



November LRCA Board Meeting Agenda

Lakehead Region Conservation Authority
130 Conservation Road/Microsoft Teams
2024-11-27 16:30 - 18:00 EST

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1. CALL TO ORDER

Declaration: "The Lakehead Region Conservation Authority respectfully acknowledges that the lands on which we live and work are the traditional lands of the Anishinabek Nation and the traditional territory of Fort William First Nation, signatory to the Robinson-Superior Treaty of 1850. As partners in the conservation and protection of the Lakehead Watershed along with First Nations communities, the Métis Nation of Ontario, and other Indigenous peoples, the LRCA is committed to the common vision of a healthy, safe and sustainable Lakehead Watershed."

2. ADOPTION OF AGENDA

THAT: the Agenda is adopted as published.

3. DISCLOSURE OF INTEREST

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THAT: the Minutes of the Lakehead Region Conservation Authority Ninth Regular Meeting held on October 30, 2024 be adopted as published.

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5. IN-CAMERA AGENDA

No In-Camera Meeting will be held.

6. BUSINESS ARISING FROM PREVIOUS MINUTES

None.

7. CORRESPONDENCE

None.

8. STAFF REPORTS

8.1. Conservation Lands Inventory.....10

THAT: Staff Report CORP-13-2024 be received AND FURTHER THAT the Conservation Lands Inventory be approved.

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THAT: Staff Report CORP-15-2024 be received AND FURTHER THAT the Watershed-Based Resource Management Strategy Version 1.0 be approved.

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14. NEXT MEETING	
The next meeting will be held on January 29, 2025 at 4:30 p.m., which will be the Annual General Meeting and elections.	
15. ADJOURNMENT	
THAT: the time being _____ p.m. AND FURTHUR THAT there being no further business we adjourn.	



October LRCA Board Meeting Minutes
Lakehead Region Conservation Authority
October 30, 2024 at 4:30 PM
130 Conservation Road/Microsoft Teams

Members Present: Albert Aiello, Grant Arnold, Robert Beatty, Donna Blunt, Rudy Buitenhuis, Dan Calvert, Sheelagh Hendrick, Brian Kurikka

Members Present Virtually: Trevor Giertuga, Jim Vezina

Members Absent: Greg Johnsen

Also Present:

Tammy Cook, Chief Administrative Officer
Mark Ambrose, Finance Officer
Ryne Gilliam, Lands Manager
Ryan Mackett, Communications Manager
Melissa Hughson, Watershed Manager
Melanie O'Riley, Administrative Clerk/Receptionist, recorder of Minutes

1. CALL TO ORDER

The Chair called the meeting to order at 4:30 p.m.

2. ADOPTION OF AGENDA

THAT: the Agenda be adopted as published.

Motion: #105/24

Motion moved by Dan Calvert and motion seconded by Albert Aiello. **CARRIED.**

3. DISCLOSURE OF INTEREST

None.

4. MINUTES OF PREVIOUS MEETING

THAT: *the Minutes of the Lakehead Region Conservation Authority Eighth Regular Meeting held on September 25, 2024 be adopted as published.*

Motion: #106/24

Motion moved by Albert Aiello and motion seconded by Dan Calvert. **CARRIED.**

5. IN-CAMERA AGENDA

THAT: *we now go into Committee of the Whole (In-Camera) at 4:35 p.m.*

Motion: #107/24

Motion moved by Albert Aiello and motion seconded by Dan Calvert. **CARRIED.**

THAT: *we go into Open Meeting at 4:50 p.m.*

Motion: #108/24

Motion moved by Dan Calvert and motion seconded by Albert Aiello. **CARRIED.**

THAT: *the In-Camera Minutes of the Lakehead Region Conservation Authority September 25, 2024 meeting be adopted as published.*

Motion: #109/24

Motion moved by Albert Aiello and motion seconded by Dan Calvert. **CARRIED.**

THAT: *a new full-time permanent position will be created to assist with the mandatory Natural Hazard programs.*

Motion: 110/24

Motion moved by Rudy Buitenhuis and motion seconded by Robert Beatty. **CARRIED.**

THAT: *the CAO is authorized to apply for funding under the Northern Ontario Heritage Fund Corporation, under the Workforce Development Stream, to hire an intern to assist with Natural Hazard programs.*

Motion: #111/24

Motion moved by Robert Beatty and motion seconded by Rudy Buitenhuis. **CARRIED.**

6. BUSINESS ARISING FROM PREVIOUS MINUTES

It was noted that the one day event hosted by Mr. Leo Desmoulin on LRCA's "Triangle" property located off Fort William Road, was a success. About 25 people attended. There were no issues with the neighbors and the site was cleaned up after the event.

7. CORRESPONDENCE

None.

8. STAFF REPORTS

8.1. Pre-Submission Consultation and Complete Application Policy

Members reviewed and discussed Staff Report Policy DEVREG-05-2024 related to the Development Regulations Pre-Submission Consultation and Complete Application Policy.

THAT: Development Regulations Policy DEVREG-05-2024, Pre-Submission Consultation and Complete Application Policy under O. Reg. 41/24 be adopted.

Motion: #112/24

Motion moved by Grant Arnold and motion seconded by Rudy Buitenhuis. **CARRIED.**

9. CHIEF ADMINISTRATIVE OFFICER'S REPORT

9.1. Monthly Treasurer's Report

Members were provided with the monthly Treasurer's Report for September's Administration and Capital.

9.2. Watershed-Based Resource Management Strategy

Members reviewed and discussed Staff Report CORP-11-2024 related to the Draft Watershed-Based Resource Management Strategy which was out for public consultation. Tammy Cook, CAO, gave a brief overview of the strategy.

THAT: Staff Report CORP-11-2024 be received.

Motion: #113/24

Motion moved by Brian Kurikka and motion seconded by Robert Beatty. **CARRIED.**

9.3. Application to Renew Chair and Vice-Chair Term Exceptions

Members reviewed and discussed Staff Report CORP-11-2024 related to reapplying to the Minister of Natural Resources to request an exception to the rotation and maximum term of the Chair and Vice-Chair positions for the 2025 and 2026 elections.

THAT: the LRCA reapply to the Minister of Natural Resources requesting an exception to the rotation and maximum term of the Chair and Vice-Chair positions for the 2025 and 2026 elections thereby permitting all members to be eligible to hold the positions, if so elected at the annual elections by the Members of the Lakehead Region Conservation Authority.

Recorded Vote:

Municipality	Member	YES	NO	ABSENT
Conmee	Grant Arnold	Yes		
Dorion	Robert Beatty	Yes		
Gillies	Rudy Buitenhuis	Yes		
Needing	Brian Kurikka	Yes		
O'Connor	Jim Vezina	Yes		
Oliver Paipoonge	Dan Calvert	Yes		
Shuniah	Donna Blunt	Yes		
Thunder Bay	Sheelagh Hendrick	Yes		
Thunder Bay	Trevor Giertuga	Yes		
Thunder Bay	Albert Aiello	Yes		
Thunder Bay	Greg Johnsen			Absent

Motion: #114/24

Motion moved by Sheelagh Hendrick and motion seconded by Robert Beatty. **CARRIED.**

10. PASSING OF ACCOUNTS

THAT: having examined the accounts for the period September 1, 2024 to September 30, 2024 cheque #3349 to #3377 for \$29,306.93 and preauthorized payments of \$142,221.84 for a total of \$171,528.77, we approve their payment.

Motion: #115/24

Motion moved by Rudy Buitenhuis and motion seconded by Brian Kurikka. **CARRIED.**

11. REGULATORY ROLE

Members were provided with the summaries of the Plan Review program and Section 28 permits issues since last meeting.

12. PROJECTS UPDATE

12.1. Communications Manager Projects Update

Members were advised that the Communications Manager, Field Operations Lead Hand, and Environmental Planner attended the annual Conservation Areas Workshop. It was noted that the LRCA won the “Inspiration Award”, awarded in recognition of inspiring achievement in conservation, for the LRCA’s Seeds for Conservation program.

It was noted that the CAO and Communications Manager attended the 2024 Latornell Conservation Symposium. The CAO also attended the pre-Latornell session.

It was noted that the Archaeology Workshop was very successful with 30 participants.

It was noted that Fall Waterfowl Viewing Day was very successful. This event in 2025 will have a rebranded name of “Fall Migratory Bird Day”, as this will reflect participant expectations and bird observations.

12.2. Lands Manager Projects Update

Members were advised that the Mills Block Conservation Area Redevelopment project was progressing well.

It was noted that the Diversion Structure had been painted using colors to reflect the LRCA’s Flood Warning System. In the event of a Flood occurrence, the colors will assist in documenting water levels and calibration of future floodplain modeling.

12.3. Watershed Manager Projects Update

Members were advised that a Level I Low Water Condition advisory was declared for the LRCA Area of Jurisdiction to the Ministry of Natural Resources by the LRCA on October 10, 2024.

It was noted that Lake Superior water levels continue to be drier than average for the month of September.

Members were advised that the GIS/Water Resources Technologist attended the Flood Forecasting Workshop.

It was noted that the CAO, Watershed Manager, Development Regulations Officer and the GIS/Water Resources Technologist attended the 2024 Planning Workshop hosted by the Ministry of Municipal Affairs and Housing.

It was noted that 5,300, LRCA grown, native seeds were planted at Boulevard Lake for the Boulevard Lake Wetland project.

Members were advised that the LRCA received \$15,000 from Enbridge and another \$5,000 from TD Friends of the Environment for the 2025 Shoreline Restoration project at Hazelwood Lake Conservation Area which will enhance shoreline vegetation and increase filtration of runoff.

13. NEW BUSINESS

Board Member, Albert Aiello, City Councilor and Executive Director for the Boys and Girls Club Thunder Bay (BGCTB), requested the presence of the LRCA Staff to attend an event at the BGCTB with a booth or activity on December 30, 2024.

14. NEXT MEETING

The next meeting will be held on November 27, 2024 at 4:30 p.m.

15. ADJOURNMENT

THAT: the time being 5:27 p.m. AND FURTHER THAT there being no further business we adjourn.

Motion: #116/24

Motion moved by Robert Beatty and motion seconded by Rudy Buitenhuis. **CARRIED.**

Chair

Chief Administrative Officer



PROGRAM AREA	CORPORATE	REPORT NO.	CORP-13-2024
DATE PREPARED	November 8, 2024	FILE NO.	
MEETING DATE	November 30, 2024		
SUBJECT	Conservation Lands Inventory		

RECOMMENDATION

Suggested Resolution

“THAT: Staff Report CORP-13-2024 be received AND FURTHER THAT the Conservation Lands Inventory be approved.”

LINK TO STRATEGIC PLAN (2023-2027)

Conserve and Sustain:

- *Manage land holdings through systemic evaluations, inventories, and strategies.*

Connect and Explore:

- *Provide spaces, opportunities, and experiences that focus on physical and mental well-being through a connection to the land.*
- *Manage and enhance recreational areas for current and future generations through robust land management, efficient maintenance programs, and reinvestment in the land.*

Govern and Enhance:

- *Continue to commit to accountable and transparent organizational governance.*
- *Maintain a stable model of financial resiliency based on capacity, capabilities, and public expectations by maximizing new funding opportunities, fundraising, and self-generated revenue.*

EXECUTIVE SUMMARY

Under the *Conservation Authorities Act*, Ontario Regulation 686/21, Section 11, requires Conservation Authorities to develop a Land Inventory by December 31, 2024. The primary intent of the Land Inventory is to summarize all land owned by the Authority. The Land Inventory encompasses key information regarding the lands owned and operated by the LRCA and must also identify: parcels that are considered developable by the Authority; whether a recreational activity is provided on any parcels that requires the direct support or supervision of staff employed by the authority or by another person or body; or whether commercial logging is carried out on any parcel. The Land Inventory will undergo periodic review on a five-year basis and be updated as warranted.

DISCUSSION

Under the *Conservation Authorities Act*, Ontario Regulation 686/21, Section 11, requires Conservation Authorities to develop a “Land Inventory” by December 31, 2024. The Lakehead Region Conservation Authority (LRCA) currently owns and maintains 86 parcels of land, totaling 2,597 hectares, which were acquired for various purposes. Staff used Conservation Ontario’s standardized template for the Land Inventory, which captures all mandatory components, as well as complementary data, in one working Excel file. LRCA staff compiled information on LRCA-owned properties utilizing existing property documentation, regulated area mapping, GeoWarehouse reports, and Natural Heritage Information Center reports. All descriptor documentation (surveys, maps, reports) were saved on the LRCA’s server and have been backed up to the cloud. Reference documents will be made available upon request or at the discretion of the Authority. The Land Inventory is not required to be provided to the Province; however, could be requested in the future.

The Land Inventory classifies all LRCA-owned properties into designated land use categories. Land use categories are designated based on the type of activities or other matters of significance related to each parcel of land (e.g. passive recreation, forest management, floodplain protection, etc.). LRCA-owned lands have been classified into four categories, some with corresponding subcategories, including:

- 1) Conservation and Recreation (accessible to public)
- 2) Conservation Authority Administrative Area (authority office and workshop area)
- 3) Management Areas
 - Floodplain and Erosion Control Lands
 - Neebing McIntyre Floodway Lands
 - Forest Management Property
 - Conservation Lands

The Lands Inventory encompasses detailed information on each parcel including location details, acquisition, site characteristics, connectivity, natural heritage features, and if the parcel of land is suitable for housing and housing infrastructure. In determining if a parcel of land is suitable for housing or development, LRCA staff assessed zoning, regulated areas, hazard lands, natural heritage features, and if the parcel integrates with any other provincially or municipally publicly accessible lands. As the LRCA has strategically acquired lands that encompass floodplain, erosion hazards, or significant natural heritage features, only one property was identified as suitable for housing and housing infrastructure. The Harpell/Bocking Area located in the Township of Ware (see attached map), which was donated to the Authority in 2006, was identified as developable as it is located outside of the LRCA’s jurisdiction with a portion considered able to support development.

It is noted that no parcels were identified that met the following specified criteria:

- a recreational activity is provided on the parcel that requires the direct support or supervision of staff employed by the authority or by another person or body, or

- commercial logging is carried out on the parcel.

All harvesting conducted on LRCA owned land is considered to be undertaken in an effort to manage the forest, not commercial logging.

The Lands Inventory will serve as a complimentary document to the Conservation Lands Strategy and Strategic Plan, specifically identifying lands owned and operated by the LRCA and the associated parcel information. The Lands Inventory will be reviewed and updated every five years, or as warranted (i.e., land is acquired or disposed of).

FINANCIAL IMPLICATIONS

Any future actions resulting from the acquisition or disposition of lands will be included in future budgets, as warranted.

CONCLUSION

As required in legislation, the LRCA has compiled a Land Inventory which is a complimentary document to the Conservation Lands Strategy and Strategic Plan, intended to summarize all the land owned by the Authority. The Land Inventory lists each parcel of land, highlighting important details regarding regulated areas, natural heritage features, and passive recreation. When considering future acquisition or disposition of land, the Authority should utilize the Land Inventory in making future decisions. The Land Inventory will be reviewed and updated on a five-year basis, unless otherwise warranted by the Authority.

BACKGROUND

Ontario Regulation 686/21 under the *Conservation Authorities Act* outlines the Mandatory Programs and Services which must be delivered by all Conservation Authorities (CAs) in Ontario. As outlined in Section 11, each Conservation Authority is required to prepare a “Land Inventory” on or before December 31, 2024. The required components of the Land Inventory are further outlined in Subsection 11(1) of the regulation:

11. (1) The land inventory referred to in paragraph 3 of subsection 9 (1) shall include the following information for every parcel of land the authority owns or controls:

1. *The location of the parcel.*
2. *The identification of any information the authority has in its possession in respect of the parcel, including any surveys, site plans or other maps.*
3. *When the authority acquired the parcel.*
4. *Whether the parcel was acquired using a grant made under section 39 of the Act.*
5. *Whether the parcel was acquired through an expropriation.*

6. *Whether the authority owns the parcel or has a registered legal interest in the parcel, including an easement.*
7. *Identification of the land use categories mentioned in paragraph 4 of subsection 10 (1) that apply to the parcel.*
8. *For the purpose of ensuring a program or service is not included as a mandatory program or service under subparagraph 2 ii or v of subsection 9 (1), identification of whether,*
 - i. a recreational activity is provided on the parcel that requires the direct support or supervision of staff employed by the authority or by another person or body, or*
 - ii. commercial logging is carried out on the parcel.*
9. *Whether or not the parcel or a portion of the parcel is suitable for the purposes of housing and housing infrastructure development, including identifying,*
 - i. any applicable zoning by-law passed under section 34 or 38 of the Planning Act or any predecessor of them,*
 - ii. if the parcel or a portion of the parcel augments any natural heritage located within the authority's area of jurisdiction, and*
 - iii. if the parcel or a portion of the parcel integrates with other provincially or municipally owned lands or other publicly accessible lands and trails within the authority's area of jurisdiction. O. Reg. 686/21, s. 11 (1); O. Reg. 594/22, s. 2.*

REFERENCE MATERIAL ATTACHED

Attachment #1 – Harpell/Bocking Area Map

PREPARED BY: Michelle Willows, Environmental Planner

THIS REPORT SIGNED AND VERIFIED BY:  Tammy Cook Chief Administrative Officer	DATE: November 14, 2024
--	----------------------------

M-11: Harpell/Bocking Area


Legend

- Highway
- Road
- Street
- LRCA Property
- Assessment Parcel
- Stream
- River
- Water Body
- Wetland

**Total Area of
Harpell/Bocking Area
28.363 ha / 70.0888 ac**

0 500 1,000 m

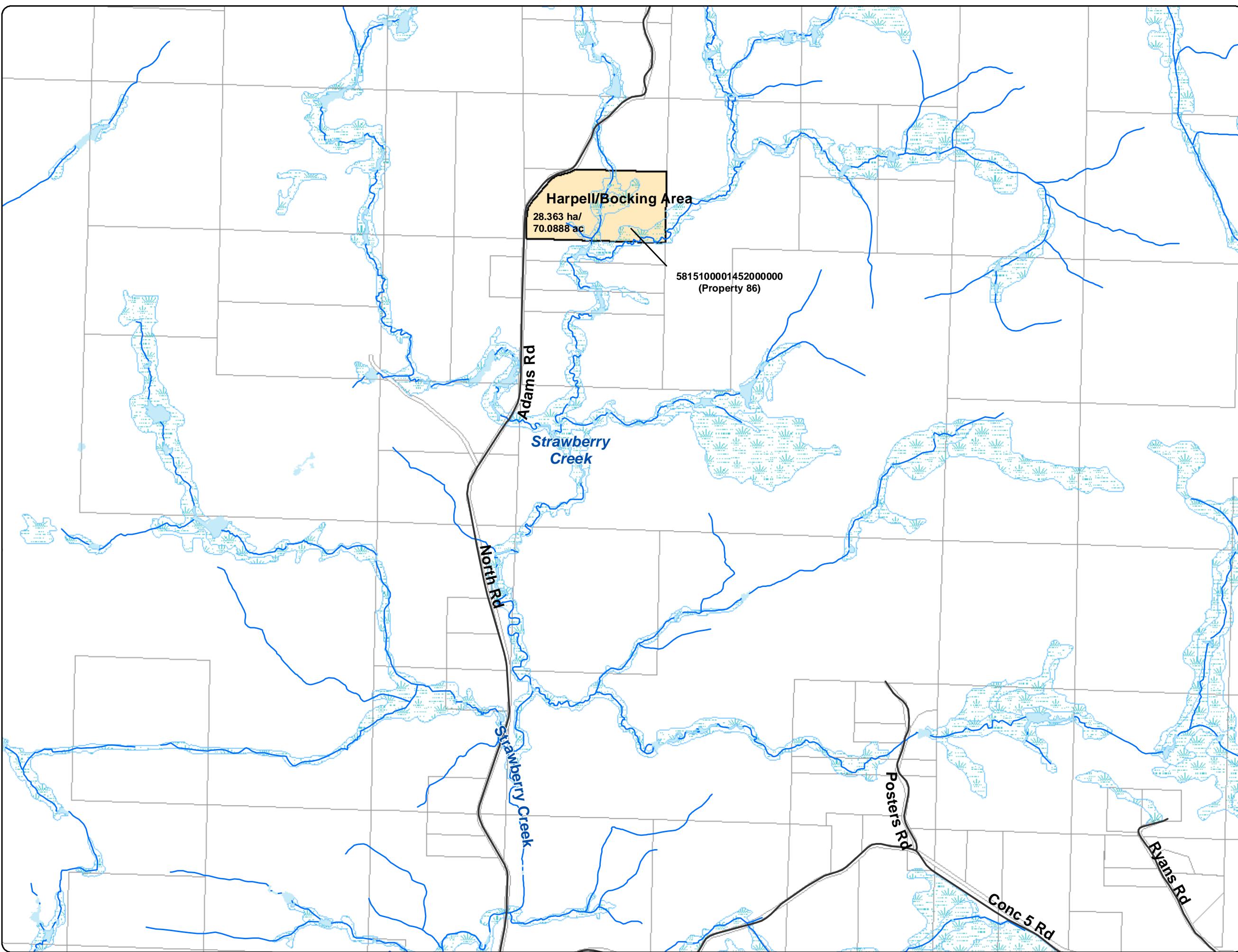
This publication was produced by:
Lakehead Region Conservation Authority
130 Conservation Rd.
Thunder Bay, ON
P7B 6T8

Base data used under license through the members of
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precise indicator of routes or features, nor as a guide to
navigation.

Datum: NAD 83
Projection: UTM Zone 16N
Date: February 2016

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PROGRAM AREA	CORPORATE	REPORT NO.	CORP-15-2024
DATE PREPARED	November 19, 2024	FILE NO.	
MEETING DATE	November 27, 2024		
SUBJECT	Watershed-Based Resource Management Strategy – Final		

RECOMMENDATION

Suggested Resolution

"THAT: Staff Report CORP-15-2024 be received **AND FURTHER THAT** the Watershed-Based Resource Management Strategy Version 1.0 be approved."

LINK TO STRATEGIC PLAN (2023-2027)

All Areas.

EXECUTIVE SUMMARY

As required in O. Reg. 686/21 under the *Conservation Authorities Act*, all Conservation Authorities must prepare a “watershed-based resource management strategy” by December 31, 2024. Consultation was completed on the draft document as required with no comments received. The final version of the Strategy is being presented to the Board for approval.

DISCUSSION

Ontario Regulation 686/21: Mandatory Programs and Services, sets out the Mandatory Programs and Services which must be delivered by all Conservation Authorities in Ontario. Subsection 12(1)3 of the regulation requires all Conservation Authorities to prepare a “watershed-based resource management strategy” in accordance with subsections 12(4) through (9) on or before December 31, 2024. The first version of the LRCA’s Watershed-Based Resource Management Strategy (attachment #1) will guide the efficient, transparent, and inclusive approach for the delivery of mandatory programs and services provided by the Authority.

The Watershed-Based Resource Management Strategy will encompass the LRCA’s vision to provide a healthy, safe, and sustainable Lakehead Watershed for future generations, with a mission to lead in the conservation and protection of the Lakehead Watershed. The Watershed-Based Resource Management Strategy will serve as a complimentary document to the Strategic Plan and Conservation Lands Strategy, that specifically relates to the mandatory programs provided by the LRCA. The three documents encompass similar themes, focused on achieving goals and objectives that align with the LRCA’s mandate. The Watershed-Based Resource

Management Strategy will follow the same pillars focusing on the four priorities: Conserve and Sustain, Protect and Support, Connect and Explore, and Govern and Enhance.

No comments were received from the public or the Board of Directors during the consultation period.

FINANCIAL IMPLICATIONS

Any future actions resulting from the objectives will be included, if warranted, in future budgets.

CONCLUSION

The final draft of the Watershed-Based Resource Management Strategy has been completed after a period of consultation was undertaken, with no comments received. The final document is being brought forward for Board approval.

The Watershed-Based Resource Management Strategy will be used along with the Strategic Plan and Conservation Lands Strategy to set priorities going forward for the LRCA.

BACKGROUND

Ontario Regulation 686/21: Mandatory Programs and Services, sets out the Mandatory Programs and Services which must be delivered by all Conservation Authorities in Ontario. Subsection 12(1)3 of the regulation requires all Conservation Authorities to prepare a “watershed-based resource management strategy” in accordance with subsections 12(4) through (9) on or before December 31, 2024.

The Watershed-Based Resource Management Strategy “Watershed Strategy” is to include the following components:

1. Guiding principles and objectives that inform the design and delivery of the programs and services that the authority is required to provide under section 21.1 of the Act.
2. A summary of existing technical studies, monitoring programs and other information on the natural resources the authority relies on within its area of jurisdiction or in specific watersheds that directly informs and supports the delivery of programs and services under section 21.1 of the Act.
3. A review of the authority’s programs and services provided under section 21.1 of the Act for the purposes of,
 - i. determining if the programs and services comply with the regulations made under clause 40 (1) (b) of the Act,
 - ii. identifying and analyzing issues and risks that limit the effectiveness of the delivery of these programs and services, and

- iii. identifying actions to address the issues and mitigate the risks identified by the review, and providing a cost estimate for the implementation of those actions.
- 4. A process for the periodic review and updating of the watershed-based resource management strategy by the authority that includes procedures to ensure stakeholders and the public are consulted during the review and update process.
- 5. The Authority must ensure that stakeholders and the public are consulted during the preparation of the Watershed Strategy in a manner that the Authority considers advisable.
- 6. The Authority must ensure that the Watershed Strategy is made public on the Authority's website, or by such other means as the Authority considers advisable.

REFERENCE MATERIAL ATTACHED

Attachment #1 – Watershed-Based Resource Management Strategy, Version 1.0– Final Draft

PREPARED BY: Tammy Cook, CAO

THIS REPORT SIGNED AND VERIFIED BY:	DATE:
 Tammy Cook Chief Administrative Officer	November 20, 2024



LAKEHEAD REGION
CONSERVATION AUTHORITY

Watershed-Based Resource Management Strategy

Version 1.0

November 2024

VERSION	APPROVAL DATE	RESOLUTION #
1.0	November 27, 2024	##/24

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EXECUTIVE SUMMARY

All Conservation Authorities in Ontario are required to complete a Watershed-Based Resource Management Strategy under Section 21.1 of the *Conservation Authorities Act* and Ontario Regulation 626/21 under this Act, by December 31, 2024.

The Strategy will assist the LRCA with evolving or enhancing the delivery of Mandatory Programs and Services and assess issues and risks that impact effective delivery. Components of the Strategy include:

- Setting guiding principles and objectives to inform the design and delivery of Mandatory Programs.
- Characterizing the system by summarizing existing technical studies, monitoring programs and other information on the natural resources within the LRCA area of jurisdiction that directly informs and supports the delivery of the LRCA's Mandatory Programs and Services.
- A review of the Mandatory Programs and Services for the purpose of determining if they comply with the mandatory programs and services regulation.
- Assess and identify any issues and risks which may limit effective delivery of the Mandatory Programs and Services.
- Developing potential actions by identifying future programs, reports, services, and actions to meet objectives and long-term goals and identify where opportunities exist for improving and/or maintaining watershed health.
- Process for periodic review and update of the Strategy.

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- Map 8: Provincial Water Quality Monitoring Network Locations

1 INTRODUCTION

The Lakehead Region Conservation Authority (LRCA) is a community-based environmental non-profit agency that provides for the organization and delivery of programs and services that further the conservation, restoration, development and management of natural resources within the Lakehead Watershed. The LRCA was established in 1954 (initially the Neebing Valley Conservation Authority) by the Province of Ontario at the request of municipalities in the Lakehead watershed. The area of jurisdiction of the LRCA is shown on Map 1: Area of Jurisdiction.

As legislated, the LRCA provides mandatory programs that manage the risk of natural hazards, manage land owned or managed by the Authority, protect sources of drinking water and monitor groundwater and surface water. The Authority also provides non-mandatory programs including programs at the request of a municipality (GIS mapping service, water sampling) and programs that the LRCA considers to be beneficial to the watershed such as stewardship on public and private lands and environmental education programming.

Conservation Authorities have been mandated to complete a Watershed-Based Resource Management Strategy by December 31, 2024. This document is the first version of the LRCA's Watershed-Based Resource Management Strategy, which will guide the efficient, transparent, and inclusive approach for the delivery of mandatory programs and services provided by the Authority.

In addition to the Watershed-Based Resource Management Strategy, a Lands Inventory and Conservation Lands Strategy are being developed as legislated.

1.1 Purpose of Document

The purpose of the Watershed Strategy is to assist the LRCA with evolving or enhancing the delivery of programs and services and improve efficiencies and their effectiveness in supporting Mandatory Category 1 programs.

The goal of the Watershed Strategy is to design and deliver cost-effective programs and services that protect people and property from natural hazards and achieve the pillars in the LRCA Strategic Plan:

- Conserve and Sustain
- Protect and Support
- Connect and Explore
- Govern and Enhance.

1.2 *Legislative Requirements*

Ontario Regulation 686/21: Mandatory Programs and Services, sets out the Mandatory Programs and Services which must be delivered by all Conservation Authorities in Ontario. Subsection 12(1)3 of the regulation requires all Conservation Authorities to prepare a “watershed-based resource management strategy” in accordance with subsections 12(4) through (9) on or before December 31, 2024.

The Watershed-Based Resource Management Strategy “Watershed Strategy” is to include the following components:

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

The Watershed Strategy is to only include Mandatory Programs and Services, and can only include Non-Mandatory Programs, if an Agreement has been executed with the Conservation Authority’s member municipalities. The LRCA does not have any such Agreement in place; therefore, the Watershed Strategy does not include Non-Mandatory Programs (i.e., Stewardship and Environmental Education).

2 BACKGROUND

The current LRCA Five-Year Strategic Plan 2023-2027 outlines the overall priorities and initiatives for the Authority over the five-year period, carrying on from the Authority's first ever Strategic Plan that was adopted in 2018. The plan provides a focus on the continual protection of natural hazards, natural heritage, and ecosystems, in partnership with the community and organizations in the watershed.

The Watershed-Based Resource Management Strategy will encompass the LRCA's vision to provide a healthy, safe, and sustainable Lakehead Watershed for future generations, with a mission to lead in the conservation and protection of the Lakehead Watershed. The Watershed-Based Resource Management Strategy will serve as a complimentary document to the Strategic Plan and Conservation Lands Strategy, that specifically relates to the mandatory programs provided by the LRCA. The two documents encompass similar themes, focused on achieving goals and objectives that align with the LRCA's mandate. The Watershed-Based Resource Management Strategy will follow the same pillars focusing on the four priorities: Conserve and Sustain, Protect and Support, Connect and Explore, and Govern and Enhance.

2.1 Area of Jurisdiction

The LRCA's area of jurisdiction is approximately 2,719 square kilometres (Map 1) and includes the eight Member Municipalities of the LRCA including: City of Thunder Bay, Municipalities of Neebing, Shuniah and Oliver Paipoonge and the Townships of Conmee, O'Connor, Gillies and Dorion. The Ministry of Natural Resources is responsible for the areas outside the jurisdiction of the Authority. The scientific boundary of the Lakehead Watershed is 11,526 square kilometres.

2.2 Lakehead Region Conservation Authority

The LRCA is a community-based environmental protection and advisory agency, established in 1954 (initially the Neebing Valley Conservation Authority) by the Province of Ontario at the request of municipalities in the Lakehead watershed. The LRCA's purpose is to provide for the organization and delivery of programs and services that further the conservation, restoration, development and management of natural resources in the Lakehead Watershed. Conservation Authorities undertake a broad range of programs, including: watershed management, erosion control, Flood Forecasting and Warning, recreation and land management, water level monitoring, Plan Review, environmental education and stewardship. We improve quality of life by actively providing Conservation Areas for semi-passive recreation and environmental education opportunities.

Our integrated approach to resource management leads to a wide range of programs and projects, which are aimed at keeping our watersheds healthy. We improve quality of life by actively providing open space and protecting life and property from flooding and erosion, as well as restoring and conserving aquatic and natural habitats. In addition to serving our watershed residents, we also provide advice and counsel to all levels of government regarding natural hazards.

The LRCA is one of 36 Conservation Authorities across Ontario, including one of five in Northern Ontario.

2.3 Strategic Plan

In 2017, the LRCA adopted vision and mission statements and in January 2018, the LRCA adopted its first ever Five-Year Strategic Plan for the period 2018-2022. The Strategic Plan was updated in 2022 for the next five-year period (2023-2027). The Strategic Plan identifies four main priorities including: conserve and sustain; protect and support; connect and explore; and govern and enhance. LRCA's vision and mission statements are as follows:

Vision: A healthy, safe and sustainable Lakehead Watershed for future generations.

Mission: To lead the conservation and protection of the Lakehead Watershed.

2.4 Inventory of Programs

O. Reg. 687/21: Transition Plans and Agreements for Programs and Services under Section 21.1.2 of the *Conservation Authorities Act* mandated that every Conservation Authority prepare prior to February 28, 2022, an inventory that listed all programs and services that the Authority was providing or intended on providing in the future. As required, the LRCA prepared the inventory and updated it as programs developed. As outlined in Version 4.0 of the Inventory, the programs are organized into three categories:

- Category 1: Mandatory Programs and Services
- Category 2: Non-Mandatory Programs and Services at the request of a Municipality
- Category 3: Non-Mandatory Programs and Services.

2.4.1 Mandatory Programs

The Mandatory Programs (Category 1) were categorized into Program Areas and Subservices. The programs include:

Table 1: Category 1: Mandatory Programs

Category 1: Mandatory Programs	
Program Area	Subservice
Enabling Service	<ul style="list-style-type: none"> • Administration • Community Relations • Vehicle and Equipment • Information Technology • Corporate GIS
Risk of Natural Hazards	<ul style="list-style-type: none"> • Floodplain Mapping • Technical Studies • Communications and Outreach • Flood Forecasting and Warning • Drought and Low Water Response • Infrastructure: Neebing-McIntyre Floodway • Infrastructure: Victor Street Erosion • Review of Proposals under an Act • Plan Review Comments • Administering and Enforcing the Act (Section 28 Development Regulations)
Management, Operation and Maintenance of CA Owned Land	<ul style="list-style-type: none"> • Conservation Areas • Administer Section 29 Regulations in Conservation Areas • Other Owned Land
Source Water Protection	<ul style="list-style-type: none"> • Source Water Protection
Other Programs and Services	<ul style="list-style-type: none"> • Water Quality and Quantity Monitoring: Provincial Groundwater Monitoring Network • Water Quality and Quantity Monitoring: Provincial Water Quality Monitoring Network • Watershed-Based Resource Management Strategy

2.4.2 Non-Mandatory Programs

The Non-Mandatory Programs include both programs at the request of a municipality (Category 2) and those that the Conservation Authority deems to be necessary (Category 3).

Table 2: Non-Mandatory Programs

Category 2: Non- Mandatory Programs at the Request of a Municipality	
Program Area	Subservice
Mapping Service	<ul style="list-style-type: none"> • GIS Mapping Service. Maintaining hardware and software required to provide a web-based mapping service that provides mapping capabilities to users.
Water Quality Monitoring	<ul style="list-style-type: none"> • Mosquito and Pennock Creek Monitoring
Category 3: Non- Mandatory Programs	
Program Area	Subservice
Education	<ul style="list-style-type: none"> • Environmental Education • Nature Interpretive Programming
Stewardship	<ul style="list-style-type: none"> • Superior Stewards • Tree Seedling • Seeds for Conservation • Private Land Stewardship • Invasive Species

3 GUIDING PRINCIPLES AND OBJECTIVES

LRCA's Strategic Plan (2023-2027) provides a framework for the LRCA outlining the Authority's guiding principles (pillars), vision and mission.

Vision: A healthy, safe and sustainable Lakehead Watershed for future generations.

Mission: To lead the conservation and protection of the Lakehead Watershed.

The objectives of the Watershed-Based Resource Management Strategy provide high-level context and guidance and direction for actions related to the Mandatory Programs and Services provided by the LRCA. Aligning with the LRCA's Five-Year Strategic Plan, the objectives will focus on the Strategic Plan's four pillars relating to the programs and services provided by the LRCA.

3.1 Guiding Principles

Principle: a concept or idea that guides measurable actions.

Table 3: Guiding Principles

Strategic Plan Pillar	Guiding Principles
Conserve and Sustain <i>Enhance the management and sustainability of natural habitats and ecosystems through an integrated approach.</i>	<ul style="list-style-type: none"> The conservation, restoration, development, and management of natural resources is best implemented on a watershed basis.
Protect and Support <i>Safeguard people, property and communities through robust watershed management.</i>	<ul style="list-style-type: none"> Water and other natural resources are vital natural assets; they buffer the impacts of climate change, mitigate natural hazards, filter contaminants, assimilate waste, sustain biodiversity, and provide green spaces for recreation, among other community benefits. The health and safety of watershed residents is a primary consideration for all decisions.
Connect and Explore <i>Maximize intergenerational educational, engagement and recreational opportunities through strong collaborations.</i>	<ul style="list-style-type: none"> The management of water and other natural resources is a shared responsibility among Conservation Authorities, Municipalities, government agencies and other stakeholders.

	<ul style="list-style-type: none"> • Natural green spaces are critical to the community, providing environmental, economic, social, mental and physical health benefits. • Community education leads to environmental stewardship – active participation in conservation efforts to protect land and water resources.
Govern and Enhance <i>Distinguish the organization as a leader in environmentally-sustainable practices and responsible stewardship.</i>	<ul style="list-style-type: none"> • The Watershed-Based Resource Management Strategy provides the necessary framework for identifying and assessing resource conditions, trends, risks, and issues and implementing the delivery of programs to manage them. • The Watershed-Based Resource Management Strategy informs policy and decision-making by the Conservation Authority, participating Municipalities, and other partners. • Resource management decisions are integrated and transparent and take into consideration a broad range of community uses, needs, and values, including ecosystem needs.

3.2 Objectives

Objective: a statement describing desired outcomes for measurable short-term actions that help achieve a goal.

Table 4: Objectives

Strategic Plan Pillar	Objectives
Conserve and Sustain <i>Enhance the management and sustainability of natural habitats and ecosystems through an integrated approach.</i>	<ul style="list-style-type: none"> • Protect, enhance and restore natural areas to improve ecosystems health and resilience. • To identify and understand key resource issues and the primary stressors that cause them.
Protect and Support <i>Safeguard people, property and communities through robust watershed management.</i>	<ul style="list-style-type: none"> • Develop and maintain programs that will protect life and property from natural hazards such as flooding and erosion. • To avoid, reduce or mitigate risk to public health and safety and property damage from flooding and other natural hazards and the impacts of climate change. • To monitor key indicators of natural resource issues to describe conditions, trends, and risks. • To characterize surface/groundwater systems and natural resources, which support hydrological and ecological integrity and influence natural hazard processes.

	<ul style="list-style-type: none"> • To work with the City of Thunder Bay and the Municipality of Oliver Paipoonge to mitigate potential risk to drinking water sources and ensure a sustainable and clean municipal water supply for the watershed community.
Connect and Explore <i>Maximize intergenerational educational, engagement and recreational opportunities through strong collaborations.</i>	<ul style="list-style-type: none"> • To protect and maintain Conservation Authority owned lands for public safety, natural heritage protection, outdoor recreation, and socio-economic health. • To educate and engage the watershed community to promote awareness of natural hazards and watershed health, and to encourage the protection and restoration of land and water resources through stewardship action.
Govern and Enhance <i>Distinguish the organization as a leader in environmentally-sustainable practices and responsible stewardship.</i>	<ul style="list-style-type: none"> • Demonstrate organizational excellence through the effective and efficient delivery of LRCA's programs and services in an equitable and respectful manner. • Manage the LRCA's landholdings in a responsible and sustainable way.

4 CHARACTERIZE THE SYSTEM

The LRCA relies on a variety of existing reports, studies and information to inform and support the delivery of the mandatory programs and services.

The information has been summarized in the following appendices summarized by Member Municipality and program area:

- Appendix A: Studies
- Appendix B: Monitoring Programs
- Appendix C: Available GIS Data
- Appendix D: Issues, Risks and Potential Actions

4.1 Existing Studies

The existing studies utilized in the administration of mandatory programs and services are summarized by Member Municipality in Appendix A and include the following:

Table 5: Existing Studies

Program Area	Type of Study
Risk of Natural Hazards	<ul style="list-style-type: none"> • Watershed Report Card • Floodplain Mapping • Lake Superior Information • Wetland Evaluations • Erosion Studies
Source Water Protection	<ul style="list-style-type: none"> • Thunder Bay Area Aquifer Characterization Groundwater Management and Protection Study (2005) • Lakehead Source Protection Area, Water Budget and Water Quantity Stress Assessment (2007) • Groundwater Vulnerability Analysis Issues Evaluation Threats, Inventory and Water Quality Risk Assessment for Hamlet of Rosslyn Village WHPA (2008) • Lakehead Watershed Characterization Report (2008) • City of Thunder Bay Source Protection Technical Study - Phase 1 (2009) • City of Thunder Bay Source Protection Planning Technical Study - Phase 2 (2009) • Approved Assessment Report (2011) • Approved Source Protection Plan (2013)
Conservation and Management of Owned Land	<ul style="list-style-type: none"> • Asset Management Plan • Forest Management Plans • Natural Heritage Information

4.1.1 Risk of Natural Hazard Studies

Watershed Report Card

Every five years the LRCA prepares a Watershed Report Card (last version completed in 2023) for the LRCA Area of Jurisdiction that uses criteria established by Conservation Authorities to provide an average grade for groundwater quality, surface water quality, forested areas and wetland coverage. The grade scores are calculated based on available data collected during the five-year reporting period such as Watershed Assessments on various rural rivers and streams and data collected in partnership with the Ministry of the Environment, Conservation and Parks (i.e., Provincial Groundwater Monitoring Network and Provincial Water Quality Monitoring Network). Forest conditions and wetland cover are calculated in house using available GIS data at the time of assessment.

The LRCA currently does not complete any benthic macroinvertebrates or chloride surface water monitoring, which are parameters monitored by other Conservation Authorities.

Floodplain Mapping

The Regulatory Floodplain is the approved standard used in a particular watershed to define the limit of the floodplain for regulatory purposes. LRCA's Floodplain Mapping is used to complete mandatory program services and requirements including administering: O. Reg. 41/24: Prohibited Activities, Exemptions and Permits; Plan Review; and Flood Forecasting. Adaptive watershed management requires a preventative and proactive approach to address the potential impacts of urbanization and climate change.

The Authority has completed various floodplain mapping studies over the years, which are currently used during the administration of O. Reg. 41/24, and for Plan Review purposes. When the original studies were completed, partial funding was provided under a variety of government funding programs. The studies were completed between 1979 and 1985, with McVicar Creek updated in 1995.

National Disaster Mitigation Funding was used to fund updates to floodplain mapping studies that were completed including:

- McIntyre River (2015),
- Neebing River (2018),
- McVicar Creek (2019),
- Kam River (2020),
- Pennock Creek, (2020),
- Mosquito Creek, (2020).

Completed studies are shared with applicable Member Municipalities for use by the engineering departments, for asset management and to be incorporated into their Official Plan and Zoning By-Law.

Floodplain mapping has been completed on the major watercourses in the City of Thunder Bay and a small portion of the watersheds in the Municipality of Oliver Paipoonge. One small creek (Northstar Creek) in the Municipality of Shuniah has floodplain mapping, which was completed by a developer. Completed mapping is shown on Map 2: Completed Floodplain Studies. The majority of the watersheds in the jurisdiction do not have floodplain mapping completed, due to a lack of funding and lack of development pressure.

Lake Superior Information

The 100-year flood elevation is obtained from the Great Lakes St. Lawrence River System and Large Inland Lake Technical Guides (2001). Required studies include confirmation of the current 100-year flood level, determination of 100-year erosion hazard and the wave uprush hazard and confirmation there are no dynamic beaches along the shoreline.

Wetland Studies

The LRCA utilizes the historic Ministry of Natural Resources (MNR) delineated provincially significant wetlands as available in the Lands Inventory Ontario (LIO) warehouse. Since 2015, the LRCA has completed wetland mapping and evaluation studies within selected watersheds through funding from external sources. The watersheds with evaluated and mapped wetlands are the Neebing River (2019), McVicar Creek (2016), McIntyre River (2018) and Mosquito Creek (2019) watersheds, which represent approximately 14% of the total watershed area, respectively. Through this process McVicar and the McIntyre wetlands were deemed to be Provincially Significant. In 2021, the remaining wetlands in the LRCA area of jurisdiction had their outer extents mapped and confirmed along with the production of a GIS shapefile that included the wetland types and ecosites as defined by Ontario's Ecological Land Classification. Completed Wetland Studies are shown on Map 3. The rural wetland boundaries delineated in 2021 require ground truthing and further refinement.

