

CHAIRMAN'S MESSAGE - *by Bill Bartley*



Land and water resources throughout the region are closely linked in a watershed.

What we as individuals, business or industry do in our daily lives, can impact the quality of our environment. How we use the land or treat the water through such activities as property development or waste disposal

can have an impact on the health of the entire ecosystem, especially areas downstream.

Activities that we take for granted, or which seem necessary as part of every day life in a modern society, can affect the conditions of our lakes, rivers, streams, forests and communities in the watershed. That's why it's important for everyone to consider what we do and the impact it may be having on the health of our environment as well as the people and animals who live here.

A watershed is defined as an area of land which is drained by a river or a stream into another body of water such as a wetland or lake. More than 90-percent of Ontario's population, including everyone in the Lakehead Region, lives within watersheds which are managed by a Conservation Authority.

Since the LRCA was created more than 50 years ago, we

have been providing programs and services that help to maintain a balance between human, environmental and economic interests. Some of these programs include Source Water Protection, protection from flooding and erosion, water quality improvement, land use planning, recreation and education programs.

The Lakehead Region Conservation Authority works in partnership with its eight member municipalities, landowners, community groups, government, environmental agencies and other stakeholders to plan and deliver these programs throughout the watershed.

This would not be possible without the hard work of the Authority's staff. I thank them as well as the many volunteers and members of the Board of Directors for their commitment to Conservation throughout the past year and in the year ahead.

Board of Directors

The Board is responsible for making policy, budget and regulatory decisions affecting the Lakehead Region Conservation Authority.

Chairman	Bill Bartley, Shuniah
Vice-Chairman	Phil Jarvis, Thunder Bay

Lauri Pajamaki	Conmee
Ed Chambers	Dorion
Henry Jantunen	Gillies
Beverley Dale	Neebing
Lee-Ann Nygard	O'Connor
David Hearn	Oliver Paipoonge
Dick Waddington	Thunder Bay
Gary Murchison	Thunder Bay
Lawrence Timko	Thunder Bay

The Lakehead Region Conservation Authority 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: flood control; floodplain management; wetland protection; erosion control; reforestation; conservation lands; and conservation education.

Visit us for Regulation related inquiries, brochures and conservation information.

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Email: info@lakeheadca.com
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ONTARIO REGULATION 180/06:

DEVELOPMENT, INTERFERENCE WITH WETLANDS & ALTERATIONS TO SHORELINES & WATERCOURSES

The Fill, Construction and Alteration to Waterways Regulation was amended in 2006 and is now known as the "Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation" (Ontario Regulation 180/06, under O. Reg. 97/04). This Regulation may affect you if your land is in a regulated area. Your land may be regulated if it meets one of the following criteria:

- ♦ ***THERE IS A WATERCOURSE, LAKE SHORELINE or PROVINCIALLY SIGNIFICANT WETLAND ON YOUR PROPERTY***
- ♦ ***YOUR PROPERTY BACKS ONTO A RIVER VALLEY OR RAVINE***
- ♦ ***ALL OR PART OF YOUR PROPERTY IS ZONED "HAZARD LAND" OR "USE LIMITATION."***

The intent of the Regulation is to prevent the loss of life or property damage from the hazards of flooding and erosion, and to conserve and enhance natural resources.

The Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation is a key tool in fulfilling this mandate because it gives the LRCA the power to regulate



Revised regulations are intended to help prevent property damage such as that caused during the Shuniah flood in 1997.

development in areas where the control of flooding, erosion, dynamic beaches, pollution, or the conservation of land may be affected by development.

The Regulation applies to all lands within the LRCA's jurisdiction which includes the City of Thunder Bay, Municipalities of Neebing, Shuniah, Oliver Paipoonge and the Townships of O'Connor, Conmee, Gillies and Dorion.

Prior consultation with the Authority is recommended before starting any project near or within the regulated area.

Screening maps have been developed which depict the "Approximate Regulated Area." These maps can be viewed at the Authority's office.

In addition, the LRCA has a Level II Agreement with the Department of Fisheries and Oceans. The LRCA is responsible for evaluating proposed work in, on or near water as to its impact on fish habitat within the LRCA Area of Jurisdiction.

