



April LRCA Board Meeting
 Lakehead Region Conservation Authority
 130 Conservation Road/Microsoft Teams
 Apr 27, 2022 4:30 PM - 6:00 PM EDT

Table of Contents

1. CALL TO ORDER

Declaration: 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.

2. ADOPTION OF AGENDA

THAT : the Agenda be adopted as published.

3. DISCLOSURE OF INTEREST

4. MINUTES OF PREVIOUS MEETING.....4

THAT: the Minutes of the Lakehead Region Conservation Authority Third Regular Meeting held on March 30, 2022 be adopted as published.

03-30-22 LRCA Board Meeting Minutes.pdf.....4

5. IN-CAMERA AGENDA

THAT: we now go into Committee of the Whole (In-Camera) at _____p.m. THAT: we go into Open Meeting at _____ p.m.

6. BUSINESS ARISING FROM PREVIOUS MINUTES

None.

7. CORRESPONDENCE

7.1. MECP Conservation Authority Program and Service Inventory Workshop.....10

MECP - CA Program and Service Inventory Workshop, May 2, 2022.pdf.....10

8. STAFF REPORTS

8.1. 2022 Tender Award - Floodway CPR Sediment Trap Dredging.....12

THAT: the Contract for Neebing-McIntyre Floodway Sediment Removal 2022 for the material, equipment and labour necessary for the removal of accumulated sediment be awarded to LTL Contracting Ltd. for a cost of \$257,635.00, not including HST.

NMFC-02-2022_2022 Floodway CPR Sediment Trap Dredging_Tender

Award-combined.pdf.....12

8.2. Kam River Erosion Control, Victor Broadway Operation, Maintenance and

Surveillance Plan - 2022.....23

THAT: Staff Report KAMEC-01-2022 be received.

KAMEC-01-2022_Operation Maintenance and Surviellance Plan.pdf.....	23
8.3. Annual Monitoring Report - Victor Street.....	46
THAT Staff Report KAMEC-02-2022 and the Victor Street Slope Monitoring Report, dated March 28, 2022 be received.	
KAMEC-02-2022_2021 Annual Monitoring Report - Victor Street.pdf.....	46
8.4. LRCA Administration Building Electrical Upgrade – Contract.....	49
THAT: the Contract for LRCA Administration Building Electrical Upgrade for Contract Administration be awarded to TBT Engineering for a cost of \$16,000.00, not including HST AND FURTHER THAT funds will be appropriated from the Administrative Facility Maintenance Reserve.	
LM-05-2022, LRCA Administration Building Electrical Upgrade Contract Administration Request for Quote Award .pdf.....	49
8.5. Silver Harbour Dive Park Access Project.....	51
THAT: Staff Report CONAREA-01-2022 be received AND FURTHER THAT the CAO and Chair are authorized to apply for funding from NOHFC: Enhance your Community Program related to the Silver Harbour Dive Park Access Project in collaboration with Thunder Country Diving.	
CONAREA-01-2022_Enhancing the Dive Park at Silver Harbour Conservation Area.pdf.....	51
8.6. 2021 Plan Review Summary.....	60
THAT: Staff Report PIR-01-2022 be received.	
PIR-01-2022_2021 Plan Input and Review Summary.pdf.....	60
9. CHIEF ADMINISTRATIVE OFFICER'S REPORTS	
9.1. Monthly Treasurer's Report.....	67
Monthly Financial Report March	
Monthly Financial Report March .pdf.....	67
9.2. LRCA Office Furniture.....	68
THAT: the CAO is authorized to purchase office furniture as outlined is Staff Report FIN-07-2022 AND FURTHER THAT the purchase will be funded from the Operating Capital Reserve.	
FIN-07-2022, Purchase office furniture.pdf.....	68
9.3. Financial Statements and Report to the Board.....	78
THAT: the 2021 Audit Report and Financial Statements are adopted as presented AND FURTHER THAT each Member Municipality will be forwarded a copy of the final version.	
FIN-08-2022 Audited Financial Statements.pdf.....	78
10. PASSING OF ACCOUNTS.....	110
THAT : having examined the accounts for the period March 1, 2022 to March 31, 2022 cheque #2522 to #2552 for \$85,813.03 and preauthorized payments of \$74,607.90 for a total of \$160,420.93, we approve their payment.	
Passing of Accounts March.pdf.....	110

11. REGULATORY ROLE

Plan Review program comments and Section 28 permits issued since last meeting summaries.

11.1. Plan Review Commenting Summary.....111
Plan Input Summary March 2022 to April 19, 2022

Plan Input and Review Summary.pdf.....111

11.2. Section 28 Permit Summary.....113
2022 Permit Summary to Date

April 2022 Permit Tracking Log.pdf.....113

12. PROJECTS UPDATE

12.1. Communications Manager Projects Update.....114
Communications Manager April 2022 Agenda Project Update.pdf.....114

12.1.1. 2021 Annual Report.....118
THAT: the 2021 Lakehead Region Conservation Authority Annual Report be approved .

DRAFT 04_2021 Annual Report.pdf.....118

12.1.2. Superior Country Partnership Memorandum of Understanding.....125
THAT: the Chair and CAO are authorized to enter into an agreement with Superior Country for the placement of a picnic table at Hurkett Cove Conservation Area .

LRCADorionSCPicnicMOUFINAL.pdf.....125

12.2. Lands Manager Projects Update
None.

12.3. Watershed Manager Projects Update.....129
Watershed Manager April 2022 Agenda Project Update.pdf.....129

13. NEW BUSINESS

14. NEXT MEETING

The next meeting will be held on May 25, 2022 at 4:30 p.m.

15. ADJOURNMENT

THAT: the time being _____ p.m. AND FURTHER THAT there being no further business we adjourn.



LRCA Board Meeting Minutes
Lakehead Region Conservation Authority
March 30, 2022 at 4:30 PM
via Microsoft Teams

Members Present:

Grant Arnold, Donna Blunt, Joel Brown, Erwin Butikofer, Andrew Foulds, Andrea Goold, Umed Panu, Jim Vezina, Allan Vis

Also Present:

Tammy Cook, Chief Administrative Officer
Mark Ambrose, Finance Manager
Gail Willis, Watershed Manager
Ryne Gilliam, Lands Manager
Ryan Mackett, Communications Manager
Melanie O'Riley, Administrative Clerk/Receptionist, recorder of Minutes

Regrets:

Rudy Buitenhuis, Trevor Giertuga

1. CALL TO ORDER

The Chair called the Meeting to order at 4:30 p.m.

2. ADOPTION OF AGENDA

THAT: the Agenda be adopted as published.

Motion: #37/22

Motion moved by Allan Vis and motion seconded by Grant Arnold. **CARRIED.**

3. DISCLOSURE OF INTEREST

None.

4. MINUTES OF PREVIOUS MEETING

***THAT:** the Minutes of the Lakehead Region Conservation Authority Second Regular Meeting held on February 23, 2022 be adopted as published.*

Motion: #38/22

Motion moved by Jim Vezina and motion seconded by Joel Brown. **CARRIED.**

5. IN-CAMERA AGENDA

***THAT:** we now go into Committee of the Whole (In-Camera) at 4:34 p.m.*

Motion: #39/22

Motion moved by Umed Panu and motion seconded by Joel Brown. **CARRIED.**

***THAT:** we go into Open Meeting at 4:38 p.m.*

Motion: #40/22

Motion moved by Andrea Goold and motion seconded by Erwin Butikofer. **CARRIED.**

***THAT:** the In-Camera Minutes of the Lakehead Region Conservation Authority February 23, 2022 meeting be adopted as published.*

Motion: #41/22

Motion moved by Andrew Foulds and motion seconded by Erwin Butikofer. **CARRIED.**

***THAT:** the Lakehead Region Conservation Authority will accept the donation of land located at 330 Beaver Avenue, Thunder Bay **AND FURTHER THAT** a charitable tax receipt will be issued to the owners **AND FURTHER THAT** the CAO is authorized to take such action and execute such acknowledgements and agreements as may be necessary for the aforementioned purposes.*

Motion: #42/22

Motion moved by Grant Arnold and motion seconded by Joel Brown. **CARRIED.**

***THAT:** expenses incurred to facilitate acquiring the donated land located at 330 Beaver Avenue, Thunder Bay will be appropriated from the Land Acquisition Reserve.*

Motion: #43/22

Motion moved by Umed Panu and motion seconded by Andrew Foulds. **CARRIED.**

The purpose of the In-Camera Meeting pertained to property matters.

6. BUSINESS ARISING FROM PREVIOUS MINUTES

None.

7. CORRESPONDENCE

None.

8. STAFF REPORTS

8.1. Electric Charging Station at LRCA Office

Members reviewed and discussed Staff Report LM-03-2022.

***THAT:** the Chair and CAO are authorized to enter into a funding Agreement with Plug-In Thunder Bay to purchase and install an Electric Vehicle charging station at the LRCA administrative office for the intended use of the public, staff and potential future electric LRCA fleet vehicles.*

Motion: #44/22

Motion moved by Andrea Goold and motion seconded by Umed Panu. **CARRIED.**

8.2. Memorandum of Understanding Hurkett Cove Conservation Area "Lake Superior Trail Experiences"

Members reviewed and discussed Staff Report LM-04-2022.

