Little Cataraqui Creek Conservation Area
Master Plan, 2012

<table>
<thead>
<tr>
<th>Document No.</th>
<th>MP - 1</th>
<th>Rev.</th>
<th>Original</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepared:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jason D. Hynes, Lands Planner</td>
<td>Date:</td>
<td>20/11/12</td>
</tr>
</tbody>
</table>
This document represents the primary strategic direction for management of Little Cataraqui Creek Conservation Area over the next 20 years. This Master Plan shall be subject to cursory reviews every five years and a more comprehensive reassessment every ten years.
Acknowledgement

It is important to acknowledge the keen and dedicated interest that so many have shown towards developing an updated master plan for the Little Cataraqui Creek Conservation Area that provide direction for land managers and development that will guide this special place into the future. At this time I would like to recognize and thank the following for their contributions:

- City of Kingston, our partner in conservation.

- Conservation Lands Advisory Board: A. Hanes, A. McPhail, B. Herfst, J. Scott and D. Henderson

- John Andrew for mediating our focus group.

- Stakeholders and members of the public who contributed to the development of this plan.

- CRCA staff members:
  - Tom Beaubiah, Biologist
  - Donna Campbell, Administrative Assistant
  - Michael Dakin, Development Technician
  - Shannon Fleming, Outdoor Centre Supervisor
  - Rob Gerritsen, Conservation Lands Coordinator
  - Rick Knapton, Forestry Technician
  - Steve Knechtel, General Manager/Secretary Treasurer
  - Karla Maki-Esdon, Communications Coordinator
  - Rob McRae, Watershed Planning Coordinator
  - Casey Sharp, Communication and Marketing Officer
  - Travis York, Geomatics Technician
EXECUTIVE SUMMARY AND RECOMMENDATIONS

The Cataraqui Region Conservation Authority (CRCA) currently owns and manages more than 4,000 hectares of land throughout its jurisdiction. This commitment towards owning and managing property is in part to support the CRCA objectives of protecting the natural heritage and water resources of its watersheds and to protect the public from flood hazards. A significant amount of infrastructure has been developed in support of public recreational use of these lands.

Located north of the 401, just outside the City of Kingston’s core area, Little Cataraqui Creek Conservation Area (LCCCA) is nearly 400 hectares of wetlands, forests and field that is used primarily for recreation, outdoor education and as the CRCA’s administrative base. This property has now been in operation as a conservation area for over 40 years, and contains major natural heritage features that contribute largely to the local green space system. Approximately 35,000 people visit the area each year.

LCCCA is a tremendous example of how the local community values the principles of stewardship and having access to safe high-quality outdoor recreation and leisure activities.

The major goals for the CRCA are to:

- Manage LCCCA in a manner that protects the important natural features of this property
- Use the developed infrastructure of LCCCA’s facilities to meet the needs of the community
- Provide recreational open space where the community can connect with and learn about nature and the outdoors

Due to landscape limitations, such as the location of wetland features and topography, the bulk of trails and other facilities were developed in the southeast corner of LCCCA. This has resulted in minimized ecological impacts on the Conservation Area as well as reduced infrastructure development costs.

A diverse group of people are regularly using the facilities to enjoy outdoor education and passive recreation activities, as well as activities related to CRCA corporate/administrative business. The Outdoor Centre is the base for much of the CRCA’s education programs and is also rented out for meetings and small events. Plans for upgrades to existing infrastructure will serve to maintain customer service levels at LCCCA and will be based on evaluating site conditions as well as the needs and demands of property users.

Revenue for LCCCA is generated primarily through gate-fees and annual pass sales, and hosting curriculum-based education for school groups and the public (e.g. Maple Madness). Some revenues are also generated through facility and day-use equipment rentals. This revenue is used to support LCCCA programs and maintenance activities throughout the year.

Unsanctioned use of the conservation area, along with other inappropriate activities, occasionally occurs on the property. Misuse of the property will be addressed through education, public awareness campaigns and through enforcement where required. As property traffic is expected to increase over the
next number of years, the CRCA must focus on key projects that will maintain stability of the property’s base facilities and infrastructure through programs that will mitigate the impacts of property use so that LCCCA is preserved for future generations.

This master plan has been created to provide a policy framework to guide the protection and management of this property, and to identify anticipated development projects that will support the needs of current and future users.

The following list includes the recommendations noted through this document; a secondary list notes those recommendations that impact LCCCA indirectly as corporate and/or operational initiatives of the CRCA.

**Little Cataraqui Creek Conservation Area Recommendations:**

- Evaluate policies/programs for gate fees and annual passes
- Enhance the trailhead area and facilities around the warming huts
- Establish a program to assist in facilitating community partnerships
- Develop a communications and promotion strategy for LCCCA
- Upgrade the LCCCA entrance, the main driveway and parking area surfaces
- Integrate stormwater management best practice into future plans regarding roads and parking areas
- Expand LCCCA capacity to support overflow parking during programs/events
- Conduct a trail rationalization study
- Introduce gravel surfacing throughout the primary program area around the Sugar Shack buildings, and develop visitor protection from wind and rain in this area
- Expand and enhance casual picnicking spaces near trailhead areas and around the Outdoor Centre
- Promote fishing as an alternative to trail recreation on the property and indicate on property maps locations where land-based angling is permitted
- Expand facilities and support for canoeing/kayaking at LCCCA

**CRCA Corporate and Operational Recommendations:**

- Conduct a business analysis of the Outdoor Centre to determine an operation and programming plan of the facility
- Review the suitability of the current expansion plan for the Administration Office
- Expand the indoor storage, project-workspace and parking capacity of the Operation’s Workshop
- Evaluate commitments to landlord-tenancy arrangements and determine a long-term strategy regarding these relationships and the management of related assets
- Develop a land acquisition/disposition strategy for LCCCA
- Create a new CRCA website to better communicate LCCCA/CRCA programs, activities and events
- Create a Risk Management Plan for CRCA properties
Table of Contents

INTRODUCTION .......................................................................................................................... 7
1.1 Purpose and Intent ................................................................................................................... 8
1.2 Aim of Management Plan ....................................................................................................... 8
1.3 Report Layout ....................................................................................................................... 9

2 SITE DESCRIPTION ............................................................................................................... 9
2.1 Location ................................................................................................................................ 9
2.2 Setting .................................................................................................................................. 11
2.3 Acquisition and Management Background .......................................................................... 11
2.4 Natural Elements and Resources ....................................................................................... 12
2.5 Built Elements (Facilities and Infrastructure) ...................................................................... 15
2.6 Programs .............................................................................................................................. 24

3 MASTER PLANNING CONCEPTUAL DEVELOPMENT .............................................................. 25
3.1 Little Cataract Creek Conservation Area Planning Process .................................................. 25
3.2 Market Analysis and Consultations ...................................................................................... 25
3.3 Proposed Concepts for LCCA ............................................................................................. 27
3.4 The Preferred Concept Model .............................................................................................. 29

4 PROPERTY MANAGEMENT PLAN ..................................................................................... 32
4.1 Key Directives ...................................................................................................................... 32
4.2 Land and Water Management .............................................................................................. 34
4.3 Wildlife and Habitat Protection/Enhancement ..................................................................... 36
4.4 Adapting to Development .................................................................................................. 37
4.5 Intended Activities by Management ................................................................................... 38
4.6 Volunteer Activities and Organization ................................................................................ 46
4.7 Land Acquisition and Disposition ...................................................................................... 46
4.8 Other Improvements .......................................................................................................... 47

5 IMPLEMENTATION, PHASING AND EVALUATION .............................................................. 48
5.1 Prioritizing Activities .......................................................................................................... 48
5.2 Phasing of Implementation and Relative Cost Estimates .................................................... 49
5.3 Evaluation Plan for Operations and Management ............................................................... 50

6 CONCLUSIONS AND RECOMMENDATIONS ................................................................... 50

APPENDICES .......................................................................................................................... 53
<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Little Cataraqui Creek CA Locator Map</td>
<td>10</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Little Cataraqui Creek Watershed</td>
<td>14</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Little Cataraqui Creek CA Existing Facilities</td>
<td>23</td>
</tr>
<tr>
<td>Figure 4</td>
<td>Little Cataraqui Creek CA Concept</td>
<td>30</td>
</tr>
<tr>
<td>Figure 5</td>
<td>Little Cataraqui Creek CA Concept (close up)</td>
<td>31</td>
</tr>
</tbody>
</table>
INTRODUCTION

In 1971, when the flood control dam was installed on Little Cataraqui Creek, it created a reservoir that covered approximately 36 hectares of agricultural land. This reservoir has provided a measure of flood control for the City of Kingston for four decades, and also augments the flow of Little Cataraqui Creek through the property. Funding for the land acquisition and the flood control dam was provided by the Province of Ontario and the City of Kingston (including the former Kingston Township). The proximity of Little Cataraqui Creek Conservation Area (LCCCA) to Kingston was viewed as an asset as it enhanced local recreational opportunities and provided flood control for the City; establishing the LCCCA also secured a major green-space on the periphery of urbanization within the City.

The 2001 release of a strategic plan (Cataraqui to 2020) for the Cataraqui Region Conservation Authority (CRCA) identified a goal to focus on long-term planning and the future of its lands and conservation efforts. This plan references various challenges facing the CRCA, including municipal and provincial downsizing, changing demographics, and more frequent severe climatic events. In order to reach its goals and overcome these obstacles, it is crucial for the CRCA to remain a steward for the environment, an advocate for public green spaces and a manager of natural resources within its boundaries.

In 2010, the CRCA initiated the process to develop an updated master plan for LCCCA. The previous master plan was over 30 years old and did not reflect current CRCA priorities. Since the assembly of the nearly 400 hectares of land that make up LCCCA, many facilities have been developed; the character of the land has transformed and continues to change. The Kingston area also continues to grow, and the value placed on natural areas to the well-being of area residents is widely considered to be very significant. Further to preserving the natural heritage and water management features within LCCCA, the Authority recognizes the value of this property as part of a larger green space system in the City of Kingston. In addition to functioning as a protected outdoor space with trails and day-use areas, LCCCA is home to the Outdoor Centre (ODC) which is the base for the CRCA’s outdoor education programs as well as an event and rental facility. The corporate headquarters of the Authority are also located at LCCCA, as well as the western district workshop and lands operations centre. In recognizing these conditions, as well as the challenges that CRCA faces in fulfilling its multiple functions, this update to the LCCCA master plan has been produced.

The following steps were taken in development of this document:

- Reviewed background materials
- Conducted a situation analysis;
- Directed new user and market research;
- An analysis of ecological resources;
- Consultations with stakeholders, neighbours and the public;
- Presented potential development options to the public and partners for comment;
- Presented the draft document/plan for comments, and revise; and
- Submitted the draft master plan update for approval and adoption.
1.1 Purpose and Intent

The role of the LCCCA in relation to the CRCA and the City of Kingston remains vital and adopting an updated master plan for the property will be an important step in ensuring its successful future. In 1992, a new master plan was drafted to replace an earlier version, but was never formally adopted. Additional studies and initiatives over the years have continued to shape the development and operation of this conservation area including: the construction of an extensive trail system; construction of the Outdoor Centre in 1994; adoption of a forest management plan; the establishment of a formal educational program; and development of a demonstration maple syrup facility. The future of the LCCCA lies in the ability of the CRCA to effectively manage its priorities and resources, changing demands on staff, and development pressures on adjacent lands. In its desire to keep LCCCA open to the public as a recreational space for the region, the CRCA must lead by example in its efforts to promote conservation and restoration of the environment and to foster a community ethic of stewardship.

This update to the LCCCA Master Plan has been created to serve as a reference document to guide the future management of this property. It is intended to provide a broad context and direction for the day-to-day operation and management of the property. It outlines the primary goals, as well as new and current management practices to accomplish these objectives.

1.2 Aim of Management Plan

The CRCA prepares master plans to guide the management, operation and development of its properties. These plans express how these properties will contribute to achieving the goals of the CRCA and define the property uses, development and policies that will maintain or enhance that contribution over a 20 year period. The goals of the CRCA are presented in the 2001 document *Cataraqui to 2020*.

Also, in 2005, to support the Authority’s lands program *Conservation Lands Guidelines: Our Role, Principles and Priorities* was created to define the CRCA’s relationship with its own properties and other lands and landowners. This document was amended in 2010. The preparation of an updated master plan for LCCCA establishes a clear direction for the long-term management of the area and is an opportunity to address management issues, consult with the public, and generate an updated site inventory and assessment of the property.

The long-term management of LCCCA is to be administered by the CRCA, to meet the following aims:

- To manage the reservoir for flood control, and to manage use of the surrounding lands in a suitable manner;
- To protect, conserve and enhance the site’s natural environment and heritage features; and
- To provide opportunities for outdoor recreation, and a facility to present quality programs, events and outdoor education;
To achieve these aims, the following objectives will be fulfilled through the management of the property:

- To protect and enhance the functions of the site’s natural heritage features through monitoring and restoration projects;

- To promote stewardship of the environment through education programs and opportunities for passive recreational experiences;

- To enhance property security related to visitor activities and safety; and

- To minimize the impacts and degradation caused by property use.

1.3 Report Layout

The LCCCA property components are described through Section 2. The steps followed throughout concept development and of the master planning process are described in Section 3; this includes discussion of the consultation activities, a marketing analysis and description of the development concept for this plan. Section 4 presents outcomes of the master planning process. An implementation framework and relative costs are developed in Section 5. A brief conclusion is presented in Section 6, along with a list of the master plan’s key recommendations.

2 SITE DESCRIPTION

The LCCCA has operated as a conservation area for over 40 years. LCCCA is affected by a wide range of factors and has been evaluated in terms of its goals and influencing components in order to identify the suitability and feasibility of the site for various types and intensities of use, development and management.

Despite the various activities that the property is host to, this master plan update has shown that LCCCA is not heavily used, thereby limiting the overall impacts that visitors and activities have on this site. However, as the area’s population increases, along with the rising average age of local residents, it is expected that there will be increasing demands for safe and easily accessed places such as LCCCA for passive use and enjoyment.

2.1 Location

Little Cataraqui Creek Conservation Area is located north of, and adjacent to, Highway 401 in the City of Kingston (formerly Kingston Township), Lots 19 to 24, Concession III and part of Lots 21 to 25, Concession IV. The 393 hectare property has public road frontage on Highway 401, Perth Road (extension of Division Street), Bur Brook Road, and Sunnyside Road, with public access from Perth Road. (Figure 3)

The property is centrally located between the east and west limits of the CRCA’s jurisdiction. The property is also centrally located within the greater Kingston area, which is the largest urban area in the region, serving a population of more than 117,000 (Appendix 3 Market Analysis).
Figure 1 – Little Cataraqui Creek CA Locator Map
2.2 Setting

LCCCA is located between the urban and rural parts of the City of Kingston on the north side of the 401 which creates a mental as well as physical barrier between these areas. The character of the area is rural, with primarily residential development and farmland surrounding LCCCA. There is one commercial development on the west side of Perth Road (at the northeast corner of LCCCA) and farmland on the east side of Perth Road.

Roadways make up the majority of LCCCA’s boundaries, with Highway 401 to the south, Perth Road to the east, Burbrook Road to the north and Sunnyside Road to the west. There are also a number of parcels of land surrounding LCCCA that interrupt the road frontage; most of these are smaller private land holdings, but notably the City of Kingston owns the large adjacent parcel, commonly known as the “Knox Farm,” that is on the northwest corner of Highway 401 and Perth Road. While the LCCCA is approximately 393 hectares in size, this property only represents about one-tenth of the total area that is owned and managed by the CRCA. The CRCA is also responsible for the conservation and management of natural resources across its watershed-based geographic jurisdiction, spanning 10 major drainage basins and all or part of 11 municipalities. With the corporate headquarters and operations base of the CRCA being situated on the LCCCA property, this conservation area plays a vital role in the delivery of services to the region by the CRCA.

The property is also located in the centre of the of the Little Cataraqui Creek watershed, an area of more than 75km² (Figure 2). Located entirely within the City of Kingston, the Little Cataraqui Creek watershed drains from the northeast to southwest and empties into Lake Ontario. This watershed is characterized by a variety of land use types. Urban land uses, primarily based south of the LCCCA property, consist of high and low density residential, commercial, industrial and institutional. The upper portion of the watershed consists mostly of agricultural land use, with sizeable wetlands and woodlots, along with some residential and industrial uses.

2.3 Acquisition and Management Background

Historically, the area and surrounding lands were used for agriculture. However, by the mid-1960s when the Conservation Authority proposed the acquisition of lands for creation of a reservoir and conservation area, the lands had been left idle or used for rough pasture.

The acquisition of the land for LCCCA took place in two stages. Initially, 229 hectares were acquired in 1966 to develop the reservoir. The reservoir was intended to augment water flow and control flooding, as well as improve the area for wildlife. In 1967, an additional 164 hectares were purchased as the setting was considered to be an ideal location for a conservation area.

In 1971, a dam was constructed on Little Cataraqui Creek immediately north of 401. The reservoir was created by the dam. The dam is an overflow weir and acts to moderate the flows on Little Cataraqui Creek.

There are two easements crossing the property, one for a hydro-line corridor and the other for an underground oil pipeline. When the property was purchased, the 12.2 metre-wide road allowance between the Third and Fourth Concession was closed through part of the property. The parts closed are primarily those lands that are now under water; about 480 metres east of the reservoir to Perth Road and...
500 metres west of the reservoir to Sunnyside Road remains un-open but not formally closed. In 1990, 4.8 hectares adjacent to Highway 401 were sold to the Province of Ontario for the Sir John A. MacDonald Boulevard interchange.

The Little Cataraqui Creek valley is marked by a series of clay ridges, which are considered a regional Area of Natural and Scientific Interest (ANSI) by the Ontario Ministry of Natural Resources (OMNR). The OMNR has also designated the wetland area associated with the LCCCA to be a Class 1 Provincially Significant Wetland (PSW). The ANSI feature and the PSW restrict the types of use and development that can occur on the LCCCA property. These features can also be an asset to the LCCCA and the CRCA by providing an opportunity to educate the public on the significance of these features and the benefits that they provide to communities and through the region.

The 1964 Cataraqui Conservation Report identified further acquisitions that would complete the logical extent of the LCCCA property as a distinct landscape/management unit and conservation area. To date, these have not been realized. This document also recognizes the value of protecting the Little Cataraqui Creek (LCC) watershed and corridor through the City of Kingston, both south of Highway 401 and north through the area known locally as “Bell’s Swamp.” The protection of a major greenbelt in the City of Kingston (of which LCCCA plays a major role) for ecological protection was the key consideration at the time, but there was also acknowledgement of the role this corridor could play on local and regional recreation/tourism infrastructure.

More than forty years later, LCCCA continues to fulfill this role quite well. The facilities, variety of programming and opportunities for passive enjoyment that this property provides to the community and region are the primary basis for this ongoing success.

2.4 Natural Elements and Resources

Having current resource information is critical to this master plan recommending the most appropriate protection and retention measures for the long-term management of LCCCA. Led by the Biologist, CRCA staff conducted a review of the existing resource data and an Ecological Land Classification analysis for LCCCA, to begin a data set that reflects a current representation of the property’s features. This review is attached to this report as Appendix 3; a summary of the observations follows below:

The LCCCA is located on the Little Cataraqui Creek which flows begins at Lake Ontario and extends northward beyond Highway 401. The property forms an integral part of a natural system that provides a key north to south migratory corridor through the City of Kingston. While the corridor within the urbanized portion of the City contains wetland and narrow riparian regions, the LCCCA is the starting point where habitats extend beyond these restraints.

A natural heritage system is comprised of a number of parts. The health and integrity of these parts influence the health of the system. The Little Cataraqui Creek Conservation Area is part of the Little Cataraqui Creek watershed, and as such, plays an important role on the landscape. The CRCA, along with the City of Kingston, have also pursued the protection of many components of the Little Cataraqui Creek valleylands through an ongoing strategy to preserve this corridor by acquisitions.

A properly functioning system relies upon the presence of core areas (natural cover) connected by linkages and corridors. The Little Cataraqui Creek Conservation Area can be considered a core area with
linkages to the south (Little Cataraqui Creek Valleylands) and to the North East (Bell’s Swamp). This system is based on the Little Cataraqui Creek and its tributaries. Within this system, there are two provincially recognized features; the Little Cataraqui Creek Wetland Complex and the Cataraqui Creek Clay Ridges Area of Natural and Scientific Interest (Earth Science).

