













LAKEHEAD REGION

CONSERVATION AUTHORITY

VISION

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

BOARD

Donna Blunt, Chair Municipality of Shuniah Grant Arnold, Vice-Chair Township of Conmee Ed Chambers (Jan. - Mar.) Township of Dorion Joel Brown (April - Dec.) Township of Dorion Rudy Buitenhuis *Township of Gillies* Erwin Butikofer Municipality of Neebing Jim Vezina Township of O'Connor

Allan Vis Municipality of Oliver Paipoonge

Andrew Foulds City of Thunder Bay

Trevor Giertuga City of Thunder Bay Andrea Goold City of Thunder Bay Umed Panu City of Thunder Bay

MISSION

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

Ryan 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 Michelle Sixsmith Development Regulations Officer

Rena Viehbeck Education Coordinator

Dave Olson Field Operations Lead Hand (Seasonal)

Neil Hillis **Labourer** (Contract)

Jessie McFadden Watershed Stewardship Technician 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. 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: A Barred Owl near Hurkett Cove Conservation Area.



Message from Donna Blunt, LRCA Chair

The past year has been a difficult one for everybody, as we all collectively navigated the "new normal" of the pandemic. I am extremely proud of how the staff of the Lakehead Region Conservation Authority were able to rise to the challenges presented during 2020; not only were staff able to adapt to the constantly changing issues related to COVID-19, but they were able to do so while maintaining the high level of service, efficiency and quality of work that residents of the Lakehead Watershed have come to expect. I am very grateful to the staff of the LRCA and their hard work during 2020.

I also wish to express my thanks and gratitude to all of my fellow Board Members on the LRCA Board of Directors, as well as to LRCA CAO Tammy Cook for her leadership and resiliency throughout the past year.

I am also very proud of the fact that the LRCA was able to continue to provide the community with access to our beautiful Conservation Areas. As more and more people explored nature during 2020, our Areas saw a huge increase in use, which has been so beneficial for the physical and mental wellbeing of all visitors.

I look forward to working with the Board and staff of the LRCA in 2021, with full confidence that we will be able to continue to rise to any and all challenges we will face.

Message from Tammy Cook, LRCA CAO

As with the rest of the world, the Lakehead Region Conservation Authority (LRCA) was faced with unprecedented challenges in 2020 resulting from the pandemic. In response, LRCA staff responded to the challenges presented and quickly adapted to create and adhere to new Health and Safety policies and measures; transitioned to working from home virtually; adapted and created new forms of virtual education programming; continued to provide recreational spaces for the public; and continued to administer our important role in flood forecasting and managing programs related to natural hazards.

It became evident early on during the pandemic that the LRCA's Conservation Areas were important in providing a safe outdoor accessible space for people to reconnect with nature in order to maintain their mental and physical well-being. The closure of other outdoor spaces during the year resulted in record breaking visitors to our Areas. While the increased usage presented some challenges, we are grateful that we were able to provide some refuge during these challenging times and are hopeful that all our new and regular visitors continue to enjoy and respect our areas in the future.

During 2020, long-time Board Member Ed Chambers of the Township of Dorion stepped down from his duties as Board Member after having served over 24 years on the LRCA Board of Directors. Throughout his time as a Board Member, Mr. Chambers has been an invaluable asset and advocate for the Authority and has been a dedicated supporter of the LRCA's Vision and Mission. Mr. Chambers was also one of the driving forces of the extremely popular Dorion's Canyon Country Birding Festival, which the LRCA took over in 2019. I would like to thank Mr. Chambers for all his contributions to the Authority and wish him well in the future. His constant positivity and gentle nature will continue to be missed by all of us at the Authority.

Looking forward to 2021, we are optimistic that better times are ahead, and that we can safely offer all our regular programming and events in the near future and personally reconnect with all our partners who collectively work with us towards a healthy, safe and sustainable Lakehead Watershed.



CONSERVE & SUSTAIN

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

Collaborate with member municipalities and community partners to foster an integrated watershed management approach. Optimize decision-making by sharing data and knowledge.



