDED BY: Willie Woo

THAT the Ganaraska Region Conservation Authority approve the minutes of the May 16, 2024 meeting.

CARRIED.

4. Adoption of the Agenda

GRCA 30/24

MOVED BY: Miram Mutton

SECONDED BY: Mark Lovshin

THAT the Ganaraska Region Conservation Authority adopt the agenda.

CARRIED.

5. Business Arising from Minutes:

None.

6. Delegations

None.

7. Presentations

a) Clean Water-Healthy Land Stewardship Program Update

Miriam Mutton asked about Cobourg's participation to which staff responded that participation was through Lakefront Utilities. Members asked about purchasing trees and the size of the trees as well as the survival rate. A copy of the presentation will be sent to the board members.

GRCA 31/24

MOVED BY: Joan Stover

SECONDED BY: Randy Barber

THAT the Ganaraska Region Conservation Authority receives the Clean Water-Healthy Land Stewardship Program, 2024 Update presentation for information.

CARRIED.

8. Correspondence

None.

9. Applications under Ontario Regulation 168/06 and *Conservation Authorities Act*:

Permits approved by Executive:

GRCA 32/24

MOVED BY: Joan Stover

SECONDED BY: Margaret Zwart

THAT the Ganaraska Region Conservation Authority receive the permits for information.

CARRIED.

Permit Application requiring Ganaraska Region Conservation Authority Board of Directors discussion:

None.

10. Committee Reports:

a) Ganaraska Forest Recreational Users Committee minutes – June 6, 2024

GRCA 33/24

MOVED BY: Randy Barber

SECONDED BY: Mark Lovshin

THAT the Ganaraska Region Conservation Authority receives the Ganaraska Forest Recreational Users Committee minutes of June 6, 2024 for information.

CARRIED.

11. New Business:

a) Draft Conservation Lands Strategy

The Board commented about the planning process and balancing the need to manage lands. Members congratulated staff on a well-done report.

GRCA 34/24

MOVED BY: Miriam Mutton

SECONDED BY: Joan Stover

THAT the Ganaraska Region Conservation Authority receives the Draft Conservation Land Strategy staff report for information;

FURTHER THAT the Ganaraska Region Conservation Authority receives the Draft Conservation Land Strategy document for information and review; and

THAT the Ganaraska Region Conservation Authority directs staff to begin public consultation.

CARRIED.

b) Bill 168 – *Stormwater Flood Prevention Act, 2024*

Miriam Mutton asked about whether the municipalities could move the initiative forward.

GRCA 35/24

MOVED BY: Miriam Mutton

SECONDED BY: Mark Lovshin

THAT the Ganaraska Region Conservation Authority receives the staff report regarding Bill 168 for information.

CARRIED.

12. Other Business

None.

13. Public Question Period

None.

14. In Camera

None.

15. Adjourn

GRCA 36/24

MOVED BY: Joan Stover

THAT the meeting adjourned at 4:30 p.m.

CARRIED.

CHAIR

CAO/SECRETARY-TREASURER



**Ganaraska Region
Conservation Authority**

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Port Hope, ON L1A 3V8

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MEMBER OF
CONSERVATION ONTARIO

July 12, 2024

Mr. Dwayne Campbell, MCIP, RPP
Manager, Planning and Community Development/Chief Planner
Northumberland County
600 William Street
Cobourg, ON K9A 3A5
campbelld@northumberland.ca

Re: Northumberland County Draft Growth Management Official Plan Amendment

Dear Mr. Campbell,

The Ganaraska Region Conservation Authority (GRCA) is pleased to provide the following comments on the Northumberland Draft Growth Management Official Plan Amendment (OPA).

The initial comments will focus on the OPA policies with a later focus on the supporting technical documents.

Policy - Part B "The Amendment"

Section B6 Minimum Greenfield Density Target

- Please revise Subsection b) to indicate "The minimum density target shall exclude *natural heritage features* and *natural hazards* (including flooding and erosion hazards), provided development is prohibited in these areas." There are several types of natural hazards regulated under the *Conservation Authorities Act*, in addition to floodplains, that should also be excluded from the application of minimum density targets. GRCA will require setbacks from these natural hazard features.

Section B9 Water and Wastewater Servicing

- Please reword and expand this section to be more in keeping with Section 3.6 of the 2024 Provincial Planning Statement (PPS). In particular:
 - Include the requirement to integrate the planning of services with source protection planning as per Subsection 1 f) of Section 3.6 of the PPS.
 - Include 'stormwater' in the title of the section of the OPA and add subsection

8 from Section 3.6 (excerpt below) as stormwater is a critical element of servicing:

8. *Planning for stormwater management shall:*

- a) *be integrated with planning for sewage and water services and ensure that systems are optimized, retrofitted as appropriate, feasible and financially viable over their full life cycle;*
- b) *minimize, or, where possible, prevent or reduce increases in stormwater volumes and contaminant loads;*
- c) *minimize erosion and changes in water balance including through the use of green infrastructure;*
- d) *mitigate risks to human health, safety, property and the environment;*
- e) *maximize the extent and function of vegetative and pervious surfaces;*
- f) *promote best practices, including stormwater attenuation and re-use, water conservation and efficiency, and low impact development; and*
- g) *align with any comprehensive municipal plans for stormwater management that consider cumulative impacts of stormwater from development on a watershed scale.*

General Comments on OPA

- Schedules X3 and X4 show the same areas, however one is for the lands to be designated Urban Area and the other refers to lands to be designated Major Employment Area.
- Watershed plans and subwatershed studies are mentioned in several sections of the County's Official Plan. We strongly recommend that the County reiterate and reinforce the important role of subwatershed studies by incorporating the language from all of Section 4.2 of the 2024 PPS, with particular emphasis on subsections 2 through 5.
- Subwatershed planning has been taking place in Ontario for over thirty years and we encourage the County to include language in the OP and OPA documents requiring that subwatershed studies and secondary plans be completed for all development areas of appreciable size (i.e. greater than 30 – 40 hectares). Section 1.5 of the 2022 Draft Subwatershed Planning Guide describes the relationship of watershed planning to land use and infrastructure planning:

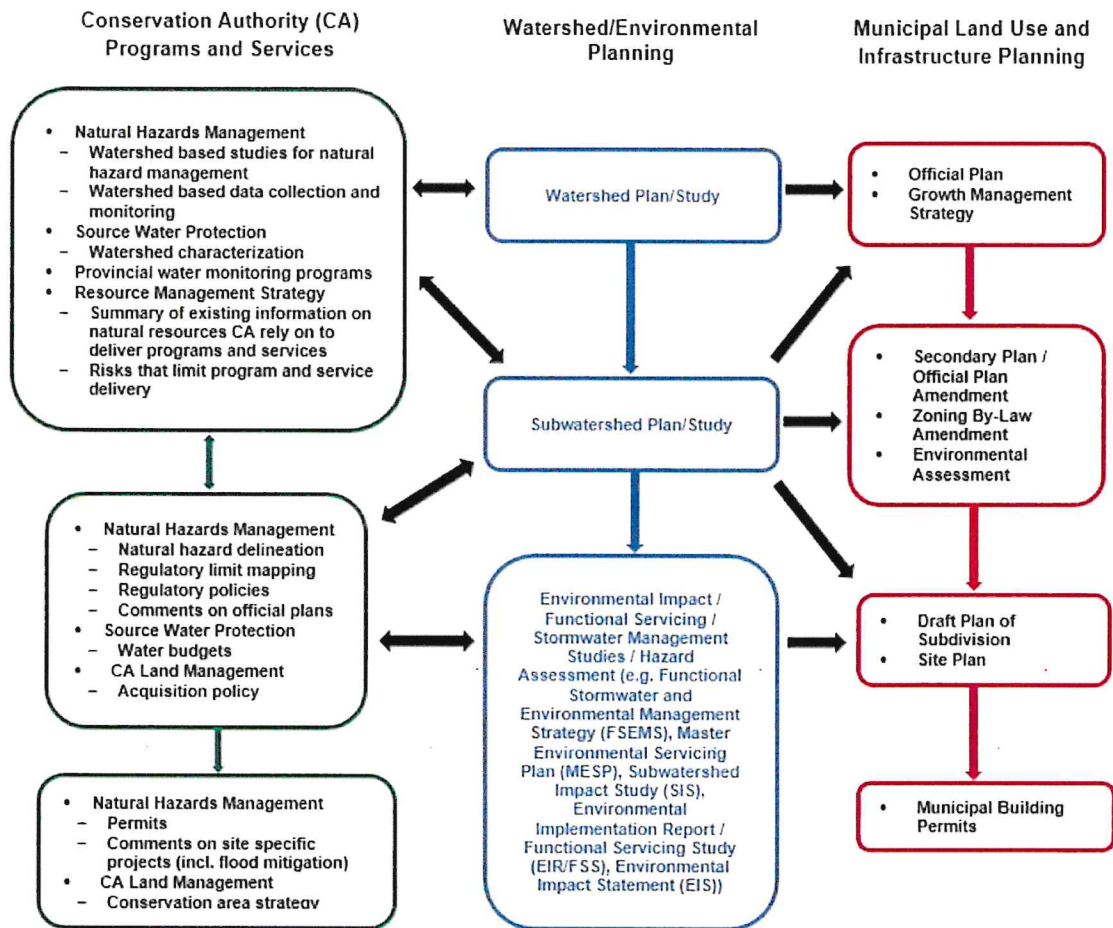
Watershed planning informs broad scale municipal planning processes, including decisions on allocation of growth, planning for water, wastewater and stormwater infrastructure, and the identification of water resources within the watershed. Subwatershed planning informs site-specific development applications and official plan amendments, site plans, zoning, plans of subdivision, secondary plans, master environmental servicing plans and environmental approvals. Some planning authorities develop subwatershed plans to inform all planning decisions for a growing area. This may also be required to meet provincial policies provided that the subwatershed plan contains the appropriate information to inform planning decisions.

- From the “Subwatershed Planning Guide (Draft) January 2022” the benefits of subwatershed planning include:
 - Protecting, improving, or restoring the quality and quantity of water in a watershed.
 - Mitigating potential risk to drinking water sources.
 - Mitigating potential risk to public health or safety or of property damage from flooding and other natural hazards and the impacts of a changing climate.
 - Facilitating an integrated and long term planning approach at a watershed scale.
 - Identifying water resource systems, which are necessary for the ecological and hydrological integrity of the watershed.
 - Clarifying roles and responsibilities among municipalities, provincial ministries and conservation authorities.
 - Streamlining planning processes and reducing duplication and delays.
 - Facilitating complete communities.

A link to the Subwatershed Planning Guide can be found here:

<https://ero.ontario.ca/notice/019-4978>

- Figure 2 from the Subwatershed Planning Guide illustrates the inter-relationship between the various planning processes that local agencies perform and highlights the role that watershed and subwatershed planning plays in the process. See the following flow diagram:



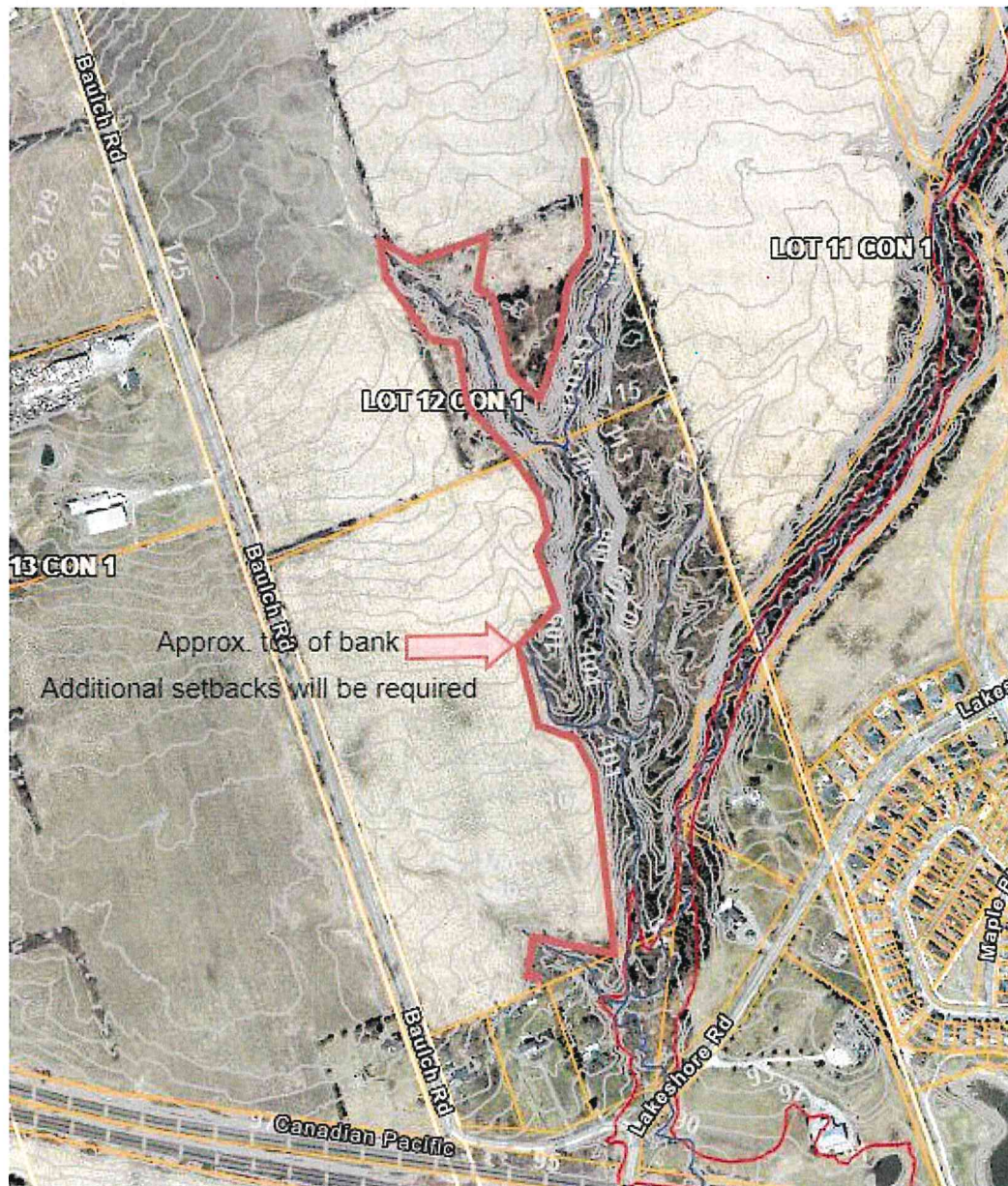
- The expansion area for the Municipality of Port Hope is focused to the west. Staff request additional justification and/or discussion for this option and a review and summary of the other options that were investigated. Furthermore, GRCA is unclear if other expansion concepts have considered preliminary feasibility assessments for servicing options and associated cost estimates.
- GRCA notes that, when requesting documents from the County, a cost estimate was provided for the servicing of the lands north of Telephone Road. Please advise whether a similar cost estimate was prepared for the proposed residential expansion lands to the west. If so, please provide to GRCA. If not, it is recommended that such an analysis and cost estimate be completed.

Review of Technical Documents

North South Environmental – Preliminary Constraints Assessment – Port Hope Settlement Area Lands

- The limit of regulated natural hazards were acquired from GRCA's online screening tool and is not an accurate depiction of all natural hazard limits. These limits need to be refined in consultation with GRCA staff.

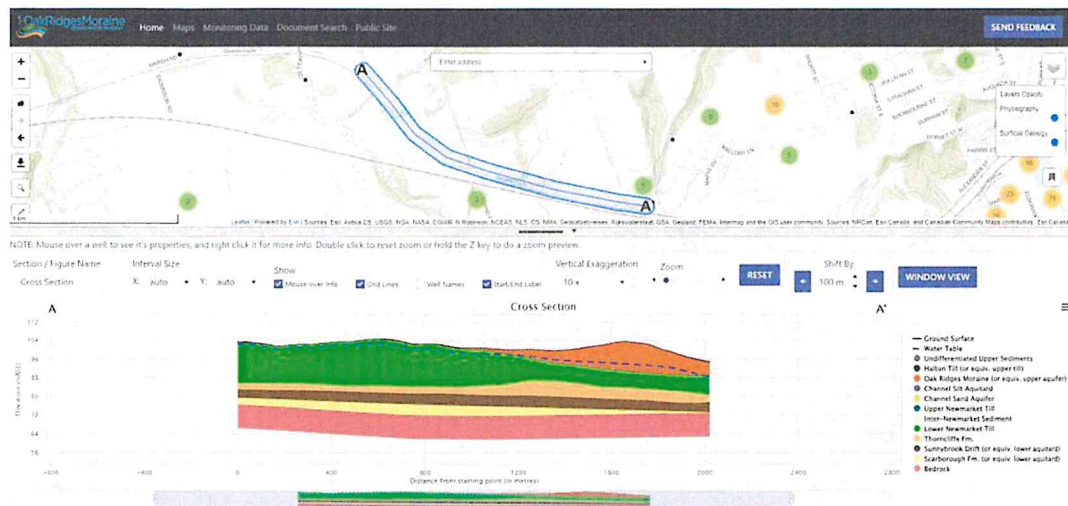
- Valley slopes – GRCA does not support construction on, within or over a valley slope, and will require setbacks from the top of slope for new construction or lot grading. This includes any overhangs or cantilevered structures and is to ensure that new development is protected from potential slope instability or erosion and to protect the environmental integrity of the valley system. GRCA may require a geotechnical investigation to determine the extent of the erosion hazard. The erosion hazard of the watercourse must also be considered. GRCA may require an additional access allowance of 6m from the top of bank or long term stable slope line (whichever is greater). No SWM facilities will be supported within the hazard lands or required setbacks. See mapping excerpt below.



- Floodplains – Although not mapped, all watercourses have an associated floodplain. There are watercourses on the subject properties. GRCA's primary concern is the protection of life and property from the flood hazard. GRCA's concerns for new construction would include maintaining setbacks to address channel bank erosion, sediment control during construction, and no negative impact to Regulatory Storm Floodplain. It will be necessary to determine the extent of the floodplain of these watercourses to establish limits of development. All SWM facilities should be outside the floodplain and no development (including lot lines) can extend into the floodplain.
- Fisheries data did not include existing brook trout records for tributaries of Brands and Little's Creek. These features are supported by groundwater inputs/upwellings and would need to be clearly identified and protected through the development process. Additionally, any stormwater management measures draining to these features would need to incorporate thermal mitigation measures.
- Stormwater management constraints/criteria needs to be established through a subwatershed study and secondary plan process. This would typically include unitary volume and discharge rates for flood control, erosion control and water quality control (including thermal mitigation) measures, recommended Low Impact Development (LID) best management practices, etc.

GM Blue Plan – Feasibility of Servicing Future Settlement Expansion Area West of Port Hope

- Wastewater Option 1 vs Option 2 – GRCA has reviewed the LiDAR-based digital terrain model (DTM) for the area and notes that the creek invert is closer to 119 meters above sea level (masl). This is approximately 4 metres lower than the 123 masl that was estimated in the GM Blue Plan assessment. This lower invert creates physical challenges to the servicing of the triangular area in the northwest portion of the proposed settlement expansion area and points to Option 2 (new pumping station) as the more viable servicing option.
- GRCA has concerns with the depth of the sanitary sewer trenches along the south limit of the proposed expansion area. In reviewing the hydrogeology of the area, the water table appears to be rather high which is a significant concern for GRCA (see blue dashed line in cross section figure below).



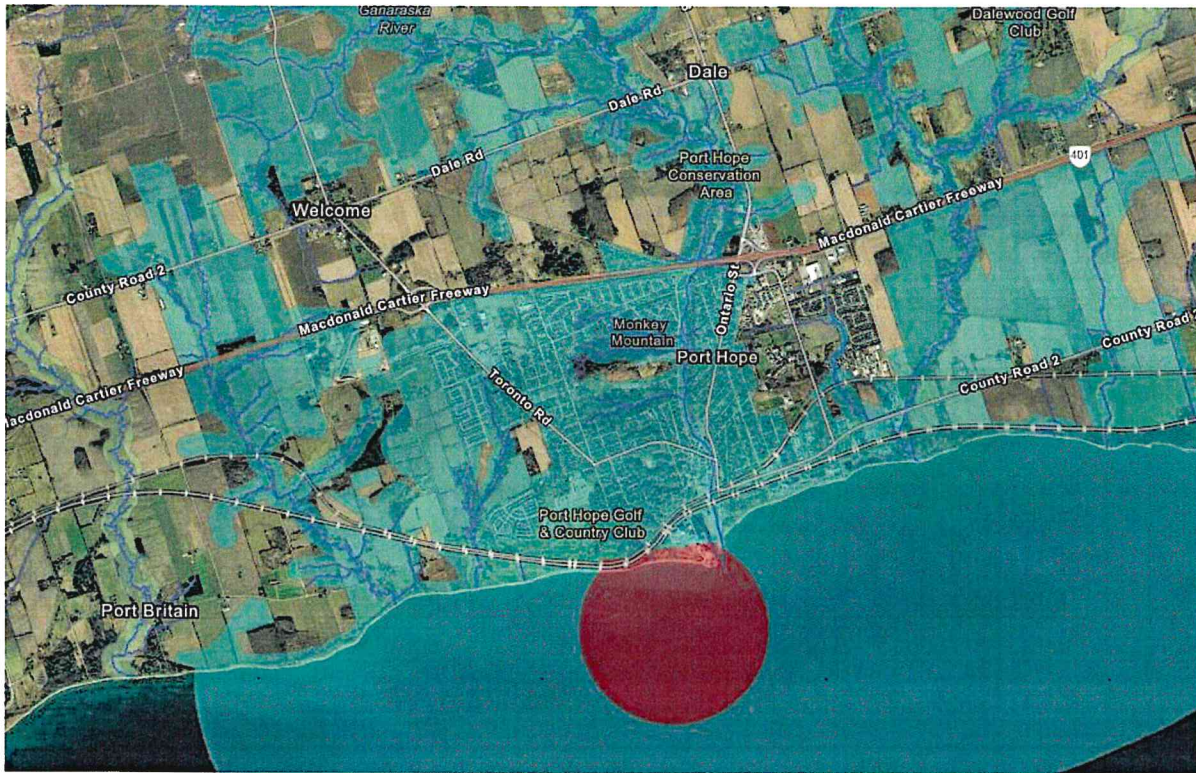
- Sanitary sewer trenches are often in excess of 4 metres in depth and could potentially steal or divert groundwater away from local watercourses and fish habitat. Mitigation measures, such as trench plugs, may need to be incorporated into design concepts for this area. A detailed understanding of local hydrogeology/groundwater features, potential development impacts, and mitigation measures need to be studied through a subwatershed study process.

North South Environmental – Preliminary Constraints Assessment for Settlement Area Lands

- The limit of regulated natural hazards shown for the major employment lands north of Telephone Road, depicted in Figure 5, were acquired from GRCA's online screening tool and are not an accurate depiction of all natural hazard limits. These limits need to be identified and refined in consultation with GRCA staff.
- Stormwater management constraints/criteria for the area north of Telephone Road needs to be established through a subwatershed study and secondary plan process. This would typically include unitary volume and discharge rates for flood control, erosion control and water quality control (including thermal mitigation) measures, recommended Low Impact Development (LID) best management practices, etc.

Source Water Protection Comments

As part of the Source Protection Plans (SPPs), the Source Protection Committees (SPCs) delineate Intake Protection Zones (IPZs) around surface water intakes (e.g. lakes, rivers) that serve as municipal drinking water sources. The IPZs are defined based on the time it would take for a contaminant to reach the intake under various flow conditions. The planned development, both to the north and west of Port Hope, is in the IPZ-2 vulnerable area as depicted in the image below.



The IPZ-2 zone represents the secondary protection zone around a surface water intake for a municipal drinking water system. It is the area within which a contaminant could reach the intake within a 2-hour time of travel under an extreme event. As such, when new developments are planned within that area, several considerations come into play:

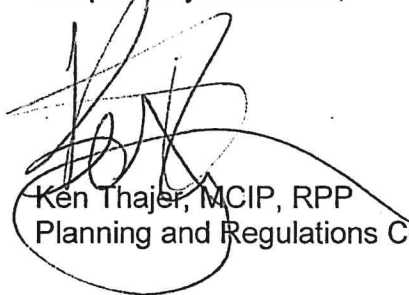
- Evaluate the potential for the development to introduce new contaminant threats or increase risks to the drinking water source.
- Compliance with Source Water Protection policies is required through the municipal planning and approvals process. This could include restrictions on certain land uses, requirements for spill prevention plans, and enhanced monitoring/reporting near the intake.
- Particular attention should be given to transport pathways that may be constructed when the area is developed. Under the *Clean Water Act*, 2006 in Ontario, a transportation pathway is defined as:
 - "A natural or constructed conduit or channel that could facilitate the movement of contaminants from a source to a drinking water system."
- Some key aspects of how transportation pathways are defined under the legislation include:
 - **Constructed pathways:** These are man-made structures or infrastructure that can facilitate the movement of contaminants. Examples include roads, railways, sewers, culverts, ditches, and underground utilities.
 - **Conduits and channels:** The pathways do not necessarily have to be fully enclosed or pipe-like. Open channels, overland flow routes, and preferential flowpaths are also considered transportation pathways.
 - **Facilitating contaminant movement:** The key criteria is the pathway's

ability to move contaminants from a source to a drinking water system, such as a surface water intake. This includes the potential for spills, leaks, runoff, or other means of contaminant transport.

- The identification and assessment of transportation pathways is a critical component of the source water protection planning process under the *Clean Water Act*. It helps guide the development of policies, risk management measures, and emergency response protocols to safeguard drinking water sources.
- As noted previously, any potential risks to drinking water sources would need to be identified and mitigated through a subwatershed study process.

We trust that the above information is of assistance. GRCA staff would be pleased to discuss these comments in greater detail. Please contact the undersigned if you have any questions or would like to discuss these comments.

Respectfully submitted,



Ken Thajer, MCIP, RPP
Planning and Regulations Coordinator



Cory Harris, P. Eng.
Watershed Services Coordinator

Conservation Authorities Act - Ontario Regulation 41/24

Permits approved by Executive:

Date: September 19, 2024

Permit No.	Date	Address	Municipality/ Township	Description of Works
2357-07/24	Jul 2/24	9120 Dale Road, Cobourg Pt.Lt.10, Conc.3	Hamilton	Construction of an addition to an existing dwelling
2367-07/24	Jul 9/24	3299 Concession Road 3 Newcastle Pt.Lts. 32 & 33, Conc. 2	Clarington	Construction of a non-habitable storage barn.
2368-08/24	Aug 6/24	583 Daintry Crescent Cobourg	Cobourg	Construction of a new front porch, new main floor entrance, changes to existing driveway and interior alterations for the creation of a legal basement apartment.
2371-06/24	Jun 20/24	755 Division Street	Cobourg	Regrading an existing parking lot and the reconstruction and enhancement of an existing swale outlet.
2372-07/24	Jul 8/24	5487 Front Street Harwood Pt.Lts. 3 & 4, Conc. 9	Hamilton	Construction of additions to 4 existing cottages.
2376-06/24	Jun 13/24	Workman Road (Town Right-of-way), adjacent #1617	Cobourg	Restabilize creek bank adjacent Massey Creek, with vegetation planting and temporary placement of rip rap.
2377-07/24	Jul 2/24	6 Hamilton Court Cobourg	Cobourg	Construction of a replacement dwelling on an existing footprint.
2378-07/24	Jul 5/24	3030 Stapleton Road (TransCanada Pipelines right-of-way), Newtonville Pt.Lt. 14, Conc. 3	Clarington	Excavation for integrity dig for pipeline inspection and maintenance.
2379-07/24	Jul 19/24	5703 Main Street, Orono Pt.Lt. 28, Conc. 5	Clarington	Construction of a house addition with garage.
2380-07/24	Jul 3/24	1 Eldorado Place (West of Port Hope Harbour Turning Basin)	Port Hope	Soil stabilization, fill and grading work, including the construction/ replacement of a storage area footprint.
2383-06/24	Jun 28/24	5269 Oriole Beach Road, Unit #110 – Gores Landing Pt.Lt. 2, Conc. 9	Hamilton	Construction of a detached garage.
2384-06/24	Jun 28/24	4753 D Mastwoods Road Port Hope Pt.Lt. 21, Conc. 4	Port Hope	Construction of an in-ground swimming pool and surrounding decking.