The Little Cataraqui Creek Conservation Area contains diverse habitats that interact with one another to support an array of flora and fauna. The habitats that exist on the property include aquatic and terrestrial features. The aquatic habitats include the main reservoir as an open water habitat, the wetland (which has both submergent and emergent vegetation), the flowing creek system with its tributaries, and the isolated pools and ponds that exist throughout the property. The terrestrial environments include the woodlands (natural and plantations), meadows, and recreation areas. With such diversity it provides opportunities for diverse wildlife, some of which are considered to be threatened or endangered either regionally or provincially.

Much of the property has unique features that would be potentially sensitive to further development. Based on the current use of the property, however, the ecological state of the property can be considered healthy and stable. Through sound management and planning, both existing and future uses can be considered to encourage both nature appreciation and education.

This report was compiled to assess baseline information about the LCCCA’s ecosystems and determine the current state and future trend of key indicators of ecological integrity. In doing so, there are some gaps in information primarily due to the age of the data.

Assembled below are the primary recommendations that have been compiled from the Biologist’s report:

- Fill gaps in information with baseline data collection and local knowledge in order to better understand and conserve the ecology of the Little Cataraqui Creek Conservation Area.

- Maintain existing monitoring programs and create new ones to track changes concerning the Little Cataraqui Creek Conservation Area's ecological integrity.

- Undertake restoration and enhancement activities to benefit the ecological health and biodiversity of the Little Cataraqui Creek Conservation Area's ecosystems with priority given to: aquatic species and habitats, environmentally sensitive areas, invasive species management, species at risk, and human caused stressors.

- Continue to provide environmental education at the Little Cataraqui Creek Conservation Area and within the greater community for the benefit of the area and its surrounding environment.
Figure 2 – Little Cataraqui Creek Watershed
2.5 Built Elements (Facilities and Infrastructure)

This section identifies facilities and built infrastructure of LCCCA; discussion will include brief descriptions of the various assets and developments as they affect the use and relate to management of the property.

Securing the resources for the management of facility and infrastructure assets is a challenge for the CRCA, as it is for most public sector organizations. As the majority of LCCCA’s facilities/infrastructure were constructed in the 1970s and 80s during a different economic climate, a number of these assets require some form of maintenance or enhancement to continue performing at a reasonable level.

Although the intent of this document is to identify a long-term strategy to manage the protection and use of LCCCA, it is also an important opportunity to acknowledge the challenges and complications that these resource limitations pose when planning future projects, programs or developments. With much of the facilities and infrastructure at LCCCA being from twenty to thirty years old, they will need significant repairs/upgrades, replacement or possible removal in coming years. As these assets continue to age, a crucial challenge will be to identify the changes required based on the needs of property managers, programmers and users.

2.5.1 Facilities

Since the first master plan, several facilities have been developed on the site. The current facilities and infrastructure of LCCCA are identified below and in Figure 3.

Further to initial conservation and resource management objectives, the LCCCA property has been developed both for recreation and educational purposes. It is also the home of the CRCA’s Administration Office as well as the CRCA Operations Workshop. The Outdoor Centre is a large facility primarily used to host public/private events, support day-users of the property and as the base for the bulk of the CRCA’s education programs. The bulk of property development has been concentrated in the southeast corner of the property. Vehicular access to these buildings is provided from Perth Road. Of these two buildings used by the public, only the Outdoor Centre is wheelchair accessible. The property currently has private water and sewage services for the buildings. Both underground and overland lines supply service for telephone and hydro-electricity.

2.5.1.1 Corporate Buildings (Administration Offices and Operations Workshop)

Administrative Offices

The bulk of CRCA staff (primarily administrative and technical staff) work out of this building. Currently, there is inadequate space for filing/records, storage and the current number of staff.

In 2003, as a temporary solution to spacing issues, a trailer was placed next to the Administration Office to provide additional office space for staff. This trailer is used to its full capacity. Although the ongoing business of the CRCA continues, it does appear that some work and potential project/programs are hampered by the limitations that these two buildings have.
Workshop/Operations Buildings (Western Service Centre)

This maintenance area includes 3 structures; the workshop, the drive-shed and the (former) interpretive centre building.

The CRCA’s western service centre at LCCCA is the primary base for the majority of all conservation lands activities. Operations are based out of the workshop building. The workshop is poorly ventilated, and does not provide adequate lighting in all work areas. There is insufficient space for suitable offices, washrooms, lunchroom or storage. A variety of tools, outdoor equipment and vehicles are kept in a separate unheated area of the workshop; additional storage space for equipment is also the role filled by the other two buildings in the maintenance area. Although there are no immediate plans to upgrade this facility, staff are investigating options and opportunities to expand storage and work areas while also looking at means of enhancing the function of current workspace; this would include consideration of surfacing throughout the driveway and parking area as well.

In the early 1990’s, the former Interpretive Centre building was moved to the maintenance area for use there as a storage facility by staff for various programs. This building has since been fitted with a large climate control system that allows staff to safely store the tree seedlings that are ordered each spring as part of annual tree planting though the CRCA’s forestry program.

The drive shed building is primarily used as a garage and storage space for large pieces of equipment such as tractors, the snow groomer, a boat and canoes/kayaks. This building also houses controls to the adjacent fuel storage and filling station that was upgraded to coincide with recently conducted building renovations. In 2010, the drive shed underwent a major overhaul to repair its stability and function.

2.5.1.2 Outdoor Centre

The Outdoor Centre was constructed to replace an undersized Interpretive Centre building in the 1990s. The location of the new building is immediately adjacent to the reservoir where the former building was located. While additional works envisioned for this facility have been realized, such as the first phase in expanding the parking capacity here, the intended surface treatment has not yet been applied.

This building is the headquarters for the CRCA’s curriculum-based Education Program (including the summer day-camp program) as well as for public information and education sessions. Additionally, the Outdoor Centre functions as a trailhead for all visitors to LCCCA. All day-use equipment rentals (ski/skate/snowshoe), except for the canoes/kayaks that are rented from the Administration Office, are available at the Outdoor Centre as well. The Outdoor Centre is also used as a public/private event, meeting and rental facility. And finally, the Outdoor Centre is a major part of the CRCA’s public face to service people who may be interested in any of the lands that are owned and managed by the Authority.

The Outdoor Centre was built in a significantly different economic climate and has unfortunately not developed into the community resource that was originally envisioned. Although still being a relatively new facility for LCCCA, this building’s programming and operation continues to pose serious challenges for property managers. The CRCA manages the Outdoor Centre somewhat independently from the rest of LCCCA, and due to the operational challenges this building presents, and multiple programs/activities that are straining to use the same space, staff suggest that an independent business study to review programming and operation of this facility over the long-term is required.
While the bulk of public programming is based out of the Outdoor Centre building, section 2.6, below, includes a brief rundown of programs and activities that LCCCA is host to.

2.5.1.3 Gatehouse

A gatehouse (toll booth) is located along the main access road, near the Workshop/maintenance area, off of Perth Road. Except for during events, the gatehouse is rarely staffed, and visitors to the property are expected to pay the fees on a self-serve/honour system. Although this simple wood frame structure creates an area that provides the initial point of contact for visitors to be informed about fees, regulations and directions, without regular monitoring and enforcement of the regulations, staff have observed that this structure does little to guide visitors or assist property managers in effectively controlling access to the property. This facility poses a safety risk for staff that do occasionally work at the gatehouse, as they are working in an isolated location with money, and without electricity for lighting or telephone service in the case of an emergency.

2.5.1.4 Warming Huts

There are two simple wood-framed buildings adjacent to the reservoir that provide an area to get out of the elements for visitors to LCRRCA. These buildings are primarily used in the winter by skaters, as well as skiers, as a warming area. Both buildings can each accommodate an estimated 18 - 24 people at a time. Each of these buildings is beginning to show considerable aging of both the interior and exterior, and could require significant maintenance in coming years. One of the buildings has a wood burning stove and benches, with a separate (wood) storage room that is accessed from the outside. The other warming hut building has two pit toilet privies that are accessed from the outside. This area of the property can occasionally become fairly busy with people and some vehicle traffic during events. During much of the year, the area around these building sees much use as the primary trailhead area. It is also used by people picnicking and is adjacent to the water access point for people that want to launch a canoe or kayak. The area around the warming huts, including the fire pit next to the buildings, is occasionally used during other times of the year by property visitors as well as through some of the public/education programs that are held at LCRRCA. For example, during the annual ‘Mardi Gras’ event activities, the fire pit is used in making s’mores for children and adults. At least one of the warming huts is open and unlocked for visitors to wait out inclement weather throughout the year.

2.5.1.5 Privy (pit toilet) Facilities

There are four of these structures/facilities throughout LCRRCA.

As noted above, one of the warming hut buildings provides pit privy facilities to property visitors. Each of the one-stall privy units is accessed by individual doors, and is posted for males and females respectively. The remaining three privy structures/facilities are each double (two-stall) units that have been separated for males/females. These are spread throughout the conservation area. One set of privies is adjacent to the sugar shack building at the north end of the property and is primarily used in spring to provide service for visitors and staff during the annual Maple Madness (maple sugar) event. The other two sets of privies are each located at strategic locations in each of the picnic areas; with one lying between the parking area and the dam in Picnic Area 3, and the other being located next to the service road in Picnic Area 2.

Despite the age of these buildings, they are in good shape structurally and function relatively well. The structures housing each of the privies are generally very well constructed and are all made of cedar wood
that has weathered the last thirty years very well. The vault-tanks of these facilities are each relatively similar in age; however they are individually at varying stages of decline and should be evaluated by a qualified technician to determine a regimen for replacement or removal of these structure/facilities according to user needs and site limitations.

2.5.1.6 Houses

There are two houses on the LCCCA property. Each of the homes is currently rented out, whose occupancy assists the CRCA in managing and maintaining these buildings.

The first house is a brick bungalow located beside the maintenance area, near the property’s entrance and gatehouse. The residents of this home are also under contract with the CRCA to be responsible for property security.

The other house (known as the Powley House) is located on the west side of the property and is accessed from Sunnyside Road. The house, along with some surrounding land, is currently being rented. The house is a historic limestone farmhouse constructed in c1820. Along with a number of regular maintenance items, some major maintenance work was carried out on the roof and windows of the home in 1990 so that it would not deteriorate. Also associated with the house, is a historic stone barn that needs significant repairs to maintain structural integrity and protect previously identified architectural-heritage values.

2.5.2 Infrastructure

2.5.2.1 Entrance and Roadways

Property access is controlled by perimeter fencing and gates at ten points around LCCCA (Figure 3), only one of which is open for use by the public. The primary and only approved/permitted entry point follows a main access road that enters the property from Perth Road. The entrance and main roadway leading up to the Administration Offices has been finished with an asphalt surfacing treatment. A gatehouse (toll booth) is located along main access road, off of Perth Road, near the driveway that branches off to the north for access to the Maintenance Buildings and the rental house. The main road continues past the gatehouse before splitting with one roadway leading north towards the Outdoor Centre and the other towards the Administration Office that is next to the reservoir. The additional gated entry points are off of Perth Road (5), Bur Brook Road (2) and Sunnyside Road (2) and are closed off to control access. Two of these gates, one each on Perth Road and Sunnyside Road, that have been installed in alignment with the Fourth Concession Road Allowance. The second gate on Sunnyside Road provides access to the ‘Powley House.’ The rest of the gates are remnants from the assembled parcels that make up LCCCA. Except for the driveway leading into the Powley House, all but one of these gates along Bur Brook Road are in poor condition, but could potentially provide access for CRCA Operations or in case of an emergency situation.

The base of the entrance-roadway and parking areas of LCCCA are stable, but at this time the surfaces are beginning to show varying degrees of wear and need treatment. If, as expected, use of the property continues to rise, the extent of maintenance will have to increase to minimize the annual impact of activities. CRCA Biologist, Tom Beaubiah, also identifies further issues related to the construction and maintenance of this infrastructure within Appendix 2 in regards to stormwater run-off treatment.
As identified through the CRCA’s Asset Management Plan, LCCCA’s entrance-roadway, service roads and parking areas each have inconsistent surfacing treatments in addition to being different ages and in various stages of decline.

There is a gravel service road leading north from the warming huts to the sugar bush area. This road also provides access to the sand/gravel pit (no longer in use) on the property, where a number of surplus materials have been stockpiled. The road is not suitably constructed for use in the spring when it is most heavily used. As part of any plans to make improvements to the Maple Madness/sugar bush facilities, this road should be upgraded to a higher design standard (including consideration of routing changes) that might facilitate increased use of the sugar bush facilities/area throughout the year.

Another service road travels west from the Administration Office, south of the reservoir and through Picnic Areas 1 & 2 and ends at Picnic Area 3, which is adjacent to the dam. This service road allows visitors to access the day-use and picnic areas through spring, summer and fall. The surfacing of this service road is made up of two types, with the easterly end finished with recycled asphalt and the western end being gravel. Although this road is rough along some portions, with rather limited use and regular maintenance, it should continue to be serviceable for the foreseeable future. However, as use of LCCCA is expected to increase in the coming years, this infrastructure needs to be monitored to ensure that it continues functioning in a reasonable manner.

Parking at LCCCA is provided for staff and visitor use as well as for CRCA fleet vehicles (Figure 3). The numbers of spaces are located and distributed as follows (the surfacing type that each area is finished with has also been included here):

- Administration building (60 spaces on recycled asphalt)
- Warming huts (30 spaces on recycled asphalt)
- Outdoor Centre (80 spaces on gravel)
- Dam and Picnic Area 3 (40 spaces on gravel)
- Maintenance Area (8-10 spaces on gravel)
- A small parking area (8 spaces on recycled asphalt) is located near the reservoir at the gate that provides access to the service road leading to the dam.

For special events (e.g. Maple Madness) and on busy weekends for winter recreation, there is insufficient parking space. Current demand could indicate a need for at least 40 additional spaces for overflow periods during special events. An additional parking lot would also create an open flat space that could be used for ski training activities, if built in a suitable location.

### 2.5.2.2 Dam

The Little Cataraqui Creek Dam was constructed in 1970 to provide a reservoir, wildlife habitat, and flood protection in a new conservation area. A small portion of the reservoir area was excavated (ahead of the valley being flooded) and headlands at the eastern end were created. The dam itself was constructed as an earth-fill embankment (elevation 82.30 metres GSC) on the west side and a sheet steel wall with limestone armour rock-fill on either side to the east. A low-flow valve was constructed on the east side of the structure. In 1972 a movement in the dam crest (elevation 81.23 metres) was observed. A relief well system was installed at that time to reduce pore water pressures in the embankment.
The structure is not operated, except for occasional use of the 0.6 metre diameter low-flow valve. The normal water surface elevation is 81.23 metres.” (CRCA, 2004)

2.5.2.3 Trails

There are a number of trails throughout the property that are used by visitors for passive leisure activities (such as walking, bird watching, jogging etc.) as well as by staff, students and the public who may be taking part in CRCA programming (Figure 3). The total length of trails is approximately 17 km. Trails 1, 2 and 3 are a series of stacked looping routes beginning behind the Outdoor Centre. Trail 4 is a long looped trail that loops around the reservoir and can be accessed at a number of locations. Trail 5 is a short looped trail that starts/finishes behind the Outdoor Centre. Most of the trails are bare-earth/grass surfaced and thus cannot withstand heavy use throughout much of the year. The trail surfacing and drainage also limits the access and serviceability by staff. Although not officially incorporated into the trail system, the series of fire-breaks that are maintained on the property along with the hydro and gas corridors have been adopted by many property users, especially during winter conditions by skiers. This is in addition to a number of other unofficial paths and unauthorized property access points that have been observed by staff.

A portion of trail number 4 at LCCCA currently travels through the neighbouring “Knox Farm” property, noted above in section 1. There is no formal agreement between the CRCA and the City of Kingston (owners of this parcel) regarding use of this land or the maintenance of a trail through this area. Securing the trail’s routing through the naturally forested valleylands here is a high priority for property managers because it also furthers long-term ecological protection interests for the area.

While trail 5 was constructed in the mid-1980s for wheelchair access and resurfaced less than ten years ago, it is in need of specific drainage/surfacing work to ensure this function is maintained. Beyond trail 5, the trail conditions limit access for anyone pushing a baby stroller or for those who may have physical limitations.

Except for a limited amount of directional and information signage, there are few benches, amenities or other developed rest areas along the trails at LCCCA. However, downed trees and other landscape features adjacent to trails are often used to fill this role. There is one bench-shelter located next to trail 3 near the service road’s access to the Sugar Bush area, and one large bench (not part of the trail system) is adjacent to the reservoir. There are a further 10 benches on the property; these have been primarily located along trails 1 and 5, which are the most used of the property’s trails.

As cycling has become a more popular pastime, bicyclists have occasionally been observed coming out to LCCCA and using the trails more often. This includes families that have transported their bicycles here by automobile, and those who have ridden to LCCCA. At the current time, staff direct these visitors to using the service roads for cycling. Demand is expected to continue increasing, resulting in potential conflicts between cyclists and walkers, as well as damage to the soil and plants adjacent to the trails, which have not been constructed to sustain the impacts of bicycle riders.

Except for the service roads and trail 5, all trails are groomed for cross-country skiing during the winter (when conditions allow). This is one of the most popular activities that visitors participate in at LCCCA; and is also responsible for drawing significant revenue through gate fees, annual pass sales and
equipment rentals. The grooming of the trails sets track for traditional style cross-country skiing. In recent years, the rising popularity of skate-style skiing has seen more of these users seeking access to the property, where they have been directed to using the property’s service roads; however some conflict between these two different skier/user groups still occurs.

Snowshoers are another winter user group who are authorized to access LCCCA facilities when conditions permit. In addition to being directed to using the property’s service roads as well as trail 5, these users (like hikers or dog walkers) are also permitted to use the other trails provided they are not damaging the groomed tracks set by Operations staff. However, there does seem to be more conflict between people who walk through tracks set for skiers on the groomed trails during the winter recreation periods.

Due to the design, location and routing of LCCCA trails, seasonal conditions can significantly limit access for visitors as well as for staff. Access throughout the property’s trail system must be developed to support quality visitor experiences and to ensure that year-round operational access is maintained.

2.5.2.4 Skating Rink

Part of the reservoir adjacent to the warming huts is cleared during the winter for ice-skating. It is the largest natural ice rink in the Kingston area. When conditions permit, skating at LCCCA is a popular activity that has attracted significant numbers of visitors (individuals and groups). The skating rink is also available to be rented out for group use, along with the rental of skates that are available at the Outdoor Centre.

Harvesting submergent plant material from the reservoir, around the rink area, is required periodically to prevent the vegetation from interfering with the stability and quality of the ice and rink surfaces. The weed harvesting that must be undertaken every two to three years represents a significant cost to the operation of this facility; this is in addition to substantial labour and equipment costs related to rink preparation and operation.

2.5.2.5 Maple Syrup Demonstration Area

There are four buildings in the Sugar Bush area:

1. Sugar shack
2. Evaporator room (and wood storage)
3. Waste & Recycling building
4. Privy building/structure

The sugar shack is the primary building that people visit during Maple Madness, as it is the base for the making and selling of pancakes as well as other related items. This simple wood frame (on slab) building is beginning to show its age, and requires new roof sheathing to ensure the long-term stability of the structure. People eat pancakes outside of this building on picnic tables, where there is a need for improvement to ground surfacing and protection from wind/rain.

The evaporator room is part of a building (wood frame with concrete floor and cedar shake-shingles) that, in addition to housing the sap collection/storage tanks and the ‘Grimm’ evaporator that is used to produce syrup, also has a small viewing stage for visitors along with an attached wood storage area.
The waste & recycling building is a small shed that is mainly used for storage throughout the year. During the Maple Madness event it is used as a collections centre for waste materials (garbage/compostables/recyclables).

The sugar bush area and buildings are primarily only used during the annual Maple Madness (maple sugar) event held each spring, in March. In previous years, the CRCA had assistance from a number of local maple syrup producers to install and redevelop the sap line collection system on the basis that the Authority was only producing maple syrup for demonstration purposes.

The privy structure that is located adjacent to the Sugar Shack is more than twenty years old; as are the other privies at LCCCA. These facilities require annual servicing to empty the vault/tanks. An inspection by a qualified technician would ensure that these structures are sound, safe and pose no threat to the surrounding landscape.

The small system of paths (and bridges) throughout the sugar-bush demonstration area were developed through the activity in this area each year as part of Maple Madness. They are so well established that they are now used by visitors throughout much of the year. Although there is a limited amount of maintenance work done each spring in preparation for the event, including occasional placement of wood chips, the paths themselves are in fair condition. In addition to assisting staff to manage the impact of visitors, it would help visitors to better guide themselves through the area if there was a map that laid out these paths and their current location. The stairwell, which was newly rebuilt in 2009, provides safe access for visitors and staff to access the upper part of the sugar bush area and also links the sugar bush paths to Trail #3. In preparation for the 2012 Maple Madness season, a number of smaller projects were undertaken as staff also began to plan for upgrades to the Sugar Shack’s equipment.

