











LAKEHEAD REGION

CONSERVATION AUTHORITY

VISION

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



of the Lakehead Watershed.



Donna Blunt, Chair *Municipality of Shuniah*

Linda Rydholm, Vice-Chair City of Thunder Bay

Grant Arnold *Township of Conmee*Ed Chambers *Township of Dorion*

Wendy Wright *Township of Gillies*

Erwin Butikofer *Municipality of Neebing*

Jim Vezina *Township of O'Connor*

Jim Byers Municipality of Oliver Paipoonge

Andrew Foulds City of Thunder Bay

Andrea Goold City of Thunder Bay (June-Dec.)

Umed Panu City of Thunder Bay

Ken Boshcoff City of Thunder Bay (Jan.-May)

STAFF 1 3

Tammy Cook Chief Administrative Officer

Gail Willis 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

Gene Kent **Education Coordinator** (Contract)

Dave Olson Field Operations Lead Hand (Seasonal)

Randy Kelly *Labourer* (Seasonal)

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. We are responsible for the wise management of renewable natural resources in our 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.

Cover Photo: Bald Eagle at Hurkett Cove Conservation Area



Message from Tammy Cook, LRCA CAO

This past year marked the first year that the LRCA has worked under a Strategic Plan. The five-year guiding document, that was the culmination of engaging our staff, Board, partners and the public, is providing the framework for the Authority to enhance and prioritize its services moving forward.

One major accomplishment over the past year was the updating of the Neebing River Floodplain mapping, which is the second update completed in our watershed. It is anticipated that all of the 40-year-old floodplain mapping will be updated by 2020. Another focus has been the evaluation of area wetlands, which lead to the designation of a new Provincially Significant Wetland in the McIntyre River watershed. These updated studies are critical in ensuring that development is directed away from natural hazards, which in turn protects people and property from the perils of flooding and erosion.

A continuing focus in 2018 has been the creation and updating of policies to optimize organizational performance. This past year several polices were created and updated, including the Administrative By-Law that provides a clear framework under which the Board of Directors operates.

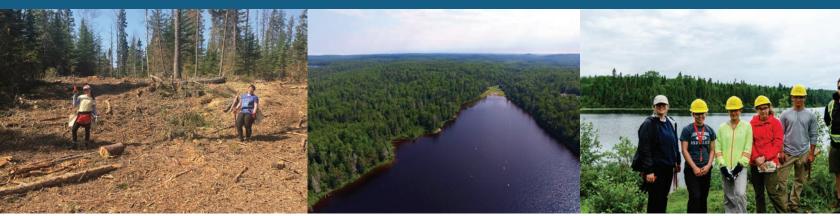
Overall, 2018 marked a year of growth and continued commitment to our role in integrated watershed management. This continued commitment from staff and the Board of Directors will ensure that we continue to strive towards our mission of leading the conservation and protection of the Lakehead Watershed.





CONSERVE & SUSTAIN

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



Photos (left to right): reforestation efforts at Wishart Forest; drone image of Hazelwood Lake Conservation Area courtesy of Lakehead University C.A.R.I.S.; Staff working with members of the Stewardship Youth Rangers; pollinator garden at the LRCA Administrative Office; selective harvesting at Wishart Forest as part of the Wishart Forest Operational Forest Plan.

In order to enhance the management and sustainability of natural habitats and ecosystems, one must first understand where they are and how they interact with one another.

Due to a lack in funding, the majority of floodplain mapping studies in the Lakehead Watershed have not been updated in over 40 years. In 2018, funding was provided through the Federal National Disaster Mitigation Program, City of Thunder Bay and the Municipality of Oliver Paipoonge to update the 1985 Neebing River Floodplain Mapping. This updated and expanded mapping will be used by the Authority in the administration of their Development Regulations as well as by the municipalities in their Official Plans and Zoning by-laws. By 2020, all completed floodplain mapping will be updated.

