



LAKEHEAD REGION
CONSERVATION AUTHORITY



2023 ANNUAL REPORT



BOARD OF DIRECTORS

			<i>Vice-Chair</i>		<i>Chair</i>					
Sheelagh Hendrick	Rudy Buitenhuis	Brian Kurikka	Jim Vezina	Greg Johnsen	Donna Blunt	Robert Beatty	Dan Calvert	Albert Aiello	Grant Arnold	Trevor Giertuga
City of Thunder Bay	Township of Gillies	Municipality of Neebing	Township of O'Connor	City of Thunder Bay	Municipality of Shuniah	Township of Dorion	Municipality of Oliver Paipoonge	City of Thunder Bay	Township of Conmee <i>(absent)</i>	City of Thunder Bay <i>(absent)</i>

STAFF

Tammy Cook	Chief Administrative Officer
Melissa Hughson	Watershed Manager
Mark Ambrose	Finance Manager
Ryne Gilliam	Lands Manager
Ryan Mackett	Communications Manager
Melanie O'Riley	Administrative Clerk/Receptionist
Gayle Little	Financial Administrative Assistant
Roman Augustyn	Information Systems Coordinator
Scott Drebit	GIS/Water Resources Technologist
Michelle Sixsmith	Development Regulations Officer
Ryan Harris	Field Operations Lead Hand
Michelle Willows	Environmental Planner
Jessie McFadden	Stewardship Technician <i>(Contract)</i>
Rachael Zacharias Bezanson	Education Coordinator <i>(Contract)</i>
Amanda Donolovitch	Labourer <i>(Seasonal)</i>

Various seasonal, contract and intern positions are also filled, as needed, on an annual basis.

MISSION

To lead the conservation and protection of the Lakehead Watershed.

The Lakehead Region Conservation Authority (LRCA) is a community-based environmental agency, responsible for the 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 flood forecasting and warning; development regulations; plan input; water monitoring; floodplain management; erosion mitigation; Source Water Protection; conservation lands; stewardship; and environmental education.

The Authority is responsible for the administration of Ontario Regulation 180/06 which regulates development in areas where the control of flooding, erosion, pollution or the conservation of land may be affected by development.

VISION

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

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.



Message from Donna Blunt, LRCA Chair

The LRCA's first year operating with a new Board of Directors and under the new Five-Year Strategic Plan was a successful and eventful one. Thanks to a second Minister's exception related to the term of the Chair, as well as the confidence of the LRCA Board of Directors, I was once again elected as Chair, allowing me the continued privilege and responsibility of guiding the Board in our common mission to lead the conservation and protection of the Lakehead Watershed. I greatly appreciate the support of the new and returning Board Members; we all work very well together toward our vision of a healthy, safe and sustainable Lakehead Watershed for future generations.

The LRCA's amazing staff once again worked extremely hard throughout the year under the leadership of CAO Tammy Cook. The staff's dedication to the conservation and protection of the Lakehead Watershed is exemplified by the fantastic work they do, and I thank them for it. I would also like to thank the numerous volunteers, community partners, and donors that help us work toward our vision and mission.

Message from Tammy Cook, LRCA CAO

Conservation Authorities continued to move forward with the changes and requirements in the *Conservation Authorities Act* and associated regulations. The LRCA completed all the required reporting, completion of the Transition Plan and Inventory of Programs, and continued working on the mandated Conservation Areas Strategy, Land Inventory and Watershed-Based Resource Management Strategy which will be completed in 2024.

LRCA staff completed many projects during the past year which resulted in beneficial improvements to the administrative office, Conservation Areas and in the watershed.

The past year was the first year of the Authority's second Strategic Plan, and the first year of our current Board Member's term. Staff would like to acknowledge the enthusiasm, guidance and support from the Board and our returning Chair, Donna Blunt. As we look forward to celebrating the LRCA's 70th anniversary in 2024, the LRCA team is excited to envision where the next 70 years takes our organization.