Conservation Authorities Act - Ontario Regulation 41/24

Permits approved by Executive:

Date: September 19, 2024

Permit No.	Date	Address	Municipality/ Township	Description of Works
2385-07/24	Jul 5/24	81 William Allin Court Newcastle Pt.Lt. 19, Conc. 2	Clarington	Construction of a covered deck extension.
2386-07/24	Jul 19/24	V/L north of Talbot Drive Port Hope Pt.Lt. 2, Conc.1	Port Hope	Development activity and alteration to a watercourse for the installation of a crossing of Gages Creek.
2387-07/24	Jul 19/24	3 Coronation Crescent Cobourg	Cobourg	Construction of a new detached additional residential unit with deck (no basement or grading proposed).
2388-07/24	Jul 19/24	1 Eldorado Place Pt.Lt. 6, BF Conc.	Port Hope	Mechanical dredge from the Port Hope outer harbour.
2389-07/24	Jul 19/24	1000 D'Arcy Street, #23 (23 Nickerson Woods) Cobourg	Cobourg	Construction of a new deck.
2390-07/24	Jul 19/24	5304 Rice Lake Scenic Drive Gores Landing Pt.Lt.14, Conc.9	Hamilton	Installation of replacement septic system.
2393-08/24	Aug 8/24	Port Hope Harbour (west wall of Harbour Approach Channel) Pt.Lt. 6, BF Conc.	Port Hope	Removal of a water intake structure and isolate existing penetrations of harbour wall.
2394-08/24	Aug 23/24	East side of North Street to west side of Arthur street, south of Conc. Rd. 3 – Newcastle Pt.Lts. 27 & 28, Conc. 2	Clarington	Installation of a new natural gas pipeline to a new subdivision (Phase 1)
2395-09/24	Sep 12/24	7574 White Road Kendal Pt.Lts. 11 & 12, Conc. 7	Clarington	Filling and grading to facilitate the installation of a new driveway
2396-08/24	Aug 23/24	East side of North Street to west side of Arthur street, south of Conc. Rd. 3 – Newcastle Pt.Lts. 27 & 28, Conc. 2	Clarington	Installation of a new natural gas pipeline to a new subdivision (Phase 2)
2397-08/24	Aug 15/24	Victoria Park Estates – Reg. Plan 40-M-2661, Reg. Lot 1 Newtonville Pt.Lts. 1 & 2, Conc. 1	Clarington	Construction of a new single family dwelling and septic system.

Conservation Authorities Act - Ontario Regulation 41/24

Permits approved by Executive:

Date: September 19, 2024

Permit No.	Date	Address	Municipality/ Township	Description of Works
2398-08/24	Aug 15/24	Victoria Park Estates – Reg. Plan 40-M-2661, Reg. Lot 3 Newtonville Pt.Lts. 1 & 2, Conc. 1	Clarington	Construction of a new single family dwelling and septic system.
2399-08/24	Aug 15/24	Victoria Park Estates – Reg. Plan 40-M-2661, Reg. Lot 4 Newtonville Pt.Lts. 1 & 2, Conc. 1	Clarington	Construction of a new single family dwelling and septic system.
2400-08/24	Aug 15/24	1 Foster Creek Drive – Newcastle Pt.Lt. 29, Conc.1	Clarington	Construction of an in- ground pool and surround patio.
2401-08/24	Aug 23/24	Midtown Creek north of Kerr Street, west of Division Street Pt.Lt.17, Conc.A	Cobourg	Completing necessary repairs identified throughout monitoring program under the direction of DFO.
2402-08/24	Aug 29/24	Don Parker Way and North Street Pt.Lt. 28, Conc.2	Clarington	Installation of approximately 170 metres of gas pipeline.
2403-09/24	Sep 3/24	5316 County Road 28 Port Hope Pt.Lt. 1, Conc. 5	Port Hope	Installation of a 90 metre guy-line Telecommunications tower.
2404-09/24	Sep 5/24	Cobourg West Beach (from Ontario Street to Hibernia Street	Cobourg	Replacement of existing wooden boardwalk (in same location).
2405-09/24	Sep11/24	1 Eldorado Place Pt.Lt. 6, BF Conc.	Port Hope	Fill Placement, grading and paving associated with the removal of former cooling water pumphouse equipment and services.
2406-09/11	Sep11/24	215 Nickerson Drive Cobourg	Cobourg	Construction of an addition to an existing single family dwelling.
2408-09/24	Sep11/24	2383 Payn Road Baltimore Pt.Lt. 4, Conc.1	Hamilton	Construction of a single family dwelling and septic system.

MINUTES OF THE GANARASKA FOREST

RECREATIONAL USERS COMMITTEE

September 5, 2024

RUC 3/24

1. Welcome and Call to Order

Bob Gallagher welcomed all present and introduced himself as the new Chair of the Recreational Users Committee. The Chair called the Ganaraska Forest Recreational Users Committee (RUC) meeting to order at 7:01 pm, followed by a brief introduction of committee members and Ganaraska Region Conservation Authority (GRCA) representatives that were present.

MEMBER PRESENT: Bob Gallagher, Chair
Jim Pearson, Ontario Trail Riders Association
Jennifer Jackman, Ontario Nature
Garry Niece, Hike Ontario
Randy Cunningham, Ontario Federation of Snowmobile Club
Amber Panchyshyn, Orienteering Ontario
Lisa Thompson, Ontario Federation of Trail Riders
Alex Schmidt, Ontario Cycling Association
Carolyn Richards, Ontario Federation of ATV Clubs
Steve Brownell, Municipality of Port Hope
Lance Nachoff, GRCA Board of Directors

ALSO PRESENT: Ed Van Osch, GRCA Forest Recreation Technician
Pam Lancaster, GRCA Conservation Lands Coordinator
Gus Saurer, GRCA Forester

ABSENT WITH REGRETS: Maureen McDonald, Township of Cavan Monaghan

ALSO ABSENT: Matthew Robbins, Ontario Federation of Anglers and Hunters
Peter Wood, Ontario Federation of 4WD Recreationists
Cross Country Ski Ontario (position unfilled)
City of Kawartha Lakes (position unfilled)

2. Disclosure of Pecuniary Interest

None.

3. Minutes of the Last Meeting

Alex Schmidt inquired about the results of a statement made by during the June 6, 2024 minutes in Section 10, Other Business, referring to the Chair Lance Nachoff offering for members to send their three biggest concerns about the Forest to him or Pam Lancaster, Conservation Lands Coordinator.

Lance Nachoff, stated that in light of the chair position being vacant at the time, the submitted comments were held until the Chair position had been filled.

RUC 07/24

MOVED BY: Alex Schmidt
SECONDED BY: Jim Pearson

THAT the Ganaraska Forest Recreational Users Committee approve the minutes of the June 6, 2024 meeting.

CARRIED.

4. Adoption of Agenda

Alex Schmidt requested to add a notice of motion under new business regarding the allowance of Class 1 E-mountain bike use within the Central Forest. Additionally, Steve Brownell requested to add a notice of motion under new business regarding the discussion of 2.1 of the RUC Terms of Reference and the membership of the RUC. The Chair accepted the two notice of motions under new business.

RUC 08/24

MOVED BY: Garry Niece
SECONDED BY: Jim Pearson

THAT the agenda be adopted with the addition of two new business items.

CARRIED.

5. Delegations

None

6. Presentations

DSV-101 Managing the Pest in the Ganaraska Forest was presented by Gus Saurer, GRCA Forester.

Jim Pearson inquired as to pesticide applications currently occurring in the Ganaraska Forest. Gus Saurer informed the RUC that GRCA did receive funding grants for invasive species control during both 2023 and 2024. Pesticides application is part of this funding. GRCA is not currently applying pesticides within the Ganaraska Forest but has done some pesticide controls in the demonstration tall grass prairie plot near to the Ganaraska Forest Centre.

Jennifer Jackman inquired as to the effectiveness of the Hypena moth. Gus Sauer informed the RUC that trials in York Region have shown positive results, and current information indicates positive winter survival numbers.

RUC 09/24

MOVED BY: Carolyn Richards
SECONDED BY: Steve Brownell

THAT the Ganaraska Forest Recreational Users Committee receive the Dog Strangling Vine Information presentation for information.

CARRIED.

7. Business Arising from the Minutes

None

8. Correspondence

None

9. New Business

a) Trailhead Signage Update

Steve Brownell inquired as to why GRCA removed OFTR signage from the Ganaraska Forest. Pam Lancaster informed the RUC that the proposed Conservation Lands Strategy will support and direct signing procedures within the Ganaraska Forest, and that GRCA has paused removal of all signage until the Conservation Lands Strategy is approved by the Board of Directors.

Jim Pearson requested that the RUC be provided with a chance to review the Ganaraska Forest signage design. Pam Lancaster informed the RUC that Conservation Lands Strategy will support a consistent message to the Forest Users.

Pam Lancaster clarified the locations of new signage and informed the RUC of the plan to implement the first trail signage applications on the Central Forest yellow trail beginning in 2025.

RUC 10/24

MOVED BY: Carolyn Richards

SECONDED BY: Lisa Thompson

THAT the Ganaraska Forest Recreational Users Committee receive the Trailhead Signage Update Staff report for information.

CARRIED.

b) Trail Maintenance Update

Alex Schmidt inquired, what are the guidelines for trail maintenance within the Ganaraska Forest. Pam Lancaster informed the RUC that Staff are developing trail maintenance guidelines through the Conservation Lands Strategy.

Alex Schmidt stated that both Albion Hills and Kelso Conservation Areas have excellent trail systems that GRCA could look to as an example.

RUC 11/24

MOVED BY: Jennifer Jackman

SECONDED BY: Jim Pearson

THAT the Ganaraska Forest Recreational Users Committee receives the Trail Maintenance Update Staff report for information.

CARRIED.

c) Recreational User Group Discussion

A discussion occurred where each RUC representative was asked to share what their respective User group valued at Ganaraska Forest. Some comments include but are not limited to:

- Ganaraska Forest offered a variety of high-quality trails in the Central Forest.
- Access for families and generational use.
- Valuable conservation area providing habitat space that provides various ecological functions.
- Opportunities for volunteering and funding opportunities.
- User Group has a good working relationship with GRCA
- Trail design meets the needs of User group
- Ganaraska Forest is the only Conservation Area within Ontario that offers a motorized trail system
- Desire exists for increased communication capability between user groups and GRCA
- User Groups are interested in various options for recreational use

RUC members also discussed issues, some of which surrounded lack of signage, the need for more trail maintenance, the need for increased volunteerism, a cap of 100 participants for special events, lack of cellular signals in the Forest and users of the Forest that do not follow federal, provincial, municipal or GRCA rules including the need for day passes or memberships.

RUC 12/24

MOVED BY: Alex Schmidt

SECONDED BY: Jim Pearson

THAT the Ganaraska Forest Recreational Users Committee receive the Recreational Users Group Discussion staff report for information; and,

FURTHER THAT the Ganaraska Forest Recreational Users Committee continue to provide Forest Recreation Technician with User Group specific information, updates and concerns.

CARRIED.

d) New Business: Notice of Motion to Allow Class 1 E-Mountain Bike Use Within the Central Forest

Alex Schmidt provided a notice of motion for the November 7, 2024 RUC meeting. The motion is: "To Allow Class 1 E-Mountain Bike Use Within the Central Forest".

RUC 13/24

MOVED BY: Alex Schmidt

SECONDED BY: Jim Pearson

THAT a notice of motion to allow Class 1 E-mountain bike use within the Central Forest be added to the November 7, 2024 RUC meeting.
CARRIED.

e) New Business: Notice of Motion for a Discussion on 2.1 of the RUC Terms of Reference to Provide Possible Recommendations to the Board of Directors

Steve Brownell provided a notice of motion for the November 7, 2024 RUC meeting. The motion is: “A Discussion on 2.1 of the RUC Terms of Reference to Provide Possible Recommendations to the Board of Directors”.

RUC 14/24

MOVED BY: Steve Brownell

SECONDED BY: Jim Pearson

THAT a notice of motion for a Discussion on 2.1 of the RUC Terms of Reference to Provide Possible Recommendations to the Board of Directors be added to the November 7, 2024 RUC meeting.
CARRIED.

10. Other Business

None

11. Adjourn

The meeting adjourned at 8:44 pm.

RUC 15/24

MOVED BY: Jim Pearson

SECONDED BY: Alex Schmidt

THAT the meeting adjourn.
CARRIED.

The next meeting of the Ganaraska Forest Recreational User Committee is Thursday, November 7, 2024 at 7:00 pm.

Chair



Conservation Lands Coordinator

STAFF REPORT – September 19, 2024

TO: Chair and Members of the Board of Directors

RE: Draft Watershed-Based Resource Management Strategy

In December 2020, changes to the *Conservation Authorities Act* resulted in the introduction of mandatory programs and services which are to be delivered by all conservation authorities. Ontario Regulation 686/21, specifically, subsection 12(1), paragraph 3, outlines that all conservation authorities must complete a Watershed-Based Resource Management Strategy (WBRMS).

The purpose of this Strategy is to assist the Ganaraska Region Conservation Authority (GRCA) with evolving and/or enhancing the delivery of programs and services that support mandatory Category 1 programs that serve municipal partners and the broader watershed community.

As part of this Strategy, GRCA drafted guiding principles and objectives that inform the design of programs and services, included a summary of information the GRCA relies on to directly inform and support program and service delivery, and identified any issues and risks which may limit effective delivery of Category 1 programs and services, including actions to address such risks.

Attached to this staff report is the draft WBRMS that has been prepared and internally reviewed by staff. After the receipt of the strategy by the Board, public consultation will occur consisting of an online survey and a call for written comments. Following public consultation, a final WBRMS will be presented in the fall to the Board of Directors for consideration.

RECOMMENDATION:

THAT the Ganaraska Region Conservation Authority receives the Draft Watershed-Based Resource Management Strategy staff report for information;

FURTHER THAT the Ganaraska Region Conservation Authority receives the Draft Watershed-Based Resource Management Strategy document for information and review; and


FURTHER THAT the Ganaraska Region Conservation Authority directs staff to undertake public consultation.

Prepared by:

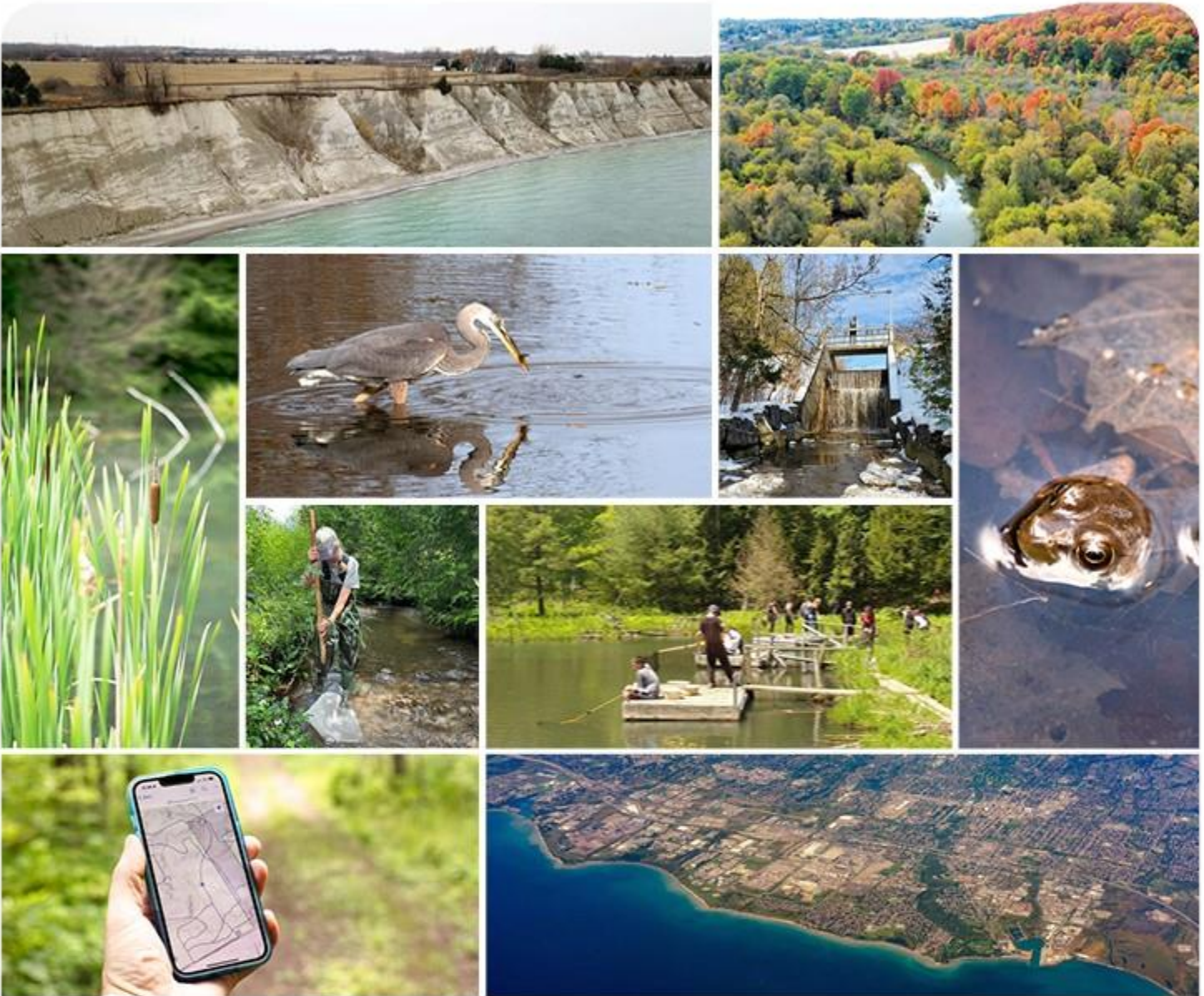


Cory Harris, P.Eng.
Watershed Services Coordinator

Recommended by:



Linda J. Laliberte, CPA, CGA
CAO / Secretary-Treasurer



Watershed-Based Resource Management Strategy

Draft September 2024



Preface

This Watershed Based Resource Management Strategy has been prepared by the Ganaraska Region Conservation Authority to meet the provisions set out under Section 21.1 of the *Conservation Authorities Act* and Ontario Regulation 686/21 under this Act.

Land Acknowledgement

The Ganaraska Region Conservation Authority respectfully acknowledges that the land on which we gather is situated within the traditional and treaty territory of the Mississauga's and Chippewa's of the Anishinabek, known today as the Williams Treaties First Nations. Our work on these lands acknowledges their resilience and their longstanding contribution to the area. We are thankful for the opportunity to live, learn and share with mutual respect and appreciation.

DRAFT

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1.0 Introduction

1.1 Purpose of the Watershed-Based Resource Management Strategy

The Watershed-based Resource Management Strategy (WBRMS) was undertaken by the Ganaraska Region Conservation Authority (GRCA) to meet requirements as outlined in the revised Conservation Authorities Act (CA Act) and release of [Ontario Regulation 686/21](#) (Regulation). The WBRMS will provide GRCA with guidance regarding continued programs and projects and the development and implementation of resource management programs on a watershed basis.

1.2 Regulatory Framework

The Regulation, specifically, subsection 12(1), paragraph 3 outlines that all conservation authorities must complete a Watershed-based Resource Management Strategy. The main requirements of the Watershed-based Resource Management Strategy per Section 12(4) of Ontario Regulation 686/21 are outlined below.

1. Guiding principles and objectives that inform the design and delivery of the programs and services that the authority is required to provide under section 21.1 of the Act.
2. A summary of existing technical studies, monitoring programs and other information on the natural resources the authority relies on within its area of jurisdiction or in specific watersheds that directly informs and supports the delivery of programs and services under section 21.1 of the Act.
3. A review of the authority's programs and services provided under section 21.1 of the Act for the purposes of,
 - i. determining if the programs and services comply with the regulations made under clause 40 (1) (b) of the Act,
 - ii. identifying and analyzing issues and risks that limit the effectiveness of the delivery of these programs and services, and
 - iii. identifying actions to address the issues and mitigate the risks identified by the review, and providing a cost estimate for the implementation of those actions.
4. A process for the periodic review and updating of the watershed-based resource management strategy by the authority that includes procedures to ensure stakeholders and the public are consulted during the review and update process.

1.3 Brief History of the Ganaraska Region Conservation Authority

The early days of conservation began in the late 1800s with the realization that ongoing deforestation was having devastating environmental, social and economic impacts. Many individuals, community groups and organizations were ringing alarm bells at local and regional levels. Numerous pieces of legislation, policies, and programs were developed in the late 1800s and early 1900s in an effort to improve land management practices, protect existing, and restore degraded landscapes. However, one of the most instrumental additions to the conservation movement was the passing of the *Conservation Authorities Act* in 1946.

The *Conservation Authorities Act* came to be in part by a group of conservationists who met to discuss shared conservation concerns at the Guelph Conference in 1941. In order to build a case for conservation in Ontario, members of the Guelph Conference decided that a pilot survey should be carried out and funded by the provincial and federal governments. The selected survey site was the Ganaraska River watershed, with the survey being conducted from 1942 to 1943. The Ganaraska River watershed survey, the work carried out by the founding conservation associations, and the *Conservation Authorities Act*, paved the way for the creation of the 36 Conservation Authorities that exist today.

The resulting report from the pilot study entitled "Ganaraska Watershed: A study in land use with recommendations for the rehabilitation of the area in the post war period" by A.H. Richardson, provided the necessary plan for managing the Ganaraska River watershed. Under the Conservation Authorities Act, the Ganaraska River Conservation Authority was formed on October 8, 1946, making it one of the first Authority's formed. While other Conservation Authorities were awaiting a conservation report from the Conservation Branch, the Ganaraska River Conservation Authority began implementing the recommendations from the Ganaraska Watershed report.

Locally, effects of land use changes and land cover were being realized in other watersheds. The Ontario Forestry Branch published "A Study in Forest Conservation and Land Use on the headwaters of Wilmot Creek" in 1940, two years before the survey work of the Ganaraska River.

In 1962 and under a requested expansion by local municipalities, Wilmot Creek, Graham Creek, and smaller streams flowing to Lake Ontario in the west were added to the responsibility of the Ganaraska River Conservation Authority. With this expansion, the Authority was re-named the Ganaraska Region Conservation Authority (GRCA). In 1970 Gage Creek, Cobourg Creek and streams flowing to Lake Ontario and Rice Lake in the east were added. With the final expansion, the GRCA covers an area of 935 square kilometres from Wilmot Creek in Clarington to east of Cobourg from the south shore of Rice Lake down to Lake Ontario.

Today, this area includes seven municipalities in whole or in part: Township of Cavan Monaghan, Town of Cobourg, Township of Alnwick/Haldimand, Township of Hamilton, Municipality of Port Hope, City of Kawartha Lakes, and Municipality of Clarington. The location of the municipal boundaries within the GRCA watershed are shown in **Figure 1**.

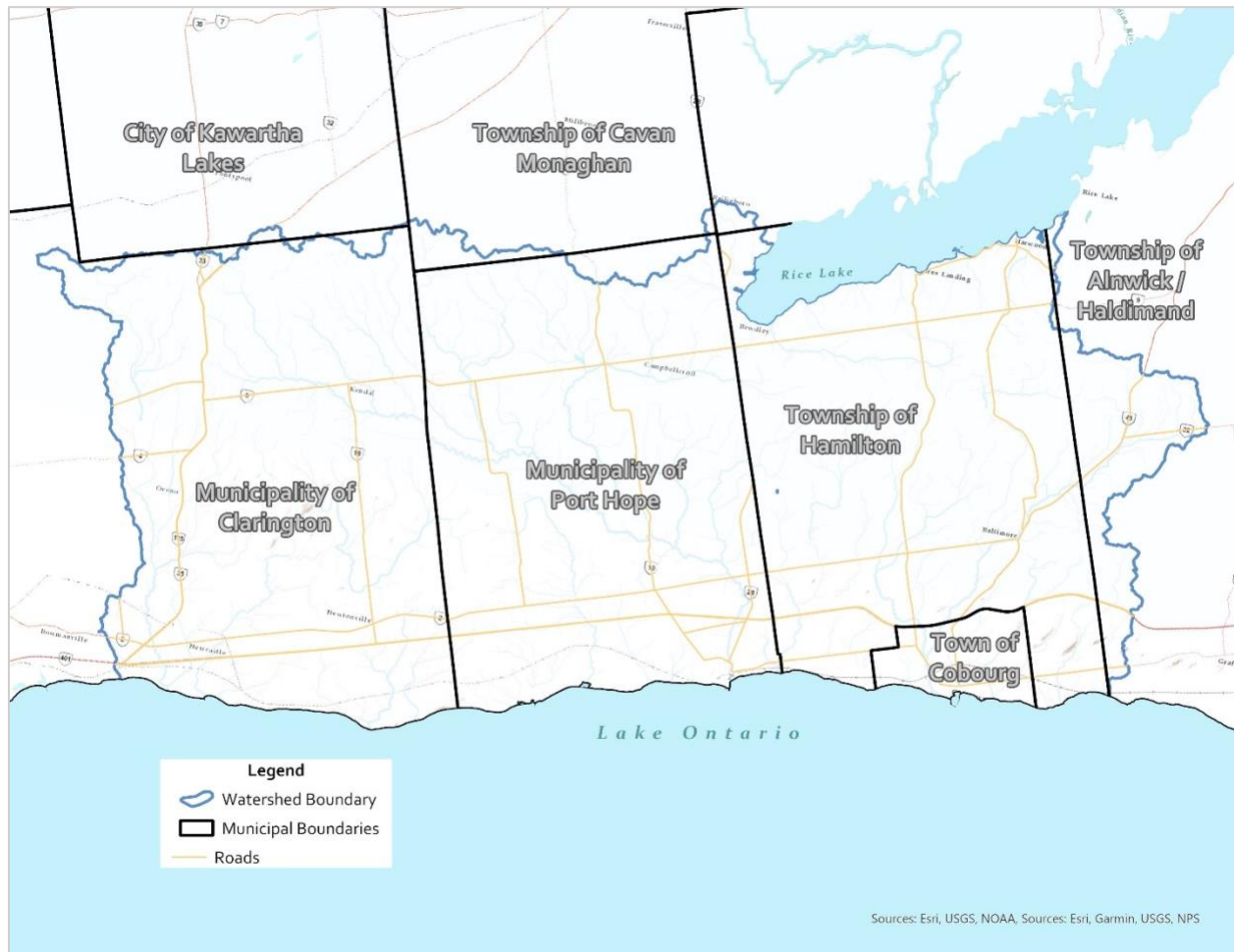


Figure 1 - Location of Municipal Boundaries in GRCA Watershed

The GRCA watershed is in the traditional and treaty territory of the Mississauga’s and Chippewa’s of the Anishinabek, known today as the Williams Treaties First Nations.

The GRCA operates under the requirements of the CA Act. Section 0.1 of the CA Act states that:

“The purpose of this Act is to provide for the organization and delivery of programs and services that further the conservation, restoration, development and management of natural resources in watersheds in Ontario.”

Governance of the GRCA is facilitated through the Board of Directors comprised of 11 Directors representing 7 municipalities. This includes 10 municipal Councillors and 1 agricultural representative. The GRCA works closely with our municipal partners as well local groups and agencies and both the Federal and Provincial governments.