For more information visit www.lakeheadca.com.

DID YOU KNOW?

Wetlands
hold and filter water
to prevent droughts and floods.

IN THE WATERSHED

Lakehead Conservation undertakes resource inventory studies of various facets of our watershed. By studying existing conditions and trends, the Authority can recommend actions that will ensure future development will not adversely impact the watershed.

In 2006, Summer Experience Program students conducted an assessment of Welch Creek (Right) which is located in the Municipality of Shuniah. They conducted an inventory of the Creek's characteristics such as water quality, plant and animal life. The water quality appears to be very healthy at this time. The information gathered can now be used as a bench mark for future monitoring of the watershed.

Controlling river bank erosion helps to protect property, reduce the risk of flooding and conserve habitat.

In the past, erosion control and bank stabilization projects have been completed on sections of the Neebing-McIntyre Floodway, Neebing River and Kaministiquia River as well as Cedar Creek, Corbett Creek, Oliver Creek and the Slate River.

In 2006, work was completed on an erosion protection project along a 50-metre section of Riverside Drive in Thunder Bay.

The McIntyre River had eroded the bluff to within three metres of the roadway at one spot. Remedial work included the placement of rip-rap (blasted rock) to prevent damage to the road in the future.



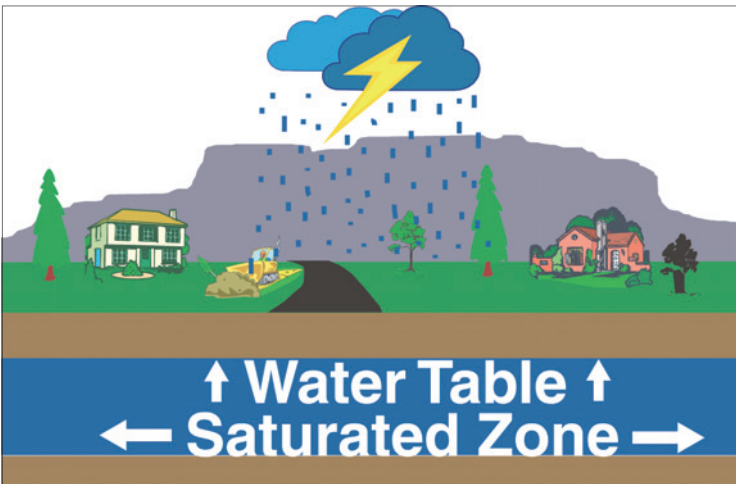
On Wednesday May 17 the Lakehead Region Conservation Authority (LRCA) held a tree planting event at Mission Island Marsh Conservation Area. This was held in conjunction with Arbour Week activities. Volunteers planted over 300 seedlings donated by the Forest Renewal Co-op and Hill's Greenhouses. Pictured left to right are Councillor Lawrence Timko, Jane Todd and Derrick Brooks of Ontario Power Generation (OPG) and Bill Bartley, Chairman of the LRCA. OPG donated funds to plant several large trees and rose bushes at the Marsh. Other Arbour Week activities included a tree planting by Grade 3 students at Kakabeka Falls Public School.

(LEFT) More than 6-tonnes of Purple Loosestrife was dug up during Purple Loosestrife Control Days in August. Ontario Rangers from Sleeping Giant Provincial Park worked on patches in Oliver Paipoonge and Shuniah.

www.lakeheadca.com



PROVINCIAL GROUNDWATER MONITORING NETWORK



The water beneath our feet is a good indicator of the health of our community.

Groundwater is water which is found beneath the Earth's surface. It is between the cracks and spaces in the soil, sand and rock. Groundwater comes from precipitation such as rain or snow which soaks into the ground. Eventually, at certain depths, the earth becomes saturated with water. This is called the "Saturated Zone" and the top of the zone is referred to as the "Water Table."

BELOW: Water sampling is conducted at one of the LRCA's Provincial Groundwater Monitoring Network well sites. The sampling is conducted on a regular basis by LRCA staff and the Ministry of the Environment.