The LRCA is committed to continue to work with our municipal partners in order to achieve our vision of a healthy, safe and sustainable Lakehead Watershed for future generations.



CONSERVE & SUSTAIN

Enhance the management and sustainability of natural habitats and ecosystems through an integrated approach.



LRCA staff with volunteers at a seed sorting workshop.



Staff planting trees at Wishart Conservation Area.



Volunteers from RBC with LRCA staff at the LRCA's greenhouse.



LRCA staff pulling Invasive Cattails from the Floodway.

2023 marked the third year of the LRCA's Stewardship Program, which continues to see growth and interest from the community. No municipal levy is used to fund the stewardship program. Staff have been extremely successful in securing external funding to leverage support for environmental stewardship in the Lakehead Watershed.

Multiple stewardship projects occurred during 2023, including: the Shoreline Protection Program; Balmoral Bridge Floodway Habitat Corridor project; various invasive species pulls; continued work at Fisherman's West Climate Change Awareness Park and on the Boulevard Lake Shoreline Naturalization Project; continued progress on the Mountdale Boat Launch Riparian Planting and Pool 6 Shoreline Planting; and various natural heritage inspections of LRCA-owned lands.

The LRCA also embarked on a new Narrow-Leaf Cattail mapping and monitoring initiative to try and mitigate the spread of the invasive species. The second Thunder Bay Regional Phragmites Collaborative meeting was also hosted by the LRCA. 2023 was also the first year of LRCA staff growing native plants for use in local stewardship projects, as well as the first year of a new seed collection program to continue growing and propagating native plants.

A biodiversity assessment of the LRCA's administrative property was initiated by staff in 2023. Staff also initiated a new partnership with Lakehead University and the City of Thunder Bay to collect seeds from native species for use in additional local habitat projects.

Interested in learning more about the LRCA's stewardship programs and how to get involved? Contact us at stewardship@lakeheadca.com.

The LRCA received funding from Environment and Climate Change Canada to increase understanding and awareness of current chemical contaminants found in fish within Thunder Bay's harbour and tributaries. This program addresses Action Item #8 of the 2020-2024 Lake Superior Lakewide Action and Management Plan, focusing on education and outreach on the impacts of chemical contaminants, pathways into fish, and how to reduce contaminants in the Thunder Bay basin.

The LRCA continued Cyanobacteria monitoring in 2023 as a protective measure to understand the presence of "blue-green" algae in select Conservation Areas. Monitoring and developing long-term datasets highlight changes in frequency, size, and duration of hazardous and nuisance algae blooms as the climate continues to change. Understanding the presence, patterns and evolution of cyanobacteria occurrences is essential for the protection of visitors and their pets.

Planned forestry work continued at Wishart Conservation Area in 2023, including selective harvesting and replanting, as per the certified Wishart Forest Management Plan.



STEWARDSHIP



5

HECTARES OF HABITAT RESTORED

Along Lake Superior, Kaministiquia River, Neebing River, Neebing-McIntyre Floodway, and Current River.



134

COMMUNITY MEMBERS ENGAGED

Through shoreline clean-ups, invasive species pulls, planting days, and landowner interest in the Shoreline Protection Program.



8

INVASIVE SPECIES MANAGED

Purple Loosestrife; Himalayan Balsam; Tatarian Honeysuckle; Reed Canary Grass; Invasive Phragmites; Common Tansy; Invasive Cattails; Forget-Me-Nots.



18

KILOGRAMS OF NATIVE SEEDS DISPERSED

By volunteers along the Neebing-McIntyre Floodway and Current River.



800

METRES OF SHORELINE REHABILITATED

Through stewardship program projects and initiatives.



6

HABITAT STRUCTURES INSTALLED

Structures include bird nesting boxes, mason bee nesting boxes, and bat boxes.



1,000

NATIVE PLANTS GROWN

Grown by LRCA staff for installation at various stewardship projects throughout the region.