***THAT:** the Chair and CAO are authorized to enter into a Memorandum of Understanding with the Parks Canada Agency (Lake Superior National Marine Conservation Area) in regards to "Lake Superior Trail Experiences" at Hurkett Cove Conservation Area.*

Motion: #45/22

Motion moved by Jim Vezina and motion seconded by Allan Vis. **CARRIED.**

9. CHIEF ADMINISTRATIVE OFFICER'S REPORTS

9.1. Monthly Treasurer's Report

Members were provided with the Monthly Treasurer's Report for January's Administration and Capital.

9.2. Policy BOD 6: Remuneration of Members Update

Members reviewed and discussed Staff Report BOD-06-2022, and confirmed that the Per Diem increased will be based on the previous year's Consumer Price Index.

THAT: *Board of Directors Policy BOD-06: Remuneration of Members, be amended as outlined in Staff Report PP-BOD-06-2022, as amended.*

Motion: #46/22

Motion moved by Allan Vis and motion seconded by Grant Arnold. **CARRIED.**

9.3. Policies related to COVID-19

Members reviewed and discussed Staff Report CORP-06-2022.

THAT: *Health and Safety Policy HS-COVID-6: Vaccines be rescinded.*

Motion: #47/22

Motion moved by Jim Vezina and motion seconded by Joel Brown. **CARRIED.**

9.4. OnBoard Agenda Software

Demonstration and discussion of the new Board Meeting Agenda format using OnBoard Software took place.

10. PASSING OF ACCOUNTS

THAT: *having examined the accounts for the period February 1, 2022 to February 28, 2022 cheque #2499 to #2521 for \$82,527.59 and preauthorized payments of \$5,194,395.62 for a total of \$5,276,923.21, we approve their payment.*

Motion: #48/22

Motion moved by Umed Panu and motion seconded by Erwin Butikofer. **CARRIED.**

11. REGULATORY ROLE

Members were provided with the Plan Input and Review Summary for the period of February 1 to March 22, 2022 and a summary of Section 28 permits issued in 2022.

12. PROJECTS UPDATE

12.1. Communication Manager Projects Update

Members were provided with Project Updates from the Communications Manager.

12.2. Watershed Manager Projects Update

Members were advised that the Watershed Manager successfully completed the advanced level 2 Provincial Offences Training Course.

Members were advised that the Source Protection Committee (SPC) held their meeting and discussed the seventh annual progress report, which is due to the MECP on May 1, 2022. Members were also provided with the Source Protection Committee Meeting Minutes from the March 16, 2021 meeting.

It was noted that the March 15, 2022 snow surveys indicated that the snow survey locations were above average for snow depth and water content when compared to historical averages for March 15.

It was noted that Lake Superior's water levels were 9 centimeters below its period-of-record and remains the lowest since 2013.

It was noted that the Authority held its 33rd Annual Spring Melt Meeting on April 7, 2022.

It was noted that environmental improvements green infrastructure, asphalt removal and riparian vegetation enhancement are planned for habitat restoration at the Mountdale Boat Launch with funding from Environment and Climate Change Canada and the City of Thunder Bay.

13. NEW BUSINESS

None.

14. NEXT MEETING

The next meeting will be held on April 27, 2022 at 4:30 p.m. in person.

15. ADJOURNMENT

THAT: the time being 5:31 p.m. AND FURTHER THAT there being no further business we adjourn.

Motion: #49/22

Motion moved by Jim Vezina and motion seconded by Grant Arnold. **CARRIED**

Chair

Chief Administrative Officer

From: [ca.office \(MECP\)](mailto:ca.office@ontario.ca)
To: djewitt@centralhuron.com; lbaldwin-sands@stthomas.ca; bchapman@oshawa.ca; tom.adams@oakville.ca; joneill@marmoraandlake.ca; tjobin@tecumseh.ca; llaliberte@grca.on.ca; chrisw@wellington.ca; abirza@hrca.on.ca; lloyd.ferguson@hamilton.ca; aletham@kawarthalakes.ca; awarwick@thamescentre.on.ca; wayne.emmerson@york.ca; dblunt@shuniah.org; jscholten@norwich.ca; Trevor.Thompson@chatham-kent.ca; ericssandford@centrehastings.com; mattduncan@northperth.ca; rock.whissel@timmins.ca; jatkinson@carletonplace.ca; rfoster@npca.ca; skaufman@golder.com; dbritton@powassan.net; mmcleod@collingwood.ca; rhuntley@cavanmonaghan.net; fielerjandc@gmail.com; pieter.leenhouts@gmail.com; maureen.couture@bmts.com; epalumbo@princetwp.ca; george.darouze@ottawa.ca; Mike.Stark@sarnia.ca; jennifer.innis@caledon.ca; adale@norwich.ca
Cc: bhorne@abca.on.ca; kfurlanetto@crca.ca; generalmanager@catfishcreek.ca; cdarling@cloca.com; quentin.hanchard@cvc.ca; tim.pidduck@crowevalley.com; tbyrne@erca.org; llaliberte@grca.on.ca; slawson@grandriver.ca; l.lanthier@greysauble.on.ca; hbasit@hrca.on.ca; Lisa.Burnside@conservationhamilton.ca; mmajchrowski@kawarthaconservation.com; elizabeth@kettlecreekconservation.on.ca; r.baldwin@srca.on.ca; Tammy.Cook@jmaxwell@lprca.on.ca; mark.peacock@lvca.ca; Rhonda.bateman@ltc.on.ca; pbeard@mvca.on.ca; David.Vallier@smcintyre@mvc.on.ca; csharma@npca.ca; Carl.Jorgensen@brian.tayler@nbmca.ca; dhevenor@nvca.on.ca; dmarinigh@otonabeeconservation.com; bmcnevin@quinteconservation.ca; richard.pilon@rrca.on.ca; sommer.casgrain@robertson@rvca.ca; j.stephens@svca.on.ca; Corrina.Barrett@acoleman@nation.on.ca; kphillips@scrca.on.ca; jmackenzie@trca.on.ca; annett@thamesriver.on.ca; [Scanlon, Debbie \(MECP\); CSPB Coordinator \(MECP\)](mailto:Scanlon,Debbie (MECP)@CSPB.Coordinator (MECP)@ontario.ca)
Subject: CA Program and Service Inventory Workshop
Date: April 12, 2022 3:26:31 PM
Attachments: [image002.png](#)

**Ministry of the Environment,
Conservation and Parks**

Conservation and Source
Protection Branch

14th Floor

40 St. Clair Ave. West

Toronto ON M4V 1M2

**Ministère de l'Environnement, de la
Protection de la nature et des Parcs**

Direction de la protection de la nature et
des sources

14^e étage

40, avenue St. Clair Ouest

Toronto (Ontario) M4V 1M2



Good afternoon:

As you know, to implement recent changes made to the *Conservation Authorities Act* (CAA), conservation authorities (CAs) are actively completing the requirements outlined in O. Reg. 687/21 (Transition Plans and Agreements for Programs and Services Under Section 21.1.2 of the Act) to transition to the new framework of categories of programs and services by January 1, 2024.

To support CAs with this transition process, the Ministry will be hosting a workshop for CA members specifically related to the O. Reg. 687/21 requirements for CAs to develop inventories of their programs and services. This will provide an opportunity for the Ministry to share the results of its analysis of the submitted CA inventories, discuss inventory requirements and answer CA member questions. It is anticipated that this workshop will assist CAs with refining the inventories where needed in the coming months to support discussions with participating municipalities and corresponding development of agreements to support delivery of category 2 and 3 programs and services. **This workshop will take place on May 2, 2022 from 1:00 – 2:30pm.**

As a reminder, CAs are required to consult with their participating municipalities on their inventories and submit quarterly progress reports, including any updates to the inventories, to the Ministry beginning July 1, 2022. Within 30 days of January 1, 2024, CAs must finalize the inventories and submit them to the Ministry.

Please confirm you have shared this correspondence with all members of the conservation authority. You and your members are invited to register for the workshop by emailing ca.office@ontario.ca with the subject line "CA Program and Service Inventory Workshop." You will receive a reply to your email with information on how to join.

Thank you in advance for your input. The Conservation Authorities Office may be reached at ca.office@ontario.ca if you have any questions.

Sincerely,

Kirsten Corrigan
Director, Conservation and Source Protection Branch
Ministry of the Environment, Conservation and Parks



PROGRAM AREA	Neebing-McIntyre Floodway Flood Control	REPORT NO.	NMFC-02-2022
DATE PREPARED	April 11, 2022	FILE NO.	1-14-1
MEETING DATE	April 27, 2022		
SUBJECT	Floodway CPR Sediment Trap Dredging – 2022 Tender Award		

RECOMMENDATION

Suggested Resolution

“THAT: the Contract for Neebing-McIntyre Floodway Sediment Removal 2022 for the material, equipment and labour necessary for the removal of accumulated sediment be awarded to LTL Contracting Ltd. for a cost of \$257,635.00, not including HST.”