INITIATIVES:

Photos (left to right): LRCA staff speaking with the Ocean Bridge delegation; purple loosestrife pulled from the Floodway; Fisherman's Park West prior to remediation work; a drone used to obtain aerial photos of Wakefield Common; staff conducting a bio-inventory at Wakefield Common; Satiny Willow found at Wakefield Common; the LRCA greenhouse being used to propagate native plants in preparation for our new Superior Stewards program.

The LRCA hired a Watershed Stewardship Technician Intern position with funding from the College and Institutes Canada (CICan) Career-Launcher Internship program, which is funded through Environment and Climate Change Canada's Science Horizons Youth Internship Program. Using additional funding from the Ministry of Natural Resources and Forestry (MNRF) the intern began creating the LRCA's new Superior Stewards shoreline protection program, which will be launched in 2021.

The LRCA worked closely with the Thunder Bay District Stewardship Council and the City of Thunder Bay to design a concept plan aimed at restoring wildlife habitat, rehabilitating Lake Superior's shoreline, recreating coastal wetlands, and providing passive recreation opportunities at Fisherman's Park West. The LRCA collaborated with stakeholders to prepare a final design for the project and organize public feedback. A volunteer event was hosted to clean up the site and remove invasive species.

In support of Environment and Climate Change Canada's objective of addressing one of the last remaining beneficial use impairments within the Thunder Bay Area of Concern (AOC), the LRCA carried out desktop analysis and field investigations to assess riparian and nearshore habitat health within the AOC. The collected data was interpreted, combined with existing information, and presented in a final summary report and an interactive Story Map online tool. The findings included a list of proposed habitat rehabilitation projects and metrics by which to advance the restoration of riparian and nearshore habitat within the AOC.

The LRCA once again hosted a delegation of youth through the Ocean Bridge initiative. The primary project completed by the group was a bio-inventory of the flora and fauna at Hurkett Cove Conservation Area, as well as the removal of invasive species. The delegation also benefited from some LRCA-led environmental education programming and traditional teaching at the site, which helped inform the historical, ecological, and cultural significance of the area for a more robust context for the bioinventory project.

LRCA staff also conducted a bio-inventory of Wakefield Common, which is a recently donated property, in an effort to provide data to Lakehead University for the use of Natural Resources Management students, who used Wakefield Common as a case study site for a major project.

Due to the COVID-19 pandemic, the LRCA's popular Tree Seedling Program was cancelled in 2020. The program, which is held in partnership with Hill's Greenhouses, is scheduled to return in 2022. Also due to the pandemic, some summer student positions were not filled, which resulted in not completing a watershed assessment in 2020. The LRCA looks forward to continuing those vital research projects in the future. The LRCA did complete floodplain mapping updates for the Kaministiquia River, Pennock Creek and Mosquito Creek, which provides valuable data for use in the LRCA's programs to manage natural hazards.

92,035 HECTARES OF FLOODPLAIN MAPPING STUDIES UPDATED

Support, strengthen and encourage environmental stewardship and sustainability. Manage future growth through a systematic evaluation of assets and landholdings.

HECTARES 83,866

study updated during 2020

study updated during 2020.

Mosquito Creek Floodplain Mapping study updated during 2020.

Member Municipalities

+2,700 km² Area of Jurisdiction

+151,000

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): the Current River during a routine river inspection; vegetation removal from the Diversion Channel; a beaver-damaged tree identified during annual Neebing River inspection; an example of updated floodplain mapping of Pennock Creek; new culverts installed on Sitch Road in O'Connor.

In 2020, the LRCA continued to conduct its Flood Warning System program, which required some months to be conducted remotely. Only one Water Conditions Statement (Flood Outlook) was issued in the spring related to the spring melt. The Neebing-McIntyre Floodway did not divert during 2020, which was the fourth year in a row with no diversion. Below average precipitation was recorded in 8 of 12 months, which resulted in declared Low Water Conditions between May and September. Despite the lack of precipitation, Lake Superior water levels remained at higher-than-average levels, with all-time record levels set in January and February, exceeding the previous records set in 1986. As a result of the high lake levels a Shoreline Conditions Statement regarding high lake levels was in effect for the majority of the year. The LRCA's 31st annual Spring Melt Meeting, which is typically held in person, was provided via e-mail, due to being held during the on-set of the pandemic.