2.0 Strategic Direction

2.1 GRCA's Strategic Plan

The GRCA developed a Strategic Plan called [Vision 2020](#) – to document GRCA's strategic organizational commitments and build on our legacy of conservation heritage to chart a path forward for 2015-2020 and beyond. The Strategic Plan was created over two years and involved a comprehensive consultation process with the GRCA Board of Directors, GRCA staff, member municipalities, partners, stakeholders, and the public. Vision 2020 illuminates important emerging areas of strategic priority and sets a course for ambitious, innovative and bold watershed management.

In 2020, GRCA prepared [“Vision 2020 - A Review that Illuminates the Future”](#) to summarize our accomplishments and will allow for reflection while determining how to continue this momentum into the future, while at the same time navigating the uncertainty imposed by the COVID-19 pandemic. The pause also allowed GRCA to consider the significant legislative changes to the *Conservation Authorities Act* brought forward by the province (15 amendments to the Act since 2018).

GRCA's Strategic Plan will be updated in the near future upon completion of the WBRMS.

GRCA's Vision and Mission Statements are summarized below.

Vision: Clean Water, healthy land for healthy communities

Mission: To enhance and conserve across the Ganaraska Region Watershed by serving, education, informing and engaging.

The Strategic Plan highlights the GRCA's commitment and shared corporate values as follows:

To Explore is to Value Knowledge: Knowledge has power. We value up to date knowledge and the wisdom of our staff and others. We are committed to working with others to build knowledge through research and information sharing.

To Learn is to Value Collaboration: We value the input of others. We listen and we learn from those who have an interest in how we carry out our responsibilities. We are a solution-focused organization. We promote teamwork because we value our partners and our partnerships.

To Lead is to Value Excellence: We value honesty, openness and accountability. We will focus on being accountable to ourselves and to one another. We are committed to service and business excellence, and we will be driven to earn the trust of those we serve.

To Evolve is to Value Innovation: Innovation comes from knowledge and critical thinking. Leading edge organizations are those that emphasize learning and focus on what they can do to foster a culture of innovation. We encourage innovation in order to continuously improve.

These values are foundational to the principles and objectives that GRCA developed within the WBRMS.

2.2 Watershed-Based Resource Management Guiding Principles

Section 12(4) of Ontario Regulation 686/21 notes that a Watershed-Based Resource Management Strategy shall include “Guiding principles and objectives that inform the design and delivery of the programs and services that the authority is required to provide under section 21.1 of the Act”.

Through a review of background documentation and GRCA’s strategic plan, the following guiding principles have been developed to meet the requirements of the CA Act and Ontario Regulation 686/21 and to inform the design and delivery of GRCA’s programs and services.

1. **Watershed-Based Management:** Conservation, restoration, development, and management of natural resources are most effective when implemented on a watershed basis, which provides a comprehensive framework for assessing and managing resource conditions and risks.
2. **Valuing Conservation Lands and Natural Assets:** Water and other natural resources are crucial for climate resilience, hazard mitigation, contaminant filtration, waste assimilation, biodiversity, and providing recreational spaces.
3. **Shared Responsibility:** Effective management of water and natural resources requires collaboration among Conservation Authorities, Municipalities, government agencies, First Nations, private landowners, and other stakeholders.
4. **Informed Decision-Making:** Watershed-based management strategies guide policies and decisions, ensuring they reflect community needs, ecosystem requirements, and a range of values.
5. **Integration and Transparency:** Resource management decisions should be integrated, transparent, and consider the diverse uses and values of the community, fostering trust and engagement among stakeholders.
6. **Community Engagement and Education:** Building strong relationships through collaboration, transparency, and public education promotes environmental stewardship and active participation in conservation efforts.
7. **Sustainable Management Goals:** Decision-making should be guided by clear, sustainable water management goals, targets, and risk prevention strategies that consider long-term environmental, economic, and community needs.
8. **Efficiency and Data Sharing:** Optimize benefits of sustainable water management with minimal cost, utilizing the best available scientific information and promoting data sharing among stakeholders and government levels for effective coordination.

2.3 Watershed-Based Resource Management Objectives

Flowing from the direction in the strategic plan and the principles identified above, the following objectives have been developed to meet the requirements of Ontario Regulation 686/21 and relate to Mandatory Programs and Services (Category 1) and support Municipal and Other Programs and Services (Category 2 and 3). Category 2 and Category 3 programs are essential to the support and delivery of Category 1 programs and services.

Priority 1: Water Management and Protection

- **Objectives:**

- Protect drinking water resources by implementing measures that reduce risks to water quality and availability.
- Characterize and monitor groundwater and surface water systems to support sustainable, clean water supply.
- Strengthen hydro-ecological functions to prepare for flood or drought conditions, reducing potential risks to public health and safety.
- Foster integrated planning for watershed management decisions to ensure the sustained beneficial uses of water resources.

Priority 2: Natural Hazard Risk Mitigation

- **Objectives:**

- Avoid, reduce, or mitigate potential risks to public health and safety, and to property from flooding and other natural hazards.
- Decrease local vulnerability to climatic extremes through adaptive and mitigation strategies.
- Work collaboratively with municipalities and stakeholders to develop and implement natural hazard prevention and management strategies.

Priority 3: Natural Heritage Conservation and Stewardship

- **Objectives:**

- Conserve and maintain Conservation Authority-owned lands to protect natural heritage, support outdoor recreation, and contribute to community well-being.
- Ensure the maintenance of biodiversity by protecting critical habitats and ecosystems within the watershed.
- Promote conservation and minimize degradation of natural resources through stewardship programs and community engagement.

Priority 4: Community Education and Engagement

- **Objectives:**

- Educate and engage the watershed community to raise awareness of natural hazards, watershed health, and the importance of protecting land and water resources.
- Inspire community action and participation in conservation efforts through targeted educational programs and stewardship initiatives.
- Support the development of environmental awareness and promote actions that contribute to the health and resilience of the watershed.

Priority 5: Sustainable Community and Economic Development

- **Objectives:**

- Support sustainable, healthy communities by integrating watershed knowledge into municipal and regional planning processes.

- Promote social and economic development that aligns with the conservation and sustainable use of natural resources.
- Identify and address key resource issues and stressors that impact the watershed, advocating for policies and funding that support sustainable management.

Priority 6: Advancing Watershed Knowledge

- **Objectives:**

- Advance watershed knowledge through research, monitoring, and data sharing to support evidence-based decision-making.
- Identify, understand, and prioritize key resource issues, and develop solutions that adapt programs and services to address emerging challenges.
- Promote the use of best available scientific information to guide the management and protection of watershed resources.

These priorities and objectives aim to guide the GRCA's strategic direction in effectively managing and protecting the watershed's natural resources while engaging and supporting the community.

2.4 Annual Budget

Each year the GRCA prepares a budget in consultation with the various municipal partners in order to reflect and align with the program priorities for the year. This approach equips the Conservation Authority to meet its goals and objectives and strive towards its corporate vision of Clean Water, healthy land for healthy communities. The budget categorizes the programs and services into Category 1, 2 and 3 (Mandatory, Municipal and Other) services.

3.0 Watershed Characterization

3.1 Physical Geography

The Ganaraska Region Conservation Authority (GRCA) oversees a watershed that is geographically diverse, encompassing approximately 935 square kilometers (km²) of land that extends from the Wilmot Creek watershed in the west to east of Cobourg Creek watershed, and from the crest of the Oak Ridges Moraine and Rice Lake in the north to Lake Ontario in the south. This watershed is in southeastern Ontario, nestled between the larger watersheds of the Trent River to the east and the Central Lake Ontario Conservation Authority watershed to the west. Its physiographical makeup is characterized by a variety of distinct landforms, including portions of the Oak Ridges Moraine, rolling drumlin fields, and flat, low-lying areas that extend toward Lake Ontario.

The Oak Ridges Moraine, which forms the headwaters of the Ganaraska River and many of its tributaries, is a prominent geomorphological feature within the region. This moraine is composed of sandy, well-drained soils, acting as a significant groundwater recharge area that sustains base flows in the watershed's rivers and streams. The major watersheds include Wilmot Creek, Graham Creek, the Ganaraska River, Gages Creek, and Cobourg Creek, all of which originate on the Oak Ridges Moraine and drain in a southerly direction to Lake Ontario, except for 107 km² of land in the northeast corner that drains to Rice Lake, which is a part of the larger Trent River watershed. The Oak Ridges Moraine rises to an elevation of about 358 masl within the GRCA watershed, its surface is hilly, and many areas have a knob and kettle type topography.

Drumlins are another key feature of the Ganaraska watershed, especially in the northern areas. These smooth, elongated hills formed by glacial action create a landscape of rolling terrain, interspersed with depressions that often host wetlands or small lakes. The region's glacial history has left a legacy of rich soil diversity, with clay loams and silt dominating the lower-lying southern areas near Lake Ontario, while sandier soils are more common in the northern, upland areas. The contrasting soil types significantly influence the region's hydrology, affecting surface water runoff, infiltration rates, and the distribution of wetlands and water bodies. Adjacent to the South Slope are the old shorelines of Lake Iroquois. This region is comprised of old underlying beaches and similar lacustrine features of varying depth overlaying the Paleozoic limestone that slopes toward Lake Ontario.

The Oak Ridges Moraine significantly contributes baseflow to the major watersheds within the Ganaraska region. Groundwater and surface water flows are governed by the underlying geology and ultimately drain into Lake Ontario. Wetlands within the Ganaraska watershed, though scattered, play a crucial role in flood regulation, groundwater recharge, and the provision of wildlife habitat. Many of these wetlands are located in low-lying areas between the drumlins and along river corridors. They act as natural buffers, absorbing excess water during periods of heavy rainfall and gradually releasing it, thus mitigating the risk of downstream flooding, especially in urbanized areas. The watershed also contains several small lakes and ponds, both natural and man-made, which are integral to the region's hydrological system.

GRCA relies on the important partnership with the [Oak Ridges Moraine Groundwater Program \(ORMGP\)](#) to provide additional technical support for various program areas, particularly in furthering the understanding of the complex interactions between groundwater and surface water resources within

the GRCA watershed.

3.2 Climate

The Ganaraska Region is characterized by hot summers and cool winters. Topography exerts a moderate influence on local temperature and precipitation with higher snowfall totals at higher elevations. The vast forests on the Oak Ridges Moraine have high snow retention leading to slow percolation as snow melts and replenishes groundwater aquifers. The year-round open water of Lake Ontario has a pronounced effect in moderating the climate close to the shoreline, particularly in spring when the water is colder than the air. With global warming, changes to the climate and hydrologic regime of the watershed region are inevitable. It is expected that average annual temperatures will increase, with the most warming occurring locally in winter. It is also anticipated that precipitation patterns will be altered with more extreme high intensity rainfall and more prolonged and severe drought conditions.

3.3 Surface Water

The GRCA watershed is bisected by the Oak Ridges Moraine in the east and is comprised of the watersheds that flow north of the Moraine, into Rice Lake, and those that flow south of the Moraine, into Lake Ontario. For reporting purposes, the watershed region has been divided into nine watersheds/watershed groupings. These are depicted in **Figure 2**.

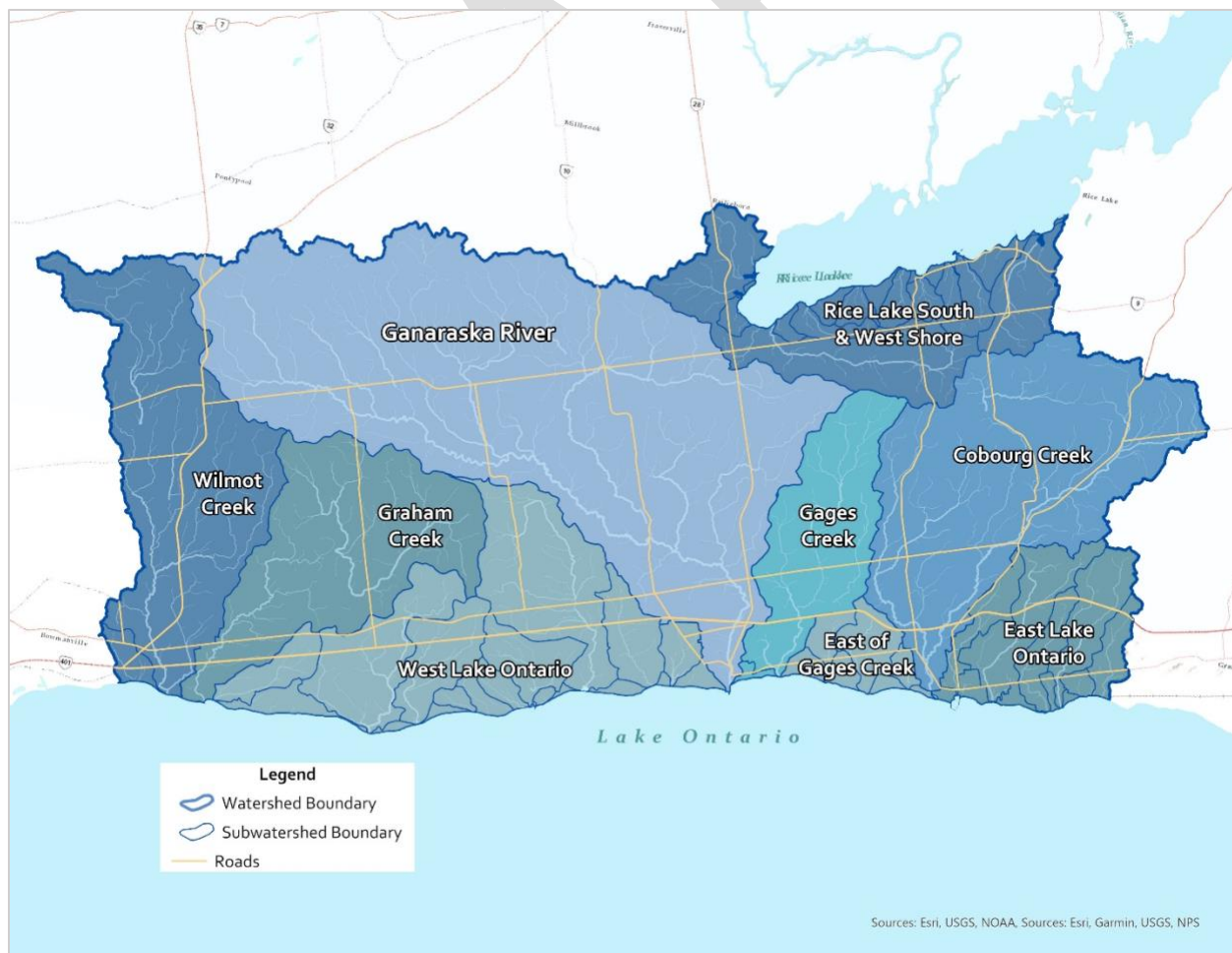


Figure 2 - GRCA Subwatersheds

One watershed flows into Rice Lake:

- Rice Lake South and West Shore – this includes:
 - Plainville Creek
 - Harwood/Goose Creek
 - Honey Creek
 - Small unnamed tributaries

Eight watersheds flow into Lake Ontario:

- Wilmot Creek
- Graham Creek
- West Lake Ontario – this includes:
 - Lovekin Creek
 - Bouchette Point Creek
 - Port Granby Creek
 - Wesleyville Marsh Creek
 - Wesleyville Creek
 - Port Britain Creek
 - Brand Creek
 - Littles Creek
 - Small unnamed tributaries
- Ganaraska River
- Gages Creek
- East of Gages Creek
 - Augustine Creek
 - Carr's Creek
 - Small unnamed tributaries
- Cobourg Creek
- East Lake Ontario – this includes
 - Midtown Creek
 - Brook Creek

- Massey Creek
- Spicer/Covert Creek
- Brookside Creek
- Small unnamed tributaries

3.4 Groundwater

Within the boundaries of the Ganaraska Region, the Oak Ridges Moraine (ORM) is the predominant landform in the northern area, with elevations ranging from approximately 150 to 395 meters above sea level (masl) (Ontario Geological Survey, 1999). The ORM is a provincially significant landform, serving as a critical resource for groundwater. Its complex internal structure, shaped by multiple advances and retreats of glacial ice, was likely formed in an area of concentrated meltwater flow between the Simcoe and Ontario Ice Lobes. The ORM deposits consist of ice-contact and outwash materials, glaciolacustrine silts and clays, and glaciofluvial sands and gravels, with textural characteristics varying both horizontally and vertically.

The ORM is vital for groundwater recharge, forming the headwaters of most creeks and rivers within the GRCA watershed. The dominant flow direction is southerly, off the Oak Ridges Moraine toward Lake Ontario, with a westerly component in some areas. Water table fluctuations observed at different monitoring wells, including those in the Provincial Groundwater Monitoring Network, exhibit two peaks and two recession patterns, resembling seasonal runoff variations. Recharge contributions, driven by climate parameters, depend on soil composition and topography. Recharge rates in the permeable Glacial Lake and Oak Ridges Moraine deposits are estimated at 250 to 350 mm/year. Infiltration within the till plains of the South Slope, and the glaciolacustrine clays and silts, was estimated to be 100 mm/year, or less. Extensive deposits of glacial till, characterized by low hydraulic conductivity due to their silt and clay content and heterogeneous particle sizes, also occur in the region. These till units act as aquitards, slowing groundwater flow and forming a protective confining layer overlying aquifers. The most significant till units in the area are the Halton Till and Newmarket Till. Deeper sedimentary units, known as Lower Sediments, contain several distinct geologic formations ranging from sand and gravel to silt and clay-textured soils. Bedrock is found at elevations of approximately 50 to 80 masl near the shores of Lake Ontario and about 200 masl in the northern boundaries of the watershed, generally yielding lower quantities of groundwater.

Groundwater plays a vital role in sustaining drinking water supplies and fisheries in the GRCA watershed. It serves as a critical source of potable water for its residents, especially in rural areas, where private wells are the primary source of drinking water. Municipalities also rely heavily on groundwater, drawing from aquifers to provide clean and safe water to their communities. Groundwater is naturally filtered through layers of soil, sand, and rock, which can remove many contaminants, making it a relatively clean and reliable water source. However, this natural filtration system is vulnerable to pollution from agricultural runoff, industrial activities, and improper waste disposal, which can introduce harmful chemicals and pathogens into groundwater supplies. Protecting groundwater from contamination is crucial for ensuring the continued availability of safe drinking water within the GRCA watershed.

In addition to its importance for human consumption, groundwater is essential for maintaining healthy aquatic ecosystems, including those that support fisheries. Many of the rivers, streams, and lakes in the watershed are fed by groundwater. Groundwater discharge provides a steady source of cool, oxygenated water critical for sustaining fish populations, particularly cold-water species such as trout and salmon. These species are highly sensitive to changes in water temperature and oxygen levels, and groundwater inflows help regulate these conditions, creating suitable habitats for spawning and growth. Moreover, during dry periods or droughts, groundwater contributions are often the only source of water sustaining aquatic ecosystems, making it indispensable for fisheries' health and biodiversity. GRCA has mapped the baseflow for the various creeks and rivers in the watershed to understand the contribution of groundwater to these features. Baseflow is depicted in **Figure 2**.



Figure 3 - Baseflow in the GRCA Watershed

3.5 Flooding and Erosion

Flooding is a natural occurrence along the streams of the Ganaraska Region and the shorelines of Lake Ontario and Rice Lake. The many forests and other natural areas of the Ganaraska Region help to slow the movement of water after it falls as rain or snow. This makes the watersheds more resilient to the heavy rainfalls that have become more common each summer and the rain on snow events that can occur during the winter and early spring. Nevertheless, excessive rainfall may cause flooding of low-lying areas – mostly unoccupied natural floodplains along the riverbanks. When this happens on dense

snowpacks or frozen ground, ice jams can occur at the lower end of the Ganaraska River. The river ice is broken up and transported downstream to the river mouth where it runs into slower moving water and more solid ice cover. The GRCA communicates the risk of ice-breakup to the town of Port Hope each year so that they can prepare in advance. The town has a contractor break up the ice cover at the mouth with heavy equipment when high flows begin. This allows an open channel to carry ice-flows out to Lake Ontario rather than having them jam further upstream where this can back up water and ice causing flooding along the lower reaches of the river.

3.6 Water Control Structures

The GRCA owns three dams or water control structures. Two are on the Ganaraska River and one is on Baltimore Creek (part of the Cobourg Creek watershed). These dams are historic and provide limited functions with respect to flood control or low flow augmentation. Corbett's Dam in Port Hope has a fish ladder with sampling station owned and operated by the MNR. The Ganaraska River channelization was built after a major flood in 1980 to improve the conveyance of flood waters through the town center. Significant amounts of effort and funding are needed to keep these structures operating in good condition. Numerous other privately owned dams still exist in the watersheds, which are remnants of a time when waterpower and milling were significant industries for the region. Some of these dams are in poor condition and are not being maintained. All dams create a barrier to fish migration reducing the potential productivity of these fisheries.

3.7 Drought/Low Water

Drought conditions can impact the Ganaraska Region in any given year during periods of low rainfall. Typically, impacts occur in the summer or fall when below average rainfall leads to low soil moisture and a high demand for water. Streamflow and groundwater in the region take longer to respond due to the buffering effect of the Oak Ridges Moraine. The aquifers of the moraine store water from snowmelt and spring rains and slowly release it into the streams that feed the larger systems (e.g. Ganaraska River, Cobourg Creek, Wilmot Creek). This strong and steady baseflow sustains the aquatic ecosystem through many shorter drought periods. When drought conditions continue through the fall months, the salmon runs don't receive the high flow pulses that are needed to achieve full spawning potential. Streams that originate off the moraine do not have the same baseflows and may be more susceptible to drying up during prolonged droughts. GRCA staff regularly evaluate watershed conditions and inform the Ganaraska Water Response Team who are responsible for declaring a low water condition.

GRCA plays an important role in monitoring and managing responses to drought conditions through the Ontario Low Water Program, which will be discussed in **Section 5.1.1**.

3.8 Natural Heritage

The GRCA watershed is characterized by a diverse array of natural heritage features, including extensive woodlands, wetlands, and riparian areas that contribute significantly to the ecological health and resilience of the region.

Within the GRCA watershed, natural vegetative cover includes approximately 44 km² of wetlands, which serve as critical habitats for a wide range of species, provide flood attenuation, and act as natural water filters. These wetlands are complemented by about 340 km² of woodlands, which are essential for

maintaining biodiversity, supporting wildlife habitats, and providing recreational opportunities. The woodlands and wetlands together form a vital network that supports the hydrological and ecological integrity of the watershed.

In addition to these, vegetated riparian areas—comprising lands within 120 meters of streams, rivers, lakes, and wetlands—cover about 209 km². These riparian zones play a crucial role in protecting water quality, reducing erosion, and providing essential corridors for wildlife movement. They also serve as buffers that help to mitigate the impacts of climate change and enhance the overall resilience of the watershed.

The natural heritage system of the GRCA watershed supports a variety of mammals, birds, reptiles, amphibians, insects, and aquatic species typical of southern Ontario. Cold and warm water streams flowing through the region support diverse fish populations, contributing to the rich aquatic biodiversity of the area. However, like many regions in Ontario, the GRCA watershed faces challenges from invasive species that threaten native habitats and compete with indigenous species, as well as pressures from urbanization and climate change.

Recent changes to the *Conservation Authorities Act* have changed the role of CAs in the management of natural heritage, particularly in the realm of development review. Natural Heritage information is used in other program areas and it is critical that Conservation Authorities continue to play a role in the mapping and management of natural heritage to ensure efficient delivery of other Mandatory/Category 1 services. This will be discussed further in **Section 5.2**.

Currently there is a regulation in effect that prevents conservation authorities from providing a plan review service on behalf of municipalities with respect to natural heritage, a role conservation authorities, including the GRCA, have been providing for decades.

3.9 Land Use

Areas of settlement in the GRCA watershed region are generally found along the shore of Lake Ontario and include the urban centers of Newcastle, Port Hope and Cobourg. There are a number of small villages and hamlets that include the settlement areas of Orono, Kendal, Canton, Bewdley, Gores Landing, Camborne and Baltimore in addition to rural residential areas throughout the watershed region. Additionally, cottage and trailer park development occurs adjacent to waterbodies, including Rice Lake and Lake Ontario. Most of this development occurred historically. The current trend of converting seasonal residences to permanent residences could result in negative impacts on water quality with increased septic system loading year-round. The population in the GRCA watershed is 75,606 as of 2024.

While the GRCA watershed is in the traditional and treaty territory of the Mississauga's and Chippewa's of the Anishinabek, known today as the Williams Treaties First Nations, there are no First Nations reserves located within the GRCA's watershed. However, Alderville, Hiawatha and Curve Lake First Nations are located north and east of the GRCA watershed area. Mississauga's of Scugog Island First Nation are located to the west of the GRCA watershed.

3.10 Infrastructure

Approximately 70% of the population in the Ganaraska Region Source Protection Area relies on six municipal drinking water systems, consisting of three groundwater and three Lake Ontario-based surface water systems. The groundwater systems include the Creighton Heights and Camborne Water Supply Systems in the Township of Hamilton, and the Orono Drinking Water System in Durham Region. Wellhead Protection Areas (WHPAs) were established for these systems using 3D groundwater models, covering a total area of 108.5 km². In addition to these municipal wells, there are around 42 smaller drinking water systems in the area, including trailer parks, schools, and public buildings, regulated under the Drinking-Water Systems Regulation (O. Reg. 170/03).

The three surface water systems—Cobourg, Port Hope, and Newcastle—draw from Lake Ontario, with Intake Protection Zones (IPZs) delineated to safeguard these sources. These zones are mapped based on distance and travel time of potential contaminants, with IPZs 1 and 2 delineated using lake-based models, while IPZ 3 is based on a modeled fuel pipeline spill.

Three pipelines, running parallel to Highway 401, traverse the Ganaraska Region watershed. The Trans-Northern pipeline carries refined oil, the Enbridge pipeline, crude oil, and the TransCanada pipeline, natural gas.

Newcastle, Port Hope and Cobourg are serviced by sanitary sewers and wastewater treatment plants. Rural areas are serviced by private septic systems.

The urban communities and settlement areas are serviced by storm sewer systems and roadside ditches.

Land use decisions are best made when integrated with a watershed plan/subwatershed study process in order to avoid unintended consequences on downstream communities and ecosystems.

3.11 Protected Areas

The Ganaraska Region Conservation Authority (GRCA) owns 4,648 hectares (11,486 acres) of land within and outside of the GRCA jurisdiction¹ (Figure 1), which represents approximately 5% of the watershed area. GRCA lands contribute to the local and regional natural heritage system and include natural features such as forests, tallgrass prairie, Provincially Significant Wetlands, watercourses, the Lake Ontario and Rice Lake shorelines, and the Oak Ridges Moraine. All lands owned by the GRCA also consist of natural hazards (e.g., floodplains, erosive soils, valleys). These lands are shown in **Figure 4**.

¹ Portions of the Ganaraska Forest extend beyond the GRCA jurisdiction into Otonabee Region Conservation Authority jurisdiction.