5,000

NATIVE PLANTINGS

Over 55 different native species of trees, shrubs and perennials planted.



REPORT SUSPECTED INVASIVE SPECIES

Invasive plants are non-native plants introduced by human action outside their natural past or present distribution whose rapid spread threatens the environment, the economy, or society.

TO REPORT SUSPECTED INVASIVE SPECIES:

Visit: <https://www.eddmaps.org/ontario/>

Call the Invasive Species Hotline: 1-800-563-7711

SCAN ME!



Invasive Phragmites (*Phragmites australis* ssp. *australis*)



Invasive Narrow-leaved Cattail (*Typha angustifolia*)



PROTECT & SUPPORT

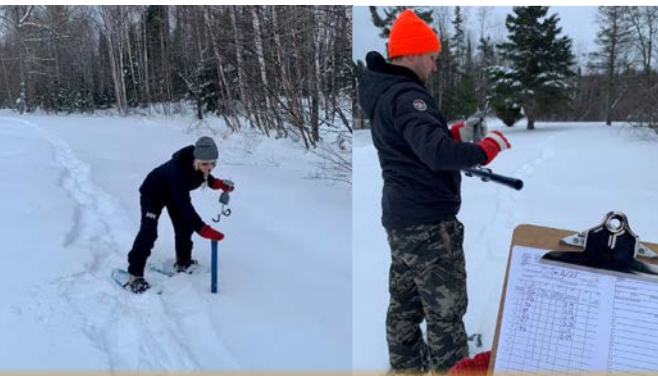
Safeguard people, property and communities through robust watershed management.



Staff attended the Flood Forecasting Workshop in Toronto.



Provincial Groundwater Monitoring Network well data collection.



Staff conducting bi-weekly winter snow surveys.



Examples of erosion (bank scour), at Mountdale Boat Launch.

As part of the Flood Forecasting and Warning Program the LRCA issued two flood messages in April 2023 (one Water Safety-Watershed Conditions Statement and one Flood Watch) related to spring freshet; however, no significant flooding occurred. The Neebing-McIntyre Floodway diverted for six days related to spring freshet.

Staff continued to conduct bi-monthly snow surveys between November and May at the three historic snow survey locations (Hazelwood Lake, Vibert Road, and McVicar Creek). Snow surveys have been conducted as part of the Flood Forecasting and Warning program since 1974. Additionally, in partnership with Water Survey of Canada, staff continued to monitor and maintain streamflow gauges and tipping bucket precipitation gauges along various watercourses within the Lakehead Watershed.

Due to below average precipitation received in the watershed every month beginning in May to the end of the year, the LRCA declared a Level I Low Water Condition in August 2023, due to received precipitation falling between 60-80% of the normal average.

In 2023, KGS Group was hired to update the Neebing-McIntyre Floodway Integrity Study, which will be used to plan and budget for future required maintenance in order to ensure the Floodway continues to provide flood protection to the lower Neebing River and Intercity Area. As part of the study the potential impacts of the invasive species phragmites and climate change are also being reviewed. Once the report is completed in 2024, recommendations will be used to update the Floodway's Operation, Maintenance and Surveillance Plan. The annual sediment survey was completed as well as a full survey of the Diversion Channel.

In 2023, 59 permits were issued under O. Reg. 180/06: Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation and 357 consultations were undertaken with landowners related to planning and permits. Additionally, staff provided 803 property maps related to property inquiries. The development regulations and plan review programs work with landowners to direct development away from natural hazards. This proactive approach reduces the need to financially or physically rescue people from the impacts of flooding or erosion. The new public online mapping tool which was introduced in 2022 received significant online traffic through the LRCA website. The tool remains available for public use on our website at www.lakeheadca.com/regulations/map-your-property.

Two LRCA staff members successfully completed Ontario Wetland Evaluation System (OWES) training and became certified evaluators. The trained evaluators will use their knowledge to assess wetlands on LRCA owned land as well as assist in the Development Regulations and Plan Review program areas.



