













# **LAKEHEAD REGION**

CONSERVATION AUTHORITY

**VISION MISSION** 

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



Donna Blunt, Chair Municipality of Shuniah Grant Arnold, Vice-Chair Township of Conmee Joel Brown **Township of Dorion** Township of Gillies Rudy Buitenhuis Erwin Butikofer **Municipality of Neebing** Township of O'Connor Municipality of Oliver Paipoonge

> City of Thunder Bay Andrew Foulds City of Thunder Bay Trevor Giertuga Andrea Goold City of Thunder Bay

Umed Panu City of Thunder Bay

**MEMBERS** 

To lead the conservation and protection

of the Lakehead Watershed.

Tammy Cook Chief Administrative Officer Gail Willis **Watershed Manager** Mark Ambrose Finance Manager Ryne Gilliam Lands Manager Rvan Mackett **Communications Manager** Melanie O'Riley Administrative Clerk/Receptionist Gayle Little Finance Administrative Assistant Roman Augustyn Information Systems Coordinator Scott Drebit GIS/Water Resources Technologist Ryan Harris Field Operations Lead Hand Dave Olson Labourer (Seasonal) Rena Viehbeck **Education Coordinator** (Contract) Jessie McFadden Watershed Stewardship Technician (Contract)

Michelle Willows Environmental Planner (Intern)

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

The Lakehead Region Conservation Authority (LRCA) is a community-based environmental agency, whose 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 input and review, environmental education, community outreach and stewardship. The LRCA's Area of Jurisdiction includes over 2,700 square kilometres, and is comprised of our eight Member Municipalities.

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.

Cover Photo: A Red Fox at Little Trout Bay Conservation Area.



## Message from Donna Blunt, LRCA Chair

Once again, the LRCA Board and staff demonstrated their resiliency and commitment to the Lakehead Watershed during another difficult pandemic year. We very much look forward to meeting in person again when it is safe and responsible to do so.

I would like to thank the staff of the Authority for their hard work and dedication. Not only have staff been able to carry out their regular duties and continue with important programming, they have done so with all of the added pressures and anxieties surrounding the pandemic. Staff have once again shown their ability to adapt and pivot in remarkable ways in order to complete their tasks.

I would also like to thank my fellow Board Members for their continued dedication and hard work in their governance of the Authority. It has been a pleasure to work alongside them as we strive to lead the conservation and protection of the Lakehead Watershed.

As the changes to the Conservation Authorities Act and enacting of new regulations begin to move forward, I anticipate that Authority staff will meet the challenges associated with the roll-out with the same level of dedication and hard work that they have exemplified during the pandemic.

### Message from Tammy Cook, LRCA CAO

The LRCA continued to persevere in 2021 while adapting and responding to the ongoing pandemic. Staff transitioned between working at home and the office, continuing to maintain positivity and productivity. The past two years have proven the dedication and strong commitment of all LRCA staff in fulfilling LRCA's vision and mission.

Many great accomplishments were made in promoting environmental stewardship in the Lakehead Watershed in 2021 including: the launch of the Superior Stewards Shoreline Protection Program; development of Fisherman's West Climate Change Awareness Park; shoreline protection at Mission Island Marsh Conservation Area; and delineation of wetlands in the rural watershed. The projects were all made possible by outside funding and partnerships with many partners and volunteers from the community, to whom we are very grateful.

Ongoing changes to the Conservation Authorities Act and the enacting of new regulations and anticipated additional regulations, have resulted in a new perspective on how Conservation Authorities will operate in the future. Staff continue to meet all requirements and will work towards maintaining the level of programming expected and enjoyed by the community. We look forward to working with our Member Municipalities during this transition.



# **CONSERVE & SUSTAIN**

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



The Superior Stewards Shoreline Protection 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. Staff consulted with eligible homeowners to establish a planting plan for their shoreline property; additionally, eligible homeowners were provided with up to 100 native plants to establish a 10-15 metre buffer between the lawn and shoreline. There are plans to expand the program in 2022. The Stewardship section of the LRCA's website was also expanded considerably, adding extensive landowner resources and other valuable information.