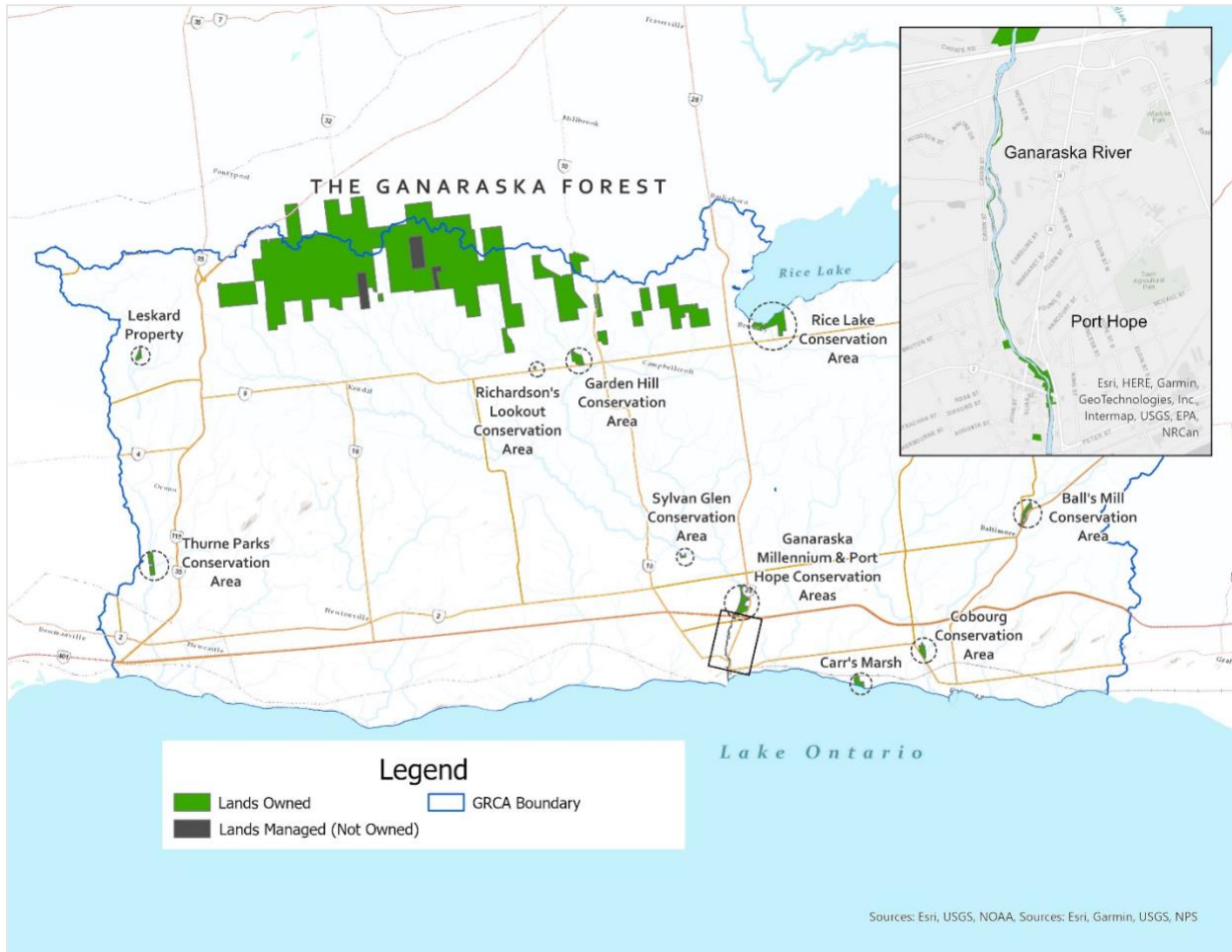


Figure 4 - GRCA Lands

4.0 Watershed Challenges

Through watershed knowledge and a review of background information, the following watershed challenges were identified that should be considered as part of the GRCA's program and services delivery in the coming years.

Increased development pressures: The Ganaraska Region faces a variety of watershed challenges that threaten the health and sustainability of its natural ecosystems. One of the primary concerns is the pressure from future development growth, especially in light of the Growth Plan for the Greater Golden Horseshoe, which encourages urban expansion and increased density in areas like Port Hope, Cobourg and Newcastle. The expansion of urban boundaries poses risks to natural areas, watercourses, and wetlands, as increased impervious surfaces lead to higher stormwater runoff, which can exacerbate flooding, erosion, and water quality issues.

Climate Change: Climate change poses a significant threat to the watershed, exacerbating issues such as extreme weather events, altered precipitation patterns, and rising temperatures. These changes disrupt the delicate balance between surface water (SW) and groundwater (GW) systems, which are crucial for maintaining both water quality and quantity. A major challenge is the lack of integrated management of groundwater and surface water, making it difficult to address climate variability effectively. One critical challenge is the missing link between groundwater and surface water management, which is essential for maintaining water quality and quantity in the face of climate variability. Altered groundwater recharge and flow can reduce the availability of surface water during dry periods, impacting aquatic ecosystems and community water supplies. This imbalance further complicates water resource management, particularly in the absence of clear provincial guidance. Without comprehensive provincial-level guidance, the burden of addressing these climate-induced challenges falls on local authorities, making coordinated, large-scale mitigation and adaptation efforts difficult and potentially more expensive. The long-term financial strain of responding to these challenges, coupled with the accelerating loss of biodiversity and ecosystem services, underscores the urgent need for a strategic and well-resourced approach to climate mitigation and adaptation. If unaddressed, the combined impacts of climate change on water systems, soil stability, and biodiversity will continue to increase the cost of managing natural resources and protecting communities from environmental hazards.

Invasive Species: Invasive species are another pressing concern, as they outcompete native flora and fauna, disrupt ecosystem balance, and degrade habitats. Species such as the emerald ash borer, phragmites, and dog-strangling vine have already impacted the region, and their continued spread poses ongoing risks to biodiversity and ecosystem function. An emerging invasive species to Southern Ontario is Oak Wilt (*Bretziella fagacearum*), which would/could have devastating effects on local forests if it were to be introduced.

Loss of biodiversity and species at risk: The Ganaraska Region is home to a variety of species at risk (SAR), whose habitats are increasingly threatened by development, invasive species, and climate change. Loss of biodiversity not only diminishes the ecological resilience of the watershed but also reduces the range of ecosystem services it provides, such as clean water, flood regulation, and recreational opportunities.

Soil Carbon: As temperatures rise, the increased heat accelerates microbial activity in the soil, leading to faster decomposition of organic matter, which releases stored carbon back into the atmosphere as carbon dioxide. Additionally, altered precipitation patterns—such as more intense rainfall or prolonged droughts—disrupt soil moisture levels, further reducing its capacity to retain carbon. In wetter conditions, soil can become saturated, limiting oxygen availability and creating anaerobic conditions that hinder plant growth and soil carbon sequestration. Conversely, in drier climates, soil becomes more prone to erosion and degradation, stripping away the top layers rich in organic carbon. These combined effects lead to a destabilization of carbon stored in the soil, weakening its role as a natural carbon sink and contributing to higher levels of atmospheric greenhouse gases, which perpetuate climate change.

Soil Erosion: The vulnerability of soil is heightened under shifting climate conditions, with heavy rains leading to erosion and droughts causing desiccation, making land less stable and less capable of supporting vegetation. This, in turn, contributes to increased sedimentation in water bodies, impacting water quality and raising the costs associated with water treatment for safe human consumption. Moreover, the erosion of natural buffers, such as wetlands and forests, further exacerbates flood risks and reduces the natural capacity of the environment to filter pollutants. The resulting degradation of ecosystems and increased pressure on water management systems come with significant financial implications, including higher costs for infrastructure repair, flood mitigation, and the maintenance of drinking water quality standards.

Agricultural Land Use: Agricultural land use covers approximately one-third of the Gannett Region watershed. The GRCA has historically had areas with severe erosion and soil degradation issues resulting from land clearing activities in the early 1900s. Although reforestation restored much of the landscape, there is a need to continue to take a proactive approach to controlling crop field erosion and improving soil health, in addition to the other best management practices agricultural producers implement. Recent history has proven that massive soil erosion and soil health degradation is possible within the GRCA due to intensive cropping practice. In the past decade, there has been an increase in row crop and vegetable farming across the GRCA, therefore assessment and rapid implementation of best management practices is needed, including erosion control measures, before further damage is done. Implementation of best management practices, supported by the GRCA will lead to reductions in nutrients loss within and to the Gannett Region watersheds, especially during high flows and bare soil conditions. Continued implementation of best management practices, and GRCA's ability to engage with producers in meaningful ways is needed to ensure soil health (productivity) is maintained or improved, riparian areas, watercourses are protected and impacts to water quality are minimized. Implementation activities that are required include planting vegetated buffers, installing livestock fencing along watercourses, innovative tillage methods, improved manure storage and handling, and cropland nutrient management.

The use of Subwatershed Planning in Land Use/Development Planning: A significant gap in current watershed management is the absence of comprehensive subwatershed planning in the development process. Subwatershed plans are critical for understanding the unique characteristics and needs of different areas within the watershed, guiding sustainable land use decisions, and ensuring that growth does not compromise the ecological integrity of the region. The lack of such planning can result in fragmented approaches that fail to address cumulative impacts, leading to degraded water quality, increased flood risks, and loss of natural heritage features.

Addressing these challenges requires a coordinated effort among municipalities, conservation authorities, stakeholders, and the community. Effective watershed management must integrate climate adaptation, watershed planning/subwatershed studies, sustainable development practices, habitat protection, and enhanced monitoring to safeguard the Ganaraska Region's natural resources for future generations.

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5.0 Programs and Services

Ontario Regulation 687/21: Transition Plans and Agreements for Programs and Services detail requirements for Transition Plans and Agreements for Programs and Services. As per the CA Act and Ontario Regulation, on February 17, 2022 the GRCA's Board of Directors approved the GRCA's Inventory of Programs and Services. The approved Inventory of Programs and Services details GRCA Mandatory Programs and Services (Category 1), Municipal Programs (Category 2) undertaken by the GRCA under agreement with the partner municipality and Other Programs and Services (Category 3) the GRCA undertakes.

The required agreements for Category 2 and Category 3 Programs and Services were completed with the various municipal partners during the fall of 2023. The costs associated for all Category 1, 2 and 3 programs and services are included in the Inventory of Programs and Services.

A summary of the programs and services is provided in the following sections. The final version of the Inventory of Programs and Services is provided at this [link](#).

GRCA relies on a range of technical studies, monitoring programs and other information to guide work planning and decision making in the delivery of programs and services. These include policy documents, technical guidelines, hazard mapping studies, etc., some of which have been completed by staff, and others contracted to consultants. These resources are described in **Appendix 1**

5.1 Mandatory (Category 1) Programs and Services

5.1.1 Natural Hazard Management

Natural hazard management is a key program area for the GRCA. The priority in this regard is the protection of life and property from flooding and erosion hazards. This is a mandatory, watershed wide program that applies to the Lake Ontario shoreline as well as area floodplains, valley and stream systems, wetlands and hazardous lands such as unstable soil or bedrock.

The Natural Hazard Management Program includes the following:

Municipal plan input and review and regulation – Municipal Plan Input and Review is a preventative program that aims to ensure that new development will not result in increased risks to public safety or property damage from natural hazards. GRCA undertakes the municipal plan input and review program to provide advice to its member municipalities and watershed residents, both through the commenting process under the *Planning Act* and through general inquiries and pre-consultation meetings.

This program includes municipal official plan related comments and proponent driven applications such as subdivisions, condominiums, severances, official plan and zoning by-law amendments, minor variances, and site plan control. The GRCA also regulates development under Section 28 of the CA Act and Ontario Regulation 41/24, Prohibited Activities, Exemptions and Permits. The intent of the regulation is to direct new development away from natural hazards to ensure that development is not impacted by flooding and erosion and that new development does not aggravate or create new hazards or create conditions which would jeopardize health and safety of people or result in damage to

property. The GRCA regulates the Lake Ontario shorelines, dynamic beaches, watercourses, ravine and stream systems, and wetlands.

Floodplain mapping – A lot of the mapping for the watershed is rather dated and GRCA has been working with local municipal partners to leverage resources to obtain federal funding through the National Disaster Mitigation Program (NDMP) and the Flood Hazard Identification and Mapping Program (FHIMP) to undertake floodplain mapping updates. This has been done for Wilmot and Graham Creek watersheds in addition to smaller creeks within Durham Region, including Lovekin, Bouchette Point and Port Granby Creeks and the northwest portion of the Ganaraska River watershed.

Further flood plain mapping will be undertaken for the remaining watercourses in the watershed as funding becomes available.

***Risks:** Updating and maintaining watershed models and floodplain mapping does not have a source of sustainable funding. There has been no provincial funding since 1990s but some recent federal funding has been made available through the NDMP and FHIMP programs. GRCA cannot meet the obligations of new provincial regulation to update mapping annually as some of our models are not in a digital format. Provincial guidance has not been provided regarding how to incorporate climate change impacts in flood and erosion risks. Interaction between groundwater and surface water is critical to understand in hydrologic models that support mapping however, the assessment of groundwater resources is not considered a mandatory/Category 1 program area.*

GRCA Owned Flood and Erosion Control Infrastructure – GRCA owns and manages the Ball's Mill Dam, Garden Hill Dam and Corbett's Dam.

The Ball's Mill Dam is located on Baltimore Creek within the Ball's Mill Conservation Area, upstream of the village of Baltimore, in the Township of Hamilton. The original dam was constructed in the mid-1800s with upgrades undertaken by the GRCA in 1975. The dam provides limited flood control and low flow augmentation.

The Garden Hill Dam is located on the North Ganaraska River within the Garden Hill Conservation Area in the village of Garden Hill/Municipality of Port Hope. Constructed in 1959, the dam provides recreational opportunities and fish habitat in addition to some limited flood control and low flow augmentation.

Corbett's Dam is located on the Ganaraska River within the Municipality of Port Hope and was a former grist mill, sawmill and electric generating plant.

In 1973, conservation groups worked with the MNR and constructed the fish ladder in the dam to allow for fish passage. Previous to the installation of the fishway, migratory fish were manually transported over the dam.

Since 1974, the Ganaraska Fishway has been in operation at Corbett's Dam. Corbett's Dam is the first barrier on the river preventing fish from migrating upstream. The fishway is a pool and weir style, consisting of a concrete channel 90 feet long and 5 feet wide.

Following the 1980 flood in Port Hope, the channelization project was completed to improve the conveyance of flood waters through the town. The bedrock river channel was made deeper and wider in

key places adjacent to downtown Port Hope to prevent the river from exceeding the confines of its channel, overtopping bridges and causing extensive damages to adjacent properties as was the case during previous major flood events. In addition, vertical walls were constructed to prevent erosion along the riverbanks, railings were installed for safety and several pools were created in the bedrock channel for fish to rest as they migrate upstream. The new river channelization's conveyance capacity is 425 m³/s, enough to contain the 1980 flood. Since construction, no flooding has occurred in the downtown area.

Risks: *All infrastructure is subject to gradual weathering and deterioration. In addition to seasonal operations and maintenance activities, consistent inspections and funding for upgrades or repairs are needed to continue to maintain these structures. Annual funding applications to the Water and Erosion Control Infrastructure program are the main source of funding for conservation authorities to maintain their structures. However, the funding can often be allocated to just a few large projects and must be matched by the applicant from local/municipal funds. This means that conservation authorities must approach municipal councils to seek additional funds for each project. A significant level of staff resources are used each year to manage these structures and apply for necessary funding.*

Flood forecasting and warning – GRCA's flood forecasting and warning program monitors watershed conditions to provide agency and public awareness of flood conditions and to provide an early warning regarding possible flood risks. The GRCA provides municipal partners, other agencies and the public, notice of potential flood events and associated issues to allow time to prepare and respond. This program involves collection and interpretation of rain and watercourse flow data, weather forecasts, watershed conditions, snow surveys, ice conditions/frazil ice, wind direction related to Lake Ontario, site conditions, watershed knowledge of susceptible areas, and provincial forecasts. This information is utilized to provide safety notices and flood warnings and to liaise with provincial and municipal departments and the public.

Risks: *After decades of zero increases in funding, the Provincial Section 39 cuts of 50% in 2019 has downloaded these costs to the municipalities and negatively impacted GRCA's ability to modernize the program.*

Ontario Low Water Response Program – The GRCA delivers the Ontario Low Water Response Program for the GRCA watershed. This includes monitoring watershed conditions for potential drought conditions and liaising with a Low water Response Committee that consists of municipal, agriculture, industry, business, recreation, government representatives and other decision makers from the watershed.

Risks: *The provincial funding that is available is helpful but does not cover the full costs of the program.*

5.1.2 Provincial Water Quality and Quantity Monitoring

GRCA, in partnership with Ministry of Environment, Climate Change and Parks (MECP), has established long term sites to monitor surface and ground water conditions. This is also an investment in long-term monitoring of climate change trends.

Provincial Water Quality Monitoring Network (PWQMN)

Through a partnership with the MECP, GRCA undertakes stream water quality monitoring at nine sites. The Conservation Authority collects water samples eight times per year and MECP is responsible for the laboratory analysis and data management. The results are made available to GRCA. The data is used to prepare watershed report cards and report on overall watershed health. It also helps to identify and prioritize the need for watershed restoration projects.

Provincial Groundwater Monitoring Network (PGMN)

GRCA has a long-standing partnership with the MCEP for groundwater level and water quality monitoring at 17 stations (12 sites) across the watershed (eight are monitored for water quality). GRCA costs include data collection, internal data management, and reporting. The province funded the installation of the network and continues to fund equipment replacements. Information collected has facilitated the creation of a database on groundwater levels and groundwater quality which is used in the preparation of watershed report cards.

A map indicating various monitoring stations is shown in **Figure 5**.



Figure 5 - GRCA Monitoring Sites

5.1.3 Source Water Protection

The Ontario *Clean Water Act* sets out a framework for drinking water source protection on a watershed basis. Thirty-eight source protection areas and authorities were established by the Province, based on Conservation Authority watersheds, and grouped into 19 Source Protection Regions. GRCA's watershed region is within the [Trent Conservation Coalition \(TCC\)](#) Source Protection Region. The TCC Drinking Water Source Protection Region is a complex regional grouping of five Source Protection Areas including Lower Trent, Crowe, Otonabee-Peterborough, Kawartha-Haliburton and Ganaraska Source Protection Areas. Kawartha-Haliburton and Otonabee-Peterborough Source Protection Areas include areas to the north in Haliburton and Peterborough Counties, outside of Conservation Authority jurisdiction.

GRCA disseminates information and provides advice to local municipalities to facilitate implementation of the Source Protection Plan and to identify local priorities for future updates to the Assessment Report and Source Protection Plan. GRCA is responsible for administering the Ganaraska Region Source Protection Authority – governance, administration, meetings, reports and the delivery of other activities required by the *Clean Water Act* and its regulations.

Risks: *Properly funding of the source water protection planning program ensures the ability to monitor and safeguard the quality of drinking water sources, such as aquifers, rivers, and lakes. Without continuous funding, the ability to protect these resources may be compromised. Contaminants, like nitrates, sodium, phosphorus, bacteria, and other pollutants from agricultural runoff, road salt, industrial discharge, and urban development could go unchecked, leading to potential contamination of drinking water supplies. This could increase the risk of health issues, such as waterborne diseases, nitrate poisoning, and exposure to harmful chemicals. The loss of this program could also increase long term costs for municipalities that would need to invest in more expensive water treatment solutions and emergency responses to water contamination events, threatening both community resilience and environmental sustainability.*

5.1.4 Conservation Areas/Conservation Lands

GRCA is responsible for the management of 4,648 hectares (11,486 acres) of land, of which the Ganaraska Forest represents 96% of this land base. The remaining land comprises 9 conservation areas and other lands owned for protection and flood infrastructure requirements. Although the primary purpose of ownership is for the protection of these lands, many of these properties allow for educational and recreational programming and enjoyment. The Ganaraska Forest itself has hundreds of kilometers of multi-use trails. Management of these lands includes restoration, passive and active recreation programming and infrastructure and carrying costs associated with taxes, insurance and capital asset replacement.

Elements of land management that are considered Category 1 activities include the following, of which some programs have links to Category 2 and 3 activities.

- Section 29 enforcement and compliance: Conservation Areas/Ganaraska Forest/ regulation enforcement and compliance. GRCA staff and a contracted company patrol the 11,000 acres Ganaraska Forest and conservation areas to ensure that the regulations are being adhered to by the users.

- Ganaraska Forest: Year-round activities include recreation, forest management, risk management program, hazard tree management, gates, fencing, signage, communications, pedestrian bridges, trails, parking lots, picnic shelters, road, restoration, ecological monitoring, carrying costs such as taxes and insurance. Management of the Ganaraska Forest is guided by the Ganaraska Forest Management Plan. The plan's primary goal is "to conserve, enhance and where feasible restore the forest ecosystem to reflect the native biodiversity of the Ganaraska Forest while at the same time embracing recreational, education and social activities that support the health and sustainability of the forest." Timber management of the Ganaraska Forest is a Category 3 program.
- Conservation Areas and other lands: The GRCA is responsible for the management and maintenance of 9 conservation areas, as well as other lands that are not formal conservation areas. This includes passive recreation, forest management, risk management program, hazard tree management, gates, fencing, signage, communications, pedestrian bridges, trails, parking lots, picnic shelters, road, restoration, ecological monitoring, carrying costs such as taxes, insurance and capital asset replacement.
- Major maintenance and capital improvements: Maintenance and improvements occur to support public access, safety, and environmental protection such as pedestrian bridges, boardwalks, pavilions, trails. These expenses are covered by the capital asset reserve in most cases.
- Land Acquisition: strategic acquisition of environmentally significant properties is a Category 2 and/or 3 project.
- Development and/or update of a Conservation Lands Strategy, lands inventory and land acquisition and disposition policy based following Ontario Regulation 686/21.

Risks: Sustainable funding is required to ensure implementation occurs to protect lands and offer recreational opportunities. In addition, increasing pressure on publicly accessible spaces can increase degradation and non-permitted uses on GRCA lands.

5.1.5 Enabling/Support Services

The following support services enable GRCA to deliver the programs and services to its municipal partners and watershed residents.

Corporate Services

Administrative, human resources, operating and capital costs which are not directly related to the delivery of any specific program or service, but are the overhead and support costs of a conservation authority. Includes health and safety program, overseeing programs and policies.

Financial Management

Annual budget, accounts payable and receivable, payroll, financial analysis, financial audit, administration of reserves and investments, financial reports for funding agencies, preparing and submitting reports to CRA, benefits program administration.

Legal Expenses

Costs related to agreements/contracts, human resources, etc.

Governance

Supporting CA Boards, Advisory Committees, Office of the CAO/Secretary Treasurer

Communications and Outreach

Public awareness-natural hazards, flood forecasting and warning, permitting requirements, natural hazard identification, mitigation, readiness and response, governance, policy, municipal and public relations and engagement, conservation lands.

Administration Buildings/Facilities

Administrative office and millennium building used to support staff, programs, and services. Includes utilities, routine and major maintenance, property taxes. Included is a charge out for capital asset replacement.

Information Technology/Remote Sensing/GIS

This service includes data management and records retention for all program areas within the Conservation Authority. Development and use of systems to collect and store data and to provide spatial geographical representations of data. The GIS and remote sensing services provide essential support to all other program areas within GRCA.

GRCA IT department provides full onsite and off site redundancy across all of GRCA's areas of business. A high-level overview/schematic of GRCA IT infrastructure is shown in **Figure 6**.

GRCA High-Level Diagram of Production / DR infrastructure

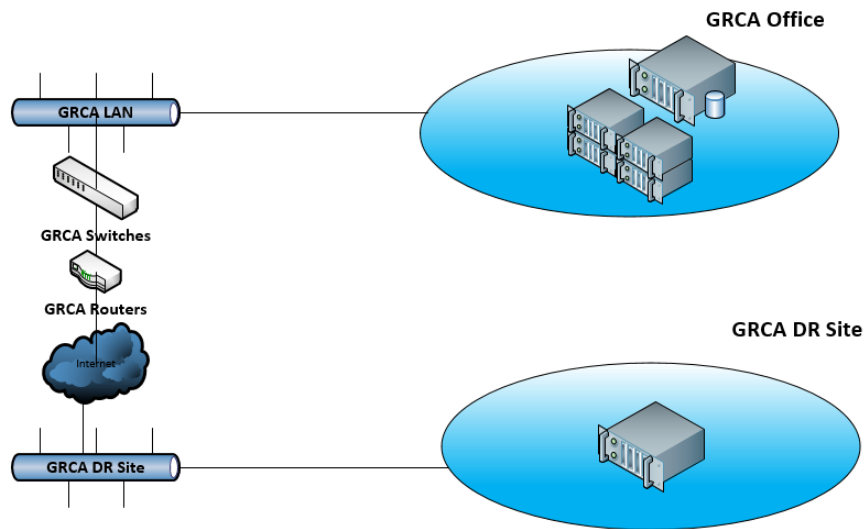


Figure 6 - GRCA IT Infrastructure

The GRCA IT Department also provides access to all the GRCA mapping data (GIS and Remote Sensing) to all staff who require access to it. This includes GIS staff who manage and disseminate base data, desktop applications and mobile applications as well as the GRCA staff who utilize those applications.

Any data collection follows the same process where the GIS staff prepare a mobile application with the input of the supervisor of the field staff who will be collecting the data. This mobile application will contain the appropriate types of fields to allow for data input in the field including map locations, numbers, text and photos. This data is then reviewed by supervisory staff and used to update the enterprise database.

The Standardized ESRI solution for this type of environment would look similar to the following image in **Figure 7**.

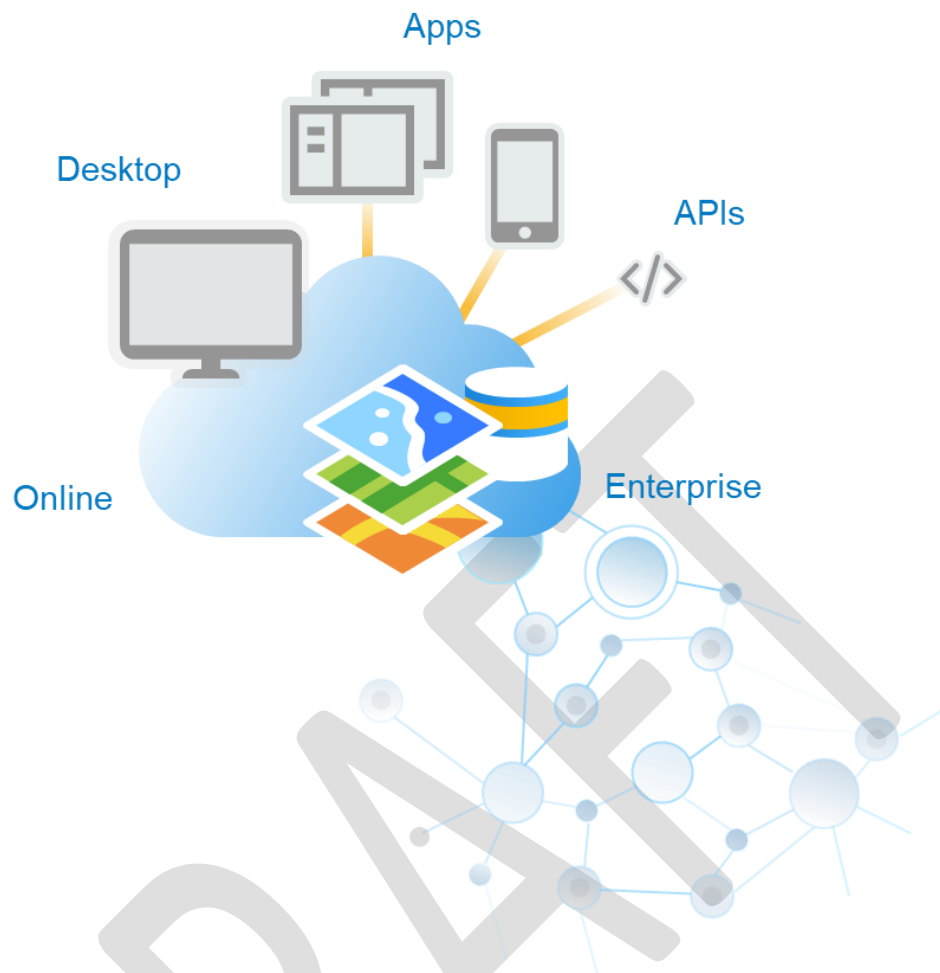


Figure 7 - GIS Infrastructure Schematic (adapted from ESRI)

The GRCA has followed this same process to implement our ArcGIS Enterprise environment. See the logical architecture diagram in **Figure 8** below.