Another area of focus that continued in 2018, was evaluating wetlands. The wetland evaluation that was completed within the McIntyre River watershed resulted in the designation of a new Provincially Significant Wetland. The focus of delineating the boundary of all wetlands in the LRCA's area of jurisdiction will continue. All collected data is shared with the applicable member municipalities and Ministry of Natural Resources and Forestry.

The Authority has continued to look for ways in which it can conserve and sustain within our own operation. In 2018, the Authority installed a new bottle filling station that provides municipal drinking water to staff as well as the public, in an effort to reduce the use of single use plastics. We also continued our partnership with the RFDA providing a community garden for their use in growing vegetables for donation to local shelters. Additionally, a pollinator garden was developed on the grounds of our Administrative office.

In an effort to sustainably manage the Wishart Forest, selective harvesting was conducted following the Operational Forest Management Plan, with the eventual goal of a mixed age forest.

Additionally, a watershed assessment of the Jarvis River Watershed also occurred during 2018. Various water and soil samples were obtained from the sampling locations within the Jarvis River Watershed, which is located in the Municipality of Neebing. The Jarvis River Watershed Assessment deemed the watershed to be in overall good-to-excellent health.

Once again, the LRCA partnered with Hill's Greenhouses Ltd. for the Private Landowner's Tree Seedling Assistance Program. Over 5,300 seedlings were planted during 2018, raising the total number of seedlings planted as part of the program since its inception in 2009 to over 143,000 tree seedlings.

- 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.



5,375 TREE SEEDLINGS PLANTED IN 2018

In partnership with Hill's Greenhouses Ltd.

HECTARES OF FLOODPLAIN MAPPING UPDATED 22,770

Neebing River Floodplain Mapping was updated during 2018.

2,080 HECTARES OF WETLANDS EVALUATED

The McIntyre River Watershed Wetlands Evaluation was initiated during 2018.

HECTARES OF WATERSHED ASSESSED 11,070

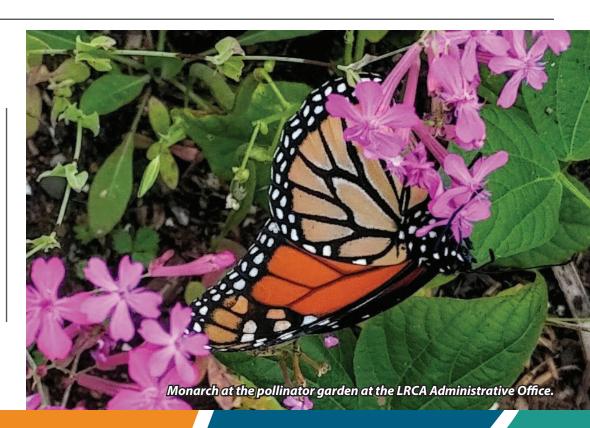
The Jarvis River Watershed was assessed during 2018.

8 Member Municipalities

+2,700 km²
Area of Jurisdiction

+140,000

Trees planted through the Private Landowners Tree Seedling Assistance Program





PROTECT & SUPPORT

Safeguard people, property and communities through robust watershed management.



Photos (left to right): weather station assembly in Dorion; water sampling in the Jarvis River Watershed; an ice-jam on the Whitefish River; erosion along the Kaministiquia River; the Neebing-McIntyre Floodway Diversion Structure; staff conducting snow surveys.

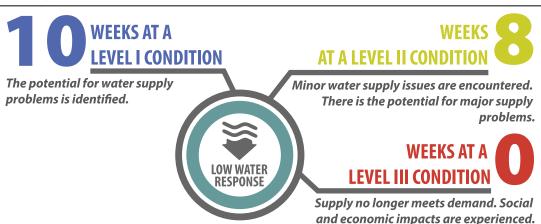
The safety of the residents of the Lakehead Watershed is of paramount importance to the LRCA, along with the protection of property, specifically related to the hazards of riverine flooding, erosion concerns and through the administration of development regulations, which directs development away from natural hazards.