LINK TO STRATEGIC PLAN

Links to the Strategic Plan (2018-2022):

Protect and Support:

- *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 and erosion control infrastructure to minimize the impacts of flooding, erosion, and sedimentation.*

EXECUTIVE SUMMARY

A Tender package was released on March 11, 2022 for bids to dredge the accumulated sediment at the CPR sediment trap in the Floodway Channel. Three bids were received by the closing date. The bids have been reviewed and it is recommended to award the Contract to the lowest bidder, LTL Contracting Ltd., in the amount of \$257,635.00, plus HST. All bids were below the cost estimate; however, it is noted that LTL’s bid is significantly lower than the other bids. LTL has proposed a different, yet cost effective, dredging operation that has been reviewed by engineers at Hatch Ltd. and approved by DFO and MNDMNR. Adequate City of Thunder Sole-benefiting levy is in the deferred fund for this project.

DISCUSSION

A Tender package was released on March 11, 2022 for bids to dredge the accumulated sediment at the CPR sediment trap in the Floodway Channel. Based on the 2021 survey of accumulated

sediment, approximately 4,500 cubic metres of sediment has accumulated over the past 20 years. This sediment needs to be removed to ensure that the Neebing-McIntyre Floodway operates as designed and continues to provide protection up to and including the Regional Storm.

Prior to tendering, the estimated Contract cost for the dredging was \$976,700, which was based on the actual cost of the previous dredging of the Balmoral sediment trap in 2019.

Tenders were received from three contractors:

- LTL Contracting Ltd. - \$257,635.00 + HST
- LH North Ltd. - \$655,500 + HST
- Pierre Gagne Contracting Ltd.- \$796,046.47 + HST

Hatch has reviewed the tenders and recommends that the Contract be awarded to LTL Contracting Ltd., who submitted the lowest bid. All bids were below the estimated Contract cost and checked arithmetically with no errors found.

It is noted that LTL Contracting submitted a significantly lower bid compared to the other bids. LTL has proposed a different, yet cost effective, dredging operation. In the past, a dredging crane positioned on the shore was used for LRCA's floodway dredging projects. LTL's proposed dredging plan is to remove the sediment using a long-arm excavator that will work from a temporarily constructed rock groin, seven metres wide by 25 meter long, perpendicular to the floodway bank.

From the rock groin, the excavator will begin removing sediment from both sides of the groin, scooping up the sediment, and walking along the groin to deposit the dredged sediment into the back of a rock truck parked on shore. The dredged sediment will be hauled by the rock truck to the disposal area on LRCA owned property. Once all the sediment is dredged from either side of the groin, the excavator will remove the rock groin entirely and begin placing and constructing a new rock groin downstream, where the dredging process will be repeated. A total of five rock groins will be temporarily placed and removed as part of the overall dredging operation.

In the case of a potential flood emergency, the method to remove a rock groin will take approximately four hours.

The Department of Fisheries and Oceans (DFO), and the Ministry of Northern Development, Mines, Natural Resources and Forestry (MNDMNRF), has reviewed and approved LTL's proposed dredging plan and supporting information. The MNDMNRF has recommended that the in-water work window be reduced to between July 1st and September 1st, 2022. LTL has confirmed that they can work within this timeframe.

FINANCIAL IMPLICATIONS

Staff have submitted an application to the MNDMNRF Water and Erosion Control Infrastructure (WECI) fund for 50% of the total project costs; however, confirmation has not been received that these funds will be available this year. If WECI funding is not successful the project will proceed with the City of Thunder Bay funding 100% of the costs, as they are the sole benefitting Member

Municipality. Sufficient sole benefitting City funds are available to fund the entire project if WECL funds are not obtained. Funds were budgeted in the 2022 budget for the project.

CONCLUSION

Staff recommend that LTL Contracting Ltd. be awarded the Contract to dredge the accumulated sediment at the CPR sediment trap in the Floodway Channel.



BACKGROUND

Sediment removal is required to ensure that the Floodway remains operational and capable of handling rainfall up to and including the Regional Storm. Annual surveys are conducted every year within the Floodway channel from the ice. The upstream end of the Floodway channel was last dredged in 1999, the Balmoral sediment trap was last dredged in 2019, and the CPR sediment trap was last dredged in 2008. A long-term major maintenance schedule is kept ensuring the annual sole-benefitting City of Thunder Levy is available to fund the required major maintenance annually.

REFERENCE MATERIAL ATTACHED

- Tender Award Recommendation Letter, dated April 8, 2022, by Hatch Ltd.
- LTL Contracting Letter and proposed rock groin sketch, dated March 28, 2022

PREPARED BY: Gail Willis, Watershed Manager

THIS REPORT SIGNED AND VERIFIED BY:  Tammy Cook Chief Administrative Officer	DATE: 
--	---

April 8, 2022

H-367518

Lakehead Region Conservation Authority
130 Conservation Road
P.O. Box 10427
Thunder Bay, Ontario
P7B 6T82**Attention: Ms. Gail Willis, C.E.T.**
Watershed Manager and Provincial Offences Officer

Dear Ms. Willis:

Re: CPR Sediment Trap Floodway Channel Dredging 2022
Tender Award Recommendation Letter

Tenders for this project were received and opened at the Authority's office on March 11, 2022. Three tenders were received, and are listed below in ascending order:

Tenderer

- | | | |
|----------------------------------|---|---------------|
| 1) LTL Group | - | \$ 291,127.55 |
| 2) LH North Ltd. | - | \$ 740,715.00 |
| 3) Pierre Gagne Contracting Ltd. | - | \$ 899,561.39 |

All prices include HST and were checked arithmetically and some minor rounding errors were found. (Please see the tender comparison spreadsheet attached for corrections). The Engineer's estimate was \$795,034.10 including HST.

TENDER IRREGULARITIES

A review of the tenders was undertaken and one irregularity was noted:

- 1) The tender submission from Pierre Gagne Contracting Ltd. was missing the required signed acknowledgement of Addendum#1. However, they had submitted acknowledgement of Addendum#2.

REVIEW OF TENDER PRICES

A review of the tender prices submitted by the tenderers was undertaken. The low tenderer (LTL Group) has indicated they are comfortable with the price submitted and are ready to start as per the Contract Documents.

As per our previous discussions, the low tenderer had submitted their bid using a different dredging methodology than what was done in the past/ what was approved by the MNRF/DFO in the LRCA's project review application.

In order to support the low tenderer's bid, the LRCA re-submitted the project review application to the MNRF/DFO with LTL Group's proposed Dredging Plan and supporting information. The MNRF/DFO approved LTL Group's

proposed Dredging plan on April 4, 2022 with the instruction that the in-water work window be revised to be: July 1st to September 1st, 2022.

We have reviewed LTL Group's Proposed Dredging Plan and find it to be an acceptable method to complete this project.

LOW TENDERER'S QUALIFICATIONS

LTL Group is a very experienced Contractor and have successfully completed numerous in-water excavation/dredging projects in the Thunder Bay area. They are co-operative, maintain schedules, excellent with documentation, and very courteous to the public. In summary, they are great contractors to work with.

PROJECT SCHEDULE

The MNRF/DFO specified in-water work to be completed between July 1 and September 1, 2022 for this particular project. The contract specifies a contract completion date of December 1, 2022. The Contractor's dredging plan indicates that they will commence work the week of July 1st and will complete the work by the end of August.

RECOMMENDATION

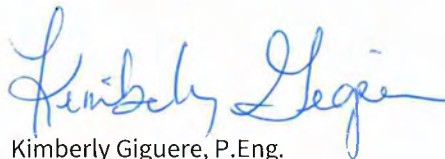
We recommend that the Contract be awarded to LTL Group for the tender amount of \$291,127.55 including HST.

With this report, we are enclosing a spreadsheet summarizing the tenders of the bidders, drawing A1-367518-G1 REV0, drawing A1-367518-G2 REV0, the original Bid Forms from each of the tenders along with the original Bid Bonds and Agreements to Bond. We are also attaching three copies of the Bid Form for LTL Group to be signed by the Authority to form the contract. Please return 2 signed copies to our office and we will forward one to LTL Group.

All of which is respectfully submitted for your consideration.

Yours very truly,

HATCH LTD



Kimberly Giguere, P.Eng.
Project Manager/Project Engineer

KG:kg

Cc Tammy Cook, LRCA
Encl.