2.5.2.6 Picnic (and day-use) Areas

In addition to several picnic tables that have been placed around the Administration Office, warming huts and the Outdoor Centre, LCCCA currently has three designated picnic areas that are available to visitors and can be booked for group use. The group picnic areas are still showing the effects (shade-tree damages and removals) caused by the ice-storm of 1998. There are relatively fewer bookings for group use of the picnic spaces taking place in recent years. Although these areas do see a moderate amount of use, staff observations have identified that most picnicking on the property is casual in nature and involves individuals, families or relatively smaller groups of people.

Picnic Areas 1 and 2 are located on opposite sides of the service road midway between the Administration Office and the dam. In these picnic areas there are picnic tables (11) and a two-stall pit privy (2). This area is surrounded by heavy thickets, yet it is shaded by relatively few trees; thanks in large part to ice damage in 1997. Besides the open grassy space, the area has no additional amenities or attraction for picnickers and does not provide a direct way for visitors to access the trails. There is no designated car parking area here; visitors are directed to park their vehicle on the grassed areas next to picnic table/sites.

Picnic Area 3 is located next to the dam/reservoir in the southern portion of LCCCA. This area provides visitors with picnic tables (7) and pit toilets (2). The parking area (40 vehicle spaces) is isolated from the picnic space by a row of trees. Similar to Picnic Area 1 and 2 above, there are relatively few trees here to provide picnickers with shade or respite from wind/rain. This picnic area provides direct access to the trail system as well as a large open space next to the reservoir for visitors to enjoy.
Figure 3 Little Cataraqui Creek CA Existing Facilities
2.6 Programs

Further to the CRCA’s Conservation Lands operations and Administrative activities at LCCCA, there are a number of additional programs that operate on the property. In addition to being used to conduct meetings of the various Boards and Committees of the CRCA, meetings of the Cataraqui Conservation Foundation and Cataraqui Trail Management Board are held in the boardroom of the Administration Offices. However, at LCCCA the majority of the public and private activities, such as the curriculum-based education programs and rental of space for meetings/events (e.g. weddings), are based out of the Outdoor Centre. Programs and activities taking place at LCCCA include:

- Maple Madness (annual maple syrup event) – based in sugar bush and Outdoor Centre
- Holiday and theme-based events – e.g. Christmas tree trimming
- Curriculum-based education – hosting elementary, secondary and private/home school groups
- Winter recreation activities/programs related to snowshoeing, skating and cross-country skiing
- Evening/weekend activities including information/educational presentations – e.g. The Bat Man
- Facility rentals for private meetings or events – including the group picnic areas
- Summer day-camps
- Equipment rentals – canoes/kayaks; winter recreation equipment (snowshoes, skis and skates)
- Gate fees and the Annual Pass Program
- Stewardship activities – volunteer trail/garden clean-ups, nest box monitoring

Revenues generated through programs like curriculum-based education, equipment rentals and gate fees, are used to support the Outdoor Centre and the balance of property upkeep through the year. Programming of some sort is required in order to generate the revenue needed to retain the current activity/service levels; otherwise the CRCA would have to begin looking at other revenue sources or reductions in the amount of programs that are supported on an annual basis.

Due to the bulk of LCCCA’s revenues being generated though programs that are winter weather dependent, the potential impacts of climate change could be a major driver in directing the CRCA to pursue other programming opportunities that would support the property’s operation and management.

As the winter recreation programs are increasingly seeing an absence/reduction in reliably consistent conditions, monitoring programs as suggested through the CRCA Biologists report (Appendix 2), will help property managers to be aware of the impacts that climate change will be having on LCCCA.

There has long been an interest expressed to staff to see ‘skate-style’ cross country skiing welcomed at LCCCA, not only as a means of servicing this activity, but to potentially also draw an increase to revenues through this group. Although opportunities to better accommodate both types of cross-country skiing will be examined, the potential impacts of climate change and local weather trends indicate that this program may have to be suspended in the future. However, so long as winter conditions permit and it is operationally feasible to do so, this program will be maintained over the next five years. In regards to the skating rink, accurately documenting the specific winter recreation operational activities will provide property managers/programmers with the detailed data that will allow for evaluation of the future commitment towards these programs.
Comments over the course of this study also spoke to a perceived lack of distinctly identified space for snowshoeing. While this activity certainly provides visitors with the ability to access extensive areas of LCCCA, property managers should work to ensure that all visitors are given clear and consistent direction, in maps and other information, regarding where/how participation in specific activities is expected to occur.

3  MASTER PLANNING CONCEPTUAL DEVELOPMENT

3.1  Little Cataraqui Creek Conservation Area Planning Process

The following chart briefly outlines development of this master plan:

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autumn 2010</td>
<td>Assess background documents and reports</td>
</tr>
<tr>
<td>Winter/Spring ‘10/’11</td>
<td>Examine the current status and conditions at LCCCA</td>
</tr>
<tr>
<td>Spring/Summer 2011</td>
<td>Collection/analysis of current market data, position and opportunities</td>
</tr>
<tr>
<td>Through 2011</td>
<td>Review ecological resource data, field investigations and assessment</td>
</tr>
<tr>
<td>Through 2011</td>
<td>Consultations with the public, neighbours, partners, staff and stakeholders</td>
</tr>
<tr>
<td>Autumn 2011</td>
<td>Inform the public of current conditions, considerations and potential concepts</td>
</tr>
<tr>
<td>Autumn 2012</td>
<td>Revise planning options to consider the public/partner input</td>
</tr>
<tr>
<td>Winter/Spring 2012</td>
<td>Develop recommendations and create a preliminary draft document</td>
</tr>
<tr>
<td>Spring 2012</td>
<td>Present the draft plan to partners and the public for review and comments</td>
</tr>
<tr>
<td>Spring/Summer 2012</td>
<td>Revise draft</td>
</tr>
<tr>
<td>Summer 2012</td>
<td>Submit draft master plan for approval and adoption</td>
</tr>
</tbody>
</table>

3.2  Market Analysis and Consultations

This section provides the background and analysis related to the usage and protection of LCCCA as viewed by the public and our partners, and is split into two sections. The first section will review the extent of consultations that have been carried out over the course of the master plan study process; and the second is a summary and analysis of the LCCCA’s position within its community and regional market for accessible/protected open space that supply communities with recreation and stewardship opportunities.

3.2.1  Consultations

There has been a significant amount of information generated over the years about LCCCA. Although much of this information is technical in nature, it is augmented with the input of experienced staff who are more service focused regarding the public use and perception of LCCCA. As such, it was decided that helpful insight might be gained by beginning this planning process with two informal gatherings (one with neighbours and one with stakeholders) to share opinions/concerns regarding the management and development of LCCCA. A summary of this event, compiled by the event facilitator, is provided at the end of this report in Appendix 1.
In addition to conducting numerous informal interviews with partners, staff and property visitors, some of the additional tools used to carry-out consultations with stakeholders and users of the property involved:

- A print user survey was made available to visitors over an 8 month period
- An online version of the survey was also available through the CRCA website
- Facilitated Focus Group Sessions, one with neighbours and one with stakeholders
- A public open house was held through which public/partner comments were considered.

The main findings of this work indicates that while having safe, high quality facilities and infrastructure to support user activities is a crucial consideration for the development of LCCCA, the importance of this being a protected place that requires a more active approach to effectively managing the activities that take place is also recognized. Another key aspect observed through these consultations was the perception that this property has the potential to play a larger role as a community resource for passive recreation, nature-based education and public events. Although there are other constraints relating to the location and accessibility of LCCCA, exploring public/private partnerships or third-party management arrangements for programming could be a method by which revenue and support for the CRCA’s ongoing work might be generated was encouraged.

3.2.2 Market Analysis

In 2011, the CRCA’s Communications and Marketing Officer led a review of the LCCCA’s position as it relates to site management and the current and anticipated demands/expectations of property visitors. Below is a summary of the findings of that study.

The Market Analysis was conducted to assess the current and future demand for public visitation and weekend programs at LCCCA, as well as provide direction and statistical support for future LCCCA marketing initiatives. The complete Market Analysis and its sources are provided in Appendix 2 of the Master Plan.

An examination of the region surrounding LCCCA (greater Kingston area) indicates that LCCCA is the largest outdoor recreational space that offers natural environment exploration and conservation education activities. While there is a well-developed park system in the City of Kingston, they are often less naturalized, small in size, and do not provide many opportunities for outdoor education. There are five Provincial Parks within 100 km of LCCCA, which are generally much larger than LCCCA and their facilities more extensive, but their gate fee is substantially higher. The St. Lawrence Parks system and the St. Lawrence Islands National Park offer many of the same facilities as LCCCA and offer camping as well. Their gate fees are considered low to moderate. LCCCA also competes with other Conservation Areas that are a short drive away in Quinte, Prince Edward County and the Rideau Valley. Locally, there are also two private campground operations, Rideau Acres Campground and the 1000 Islands/Kingston KOA, that provide overnight and seasonal family camping.

According to local statistics, user demand for drop-in activities is on the rise in the Kingston Area at the expense of organized and structured programs, which are inflexible to individuals and families with limited free time. Passive sport and nature-based tourism represents a growing market, which creates a demand for outdoor recreation and family-friendly facilities, including golf, walking, bird watching, and
marine and waterfront activities. Trails and open picnic areas continue to be one of the most demanded amenities as they provide an opportunity for a number of activities.

Canada’s rate of population growth has been accelerating for six straight years and does not show signs of slowing. The City of Kingston is expected to grow by approximately 13,500 persons between 2009 and 2026 (13.6%), for a total population of 133,100 persons. According to all population projection scenarios, seniors are expected to comprise approximately twenty-three percent to twenty-five percent of the Canadian population by 2036, and around twenty-four percent to twenty-eight percent in 2061.

Population growth will have a significant impact on current programs and services. Not only will added populations put pressures on existing facilities, but it will also generate demands for more spaces and services. The aging population, made up primarily of Baby Boomers, will increase the need for passive sport recreation programs.

**Top Marketing Recommendations (see Appendix 3 for full Market Analysis)**

1. CRCA Website re-design with online event registration and accessible format options (such as screen readers, screen magnifiers and audio recorded information)

2. “Where does your money go” pamphlet and information on website to explain why we charge a gate fee and sell annual passes

3. Annual Fun Run in the fall or the spring.

4. Market directly to seniors and students in targeted publications, school websites, senior association websites, signage, etc.

5. Create accessible communications, such as downloadable audio conservation area guides (podcasts) and large print pamphlets.

6. Messaging should emphasize how close LCCCA is to the City of Kingston.

### 3.3 Proposed Concepts for LCCCA

A public open house held at the LCCCA Outdoor Centre on September 29, 2011, discussed concepts related to the direction of this master plan update and future development of Little Cataraqui Creek Conservation Area. Three concepts were proposed for consideration, and are summarized below.

**Management Concept A - Building on our Past**

- Targeted Facility Rejuvenation
  - improving picnic facilities
  - trail and service road upgrades
  - renovation of warming huts and canoe/kayak access area
  - evaluating privy facilities
  - enhancing infrastructure of the sugar bush & facilities
Land Restoration
- supporting natural succession throughout the property
- reducing the impacts of CRCA through conservation stewardship projects, such as buffer building and reduced mowing
- implementation of the forest management plan, such as thinning of plantations
- species and habitat specific focused efforts, such as installation of wood duck nest boxes and butternut recovery program

Enhancing Communications
Specifically, about the importance of LCCCA and the value that its resources and facilities provide to the community. Main messages include:
- protecting natural heritage features, open green space and habitat
- watershed management functions
- outdoor recreation and education space
- the administrative & operational headquarters of the CRCA

Management Concept B – Building our Community Activity
- Going further to improving the property’s services and capabilities to educate visitors and provide additional opportunities for leisure and recreational activities
- Supporting community initiatives through event programming and partnerships that promote conservation and stewardship, as well as project-specific fundraising efforts
- Incorporating the principles of Concept A

Management Concept C - A Protected Place with Active Space

Incorporating the recommendations made for Concepts A & B, further strategic investment will be made to increase the property’s capacity and attraction as a recreational resource and local destination.

Ecologically sensitive features will remain protected; however, upgrades to LCCCA will be made to accommodate potential new programs, uses and activities. A variety of new activities and facilities were suggested for consideration; based on site constraints and the comments of staff and the public, those that were considered to be feasible and/or may be compatible with the property are:

- ‘Skate-style’ cross-country skiing
- Play structures/equipment
- Fitness trail apparatus
- Regular evening skating
- Management of ‘geocache’ activities
- Picnic shelter(s)
- Additional interpretive signage
- Guided (educational) nature walks
- Organized seasonal events/competitions
- Instructional and certification training courses
- Age-group/demographic oriented programs
3.4 The Preferred Concept Model

Following the September 29, 2011 Open House, CRCA staff were able to review comment forms collected through the event. The preferred option identified through this study and consultations with staff, partners and the public was Concept A.

There was a wide array of comments expressed to staff over the course of the open house and throughout this planning exercise. Some comments were supportive of making upgrades to the property’s facilities, while other respondents were concerned that developments would go too far to develop features for this property that would attract an unsustainable increase in the use of LCCCA. It should be noted however, that projects and management issues that were raised in concepts B and C may be revisited, and that those yet to be proposed might require further investigation.

From this process, the primary goals for LCCCA under this plan are as follows:

1. Protecting and enhancing the natural heritage features associated with LCCCA
2. Rationalize developed areas and trails for year-round operational access, and provide passive recreation opportunities that also support learning experiences
3. Facility and infrastructure upgrades should be conservative in nature, while maintaining an aesthetic consistent with the CRCA
4. Pursue a co-operative strategy with partners and stakeholders for moving forward with shared objectives
5. Provide opportunities for collaborations with stakeholders, members of the public and private groups to conduct programs on the property
6. Enhance the clarity and consistency of messaging for visitors regarding regulations, permitted activities and interpretive information
7. Maintain regular monitoring of site facilities/infrastructure to ensure visitor safety and regulation compliance
Figure 4 – Little Cataraqui Creek CA Concept
Figure 5 – Little Cataraqui Creek CA Concept (close up)
4 PROPERTY MANAGEMENT PLAN

This Master Plan process has identified several issues and makes several proposals to support the goals stated above in section 3.4 and, assist in guiding the CRCA’s management of LCCCA over the next 20 years. The plan identifies the significant concerns as well as key project recommendations for property managers to consider when planning the ongoing development and operation of LCCCA.

Each has been categorized under one of five headings:

- Trails and signage
- Facilities and Infrastructure
- Wildlife and Habitat Protection
- Communications and Service
- Operational and Corporate

4.1 Key Directives

Below are the recommendations for projects assembled through this planning exercise for LCCCA that are to be taken on through implementation of this plan. These have been categorized under the following headings to describe the specific area of the property’s operation and management that the item/issue addresses. The points below are not mutually exclusive to their category.

4.1.1 Trails and Signage

The trails are the primary visitor feature/facility of LCCCA and are already well established and defined but need to be rationalized. Also, as discussed in the market analysis, the demand for passive activities (i.e. walking/bird watching) is expected to increase over coming years. Being prepared to manage the demands and impacts on the trail system also indicates that an inventory of signs (and markings) at LCCCA should be conducted as part of the trail rationalization. Site signage should be reviewed every three years thereafter to ensure that signs are legible, reflective of current conditions and sufficient for current property needs. Using the CRCA sign standards, as created for other conservation areas, the design and placement of signage for LCCCA will assist property managers in continuing to communicate a clear and consistent message for visitors.

The directives proposed below address the primary issues under this heading:

- Rationalize trail system
- Install new trail maps and way-finding markers
- Extend paths from parking areas at trailheads to new informal picnic areas
- Upgrade the routing and construction standard of the loop trail around the reservoir

4.1.2 Facilities and Infrastructure

As outlined below, there are a number of key infrastructure development projects that are proposed to improve the user features of the area that are not specifically involved with the system of trails at LCCCA. The directives below address the primary issues with facilities and infrastructure according to background research and site familiarization as well as public comments.
• Enhance trailhead areas
• Improve the warming huts, including upgrades to the structures and water/ice access
• Landscaping around the Administration Office
• Perimeter fencing/gate and access survey to determine conditions and strategy to repair
• Privy assessment program to identify removal/replacement strategy
• Develop enhanced opportunities for casual picnicking around trailheads/reservoir
• Consider realignment of the entrance, main driveway and parking areas and upgrades to a consistent surface
• Upgrades to the sugar bush area to include road/routing upgrades and surfacing treatment for the area

4.1.3 Wildlife and Habitat Protection
The following recommendations primarily speak to maintaining current programs, documenting species through observation reports, and monitoring site conditions. Where opportunities are identified and resources allow, additional activities may be undertaken.

• Continue activities related to the Butternut tree recovery efforts.
• Monitoring/maintaining nesting boxes and platforms to gauge use/activity
• Pursuing opportunities to improve biodiversity through species-specific efforts (e.g. snake hibernacula)
• Implementation of the Forest Management Plan
• Manage resource inventory data through improved monitoring/reporting/tracking program, and pursue the carrying out of a “Bio-Blitz” type of event

4.1.4 Communications and Service
The following project items noted below are intended to further the effectiveness of current communications and enhance LCCCA’s promotional, educational and programming activities.

• Create a new CRCA website to enhance the online presence and information about LCCCA
• Create guidelines and a liaison capacity to assist in planning partnership projects/events
• Produce a new trail-map that incorporates seasonal uses and CRCA regulations
• Generate new interpretive signage to support self-guided learning experiences
• Implement a LCCCA promotion and communications strategy

4.1.5 Operations, Policy and Corporate Issues
Due to the more operational or corporate nature of the following items, these final recommendations have been assembled here under this heading, however, in some cases they could be applied to other categories as well.

• Evaluate the gate fees policy and annual pass program to determine program/revenue needs and values, and a new service strategy
• The Outdoor Centre (programs/operation) requires an independent business analysis to evaluate and move forward options that will support long-term viability of this facility
• Initiate regular patrols to LCCCA to enhance monitoring and enforcement
• Design and implementation of a Risk Management Policy for all CRCA properties
• Review the project/options regarding Administrative Office expansion plan to ensure suitability
• Create an acquisition/disposition strategy for LCCCA; including an examination of the CRCA’s long-term role relating to landlord-tenancy commitments and cost-benefit analysis

4.2 Land and Water Management

4.2.1 Land Management

Ongoing property management will continue to operate under CRCA policies noted in Section 1, in a manner that preserves the natural heritage features of LCCCA and within the guidelines set out by the programs described below. This will ensure continued qualification of LCCCA for the benefits these programs provide. Exceptions may be made under permit by the CRCA for certain activities (e.g. scientific research).

4.2.1.1 Managed Forests

LCCCA forests are managed in accordance with the Forest Management Plan: Little Cataraqui Creek Conservation Area 20 Year Plan (1998-2017). As the surrounding area becomes more developed, coupled with diverse nature of habitat types and provincial significance of various natural features associated with LCCCA, the pressure to maintain and/or enhance the natural aspects of the property will be most important. The forested areas of LCCCA play a key role in the ecological health and diversity of this property, and therefore need to be managed in accordance with a formal plan to sustain the natural woodlands along with artificially regenerated (plantation) portions of the property. The forest management plan recognizes:

• protecting the property as a whole for the complex vegetative communities
• important wildlife habitat
• flooding and erosion control
• its value as a passive-use recreation area and education facility

Although LCCCA is made up of previously separately-owned private parcels of land, the entire area was formerly used primarily for agricultural purposes as Developed Agricultural Land (DAL) and pasture. The area was initially assembled to build a dam and reservoir along Little Cataraqui Creek to control downstream flooding and augment low stream flow; subsequently a 36 hectare reservoir was created following construction of the overflow weir in 1971. Since ownership was procured by the CRCA between 1966 – 1970 most of the DAL portions of the property have been reforested, and are comprised mainly of coniferous plantations. The planting took place between 1982 and 1992, with a total of 450,000 seedlings being planted over 163.7 hectares. The property also manages a small maple sugar bush area and produces some maple syrup for educational-programming purposes each year.
The CRCA is very interested in not only performing sound forest management techniques to provide and/or enhance the forest environment at the LCCCA, but also has the unique opportunity to demonstrate the results and value of this activity to the public. If by no other means at all, this can be accomplished simply through the people that use the property for leisure and recreational purposes during which the resulting benefits can be observed. The public and school-based education programs that are run at LCCCA also teach people in a first-hand way by using the existing variety of habitat environment as the classroom. Given the variety of habitat, forest types, open areas and wetlands that exist within the area, there is an abundance of flora and fauna that coexist within the property as well as pass through it. (CRCA Staff. 1998)

Through the Forest Management Plan, small portions of the property make the CRCA eligible for consideration and benefits under the Managed Forest Tax Incentive Program (MFTIP). Although the majority of this property qualifies for consideration under the MFTIP, due to greater benefits being associated with having the property designated through the Community Conservation Lands program described in the following section, management of LCCCA adheres to the guidelines set out under that system. For further discussion of the property’s forestry resources, see Appendix 3.