FLOOD MESSAGES

1

WATER SAFETY STATEMENTS

High flows, unsafe banks, melting ice or other factors could be dangerous for recreational users such as anglers, hikers, canoeists, children, pets, etc. Flooding is not expected.

0

FLOOD OUTLOOK STATEMENTS

Early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high wind or other conditions.

1

FLOOD WATCH

Indicates that there is the potential for flooding within specific watercourses and municipalities.

0

FLOOD WARNINGS

Indicates that flooding is imminent or occurring within specific watercourses and municipalities.

6

FLOODWAY DIVERSION (DAYS)

The Neebing-McIntyre Floodway affords riverine flood protection to the lower Neebing River and Intercity areas.

1

LEVEL I LOW WATER CONDITION

Declared on August 3, 2023, and remained in effect into 2024.



PLANNING & PERMITS



59

PERMITS ISSUED

Under Ontario Regulation 180/06: Development, Interference with Wetlands and Alterations to Shorelines and Watercourses.



159

PLANNING ACT COMMENTS

As per delegated commenter role regarding Section 3.1 (Natural Hazards) of the Provincial Policy Statement.



803

PROPERTY MAPS ISSUED

Maps are provided to illustrate regulated features on properties and during pre-consultation.



357

GENERAL INQUIRIES

Property, planning and permit consultations.

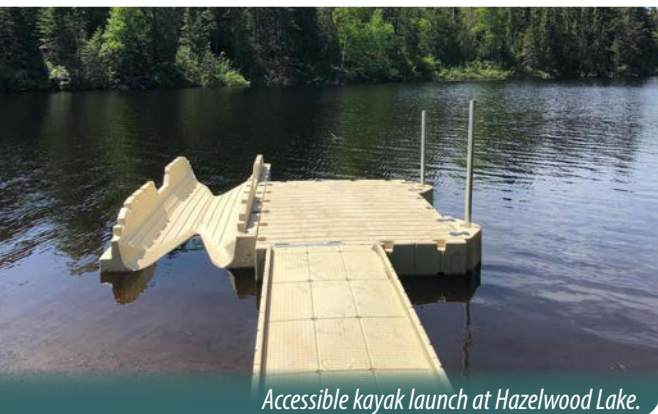


CONNECT & EXPLORE

Maximize intergenerational educational, engagement, and recreational opportunities through strong collaborations.



Upgraded AODA-compliant paved trail and parking lot at Cascades.



Accessible kayak launch at Hazelwood Lake.



Staff accepting the Innovation Award for Silver Harbour Dive Park.



Students participating in an LRCA Outdoor Education Program.

During 2023 the LRCA's field staff were busy carrying out regular day-to-day maintenance and upkeep of the 10 Conservation Areas in the Lakehead Region. Additionally, several special projects were also completed, including the installation of an accessible kayak launch at Hazelwood Lake, the re-paving of the parking lot and AODA-accessible trail at Cascades, refurbishment of several existing outhouses, the installation of a memorial bench at Hazelwood Lake, removal of several buried tires at Mills Block and re-decking of the dock at Little Trout Bay, among many other projects. The LRCA's field staff consists of two full-time employees, one seasonal employee and four summer student positions. This modest staff complement is tasked with the maintenance and upkeep of 2,500 hectares of land, including a combined 28 kilometres of trails.

Another exciting development during 2023 was the creation of the Silver Harbour Dive Park. Staff were awarded the Innovation Award at the annual Conservation Areas Workshop in Southern Ontario, an award voted on by peers from the Province's 36 Conservation Authorities. The project, in collaboration with Thunder Country Diving and thanks to the generous support of a private donation and contributions from Steve Ward Contracting provides safer access to Lake Superior for certified scuba divers and supervised divers in training.