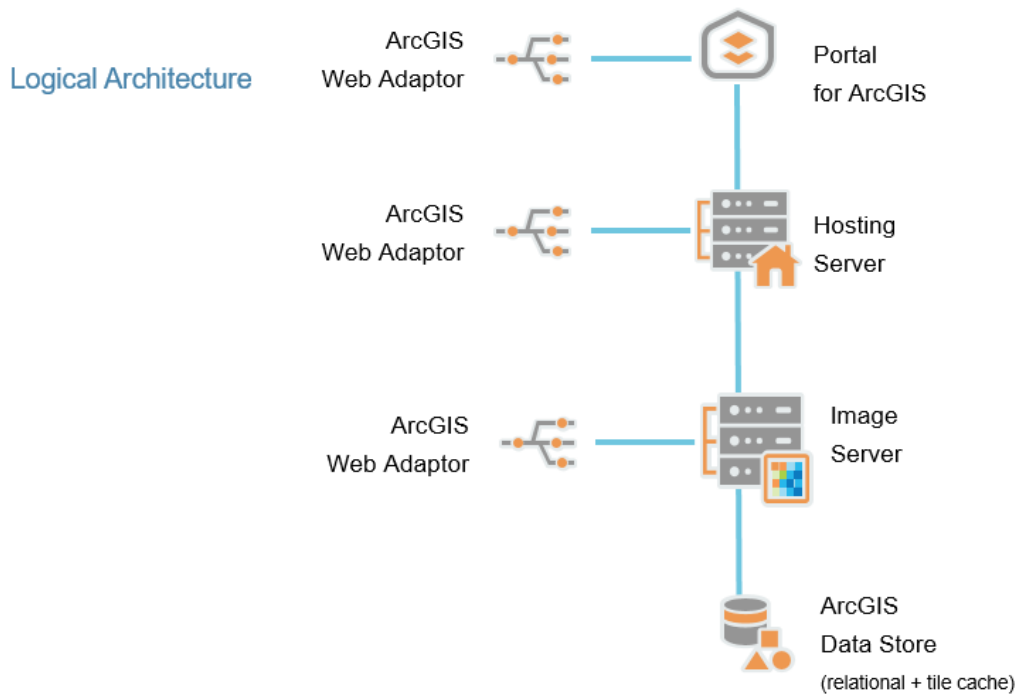


Figure 8 - GRCA ArcEnterprise Architecture

Risks: Staffing costs for IT, GIS and Remote Sensing are not fully covered under the general levy and require support from Category 2 projects which are not a consistent funding source and vary from year to year in availability.

5.2 Municipal Programs and Services (Category 2)

GRCA delivers some of its programs on behalf of its member municipalities. Memorandums of Understanding (MOUs) have been established with the participating municipalities for these programs. Funding is provided through these MOU agreements and is reflected in annual budgets.

Surface Water Quality Monitoring

Surface water quality monitoring at 18 surface water sites, (in addition to PWQMN), water quantity measurements at 80 baseflow sites and water quality samples collect at 4 auto sampler sites supporting Lake Ontario nearshore water monitoring. This supplementary monitoring work fills in the gaps between the provincial water quality stations and assists in providing a more accurate assessment of watershed health. Costs include sampling, analysis, equipment maintenance and reporting.

Natural Heritage Mapping

The GRCA offers comprehensive natural heritage mapping services to support the management and protection of the watershed's natural resources. These services include the collection, analysis, and application of ecological data, with a particular focus on wetlands and other significant habitats, to inform planning, regulatory, and conservation efforts. GRCA's mapping supports municipal partners by identifying critical natural assets, assisting in land-use planning, and integrating natural heritage considerations to ensure sustainable community growth and ecological integrity.

GRCA's natural heritage mapping plays a key role in flood and erosion hazard mitigation by identifying ecologically significant areas like wetlands that act as natural flood buffers. This data informs hydrologic and hydraulic models used in floodplain mapping, watershed plans, and subwatershed studies, helping to reduce the impact of extreme weather events. Using the Ecological Land Classification (ELC) system, GRCA categorizes ecosystems based on vegetation, soil, and topography, providing a detailed understanding of diverse habitats such as forests, wetlands, and riparian zones. Additionally, GRCA includes species-specific data through monitoring efforts in the Ganaraska Forest and Conservation Areas, focusing on habitats for species at risk and areas of high conservation value. These efforts support targeted conservation actions, helping to preserve the region's ecological health against the pressures of climate change and urbanization.

Risks: *Recent changes to the Conservation Authorities Act have changed the role of CAs in the management of natural heritage. Natural Heritage information is used in other program areas such as evaluating watershed health, confirming land use layers and quantifying input parameters for hydrologic and hydraulic models that produce floodplain mapping, water budgets, etc. This information is also utilized in assessing carbon sequestration data in addition to quantifying the value of natural assets and ecological goods and services within the GRCA watershed. It is critical that Conservation Authorities continue to play a role in the mapping and management of natural heritage to ensure efficient delivery of other Mandatory/Category 1 services.*

Watershed Ecology

The GRCA provides a range of watershed ecology services focused on monitoring, protecting, and enhancing the ecological health of the watershed. These services are crucial for maintaining diverse

natural habitats, supporting biodiversity, and ensuring sustainable management of natural resources. GRCA's efforts include monitoring wildlife populations, tracking habitat health, managing invasive species, and evaluating the overall function of natural ecosystems. By collecting and analyzing data on species populations, habitat conditions, and environmental changes, GRCA can guide targeted conservation actions to protect and restore the watershed's natural resources.

Key initiatives include participation in the Durham Region Coastal Wetland Monitoring Program, which tracks the health of coastal wetlands vital for water filtration, flood control, and habitat provision. GRCA also conducts breeding bird surveys in the Ganaraska Forest to monitor avian populations as indicators of ecosystem integrity and performs roadside frog surveys for the Species at Risk (SAR) chorus frog to assess water quality and habitat conditions. Additionally, invasive species monitoring along roadsides and trails helps manage threats to biodiversity and ecosystem function. Through these comprehensive watershed ecology services, GRCA aims to protect the ecological integrity of the Ganaraska region, ensuring it continues to provide essential benefits such as clean water, flood mitigation, carbon sequestration, and recreational opportunities for the community.

Technical Studies

The GRCA undertakes various projects and supporting technical studies that serve our municipal partners and provide critical information and guidance to various program areas. These include the following:

- Watershed Plans
- Watershed Monitoring Reports
- Floodplain Mapping Studies/Updates
- Erosion assessments
- Shoreline Management Plans
- Stormsewer capacity assessments to support municipal asset management obligations
- Flood mitigation strategies
- Culvert and bridge hydraulic capacity analyses and risk assessments for roadways and linear infrastructures within flood susceptible areas, etc.
- Soil vulnerability assessments for rural lands
- Source protection technical assessments
- Water balance and baseflow studies
- Dam safety reviews
- Feasibility studies for dam removals/alterations

The completion of these Category 2 services are *essential* for effective operation and delivery of Category 1 program areas. The various technical studies are normally funded by municipal partners with benefitting levy dollars which are leveraged to access provincial and federal funding programs. Unfortunately, provincial and federal funding sources are dependent on politics and are not consistently available.

Additionally, to offset the impact of provincial downloading, and the burden this creates on municipalities, GRCA must explore other funding sources to accomplish watershed management and

restoration objectives identified by the community. These efforts are ongoing and include alternative funding sources for regenerative financing such as [the Legacy Project](#).

Risks: *Costs associated with completing critical technical studies are not covered under the general levy and require support from Category 2 projects which are not a consistent funding source and vary from year to year in availability.*

5.3 Other Programs and Services (Category 3)

GRCA delivers other programs to Municipal partners and watershed residents that are not considered Mandatory or Municipal Programs and Services. These programs are either funded through municipal agreements and/or through self-generated funds.

The following programs and services listed under Category 3 are integral to implementing actions required or recommended by Category 1 and 2 program and services. To undertake implementation of watershed and sub-watershed plans, natural heritage strategies, fisheries management plans, climate adaptation and mitigation plans, programs related to private landowner stewardship and tree planting services are required. In addition, partnering with local, regional, provincial and federal organizations and agencies to implement programs and projects with similar goals is beneficial to implementation actions.

Private Landowner Stewardship Program

The Clean Water-Healthy Land Financial Assistance Program, offered by the GRCA in partnership with the Municipality of Clarington/Regional Municipality of Durham, Municipality of Port Hope, Township of Hamilton and Lakefront Utility Services Inc., provides watershed residents with technical and financial support to implement environmentally beneficial projects on their properties. This program is available to residents, businesses, schools, and service clubs within the GRCA's jurisdiction and participating municipalities. By equipping landowners with the tools, information, and funding necessary to undertake conservation projects, the program promotes sustainable land management practices that contribute to the overall health of the watershed.

The program is synergistic with broader initiatives such as low water response, flood mitigation, and water quality improvement. For example, one project might involve the installation of rain gardens or permeable pavements that help reduce surface runoff, thus lowering the risk of localized flooding and improving groundwater recharge. Another example could be the implementation of riparian buffer zones along waterways on private properties, which help filter pollutants from surface water, reduce erosion, and enhance water quality downstream. By encouraging private land stewardship, the Clean Water-Healthy Land program not only supports individual property owners but also plays a crucial role in enhancing the resilience and sustainability of the entire watershed ecosystem.

Tree Planting Services

GRCA offers a comprehensive Tree Planting Services program designed to enhance the region's natural landscape and promote sustainable land management. Through the GRCA Tree Seedling Program, property owners can purchase bare root native tree and shrub seedlings at a minimal cost to plant on their own properties, making it accessible for individuals to contribute to environmental stewardship.

For those seeking more support, GRCA provides a full-service tree planting option, which includes the development of tailored planting plans and the complete implementation of the project on behalf of the landowner.

Additionally, GRCA partners with member municipalities to deliver targeted tree planting initiatives, such as the Trees for Rural Roads program. These partnerships not only increase tree cover across the watershed but also help achieve broader environmental objectives like improving air quality, enhancing wildlife habitat, and reducing soil erosion. By offering these services, GRCA empowers landowners to actively participate in conservation efforts, supporting both individual property goals and the ecological health of the broader Ganaraska region.

Fisheries Services

The GRCA provides essential fisheries services to manage and preserve aquatic ecosystems within the Ganaraska region. These services include monitoring fish populations, assessing habitat conditions, and implementing measures to protect native fish species while controlling invasive species. GRCA collaborates with various partners, including Fisheries and Oceans Canada (DFO), Ontario Power Generation (OPG), and Hydro One Inc., to ensure the health and sustainability of the region's fisheries, which are critical for biodiversity, recreational fishing, and the overall ecological balance of the watershed. The partner programs are also highly cost-effective, offering significant savings for the partners involved by leveraging GRCA's local expertise, existing infrastructure, and collaborative resources to achieve shared conservation goals efficiently.

Key initiatives include the management of the Cobourg Creek Lamprey Weir in partnership with DFO's Sea Lamprey Control Centre, which helps prevent invasive sea lampreys from accessing spawning habitats and threatening native fish species. GRCA also conducts fisheries assessments on OPG and Hydro One properties to evaluate fish populations and habitat conditions, informing management decisions to mitigate environmental impacts. Additionally, GRCA runs a long-term fisheries monitoring program on Wilmot Creek, which has been in place since the 1970s, providing valuable data on fish population trends and guiding adaptive conservation strategies. Through these efforts, GRCA aims to protect native fish species, manage invasive threats, and maintain healthy aquatic habitats, contributing to the ecological integrity and resilience of the watershed.

The cost effectiveness of the program is tremendously beneficial to GRCA's provincial and federal partners.

Stewardship Partner Projects

The GRCA collaborates with various partners through its stewardship program to deliver impactful environmental projects and initiatives. These partnerships are time-limited and focus on enhancing the region's natural resources through initiatives such as tree planting and habitat restoration. Notable projects include the Highway of Heroes Tree Campaign in partnership with Trees for Life, the East Central Farm Stewardship Collaborative, Forests Ontario, and the Durham Collaborative Tree Program – Durham TREES. These initiatives are highly cost-effective and leverage GRCA's expertise to achieve

significant environmental benefits while optimizing resources through shared responsibilities and funding.

These stewardship programs also create synergies with other conservation efforts, including land cover enhancement, natural asset protection, and flood mitigation strategies. By working with partners, GRCA extends its reach and impact, contributing to broader environmental goals such as biodiversity conservation, climate resilience, and improved watershed health. The collaborative nature of these programs ensures that diverse stakeholders can contribute to and benefit from the sustainable management of natural resources in the Ganaraska region.

Outdoor Education

The Ganaraska Forest Centre (GFC), nestled in the heart of the Ganaraska Forest, serves as the hub for the GRCA's outdoor education program. Each year, thousands of students visit the Centre for immersive day or overnight experiences designed to deepen their understanding of environmental stewardship and their ecological footprint. Led by Ontario-certified teaching staff, the GFC offers a variety of curriculum-based educational programs tailored for elementary and secondary students. These programs explore local watersheds, ecosystems, and pressing environmental issues, providing students with hands-on learning opportunities that connect them with the natural world.

In addition to on-site programs, the GFC extends its educational reach by offering programs at schools, both indoors and outdoors, and through online learning platforms. These diverse educational approaches help foster a greater awareness of watershed health and environmental conservation among young learners, equipping them with the knowledge and skills to contribute positively to their communities and the environment. Through these programs, GRCA aims to inspire the next generation to recognize their role in protecting and enhancing the natural world.

***Risks:** Category 3 programs can be at risk given that the financial mechanism to support these programs are through specific agreements with member municipalities, partners or through self-generated revenues., all of which can have fluctuating financial stability. Category 3 programs and services delivered by the GRCA are integral to Category 1 or 2 programs and/or support implementation resulting from mandatory program and services.*

6.0 Future Considerations

The GRCA has a rich history of watershed management and is dedicated to the conservation and enjoyment of watershed lands and water resources. Through the development and approval of the GRCA's Inventory of Programs and Services, Agreement for Services with the municipal partners and the development of Watershed-based Resource Management Strategy, issues, costs and risks related to these programs were considered (see **Appendix 2**). These programs include the mandatory Category 1 services, i.e. natural hazard management, conservation areas and lands, drinking water source protection and water quality and quantity monitoring, in addition to Category 2 and 3 services, such as technical studies, stewardship and environmental education. The GRCA's programs and services comply with regulatory requirements and provide value and experiences for municipal partners, watershed residents and landowners and the broader community.

It can be expected that new issues and challenges will arise in the future and program areas will need to be adaptive to support our municipal partners and watershed residents in meeting these new challenges. Finding solutions to complex issues is best done together in a collaborate way to ensure efficient and cost-effective use of resources in addition to capitalizing on the synergies that exist between program areas and various partners. It is important to continue to explore the development of increased partnerships with municipalities to enhance natural hazard management, protection of drinking water sources, watershed planning, monitoring programs, etc. A key component in future efforts will involve engagement with indigenous partners to build deeper working relationships and learn from their knowledge and experiences of their traditional territory.

As program areas evolve into the future, GRCA's Strategic Plan will provide overall guidance regarding the delivery of programs and services. The Watershed-based Resource Management Strategy will provide a finer level of guidance and will be updated regularly based on overall strategic priorities and community input to address these changes, opportunities and effectiveness of programs as required.

7.0 Public Engagement

Public engagement for the Watershed-Based Resource Management Strategy involved review by the GRCA's Board of Directors prior to the strategy being made available for broader consultation. The intent of the circulation of the draft strategy was to provide an overview of the regulatory requirements and how GRCA staff had completed the document to incorporate these requirements. At this stage, the document will benefit from a broader review and will incorporate comments received through the consultation to complete a final strategy.

The initial version of the document represents a foundation upon which future engagement and input will be consolidated and incorporated into future versions. The document will be viewed as a working document which will evolve and improve with each successive update and revision.

8.0 Periodic Review

Ontario Regulation 686/21 requires a process for the periodic review and updating of the Watershed-Based Resource Management Strategy including procedures to ensure stakeholders and the public are consulted during the review and update process. In this regard, the Watershed-Based Resource Management Strategy should be reviewed and updated internally by GRCA staff on an annual basis so that it remains a current working document for staff. When a new Board of Directors for the GRCA has been appointed, Indigenous partners, stakeholders and watershed residents should be engaged for input and feedback regarding the WBRMS. This timing allows for consideration of environmental, social and economic impacts while also aligning with the municipal election cycle in Ontario.

Stakeholder and public consultation will be undertaken during the above noted review periods to ensure awareness and transparency regarding the Watershed-Based Resource Management Strategy.

Appendix 1 - Summary of Existing Technical Studies, Monitoring Programs, etc.

Flood Plain Studies and Mapping

- GRCA Fill Line Mapping Phase IV, 1978
- Little's Creek Water Management Master Plan, 1998
- Ganaraska River Town of Port Hope Floodline Study, TSH, 1986
- West Gages Creek Master Drainage Plan, 2007
- Hamilton Township Floodline Mapping Study, Dillon, 1977
- Cobourg Creek Floodline Mapping Study, GRCA 2008
- Midtown Creek Floodline Mapping Study, GRCA 2008
- Brook Creek Floodline Mapping Study, GRCA 2008
- Massey Creek Floodline Mapping Study, GRCA 2008

Flood Plain Studies Updates

- Wilmot and Graham Creek Floodplain Update Study (2022)
- Region of Durham Floodplain Mapping Update Study (2024)

Key Geographic Information Data

- MNR or provincial data:
 - PWQMN Sites
 - PGMN Wells
 - Water Quality Index Stations
 - Ontario Road Network
 - Waterbodies
 - Watercourse
- Central Geodatabases
 - Digital Ortho Imagery: 2008, 2013, 2018, 2023
 - Ontario Hydro Network
 - Digitized and Vector Floodlines
 - LiDAR high resolution terrains
 - Drinking Water Source Protection assessment report database
- Archived Aerial Photographs: 1953/54, 1982, 1989, 1993, 2002
 - The aerial photographs are a mixture of black and white and various scales. Some sets provide complete watershed coverage and others only partial coverage.
- Ontario Provincial Digital Data (Ontario GeoHub)
 - Coverage of the watershed region at a scale of 1:10,000
- Federal National Topographic Series Maps
 - Complete coverage of the watershed at a scale of 1:50,000 and partial coverage at a scale of 1:25,000
- GRCA Data
 - Flood Damage Centres (1998)
 - Rain Gauges (2013 & 2020)
 - Staff Gauges

- Benthic Rapid Bio Sites
- Wilmot Creek Electrofishing Sites
- Wesleyville Creek Electrofishing Sites
- Cobourg Lamprey Barrier
- FFW Stream Gauges
- Groundwater Monitoring Network
- Stream Gauges
- Long Term Baseflow Stations
- Piezometers
- GRCA Lands Owned
- GRCA Admin Boundary
- Subwatersheds

Strategic Plans

- 2015-2020 Strategic Plan: A Roadmap for the Future, 2015
- Vision 2020: A Review that Illuminates the Future, 2020

Lake Ontario Shoreline Management Plan

- Lake Ontario Shoreline Management Plan, 2020
 - This Plan was prepared by Zuzek Inc. for GRCA, CLOCA and LTC.

Flood Forecasting and Warning

- Provincial Flood Forecasting and Warning Program – Implementation Guidelines for Conservation Authorities and the MNRF, MNRF 2023
- Flood Contingency Plan, 2024
- Flood Operations Manual, 2024

Low Water Response

- Terms of Reference – Ganaraska Region Water Response Team, 2024

Plan Review Reports

- Policies for the Implementation of Ontario Regulation 168/06: Development, Interference with Wetlands and Alterations to Shoreline and Watercourses Regulation, 2014
- Technical & Engineering Guidelines for Stormwater Management Submissions, 2014
- GRCA Plan Review and Permit Fees, 2022
- Erosion & Sediment Control Inspection Guide, 2008
 - This Guide was prepared by TRCA for the Greater Golden Horseshoe Area Conservation Authorities
- Hydrogeological Assessment Submissions: Conservation Authority Guidelines for Development Applications, 2013
 - This report was prepared by Shelly Cuddy, Gayle Soo Chan and Ryan Post and various other Conservation Authority staff
- Low Impact Development Stormwater Management Planning and Design Guide, 2010
 - Prepared by CVC and TRCA

Subwatershed Plans

- Foster Creek Subwatershed Planning Study, 2001
 - This study was prepared by Gartner Lee Ltd. and Greenlands International Consulting Inc. for GRCA.

Master Drainage Plans

- Cobourg/Midtown Creeks Master Drainage Plan Study, 1992
 - This Plan was prepared by R.V Anderson Associated Ltd. for the Town of Cobourg, the Township of Hamilton and GRCA
- Port Hope West Community Water Management Master Plan, 1998
 - This Plan was prepared by Gartner Lee Ltd. and D.G Biddle and Associates for the Town of Port Hope and GRCA
- West Gage Creek Master Drainage Plan, 2007
 - This Plan was prepared by Urban Watershed Group Ltd. for the Town of Port Hope and GRCA

Watershed Plans

- Cobourg Creek Background Report: Abiotic, Biotic and Cultural Features, 2008
- Cobourg Creek Watershed Plan, 2008
- Ganaraska River Background Report: Abiotic, Biotic and Cultural Features, 2009
- Graham Creek Background Report: Abiotic, Biotic and Cultural Features, 2009
- Lovekin Creek, Bouchette Point Creek and Port Granby Background Report: Abiotic, Biotic and Cultural Features, 2009
- Wilmot Creek Background Report: Abiotic, Biotic and Cultural Features, 2009
- Ganaraska River Watershed Plan, 2010
- Graham Creek Watershed Plan, 2010
- Lovekin Creek, Bouchette Point Creek and Port Watershed Plan, 2010
- Wilmot Creek Watershed Plan, 2010

Watershed Monitoring

- Ganaraska Region Watershed Monitoring Plan towards an integrated approach, 2014
- Ganaraska Region Monitoring Report, 2018

Natural Heritage Strategy

- Terrestrial Natural Heritage Strategy, 2013

Climate Change

- GRCA Climate Change Strategy, 2014
- Conducting a Climate Change Analysis Across the Ganaraska Region Conservation Authority, 2020
 - This document was prepared by Ontario Climate Consortium for the GRCA

Conservation Lands Reports

- Ganaraska Forest Trails Project, Final Report for the Ganaraska Region Conservation Authority, 1997
 - This document was prepared by Marsh and Warfield for the GRCA

- Cobourg Conservation Area Master Plan, 2002
- Ganaraska Forest Management Plan, 2017
 - This document was prepared by Madawaska Forestry Inc. for the GRCA
- Conservation Lands Strategy (draft), 2024

Dam Operation, Maintenance, Safety and Surveillance Manuals

- Operations Manual Corbett's Dam, 1995
- Operations Manual Ball's Mill Dam, 2004
- Operations Manual Garden Hill Dam, 2004
- Public Safety Assessment Ball's Mill Dam, 2013
- Public Safety Assessment Corbett's Dam, 2013
- Public Safety Assessment Garden Hill Dam, 2013
- Background Report- Ganaraska Region Conservation Authority- Dam Safety Reviews, 2016
- Public Safety Plan Ball's Mill Dam, 2017
- Public Safety Plan Corbett's Dam, 2017
- Public Safety Plan Garden Hill, 2017

Drinking Water Source Protection Reports

- Ganaraska Assessment Report, updated 2018
- Ganaraska Source Protection Plan (updated September, 2023)

Appendix 2 – Issues and Risks, Mitigation Measures, etc. related to GRCA Programs

GRCA has reviewed the issues and risks documented in this strategy and has described preliminary proposed mitigation measures. The amount of funding required to mitigate the risks are generally noted as “To be Determined (TBD)” as the issue may not arise or be able to be addressed in the foreseeable future and may be outside of the review period for this document. Additionally, degree of needed investment has been represented by dollar signs to show order of magnitude costs.

\$ - tens of thousands

\$\$ - hundreds of thousands

\$\$\$ - millions

Mandated Programs and Services: Category 1		
Issues and Risks	Mitigation Measures	Costs (TBD)
5.1.1 Natural Hazard Management		
Floodplain mapping		
Updating and maintaining watershed models and floodplain mapping does not have a source of sustainable funding. There has been no provincial funding since 1990s but some recent federal funding has been made available through the NDMP and FHIMP programs. GRCA cannot meet the obligations of new provincial regulation to update mapping annually as some of our models are not in a digital format. Provincial guidance has not been provided regarding how to incorporate climate change impacts in flood and erosion risks. Interaction between groundwater and surface water is critical to understand in hydrologic models that support mapping however, the assessment of groundwater resources is not considered a mandatory/Category 1 program area.	Continue to work with municipal partners to request support from provincial and federal funders. Apply to Flood Hazard Identification and Mapping Program (FHIMP). Encourage municipalities to establish hazard mapping reserves so that matching local dollars are available to leverage provincial and federal funding as it becomes available. Provincial mapping guidelines are currently being updated by MNR. Work with ORMGP to develop local models to further understanding of how groundwater and surface water interact within the GRCA watershed to plan for future growth.	\$\$\$
GRCA Owned Flood and Erosion Control Infrastructure		
All infrastructure is subject to gradual weathering and deterioration. In addition to	Continue to work with municipal partners to request support from	\$\$\$

<p>seasonal operations and maintenance activities, consistent inspections and funding for upgrades or repairs are needed to continue to maintain these structures. Annual funding applications to the Water and Erosion Control Infrastructure (WECI) program are the main source of funding for conservation authorities to maintain their structures. However, the funding can often be allocated to just a few large projects and must be matched by the applicant from local/municipal funds. This means that conservation authorities must approach municipal councils to seek additional funds for each project. A significant level of staff resources are used each year to manage these structures and apply for necessary funding.</p>	<p>WECI program to maintain flood and erosion control infrastructure.</p> <p>Encourage municipalities to establish reserves so that matching local dollars are available to leverage WECI funding as it becomes available.</p>	
Flood Forecasting and Warning		
<p>After decades of zero increases in funding, the Provincial Section 39 cuts of 50% in 2019 has downloaded these costs to the municipalities and negatively impacted GRCAs ability to modernize the program.</p>	<p>Request that the funding be restored. Seek additional funding sources.</p> <p>Encourage municipalities to establish reserves so that matching local dollars are available to leverage funding as it becomes available.</p>	<p>\$\$</p>
Ontario Low Water Response Program		
<p>The provincial funding that is available is helpful but does not cover the full costs of the program.</p>	<p>Work with the Province and local partners to request additional funding.</p>	<p>\$</p>
5.1.3 Source Water Protection		
<p>The need for proper funding for the Source Water Protection Planning Program. Without this program the municipalities would be responsible for the water treatment solutions.</p>	<p>Work with the Trent Conservation Coalition (TCC), the MECP to protect/maintain and potentially increase funding.</p>	<p>\$\$</p>
5.1.4 Conservation Areas/Conservation Lands		
<p>Sustainable funding is required to ensure implementation occurs to protect lands and</p>	<p>Seek additional funding and revenue opportunities.</p>	<p>\$\$\$</p>

offer recreational opportunities. In addition, increasing pressure on publicly accessible spaces can increase degradation and non-permitted uses on GRCA lands.		
5.1.5 Enabling/Support Services		
Staffing costs for IT, GIS and Remote Sensing are not fully covered under the general levy and require support from Category 2 (benefitting levy) projects which are not a consistent funding source and vary from year to year in availability.	Explore sustainable, ongoing funding sources to secure support services.	\$\$
Municipal Programs and Services: Category 2		
Issues and Risks	Mitigation Measures	Cost
Natural Heritage		
Recent changes to the Conservation Authorities Act have changed the role of CAs in the management of natural heritage. Natural Heritage information is used in other program areas such as evaluating watershed health, confirming land use layers and quantifying input parameters for hydrologic and hydraulic models that produce floodplain mapping, water budgets, etc. This information is also utilized in assessing carbon sequestration data in addition to quantifying the value of natural assets and ecological goods and services within the GRCA watershed. It is critical that Conservation Authorities continue to play a role in the mapping and management of natural heritage to ensure efficient delivery of other Mandatory/Category 1 services.	<p>Continue to work with municipal partners to provide support and expertise that best serves them.</p> <p>Coordinate mapping and management of natural heritage data on a watershed scale for use in program areas and special projects.</p> <p>Collaborate with municipal partners so that data is prepared and openly shared in an efficient and cost effective manner (avoids duplication of effort) that serves multiple program areas</p> <p>Demonstrate value of natural heritage data for use in developing land cover GIS layers for watershed models.</p> <p>Explore funding opportunities to develop and maintain natural heritage and land cover data for projects that benefit watershed residents.</p>	\$ - \$\$
Technical Studies		
Costs associated with completing critical technical studies are not fully covered under the general levy and require support from	Encourage municipalities to establish reserves for watershed plans, subwatershed studies, etc. to	\$\$ - \$\$\$

Category 2 projects which are not a consistent funding source and vary from year to year in availability.	support the monitoring of watershed health and to strategically position municipalities for future growth. These matching local dollars would be used to leverage additional funding as it becomes available.	
Category 3		
Issues and Risks	Mitigation Measures	Cost
Category 3 programs can be at risk given that the financial mechanism to support these programs are through specific agreements with member municipalities, partners or through self-generated revenues., all of which can have fluctuating financial stability. Category 3 programs and services delivered by the GRCA are integral to Category 1 or 2 programs and/or support implementation resulting from mandatory program and services.	Work with municipal partners to demonstrate value and cost effectiveness of Category 3 programs to watershed residents. Explore funding and revenue opportunities.	\$ - \$\$\$

DRAFT

STAFF REPORT – September 19, 2024

TO: Chair and Members of the Board of Directors

RE: Draft Conservation Lands Strategy Public Consultation Report

At the June 20, 2024 Board of Directors Meeting, the draft Conservation Lands Strategy was received for information by members, and direction was provided to staff to initiate public consultation.