LRCA CPR TRAP FLOODWAY CHANNEL DREDGING 2022

TENDER COMPARISONS

MARCH 14, 2022

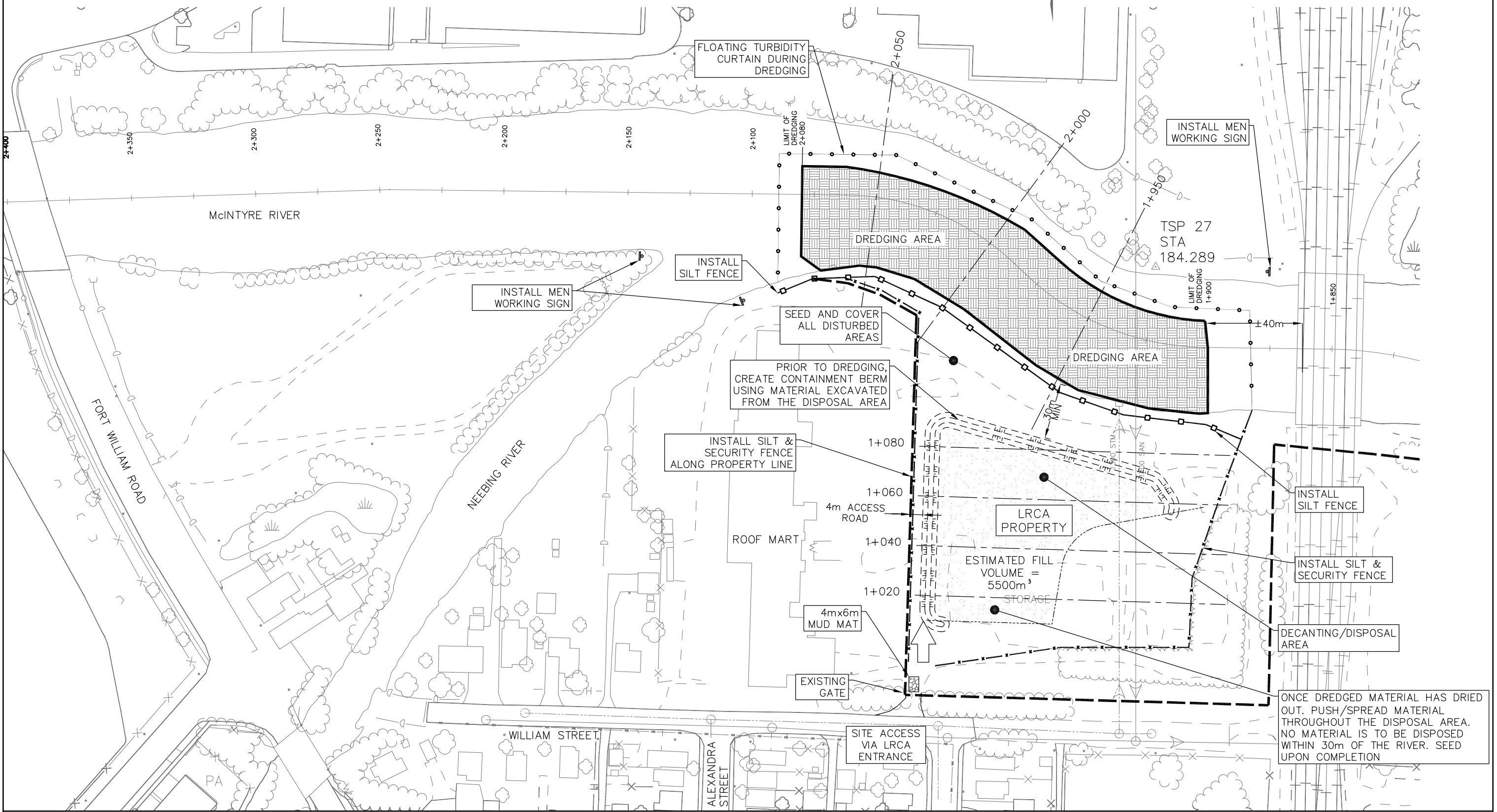
ITEM NO.	DESCRIPTION	UNIT	EST. QTY	ENGINEER'S ESTIMATE		PIERRE GAGNE		LH NORTH LTD.		LTL GROUP	
				UNIT BID PRICE	TOTAL PRICE	UNIT BID PRICE	TOTAL PRICE	UNIT BID PRICE	TOTAL PRICE	UNIT BID PRICE	TOTAL PRICE
	DIVERSION CHANNEL										
001	Sediment Removal	m ³	4500	80.00	360,000.00	127.53	573,885.00	87.00	391,500.00	42.10	189,450.00
002	Floating Turbidity Curtain	LS	1	30,320.00	30,320.00	33,948.00	33,948.00	30,000.00	30,000.00	36,290.00	36,290.00
003	Silt Fence	m	500	42.50	21,250.00	33.65	16,825.00	38.00	19,000.00	21.45	10,725.00
004	Seed and Cover	m ²	10000	1.90	19,000.00	1.97	19,700.00	1.00	10,000.00	1.10	11,000.00
003	Mobilization/Demobilization	LS	1	182,000.00	182,000.00	57,405.00	57,405.00	150,000.00	150,000.00	5,660.00	5,660.00
004	Bonds, Insurance and Other Fixed Costs	LS	1	91,000.00	91,000.00	94,309.03	94,309.03	55,000.00	55,000.00	4,510.00	4,510.00
	TOTAL				\$ 703,570.00		\$ 796,072.03		\$ 655,500.00		\$ 257,635.00
	SUMMARY										
	SUB-TOTAL				703,570.00		796,072.03		655,500.00		257,635.00
	PLUS HST (13%)				91,464.10		103,489.36		85,215.00		33,492.55
	TOTAL OPENED TENDER PRICE				N/A		\$899,532.51		\$740,715.00		\$291,127.55
	TOTAL CORRECTED TENDER PRICE				\$795,034.10		\$899,561.39		\$740,715.00		\$291,127.55

Footnotes:

a) Corrected Total Tender Price based on unit prices presented in tender

REFER TO DRAWING G2 FOR TYPICAL SECTIONS OF THE FLOODWAY CHANNEL SEDIMENT AND SECTION OF THE DISPOSAL AREA

THE POSITION OF POLE LINES, CONDUITS, WATERMAIN, SEWERS & OTHER OVERGROUND & UNDERGROUND UTILITIES & STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWING, & WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES & STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL UTILITIES & STRUCTURES, & SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM



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B	ISSUED FOR 2nd CLIENT REVIEW	02/24/22	MWS/KG
A	ISSUED FOR 1st CLIENT REVIEW	01/26/22	MWS/KG

Approved

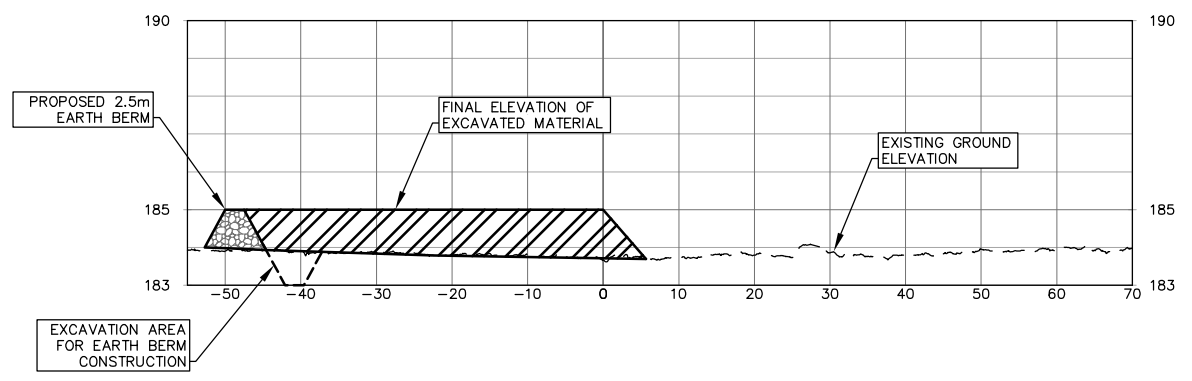
DREDGING SITE PLAN
 CPR Trap
 From West of the CPR Bridge
 STA 1+900 to 2+080
 East of Neebing R./
 McIntyre R. Confluence

**McINTYRE/NEEBING
 FLOODWAY CHANNEL**

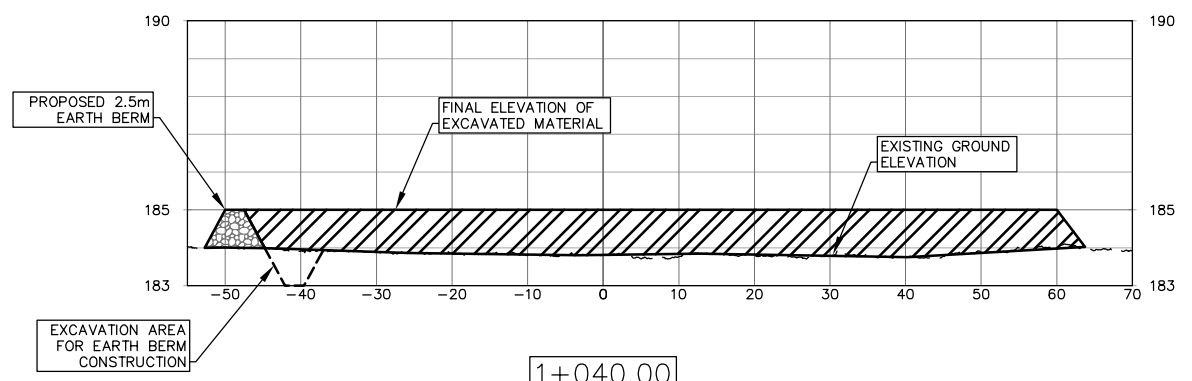
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 Date FEBRU 18