Erosion Studies

Kam River Erosion Site Inventory

The Kaministiquia River Erosion Sites Inventory Report (Study) updated the previous 1987 record of Erosion Sites and delineated the 100-year Erosion Hazard Limit and Fill Line maps. The Study acquired historical air photos and satellite imagery (from 1983 and 2006), digital orthophotos (from 2007 and 2017), LiDAR data (May 2018), features from LIO, and information from various historical studies to estimate the actual recession rate of the Kaministiquia River (Kam River) top of bank and river edge at identified Erosion Sites. Further, topographic and bathymetric surveys were conducted to collect data on

water level, slopes, river thalweg, soil samples, drainage features, structures at each Erosion Site, as well as photo logs and video surveillance along the Kam River.

The actual rate of erosion at each Erosion Site over the 35-year period of study (i.e., 1983 to 2019) was estimated, and an average erosion rate was calculated to represent all toe erosion with one rate and all slope erosion with one rate. The 100-year Erosion Hazard allowance was determined by using the greater of the site-specific rate or the average rate (associated with the given site) and multiplied by 100. The allowance in metres was applied from either the projected 2:1 slope (toe erosion) or the top of slope (slope erosion). All stable slopes were considered to be stable with an average annual recession rate of 0 m/year. The Fill Line is located 15 metres from either the 100-year Erosion Hazard Limit, or 15 metres from the intersection of the 2:1 stable slope measured from the rivers edge.

The study identified several areas of concern based on the erosion site findings, which were grouped into categories for specific recommendations. Areas of concern in Group I show signs of erosion or recent failure and have inherent threat to life, infrastructure, or adjacent structures. Areas of concern in Group II show signs of erosion or failure, however threat to loss of life or infrastructure is not immediate. The study recommends regular monitoring of the areas of concern and notes that property owners are responsible to monitor their own lands.

Documents produced as part of the study included a LiDAR Project Report, Erosion Sites Inventory Report, and 100-year Erosion Hazard Limit and Fill Line Maps. The estimated 100-year erosion Hazard Limit and Fill Line Maps will require updating approximately every 10 years.

Victor Broadway Assessment Study

In 2019, LRCA retained KGS Group to complete a study to determine the 100-year erosion limits of the Kam River. The results of that study identified the Victor/Broadway area as an area of concern which was categorized into the highest risk group with regards to inherent threat to life, adjacent structures or infrastructure. As a result of that determination, Hatch Consulting was retained by the Lakehead Region Conservation Authority to perform a study of the existing erosion mitigation and slope stabilization measures along the bank of the lower Kaministiquia River, review the causes of erosion, and determine mitigation measures.

The report presented the results of a geotechnical investigation, laboratory testing, subsurface assessment, and slope stability assessment conducted for the study of the Kaministiquia River's bank along Victor Street and Broadway Avenue southwest of Thunder Bay. This study also presents concepts to mitigate risks.

Objectives of the study were to determine the viability and efficacy of the existing measures, assess the cause and extent of slope instability, and develop options or concepts to mitigate potential risk to public and private property within the study area. The main focus area of the study was Victor Street and the associated utilities and infrastructure along its corridor. Victor Street is the only access and egress for 74 residential lots; the consequences of a slope failure damaging Victor Street and the associated utilities would be detrimental for the residents who rely on it. The study area also reviewed the area along Broadway Avenue between Victor Street and Daisey Lane as well as the Daisey Lane neighbourhood.

4.1.2 Source Water Protection Studies

The following technical reports were prepared as part of the process to create the Lakehead Source Protection Plan.

Technical Reports:

- ***Thunder Bay Area Aquifer Characterization Groundwater Management and Protection Study (2005)***
 - The Thunder Bay Aquifer Characterization Groundwater Management and Protection Study was completed to meet the following objectives: obtain a better understanding of the groundwater resources, uses and vulnerability within the study area; complete a hydrogeological characterization and mapping of the area; complete an inventory and assess potential contaminant sources; assess water use in the area; assess groundwater vulnerability; and assist in the development of groundwater protection strategies.
- ***Lakehead Source Protection Area, Water Budget and Water Quantity Stress Assessment (2007)***
 - The report provided an analysis of how much water was available within the boundaries of the Lakehead Source Protection Area. The focus of the water budgeting activities carried out for the Lakehead Source Protection Area was restricted to municipal drinking water systems only, which included the ground water supply in Rosslyn, the Lake Superior intake for Thunder Bay, and the former intake in Loch Lomond for Thunder Bay (which technically was no longer classified as a municipal system). The water budget was linked to the Watershed Characterization (LRCA, 2006) and provided a conceptual quantitative look at the watershed.
- ***Groundwater Vulnerability Analysis, Issues, Evaluation, Threats, Inventory and Water Quality Risk Assessment for Hamlet of Rosslyn Village WHPA (2008)***

- AMEC conducted a Groundwater Vulnerability Analysis, Issues Evaluation, Threats Inventory and Water Quality Risk Assessment for the Wellhead Protection Area of the Hamlet of Rosslyn Village.
- **Lakehead Watershed Characterization Report (2008)**
 - The Watershed Characterization Report is a documentation of the water resources within the boundaries of the Lakehead Source Protection Area. The Characterization Report provides a description of the natural environment and the human influences that may impact water quantity and quality of the watershed as it relates to Source Protection Planning.
- **City of Thunder Bay Source Protection Technical Study - Phase 1 (2009)**
 - Stantec Consulting Limited completed a Surface Water Vulnerability Analysis for the Bare Point Water Treatment Plant surface water intake on Lake Superior.
- **City of Thunder Bay Source Protection Planning Technical Study - Phase 2 (2009)**
 - Stantec Consulting Limited completed the Issues Evaluation and Threats Inventory and Water Quality Risk Assessment (Tier 1) for the Bare Point Water Treatment Plant surface water intake on Lake Superior.
- **Approved Assessment Report (2011)**
 - The Approved Assessment Report describes local watershed characteristics and the available water supply in the watershed of the Lakehead Source Protection Area. It identifies the vulnerable areas for Municipal residential drinking water systems where the sources of drinking water may face risk of contamination or depletion and assesses the potential threats to the sources of Municipal residential drinking water within the defined vulnerable areas.
- **Approved Source Protection Plan**
 - The Source Protection Plan is the strategic document for the Lakehead Source Protection Area that outlines policies and procedures to ensure that all significant and potential threats to the sources of Municipal residential drinking water systems are managed in a way that they will never become significant drinking water risks.

4.1.3 Conservation and Management of LRCA Owned Land Studies

Asset Management Plan

In 2021, an update to the LRCA Asset Management Plan (AMP) was completed for existing assets. The AMP was developed to prioritize needs and minimize future repair and rehabilitation costs and maintain assets. The AMP will ensure that sufficient financial planning is undertaken to afford future asset repair maintenance, rehabilitation or replacement or expansion in order to maintain acceptable levels of service for users. The AMP covered a period of 20 years and will require regular updates (i.e. every five years)

to ensure that assets are managed efficiently and sustainably. Reports associated with the AMP include:

- Asset Management Plan Update,
- Condition Assessment of Conservation Areas,
- Condition Assessment of Diversion Structure,
- Condition Assessment of Office Building.

Forest Management Plans

Ten LRCA-owned lands have Forest Management Plans developed under the Managed Forest Tax Incentive program (MFTIP), which provides some tax relief as well as a plan for proper long-term forest management. In 2017, the LRCA contracted KBM to develop and approve Managed Forest Plans for a twenty-year period, from January 1, 2017, to December 31, 2036. The Plans require updating every 10 years, with the next update scheduled in 2026.

Forest Management Plans registered under the MFTIP are for the following LRCA-owned properties:

- Cascades Conservation Area
- Cedar Falls Conservation Area
- Hazelwood Lake Conservation Area
- Hurkett Cove Conservation Area
- Little Trout Bay Conservation Area
- Wishart Conservation Area
- Mills Block Conservation Area
- Harpell/ Bocking (no public access)
- William's Forest (no public access)
- Granite Point (no public access)

Natural Heritage Information

The collection of current natural heritage information on LRCA owned land is a priority and a plan to prioritize data collection will be an action item for completion.

4.2 Monitoring Programs

The LRCA provides a variety of Monitoring Programs as part of the administration of mandatory programs and services. A full summary of the Monitoring Programs administered in each Member Municipality is summarized in Appendix B. Monitoring Programs include the following:

Table 6: Monitoring Programs

Program Area	Type of Monitoring Program
Risk of Natural Hazards	<ul style="list-style-type: none"> • Neebing River Climate Change Station • Precipitation • Streamflow/level • Snow Surveys • Spring Thaw Records • Lake Level Monitoring • Neebing- McIntyre Floodway Level Monitoring • Victor Street/Broadway Erosion Annual Inspections
Conservation and Management of Owned Land	<ul style="list-style-type: none"> • Infrastructure Inspections • Water Quality • Invasive Species Monitoring
Other Programs and Services	<ul style="list-style-type: none"> • Provincial Groundwater Monitoring Network (PGMN) • Provincial Water Quality Monitoring Network (PWQMN)
Non-Mandatory Programs and Services	<ul style="list-style-type: none"> • Wolf River Weir inspections (DFO funded) • Mosquito Creek/Pennock Creek Water Quality Monitoring (City of Thunder Bay funded) • Invasive Species (externally funded)

4.2.1 Risk of Natural Hazard Monitoring Programs

Neebing River Climate Change Station

In partnership with MECP, the Water Survey of Canada Neebing Gauge (02AB008) site was upgraded by the Province to be designated as one of five in the province as a Climate Change Detection and Adaptation Monitoring site. In addition to the existing monitoring of streamflow and precipitation, in 2011 a groundwater monitoring well was installed as part of the Provincial Groundwater Monitoring Program which records groundwater levels every hour and has the groundwater collected annually for water quality analysis. In 2012, soil moisture, air and water temperature sensors were installed and surface

water sampling of the Neebing River was initiated as part of the Provincial Water Quality Monitoring Network. In 2016, a barometric pressure sensor was added to the groundwater well.

Precipitation

Tipping bucket precipitation gauges have been installed at all LRCA streamflow gauge sites. The tipping buckets data is recorded by Water Survey of Canada loggers; however, the precipitation equipment is maintained by the LRCA. The tipping bucket gauges provide a measurement of precipitation which is recorded in the data logger at the gauge site. Tipping bucket gauges do not operate during the winter months. Additionally, tipping buckets are installed as part of the PGMN well program at the Kakabeka Falls and Murillo Fire Hall sites. The data is recorded and downloaded quarterly. The Municipalities of Shuniah and Neebing operate tipping buckets that are accessed by the LRCA.

In 2007, a Geonor Precipitation Gauge was installed at the LRCA office at 130 Conservation Road. The Geonor provides precipitation data (rainfall and snowfall water content) throughout the year. In addition, local volunteers have joined the Community Collaborative Rain, Hail and Snow Network (CoCoRaHS), which is a non-profit, community-based network of volunteers who record and report precipitation utilizing a reporting forum through the internet. The data is viewable by the public through the CoCoRaHS website <http://cocorahs.org/>.

The precipitation monitoring network is summarized in Table 7 below and is shown on Map 4: Precipitation Gauge Locations.

Table 7: Precipitation Gauge Locations

Gauge Name	Operating Season	Gauge Type	Location
McVicar Creek	Spring Summer Fall	Tipping Bucket	City of Thunder Bay Briarwood Street off of Farrand Street
McIntrye River	Spring Summer Fall	Tipping Bucket	City of Thunder Bay Corner of Highway 102 and Dog Lake Road
Neebing River	Spring Summer Fall	Tipping Bucket	City of Thunder Bay Neebing Avenue, behind Arthur Street Market Place
Upper Neebing River	Spring Summer Fall	Tipping Bucket	City of Thunder Bay Corner of John Street and Thompson Road
Current River	Spring Summer Fall	Tipping Bucket	Gorham Township Onion Lake Dam Road
North Current River	Spring	Tipping Bucket	Municipality of Shuniah

	Summer Fall		Isku Park Road
Slate River	Spring Summer Fall	Tipping Bucket	Municipality of Oliver Paipoonge Candy Mountain Road
Whitefish River	Spring Summer Fall	Tipping Bucket	Village of Nolalu Corner of Highway 588 and Old School Road
Corbett Creek	Spring Summer Fall	Tipping Bucket	Municipality of Oliver Paipoonge 98 McNally Road
Geonor	All Year	Geonor – All Weather Precipitation Gauge	City of Thunder Bay LRCA Office 130 Conservation Road
Dorion Fish Hatchery Station	All Year	OTT Pluvio2 - All Weather Precipitation Gauge	Dorion Fish Hatchery Station Fish Hatchery Road
LRCA office CAN-ON-70	All Year	CoCoRaHS Gauge Evapotranspiration	City of Thunder Bay LRCA Office 130 Conservation Road
CAN-ON-87	Spring Summer Fall	CoCoRaHS Gauge	Township of O'Connor Connolly Road
CAN-ON-99	All Year	CoCoRaHS Gauge	Municipality of Neebing Copper Cliff Road East
CAN-ON-97	All Year	CoCoRaHS Gauge	Municipality of Oliver Paipoonge Tysoski Road
CAN-ON-681	All Year	CoCoRaHS Gauge	City of Thunder Bay Caspian Place
CAN-ON-621	All Year	CoCoRaHS Gauge	Simon Fraser Drive City of Thunder Bay
CAN-ON-1030	All Year	CoCoRaHS Gauge	Norah Street South City of Thunder Bay
CAN-ON-1031	All Year	CoCoRaHS Gauge	Hwy 11/17 Pearl
CAN-ON-1077	All Year	CoCoRaHS Gauge	Melbourne Road City of Thunder Bay
Shuniah Municipal Gauges	Spring Summer Fall	Tipping Bucket	Shuniah #1 – Lakeshore Drive Shuniah #2 – Road #5 South Shuniah #3 – Lakeshore Drive

Neebing Municipal Gauge	Spring Summer Fall	Tipping Bucket	East Oliver Lake Municipality of Neebing
PGMN	Spring Summer Fall	Tipping Bucket	Kakabeka Falls Fire Hall (PGMN well site)
PGMN	Spring Summer Fall	Tipping Bucket	Murillo Fire Hall (PGMN well site)

Streamflow/Level

Water Survey of Canada in partnership with the LRCA shares the data from streamflow/level gauges on watersheds that affect the LRCA Area of Jurisdiction. In addition to the LRCA gauges, other gauges are accessed through Environment Canada and the MNR WISKI Web (i.e. Wolf River gauge and Fort William Historical Park's Kaministiquia River gauge).

The streamflow gauges measure water levels at each gauge station and record the levels in the data logger at the gauge station. Environment Canada Stage Discharge Curves are used to convert the stream level to stream flow. Return period stream flows have been calculated for all watercourses where floodplain mapping has been completed. The streamflow/level gauge locations are summarized in Table 8 below and are shown on Map 5: Streamflow Gauge Locations.

Table 8: Streamflow/Level Gauge Locations

Gauge	Location
McVicar Creek 02AB019	City of Thunder Bay Briarwood Street off of Farrand Street
McIntrye River 02AB020	City of Thunder Bay Corner of Highway 102 and Dog Lake Road
Neebing River 02AB008	City of Thunder Bay Neebing Avenue, behind Arthur Street Market Place (upgraded in 2011/2012 for climate change monitoring purposes).
Upper Neebing River 02AB024	City of Thunder Bay Corner of John Street and Thompson Road
Current River 02AB021	Township of Gorham Dam Road
North Current River 02AB014	Municipality of Shuniah Isku Park Road
Slate River 02AB023	Municipality of Oliver Paipoonge Candy Mountain Road
Whitefish River 02AB017	Village of Nolalu, Township of Lybster Corner of Highway 588 and Old School Road

Whitefish River 02AB027	Municipality of Oliver Paipoonge 70 Sideen Drive
Corbett Creek 02AB022	Municipality of Oliver Paipoonge 98 McNally Road

The Conservation Authority has access to real-time streamflow gauge levels and precipitation data 24 hours per day through equipment located at the Authority office. All streamflow data is stored in a database at the Authority office and is also available through Water Survey of Canada's website: https://wateroffice.ec.gc.ca/index_e.html.

The LRCA utilizes Water Information Systems by KISTER (WISKI) software. The internet-based software enhances the LRCA's ability to collect real-time streamflow levels and precipitation levels. The WISKI software package also includes an Alarm Manager which will send alerts to the LRCA when critical levels and precipitation rates have been detected on area gauges.

Snow Surveys

Since 1974, snow surveys have been conducted bi-monthly (15th and 30th) by the staff of the LRCA between November 15th and May 15th each year. The three historical snow survey locations are located at Hazelwood Lake Conservation Area (Current River), Madeline Street in the City of Thunder Bay (McVicar Creek) and Vibert Road in the Municipality of Oliver Paipoonge (Pennock Creek). Snow depth and weight (water content) are collected and forwarded to the MNR's Surface Water Monitoring Centre as part of the Flood Forecasting Program.

Historical averages are compared to current snow depth/water content results to determine snowpack conditions for a particular time of year. Snow water equivalent values are used to estimate the potential water content in the snow during times of melt. As part of the CoCoRaHS program the LRCA records snow depth at the LRCA office.

The snow survey locations are shown on Map 6: Snow Survey Locations.

Spring Thaw Records

Since 1971 the Lakehead Region Conservation Authority has maintained Spring Thaw Records of when area rivers are considered to be open and ice free. Records have been kept for the Neebing River, McIntyre River, McVicar Creek and the Kaministiquia River. Typically, rivers are ice-free between mid-March and mid-April.

Lake Level

Since 2010, using an installed staff gauge fixed to the bedrock, Oliver Lake resident volunteers report to the LRCA the level of Oliver Lake in the Municipality of Neebing, which is then recorded at the LRCA for historical purposes.

Measurements were taken at Loon Lake in the Municipality of Shuniah between June 2010 to October 2014 at the public dock. Since that time the municipal dock was removed and replaced with a new structure.

Neebing-McIntyre Floodway Level

In 2024, an automated system to collect water level readings at four locations along the Diversion and Floodway channels were installed to digitally log water level data and automatically send the logger data to the LRCA office via a Solinst cloud telemetry system. The system collects accurate measurements of water levels to ensure future updates to the flood models can be properly calibrated. The data will also provide records of diversion. The four logger locations are:

- Diversion Structure (Neebing River),
- Redwood Bridge (Diversion Channel),
- Chapples Pedestrian Bridge (Diversion Channel),
- Balmoral Street Bridge (Floodway Channel).

Victor/Broadway Erosion

In order to protect City of Thunder Bay infrastructure along Victor Street (i.e. road surface and water mains), the LRCA has completed soil nailing at several erosion sites along the Kaministiquia River banks on land owned by the City of Thunder Bay .

Five sites were treated in 2005, and three sites were treated in 2014/2015 with DST Consulting Engineer's proprietary soil nail stabilization system SNART (Soil Nail and Root Technology), which is comprised of steel bars inserted into the soil extended below all potential failure surfaces. The nails are typically installed on a 1 to 1.5 metre grid to varying depths up to 11.0 metres. Vegetation was then planted over the area. The design life of the soil nailed areas is estimated to be 50 to 100 years. Bi-annual inspections are conducted by engineering consultants of the erosion prone, soil nailed remediated City owned lands along Victor Street to assess the condition of the existing remediation and to identify any new emerging erosion issues.

4.2.2 Conservation and Management of Owned Land Monitoring Programs

Infrastructure Inspections

Annually engineering consultants are hired to conduct inspections and provide condition reports on the following infrastructure:

- Mission Island Marsh Conservation Area Boardwalk
- Diversion Structure
- Neebing River Weir
- Hazelwood Lake Dam.

Additionally, staff inspect the Hazelwood Lake Conservation Area Causeway and prepare an annual report.

Water Quality Monitoring

The LRCA monitors water quality at four conservation areas: Hazelwood Lake, Hurkett Cove, Mission Island Marsh and Silver Harbour. *E. coli* levels are monitored at Hazelwood Lake and Mission Island Marsh under the Thunder Bay District Health Unit's Bathing Beach Program. Cyanobacteria and algae blooms are monitored at all four sites, with the assistance of Blue Green Labs to conduct microbiology assessments.

Invasive Species

In partnership with Parks Canada Lake Superior National Marine Conservation Area, LRCA is monitoring to gain a better understanding of the extent and potential impacts of Narrowleaf Cattail at Hurkett Cove Conservation Area. The two-year project (2024-2025) will result in the development of a management strategy, with the aim of reducing the spread of invasive cattails, impacts on Wild Rice, and subsequent loss of biodiversity at the site.

4.2.3 Other Programs and Services Monitoring Programs

Provincial Groundwater Monitoring Program (PGMN)

The LRCA, in partnership with the MECP, participates in the Provincial Groundwater Monitoring Program (PGMN) in which LRCA monitors ambient groundwater level and water chemistry in eight groundwater monitoring wells. Water levels are recorded hourly with level loggers installed in each of the wells. The level loggers are downloaded four times per year and corrected using collected barometric pressure and temperature data. LRCA staff collect water samples once per year and submit them to the MECP laboratory for analysis. Laboratory costs and sample shipping costs are paid by the MECP. The data is available from MECP [MECP Open Data Catalogue](#).

Groundwater monitoring is conducted at the following locations (See Map 7).

- Neebing River (behind Arthur Street Market Place)
- Birch Beach
- Loon Lake

- Kakabeka Fire Hall
- Murillo Fire Hall
- Dorion Fish Hatchery
- Wishart Conservation Area
- Hazelwood Lake Conservation Area

Provincial Water Quality Monitoring Program (PWQMN)

The Authority in partnership with the MECP participates in the Provincial Water Quality Monitoring Network (PWQMN) program, in which LRCA monitors seven surface water locations. LRCA staff collect samples once per month during the ice free period and submit them to the MECP laboratory for analysis. Samples collected and analyzed for: total and dissolved nutrients, chloride and metals. Laboratory costs and sample shipping costs are paid by the MECP. Field parameters collected include: conductivity, water temperature, dissolved oxygen, pH and turbidity. The data is available from MECP [MECP Open Data Catalogue](#).

Monitored watersheds include (see Map 8):

- McVicar Creek
- McIntyre River
- Neebing River (two locations)
- Current River
- Kaministiquia River

4.2.4 Non-Mandatory Programs and Services Monitoring

Neebing-Weir and McIntyre River Sea Lamprey Monitoring

Subject to being awarded an annual contract from DFO, the LRCA conducts Sea Lamprey trapping on the Neebing and McIntyre Rivers. Five days per week for eight to twelve weeks, sea lamprey traps are emptied to conduct mark and release studies, collect biological data, environmental data and complete daily reports to provide data to DFO in order for population estimates to be undertaken. These estimates are used along with that of other streams to estimate the population in all of Lake Superior.

Wolf River Weir inspections

Subject to being awarded an annual contract from DFO LRCA staff inspect the Sea Lamprey Barrier and grounds on the Wolf River. LRCA staff conduct five inspections annually and complete a Barrier Inspection/Maintenance Report.

Mosquito Creek/Pennock Creek Water Quality Monitoring

At the request of the City of Thunder Bay Engineering and Operations Division, LRCA staff complete surface water sampling along Mosquito Creek (ten sites) and Pennock Creek (two sites) within the City of Thunder Bay once per month, from June through October. Mosquito Creek and Pennock Creek are both watersheds where residents are serviced by municipal water and private septic systems.

Invasive Species

Partnered with the Invasive Species Centre, the Thunder Bay Regional Phragmites Collaboration is coordinated by LRCA and is composed of 35 stakeholders and groups with the shared vision of a “phrag-free” landscape by 2033. Phragmites stands that have been treated with herbicide for eradication are being monitored to track the success of the treatment and new reported and/or discovered stands are being recorded for future treatment.

4.3 Available GIS and Imagery Resources

The LRCA relies on a variety of GIS Data in the administration of its programs and services. The various sources are outlined in Appendix C: GIS Data. It is anticipated that LiDAR data will be available for LRCA’s entire area of jurisdiction from the MNR in 2025 as part of the Ontario Elevation Mapping Project.

5 Programs and Services

5.1 *Mandatory Programs and Services*

As outlined in the LRCA Inventory of Programs and Services, the LRCA provides all the prescribed Mandatory Programs and Services as outlined in O. Reg. 686/21: Mandatory Programs and Services. The LRCA does not undertake an Ice Management program as it is not considered to be necessary in our area of jurisdiction. The LRCA has completed a Land Inventory and a Conservation Areas Strategy (referred to as “Conservation Lands Strategy”) as required in the regulation. The Mandatory Programs and Services provided by the LRCA are summarized in the following table.

Table 9: Mandatory Programs and Services provided by the LRCA

General Category	Subservice	
Risk of Natural Hazards	Floodplain Mapping	Creation and maintenance of floodplain models and mapping.
	Technical Studies	Studies, mapping and data collection to understand the risks related to natural hazards including how those risks might be affected by climate change. Development of plans and policies to support the delivery of programs.
	Communications and Outreach	Promoting public awareness of natural hazards including flooding, drought and erosion. Public events and materials. Social media services and website. Media relations.
	Flood Forecasting and Warning	Daily data collection and monitoring of weather forecasts, provincial and local water level forecasts and watershed conditions. Flood event forecasting. Flood warning and communications. Maintenance of Equipment. Documentation of flood events. Flood Warning System.
	Drought and Low Water Response	Conditions monitoring/analysis. Technical and administrative support to the Water Response Team representing major water users and decision makers who recommend drought response actions.
	Infrastructure: Neebing-McIntyre Floodway	Operation and minor maintenance of Neebing-McIntyre Floodway.

	Infrastructure: Victor Street Erosion	Monitoring and minor maintenance of Victor Street Erosion. Erosion prone City of Thunder Bay owned land, to ensure protection of infrastructure and maintain access and egress to Victor Street.
	Review of Proposal Under an Act	Input to the review and approval processes under other applicable law (i.e. Aggregate Resources Act, Drainage Act, Environmental Assessment Act, etc.) with comments principally related to natural hazards, wetlands, watercourses and Section 28 permit requirements.
	Plan Review Comments	Technical information and advice to municipalities related to Section 5.2: Natural Hazards (PPS), on circulated municipal land use planning applications (Official Plan and Zoning By-Law Amendments, Subdivisions, Consents, Minor Variances). Input to Municipal land-use planning, documents (OP, Comprehensive ZB, Secondary plans) related to natural hazards, on behalf of MNR(delegated to CAs in 1983).
	Administering and Enforcing the Act (Section 28 Development Regulations)	Reviewing and processing permit applications, associated technical reports, site inspections, communication with applicants, agents and consultants related to development in a regulated natural hazard.
Management, operation and maintenance of CA owned land	Conservation Areas	Operation and minor maintenance in Conservation Areas. Forest management, natural heritage management. Comment on planning applications as a landowner.
	Administer Section 29 Regulations in Conservation Areas	Conservation areas enforcement/compliance.
	Other owned land (i.e. floodplain lands, erosion prone lands, forest management land, etc.)	Operation and minor maintenance in other Conservation Authority owned land. Forest management, natural heritage management.
Source Water Protection		Provide programs and services to ensure the Authority carries out its duties, functions and

		responsibilities as a Source Protection Authority under the provisions of the <i>Clean Water Act</i> (2006). Applies to municipal drinking water systems: City of Thunder Bay Bare Point Water Treatment Plant and Municipality of Oliver Paipoonge Rosslyn Village Drinking Water System. Comment on planning applications related to Source Water Protection.
Other Programs and Services	Water Quality and Quantity Monitoring: Provincial Groundwater Monitoring Network	A long standing (20+ year) CA/MECP partnership for groundwater level and quality monitoring. CA maintains equipment, data transfer to MECP, water sampling; MECP provides equipment, standards, data management and lab analysis. Includes summer students.
	Water Quality and Quantity Monitoring: Provincial Water Quality Monitoring Network	A long standing (50+year) CA/MECP partnership for stream water quality monitoring. CA takes water samples; MECP does lab analysis and data management. Includes summer students.
	Watershed-based Resource Management Strategy	Developing funding principles and objectives that inform the design and delivery of programs and services the CA is required to provide. Collate/compile existing resource management plans, watershed plans, studies and data. Strategy development, implementation and annual reporting. A review of programs and services provide for the purposes of compliance with the regulations and Section 21.1 of the CA Act. Develop process for periodic review including procedures to engage/consult with stakeholders and the public. Strategy development must include a stakeholder and public consultation component. Make available to the public.

5.2 Other Programs and Services (Category 2 and 3 (non-mandatory) that support Category 1 (Mandatory) Programs.

The following Non-Mandatory Programs are provided by the LRCA that directly support the prescribed Mandatory Programs.

Table 10: Non-Mandatory Programs and Services provided by the LRCA that support Category 1 Programs

General Program	Subservice
Category 2	<ul style="list-style-type: none"> • Mosquito Creek/Pennock Creek Water-Quality Monitoring
Category 3	<ul style="list-style-type: none"> • Education: Environmental Education • Education: Nature Interpretive Education • Stewardship: Tree Seedling Program • Stewardship: Private Land Stewardship • Stewardship: Seeds for Conservation • Invasive Species: Sea Lamprey • Invasive Species: Phragmites

5.2.1 Category 2: Non-Mandatory Programs at the request of a Municipality

Mosquito Creek/Pennock Creek Water Quality Monitoring

At the request of the City of Thunder Bay Engineering and Operations Division, LRCA staff complete surface water sampling along Mosquito Creek (ten sites) and Pennock Creek (two sites) within the City of Thunder Bay once per month, from June through October. Mosquito Creek and Pennock Creek are both watersheds where residents are serviced by municipal water and private septic systems.

This program provides additional surface water quality data related to the Mandatory Program: Other Programs and Services, Water Quality and Quantity Monitoring, Provincial Water Quality Monitoring Program.

5.2.2 Category 3: Non-Mandatory Programs

Education: Environmental Education

The Environmental Education program provides curriculum-based educational presentations and field trips to Conservation Areas and within school classrooms. The non-mandatory (i.e., not related to the risk of natural hazards) education program is operated with 100% other funding (no levy). The program covers a wide array of topics including watersheds, various natural heritage, and natural science topics such as birds, trees, aquatics invertebrates, and other topics, many of which are tied directly to Ontario

Ministry of Education curriculum expectations. As a private landowner, the LRCA is uniquely positioned to provide meaningful, impactful outdoor education programming utilizing Conservation Areas as “living classrooms”. Watershed stewardship best practices and fostering a sense of wonder and appreciation for the natural world is the goal of the education program, as the best way to inspire people to care about the natural world and the environment is to give them meaningful educational and recreational experiences.

The Environmental Education program supports all the Mandatory Programs administered by the Authority by educating school age children about all aspects of the natural environment, natural hazards, natural heritage, climate change, etc.

Education: Nature Interpretive Programming

Nature Interpretive Programming is programming developed for execution on LRCA-owned land. This program is funded with non-levy funds. Programs and events with nature interpretive programming components within Conservation Areas vary year to year; however, the Dorion Bird Festival is held annually at Hurkett Cove Conservation Area. Nature interpretive programming also includes Watershed Explorer programs (typically funded by the TD Friends of the Environment Fund), guided hikes, workshops, and other non-school-based interpretive programming.

The Nature Interpretive Program directly relates to the Mandatory Program: Management, Operation and Maintenance of CA Owned Land. This program educates the public related to various environmental topics, natural hazards, natural heritage, and climate change impacts related to land owned by the CA.

Stewardship: Tree Seedling Program

The Tree Seedling Program provides an opportunity for the public to purchase locally grown tree seedlings in the watershed. This program’s goal is to achieve a no net loss of trees in the overall watershed by providing trees to plant to the public to offset any harvesting on LRCA owned land.

The Tree Seedling Program directly relates to the Mandatory Program: Management, Operation and Maintenance of CA Owned Land and also supports the Risk of Natural Hazards Programs by encouraging planting to mitigate and prevent erosion.

Stewardship: Private Land Stewardship

To promote and practice stewardship on private, LRCA and municipally owned lands, staff apply for funding for a variety of projects annually. The specific program varies annually however works towards: removing invasive species, installing low impact developments, planting native species, assisting homeowners to restore impacted riparian zones along lake/river shorelines, etc.

The Stewardship Program directly relates to the Mandatory Program: Management, Operation and Maintenance of CA Owned Land as it works towards the proper management of LRCA owned lands. It also supports all the Risk of Natural Hazards programs, as it assists in educating, mitigating and preventing flooding and erosion issues on land within the watershed.

Stewardship: Seeds for Conservation

The Seeds for Conservation program offers native perennials grown from seed sustainably harvested by staff from LRCA Conservation Areas. The plants are grown in the LRCA Greenhouse by LRCA staff. With insufficient access to Northwestern Ontario native species through local nurseries, LRCA's Seeds for Conservation program provides regionally adapted seed and plants for habitat restoration projects, pollinator gardens, rain gardens, and more. It is used by LRCA and community partners such as Fort William First Nation, Ontario Native Women's Association, the City of Thunder Bay, EcoSuperior, Lakehead University and Confederation College.

The Seeds for Conservation Program directly relates to the Mandatory Program: Management, Operation and Maintenance of CA Owned Land as it provides native plants for projects, and enhancement and remediation efforts on LRCA owned land. It also supports all the Risk of Natural Hazards programs, as it provides plants to mitigate and prevent flooding and erosion on land within the watershed.

Invasive Species: Sea Lamprey

A contract is executed annually between the LRCA and DFO for Sea Lamprey trapping on the Neebing and McIntyre Rivers. The trapping is undertaken at the weir located on LRCA owned land. Five days per week for eight to twelve weeks, sea lamprey traps are emptied to conduct mark and release studies, collect biological data, environmental data and complete daily reports to provide data to DFO in order for population estimates to be undertaken. These estimates are used along with that of other streams to estimate the population in all of Lake Superior.

The Sea Lamprey Program directly relates to the Mandatory Program: Management, Operation and Maintenance of CA Owned Land as it manages the invasive species on LRCA owned land.

Invasive Species: Phragmites

Partnered with the Invasive Species Centre, the Thunder Bay Regional Phragmites Collaboration is coordinated by LRCA and is composed of 35 stakeholders and groups with the shared vision of a "phrag-free" landscape by 2033. The intent of the Collaborative is to engage interested community groups in the status of Invasive Phragmites in the region, develop an integrated long-term plan for its management, and collaborate on its removal.

The Phragmites Program directly relates to the Mandatory Program: Management, Operation and Maintenance of CA Owned Land; by proactively managing the spread of phragmites in Northern Ontario, it will reduce the likelihood of the LRCA having to manage it on LRCA owned land in the future.

6 ISSUES AND RISKS

A summary of identified issues and risks associated with the Mandatory Programs and Services is provided in Appendix D. Potential Actions have also been summarized in the table.

The main issues and risks identified include:

- Small staff/capacity
- Deficiency of funding:
 - to complete/maintain studies
 - to maintain/operate LRCA owned land
 - Aging Infrastructure replacement costs
- Climate change, no direction from Province
- Absence/insufficient data
 - Floodplain not delineated in rural areas (majority of watershed)
 - Poor base-data (i.e., LiDAR, digital elevation model/contours)
 - Lake Superior data (updated 100-year flood elevation, waver uprush, erosion hazard)
 - Erosion Hazard not delineated
 - Outdated technical guidance documents from the Province
- Lack of qualified professionals in the area to complete required studies
- Lack of prediction modelling capabilities for Flood Forecasting Program
- Liability issues related to land ownership and administration of regulatory programs
- Legal costs
 - Administration of Section 28 regulations
- Liability risks associated with land ownership
- Blue-green algae at Conservation Areas open to the public
- Invasive species on LRCA owned land
- Lack of natural heritage data on LRCA owned land and lack of on-going monitoring
- Encroachment on LRCA owned land

6.1 Risk Mitigation Actions

Potential actions to address issues and mitigate the risks have been summarized in Appendix D: Summary of Issues and Risks.

Estimated costs have not been provided due to the complexity of assessing costs or the potential action is not considered to be quantifiable.

7 BUSINESS PLAN

Each year the Board of Directors reviews and approves the annual budget. The budget includes projects that align with the Authority's priorities for the given year. The budget takes into account the Strategic Plan and Asset Management Plan and categorizes the programs and services into Category 1, 2 and 3 Program areas (i.e., Mandatory, Municipal Programs, Non-Mandatory). Future Budgets will take into consideration the Conservation Lands Strategy and the Watershed-Based Resource Management Strategy. Actions plans will be developed for each Strategy which will prioritize future projects to address the identified potential actions outlined in Appendix D.

8 PROCESS FOR REVIEW

8.1 Consultation Strategy

Ontario Regulation 686/21 Section 12(8) mandates that the LRCA consult with stakeholders and the public during the preparation of the Watershed-Based Resource Management Strategy in the manner in which the authority considers advisable. Additionally, the strategy is to be posted on the authority's website.

8.1.1 Public Consultation

On July 18, 2024 the LRCA held an “Open House” for the organization’s 70th anniversary. As part of the event, the LRCA had a public engagement booth where information panels and facts sheets about the Watershed-Based Resource Management Strategy were available for the public to review. It is estimated that approximately 120 people attended the booth.

Additionally, the fact sheet regarding the completion of the strategy was posted on the website from July 10, 2024 to September 26, 2024. The full draft document and updated fact sheet were posted for consultation between October 29, 2024 to November 18, 2024.

No comments from the public were received.

8.1.2 Board of Director Consultation

The LRCA’s Board of Directors are responsible for overseeing the organization’s governance, strategies, policies and budget. Consultation materials related to the strategy were approved by the Board on July 27, 2024 (Res.#77/24).

Consultation on the draft strategy was undertaken at the October 30, 2024 meeting, with final approval at the November 27, 2024 meeting.

8.2 *Strategy Review Schedule*

The Watershed-Based Resource Management Strategy will be reviewed and updated every five years or sooner if conditions warrant. Updates to the Strategy will align with the LRCA's Five-Year Strategic Plan. Changes to the Strategy will be at the discretion of the Board of Directors and approved by resolution. Stakeholders and the public will be consulted as considered advisable during the periodic review and update process for the Strategy.