Along with the protection of life and property from flooding and erosion hazards, the LRCA also protects shorelines, watercourses, wetlands and fill regulated areas through the administration of Ontario Regulation 180/06: Development, Interference with Wetlands and Alterations to Shorelines and Watercourses under the *Conservation Authorities Act* within our Area of Jurisdiction.

Staff diligently monitor rainfall amounts, streamflow gauges, snow depth and water content of snow, weather forecasts, water levels, ice jams and other local conditions as part of our Flood Warning System in which local Flood Messages are issued when warranted within our Area of Jurisdiction. We also administer the Low Water Response program, which provides early drought warning. In 2018, one Flood Outlook Statement was issued related to ice jamming on the Whitefish River and two flood watches were released over the summer, both related to high intensity rainfall.

The Neebing-McIntyre Floodway, that is owned and maintained by the Authority, protects the Intercity area and lower Neebing River from riverine flooding. On-going monitoring and maintenance is conducted to ensure the Floodway continues to provide protection up to the Regional Storm.

The LRCA's regulations staff were all busy during 2018, issuing 60 permits, commenting on *Planning Act* applications, fielding various general inquiries and creating nearly 900 property maps for local residents and agencies.



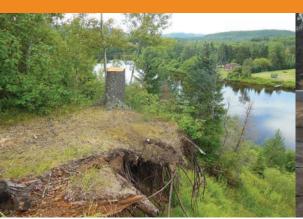
9 Streamflow Gauges

Precipitation Gauges

3 Snow Survey Sites

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

- Increase awareness of the impacts of floods and hazards and the importance of mitigation.
- Demonstrate effective land use planning and emergency flood management through a collaborative approach.
- Maintain and enhance flood control infrastructure to minimize the impacts of flooding, erosion, and sedimentation.
- Evaluate the priorities for the protection and management of wetlands and natural heritage features.
- Integrate the impacts of climate change into future actions.
- Align watershed decision-making with stakeholders outside of the jurisdiction.





FLOOD MESSAGES



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.

FLOOD WATCHES

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. 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.

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.

COMMENTS MADE ON PLANNING ACT **APPLICATIONS**

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

PROPERTY MAPS ISSUED

Maps are provided to illustrate regulated features on properties.

REGULATIONS

GENERAL INQUIRIES 3 7

Property and Permit consultations.



CONNECT & EXPLORE

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



Photos (left to right): Dorion Bird Festival guide Doug Tate observing waterfowl; Union Gas volunteers installing a roll-in dock at Hazelwood Lake Conservation Area; new entrance sign at Mission Island Marsh Conservation Area; students studying a dragonfly; trail maintenance at Hurkett Cove Conservation Area; annual fall mushroom hike; paddler at Hazelwood Lake Family Fun Day.

In 2018 LRCA staff continued to maintain our Conservation Areas, plan public events and outreach programs and conduct environmental education programs with local schools and community groups. One of the highlights of 2018 was the installation of the new metal entrance sign at Mission Island Marsh Conservation Area. The sign was designed and fabricated by Despres Metal Artwork and is considered to be a work of public art.

General maintenance of the Conservation Areas and publicly-accessible Forest Management Properties always keeps the LRCA field crews busy. Over 2,370 kilograms of garbage and debris was removed from area waterways, including shopping carts, bicycles, tires, drug paraphernalia, syringes, and much more.

Many new community partnerships were created during 2018, and several long-standing partnerships were continued. The Authority hosted the 1st Annual Partners Gathering with EcoSuperior and the City of Thunder Bay in an effort to collaborate and grow partnerships.

The LRCA's education program had continued growth, reaching more than 3,000 program participants.

71 VOLUNTEERS

GUEST SPEAKERS

COMMUNITY

CORPORATE SPONSORS

Lakehead Conservation Foundation
Ministry of Seniors Affairs
Ontario Power Generation
Red Lion Smokehouse
TD Friends of the Environment Fund
Union Gas

PRIVATE DONORS

60

69 COMMUNITY PARTNERS

Adopt A Mutt Rescue
Caring Hearts Cat Rescue & Sanctuary
City of Thunder Bay
City of Thunder Bay Animal Services

Confederation College Let's Talk Science

Criss Cross Racing Dorion's Canyon Country Birding Festival

Earth Rated EarthCare

EcoSuperior Feeding Program for the Northern

Dogs Flashback Photo Fort William Historical Park

Gear Up For Outdoors Hill's Greenhouses Ltd.