In Northwestern Ontario most of this groundwater is clean. But it can become polluted. Some causes of the contamination may be leaking oil or gas storage tanks, or the overuse of fertilizers. Just like the rain or melting snow, these toxic materials seep down through the soil. While some of it gets filtered, some also makes its way into the groundwater.

We count on Groundwater for our drinking water. Many rural residents get their water from wells.

But because groundwater is so deep under the Earth, it's difficult and expensive to clean. Contamination may make some water supplies unsafe for drinking and may even endanger our health.

The Lakehead Region Conservation Authority has partnered with the Ontario Government to establish a system to monitor groundwater conditions. The Provincial Groundwater Monitoring Network (PGMN) measures changes in water levels and water quality.

Samples taken from these wells provide information which will help with present and future decisions on water-takings, drought management and land-use planning.

DID YOU KNOW?

The average Canadian
uses over 1300L
of water a day!

2006 HIGHS AND LOWS



Unusually high rainfall in the autumn of 2005 led to high winter water flows along the Kaministiquia River. Over the winter this developed into frazil ice which caused flooding concerns at Fort William Historical Park and other properties along the River.

Frazil ice is a long fibrous ice crystal which is similar to slush. It is created by conditions such as cold temperatures, high wind, large areas of open water and sufficient water flow in the stream. After the frazil ice is generated it floats downstream and is pulled under existing ice cover creating a plug. Subsequently ice and water levels rise due to the blockage.

In the spring, the Neebing-McIntyre Floodway (below) was pressed into service to divert excess waterflows after warm weather accelerated the spring melt.



A prolonged drought over the summer of 2006 resulted in low water flows. Many creeks and rivers ran at all time lows. In November, a Level II Low Water Advisory was issued and all water users were asked to reduce water use by at least 20%.

The Lakehead Region Conservation Authority maintains a network of Streamflow Gauges which measure water levels and precipitation. This information assists in the forecasting of floods and dry conditions.

In the winter, snow sampling is conducted at several sites. This helps to predict water levels in the spring and potential concerns.

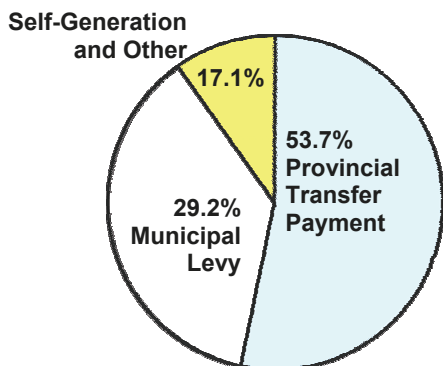
Rainfall is also tracked at several locations around the Region. This is done by staff as well as observers in rural areas.

Combined, this data helps staff to determine if there is a potential for flooding or drought. Accordingly, from time to time, the LRCA may issue Watershed Conditions Advisories, Flood Warnings or Low Water Condition alerts.

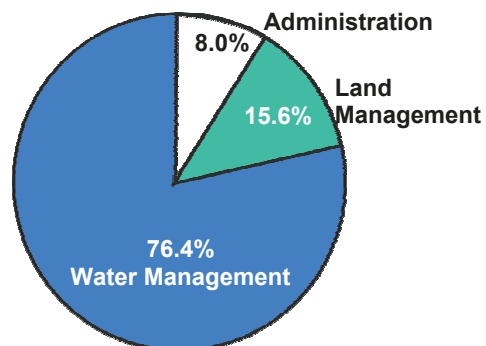


2006 FINANCIAL SUMMARY

REVENUE



EXPENSES



Lakehead Conservation's budgeted 2006 revenue and expenditures were approximately \$2.2 million.

Annual expenses include administration of flood and erosion control programs; flood forecasting and warning based on data collected from our Streamflow Gauges; Provincial Groundwater Monitoring Network; plan input and review; forest management; watershed planning; operations and development of Conservation Areas and Hazelwood Lake Centre; and community outreach programs including education.

Revenue is derived primarily from three sources, Provincial/Federal Government Grants, Municipal Levies and self-generation which comprises user fees, partnerships with other agencies, donations and sponsorships, etc. This past year, our first Children's Water Festival received excellent financial support through grants, donations and sponsorship plus volunteers who helped to make this event a huge success.