APPENDIX A:

Existing Studies

Appendix A: Studies (2024)											
Category 1: Mandatory Programs and Services	Risk of Natural Hazards					Source Water Protection	Conservation and Management of Lands			Non-Mandatory Program and Services	
	Watershed Report Card	Floodplain Mapping Studies	Lake Superior Information	Wetland Evaluations	Erosion Studies	Source Water Protection	Asset Management Plan	Forest Management Plans	Natural Heritage Assessments	Natural Heritage Information	Watershed Assessment
City of Thunder Bay		Current River (1979) McIntyre River (2015) Neebing River (2018) Neebing-McIntyre Floodway (2024) McVicar Creek (2019) Kam River (2020) Pennock Creek (2020) Mosquito Creek (2020)	100 year flood elevation - Great Lakes St. Lawrence River System and Large Inland Lake Technical Guides (2001)	MNR delineated PSWs (Williams Bog, Mills Block, Neebing Marsh, Mission Island) McVicar Creek PSW (2016) McIntyre River Watershed PSW (2018) Neebing River Watershed (2019) Rural watersheds (2021) Mosquito Creek Watershed (2019) Jim Jessiman Nature Preserve (2024) Marina Park (2024)	Kaministiquia River Erosion Sites Inventory (2019) Victor/Broadway Bank Stabilization Assessment Study (2021)	City of Thunder Bay Source Protection Technical Study - Phase 1 (2009) City of Thunder Bay Source Protection Planning Technical Study - Phase 2 (2009)		Cascades CA (2016) Mills Block CA (2016)	Jim Jessiman Wetland Assessment (2024)		Slate River (2008) Pennock Creek (2010) Mosquito Creek (2015, 2022, 2023) North Current River (2019)
Municipality of Neebing			100 year flood elevation - Great Lakes St. Lawrence River System and Large Inland Lake Technical Guides (2001)	Rural watershed (2021) MNR delineated PSWs (Pearson, Pine Bay, Cloud Bay, Caldwell Lake, Sturgeon)				Little Trout Bay CA (2016)			Slate River (2008) Pine River (2011) Whitefish River (2012) Cloud River (2014) Mosquito Creek (2015, 2022) Oliver Creek (2016)
Municipality of Shuniah		North Star Creek (2014)	100 year flood elevation - Great Lakes St. Lawrence River System and Large Inland Lake Technical Guides (2001)	Rural watershed (2021)				Granite Point (2016)			Blind Creek (1999, 2010) Wild Goose Creek (1999, 2010) Welsh Creek (2006) McKenzie River (2013) Cold Water Creek (2017) Jarvis River (2018) North Current River (2019)
Municipality of Oliver Paipoonge		Kam River to Rosslyn brick yard (2020) Pennock Creek (2020)		Neebing River Watershed (2019) Rural watershed (2021)		Groundwater Vulnerability Analysis Issues Evaluation Threats, Inventory and Water Quality Risk Assessment for Hamlet of Rosslyn Village WHPA (2008)		William Forest (2016)			Slate River (2008) Corbett Creek (2010) Pennock Creek (2010) Whitefish River (2012) Mosquito Creek (2015, 2022) Oliver Creek (2016)
Township of Connec				Rural watershed (2021)							Cedar Creek (1998, 2010) Whitefish River (2012) Brule Creek (2007)
Township of O'Connor				Rural watershed (2021)				Cedar Falls CA (2016)			Cedar Creek (1998, 2010) Whitefish River (2012)
Township of Gillies		Whitefish River Fill Line (1985)		Rural watershed (2021)							Slate River (2008) Pine River (2011) Whitefish River (2012) Oliver Creek (2016)
Township of Dorion		Wolf River Fill Line (1985)	100 year flood elevation - Great Lakes St. Lawrence River System and Large Inland Lake Technical Guides (2001)	Rural watershed (2021)				Hurkett Cove CA (2016)			Wolf River (2009) McKenzie River (2013) Cold Water Creek (2017)
Entire Jurisdiction	Watershed Report Card (2023)					Thunder Bay Area Aquifer Characterization Groundwater Management and Protection Study (2005) Lakehead Source Protection Area, Water Budget and Water Quantity Stress Assessment (2007) Lakehead Watershed Characterization Report (2008) Approved Assessment Report (2011)	Asset Management Plan (2022)				
Outside Jurisdiction				Lappe wetland (2018)				Harpell-Bocking (2016) Wishart CA (2016) Hazelwood Lake CA (2016)			

*CA - Conservation Area

APPENDIX B:

Monitoring Programs

Appendix B: Monitoring Programs (2024)															
Category 1: Mandatory Programs and Services	Risk of Natural Hazards							Conservation and Management of Lands				Other Programs and Services		Non-Mandatory Programs and Services	
	Climate Change Station	Precipitation	Streamflow/Level (in partnership with WSC)	Snow Surveys	Lake Level Monitoring	Floodway Level Monitoring	Victor Street Erosion	Infrastructure Inspections	Water Quality Monitoring		Invasive Species	Provincial Groundwater Monitoring Program	Provincial Water Quality Monitoring Program	Miscellaneous Programs	
City of Thunder Bay	Needing River Gauge	McVicar Creek McIntyre River Needing River Upper Needing Current River 130 Conservation Road	McVicar Creek McIntyre River Needing River Upper Needing Current River Kaministiquia River	McVicar Creek 130 Conservation Road	Lake Superior - ECCC monthly Great Lakes Levels Memo	Level monitoring on the Diversion Structure (Needing River), Redwood Bridge (Diversion Channel), Chapples Pedestrian Bridge (Diversion Channel) and Balmoral Street Bridge (Floodway)	Victor Street /Broadway Annual Inspections (spring and fall)	Floodway Inspections (Annual LRCA/CTB) Diversion Structure, Mission Island Board Walk, Needing Weir (Annual Consultant Engineering Assessment)	Mission Island Marsh CA	Mission Island Marsh CA		Needing River Gauge	McVicar Creek McIntyre River Needing River x2 Current River Kaministiquia River	Needing Weir and McIntyre River - Sea Lamprey Monitoring (DFO funded) Mosquito Creek/Pennock Creek Water Quality Monitoring (City funded)	
Municipality of Needing					Oliver Lake (private citizen) Lake Superior - ECCC monthly Great Lakes Level Memo										
Municipality of Shuniah					Lake Superior - ECCC monthly Great Lakes Levels Memo					Silver Harbour CA		Birch Beach Loon Lake			
Municipality of Oliver Paipoonge		Corbett Creek Kakabeka Fire Hall (PGMN Site) Murillo Fire Hall (PGMN Site)	Whitefish River Corbett Creek	Vibert Road								Kakabeka Fire Hall Murillo Fire Hall	Slate River		
Township of Conmee															
Township of O'Connor															
Township of Gillies															
Township of Dorion	Fish Hatchery		Wolf River		Lake Superior - ECCC monthly Great Lakes Levels Memo					Hurkett Cove CA	Narrow Leaved Cattail - Hurkett Cove CA	Fish Hatchery			
Entire Jurisdiction														Invasive Species - Phragmites, Narrow Leaved Cattail	
Outside Jurisdiction		Whitefish River (Nolalu) North Current (Gorham)	Whitefish River (Nolalu) North Current (Gorham)	Hazelwood Lake CA				Hazelwood Lake Dam (Annual Consultant Engineering Assessment) Causeway Inspection (Annual LRCA)	Hazelwood Lake CA	Hazelwood Lake CA		Wishart CA Hazelwood Lake CA			

*CA - Conservation Area

APPENDIX C:

Available GIS Data

Appendix C: Available GIS Data (2024)							
Category 1: Mandatory Programs and Services	Risk of Natural Hazards						
	Contours	Aerial Photography	LIDAR	LIO Data	Floodplain - GIS Data	Erosion Hazards - GIS Data	Wetland Information
City of Thunder Bay	0.5 metre	NWOOP 2022	Yes		McVicar Creek, 2019 McIntyre River, 2016 Neebing River, 2018 Pennock Creek, 2020 Kam River, 2020 Mosquito Creek, 2020	Victor Street - Kam River 100 year erosion line	McVicar Creek (2016) McIntyre River Watershed (2018) Neebing River Watershed (2019) Rural watersheds (2021) Mosquito Creek Watershed (2019) Jim Jessiman Nature Preserve (2024) Marina Park (2024)
Municipality of Neebing	2 metre	NWOOP 2022	No				Rural watersheds (2021)
Municipality of Shuniah	2 metre	NWOOP 2022	No				Rural watersheds (2021)
Municipality of Oliver Paipoonge	2 metre	NWOOP 2022	No		Kam River to Brick Yard, 2020 Pennock Creek, 2020 Neebing River, 2018		Rural watersheds (2021)
Township of Conmee	2 metre	NWOOP 2022	No				Rural watersheds (2021)
Township of O'Connor	2 metre	NWOOP 2022	No				Rural watersheds (2021)
Township of Gillies	2 metre	NWOOP 2022	No				Rural watersheds (2021)
Township of Dorion	2 metre	NWOOP 2022	No				Rural watersheds (2021)
Entire Jurisdiction			No	Lakes, watercourses, parcels, roads, municipal boundary, general wetlands, Provincially Significant Wetlands			
Outside Jurisdiction			No				

*CA - Conservation Area

APPENDIX D:

Issues, Risks and Potential Actions

Appendix D: Issues, Risks and Potential Actions (2024)														
Mandatory Program Area	Subservice	Issue and Risk	Entire Jurisdiction	City of Thunder Bay	Municipality of Neebing	Municipality of Shuniah	Municipality of Oliver Paipoonge	Township of Conmee	Township of O'Connor	Township of Gillies	Township of Dorion	Outside Jurisdiction	Potential Actions to Address Issues and Mitigate the Risks	
													Potential Actions	Estimated Cost
Category 1: Mandatory Programs and Services														
Mandatory Programs per Subsection 21.1(1) of the Conservation Authorities Act														
All Program Areas		Small staff - capacity issues												
		Lack of funding											Continue to continually seek and apply for available funding when available.	
		Ability to find qualified staff in the event of a vacancy												
		Continual changing legislation												
		Succession planning											Cross train in all areas.	
		Climate change, no direction from Province											Coastal Resilience Plan to be completed by 2027 to assess Lake Superior climate impacts.	
i. Programs and Services related to the Risk of Natural Hazards														
Risk of Natural Hazards	Floodplain mapping	Floodplain not delineated						-Corbett Creek priority -Whitefish River fill line only, outdated			-Whitefish River fill line only, outdated	-Wolf River fill line only, outdated		Seek funding to complete all mapping. Explore Regional Floodplain modelling in areas where there is minimal development pressure and where matching municipal funding is unattainable. Advocate for an equitable funding model for small municipalities. Re-install Lake Level Gauge on Loon Lake.
		Lack of base data (i.e., LiDAR, digital elevation model/contours)												MNR LiDAR Data expected early 2025.
		Lack of funding to complete/maintain studies												Seek funding to maintain data. Advocate for equitable funding models for small municipalities.
		Lake Superior flood elevation outdated												Coastal Resilience Plan to be completed by 2027 which will assess Lake Superior Flood elevation.
	Technical Studies	Erosion hazard not delineated		-only completed on Kam River/Victor Street area										Seek funding to complete all erosion mapping. Advocate for an equitable funding model for small municipalities.
		Erosion hazard not delineated on Lake Superior shoreline												Coastal Resilience Plan to be completed by 2027 which will assess Lake Superior erosion rate.
		Wave uprush not delineated on Lake Superior shoreline												Coastal Resilience Plan to be completed by 2027 which will assess Lake Superior wave uprush.
		Lack of digital elevation model/contours greater than 2 metre												MNR LiDAR Data expected early 2025.
		Lack of funding to complete studies												
	Communications and Outreach													
	Flood Forecasting and Warning	Lack of prediction modelling capabilities												Explore affordable options for predictive modelling that align with staff capabilities.
		Dependence on Water Survey of Canada to maintain joint streamflow gauges												Execute 3rd Party Agreement to demonstrate commitment and importance of partnership.
	Drought and Low Water Response													
	Infrastructure: Neebing-McIntyre Floodway	Lack of funding for major maintenance												Continue to advocate to the Province to maintain the WECI Funding Program.
		Liability												Continue to maintain and monitor.
		Climate Change												Continue to assess Climate Change in future updates to the Integrity Study.
	Infrastructure: Victor Street Erosion	Lack of funding for future major maintenance to address erosion issues												Continue to advocate to the Province to maintain the WECI Funding Program.
		No formal agreement with the City of Thunder Bay to manage the infrastructure on City owned land												Execute MOU with City.
Review of Proposal under an Act														

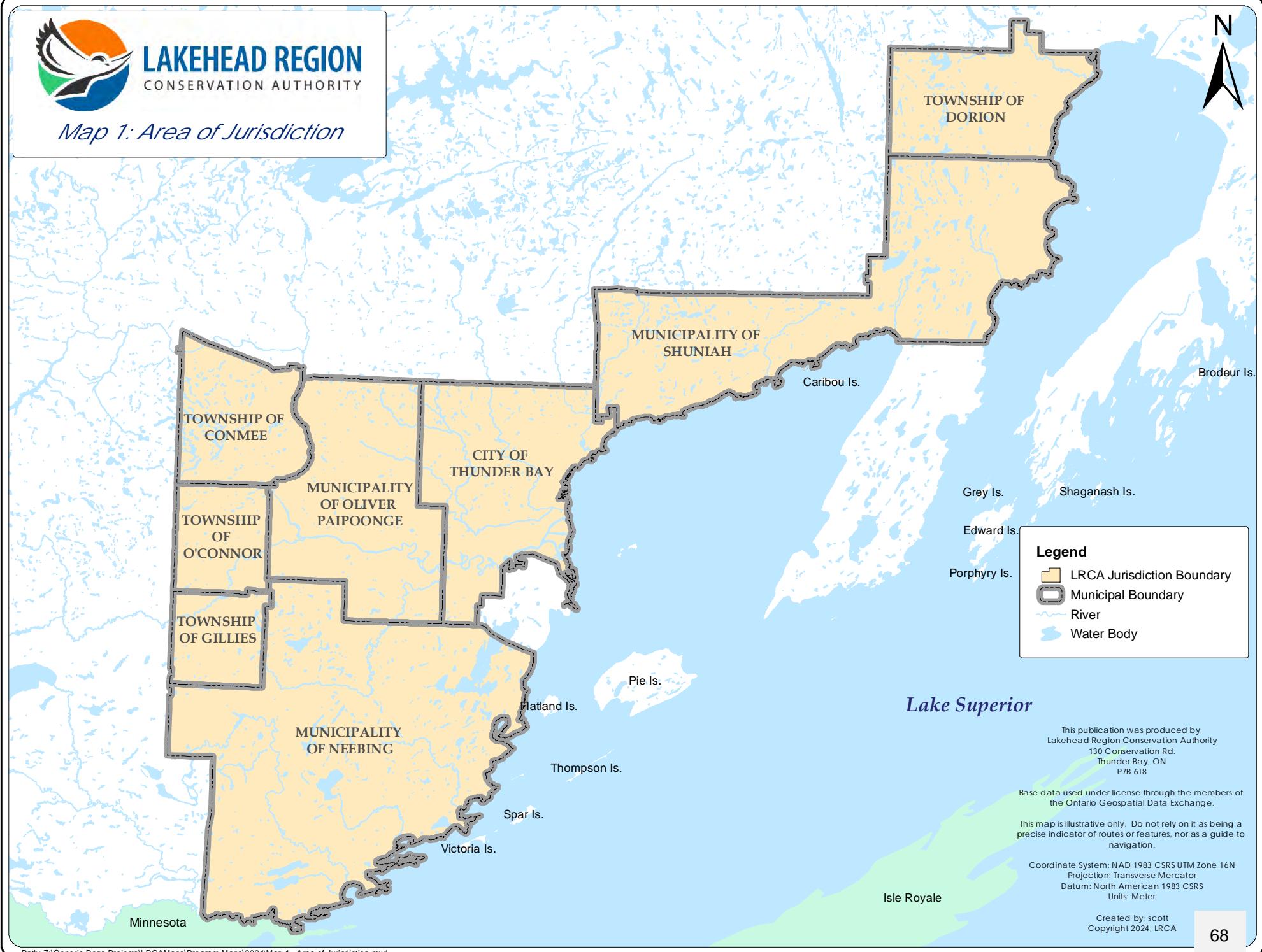
Appendix D: Issues, Risks and Potential Actions (2024)														
Mandatory Program Area	Subservice	Issue and Risk	Entire Jurisdiction	City of Thunder Bay	Municipality of Neebing	Municipality of Shuniah	Municipality of Oliver Paiponge	Township of Conmee	Township of O'Connor	Township of Gillies	Township of Dorion	Outside Jurisdiction	Potential Actions to Address Issues and Mitigate the Risks	
													Potential Actions	Estimated Cost
	Plan Review Comments	Lack of hazard mapping (i.e., floodplain, erosion hazard, coastal hazards, steep slopes, unstable soil and bedrock)	Yellow										Seek funding to complete hazard assessments and mapping of features. Advocate for an equitable funding model for small municipalities.	
		Lack of data (i.e., LiDAR, digital elevation model/contours)	Yellow										MNR LiDAR data expected early 2025.	
	Administering and enforcing the Act (Section 28 Development Regulations)	Lack of hazard mapping (i.e., floodplain, erosion hazard, coastal hazards, steep slopes, unstable soil and bedrock)	Yellow										Seek funding to complete hazard assessments and mapping of features. Advocate for an equitable funding model for small municipalities.	
		Lake of technical guidance from the Province (i.e., outdated technical manuals)	Yellow										Advocate for updated Provincial Technical Guidance Documents to be completed.	
		Lack of data (i.e., LiDAR, digital elevation model/contours)											MNR LiDAR data expected early 2025.	
		Lack of qualified professional in area to complete required studies (i.e., lack of Coastal Engineers, Wetland hydrology studies, etc.)	Yellow											
		Lack of provincial support in enforcing the Act	Yellow											
		Cost of legal proceedings	Yellow										Maintain adequate Legal Reserve.	
ii. Programs and Services related to the Conservation and Management of Lands owned and controlled by the Authority														
Management, operation and maintenance of CA owned land	Conservation Areas			Mission Island Marsh CA Cascades CA Mills Block CA	Little Trout Bay CA	Silver Harbour CA Mackenzie Point CA			Cedar Falls CA		Hurkett Cove CA	Hazelwood Lake CA Wishart CA		
		Liability risks											Continue to monitor and maintain areas.	
		Blue-green algae												
		Aging infrastructure											Maintain AMP and financial model fund identified repairs/replacements.	
		Lack of natural heritage data											Prepare plan to collect and maintain data	
		Increase costs to maintain											Increase self-generated revenue.	
		Invasive species (phragmites, emerald ash borer, etc.)											Continue to monitor and address when identified.	
		Lack of ongoing monitoring of natural heritage features											Prepare plan to monitor identified natural heritage features.	
	Administer Section 29 Regulations in Conservation Areas	Lack of payment of parking/day use fees											Continue with enforcement to encourage payment. Continue to educate on fees.	
		Liability											Continue to monitor and address enforcement issues.	
		Encroachment											Routinely assess boundaries to identify and address encroachment.	
		Cost of legal proceedings											Maintain adequate Legal Reserve.	
	Other owned land (i.e. floodplain lands, erosion prone lands, forest management land, Administrative Facility, etc.)	Lack of natural heritage data											Prepare plan to collect and maintain data.	
		Increase costs to maintain											Increase self-generated revenue.	
		Lack of ongoing monitoring of natural heritage features											Prepare plan to monitor identified natural heritage features.	
		Liability risks											Continue to monitor and maintain areas.	
		Aging infrastructure (Administrative Facility)											Maintain AMP and financial model fund identified repairs/replacements.	
iii. Programs and Services related to the authority's duties, functions and responsibilities as a Source Protection Authority under the Clean Water Act 2006														
Source Water Protection Program	Source Water Protection	Lack of data												
iv. Other Programs and Services														
Other Programs and Services	Water Quality and Quantity Monitoring: Provincial groundwater Monitoring Network	Costs to maintain infrastructure											Work with MECP to fund.	
		Issues with Murillo well casing											Work with MECP to repair.	
	Water Quality and Quantity Monitoring: Provincial Water Quality Monitoring Network													

Maps



LAKEHEAD REGION
CONSERVATION AUTHORITY

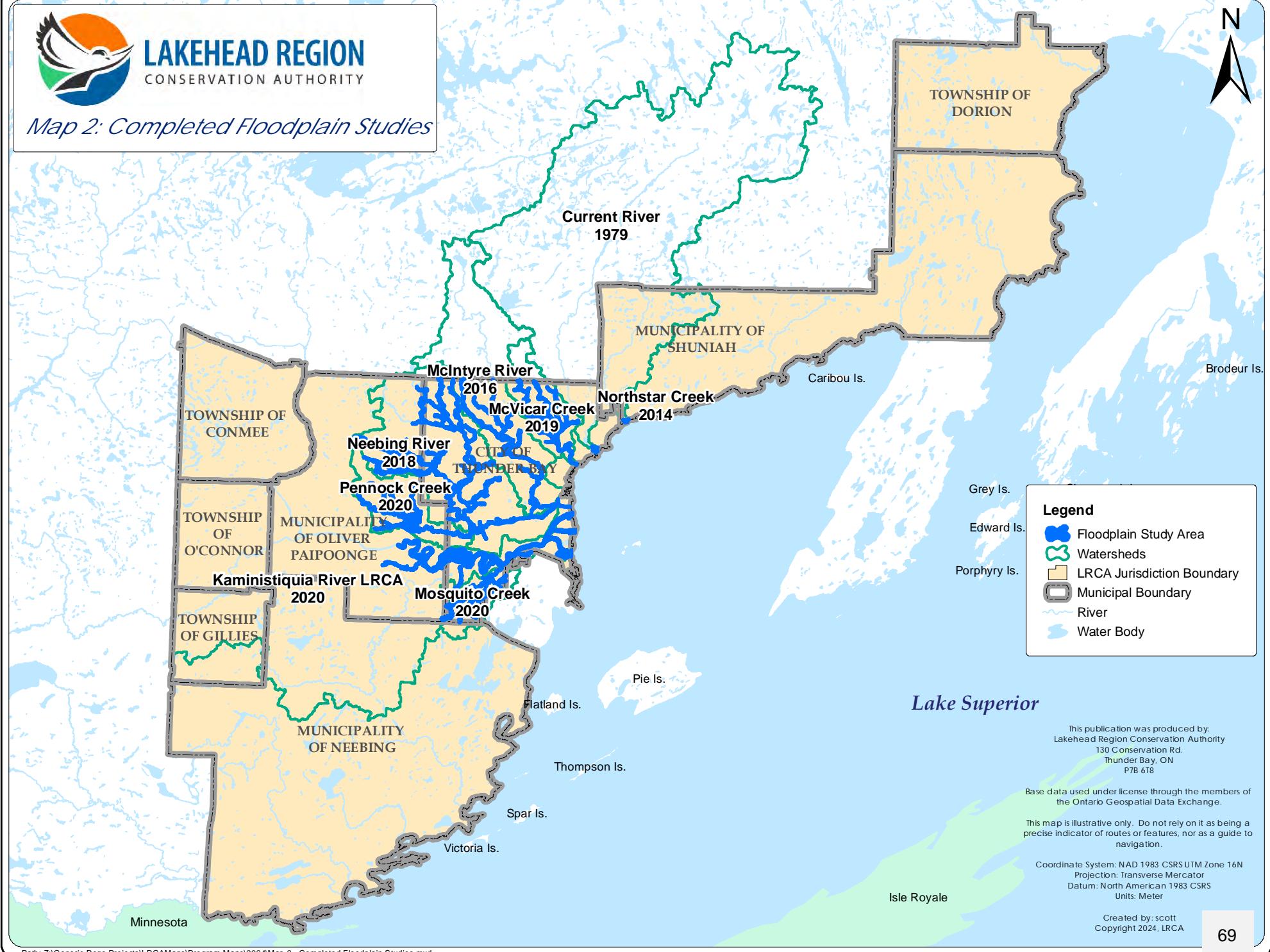
Map 1: Area of Jurisdiction





LAKEHEAD REGION
CONSERVATION AUTHORITY

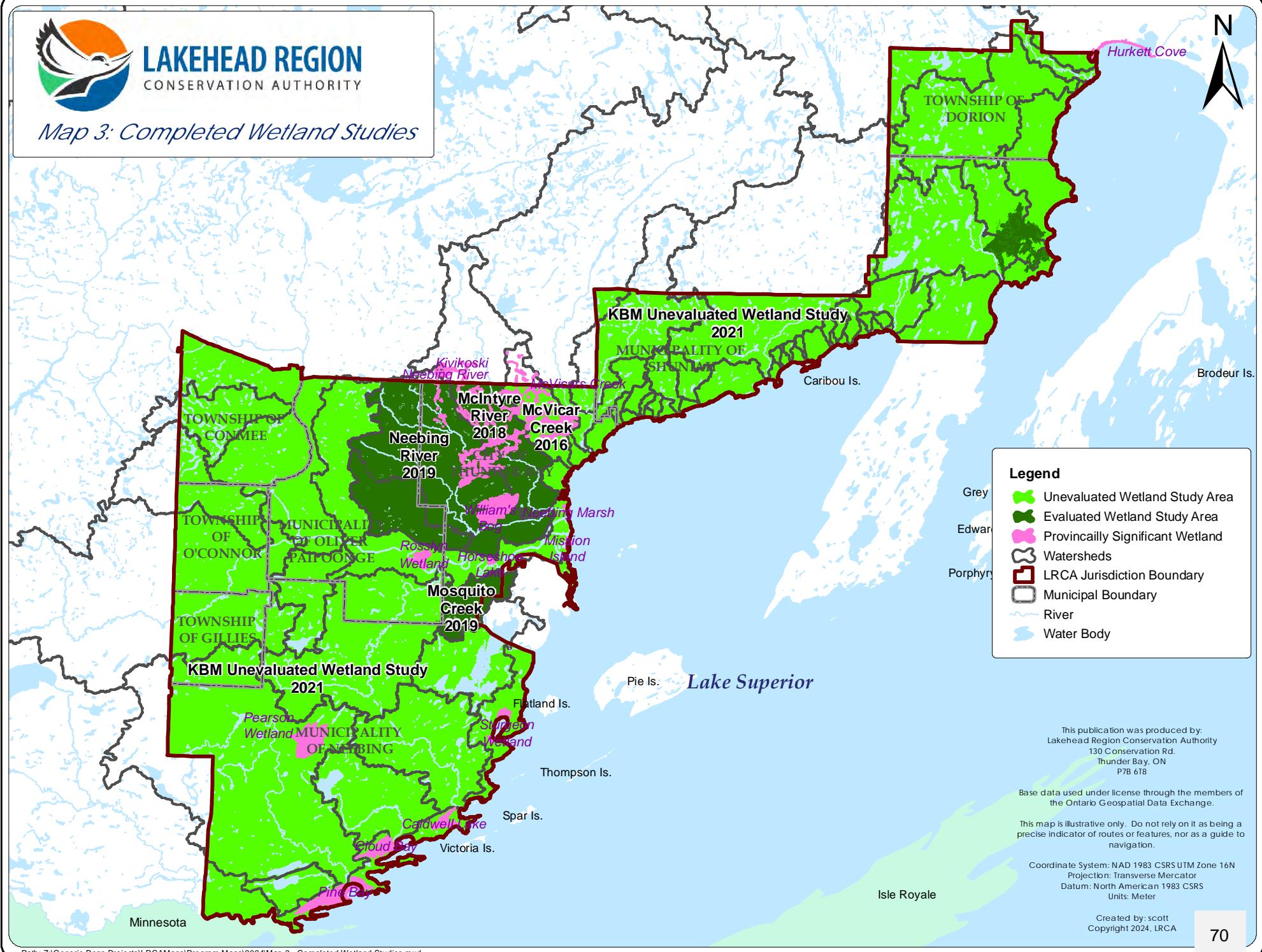
Map 2: Completed Floodplain Studies





**LAKEHEAD REGION
CONSERVATION AUTHORITY**

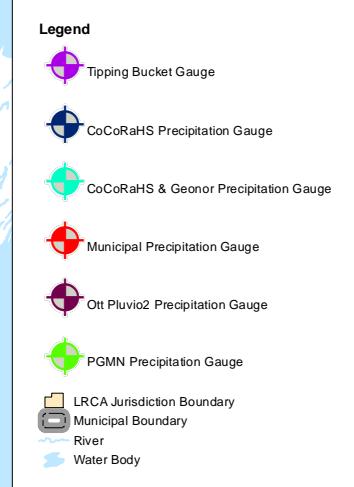
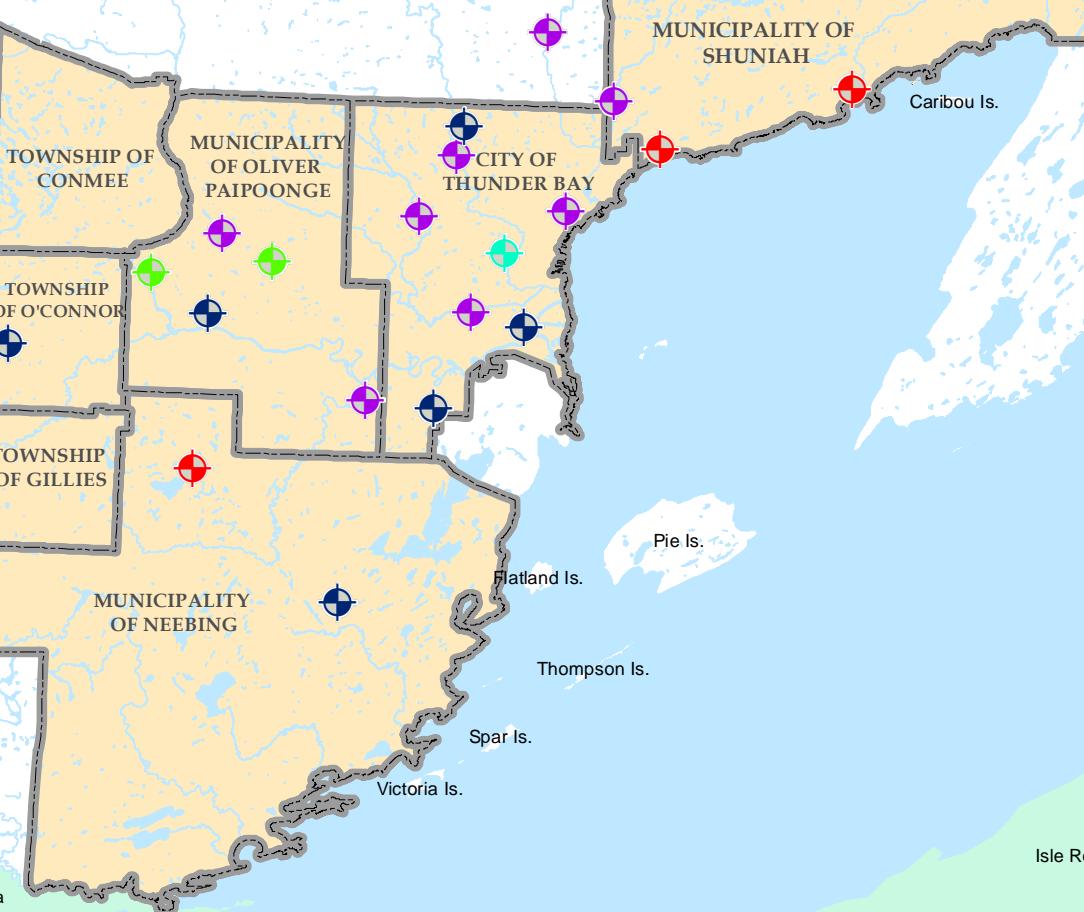
Map 3: Completed Wetland Studies





LAKEHEAD REGION
CONSERVATION AUTHORITY

Map 4: Precipitation Gauge Locations



Lake Superior

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Thunder Bay, ON
P7B 6T8

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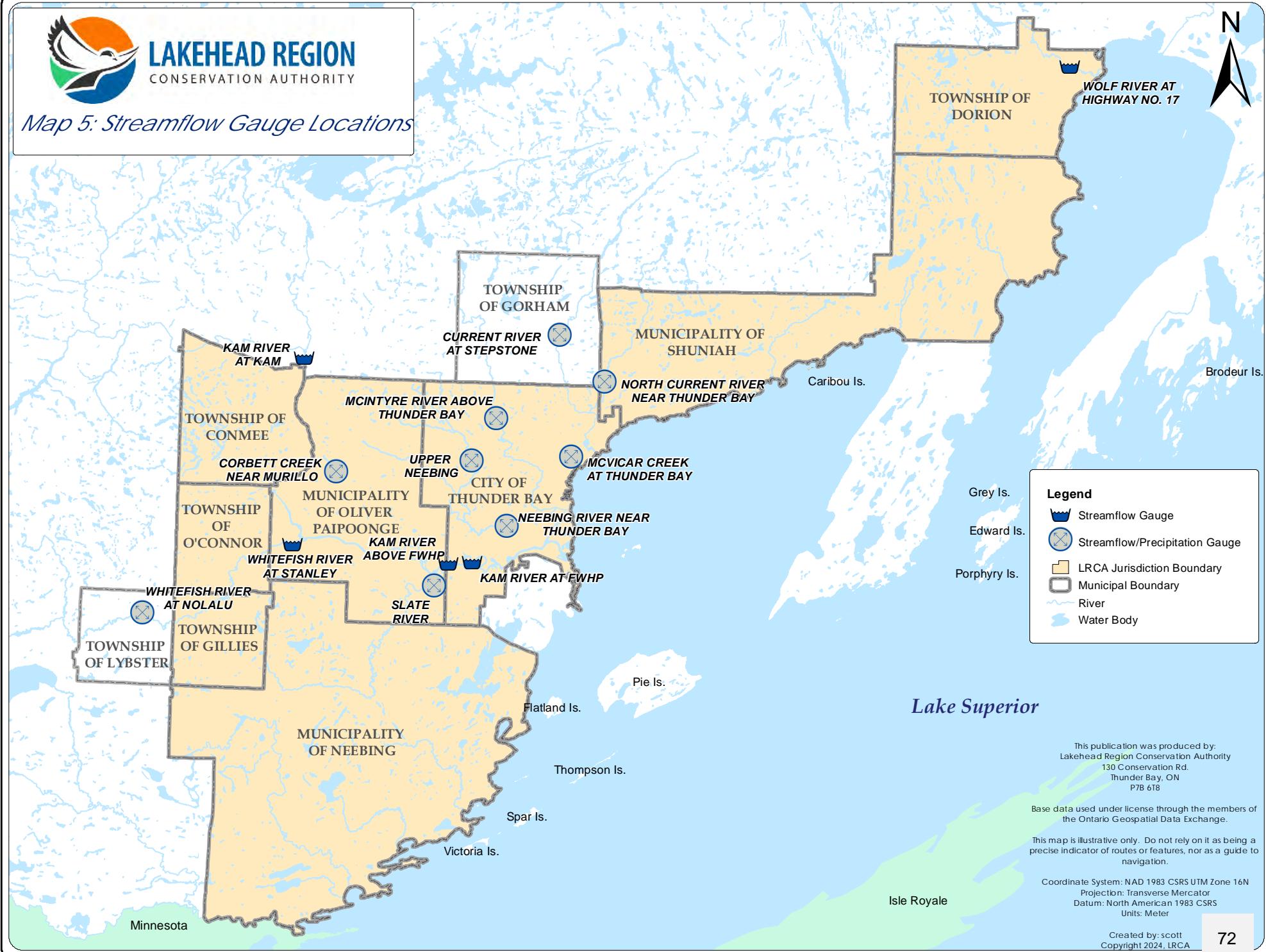
Coordinate System: NAD 1983 CSRS UTM Zone 16N
Projection: Transverse Mercator
Datum: North American 1983 CSRS
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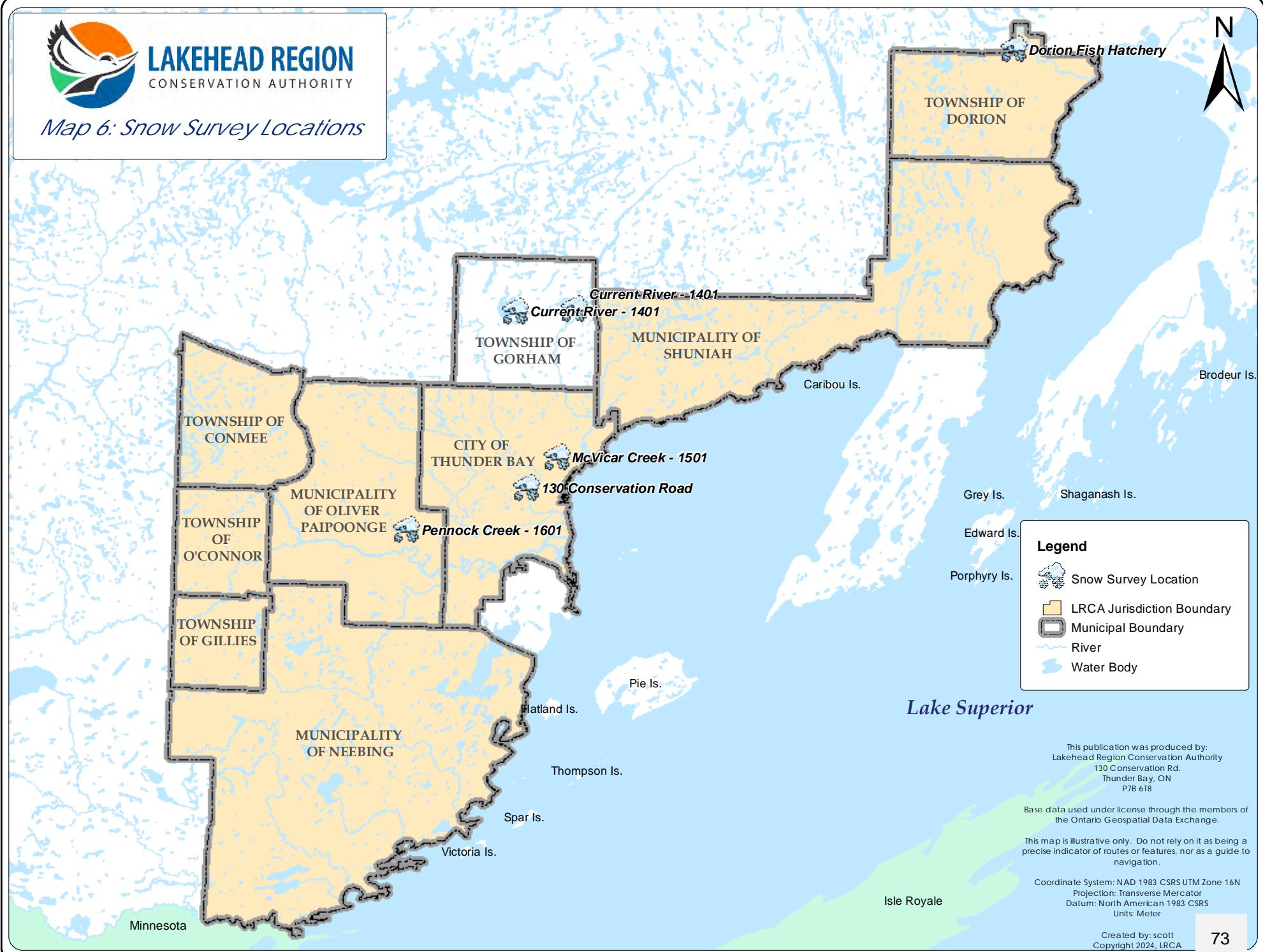
Map 5: Streamflow Gauge Locations





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CONSERVATION AUTHORITY**

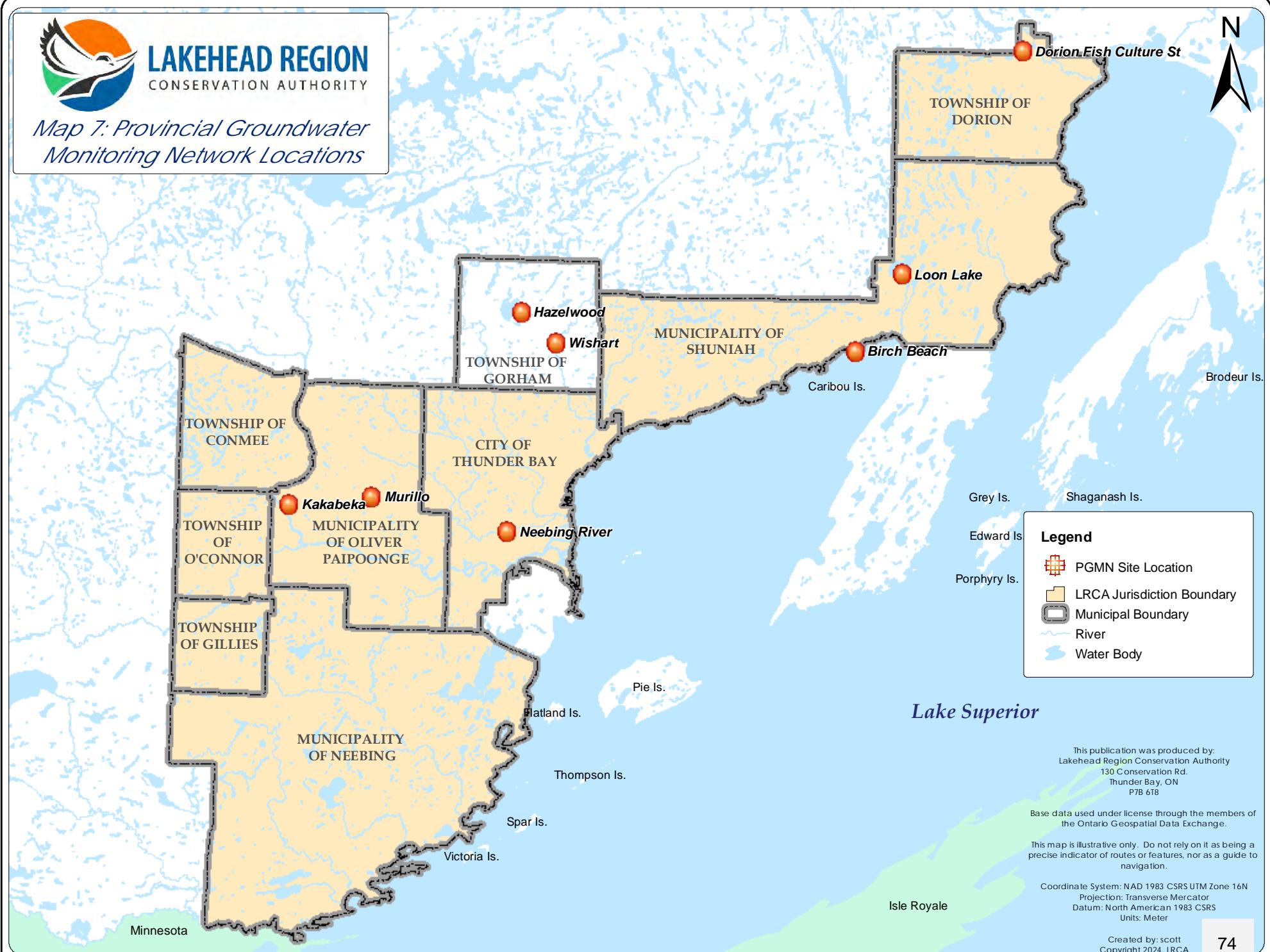
Map 6: Snow Survey Locations





LAKEHEAD REGION CONSERVATION AUTHORITY

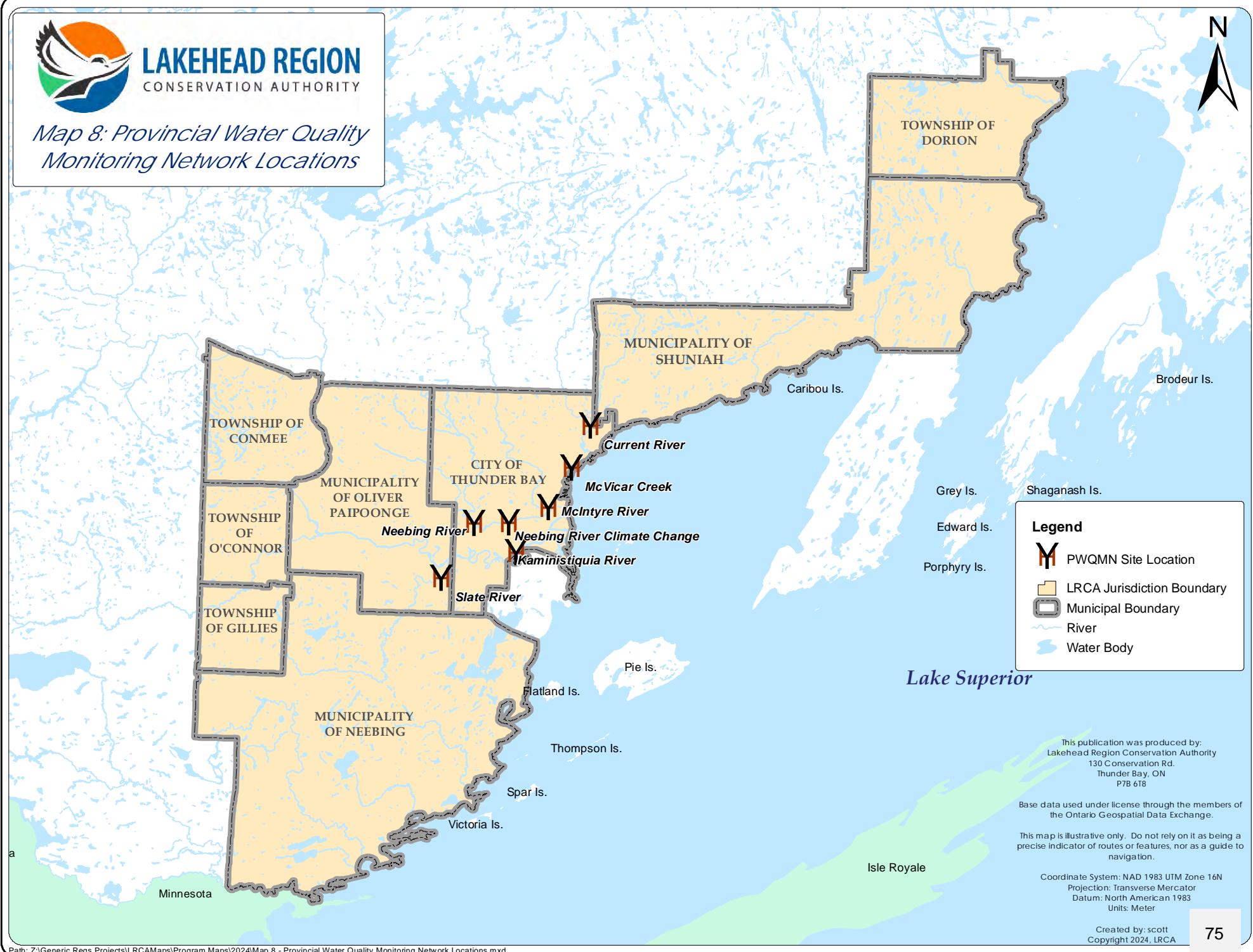
Map 7: Provincial Groundwater Monitoring Network Locations





LAKEHEAD REGION CONSERVATION AUTHORITY

Map 8: Provincial Water Quality Monitoring Network Locations





PROGRAM AREA	POLICY	REPORT NO.	POLICY-DEVREG-07-2024
DATE PREPARED	November 19, 2024	FILE NO.	
MEETING DATE	November 27, 2024		
SUBJECT	Section 28 Permit Timelines and Compliance Reporting		

RECOMMENDATION

Suggested Resolution

“THAT: Development Regulations Policy DEVREG-07-2024, Section 28 Permit Timelines and Compliance Reporting Policy under O. Reg. 41/24 and O. Reg. 686/21 be adopted.”

LINK TO STRATEGIC PLAN (2023-2027)

Links to the Strategic Plan (2023 – 2027):

Protect and Support:

- *Create and update policies, guidance documents and technical data to streamline the LRCA approvals process that provides transparency of process and rules of service.*
- *Prioritize and promote the protection and management of natural hazards, wetlands and natural heritage features within the LRCA Area of Jurisdiction.*

EXECUTIVE SUMMARY

As required per section 12 of O. Reg. 41/24, LRCA has drafted a policy and procedure document outlining standard timelines for the Authority to make decisions on permit applications following the notification to applicants that an application is deemed complete. The document also includes annual reporting requirements as required per Section 8.1 of O. Reg. 686/21. Once approved the policy will be posted on the LRCA website.

DISCUSSION

On April 1, 2024, the *Conservation Authorities Act* (CA Act) was amended, bringing into force new legislative and regulatory requirements associated with Conservation Authority (CA) permitting. Requirements include timelines associated with the permitting process, and a new requirement for all CAs to prepare an annual report outlining statistics on permits and the level of compliance with the requirements of Ontario Regulation 41/24 (Prohibited Activities, Exemptions and Permits).

The attached draft policy details LRCA's Section 28 permit timelines and compliance reporting policies and procedures. The document provides an overview of timelines and best practices

associated with the LRCAs permitting process and includes a standard annual reporting template that ensures LRCAs reporting meets the requirements of section 8.1 of O. Reg. 686/21 (Mandatory Programs and Services) and provides a consistent format for LRCA to provide annual reporting to its Board of Directors and Conservation Ontario.

Staff are drafting the following additional policies related to the Section 28 Regulations Program, which will be brought to the Board for approval:

- Mapping Update Policy
- Development Regulations Policy (O. Reg. 41/24)

FINANCIAL IMPLICATIONS

None.

CONCLUSION

The policy provides a document to guide staff and the applicant through the permit timelines and annual reporting requirements.

BACKGROUND

On February 16, 2024, a new Minister's regulation (Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits) under the *Conservation Authorities Act* was approved by the Province, with an effective date of April 1, 2024. The regulation replaced the individual "Development, Interference with Wetlands and Alterations to Shorelines and Watercourses" regulation [O. Reg. 180/06] held by the Lakehead Region Conservation Authority (LRCA) and provided one regulation that is used by all Conservation Authorities.

REFERENCE MATERIAL ATTACHED

Draft Development Regulations Policy DEVREG-07-2024, Section 28 Permit Timelines and Compliance Reporting

THIS REPORT SIGNED AND VERIFIED BY:	DATE: November 20, 2024
 Tammy Cook Chief Administrative Officer	



Section:	DEVELOPMENT REGULATIONS		
Title:	DEVREG-07: Section 28 Permit Timelines and Compliance Reporting		
Resolution	##/24	Approval Date:	Month DD, YYYY
Revisions			

1.0 Background

On April 1, 2024, the *Conservation Authorities Act* (CA Act) was amended, bringing into force new legislative and regulatory requirements associated with Conservation Authority (CA) permitting. Including timelines associated with the permitting process, and a new requirement for all CAs to prepare an annual report outlining statistics on permits and the level of compliance with the requirements of Ontario Regulation 41/24 (Prohibited Activities, Exemptions and Permits).

1.1 *Legislated Permit Application Review Timelines*

Timelines associated with CA permit reviews are specified in section 7 of O. Reg. 41/24 and under section 28.1 of the *Conservation Authorities Act*. Per section 12 of O. Reg. 41/24, all CAs must develop policy and procedure documents outlining standard timelines for the Authority to make decisions on permit applications following the notification to applicants that an application is deemed complete.