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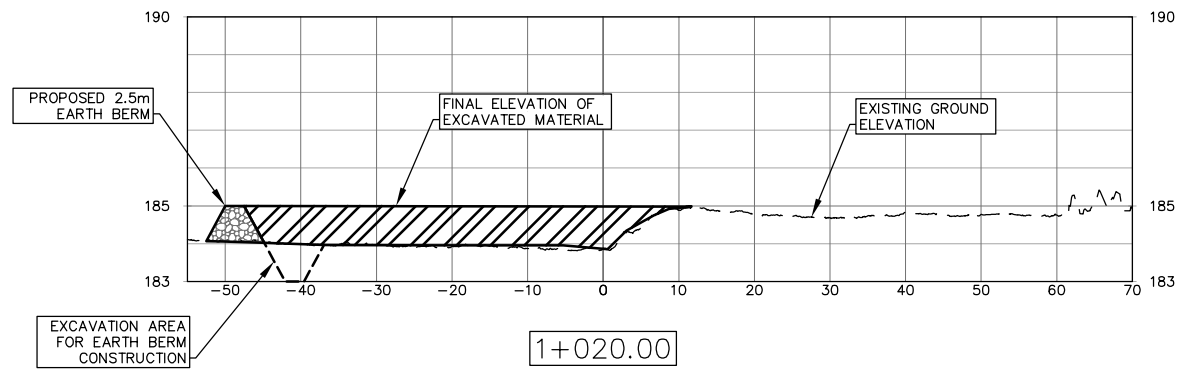
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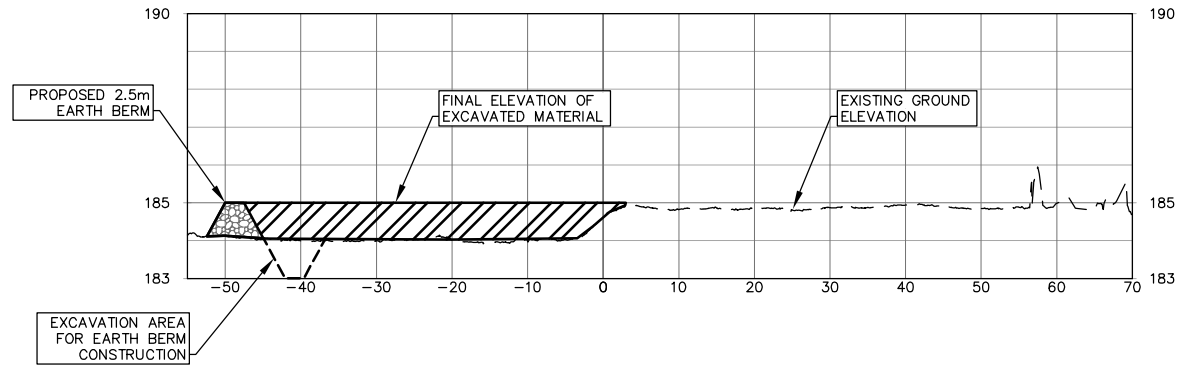
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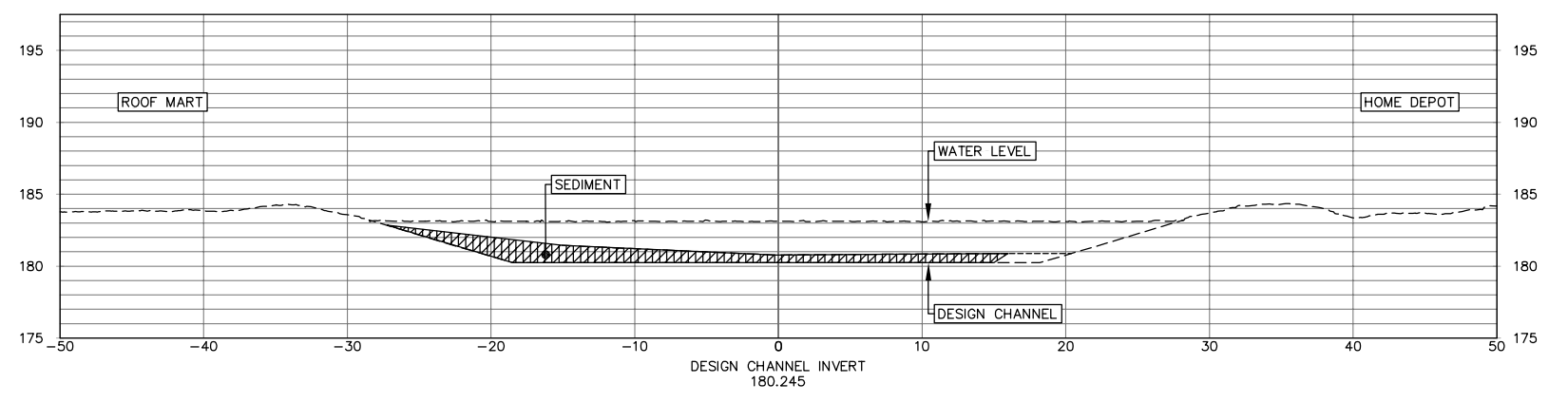
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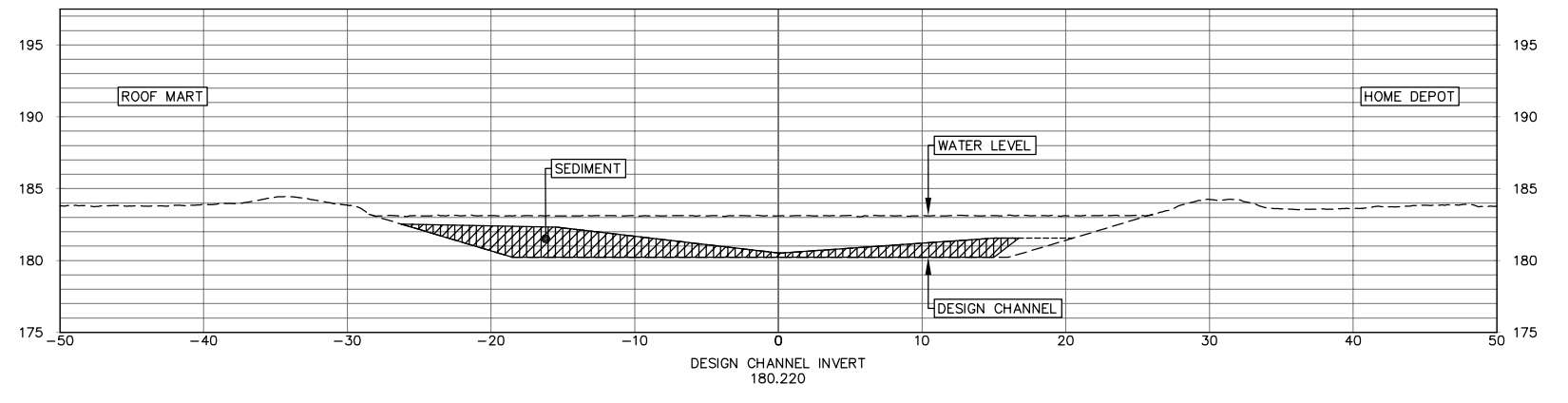
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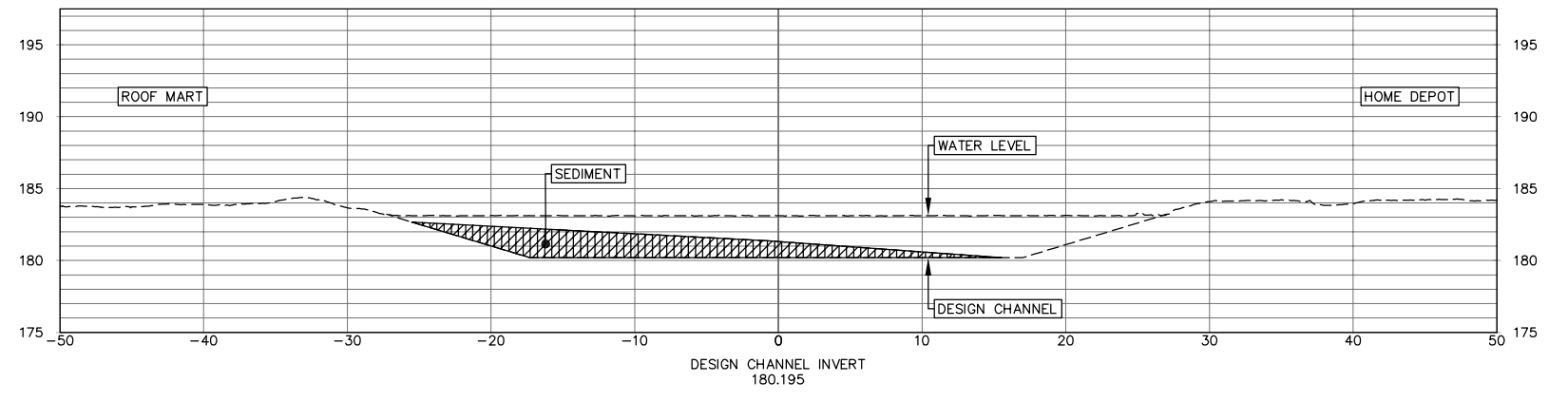
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0	ISSUED FOR TENDER	02/28/22	MWS/KG
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Approved

TYPICAL SECTIONS
DREDGING AREA & DISPOSAL AREA

McINTYRE/NEEBING
FLOODWAY CHANNEL

Scale: N/A
 Drawn By: MWS
 Ckd. By: KG
 Dwg. No.: A1-367518-G2
 Date: FEBRU 19



L.T.L. Contracting Ltd.