4.2.1.2 Community Conservation Lands
As noted above, the majority of LCCCA is designated as Community Conservation Lands (CCL) under the Conservation Lands Tax Incentive Program (CLTIP). Portions of LCCCA totaling nearly 352 hectares are considered CCLs through this Ministry of Natural Resources program.

“In 2004, the provincial government announced the reinstatement of the Community Conservation Lands (CCL) category (formerly called ‘other conservation lands’). The category Community Conservation Lands is restricted to non-profit charitable conservation organizations and conservation authorities. Eligibility criteria for the new category are outlined in Ontario Regulation 388/04 under the Assessment Act.

All lands submitted for consideration under this category must meet the natural heritage protection objectives of the CLTIP. Lands in a non-natural state, previously or currently subjected to activities inconsistent with the program's protection mandate or that currently generate revenue through use of the natural resources, are not eligible for inclusion under CLTIP. Lands currently under the MFTIP must clearly demonstrate that past MF objectives, activities and existing site conditions conform to CLTIP policies.” (Ontario Ministry of Natural Resources. 2011)

4.2.2 Water Management
The Conservation Authority uses Little Cataraqui Creek Conservation Area to carry out several water management functions. Water quality samples are collected by Operations Staff, as part of the Provincial Water Quality Monitoring Network.

The dam plays a small part in flood control. A low-flow valve can be opened and closed to lower or maintain water levels. There is also a relief well system located immediately downstream of the dam on the west side of the creek, which is vital to the continued stability of the dam. Activities must be kept away from this system and periodic maintenance is required. There are no major works planned for this control system, as such the flood protection capacity at LCCCA shall be maintained in its current state.
There are numerous wells that exist throughout LCCCA, most of these relate to past activities on the former parcels that make up LCCCA. According to long-time staff, many of these were decommissioned to varying degrees following land assembly, but the lack of specific records on the condition and location of each of these wells indicates that the CRCA should investigate this issue further. Certainly as part of moving forward with the management of LCCCA, properly closing these wells will represent the CRCA taking active steps to protect local water sources.

4.3 Wildlife and Habitat Protection/Enhancement

It is crucial, through the implementation of this plan, that the ecological integrity of LCCCA be maintained. As described in Appendix 2, further investigation of species and habitat needs must be conducted to determine the need for any additional specific protection measures. The retention and enhancement features currently enacted at LCCCA includes monitoring wood duck nesting boxes and a butternut recovery program, as well as implementation of the Forest Management Plan.

4.3.1 Monitoring

A 1986 resource inventory of the LCCCA property was reviewed as part of the 2011 resources study carried out by staff. Although carrying out a new in-depth inventory study may not be feasible, staff should work with local groups (e.g. Kingston Field Naturalists) to conduct a ‘Bio Blitz’ to further identify the status of species on the property. Ideally, all CRCA conservation areas would maintain records of species observed so that this ongoing inventory would be current and be able to recognize changes to habitat(s) and the potential for impacts on species.

Appropriate management and planning measures will be determined to retain and protect Species at Risk and Species of Special Concern as they are identified. These measures will ensure that significant and/or sensitive species and habitats are protected over the long-term by the appropriate and necessary measures.

Knowledge of the wetland’s water quality is also necessary to maintain the health of the reservoir and wetlands of LCCCA. This accumulated data will consider the property’s wide range of species and habitats to recognize and address the potential impacts stemming from upstream changes. It would be appropriate to begin conducting water quality monitoring in the wetland to gauge baseline levels and trends for the area and to identify any current water quality issues.

4.3.2 General Property Operations

Maintenance of mown areas and plowing snow from roadways and parking areas is the major extent of operational activities at this property, along with occasional trail upkeep. Currently the trail maintenance operations are limited at LCCCA, mainly focusing upon responding to reported issues (such as a downed tree or safety concerns), and hazard tree/trail inspections following major storms; the exception being, during winter conditions, when the trails are groomed for cross-country skiing. These activities, although limited, do keep staff familiar with not just visitor patterns and impacts, but also with the range and variability of habitat changes and wildlife activities.

Moving forward with the recommendations noted through this study will certainly have some influence on staff activities; however these are expected to be mostly project related.
The impacts on operational activities, which carrying out the recommendations made within this master plan update, haven’t been determined.

4.3.3 Nesting Boxes/Platforms

In the 1990s, a nesting platform for osprey was erected on a light standard along the shoreline on the south side of the reservoir. To date, there have been no reported observations of osprey using the platform. It has been suggested that adding a couple of sticks/branches to the platform could be a way to attract activity. Relocating this platform to a more suitable location may be considered should it continue to be unused.

As indicated through the Biologist’s report (Appendix 3), there may be opportunities at LCCCA to initiate a snake rehabilitation service. Such a program would see the building, installation and monitoring of hibernacula for snakes where appropriate conditions are identified.

In 2009, staff installed six wood duck nesting boxes at LCCCA in participation with the Ducks Unlimited Canada, Wetland Care Program. As part of the ongoing program, annual monitoring inspections must be carried out each winter to determine animal usage and prepare the nest box for the following season.

It may be beneficial to also consider further opportunities to install/monitor additional nesting structures for other species (such as eastern bluebird, common loons or black ratsnake).

4.4 Adapting to Development

Throughout the property study to update this master plan, the significant importance of the rural setting and lack of larger-scale development surrounding the LCCCA was noted as being one of the most favoured aspects of the area by regular users.

As the lands that make up LCCCA were denigrated through past agricultural practices, an important challenge continues to be the rejuvenation of this area’s landscape and habitat through sound land management practices. Anticipated development pressures surrounding the Conservation Area also enhances the need for regular monitoring and proper management of this property as a whole. The market analysis (Appendix 3) discusses how expected population growth in the area will have a significant impact on current programs and services; not only will added populations put pressures on existing facilities, but it will also generate demands for more spaces and services.

The City of Kingston’s Recreation Master Plan identifies the value that people of the community place on protecting open green spaces and natural heritage features within the region. The community also recognizes the importance that these places have on the well-being of area residents and visitors through providing opportunities for outdoor recreation, education and appreciation of the natural landscape of the area. This is in line with the CRCA objectives to provide value to the people of this region through resource management and the delivery of multiple programs and services. The Authority’s Conservation Lands Program works to demonstrate a tangible link between varying components of the organization by protecting natural heritage features within the region, and by providing people with access to these protected natural spaces (where appropriate) in order to facilitate opportunities to enjoy, explore, experience and learn about the value of these spaces.
LCCCA is a great example of an area that could benefit from working with potential partners that might be interested in helping to develop and provide programs at LCCCA. A key avenue to explore along these lines would be to formalize a strategy with the City of Kingston to move forward on shared conservation-based objectives. As an example:

Immediately south and east of the LCCCA is a large tract of land that is commonly referred to as the “Knox Farm.” Currently, the City of Kingston is using parts of this property for light industrial activities, such as a snow dump/storage area. This property has been a target for CRCA acquisition for more than 40 years. Interests were based on the values that it would provide an enhanced buffer of protection around the PSW and reservoir, as well as to conserve the woodlands (including sugar-bush) and habitat for wildlife. This would also secure the routing of LCCCA’s trail #4, which travels through a portion of the “Knox Farm.” Conducting more formal discussions with the City of Kingston would provide a venue for acquisition of this property (in whole or in part) by the CRCA, along with additional shared management objectives in the area, to be pursued.

4.5 Intended Activities by Management

Through program monitoring and evaluations, staff will be able to move forward the appropriate and reasoned guidance for carrying-out the recommendations made within this master plan. This section below provides brief analysis and recommendations regarding the management and development of the facilities and infrastructure at LCCCA as implementation of this master plan proceeds.

4.5.1 Corporate Buildings

Administration Office

Rationalizing the space for administration of Conservation Authority activities is required. Of concern is the lack of space required for staff, storage, and Conservation Authority Board meetings in the existing building. There is also concern with the energy efficiency of the building and accessibility. With LCCCA being centrally located for service/access within the CRCA’s jurisdiction, this property continues to be the ideal location to base the Administrative and Operational headquarters of the Authority. Further to expansion designs that were completed for the CRCA in 2000, there are additional options that should be considered ahead of moving forward with the existing plan that is now more than ten years old. For example, additional options may include constructing a new building or possibly relocating the existing building to an alternative site on the property. These options would also separate the contrasting public recreation/education use of LCCCA from operational and administrative activities.

*It is recommended that a specific study to review suitability of the current expansion plan be conducted, to explore the current/projected needs of the CRCA as well as other potential opportunities for meeting these objectives.*

Workshop/Operations Buildings (CRCA Western Service Centre)

There is a need to build additional shelter for storing equipment, as well as bulk materials (such as road sand), in an area that will be protected from the elements. The parking spaces and staging area here also
require surfacing upgrades and treatment that will enhance drainage through this area as well as provide improved/expanded parking areas for CRCA equipment, staff vehicles and volunteers during events.

*It is recommended that the indoor storage and project-workspace, as well as the area’s parking capacity, be improved and expanded to meet expected future program requirements.*

### 4.5.2 Outdoor Centre

Due to the complexity involved with managing this building to meet the needs of the various programs and functions that are based here, this master plan recommends that a business study of the Outdoor Centre be carried out. This study should be inclusive of all programs based out of the Outdoor Centre, as well as an examination of the site’s structural and spatial limitations/opportunities, to determine a long-term program for operating this facility.

In the short-term however, simple improvements around the building that will enhance/expand picnicking capacity should be undertaken. This may include the installation of additional amenities (including shade structures), and enlarging the deck area of the Outdoor Centre by extending west and north towards the wetland.

*It is recommended that improvements be made at the Outdoor Centre that will improve the casual day-use and picnic space around this facility.*

*It is recommended that the CRCA conduct a business analysis of the Outdoor Centre to determine a plan for operation and programming of this facility.*

### 4.5.3 Gatehouse

In light of minimal enforcement activities, it was suspected that gate entry/exit counts and observations would show a high number of visitors accessing the property without paying the gate fee and potentially revealing significant lost revenues. However, while there is certainly some lost revenue through people not paying the required fee, whether entering at the permitted access point or not, staff observations noted that more than 50% and occasionally as high as 70% of visitor-vehicles entering LCCCA have an annual pass. This would suggest that the potential loss of revenue ‘at the gate’ may not be quite as high as anticipated. But it is important to note that with awareness and demand for access to LCCCA (and all CRCA properties) expected to increase and bring more visitors to the area it becomes less tolerable to ignore any disregard of the regulations; and especially in light of the challenging fiscal climate, staff must increase efforts to reduce any potential for lost revenue.

Over the course of this property study, observations were made at random 3 and 4 hour intervals, to augment the gate entry/exit counts that were being collected at the gatehouse using “Traf-x” (infra-red) Data Recorders from November 2010 to November 2011. The following chart (below) breaks down the estimated numbers of vehicles entering/leaving the property over the study period.
It is recommended that the policy that directs the charge/collection of fees paid for property use, and the annual (vehicle) pass program, be evaluated in order to provide improved service for visitors and to better position staff to effectively enforce the program as well as manage the property.

The age and condition of the gatehouse structure, including the lack of hydro/phone services, and non-cash payment options, indicates a need for the structure to be renovated or replaced in the near future if it is going to be continuing to function in this role. The planning for such a structure, however, should be held off until the above recommendation regarding the evaluation of the gate-fee and annual pass program has been completed.

4.5.4 Warming Huts

Due to this area of LCCCA functioning as a hub for visitors, efforts should be made to upgrade the function and aesthetics of facilities here. Further development of this area will not only improve the ability of this space to meet the needs of different property users, but it will also increase the visual appeal of this area and provide property managers with an improved venue for communicating with visitors.

It is recommended that enhancements to this area should consider building renovations, an extended space to accommodate shaded picnic tables, and an improved water/ice access structure.

4.5.5 Privy (pit toilet) Facilities

Although these facilities are currently in good working order, a program to assess the age and condition of the pit toilet facilities (structures and tanks) should be put in place to ensure that the units are each sound and pose no threat to the surrounding landscape/environment. This program will also determine the life expectancy for this infrastructure, along with plans for the renovation, removal or replacement of these facilities as appropriate.

Due to the reduced demand for the group picnic areas, the master plan recommends decommissioning Picnic Area 1 and 2; this could involve the removal of the picnic tables here along with the privy structure that is in this area.

It is recommended that a privy assessment program be developed for these facilities.
4.5.6 Houses

In the short-term, each of the houses will continue to be rented; and until the long-term function and role of that these buildings could play for the CRCA has been confirmed, they should be maintained in their current state.

**Rental Home (Contract Security Residence)**

The security function, performed by residents (under contract with the CRCA) of this home is expected to continue over the next 20 years; however, the recommendation below indicates that the arrangement may be re-evaluated by the CRCA within that timeframe.

**Powley House**

Besides the house, the only remaining outbuilding from the original homestead, is the barn structure. Although these structures are currently in a relatively stable condition, these ageing buildings will eventually require an independent assessment of the structures to determine long-term protection/restoration needs. Such a project would have to be conducted by a qualified heritage architect to first determine if/what actions might be taken to preserve the local heritage value associated with the buildings, before the consideration could be given to undertaking the work. However, this sort of cultural-heritage restoration project would certainly present the CRCA with resource/funding challenges that may be outside the scope of the Authority’s mandate and expertise. As such, this could be an opportune time to consider selling this house and barn (along with a small portion of land), which could provide revenue towards funding future projects at LCCCA.

*It is recommended that the CRCA evaluate its commitments relating to landlord-tenancy arrangements, to determine a long-term strategy regarding these relationships and the management of related assets.*

4.5.7 Entrance and Roadways

The potentially hazardous entrance point to LCCCA is still an important issue for the CRCA, and one that could benefit from the pursuit of further discussions with partners at the City of Kingston. There may be opportunities to improve the current intersection, with the installation of an additional slip-lane. However the preference would be to relocate the property’s entry point to a safer location. The best option would be to come through the “Knox Farm,” where a new entrance could be constructed at a location to align with the Perth Road and McAdoo’s Lane intersection.

Although each of the service roads at LCCCA are expected to continue filling the same roles in the coming years, the level of traffic on each may be expected to change in relation to the recommendations made through this document. For example:

- the service road that travels back to the dam will see considerably less use if public access for vehicles is only permitted when group picnic permits are issued.

- the service road that travels to the sugar bush area needs significant improvements to manage the current uses of the road, but to also maintain drainage and frost heaving issues that occur each year. Plans to undertake a major upgrade of this road should also plan for rerouting access to the sugar shack facilities along parts of trails #4 and #2 to a new turnaround and passenger drop-off point (during programs/events).
The surfaces of main parking areas, the entrance area and service roads vary in the (finished) surfacing materials, age and conditions. This ranges from the asphalt along the entrance road, to gravel surfaces along portions of the service road and parking area next to the dam; all of these areas are in various conditions. Future works in these areas should pursue upgrades that will bring the entrance road and all of the main parking areas up to a consistent standard with a single surface type for the entrance roads and main parking areas around the ODC, Administration Office and trailheads. The workshop area and service roads should be brought up to consistent gravel surfacing as conditions dictate. As any improvements to this infrastructure are planned, especially in areas adjacent to the wetland, it is crucial that appropriate consideration be given to stormwater management.

It is recommended that:

- the LCCCA entrance point and roadway, along with the main parking areas, be brought up to a consistent standard with one type of finished surface
- future plans to improve the entrance, parking and service road areas should consider stormwater management as part of the design to the infrastructure
- an additional capacity to support overflow parking during programs/events be developed

### 4.5.8 Trails

Primarily based on the trail system, the recreational use of LCCCA consists of passive or low-impact pedestrian activities. Further to the wheelchair accessible trail #5, this usually involves walking-based activities such as hiking, dog-walking, nature/wildlife viewing, and snowshoeing; cross-country skiing is another activity that takes place on the trails when conditions allow. In addition to the Outdoor Centre, the curriculum-based education activities and other public programs also use the trail system as a basis for much of the programming. Property access for visitors is restricted to the trails, facilities and designated picnic and day-use areas. Service vehicles used for operations, or in the case of emergency, may occasionally access the trails as necessary.

A long-standing trail-grooming program at LCCCA has contributed to the development of a large group of cross-country skiers who have contributed significantly to the number of annual property visitors and revenues (through gate-fees, annual passes, etc.) for many years. As noted within sections 2.5 and 2.6, with the potential impacts of climate change reducing the winter recreation season in the region, the CRCA’s long-term commitment to this program will be dependent on being able to balance operational costs with program revenue. As part of any trail rationalization study in the future, specific operations and maintenance activities should be documented to assist in determining the long-term costs/commitments to individual programs.

Although there is only one sanctioned point of access for LCCCA, there are a number of additional locations that are used to access the property. Staff observations indicate that some users are entering the property at the additional gated access points to former lots as well as by coming over fence lines from neighbouring properties. In addition to this being in contravention of the Conservation Authorities Act regulations and creating an undue impact on the property, it also circumvents the collection of gate fees. As part of upgrading property security, LCCCA perimeter fencing (including the additional gates noted above) should be evaluated and re-installed or removed as conditions dictate and sites allow.
Due to location, routing and conditions, there is limited seasonal access to the parts of the LCCCA trail system, especially the area lying in the west side of the property that is north of the reservoir. This causes additional challenges for staff in carrying out maintenance work and could pose safety problems in cases of injury or lost persons. Access throughout the property’s trail system must be developed to support safe, high-quality visitor experiences and to ensure that year-round access is maintained for operational needs and in the case of an emergency.

By also examining ways in which LCCCA could be made more accessible by seniors and people with mobility limitations, the CRCA would be building capacity to serve this growing segment of potential visitors. While this may pose a significant challenge, there may be measures that may be taken that would improve the situation greatly for this growing segment of users.

There are several bridges, numerous culverts, as well as a number of additional drainage and washout problem areas on the property’s trail system that are in need of inspections to determine a regimen for prioritizing the work to repair or replace these structures as necessary.

Although recommendations made within this report speak to possibly removing existing access points (through the evaluation of LCCCA’s perimeter fencing) it is important to note that recommendations for trail improvements and other developments will consider the potential needs of emergency services to have the appropriate access throughout the property. Future development and operations will continue to ensure that reasonable access is provided for incident responders. When new site maps are created for LCCCA, copies will be forwarded to each emergency responder group (police, fire and ambulance) to ensure updated information is available.

Because the trails at LCCCA are the primary user feature of the property, investing in an in depth study to rationalize the overall trail system is required and should be pursued throughout implementation of this plan, such that it will consider/propose:

- Justification of routing and trail access points
- Trail classifications and rating criteria
- Seasonal programs and activities
- Enhancing surfaces, drainage and signage
- Design, construction and maintenance standards for trails, signs and trailheads
- Integration of sugar bush paths, service roads, utility corridors and firebreaks
- Upgrades to make LCCCA more accessible by those with mobility limitations
- Potential accommodation of cycling, skate-style skiing and/or other passive activities

_It is recommended that a trail rationalization study be carried-out in order to develop a plan for property managers to meet the needs of programs and property users while minimizing the impacts these activities have on the property’s ecology._
4.5.9 Skating Rink

As noted above (section 2.5), the preparation and maintenance of this winter feature of LCCCA does require a significant commitment of resources to operate safely. Although there is significant interest to see this feature of the property maintained, further challenges are also presented through the trend toward less reliable/consistent winter weather conditions. Beginning to more accurately document the labour, equipment and other costs related to operation of the skating rink on an annual basis will allow property managers to weigh the value of the program versus the costs. So long as it is environmentally safe and operationally feasible to do so, this community asset will be maintained over the next five years; during which time the program will be evaluated to determine the long-term plan for the skating rink.

