



CONSERVATION LAND STRATEGY

For Lands Owned by the Gannaraska Region Conservation
Authority

Draft May 2024



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1. Introduction

The Gananaska 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 Gananaska Forest extend beyond the GRCA jurisdiction into Otonabee Region Conservation Authority jurisdiction.

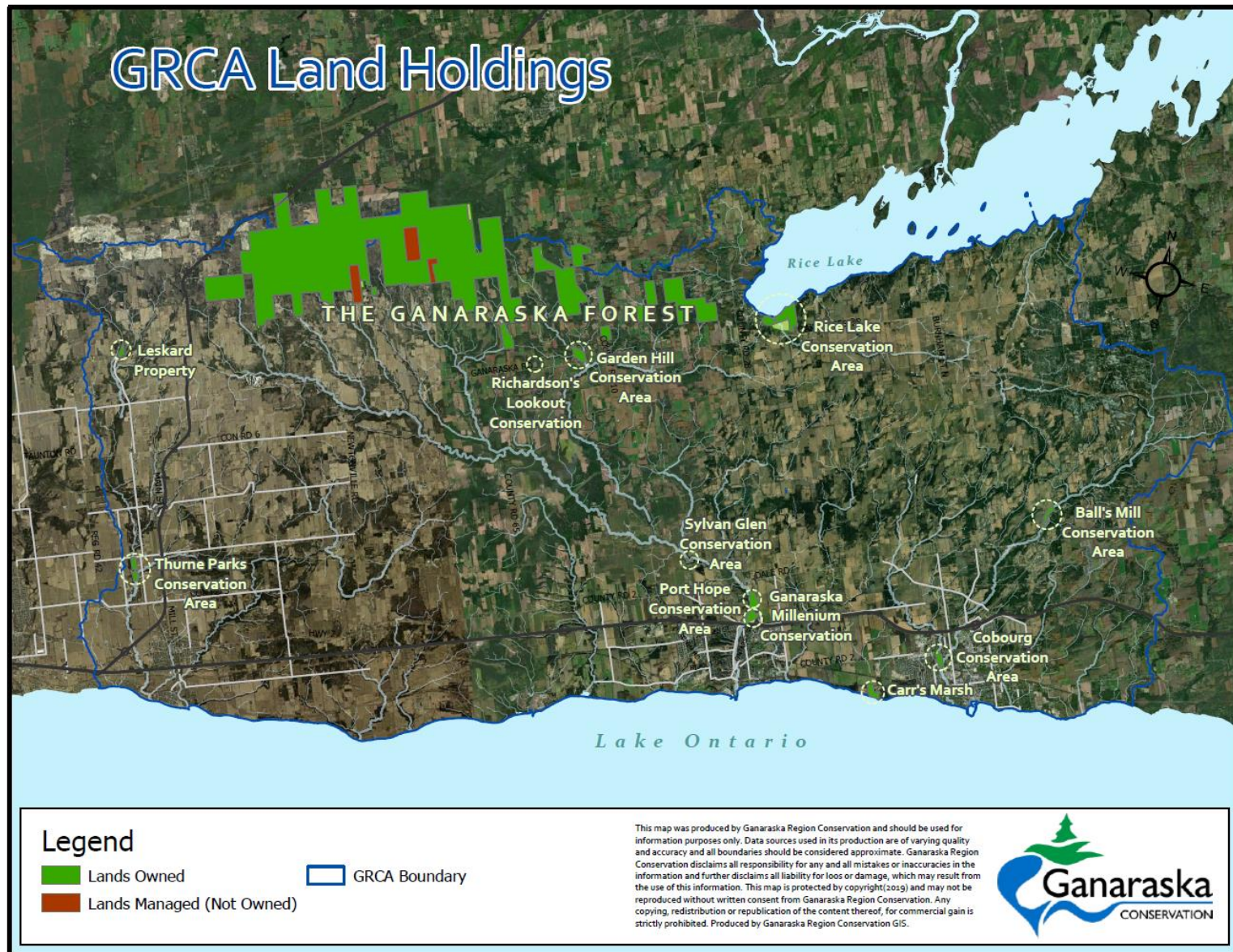


Figure 1: GRCA owned and managed lands

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.

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.

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, 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.

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.*

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:

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

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.*
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

To be written for final version.

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 (e.g., a parcel within the Ganaraska Forest may offer passive and active (multi-use) recreation, resource-based recreation, and restoration/stewardship. Further, many parcels will be combined to form a larger land holding (e.g., two parcels form Rice Lake Conservation Area).

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.

Resource-based recreation: hunting and fishing in accordance with Provincial regulations.

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 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, trails, 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 can also include “management areas” and in particular “flood management infrastructure and/or natural hazards,” and “restoration/stewardship”. The nine properties that are considered under the land classification of “Conservation Area” 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
Ball’s Mill	21	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 Millenium	36.4	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	2.02	Ganaraska River/Municipality of Port Hope	Floodplain	Ganaraska River
Garden Hill	21.2	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	18.5	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 subcategories:

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

These subcategories, along with the “management areas” category and the subcategories of “no recreation” and “restoration/stewardship” can be individually assigned to a parcel or be used to classify the same land parcel. For 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 (i.e., a land locked parcel of land in the East Ganaraska Forest with no public access).

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.

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 Millenium Building, Ganaraska Forest Centre and associated out buildings, and the Baltimore workshop.

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 and active 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 have as few signs on GRCA properties as possible, while still providing clear and consistent imagery, typography, and messaging to visitors. 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 Gananaska 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 *Gananaska Region Watershed Monitoring Plan, 2014* and subsequent reports such as the 2018 *Gananaska 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 carryout 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 heritage⁸ information.

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

⁸ 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>

Hope provides linkages to the Gananaska Millenium 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 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	Resources Required	Timeline for Implementation
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 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	Resources Required	Timeline for Implementation
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 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	Resources Required	Timeline for Implementation
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, <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. 	Section 8 – Natural Features
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 8 – Innovative Resource Mechanisms
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 6
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 4
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.	Section 5
		The Conservation Lands Strategy will be available at www.grca.on.ca