KBM Resources Group Lake Superior National Marine Conservation Area Lakehead Canoe Club Lakehead University LU Archaeology Department LU C.A.R.I.S.

Ministry of Environment and Climate Change

Ministry of Natural Resources and Forestry

Ministry of Northern Development and Mines

Ministry of Transportation Municipality of Neebing Municipality of Oliver Paipoonge Municipality of Shuniah Natural Edge EcoPark

Nature Conservancy of Canada Neebing Emergency Services Neebing Fire/Rescue Association No. 7 Grannies Rustic Pizza Northern Lights Dog Rescue Northern Reach Rescue Network NWO Geocachers

Ontario Nature Ontario Parks

Path of the Paddle

Ontario Power Generation Parks Canada

Rainy Lake Conservancy
Regional Food Distribution Association

S.A.N.D. Adventure Expeditions Scouts Canada

Seek Adventure & Tours Skyline Falconry

Stewardship Youth Rangers The Dog Classroom

Thunder Bay 55+ Centre Thunder Bay Carvers

Thunder Bay District Health Unit Thunder Bay Field Naturalists Thunder Bay Fire and Rescue Thunder Bay Geology and Lapidary Club

Thunder Bay Hiking Association
Thunder Bay Indigenous Friendship
Centre

Thunder Bay Master Gardeners
Township of Conmee

Township of Conmee
Township of Dorion
Township of Gillies

Township of O'Connor Union Gas Helping Hands In Action United Way Day of Caring

Urban Greenscapes Walk With Doc WALKstock

Wayfinder Trails & Recreation Wilderness Supply

Wildlife Preservation Canada

- 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.



WORKSHOPS

TRADESHOWS & PRESENTATIONS

OUTREACH

VISITORS TO CONSERVATION AREAS 300K+

PUBLIC EVENTS

PROGRAMS 83

EVENT ATTENDEES

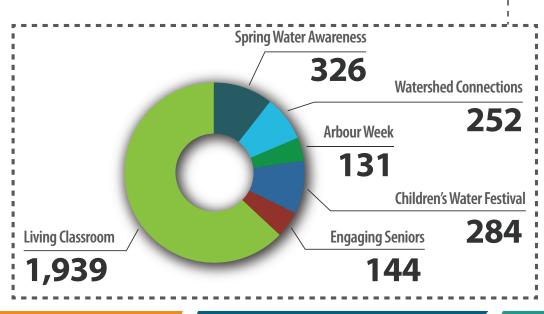
1,300+

PROGRAM PARTICIPANTS

3,076

+2,500

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





GOVERN & ENHANCE

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



Photos (left to right): LCF Cheque Presentation from Foundation Member Kestrel Wraggett to LRCA Chair Donna Blunt; a copy of the LRCA's Administrative By-Law; studying Wampum Belts as part of Indigenous Engagement Training at the Latornell Conservation Symposium; LRCA Chair Donna Blunt reviewing and signing administrative documents; Safety Groups Program Binder.

ADMINISTRATION

In 2018 the Provincial Government moved Conservation Authorities under the Ministry of Environment, Conservation and Parks from the Ministry of Natural Resources and Forestry.

In an effort to optimize performance and transparency, several polices were updated and created, including the Administrative By-Law, which outlines the operation of the Board of Directors. A continuing focus remains around the Health and Safety of our employees, which resulted in training and policy development, as well as joining the Northern Ontario Safety Group. Staff also took part in Indigenous cultural awareness and engagement sessions, in an effort to increase our understanding of indigenous knowledge and practices.

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

ADMINISTRATIVE BY-LAW ADOPTED

Provides guidance on the operation of the General Membership.