Work also occurred at Fisherman's West Climate Change Awareness Park in order to restore wildlife habitat, rehabilitate shoreline, recreate coastal wetlands and provide passive recreational opportunities to the public. The goal is to restore the park by returning the area to naturalized conditions by planting native trees, shrubs, and perennials, and to manage invasive species. Staff have applied for additional funding to continue work at this site.

Shoreline protection and habitat creation efforts were carried out at Mission Island Marsh Conservation Area, with over 275 native shoreline plants installed along the shoreline. Access to Lake Superior and views of the Sleeping Giant have been maintained through the planting of low-lying shrubs and by establishing a 3-metre wide path to the water's edge, with room for the unloading and setup of on-water recreational equipment.

Concept plans and community consultation began in 2021 for stewardship projects planned for the 2022 season, including riparian habitat restoration at the Mountdale Boat Launch, and wildlife habitat restoration along the Neebing-McIntyre Floodway corridor.

The LRCA is grateful to the community partners and volunteers that assisted with the various 2021 Superior Stewards projects, including the City of Thunder Bay, the Thunder Bay District Stewardship Council, EarthCare, the Thunder Bay Field Naturalists, the United Way - GenNext, and Richardson International. Funding for these programs was provided by the Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health through the Ministry of Northern Development, Mines, Natural Resources and Forestry, the Great Lakes Local Action Fund through the Ministry of the Environment, Conservation and Parks, the City of Thunder Bay, and the Great Lakes Protection Initiative through Environment and Climate Change Canada.

A Rural Wetland Delineation Project was carried out in 2021 in order to delineate the outer boundary of and identify additional wetlands within the LRCA area of jurisdiction. As a result, over 275 square kilometres of wetlands were identified.

Due to the COVID-19 pandemic, the LRCA's popular Tree Seedling Program was cancelled in 2021, but will return in 2022.

## **INITIATIVES:**

- Support, strengthen and encourage environmental stewardship and sustainability.
- Manage future growth through a systematic evaluation of assets and landholdings.
- Collaborate with member municipalities and community partners to foster an integrated watershed management approach.
- Optimize decision-making by sharing data and knowledge.





HECTARES OF HABITAT RESTORED

Along Lake Superior, the Kaministiquia River, and the Neebing River.

INVASIVE SPECIES MANAGED

Through the Stewardship Program (Purple Loosestrife; Himalayan Balsam; Reed Canarygrass; Dame's Rocket;

NATIVE TREES, SHRUBS, AND PERENNIALS PLANTED

Over 50 different native species used.

**COMMUNITY MEMBERS ENGAGED** 

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

**KILOGRAMS OF NATIVE SEEDS DISPERSED** 

By volunteers from Lakehead University and Confederation College at Fisherman's West Climate Change Awareness Park.

**METRES OF SHORELINE REHABILITATED** 

Member Municipalities

+151,000

**Assistance Program** 



+2,700 km<sup>2</sup> Area of Jurisdiction

Trees planted through the Private Landowners Tree Seedling



# **PROTECT & SUPPORT**

Safeguard people, property and communities through robust watershed management.



**INITIATIVES:** 

Photos (left to right): protecting trees from beavers along the Floodway; the Diversion Structure during spring freshet; the mouth of the Current River during high flows; major repair work on the Hazelwood Lake dam; Corbett Creek Streamflow/Precipitation Gauge Station.

The LRCA's Flood Forecasting program was relatively guiet during 2021 due to an uneventful spring freshet and below-average precipitation throughout most of the year. Three Flood Outlook Statements and one Water Safety Statement were issued in 2021; however, no significant flooding occurred. The Watershed Conditions Statement that was issued on December 15, was the latest in the year that the LRCA has ever issued a Flood Message in the history of the program.

For the fifth year in a row, the Neebing-McIntyre Floodway did not divert. During eventful spring freshets and extreme rainfall events, the Neebing-McIntyre Floodway diverts excess flows from the Neebing River into the Diversion Channel around Chapples Park and then into the widened, deepened Floodway Channel. Annually, a floodway sediment survey is conducted to ensure that the Floodway is working at full capacity of up to and including the Regional Storm.