4.5.10 Maple Syrup Demonstration Area

As staff feel that the sugar bush should continue to be productive, despite the potential impacts of climate change, this program should be sustainable beyond the 20 year horizon of this document. Over the course of the next 10 – 20 years, it will be critical for forestry staff to continue monitoring the maple stand as well as regional trends to confirm that sap/syrup production will continue.

Investment is needed to upgrade the facilities here in order to continue providing an environment that supports safe and enjoyable experiences. Improvements made in this area should be planned in association with Operations, Forestry and Education staff to ensure that such changes will have a positive impact on programs that take place here, by making the area more attractive, easily accessible and useful. This could also make the facilities here more desirable to CRCA staff or third-party program planners who may want to use this area more often, thereby freeing up space elsewhere (e.g. Outdoor Centre).

During the annual Maple Madness program, people eat pancakes outside of the Sugar Shack, on picnic tables in an area that is central to many of the event’s activities. Each year as part of preparing the area, it has been the practice of staff to add wood chips to the high traffic area as a means of controlling mud and reducing slip/fall hazards However, there is now an over-accumulation of this deteriorating wood-matter that needs to be removed; plans should be made to replace this material with gravel surfacing throughout this area. There is also a need for some protection from wind and rain over the course of the annual maple syrup program. As there are other areas of the property (e.g. picnic areas) that would provide an enhanced benefit for property visitors by having mobile shade structures; staff will investigate options for mobile canopy structures that are durable enough to withstand operational requirements.

It is recommended that:

- gravel surfacing be placed throughout the primary program area around the buildings;
- planned building renovations should be consistent with the area’s aesthetics as well as the potential needs of programming; and
- develop (canopy-type) protection from wind and rain for visitors.

Further to the other recommendations noted in relation to this area, there are a number of improvements that will have to be planned for the facilities and infrastructure as part of maintaining safety, program and asset management capacities. In ensuring these projects are considerate of managing the anticipated demands and impacts of visitors, it will also be critical for staff to consult experienced professionals that can advise the Authority with the appropriate consideration for meeting local and provincial standards.
4.5.11 Casual Picnic and Day-use Areas

Significant upgrades to the casual picnicking spaces and opportunities around the trailhead areas, the reservoir and along trails #1 and #5 at LCCCA would support the visitor trend for casual ‘drop-in’ use. In addition to making use of the canopy structures noted above, simple improvements to enhance the function and aesthetics of the area could be done at a relatively low cost. Activities could include:

- extending paths from the trailhead/parking areas to new picnic sites adjacent to the reservoir;
- installing informative signs regarding the functions and features of LCCCA; and
- planting additional (large caliper) tree stock to improve the shade of tree canopies here.

Further upgrades may consider construction of small pergola or shade structures in some locations, as well as making improvements that enhance the accessibility of some of these picnic sites.

*It is recommended that casual picnicking opportunities be expanded and further paths be formalized throughout the trailhead area(s), as a means of focusing the impacts and management of these activities in a single area.*

4.5.12 Fishing

Fishing is permitted at LCCCA in accordance with provincial regulations. The waters that are clearly accessible from the developed areas (trails, service road and day-use areas), as well as those parts of the wetland and reservoir that are accessible by canoe or kayak, are the points from which angling is permitted. Staff observations and visitor comments have indicated that there is rather good fishing within the reservoir and that there might be good opportunities to plan for small-scale community or youth-oriented events that promote this activity.

*It is recommended that fishing be promoted as an alternative to trail recreation on the property, and that property maps indicate locations around the reservoir where land-based angling is permitted.*

4.5.13 Canoe/Kayaking

The careful exploration of the reservoir and wetland areas of LCCCA is encouraged. The developed launch point is located near the warming huts, on the inside of a gated entry point to the north service road; this prevents the launching of larger/motorized water craft onto the reservoir. Property visitors have also been observed launching canoe/kayaks onto the reservoir from Picnic Area 3. Facility improvements around the reservoir should focus on the needs that these property users have and be planned accordingly.

People visiting LCCCA are also able to rent canoes/kayaks, for use on the LCC reservoir, between Canada Day and Thanksgiving.

*It is recommended that facilities and support for this activity, as well as the rental program, should continue and be expanded as opportunities and resources allow.*
4.6 Volunteer Activities and Organization

CRCA experience with individual volunteers and supporting volunteer groups such as the ‘Friends of Mac Johnson’ and the ‘Friends of Lemoine Point’ provides Authority staff with an extensive background in effectively working with dedicated people/groups who are interested in assisting with ongoing protection of a conservation area. These relationships have proven themselves to be beneficial for the CRCA. Friends organizations often take on special projects and monitoring of site conditions/activities and provides CRCA and area visitors with a more safe and attractive environment. A number of years ago, staff attempted to guide the interests of a number of regular users and volunteers into the “Friends of Little Cat”; and, although some of these people continue to assist staff by volunteering with events/activities, this group unfortunately has not coalesced into a formal group. Should an individual or group take the initiative to approach staff with interest to take on an event or activities, CRCA staff should be prepared to provide support for the endeavour, provided that it is compatible with property operations and management objectives. The CRCA should also be prepared to actively assist interests that could develop around the idea of a grassroots (community-led) volunteer group.

4.7 Land Acquisition and Disposition

Over the last number of years as the CRCA has been working through a series of challenges, ranging from the withdrawal of provincial funding for lands projects and incorporating the changes related to the amalgamation of municipal partners, the pursuit of acquisitions became less of a priority. With that being said, the CRCA updated the Conservation Lands Guidelines: Our Role, Principles and Priorities policy report in 2010, in which land acquisition/disposition, and the long-term securement of lands along the Little Cataraqui Creek and throughout the Watershed (including those parcels associated with LCCCA) was reaffirmed. This study to update the LCCCA Master Plan has also identified that partners and the public are supportive of these ongoing interests. Therefore, those lands identified below as targets for acquisition, (see Figure 4) should continue to be pursued as they become available and resources allow.

Since the initial assembly of this property, CRCA reports and land management documents have always indicated the intent to further extend the boundaries of LCCCA. In addition to pursuing closure of the Concession IV road allowance abutting LCCCA, there are three property/parcels of interest that the CRCA should acquire. Further to advancing ongoing conservation interests, acquiring those parcels noted below would also complete the assembly of the LCCCA management unit from a landscape perspective.

The first parcel(s) of property to note are the lands associated with the unopened Concession IV road allowance. Pursuing closure and acquisition of this road allowance would secure these lands from being used to access LCCCA unlawfully and would enhance the ability of the Authority to manage the property. Secondly, the City-owned land often referred to as the “Knox Farm,” is to the immediate southeast of the LCCCA. This property has been a target for CRCA acquisition for more than 40 years. Interests were based on the values that it would provide an extension to the buffer of protection around the ANSI, PSW and lands that drain into the reservoir, and its potential role in conserving natural heritage values associated with the area’s forest cover. The third area of interest is a vacant parcel located north of the Fourth Concession road allowance on the west side of the reservoir, between LCCCA and Sunnyside Road. It is generally referred to as the “Patterson Tract” in CRCA documents/reports, and is an acquisition target because of site geography and the continuity to the LCCCA’s boundaries that it represents. Finally, from a landscape perspective, securing the valleyland portions of a fourth parcel that is immediately
adjacent to the southwest corner of LCCCA would also be an attractive addition to completing assembly of this property.

None of the LCCCA property is currently identified as being surplus. It is recommended, however, that the CRCA examine its commitment towards being involved in landlord-tenancy arrangements, due to the extraneous obligations that can be imposed through such relationships. An example related to LCCCA could be that, should the Authority wish to move away from these types of contractual commitments, consideration could be given to the possibility of selling the Powley House and barn (including the severance of a small parcel of land around the home). Removing these buildings from the CRCA’s portfolio could potentially serve to fund planned future LCCCA developments and acquisitions. In addition to relieving the Authority of not only the operational challenges related to maintaining the ageing structures it would also preclude future interests in taking on a restoration project that is outside of the CRCA’s mandate.

The CRCA should prepare a prioritized land acquisition/disposition strategy for moving forward with these recommendations. Suggested prioritization may be for:

1. Closing the Concession IV unopened road allowance
2. Securing acquisition of the “Knox Farm” property
3. Examination of landlord/tenancy arrangements and programs
4. Securing acquisition of the portions of vacant valleylands that are south and west of the LCC Reservoir

It is recommended that the CRCA develop a land acquisition/disposition strategy for LCCCA.

4.8 Other Improvements

Projects and activities that will have a broader impact on the CRCA from a corporate perspective and are operational by nature have been assembled here to provide the direction for further review and action as required.

It is recommended that:

- A new CRCA website be developed to better communicate LCCCA’s programs activities and events
- Develop a communications strategy to enhance marketability and promotion of LCCCA programs
- Create a Risk Management Plan for all CRCA properties
- Establish a program that assists in facilitating partnership projects
5 IMPLEMENTATION, PHASING AND EVALUATION

The purpose of this implementation strategy is threefold:

1. to prioritize projects into a phasing schedule
2. to identify capital development projects and associated relative costs
3. to assist in identifying annual operating and maintenance costs

The phasing plan will ensure that projects identified in this master plan are carried out in a systematic fashion. However, implementation is dependent on the availability of financial resources as well as staff and volunteer capacity. Approval of this master plan does not ensure that funding and/or labour capacity will be sufficient for the implementation of recommendations that are made as part of this master plan.

A review of the master plan will be conducted every five years. This schedule of review ensures that the master plan continues to follow a direction for LCCCA that is current and consistent with the priorities for the area, the needs of the community and the concerns of neighbouring landowners. Phasing of Implementation and Relative Cost Estimates charts appear further along in this section.

5.1 Prioritizing Activities

Management of LCCCA should follow the goals developed for the property through this master planning process and prioritize projects as they relate to the following considerations:

1. Public Safety – The first priority when considering the planning/implementation of any projects at LCCCA will be to identify, evaluate and reduce or remove risks as appropriate.

2. Habitat and Character – Projects that protect or enhance the natural heritage characteristics of LCCCA will have second priority; this includes maintaining the protection of existing habitats, the PSW, ANSI and woodland features as well as the water management functions.

3. Public Use and Education – Those projects that maintain the trails, infrastructure, and facilities for use by the public are the next priority; they include renovation/replacement of existing structures and features.

4. Amenity Improvements – Projects to enhance the trails, facilities and infrastructure of LCCCA are the final priority.

This list is intended to guide the focus of future projects. Some projects will cover more than one of these priorities; they are not exclusive of one another.
## 5.2 Phasing of Implementation and Relative Cost Estimates

<table>
<thead>
<tr>
<th>PLANNED PROJECT</th>
<th>1-4</th>
<th>5-10</th>
<th>11-15</th>
<th>16+</th>
<th>Initial Cost</th>
<th>Annual Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRAIL IMPROVEMENTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rationalize trail system</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>Med.</td>
<td>Med.</td>
</tr>
<tr>
<td>Install new trail maps/markers and interp. Info</td>
<td>X</td>
<td>Med.</td>
<td></td>
<td></td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Evaluate &amp; justify trail/property access points</td>
<td>X</td>
<td>Low</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upgrade the ‘loop’ trail around the reservoir</td>
<td>X</td>
<td>High</td>
<td>Med.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extend paths to improve informal picnic space</td>
<td>X</td>
<td>Low</td>
<td>Med.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FACILITY IMPROVEMENTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enhance trailhead area</td>
<td>X</td>
<td>Low</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve warming huts and water/ice access</td>
<td>X</td>
<td>Med.</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscaping at the Administrative Office</td>
<td>X</td>
<td>Low</td>
<td>Med.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perimeter fencing survey/repairs</td>
<td>X</td>
<td>High</td>
<td>Med.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upgrade sugar shack area infrastructure</td>
<td>X</td>
<td>High</td>
<td>High</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Privy Assessment Program</td>
<td>X</td>
<td>Med.</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decommission picnic area 1 &amp; 2</td>
<td>X</td>
<td>Low</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enhance casual picnicking opportunities</td>
<td>X</td>
<td>Med.</td>
<td>Med.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upgrade landscaping around parking areas</td>
<td>X</td>
<td>Med.</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify former well sites for decommission</td>
<td>X</td>
<td>Med.</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>WILDLIFE and HABITAT FEATURES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Update resource inventory (Bio Blitz)</td>
<td>X</td>
<td>Med.</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butternut Recovery Program expanded</td>
<td>X</td>
<td>Low</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forest Management Plan</td>
<td>X</td>
<td>Separate funding</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitor/maintain various nesting structures</td>
<td>X</td>
<td>Low</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>COMMUNICATIONS and SERVICE RECOMMENDATIONS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New website</td>
<td>X</td>
<td>High</td>
<td>Med.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create new (seasonal) trail-maps</td>
<td>X</td>
<td>Low</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create a communications/promotion strategy</td>
<td>X</td>
<td>Med.</td>
<td>Med.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish capacity/guidelines for partnerships</td>
<td>X</td>
<td>Med.</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ADMINISTRATIVE and OPERATIONAL RECOMMENDATIONS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluate gate fees and annual pass program</td>
<td>X</td>
<td>Med.</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct business analysis of Outdoor Centre</td>
<td>X</td>
<td>Med.</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initiate enforcement safety/security patrols</td>
<td>X</td>
<td>Med.</td>
<td>High</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk Management Policy</td>
<td>X</td>
<td>Med.</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create a land acquisitions strategy</td>
<td>X</td>
<td>Med.</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review Administrative Office Expansion Plan</td>
<td>X</td>
<td>Low</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- note some project costs could potentially be reduced, by using funds generated if the Authority were to pursue sale of the Powley House
5.3 Evaluation Plan for Operations and Management

Master plans are developed to determine the best use of and direction for a property over a 20-year period. The planned review of this master plan every five years will facilitate the identification of additional major long-term goals for the preservation and development of LCCCA. Further investigation of site specific needs (sensitivity and limitations), as well as ongoing user needs, will also drive the appropriate programs for the operation, management and development of the area.

Review of this master plan and site conditions should be conducted to determine the ongoing applicability of the plan. This review will consider, but should not be limited to, the following:

- Public and visitor safety issues
- Facility and infrastructure deficit assessments;
- The status of previous recommendations
- New opportunities and trends

6 CONCLUSIONS AND RECOMMENDATIONS

Little Cataraqui Creek Conservation Area is a great example of how a protected open space on the edge of an urbanized area can not only preserve important ecological features, but can also promote stewardship values within a community. With projected increases to local populations as well as steady demand for access to safe outdoor recreation spaces, this is an opportune time to identify a strategy for the management of LCCCA. Our goal will be to ensure that property facilities and infrastructure are maintained and developed in a way that will meet public demand while protecting the site’s natural heritage features. As such, in order to manage the impacts of property access, activities and programs, most of the property use and future development will continue to be focused within the south-east part of the property and those areas that are already developed. It is the CRCA’s aim to continue to use the property as the base for the CRCA’s administrative and lands operations while providing opportunities for outdoor recreation and education to the public.

The purpose of this master plan is to provide a policy framework and guidelines for the management and future development of the LCCCA and to identify specific development projects for this site. The following page lists a set of key recommendations contained within this master plan:
Little Cataraqui Creek Conservation Area Recommendations:

- Evaluate policies/programs for gate fees and annual passes
- Enhance the trailhead area and facilities around the warming huts
- Establish a program to assist in facilitating community partnerships
- Develop a communications and promotion strategy for LCCCA
- Upgrade the LCCCA entrance, the main driveway and parking area surfaces
- Integrate stormwater management best practice into future plans regarding roads and parking areas
- Expand LCCCA capacity to support overflow parking during programs/events;
- Conduct a trail rationalization study
- Introduce gravel surfacing throughout the primary program area around the Sugar Shack buildings, and develop visitor protection from wind and rain in this area
- Expand and enhance casual picnicking spaces near trailhead areas and around the Outdoor Centre
- Promote fishing as an alternative to trail recreation on the property and indicate on property maps locations where land-based angling is permitted
- Expand facilities and support for canoeing/kayaking at LCCCA

CRCA Corporate and Operational Recommendations:

- Conduct a business analysis of the Outdoor Centre to determine an operation and programming plan of the facility
- Review the suitability of the current expansion plan for the Administration Office
- Expand the indoor storage, project-workspace and parking capacity of the Operation’s Workshop
- Evaluate commitments to landlord-tenancy arrangements and determine a long-term strategy regarding these relationships and the management of related assets
- Develop a land acquisition/disposition strategy for LCCCA
- Create a new CRCA website to better communicate LCCCA/CRCA programs, activities and events
- Create a Risk Management Plan for CRCA properties
Key References

- Cataraqui Region Conservation Authority (CRCA) Staff. 1979. *Little Cataraqui Creek Conservation Area Master Plan*. Glenburnie, ON: CRCA.
- Cataraqui Region Conservation Authority (CRCA) Staff. 1992. *(Draft) Little Cataraqui Creek Conservation Area Master Plan*. Glenburnie ON: CRCA.
- McRae, Rob. 1998. *Building Linkages to a Regional Trail Network*. Glenburnie, ON: CRCA.
- Cataraqui Region Conservation Authority (CRCA) Staff. 2004. *Cataraqui Region Conservation Authority - Safety and Maintenance Assessment Study for Water Control Structures*. Glenburnie, ON: CRCA. OR is it by TROW ASSOCIATES
- Queen’s University, School of Urban and Regional Planning. 2002. *Green Space Planning for the Little Cataraqui Creek Watershed*. Glenburnie ON: CRCA.
- Queen’s University School of Urban and Regional Planning. 2003. *Planning for the Future Well-Being and Value of Little Cataraqui Creek Conservation Area*. Glenburnie ON: CRCA.
APPENDICES

Appendix 1, Facilitators Report on Neighbour and Stakeholder Focus Group Meetings

Appendix 2, LCCCA Master Plan (2012) Ecological Report and Analysis

Appendix 3, LCCCA Master Plan (2012) Market Analysis
Appendix 1
LITTLE CATARAQUI CREEK
CONSERVATION AREA
MASTER PLANNING PROCESS

FACILITATOR’S REPORT ON
FOCUS GROUP SESSIONS

JOHN S. ANDREW, PH.D., MCIP, RPP
QUEEN’S UNIVERSITY

JUNE 30, 2011
**Introduction**

The Cataraqui Region Conservation Authority (CRCA) conducted two focus groups with stakeholders in order to receive feedback and ideas to incorporate into a new Master Plan for the Little Cataraqui Creek Conservation Area (LCCCA). The CRCA retained my services as an independent facilitator to assist with the focus groups. These sessions were held at LCCCA Outdoor Centre on the evening of May 3, 2011 for neighbours of LCCCA; and on the afternoon of May 5, 2011 for partners and stakeholder organizations. Each session was approximately 2.5 hours in duration. The parties that were invited and which actually attended these two sessions are listed in Appendix 1 and 2.

**Methods**

Flyer invitations entitled “Help plan the future of Little Cataraqui Creek Conservation Area” (included as Appendix 3) were hand-delivered door-to-door approximately ten days in advance for the neighbours’ session on May 3. For the partners and stakeholder organizations session on May 5, appropriate representatives of each relevant organization and government department were invited by e-mail and/or telephone, approximately two weeks in advance.

At the beginning of each focus group session, the participants were given a two-page handout to guide the session (included as Appendix 4). It defined the objectives of the session as:

“To consult with (“neighbours” or “partners/stakeholders”) about their perspectives on the Little Cataraqui Creek Conservation Area, its role within the region and as an integral part of the community; and to also invite ideas for future development and uses that are compatible with the environmental value of the property.”

The handout also asked the participants to consider a list of “issues and ideas” for LCCCA, including:

- Permitted/prohibited uses
- Recreational activities
- Organized public and/or group events
- Educational programs
- Walking and hiking trails
- Dogs off-leash
- Natural corridors and watercourse connections
- Quiet enjoyment
- Links to historic, heritage and cultural values
- Access to the property
Facilitator’s Report on LCCCA Master Plan Focus Groups

- Facilities & infrastructure for visitors/users
- Physical accessibility
- Personal safety and site security
- Environmental initiatives
- Protection of the ecology
- Protection of the PSW and ANSI
- Potential new users
- Potential partnerships
- Role as a community asset
- Impact of population growth
- Impact of nearby development
- Land acquisition/disposition

It also provided a set of seven discussion questions:

1. From your own point of view, what would be the best potential use or top quality of a conservation area like LCCCA? What should the primary application of management be focused on?

2. Thinking of all the possible ways to improve the site, what additions might be a good fit? What existing features or activities should be eliminated?

3. Considering current and potential users along with the environmental value of the site, what barriers need to be overcome to increase the value and enjoyment of the property?