The LRCA hosted its first-ever Outdoor Health and Wellness Day at Cascades Conservation Area in partnership with Dorset Pier Mental Health. The popular Dorion Birding Festival also occurred at the end of May 2023. The LRCA also hosted the bi-annual Silver Harbour Day in August, in partnership with the Municipality of Shuniah. Additionally, the TD Friends of the Environment Fund provided support for the LRCA's annual Watershed Explorers Programs, which included outdoor guided hikes with expert guest speakers on a wide range of topics including birds and birding, plants and wildflowers, fish and aquatics, and more.

Another highlight of 2023 was the Two-Eyed Seeing Archaeology Workshop held at the LRCA Administrative Office. Guest experts Dr. Jill Taylor-Hollings and Chris McEvoy of Lakehead University's Department of Anthropology, Dr. David Norris of Woodland Heritage Northwest and Elder Cindy Crowe led a discussion about the archaeological and anthropological findings and observations showcasing Indigenous Peoples through time in the region. Participants were also able to view actual and replica artifacts up-close.

The LRCA's outdoor environmental education program was once again highly subscribed during 2023. Staff led multiple education and nature interpretive programs for schools, organized clubs and groups and the general public, with approximately 3,072 participants. Educators are encouraged to book educational outdoor field trips to Conservation Areas through the LRCA website, or to reach out to staff at education@lakeheadca.com.



OUTREACH & EVENTS

 **3,072**

PROGRAM PARTICIPANTS

Estimated number of participants in our outdoor education and nature interpretive programs.

EDUCATION PROGRAMS

→ 1,760

SPRING WATER AWARENESS

→ 256

WATERSHED CONNECTIONS

→ 174

ARBOR WEEK

→ 274

CHILDREN'S WATER FESTIVAL

→ 328

WATERSHED EXPLORERS

→ 280

 **93**

EDUCATION PROGRAMS

Includes Environmental Education programming such as school field trips to Conservation Areas and in-class presentations.

 **22**

PUBLIC EVENTS

Includes events such as the Dorion Birding Festival, Fall Waterfowl Viewing Day, Silver Harbour Day, etc.

 **43**

TRADESHOWS & PRESENTATIONS

Includes LRCA appearances at other community events, as well as presentations to the community.

 **16**

WORKSHOPS

Includes Nature Interpretive Programs such as guided hikes and nature-based programming.

 **660+**

EVENT ATTENDEES

Estimated number of guests attending our public events.

 **17**

GUEST SPEAKERS

Expert guest speakers assist with the delivery and development of specialized education and outreach programs.

 **375K+**

ESTIMATED VISITORS TO CONSERVATION AREAS (based on partial data)



COMMUNITY

 **11**

CORPORATE SPONSORS

- Avista Realty
- Copperfin Credit Union
- Enbridge (Greenwich Windfarm)
- Hill's Greenhouse
- Invasive Species Centre
- Lakehead Conservation Foundation (LCF)
- Northern Ontario Heritage Fund Corporation
- Ontario Nature
- Ontario Power Generation
- RBC Foundation
- Steve Ward Contracting
- Synergy North
- TC Energy
- TD Friends of the Environment Fund

 **40**

PRIVATE DONORS

Generous contributions from members of the public towards education, Conservation Areas projects, land donations, and more.

 **156**

VOLUNTEERS

Hardworking volunteers help in various capacities, including at plantings, clean-ups, special events, and the Foundation.