In order to maintain the LRCA's assets, we have prepared an Asset Management Plan and undertake routine inspections of all infrastructure. As identified in the Plan, repairs were completed on the Hazelwood Lake Dam in 2021.

The Victor/Broadway Bank Stabilization Assessment Study was completed during 2021. The purpose of the study is to monitor the rate of erosion along the banks of the Kaministiquia River, as well as to monitor erosion repair work that had previously been carried out. Soil erosion mitigation projects are routinely carried out along the banks of the Kaministiquia River to lessen the impacts of soil erosion.

It was another busy year for regulations staff. Many development projects were completed within the regulated area, resulting in staff issuing 62 permits during the year.

**LEVEL I CONDITION** 

The potential for water supply problems is identified.

AT A LEVEL II CONDITION

Minor water supply issues are encountered. There is the potential for major supply problems.

> **WEEKS AT A LEVEL III CONDITION**

Supply no longer meets demand. Social and economic impacts are experienced. Streamflow Gauges

Precipitation Gauges

**3** Snow Survey Sites

Riverine flood protection provided by Neebing-McIntyre Floodway to the lower Neebing River and Intercity areas

# **WATER SAFETY STATEMENT**

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.

**FLOOD WATCH** 

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

FLOOD WARNINGS

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

Increase awareness of the impacts of floods and hazards and the importance of mitigation.

Align watershed decision-making with stakeholders outside of the jurisdiction.

Integrate the impacts of climate change into future actions.

Demonstrate effective land use planning and emergency flood management through a collaborative approach.

Evaluate the priorities for the protection and management of wetlands and natural heritage features.

Maintain and enhance flood control infrastructure to minimize the impacts of flooding, erosion, and sedimentation.

## **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.

> **LAKE SUPERIOR** SHORELINE CONDITIONS STATMENTS

The LRCA may issue a Shoreline Conditions Statement for the shores of Lake Superior when at high levels.

**FLOODWAY DIVERSIONS** 

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

**PERMITS ISSUED** 

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

**PROPERTY MAPS** 

Maps are provided to illustrate regulated features or properties.

**COMMENTS MADE ON PLANNING ACT APPLICATIONS** 

Per delegated commenter role regarding Section 3.1 of the Provincial Policy Statement.

REGULATIONS

**GENERAL INQUIRIES** 

Property and permit consultations.

FLOOD MESSAGES



# **CONNECT & EXPLORE**

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



Photos (left to right): sheet steel piling removal at Mission Island Marsh; restored Cascades entrance sign; Monarch butterfly in the LRCA's pollinator garden; learning about fish at a Watershed Explorer program; fungi specimen at the Fall Mushroom Hike; dock repairs at Little Trout Bay; LU's Ryan Wilkie at the Trees and Fall Colours quided hike at Little Trout Bay; LRCA's Michelle Willows using a seine net at the Fish and Aquatics program.

Field staff were busy during 2021 carrying out numerous maintenance projects, including the restoration of several Conservation Area entrance signs, the repair and painting of the Little Trout Bay boat launch dock, and repairs to the Silver Harbour boat launch dock. A new floating dock component was also added to the boat launch at Silver Harbour. The pavilion at Mission Island Marsh was restored as well. The sheet steel pilings from the damaged section of the Mission Island Marsh boardwalk were safely removed, and the remaining boardwalk elements were revitalized through the replacement of damaged boards and a fresh coat of paint. Several memorial benches were also installed at Mission Island Marsh and Silver Harbour Conservation Areas.

The many visitors to Conservation Areas also kept staff busy; the majority of 2021 had significant pandemic-related restrictions, so once again the community turned to LRCA Conservation Ares for outdoor recreation opportunities. The LRCA is proud to have been able to provide the community with these spaces for the physical and mental health benefits of watershed residents.

Lake Superior National Marine CA

Ministry of Environment, Conservation

Ministry of Northern Development,

Municipality of Oliver Paipoonge

Mines, Natural Resources and

Lakehead University

and Parks

Ministry of Transportation

Municipality of Neebing

Municipality of Shuniah

LU C.A.R.I.S.

extremely popular Birding Festival returned in 2021 in a virtual format, and plans are underway to host an inperson event in 2022.