The CA Act and O. Reg. 41/24 outlines two distinct timelines associated with CA reviews of permit applications:

1. Upon receipt of an application and applicable fee, the Authority has **21 days** to notify the applicant in writing whether or not the application is deemed a “complete application”.
2. Once an application is deemed “complete”, the CA will complete their review and make a decision. Per subsection 28.1 (22) of the *CA Act*, if the CA has not made a decision within **90 days**, the applicant may appeal the application directly to the Ontario Land Tribunal on the basis of a non-decision. All timelines presented are in calendar days, and exclude statutory holidays.

2.0 Definitions

Major Applications: for section 28.1 permits require significant staff involvement. These are generally highly complex projects (e.g., large subdivisions requiring technical review supported by comprehensive analysis), or smaller-scale site-specific applications requiring complex technical reviews. These proposals may involve sites with significant natural hazards, environmental impacts, or multiple approval process requirements. Major applications may

include: Plans of Subdivision or Condominium, large Site Plan Control applications, major watercourse alterations, and major infrastructure development. In general, LRCA has categorized Major Permit Applications to be all permit applications considered as 'Major' under LRCA's Fee Schedule, certain permit applications that have been deemed to be a violation (i.e., work has been completed prior to LRCA approving the proposed development and issuing a Permit) and/or applications that may require additional studies and/or internal review time to support the permit application.

Minor Applications: for section 28.1 permits generally have minor impacts on the control of flooding, erosion, dynamic beaches, or unstable soil or bedrock. Permit applications may be considered minor due to: a limited scale/scope of work, level of risk to health and safety of persons or property damage, location, or application requirements for technical information, studies or plans. Minor permit applications are reviewed by LRCA staff and generally require standard recommendations or conditions. Generally, these include: minor fill, development, or site alteration where there is a high degree of certainty that issues associated with natural hazards are minimal.

3.0 Stages of Permit Application Review

The following table outlines the Stages of Permit Application Review and associated timelines.

Table 1: Stages of Permit Review

Application Process Step	Associated Timeline	Details
Pre-Submission	N/A	<ul style="list-style-type: none"> Applicant contacts the LRCA to discuss proposed works and confirm permit requirements. If required, LRCA will schedule a pre-submission consultation meeting at a mutually agreeable time. As a best practice, LRCA will endeavor to respond to inquiries within 2 business days, and schedule pre-submission consultation meetings in a timely manner.
Pre-Submission Consultation Section 6 of O. Reg. 41/24 <i>See LRCA Policy DEVREG-05: Pre-Submission Consultation and Complete Application Policy</i>	N/A	<ul style="list-style-type: none"> Pre-submission consultation may be requested by either the Authority or the applicant for the purpose of confirming the requirements for a complete application. Where requested by the applicant, the Authority is required to engage in the pre-submission consultation. Pre-submission consultation generally includes: review of complete application requirements, determination and scope of technical information, studies or plans needed to support the application, and a discussion of associated timelines and fees.

Application Process Step	Associated Timeline	Details
		<ul style="list-style-type: none"> Site visits may be necessary to appropriately scope technical study requirements. Pre-submission consultation streamlines the application review process and provides the applicant with information to submit an application with greater certainty for approval.
Application Submission (Confirmation of a Complete Application) Section 7 of O. Reg. 41/24 <i>See LRCA Policy DEVREG-05: Pre-Submission Consultation and Complete Application Policy</i>	21 Days (Regulatory Timeline)	<ul style="list-style-type: none"> Once an applicant has submitted all required information (section 7 of O. Reg. 41/24) <u>and</u> paid the applicable permit fee, the CA has 21 days to review the application and notify the applicant in writing if the application is deemed “complete”. If it is determined that a permit can be approved/issued during this review period, the Authority may proceed directly with issuing a permit to the applicant. If the CA determines the application is complete, the CA will provide notice of a complete application in writing to the applicant. At this time, the application review / decision timeline (below) will begin. If the CA determines the application is incomplete, the CA will provide the applicant with reasons why the application is deemed “incomplete” in writing. The application review timeline (below) does not begin until an application is deemed complete.

Application Review	90 Days (Major) 30 Days (Minor)	<ul style="list-style-type: none"> Subsection 28.1(22) of the CA Act provides the applicant with the ability to appeal their application to the Ontario Land Tribunal if the CA has not provided a notice of a decision within 90 days after confirming a complete application has been submitted. <i>For greater certainty, this 90-day timeline does not begin until the CA has deemed the application complete.</i> Upon providing notice that a major application is complete, the CA has 90 days to make a decision (issue permit or recommend refusal). Upon providing a notice that a minor application is complete, the LRCA has chosen to commit to making a decision in 30 days (issue permit or recommend refusal). <i>For greater certainty, despite this timeline, the ability to appeal a non-decision to the OLT remains 90 days following the confirmation of a complete application, regardless of the “permit category”.</i> During this stage, the CA may not require new technical studies, information or plans, except through agreement with the applicant. The CA may ask the applicant for clarification or further details regarding any matter related to the application to help refine and prepare the application for approval. See “Requests for Clarification and Resubmissions” below for additional details.
Notice of Decision – (Issue Permit or Recommend Refusal)	Within 90-Day Review Period (Major) Within 30-Day Review Period (Minor)	<ul style="list-style-type: none"> CA staff will provide a notice of decision to the applicant. Where an application complies with legislative, regulatory and policy requirements, a permit will be issued. Where an application cannot comply with legislative, regulatory and policy requirements, staff will discuss next steps with the applicant (e.g., comments, withdrawal, or referral to a hearing before the Authority).

If the LRCA has not made a decision on an application for a permit pursuant to Section 28.1 of the CA Act within the timelines noted above, the applicant may contact the Chief Administrative Officer for application issue management.

3.1 Administrative Reviews

Section 8 of O. Reg. 41/24 provides that an applicant may request a review of an application by the CA if:

- The applicant has not received notice whether their application is deemed a complete application within 21 days;
- The applicant disagrees with the CA's determination that the application is incomplete; or,
- The applicant believes the CA's request for other information, studies or plans is unreasonable.

When a request for review is received, CAs must complete a review no later than 30 days after it is requested. Additional details on the Administrative Review process can be found in LRCAs Policy DEVREG-04, Process for Administrative Review Under Section 8 of O. Reg. 41/24.

The 30-day timeline associated with completing an administrative review is a separate timeline and does not relate to the 30 or 90-day timelines to make a decision on a complete permit application. As part of the annual reporting, LRCA will track the number of requests for reviews received and whether reviews are completed within the regulatory timelines (i.e., 30 days).

3.2 Requests for Clarification and Resubmissions

As noted in Table 1, once the LRCA has provided notice of a complete application to the applicant, the LRCA cannot require new studies, technical information or plans, unless agreed to by the applicant. The LRCA may request clarification or further details from the applicant regarding any matter related to the application (e.g., deficiencies in technical information / studies / plans, etc.).

Requests for clarification / additional details, or applicant-initiated amendments to submitted permit applications ("resubmissions") may affect application review timelines. When requests for clarification are made to the applicant, the LRCA will "pause" the decision timeframe until a resubmission is made. It is noted that pausing/stopping the clock for the purpose of the CA review and decision-making period does not impact the applicant's ability to appeal a complete application to the OLT after 90 days on the basis of a non-decision.

3.3 Permits Issued By Minister

Further to Section 28.1.1 of the CA Act, and subject to the regulations, the Minister (Ministry of Natural Resources) may issue an order to:

- Direct a CA not to issue a permit to a person who wishes to engage in an activity that, without a permit, would be prohibited under section 28 of the CA Act; or,
- Direct a CA or CAs to not issue permits to any persons who may wish to engage in a type or class of activity that, without a permit, would be prohibited under section 28 of the CA Act, for a specified period of time.

Where such an order is made, the Minister will assume the responsibility for any permitting needs for the specified persons or activities in the order. CAs are not required to track timeliness associated with these permits; however, will provide details on how many applications are subject to such orders in a given year (see Appendix A).

4.0 Annual Reporting Requirements

Regulatory Requirement

Ontario Regulation 686/21 (Mandatory Programs and Services) under the *Conservation Authorities Act* was amended on April 1, 2024 to include annual reporting requirements for CAs. Further to section 8.1 of the regulation, all CAs are required to prepare and publish (“make public”) an annual report outlining statistics on permits, including reporting on the level of compliance with requirements of O. Reg. 41/24 respecting the application for and issuance of permits, including any associated timelines.

In addition to reporting on permit statistics and timelines, the Annual Report will provide details on compliance with the following elements of O. Reg. 41/24:

- Public availability and annual review of CA mapping;
- Notification of complete applications; and,
- Completion of administrative reviews (within 30 days following a request).

Appendix A provides a standard template developed by Conservation Ontario that the LRCA will use to present annual reports and ensures comparability between CAs. Where variances from the timelines or other regulatory elements exist, LRCA staff will provide brief commentary on common reasons for such variances.

4.1 Annual Reporting to the CA Board of Directors

Prior to publishing the Annual Report online, the LRCA will ensure the report has been received by its Board of Directors. Once received by the Board, the Annual Report will be published on LRCA’s website on the “Governance” webpage, as well as on the “CA Permitting / Regulations” webpage.

4.2 Annual Reporting to Conservation Ontario Council

Conservation Ontario will prepare an annual report to CO Council on the collective outcomes of all CAs’ Annual Reports. The first CO Annual Report under this framework will be received by CO Council in April 2025, and will cover permits issued from April 1 – December 31, 2024. For annual reporting for 2025 and beyond, CO will request each CAs’ Annual Report in February of each year for consideration by Conservation Ontario Council at their Annual General Meeting.

Attachments:

- *Appendix A: Annual Reporting Template*

Appendix A: Annual Reporting Template

Conservation Authority: Lakehead Region Conservation Authority	
Annual Reporting – Permit Statistics	
Total Permits Issued (Overall) (January 1¹ – December 31):	#
Total Major Permits Issued (January 1¹ – December 31):	#
Total Minor Permits Issued (January 1¹ – December 31):	#
Total Applications Subject to Minister's Order (Minister's Review):	#
Annual Reporting – Permit Timelines	
COMPLETE APPLICATION REVIEW Total complete application reviews completed in 21 days:	# + commentary for those not completed in 21 days.
PERMIT TIMELINES (MAJOR) Total Major Permits Issued <u>Within</u> Decision Timeline (90 Days):	#
PERMIT TIMELINES (MAJOR) Total Major Permits Issued <u>Outside</u> Decision Timeline (90 Days):	#
PERMIT TIMELINES (MINOR) Total Minor Permits Issued <u>Within</u> Decision Timeline (30 Days):	#
PERMIT TIMELINES (MINOR) Total Minor Permits Issued <u>Outside</u> Decision Timeline (30 Days):	#
VARIANCE FROM TIMELINES Reason for Variance from Timelines (Optional):	Commentary
PERMIT TIMELINES (AVERAGE – ALL) Overall Average Permit Review Timeline ():	Average # of days
PERMIT TIMELINES (AVERAGE – MAJOR – 90 DAYS) Average Major Permit Review Timeline:	Average # of days
PERMIT TIMELINES (AVERAGE – MINOR – 30 DAYS) Average Minor Permit Review Timeline:	Average # of days

¹ Note: For the first Annual Report using this framework will only capture permits issued from April 1 – December 31, 2024.

Annual Reporting – Compliance with O. Reg. 41/24	
MAPPING Are maps of regulated areas available at the CA head office and on the CA website? (ss. 4(1) of O. Reg. 41/24)	Yes / No (+commentary)
MAPPING Has the Authority undertaken an annual review of the mapping and made necessary updates? (ss. 4(2) of O. Reg. 41/24)	Yes / No (+commentary)
ADMINISTRATIVE REVIEWS Total requests for administrative reviews made to the Authority:	#
ADMINISTRATIVE REVIEWS Total administrative reviews completed within 30 days of the request:	# + commentary for those not completed within 30 days



PROGRAM AREA	STEWARDSHIP	REPORT NO.	STEW-03-2024
DATE PREPARED	November 18, 2024	FILE NO.	
MEETING DATE	November 27, 2024		
SUBJECT	2024 Stewardship Program Project Summary		

RECOMMENDATION

Suggested Resolution:

"THAT: Staff Report STEW-03-2024 be received."

LINK TO STRATEGIC PLAN

Links to the Strategic Plan (2023-2027):

Conserve and Sustain:

- *Engage stakeholders, the environmental community, and our watershed residents in a collective effort to protect, restore, and enhance our local environment through stewardship programs, strategies, and best management and sustainable practices.*
- *Collaborate and partner with agencies and community organizations to take action in the protection of natural habitats and ecosystems, share decision-making, and address emerging issues that impact the health and sustainability of the Lakehead watershed.*

Protect and Support:

- *Continue maintaining and enhancing flood control infrastructure in an effort to minimize the impacts of riverine flooding, erosion, and sedimentation.*
- *Prioritize and promote the protection and management of natural hazards, wetlands and natural heritage features within the LRCA Area of Jurisdiction.*
- *Promote and implement programs to alleviate the impacts of climate change, habitat degradation, and threats to biodiversity.*

Connect and Explore:

- *Engage diverse stakeholders through effective communications, outreach, and education initiatives.*
- *Grow partnership, collaborations and relationship with new and existing partners who share the LRCA's Vision and Mission.*

EXECUTIVE SUMMARY

The LRCA's stewardship projects and programs have been steadily growing since 2020. Eleven habitat restoration projects have been completed since then, and an additional nine stewardship projects are ongoing. No municipal levy has been used, and external funding from the municipal, provincial, and federal governments provided \$1,049,980.00 to support LRCA's stewardship projects and programs from 2020 to 2025. Thanks to the success of funding programs, stewardship has supported one full time role for the past 4.5 years, and a second Intern position in 2024. The Watershed Stewardship Technician was hired in 2020 and became a full-time permanent position in 2024, with a title change to Watershed Biologist. The Watershed Stewardship Technician Intern position was filled Spring 2024, thanks to funding from the Northern Ontario Heritage Fund Corporation.

In 2024, staff and volunteers have planted over 12,000 native trees, shrubs and perennials through Stewardship programs and projects. Plants have restored riparian habitat, shoreline, and wetland with funding from the Ministry of Environment, Conservation and Parks (MECP), the Ministry of Natural Resources (MNR), and Environment and Climate Change Canada (ECCC). Of these 12,000 native plants, around 4,500 were grown by LRCA's Seeds for Conservation program. In 2023 and 2022, 5,000 native plants were planted annually along with 20 total kilograms of native seed sown and 5 hectares of riparian and shoreline habitat restored. In 2021, 2,250 plants were installed.

Stewardship projects that are ongoing in 2025 include the Floodway Habitat Corridor project along the Neebing-McIntyre Floodway, Waterfront Shoreline Habitat Restoration along Lake Superior, Boulevard Shoreline Naturalization, the Cyanobacteria Shoreline Protection Program for private landowners, the Regional Phragmites Collaboration, Hurkett Cove Invasive Narrowleaf Cattail Monitoring, Hazelwood Lake Shoreline Naturalization, Seeds for Conservation and the Tree Seedling Program.

DISCUSSION

In 2020, the LRCA hired a full-time Watershed Stewardship Technician to develop and implement a new Stewardship Program. The long-term vision is to sustain an externally funded stewardship program (i.e., no municipal levy). The goal of the program is to promote watershed stewardship in the community and restore wildlife habitat, particularly along shorelines and riparian ecosystems. The program is also increasing ecological monitoring in Conservation Areas and LRCA land holdings.

In 2024, LRCA's Seeds for Conservation program officially launched. The program sustainably harvests seeds native to Northwestern Ontario from LRCA Conservation Areas for use in our ongoing stewardship initiatives. Seed has been shared with the City of Thunder Bay and the Ontario Native Women's Association. Plants raised from seed collected have also been provided to Fort William First Nation, EcoSuperior, Lakehead University, and Confederation College. The first year of the program has been a great success; \$35,741 was generated in plant sales and

Seeds for Conservation was awarded the Inspiration Award at the Conservation Areas Workshop in October.

The following provides a summary of the stewardship projects and programs that have been completed in 2024 or are ongoing. The projects are divided into Category 1 and 3 projects, see the summary table attached.

1. CATEGORY 1: Mandatory Programs and Services – Stewardship Projects on LRCA-owned land

2021 to 2025 – Wildlife Habitat Restoration along the Neebing-McIntyre Floodway Corridor

An ECCC and MECP funded project. The project involves the restoration of riparian habitat along the Neebing-McIntyre Floodway in the Thunder Bay Area of Concern. The long-term goal of the Floodway Habitat Corridor is to create a functioning riparian buffer along the entire Floodway Corridor, while creating ecologically diverse wildlife habitat and a vibrant greenspace for pollinators, birds, and wildflowers to thrive. The Floodway Corridor envisions restored riparian and meadow habitat along 5 kilometres of urban waterway. In collaboration with community partners, LRCA will reestablish a shoreline buffer by planting indigenous vegetation that offers unique ecosystem services such as: deeper rooting systems to anchor the bank in place; competition with invasive and non-native species; food, shelter, and nesting grounds for wildlife and waterfowl; and community awareness regarding climate change and wildlife habitat. Three sites were restored from 2021-2022, a fourth was completed in 2023 targeting management of invasive Tatarian Honeysuckle and Narrowleaf Cattail. In 2024, a fifth site was restored along the diversion channel. An additional site at Waterford Street will be undertaken in 2025.

Progress: *Completed* – Five sites restored with native shrubs and perennials, invasive species removed, habitat structures and signage installed. In 2024, just over 1,000 plants were installed along the Floodway. These plants mainly found homes at the Diversion Structure, with around 250 supplementing last year's plantings at the Balmoral Bridge site. *Ongoing* – In 2025, the Waterford site will be restored with enhanced riparian and meadow habitat plantings and invasive species removal. Engagement with schools to deliver programing related to restoration and climate change, including field trips, is ongoing.

2024 to 2025 – Snapping Turtle Monitoring along the Neebing-McIntyre Floodway

In the spring of 2024, surveys were conducted during the months of May and June to assess the use of the Neebing River and diversion channel by Snapping Turtles (*Chelydra serpentina*), a species at risk in Ontario. Snapping Turtles are designated by the Committee on the Status of Species at Risk in Ontario (COSSARO) as a species of Special Concern. Due to increasing reports of Snapping Turtle sightings from the Neebing Weir to the pedestrian bridge across the diversion channel to Chapples Golf Course, further investigation was carried out. In anticipation of planned dredging at the Diversion Channel Lip in fall 2025, surveys will be conducted again in spring 2025. Recommendations to mitigate impacts to Snapping Turtles will be incorporated into the Floodway Operation and Maintenance protocol.

Progress: *Completed* – Spring 2024 Snapping Turtle monitoring program. One Snapping Turtle was observed emerging from the diversion channel and walking across Chapples Golf Course to a pond. No evidence of nesting was observed in the diversion channel. *Ongoing* – A complete report including recommendations for incorporation into ongoing Floodway operation and maintenance plans will be completed this winter. Additional surveys will be carried out spring and fall 2025.

2024 to 2025 – Hazelwood Lake Shoreline Naturalization

Shoreline surrounding the Hazelwood Lake beach will be revegetated in 2025 to address ongoing cyanobacteria blooms and harmful, nuisance algae at Hazelwood Lake. Seeds for Conservation harvested seeds for this project in the fall of 2024, thanks to successful funding from TD Friends of the Environment and TC Energy. Native shrubs and perennials along the water's edge will filter runoff entering the lake while offering nearshore shading and temperature regulation.

Progress: *Completed* – Fall 2024 seed collection in preparation for the cultivation of native perennials through Seeds for Conservation for fall 2025 restoration. *Ongoing* – Restoration planning, native perennial cultivation, and education and outreach.

2024 – LRCA Office Pollinator Garden Expansion

Thanks to funding through TD Friends of the Environment and in-kind contributions from volunteers and Seeds for Conservation, the LRCA Office Pollinator Garden was expanded in June, 2024. Over 500 native plants were installed, all grown by Seeds for Conservation using locally harvested seed. A sod cutter rental was generously donated by Serafini General Contracting, topsoil leftover from the office utility upgrade restoration was used, and mulch donated by Garden of Eden prepped the site for planting.

Progress: *Completed* – Pollinator Garden expanded by approximately 25 square metres in June, 2024. Over 500 native plants installed by volunteers, all raised through Seeds for Conservation.

Seeds for Conservation

The Seeds for Conservation program offers native perennials grown from seed sustainably harvested by staff from LRCA Conservation Areas. The plants are grown in the LRCA Greenhouse by the Watershed Stewardship Technician Intern. With insufficient access to Northwestern Ontario native species through local nurseries, LRCA's Seeds for Conservation program provides regionally adapted seed and plants for habitat restoration projects, pollinator gardens, rain gardens, and more. It is used by LRCA and community partners such as Fort William First Nation, Ontario Native Women's Association, the City of Thunder Bay, EcoSuperior, Lakehead University and Confederation College. In-person native plant sales and sales through the LRCA webstore have generated additional revenue for this program. This is a new initiative at LRCA and is a great support to the growing stewardship program. In October, Seeds for Conservation was awarded the Inspiration Award at the Conservation Areas Workshop, recognizing the initiative for its outstanding positive change.

Progress: *Completed* – LRCA raised 4,500 plants from locally-harvested seed through Seeds for Conservation this year, using the LRCA Greenhouse. *Ongoing* – The initiative will continue into 2025, applying lessons learned and supplying stewardship projects and the public with regionally appropriate native plants.

2. CATEGORY 3: Non-Mandatory Programs – Stewardship Projects on municipal land, carried out with local partners

2020 to 2025 – Fisherman’s Park West Wildlife Habitat and Shoreline Restoration

With funding from the Thunder Bay District Stewardship Council, City of Thunder Bay, MECP, and ECCC, the LRCA will continue to restore wildlife habitat, rehabilitate the Lake Superior shoreline, recreate coastal wetlands, and provide passive recreation opportunities at Fisherman’s Park West. The goal of the project is to restore the park by returning the area to a more natural condition by planting trees, shrubs, and perennials that are native to our region. Invasive species management of five different invasive species is ongoing at this site. The naturalization of this area will provide valuable breeding grounds, shelter, and forage for migratory waterfowl, birds, and pollinators, while also creating a space where the public can explore and enjoy the beautiful natural landscape. This project included student engagement with respect to climate change adaptation by re-naturalizing urban areas. In 2024, efforts focused on expanding the meadow habitat with over 3,700 plants installed by volunteers. Ongoing management of invasive species and stewardship of the coastal wetland constructed last year were also prioritized.

Progress: *Completed* – Enhancement and expansion of coastal wetland, riparian planting of native trees and shrubs, diversification and expansion of meadow habitat, and installation of viewing platform. *Ongoing* – Design and installation of educational signage at the new viewing platform. Collaboration with the Thunder Bay District Stewardship council to develop a nest box database from ongoing monitoring.

2022 to 2025 – Waterfront Shoreline Habitat Restoration

An ECCC and MECP funded project, in partnership with City of Thunder Bay. The Waterfront Shoreline Habitat Restoration project is re-creating wildlife habitat and a vegetative buffer along the Lake Superior shoreline. The project area spans Marina Park Drive from the mouth of McVicar Creek to Richardson Park (at Richardson’s grain terminal). Approximately 400 native trees, shrubs, and perennials were installed in 2024. The restoration and plantings have been coordinated with the City’s new Waterfront Trail lookout at the end of Marina Park Drive.

Progress: *Completed* – On-the-ground restoration completed with volunteers on International Trail Day, June 1, 2024.

2022 to 2025 – Boulevard Lake Shoreline Naturalization

An ECCC funded project, in partnership with City of Thunder Bay. The Boulevard Lake Naturalization project will introduce a vegetative buffer to filter runoff, incorporate low impact development techniques to catch runoff, and address concerns regarding an outflow into Boulevard Lake. Youth from the nearby school, St Ignatius High School, have participated directly

in the project by conducting benthic invertebrate analyses in the nearshore project area spring and fall through the duration of the project. A catchment basin to capture and filter runoff from the new Jumpstart Playground was vegetated and additional plants were installed along the shoreline.

Progress: *Completed* – The retaining wall along Boulevard Lake has been removed, a 3:1 slope restored, and over 500 native species planted along the shoreline to enhance the buffer between recreational areas and aquatic environment. *Ongoing* – An engineered wetland was installed in 2024 to complement restoration efforts achieved by this project.

2024 – Boulevard Lake Wetland

A 3-hectare engineered wetland was installed along the shoreline of Boulevard Lake in 2024, thanks to funding through MECP's Wetland Conservation Partner Program and the City of Thunder Bay. This stormwater management project will address water quality concerns in Boulevard Lake by redirecting the flow of three storm drains into a wetland, offering filtration of runoff prior to entering the lake. The wetland habitat will also provide terrestrial and aquatic habitat for fish, birds, amphibians, and pollinators. Benthic analyses from the “Boulevard Lake Shoreline Naturalization” project, alongside an electrofishing survey in August will help assess the impact of this restoration. Over 5,000 native plants installed this fall will offer natural filtration and ecosystem services. Special thanks to Confederation College, Lakehead University, and La Verendrye high school students, along with Enbridge Gas volunteers for successfully getting all the plants in the ground!

Progress: *Completed* – Approximately 5,300 native plants installed in the Boulevard Lake Wetland, of which around 3,300 were grown and supplied by Seeds for Conservation. *Ongoing* – An educational sign for the site is being finalized with details about the function and benefits of the wetland.

3. CATEGORY 3: Non-Mandatory Programs – Superior Stewards

2020 to 2024 – Superior Stewards Program

The Superior Stewards program offers online resources, available on the LRCA's Stewardship webpage, to watershed residents to learn the best ways to naturalize their property, implement low impact development, and plant more native trees and shrubs. Webpages under the Superior Stewards program include shoreline naturalization, managing stormwater, invasive species, habitat enhancement, and LRCA stewardship. In 2024, a comprehensive review of the stewardship content has been instigated to update project information and resources.

Progress: *Completed* – Streamlined Stewardship webpage and launched the new Superior Stewards online resources on April 1, 2021. *Ongoing* – Updates to the Stewardship section of the webpage will be incorporated into LRCA's new website.

2020 to 2025 – Shoreline Protection Program within the Thunder Bay Area of Concern (AOC)

A MNR funded project. LRCA has developed the Shoreline Protection Program to address fish and wildlife related to beneficial use impairments within the Thunder Bay Area of Concern. The program is a shoreline assessment and educational stewardship program that supports private landowners in planting native vegetation to enhance shoreline and riparian zones, rehabilitate and maintain healthy shoreline habitat, provide erosion protection, and improve water quality. The rehabilitation of the Lake Superior shoreline at Mission Island Marsh Conservation Area was also included as part of the program in 2021. 2024 was the final year of the project, with an additional 9 restoration projects completed and 1,000 plants installed.

Progress: *Completed* – Through the Shoreline Protection Program, 7,500 square metres of shoreline was restored with over 4,000 plants installed. The LRCA consulted with 35 landowners to restore the shoreline on their property. The Watershed Biologist is pursuing funding opportunities to continue this program in the future.

2024 to 2025 – Cyanobacteria Shoreline Protection Program

The Cyanobacteria education and outreach project, funded by MECP, intends to increase public understanding and address knowledge gaps regarding cyanobacteria, harmful algal blooms, and nuisance algal blooms. Habitat restoration activities will also be carried out: landowner consultation and design plans, and native trees, shrubs and perennials will be available to landowners for installation along the shorelines of affected lakes. Further, the funding will contribute to ongoing monitoring efforts on selected LRCA-owned properties.

Progress: *Ongoing* – Planning of outreach and education events has begun this fall. Engagement sessions with campers associations and private landowners experiencing cyanobacteria concerns will commence winter 2025.

Tree Seedling Program

The Tree Seedling Program offers private landowners in the Lakehead Watershed a place to purchase tree seedlings. The program is a partnership between LRCA and Hill's Greenhouse. The Tree Seedling Program distributed over 10,000 white spruce, black spruce and jack pine tree seedlings in 2024, with profits generously donated by Hill's Greenhouse back to LRCA's Nature Interpretive programming.

Progress: *Ongoing* – The program will continue in 2025.

4. CATEGORY 1 (on LRCA-owned land) and 3 – Invasive Species

2022-2025 – Thunder Bay Regional Phragmites Collaboration

Development of a strategic framework to tackle invasive phragmites in Thunder Bay and surrounding areas, generously funded by MNR and the Invasive Species Centre. LRCA has engaged key stakeholders to inform the current status of invasive phragmites in the region, develop an integrated long-term plan for its management, and collaborate on its removal. The formation of a Thunder Bay Regional Phragmites Collaboration has established the foundation

needed for continued collaboration, and combines resources, knowledge, and enthusiasm to effectively manage Invasive Phragmites in the region.

Progress: *Ongoing* – In 2024, 21 stands of Invasive Phragmites were treated by LRCA and partners, with management carried out by Haveman Brothers Forestry Inc. That is 6 more stands than were managed in 2023. Approximately 10,521 square metres of Invasive Phragmites was eradicated in 2024. By-annual meetings with the Thunder Bay Regional Phragmites Collaborative will continue into 2025.

2024 to 2026 – Invasive Cattail Management at Hurkett Cove

Hurkett Cove is known for its intrinsic natural beauty consisting of lacustrine and riverine marshes and swamps along the Black Bay shore. The location has been assessed as a Provincially Significant Wetland and is a known migratory bird stopover site, attracting over 200 different species annually. The ecological implications of Narrowleaf Cattail are numerous as it eliminates viable habitat, reduces diversity, and influences hydrology. This is particularly concerning as it could outcompete existing Northern Wild Rice (*Zizania palustris*) which is an essential food source for migratory and resident birds. Wild Rice is also a species of cultural significance and is uncommon in the region. The project is the first phase of a larger objective for addressing Narrowleaf Cattail within Hurkett Cove. The intent is to locate and map stands of Narrowleaf Cattail and Wild Rice within Hurkett Cove to better understand the spread and species interactions. Initial mapping and monitoring will support planning for future treatment methodologies and eradication of the species within the bay. Additionally ecological data is being collected and background literature compiled to support future recommendations.

Progress: *Completed* – Invasive Narrowleaf Cattail was mapped in Hurkett Cove late summer 2023. In 2024, Wild Rice was mapped to compare to the spread of Cattail. Aquatic and benthic surveys, along with Autonomous Recording Unit installation for bird and amphibian observations was completed this year. *Ongoing* – Data interpretation and a summary report is in progress, and will include best management practices for the invasive species. An updated wetland evaluation for Hurkett Cove will be completed in 2025.

FINANCIAL IMPLICATIONS

LRCA staff have been successful in obtaining external funding from the municipal, provincial, and federal governments, as well as private donors, to support LRCA's stewardship projects and programs, including wages for a full time Watershed Biologist and a contract Watershed Stewardship Technician Intern. The total external funding provided for stewardship projects from 2020 to 2025 is \$1,049,980.00. Staff will continue to apply for funding to sustain this program.

CONCLUSION

The LRCA's stewardship projects and programs have been progressing very well. LRCA staff have been successful in developing meaningful partnerships with key stakeholders to promote watershed stewardship in the community and restore shorelines and riparian ecosystems within the LRCA's area of jurisdiction. The stewardship program carries out effective environmental

action in the Lakehead Watershed and is positively contributing to climate change resiliency, habitat creation, and supporting biodiversity.

BACKGROUND

Under the guidance and direction of the Watershed Manager, the Watershed Stewardship Technician was hired in 2020 to develop and implement the LRCA's stewardship projects and programs. The stewardship program now supports two positions: the Watershed Biologist and Watershed Stewardship Technician Intern, raising landowner awareness of riparian and shoreline stewardship principles and implementing ecological restoration in the Lakehead Watershed. Stewardship and habitat restoration projects range from terrestrial and aquatic plantings, invasive plant species removal, green infrastructure techniques, species-at-risk habitat enhancement and protection, general habitat enhancement, and pollinator habitat creation.

REFERENCE MATERIAL ATTACHED

- Table 1 – Inventory of Programs - LRCA Stewardship
- Map – LRCA Stewardship Projects
- Floodway Habitat Corridor – Stewardship Project Sites

PREPARED BY: Jessie McFadden, Watershed Biologist

THIS REPORT SIGNED AND VERIFIED BY:  Tammy Cook Chief Administrative Officer	DATE: November 21, 2024
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Table 1 – Inventory of Programs - LRCA Stewardship

(COMMUNICATIONS AND OUTREACH RELATED TO RISK OF NATURAL HAZARDS	LAND MANAGEMENT	STEWARDSHIP
CATEGORY 1: Mandatory Programs & Services	CATEGORY 1: Mandatory Programs & Services	CATEGORY 3: Non-Mandatory Programs
1. Stewardship projects on LRCA-owned land <ul style="list-style-type: none">• Neebing-McIntyre Floodway-related stewardship projects, education programs, and community volunteer events• Superior Stewards online webpage and resources for landowners; how to steward land to lower risk to natural hazards on private property	<ul style="list-style-type: none">• Mission Island Marsh Conservation Area shoreline restoration• Neebing-McIntyre Floodway stewardship• Stewardship and land inventories in Conservation Areas• Seeds for Conservation• Hazelwood Lake Shoreline Naturalization	2. Stewardship projects on municipal land, carried out with local partners <ul style="list-style-type: none">• Restoration projects on public lands with community partners (City of Thunder Bay and Fort William First Nation) 3. Superior Stewards <ul style="list-style-type: none">• Shoreline Protection Program restoring riparian and shoreline habitat on private property, working one-on-one with landowners• Tree Seedling Program• Seeds for Conservation• Cyanobacteria Shoreline Protection Program
	4. Invasive Species <ul style="list-style-type: none">• Hurkett Cove invasive Narrowleaf Cattail mapping and BMP• Neebing-McIntyre Floodway invasive species management	<ul style="list-style-type: none">• Invasive species management at restoration project sites• Thunder Bay Regional Phragmites Collaboration