4. What ideas from other conservation areas, or similar operations, should be considered for LCCCA?

5. If you were responsible for managing development while still keeping conservation and environmental protection as the top priority, what choices do you think would be hardest?

6. What issues must be addressed to ensure a good fit with the community?

7. If you were going to make a significant investment of time and money in LCCCA, what would your top three priorities be?

The second page of the handout offered the opportunity for the participants to provide written comments about LCCCA. Four questions were posed, asking about the participants’ top three priorities for the property, specific issues they would like addressed in the master planning process, their suggestions of specific management issues, and other comments.

Four neighbours that own property or live very near LCCCA attended the first focus group on the evening of May 3. While this number was small, all of the attendees were remarkably engaged and active participants in the discussion. All were quite familiar with the property as both neighbours and users, and had a good understanding of the CRCA as an organization. Eight partners/stakeholders attended the second focus group session on May 5. A list of participants in each session is included in Appendix 1 and 2.
As the facilitator, I attempted to cover in both of the focus groups the content and scope of the seven discussion questions above, while giving some leeway for the participants to guide the direction of the discussion and allow it to flow as naturally as possible. With these objectives in mind, I loosely followed the following framework of guiding questions:

1. What qualities/features of LCCCA do you value the most?
2. What do you see as the top 2-3 roles of LCCCA?
3. What issues related to LCCCA are the most important (to you as a neighbour)?
4. What about LCCCA would you like to see changed? How?
5. What features and/or activities should be added to LCCCA? What should be eliminated?
6. What have you seen at other conservation areas that should be tried here?
7. How should CRCA staff direct their limited time and money?
8. Should LCCCA be trying to expand its land area? Which properties should it try to acquire?

The only difference between the focus groups was that the part of Question 3 in brackets was omitted in the second focus group with the partners/stakeholders. The questions also provide the structure of the discussion of Key Findings that follows.

**Key Findings from the Focus Groups**

**Valued Qualities of LCCCA**

The neighbours very much appreciate LCCCA as a relatively wild and natural land reserve, and the wildlife and plant species that occupy its high-quality and varied habitats. One of the partners/stakeholders also noted that because of its semi-rural location, LCCCA is not an “island of green”; but instead forms part of a larger network of green space and ecological habitats. At the same time, its location just north of Highway 401 makes it very close to the urban area (and most of the population of Kingston). Another sees the limited number of activities as a plus, since it avoids the kind of crowding issues often experienced by provincial parks that offer camping, boating, etc.
The neighbours also recognize that the property presents excellent opportunities for recreational activities; many of which capitalize on users’ proximity to nature, and to educational opportunities. They place high value on the trail system, and suggested that it is fairly common for neighbours to get onto the property via non-authorized access points along the periphery of LCCCA.

Several neighbours commented on the casual and comfortable nature of events at LCCCA as being a positive feature. They also appreciate the low-cost of the events and the fact that they are not usually crowded. They feel that they provide good, multi-generational opportunities for families to do healthy outdoor, nature-oriented activities together. They believe that the facilities such as the Outdoor Centre are adequate and of high-quality, and recognize that the rental of the latter to groups is a significant source of revenue for LCCCA. One person also noted that the property’s picnic areas are the only ones in the vicinity.

Key Roles of the LCCC

To the neighbours, the key roles of LCCCA are three-fold:

1. A large and high-quality ecological/wildlife preserve.
2. A recreational area in which people may pursue (where appropriate) outdoor nature-oriented activities such as hiking, fishing and cross-country skiing.
3. An outdoor education facility for school groups and families.

The partners/stakeholders also recognize the important role that LCCCA plays in protecting the Little Cataraqui Creek, including protection against flooding and preservation of provincially significant wetlands.

Challenges and Constraints LCCCA Faces

According to both the neighbours and the partners/stakeholders, LCCCA and its activities are not very well known to residents in Kingston and region. While there are a limited number of neighbours that engage in unauthorized access of the property (and they did not see the physical
or ecological impact of this as significant), few of these users have memberships in LCCCA so they are paying nothing. They feel that these users should be expected to pay something for their frequent access. The neighbours also believe that most members of the public do not realize that LCCCA is a *maintained* property, and therefore expensive to operate.

The lack of accessibility of the site by Kingston Transit bus and by bicycle (a safety issue due to lack of bike lanes on Perth Road) was observed by both focus groups as a major impediment to many people visiting LCCCA, despite its relatively short distance from most of the population of Kingston. Many people who could make good use of the inexpensive activities on the property cannot get there because they do not own a vehicle. Moreover, the property itself is virtually inaccessible by people with mobility limitations. This was observed to be an increasingly problem due to the aging population and provincial legislation mandating accessibility.

The partners/stakeholders also noted the significant funding challenge LCCCA faces, which creates the great need to find additional sources of revenue. This is characterized in part by the property’s current understaffing situation. Additional revenue could accrue from offering new recreational activities, which may also be needed due to the impact of climate change on winter activities such as skating, skiing and “Maple Madness.” However, many existing and potential new users of LCCCA are quite sensitive to the price of activities, especially those aimed at young families. They also observed the pressure that LCCCA is under to consider developing small parcels of land for commercial use. Finally, there was a brief discussion of a set of related issues such as unauthorized entry, dumping of waste material, and various illegal activities that have occasionally been detected on the property.

**Opportunities for LCCCA to Consider**

The neighbours believe that the CRCA could more effectively promote LCCCA and its activities, but did not suggest specific means of doing this. They feel that their fellow neighbours that access LCCCA through improper access points and who don’t hold memberships should be expected to pay something for their use of the property. One idea they expressed is to launch a campaign using mail or flyers to encourage neighbours to take out memberships in LCCCA, and
Facilitator’s Report on LCCCA Master Plan Focus Groups

to let them know the low cost of this option. It may help to educate prospective members about the high cost to the CRCA of maintaining LCCCA. Providing a breakdown of how the membership fee is used would also help. The idea of different categories of memberships (e.g., “Friends of Little Cat”) was raised. The partners/stakeholders believe that the best place to start a fundraising drive may be with the current users of LCCCA.

Complementing this, staff or volunteers could place courtesy envelopes on cars parked along the periphery of LCCCA, whose drivers are obviously using the property at the time. The envelopes would invite users to make a payment or donation for their probably frequent use of LCCCA. The participants did not think it would be prudent to add one or more access points to make it easier for neighbours and others to get onto the property, although use of a automated card-activated gate may be cost-effective. A public education campaign to inform the local community about the high cost of managing LCCCA would also be beneficial.

Participants in both focus groups feel that the use of LCCCA could be promoted through more general advertising, as opposed to that linked to specific popular events such as “Maple Madness.” They believe that it is important to communicate to residents in the region (primarily through print media, e-mail, LCCCA’s website and social media) the value of the property. It was noted that LCCCA’s website is in need of updating, and that better use needs to be made of existing and emerging technology.

There was discussion in both focus groups of new activities that LCCCA could offer that would generate additional sources of revenue. Some of these have been successfully implemented at other similar properties (not necessarily within the CRCA system). Suggestions include (among others):

- “Paddling and pizza” for teens
- Kayaking and canoeing certification courses
- Guided/educational nature walks and bird watching
- Geocaching / orienteering (there is already some informal geocaching)
- Fly fishing courses
- Retriever dog trials
Facilitator’s Report on LCCCA Master Plan Focus Groups

- Cross-country/trail running races
- Horseback riding
- Antique car rallies/shows
- Winter camping
- Organized pond hockey
- Tobogganing hill

It was noted that like the current activities at LCCCA, any of these new additions would have at least a small educational component, with the emphasis being on ecology and nature. The partners/stakeholders cautioned the CRCA to not “spread itself too thin”, especially with its limited staff. It should focus on its strengths and consider strategically adding one or two new activities each year, rather than offering too many activities or programs.

**Land Acquisition**

Both focus groups were supportive of the concept of the CRCA expanding LCCCA through the strategic acquisition of specific parcels of land. One neighbour wondered why more of this had not taken place. Possible parcels for acquisition that were discussed included the City of Kingston land to the southeast of LCCCA, known as the Knox Farm, and a parcel referred to by the CRCA as the Patterson Tract. There has already been discussion of realigning the Perth Road entrance to LCCCA, which would make it safer and could free up potentially developable land along the west side of Perth Road. One person expressed concern about whether the City-owned dump adjacent to LCCCA (to the southeast) had contaminated the reservoir. One partner/stakeholder noted the importance of the CRCA having a clear and compelling rationale for each property that it seeks to acquire. In addition to the obvious and high cost of property acquisition, it was also noted that funds must be available for the ongoing maintenance of the acquired lands.

The neighbours had no particular opinion on the issue of administrative office space and the various options of expanding the current building, or building or renting space elsewhere either one or off the property. One neighbour who arrived at this point in the discussion was initially
concerned that the purpose of the focus group was to test the idea of constructing a new administrative building. Her concerns were quickly allayed by the facilitator and CRCA staff. There was a weak consensus that there was value in having the administrative building on the property, as opposed to renting office space off-site. However, it was recognized that rented office space south of Highway 401 may be a more convenient location for staff and office visitors, yet still be within a few minutes’ drive of LCCCA.

Other Feedback

Most of the focus group participants stated that they were interested in the future of LCCCA and its activities. They expressed their appreciation for the opportunity to be involved in the master planning process, and indicated that they would inform their other neighbours, partners and stakeholders about it and encourage them to come too any future sessions. Several neighbours also expressed their appreciation of LCCCA the way it is now, and urged the CRCA not to engage in large changes.

Conclusions and Recommendations

The CRCA has clearly done an exemplary job in managing the LCCCA. It is highly regarded by both its neighbours and the partners/stakeholders that were consulted. It seems to have a reasonable balance between its various functions and purposes; including ecological/habitat preservation, flood control, outdoor educational programs, and environmentally-friendly recreational activities. It has achieved this despite serious financial constraints; which indeed create some pressure on the CRCA to introduce carefully chosen, new activities that will generate revenue for the LCCCA. In the future, given its location on the urban fringe, the LCCCA will inevitable face some degree of development pressure. This will create both opportunities and constraints for the area to continue to meet its mandate. The CRCA is prudent in undertaking its long-range planning now, in advance of these additional pressures, and while it remains in a relatively healthy financial state (the author notes that the scope of this report does not extend into a review of financial matters, and so it is limited to issues that were raised in the focus groups).
As new activities are added, the CRCA must be careful to manage the negative impacts on staffing requirements and the natural environment that may ensue. It is recommended that the CRCA undertake a carefully designed survey of the local population (reaching both users and potential users of the property) to determine the community’s degree of interest in a broad range of possible new activities at LCCCA. This could be achieved quickly, effectively and inexpensively through a student project. This report (on pages 6-7) listed some of the potential new activities that were mentioned during the focus groups. The environmental impacts of those activities that may be under consideration must be thoroughly assessed prior to their implementation.

While the CRCA has done a reasonably good job in promoting the LCCCA to the citizens of Kingston and the broader region, it needs to continue these efforts. It should embrace current and emerging technology (e.g. e-mail, Facebook, LinkedIn, twitter, etc.) in order to more effectively communicate the purpose and recreational opportunities at the LCCCA. This will become even more important if and when new activities are added. Therefore, it is recommended that the CRCA prepare a comprehensive promotion and communications strategy.

The CRCA should also renew its efforts to sell annual memberships, and consider creative pricing structures. Efforts to curb unauthorized use of the property (perhaps though a second, possibly automated entrance to the property), and attempts to market memberships to these users need to be made.

It is recommended that the CRCA aggressively campaign Kingston Transit to provide bus access to the site, which is currently only accessible by private vehicles and chartered buses. There is a significant population in Kingston that would use the LCCCA (especially lower-income families), but which is prevented from doing so due to its lack of access.

The CRCA should continue its examination of ways in which the LCCCA could be made more accessible by people with mobility limitations. While clearly this is a significant challenge, there may be measures that may be taken that would improve the situation greatly, at a reasonable cost.
Finally, the CRCA should prepare a land acquisition plan and assess its financial capacity for securing new properties. This may include innovative financial tools such as long-term leases, property tax relief, and sale-leaseback arrangements (to name just a few). It should consider entering into discussions with the City of Kingston for accumulating the City-owned land to the immediate southeast of the LCCCA. It may be prudent to compile a prioritized list of properties for potential acquisition, and possibly obtain independent appraisals for each site. As part of this exercise, the CRCA should investigate the cost and availability of renting office space off-site, specific buildings where these functions could be located, and determining which staff functions (if any) could operate as effectively off-site.
List of Appendices

Appendix 1: List of Invitees and Participants at May 3rd Focus Group
Appendix 2: List of Invitees and Participants at May 5th Focus Group
Appendix 3: Flyer Invitation to May 3, 2011 Neighbours’ Focus Group Session
Appendix 4: Focus Group Session Handout
## Appendix 1: List of Invitees & Participants at May 3 Focus Group

<table>
<thead>
<tr>
<th>Invited</th>
<th>Relationship to LCCCA</th>
<th>Attended Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Andrew</td>
<td>Consultant/Facilitator</td>
<td>✓</td>
</tr>
<tr>
<td>Jason D. Hynes</td>
<td>CRCA Staff</td>
<td>✓</td>
</tr>
<tr>
<td>Casey Sharp</td>
<td>CRCA Staff</td>
<td>✓</td>
</tr>
<tr>
<td>Liz Munt</td>
<td>Neighbour</td>
<td>✓</td>
</tr>
<tr>
<td>Peter Lawton</td>
<td>Neighbour</td>
<td>✓</td>
</tr>
<tr>
<td>Ineke Garofalo</td>
<td>Neighbour</td>
<td>✓</td>
</tr>
<tr>
<td>Joy Boals</td>
<td>Neighbour, property resident/security staff</td>
<td>✓</td>
</tr>
</tbody>
</table>

*Flyers were hand delivered to 50 addresses of adjacent properties and neighbours two weeks prior to meeting*
**Appendix 2: List of Invitees & Participants at May 5 Focus Group**

<table>
<thead>
<tr>
<th>Invited</th>
<th>Relationship to LCCCA</th>
<th>Attended Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Andrew</td>
<td>Consultant/Facilitator</td>
<td>✓</td>
</tr>
<tr>
<td>Jason D. Hynes</td>
<td>CRCA Staff</td>
<td>✓</td>
</tr>
<tr>
<td>Casey Sharp</td>
<td>CRCA Staff</td>
<td>✓</td>
</tr>
<tr>
<td>Rob Gerritsen</td>
<td>CRCA Staff</td>
<td>✓</td>
</tr>
<tr>
<td>Jeff Scott</td>
<td>CRCA Board, Kingston District Representative</td>
<td></td>
</tr>
<tr>
<td>Gary Osborne</td>
<td>CRCA Board</td>
<td>✓</td>
</tr>
<tr>
<td>Jane Topping</td>
<td>CRCA Board</td>
<td></td>
</tr>
<tr>
<td>Bob Morrison</td>
<td>CRCA Board, Chair</td>
<td></td>
</tr>
<tr>
<td>John Bonser</td>
<td>CRCA Board</td>
<td></td>
</tr>
<tr>
<td>Colin Boag</td>
<td>CRCA Board</td>
<td></td>
</tr>
<tr>
<td>Hugh Gale</td>
<td>City of Kingston, Sr. Special Projects Planner</td>
<td>Annemarie Eusebio declined</td>
</tr>
<tr>
<td>Kristine Hebert</td>
<td>CoK, Parks/Open Space Planning Coordinator</td>
<td>✓</td>
</tr>
<tr>
<td>Neal Unsworth</td>
<td>CoK, Manager Parks Development</td>
<td></td>
</tr>
<tr>
<td>Speros Kanellos</td>
<td>CoK, Real Estate &amp; Construction Services</td>
<td></td>
</tr>
<tr>
<td>Ian Semple</td>
<td>CoK, Transit – Project Manager</td>
<td></td>
</tr>
<tr>
<td>Stacey Sweezezy</td>
<td>Ont. Min of Transport, Corridor Management</td>
<td></td>
</tr>
<tr>
<td>Chris Hargreaves</td>
<td>Kingston Field Naturalists</td>
<td></td>
</tr>
<tr>
<td>Erling Armson</td>
<td>Ducks Unlimited Canada</td>
<td>✓</td>
</tr>
<tr>
<td>Gord Prue</td>
<td>Canadian Ski Patrol, LCCCA volunteer</td>
<td>✓</td>
</tr>
<tr>
<td>Lesley Rudy</td>
<td>Kingston and Frontenac Stewardship Council</td>
<td></td>
</tr>
<tr>
<td>David Armitage</td>
<td>Rideau Trail Association</td>
<td>✓</td>
</tr>
<tr>
<td>Jeff Garrah</td>
<td>Kingston Economic Development Corporation</td>
<td></td>
</tr>
<tr>
<td>Mr. Jody DiRocco</td>
<td>Algonquin &amp; Lakeshore Catholic District S.B.</td>
<td></td>
</tr>
<tr>
<td>Brenda Hunter</td>
<td>Limestone District School Board</td>
<td></td>
</tr>
<tr>
<td>Mary Myers</td>
<td>Frontenac Heritage Foundation</td>
<td></td>
</tr>
<tr>
<td>Michael Bell</td>
<td>Cataraqui Conservation Foundation</td>
<td>John Morse did not attend</td>
</tr>
<tr>
<td>Chris Cannon</td>
<td>Little Cataraqui Environment Association</td>
<td>✓</td>
</tr>
<tr>
<td>Todd Norris</td>
<td>OMNR</td>
<td></td>
</tr>
<tr>
<td>Louise Richer</td>
<td>Ont. Min of Culture, Sport &amp; Recreation</td>
<td></td>
</tr>
<tr>
<td>Sharon Proulx</td>
<td>Ont. Ministry of Tourism, Regional Advisor</td>
<td></td>
</tr>
<tr>
<td>Carolyn Bonta</td>
<td>Ontario Parks, Cataraqui Canoe Club</td>
<td></td>
</tr>
<tr>
<td>Staff-Sgt. Lillian Walcer</td>
<td>Kingston Police Force</td>
<td></td>
</tr>
<tr>
<td>Mary Kloosterman</td>
<td>Kingston Family YMCA,CEO</td>
<td></td>
</tr>
<tr>
<td>Steve Pitt</td>
<td>Ontario Woodlot Association</td>
<td></td>
</tr>
<tr>
<td>Stephanie Sciberras</td>
<td>KFL&amp;A Public Health, Physical Activity Specialist</td>
<td>✓</td>
</tr>
<tr>
<td>Bill Stewart</td>
<td>Kingston Chamber Commerce,</td>
<td>✓</td>
</tr>
</tbody>
</table>
APPENDIX 3:  
**Flyer Invitation to May 3, 2011 Neighbours’ Focus Group Session**

Help plan the future of Little Cataraqu Creek Conservation Area

The Cataraqui Region Conservation Authority is updating its master plan for Little Cataraqu Creek Conservation Area.

A master plan guides the development of facilities and the management of lands in a conservation area over a 20-year time period.

The current master plan for this property was approved in the late 1970s, so it’s time for an update.

We are inviting our neighbours to participate in a focus group meeting to be held on:

- **Tuesday, May 3, 2011**
- **6:00 to 9:00 p.m.**
- **Little Cataraqu Creek Conservation Area - Outdoor Centre, 1655 Perth Road.**

We’re looking for your input on:

- the trails, recreational uses and activities
- protecting wildlife habitat
- education and recreation programs.

A map of the property showing our trails and facilities is provided on the back of this flyer.

**Registration is requested by April 29** so that we can make meeting arrangements.

Please register by:

- phone (613) 546-4228 ext. 223 or
- e-mail jhynes@cataraqueregion.on.ca

For more information contact:

Jason D. Hynes, Lands Planner
(613) 546-4228 ext. 223 or 1-877-956-CRCA (2722) ext. 223
jhynes@cataraqueregion.on.ca

www.cataraqueregion.on.ca

CATARAQUI REGION CONSERVATION AUTHORITY
1641 Perth Road, PO Box 160 Glenburnie, Ontario K0H 1S0
Phone (613) 546-4228 Toll Free (613) 956-CRCA
Fax (613) 547-6474 E-mail crca@cataraqueregion.on.ca
Websites: www.cleanwatercataraqui.ca & www.cataraqueregion.on.ca
### Appendix 4: Focus Group Session Handout

#### Little Cataraqui Creek Conservation Area Focus Group – May 3, 2011, at 6pm

- **Welcome / Introductions / Outline of the Session**

- **Objective for the Session**

  To consult with neighbours about their perspectives on the Little Cataraqui Creek Conservation Area, its role within the region and as an integral part of the community; and to also invite ideas for future development and uses that are compatible with the environmental value of the property.