This is the second year that the provincial government funded at a 100% our activities related to Source Water Protection. This funding is reflected in the Provincial Transfer Payment in the revenue pie chart.

As property owners, we pay taxes on our 2500 hectares of land which is comprised of our office, flood and erosion control, conservation, forest management and lastly our Conservation Areas, five of which provide access to Lake Superior. In 2006, we paid about \$58,900 in taxes.

Much of our work is highlighted throughout this Annual Report. Appearing in the centre of the Report is a map outlining our area of jurisdiction together with the scientific boundary which is the basis for Source Water Protection planning.

Lakehead Conservation Staff

General Manager/Secretary-Treasurer
Mervi Henttonen
Director of Technical Operations
Steve Suke
General Superintendent
Tom Mikulinski
Water Resources Technologist
Tammy Cook
Community Relations Officer
Richard Boon
Finance and Administrative Assistant
Laurie Henderson

Source Water Protection (SWP) - Project Manager
Melanie Mathieson
SWP GIS/Data Specialist
Roman Augustyn
SWP Communications Specialist
Jordan Forbes
SWP Administrative Assistant
Valerie Swan
Children's Water Festival Coordinator
Joanne Wolnik

The Lakehead Region Conservation Authority is a member of Conservation Ontario

Community Outreach and Education

Raising awareness of conservation issues and developing an appreciation for the wonders of nature are essential to the conservation of our watershed. To accomplish this the Lakehead Region Conservation Authority undertakes several special events throughout the year and welcomes school tours at its Conservation Areas.



LEFT: 2006 saw the introduction of Plein Air art to the Lakehead Region. A festival, in which artwork was created outdoors right from the subject, rather than being created in a studio, was held in August. Pictured here, left to right, are Luke Nicol - first prize winner in the People's Choice Competition, LRCA Vice-Chairman Phil Jarvis, Anthony Epp - third prize winner, and Ken Crawford - second prize winner.

BELOW: A new interpretive panel explains the McKellar River Habitat Creation Project at Mission Island Marsh Conservation Area. Other new signage was installed at Hazelwood Lake Conservation Area and Mills Block Forest.



ABOVE: Students at Kakabeka Falls Public School plant a Birch Tree donated by the Lakehead Region Conservation Authority as part of local Arbour Week activities.



RIGHT: Students from Corpus Christi School examine the work of a beaver on a tree at Mission Island Marsh. The LRCA manages over 2,500 hectares of conservation lands, many of which are suitable for field trips. Study Kits are also available to help teachers prepare for a visit to our Conservation Areas.



GROUP TOURS:

Guided Tours = \$3/person
Self-Guided = \$25/bus

2007 Calendar of Events



Residents from the Dorion area participate in a guided nature walk. The walk was just one activity during the LRCA's Community Picnic held in August at Hurkett Cove Conservation Area. Volunteers from Dorion Bible Camp and Wilderness Supply Co., provided canoe rides. (Photo by Ed Chambers)

HAZELWOOD LAKE CENTRE



Available for rental and catered events
May to October.
Call 344-5857 or 767-3565
for information.

The Lakehead Region Conservation Authority is pleased to be presenting or participating in these events during 2007:

- February 8 Lakehead Conservation Foundation Dinner Auction - Valhalla Inn
- April 28 Spring Waterfowl Viewing Day - Mission Island Marsh Conservation Area
- May (TBA) Chamber of Commerce Trade Show - CLE Grounds
- May 13 - 19 Arbour Week
- June 2 Lakehead Conservation Foundation Plant Sale
- June 24 Memorial Grove Ceremony - Slovak Legion
- July 8 Family Fishing Day - Hazelwood Lake Conservation Area
- July 29 LRCA Community Picnic - Little Trout Bay Conservation Area
- July 30 - Aug 3 Purple Loosestrife Control Days
- August 13 - 19 Plein Air Festival, Show & Sale Hazelwood Lake Centre
- September 16 Fall Craft Fair - Hazelwood Lake Centre
- September 22 LRCA Open House - 130 Conservation Road
- September 26 - 27 Children's Water Festival - CLE Coliseum
- October 13 Fall Waterfowl Viewing Day - Mission Island Marsh Conservation Area

Call 344-5857 for more information or visit www.lakeheadca.com.