LRCA Stewardship Projects



Legend	
	LRCA Jurisdiction
Stewardship Project	
★	LRCA Owned Land
★	Municipal Land
●	Superior Stewards
▲	Invasive Species Management
	Parcels
Drainage	
~~~~~	Water Body
~~~~~	Stream
~~~~~	River

0 5 10 15 km

1:375,000

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130 Conservation Rd.
Thunder Bay, ON
P7B 6T8

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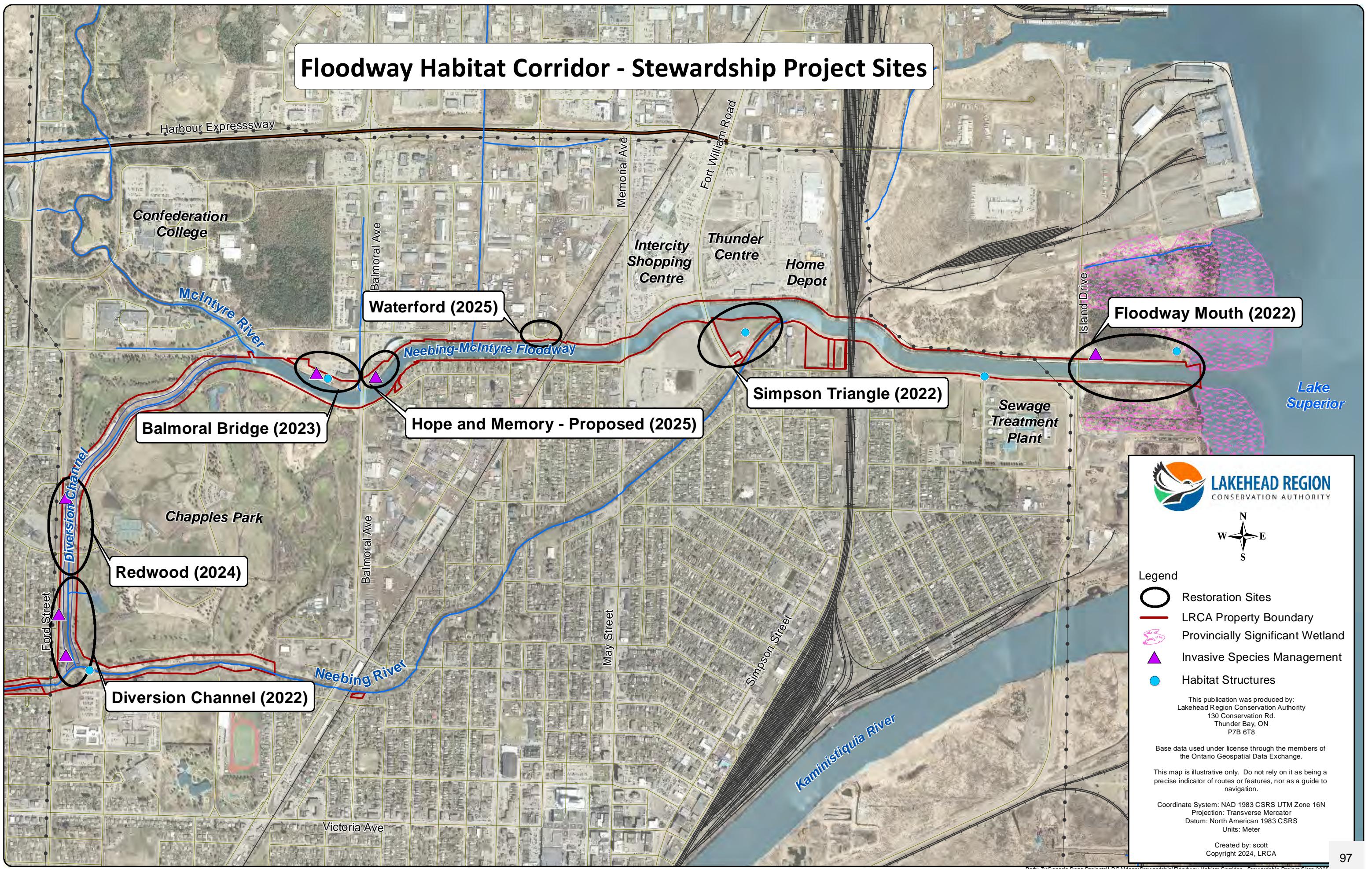
This map is illustrative only. Do not rely on it as being a
precise indicator of routes or features, nor as a guide to
navigation.

Coordinate System: NAD 1983 CSRS UTM Zone 16N
Projection: Transverse Mercator
Datum: North American 1983 C
Units: Meter

Created by: scott
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Floodway Habitat Corridor - Stewardship Project Sites





PROGRAM AREA	WATERSHED MONITORING	REPORT NO.	WM-01-2024
DATE PREPARED	November 21, 2024	FILE NO.	
MEETING DATE	November 27, 2024		
SUBJECT	Conservation Area Water Quality Monitoring Report 2024		

RECOMMENDATION

Suggested Resolution:

“THAT: the Staff Report WM-01-2024 be received AND FURTHER THAT the Conservation Area Water Monitoring Program will continue in 2025.”

LINK TO STRATEGIC PLAN (2023 – 2027)

Connect & Explore:

- *Manage recreational areas for current and future generations through robust land management, efficient maintenance programs, and reinvestment in the land.*

EXECUTIVE SUMMARY

The Lakehead Region Conservation Authority (LRCA) monitors water quality at four conservation areas: Hazelwood Lake, Hurkett Cove, Mission Island Marsh and Silver Harbour. *E. coli* levels are monitored at Hazelwood Lake and Mission Island Marsh under the Thunder Bay District Health Unit’s Bathing Beach Program. Cyanobacteria and algae blooms are monitored at all four sites, with the assistance of Blue Green Labs to conduct microbiology assessments.

In 2024, *E. coli* test results for Hazelwood Lake and Mission Island Marsh were within acceptable levels (≤ 200 counts of *E. coli* per 100 millilitres of water) for the entire season. As a result, no beach advisories were posted in the summer of 2024 for *E. coli* exceedances.

The LRCA continued the cyanobacteria monitoring program in 2024 as a protective measure to better understand the presence of cyanobacteria. During the 2024 cyanobacteria monitoring season, from July 15 to August 12, 2024, at least one genus of cyanobacteria was identified at all selected sample locations; however, the Eurofins Algal Toxin (Microcystins) Recreational Water Test Strips Kit tests did not exceed the Health Canada Recreational Guidelines of 10 $\mu\text{g/L}$.

In 2024, a blue-green algae bloom was observed and reported to the Spills Action Centre and MECP on August 13, 2024. LRCA staff collected a sample, which was provided to Blue Green labs for taxonomic analysis and to MECP for toxin analysis. It was determined that the sample was indicative of a blue-green algae bloom which resulted in the posting of a beach advisory from August 13 to August 28, 2024, as recommended by the Thunder Bay District Health Unit.

DISCUSSION

The Lakehead Region Conservation Authority (LRCA) monitors water quality at four conservation areas: Hazelwood Lake, Hurkett Cove, Mission Island Marsh and Silver Harbour. *E. coli* levels are monitored at Hazelwood Lake and Mission Island Marsh under the Thunder Bay District Health Unit's Bathing Beach Program. Cyanobacteria and algae blooms are monitored at all four sites, with the assistance of Blue Green Labs to conduct microbiology assessments.

Hazelwood Lake *E. coli* levels were well below the PWQO criterion of 200 counts per 100 millilitres (mL) of water for the entire sampling season. The highest geometric mean of the year was 14 counts per 100 millilitres of water which occurred on August 19, 2024.

Based on the historical bathing beach data for Hazelwood Lake, there does not seem to be an indication of improvement or deterioration of water quality at this Conservation Area. Since 1994, Hazelwood Lake has exceeded the applicable *E. coli* criterion during four sampling periods. In 1998 and 1999, Hazelwood Lake exceeded the applicable *E. coli* criterion once each year: August 5, 1998 (138.78 counts per 100 millilitres of water) and July 6, 1999 (97.36 counts per 100 millilitres of water). In 2006, the applicable criterion was exceeded five times resulting in a closure from July 28 until August 16, 2006; the highest exceedance was $>10^3$ counts per 100 millilitres of water and was directly attributed to a large flock of Canadian geese, low lake levels and warm water temperatures. In 2007 the applicable criterion was exceeded twice: July 9 (486.63 counts per 100 millilitres of water), and August 27 (271.81 counts per 100 millilitres of water).

At Mission Island Marsh, *E. coli* levels approached the criterion throughout the sampling season but did not exceed. All samples were less than 200 counts per 100 mL the geometric mean for the sample set, unlike 2023. The highest geometric mean of the year occurred on June 4, 2024, with 78 counts per 100 mL of water.

Based on the historical bathing beach data for Mission Marsh, there does not seem to be an indication of improvement or deterioration of water quality at this Conservation Area. Since 1994, Mission Marsh has exceeded the applicable *E. coli* criterion during three sampling periods. In 1998, the applicable *E. coli* criterion was exceeded once on August 5 (119.07 counts per 100 millilitres). In 1999, the applicable criterion was exceeded twice: July 6 (126.17 counts per 100 millilitres), and July 8 (158.22 counts per 100 millilitres). In 2008, the applicable criterion was exceeded once on August 18 (373.31 counts per 100 millilitres) resulting in a closure from August 19 to August 21, 2008. All other analyzed samples at Mission Marsh from 1994 to 2024 were within acceptable levels of *E. coli* (no sampling was undertaken between 2009 to 2021).

Beginning in 2021, the LRCA has been taking progressive steps to further understand and analyze cyanobacteria within the conservation areas where visitors recreate in open water. Cyanobacteria blooms have been observed and documented in Hazelwood Lake, initially in 2021, 2022, 2023, and again in 2024. During July and August 2024, the LRCA conducted weekly testing, using Algal Toxin Test Strips and a microscope analysis of samples to understand the phytoplankton community at the four conservation areas. The results of the Algal Toxin Test Strips indicated that the total concentration for microcystins was zero ppb for all sites for the

five-week testing period. The test results do not indicate the absence of microcystins, rather that the concentrations are too low to be considered toxic or result in a Harmful Algae Bloom (HAB).

Various genera of cyanobacteria were observed and recorded across all sample locations selected for water quality monitoring in 2024. A total of five genera of cyanobacteria were observed as dominant, secondary, or tertiary within the study including Dolichospermum, Woronchinia, Microcystis, Snowella, and Merismopedia. While Microcystins are regarded as the most prevalent and significant of the cyanotoxins, it's important to monitor for other known cyanotoxins produced by the genus of cyanobacteria observed as they too can also produce harmful health effects.

On August 13, 2024, LRCA staff observed and sampled a cyanobacteria bloom, occurring a day after the final sample of the study. The samples were provided to MECP and Blue-Green Labs for microscopic analysis and toxin testing. MECP confirmed that the microscopic examination of the contents of the sample was indicative of a blue-green algae bloom. However, the Ministry lab advised that the sample collected from Hazelwood Lake did not undergo a toxin analysis due to the limited volume provided. Blue-Green Labs determined that there were three dominant genera of cyanobacteria in the same sample including Dolichospermum, Woronchinia, and Microcystis respectively. In part of due diligence, the LRCA issued a two-week advisory to warn bathers of the presence of cyanobacteria from August 13, 2024, to August 28, 2024.

MECP communicated that the Ministry's Lab requires two 1-liter samples that contain a preservative and are pre-charged by the lab to run an accurate toxin analysis. Since this event, MECP has provided the LRCA with six sampling kits to better capture these bloom events and to assist with the sampling process in the years to come.

In 2024, the LRCA received funding from TC Energy and TD Friends of the Environment to rehabilitate the Hazelwood Lake Shoreline, with additional funding from MECP to conduct a cyanobacteria education and outreach project which encompasses funding for 2025's cyanobacteria monitoring program. Therefore, monitoring of bacteriological water quality and cyanobacteria will be continued in the summer of 2025. Further testing of field parameters should be continued in succeeding years to determine normal ranges and trends for the selected Conservation Areas. LRCA staff will continue to contact the Spills Action Centre if blue-green algae blooms are suspected during monitoring.

FINANCIAL IMPLICATIONS

Water quality analysis is conducted by the Ministry of Health laboratory under the Thunder Bay District Health Unit's Bathing Beach Program.

The total cost associated with the cyanobacteria monitoring in 2024 was \$2,744.28 including: the purchase of Abraxis Microcystins Recreational Water Test Kit (20 tests) (\$1,016.66); and consultant costs for Blue Green Labs for materials, microscopy work, analysis (20 hours), and report writing (\$1,727.62).

Water quality monitoring expenses will be included in future budgets as warranted.

CONCLUSION

All analyzed samples for Hazelwood Lake and Mission Island Marsh were within acceptable levels for *E. coli* for the 2024 bathing beach season. While various genera of cyanobacteria were observed and recorded across the sample locations, the Hazelwood Lake Conservation Area was the only location that received a report of a bloom and required a closure in 2024. Future efforts will be focused on addressing cyanobacteria blooms at Hazelwood Lake.

BACKGROUND

Since 1994, the LRCA has annually monitored the water quality of the beach waters at the Hazelwood Lake Conservation Area. In 2022 the monitoring program was expanded to include Mission Island Marsh Conservation Area after monitoring had ceased in 2008. Sampling at the beach area was previously discontinued after it was classified as a 'non-bathing beach' due to a low usage of the water for swimming/bathing purposes. An increase in non-bathing activities and the expansion of the program to test for other water quality parameters warranted the return of the monitoring program to Mission Island Marsh Conservation Area in 2022.

The main contaminant of concern at bathing beaches is *Escherichia coli* (*E. coli*). *E. coli* is naturally found in the intestines of humans and warm-blooded animals. Unlike other bacteria in this family, *E. coli* does not usually occur naturally on plants or in soil and water. The inability of *E. coli* to grow in water combined with its short survival time in water environments means that detecting *E. coli* in a water system is a good indicator of recent fecal contamination. These bacteria can cause irritation of the skin and eyes when contact is made and can cause serious illness when ingested. When *E. coli* criterion is exceeded, a Beach Advisory is posted at the facility.

Emerging reports of cyanobacteria, also referred to as blue-green algae, heightened the need for monitoring at conservation areas where visitors recreate in open water. These microscopic plant-like organisms are naturally found within natural streams, rivers, and lakes. Blooms occur when the populations rise rapidly, creating a large floating mass that can be bluish-green, brown, red, or yellow. Changes in cyanobacteria populations can be an indicator of water quality issues. Cyanobacteria can produce a range of cyanotoxins and variants of these cyanotoxins which can have different negative health effects. Exposure is often related to recreational activities within a water system. Exposure to cyanotoxins during recreational activity can result in hay fever-like symptoms, skin rashes, respiratory issues, and gastrointestinal distress. When blue-green algae is suspected, the Spills Action Centre is contacted.

REFERENCE MATERIAL ATTACHED

Executive Summary, Conservation Area Water Quality Monitoring, 2024.

A copy of the full report will circulate at the meeting and can be made available electronically.

PREPARED BY: Michelle Willow, Environmental Planner

THIS REPORT SIGNED AND VERIFIED BY:



Tammy Cook

Chief Administrative Officer

DATE:

November 21, 2024

EXECUTIVE SUMMARY

Water quality sampling of the bathing beach at Hazelwood Lake Conservation Area and non-bathing beach at Mission Island Marsh Conservation Area was undertaken by the Lakehead Region Conservation Authority (LRCA) throughout the summer of 2024. Collected water samples were analyzed by the Public Health Ontario laboratory for *Escherichia coli* (*E. coli*) bacterial concentrations and compared to the bathing beach criterion published in the Ministry of Health and Long-Term Care (MOHLTC), Operational Approaches for Recreational Water Guideline, 2018. Additionally, the LRCA has continued the cyanobacteria monitoring program in 2024 as a protective measure to better understand the presence of cyanobacteria within four Conservation Areas. In 2024, cyanobacteria monitoring, sampling, and cyanotoxin testing were conducted weekly as part of the Beach Bathing Program from July 15 to August 12, 2024. The Conservation Areas selected for assessment include Hazelwood Lake, Hurkett Cove, Mission Island Marsh, and Silver Harbour.

E. coli test results for both Conservation Areas were within acceptable levels (≤ 200 counts of *E. coli* per 100 milliliters of water) for the entire season. As a result, there were no beach advisories posted in the summer of 2024 for *E. coli* exceedances. Previously, the Hazelwood Lake beach had swimming advisories posted in 1998, 1999, 2006, and 2007, while the Mission Island Marsh beach had one swimming advisory posted in 2008 when the analyzed water samples resulted in *E. coli* levels above the applicable criteria; however, no sampling was conducted between 2009 and 2021. It is noted that prior to 2018, the criterion was <100 counts of *E. coli* per 100 milliliters of water.

Field parameters, which included water temperature, turbidity, pH, dissolved oxygen and conductivity, were measured as additional indicators of water quality. Testing of these field parameters began in 2005. The water quality parameters for all four sites were within the acceptable criterion for the Provincial Water Quality Objectives (PWQO). Testing of field parameters should be continued as part of the Bathing Beach program in succeeding years to help clarify normal ranges and trends for both the monitored Conservation Areas.

During the 2024 cyanobacteria monitoring season, at least one genus of cyanobacteria was found at all selected sample locations. The observable trend for all sites over the month was an increase in the dominance of cyanobacteria in the phytoplankton community during late August. However, the Eurofins Algal Toxin (Microcystins) Recreational Water Test Strips Kit tests did not exceed the Health Canada Recreational Guidelines of 10 $\mu\text{g}/\text{L}$. The microbiology analysis of the samples revealed that the most common freshwater diatoms were *Asterionella* and *Tabellaria*. Of the observed cyanobacteria, the most abundant was *Dolichospermum* followed by *Woronichinia* and

Mycrocystis. This is concerning as Dolichospermum is a well-documented producer of the cyanotoxin Microcystin-LR and the Anatoxin-a group.

In 2024, an algal bloom occurred at Hazelwood Lake on August 13, 2024. LRCA staff collected a sample from the bloom. The bloom was reported to the Spills Action Centre; to the Ministry of Environment, Conservation and Parks (MECP); and samples were sent to the ministry's lab for toxin analysis, as well as Blue-Green Labs. The bloom was later confirmed to be cyanobacteria by MECP via microscopic examination. Due to the sample size collected by staff, the Ministry Lab did not perform a toxin analysis on the sample. As a safety precaution, a beach advisory was posted on August 13, 2024, for a total of 14 days as recommended by the Thunder Bay District Health Unit.

Funds and personnel permitted, bacteriological water quality and cyanobacteria monitoring should continue in the summer of 2025. As these programs progress forward, data collection will be streamlined using available technology (iPads and Survey 123). Should a cyanobacteria bloom be encountered during sampling activities, LRCA staff will report to the Spills Action Centre.

2024 TREASURER'S REPORT MONTHLY EXPENSES				
	2024 BUDGET	October	TOTAL TO DATE	BALANCE REMAINING
REVENUE				
Provincial Grants	348,732	-	402,044	- 53,312
Municipal Levy	1,854,691	106,860	1,961,551	- 106,860
Self Generated	341,214	80,054	820,486	- 479,272
Other Revenue	414,019	2,500	133,239	280,780
TOTAL REVENUE	2,958,656	189,414	3,317,320	- 358,664
EXPENSES				
Category 1 Mandatory Programs and Services				
Corporate Services	959,560	49,278	805,654	153,906
Risk of Natural Hazards	1,048,714	66,489	568,058	480,656
Conservation and Management of Lands owned and controlled by the Authority	455,875	54,367	482,634	- 26,759
Source Water Protection	68,792	3,992	46,248	22,544
Other Programs and Services	22,870	5,338	22,651	219
Total Category 1 Mandatory Programs and Services	2,555,811	179,464	1,925,246	630,565
Category 2 Non-Mandatory Programs and Services at the Request of a Municipality				
Mapping Services	16,000	2,597	11,335	4,665
Total Category 2 Non-Mandatory Programs and Services at the Request of a Municipality	16,000	2,597	11,335	4,665
Category 3 Non-Mandatory Programs and Services				
Education	103,882	6,423	62,350	41,533
Stewardship	272,963	10,407	282,686	- 9,723
Other	10,000	-	3,816	6,184
Total Category 3 Non-Mandatory Programs and Services	386,845	16,830	348,851	37,994
Total All Expenses	2,958,656	198,891	2,285,432	673,224



PROGRAM AREA	CORPORATE	REPORT NO.	CORP-14-2024
DATE PREPARED	November 14, 2024	FILE NO.	
MEETING DATE	November 27, 2024		
SUBJECT	<i>Conservation Authorities Act - Transition Plan, Phase I and II Regulations</i> Deliverable Completion		

RECOMMENDATION

Suggested Resolution

“THAT: Staff Report CORP-14-2024 be received for information.”

“THAT: The CAO and Chair are authorized to execute a Memorandum of Understanding with the City of Thunder Bay related to the Risk of Natural Hazard Program - Victor Street Erosion.”

LINK TO STRATEGIC PLAN (2023-2027)

All Areas.

EXECUTIVE SUMMARY

Over the last several years the government has introduced various Bills and regulations related to Conservation Authorities that required various deliverables to be completed. Between 2021 to 2024 the LRCA completed a Transition Plan, Inventory of Programs, reported to Province six separate times, reformatted the budget and approval process and completed a Conservation Lands Strategy. At the November 27, 2024 meeting, the Lands Inventory and Watershed-Based Resource Management Strategy will be finalized. The final deliverables related to Operation, Maintenance and Surveillance Plans (OMS) and Asset Management Plans (AMP) related to infrastructure are summarized in this report. Once an Memorandum of Understanding is executed with the City of Thunder Bay related to Victor Street Erosion, all mandatory deliverables will be completed.

DISCUSSION

Over the last several years the government has introduced various Bills and regulations related to Conservation Authorities that required various deliverables to be completed. The attached table (Attachment #1) outlines the LRCA's completion of the deliverables between 2021 and 2024. The final deliverables are on schedule to be completed by the due date of December 31, 2024.

The deliverables for 2024 included the Conservation Lands Strategy, which was approved by the Board at the September 25, 2024 meeting, and the Lands Inventory and Watershed-Based Resource Management Strategy which are scheduled to be approved at the November 27, 2024 meeting. The final deliverables related to Operation, Maintenance and Surveillance Plans (OMS) and Asset Management Plans (AMP) related to infrastructure are summarized below.

Neebing-McIntyre Floodway/Hazelwood Lake Dam/Victor Street Erosion

Ontario Regulation 686/21: Mandatory Programs and Services, sets out the Mandatory Programs and Services which must be delivered by all Conservation Authorities in Ontario. Subsection 5(1) of the regulation requires all Conservation Authorities to “provide programs and services to support the operation, maintenance, repair and decommissioning of the following types of infrastructure the authority owns or manages:

1. Any water control infrastructure, the purpose of which is to mitigate risks to life and damage to property resulting from flooding or to assist in flow augmentation.
2. Any erosion control infrastructure.”

The LRCA provides programs and services for the following water and erosion control infrastructure:

- a) Neebing-McIntyre Floodway
- b) Hazelwood Lake Dam
- c) Kaministiquia River Erosion near Victor Street and Broadway Avenue

Subsection 5(2) of the regulation further states that the programs or services provided under subsection (1) shall include the development and implementation of operational plans and asset management plan(s), and the undertaking of any technical or engineering studies necessary to ensure the proper operation and maintenance of the infrastructure to which the program or services applies.

OSM Plans have been developed and are being implemented for all three program areas (Neebing McIntyre Floodway, Hazelwood Lake Dam and Kaministiquia River erosion at Victor Street and Broadway Avenue). The OSM Plans summarize major projects completed for each program area, include a Maintenance Plan Summary that forecasts approximate times for future projects/require maintenance as applicable and also summarizes LRCA's surveillance plan (i.e. monitoring efforts of the water and erosion control infrastructure); the OMS Plans will be updated annually.

LRCA's AMP includes infrastructure that is owned by the LRCA including the Diversion Structure for the Neebing McIntyre Floodway and the Hazelwood Lake Dam. Erosion control infrastructure in place along Victor Street is owned by the City of Thunder Bay and is therefore not included in LRCA's AMP. LRCA's AMP explains LRCA's assets and details an asset management strategy as well as a financial strategy to support the asset management strategy to maintain or achieve the required levels of service of the assets over a 20-year period. LRCA's AMP is updated every five

years and will continue to include water and erosion control infrastructure owned and operated by the LRCA in future updates.

Technical and engineering studies will be completed as necessary for each of the program areas and will continue to be noted in the OSM Plans once complete.

Subsection 5(3) explains that if an authority enters into an agreement with an owner of water or erosion control infrastructure to manage the infrastructure on the owner's behalf, the authority shall provide the programs and services to operate, maintain, repair and decommission the infrastructure only in accordance with its obligations under the agreement.

An Agreement is in place between the City of Thunder Bay and the LRCA regarding the continued operation and maintenance of the Neebing McIntyre Floodway. The LRCA and the City of Thunder Bay are working towards finalizing a Memorandum of Understanding by December 31, 2024 regarding LRCA's involvement in monitoring and facilitating minor maintenance of erosion and erosion control infrastructure along Victor Street. The MOU outlines that the LRCA will continue to budget for this work in LRCA's regular budget as a sole-benefiting levy, as is currently done. Major maintenance will be completed outside of the MOU under a separate agreement when warranted.

FINANCIAL IMPLICATIONS

Any future actions resulting from the programs and services to support the operation, maintenance, repair and decommissioning of water and erosion control infrastructure the authority owns or manages will be included, if warranted, in future budgets.

CONCLUSION

By the end of 2024 the LRCA will have completed all required deliverables as mandated in recent legislation (summarized on the attached table).

BACKGROUND

Ontario Regulation 686/21: Mandatory Programs and Services, sets out the Mandatory Programs and Services which must be delivered by all Conservation Authorities in Ontario. Subsection 5(1) of the regulation requires all Conservation Authorities to provide programs and services to support the operation, maintenance, repair and decommissioning of the following types of infrastructure the authority owns or manages:

1. Any water control infrastructure, the purpose of which is to mitigate risks to life and damage to property resulting from flooding or to assist in flow augmentation.
2. Any erosion control infrastructure.

Programs or services provided in relation to the above (water control infrastructure and erosion control infrastructure) shall include:

1. The development and implementation of an operational plan on or before December 31, 2024.
2. The development and implementation of an asset management plan on or before December 31, 2024.
3. The undertaking of any technical or engineering studies necessary to ensure the proper operation and maintenance of the infrastructure to which the program or service applies.

If an authority enters into an agreement with an owner of water or erosion control infrastructure to manage the infrastructure on the owner's behalf, the authority shall provide the programs and services to operate, maintain, repair and decommission the infrastructure only in accordance with its obligations under the agreement.

The LRCA provides programs and services for the following flood and erosion control infrastructure:

- a) Neebing-McIntyre Floodway
- b) Hazelwood Lake Dam
- c) Victor Street, Kaministiquia River Erosion

Neebing McIntyre Floodway

Construction of the Neebing-McIntyre Floodway was completed in 1984 by the Lakehead Region Conservation Authority. The Floodway was constructed to address flooding in the Intercity Area of the City of Thunder Bay and was designed to protect up to and including the Regional Storm which is 193 millimetres of precipitation over 12 hours

The main features of the Floodway include:

- Diversion Structure at Ford Street
- Diversion Channel
- Sediment Trap at Balmoral Street
- Sediment Trap at CPR Bridge
- McIntyre River channel from William Street to Fort William Road
- New channel alignment from Fort William Road to Lake Superior
- Outlet into Lake Superior

In general, the LRCA owns the diversion structure as well as the bed and the banks of the floodway; the City of Thunder Bay owns the bridges and some adjacent lands. An Agreement between the LRCA and the City of Thunder Bay is in place that explains the Lands subject to the Agreement and who is responsible for what concerning maintenance, development, uses, etc. The current Agreement is a five-year extension of the original-extended agreement that will terminate on December 31, 2027. It is anticipated that the LRCA and the City will continue to extend the agreement in the future.

LRCA Staff maintain and update annually an Operation, Maintenance and Surveillance (OSM) Plan for the Neebing McIntyre Floodway. The OSM Plan summarizes major projects completed along

the Floodway (e.g., dredging projects), includes a Maintenance Plan Summary that forecasts approximate times for future projects (i.e., where dredging may be required and when) and also summarizes LRCAs surveillance plan (i.e., monitoring being completed annually, every 5 years, etc.).

LRCAs Asset Management Plan (AMP), last updated in 2021, includes the infrastructure associated with the Neebing McIntyre Floodway including the diversion structure, and summarizes the state of the infrastructure, desired levels of service, LRCAs asset management strategy as well as our financial strategy to maintain the infrastructure. LRCA updates the AMP every 5 years, with the next update scheduled for 2026.

Hazelwood Lake Dam

The Hazelwood Lake Dam is located at the outlet of Hazelwood Lake within LRCAs Hazelwood Lake Conservation Area. The dam consists of a 220-metre section of earth fill dam and a 59-metre-long reinforced concrete spillway weir that maintains and regulates the water level in Hazelwood Lake. The dam is owned and operated by the LRCA.

As a result of O. Reg. 686/21, the LRCA has recently created an OMS Plan for the Hazelwood Lake Dam that summarizes the major projects completed to the infrastructure, estimates a required recurrence for maintenance and summarizes LRCAs surveillance plan for the infrastructure. The Plan will be updated annually moving forward.

The Hazelwood Lake Dam is included in LRCAs AMP. The AMP summarizes the state of the infrastructure, desired levels of service, LRCAs asset management strategy as well as our financial strategy to maintain the infrastructure.

Kaministiquia River Erosion at Victor Street and Broadway Avenue

The Kaministiquia (Kam) River system is one of the largest tributaries draining into Lake Superior. In many areas, the Kam River is contained by steep banks that range from two metres to over 25 metres in height, while other areas along the banks are considered to be low lying. Erosion and slope failure on the Kam River has been studied extensively over the years. In order to protect municipal infrastructure in the Vickers Heights area, particularly Victor Street and the water main along the slope of the Kam River, extensive work has been carried out to address the on-going erosion. Monitoring of the at-risk areas is conducted annually.

As a result of O. Reg. 686/21, the LRCA and the City of Thunder Bay are working towards finalizing an Agreement regarding LRCAs involvement in monitoring and facilitating maintenance of minor erosion and erosion controls along Victor Street and the Kam River that is planned to be in place by December 31, 2024.

The LRCA maintains and updates annually an OMS Plan of the Kam River and Victor Street-Broadway Avenue area. The Plan summarizes major works that have been completed since the early 1980s, past studies and reports that have been completed, an estimate of when required maintenance is to recur as well as LRCAs surveillance plan.

LRCA does not own the land associated with the Victor Street erosion or erosion controls, and therefore the site is not included in LRCA's AMP, rather, the City of Thunder Bay has included the erosion controls in their AMP.

REFERENCE DOCUMENTS:

Attachment #1 - LRCA Progress Tracking of Deliverables – Transition Plan, Phase I and II
Regulations, Revision date: November 15, 2024

PREPARED BY: Melissa Hughson, Watershed Manager
Tammy Cook, CAO

THIS REPORT SIGNED AND VERIFIED BY:  Tammy Cook Chief Administrative Officer	DATE: November 15, 2024
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Lakehead Region Conservation Authority**Progress Tracking of Deliverables – Transition Plan, Phase I and Phase II Regulations****Revision Date: November 15, 2024**

Deliverable	Planned Timeline	Due Date	Status
2021			
Develop Transition Plan		December 31, 2021	Complete
Obtain Board approval of the Transition Plan		November 24, 2021	Complete Resolution #121/21
Post Transition Plan to website and circulate to municipalities and MECP		December 31, 2021	Complete
2022			
Develop Programs and Services Inventory with Board approval			Complete Resolution #27/22
Circulate Programs and Services Inventory to municipalities and MECP		February 28, 2022	Complete
MECP Report #1	June 24, 2022	July 1, 2022	Complete Resolution #80/22
Update Governance Section on website and notify Minister		January 1, 2023	Complete July 18, 2022
MECP Report #2	September 29, 2022	October 1, 2022	Complete Resolution #105/22
Update Fee Policy		January 1, 2023	Complete October 26, 2022 Resolution #116/22
MECP Report #3	December 16, 2022	January 1, 2023	Complete November 28, 2022 Resolution #134/22

Lakehead Region Conservation Authority**Progress Tracking of Deliverables – Transition Plan, Phase I and Phase II Regulations****Revision Date: November 15, 2024**

2023			
Prepare 2024 Budget Adhering to Legislation	January 1, 2023 to August 2023	November 2023	Draft Report complete
MECP Report #4	March 31, 2023	April 1, 2023	Complete March 30, 2023 Resolution # 48/23
Negotiations of cost apportioning agreement with municipalities	March 2022 to May 2023		N/A-No Category 3 agreements required
LRCA Approval of MOUs/Agreements	June 2023 to August 2023		N/A -No Category 3 agreements required
MECP Report #5	June 21, 2023	July 1, 2023	Complete June 21, 2023 Resolution #76/23
MECP Report #6	September 27, 2022	October 1, 2023	Complete September 27, 2023 Resolution #99/23
Request for extension of transition date		October 1, 2023 (if required)	Not required
Execute municipal agreements	June 2023 to October 2023	January 2024	Category 2 Mapping Service MOUs executed
2024			
Final Report to MECP	January 30, 2024	January 30, 2024	January 23, 2024
Land Inventory	Draft to Board November 2024	December 31, 2024	Complete
Conservation Lands Strategy Public Consultation	Booth at 70 th Anniversary On-line	December 31, 2024	Complete
Conservation Lands Strategy	Draft to Board March 2024. Final to Board September 2024	December 31, 2024	Complete Resolution #101/24

Lakehead Region Conservation Authority**Progress Tracking of Deliverables – Transition Plan, Phase I and Phase II Regulations****Revision Date: November 15, 2024**

Asset Management Plan Floodway	September 2024.	December 31, 2024	Complete
Operational Management Plan Floodway	September 2024.	December 31, 2024	Complete
Asset Management Plan Victor Street	October 2024.	December 31, 2024	To be in City AMP as warranted
Operational Management Plan Victor Street	November 2024.	December 31, 2024	MOU with City for review
Watershed Based Resource Management Strategy Consultation	Booth at 70 th Anniversary On-line	December 31, 2024	Complete
Watershed Based Resource Management Strategy	Draft to Board October 2024. Final to Board November 2024	December 31, 2024	Complete



PROGRAM AREA	FINANCE	REPORT NO.	FIN-11-2024
DATE PREPARED	November 19, 2024	FILE NO.	
MEETING DATE	November 27, 2024		
SUBJECT	Final 2025 Budget, Version 2.0		

RECOMMENDATION

Suggested Resolution

Recorded Weighted Vote

“THAT: the 2025 Budget levy apportionment as outlined in Version 2.0 of the Lakehead Region Conservation Authority Final Budget be approved AND FURTHER THAT a copy of the final budget will be provided to the Minister of Natural Resources and all Member Municipalities.”

Majority Vote:

“THAT: in 2025 the following will be appropriated from the following reserves: Operating Capital Reserve \$65,000; Vehicle and Equipment Reserve \$5,470; Conservation Area Major Maintenance Capital Reserve \$299,990; Administrative Facility Reserve \$178,520 and Forest Management Reserve \$4,781”

“THAT: the Lakehead Region Conservation Authority adopts the 2025 Budget Document, Version 2.0 for a total budget of \$4,574,963. “

LINK TO STRATEGIC PLAN (2023-2027)

Govern and Enhance:

- Continue to commit to accountable and transparent organizational governance.
- Find and implement efficiencies and streamline processes across all program areas.
- Maintain a stable model of financial resiliency based on capacity, capabilities, and public expectations by maximizing new funding opportunities, fundraising and self-generated revenue.
- Build organizational capacity to provide new and developing program areas.

EXECUTIVE SUMMARY

The 2025 Draft Budget has been set at \$4,574,963 which includes a total levy of \$1,913,993 of which all Member Municipalities pay \$1,143,855 with the remainder being sole-benefitting levy to the City of Thunder Bay (\$770,138). The 2025 budget contains a 3.08% increase to levy-all compared to 2024. The Final Budget Summary will be provided to Member Municipalities and posted on the Governance section of the LRCA website as required. The levy values remain at the levels presented in the August Draft Budget.

DISCUSSION

The 2025 Draft Budget document contains details for the Lakehead Region Conservation Authority's (LRCA) 2025 planned operations and capital activity. The Budget has been set at \$4,574,963 which includes a total levy of \$1,913,993 of which all Member Municipalities pay \$1,143,855 with the remainder being sole-benefitting levy to the City of Thunder Bay (\$770,138). No changes have been made to the levy from the August Draft Budget; however, the total budget has increased due to additional projects added related to successful funding applications.

It is noted that at the time of budget preparation confirmation had not been received that the long-standing provincial Section 39 Transfer Payment was forthcoming in 2025 from the province. For budget purposes, it has been assumed it will be provided. If funding does not materialize, staff will come back to the Board with a revised budget, including the use of reserve funds from the Operating Capital Category.

The budget results in a 3.08 % increase in levy-all in 2025 compared to 2024. The 2025 budget requires a 3.08% increase to maintain its current level of service, which is well below the current cost-of-living increases.

Financial pressures anticipated in 2025 include: potential increases to insurance costs, increased cost for salaries and benefits; and increased costs of goods and services.

Programs have been categorized into three mandated categories including:

- Category 1: Mandatory Programs and Services
- Category 2: Non-Mandatory Programs and Services at the request of a Municipality
- Category 3: Non-Mandatory Programs and Services

Highlights of the 2025 Budget expenditures include:

- Continuation of the annual programming including:
 - Plan Review,
 - Development Regulations,
 - Flood Forecasting and Warning,
 - Operation and maintenance of LRCA owned properties,
 - Stewardship, and
 - Education programming.
- Capital improvements at the Conservation Areas:
 - Mission Marsh – parking lot maintenance and line painting
 - Mills Block – parking lot relocation; AODA trail construction and trail connection; outhouse, sign and pay and display installation
- Other items:
 - Floodway Diversion Channel Dredging (Neebing River to Redwood Bridge)
 - Board Room renovations including air conditioning units and AV upgrade
 - Server Room renovations

- Fence installation on office grounds
- Conservation Area wayfinding sign design
- Lake Superior Coastal Resilience Plan (2024 to 2027)
- Hazelwood Shoreline Remediation
- Cyanobacteria Education and Outreach
- Neebing Culvert Assessment Project
- Seeds for Conservation Program
- Hurkett Cove Invasive Species Management (2024-2026)
- Phragmites Monitoring and Management
- Mural painting on external garage

Overall, the 2025 Budget reflects the short-term objectives of the Authority and considers long-term requirements to ensure the LRCA can provide sustainable benefits to the watershed residents.

The full 2025 Budget Explanatory Document and the Budget Summary are attached along with the Budget Checklist. As mandated, the budget summary will be posted on the website and circulated to all Member Municipalities, along with the offer to attend a Council meeting if requested.

FINANCIAL IMPLICATIONS

The 2025 Draft Budget has been set at \$4,574,963 which includes a total levy of \$1,913,993 of which all Member Municipalities pay \$1,143,855 with the remainder being sole-benefitting levy to the City of Thunder Bay (\$770,138). The 2025 budget contains a 3.08% increase to levy-all compared to 2024. It is noted that each Member Municipalities levy impact will be determined by the current value assessment.

CONCLUSION

Phase Three of the budget approval process provides the Final 2025 Budget, Version 2.0 for Board consideration and approval.

BACKGROUND

O. Reg. 402/22: Budget and Apportionment specifies that the 2024 budget and all subsequent budgets must adhere to this regulation. It provides details on the budget process and municipal apportionment methods for levying participating municipalities and includes revocation of the previous regulations that governed municipal levies (O. Reg. 670/00 and O. Reg. 139/96).

The 2025 Draft Budget Version 1.0 was presented to the Board on August 28, 2024, and was approved for consultation (Res. #91/24). The Draft Budget was circulated to all Member Municipalities on August 29, 2024. All Member Municipalities were notified of the date of the meeting to approve the final budget on October 30 and were provided with the Draft Budget Summary. Staff attended the City of Thunder Bay's Executive Management Team Operation Budget Meeting on November 1, 2024, and presented the Draft Budget.

REFERENCE MATERIAL ATTACHED

2025 Final Budget Summary, Version 2.0
2025 Final Budget, November, Version 2.0
Budget Summary Checklist

PREPARED BY:

Tammy Cook, CAO

THIS REPORT SIGNED AND VERIFIED BY:  Tammy Cook Chief Administrative Officer	DATE: November 20, 2024
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2025 LRCA Draft Budget Summary

2025 Budget	
3.08% Levy-All increase compared to 2024	
Total Levy	\$1,913,994
Levy-All	\$1,143,855 (25%)
City of Thunder Bay Sole-Benefitting	\$770,138 (17%)
Total Provincial Grant Revenue**	\$316,923(7%)
Total Federal Grant Revenue	\$453,835 (10%)
Total Donation Revenue	\$14,000 (1%)
Total Other Grants	\$144,895(2%)
Self-Generated Revenue	\$525,890(11%)
Deferred/Surplus	\$666,136(15%)
Reserve Appropriations	\$539,291 (12%)
Total Budget	\$4,574,963

** Section 39 Transfer Payment unconfirmed for 2025

2025 Total Levy-All Compared to 2024						
Municipality	2024 CVA %	2024 Levy \$	2025 CVA %	2025 Levy \$	\$ Change	% Change
Thunder Bay	85.8012	952,196	85.6600	979,821	27,674	2.91
Conmee	0.4440	4,927	0.4500	5,147	220	4.47
Dorion	0.2879	3,195	0.2900	3,317	122	3.82
Gillies	0.2470	2,741	0.2500	2,860	119	4.33
Neebing	2.2565	25,043	2.2600	25,852	810	3.24
O'Connor	0.4770	5,295	0.4800	5,492	198	3.73
Oliver Paipoonge	5.5386	61.467	5.6300	64,400	2,936	4.78
Shuniah	4.9477	54,910	4.9900	56,966	2,059	3.75
	100	1,109,775	100	1,143,855	34,138	3.08

*CVA – Current Value Assessment

2025 Sole-Benefitting Levy Compared to 2024						
Municipality	2022	2023	2024	2025	2024 vs 2025 \$ Change	2024 vs 2025 % Change
Thunder Bay	680,720	716,497	744,916	770,138	25,222	3.38

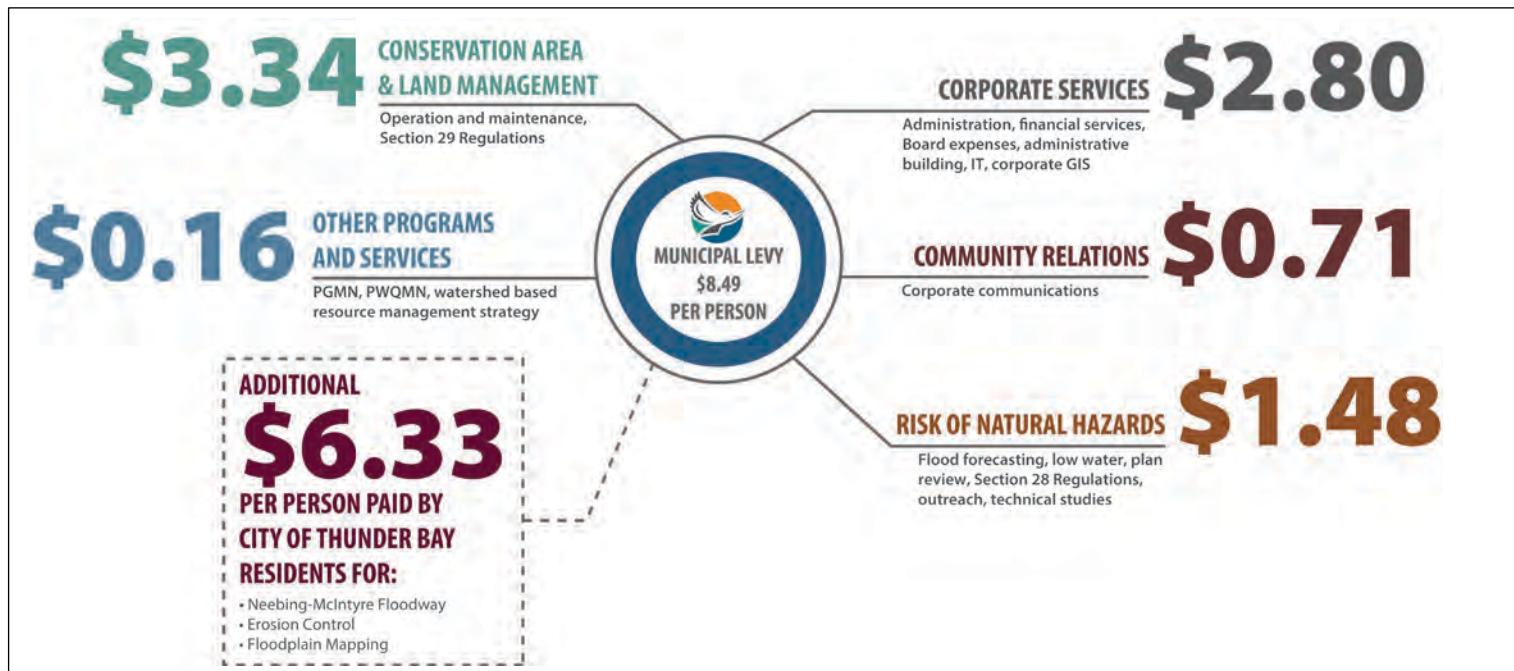
Sole-benefitting: Neebing-McIntyre Floodway, Victor Street Erosion, Maintaining Floodplain Mapping

2025 Total Levy Compared to 2024						
Levy-All + Sole Benefitting						
Municipality	2022	2023	2024	2025	2024 vs 2025 \$ Change	2024 vs 2025 % Change
Thunder Bay	1,733,333	1,793,799	1,854,691	1,913,994	59,303	3.20

2025 LRCA Draft Budget Summary

2025 Budget Notes
<ul style="list-style-type: none"> Levy-all increase 2025 versus 2024 = 3.08% <ul style="list-style-type: none"> 2024 increase – 3.01% Minimal to no increases are feasible in the short term but are not realistic for the long-term operation of the LRCA. Provincial funding anticipated to be provided in 2025 (included as revenue in budget) <ul style="list-style-type: none"> Section 39 Transfer Payment = \$150,940 Source Water Protection Transfer Payment = \$55,883

2025 Budget Highlights
<p>Highlights of the 2025 Budget expenditures include:</p> <ul style="list-style-type: none"> Continuation of annual programming including: <ul style="list-style-type: none"> Plan Input and Review, Development Regulations, Watershed monitoring, Flood Forecasting and Warning, Operation and maintenance of LRCA owned properties, Stewardship (no levy), and Education programming (no levy). Capital improvements at the Conservation Areas: <ul style="list-style-type: none"> Mission Marsh – parking lot maintenance and line painting Mills Block – parking lot relocation; AODA trail construction and trail connection; outhouse, sign and pay and display installation Other items: <ul style="list-style-type: none"> Floodway Diversion Channel Dredging (Neebing River to Redwood Bridge) Board Room renovations including air conditioning units and AV upgrade Server Room renovations Fence installation on office grounds Conservation Area wayfinding sign design Lake Superior Coastal Resilience Plan (2024-2027) Hazelwood Shoreline Remediation Cyanobacteria Education and Outreach Neebing Culvert Assessment Sea-Lamprey Monitoring Seeds for Conservation Program Hurkett Cove Invasive Species Management (2024-2026) Phragmites Monitoring and Management Mural painting on Garage (subject to funding) Rain Garden at office (subject to funding) Planned Reserve withdrawals: <ul style="list-style-type: none"> Administration - \$65,000 Vehicle and Equipment - \$5,470 Forest Management - \$4,781 Conservation Area Capital - \$299,990 Other Owned Land- \$178,520