- **Idea Starters:** Before we begin, you may wish to reflect on various issues and ideas for the area; such as:

  - Permitted/prohibited uses
  - Recreational activities
  - Organized public and/or group events
  - Educational programs
  - Walking and hiking trails
  - Dogs off-leash
  - Natural corridors and watercourse connections
  - Quiet enjoyment
  - Links to historic, heritage and cultural values
  - Access to the property
  - Facilities and infrastructure for visitor/users
  - Physical accessibility
  - Personal safety and site security
  - Environmental initiatives
  - Protection of the ecology
  - Protection of the PSW and ANSI
  - Potential new users
  - Potential partnerships
  - Role as a community asset
  - Impact of population growth
  - Impact of nearby development
  - Land acquisition/disposition

- **Discussion Questions**

  | From your own point of view, what would be the best potential use or top quality of a conservation area like Little Cataraqui Creek property? What should the primary application of management be focused on? |
  | Thinking of all the possible ways to improve the site, what additions might be a good fit? What existing features or activities should be eliminated? |
  | Considering current and potential users along with the environmental value of the site, what barriers need to be overcome to increase the value and enjoyment of the property? |
  | If you were responsible for managing development while still keeping conservation and environmental protection as the top priority, what choices do you think would be hardest? |
  | What ideas from other conservation areas, or similar operations, should be considered for Little Cataraqui Creek Conservation Area? |
  | What issues must be addressed to ensure a good fit with the community? |
  | If you were going to make a significant investment of time and money in Little Cataraqui Creek Conservation Area, what would your top three priorities be? |

*Please see the reverse side of this form to make comments.*
What are your “Top Three Priorities” for the Little Cataraqui Creek Conservation Area?
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________

Please indicate specific issues you would like addressed through this process.
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________

Are there specific management measures that you would suggest undertaking differently?
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________

Please indicate any other comments that you would like to make?
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________

Thank-you for your participation; you do not have to sign this form, but please do so and include your
contact information if you wish to be added to our mailing list.

Name (please print legibly) ________________________________________________
Contact information  ______________________________________________________
______________________________________________________

To respect your privacy, this information will not be shared with anyone outside the CRCA

Please return this to a CRCA staff member or fax, mail or e-mail it no later than May 13, 2011 to:
Cataraqui Region Conservation Authority
P.O. Box 160, 1641 Perth Road,
Glenburnie, Ont. K0H-1S0
Attention: Jason D. Hynes
Phone:  (613) 546 – 4228 Ext. 223
Fax:  (613) 546 – 6474
E-mail – jhynes@cataraquiregion.on.ca
Appendix 2
Little Cataraqui Creek Conservation Area

Ecological Summary Report

By: Tom Beaubiah

Date: August, 2012
Executive Summary

The Little Cataraqui Creek Conservation Area (LCCCA) is located on the Little Cataraqui Creek which flows in a north south direction commencing at Lake Ontario and extending northward beyond highway 401. The property forms an integral part of a natural system that provides a key north south migratory corridor through the City of Kingston. While the corridor within the urbanized portion of the City contains wetland and narrow riparian regions, the LCCCA is the starting point where habitats extend beyond these restraints.

A natural heritage system is comprised of a number of parts. The health and integrity of these parts influence the health of the system. The Little Cataraqui Creek Conservation Area is part of the Little Cataraqui Creek Watershed System and as such plays an important role on the landscape.

A properly functioning system relies upon the presence of core areas (natural cover) connected by linkages and corridors. The Little Cataraqui Creek Conservation Area can be considered a core area with linkages to the south (Little Cataraqui Creek Valleylands) and to the North East (Bell’s Swamp). This system is based on the Little Cataraqui Creek and its tributaries. Within this system there are 2 provincially recognized features; the Little Cataraqui Creek Wetland Complex and the Cataraqui Creek Clay Ridges Area of Natural and Scientific Interest (Earth Science).

The Little Cataraqui Creek Conservation Area contains diverse habitats that interact with one another to support an array of flora and fauna. The habitats that exist on the property include aquatic and terrestrial features. The aquatic habitats include the main reservoir as an open water habitat, the wetland (which has both submersent and emergent vegetation), the flowing creek system with its tributaries, and the isolated pools and ponds that exist throughout the property. The terrestrial environments include the woodlands (natural and plantations), meadows, and recreation areas. With such diversity it provides opportunities for wildlife some of which are considered to be threatened or endangered either provincially.

Much of the property can be considered as having unique features that would be potentially sensitive to further development. However, based on the current use of the property the ecological state of the property can be considered healthy and stable. Through sound management and planning both existing and future uses can be considered to encourage both nature appreciation and education.
Introduction

The following Little Cataraqui Creek Conservation Area (LCCCA) report will serve as background documentation to update the LCCCA Master Plan (2011-2012) and provide a step towards the long-term maintenance and restoration of the Conservation Area’s ecological health and biodiversity.

The primary purposes of this report are to:

- Assess the current state of ecological health;
- Describe what is happening with respect to the Conservation Area's major ecosystems and the potential stressors acting on them; and
- Identify gaps in ecological knowledge.

Methodology

The overview and ecological inventor sections are based on a review of available literature, monitoring data, and local knowledge. The environmental summary will be used as a framework to assess and evaluate the current state and future trend of the Conservation Authority’s natural resources. While it is common to contain considerable background information in a report, this report will be limited to the ecological aspects as existing documentation and the proposed Master Plan update will contain those references and materials. The site was traversed on foot with an attempt to establish a general overview of the property, to assess changes that may have occurred, and to identify sensitivities that require specific attention.

Limitations

The study relies upon existing information and rapid field investigations, therefore there are inherent limitations in that some data sources may contain older information that has not been updated for a number of years. While this limitation is not considered to affect the validity of the report future consideration should be made to update data where and when available.

*Recommendation – that information and data regarding the ecology of property be updated when feasible.
*Recommendation – that a system be developed that permits patrons to submit ecological information electronically for inclusion in a digital data set.

Location and Regional Context

The Little Cataraqui Creek Watershed is approximately 75.4 square kilometers in area (Figure 1). There are three main branches to the Little Cataraqui Creek. The main branch flows through the LCCCA property whereas the headwaters of the east branch are just to the south east of the property near Perth Road (Division Street).

The Little Cataraqui Creek flows from a rural area with mixed residential and farming properties through the urban area of the City of Kingston, eventually reaching Lake Ontario. The wetland associated with the LCCCA is part of a larger Provincially designated wetland complex. The lower portions of the wetland where it outlets into Lake Ontario are considered to represent a coastal wetland.

As a north to south flowing watercourse with a wide corridor, the area provides a valuable north south connection through the City for wildlife and in particular Avian species.
Figure 1 Little Cataraqui Creek Watershed
**Biophysical Inventory**

**Climate**

The Climate of the Kingston region is moderated by Lake Ontario however it is modeled to have an increased growing season as winter’s become shorter. The change in climate will have potential negative impacts to the Conservation Area. The impacts will be a result of increased surface water temperatures, increased average air temperatures, and an increase in total greenhouse gas emissions. A decreasing ecological health trend has been indicated because of the predicted negative impacts of climate change.

Summer temperatures average around 24°C, with winters normally –8°C. Climate change (warming) appears to be consistent with broader North American and Global trends, with Kingston potentially moderated by Lake Ontario. Changes in the local climate will have implications for the property. Although the full implications are not understood, it is realized that adaptation and resiliency to change will be necessary. At this point in time, the Authority will have to monitor the changes locally, and follow any research advancements/knowledge that would indicate the steps that are necessary to prepare for the changes that will occur. The greatest areas of influence will be related to water quality within the reservoir (potential for algal blooms, increased temperature, fish community shifts, etc.), and changes to the plant community structure as plants either become stressed or thrive depending on their climatic preferences and hydraulic regimes. It will be important to monitor the communities reactions to a climate shift so that we can build the resiliency of the property to such a change.

*Recommendation that the Authority investigates potential issues with respect to the plant community as climate change impacts become more evident. Through this investigation potential plant community management options should be considered.*

Additionally with climate change weather events can become more dramatic. Ice storms and may become more frequent resulting in greater damage to the forest ecosystem. Drought conditions may impact the forest community both from a growth perspective and a forest fire potential.

*Recommendation - Fire hazard signs could be placed at the information kiosks to warn patrons of the hazard.*

**Geology and Soil**

The Little Cataraqui Creek Conservation Area is located on Gull River Limestone with a surficial geology comprised of three basic soils dominated by Gananoque Clay, Farmington Loam and Lansdowne Clay respectively (Figure 2). The clay component creates opportunities for poor infiltration which is observed by the series of ponds and pools that occur throughout the property.
Figure 2 Geology and Soil of the Little Cataraqui Creek Conservation Area and surrounding landscape.
Topography and Earth Science Area of Natural and Scientific Interest

The topography of the property is a low valley with gradual to moderate sloping areas. The valley extends from a south west to a north east direction (Figure 3). The area is listed as an Earth Science Area of Natural and Scientific Interest (ANSI). The Little Cataraqui Creek Clay Ridges is a series of hummocky landforms attributed to subglacial, supraglacial and proglacial processes. The hummocks are irregular and are separated by irregular depressions. “The difference between these forms and a moraine is that either the hummocks, or the depressions, have a systematic alignment” (ANSI description).
Figure 3 Valley Topography (contours) Little Cataraqui Creek Conservation Area
Hydrology - Aquatic Ecosystems

The aquatic ecosystems within the LCCCA are considered to be in fair condition as there has been no evidence to indicate that the health of the aquatic ecosystems are in decline. Potential pollution sources have not changed, species composition within the wetlands has remained consistent and there are no indicators that the system is stressed. The aquatic system however is a delicate system that could experience significant changes as a result of a minor influence. More study or baseline data collection would be necessary to monitor a change over time. As noted previously climate change effects may take time to be recognized.

Throughout the property there are watercourses, isolated ponds and wetland environments. Significant portions of the property through either poor drainage or flowing systems can be considered to be moist to wet year round.

The main aquatic feature of the property is the reservoir. This area is created by a dam constructed to provide flood control for the City of Kingston. The reservoir has mixed depths typically in the range 2-4ft with the deepest section approximately 20 feet deep near the dam (Figure 4).

Figure 4 – Bathymetry of the Little Cataraqui Creek Reservoir

Ecosystems

With the data from the MFTIP program, recent air photography and ground truthing the property was evaluated using the Ecological Land Classification (Lee, et al). There were 61 compartments identified with 16 different ecological classes (Figure 5)
Forest (Plantation and Natural Woodlands)

The property was originally used for farming until the dam was constructed that created the reservoir. The area was subject to flooding and farming opportunities were considered to not be optimal. Through restoration programs, plantation plantings, and other activities the biodiversity of the property has been increasing. Through proper forest management the overall health will continue to improve. There are also opportunities for continued improvement through infilling and habitat diversification.

The Little Cataraqui Creek property contains both naturally occurring and plantation woodlands. The typical monoculture of the plantations does present a reduction in the potential biodiversity of those areas when compared to the naturally occurring woodlands of the property. The management of the plantation areas does take into consideration the inclusion of multiple species and does allow for interspersion of other vegetation. The woodlands on the property are managed under the Managed Forest Tax Incentive Program (MFTIP). Details of the MFTIP program and related documentation are available and therefore will not be expanded upon in this report.

Riparian areas

The property is bisected by the Little Cataraqui Creek, and contains a multitude of small wetland/pond pockets. These features provide a significant amount of riparian lands. The preservation and protection of riparian vegetation helps to maintain/improve the water quality of the system while providing wildlife benefits. The property can be considered rich in riparian areas, with a mix of woodland, shrubland, and marsh edges.

*Recommendation – riparian lands provide resources for both the terrestrial and aquatic communities of the property. It is recommended that 30m adjacent to any aquatic feature be considered important.

Provincially Significant Wetlands

The Little Cataraqui Creek Conservation Area wetland has been designated as Provincially Significant (Figure 6). The Wetland is part of a larger system (Little Cataraqui Creek Wetland Complex) that extends from Lake Ontario through the Conservation Area to areas north-east of the LCCCA.

Provincially Significant Wetlands (PSWs) have been identified by the province through a science-based ranking system known as the Ontario Wetland Evaluation System (OWES). This Ministry of Natural Resources (MNR) framework provides a standardized method of assessing wetland functions and society values, which enables the province to rank wetlands relative to one another.
Figure 6 Provincially Significant Wetland delineation Little Cataraqui Creek

*Recommendation – The adjacent lands designation to a wetland is 120m. All lands within this 120m distance should be considered important

Unevaluated Wetlands/Treed Swamps/Ephemeral and Permanent Ponds

The Little Cataraqui Creek property due to topographical and high water table conditions has a number of small aquatic features that are not recognized in the larger evaluation formats, however do provide significant resources to the wildlife of the property. These small isolated wetland pockets provide breeding and nursery grounds for a number of herptiles. Individual assessments of the ponds has not been conducted for the species they each support, however each spring a variety of frogs can be heard calling, and the woodlands contain salamanders which would also breed in these ponds. The ponds and small tributaries are located primarily in the northern portion of the property (Figure 7).

*Recommendation conduct surveys of the ephemeral ponds to determine species usage and value.

*Recommendation – lands within 30m of the above noted feature should be considered to provide a riparian function and therefore be considered important ecologically to the property.
Isolated Ponds and small tributaries of the LCC Valleyland.
Open water

The open water habitats of the authority include the main reservoir wetlands and isolated ponds. These open water features provide valuable staging areas for waterfowl and aquatic habitats for the fish and herptile populations. The diversity of aquatic features is quite high on the property from small seasonal pools to the main reservoir. This diversity hosts an array of wildlife.

Cultivated Areas

Historically the Little Cataraqui Creek property was cleared and the upland areas used for agricultural purposes. Many of these areas have been replanted with coniferous plantations, however some smaller field/meadow areas still remain.

Flora and Fauna

Native Biodiversity

The state of biodiversity in the Conservation Area is fair because although there is a large diversity of animals living in and using the Conservation Area. Overall native biodiversity in the Conservation Area has however likely declined (regional trend). Stressors such as habitat fragmentation, climate change effects, and invasive species are acting on those that remain. However, it is thought that the current state is relatively stable, more baseline data is needed for several groups of wildlife (including reptiles and small mammals), and efforts to restore and enhance existing habitat should benefit biodiversity in the future.

The Little Cataraqui Region Conservation Area is home to an array of wildlife (mammals, birds, amphibians/reptiles, fish and invertebrates). The most recent inventory was compiled during the 1980’s (Appendix A) and although not updated as part of this assessment, there has been no distinct changes on the property that would result in the loss of any particular species. Habitats that existed at the time of the inventory continue to exist.

*Recommendation that the Authority develop a species reporting program (volunteer) that would allow for more input from the community with respect to species observations.

Species at Risk

The Natural Heritage Information Centre (NHIC) tracks a number of species on the landscape. It has been suggested that the NHIC will become the central repository of species data. CRCA staff should ensure that any updates to the species data for the Authority’s property is provided to the NHIC for inclusion in their records.

*Recommendation that the Authority provide information on species occurrences to the NHIC.
Invasive alien species

Invasive species although identified on the property are not in numbers that should cause alarm. In many instances other than raising awareness the Authority will not have the ability to control the entry of invasive species.

* Recommendation that the Authority monitor invasive species populations, and take action where feasible to do so to control the spread/poisonation.

Forest fragmentation

The Little Cataraqui Creek property is surrounded by a road network. Distances of more than 20m between features is considered to separate ecological features. The LCC property has a number of features which contribute to the fragmentation of the terrestrial habitats (utility corridors, parking areas and buildings). Edge effects are increased by the road network, fire breaks and main trails. Due to the recreational opportunities provided by the property reducing forest fragmentation is not achievable. In most instances heavy traffic or regular disturbances do not occur and therefore wildlife have become adapted to its presence. Only species that rely on continuous cover would be at risk to predation as a result of entering or crossing these open areas.

* Recommendation that forest fragmentation be considered when developing any new or existing facilities where increased fragmentation may occur.

Tree diseases, insect infestations

Due to stresses from climate change and or invasive insects the potential for significant forest loss is possible at the Little Cataraqui Creek Conservation Area through direct damage (insects) and/or disease. The pine plantations represent reasonable tracks of land that are essentially monoculture woodlands. Through the forest management plan species communities have been recorded. Utilizing this information will be helpful should an insect pest be identified in the region.

*Recommendation that planting programs should consider a diverse plant community in order to maintain diversity and general health.

Ecological Improvements

It has been noted earlier in the report that the property was once maintained for agricultural operations. As the property naturalizes over time with either the help of the Authority or through natural processes there are a number of opportunities beyond the normal activities that could be considered.

Hibernacula – with the increased pressures on reptilian communities the Authority has the potential to contribute to the snake populations by creating snake hibernacula on the property. The design of such refuge areas is available through a number of sources as the principles of design are common.

*Recommendation that the Authority consider the creation of snake hibernacula when conditions or opportunities occur.
Meadows – While reforestation efforts are common stewardship activities the maintenance of open meadow environments can also add to the diversity and structure of the LCC property floral and faunal community. There are some tracts of the property that could be actively managed as meadow environments. This would involve infrequent clearing and maintenance to control natural succession of the adjacent woodlands.

*Recommendation that the Authority consider the active management of meadow environments. Restoration of meadow environments could occur on inactive, under utilized day use areas.

Wetlands - the creation of the main wetland was accomplished through the construction of a control weir at the south western portion of the property. With advancements in air photography the growth of cat-tail could be monitored to assess when actions would be necessary to limit/control its growth. Throughout Ontario wetlands environments have become dominated by cattail species. This dominance reduces the diversity within the wetland.

*Recommendation that the Authority monitor the cattail expansion within the property and assess rate of loss to determine if/when corrective action may be required.

In reviewing the dam operation information it appears that the reservoir water levels could be reduced as much as 2m through the operation of the low flow valve. From a vegetative management perspective adjusting the water level within the reservoir may be an option. Ducks Unlimited has been regulating water levels at a number of their sites for ecological purposes. The Authority has a strong working partnership with Ducks Unlimited and there are opportunities to draw on their expertise.

*Recommendation that the Authority approach Ducks Unlimited to provide input on potential water level management options for ecological improvements.

Recreation and Facilities

The property provides a number of recreational and educational opportunities (e.g. trails, canoeing, school programs, special events, etc.). The nature of the activity and the number of visitors vary with the season. While these activities can be considered to have impacts to the ecology of the property, the benefits of providing these opportunities can be designed such that the negative impacts are mitigated. Development has been directed to the south eastern portion of the property which contains the operating facilities (Outdoor Centre, Administrative Building, Operations Facilities, Rental Residence). The remainder of the property with the exception of the Maple Syrup demonstration area is maintained in a nature state (exclusion of trails). Continued focused development will reduce the impacts of this type of development to a defined area where impacts are already occurring and the ecology of those areas has adapted to its presence.

Infrastructure and Developments

Trails and Roads

Trails and roads cause habitat loss, create problems with hydrology, wildlife movement, and the spread of invasive plants; off-trail use damages understory plants and soils. While there are impacts associated with these features maintaining a property with unique opportunities for both education and nature appreciation is important. The impacts associated with the existing facilities on the property are not having any significant impacts to the flora or fauna of the property other than the occasional disturbances caused by visitors and maintenance activities and the physical occupation of space.
The Authority would benefit from the inclusion of a trails management plan. Such a plan could include the format of the various trails (accessible, maintained, unmaintained/rugged, etc.) which could be applied to all properties and the creation of a rationalization study. The study would look at the existing trails, the issues they face, the location and intent etc. in order to determine what trails make sense, which trails are not necessary, and where new trails would be beneficial.

*Recommendation – That the Authority consider the creation of a Trails Management Plan and conduct a trails rationalization study.

*Recommendation that the Authority conduct a brief ecological assessment of any new trail locations or upgrades where the trail surface will be expanded.

**Hardened Areas**

The Authority also maintains a number of facilities on the property that can be considered to be hardened surfaces. The roads, parking areas, trails and buildings present areas where water infiltration is reduced. The severity of the reduction is dependent upon the area in question. The main hardened surfaces include the main parking areas of the outdoor centre, administration building, shop and day use parking around the edges of the reservoir.

*Recommendation that the Authority engineering department conduct an evaluation of storm water treatment that is occurring on the hardened surfaces and develop recommendations as to where improvements could occur.

**Day Use Areas**

As was noted earlier in the report there is the opportunity for the Authority to conduct wildlife improvements to the property. The Day Use areas represent areas that may be underutilized. In situations where an area is underutilized it would be appropriate for the Authority to consider redevelopment of these areas.