All events subject to change.

THE NEEBING-MCINTYRE FLOODWAY



Since 1984, the Neebing-McIntyre Floodway has been protecting homes and property in the City of Thunder Bay.

Constructed at a cost of \$15-million, the Floodway consists of a ***Diversion Structure*** near the Ford St. and Parkway Drive intersection. It has an opening which limits the flow of water on the Neebing River.



When water flow exceeds the design capacity, water is diverted down the ***Diversion Channel*** which runs parallel to Ford Street until it meets the McIntyre River and the start of the ***Floodway Channel***. This channel runs through Intercity and out to the mouth at Lake Superior.

The Floodway's biggest test to-date came in July 1997 when more than 90mm (3.5-inches) of rain was received in 7 hours.

Thanks to the Diversion Structure homes downstream and the Intercity area were protected from flooding.

The presence of the Neebing-McIntyre Floodway has enabled significant development in the Intercity area.

The Lakehead Region Conservation Authority owns and maintains the Floodway. In 2006 maintenance included dredging the Diversion Channel.

In partnership with the City of Thunder Bay, the LRCA has constructed over five kilometres of pathways along the Floodway. The Floodway, between Island Drive and Fort William Road, is also home to the Memorial Grove where trees are planted in memory of departed loved ones.



LAKEHEAD CONSERVATION FOUNDATION



The Lakehead Conservation Foundation Dinner Auction remains a popular fundraiser. Money raised supports LRCA land management programs. The 2007 Dinner Auction will be held Thursday February 8 at the Valhalla Inn. Tickets are now on sale. Use the convenient order form below to get your tickets today!



The Lakehead Conservation Foundation raises funds to support improvements to Conservation Area facilities and education programs.

In 2006, the Foundation donated \$25,000 to the LRCA. A portion of this supported the inaugural Thunder Bay Children's Water Festival. The Festival teaches students the importance of water through fun, hands-on activities.

The 2007 Children's Water Festival will be held September 26-27. Grade 3 and 4 teachers interested in having their students attend should call the Authority now to register.

Lakehead Conservation Foundation

2007 Dinner Auction

Thursday February 8, 2007

Valhalla Inn

Tickets \$50/person.

I would like to order ____ tickets at \$50 each.

☐ My cheque made payable to the Lakehead Conservation Foundation, in the amount of \$_____ is enclosed.

☐ Charge to my VISA:
Card # _____ Exp: _____

Signature: _____

Please send my tickets to:

Name: _____

Address: _____

City: _____ Postal Code: _____

MAIL FORM TO:

Lakehead Conservation Foundation
P.O. Box 10147
Thunder Bay, ON, P7B 6T6



Your 2007 Explorer Card entitles you to UNLIMITED ACCESS to all of our Conservation Areas! No need to worry about the \$2/vehicle fee!

Order Now!

NAME: _____

ADDRESS: _____

CITY: _____ PROV: ____ P. CODE: _____

Send me ____ Explorer Cards @ \$25 each = \$_____

☐ My cheque made payable to Lakehead Region Conservation Authority is enclosed.

☐ Bill to my VISA
Card # _____ Exp. _____

Signature _____

PLEASE MAIL THIS FORM TO:

Lakehead Region Conservation Authority
P.O. Box 10427, 130 Conservation Road
Thunder Bay, ON, P7B 6T8

The Clean Water Act is now law. Find out more inside.



Sheila Streutker of the Thunder Bay Christian School teaches Grade 3 and 4 students about how an oil spill might impact wildlife. No Water Off A Ducks Back was one of ten activity centres at the 2006 Children's Water Festival.

The Thunder Bay Children's Water Festival was presented by the Lakehead Region Conservation Authority and sponsored by the Lakehead Conservation Foundation, Source Water Protection and TD Friends of the Environment. It was also supported by the City of Thunder Bay Environment Division/Eco-Superior, LU Faculty of Science and Environmental Studies, Ontario Power Generation, CP Rail, Union Gas and TBAYtel.



Lakehead Region Conservation Authority

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