LAKEHEAD REGION
CONSERVATION AUTHORITY

2025 Budget

November 27, 2024
Version 2.0

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VERSION		Approval Date	RESOLUTION #
2025 Version 1.0	Draft Budget for consultation	August 28, 2024	#91/24
2025 Version 2.0	Levy		
	Reserve Withdrawals		
	Budget Document		

EXECUTIVE SUMMARY

The 2025 Budget document contains details for the Lakehead Region Conservation Authority's (LRCA) planned operations and capital activity. The 2025 total Budget is \$4,574,963 which includes a total levy of \$1,913,993 of which all Member Municipalities pay \$1,143,855 with the remainder being sole-benefitting levy to the City of Thunder Bay (\$770,138).

It is noted that at the time of budget preparation confirmation had not been received that the long-standing provincial Section 39 Transfer Payment was forthcoming in 2025 from the province. For budget purposes, it has been assumed it will be provided. If funding does not materialize, staff will come back to the Board with a revised budget, including the use of Reserve Funds from the Operating Capital Category. It is noted that notification of provincial funding is consistently late.

The budget results in a 3.08% increase in levy-all in 2025 compared to 2024. The 2025 budget requires a 3.08% increase in order to maintain its current level of service, which is well below the current cost-of-living increases.

Financial pressures anticipated in 2025 include: Salaries and Wage increases; increase in fuel costs; and increased costs of goods and services due to inflation.

Programs have been categorized into three mandated categories including:

- Category 1: Mandatory Programs and Services
- Category 2: Non-Mandatory Programs and Services at the request of a Municipality
- Category 3: Non-Mandatory Programs and Services

Highlights of the 2025 Budget expenditures include:

- Continuation of the annual programming including:
 - Plan Review,
 - Development Regulations,
 - Flood Forecasting and Warning,
 - Operation and maintenance of LRCA owned properties,
 - Stewardship, and
 - Education programming.
- Capital improvements at the Conservation Areas:
 - Mission Marsh – parking lot maintenance and line painting
 - Mills Block – parking lot relocation; AODA trail construction and trail connection; outhouse, sign and pay and display installation
- Other items:
 - Board Room renovations including air conditioning units and AV upgrade
 - Server Room renovations

- Fence installation on office grounds
- Conservation Area wayfinding sign design
- Floodway Diversion Channel Dredging (Neebing River to Redwood Bridge)
- Fence installation on office grounds
- Conservation Area wayfinding sign design
- Lake Superior Coastal Resilience Plan (2024 to 2027)
- Hazelwood Shoreline Remediation
- Cyanobacteria Education and Outreach
- Neebing Culvert Assessment Project
- Seeds for Conservation Program
- Hurkett Cove Invasive Species Management (2024-2026)
- Phragmites Monitoring and Management
- Mural painting on external garage

Opportunities considered to raise and use self-generated revenue to fund the authority's operations:

- User fees (i.e., permit and plan review fees, education fees, inquiry fees)
- Explore Card/pay and display units/coin boxes – parking/day use fee at Conservation Areas
- Interest earned in 2024 will be placed in Reserve to fund Board approved wage increases in 2025
- External funding will be continually sought throughout the year.

The Watershed Biologist and Education Coordinator positions will continue using non-levy funds for non-mandatory programs. The Watershed Stewardship Technician Internship will end in June 2025. Subject to adequate performance and available project funding, the position will be extended as a recurring contract.

The total Budget Levy is summarized in Appendix A including the amount applicable to each Member Municipality. Appendix B outlines the cost for each Member Municipality based on per resident, per household and \$100,000 of assessed value.

Overall, the 2025 Budget reflects the short-term objectives of the Authority and considers long-term requirements to ensure the LRCA can provide sustainable benefits to the watershed residents, while meeting the Authority's legislative responsibilities.

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1 INTRODUCTION

The Lakehead Region Conservation Authority (LRCA) draft budget for 2025 is \$4,574,963 which includes a total levy of \$1,913,933 of which all Member Municipalities pay \$1,143,855 with the remainder being sole-benefitting levy to the City of Thunder Bay (\$770,138).

The budget results in a 3.08% increase in levy-all in 2025 compared to 2024. The 2025 budget requires a 3.08% increase in order to maintain its current level of service, which is well below the current cost-of-living increases.

The total Budget Levy is summarized in Appendix A including the amount applicable to each Member Municipality, which includes a summary of the breakdown between Operating and Capital. Appendix B outlines the cost for each Member Municipality based on per resident, per household and \$100,000 of assessed value.

It is noted that at the time of budget preparation confirmation had not been received that the long-standing provincial Section 39 was forthcoming for the 2025/2026 fiscal budget year from the province. For budget purposes, it has been assumed it will be provided. If funding does not materialize, staff will come back to the Board with a revised budget, including the use of Reserve Funds from the Operating Capital Category. It is noted that notification of provincial funding is consistently late.

2 BACKGROUND

The LRCA is a community-based environmental protection and advisory agency, established in 1954 (initially the Neebing Valley Conservation Authority) by the Province of Ontario at the request of municipalities in the Lakehead watershed. The LRCA's purpose is to provide for the organization and delivery of programs and services that further the conservation, restoration, development and management of natural resources in the Lakehead Watershed. Conservation Authorities undertake a broad range of programs, including: watershed management, erosion control, Flood Forecasting and Warning, recreation and land management, water level monitoring, Plan Review, environmental education and stewardship. We improve quality of life by actively providing Conservation Areas for semi-passive recreation and environmental education opportunities.

Our integrated approach to resource management leads to a wide range of programs and projects, which are aimed at keeping our watersheds healthy. We improve quality of life by actively providing open space and protecting life and property from flooding and erosion, as well as restoring and conserving aquatic and natural habitats. In addition to serving our watershed residents, we also provide advice and counsel to all levels of government regarding natural hazards.

The LRCA is one of 36 Conservation Authorities across Ontario, including one of five in Northern Ontario.

Historically Conservation Authorities were administered by Ministry of Natural Resources (MNR); however, in 2018, Conservation Authorities were moved under the Ministry of Environment, Conservation and Parks (MECP). In September 2022, Conservation Authorities were moved back under the administration of MNR.

2.1 MANDATE

In 2017, the LRCA adopted vision and mission statements and in January 2018, the LRCA adopted its first ever Five-Year Strategic Plan for the period 2018-2022. The Strategic Plan was updated in 2022 for the next five-year period (2023-2027). The Strategic Plan identifies four main priorities including: conserve and sustain; protect and support; connect and explore; and govern and enhance. LRCA's vision and mission statements are as follows:

Vision: A healthy, safe and sustainable Lakehead Watershed for future generations.

Mission: To lead the conservation and protection of the Lakehead Watershed.

Action items will be drafted taking into consideration the identified initiatives in the Strategic Plan, which will be incorporated into future work plans and budgets, as well as the overall business of the Authority.

2.1.1 PURPOSE

With the passing of Bill 139 on December 12, 2017, a purpose statement was added to the *Conservation Authorities Act*, which states:

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

2.1.2 FOUNDING PRINCIPLES

Conservation Authorities are based on three fundamental principles:

- Municipal and Provincial partnership
- Local initiative and involvement
- Management of natural resources on a watershed basis.

2.1.3 OBJECTS OF AN AUTHORITY

Per Section 20(1) of the *Conservation Authorities Act*,

The objects of an authority are to provide, in an area over which it has jurisdiction,

- a) the mandatory programs and services required under Section 21.1;
- b) any municipal programs and services that may be provided under section 21.1.1; and
- c) any other program or services that may be provided under section 21.1.2.

2.2 ORGANIZATION DETAILS

2.2.1 AREA OF JURISDICTION

The LRCA Area of Jurisdiction (2,719 square kilometres) includes:

- City of Thunder Bay
- Municipality of Neebing
- Municipality of Shuniah
- Municipality of Oliver Paipoonge
- Township of Conmee
- Township of O'Connor
- Township of Gillies
- Township of Dorion

The Ministry of Natural Resources (MNR) is responsible for areas outside the jurisdiction of the Authority.

The scientific boundary of the Lakehead Watershed is 11,526 square kilometres.

2.2.2 BOARD OF DIRECTORS/MEMBERS

Policy and budget decisions are made by a Board of Directors comprised of eleven members appointed by LRCA's Member Municipalities. The number of representatives appointed as Members of the LRCA Board of Directors is based on population as outlined in subsection 2(2) of the *Conservation Authorities Act*.

Per Bill 229, Schedule 6, as of the end of the 2022 term of the Board, at least 70% of the appointees to the Board must be municipal councillors, unless an exception has been granted by the Minister, at the request of a municipality (per Section 14(1.1), 14(1.2) of the *Conservation Authorities Act*). Therefore, unless an exception has been granted each Member Municipality must only appoint municipal councillors, with the exception being the City of Thunder Bay who has four Members. They will be required, at a minimum, to appoint three municipal councillors. Prior to this change, the City of Thunder Bay appointed two municipal councillors and two citizen appointees. Historically, other municipalities had periodically appointed citizens to the Board.

As of February 2, 2021 (per Section 17 (1.1)(1.2)(1.3) of the *Conservation Authorities Act*) the term of the Chair and Vice-Chair is limited to one year and they can serve for no more than two consecutive terms. Positions must rotate between participating municipalities; therefore, the Board cannot appoint the succeeding chair from the same municipality as the current chair. A Conservation Authority or a municipality can request permission for a longer term to the Minister.

Three exceptions have been granted by the Minister to date. For the 2022 election both the Chair and Vice-Chair were approved to continue their terms if so elected. Additionally, for the 2023 and 2024 elections, the Chair was approved to continue her term if so elected. The incumbents were acclaimed to their positions in all three elections. A request has been submitted to the Minister for the 2025 and 2026 election to extend the term of the Chair and Vice-Chair.

AGRICULTURAL REPRESENTATIVE

Per Bill 229, Schedule 6, as of February 2, 2021, the Minister may appoint an Agricultural Representative to the Board of Directors. If appointed the Agricultural Representative can not vote on enlarging, amalgamating or dissolving an authority or any budgetary matter. Their term can be up to four years as determined by the Minister. At the time of budget preparation, it was unknown whether or not an Agricultural Representative would

be appointed to the LRCA Board. Per diems for this position would be paid by the Ministry.

2.2.3 STAFF COMPLEMENT

In 2025, the Authority will have a full-time equivalent (FTE) staff complement of 14 who deliver the programs/services on behalf of the LRCA Board, which include:

- Chief Administrative Officer
- Finance Manager
- Watershed Manager
- Lands Manager
- Communications Manager
- Development Regulations Officer
- GIS/Water Resources Technologist
- Admin Clerk/Receptionist
- Financial Admin Assistant
- Field Operations Lead Hand
- Environmental Planner
- Watershed Biologist
- Watershed Stewardship Technician Intern
- NEW - Planning and Regulations Assistant (title and hire date in 2025 to be determined)

Recurring contract employees that amount to an equivalent of 1.4 FTEs include:

- Education Co-ordinator (39 weeks)
- Floodway Labourer (33 weeks)

Seasonal employees that amount to an equivalent of 1.2 FTE include:

- Four summer field staff (15 weeks – students)
- Two Assistant Water Resources Technologists (16 weeks – students)

2.2.4 CONSERVATION AND MANAGEMENT OF LAND

The LRCA owns a total of 2,597 hectares of land. The lands owned by the LRCA offers a diversity of services in the watershed including recreation, water management, protection of natural heritage features, flood protection, erosion control and forest management. The properties owned by the LRCA fall into three land use categories including:

1. Conservation Areas for Passive Recreation
2. Conservation Authority Administrative Area
3. Management Area

The categories of land are grouped in the Inventory of Programs into two classifications, Conservation Areas and Other Owned land, which includes the Administrative Office and Management Areas.

CONSERVATION AREAS

The LRCA owns and maintains ten Conservation Areas (1,550 hectares), which provide semi-passive recreational use opportunities to the public and access to Lake Superior. The areas include:

- Hurkett Cove (Township of Dorion)
- Cascades (City of Thunder Bay)
- Silver Harbour (Municipality of Shuniah)
- Cedar Falls (Township of O'Connor)
- Little Trout Bay (Municipality of Neebing)
- Hazelwood Lake (unincorporated Township of Gorham)
- MacKenzie Point (Municipality of Shuniah)
- Mission Island Marsh (City of Thunder Bay)
- Mills Block (City of Thunder Bay)
- Wishart (unincorporated Township of Gorham)

In 2022, Mills Block Forest and Wishart Forest were renamed as Conservation Areas. Previously, they were referred to as Managed Forests.

Boat launches at Silver Harbour and Little Trout Bay Conservation Areas provide access to Lake Superior.

As a private landowner, the LRCA pays property taxes to the Municipality/Township in which the land resides.

OTHER LAND OWNED BY THE LRCA

The LRCA owns 3.4 hectares at 130 Conservation Road in Thunder Bay which is where the LRCA's Administrative office and grounds are located.

Management Areas include floodplain and erosion control lands, forest management properties, nature reserves, Neebing-McIntyre Floodway and the Hope and Memory Garden.

The LRCA owns and maintains one Forest Management property known as Williams Forest, located in the Municipality of Oliver Paipoonge and is not open to the public. That property, as well as other Conservation Areas have Forest Management Plans under the Managed Forest Tax Incentive program (MFTIP), which provides some tax relief as well as provides a plan for proper long-term forest management. As warranted, harvesting occurs with revenue used to maintain the forest management area and the associated

Forest Management Plans. Surplus generated funds in a given year are allocated to the Forest Management Reserve.

The LRCA also owns other conservation, floodplain and erosion lands as well as the banks and bed of the Neebing-McIntyre Floodway. Property taxes are paid on all lands.

Conservation of Land Tax Incentive Program (CLTIP) is applied to annually to reduce the taxes in recognition of natural heritage features for the following lands:

- 330 Beaver Avenue
- Wakefield Common
- Hurkett Cove
- Mills Block

2.2.5 WATERSHED MONITORING

The LRCA conducts a variety of watershed monitoring throughout the year including:

- Provincial Groundwater Monitoring Program (in partnership with MECP)
- Provincial Water Quality Monitoring Program (in partnership with MECP)
- Streamflow Gauges (in partnership with Water Survey of Canada)
- Precipitation Gauges (some in partnership with Water Survey of Canada)
- Neebing River Climate Change Monitoring Station (in partnership with MECP)
- Dorion Fish Culture Station Monitoring Station (new as of 2018, in partnership with MNR)
- Bathing Beach Sampling (Hazelwood Lake and Mission Island Marsh)
- Blue/Green Algae Monitoring (Hazelwood Lake, Mission Island Marsh, Hurkett, Silver Harbour)
- Snow Surveys
- Floodway Channel water level monitoring (automated in 2024)
- Ontario Low Water Response
- Invasive Species Monitoring (Neebing-McIntyre Floodway and Conservation Areas)

2.3 SOURCES OF FUNDING

LRCA funding comes from several sources:

- Grant Revenue
 - MNR – Provincial Section 39 Transfer Payment
 - MNR – Water and Erosion Control Infrastructure (WECl) (when applicable and approved)
 - MECP – Source Water Protection
- Special Projects (programs/available funds vary from year to year)

- TD Friends of the Environment
- Enbridge
- Ontario Power Generation
- Canada Summer Jobs
- Environment and Climate Change Canada (ECCC) - Great Lakes Freshwater Ecosystem Initiative
- Ministry of the Environment, Conservation and Parks (MECP) – COA, Wetland Conservation Partnership Program
- Invasive Species Centre – Invasive Species Action Fund
- Invasive Phragmites Control Fund
- Green Shovels Collaborative – Invasive Phragmites Control Fund
- TC Energy
- Northern, Ontario Heritage Corporation (NOHFC)
- Natural Resources Canada (NRCan)
- Parks Canada
- CPRA Green Jobs Canada
- Municipal Levy
 - Levy – All
 - Levy - Sole-Benefitting
- Other Revenue
 - Interest
 - Contracts - Department of Fisheries and Oceans Wolf River Weir Inspections, Sea Lamprey Trapping
 - Coin Boxes/Pay and Display – parking fees/day use fees at Conservation Areas
 - Explore Card sales
 - Lakehead Conservation Foundation donation
 - Multi-purpose Room rentals
 - Forest Management harvesting
 - Property Rentals
 - Mapping Service
 - Donations
 - Lawyer Request Fees
 - Development Regulation Permit Fees
 - Plan Review Fees
 - Education Fees
 - Calendar advertising
 - Seeds for Conservation Sales
 - Other

2.3.1 GRANT REVENUE

2.3.1.1 PROVINCIAL SECTION 39 TRANSFER PAYMENT

The *Conservation Authorities Act* Section 39 Provincial “Operating” Grant funds the Conservation Authority in undertaking provincially mandated activities that include:

1. Flood/Erosion Operations (flood and erosion control structures, Flood Forecasting and Warning, ice management) and
2. Hazard Prevention (Plan Input, Hazard Information).

Eligible activities include:

- Flood and Erosion Operations
 - Operation of Flood Control Structures
 - Routine/Minor Maintenance of Flood Control Structures
 - Preventative Maintenance of Flood Control Structures
 - Operation of Erosion Control Structures
 - Routine/minor Maintenance of Erosion Control Structures
 - Preventative Maintenance of Erosion Control Structures
 - Flood Forecasting and Warning-System Operation
 - Ice Management
- Hazard Management
 - Plan Input (Official Plan/Amendment review only)
 - Information (i.e., Watershed Planning/Technical Studies)
- Administration

Funds are provided by lump sum payment for work undertaken from April 1 to March 31 of any given year. Funding is contingent of having local matching levy from the Member Municipalities. Interim and Year End reports are submitted by the LRCA to the MNR.

Between 1998 and 2019, Provincial Section 39 Transfer Payments to all 36 Conservation Authorities remained at the same level of \$7,400,000. In 2019, mid-way through the budget year, the Provincial Government announced a 48-50% funding cut to all Conservation Authority Section 39 Transfer Payments, effective for the current year. LRCA's transfer payment was reduced from \$292,380 to \$150,940, resulting in a funding reduction of 48% (\$141,440). This resulted in an emergency mid-year amendment to the budget, which resulted in a cancelation of all planned training, advertising, and capital expenditure spending at Conservation Areas as well as delaying some planned repairs. Funds were reallocated to ensure that the provincially mandated programs were still delivered.

At the time of budget preparation, no confirmation had been received that this long-standing Transfer Payment is forthcoming for the 2025/2026 fiscal year. For budget purposes, staff have budgeted as though the funding would be provided at the reduced

level of \$150,940. If this funding is not forthcoming, it is proposed to utilize funds from the Operating Capital Reserve, which was established to provide operating funds in the event of loss of funds in a given year. Notification of the approval of this funding is consistently delayed annually.

2.3.1.2 SOURCE WATER PROTECTION FUNDING

The MECP provides 100% funding to administer the Source Protection program through Provincial Transfer Payment, which is a program under the *Clean Water Act* to protect municipal drinking water systems, which there are two in the LRCA Area of Jurisdiction (i.e., Bare Point Water Treatment Plant (City of Thunder Bay) and Rosslyn Drinking Water System (Municipality of Oliver Paipoonge)).

This program runs on the Provincial fiscal year of April 1 to March 31 of any given year. In 2024, a multi-year funding agreement was signed for the period of April 1, 2024 to March 31 2027 for a total of \$226,007.48 in funding. Total funded FTEs over the period are 0.55 FTE for 2024-2025 and 2025-2026 and 0.5 FTE for 2026-2027.

It is noted that if the Drinking Water Source Protection Transfer Payment was ever eliminated, the cost to administer this mandatory program would be applicable to the City of Thunder Bay and the Municipality of Oliver Paipoonge as sole-benefitting municipalities.

2.3.1.3 WATER AND EROSION CONTROL INFRASTRUCTURE FUNDING

MNR administers the Water and Erosion Control Infrastructure (WECl) funding program, which typically provides an annual five-million-dollar capital investment to fund major maintenance required to maintain Conservation Authority dams and other flood and erosion control structures.

The WECl program provides matching funding to Conservation Authorities for studies or major maintenance of water or erosion control structures that are either owned by or maintained by Conservation Authorities. Local benefiting municipalities provide matching funds. A committee made up of five Conservation Authority representatives, one MNR and one Conservation Ontario representative, oversees the program and determines the priority list of eligible projects based on need and level of risk.

Funding is not guaranteed year to year. The LRCA applies for funding when major maintenance or studies are required on the Neebing-McIntyre Floodway or if major maintenance (i.e., soil nailing) is required on City of Thunder Bay owned land on Victor Street along the banks of the Kaministiquia River.

2.3.2 MUNICIPAL LEVY

2.3.2.1 LEVY – ALL

Operation and Capital Project costs that benefit all Member Municipalities is levied to all Member Municipalities based on their proportion of the Modified Current Value Assessment (see Section 2.4).

2.3.2.2 SOLE- BENEFITTING LEVY

A sole-benefitting levy is applied to a single Municipality for work undertaken by the LRCA upon which they are sole-benefitting. The operation and maintenance of the Neebing-McIntyre Floodway and Victor Street erosion protection (City owned land) are included in the sole-benefitting levy of the City of Thunder Bay. Another example is the completion, updating or maintenance of floodplain mapping, where the municipality/municipalities upon which the watershed is located are levied for that cost of the project.

2.4 MODIFIED CURRENT VALUE ASSESSMENT (MCVA)

Modified Current Value Assessment (MCVA) means a method of apportioning an authority's operating and capital costs that is based on the MCVA of the properties within the authority's area of jurisdiction (as outlined in O. Reg. 402/22). Municipal Current Value Assessment values are modified for conservation authorities where only a portion of a municipality falls within an area of jurisdiction of an authority. Since the LRCA's Member Municipalities are geographically entirely within the LRCA area of jurisdiction, no modification of the CVA is required. The Modified Current Value Assessment (MCVA) data is provided by the MNR annually, which is then used to calculate the levy-all for each Member Municipality. Each Conservation Authority has an Agreement regarding the use of Modified Property Assessment Information with MNR. Generally, this data is received by the Conservation Authority in late August. Since adoption of the CVA method, the levy percentage for Member Municipalities fluctuates annually.

For population data, reliance on the information from Statistics Canada is used, as the information received within the MCVA is not reflective of the actual population in our Member Municipalities. Representation on the Board is determined by the population of the applicable Member Municipality as detailed in the *Conservation Authorities Act*.

2.5 BUDGET APPROVAL PROCESS

The *Conservation Authorities Act* and O. Reg. 402/22 outline the process of approving Conservation Authority budgets, specifically the process of approving the annual Municipal levies.

2.5.1 O. REG. 402/22: BUDGET AND APPORTIONMENT

O. Reg. 402/22: Budget and Apportionment specifies that the 2024 budget and all subsequent budgets must adhere to this regulation. It provides details on the budget process and municipal apportionment methods for levying participating municipalities and includes revocation of the previous regulations that governed municipal levies (O. Reg. 670/00 and O. Reg. 139/96).

The regulated budget process includes:

First Phase

Budget must include:

- All sources of revenue (other than municipal levy)
- Categorize operating expenses into Category 1, 2 and 3
- Categorize capital expenses into Category 1, 2 and 3
- Amount of levy for each Member Municipality
- Specify if the Authority considered opportunities to raise and use self-generated revenue to help finance the authority's operations, including the programs and services it provides, a description of what the authority considered.

Budget must:

- Apply any relevant revenue to specific programs to offset levy.
- Apply Modified Current Value Apportionment method to determine levy for each program.
- Apply Benefit Based Apportionment method to sole benefitting programs (i.e., Floodway, Victor Street Erosion)

Second Phase

Draft Budget Process:

1. Notify all Member Municipalities of Draft Budget meeting if a Member Municipality will owe levy for Category 1 *Clean Water Act* programs and Services.
 - a. Advise of amounts owing or to be owed for Category 1 *Clean Water Act* programs and services (n/a to LRCA)
2. Hold meeting to consider draft budget.
3. Hold vote on whether or not to approve the draft budget for consultation.
 - a. If there is a levy for Category 1 *Clean Water Act* programs and services, hold a separate vote of Members from applicable municipalities for that portion of the draft budget (n/a to LRCA).
 - b. Vote is a one-member-one vote method.
4. Send Member Municipalities a copy of the Draft Budget and all financial information relating to the apportionment of operating and capital expenses.
5. Post a copy of the Draft Budget and financial information on Governance section of Authority's website.

6. Consult as necessary with Member Municipalities on draft budget in order to finalize final budget.

Third Phase

Final Budget Approval Process:

1. Notify all Member Municipalities of Budget meeting.
 - a. Notification must be at least 30 days prior to meeting.
 - b. Must include copy of most recent draft of the budget.
 - c. Must specify amount of levy for the given year.
2. Hold meeting to approve budget.
3. Hold a recorded vote to municipal levy/amounts owing.
 - a. If there are any Category 1 *Clean Water Act* apportionments, hold a vote with participating municipality representatives (n/a to LRCA).
 - b. Weighted vote to approve municipal levy/amounts owing.
 - c. Authority can not send a notice of apportionment unless a vote has occurred.
4. Hold a recorded vote to approve final budget.
 - a. One -member-one vote to approve final Budget Document.
5. “Promptly” after the final budget process is approved, provide a copy of the final budget to the Minister and each Member Municipality.
6. Post final budget on the Authority’s website in the Governance section.

2.5.2 BUDGET APPROVAL METHODS

Quorum must be achieved to approve the budget (i.e., 6 of 11 members must be present. Voting by proxy is not permitted.

For each phase of the budget approval process, the following budget approval method shall be used:

- Draft Budget
 - Decide on whether to approve draft budget for consultation
 - one-member-one-vote method
- Final Budget
 - Municipal levy/amounts owing
 - recorded weighted majority vote
 - Budget document
 - recorded one-member-one-vote

Weighted Majority Vote:

As outlined O. Reg. 402/22 Section 19, a recorded weighted vote is to be conducted to approve the levy/amounts owing in the Final Budget.

The following rules apply:

- Each Member's vote shall be weighted according to the ratio of the MCVA for applicable Member Municipality.
- Approval requires 51%, based on the weighted percentage of those present.
- In the case of a tie vote, the vote is lost.
- If a municipality appoints more than one member to the authority, each member's votes shall be equal to the municipality's weighted vote divided by the number of members the municipality appoints to the authority.
- A municipality shall not have a weighted vote of more than 50 percent of the total weighted value for all the votes to be cast unless the municipality appoints more than 50 percent of the members to the authority.
- Absent members percentage does not carry to the members present from their Municipality (only applies to the City of Thunder Bay, as they have four members).
- Must be a recorded vote.

For weighted voting, the weighting of the votes is based on the applicable year's MCVA values provided annually by MNR. In the case of the City of Thunder Bay, where their MCVA apportionment is greater than 50%, their members are equally apportioned 50% of the total vote, as no one municipality can hold greater than 50 percent of the vote for the weighted majority vote.

Weighted Vote Allocations:

Municipality	# of Members	2025 CVA (%)	Vote %
City of Thunder Bay	1	85.66	12.5
	1		12.5
	1		12.5
	1		12.5
Conmee	1	0.45	1.57
Dorion	1	0.29	1.01
Gillies	1	0.25	0.88
Neebing	1	2.26	7.88
O'Connor	1	0.48	1.67
Oliver Paipoonge	1	5.63	19.63
Shuniah	1	4.98	17.36
TOTAL	11	100	100

Example: Conmee = $(0.45 / (100-85.66)) \times 50$

One-Member-One-Vote Method:

A one-member one-vote (i.e., majority vote) is to be conducted to approve consultation of the draft budget and approval of the Budget Document. Each member present has an equal weighting of their vote.

Majority Vote Allocations:

Municipality	# of Members	% Vote
City of Thunder Bay	1	9.09
	1	9.09
	1	9.09
	1	9.09
Conmee	1	9.09
Dorion	1	9.09
Gillies	1	9.09
Neebing	1	9.09
O'Connor	1	9.09
Oliver Paipoonge	1	9.09
Shuniah	1	9.09
TOTAL	11	100

2.6 ASSET MANAGEMENT PLAN

TBT Engineering Consulting Group completed the LRCA Asset Management Plan (AMP) in July 2016, which was updated in 2021 by KGS Group. The AMP provided insight into the current condition of the Authority's assets and a timeline indicating recommended repairs, maintenance and replacement of assets. The goal of the AMP is to provide a strategy to achieve and maintain the desired level of services for each asset while maintaining financial goals.

The Asset Management Plan is updated every five years. The next update will occur in 2026.

2.7 RESERVE POLICY

The Authority has an approved Reserve Policy (FIN-04) which outlines how the various reserves are to be managed. A summary of planned appropriations to and from Reserves is included in Section 4.

2.8 PURCHASING POLICY

The LRCA approved Purchasing Policy (FIN-06), which was updated in 2019, guides all purchasing.

2.9 LAKEHEAD CONSERVATION FOUNDATION

The Lakehead Conservation Foundation was formed in 1987 as it became evident that funding from the Province of Ontario was decreasing. Since inception, the Foundation has donated \$836,290 towards these programs. Their annual contribution has been typically \$20,000 and is allocated for environmental education and other special projects.

Due to COVID-19 in 2021 the annual Dinner and Auction and the Wine Tasting Fundraising events were cancelled, and in 2022 the Dinner Auction was cancelled resulting in a loss in revenue of approximately \$20,000.00 each year, and subsequently no donation to the LRCA. The LCF hosted both events in 2024, however only plans on hosting the wine tasting event in 2025. Future donations will be determined based on the success of the events.

2.10 CONSERVATION ONTARIO

Conservation Ontario (CO) is the network or umbrella organization of the 36 Conservation Authorities similar to the Association of Municipalities (AMO). Decisions made at CO Council Meetings do not bind individual Conservation Authorities unless specifically adopted by the Conservation Authority. CO advocates on behalf of the collective and has been instrumental during the current *Conservation Authorities Act* review process. Typically, both the Chair and CAO attend the quarterly CO Council meetings; however, since COVID, meetings have been mostly virtual, with two meetings in person per year. The LRCA pays an annual levy to CO.

2.11 PROGRAMS AND SERVICES

In October 2021 the MECP released O. Reg. 686/21: Mandatory Programs and Services and O. Reg. 687/21: Transition Plans and Agreements under the *Conservation Authorities Act*. The purpose of the transition period is to provide conservation authorities and municipalities with the time to address changes to the budgeting and levy process based

on the delivery of mandatory programs and services (Category 1), municipal programs and services (Category 2), and other programs and services (Category 3) and to reach agreements.

As required in O. Reg. 687/21: Transition Plans and Agreements the following requirements have been completed:

- **Transition Plan** (November 24, 2021): Included a timeline/workplan to meet the requirements for the first and second phases of the transition period.
- **Inventory of Programs and Services** (February 28, 2022): List of all the programs and services that the authority was providing at that time, and those that it intends to provide as of January 1, 2024. Summarized programs into Category 1, 2 and 3 and detailed how they were funded.

The Act outlines programs areas which have been categorized into three categories:

2.11.1 CATEGORY 1 – MANDATORY PROGRAMS AND SERVICES

Mandatory programs and Services (as outline in the Act)

21.1 (1) An authority shall provide the following programs or services within its area of jurisdiction:

1. *A program or service that meets any of the following descriptions and that has been prescribed by the regulations:*
 - i. *Programs and services related to the risk of natural hazards*
 - ii. *Programs and services related to the conservation and management of lands owned or controlled by the authority, including any interests in land registered on title.*
 - iii. *Programs and services related to the authority's duties, functions and responsibilities as a source protection authority under the Clean Water Act, 2006.*
 - iv. *Programs and services related to the authority's duties, functions and responsibilities under an Act prescribed by the regulations.*
3. *A program or service, other than a program or service described in paragraph 1, that has been prescribed by the regulations on or before the first anniversary of the day prescribed under clause 40 (3) (i).*

Within the budget the Mandatory Programs and Services are categorized under each of the following categories:

- Risk of Natural Hazards
 - Floodplain Mapping
 - Technical Studies
 - Communications and Outreach
 - Flood Forecasting and Warning
 - Drought and Low Water Response
 - Infrastructure: Neebing-McIntyre Floodway
 - Infrastructure: Victor Street Erosion
 - Review of Proposal Under an Act
 - Plan Review Comments
 - Administering and Enforcing the Act (Section 28 Development Regulations)
- Conservation and Management of Lands
 - Conservation Areas
 - Administer Section 29 Regulations in Conservation Areas
 - Other owned land
- Source Protection
- Other Programs and Services
 - Water Quality and Quantity Monitoring: Provincial Groundwater Monitoring Network
 - Water Quality and Quantity Monitoring: Provincial Water Quality Monitoring Network
 - Watershed-based Resource Management Strategy (new mandated requirement due December 31, 2024)

2.11.2 CATEGORY 2 – NON-MANDATORY PROGRAMS AND SERVICES AT THE REQUEST OF A MUNICIPALITY

Municipal programs and services (as outlined in the Act)

21.1.1 (1) An authority may provide within its area of jurisdiction municipal programs and services that the authority agrees to provide on behalf of a municipality situated in whole or in part within its area of jurisdiction under a memorandum of understanding or such other agreement as may be entered into with the municipality in respect of the programs and services.

On November 28, 2022, the *More Homes Built Faster Act* (Bill 23) was passed and subsequently O. Reg. 596/22 (Prescribed Acts) came into affect on January 1, 2023. This legislation impacts the LRCA's Category 2 programs as outlined in the Inventory of Programs.

Within LRCA's current Inventory of Programs, the Category 2 programs include:

- Mapping Service
 - GIS mapping service provided to Municipality of Oliver Paipoonge, Township of Dorion and the Lakehead Rural Planning Board, as a fee for service.

Effective January 1, 2023, the following section was added to the *Conservation Authorities Act*:

21.1.1 (1.1) *An authority shall not provide under subsection (1), within its area of jurisdiction, a municipal program or service related to reviewing and commenting on a proposal, application or other matter made under a prescribed Act.*

Where the prescribed Acts are outlined in O. Reg. 596/22:

The following Acts are prescribed for the purposes of subsections 21.1.1 (1.1) and 21.1.2 (1.1) of the Act:

1. The *Aggregate Resources Act*.
2. The *Condominium Act, 1998*.
3. The *Drainage Act*.
4. The *Endangered Species Act, 2007*.
5. The *Environmental Assessment Act*.
6. The *Environmental Protection Act*.
7. The *Niagara Escarpment Planning and Development Act*.
8. The *Ontario Heritage Act*.
9. The *Ontario Water Resources Act*.
10. The *Planning Act*.

The new legislation prohibits the LRCA from providing the Category 2 program "Natural Heritage Planning Review" program as proposed to the City of Thunder Bay. Staff have removed this program from the Inventory of Programs. The "GIS Mapping Service" program will continue to be offered to the applicable municipalities.

2.11.3 CATEGORY 3 – NON-MANDATORY PROGRAMS AND SERVICES

Other programs and services (as outlined in the Act)

21.1.2 (1) *In addition to programs and services described in section 21.1 and 21.1.1, an authority may provide, within its area of jurisdiction, any other programs and services that it determines are advisable to further the purposes of this Act.*

NEW AS OF JANUARY 1, 2023 - (1.1) *An authority shall not provide under subsection (1), within its area of jurisdiction, a program or service related to reviewing and commenting on a proposal, application or other matter made under a prescribed Act.*

(2) *On and after the day prescribed by the regulations, if financing under section 25 or 27 by a participating municipality is necessary in order for the authority to provide such programs and service authorized to be provided under subsection (1), the program or service shall not be provided by the authority unless an agreement that meets the following criteria has been entered into between the authority and the participating municipality in respect of the program and service:*

- 1.** *The agreement must provide for the participating municipality to pay to the authority,*
 - i. An apportioned amount under section 25 in connection with a project related to the program or service, or*
 - ii. An apportioned amount under section 27 in respect of the program or service.*
- 2.** *The agreement must include provisions setting out on which the agreement terminates and a requirement that it be reviewed by the parties within the period specified in the regulations for the purpose of determining whether or not the agreement is to be renewed by the parties.*
- 3.** *The agreement must meet such other requirements as may be prescribed by the regulations.*

Category 3 programs included in the budget include:

- Education
 - Environmental Education
 - Nature Interpretive Programming
- Stewardship
 - Superior Stewards
 - Tree Seedling
 - Private Land Stewardship
 - Superior Seeds
 - Sea Lamprey

2.11.4 CORPORATE SERVICES

Corporate Services that apply to all program areas are considered an enabling service and are categorized as a separate budget category. They are considered to be applicable to all Member Municipalities and are part of the levy-all. Subservices within this category include:

- Corporate Services
 - Administration
 - Community Relations
 - Vehicle and Equipment Program
 - Information Technology Management
 - Corporate GIS

The *Conservation Authorities Act* defines the following term:

Operating expenses: include,

- a) salaries, per diems and travel expenses of employees and members of an authority,
- b) rent and other office costs,
- c) program expenses,
- d) costs that are related to the operation or maintenance of a project, but not including the project's capital costs, and
- e) such other costs as may be prescribed by regulation.

3 2025 BUDGET

The 2025 Draft Budget document contains details for the Lakehead Region Conservation Authority's (LRCA) planned operations and capital activity. The Budget has been set at \$4,574,963 which includes a total levy of \$1,913,993 of which all Member Municipalities pay \$1,143,855 with the remainder being sole-benefitting levy to the City of Thunder Bay (\$770,138). The draft budget has a 3.08% levy-all increase compared to the 2024 approved budget.

BUDGETED REVENUE

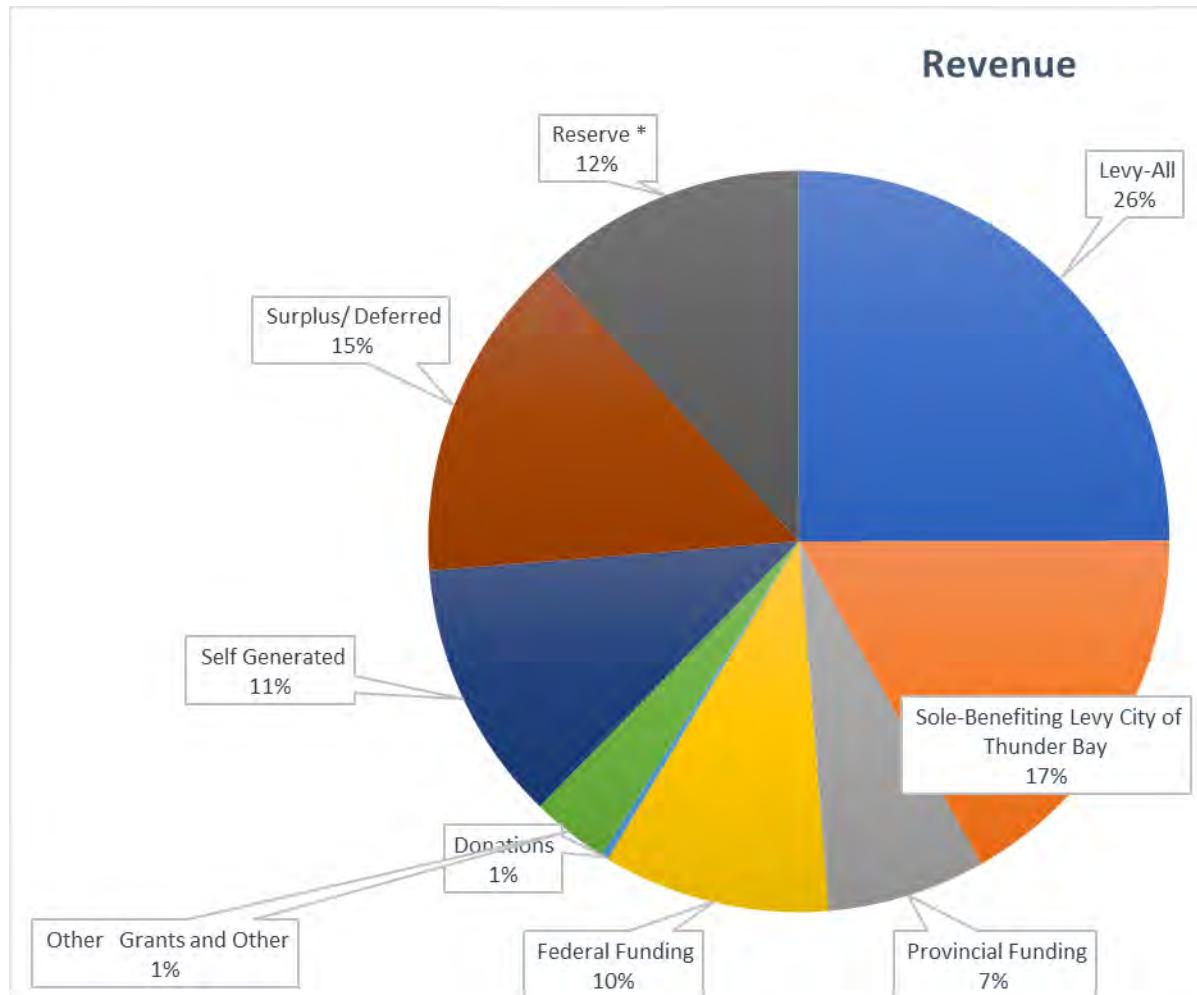
The LRCA draws revenue from a variety of sources:

- Municipal levies
- Provincial transfer payments (MNR)
- Other Transfer Payments for specific purposes (i.e., Source Water Protection)
- User fees (i.e., parking fees, education programs, permit fees, etc.)
- Reserves and prior years deferred revenue
- Donations from the Lakehead Conservation Foundation
- Other miscellaneous sources of revenue (i.e., property rental, interest, etc.)
- Other funding sources (varies from year to year)
-

**See Section 2.3 – Sources of Funding for a detailed analysis*

Projected Revenues by category:

FIGURE 1: 2025 PROJECTED REVENUES



Significant revenue sources budgeted for 2025 include the following:

- \$1,143,872 – Levy-all
- \$770,138 – Levy – City of Thunder Bay (sole-benefitting)
- \$150,940 – MNR Section 39 Provincial Transfer Payment
- \$318,525 - NRCan Climate Resilient Coastal Communities Program
- \$55,883– MECP – Source Water Protection
- \$70,250 – ECCC Freshwater Ecosystem Initiative (Floodway Stewardship)
- \$19,500 – MECP Waterfront Shoreline Restoration

- \$39,500 – Invasive Phragmites Control Fund
- \$55,760 – Parks Canada Hurkett Cove Cattail
- \$17,500 – NOHFC Internship
- \$5,000 – TD Friends of the Environment - Hazelwood Shoreline
- \$31,400 – MECP Neebing Culvert Assessment
- \$48,500 – MECP Cyanobacteria Education
- \$162,000 – Interest income

Other grants that the LRCA intends to apply for in 2025 include:

- Canada Summer Jobs (\$10,566)

This budget has been prepared based on estimates of potential revenue from various funding sources, which will be dependent on successful funding applications. Some of the projects included in the budget will only be completed if grant funding is successfully obtained. Additional applications for other programs may be completed as funding becomes available throughout the year.

CONSIDERATION OF OPPORTUNITIES TO RAISE AND USE SELF-GENERATED REVENUE

Per O. Reg. 402/22, Section 13(2)8, the budget must provide a description of what opportunities the authority considered to raise and use self-generated revenue to help finance the authority's operations, including the programs and services it provides.

Currently the LRCA's self generated revenue is derived from fee for service and user fees from the following sources:

- Interest