227 Hwy 527
Shuniah, Ontario
P7A 0N4

March 28, 2022

LRCA c/o Hatch
973 Balmoral Ave
Thunder Bay, ON P7B 0E2

Attn: Kimberly Giguere

In response to your request we provide the following outline of our proposed methodology to complete the dredging operation at the CPR Sediment Trap.

- There will be no added footprint to the dredging area than what was previously submitted to the MNRF/DFO (ie. the fingers/groins will be constructed within the footprint of the dredging area shown on the tender drawing).
- Installation of the silt fence and security fence, the construction of the disposal area containment berm and the pre-dredging survey will be completed prior to July 1st, 2022.
- All in-water work and dredging work including the installation of the turbidity curtain and oil containment boom will be completed between the revised in-water work window of **July 1st and September 1st, 2022** as requested by the MNRF/DFO.
- The fingers will be constructed by a Volvo EC360 excavator with a 65 foot boom and 0.5m³ bucket by placing approved 150 to 450mm blast rock into the floodway 7m wide and up to 0.3m above the top of the water starting from the shoreline out across the floodway channel. As the finger is being constructed, the excavator will start driving on the finger to construct the entire finger length of 25m from the shoreline. The first finger will be constructed at Station 2+065. Once the first finger is constructed, the excavator will begin the dredging operation by scooping the sediment from the bottom of the floodway channel using the ditching bucket west and east of the finger and then walking along the finger towards the shore to load the rock truck parked on the shoreline. The loaded rock truck will haul the dredged material to be dumped in the disposal area. Once the dredging the west and east of the first finger is completed, the excavator will remove the blast rock by scooping up the rock with the bucket and loading the rock truck on shore. The rock truck will haul the rock to the next finger location and the excavator will begin constructing the second finger located at Station 2+025. The excavator will also dredge the area under the first finger from the shoreline. The sediment under the first finger will be removed when the rock is being removed to construct the second finger. The finger construction and dredging process noted will be repeated for the second finger at Station 2+025, the third finger at Station 1+985, fourth finger at 1+945 and fifth finger at Station 1+905.

- An absorption mat will be placed underneath the excavator to catch any oil that may drip from the machine.
- In the case of an oil leak/spill in the river, oil will be contained by the oil containment boom and a vacuum truck would be called to the site to vacuum up the containment off the surface of the water. The shoreline will also be inspected and any residual would be cleaned up.
- In the case of a flood, the fingers will be removed as per the same method described above. Finger removal will take approximately 4 hours to complete.
- For clarification the rock truck will not be driving on the fingers that are constructed within the floodway
- Rock fill for the fingers will be obtained from Taranis's pit on Virallainen Road from a 10 year old stockpile of blasted granite rock.

If you require anything else please let us know.

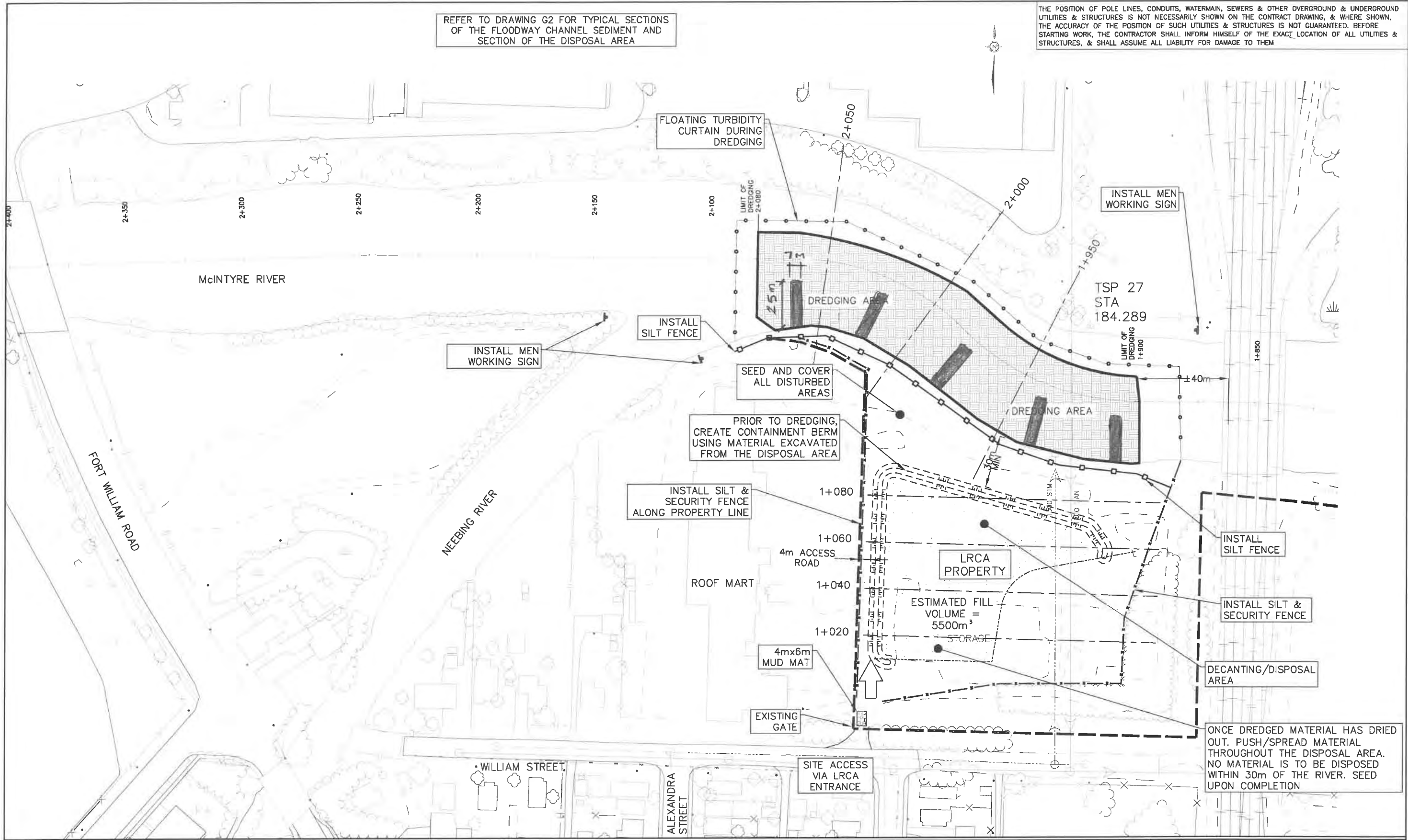
Thank you



Todd Varey
Project Coordinator / Sr Estimator
LTL Contracting Ltd

REFER TO DRAWING G2 FOR TYPICAL SECTIONS OF THE FLOODWAY CHANNEL SEDIMENT AND SECTION OF THE DISPOSAL AREA

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No.	Revision	Date	Initial
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B	ISSUED FOR 2nd CLIENT REVIEW	02/24/22	MWS/KG
A	ISSUED FOR 1st CLIENT REVIEW	01/26/22	MWS/KG

Approved

DREDGING SITE PLAN
CPR Trap
From West of the CPR Bridge
STA 1+900 to 2+080
East of Neebing R./
McIntyre R. Confluence

LAKEHEAD REGION
CONSERVATION AUTHORITY

**McINTYRE/NEEBING
FLOODWAY CHANNEL**

HATCH

Scale: 15m 0 7.5m HORIZ.

Drawn By MWS
Ckd. By KG
Dwg. No. A1-367518-G1

Date: FEBRUARY 2022
Rev. 0



PROGRAM AREA	Operation and Maintenance of Erosion Control Structures	REPORT NO.	KAMEC-01-2022
DATE PREPARED	April 14, 2022	FILE NO.	26-15-1
MEETING DATE	April 27, 2022		
SUBJECT	Kam River Erosion Control, Victor Broadway, Operation, Maintenance and Surveillance Plan – 2022		

RECOMMENDATION

Suggested Resolution:

“THAT: Staff Report KAMEC-01-2022 be received.”

LINK TO STRATEGIC PLAN (2018 – 2022)

Protect & Support:

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

EXECUTIVE SUMMARY

The Kaministiquia River Operation, Maintenance and Surveillance Plan for Victor Broadway area has been updated for 2022. The Plan outlines completed major works, anticipated and completed maintenance, surveillance plan, and lists past studies and reports.