*Recommendation that the Authority evaluate the mown areas to determine needs. Through evaluation determine if some areas can be converted to meadow habitats to increase diversity and reduce manicured areas.

**Utility Corridors**

The hydro easement and gas pipeline easements (Figure 8) are regularly cultivated to control vegetation growth. Beyond the cultivation there are no services or facilities located in these areas. These bands of cultivated land bisect the property creating discontinuity of the woodlands. This discontinuity does not greatly impair the wildlife movements within the property.

*Recommendation Evaluate opportunities to utilize utility corridors for recreational purposes in order to localize impacts and improve use of the property.

*Recommendation speak to the respective utility companies to determine if enhancement opportunities exist to create a diverse open habitat environment.
Utility Corridors

Figure 8
**Visitor Management**

**Off-leash Dogs**

Off-leash dogs can be a detriment to the natural environment. Dogs can carry invasive species from one location to another. By keeping dogs controlled they can stay on the trail surfaces.

Natural instincts of dogs to chase prey can cause impacts to local native species. Dogs can induce flight instincts which can scare breeding animals and interfere with feeding.

*Recommendation that the Authority maintain its leash policy through enforcement of the regulations that apply*

**Off-trail Activities**

Off trail activities increases the area of influence that a recreational trail has. Illegal trails increase the intrusion into natural environments. The use of illegal trails can increase the spread of invasive species, can increase risks to illegal trail users (tick populations), disturb wildlife, fragment communities, and others. Off trail activities should be restricted to those that are necessary for maintenance and or CA endorsed monitoring and stewardship activities.

*Recommendation that the Authority discourage off trail activities through enforcement of the regulations that apply.*

**Wildlife Feeding**

Wildlife feeding is a common activity with respect to small birds (primarily the Chickadee feeding area) on the LCC property. While the feeding of small birds will not have a significant adverse impact, feeding of other animals can create an interdependency of supplemental food resources and a potential safety risk.

*Recommendation that feeding be limited to avian species excluding geese and other waterfowl.*

*Recommendation feeding of larger mammals should not be tolerated due to not only the health of the organism but also the safety concerns of doing so.*

**Canada Goose Management**

Canada Geese can be problematic for those areas fronting on water bodies. The Authority over the last decade has reduced mowing activities near the water’s edge in order to create a barrier to shoreline access. In most instances this has been an effective deterrent however in locations where geese continue to be a problem or access cannot be controlled through vegetative management line barriers could be considered or buffer widths can be enhanced/increased

**Operations**

Conservation Area maintenance activities such as tree planting, stand thinning, hazard tree removal, grass moving, trailside vegetation brushing, and trail maintenance, conducted primarily on behalf of Conservation Area patrons, has potential negative impacts on wildlife habitat. These activities however are considered
essential to maintaining patron safety. Those operational activities that are within the developed portions of the property (including trails) are not considered to have a significant impact.

Pollution and Environmental Contaminants

The LCC property will not be influenced by its regular operation activities as it relates to pollution and environmental contaminants. Potential influences are localized to the administrative areas of the property. With the exception of the parking areas which drain to the wetland environments containment of pollutants is effectively being accomplished. Continued diligence with respect to equipment operation and waste disposal is necessary.

The temporary storage of materials within the gravel pit, particularly with compostable materials is considered adequate. The area should be assessed on a regular basis to identify items that should be sent to an appropriate disposal location.

Summary

The following map summarizes the features of the property. The associated woodlands and sensitive areas are those which will receive consideration when development or other activities are proposed within those areas. Development proposals within the above noted areas will be considered on a case by case basis. Designation of these areas should not be interpreted as areas of no development, depending on the nature of the activity, its related impacts and the mitigation measures used to diminish impacts further development of the property would be feasible.
**Conclusion**

The use of the property by the public is expected to increase over time. As the pressures of development surround the property the careful management and control of access will become more critical. It is important that the use of the property be monitored and negative impacts controlled. Through active monitoring the threshold of user interaction vs. detrimental change can be determined or actions taken to avoid the threshold being breached.
For any new facilities or services an appropriate review should be conducted in advance of the project to ensure that it is accomplished in an environmentally conscious manner.

As the property develops, the decisions today, will reflect how we can manage the property into the future. Through the careful design/sighting of new features and assessment/modification/decommissioning of existing features it will be possible to maintain the ecological integrity of the property. The recommendations within this report should assist in determining future direction; however this should be considered an evolving document that changes based on new information and knowledge.
Appendix 3
Little Cataraqui Creek Conservation Area (LCCCA)

Market Analysis

July 2011

Created by:

Cataraqui Region Conservation Authority
Little Cataraqui Creek Conservation Area (LCCCA)
Market Analysis – July 2011

Background

The Little Cataraqui Creek Conservation Area (LCCCA) Market Analysis was conducted by Cataraqui Region Conservation Area (CRCA) staff in July 2011. Its purpose is to assess the current and future demand for public visitation and public programs at LCCCA, as well as provide direction and statistical support for future LCCCA marketing initiatives. An assessment of the school programs and the demand for meeting and event space at the Outdoor Centre was not included as part of this market analysis.

Methodology

The LCCCA Market Analysis is based on both quantitative and qualitative research conducted by CRCA staff, which included consultations with conservation area users, municipal staff, key stakeholders and the general public.

CRCA staff also conducted a statistical review of local and national demographic and recreational trends, as well as a competitive review.

Competitive Environment - Parklands

An examination of the region surrounding LCCCA (greater Kingston area) indicates that LCCCA is the largest outdoor recreational space that offers natural environment exploration and conservation education activities.

Within the City of Kingston, there is a well developed park system of over 100 recreational sites, including both public and private parks. These parks provide outdoor recreation, but often are less naturalized, small in size, and don’t provide many opportunities for outdoor education. The facilities that are often offered in city parks are playground areas, baseball diamonds, and basketball courts. Some parks offer walking trails, but most are less than one km in length. Picnic areas are rare, but there are often park benches. City of Kingston parks do not charge a gate fee.

There are five Provincial Parks within 100 km of LCCCA: Charleston Lake Provincial Park, Frontenac Park, Sandbanks Provincial Park, Sharbot Lake Provincial Park, Silver Lake Provincial Park, and Lake on the Mountain Provincial Park. These parks provide camping areas, picnic areas, swimming and boating, hiking, fishing, wilderness viewing and winter activities. They are generally much larger than LCCCA and their facilities more extensive. Some offer educational classes, such as the Wilderness Skills Training Program at Frontenac Park. They charge a
substantial gate fee (between $10.00 - $20.00) and charge extra for classes. There tends to be large crowds at Provincial Parks.

The St. Lawrence Parks system is primarily targeted towards campers. Along with camping facilities, there are trails, picnic areas and swimming offered for day-use for a small gate fee ($4.95 per adult).

St. Lawrence Islands National Park is a short drive from the Kingston area. There are many activities offered at the park, such as canoe/kayak/boat rentals, swimming, camping, geocaching, wildlife viewing, hiking and planned events. Facilities include picnic areas, camp sites, a boat launch, a playground, trails, a boardwalk, and a visitor centre. Heritage presentations and group tours are given regularly. This park is unique because it is made up of a number of islands that visitors can reach by boat. The moderate gate fee ($6.80) covers admission to all islands.

There are also other Conservation Areas that are similar to LCCCA that are a short drive away. Foley Mountain Conservation Area, owned by the Rideau Valley Conservation Area, is in nearby Westport and is similar in size and amenities. The property offers picnic areas, walking trails, and open water areas, as well as outdoor education and interpretive programs. The gate fee is $6.00 per car or $2.50 per person and often events are included in the gate fee. Sheffield Conservation Area, owned by Quinte Conservation Area, is 45 kilometers away in Kaladar. The property facilities include canoeing, kayaking, fishing, picnic areas, boat ramp and walking trails. There is no gate fee at Sheffield Conservation Area.

See Appendix for a map of all parkland areas in the region.

**Competitive Environment - Events**

A number of organizations offer recreational and outdoor programs in the Kingston area. Some of these are offered annually or on an ongoing basis. Some are less regular because they are reliant either on special funding or the efforts of volunteers. Below is a list of events offered in 2011.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Event</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Kingston</td>
<td>Little Tree Huggers</td>
<td>Each program includes a walk and talk about nature found around the museum and then a nature craft class. (2-6 years old) Held at MacLachlan Woodworking Museum every Saturday, July and August at 10 a.m.</td>
</tr>
<tr>
<td>City of Kingston</td>
<td>Music In The Gardens</td>
<td>A variety of local and visiting entertainers, sponsored by City of Kingston and the Music Performance Fund. Wednesday and Sunday evenings in July and August, weather permitting.</td>
</tr>
<tr>
<td>City of Kingston</td>
<td>Reptiles at Risk</td>
<td>Bring your family to experience the interesting</td>
</tr>
<tr>
<td>Location</td>
<td>Event</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>City of Kingston</td>
<td>Pumpkinfest</td>
<td>Celebrate the harvest at the museum, with games, pumpkin carving, entertainment, and more. Location: MacLachlan Woodworking Museum, 12 to 4 p.m. October 29</td>
</tr>
<tr>
<td>Kingston Senior Association</td>
<td>Yoga, Karate, Tai Chi, Badminton, Urban Poling, Woodcarving, Pilates, Badminton, Meditation</td>
<td>All are offered weekly at the Senior Centre. For Seniors Association members only.</td>
</tr>
<tr>
<td>YMCA</td>
<td>Swimming certifications, Group fitness classes, Indoor soccer and Basketball</td>
<td>A variety of sports-focused programs for Adults, Seniors and Children. Event fee.</td>
</tr>
<tr>
<td>GoodLife Fitness</td>
<td>Yoga, Zumba, BodyJam, etc.</td>
<td>A variety of fitness programs for all ages. Class fee.</td>
</tr>
<tr>
<td>Kingston Community Gardens</td>
<td>Weed Walk</td>
<td>Bring the weed you love to hate for identification to the Heirloom Seed Sanctuary this Saturday, July 16th at 2pm. Tour the gardens and find out what weeds are trying to tell us about our land. Free. Garden-grown refreshments included.</td>
</tr>
<tr>
<td>Kingston Community Gardens</td>
<td>Square Foot Gardening</td>
<td>Square Foot Gardening is a condensed, all natural method of gardening that grows more food in less space, with less time, less water and less work. Learn more about this innovative approach to urban gardening in a one hour workshop facilitated by Wess Garrod of WillGrow Gardens, and see a sample garden close up. Free.</td>
</tr>
<tr>
<td>Kingston Community Gardens</td>
<td>Garlic Growing and Natural Pest Control</td>
<td>Familiarize yourself with ways to control pests naturally, including growing garlic. Participants will learn about planting and growing garlic and will be invited to make a natural pest control potion that saves money and avoids poisoning. Free.</td>
</tr>
<tr>
<td>Kingston Community Gardens</td>
<td>Seed Saving Workshop</td>
<td>Workshop participants will learn to grow vegetable seed varieties that are compatible with the ecosystems of their own garden localities, contributing to a more secure local food system. Free.</td>
</tr>
</tbody>
</table>
Key Trends in the Leisure Industry (Kingston Area)

According to local statistics collected by the City of Kingston, user demand for drop-in activities is on the rise in the Kingston Area. This is at the expense of most organized and structured programs, which are inflexible to individuals and families with limited free time. Correspondingly, most organized sports have seen a decline in participation in favour of casual activities that fit into individual schedules. ii

Passive sport and nature-based tourism represents a growing market, which creates a demand for outdoor recreation and family-friendly facilities, including golf, walking, bird watching, and marine and waterfront activities. Trails continue to be one of the most demanded amenities since they provide an opportunity for a number of activities, such as hiking, cycling, inline skating, and skiing. Demands have also been observed for outdoor social gathering areas, such as public picnic areas and outdoor barbeques.iii

Due to this, the “multi-use” facility and recreation concept is being increasingly viewed as the preferred development model since it consolidates a number of leisure activities at a single location and provides a convenient venue for time-pressed individuals across a wide range of ages. iv

User Perspectives on Outdoor Recreation (National)

The 2009 Physical Activity Monitor created by the Canadian Fitness & Lifestyle Institute examined the extent to which Canadians feel that the availability of facilities and supportive services in their communities are important. Eighty-two per cent of those surveyed reported that having safe places to walk was “very important” and 64 per cent reported that having safe places to cycle was “very important.” Women were more likely than men to list these two items as “very important.” Adults aged 25 to 64 years were the most likely to cite safe places to walk as “very important.”

Nearly half of all respondents (46 per cent) cited having access to multi-purpose trails as “very important.” Adults aged 45 to 64 years were mostly likely to say that having multi-purpose trails in their communities was “very important.” v

The 2009 Physical Activity Monitor also examined Canadians’ perceptions of the presence of potential barriers to participation in physical activity or sport. Overall, cost of activity was the strongest barrier that prevented participation, with over one-quarter of Canadians “strongly agreeing” that costs of participating are too high. The second largest barrier as cited by Canadians was lack of skill and ability. Older adults were the most likely to “strongly agree” that a lack of skill and ability was a key barrier to participation. Women were more likely than men to “strongly agree” that this was a key barrier. vi
Another notable key barrier was lack of awareness of programs and activities, with 21 per cent “agreeing” and 26 per cent “strongly agreeing” that there is a lack of information about local opportunities for physical activity and sport.\textsuperscript{vii} Older adults were most likely to cite this as a key barrier.\textsuperscript{viii}

A noted environmental barrier was lack of access to physical activity opportunities. Twenty-four per cent of respondents either “agreed” or “strongly agreed” that there was difficulty getting to locations that provided outdoor physical activity opportunities. This included lack of public transit and lack of bike lanes. Women, older age groups, homemakers, retirees, and lower household income families were most likely to respond with “strongly agree.”\textsuperscript{ix}

Lastly, 19 per cent of Canadians responded that a lack of support services presented a barrier to seeking physical activity. This included lack of instruction and lack of childcare.\textsuperscript{x}

**Demographic Trends**

Canada’s rate of population growth has been accelerating for six straight years and does not show signs of slowing down. On July 1, 2009, the population had grown to over 33.7 million, which is a 3.6 per cent jump from July 1, 2006, or nearly 1.2 million people.\textsuperscript{xii} Canada’s population is projected to grow to 40.2 million by 2026, using medium growth projections.\textsuperscript{xii}

The City of Kingston is expected to grow by approximately 13,500 persons between 2009 and 2026 (13.6 per cent), for a total population of 133,100 persons. This is using medium growth projections provided by the City.\textsuperscript{xiii}

Population growth will have a significant impact on current programs and services. Not only will added populations put pressures on existing facilities, but it will also generate demands for more spaces and services.

The proportion of seniors within the Canadian population has been steadily growing since 1960, increasing from eight per cent at that time to 14 per cent in 2009. According to all population projection scenarios, seniors are expected to comprise approximately 23 per cent to 25 per cent of the population by 2036, and around 24 per cent to 28 per cent in 2061. By 2017, seniors are projected to become more numerous than children in Canada for the first time in the country’s history.\textsuperscript{xiv}

The City of Kingston’s population is also seeing this trend as it is weighted more heavily toward the older age groups. Also, the proportion of the population that is considered to be children or youth is slightly smaller in Kingston relative to other communities of similar size.\textsuperscript{xv}

The aging population is driven primarily by the Baby Boom generation, a group that will put considerable pressures on the recreation system. The Baby Boomers differ from past
generations of senior citizens, as they have a tendency to be more physically active and have more disposable income available at retirement.\textsuperscript{xvi} This suggests that Baby Boomers will continue to pursue physical activity that they have grown up with (e.g. personal fitness, hiking, cycling, ice sports, etc.), as they continue to age, but at a milder pace.

Despite the growing number of older Canadians, people between the ages of 20-24 remain the largest single age group in Kingston.\textsuperscript{xvii} It is likely that this is due to the large post-secondary student population in the Kingston area. Also, youth between the ages of 10 and 19 make up 13 per cent of the population of Kingston, though forecasts indicate that this proportion will slightly decrease to 10 percent by the year 2026.\textsuperscript{xviii}

User Perspectives of Little Cataraqui Creek Conservation Area
Public Consultation/Focus Group

Cited strengths of LCCCA, paraphrased:

1. It is a natural setting, and it is not over-manicured.
2. The property is close to Kingston.
3. LCCCA is not as crowded as National Parks.
4. Many natural habitats and a variety of wildlife are supported.
5. The trail system at LCCCA is highly valued.
6. LCCCA presents a great opportunity for outdoor education.
7. The events are casual and comfortable.
8. Chickadee feeding provides a unique user experience.
9. LCCCA is a low-cost way to be active.
10. LCCCA’s picnic areas are nice because you don’t see them much elsewhere.

LCCCA weaknesses, paraphrased:

1. LCCCA is not well known to local residents (both the property and events).
2. Many people get away with not paying the admission fee.
3. There is a lack of access to LCCCA, i.e. lack of public transit and bike paths to property, as well as construction.
4. Information on LCCCA is hard to find on the website.
5. It is not accessible for those with mobility issues.

User Perspectives on LCCCA
User Survey
Relevant findings:

1. 71% respondents think that they get good value for the gate fee. 22% do not.
2. Walking was cited as the most popular activity, bird watching was 2nd, skiing was 3rd, weekend programs and meeting at the ODC was 4th, nature photography was 5th and dog walking was 6th.
3. Most respondents cited that they visited LCCCA with a friend/spouse (48%). 14% visited alone, 10% visited with children, and 9% visited as part of an organized group. 26% of those that completed the survey were under 39 years old.
4. 62% of respondents use the property in the spring, 53% in the winter, 55% in the fall and 50% in the summer (these categories are not mutually exclusive)
5. 65% of respondents do not have an annual pass.
6. 81% of respondents rated the facilities at LCCCA as 7 out of 10 or above.

Marketing Opportunities
Based on the results of the LCCCA Market Analysis, including the research conducted and priority areas identified through the user survey and public consultation, recommendations have been created to help guide future investment in marketing initiatives. Financial and/or staffing implications associated with the marketing recommendations will need to be evaluated before moving forward with any initiatives.

Marketing Goal: Increase Visibility and Popularity of Property

1. Promoting the value to the community through general advertising (not event specific). This should emphasize the unique selling proposition of the property, such as open walking trails, canoe/kayak rentals, chickadee feeding, picnic areas, etc. as well as the fact that visitors can drop in anytime during the day to use these facilities.

2. “Why is there a gate fee” information on website and/or pamphlet. There seems to be a lack of awareness of what the CRCA needs the money for (based on user survey and focus group findings).

3. Messaging should emphasize how close property is to Kingston as there is the impression that the property is far out of town (based on user survey and focus group findings).

5. Target post-secondary student and seniors markets. Data suggests that the retiree and senior citizen market is seeking opportunities for passive outdoor recreation. User Survey findings suggest that there is a lack of awareness and/or usage of the LCCCA property and its programs in individuals under 30.
6. **Hold an annual fun run in late-spring or early fall through trails.** This idea was identified by users in both the user survey and the focus groups without prompting.

**Marketing Goal: Promote Public Recreation Programs**

1. **Create online registration for events and programs.** The lack of online registration has been cited many times by users as a deterrent to signing up for our events and programs.

2. **Create maps of places on the property to spot animals** along with information about the animals.

3. **Create trail map podcasts** that people can download online that act as property tour guides.

4. **Market to university and college students** as this seems to be a large demographic that we are not reaching properly.

5. **Guided nature walks.** This was identified by respondents in both the user survey and the focus group.

6. **Promote our Nature Program for Retirees at LCCCA heavily.** Given the demographics of the Kingston area, this program should be popular. It replaces the former Brown Bag Seniors Program which was organized by a local volunteer.

**Marketing Goal: Increase Recognition of the CRCA**

1. **Website re-design** with accessible format options (such as screen readers, screen magnifiers and audio recorded information). Based on a growing seniors’ population in the area and the upcoming accessibility legislation.

2. **Create annual pass package.** “Where does your money go” information.

3. **General advertising for the CRCA and its services (not CAs or events).** If budget allows.

4. **Create accessible print communications.** The Integrated Accessibility Standard legislation for Communications and Information comes into effect shortly and the CRCA must comply.

5. **Hold more landowner workshops** (such as tree planting, etc.). This will demonstrate how CRCA adds value to the community besides providing Conservation Areas, as well as showcasing the CRCA’s expertise in environmental planning.
Sources

i See Appendix for full listing.


Appendix 1 – City of Kingston Parks
Appendix 2 - Parkland Areas in the Region