- Mapping Service (Category 2 program)
- Education programming fees (Category 3 program)
- Plan Input fees
- Section 28 Permit fees
- Lawyer Inquiry fees
- Explore Card sales
- Coin boxes for parking/day use fees at:
 - Mills Block Forest
 - Little Trout Bay
 - Cedar Falls
 - Hurkett Cove
 - Wishart Forest
 - Hazelwood Lake

- Pay and Display Units for parking fees (enforced under City of Thunder Bay Parking By-Law)
 - Mission Island Marsh
 - Cascades
 - Silver Harbour
- Seeds for Conservation native seed and plant sales

The Fee Schedule will be reviewed annually to determine the annual fee rates, as approved by the Board. On December 28, 2022, a Minister's Direction was issued to Conservation Authorities prohibiting them from changing fees related to reviewing and commenting on planning and development related proposals or land use planning policies, or for permits issued by the Conservation Authority for the period of January 1, 2023 to December 31, 2023. The freeze was extended for 2024. At the time of budget creation, it was not known if fees were going to be frozen again for 2025.

Increased revenue will be used to offset levy and reinvest in amenities provided at Conservation Areas.

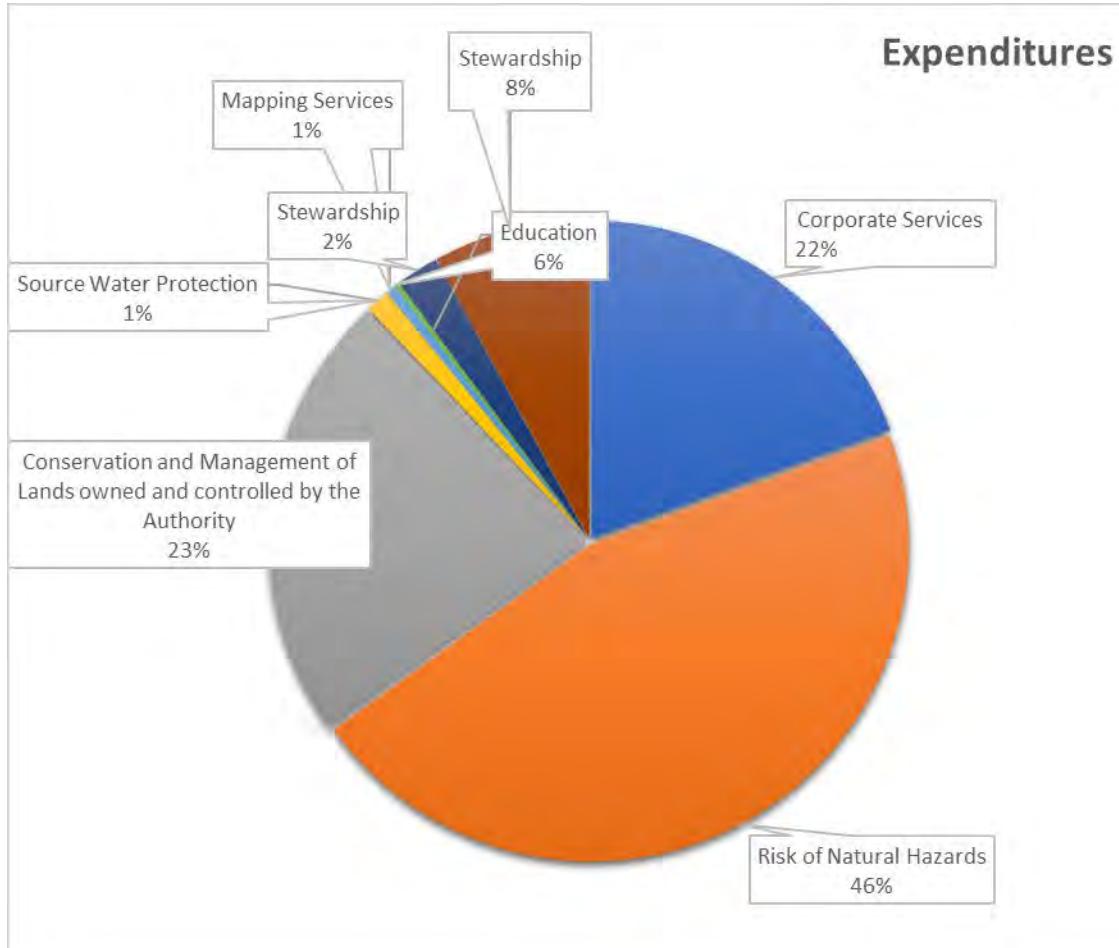
BUDGETED EXPENDITURES

The 2025 Budget is categorized into eight categories as listed below:

Projected Expenses by category include:

- 1) Corporate Services
- 2) Risk of Natural Hazards
- 3) Management, Operations and Maintenance of Authority Owned Lands
- 4) Drinking Water Source Protection
- 5) Other Programs and Services as described in Section 21.1(2) of the Act
- 6) Mapping Services
- 7) Education
- 8) Stewardship

FIGURE 2: 2025 PROJECTED EXPENSES BY PROGRAM



CORPORATE SERVICES

Corporate Services include programs that apply to all programs and services and the general overall management of the organization.

ADMINISTRATION

Expenditures	\$705,815	
Annual	\$705,815	Travel and training (admin staff) Wages and benefits (admin staff) Insurance Professional fees, subscriptions, memberships Conservation Ontario levy Security monitoring Vehicle rental Board Member allowance (per diems, travel, meeting expenses) Audit fees Latornell Conference Legal fees Bank fees Computer equipment and software Photocopying Postage Stationery and office supplies Utilities Annual Report Telephone Northern Ontario Safety Group Health and Safety Training
One-Time		
Revenue	\$705,815	
Grants	\$30,188	MNR Section 39
Self-Generated	\$253,508	Interest Revenue \$162,000, SWP Admin Fee \$9,000, Various Revenues \$4,000, Admin Fee for various projects \$78,508
Levy-All	\$240,193	
Reserve	\$65,000	2024 interest that was moved to reserve to fund 2025 wage increases (planned)
Prior Year Surplus	\$116,926	Previous Year Surplus

COMMUNITY RELATIONS

Community Relations applies to all programs and includes: promoting the Authority; media relations; website; creation of publications (i.e., fact sheets, annual report, etc.) and other materials; and watershed-wide communication and promotion of LRCA and its programs to watershed residents, municipalities, and other agencies. Annually the LRCA produces a calendar, which is fully funded by paid advertising.

Expenditures	\$103,192	
Annual	\$103,192	Staff wages Vehicle rental Advertising Training Booth rentals Promotional items Website Calendar Expenses (\$6,000)
One-Time		
Revenue	\$103,192	
Grants		
Other	\$7,000	Other Revenue \$1,000, Calendar Revenue \$6,000
Levy-All	\$96,192	

VEHICLE AND EQUIPMENT PROGRAM

The Vehicle and Equipment Program is utilized to internally charge LRCA programs vehicle related usage costs to self fund all vehicle and equipment costs, including replacement, in the form of a Reserve.

The following table illustrates the 2025 Vehicle and Equipment Program Budget for revenue and expenses, which shows the actual revenue and expenses for the previous three years. The projected surplus at the end of the financial year is to be transferred into the Replacement of Vehicle/Equipment Reserve.

Lakehead Region Conservation Authority 2025 Vehicle and Equipment Budget			
	2025 BUDGET	2024 BUDGET	2023 BUDGET
Revenue:			
Vehicle rental recoveries	44,570.00	33,550.00	33,000.00
Equipment rental recoveries	3,000.00	3,000.00	3,000.00
	47,570.00	36,550.00	36,000.00
Expenses:			
Insurance	5,000.00	5,000.00	5,000.00
Vehicles:			
Repairs and maintenance	7,000.00	6,500.00	5,000.00
Annual safety check	1,300.00	1,200.00	900.00
Licenses	-	-	500.00
Fuel	12,000.00	11,500.00	9,000.00
Equipment:			
Fuel	2,800.00	2,800.00	2,300.00
Repairs and maintenance	4,500.00	4,000.00	3,500.00
Small Tools	500.00	500.00	500.00
	33,100.00	31,500.00	26,700.00
Transfer to V/E Reserve	14,470.00	5,050.00	9,300.00

Reserve for Vehicle/Equipment Replacement

Budgeted Purchases from Reserves:

Clearing Saw	2,000.00
Pressure Washer	670.00
Battery Trimmer	1,850.00
Power Broom	950.00
Total	5,470.00

INFORMATION TECHNOLOGY MANAGEMENT

Information Technology Management is provided to all programs and services. It includes all hardware and software and is managed by the GIS/Water Resources Technician.

Expenditures	\$33,365	
Annual	\$33,365	Staff wages Accounting Software Adobe upgrades Bitdefender upgrade Office 365 upgrade Dalto Alto Cloud Backup Computer purchases Travel and training
One-Time		
Revenue	\$33,365	
Grants		
Other		
Self-Generated		
Levy-All	\$33,365	
Deferred		

CORPORATE GIS

Corporate GIS is provided to all programs and services. It includes the overall management of data and GIS software and is managed by GIS/Water Resources Technician.

Expenditures	\$14,382	
Annual	\$14,382	Staff wages Consulting Fees ESRI Software Hardware
One-Time		
Revenue	\$14,382	
Grants		
Other		
Self-Generated		
Levy-All	\$14,382	
Deferred		

3.1 CATEGORY 1: MANDATORY PROGRAMS AND SERVICES

Two summer students (Water Resources Technologist Assistants) will be hired in 2025 for 16-weeks. The Water Resources Technologist Assistants will assist the GIS/Water Resources Technologist and Environmental Planner with the following program areas:

- PGMN
- PWQMN
- Bathing Beach Sampling/Blue Green Algae Monitoring
- Sea Lamprey Trapping
- Mosquito and Pennock Creek Water Quality Monitoring
- Filing and data management.

3.1.1 RISK OF NATURAL HAZARDS

Mandatory Programs and Services related to the risk of natural hazards.

FLOODPLAIN MAPPING

The Regulatory Floodplain is the approved standard used in a particular watershed to define the limit of the flood plain for regulatory purposes. Adaptive watershed management requires a preventative and proactive approach to address the potential impacts of urbanization and climate change.

The Authority completed various floodplain mapping studies, which are currently used during the administration of the Regulations and for Plan Input and Review purposes. When the studies were completed, partial funding was provided under a variety of government funding programs. The studies were completed between 1979 and 1985, with McVicar Creek updated in 1995.

In recent years, utilizing National Disaster Mitigation Funding, updates to floodplain mapping studies were completed including:

- McIntyre River (2015),
- Neebing River (2018),
- McVicar Creek (2019),
- Kam River (2020),
- Pennock Creek, (2020),
- Mosquito Creek, (2020).

Completed studies are shared with applicable Member Municipalities for use by the engineering departments, for asset management and to be incorporated into their Official Plan and Zoning By-Law.

It is important for the recently updated Watershed hydraulic models to be updated regularly to reflect newly installed/modified infrastructure, such as culverts and bridges, and other changes that are proposed or permitted through the regulations process. Protocols for updating the hydraulic model are needed to ensure that updates are performed efficiently and on a regular schedule with clear communication between the LRCA, Municipality and the Consultant updating the models. A Consultant will be hired to complete updates to the models when required. Any changes to the watersheds allowed through the regulation process, or otherwise identified, will be tracked by LRCA and sent to the Consultant. As the anticipated updates will occur within the City of Thunder Bay, the costs will be part of a sole-benefitting levy to the City of Thunder Bay.

Expenditures	\$42,245	
Annual	\$42,245	Maintenance of current models
One Time		
Revenue	\$42,245	
Grants		
Other		
Levy, Sole-Benefitting City of Thunder Bay	\$42,245	
Deferred		

TECHNICAL STUDIES

Studies, mapping and data collection to understand the risks related to natural hazards including how those risks might be affected by climate change. Development of plans and policies to support the delivery of programs.

In collaboration with Conservation Ontario, the LRCA has applied to Natural Resources Canada (NRCan) to complete a Lakehead Coastal Resilience Management Plan for the Lake Superior shoreline. Subject to confirmation of funding, the multi-year project will be completed between 2024 – 2027. The key priority of the project will be to understand current and future risks and develop adaptive short- and long-term actions that impacted municipalities can use to prepare for, respond to, and recover from the potential impacts of climate change. This will protect people and property as well reduce the economic impact of climate change impacts to municipal and private infrastructure. The expected products and outputs include:

1. Shoreline analysis to document current and future impacts due to climate change from flooding, erosion, wave uprush and extreme weather events;
2. Identify at risk infrastructure; assess value of impacted infrastructure;
3. Where applicable create a plan of retreat of community assets, housing or infrastructure away from hazards;

4. Create best management practices for mitigating and adapting to climate change;
5. Develop innovative solutions;
6. Develop short- and long-term solutions.

Expenditures	\$389,674	
Annual	\$2,449	Staff wages
One-time	\$387,225	Consulting Fees
Revenue	\$389,674	
Grants	\$318,525	
Levy-All	\$2,449	
Deferred	\$68,700	

COMMUNICATIONS AND OUTREACH

Promoting public awareness of natural hazards including flooding, drought and erosion including: public events and materials; social media services; website; and media relations.

Expenditures	\$11,804	
Annual	\$11,804	Staff wages Clothing Allowance
One-Time		
Revenue	\$11,804	
Grants		
Levy-All	\$11,804	
Deferred		

FLOOD FORECASTING AND WARNING

This includes procedures undertaken by the LRCA required to reduce this risk of loss of life and property damage due to flooding through the forecasting of flood events and the issuing of flood messaging (i.e., Watershed Conditions Statements, Flood Watch and Flood Warnings) to prepare those who must respond to the flood event. Additionally, this includes development and implementation of a comprehensive system developed to guide and implement Flood Forecasting and Warning activities, to effectively manage flood control structures and to provide guidance during the response to a flood.

Annual measures include:

- Operation and maintenance of stream flow gauges and precipitation gauges
- Snow surveys
- Spring Melt Meeting with Member Municipalities and applicable agencies
- Maintaining Flood Forecasting and Warning System Manual

- Monitor weather conditions 365 days per year
- Issuance of Flood Messaging as warranted
- Attend the annual Provincial Flood Forecasting Workshop
- Collect streamflow and precipitation data (partnership with Water Survey of Canada)
- Facilitate the CoCoRaHS program (volunteer-based precipitation monitoring program)
- Participate in Ontario Power Generation's Kaministiquia River Dam Safety Emergency Preparedness and Response Plan
- Post flood event meetings and reports

Expenditures	\$54,721	
Annual	\$54,721	Staff wages Vehicle rental Materials and supplies Insurance Staff training (Flood Forecasting workshop, WISKI training) WISKI software annual maintenance fees Computer and office equipment, network repairs Boot Allowance Clothing Allowance
One-Time		
Revenue	\$54,721	
Grants		
Other		
Levy-All	\$54,721	
Deferred		

DROUGHT AND LOW WATER RESPONSE

In conjunction with the MNR, the Authority administers the Ontario Low Water Response program within the LRCA area of jurisdiction, which is a response plan to minimize the effects of drought. The program includes condition monitoring and analysis and technical support to the Water Response Team representing major water users and decision makers who recommend drought response actions.

Expenditures	\$4,629	
Annual	\$4,629	Staff wages
		Materials and equipment
Revenue	\$4,629	
Grants		
Other		
Levy-All	\$4,629	
Deferred		

INFRASTRUCTURE: NEEBING-MCINTYRE FLOODWAY

OPERATING

This category includes costs associated with the operation and minor maintenance of flood control structures, the primary purpose of which is to provide protection to life and property. This includes all costs related to the Neebing-McIntyre Floodway. Overall, flood control services provide watershed residents with an effective and efficient system that will reduce their exposure to the threat of flood damages and loss of life.

Expenditures	\$321,818	
Annual	\$321,818	Annual structural inspections of Neebing Weir and Diversion Structure Floodway water level monitoring Minor maintenance (tree removal, minor repairs, etc.) Hiring of two summer students (14 weeks) to complete Floodway maintenance Staff wages Vehicle rental Materials and supplies Insurance Administration Fee Property Taxes
One-Time		
Revenue	\$321,818	
Grants	\$88,152	MNR Section 39
Other		
Self-Generated	\$500	CLE Land Rental
Levy, Sole-Benefiting City of Thunder Bay	\$233,166	
Deferred		

CAPITAL

This category includes costs associated with the capital and major maintenance of flood control structures, the primary purpose of which is to provide protection to life and property. This includes all costs related to the Neebing-McIntyre Floodway. Overall, flood control services provide watershed residents with an effective and efficient system that will reduce their exposure to the threat of flood damages and loss of life.

The Floodway has provided 40 years of continuous operation since completion in 1984. In 2023, a consultant was hired to update the Neebing-McIntyre Floodway Integrity Study, which is updated every 10 years. The study provided a comprehensive review of the original design assumptions versus the actual observed and predicted performance. The schedule of long-range maintenance will be reviewed as part of the study and will be used to confirm future required funds to maintain the integrity of the Floodway. The data will also be used to update the Asset Management Plan and Operational Plan which are mandated to be completed by December 31, 2024.

In 2025, the Diversion Channel will be dredged from the Diversion Structure to Redwood Bridge in order to restore the designed capacity of the channel.

Expenditures	\$890,000	
Annual	\$440,000	Annual Levy to deferred for future use
One Time	\$450,000	Diversion Channel Lip Dredging
Revenue	\$890,000	
Grants		
Deferred	\$450,000	Use of Deferred for Lip Dredging
Levy, Sole-Benefiting City of Thunder Bay	\$440,000	A constant amount is levied annually, with funds not needed in the given year placed in a deferred fund for future years in order to avoid the highs and lows when major maintenance is required. LRCA staff maintains a timeline for major maintenance required on the Floodway, which is used to calculate required future funds needed in order to provide a consistent and manageable annual levy to the City of Thunder Bay. As the Floodway is an essential part of mitigating the risk to life and property, the LRCA must guarantee funds are available to ensure the integrity of the Floodway is maintained.

Some of the larger (over \$100,000) major maintenance expected to be required in the next 10 years include (based on 2024 Integrity Study):

- 2026 Floodway Channel Dredging – Island Drive to CPR Bridge (\$2,000,000)
- 2028 Balmoral Sediment Trap Dredging (\$900,000)
- 2029 Diversion Channel Lip Dredging (\$450,000)
- 2031 Floodway Channel Dredging – Island Drive to Lake Superior (\$1,500,000)

Major maintenance projects are eligible for Provincial Transfer Payment Water and Erosion Control Infrastructure (WECl) funding which the LRCA applies for the year the work is undertaken; however, the allocation of WECl funds varies year-to-year and is not guaranteed year-to-year; therefore, total costs of major maintenance are used in determining required future funds. Any additional funding obtained through WECl will result in the levy being carried forward for future year's projects and adjusting the long-term projections accordingly. A WECl application has been made for the 2025 project; however, approval of the application is pending.

INFRASTRUCTURE: VICTOR STREET EROSION

OPERATING

This category includes costs associated with the minor maintenance of erosion control structures on City of Thunder Bay owned land on Victor Street and protection of City owned infrastructure along Kam riverbank. The primary purpose of which is to provide protection to life and property. Overall, erosion control services reduce watershed resident's exposure to the threat of property damages and loss of life. This area has historically been managed/monitored on behalf of the City of Thunder Bay.

Expenditures	\$21,122	
Annual	\$21,122	Victor Street soil nailing, slope inspection (2x/year)
		Staff wages
One-Time		
Revenue	\$21,122	
Grants		
Self-Generated		
Levy, Sole-Benefiting City of Thunder Bay	\$21,122	
Levy-All		
Deferred		

CAPITAL

This category includes costs associated with the capital and major maintenance of erosion on City of Thunder Bay owned land on Victor Street, the primary purpose of which is to provide protection to life and property. Overall, erosion control services reduce watershed resident's exposure to the threat of property damages and loss of life. The main erosion control structure is the soil nailing completed along Victor Street on City of Thunder Bay land to protect Victor Street and the adjacent infrastructure.

In 2019 the Kaministiquia River Erosion Sites Inventory Report was completed which delineated the 100-year erosion rate along the Kaministiquia River within the City of Thunder Bay. Within the report, it was identified that Victor Street was within the 100-year erosion hazard, based on the completed methodology. A detailed analysis of the area was recommended to look at the risk to Victor Street and adjacent infrastructure, including long-term recommendations related to access and egress to the area. This study was completed in 2020; recommendations will be incorporated into future budgets in consultation with City of Thunder Bay Engineering.

Expenditures	\$46,105	
Annual	\$46,105	Amount to be deferred for future use.
One Time		
Revenue	\$46,105	
Grants	12,500	MNR Section 39
Levy, Sole-Benefiting City of Thunder Bay	\$33,605	
Levy-All		
Deferred		

REVIEW OF PROPOSALS UNDER AN ACT

As a mandatory program, staff will provide input to the review and approval processes under other applicable law (i.e., *Aggregate Resources Act*, *Drainage Act*, *Environmental Assessment Act*, etc.) with comments related to natural hazards, wetlands, watercourses and Section 28 permit requirements.

Expenditures	\$2,250	
Annual	\$2,250	Staff wages
Revenue		
Grants		
Other		
Levy-All	\$2,250	
Deferred		

PLAN REVIEW COMMENTS

Conservation Authorities are delegated the responsibility from MNR to comment on all *Planning Act* applications processed by their Member Municipalities as to the applications adherence to Section 3.1 of the Provincial Policy Statement (i.e., natural hazards).

This category includes reviewing comprehensive updates to Member Municipality Official Plans and Zoning By-laws; site specific amendments to Official Plans and Zoning By-laws; subdivision applications; site plan control; consent applications; minor variances, etc. Comprehensive Official Plan and Zoning By-Law reviews are eligible for Section 39 Transfer Payment; however, due to the province under funding core mandate programming, no transfer payment is allocated for this mandated review.

Effective January 1, 2021, the LRCA began charging a Fee for Service for all Plan Review comments. The generated revenue will be used to reduce levy required to administer this delegated program. A few years of revenue will be required to fully predict future years generated revenue, which will fluctuate annually depending on the volume of *Planning Act* applications received by our Member Municipalities.

Effective January 1, 2023, a Minister's Direction as part of the *More Homes Built Faster Act* 2022 (Bill 23) was issued to Conservation Authorities to not change fees related to reviewing and commenting on planning applications for the period of January 1, 2023 to December 23, 2023; therefore, fees charged to applicants for planning comments were not changed through the legislated period. The fee freeze was continued into 2024. It is unknown whether or not the freezing of fees will be extended into 2025.

Expenditures	\$106,824	
Annual	\$106,824	Staff wages
		Training
		Legal Fees
One time		
Revenue	\$106,824	
Other	\$24,300	Canada Summer Jobs \$9,300, Planning Fees Revenue \$15,000
Levy-All	\$62,524	
Deferred	\$20,000	

***ADMINISTERING AND ENFORCING THE ACT (SECTION 28
DEVELOPMENT REGULATIONS)***

The Development Regulations category includes the costs and revenues associated with administering Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits under the *Conservation Authorities Act*, which includes: permit application review, inspections, permit issuance, enforcement and follow-up. Also, which may include defending appeals and conducting Hearings.

Effective January 1, 2023, a Minister's Direction as part of the *More Homes Built Faster Act* 2022 (Bill 23) was issued to Conservation Authorities to not change fees related to permits issued by Conservation Authorities for the period of January 1, 2023, to December 23, 2023; therefore, fees charged to applicants for development permits were not changed through the legislated period. This freeze was extended into 2024. It is unknown whether or not the freezing of fees will be extended into 2025.

Expenditures	\$193,907	
Annual	\$193,907	Staff wages Training and travel Legal Fees Engineering Support Provincial Offences Officer supplies Professional Fees
One-Time		
Revenue	\$193,907	
Self-Generated	\$25,000	Lawyer property inquiries \$4,000, Development Regulation Permit fees \$21,000
Levy-All	\$168,907	
Other		
Deferred		

**3.1.2 CONSERVATION AND MANAGEMENT OF LANDS OWNED AND
CONTROLLED BY THE LRCA**

Programs and services related to the conservation and management of lands owned or controlled by the authority.

CONSERVATION AREAS

OPERATING

This includes all expenses and revenue associated operation, and minor maintenance of land owned and/or managed by the Authority. In total, the LRCA owns 2,603 hectares of land, including Conservation Areas, administrative office lands, and management lands.

The Conservation Areas provide an opportunity for the watershed residents for semi-passive activities such as hiking, nature appreciation, photography, fishing, etc. Of the eight Conservation Areas, five provide access to Lake Superior with three being adjacent to Provincially Significant wetlands. Comments on planning applications near Conservation Areas will be provided by the LRCA.

The Bathing Beach monitoring program will continue at Hazelwood Lake and Mission Island Marsh Conservation Areas, which monitors *E. coli* levels in conjunction with the Thunder Bay District Health Unit. Additionally, cyanobacteria (blue-green algae) monitoring will continue in 2025 at Hazelwood, Mission, Silver Harbour and Hurkett Conservation Areas. Continued testing will solidify LRCA's understanding of cyanobacteria within selected Conservation Areas, while protecting visitors and their pets from Harmful Algal Blooms (HABS). Further, the study will contribute to a greater understanding of how cyanobacteria are influencing the Lakehead Watershed. Continued testing will involve the use of Eurofin's Algal Toxin (Microsystins) Test Strip Kit for Recreational Water and continued Microscopy Work provided by Blue-Green Labs.

In 2024, staff completed the mandatory Conservation Lands Strategy and Land Inventory (due December 31, 2024).

In 2021, pay stations were added to Mission Marsh and Cascades Conservation Areas, and in 2023 a pay station was added at Silver Harbour Conservation Area, in an effort to increase generated revenue. The pay stations at Mission Marsh and Cascades Conservation Areas have resulted in a significant increase in revenue at the respective Conservation Areas. This increase in revenue is anticipated to continue in the years ahead and will be used to off-set required levy to operate the areas and enhance amenities at the area.

In 2025, a consultant will be hired to design new wayfinding signage for the Conservation Areas. The signage will be installed in one Conservation Area in 2025, with the remaining Conservation Areas having the signage installed in 2026.

Expenditures	\$324,100	
Annual	\$301,100	Staff wages Clothing allowance On-going maintenance Garbage removal Sanding/salting of parking areas Outhouse rentals Property Taxes Credit Card usage fees
One-Time	\$23,000	Wayfinding Sign Design (\$23,000)
Transfer to Reserve		
Revenue	\$324,100	
Other	\$20,000	TD Friends of the Environment, Enbridge
Levy-All	\$214,100	
Self-Generated	\$90,000	Explorer Cards, Pay-Station, Coin Box Revenue
Deferred		

CAPITAL

The capital fund is used for major maintenance and capital investment at the Conservation Areas. In 2021, KGS Group updated the LRCA's Asset Management Plan (AMP), which assessed the current condition, annual maintenance and major repairs required to the Authority's assets. LRCA staff have analyzed the AMP and prepared a long-term schedule of capital repairs, which has been used to provide a consistent and manageable annual levy. It was identified in the AMP that there are some major repairs required to ensure the integrity and safety at our Conservation Areas. In addition, other major capital requirements were identified to be completed in the near future to avoid conditions deteriorating.

In 2025, Mills Block Conservation Area will be upgraded as designed by a consultant in 2024 to enlarge and move the parking lot onto LRCA owned land. An AODA accessible section of trail will be installed along with a connection to the existing trails. Additionally, an AODA washroom, sign and pay and display unit will be installed. External funding will be sought for the project.

Expenditures	\$397,593	
Annual	\$20,000	Appropriation to Hazelwood Lake Dam Reserve (\$20,000)
One-Time	\$300,000	Mills Block parking lot relocation; washroom, sign, pay and display installation; and AODA trail development and trail connection (\$300,000)
		Mission Marsh Parking lot maintenance (\$6,500)
Other	\$77,593	Appropriation to Reserves
Revenue	\$397,593	
Grants		
Other		
Levy-All	\$97,603	
Reserve	\$299,990	

ADMINISTER SECTION 29 REGULATIONS IN CONSERVATION AREAS

Enforcement and compliance in Conservation Areas, related to Conservation Areas Regulations and Parking by-law enforcement in the City of Thunder Bay and Conservation Area Regulation enforcement in Conservation Areas. APEX will be used to increase enforcement at Cascades and Mission Island Marsh after hours and on weekends.

Expenditures	\$13,605	
Annual	\$13,605	Staff wages Enforcement Supplies Apex weekend enforcement
One-Time		
Revenue	\$13,605	
Grants		
Other		
Levy-All	\$13,605	
Self-Generated		
Deferred		

OTHER OWNED LAND

Operation and minor maintenance in other Conservation Authority owned land (i.e., forest management property, floodplain lands, Hope and Memory Garden, etc.). In 2024, staff completed the mandatory Land Inventory (due December 31, 2024).

The Authority owns and maintains one Forest Management property (William's Forest) and has Forest Management Plans on 10 property holdings, which guide the management of the areas as well as reduce property taxes through the Managed Forest Tax Incentive Program (MFTIP) administered by MNR.

The Forest Management Reserve is used for activities related to the forest management properties, including maintaining Forest Management Plans and for promoting greening activities. The Reserve is maintained from previous year's revenue for future purchases of forest management properties and forest management related expenditures.

In 2025, some harvesting may be undertaken at Wishart Conservation Area subject to contractor availability and market conditions.

Expenditures	\$53,903	
Annual	\$53,903	Wages (\$16,903) Property taxes (William Forest), Office Building, other lands Routine Maintenance (\$7,000)
One-Time		
Revenue	\$53,903	
Grants		
Other		
Levy-All	\$41,647	
Self-Generated	\$5,256	
Reserve	\$7,000	

OFFICE CAPITAL AND OPERATING

This fund is used for long-term capital repairs of the LRCA Administration Facility. In 2021, the Authority updated the Asset Management Plan (AMP) that provides guidance on the long-term maintenance and major capital repairs to maintain the integrity and safety of the building. The AMP was used to plan upgrades and repairs over the next five years. As a result, LRCA staff have completed a long-term plan for the timing of significant repairs, which is used to provide a consistent and manageable annual levy. This levy does not include any additional capital plans; it is only to maintain the building in its current condition.

In 2025 the large boardroom will be updated including: addition of air conditioning units, new flooring and wall materials and upgrade the audio/visual equipment. The security system for the office will be upgraded. The area around the garden and greenhouse will be fenced for security reasons to provide a secure compound for plant material and other assets.

Expenditures	\$255,000	
Annual	\$ 15,000	Maintenance of grounds, buildings, and equipment
		Emergency repairs as needed
One-Time	\$240,000	Board Room Renovations including Air Conditioning units and Audio/Visual upgrade and security system upgrade for office \$200,000. Fence at office \$40,000.
Revenue	\$255,000	
Other		
Grants		
Levy-All	\$83,480	
Reserve	\$171,520	Appropriated from Reserve for Capital Work

Per the 2021 AMP, some of outstanding larger projects that are expected to be completed include:

- Short-Term (1-5 years):
 - Replace heating pumps
 - Air Conditioner units for Board and Multipurpose room
 - Exhaust Fans replaced
 - Replace foundation on front signage
- Mid-Term (5-10 years):
 - Replace windows and parging
 - Hot water heater
 - Radiators and unit heater replacement
 - A/C and thermostat control replacement
 - Replace unit ventilators at end of life
 - Replace A/C heads and outdoor condensing units
 - Flooring
 - Major heating repairs (piping and boiler)
- Long-term (10-20 years):
 - Exterior doors and handrails
 - Eaves trough and downspouts
 - Parking lot replacement
 - Patio stone area
 - Shingles and roof repairs
 - Detached Garage Replacement
 - Refrigerant Piping for Cooling Units

3.1.3 SOURCE WATER PROTECTION

This category refers to programs and services related to the Authority's duties, functions and responsibilities as a Source Protection Authority under the *Clean Water Act, 2006*.

The Source Water Protection program commenced in 2005 with 100% funding provided from the MECP with the goal of completion of Source Protection Plans for municipal drinking water systems. Within the Lakehead Watershed, there are only two municipal drinking water systems: City of Thunder Bay Bare Point Water Treatment Plant and the Municipality of Oliver Paipoonge Rosslyn Village Drinking Water System.

The Lakehead Source Protection Plan was approved on January 16, 2013, with an effective date of October 1, 2013. The Source Protection Plan contains a series of policies developed by the Source Protection Committee in consultation with the local community to protect municipal drinking water sources from existing and future drinking water threats. The Plan describes the actions that must be taken by various implanting bodies to protect surface water and groundwater sources that supply municipal drinking water.

The affected municipalities are responsible to implement the Source Protection Plans and must adhere to the policies including providing annual reports to the Source Protection Authority (i.e., LRCA Board). The Source Protection Authority is then required to assess the municipal annual reports and report annually to the MECP.

The current Agreement provides funding for three years between the LRCA and MECP will expire on March 31, 2027. It provides \$226,007.48 over the period, which funds administration and 0.55 FTE salary and benefits for years 1 and 2 and 0.5 FTE for year 3. The Source Protection Authority (i.e., LRCA Board) is responsible for maintenance of the Source Protection Committee, submission of Annual Reports to MECP, maintenance and retention of data and files (i.e., 15-year retention requirement) related to this program, which began in 2005. There is an expectation by MECP that each Source Protection Authority maintain qualified staff to ensure that the Plan remains current.

If funding is not provided in the future, the cost of the program would be a sole-benefitting levy applicable to the City of Thunder Bay and Oliver Paipoonge.

Expenditures	\$55,883	
Annual	\$55,883	Staff wages (0.25 FTE Watershed Manager, 0.15 FTE Information Systems Coordinator, 0.1 FTE Administrative Assistant, 0.05 FTE Communications Manager)

		Travel and per diem expenses to attend Chair's meetings
		Source Protection Committee (member per diems, room rental, agenda costs)
		Administration Fee
One-Time		
Revenue	\$55,883	
Grants	\$55,883	MECP Transfer Payment
Other		
Levy-All		
Deferred		

3.1.4 OTHER PROGRAMS AND SERVICES

PROVINCIAL GROUNDWATER MONITORING NETWORK (PGMN)

The Authority in partnership with the MECP participates in the Provincial Groundwater Monitoring Program (PGMN) in which LRCA monitors eight groundwater monitoring wells. LRCA staff collect samples and submit them to the MECP laboratory for analysis. Laboratory costs and sample shipping costs are paid by the MECP. The data not only provides data for the LRCA area of jurisdiction, but it is also the only sampling completed in northern Ontario.

Expenditures	\$7,869	
Annual	\$7,869	Vehicle rental
		Wages
		Materials and equipment
One-Time		
Revenue	\$7,869	
Grants		
Other		
Levy-All	\$7,869	
Deferred		

PROVINCIAL WATER QUALITY MONITORING NETWORK (PWQMN)

The Authority in partnership with the MECP participates in the Provincial Water Quality Monitoring Network (PWQMN) program, in which LRCA monitors six surface water locations. LRCA staff collect samples and submit them to the MECP laboratory for analysis. Laboratory costs and sample shipping costs are paid by the MECP. The data not only provides data for the LRCA area of jurisdiction, but it is also the only sampling completed in northern Ontario.

Expenditures	\$14,235	
Annual	\$14,235	Vehicle rental Wages Materials and equipment
One-Time		
Revenue	\$14,235	
Grants		
Other		
Levy-All	\$14,235	
Deferred		

3.2 CATEGORY 2: NON-MANDATORY PROGRAMS AT THE REQUEST OF A MUNICIPALITY

MAPPING SERVICE

The LRCA offers for a fee, a mapping service to our Member Municipalities who choose to participate. LRCA staff maintain the hardware and software required to provide a web-based mapping service that provides mapping capabilities to its users. Additionally, maps are created and updated, by request for a Member Municipality (i.e., Official Plan/Zoning By-Law Comprehensive Updates, etc.). Revenue from this service is used to maintain equipment and supplies related to GIS.

Expenditures	\$12,682	
Annual	\$12,682	Staff Wages Portion of ESRI License Plotter and computer expense
One-Time		
Revenue	\$12,682	
Grants		
Other	\$16,000	Oliver Paipoonge \$12,350, Dorion \$650, Lakehead Rural Planning Board \$3,000
Deferred	(\$3,318)	Surplus to Deferred

MOSQUITO AND PENNOCK CREEK MONITORING

At the request of the City of Thunder Bay Engineering and Operations Division, LRCA staff are completing surface water sampling along Mosquito Creek (10 sites) and Pennock Creek (2 sites) within the City of Thunder Bay once per month, from June through October. The City of Thunder Bay is interested in tracking water quality within Mosquito

Creek and Pennock Creek watersheds within the City. Mosquito Creek and Pennock Creek are both watersheds where residents are serviced by municipal water and private septic systems. A Watershed Assessment for Mosquito Creek was last completed in 2022. Since that time, the City has used LRCA's resources and expertise to continue to collect surface water samples for water quality analysis to continue to track exceedances specifically related to nutrients (nitrates, nitrites, phosphorus) within the watershed. The Category 2 program is funded through direct billing to the City of Thunder Bay Engineering and Operations Division and does not use municipal levy.

Expenditures	\$5,845	
Annual		Staff Wages
		Vehicle and Equipment
One-Time		
Revenue	\$5,845	
Grants		
Other	\$5,845	
Deferred		

3.3 CATEGORY 3: NON-MANDATORY PROGRAMS

3.3.1 EDUCATION

ENVIRONMENTAL EDUCATION

The Environmental Education program provides curriculum-based educational presentations and field trips to Conservation Areas and within school classrooms. The non-mandatory (i.e., not related to the risk of natural hazards) education program is operated with 100% other funding (no levy). The program covers a wide array of topics including watersheds, various natural heritage, and natural science topics such as birds, trees, aquatics invertebrates, and other topics, many of which are tied directly to Ontario Ministry of Education curriculum expectations. As a private landowner, the LRCA is uniquely positioned to provide meaningful, impactful outdoor education programming utilizing Conservation Areas as “living classrooms”. Watershed stewardship best practices and fostering a sense of wonder and appreciation for the natural world is the goal of the education program, as the best way to inspire people to care about the natural world and the environment is to give them meaningful educational and recreational experiences.

Expenditures	\$43,656	
Annual	\$43,656	Education Coordinator position (39 weeks) Vehicle rental Educational expenses (guest speakers, supplies, safety items, etc.)
One-Time		
Revenue	\$43,656	
Grants	\$7,000	OPG Donation (\$7,000)
Self-Generated	\$36,656	Various fundraising (\$25,000), School Program Fees (\$9,656), Living Classroom Donations (\$2,000)
Levy-All		
Deferred		

NATURE INTERPRETIVE PROGRAMMING

Nature Interpretive Programming is programming developed for execution on LRCA-owned land. Programs and events with nature interpretive programming components within Conservation Areas vary year to year; however, the Dorion Bird Festival is held annually at Hurkett Cove Conservation Area. Nature interpretive programming also includes Watershed Explorer programs (typically funded by the TD Friends of the Environment Fund), guided hikes, workshops, and other non-school-based interpretive programming. Grant revenue is estimated based on previous years applications. Deferred funds will be used in the event external funding is not obtained.

Expenditures	\$55,825	
Annual	\$55,825	Staff Wages Fall Mushroom Hike Fall Migratory Birding Day (formerly Waterfowl Viewing Day) Silver Harbour Day TD Programming Dorion Bird Festival
One-Time		
Revenue	\$55,825	
Grants	\$33,000	TD Friends of the Environment, (\$14,000), TC Energy (\$1,000), OPG (\$13,000), Enbridge (\$5,000)
Self-Generated	\$18,000	Dorion Bird Festival Ticket Sales
Levy-All		
Deferred	\$4,825	

3.3.2 STEWARDSHIP

Stewardship is the planning, promotion, and implementation of management practices that contribute to restoration and protection of our natural resources. LRCA's Stewardship Program aims to promote and encourage stewardship within the Lakehead Watershed. Programs enable private landowners to restore riparian and shoreline area on their property; plant trees on private land; and facilitate stewardship projects on LRCA/municipally owned lands to restore and create wildlife habitat. Examples of on-the-ground projects include invasive species pulls, wetland creation, meadow habitat enhancement, and shoreline stabilization. LRCA's Stewardship Program engages over 200 volunteers annually in these activities. Projects vary year to year depending on funding and need in the watershed. Stewardship projects are funded from various provincial and federal funding sources. No levy is used for the Stewardship Program.

SUPERIOR STEWARDS PROGRAM

In 2025, the LRCA's Shoreline Protection Program will wrap up after four years of funding from the MNR. The program focuses on rehabilitating shoreline and riparian zones on private property within the Thunder Bay Area of Concern. The Thunder Bay Area of Concern is a 100-metre buffer along the Lake Superior coast and up Thunder Bay's five main tributaries, defined by ECCC as having experienced significant environmental degradation. The program provides landowners with a shoreline assessment, educational materials, individualized planting plans, up to 100 native plants, and planting implementation support.

Planting native vegetation enhances shoreline and riparian zones, rehabilitates, and maintains healthy shoreline habitat, provides erosion protection, and improves water quality. The objective of the Superior Stewards program is to raise landowner awareness of riparian and shoreline stewardship principles and implement restoration and naturalization through on-the-ground projects. The restoration projects range from terrestrial/aquatic plantings, invasive plant species removal, green infrastructure techniques, species-at-risk habitat enhancement/protection, general habitat enhancement, and/or pollinator habitat creation.

In 2025, additional sources of funding will be sought to continue offering this service to Lakehead Watershed residents. A fee-for-service model will also be explored.

STEWARDSHIP INTERNSHIP

In May 2024, a Watershed Stewardship Technician Intern was hired on a 52-week contract with funding from the Northern Ontario Heritage Fund Corporation (NOHFC) under the Workforce Development Stream. The Intern will work under the Watershed Biologist,

assisting with stewardship programming, focusing on developing the Seeds for Conservation Program (native seed/native plant program) to grow native species for stewardship projects. Funding applications in 2025 will include wages for both the Watershed Biologist and Watershed Stewardship Technician.

Expenditures	\$26,503	
One-Time	\$26,503	Watershed Stewardship Technician Intern (January to May)
Revenue		\$26,503
Grants	\$17,500	NOHFC
Other		
Deferred	\$9,003	Stewardship

TREE SEEDLING PROGRAM

In partnership with Hill's Greenhouse, the LRCA administers a Tree Seedling Program, which provides the opportunity for the public to purchase locally grown tree seedlings to plant in the watershed. As of 2024, over 171,350 trees have been accessed through the program. Wages for this program are funded by past generated revenue from harvesting on LRCA owned land. This program's goal is to achieve a no net loss of trees in the overall watershed by providing trees to plant to the public to offset any harvesting on LRCA owned land.

In 2024, all tree seedling revenue went towards LRCA's Environmental Education Programming at the request of Hill's Greenhouse, who generously donated 13,350 trees. In 2025, the trees will be purchased from the greenhouse.

Expenditures	\$10,781	
Annual	\$10,781	Staff wages Purchase Tree Seedlings (\$6,000)
Revenue		\$10,781
Grants		
Self-Generated	\$6,000	Tree Seedling Sales
Levy-All		
Reserve	\$4,781	Forest Management Reserve

PRIVATE LAND STEWARDSHIP

To promote and practice stewardship on LRCA and municipally owned lands, staff apply for funding for a variety of projects annually. Other funding applications will be submitted throughout the year as they become available. The following restoration projects are planned in 2025:

- In partnership with the City of Thunder Bay, the Waterfront Shoreline Restoration project involves the rehabilitation of Lake Superior shoreline at Fisherman's Park West and McVicar Creek mouth. This is a continuation of coastal wetland restoration, riparian revegetation, and meadow habitat creation at the Fisherman's West Climate Change Awareness Park, and an extension of the project south along Lake Superior shoreline on City of Thunder Bay-owned land. The goal of the project is to return these areas to productive wildlife habitat and liaise with neighbouring private landowners to generate awareness and promote shoreline stewardship.
- The Floodway Habitat Corridor will be continued in 2025, with the vision of restoring a five-kilometre stretch of riparian habitat on LRCA owned lands along the Neebing-McIntyre Floodway corridor. The project aims to enhance riparian habitat by planting native vegetation and managing invasive species through volunteer clean-up and planting events. Funding is provided by ECCC Freshwater Ecosystem Initiative for a site along Waterford Street in 2025.