No major maintenance is planned in 2022 on the Kaministiquia River (Kam River). Minor maintenance includes the placement of topsoil and riprap at the soil nail sites in the vicinity of 1470 and 1480 Victor Street.

In 2022, monitoring of the slope will be increased to biannual inspections at 1620 Broadway Avenue, and at the 2014/2015 and 2005 Victor Street soil nailed sites. LRCA staff will undertake an inspection of the existing retaining wall, regrading work to stabilize the slope, install hazard signs, develop slope hazard self-assessment resources for landowners, and implement the revegetation plan.

DISCUSSION

The Kaministiquia River Operation, Maintenance and Surveillance Plan for Victor Broadway has been updated for 2022. The Plan outlines completed major works, anticipated, and completed maintenance, surveillance plan, and lists past studies and reports.

No major maintenance is planned on the lower Kaministiquia River (Kam River) in 2022. Minor maintenance includes the placement of topsoil and riprap at the soil nail sites in the vicinity of 1470 and 1480 Victor Street.

Subsequent to the Victor/Broadway Bank Stabilization Assessment Study Report in March 2021, LRCA staff met with City of Thunder Bay Engineering staff in April 2021 and in February 2022 to develop an action plan based on the recommendations from the Report. The LRCA/City action plan items for 2022 are planned as follows:

- LRCA to increase the surveillance of the property at 1620 Broadway Avenue, and at the 2014/2015 and 2005 Victor Street soil nailed sites to biannual monitoring (spring and fall) and on an as-needed basis (i.e., after significant rainfall),
- LRCA to inspect the existing retaining wall and complete slope regrading as necessary,
- LRCA to complete the required soil nail site repairs in the vicinity of 1470 and 1480 Victor Street,
- LRCA to implement the revegetation plan for soil nail sites, and install hazard signs,
- LRCA to develop resources for landowners to monitor the slope on their own property (self-assessment),
- City to flush and video inspect drainage outlets on Victor Street,
- City to develop a plan and drainage assessment for road re-ditching and reshaping,
- City to investigate additional funds for LRCA reserves to support additional work for Victor Street, and
- LRCA and City to set up annual meeting to discuss progress.

FINANCIAL IMPLICATIONS

The City of Thunder Bay is designated as sole benefitting municipality for the Victor Street monitoring. Available budgeted funds and deferred funds will be used for the required minor maintenance, and the action plan items required by LRCA staff.

CONCLUSION

No major maintenance is planned in 2022 on the Kaministiquia River for Victor Broadway area. The LRCA will increase to biannual monitoring of the Victor Street soil nailed sites. Minor maintenance, retaining wall inspection, installation of hazard signs, and the revegetation plan will be implemented by LRCA staff in 2022. The Operation, Maintenance and Surveillance Plan has been updated for 2022.

BACKGROUND

The Kaministiquia River watershed is partially located within the area of jurisdiction of the LRCA. Major erosion control projects have been undertaken by the Authority over the years on City of Thunder Bay owned land in order to protect City infrastructure including water mains and roads, mainly in the Victor Street area. Erosion control projects have been funded by the City of Thunder Bay as the sole benefitting municipality with partial funding for some completed major infrastructure maintenance coming from the Water and Erosion Control Infrastructure (WECI)


program administered by the Ministry of Natural Resources and Forestry. Prior to 1995 funds were from transfer payments and after 1995 major maintenance funds were from the WECl program.

The LRCA administers O. Reg. 180/06 Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation within the area of jurisdiction of the Authority. Regulated areas within the Kam River watershed include all floodplain lands and fill regulated lands and all Provincially Significant Wetlands and 120 metre adjacent lands.

REFERENCE MATERIAL ATTACHED

Kaministiquia River Operation, Maintenance and Surveillance Plan, Victor Broadway, 2022
Victor Street – Vegetation Assessment & Proposed Plants

PREPARED BY: Gail Willis, Watershed Manager

THIS REPORT SIGNED AND VERIFIED BY:  Tammy Cook Chief Administrative Officer	DATE: April 20, 2022
--	-----------------------------

Kaministiquia River

Operation, Maintenance and Surveillance Plan, Victor Broadway – 2022

The Kaministiquia (Kam) River system is one of the largest tributaries draining into Lake Superior. The watershed drainage area is approximately 7,800 square kilometres, originating north of the City of Thunder Bay at Dog Lake. Ontario Power Generation operates dams on the Kam River at Dog Lake, Shebandowan Lake and Kakabeka Falls.

In many areas, the Kam River is contained by steep banks that range from two metres to over 25 metres in height, while other areas along the banks are considered to be low lying. In the low lying areas flooding periodically occurs due to intense rainfall, ice jams and frazil ice. In its lower reaches, the erosion of alluvial deposits has formed many meanders, oxbow lakes and other features commonly associated with a “mature” river. Due to the natural meandering process, erosion of the banks is continuing and is expected to continue into the future.

Erosion and slope failure on the Kam River has been studied extensively over the years. In order to protect municipal infrastructure in the Vickers Heights area, particularly Victor Street and the water main along the slope of the Kam River, extensive work has been carried out to address the on-going erosion. Monitoring of the at-risk areas is conducted annually.

DST Consulting Engineers concluded that crest regression is likely to continue along Victor Street; however, more than six metres of crest failure at any one time was not expected and deep-seated failures below the roadway were not generally expected. Hazards have been managed by utilizing cautionary zones along facilities to be protected, namely Victor Street with its water main (6 metre zone) and nearby residence (10 metre zone). Flood and fill line mapping is utilized to manage development within the regulated area of the Kam River.

Speed limit restrictions on the Kam River are outlined in the Vessel Operation Restriction Regulations which state that in the City of Thunder Bay between the 20th Side Road downstream to the western boundary of Lot 14, Concession 1, south of the Kam River is restricted to 10 kilometers per hour, as shown on the attached map. The City of Thunder Bay is responsible to erect and maintain the signage advising of the speed limit. The City of Thunder Bay Police is responsible to enforce the speed limit.

Kaministiquia River

Operation, Maintenance and Surveillance Plan, Victor Broadway – 2022

Victor Street/Broadway Avenue – Completed Erosion Protection Works

Major undertakings have been completed by the Lakehead Region Conservation Authority to address the on-going erosion along the banks of the Kam River in the Vickers Heights/Victor Street/Broadway Avenue area.

Completed major works to date include (see attached map):

Table 1 – Completed Major Works	
Year	Description of Work
1980	Test drain installed at North Victor Street. Drain failed in 1981.
1981	600 metres of rip rap blanket toe protection on east side of channel of west river channel section, South Victor Street.
1982	LRCA purchased six homes that were within 10 metres of the top of bank along Broadway Avenue (i.e. within cautionary zone). All homes were then demolished, thereby removing the residents from the hazard. One home remains to be purchased, however is not presently within the 10 metre cautionary zone.
1984	1,200 metres of the toe of the slope along Broadway Avenue/ North Victor Street was armoured with 38,000 metric tonnes of rip rap.
1985	350 metres of sheet pile wall installed along a section of Victor Street.
2004-2005	Five sites secured with Soil Nail and Root Technology (SNART) as erosion was within 6 metres of the watermain along North Victor Street.
2011	Slope re-grading and rip rap placement across from 1420 Victor Street. After the May 2012 rainfall event the treated slope failed.
2013	Slope re-grading, benching and rip rap placement across from 1420 Victor Street. Short Term Solution.
2013	Slope re-grading and erosion control blanket placement across from 1470 Victor Street. Short Term Solution.
2013	Slope re-grading and erosion control blanket placement across from 1480 Victor Street. Short Term Solution.
2014	Three sites (across from 1420, 1470 and 1480 Victor Street) secured Soil Nail and Root Technology (SNART).
2015	Site across from 1470 Victor Street required additional SNART installation on south side of remediation due to additional failure in the spring of 2015. Rip rap was also added to site.

Kaministiquia River

Operation, Maintenance and Surveillance Plan, Victor Broadway – 2022

Anticipated and Completed Maintenance

The following table provides a summary of anticipated and completed maintenance.