As part of the 2020 Ontario Flood Forecasting and Warning Workshop webinar series, the LRCA's Watershed Manager conducted a presentation to program participants regarding the 2019 Whitefish River flood event to outline what happened and lessons learned. Applicable staff would typically attend this conference in person; however, it was offered virtually as an extensive webinar series in 2020.

Routine annual maintenance of the Neebing-McIntyre Floodway occurred as usual in 2020, including the removal of vegetation from the Diversion Channel and minor bank repair along Ford Street. The completion of on-going maintenance ensures that the Floodway operates to its designed capacity of providing flood protection up to and including

the Regional Storm.

During 2020, floodplain mapping studies for the Kaministiquia River, Mosquito Creek and Pennock Creek were updated. The Pennock Creek Floodplain Mapping Study was expanded to include floodplain mapping for the entirety of the creek, incorporating areas that had previously not been mapped. The LRCA utilizes floodplain mapping for the administration of Ontario Regulation 180/06 under the *Conservation Authorities Act* and when providing comments on *Planning Act* applications as part of the one-window review. The data is also provided to the applicable Member Municipalities for use by their engineering and planning departments. In order to enforce O. Reg. 180/06, the Chief Administrative Officer was designated as a Provincial Offences Officer, joining the Watershed Manager, who had previously been designated in 2019.

It was a busy year for regulations staff at the Authority; with many people staying home, consulting with staff and working on projects around their property, including a continued increase of people dealing with erosion related to the high Lake Superior levels. In spite of the pandemic, 75 permits were issued in 2020.

9 Streamflow Gauges

11 Precipitation Gauges

3 Snow Survey Sites

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

- 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 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.

FLOOD OUTLOOK STATEMENT

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

MONTHS OF LAKE SUPERIOR SHORELINE CONDITIONS STATMENTS

The LRCA issued a Shoreline Conditions Statement for the shores of Lake Superior due to 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 ISSUED

Maps are provided to illustrate regulated features or properties.

ON PLANNING ACT APPLICATIONS

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

REGULATIONS

GENERAL INQUIRIES 384

Property and permit consultations.



CONNECT & EXPLORE

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

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.



Photos (left to right): Tree Expert Stephane Audet at our Trees & Fall Colours quided hike; new entrance sign hand-made by LRCA Lands Manager Ryne Gilliam; the new floating dock at Hurkett Cove, courtesy of Parks Canada; a Junior Explorer examining aquatic wildlife; Ryan Wilkie of Lakehead University at our Birds & Birding guided hike; Dr. Leonard Hutchison of Lakehead University leading our Fall Mushroom Hike.

COVID-19 presented some challenges related to the operation of the Conservation Areas in 2020; however, all areas remained open throughout the year. As a result, the LRCA's Conservation Areas experienced a huge increase in visitation and new users as more and more people found themselves reconnecting with nature for their mental health and physical well-being. Field staff were extremely busy throughout the year and with only half the usual summer staff hired they managed to maintain all LRCA-owned properties for the use and enjoyment of all visitors. While there were some frustrating instances of vandalism and unwanted behaviour throughout the year, for the most part the majority of visitors were respectful of all COVID-19 restrictions and Conservation Area Regulations while visiting.

In 2020 approximately 475,000 people visited Conservation Areas, compared to the typical average of about 300,000 annual

visitors. The highest visited Conservation Areas during 2020 were Mission Island Marsh Conservation Area and Cascades Conservation Area. with over 74,000 and 73,000 visitors each, respectively.

A new floating dock was installed at Hurkett Cove Conservation Area for easy access to Lake Superior. The dock was made possible as a result of funding from Parks Canada.

A new entrance sign was installed at Cedar Falls and new hand railings were installed at Cascades; additionally, new picnic tables were also installed at both Areas.