 **67**

COMMUNITY PARTNERS

- | | | | |
|---------------------------------------|---|-----------------------------------|-----------------------------------|
| Blue Sky Strategic Group | Harris Ecological Consulting | Nature Conservancy of Canada | Thunder Bay 55+ Centre |
| Blue-Green Labs | HMCS Griffon | North Shore Steelhead Assoc. | TB Catholic District School Board |
| Boy Scouts | Hope & Memory Garden | North/South Consultants | TB District Health Unit |
| Canada Summer Jobs | Invasive Species Centre | Northern Ontario Heritage Fund | TB District Stewardship Council |
| Canadian Forces Naval Reserve | Kay Lee Photography | Ontario Nature | Thunder Bay Field Naturalists |
| City of Thunder Bay | KBM Resources Group | Ontario Parks | TB Indigenous Friendship Centre |
| Confederation College | Lake Superior National Marine CA | Ontario Power Generation | Thunder Country Diving |
| Conservation Ontario | Lakehead University | Parks Canada | Township of Conmee |
| Copperfin Credit Union | LU C.A.R.I.S. | Regional Food Distribution Assoc. | Township of Dorion |
| D&R Sporting Goods | Magnus Theatre | Remedial Action Plan Committee | Township of Gillies |
| Dark Forest Photographic | Métis Nation of Ontario | Resolute Forest Products | Township of O'Connor |
| Dept. of Fisheries and Oceans | Ministry of Natural Resources and Forestry | Richardson International | United Way |
| EarthCare | Ministry of the Environment, Conservation and Parks | Royal Bank of Canada | Upriver Running |
| EcoSuperior | Ministry of Transportation | Science North | Wildlife Conservation Society |
| Enbridge Inc. | Municipality of Neebing | Shuniah Emergency Services | Woodland Heritage Northwest |
| Environment and Climate Change Canada | Municipality of Oliver Paipoonge | | |
| Epica Pictures | Municipality of Shuniah | | |
| Fort William First Nation | | | |



GOVERN & ENHANCE

Distinguish the organization as a leader in environmentally-sustainable practices and responsible stewardship.



LRCA Five-Year Strategic Plan 2023-2027.

The LRCA's new Five-Year Strategic Plan 2023-2027, which was developed during 2022, came into effect January 1st, 2023, and will continue to provide a trail guide for the organization in service of the LRCA's Mission to lead the conservation and protection of the Lakehead Watershed and Vision of a healthy, safe and sustainable Lakehead Watershed for future generations. The four Pillars of the new Strategic Plan remain the same: Conserve & Sustain, Protect & Support, Connect & Explore, Govern & Enhance.

As per Provincial mandate, further updates were made to the LRCA's Administrative By-Law in 2023, in addition to an updated fee policy, all of which can be viewed on the LRCA website.



New pay-and-display unit being installed at Silver Harbour.

A new pay-and-display unit was installed at Silver Harbour; it, in addition to the units already present at Cascades and Mission Island Marsh, were all upgraded to include debit and "tap" functionality, making compliance even easier for visitors to those areas. Daily parking and day-use fees and Explore Card Parking Pass sales revenue all go towards the ongoing upkeep and maintenance of the LRCA's 10 Conservation Areas.

Maintenance work was carried out at the LRCA's Administrative Office in Thunder Bay, as per the LRCA's Asset Management Plan. Some of the work carried out included the removal of lead pipes and other plumbing work, as well as a required electrical system upgrade, including the addition of a generator in the event of a power outage, allowing staff to continue flood forecasting duties and the issuing of flood messages during extreme weather events. Also included in the electrical upgrade, utilizing funding from the CEDC, was the addition of an electric vehicle charging station at the office for public and staff use. This will also allow for the charging of potential future electric LRCA fleet vehicles.



Staff participating in the annual Spring-Up to Clean-Up event.

Thanks to two successful fundraising events held during 2023 (the annual Conservation Dinner & Auction and annual Wine Tasting & Dinner at Whitewater), the Lakehead Conservation Foundation (LCF) was able to provide the LRCA with a cheque in the amount of \$20,000.00. These funds are designated for the LRCA's environmental education and nature interpretive program, which relies on charitable donations, special grants, corporate sponsorships, and self-generated user fees in order to operate.

Currently, five staff members are designated Provincial Offences Officers for enforcement of Section 29 Conservation Areas Regulations and Section 28 Development Regulations under the *Conservation Authorities Act*. Additional staff may be designated as warranted.



LRCA Board Members and staff on a tour of the Conservation Areas.