- Partnered with the Invasive Species Centre, the Thunder Bay Regional Phragmites Collaboration is coordinated by LRCA and is composed of 35 stakeholders and groups with the shared vision of a “phrag-free” landscape by 2033. The intent of the Collaborative is to engage interested community groups in the status of Invasive Phragmites in the region, develop an integrated long-term plan for its management, and collaborate on its removal.
- In partnership with Parks Canada Lake Superior National Marine Conservation Area, LRCA will work to gain a better understanding of the extent and potential impacts of Narrowleaf Cattail at Hurkett Cove Conservation Area. The two-year project will result in the development of a management strategy, with the aim of reducing the spread of invasive cattails, impacts on Wild Rice, and subsequent loss of biodiversity at the site.
- The Cyanobacteria Education and Outreach Project, funded by MECP, intends to increase public understanding and address knowledge gaps regarding Cyanobacteria, Harmful Algal Blooms, and nuisance algal blooms. Habitat restoration activities will also be carried out: landowner consultation and design plans, and native trees, shrubs and perennials available to landowners for installation along the shorelines of affected lakes. Further, the funding will contribute to ongoing monitoring efforts on selected LRCA-owned properties.
- The Neebing Culvert Assessment is focused on mapping access, egress, and fish passage for the Municipality of Neebing. Funded by MECP (Canada-Ontario

Agreement), the project aims to identify undersized culverts and assess if they present flood hazard or prevent access, as well as to identify perched culverts impacting fish passage. The information will be used by the LRCA within their authority of commenting on Planning Applications and will assist the Municipality of Neebing to prepare for and adapt local climate change impacts caused by more frequent and severe storm events and flooding.

- A portion of the Hazelwood Lake beach shoreline will be re-vegetated to address ongoing water quality concerns and cyanobacteria at Hazelwood Lake. Thanks to funding from TD Friends of the Environment and TC Energy, native shrubs and perennials along the water's edge will filter runoff entering the lake while offering nearshore shading and temperature regulation. This naturalization project will include an educational component and outreach, encouraging similar shoreline stewardship in the Lakehead Watershed.

Expenditures	\$278,610	
Annual	\$278,610	Staff Wages \$151,500 Materials \$107,474 Administration Fees \$19,636
One-Time		
Revenue	\$278,610	
Grants	\$19,500	MECP – Waterfront Shoreline Restoration
	\$70,250	ECCC Freshwater Ecosystem Initiative – Floodway Corridor
	\$40,000	Invasive Species Centre – Thunder Bay Regional Phragmites Collaboration
	\$55,760	Parks Canada – Hurkett Cove Cattail
	\$41,700	MECP – Cyanobacteria Education and Outreach Project
	\$31,400	MECP - Neebing Culvert Assessment
	\$20,000	Hazelwood Lake Shoreline Project (\$5,000) TDFEF, (\$15,000) TC Energy
Levy-All		
Deferred		

SEEDS FOR CONSERVATION

The Seeds for Conservation program offers native perennials grown from seed sustainably harvested by staff from LRCA Conservation Areas. The plants are grown in the LRCA Greenhouse by the Watershed Stewardship Technician Intern. With insufficient access to Northwestern Ontario native species through local nurseries, LRCA's Seeds for Conservation program provides regionally adapted seed and plants for habitat restoration projects, pollinator gardens, rain gardens, and more. It is used by LRCA and community partners such as Fort William First Nation, Ontario Native Women's Association, the City of Thunder Bay, EcoSuperior, Lakehead University and Confederation College. In-person native plant sales and sales through the LRCA webstore have generated additional revenue for this program. This is a new initiative at LRCA and is a great support to the growing stewardship program.

Expenditures	\$29,500	
Annual	\$2,500	Expenses
One-Time	\$27,000	Transfer to Seeds for Conservation deferred
Revenue	\$29,500	
Levy-All		
Self-Generated	\$29,500	Plant sales (sales to public and private land stewardship projects)

SEA LAMPREY

A contract is executed annually between the LRCA and the Department of Fisheries and Oceans (DFO) for Sea Lamprey Barrier Surveillance, Monitoring and Grounds keeping on the Wolf River. LRCA staff conduct five inspections annually and complete a Barrier Inspection/Maintenance Report.

A contract is executed annually between the LRCA and DFO for Sea Lamprey trapping on the Neebing and McIntyre Rivers. Five days per week for eight to twelve weeks, sea lamprey traps are emptied to conduct mark and release studies, collect biological data, environmental data and complete daily reports to provide data to DFO in order for population estimates to be undertaken. These estimates are used along with that of other streams to estimate the population in all of Lake Superior.

Expenditures	\$8,950	
Annual	\$8,950	Staff wages Vehicle rental
One-Time		

Revenue		
Contracts	\$1,750	DFO Wolf River Inspections
	\$7,200	DFO Neebing and McIntyre River trapping
Levy-All		
Deferred		

4 RESERVE APPROPRIATIONS

The Authority's Reserve Policy sets goals for the Board Designated Reserves and the terms and conditions for their use. As outlined in the Policy, planned appropriations to and from reserves will be outlined in the Budget Document annually, and will be approved through the budget approval process.

Unplanned appropriations to and from reserves throughout the year will require Board approval, unless they meet the terms outlined in the Reserve Policy.

Reserve shortfalls from the determined "Target Reserve Level" as outlined in the Policy will be outlined in the Budget Document, and if warranted, appropriations to a reserve will be proposed to achieve the Target Reserve Level.

4.1 PERCENTAGE OF TARGET RESERVE LIMIT REACHED

The Reserve Policy indicates that if any reserve category is less than 50% of the targeted reserve, the Board of Directors, in the absence of any extraordinary circumstances, should consider adopting an annual budget that includes a projected surplus sufficient to rebuild the reserve category over a defined period to its targeted reserve level.

Reserve	Reserve Level as of December 31, 2023	Reserve Limit	Target Reserve Level	% of Target Reserve Level
Operating Capital	\$1,409,479	\$1,100,000	\$1,100,000	128
Administrative Facility - Maintenance	\$352,277		Adequate funds available to complete annual regular maintenance, emergency repairs and major maintenance per the AMP	
Administrative Facility - New Facility	\$32,310		Adequate funds available to construct a new Administration Facility (previous donations)	
Vehicle and Equipment	\$59,298	\$125,000	Adequate funds available to purchase required vehicles and equipment	47
Insurance Deductible	\$32,427		\$30,000	108
Legal Fees	\$120,402		\$100,000	120
Conservation Area Major Maintenance Capital	\$305,310		As forecasted in Asset Management Plan	
Hazelwood Lake Dam	\$60,000		\$250,000	24
Forest Management	\$127,529			
Land Acquisition	\$248,500			

4.2 2025 PLANNED APPROPRIATIONS TO AND FROM RESERVES

Reserve	Appropriations to Reserve	Appropriations from Reserves
Operating Capital		\$65,000
Administrative Facility - Maintenance	\$38,480	\$178,520
Administrative Facility - New Facility		
Vehicle and Equipment	\$9,000	\$5,470
Insurance Deductible		
Legal Fees		
Conservation Area Major Maintenance Capital	\$97,593	\$299,990
Hazelwood Lake Dam	\$20,000	
Forest Management		\$4,781
Land Acquisition		

5 CONCLUSION

The 2025 Budget document details the LRCA's capital and operating plans for the upcoming year. It is the opinion of staff that the current budget is reflective of the Authority's short-term goals and the long-term requirements.

The Draft Budget document provides the details of the budget. The Budget Summary will be used in the consultation with Member Municipalities and will be posted on the LRCA website as required in O. Reg. 402/22. The Final Budget will be brought to the Board in November for final approval.

6 RECOMMENDATIONS

Suggested Resolution

Recorded Weighted Vote

“THAT: the 2025 Budget levy apportionment as outlined in Version 2.0 of the Lakehead Region Conservation Authority Final Budget be approved AND FURTHER THAT a copy of the final budget will be provided to the Minister of Natural Resources and all Member Municipalities.”

Majority Vote:

“THAT: in 2025 the following will be appropriated from the following reserves: Operating Capital Reserve \$65,000; Vehicle and Equipment Reserve \$5,470; Conservation Area Major Maintenance Capital Reserve \$299,990; Administrative Facility Reserve \$178,520 and Forest Management Reserve \$4,781”

“THAT: the Lakehead Region Conservation Authority adopts the 2025 Budget Document, Version 2.0 for a total budget of \$4,574,963. “

APPENDIX A:

2025 BUDGET SUMMARY

Figure 3: 2025 Budget Summary

Lakehead Region Conservation Authority 2025 Draft Budget Version 2.0											
Program	Annual Cost								Total Cost 2024		
	Source of Funding										
	Levy-All	Sole-Benefiting Levy City of Thunder Bay	Provincial Funding	Federal Funding	Other Donations and Other	Grants	Self Generated	Surplus/Deferred	Reserve *		
Category 1 Mandatory Programs and Services											
Corporate Services											
Administration	240,193	-	30,188	-	-	-	253,508	116,926	65,000	705,815	
Community Relations	96,192	-	-	-	-	-	7,000	-	-	103,192	
Vehicle and Equipment Program	-	-	-	-	-	-	47,570	-	(9,000)	38,570	
IT	33,365	-	-	-	-	-	-	-	-	33,365	
Corporate GIS	14,382	-	-	-	-	-	-	-	-	14,382	
	384,132	-	30,188	-	-	-	308,078	116,926	56,000	895,324	
Risk of Natural Hazards											
Flood Plain Mapping	-	42,245	-	-	-	-	-	-	-	42,245	
Technical Studies	2,449	-	-	318,525	-	-	68,700	-	-	389,674	
Communications and Outreach	11,804	-	-	-	-	-	-	-	-	11,804	
Flood Forecasting and Warning	34,621	-	20,100	-	-	-	-	-	-	54,721	
Drought and Low Water Response	4,629	-	-	-	-	-	-	-	-	4,629	
Infrastructure: Neebing-McIntyre Floodway	-	673,166	88,152	-	-	500	450,000	-	-	1,211,818	
Infrastructure: Victor Street Erosion	-	54,727	12,500	-	-	-	-	-	-	67,227	
Review of Proposals under Act	2,250	-	-	-	-	-	-	-	-	2,250	
Plan Review Comments	62,524	-	-	9,300	-	15,000	20,000	-	-	106,824	
Administering and Enforcing the Act (Section 28)	168,907	-	-	-	-	25,000	-	-	-	193,907	
	287,184	770,138	120,752	327,825	-	-	40,500	538,700	-	2,085,099	
Conservation and Management of Lands owned and controlled by the Authority											
Conservation Areas	214,100	-	-	-	-	20,000	90,000	-	-	324,100	
Conservation Areas Capital	97,603	-	-	-	-	-	-	-	299,990	397,593	
Administer Section 29 Regulations	13,605	-	-	-	-	-	-	-	-	13,605	
Other Owned Land	125,127	-	-	-	-	-	5,256	-	178,520	308,903	
	450,435	-	-	-	-	20,000	95,256	-	478,510	1,044,201	
Source Water Protection											
Source Water Protection	-	-	55,883	-	-	-	-	-	-	55,883	
	-	-	55,883	-	-	-	-	-	-	55,883	
Other Programs and Services											
Provincial Groundwater Monitoring Network (PGMN)	7,869	-	-	-	-	-	-	-	-	7,869	
Provincial Water Quality Monitoring Network (PWQMN)	14,235	-	-	-	-	-	-	-	-	14,235	
	22,104	-	-	-	-	-	-	-	-	22,104	
	Total Category 1	1,143,855	770,138	206,823	327,825	-	20,000	443,834	655,626	534,510	4,102,611
Category 2 Non-Mandatory Programs and Services at the request of a Municipality											
Mapping Services	-	-	-	-	-	-	16,000	-	3,318	-	
Mosquito and Pennock Creek Monitoring	-	-	-	-	-	-	5,845	-	-	5,845	
	Total Category 2	-	-	-	-	-	5,845	16,000	3,318	-	18,527
Category 3 Non-Mandatory Programs and Services											
Education											
Environmental Education	-	-	-	-	-	31,200	12,456	-	-	43,656	
Nature Interpretive Programming	-	-	-	-	14,000	18,900	18,100	4,825	-	55,825	
	-	-	-	-	14,000	50,100	30,556	4,825	-	99,481	
Stewardship											
Superior Stewards Program	-	-	-	-	-	-	-	-	-	-	
Tree Seedling Program	-	-	-	-	-	-	6,000	-	4,781	10,781	
Seeds for Conservation	-	-	-	-	-	-	29,500	-	-	29,500	
ECCC Freshwater Ecosystem	-	-	-	70,250	-	-	-	-	-	70,250	
Waterfront Shoreline Restoration-MECP	-	-	19,500	-	-	-	-	-	-	19,500	
Stewardship Internship	-	-	17,500	-	-	-	-	9,003	-	26,503	
Invasive Species	-	-	-	-	-	40,000	-	-	-	40,000	
Parks Canada Hurkett Cove Catail	-	-	-	55,760	-	-	-	-	-	55,760	
Hazelwood Shoreline	-	-	-	-	-	30,000	-	-	-	30,000	
Cyano Outreach and Shoreline Restoration-MECP	-	-	41,700	-	-	-	-	-	-	41,700	
Culvert Assessments - MECP	-	-	31,400	-	-	-	-	-	-	31,400	
Sea Lamprey	-	-	-	-	-	8,950	-	-	-	8,950	
	Total Category 3	-	110,100	126,010	-	78,950	35,500	9,003	4,781	364,344	
	Total	1,143,855	770,138	316,923	453,835	14,000	154,895	525,890	666,136	539,291	4,584,963

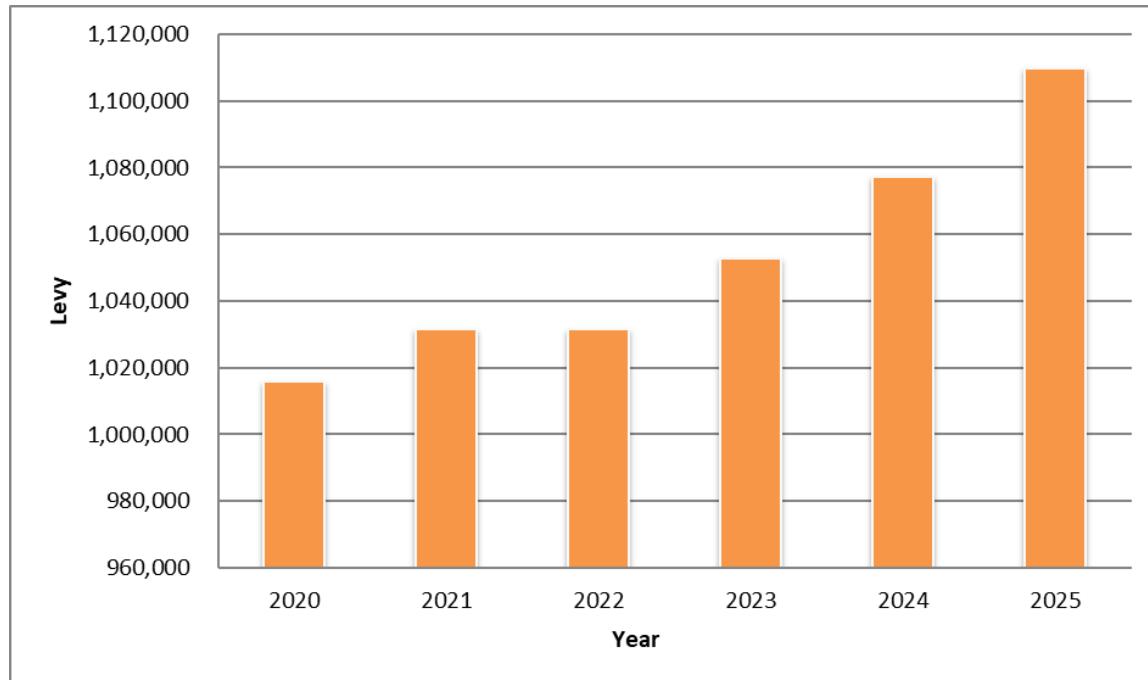
FIGURE 4: LEVY ALL COMPARISON FOR THE PERIOD OF 2020-2025


Figure 4 compares the levy-all fluctuations for the period of 2020-2025. In 2019, the long-standing Section 39 transfer payment was reduced from \$292,380 to \$150,940, which required a mid-year adjustment to the budget and also affected all future budgets. As a result of financial pressures on our Member Municipalities and the effects of COVID-19, 0% levy-all increases were implemented in 2021 and 2022.

Minimal to no increases are feasible in the short term but are not realistic for the long-term operation of the Authority. The 2025 budget requires a 3.08% increase in order to maintain its current level of service, which is consistent with cost-of-living increases.

APPENDIX B: LEVY COST COMPARISON

FIGURE 5: 2025 COMPARED TO 2024 BUDGET LEVY- ALL COMPARISON

2025 Total Levy Compared to 2024- All							
MUNICIPALITY	2025 CVA	Actual Levy 2025	2024 CVA	Levy 2024	\$ Change	% Change	
Thunder Bay*	85.6600%	979,821	85.8012%	952,147	27,674	2.91%	
Conmee	0.4500%	5,147	0.4440%	4,927	220	4.47%	
Dorion	0.2900%	3,317	0.2879%	3,195	122	3.82%	
Gillies	0.2500%	2,860	0.2470%	2,741	119	4.33%	
Neebing	2.2600%	25,852	2.2565%	25,042	810	3.24%	
O'Connor	0.4800%	5,492	0.4770%	5,294	198	3.73%	
Oliver Paipoonge	5.6300%	64,400	5.5386%	61,464	2,936	4.78%	
Shuniah	4.9900%	56,966	4.9477%	54,907	2,059	3.75%	
TOTAL	100%	1,143,855	100.00%	1,109,717	34,138	3.08%	

*The City of Thunder Bay total levy payable will also include their sole-benefitting levy.

The following table summarizes the annual levy cost per household, per resident and cost per \$100,000 of assessed value of property. It is noted that the resident numbers represent permanent residents and does not factor in seasonal residents.

Figure 6: Levy Cost

Municipality	2025	Number of Households (2016)	Cost Per Household	Number of Resident	Cost per Resident	Current Value Assessment \$ (2024)	Cost per \$100,000
***Thunder Bay	\$1,751,574	57,146	\$30.65	121,621	\$14.40	14,316,354,924	\$12.23
Conmee	\$5,079	327	\$15.53	816	\$6.22	74,534,070	\$6.81
Dorion	\$3,293	128	\$25.73	316	\$10.42	47,803,505	\$6.89
Gillies	\$2,825	201	\$14.05	474	\$5.96	42,000,610	\$6.73
Neebing	\$25,812	1,166	\$22.14	2,055	\$12.56	377,875,906	\$6.83
O'Connor	\$5,457	272	\$20.06	663	\$8.23	79,685,052	\$6.85
Oliver Paipoonge	\$63,354	2,289	\$27.68	5,922	\$10.70	941,205,220	\$6.73
Shuniah	\$56,596	2,130	\$26.57	2,798	\$20.23	833,452,815	\$6.79

***City of Thunder Bay Includes Sole Benefiting Levy

16,712,912,102

APPENDIX C: PASSED RESOLUTIONS

Budget Summary Checklist

Per O. Reg. 402/22: Budget and Apportionment, the 2024 budget and every subsequent budget must be prepared in accordance with the regulation.

Budget Year - 2025		
Task	Date	Completed
First Phase		
Identify all sources of revenue including: <ul style="list-style-type: none"> • Fees • Donations • Grants • Self-generated • Reserve funds • Deferred funds • From agreements • Other sources • Total revenue 	June	June
Identify operating expenses into Cat. 1,2, 3. Specify total operating expenses for year.	June	June
Identify capital costs into Cat. 1,2 ,3. Specify total capital costs for year.	June	June
Apportion operating expense or capital costs to participating municipalities (levy-all, and sole-benefitting).	June	June
Preliminary % levy-all increase Board Review	June Board Meeting	June 26, 2024
Second Phase – Draft Budget and Consultations		
Prepare Draft Explanatory Budget Document <ul style="list-style-type: none"> • Include all items in First Phase • Specify if the authority considered opportunities to raise and use self-generated revenue to help finance the authority's operations, including the programs and services it provides, a description of what the authority considered. 	July/August	
Prepare Budget Summary	July/August	
Meeting on Draft Budget <ul style="list-style-type: none"> • Hold majority vote to approve Draft Budget for consultation purposes 	August Board Meeting	August 28, 2024

Send each participating municipality a copy of approved draft budget including apportionment	September	August 29, 2024
Post draft budget on Governance section of LRCA website	September	August 29, 2024
Conduct consultations with participating municipalities as warranted	September	November 1, 2024 – City Executive Committee
Third Phase – Final Budget Approval		
Provide notice of Board Meeting to participating municipalities of Final Budget approval <u>30</u> days prior to meeting to approve Final Budget <ul style="list-style-type: none"> Include most recent draft of budget Specify levy apportionments 	September/October	October 30, 2024
Hold a recorded weighted majority vote to approve apportionment. <ul style="list-style-type: none"> 51% or more is required to approve. Tie is a lost vote 	November 27, 2024 Board Meeting	November 27, 2024
Hold a recorded majority vote to approve Final Budget	November 27, 2024 Board Meeting	November 27, 2024
Provide copy of Final Budget to Minister	December	
Provide copy of Final Budget to participating municipalities	December	
Post Final Budget on Governance section of website	December	



PROGRAM AREA	POLICY	REPORT NO.	POLICY-FIN-05-2024
DATE PREPARED	November 20, 2024	FILE NO.	
MEETING DATE	November 27, 2024		
SUBJECT	Corporate Services Update		

RECOMMENDATION

Suggested Resolution

“THAT: the updated Finance Policy FIN-05: Corporate Services as outlined in Staff Report POLICY-FIN-05-2024 be adopted.”

LINK TO STRATEGIC PLAN (2023-2027)

Govern and Enhance:

- *Continue to commit to accountable and transparent organizational governance.*
- *Maintain a stable model of financial resiliency based on capacity, capabilities, and public expectations by maximizing new funding opportunities, fundraising and self-generated revenue.*

EXECUTIVE SUMMARY

The Corporate Services Policy (FIN-05) has been updated to reflect language in the Authority's Administrative By-Law and current legislation. The updated policy provides general guidance related to the annual appointment of the Auditor, Bank and Solicitor.

DISCUSSION

The LRCA's current policy related to the retention of Corporate Services, which was adopted in November of 2000, contains outdated references and requires an update. Staff have updated the policy to reflect language in the Administrative By-Law and current *Conservation Authorities Act*. Additionally, language related to the current incumbent not being eligible to submit a proposal if the Authority were to go out for proposals to engage a solicitor, auditor or banker has been removed. The policy also now outlines the information that is to be provided by the CAO in annual reports related to the appointment of each of the services and provides some considerations when deciding when to go out for proposals and when reviewing proposals.

Staff do not recommend specifying a specific term related to mandating going out for proposals for any of the services and rather propose leaving the decision to be made annually by the Board based on the performance of the service provider and the recommendation of the CAO. Conservation Authority business is unique; therefore, continuity of service is beneficial when

considering the time for the service provider to provide a service (i.e., experienced providers are more efficient) as well as their ability to provide quality service (i.e., representing the authority enforcing Section 28 violations, etc.). Additionally, the staff time involved in the proposal process and educating of new providers would outweigh small monetary savings between providers.

FINANCIAL IMPLICATIONS

None.

CONCLUSION

The Corporate Services Policy has been updated to reflect current legislation and general guidance related to the appointment of corporate services annually.

BACKGROUND

On November 15, 2000, the Authority adopted a Policy related to the retention of Corporate Services (Res#111/00).

REFERENCE MATERIAL ATTACHED

Updated Finance Policy FIN-05: Corporate Services – red font indicates new text

REVIEWED BY:

Mark Ambrose, Finance Manager

PREPARED BY:

Tammy Cook, CAO

THIS REPORT SIGNED AND VERIFIED BY:  Tammy Cook Chief Administrative Officer	DATE: November 21, 2024
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Section:	FINANCE		
Title:	FIN-05: Corporate Services		
Resolution	#111/00	Approval Date:	November 15, 2000
Revisions	##/24		

1.0 Purpose

As outlined in the LRCA's Administrative By-Law the Authority appoints a Solicitor, Financial Institution and Auditor annually at the Annual Meeting by resolution. This Policy establishes guidelines for the retention of Corporate Services.

2.0 Solicitor

The General Membership shall appoint a solicitor(s) to act as the Authority's legal counsel by Resolution annually at the Annual Meeting.

~~At the Annual Meeting of the Authority, which is generally held the fourth Wednesday in January, a motion to adopt the Solicitor is obtained. The firm of McKittrick Jones has ably served the Authority for several years.~~

On an annual basis, the ~~General Manager/Secretary Treasurer~~ Chief Administrative Officer (CAO) will submit a report to the Board ~~relative to~~ outlining the legal services performed by the current Solicitor ~~for the previous year summarizing the type of service, fees paid, performance of the firm and recommendation regarding continuing with their service. The purpose of the Report will be to update the Board on the performance of the Solicitor.~~ The Solicitor ~~would~~ will be provided with a copy of the Staff Report.

~~If the current Solicitor's services were no longer being recommended, then they would be permitted to present to their views to the Board, if they so wished.~~

~~If the Board is dissatisfied with the services of the Solicitor, then by motion, proposals for the service of Authority Solicitor will be requested. The current incumbent would not be eligible to submit a proposal.~~

3.0 Auditor

The General Membership shall appoint an Auditor annually at the Annual Meeting by resolution and in accordance with Section 38 of the *Conservation Authorities Act*. Per Section 38(2) of the Act, no person shall be appointed as an auditor who is or during the preceding year was a Member of the Authority or who has or during the preceding year had any direct or indirect

interest in any contract or any employment with the Authority other than for services within his or her professional capacity.

~~At the Annual Meeting of the Authority, which is generally held the fourth Wednesday in January, a motion to adopt the Auditor is obtained. The firm of Ernst & Young LLP has ably served the Authority for several years.~~

On an annual basis, the General Manager/Secretary Treasurer CAO will submit a report to the Board ~~outlining the relative to audit services performed by our~~ the Auditor summarizing the type of service, fees paid, performance of the firm and recommendation regarding continuing with their service. ~~The purpose of the Report will be to update the Board on the performance of the Auditor and any other related matters.~~ The Auditor ~~would~~ will be provided with a copy of the Staff Report.

~~If the current Audit Firm's services were no longer being recommended, then they would be permitted to present their views to the Board, if they so wished.~~

~~If the Board is dissatisfied with the services of the Auditor, then by motion, proposals for the service of Authority Auditor will be requested. The current incumbent would not be eligible to submit a proposal.~~

4.0 Bank

The General Membership shall appoint a financial institution to act as the Authority's banker by Resolution annually at the Annual Meeting.

~~At the Annual Meeting of the Authority, which is generally held the fourth Wednesday in January, a motion to adopt the Bank is obtained. The Royal Bank has ably served the Authority for several years.~~

On an annual basis, the General Manager/Secretary Treasurer CAO will submit a report to the Board ~~outlining the type of banking services provided, fees paid, interest earned and a recommendation regarding continuing with their service. relative to legal service performed by our Bank. The purpose of the Report will be to update the Board on the performance of the Bank and any other related matter.~~ The Bank ~~would~~ will be provided with a copy of the Staff Report.

~~If the current Bank's services were no longer being recommended, then they would be permitted to present to their views to the Board, if they so wished.~~

~~If the Board is dissatisfied with the services of the Bank, then by motion, proposals for the service of Authority Bank will be requested. The current incumbent would not be eligible to submit a proposal.~~

5.0 Considerations when issuing an RFP or reviewing Proposals

When directed by the Board of Directors, staff will undertake the process to solicit proposals for the required services.

When deciding when to go out for proposals or when reviewing proposals, the following should be taken into consideration:

- Experience of firm dealing with Conservation Authorities (i.e., Section 28 regulations, *Conservation Authorities Act* and associated regulations, fund accounting, etc.), non-profit organizations, etc.
- Cost of transition to a new service provider
- Staff capacity to undertake transition to new service provider
- Cost of provided service
- Period of retention of services (i.e., 5-year terms, etc.)
- Time required to transition to the new service
- Reputation of firm



November 27, 2024

Moved By

Seconded By

"THAT: having examined the accounts for the period October 1, 2024 to October 31, 2024 cheque #3378 to #3411 for \$84,573.27 and preauthorized payments of \$173,316.24 for a total of \$257,889.51, we approve their payment."

3378	ALS Sewage Services	Hazelwood Pumping Lake Aug 22-Sep 18	254.25
3379	City of Thunder Bay	Water bill to Aug 9	850.32
3380	Doane Grant Thornton LLP	QBO Fee July to September	389.85
3381	Haveman Brothers	Herbicide treatment on Invasive Phragmites	3,610.35
3382	RAS Maintenance Services	Office Cleaning August	515.23
3383	Tammy Cook	Travel Expenses - CO meeting-Tammy Cook Sep 22, 23	149.00
3384	Teleco	Repair VM to Email connection	169.50
3385	Thunder Bay Answering Service Inc.	Answering Service	258.72
3386	Thunder Bay Broom & Chemicals	Janitorial Supplies	766.20
3387	Walleye Media Inc	Advertising October 2024	335.61
3388	Whispers from the North Native Plants	Native plants for Waterfront Shoreline	6,326.87
3389	Michelle Willows	CA Workshop Meals	114.00
3390	Ryan Harris	CA Workshop Meals	130.00
3391	Ryan Mackett	CA Workshop Meals	144.00
3392	ALS Sewage Services	Pumping Various CA's	1,474.65
3393	Ashley Agombar	Boot Allowance	200.00
3394	Bay Lock & Security	Door Monitoring Oct 1, 2024 - Sep 30, 2025	135.60
3395	Canadian Tods Limited	Highway signs for various CA's	3,167.00
3396	Innovated Solutions	2024 Cloud Protection	847.50
3397	JML Engineering	Mills Block Re-Development project	4,651.08
3398	KGS Group Consulting Engineers	Neebing-McIntyre Floodway Floodplain Mapping and Water Level Monitoring system	42,544.50
3399	Rachael Z Bezanson	Per Diem expenses for ReKindle November 2024	87.00
3401	Tammy Cook	2024 Latornell expenses	286.10
3402	Apex Security	CA Patrols in September 2024	336.18
3403	Chargepoint Canada Inc	Vehicle Charging Stations website access	1,514.20
3404	Conservation Ontario	2024 ESRI bill	2,884.23
3405	Englobe Corp.	Victor St. Monitoring Inspection #1	4,633.00
3406	KGS Group Consulting Engineers	2024 Structure Inspections	4,367.85
3407	Lowery's	Photocopy charges October 2024	323.15
3408	MacKay Meters	Pay Station Gateway Hosting Nov 1, 2024 - Oct 31, 2025	2,600.47
3409	Mark Ambrose	Petty Cash	305.45
3410	Mr. Lube	Oil Change Dodge Ram	75.01
3411	Scott Dribit	Expenses re Flood forecasting Workshop - Brampton Oct 1-2	126.40
			<u>84,573.27</u>
PA	Payroll and Per Diems		132,776.74
PA	Royal Bank Group Retirement RRSP and TFSA		1,602.40
PA	RWAM and Lifeworks Benefits		3,451.25
PA	Enbridge		44.42
PA	Synergy North		947.52
PA	Esso		1,587.02
PA	Visa Routine Monthly Expenses		6,279.91
PA	Banking and Visa Fees		664.97
PA	Postage		-
PA	Omers September		14,307.37
PA	Photocopier Lease		286.90
PA	Property Taxes		11,367.74
PA	GIC		-
			<u>173,316.24</u>
			<u>257,889.51</u>

Chair

Res# _____ /24

Monthly Plan Input/Review and Fill Regulations Administration

October 1 to 31, 2024

Monthly Plan Input/Review and Fill Regulations Administration

November 1 to 19, 2024

Prohibited Activities, Exceptions and Permits- Ontario Regulation 41/24
Year: 2024

Permit #	Category	Fee	Applicant Name	Municipality	Subject Property Address	Type of Work	Key Dates					Within Timelines	Notes (violation, reason for timeline, etc.)
							Complete Application Received with Permit Fee Paid (YYYY-MM-DD)	Notice of Complete/Incomplete Application ISSUED (YYYY-MM-DD)	Days to Issue Notice of Complete/Incomplete Application (21 day timeline)	Permit Issued / Refused (YYYY-MM-DD)	Days to Issue /Refuse Permit (90 day timeline)		
#25/24	Standard	\$300.00	Brian Belluz	Oliver Paipoonge	Vacant Lot West of 412 Barrie Dr.	Shed Construction, Fill Placement & Site Grading	4/11/2024	4/16/2024	5	4/17/2024	1	Yes	
#26/24	Small	\$150.00	Rob Frenette	Shuniah	620 Bryan Avenue	Retaining Wall Reconstruction	4/11/2024	4/12/2024	1	4/15/2024	3	Yes	
#27/24	Standard	\$300.00	Confederation College	City of Thunder Bay	1450 Nakina Drive	Disc Golf Course	4/22/2024	4/29/2024	7	5/1/2024	2	Yes	
#28/24	Standard	\$300.00	Trogan Management Services	City of Thunder Bay	133 Bruin Crescent	Dwelling	5/8/2024	5/9/2024	1	5/11/2024	2	Yes	
#29/24	Standard	\$300.00	Tracey Lazzarotto	Shuniah	677 E. Green Bay Rd	Garage	5/8/2024	5/10/2024	2	5/13/2024	3	Yes	
#30/24	Standard	\$300.00	Allen Koistinen	Dorion	251 Wolf River Road	Erosion Protection	5/8/2024	5/13/2024	5	5/14/2024	1	Yes	
#31/24	Standard	\$300.00	Dwight Anderson	City of Thunder Bay	2537 Cypress Drive	Garage	5/6/2024	5/14/2024	8	5/14/2024	1	Yes	
#32/24	Standard	\$300.00	Jeff Salmela	City of Thunder Bay	3111 Feaver Avenue	Garage Addition	5/16/2024	5/17/2024	1	5/21/2024	4	Yes	
#33/24	Small	\$150.00	Deb Bissonnette	Shuniah	2701 Knoble Point	Retaining Wall, Site Grading, Rock Placement	5/21/2024	5/23/2024	2	5/23/2024	2	Yes	
#34/24	Large	\$600.00	Amerigo Coltellaro	City of Thunder Bay	3300 Government Road	Dwelling Construction	5/21/2024	5/24/2024	3	5/27/2024	4	Yes	
#35/24	Large	\$600.00	Brad McKinnon	City of Thunder Bay	1659 Mountain Road	Dwelling & Driveway Construction	5/30/2024	5/31/2024	1	6/3/2024	4	Yes	
#36/24	Standard	\$600.00	Craig Kashak	Shuniah	1109 Cedar Bay Road	Garage Construction	5/24/2024	5/29/2024	7	5/30/2024	1	Yes	
#37/24	Standard	\$300.00	Leigh Shonosky	Neebing	100 Milne Road	Garage Construction	6/4/2024	6/4/2024	1	6/6/2024	2	Yes	
#38/24	Small	N/A	Nature Conservancy of Canada	Dorion	Vacant Lot west of Meyers Road	Culvert Removal & Site Grading	5/24/2024	6/3/2024	13	6/5/2024	3	Yes	
#39/24	Small	\$150.00	Marvin Butikofer	Shuniah	792 Wild Goose Bay Road	Retaining Wall Replacement	5/29/2024	6/3/2024	6	6/5/2024	3	Yes	
#40/24	Standard	\$150.00	Brad McKinnon	City of Thunder Bay	1655 Mountain Road	Driveway Installation	6/4/2024	6/6/2024	2	6/6/2024	2	Yes	
#41/24	Standard	\$300.00	Valard Construction	Shuniah	Locations Parallel to Transmission Lines	Temporary Access Roads	5/17/2024	5/31/2024	14	6/11/2024	11	Yes	
#42/24	Standard	\$300.00	Valard Construction	Shuniah	Locations Parallel to Transmission Lines	Temporary Culvert Installations	5/17/2024	5/31/2024	14	6/11/2024	11	Yes	
#43/24	Small	\$150.00	Jarvis McComber	Shuniah	859 Superior Shores Road	Rock Relocation in Lake Superior	6/12/2024	6/12/2023	1	6/13/2024	1	Yes	
#44/24	Small	\$150.00	James Colby	Shuniah	855 Superior Shores Road	Rock Relocation in Lake Superior	6/12/2024	6/12/2024	1	6/13/2024	1	Yes	
#45/24	Small	\$150.00	Fred Wagenaar	Shuniah	861 Superior Shores Road	Rock Relocation in Lake Superior	6/12/2024	6/12/2024	1	6/13/2024	1	Yes	
#46/24	Large	\$600.00	Port of Thunder Bay	City of Thunder Bay	Mission River - Mobile Ex Terminal	Mission River Dredging	6/11/2024	6/13/2024	2	6/13/2024	1	Yes	
#47/24	Standard	\$300.00	Allison Belluz	Neebing	498 Memory Rd	Cottage Addition	6/13/2024	6/14/2024	2	6/17/2024	4	Yes	
#48/24	Small	N/A	Municipality of Neebing	Neebing	710 Cloud Lake Rd	Shoreline Alteration	6/13/2024	6/14/2024	2	6/18/2024	5	Yes	

Prohibited Activities, Exceptions and Permits- Ontario Regulation 41/24

Year: 2024

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#49/24	Standard	N/A	City of Thunder Bay	City of Thunder Bay	5140 Willrod Road	Culvert Replacement	6/18/2024	6/25/2024	7	6/25/2024	1	Yes	
#50/24	Large	\$600.00	Hydro One - Waasigan Transmission Line	Shuniah	3 locations parallel to existing transmission line	Transmission Towers	6/18/2024	6/18/2024	0	6/28/2024	10	Yes	
#51/24	Standard	\$300.00	Mickelson Family Inc	Shuniah	Mickelson Drive	Access Road & Boardwalk to Lake Superior	6/13/2024	6/18/2024	5	6/28/2024	10	Yes	
#52/24	Small	\$150.00	Robert Tuchenhagen	City of Thunder Bay	1507 John Street Road	Fill Placement	7/5/2024	7/5/2024	0	7/9/2024	4	Yes	
#53/24	Small	\$150.00	Elaina Roberts	Needing	200 Island Ave	Slope Regrading for Boat Ramp	7/8/2024	7/16/2024	8	7/16/2024	0	Yes	
#54/24	Large	\$600.00	L. Sebastianis	City of Thunder Bay	Lot 24 Bruin Cres (Parkdale)	New Dwelling Construction	7/9/2024	7/17/2024	8	7/17/2024	0	Yes	
#55/24	Standard	\$300.00	Leigh Mork	Shuniah	472 East Floral Beach Rd	Garage Construction	7/18/2024	7/18/2024	0	7/18/2024	0	Yes	
#56/24	Small	\$150.00	Robert Bates	Needing	58 Cottage Drive	Shed Construction	7/23/2024	7/25/2024	2	7/29/2024	4	Yes	
#57/24	Standard	\$300.00	George Biniaris	City of Thunder Bay	137 Bruin Cres Lot 10 Parkdale	New Dwelling Construction	7/22/2024	7/24/2024	2	7/24/2024	0	Yes	
#58/24	Small	\$300.00	Vincenzo Giorgio	City of Thunder Bay	1690 Paquette Road	Site Grading & Fill Placement	7/25/2024	7/26/2024	1	7/26/2024	0	Yes	
#59/24	Standard	\$300.00	Gino Garritano	Oliver Paipoonge	94 Vibert Road	Driveway Construction & Bridge Removal	7/26/2024	7/29/2024	3	7/31/2024	2	Yes	
#60/24	Standard	\$300.00	Mackenzie Blackwood	Needing	892B Cloud Lake Road	Erosion Protection & Fill Placement	7/29/2024	7/29/2024	0	7/30/2024	1	Yes	
#61/24	Small	\$150.00	Melissa McAlister	Needing	50 Griffis Road	Deck/Dock & Stairs	8/2/2024	8/6/2024	4	8/8/2024	2	Yes	
#62/24	Standard	\$300.00	Jordan Carroll	Oliver Paipoonge	126 Haquoil Road	Driveway Construction	7/16/2024	8/1/2024	16	8/1/2024	0	Yes	
#63/24	Small	\$300.00	Michael Goch	Needing	11 Cloud Bay Road	Site Grading	8/8/2024	8/8/2024	0	8/13/2024	5	Yes	
#64/24	Large	\$600.00	Michael Goch	Needing	11 Cloud Bay Road	House	8/8/2024	8/12/2024	4	8/14/2024	2	Yes	
#65/24	Standard	\$300.00	Cory Bruno	Shuniah	699 East Bay Rd	Deck	8/9/2024	8/12/2024	3	8/15/2024	3	Yes	
#66/24	Small	\$150.00	Derek Egeberg	City of Thunder Bay	6251 Mapleward Road	House Demolition & Fill	8/16/2024	8/19/2024	3	8/20/2024	1	Yes	
#67/24	Standard	\$300.00	Triad Contracting	City of Thunder Bay	157 Bruin Crescent	Dwelling	8/16/2024	8/19/2024	3	8/20/2024	1	Yes	
#68/24	Standard	N/A	City of Thunder Bay	City of Thunder Bay	169 Little Norway Road	Culvert Replacement	8/19/2024	8/26/2024	7	8/26/2024	0	Yes	
#69/24	Standard	\$300.00	Walter Modin	Shuniah	212 Alder road	New Deck Construction	8/12/2024	8/26/2024	14	8/27/2024	1	Yes	
#70/24	Standard	\$300.00	Carolyn Hughes	Oliver Paipoonge	446 Calvert Road	Shed Construction	8/27/2024	8/27/2024	0	8/28/2024	1	Yes	
#71/24	Large	\$600.00	Thomas Owen	City of Thunder Bay	300 Owen Drive	Shop/Storage Building	8/28/2024	9/3/2024	6	9/5/2024	2	Yes	
#72/24	Small	\$150.00	James Ward	City of Thunder Bay	1391 Arthur St. West	Erosion Protection	9/4/2024	9/5/2024	1	9/6/2024	1	Yes	

Prohibited Activities, Exceptions and Permits- Ontario Regulation 41/24
Year: 2024

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#73_24	Small	\$150.00	Reg Rosengren	Oliver Paipoonge	510 River Road	Site Grading	9/5/2024	9/5/2024	0	9/9/2024	5	Yes	
#74/24	Standard	\$300.00	JW Michieli Construction	City of Thunder Bay	Bruin Cres. Lot 6 Parkdale	Dwelling Construction	9/5/2024	9/9/2024	4	9/9/2024	0	Yes	
#75/24	Standard	\$300.00	Triad Contracting	City of Thunder Bay	205 Bruin Cres - Lot 29 -Parkdale	Dwelling Construction	9/5/2024	9/9/2024	4	9/9/2024	0	Yes	
#76_24	Small	\$150.00	Michael Racoo	Needing	650 Cloud Lake Rd	Shoreline Regrading	9/9/2024	9/10/2024	1	9/12/2024	2	Yes	
#77/24	Small	\$150.00	Gregory Heroux	Shuniah	1664 Coral Bay Drive	Shoreline Regrading & Fill Placement	9/12/2024	9/13/2024	1	9/17/2024	4	Yes	
#78/24	Standard	\$150.00	Brad McKinnon	City of Thunder Bay	2365 15th Side Road	Fill Placement/Lot Development & Landscaping	9/24/2024	9/25/2024	1	9/26/2024	1	Yes	
#79/24	Small	\$150.00	Jamie Deck	Needing	690 Memory Road	Shoreline Regrading for Boat Ramp	9/26/2024	9/26/2024	0	10/1/2024	5	Yes	
#80/24	Standard	\$300.00	Lucy Turgeon	City of Thunder Bay	325 Gus Wouri Rd	Fill Placement	10/2/2024	10/3/2024	1	10/8/2024	5	Yes	
#81/24	Standard	\$300.00	Brent Sylvester	Needing	235 Margaret St	Fill Placement	10/7/2024	10/8/2024	1	10/11/2024	3	Yes	
#82/24	Standard	\$300.00	George Biniaris	City of Thunder Bay	141 Bruin Cres.	Dwelling	10/9/2024	10/10/2024	1	10/11/2024	1	Yes	
#83/24	Standard	\$300.00	Antonio Donato	City of Thunder Bay	145 Bruin Cres	Dwelling	10/10/2024	10/15/2024	5	10/16/2024	1	Yes	
#84/24	Large	\$600.00	Wenco Properties	Shuniah	362 Lakeshore Drive	Dwelling & Site Grading	10/16/2024	10/17/2024	1	10/22/2024	5	Yes	
#85/24	Large	\$600.00	Wenco Properties	Shuniah	362 Lakeshore Drive	Dwelling & Site Grading	10/16/2024	10/17/2024	1	10/22/2024	5	Yes	
#86/24	Small	\$150.00	Pauline Sameshima	Needing	640 Cloud Lake Road	Shoreline Alteration	10/23/2024	10/23/2024	0	10/25/2024	2	Yes	
#87/24	Standard	\$300.00	Brandon Brown	Dorion	0 Black Bay Road	Cottage Construction	10/18/2024	10/23/2024	5	10/28/2024	5	Yes	
#88/24	Standard	N/A	City of Thunder Bay	City of Thunder Bay	173 Balsam St.	Stormwater (LID) Fill Placement and Removal	10/24/2024	10/25/2024	1	10/28/2024	3	Yes	
#89/24	Standard	\$300.00	Jaime Hill	Needing	1333 Hwy 608	Garage Construction	11/7/2024	11/8/2024	1	11/12/2024	4	Yes	
									0		0		
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Monthly Project Update

MEETING DATE	November 27, 2024
STAFF NAME	Ryan Mackett
POSITION	Communications Manager

CEDC Mural Funding

Staff were successful in acquiring funding for a mural at the Administrative Office as part of the CEDC Tourism Muralscapes funding application. The LRCA was awarded \$5,000 towards the project, which will consist of repainting/priming the existing metal storage shed, and a local artist creating a custom mural on the side and back of the unit. Staff will work with the selected artist to ensure the mural is nature-themed and representative of the work of the Authority (i.e. water, nature, plants, animals, etc.) This project will further enhance the office grounds in the plan to create the proposed Urban Conservation Area, giving another reason for people to visit, as street art/public mural tours are regularly tourist destinations.

2024 Holiday Gathering & Community Partner Thank You Event

The 2024 Holiday Gathering will take place on Thursday, December 12 at the LRCA Administrative Office from 5:00 p.m. – 7:30 p.m. If you have not already RSVP'd, please let Ryan Mackett know if you and a guest are able to attend.

Fundraising Calendar

For your information, 10,000 copies of the 2025 Fundraising Calendar have been ordered at a cost of approximately \$8,921.35. Staff were able to sell \$6,669.00 in advertisements to offset the cost of the calendar's production. Some of the Community Relations discretionary advertising and promotion budget was used to offset some of the printing costs to facilitate printing the calendar. The popularity of this calendar, its reach, and its effectiveness at showcasing the LRCA and its Conservation Areas is value-added and justifies this expenditure. Note that the LRCA advertises its own events in this calendar too, as well as includes various LRCA messaging regarding Explore Card sales, etc. Staff have been distributing the calendars this month. Please let staff know how many copies of the calendar you would like for your municipality.

Mental Health First Aid Training

Staff will be participating in Mental Health First Aid training on Friday, November 29, 2024. This training will ensure staff are better equipped to deal with individuals suffering from a mental

health crisis, and is another example of the LRCA's commitment to the health and safety of all staff.



Monthly Project Update

MEETING DATE	November 27, 2024
STAFF NAME	Ryne Gilliam
POSITION	Lands Manager

Hazelwood Lake Conservation Area Parking Barrier

A parking barrier was installed at the top parking lot at Hazelwood Lake Conservation Area. Boulders were added along the perimeter of the parking lot to block vehicles from accessing the grassed picnic area and causing damage to the lawn. Boulders approximately one cubic meters in size were dug into the ground for greater stability. The gate which was separating the two main parking lots has been moved to allow access to both parking lots. Visitors will now have closer access to the pavilion and lake side dock which are located within this area. The gate was reinstalled along the roadway leading to the garage and storage area to restrict public access to that area.



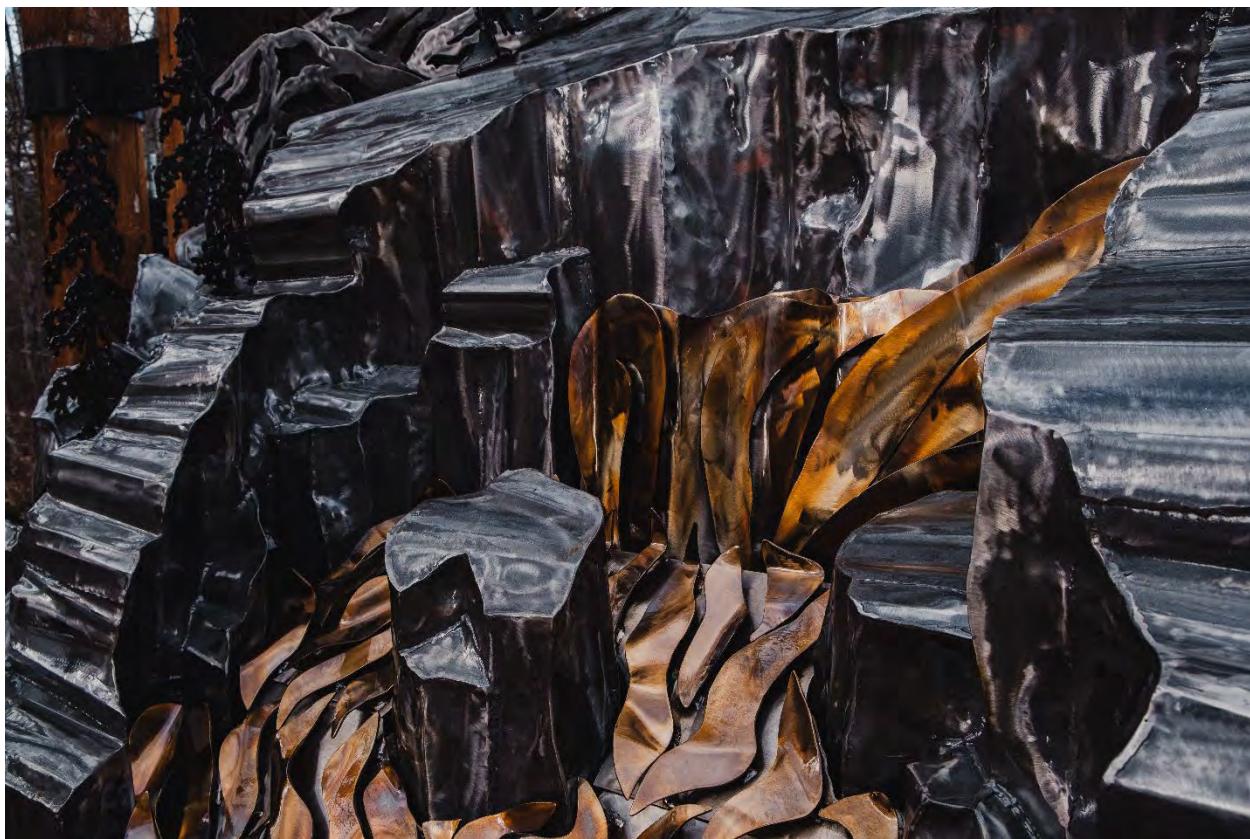
Photo 1: Portion of parking barricade at top parking lot.

New Cascades Entrance Sign

Luc Despres of Despres Metal Artwork has completed and installed the new sculptural entrance sign for Cascades Conservation Area. The sign depicts a three-dimensional interpretation of the rugged beauty of the cascading waters of the Current River surrounded by the Canadian Shield outcrop and Boreal Forest. This is the second metal sign Luc has constructed for the Authority, following his work at Mission Island Marsh Conservation Area. Public feedback has been incredibly positive, and staff spoke with at least one media outlet regarding the sign at the time of writing.









Monthly Project Update

MEETING DATE	November 29, 2024
STAFF NAME	Melissa Hughson
POSITION	Watershed Manager

Ontario Low Water Response

LRCA's area of jurisdiction remains in a Level 1 Low Water advisory. The LRCA will continue to monitor water levels.

Watershed Conditions – Lake Superior Water Levels

Water supply conditions continue to be drier than average for the Lake Superior basin for the month of October. The lake had a 10 cm decline in water level between the beginning of October and beginning of November which is the 5th largest decline for the month on record. The water level is 18 cm below the monthly average (1918 – 2022).

Provincial Water Quality Monitoring Network (PWQMN)

LRCA's GIS/Water Resources Technologist and Environmental Planner were in Sudbury November 4th to 5th to participate in a Regional PWQMN (surface water monitoring) meeting. LRCA staff were able to meet with MECP PWQMN staff in person as well as with the other northern region Conservation Authority staff. General discussion included PWQMN protocols, sampling schedules, data reminders and updates, common mistakes, equipment updates, etc.

LRCA has volunteered to participate in PWQMN's winter sampling program this year (2024/2025). Winter sampling for PWQMN is completely optional and is flexible by nature. The number of samples collected will depend on how fast the rivers freeze over. The first 'winter' sampling day occurred on November 18th.

Provincial Ground Water Monitoring Network (PGMN)

Sampling under the Provincial Ground Water Monitoring Network (PGMN) program is now complete for the year. LRCA's involvement in the PGMN program consists of monitoring and sampling eight groundwater monitoring wells in our region owned by the Ministry of the Environment Conservation and Parks (MECP). Once per year, the groundwater wells are pumped, and water samples collected and shipped to a MECP laboratory for water chemistry testing. Four times per year, information including water level, temperature and barometric pressure is downloaded from the wells and reported to MECP. The data is used by MECP, Conservation

Authorities, agencies and research groups to identify temporal and spatial trends in groundwater quality and inform policy and program decision making.