City of Thunder Bay Confederation College EcoSuperior Enbridge Inc. Flashback Photo Kay Lee Photography KBM Resources Group Lake Superior National Marine Conservation Area

Lakehead University LU C.A.R.I.S. Ministry of Environment, Conservation and Parks Ministry of Natural Resources and Forestry Ministry of Northern Development and Mines Ministry of Transportation Municipality of Neebing

Municipality of Oliver Paipoonge

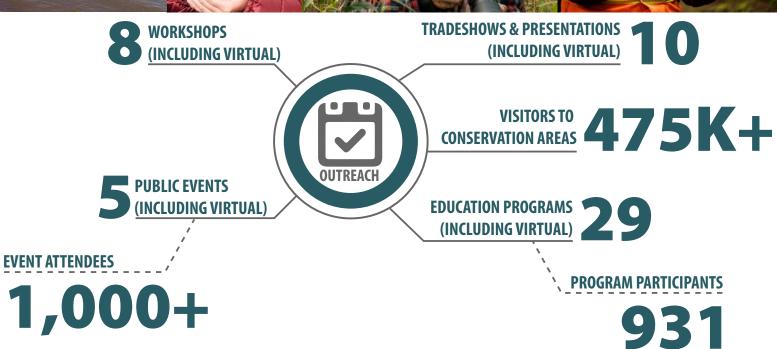
Municipality of Shuniah

Nature Conservancy of Canada Ocean Bridge Ontario Nature Ontario Parks Ontario Power Generation Parks Canada Regional Food Distribution Association Shunia Fire and Rescue Thunder Bay 55+ Centre Thunder Bay District Health Unit Thunder Bay District Stewardship Council Wayfinder Trails & Recreation Thunder Bay Field Naturalists

Thunder Bay Indigenous Friendship Thunder Bay Master Gardeners Thunder Country Diving Township of Conmee Township of Dorion Township of Gillies Township of O'Connor Unriver Running Urban Greenscape

+2,500hectares 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 2020 was impacted by the pandemic, resulting in the cancelation of most events and education programs. We were, however, still able to safely host several small-scale guided nature hikes as part of our Living Classroom Program, generously sponsored by the TD Friends of the Environment Fund. We hope to offer similar programming during 2021, funding and COVID-19 restrictions permitting.

In order to continue to provide environmental programming, LRCA staff quickly adapted, created and implemented new virtual programming. Additionally, staff conducted several virtual presentations for several Lakehead University courses, as well as several small, guided hikes for Lakehead University and Confederation College students.

The safety of our staff, employees and visitors to our Conservation Areas is paramount. The LRCA has and continues to follow all restrictions, Provincial Orders, and local health unit recommendations in response to the continuing COVID-19 pandemic.



GOVERN & ENHANCE

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



DISTANCING!

All visitors must keep at least two metres / six feet away from others.

WWW.LAKEHEADCA.COM

FOLLOW THE RULES!

We encourage everyone to STAY HOME however if you DO visit a Conservation Area, you MUST follow the rules or we will be forced to close the Areas to the public.

- Stay at least two metres apart from others
- Remove all of your own garbage
- Pets are to be leashed at all times

WWW.LAKEHEADCA.COM

Photos (left to right): The 2020 Conservation Dinner & Auction fundraising event occurred in early February 2020, pre-pandemic; examples of some COVID-19 safety messaging used on social media and in our Conservation Areas; screenshot from a virtual LRCA Board Meeting; newly-installed safety and regulations signage at Silver Harbour; LRCA Chair Donna Blunt presenting Board Member Ed Chambers with a collage in honour of his 24 years of service on the Board.

In order to allow for the LRCA Board of Directors to meet electronically, the LRCA's Administrative By-Law and Hearing Guidelines were amended early in 2020. This necessity has facilitated the transition to virtual Board Meetings, which have been in practice since April 2020.

The LRCA executed Memorandums of Understandings with our Member Municipalities and the Lakehead Rural Planning Board to initiate a new Fee for Service model for the delegated Plan Review program, in which the LRCA reviews all Planning Act applications in regards to conformity to Section 3.1 (Natural Hazards) of the Provincial Policy Statement.