Note that effective April 1, 2024, Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits replaces O. Reg. 180/06: Development, Interference with Wetlands and Alterations to Shorelines and Watercourses.



ADMINISTRATION



4

HEALTH & SAFETY POLICIES

LRCA strives to be a healthy, diverse, and positive workplace through a dynamic culture of learning, safety, inclusion, and mental well-being.



7

POLICIES CREATED & AMENDED

Various operational and administrative policies to ensure efficient and transparent governance of the Authority.



31

STAFF TRAINING SESSIONS

Professional development and continuous knowledge opportunities for staff.



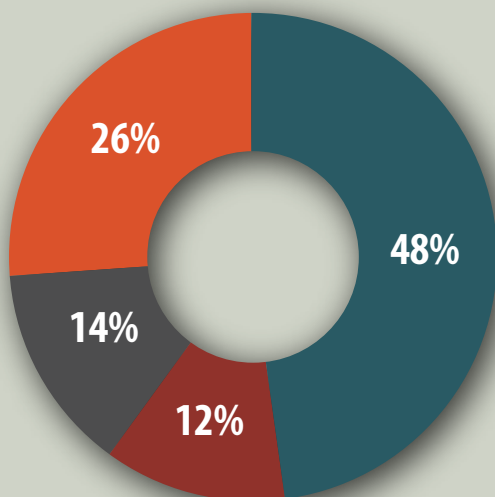
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PROVINCIAL OFFENCES OFFICERS

Staff designated as Provincial Offences Officers under the Conservation Authorities Act to enforce Development and Conservation Areas Regulations.



FUNDING SOURCES



48%

\$1,185,703

MUNICIPAL LEVY

(FOR CATEGORY 1 PROGRAMS ONLY)

26%

\$650,601

SELF-GENERATED REVENUE & DONATIONS

(FOR CATEGORY 1, 2 & 3 PROGRAMS)

14%

\$354,019

PROVINCIAL, FEDERAL & OTHER GRANTS

(FOR CATEGORY 1 & 3 PROGRAMS)

12%

\$291,135

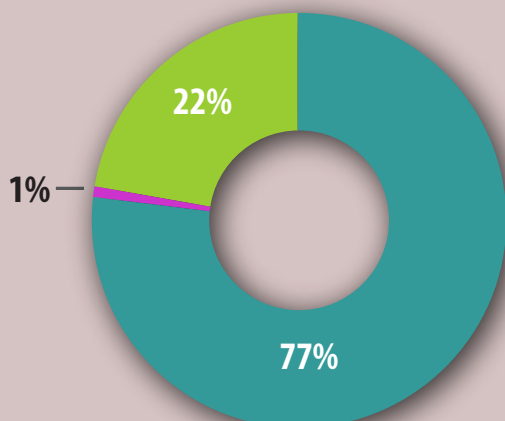
PROVINCIAL GRANTS

(FOR CATEGORY 1 PROGRAMS ONLY)

\$2,481,458 TOTAL FUNDING SOURCES



FUNDING SOURCE ALLOCATIONS BY PROGRAM AREA



77%

CATEGORY 1:

Mandatory Programs & Services

- Corporate Services
- Risk of Natural Hazards
- Management, Operation & Maintenance of LRCA-Owned Lands
- Source Water Protection
- Other Programs & Services (PGMN; PWQMN)

1%

CATEGORY 2:

Non-Mandatory Programs & Services at the Request of a Municipality

- Municipal Mapping Service (Oliver Paipoonge; Dorion; Lakehead Rural Planning Board)