NEW HEALTH & SAFETY POLICIES CREATED

Continued commitment to the Health and Safety of Staff.

23 STAFF TRAINING SESSIONS

Commitment to ongoing learning and development of staff.

POLICIES CREATED & AMENDED

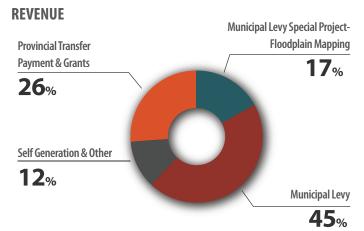
Continued effort to improve accountability and transparency.

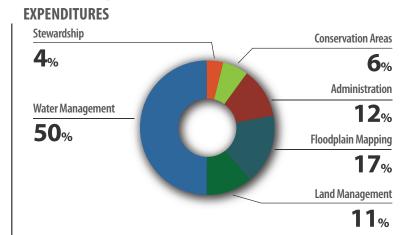
- Optimize organizational performance through policy and measurable actions to improve accountability and transparency.
- Build a resilient financial model based on capacity, capabilities and public expectations.
- Create a dynamic culture of learning, safety, and positivity.
- Increase awareness of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



ONSERVATION FOUNDATION

The LRCA's budgeted 2018 revenue and expenditures totalled approximately \$2,847,752.00.





\$18K RAISED

Funds raised by the LCF help fund the LRCA's Environmental Education program.

FUNDRAISING EVENTS

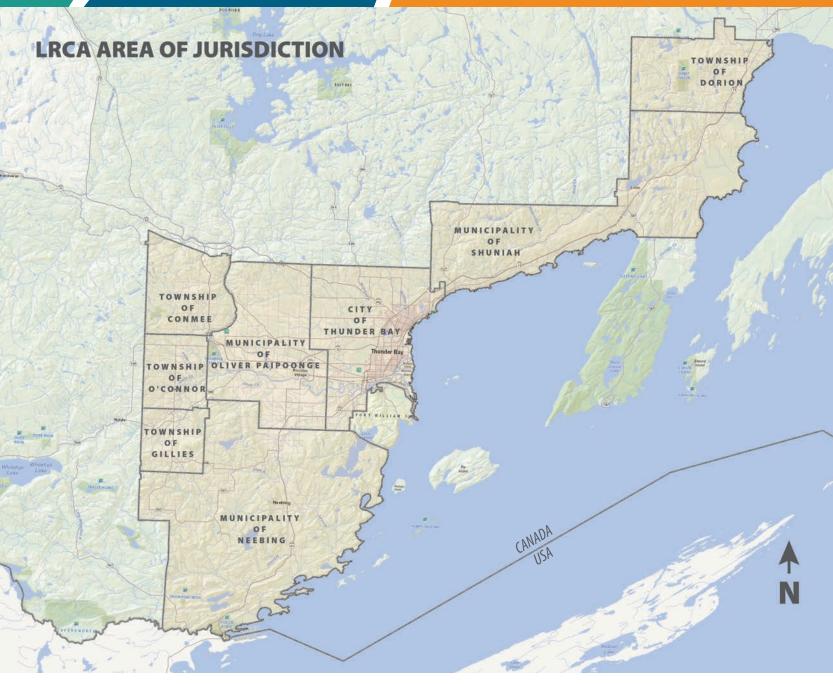
2018 Conservation Dinner & Auction 2018 Wine Tasting & Dinner at Whitewater

13 FOUNDATION MEMBERS

Andrea Goold, **President**Andrew Dubinsky, **Vice-President**Krysta Alexander, **Secretary**Mary Provenzano, **Treasurer**Ken Boshcoff
Shelly Brown
Mary Creed

Dr. Bradley Jacobson Erin Knight Virginia Lane Reba MacDonald Kestrel Wraggett Wendy Wright DONATIONS 75

Donations include auction items, local art, cash donations and corporate sponsorships.



"CONSERVE TODAY ... FOR A BETTER TOMORROW"



LRCA ESTABLISHED 1954

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