The LRCA joined WSIB's new Health and Safety Excellence Program in 2020, which led to the creation of five new health and safety policies. Additionally, several health and safety policies and procedures related to COVID-19 were created and implemented.

Late in 2020, the Province enacted changes to the Conservation Authorities Act, that have and will result in changes to how all authorities operate in the future. New regulations will be forthcoming in 2021.

Conservation Authorities

Conservation **Authorities** in Northern Ontario

in the Province of Ontario

on the Lake Superior shoreline

1 of 36 Conservation Authorities

NEW HEALTH & SAFETY POLICIES CREATED Continued commitment to the Health

Commitment of ongoing learning and development of staff.

STAFF TRAINING SESSIONS

(INCLUDING VIRTUAL)

ADMINISTRATION

POLICIES CREATED & AMENDED

and Safety of Staff.

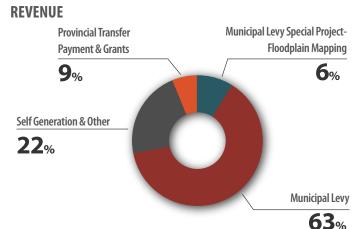
Continued effort to improve accountability and transparency.

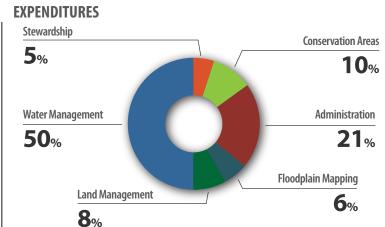
INITIATIVES:

- 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.



The LRCA's budgeted 2020 revenue and expenditures totalled approximately \$2,415,719.00.





\$17.5 KRAISED

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

FOUNDATION MEMBERS

Andrea Goold, President Erin Knight, Vice-President David Gibbs, Secretary Krysta Alexander, Treasurer Ken Boshcoff

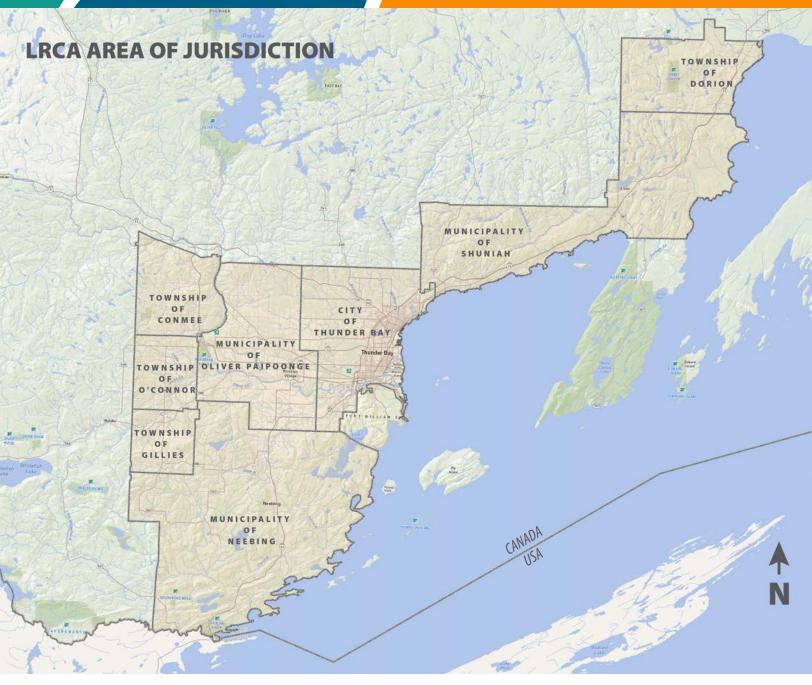
Mary Creed Virginia Lane Fiorella Latimer Mary Provenzano Wendy Wright

FUNDRAISING EVENT

2020 Conservation Dinner & Auction

DONATIONS RECEIVED

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



"CONSERVE TODAY ... FOR A BETTER TOMORROW"



LRCA ESTABLISHED 1954

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