The Ganaraska Region Conservation Authority (GRCA) conducted public consultation over 41 days from July 2 to August 12 to seek feedback on the draft Conservation Lands Strategy. During this time, a project website page provided information on the initiative and included a comment form for formal comment submissions. Two open houses were held: July 30th from 3:30 to 6:30 pm at the Ganaraska Forest Center and July 31st from 3:30 to 6:30 pm at the GRCA Administration Office.

A total of 15 comments were received during the consultation period. These comments, along with the comments received during the Ganaraska Forest Trail Modeling public consultation period were reviewed, and edits were made to the Draft Strategy.

Attached to this staff report is the Conservation Lands Strategy Public Consultation Report.

RECOMMENDATION:

THAT the Ganaraska Region Conservation Authority receives the Draft Conservation Lands Strategy Public Consultation Report, and staff report for information.

Prepared by:



**Pam Lancaster, B.Sc.
Conservation Lands Coordinator**

Recommended by:



**Linda J. Laliberte, CPA, CGA
CAO / Secretary-Treasurer**



GRCA Conservation Lands Strategy

Public Consultation Report, September 2024

Background

In December 2020, changes in the *Conservation Authorities Act* resulted in the introduction of mandatory programs and services which are to be delivered by all conservation authorities. Ontario Regulation 686/21 defines one of the mandatory programs as the “conservation and management of lands”. Further, Section 10 of the regulation requires all conservation authorities to prepare a Conservation Area Strategy, for all lands owned or controlled by conservation authorities, by December 31, 2024.

The Ganaraska Region Conservation Authority (GRCA) has modified the name of the strategy to “Conservation Lands Strategy” to encompass all GRCA land holdings. The Conservation Lands Strategy will be used to guide the conservation and management of GRCA lands.

Public Consultation

The GRCA conducted public consultation over 41 days from July 2, 2024 to August 12, 2024 to seek feedback on the draft GRCA Conservation Lands Strategy.

An online survey was available during the 41 days, and two open houses were held: July 30th from 3:30 to 6:30 pm at the Ganaraska Forest Center and July 31st from 3:30 to 6:30 pm at the GRCA Administration Office.

In order to promote the public consultation opportunities, the GRCA communicated in the following ways:

- Facebook Posts (9,093 Followers)
 - July 2: Public Invited to Provide Input (720 Reach; 780 Impressions)
 - July 8: Notice of Public Open Houses (727 Reach; 782 Impressions)
 - July 15: Public Invited to Provide Input (542 Reach; 576 Impressions)
 - July 22: Notice of Public Open Houses (1,632 Reach; 1,854 Impressions)
 - July 29: Public Invited to Provide Input (571 Reach; 615 Impressions)
 - July 30: Draft Conservation Lands Strategy Open House at the GFC Today (465 Reach; 471 Impressions)
 - July 31: Draft Conservation Lands Strategy Open House at Port Hope Office Today (429 Reach; 443 Impressions)
 - August 5: Public Invited to Provide Input (446 Reach; 472 Impressions)

- August 12 (Last Day): Last Chance to Provide Input – Input Period Now Closed (533 Reach; 571 Impressions)
- Instagram (442 Followers) and LinkedIn (328 Followers) was used between July 2 and August 12 and received the same posts as Facebook.
- X/Twitter (1,079 Followers) on July 2, 31, August 6 and August 12 the same Facebook posts were provided through X/Twitter.
- An email newsletter was sent on July 2 via Constant Contact to individuals who signed up through the online store (membership and day pass purchases), the media, the GRCA Board of Directors, and the GRCA Recreational Users Committee. The email newsletter invited participation to the consultation process. 2,968 emails were sent, and 2,002 emails were opened which is a 70.6% open rate.
- The GRCA website (grca.on.ca) was updated to host a “Public Consultation: Draft Conservation Lands Strategy” project page, which contained information on the project, the draft Conservation Lands Strategy document, open houses and a link to the comment form. Based on website analytics, the project page was viewed 24 times between July 2 and August 12.

Engagement during Public Consultation

The open houses consisted of display boards that showed GRCA owned and managed properties, and a summary of the goals, objectives and strategic actions. This information was the same as was in the draft strategy document which was provided on the GRCA website. Staff were on hand to answer questions and provide support to access the online survey. 14 people attended the July 30th open house and 2 people on July 31st.

A total of 15 online comment forms were submitted between July 2 and August 12, 2024.

Results of the Survey

Demographics

Fifteen online comment forms were submitted from individuals located within the Municipality of Port Hope, Town of Cobourg, City of Kawartha Lakes, City of Peterborough, Township of Cavan Monaghan, Municipality of Clarington, City of Whitby, City of Pickering, Township of Alfred and Plantagenet, and City of Toronto.

Combined, the commenters had visited all 9 conservation areas and the Ganaraska Forest.

Submitted Comments, Responses and How Comments were Addressed

The following are the comments that were submitted, responses to comments and notes on how the comments were addressed. Please note that some content has been removed to protect the privacy of the individual commenting.

1. Comment Submitted 2024-08-12

I am pleased to see the various proposed plans to enhance GRCA land conservation strategies. I will note a high reliance on developing plans verses programs that will implement actions. Perhaps the plans are assumed to be implemented after finalization. One program that seems to be missing is a recreational trail use compliance program to ensure that users of the various GRCA lands comply with relevant land use conservation rules. Conservation in my mind means protection of the land from negative human activities. That means interacting with the user communities on an ongoing basis, including in the field on GRCA trails, to ensure that trail and off-trail activities only take place where and as permitted by GRCA rules. A program should be established or enhanced to hire and train staff to educate and enforce GRCA rules with the public. Thank you.

Response to Comment

Strategic actions being proposed will be implemented and any plans that are created will have an additional implementation component that will include actions.

Regarding the comment about missing a compliance program, the GRCA does patrol for and enforce compliance to the *Conservation Authorities Act*, its regulation and property rules. Patrol and enforcement activities are informed by internal procedures, separate from the Conservation Land Strategy, and these internal procedures are continually being reviewed, updated and improved upon.

Any edits to the Conservation Land Strategy from the submitted comment? The comments submitted did not result in any edits to the Conservation Land Strategy.

2. Comment Submitted 2024-08-10

A lot of thought has been put into the DCLS document. It seems very comprehensive, and sensitive to the challenge of balancing conservation and land management of the conservation lands with the activities of the various types of recreational users. I attended the Open House at the Ganaraska Forest Centre with a group of equestrians who were concerned that use of the Ganaraska Forest trail system was being phased out for equestrians. We were assured by the two facilitators that this was NOT the case. The elimination of some of the equestrian amenities, e.g. hitching posts, is because of deteriorated condition. However funding of replacement amenities is a challenge. A number of the equestrian users would be willing to help out with brushing trails and possibly donating lumber, etc. Attendees left their contact information and would be happy to assist where possible. I know that there are some concerns, many which are fallacies, about the environmental impact of horses on trails. Numerous scientific studies have been done in the USA about this issue. One such paper "Environmental Aspects of Horses on Trails " by Adda Quinn addresses common misconceptions. The two facilitators at the GFC Open House were welcoming, enthusiastic and knowledgeable.

Response to Comment

As noted at the open house, equestrian use, the multi-use nature of trails in the Ganaraska Forest, and the other currently permitted uses in the Ganaraska Forest are remaining and are not a topic of the Conservation Land Strategy.

Some of the proposed strategic actions relate to volunteerism, and current programs exist to engage user groups and organizations in trail maintenance agreements.

GRCA staff utilize scientific data, research and information from similar organizations to make informed management decisions.

Any edits to the Conservation Land Strategy from the submitted comment? The comments submitted did not result in any edits to the Conservation Land Strategy.

3. Comment Submitted 2024-08-09

The introductory text to this comment was removed for privacy reasons.

The [removed for privacy] has reviewed GRCA's Draft Conservation Lands Strategy and offer only a few small comments and recommendations for your consideration. As part of Goal 2 (page 13), the Strategy sets objectives around providing and promoting passive and active recreational opportunities, but it does not reference resource-based recreation. Considering this is the only goal within the Strategy that focuses specifically on recreation, we strongly encourage the GRCA to incorporate considerations for all forms of recreation. Resource-based activities like hunting and fishing are ecologically, economically, and culturally significant and should be prioritized in the same manner as other forms of recreation. For much the same reason, the [removed for privacy] is encouraged to see objective 3.3 (page 16), "Consider cultural heritage features to enhance educational and recreational opportunities..." and fully supports the intended collection of cultural heritage data. As an organization, the [removed for privacy] is always searching for opportunities to improve social understanding of culturally significant activities, including but not limited to fishing and hunting. Aside from the obvious benefit of encouraging participating in these activities, education of this kind can also serve to reduce harmful stigmas associated with many forms of cultural and heritage recreation. We encourage the GRCA to take this opportunity to educate the public and encourage all forms of recreation. We appreciate the opportunity to engage with GRCA on this and other management topics, and look forward to continuing to work together for the betterment of conservation now and into the future.

Response to Comment

As implementation of the strategy and other programs occur, GRCA staff will work with existing partners and foster new partnerships.

Any edits to the Conservation Land Strategy from the submitted comment?

Resource-based recreation was added to the objective 2.1 related to Goal 2.

4. Comment Submitted 2024-08-09

The introductory text to this comment was removed for privacy reasons.

This looks really great, when you approach the implementation phase of things such as the monitoring, trail and invasive species management parts the [removed for privacy] will be happy to consult and brainstorm alongside GRCA. Page 4 - Build new partner opportunities - I would add "and leverage existing partnerships to re-vamp or re-start dormant/past projects/initiatives. A lot of the plan is regarding recreational use, which I think is very important. I believe this strategy in the future will help act as a tool to create trail and monitoring schedules so that partner organizations (such as us) and GRCA will have improved communication about maintenance, improvements and needs. I think for [removed for privacy], invasive species were a bit part of the management, and it goes hand-in-hand with improving the trail system and user experience. Perhaps some projects down the line to communicate threats of invasive so that public is aware when they use the trails about invasive species and their spread, ecological impacts etc. More outreach to public about invasive species in natural areas. Accessibility for Ontarians with Disabilities Act (page 6) – wanted to share that one of our easement properties [removed for privacy] – has recently installed a fully accessible trail system and they can be consulted in the future for ideas. I visited the trail last year and was really impressed. [removed for privacy] Page 12 – Monitoring requirements – we can connect on this for [removed for privacy] if there are any questions/needs around this as you roll out a new strategy. Perhaps can connect your monitoring staff with me, so I can know who is going out and when. Idea to engage youth in monitoring – perhaps have school groups or volunteers do monitoring on [removed for privacy] or other GRCA properties.

Response to Comment

As implementation of the strategy and other programs occur, GRCA staff will work with existing partners and foster new partnerships.

Regarding the comment about Page 4 text, this section outlines the GRCA Strategic Plan. The Action “Strengthen Existing Partnerships” relates to the comment given.

Any edits to the Conservation Land Strategy from the submitted comment? The comments submitted did not result in any edits to the Conservation Land Strategy.

5. Comment Submitted 2024-08-01

Support the strength of conservation lands strategy based on the 3 pillars / story boards, the importance of natural heritage system mapping (including ground truth data), natural heritage asset management plans (County, Cobourg); role of parks and CA within an urban boundary, opportunity / role of private land owners in also thinking same as CA relative protection, use and contribution (including investments like tree planting) in support of climate change thinking (fire risk prevention and response, stormwater - low impact development and natural woodlands / wetlands, green canopy enhancement, invasive species removal, future parks and CA within Cobourg secondary east planning, source water protection for those inside an urban boundary not supported with municipal infrastructure given location essentially on the “urban / rural divide). Attended July 31 public meeting.

Response to Comment

Interest may be had in the implementation of the Strategy and updates to Conservation Area Management Plans.

Any edits to the Conservation Land Strategy from the submitted comment? The comments submitted did not result in any edits to the Conservation Land Strategy.

6. Comment Submitted 2024-07-17

My property [removed for privacy] has 4 trails along my fence line some are as close as 18 inches. Why aren't existing trails moved to allow for forest recovery? New replacement trails would be more interesting to registered users. As for the mock closure of the Forest east I can tell you that all of your New gates are constantly bypassed. I have spent 3 hours yesterday repairing my fence as dirt bikers have ripped them down to bypass the gates. Who is responsible if/when these persons get injured? I can't move my fence line but the trail(s) can be moved. Why does the GRCA brag that they are the only Conservation Authority to allow any/all motorized vehicles? Where does the word CONSERVATION come into this? I'm at my property daily and never see anyone from the GRCA check things out. Who gets to see and respond to my queries? I would appreciate an answer.

Response to Comment

GRCA staff are in communication with the individual who submitted the comment.

Any edits to the Conservation Land Strategy from the submitted comment? The comments submitted did not result in any edits to the Conservation Land Strategy.

7. Comment Submitted 2024-07-17

Goal 1 Action 1.1.3 - Page 2 states that the GRCA is responsible for the timber tendering process. I would like the report to include the expectations of timber harvesting. I have witnessed a change in harvesting equipment and processes over the past 30 years, the current practices produce more slash. This increased slash makes for an ideal scaffold for invasive species such as *Cynanchum Rossicum* to take hold and outcompete the understory growth and a movement barrier to larger fauna. Goal 2 Commercialization of the public asset by GCRA. The report is silent on the frequent use of GRCA properties for the profit of commercial use such as tree top trekking, weddings, camping and movie sets. With the limited resources that the GRCA has these activities compete with the objective of goal 2. I would like to report to address how these revenue generating sources will support achieving the goals or call for their elimination to focus resources on the strategy goals.

Response to Comment

Details on management considerations to harvesting and invasive species is beyond the scope of the Conservation Lands Strategy. Considerations may be possible in subsequent planning documents. This comment has been brought to the attention of the GRCA Forester.

Regarding the comment on Goal 2, the Strategy does consider innovative resource mechanisms as Goal 3. The GRCA has the ability to create self-generated revenue by leasing and renting facilities and land for specific uses. The engagement of individuals through these opportunities and the financial benefits does help to achieve goals.

Any edits to the Conservation Land Strategy from the submitted comment? The comments submitted did not result in any edits to the Conservation Land Strategy.

8. Comment Submitted 2024-07-15

GRCA needs to re-open the singletrack mountain bike trails that have been in place for over 30 years. Ganaraska Forest used to be a destination for mountain bikers as it offered one of the longest and most complete trail networks. The recent work by Peterborough Trail Builders added some incredible trails that, without the damage caused by storms the past couple of years, was putting Ganaraska Forest singletrack trails back on the radar of Ontario, and Canadian, riders. This could have generated a ton of money for GRCA as well as local businesses. MTB Tourism is one of the most stable industries and Ganaraska Forest was uniquely situated to capitalize on this, considering the trail network and location to local amenities.

Response to Comment

The GRCA is working to develop single track in the Central Forest for multi-use opportunities.

Any edits to the Conservation Land Strategy from the submitted comment? The comments submitted did not result in any edits to the Conservation Land Strategy.

9. Comment Submitted 2024-07-13

Please consider that hunters use and enjoy the Ganaraska system and are valuable stewards of ecosystem management. All provincial hunting licence dollars go towards conservation, and hunters generally help to clean up garbage, monitor trails and safety in the GRCA forests, as well as notice trends in increases or declines in wildlife populations from year to year. I am recommending that GRCA reaches out separately specifically to hunters that use the GRCA for valuable input to protect and improve hunting in sections of GRCA forest lands. The cutting of thinner trails through thick and desolate sections of GRCA forests away from ATV and horse trails may be of benefit, as it can allow hunters with discreet access through forest sections without compromising any safety of motor vehicle operators or other non-hunting park users. As well, the GRCA should reach out to hunters to submit general wildlife reports so that the GRCA can evaluate the overall fauna within the forests. I personally have noted an increase of coyote-hybrids which would predate on small animals to deer. All motor-vehicle trails should be made at a distance from water sources to minimize contamination of wetlands and waterways. One of the conflicting issues recognized by hunters within the GRCA managed forests are that forest hours are open only until dark. Hunters often hunt when deer and coyote are most active near the end of the day, and Ontario hunting regulations permit hunting until a half hour after sunset (as well as a half hour before sunrise). Hunters hunting the evening portion likely require time to locate and retrieve/process harvested game (as is the hunter's provincial legal obligation), so it is recommended that hunters be allowed to stay after GRCA park open hours if to retrieve lawfully

harvested hours during daylight hours (an exemption). Note: Ticks have been seeming to increase each year, which will have an affect on recreational users, workers, volunteers and wildlife.

Response to Comment

The GRCA will consider resource-based recreation such as hunting during implementation of the strategy.

Regarding the hours of operation, GRCA lands are open from dawn until dusk. The terminology of dawn and dusk allows for 30 minutes before and after sunrise and sunset. GRCA Rules around hunting include following provincial legislation and rules. Therefore, if harvested game needs to be retrieved and processed according to legislation that activity can occur on GRCA property.

Any edits to the Conservation Land Strategy from the submitted comment? The comments submitted did not result in any edits to the Conservation Land Strategy.

10. Comment Submitted 2024-07-13

More than a year ago, the previous consultation took place. To date, there has been no feedback or response to any of the recommendations and content that was provided. As one example, it was recommended that the GRCA post a calendar on May 1st with the proposed dates for Volunteers to help clear the forest. It is now mid-July and, as far as I know, no volunteer events have been held. I am being asked to submit my response to this Land Strategy document but have no affirmation that the comments on this form will be used any more than the last session was. 1. The Mission statement of the GRCA makes reference to "serving, educating, informing and engaging the public." The word engaging should be eliminated. Rather than engaging, many of the current policies deny access to the Forest and ensure Users will not want to come to the Ganny. The \$16 one day pass is a disgrace. if two people want to take their dog for a walk it costs them \$32. This is ludicrous.2. In the "Strategic Plan Core Values" section the word Collaboration appears. Rather than collaborate the GRCA has abandoned the Patrol program which was a strong role to enable collaboration between the Users and the GRCA. There is no communication between the GRCA and the people who trained to be volunteers last year - they are completely ignored. The list of requirements for volunteers is expensive and impractical. You are expected to purchase a long list of safety items which you will never use because the Volunteers are not welcome on the Ganny.3. Under Strategic Actions, "Customer focussed and service driven" is the exact opposite of what actually happens. "Customers, aka as "Users" have no influence and no authority to take part in the trail development and maintenance. Trails are closed at random, no logic, no explanation and no challenges allowed. Currently the Blue trail is "closed for logging." Not true. So why can't the Blue trail be restored? No clue. THIS PAGE IS CLOSED - Very Customer Driven!!!!

Additional comments received by email

Part 2 of Response to the GRCA draft Strategic Plan.

The template provided blocks further entry after 2000 words. This is the continuation of the material I entered up to 2000 words.

4. Page 7 - Summary of Consultation and Engagement. A blank page!!!!

Nothing could make clearer my earlier comments about lack of engagement and lack of communication. How is it possible to collect data and then respond with “This will be added at a later date.” What happened to NOW?

This page is, literally, a slap in the face for all those who contributed to the previous request for comments.

5. Action 2.1.6. Re-routing and Permanent closure. “Communication to the public is part of the guideline” Nothing could be further from the truth. Since 1993 there has been a trail on the north side of the Tenth Line which runs from the Forest centre to the Horse Parking Lot. That trail has been blocked and closed, forcing pedestrians, riders, cyclists and other to travel on the Tenth line with motor bikes and other motorized vehicles. The whole benefit of the closed trail was to keep these user groups safe. No discussion, no explanation and no option to reconsider.

6. Action 2.1.7 Mapping issues. Historically maps have been available at the Forest Centre. No more. On line maps are on a black background and are absolutely indecipherable. Use of the internet in the Ganny is very spotty – much of the area is a dead zone. Users cannot rely on the internet to access maps or, in an emergency, get help. This is another overt effort to block information that users actually need.

7. Action 2.1.9 Volunteer engagement. Since the GRCA staff have made no effort to include Users in the maintenance of the forest, this section should be removed.

If the GRCA ever considers actually including Users the fastest and easiest way to restore some engagement would be to restore the Patrol program.

I am in the Forest at least 12 times every month. This year the Forest is virtually empty. Between May 1st and July 12th I have seen 5 pedestrians in the Forest and probably ten people on horseback. This fabulous space and the wonderful (original) trails should be teeming with activity. The forest is in a shocking state of disrepair and it is a tragedy that the User community is so ignored and prohibited from helping. I am sure every word I have sent to you will be ignored but at least you cannot say “I had no idea....”

Response to Comment

Please note that staff did follow up by phone with this individual to discuss some of the comments.

Comments at the start are about the summary of the GRCA Strategic Plan and how it is felt the GRCA Strategic Plan is or is not being considered.

In reference to the day pass fees at the Ganaraska Forest, the cost for a day pass for an individual 12 year or over is \$7.00. An individual 11 and under is free. The \$16 day pass is for horse back riding, hunting, cross-country skiing, mountain biking or a motorized passenger.

Communication emails were sent out at the completion of the volunteer pilot program and volunteer programs are a consideration within the Strategy. A report on how previous public consultation comments were addressed was provided to the Board of Directors in 2024 as part of the February consultation process around trail modeling criteria.

The comment “This page is closed” is in reference to the character limit. The limit was originally set at 1000 but increased to 2000 after feedback was received. However, commenters were able to email additional feedback to staff.

Commet 4 regarding the public consultation section in the strategy being blank. This section was left blank, and a note was given that stated, “to be written for the final version”. The strategy will include a high level summary consultation and engagement.

The status of specific trails – the GRCA as part of strategy implementation will focus on communications. In some cases, agreements need to be in place before trails that may have been used in the past are re-considered.

The digital map provided by the GRCA for Ganaraska Forest Trails does not require mobile signal or data to view if the map is accessed through the Field Maps Mobile Application. The basemap is in neutral colours. GRCA staff are always available to technically support users and feedback is considered annually to improve the mapping system. Paper maps can be provided on request but they will reflect a moment in time and can quickly become outdated with inaccurate information.

Any edits to the Conservation Land Strategy from the submitted comment? The comments submitted did not result in any edits to the Conservation Land Strategy. However, as noted in the response to comments, the summary of consultation and engagement has been written.

Please note that GRCA staff did communicate with this individual to discuss the various comments provided.

11. Comment Submitted 2024-07-08

I’ve been riding atv’s responsibly in the Ganaraska for about 40 years, have helped clear trails that have been blocked by wind/ice damage and would like to see responsible motorized use continued in the forest without any trail closures and the east section fully reopened to allow access to Bewdley.

Response to Comment

The Strategy is proposing that guidelines be created to consider temporary closures and trail re-routes or permanent closures. Processes for data collection, documentation, public consultation, and communication to the public will be considered as part of the guidelines.

In regards to the comment about access to Bewdley, it is to be noted that the GRCA does not own land in a contiguous manner that would facilitate access to Bewdley without having to access municipal rights-of-ways or private property.

Any edits to the Conservation Land Strategy from the submitted comment? The comments submitted did not result in any edits to the Conservation Land Strategy.

12. Comment Submitted 2024-07-08

First of all, 1000 characters does not provide the space to provide adequate detailed commentary on a 25 page document. Therefore I will use a new submission for each comment on a particular section. 6. GRCA Land Use Categories disagree with the definitions of passive and active recreation. Historically and in most other jurisdictions, both cycling and horseback riding are considered along with hiking to be passive recreation. Neither horses nor bicycles require

additional infrastructure from hiker required infrastructure. Both equestrians and cyclists have low impact on trail sustainability, especially compared to traditionally active uses such as motorized vehicles. Please see this link for more information: <https://www.americantrails.org/resources/environmental-aspects-of-horses-on-trails>

[Section] 8. Goals, Objectives, and Strategic Actions I disagree with the "The aim is to have as few signs on GRCA properties as possible, while still providing clear and consistent imagery, typography, and messaging to visitors". As a frequent user to the forest the trail labeling and signage is abysmal, often leading to lost users, difficulty communicating which trail the user is on (especially when meeting other users). I would stress the importance of signage for user safety and enjoyment. Suggested re-wording may be as follows: "The aim is to provide clear and consistent imagery, typography, and messaging to visitors while minimizing impact on ecology"

Response to Comment

Please note that the character limit was originally set at 1000 but increased to 2000 after feedback was received. However, commenters were able to email additional feedback to staff or submit another comment through the website.

Any edits to the Conservation Land Strategy from the submitted comment? Edits to the land use categories have been made to clarify the difference between active and passive recreation and relationships to the Conservation Authorities Act and its regulations.

The comment about signage was noted and updates made to reflect the suggestion.

13. Comment Submitted 2024-07-03

As you are well aware the #1 thing the local mountain bike community would like is to have access to the former Peterborough Trail Builders Trails that has been denied and the trails not allowed to be maintained. As per sections 2.1.3 and 3.1.1 "Creation of Ganaraska Forest access guidelines will help to identify where existing parking lots can be improved and additional parking lots maybe required. Consideration will also be given to access points for those who use forms of transportation other than a highway vehicle" "Consideration will be given to existing trails, environmental criteria, as well as trail user preferences." So when will the former Peterborough Trail Builders be cleaned, open and accessible Millbrook? Sec. 2.1.9 Want positive volunteers and to create a sense of community? Open them up. No local riders want to drive to the forest center to pay one of the highest mountain biking forest access fees in Ontario to r the horrible sandy logging roads.

Response to Comment

As the commenter has noted, the strategy is proposing many actions around the development of guidelines and volunteerism that will support recreational use. In some cases, agreements need to be in place before trails that may have been used in the past are re-considered.

Any edits to the Conservation Land Strategy from the submitted comment? The comments submitted did not result in any edits to the Conservation Land Strategy.

14. Comment Submitted 2024-07-03

Please provide simple trail maps that are named and color coded. These maps should be easily downloaded from your web site. Please keep it easy to read and plain to see. Current maps have been so detailed and finely printed that they are practically useless to the casual user. A simple map would show the major trails and where they intersect. Included on the map should be identifiable boundaries e.g. roads clearly marking parking lots and entry points. Thank you.