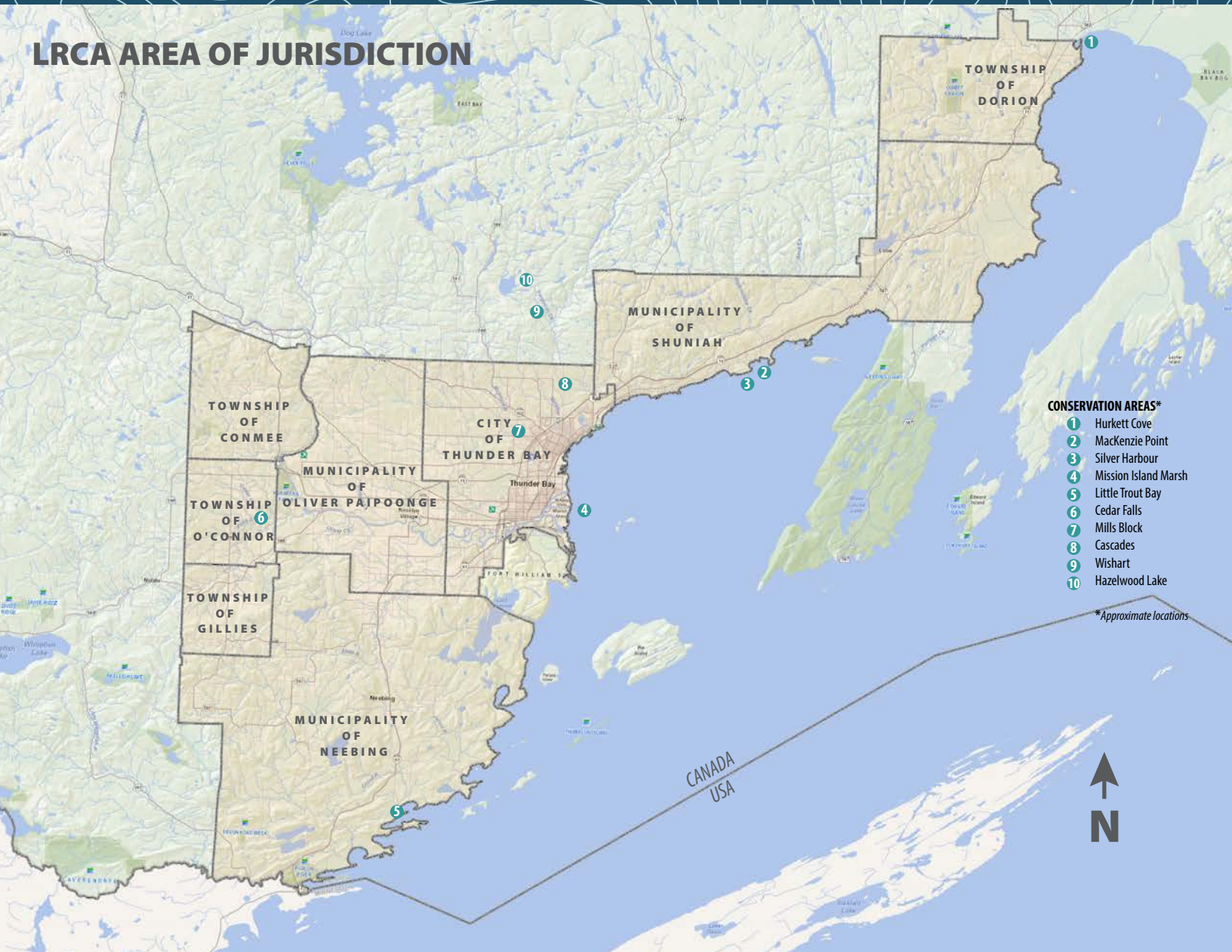
22%

CATEGORY 3

Non-Mandatory Programs & Services

- Stewardship
- Environmental Education & Nature Interpretive Programming
- Environmental Research

LRCA AREA OF JURISDICTION



"CONSERVE TODAY... FOR A BETTER TOMORROW"

LAKEHEAD REGION CONSERVATION AUTHORITY

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LAKEHEAD REGION
CONSERVATION AUTHORITY

Member of



Conservation
ONTARIO
Natural Champions



LRCA
EST. 1954