The Lands Manager and Operations Lead Hand positions underwent training and were designated Provincial Offences Officers during 2021, for the purpose of enforcing Section 29 Conservation Areas Regulations under the Conservation Authorities Act. These staff members are now able to enforce regulations and issue tickets for violations of the Regulations under the Act.

Canada Summer Jobs

City of Thunder Bay

Confederation College

**Environment and Climate Change Canada** 

Conservation Ontario

EarthCare

EcoSuperior

Enbridge Inc.

Flashback Photo

GenNext Thunder Bay

Kay Lee Photography

KBM Resources Group



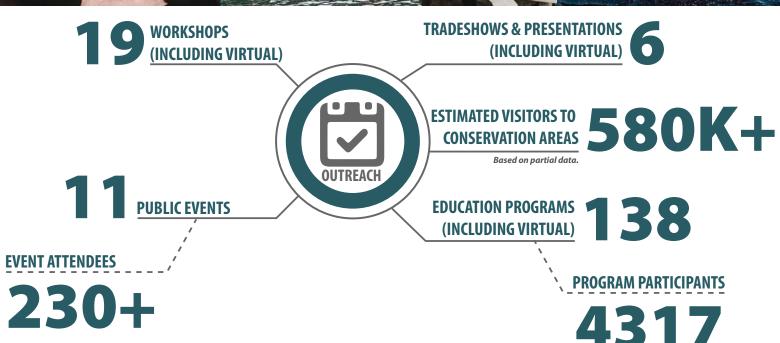
Nature Conservancy of Canada Thunder Bay Field Naturalists Northern Ontario Heritage Fund Thunder Bay Indigenous Friendship Norwest Bins and Service Ontario Parks Thunder Country Diving Ontario Power Generation Township of Conmee Parks Canada Township of Dorion Regional Food Distribution Association Township of Gillies Richardson International Township of O'Connor Shuniah Fire and Rescue United Wav Thunder Bay 55+ Centre Upriver Running Thunder Bay District Health Unit **Urban Greenscapes** 

Thunder Bay District Stewardship Council Wayfinder Trails & Recreation

## **INITIATIVES:**

- Emphasize a sense of place through positive and equitable interactive experiences.
- Develop a communications strategy to engage diverse stakeholders.
- Strengthen a shared interest in conservation through collaboration with existing and new partners.
- Manage recreational areas for current and future generations.





+2,500

hectares of land, including Conservation Areas, Forest Management Properties, floodplain lands, nature reserves and undeveloped holdings



**EVENTS, EDUCATION AND COVID-19 RESPONSE:** 

The LRCA's ability to host large public events during 2021 was once again impacted by the COVID-19 pandemic. However, staff continued with virtual offerings, which were extremely popular with local teachers. When restrictions allowed, staff were still able to safely and responsibly host several smallscale guided nature hikes as part of our Watershed Explorers program, which was generously sponsored by the TD Friends of the Environment Fund. Similar programs are being offered throughout 2022.



# **GOVERN & ENHANCE**

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

## **INITIATIVES:**

- Optimize organizational performance through policy and measurable actions to improve accountability and transparency.
- Build a resilient financial model based on capacity, capabilities and public expectations.
- Create a dynamic culture of learning, safety, and positivity.
- Increase awareness of Indigenous knowledge and practices for integration into organizational decision-making.



Photos (left to right): celebrating the retirement of Dave Olson, Lead Hand, after 36 years with the LRCA; 2021 staff photo; new pay-and-display unit installed at Mission Island Marsh; coin box installation at Mills Block Forest; safety signs at Hazelwood Lake.

In 2021, three new regulations were enacted under the *Conservation Authorities Act*: Mandatory Programs and Services; Transition Plans and Agreements; and Rules of Conduct in Conservation Areas. As required in the regulations, the Authority developed a Transition Plan that outlined a timeline and workplan to meet the requirements within the new regulations. Additionally, staff began working on the required Inventory of Programs and Services, that categorizes all delivered programs into three categories: 1 – mandatory programs and services; 2 – programs at the request of a municipality; 3 – non-mandatory programs. Future budgets and programming must meet the requirements of the new regulations.