Response to Comment

The current digital map does show property boundaries and parking lots but at a certain scale, therefore zooming of the map may be required. GRCA staff are always available to technically support users, and feedback is considered annually to improve the mapping system. This includes labeling and symbology.

Any edits to the Conservation Land Strategy from the submitted comment? The comments submitted did not result in any edits to the Conservation Land Strategy.

15. Comment Submitted 2024-07-02

It is a shame that mountain biking will no longer be available at the Ganaraska conservation area. Very sad to have such a great attraction missing from the area.

Response to Comment

Mountain biking is still permitted, and mountain biking can occur on trails as described on the Ganaraska Forest Trail Map.

Any edits to the Conservation Land Strategy from the submitted comment? The comments submitted did not result in any edits to the Conservation Land Strategy.

STAFF REPORT – September 19, 2024

TO: Chair and Members of the Board of Directors

RE: Conservation Lands Strategy

In December 2020, changes in the *Conservation Authorities Act* resulted in the introduction of mandatory programs and services which are to be delivered by all conservation authorities. Ontario Regulation 686/21 defines one of the mandatory programs as the “conservation and management of lands”. Further, Section 10 of the regulation requires all conservation authorities to prepare a Conservation Area Strategy, for all lands owned or controlled by conservation authorities, by December 31, 2024.

The GRCA has modified the name of the strategy to “Conservation Lands Strategy” to encompass all GRCA lands. The Conservation Lands Strategy will be used to guide the conservation and management of GRCA lands. The Strategy will be reviewed and updated in 2027. This date has been selected to coincide with the 10-year Ganaraska Forest Management Plan update.

The GRCA undertook consultation and engagement specific to the development of the Conservation Lands Strategy (please see Staff Report *Draft Conservation Lands Strategy Public Consultation Report*). During implementation of the strategic actions, the GRCA will consider consultation and engagement to further consider public, stakeholder and Indigenous engagement and feedback.

The creation and adoption of the Conservation Lands Strategy is an important step in managing lands owned by the GRCA and implementation of the strategy will be of the same importance. Implementation will be most successful when conducted by the GRCA in partnership with member municipalities, partner organizations, volunteers, and the public.

Attached to this staff report is the final Conservation Lands Strategy. When approved, this strategy will be made available on the GRCA website.

RECOMMENDATION:

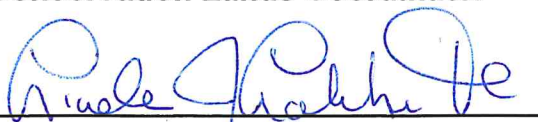
THAT the Ganaraska Region Conservation Authority receive the Conservation Lands Strategy staff report for information; and,
FURTHER THAT the Ganaraska Region Conservation Authority approve the Conservation Lands Strategy.

Prepared by:

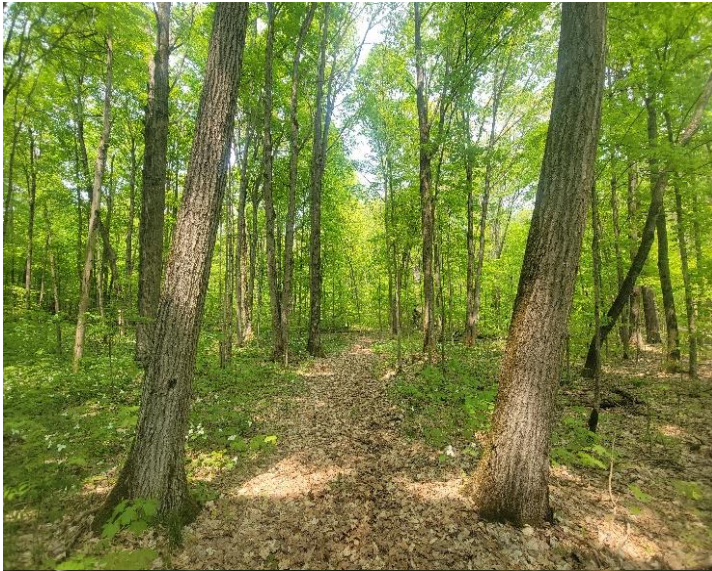


Pam Lancaster, B.Sc.
Conservation Lands Coordinator

Recommended by:



Linda J. Laliberte, CPA, CGA
CAO / Secretary-Treasurer



CONSERVATION LAND STRATEGY

For Lands Owned and Managed by the
Ganaraska Region Conservation Authority

September 2024



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1. Introduction

The Ganaraska Region Conservation Authority (GRCA) owns 4,648 hectares (11,486 acres) of land within and outside of the GRCA jurisdiction¹ (Figure 1), which represents approximately 5% of the watershed area. GRCA lands contribute to the local and regional natural heritage system and include natural features such as forests, tallgrass prairie, Provincially Significant Wetlands, watercourses, the Lake Ontario and Rice Lake shorelines, and the Oak Ridges Moraine. All lands owned by the GRCA also consist of natural hazards (e.g., floodplains, erosive soils, valleys).

In December 2020, changes in the *Conservation Authorities Act* resulted in the introduction of mandatory programs and services which are to be delivered by all conservation authorities. Ontario Regulation 686/21 defines one of the mandatory programs as the “conservation and management of lands”. Further, Section 10 of the regulation requires all conservation authorities to prepare a Conservation Area Strategy, for all lands owned or controlled by conservation authorities, by December 31, 2024.

The GRCA has modified the name of the strategy to “Conservation Lands Strategy” to encompass all GRCA land holdings. The Conservation Lands Strategy will be used to guide the conservation and management of GRCA lands.

¹ Portions of the Ganaraska Forest extend beyond the GRCA jurisdiction into Otonabee Region Conservation Authority jurisdiction.

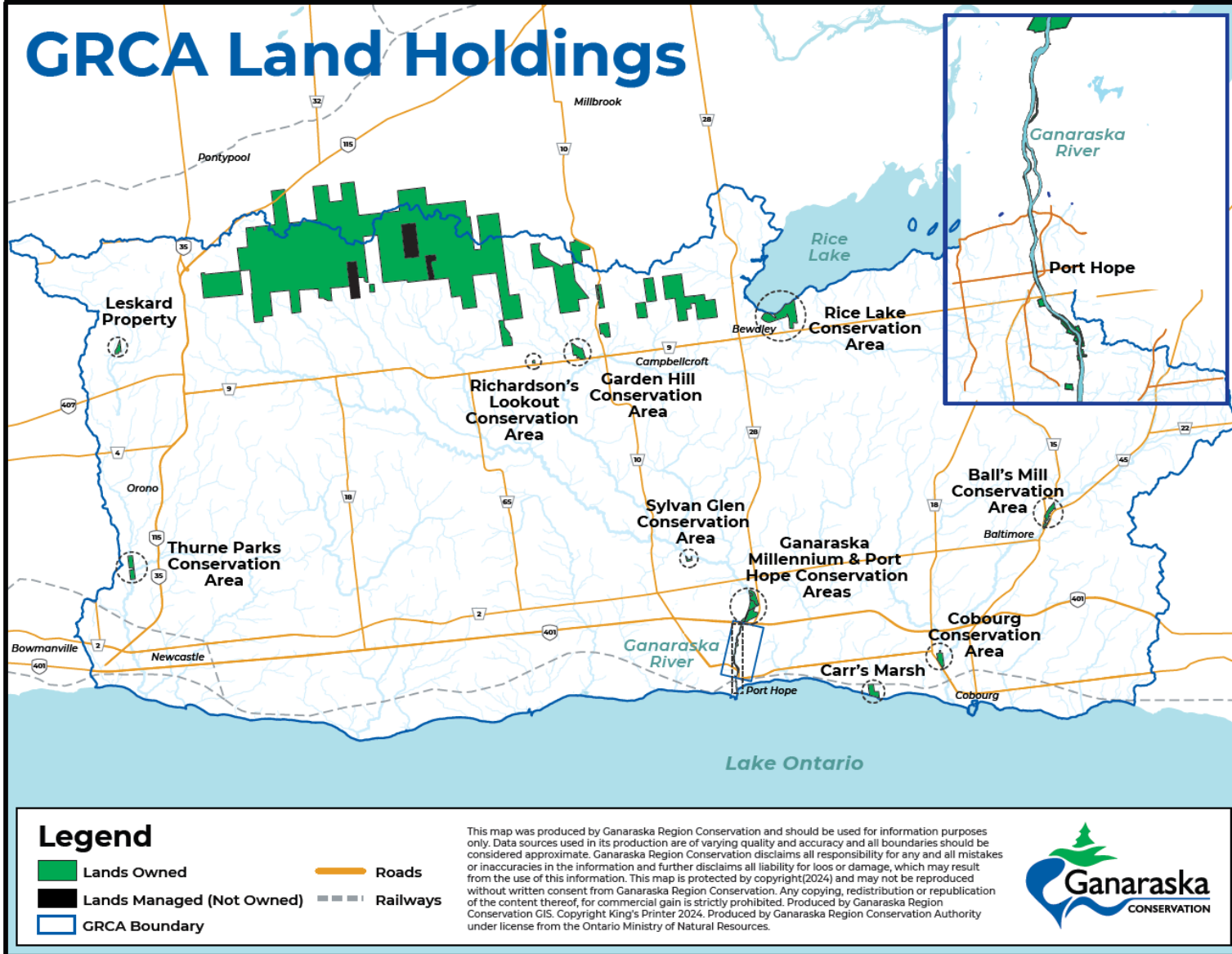


Figure 1: GRCA owned and managed lands

2. History of Land Acquisition and Land Management in the GRCA, 1946 to 2015

The need to protect land, through securement has always been a focus of the GRCA, with a priority of managing natural hazards and the preservation of natural heritage features and functions. The 1944 *Ganaraska Watershed Report* recommended the establishment of a 20,000 acre (8,000 hectare) forest on marginal and submarginal land in the headwaters of the Ganaraska River². The need resulted from significant erosion that was occurring in the area, and downstream flooding. To carry out recommended watershed management actions, the first 11 properties were acquired in 1947 by the Ganaraska River Conservation Authority³ with the purpose of reforestation, which began that same year. This long-term reforestation effort became one of the most successful conservation projects in Ontario. From 1947 to 1981, the lands that would become the current day Ganaraska Forest were acquired under the ownership of the GRCA with additional properties acquired as recently as 2001, 2007 and 2010. Today, the GRCA owns 4,378 hectares (10,818 acres) of land that is called the Ganaraska Forest.

In 1946, when the *Conservation Authorities Act* was passed, the need to acquire lands for conservation and protection was included, however the aspect of recreation was absent. The Act was amended in 1954 so that lands acquired for conservation purposes could also offer recreational opportunities⁴. From 1956 to 1976, the first parcels that would become the nine conservation areas were acquired by the GRCA primarily for water management purposes and low intensive recreation where compatible. Throughout the 1980s, additional properties were acquired to enlarge some of the conservation areas. Other land holdings were acquired in 1979 and 1985 for the sole purpose of conservation and protection. Some conservation areas, such as Garden Hill and Richardson's Lookout, and the Leskard Land Holding were dedicated to events and people who were influential to the conservation movement in Ontario. Others were opened by dignitaries, including Her Majesty Queen Elizabeth II who officially opened Cobourg Conservation Area in June 1973.

After the March 1980 flood of the Ganaraska River, the GRCA acquired over 20 properties that were impacted by the flood and were needed to undertake the Port Hope channelization project. As a result of the project, which was completed in 1983, the Ganaraska River was widened and deepened over a distance of approximately 1,000 metres to improve the capacity of the river to convey flood flows through the downtown area.

From the 1970s through the 1980s, master plans were developed for each conservation area, and projects were undertaken such as tree planting, the creation of picnic areas,

² Richardson, A.H. 1944. *The Ganaraska Watershed: A study in land use with recommendations for the rehabilitation of the area in the post-war period*. Ontario Department of Planning and Development, Toronto, Ontario

³ In 1962 the Ganaraska River Region Conservation Authority was expanded and re-named the Ganaraska Region Conservation Authority.

⁴ Richardson, A.H. 1974. *Conservation by the People: the history of the conservation movement in Ontario to 1970*. University of Toronto Press, Toronto, Ontario, Canada.

and parking lots. At the same time, recreational pressures in the Ganaraska Forest required the GRCA and the Ministry of Natural Resources (MNR), which at that time managed the forestry aspects of the Ganaraska Forest, to consider recreation management. It was decided that management of recreation would primarily be the responsibility of the GRCA based on arrangements made under an agreement with the MNR. In 1980, the *Ganaraska Forest Study* was drafted for consideration within a new *Forestry Act* agreement. In the late 1970s and early 1980s, recreational activities in the Ganaraska Forest included hiking, snowmobiling, cross country skiing, horseback riding, hunting, and picnicking. Motor vehicles also accessed the Forest and included trucks, cars, vans, dirt bikes, and dune buggies⁵.

In 1987, a review of the Ganaraska Forest Study was undertaken by the Forest Study Review Committee. The Committee recommended the need for a Forest User Committee who would provide advice to the GRCA Full Authority Board⁶ on recreational issues and management in the Forest. The Forest User Committee met for the first time in April 1988.

Between the late 1980s through to the mid-1990s there was an increase in mountain biking and equestrian use in the Central Ganaraska Forest. Motorized use also grew in popularity in the West and East Forests, and in particular dirt bike riding and related events. These increases in recreational opportunities and use of the Forest resulted not only in enjoyment of the Ganaraska Forest and engagement by volunteer organizations, but also in impacts to the environment and conflict between different activities. To mitigate and manage some of these impacts and conflicts, signage was installed, and paid duty police patrols were introduced. In the fall of 1993, the Ganaraska Forest membership program was introduced. The revenue from this program was to help fund the GRCA programs and services including the management of the Ganaraska Forest.

Before 1997, the MNR carried out forest management on the GRCA owned Ganaraska Forest. In 1997, the MNR transferred management of the Forest back to the GRCA. When the management responsibility was turned back to GRCA, it included the timber tendering process, which was previously carried out by the MNR.

In 1998, the GRCA prepared, through a consultant, an updated Forest Management Plan so the GRCA could carry out forest management activities, and that would satisfy the Managed Forest Tax Incentive Plan requirements. The GRCA continued to carry out forest management activities to ensure that the continual restoration of the Ganaraska Forest occurred, which primarily consists of thinning red pine plantations to encourage the growth of white pine and red oak.

The 1998 Forest Management Plan also outlined long- and short-term strategies which confirmed the existence of multi-use trails and existing recreational uses, supported additional signage, promoted restoration projects, and recommended the implementation

⁵ Management Plan for Ganaraska Region Conservation Authority Forest 1982 to 2002.

⁶ Today, the Full Authority Board is referred to as the Board of Directors.

of the 1997 *Ganaraska Forest Trail Study*⁷. Initiatives to implement the 1998 Forest Management Plan occurred throughout the 2000s and 2010s, with significant support from the Ganaraska Forest Recreational Users Committee, volunteers, and partner organizations.

To celebrate the year 2000, the GRCA developed the East side of the Ganaraska River north of Hwy 401 to become the Ganaraska Millennium Conservation Area. Access to 2.5 kilometres of newly developed trails were linked to the GRCA administrative office, along with the construction of the Millennium Interpretive Centre and picnic shelter. Additionally, in 2002, an updated Cobourg Conservation Area Master Plan was created, and throughout the 2010s naturalization of the riparian area within the Cobourg Conservation Area occurred through involvement of local partner organizations, community groups, and volunteers.

3. Applicable Legislation and Planning Initiatives

The Conservation Lands Strategy is informed by and will compliment existing legislation and GRCA planning initiatives. Some applicable legislation and GRCA planning initiatives include but are not limited to the following.

[Conservation Authorities Act](#)

The GRCA is governed under the *Conservation Authorities Act*. The purpose of the Act is to “Provide for the organization and delivery of programs and services that further the conservation, restoration, development and management of natural resources in watersheds in Ontario.” The creation and implementation of the Conservation Lands Strategy is in line with the purpose of the *Conservation Authorities Act*.

[Ontario Regulation 686/21 Mandatory Programs and Services](#)

As per Ontario Regulation 686/21:

*Conservation and Management of Lands required components*⁸.

9. (1) *Programs and services provided by an authority with respect to the conservation and management of lands under subparagraph 1 ii of subsection 21.1 (1) of the Act shall include the following:*

1. *A conservation area strategy, prepared on or before December 31, 2024 for all lands owned or controlled by the authority, including any interests in land registered on title, that meets the requirements set out in section 10.*

10. (1) *A conservation area strategy referred to in paragraph 1 of subsection 9 (1) shall include the following components:*

1. *Objectives established by the authority that will inform the authority’s decision-making related to the lands it owns and controls, including decisions related to policies governing the acquisition and disposition of such lands.*

⁷ Marsh, J and Warfield, J. 1997. Ganaraska Forest Trails Project for the Ganaraska Region Conservation Authority. Trail Studies Unit, Trent University, Peterborough Ontario.

⁸ Appendix A details how the GRCA Conservation Lands Strategy conforms to O. Reg 686/21.

2. *Identification of the mandatory and non-mandatory programs and services that are provided on land owned and controlled by the authority, including the sources of financing for these programs and services.*
3. *Where the authority considers it advisable to achieve the objectives referred to in paragraph 1, an assessment of how the lands owned and controlled by the authority may,*
 - i. *augment any natural heritage located within the authority's area of jurisdiction, and*
 - ii. *integrate with other provincially or municipally owned lands or other publicly accessible lands and trails within the authority's area of jurisdiction.*
4. *The establishment of land use categories for the purpose of classifying lands in the land inventory described in section 11 based on the types of activities that are engaged in on each parcel of land or other matters of significance related to the parcel.*
5. *A process for the periodic review and updating of the conservation area strategy by the authority, including procedures to ensure stakeholders and the public are consulted during the review and update process.*

(2) The authority shall ensure stakeholders and the public are consulted during the preparation of the conservation area strategy in a manner that the authority considers advisable.

(3) The authority shall ensure that the conservation area strategy is made public on the authority's website, or by such other means as the authority considers advisable.

[Ganaraska Region Conservation Authority Strategic Plan](#)

The Ganaraska Region Conservation Authority's *Strategic Plan: 2015-2020 A Roadmap for the Future* defines a vision and mission for the GRCA, which is shared with the Conservation Lands Strategy. The vision is "*Clean water healthy land for healthy communities.*" The mission is "*To enhance and conserve across the Ganaraska Region Watershed by serving, educating, informing and engaging.*"

The Strategic Plan outlines four core values, which are values shared by the Conservation Lands Strategy: knowledge, collaboration, excellence, and innovation. The Strategic Plan also defines the following strategic actions that relate to lands owned by the GRCA and the development of the Conservation Lands Strategy.

- Strengthen science, knowledge and decision making.
- Value the watershed through protection and restoration.
- Support sustainable, healthy communities.
- Strengthen existing partnerships.
- Build new partner opportunities.
- Promote information sharing and learning.
- Create connections.
- [Be] responsible watershed-based advocates.
- Foster support and improved understanding.
- Customer-focused and service driven.

Watershed Plans

Many watersheds within the Ganaraska Region are recognized for their fisheries, aquatic habitat, terrestrial natural heritage, and recreational opportunities. The *Cobourg Creek Watershed Plan*, developed in 2008, along with the *Ganaraska River Watershed Plan* and *Wilmot Creek Watershed Plan*, developed in 2010, were written to recommend actions to conserve, enhance and manage the watersheds and their resources for current and future generations; and are founded on science and community input. Among the many purposes of the Watershed Plan, the Conservation Lands Strategy can “*Encourage land and resource uses that maintain, improve or restore the ecological and hydrological functions of the watershed.*”

The watershed plans highlight the importance of recreational opportunities and promotes a target for success that “*Trails, and recreational facilities complement natural areas and reduce negative effects to natural heritage systems.*”

Ganaraska Forest Management Plan

The *Ganaraska Forest Management Plan 2018-2038* was written to provide guidance and recommendations for the sustainable use and conservation of the Ganaraska Forest. Further, the Plan satisfies requirements of the Managed Forest Tax Incentive Program. Based on this guidance, the Plan establishes forestry principles and follows an “ecology first approach”, thereby ensuring that all values are protected during harvesting and that the diversity of plants and animals are maintained and increased.

Many of the recommendations provided through the extensive consultation on the Forest Management Plan, undertaken in 2016-17, were regarding recreational use. The Synopsis Report provided a summary of the consultation and input on the multi-use nature and value of the Ganaraska Forest.

The creation of the Conservation Lands Strategy is a key tool in allowing the GRCA to continually work towards improving the trail system and user experiences within the Ganaraska Forest in an ecologically considerate manner. The Conservation Lands Strategy will be implemented in conjunction with the Ganaraska Forest Management Plan and Forest user feedback, and together will inform the Ganaraska Forest Recreation Program.

Terrestrial Natural Heritage Strategy

In 2013, the GRCA released its Terrestrial Natural Heritage Strategy, which among many purposes, includes an overview of some of the main terrestrial conservation issues in the GRCA and outlines a series of steps and a framework for addressing the issues. One recommended action is “Undertake assessments of the impacts of recreational use on natural heritage features, where possible working with educational institutions and students in the process.”

Oak Ridges Moraine Conservation Plan

While providing ecological and hydrological protection, the Oak Ridges Moraine Conservation Plan also supports recreation and tourism uses, as appropriate on the Moraine. Specifically, the Plan speaks to a trail system through the Oak Ridges Moraine

that provides for non-motorized (low intensity recreation), accessible recreational access that links with a system of parklands, water bodies, open spaces, and trails across the Greenbelt. The Conservation Lands Strategy can complement the objectives of the Oak Ridges Moraine Conservation Plan, 2017; as well as the goals of the Greenbelt Plan, 2017.

[Accessibility for Ontarians with Disabilities Act](#)

The *Accessibility for Ontarians with Disabilities Act*, or AODA, aims to identify, remove, and prevent barriers for people with disabilities. The GRCA, as opportunities arise, will aim to improve accessibility to lands for all peoples to enjoy.

4. Planning Process

The Conservation Lands Strategy is one tool that will be used in the ongoing responsible management of the lands owned by the GRCA. Publicly accessible lands within southern Ontario are facing increasing pressures, ranging from invasive species, increased use, and climate change. As a result, there is an ever-increasing need to actively manage lands to ensure that environmental impacts from recreational use are avoided or mitigated, and that trails and recreational opportunities provide for a safe and enjoyable multi-use experience.

To address growing pressures on publicly accessible spaces, the Conservation Lands Strategy must create a structured framework for planning and decision making that is adaptive and locally relevant. Generally, management planning follows an adaptive and repeated approach that is comprised of four components (Figure 2). The creation of the Conservation Lands Strategy is the “Plan” step of the process, and the Strategy will be reviewed and updated in 2027. This date has been selected to coincide with the 10-year Ganaraska Forest Management Plan update.

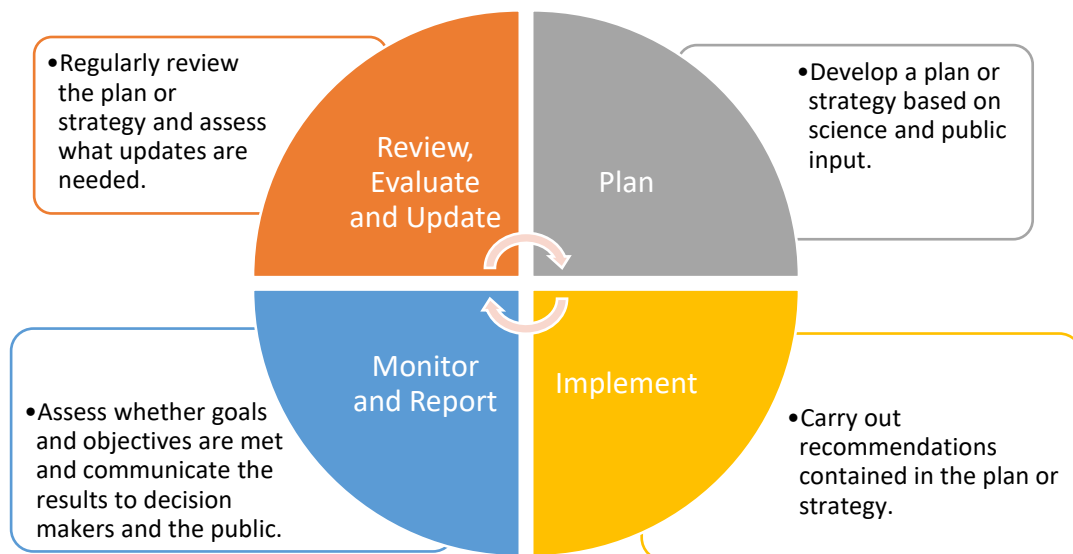


Figure 2: Adaptive management process

5. Summary of Consultation and Engagement

Consultation and engagement on the Draft Conservation Lands Strategy occurred over 2024 whereby the public, Ganaraska Forest users, conservation area users, stakeholders, partners, member municipalities and organizations were invited to open houses and submit comments.

Beginning in late winter 2024, the GRCA consulted on environmental and trail user criteria that will be used by the GIS model to help determine recreational trail locations in the Ganaraska Forest. The GRCA conducted specific public consultation over 16 days from February 21 to March 7 to seek feedback on the environmental and trail user criteria that will be used by the GIS model. An online survey was available during the 16 days, and two open houses were held: February 27th from 3:00 to 7:00 pm at the Ganaraska Forest Center and February 28th from 3:00 to 5:30 pm at the GRCA Administration Office. A total of 336 online surveys were submitted between February 21st and March 7th. Although this specific consultation was focused on modeling criteria, all comments were reviewed and considered during the creation of the Conservation Land Strategy.

On June 20, 2024, the GRCA Board of Directors directed staff to begin public consultation on the Draft Conservation Lands Strategy. Public consultation was initiated on July 2 and ended on August 12, 2024. During this time, a project website page provided information on the initiative and included a comment form for formal comment submissions. Two open houses were also held: July 30th from 3:30 to 6:30 pm at the Ganaraska Forest Center and July 31st from 3:30 to 6:30 pm at the GRCA Administration Office. A total of 15 comments were received during the consultation period.

Although the GRCA has concluded consultation and engagement specific to the development of the Conservation Lands Strategy, during implementation of the strategic actions, the GRCA will consider consultation and engagement to further consider public and stakeholder engagement and feedback.

6. GRCA Land Use Categories

To satisfy Section 10(1)4 and 11(1)7 of Ontario Regulation 686/21, land use categories must be created for the purpose of classifying lands in a land inventory. The categories are defined based on the types of activities or services that are offered on each parcel of land owned or controlled by the GRCA.

GRCA land use types can be divided into four land use categories and sub-categories.

- Conservation Areas
 - Passive recreation
 - Resource based recreation
- Ganaraska Forest
 - Passive and active (multi-use) recreation
 - Resource based recreation
- Management Areas
 - No recreation
 - Flood management infrastructure and/or natural hazards
 - Restoration/stewardship
- Conservation Authority Administrative Area

When applying land use categories to parcels owned or controlled by the GRCA, multiple land use categories can exist on one parcel. For example, a parcel within the Ganaraska Forest may offer passive and active (multi-use) recreation, resource-based recreation, but also include lands in the same parcel that are management areas with no recreation, and with the purpose of restoration/stewardship.

For the purpose of land classification and management, the following definitions apply:

- **Passive recreation:** activities that occur on trails or in manicured spaces that do not require specific infrastructure to undertake as an individual or group but may require minimal equipment. Examples include hiking, bird and wildlife watching, and picnicking.
- **Active recreation:** recreational activities that occur on trails that require specific infrastructure, staff support, and/or require specialized equipment. Examples of such activities include mountain biking, horseback riding, cross-country skiing, off-road motorcycling, ATV/side-by-side riding, 4x4 off-road use. Active recreation includes cycling and horseback riding given the requirement for the Authority to designate where those activities can occur based on *Ontario Regulation 688/21 Rules of Conduct in Conservation Areas*.
- **Resource-based recreation:** hunting and fishing in accordance with Provincial regulations.
- **No recreation:** neither passive, active, nor resource-based recreation is permitted within the area of land defined as no recreation. This can be an entire parcel or an area of land within a parcel.
- **Flood management infrastructure:** any GRCA owned or managed dams, channels, and flood warning monitoring equipment.
- **Restoration/stewardship:** GRCA land is managed to protect the natural features and functions through active restoration, stewardship activities, and forest management.

Conservation Areas

The GRCA is home to some of the oldest conservation areas in the province. The recreational use of these properties shall remain “passive recreation” and/or “resource-based recreation.” Infrastructure that is considered for lands classified as “conservation areas” may include signage, picnic tables and/or picnic shelters, waste receptacles, designated parking areas, gates, port-a-potties, educational signs, bridges, boardwalks, stairs, and observation decks. Additional infrastructure may be considered and must meet the intent of passive or resource-based recreation. Land classification will also include “management areas” and in particular “flood management infrastructure and/or natural hazards,” “no-recreation” and “restoration/stewardship”. The nine properties that are considered under the land classification of “Conservation Area” with the category of “Management Areas” and associated sub-categories identified on the same parcel, are as follows.

Conservation Area	Size (hectare)	Watershed/ Municipality	Natural Hazards	Natural Features
Rice Lake	73.6	Rice Lake/Township of Hamilton	Floodplain	Rice Lake, Provincially Significant Wetland, Significant Woodland, Area of Natural and Scientific Interest
Ball’s Mill	15.2	Cobourg Creek/ Township of Hamilton	Floodplain and Dam	Cobourg Creek, Significant Woodland
Cobourg	12.5	Cobourg Creek/Town of Cobourg	Floodplain	Cobourg Creek, Significant Woodland
Ganaraska Millennium	39.19	Ganaraska River/Municipality of Port Hope	Floodplain	Ganaraska River, Significant Woodland, wetland
Port Hope		Ganaraska River/Municipality of Port Hope	Floodplain	Ganaraska River, Significant Woodland
Sylvan Glen	1.96	Ganaraska River/Municipality of Port Hope	Floodplain	Ganaraska River
Garden Hill	21.4	Ganaraska River/Municipality of Port Hope	Floodplain and Dam	Ganaraska River, Significant Woodland, pond
Richardson’s Lookout	1.22	Ganaraska River/Municipality of Port Hope		Height of land
Thurne Parks	18.8	Wilmot Creek/Municipality of Clarington	Floodplain	Wilmot Creek, Significant Woodland

Ganaraska Forest

The Ganaraska Forest provides many local and regional social and economic benefits given that it allows people the opportunity to experience an expansive natural environment. The Ganaraska Forest provides flood mitigation benefits to downstream watershed communities through the interception and infiltration of rainfall, and the tree cover contributes to local and regional natural heritage systems. Each year thousands of Forest users from across the province and beyond, enter the Ganaraska Forest with a day pass or membership to undertake a diversity of activities on hundreds of kilometers of multi-use trails.

Of the land the GRCA owns, 96% is the Ganaraska Forest. The Ganaraska Forest is comprised of many natural hazards, features and functions that require protection, and integrated watershed-based management. Not only does the Ganaraska River watershed benefit from the Ganaraska Forest, but so too does the watershed land outside of the GRCA jurisdiction: Baxter Creek, Cavan Creek, and Squirrel Creek. The Ganaraska Forest also contributes to the natural function of the Oak Ridges Moraine, which is part of Ontario's Greenbelt.

The land use category "Ganaraska Forest" has two sub-categories:

- a) passive and active (multi-use) recreation, and
- b) resource-based recreation.

In addition, the category "Management Areas" and the following sub-categories will be used as land classifications in the Ganaraska Forest.

- No recreation
- Restoration/stewardship

As an example, in the Central Ganaraska Forest there are parcels where resource-based recreation (hunting) is not permitted, therefore the land use category would be passive and active recreation along with "restoration/stewardship". However, in the West and East Forests both passive and active (multi-use) recreation and resource-based recreation can occur on the same parcel, along with "restoration/stewardship". In addition, parcels associated with the Ganaraska Forest can be classified as management areas only: no-recreation (i.e., a land locked parcel of land in the East Ganaraska Forest with no public access). It is again important to note that multiple land use categories can be identified on a parcel and they categories can overlap or be independent of one another.

Management Areas

Properties that can be considered "Management Areas" are those where there are no recreational opportunities given the ecological sensitivities of the land, and in some cases, the challenges in providing access. Properties considered in this category include the Leskard Land Holdings and Carr's Marsh. There also may be certain areas within parcels that will have management areas only as the intended management tool is to be restoration/stewardship or no recreation.

The other use of the "management areas" classification is where land is part of flood management infrastructure. Properties considered in this category include lands east of

Corbett's Dam, and lands associated with the Port Hope flood channel. The lands associated with flood management infrastructure may offer public access and are maintained in ways that contribute to the surrounding municipal parkland or facilitate parking.

All properties will have an element of restoration/stewardship. Activities may include forest management, stream restoration and erosion control, invasive species management, and site-specific restoration opportunities such as tallgrass prairie restoration. Included with management and restoration/stewardship is education and research. All properties will have the ability to provide academic and research initiatives and opportunities will be considered on a case-by-case basis.

Conservation Authority Administrative Area

GRCA buildings that serve an administrative, operational or education programming purpose exist across the GRCA. These parcels associated with buildings will be classified as "Conservation Authority Administrative Areas" and would include the GRCA Administrative Office, GRCA Millennium Building, Ganaraska Forest Centre and associated out buildings, and the Baltimore workshop. Areas that are considered Conservation Authority Administrative would include manicured spaces around the GRCA Administrative Office, Millennium Building and Ganaraska Forest Centre. It would also include lands leased to third parties (i.e., Tree Top Trekking).

Management of these lands will relate to the administrative, operational, or educational use and nature of the land and will be maintained as required based on the intended use of each facility.

7. Mandatory and Non-Mandatory Programs and Services

Section 21.1 of the *Conservation Authorities Act* requires conservation authorities to provide certain mandatory programs and services and allows for the provision of non-mandatory programs and services (Section 21.1.1 and 21.1.2). As part of the budget process, each program or service delivered must be categorized as a Category 1 (mandatory program), and/or Category 2 (municipal funded program or service) and/or Category 3 (self-generated funding program).

The classification of conservation land programs and services are reviewed and updated annually and published under "Programs and Services Inventory" as part of the Annual GRCA Financial Budget, which can be found at www.grca.on.ca.

8. Goals, Objectives, and Strategic Actions

To inform decision-making on GRCA owned and controlled lands, a set of goals and objectives need to be defined. The following outlines the goals, objectives and strategic actions related to natural feature management, recreational and educational opportunities, and innovative resource mechanisms.

Natural Feature Management

GRCA lands provide significant contributions to the protection of local watersheds as well as local and regional natural heritage systems. Enhancing and managing natural features contributes to local and regional landscapes, and their functions.

Goal 1: Protect natural heritage features on GRCA Lands

Objective 1.1 Maintain, enhance, or restore natural features for the protection of and contribution to local watersheds, and local and regional natural heritage systems.

Strategic Action 1.1.1: Update Conservation Area Management Plans

Update conservation area management plans, including the creation of plans for lands owned for management purposes, to reflect current environmental conditions, opportunities, and issues. Consideration will be given to the connection to, and enhancement of, local and regional natural heritage systems. The development of the Plans will include public consultation and implementation of the Plans will explore volunteer opportunities and partner organization participation.

Strategic Action 1.1.2: Create an Invasive Species Management Plan

Create a management plan that recommends actions to be taken on GRCA lands to prevent, control, and/or eliminate invasive species. Consideration will be given to the connection of GRCA lands to local and regional natural heritage systems as they relate to invasive species movement and management. The development of the plan will consider the inclusion of partner organizations and member municipalities. Implementation of the Plan will consider volunteer opportunities and public participation.

Strategic Action 1.1.3: Update the Ganaraska Forest Management Plan

Update the Ganaraska Forest Management Plan based on the 10-year update cycle to incorporate new inventory and monitoring data, related to forest stands, forest health, and other habitat features. Updates will also include education and recreation opportunities and interactions.

Strategic Action 1.1.4: Create a GRCA Lands Monitoring Plan

Create a monitoring plan that specifically focuses on GRCA lands to improve monitoring, data collection, data management and reporting. Recommendations within the Plan will explore volunteer opportunities and public participation that can be implemented. The monitoring plan will consider the 2014 *Ganaraska Region Watershed Monitoring Plan: towards an integrated approach*, and subsequent reports such as the 2018 *Ganaraska Region Watershed Monitoring Report*.

Recreational and Educational Opportunities

GRCA lands provide significant contributions to the health and well-being of local and regional communities through recreational opportunities. Lands also provide opportunities for outdoor, cultural, and environmental education. The Ganaraska Forest provides for an outdoor classroom for the GRCA Ganaraska Forest Centre Outdoor Education Program. The Ganaraska Millennium Conservation Area provides a location for youth to attend summer and March break day camp as part of the GRCA Nature Nuts program. Enhancing opportunities for educational and recreational activities is important to increase awareness and appreciation of the lands and local watersheds.

Goal 2: Provide recreational and educational opportunities for visitors to connect with nature in a manner that is accessible, safe, and considerate of the environment.

Objective 2.1 Provide passive, active, and resource-based recreational opportunities in a manner that considers ecological impacts, user enjoyment and safety and operational needs.

Objective 2.2 Provide for immersive educational opportunities with minimal impact to the local ecosystem, and in a safe and accessible manner.

Strategic Action 2.1.1: Recreational Trail Maintenance Guidelines

Develop a set of recreational trail maintenance guidelines for all GRCA lands, to identify the physical parameters that are possible for trails dimensions, such as trail tread width, trail width and trail height, trail bed construction, vegetation management, and water crossings for example. Guidelines will also include objectives and guidance regarding vegetation management. The use of guidelines will help identify maintenance needs, inform design and construction, and contribute to quality, safe and enjoyable trails.

Strategic Action 2.1.2: Recreational Trail Crossings Guidelines

Trails on GRCA lands can intersect with or cross other trails, entrances, and municipal rights-of-way. The development of recreational trail crossing guidelines will help assess current crossings and the development of new crossings to ensure that the crossing is safe for use. Consideration will be given to signage, configuration of crossings, sightlines, and inspection frequency.

Strategic Action 2.1.3: Ganaraska Forest Access Guidelines

The Ganaraska Forest is a destination for those who live locally; within Northumberland County, Peterborough County, the City of Kawartha Lakes, the Regional Municipality of Durham; across the province; and outside the province. Providing trail access, needs to consider the diversity of places from which people are traveling, and their modes of transportation. Creation of Ganaraska Forest access guidelines will help to identify where existing parking lots can be improved and additional parking lots maybe required. Consideration will also be given to access points for those who use forms of transportation other than a highway vehicle.

Strategic Action 2.1.4: Signage Guidelines

Signage on GRCA properties help mitigate and manage risks, while serving the following purposes:

- Providing visitors with relevant usage and condition information at each property.
- Providing visitors with information regarding potential hazards and the relevant emergency address for the property.
- Displaying permitted activities and user responsibilities on the property.
- Providing educational signage to support recreational activities and environmental/watershed education.
- Communicating how to access trails, as well as wayfinding and movement within trail systems.

The aim is to provide clear and consistent signage on GRCA properties. Sizes, formats, and materials may vary by property/application. Signage guidelines will be created that will consider at minimum, design, fabrication, placement, installation methods, inspection, and maintenance.

Strategic Action 2.1.5: Creation of Temporary Area and Trail Closure Guidelines

Conservation areas, the Ganaraska Forest, and their associated trails can facilitate many activities, however sometimes a change in area or trail status is required. Temporary area and trail closure guidelines will define the situations when an area and/or trail(s) can be closed, how the closure is communicated, and for how long the closure can last. Reasons for closure can be a result of health and safety concerns, environmental protection and monitoring, specific public use, and management/operational needs. Closures can also be related to circumstances beyond the GRCA's control (e.g., fire, emergency, natural disaster, government restrictions, etc.).

Strategic Action 2.1.6 Creation of Trail Re-routing or Permanent Closure Guidelines

Trail re-routes or permanent closure may be required based on health and safety concerns, environmental protection and monitoring, specific public use, and management/operational needs. Trail re-routes or permanent closures can also be related to circumstances beyond the GRCA's control (e.g., fire, emergency, natural disaster, government restrictions, etc.).

Trail re-routing or permanent closure guidelines will be created to define when re-routing trails or permanent closures would need to be considered or required. Processes for data collection, documentation, public consultation, and communication to the public will be considered as part of the guidelines.

Strategic Action 2.1.7: Creation of Trail Mapping Guidelines

GRCA lands have many trails, and the Ganaraska Forest has hundreds of kilometers of trails on thousands of hectares that spans approximately twenty kilometres in an east to west orientation. Visualizing the trail system can be challenging, but with the use of GIS technology and tools, the ability to collect trail data and create digital maps is possible and ever changing.

Trail mapping guidelines and trail data collection methods will be created that will improve the accessibility, visualization, and description of recreational trails to maximize

recreational enjoyment and safety of users. These guidelines will be used to continually improve the Ganaraska Forest Trails digital map. In addition, conservation area trail maps will be created in web and static display form.

Strategic Action 2.1.8: Creation of an Area and Trail Monitoring Plan

Monitoring is a valuable tool in trail management and varies in frequency and location. Monitoring includes among other things:

- Inspections.
- Repeated measurements to understand changes over time.
- Reference sites to compare various sample sites.
- Quantitative and qualitative measurements.
- Environmental impact studies.
- Social studies of trail use.

The creation of an area and trail monitoring program will combine existing conservation area, trail inspection methods, and further consider:

- Trail inventory to collect existing trail placement and data.
- Trail inspection to evaluate existing trail conditions and impacts from use.
- Trail monitoring to assess changes in trail conditions over time.
- Use of trails.
- Data collection methods, storage, analysis, and reporting.

The area and trail monitoring program will be integrated where possible with operational requirements of trails including forest management as well as the *Ganaraska Region Watershed Monitoring Plan, 2014* and subsequent reports such as the *2018 Ganaraska Region Watershed Monitoring Report*.

Strategic Action 2.1.9 Volunteer Engagement Opportunities

Volunteers and public engagement are an important aspect of conservation land management. Volunteerism and engagement foster a sense of community, builds relationships, and increases understanding and knowledge. Public engagement and consultation will be considered when implementing the strategic actions listed in this Strategy. Existing organization and individual volunteer programs will be improved upon, and new opportunities created that will assist in the implementation of the various plans recommended in this Strategy. Volunteer opportunities will focus on participant safety, no or low barrier to participation, and meaningful contributions to GRCA lands.

Innovative Resource Mechanisms

GRCA lands rely on many resources to carry out operations, management, restoration, and the need for resources vary on the types of programs and services offered. Resources can be in the form of municipal levy, grants, self-generated revenue, or in-kind costs offered through volunteerism. Opportunities for generating or leveraging resources continually evolve, and all methods of resource generation is required to continually improve land management and program offerings.

Goal 3: Generate resourcing opportunities on GRCA Lands that will support land management, and educational and recreational opportunities.

Objective 3.1 Consider opportunities to integrate with provincially or municipally owned lands or other publicly accessible lands and trails in proximity to GRCA Lands.

Objective 3.2 Develop new sources of capital resources including revenue and in-kind contributions.

Objective 3.3 Consider cultural heritage features to enhance educational and recreational opportunities.

Strategic Action 3.1.1: Trail Network Improvements

A properly designed trail network should avoid or mitigate ecological damage, provide for safe, quality recreational experiences, and minimize maintenance efforts. A trail network can be designed to increase opportunities for a diversity of recreational and educational programs and services which can lead to increased resource generation.

Trail network design criteria is required to inform where trails should be placed in the Ganaraska Forest and conservation areas when considering natural features, topography, and user preference.

The GRCA will investigate the use of geographic information system (GIS)-based methods to identify the best placement for new recreational trails or trails that need to be relocated. Consideration will be given to existing trails, environmental criteria, as well as trail user preferences. A priority will be to ensure trails loop to defined access points.

Strategic Action 3.1.2: Cultural Heritage Data Collection

GRCA lands have strong connections to the past, which should be understood, preserved, communicated, and celebrated. A data collection initiative will be developed to define and collect cultural heritage⁹ information.

⁹ According to UNESCO, cultural heritage includes artefacts, monuments, a group of buildings and sites, museums that have a diversity of values including symbolic, historic, artistic, aesthetic, ethnological or anthropological, scientific, and social significance. <https://uis.unesco.org/en/glossary-term/cultural-heritage>

Strategic Action 3.1.3: Considerations to Regional Trails, Local Trails, and Public Spaces

The Ganaraska Forest, given its size and placement in the regional landscape, provides an opportunity for regional or provincial trail systems to traverse in a natural/forested environment. In addition, the distribution of conservation areas throughout the Ganaraska Region watershed provides opportunities for linkages to public spaces and trails owned and/or managed by other organizations and agencies. Existing regional and provincial trail systems that utilize certain trails in the Ganaraska Forest include the Ontario Federation of Snowmobile Clubs (OFSC), Oak Ridges Moraine Trail, and Ganaraska Hiking Trail. Municipal trail systems such as those provided by the Municipality of Port Hope provides linkages to the Ganaraska Millennium Conservation Area trail system. Opportunities will be explored to enhance local trail systems and public spaces through linkages and partnership enhancements to programs and services.

9. Implementation of the Conservation Lands Strategy

The creation and adoption of the Conservation Lands Strategy is an important step in managing lands owned by the GRCA and implementation of the strategy will be of the same importance. Certain resources will be required to meaningfully undertake implementation.

- GRCA staff: will undertake implementation informed through yearly work planning and annual budget.
- Member municipalities: involvement will be required to support implementation in relation to municipal properties and road rights-of-way.
- Partner organizations: include other conservation authorities, environmental, recreational, and social organizations.
- General public and volunteers: individuals can participate in public consultation and can partake in GRCA volunteer programs that will support implementation.

As strategic actions are implemented, consideration will be given to key performance indicators, including methods to measure, record and report progress and performance. Timelines for implementation will be short-term (1 to 3 years) or medium-term (up to 5 years), with an aim to have implementation underway or completed by 2027 for the next review and update. The following table outlines each strategic actions resource need for implementation, timelines for completion.

Strategic Action	Resources Required	Timeline for Implementation
Strategic Action 1.1.1: Update Conservation Area Management Plans	<ul style="list-style-type: none">• GRCA staff• Consultation with member municipalities, partner organizations and the public.	Medium-term

Strategic Action	Resources Required	Timeline for Implementation
Strategic Action 1.1.2: Create an Invasive Species Management Plan	<ul style="list-style-type: none"> • GRCA staff • Consultation with member municipalities, partner organizations and the public. 	Medium-term
Strategic Action 1.1.3: Update the Ganaraska Forest Management Plan	<ul style="list-style-type: none"> • GRCA staff • Consultation with member municipalities, partner organizations and the public. 	Short-term
Strategic Action 1.1.4: Create a GRCA Lands Monitoring Plan	<ul style="list-style-type: none"> • GRCA staff • Consultation with member municipalities, partner organizations and the public. 	Medium-term
Strategic Action 2.1.1: Recreational Trail Maintenance Guidelines	<ul style="list-style-type: none"> • GRCA staff • Consultation with member municipalities, partner organizations and the public. 	Short-term
Strategic Action 2.1.2: Recreational Trail Crossings Guidelines	<ul style="list-style-type: none"> • GRCA staff • Member municipalities • Partner organizations 	Short-term
Strategic Action 2.1.3: Ganaraska Forest Access Guidelines	<ul style="list-style-type: none"> • GRCA staff • Member municipalities • Partner organizations 	Short-term
Strategic Action 2.1.4: Signage Guidelines	<ul style="list-style-type: none"> • GRCA staff • Member municipalities • Partner organizations 	Short-term

Strategic Action	Resources Required	Timeline for Implementation
Strategic Action 2.1.5: Creation of Temporary Area and Trail Closure Guidelines	<ul style="list-style-type: none"> GRCA staff Consultation with member municipalities, partner organizations and the public. 	Short-term
Strategic Action 2.1.6: Creation of Trail Re-routing or Permanent Closure Guidelines	<ul style="list-style-type: none"> GRCA staff Consultation with member municipalities, partner organizations and the public. 	Short-term
Strategic Action 2.1.7: Creation of Trail Mapping Guidelines	<ul style="list-style-type: none"> GRCA staff Consultation with /input from with member municipalities, partner organizations and the public. 	Short-term
Strategic Action 2.1.8: Creation of an Area and Trail Monitoring Plan	<ul style="list-style-type: none"> GRCA staff Consultation with member municipalities, partner organizations and the public. 	Medium-term
Strategic Action 2.1.9: Volunteer Engagement Opportunities	<ul style="list-style-type: none"> GRCA Staff Consultation partner organizations and the public. 	Medium Term
Strategic Action 3.1.1: Trail Network Improvements	<ul style="list-style-type: none"> GRCA staff Consultation with member municipalities, partner organizations and the public. 	Medium-term

Strategic Action	Resources Required	Timeline for Implementation
Strategic Action 3.1.2: Cultural Heritage Data Collection	<ul style="list-style-type: none"> • GRCA staff • Input from member municipalities, partner organizations and the public. • Potential volunteer involvement 	Medium-term
Strategic Action 3.1.3: Considerations to Regional Trails, Local Trails, and Public Spaces	<ul style="list-style-type: none"> • GRCA staff • Partner organizations • Member municipalities • Consultation with the public. 	Medium-term

10. Conclusion

GRCA lands contribute to the local and regional natural heritage system and include natural features such as forests, tallgrass prairie, Provincially Significant Wetlands, watercourses, the Lake Ontario and Rice Lake shorelines, and the Oak Ridges Moraine. All lands owned by the GRCA also consist of natural hazards (e.g., floodplains, erosive soils, and valleys). GRCA lands also contribute to the local community, the region, and provincially, by providing spaces for residents and visitors to explore, play and learn.

To satisfy Ontario Regulation 686/21 of the *Conservation Authorities Act*, a Conservation Area Strategy is to be created. The GRCA has modified the name of the strategy to “Conservation Lands Strategy” to encompass all GRCA lands. The Conservation Lands Strategy will be used to guide the conservation and management of GRCA lands. The Strategy will be reviewed and updated in 2027. This date has been selected to coincide with the 10-year Ganaraska Forest Management Plan update.

The creation and adoption of the Conservation Lands Strategy is an important step in managing lands owned by the GRCA and implementation of the strategy will be of the same importance. Implementation will be most successful when conducted by the GRCA in partnership with member municipalities, partner organizations, volunteers, and the public.

Appendix A: Ontario Regulation 686/21 requirements conformity assessment

This table documents how requirements of Section of Ontario Regulation 686/21 Mandatory Programs and Services of the *Conservation Authorities Act* have been satisfied by the GRCA Conservation Lands Strategy

Section	Requirement	Section of the Strategy
10(1)1	Objectives established by the authority that will inform the authority's decision-making related to the lands it owns and controls, including decisions related to policies governing the acquisition and disposition of such lands.	Section 8
10(1)2	Identification of the mandatory and non-mandatory programs and services that are provided on land owned and controlled by the authority, including the sources of financing for these programs and services.	Section 7 and available at www.grca.on.ca
10(1)3	Where the authority considers it advisable to achieve the objectives referred to in paragraph 1, an assessment of how the lands owned and controlled by the authority may,	Section 8 – Natural Features
	<ul style="list-style-type: none"> i. augment any natural heritage located within the authority's area of jurisdiction, and ii. integrate with other provincially or municipally owned lands or other publicly accessible lands and trails within the authority's area of jurisdiction. 	
10(1)4	The establishment of land use categories for the purpose of classifying lands in the land inventory described in section 11 based on the types of activities that are engaged in on each parcel of land or other matters of significance related to the parcel.	Section 6
10(1)5	A process for the periodic review and updating of the conservation area strategy by the authority, including procedures to ensure stakeholders and the public are consulted during the review and update process.	Section 4
10(2)	The authority shall ensure stakeholders and the public are consulted during the preparation of the conservation area strategy in a manner that the authority considers advisable.	Section 5
10(3)	The authority shall ensure that the conservation area strategy is made public on the authority's website, or by such other means as the authority considers advisable.	The Conservation Lands Strategy will be available at www.grca.on.ca

STAFF REPORT – September 19, 2024

TO: Chair and Members of the Ganaraska Region Conservation Authority

Re: Fees Policy and Schedules Update

The current Fee Policy and Schedules as listed on the Ganaraska Region Conservation Authority (GRCA) website was approved and effective December 1, 2022. These fees are reviewed annually and updated in accordance with inflation. The fees are based on the user-pay principle. The fees and revenues generated are designed to assist with recovering the costs associated with administering and delivering the services on a program basis.

As these fees are published on the GRCA website, staff has prepared the attached fee schedules that either have remained the same (Schedules 1,2 and 3) or been increased by inflation (Schedules 4, 5 and 6) and will replace the schedules currently published within the Fee Policy and Schedules document. Some of the headings for the fees within the schedule have been update. The policy has been revised to reflect the change in headings.

RECOMMENDATION:

THAT the Board of Directors approve the updated Fee Policy and Schedules effective December 1, 2024.

Prepared by:



**Linda J. Laliberte, CPA, CGA
CAO/Secretary-Treasurer**

Staff Report – September 19, 2024

TO: Chair and Members of Ganaraska Region Conservation Authority

RE: 2025 Preliminary Budget Criteria

Staff is developing the 2025 preliminary budget for the Ganaraska Region Conservation Authority (GRCA). Staff has reviewed the current programming requirements and the need for annual adjustments to the base levy. The current base levy is set at \$16,459.79 for the seven watershed municipalities. This base levy is intended to cover costs associated with board members as well as some direct costs associated with the administrative office. The base levy is divided equally among the seven watershed municipalities. The total base levy is subtracted from the total levy and the assessment growth as well as economic adjustment is applied to that difference only.

In 2024 the total levy is \$1,279,854 which is approximately 25% of the budget. The increase to the total general levy was 3.3% in 2024 which was slightly below the annual consumer price index for 2023 of 3.9%. Staff is continually looking for funding partnerships while utilizing current resources both effectively and efficiently as well as meeting the demands of the program areas. It is important that the increase in levy continues to meet these demands while trying to balance the various guidelines from the watershed municipalities. In discussions with the Chair, it is therefore suggested that the 2025 budget criteria be set at a 3.0% increase for both the base levy and general levy. This is in keeping with the latest consumer price index (CPI) and recognizes the need to continue sustainable funding.

The levy apportionment figures are calculated from the most recent available year end assessment data from the Municipal Property Assessment Corporation (MPAC) and are further revised based on the Conservation Authority Levy Regulation and will be used as a guideline. The spreadsheets also include population data, provided by MPAC, and apportioned based on the percentage of the area of each municipality within the CA jurisdiction. MPAC population data comes from various sources – enumeration, sales affidavits, when there is a transfer from one party to another, many questionnaires (i.e., sales questionnaires, new occupant questionnaires), school support forms, and an annual Tenant Information Program (TIP) that allows the update of the MPAC population database with tenant information. These figures are provided to each Conservation Authority by the Ministry.

Once the criteria have been set, the preliminary budget will be prepared for the October meeting and the proposed levy will be reviewed in context of the 2025 preliminary budget. The Board then directs staff to send the budget, with the proposed levy amounts, to the watershed municipalities for review. The municipalities are required to have a minimum of 30 days to review the document and provide feedback. The final levy vote will take place at the November Board of Directors meeting.

RECOMMENDATION:

THAT the Board of Directors direct staff to prepare the 2025 preliminary budget based on the criteria contained in the staff report dated September 19, 2024 and the preliminary budget be prepared for the October 17, 2024 meeting.

Prepared by:



Linda J. Laliberte, CPA, CGA
CAO/Secretary-Treasurer