In the Authority's ongoing focus on policy development, an Indemnification By-Law was developed, and updates were undertaken to the Section 28 Hearing Guidelines and Rules of Procedures for Permit Application Review and Approval documents.

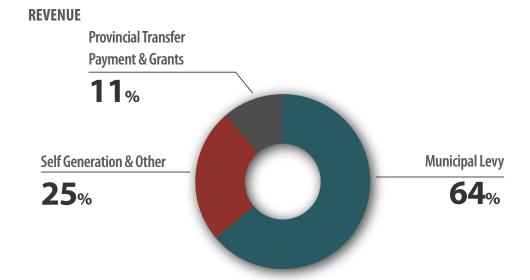
Additionally, the LRCA along with all other Conservation Authorities committed by resolution to remaining accountable and transparent through updates to the Administrative By-Law, reporting on priorities and ensuring relevant documents are made publicly available on each Authority's website.

**1 of 2** Conservation Authorities on the Lake Superior shoreline

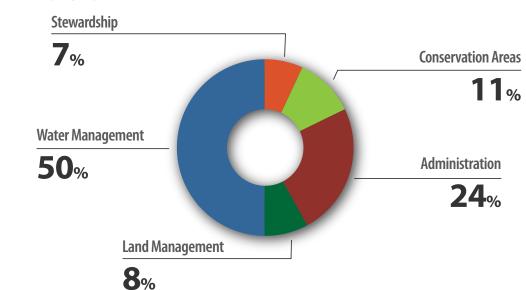
**1 of 5** Conservation Authorities in Northern Ontario

**1 of 36** Conservation Authorities in the Province of Ontario

The LRCA's budgeted 2021 revenue and expenditures totaled approximately \$2,620,547.00.



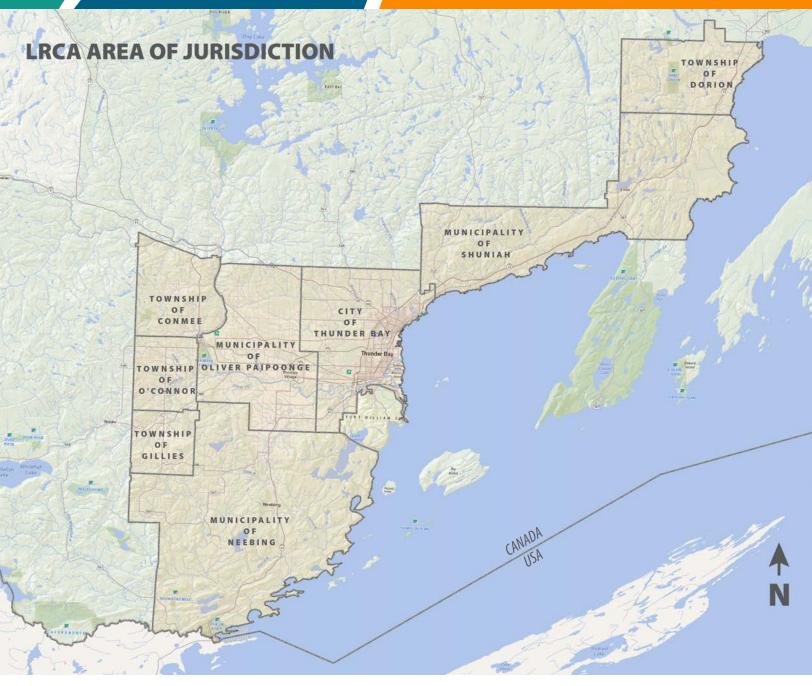












"CONSERVE TODAY ... FOR A BETTER TOMORROW"



## **LRCA ESTABLISHED 1954**

130 Conservation Road, PO Box 10427 Thunder Bay, ON P7B 6T8 Phone: (807) 344-5857 | Fax: (807) 345-9156

# **WWW.LAKEHEADCA.COM**