Table 2 – Anticipated and Completed Maintenance				
Area of Work	Description of Activity	Completion Date	*Provincial Funds Provided	Estimated Required Recurrence
Victor Street – South end, west channel	600 metres of rip rap blanket toe protection	1981	Yes	2031 (50 years)
Broadway near Victor Street	Purchase of six homes and demolition, which were at risk due to erosion on bank	1982	Yes Project 416	n/a
	Consider purchase of 1620 Broadway Avenue when home is less than 10 metres from top of slope.			Within next 10 years
Broadway/ Victor Street	Phase I - Rip Rap Rock Protection 40,000 metric tonnes of rip rap and 38,000 square metres of filter cloth placed along the toe of 1,200 metres of shoreline.	1984	Yes	2034 (50 years)
	Phase II – 350 metres of sheet pile wall installed. Panels were lowered between vertical H-beams embedded in concrete and anchored for stability. The area was backfilled, and the road was rebuilt.	1985		2035 (50 years)
King Road	Repair of Slope Failure on bank of Kam on King Road north of entrance into Fort William Historical Park. Filter fabric overlain with rip rap (14,000 tonne) to elevation 187.0 (1.5:1 slope), compacted granular (300 tonne) to toe of berm (1.8:1 slope). Mulching and hydraulic seeding of area.	1987	Yes	2037 (50 years)

Kaministiquia River

Operation, Maintenance and Surveillance Plan, Victor Broadway – 2022

Table 2 – Anticipated and Completed Maintenance

Area of Work	Description of Activity	Completion Date	*Provincial Funds Provided	Estimated Required Recurrence
1400, 1420, 1460, 1480, 1510 Victor Street	Five sites stabilized with DST's proprietary soil nail stabilization system "Soil Nail and Root Technology (SNART)".	2004-2005	Yes R.04.093	2055 – 2105 (Design life of 50 to 100 years)
1420, 1470, 1480 Victor Street	Short term stabilization completed	2013	No	2064 – 2114 (Design life of 50 to 100 years)
	Long term stabilization (i.e., soil nailing SNART technology)	2014	Yes R.14.060	
1470 Victor	Additional failure south of 2014 soil nailed site, additional nails installed in June 2015 along with rip rap in the section and hydro-seeding of entire site	2015	No	
1470 and 1480 Victor Street	Minor maintenance at DST Site #2, includes adding approximately 2.0 cubic metres of topsoil, and riprap.	2022		
Victor Street Sheet Pile Retaining Wall	Regrading and revegetation	2022		
Victor Street	Revegetation of slope and placement of hazard signs	2022		

*Pre-1995 funds were from transfer payment and post 1995 were WECEI funds.

Surveillance Plan

The following table summarizes the completed and on-going Surveillance along the Kaministiquia River.

Table 3 – Surveillance Plan

Area of Monitoring	Description of Monitoring	Date of Monitoring	Estimated Recurrence
1620 Broadway Avenue	Monitor slope to ensure structures are less than 10 metres from top of slope. (as of 2020, measurement is <u>12.45m</u> from top of slope).	Annual	Biannually – spring & fall (Starting in 2022)
	LRCA to consider purchasing home once dwelling is within 10 metres of crest of slope.		

Kaministiquia River

Operation, Maintenance and Surveillance Plan, Victor Broadway – 2022

Table 3 – Surveillance Plan

Area of Monitoring	Description of Monitoring	Date of Monitoring	Estimated Recurrence
1400, 1420, 1460, 1480, 1510 Victor Street	Annual horizontal underground monitoring of slope using SPUD devices (dry well with an installed anchored cable that has markings that is spread across Victor Street to a corresponding flush mount casing which is used as a reference point)	Plan established August 7, 2003 and initial inspection by DST. LRCA monitored 2003 to 2007. DST monitored 2008 to present	Biannually – spring & fall (Starting in 2022)
	Repairs to SPUDS by DST Fall 2008. Repairs to SPUDS by DST Fall 2013.		
1420, 1470 and 1480 Victor Street	Inclinometers, settlement plates and piezometers monitoring for slope movement.	October 2014 to March 2015 (weekly)	Biannually – spring & fall (Starting in 2022)
		April to September 2015 (bi-weekly)	
		October 2015 to June 2016 (monthly)	
		Fall 2016 going forward	
Kam River (City to Rosslyn Village)	Floodplain Mapping	1979 2018 - 2020	tbd
Kam River within City of Thunder Bay	Erosion Sites Inventory	1987 2017 - 2019	tbd
Vegetation Assessment	Victor Street Area	2021	tbd
Victor Street Sheet Pile Retaining Wall	Structural inspection, including inspection of drainage system	2022	tbd

Past Studies/Reports

Table 4 – Past Studies & Reports

Area of Study	Title of Study	Date
Kam River Lakehead Expressway to boundary of City of Thunder Bay	Bank Erosion on the Kam River in the City of Thunder Bay, VB Cook Ltd.	August 1973
Kam River and Tributaries	Report on the Sept. 8-9, 1977 Flood, MNR	November 1977
Broadway – North Victor and South Victor	Benefit Cost Study of Erosion Control on the Kam River in Thunder Bay, Andrew Brodie Associates Inc.	December 1978

Kaministiquia River

Operation, Maintenance and Surveillance Plan, Victor Broadway – 2022

Table 4 – Past Studies & Reports

Area of Study	Title of Study	Date
Lake Superior to Rosslyn Village	Kam River Floodline Mapping, James F. MacLaren Ltd.	October 1979
South Victor Avenue	Stability Analysis Kam River, South Victor Avenue, Robert Dodds Ltd.	November 1979
Vickers Heights Area	Erosion Study, Vickers Heights Area, Kam River, Dominion Soil Investigation Ltd.	January 1982
Vickers Heights Area	Review of Report on Erosion Study, Vickers Heights Area, Golder Associates	February 1982
Vickers Heights Area	Preliminary Design for Remedial Works to the banks of the Kam River, Binnie & Partners	October 1982
Vickers Heights Area	Addendum to Report Erosion Study, Vickers Heights Area, Kam River, Dominion Soil Investigations Ltd.	December 1982
Broadway Avenue and North Victor Street	Preliminary Design Report, Kam River Bank – Toe Erosion Protection, DeLCan, DeLeuw Cather, Canada Ltd.	January 1984
Kam River	Flood Risk Map, Flood Damage Protection Program	1984
Broadway Avenue and North Victor Street	Kam River Bank Toe Erosion Protection, DeLCan, DeLeuw Cather, Canada Ltd.	January 1984
Victor Street	Kam River Erosion Control Bank Stabilization Feasibility and Preliminary Design, Dominion Soil Investigation Inc.	October 1984
Victor Street	Geotechnical Design Brief Soldier Pile and Lagging Retaining Wall, Kam River Erosion Control, Bank Stabilization, Dominion Soil Investigation Inc.	October 1984
Fort William Historical Park	Old Fort William, Kam River Frontage Sand Bar Removal Study, Proctor and Redfern Ltd.	June 1985
King Road	Site Investigation, Bank Failure on Kam River, King Road, Robert Dodds Ltd.	November 1986
Kam River Hwy 61 to City Limits	Kam River Erosion Sites Inventory Study, Robert Dodds Limited	April 1987
Kam River Watershed	Kam River Watershed Management Study, Acres International Ltd.	November 1990
CP Rail Underpass to Lake Superior	Kam River Bank Clean Up Study, Proctor and Redfern Ltd.	October 1991
Lake Superior to Westfort Turning Basin	Kam River Property Assessment, LRCA	August 1994
Broadway Avenue / South Victor Street	Kam River Bank Stability Assessment Broadway Avenue / South Victor Street Area, DST	November 15, 2002
Broadway Avenue / South Victor Street	Kam River Bank Stability Assessment Broadway Avenue / South Victor Street Area	November 2002

Kaministiquia River

Operation, Maintenance and Surveillance Plan, Victor Broadway – 2022










Table 4 – Past Studies & Reports		
Area of Study	Title of Study	Date
Victor Street	Instrumentation and Monitoring Plan, Kam River Bank Stability, DST	August 7, 2003
Victor Street	“First Step” Action Plan Kam River Bank Stability Assessment Broadway Avenue/ South Victor Street, DST	November 10, 2003
Kam River System	Water Management Plan, OPG	August 2004
Victor Street soil nailed area	Design Report Soil Nail Stabilization System for Five Locations along Victor Street, DST	March 2, 2005
Victor Street soil nailed area	Construction Report 2004 Design-Build Contract Kam River Bank Stabilization, DST	December 2006
1420 Victor Street	Victor Street Slope Failure Site No. 4 (1420 Victor Street), DST	January 8, 2013
1470/1480 Victor Street	1470-1480 Victor Street Slope Failures between Sites #2 and #3	June 2013
1420 Victor Street	1420 Victor Street Slope Survey Monitoring, DST	August 6 to September 2013
1470 Victor Street	Construction Report, Slope Failures Temporary Solutions, 1470 Victor Street, DST	December 20, 2013
1480 Victor Street	Construction Report, Slope Failures Temporary Solutions, 1480 Victor Street, DST	December 20, 2013
Victor Street 2005 soil nailed areas	Victor Street Monitoring Report, DST	Annual Reports 2009 to 2015 and 2017
1420/1470/1480 Victor Street	Construction Report, 2014 Design-Build Contract	December 2014
1420/1470/1480	Victor Street Monitoring Report, DST	September 29 to December 25, 2014
1420/1470/1480	Victor Street Monitoring Report, DST	Monthly reports 2015
1420/1470/1480	Victor Street Monitoring Report, DST	Annual report 2016
1420/1470/1480	Victor Street Monitoring Report, DST	Annual report 2017
1420/1470/1480	Victor Street Monitoring Report, DST	Annual report 2018
1420/1470/1480	Victor Street Monitoring Report, DST	Annual report 2019
Kam River within City of Thunder Bay	Kaministiquia River Erosion Sites Inventory Report, KGS Group	June 2019
Victor Street and Broadway Avenue	Victor/Broadway Bank Stabilization Assessment Study Report, Hatch	March 2021

Attachments: Broadway Avenue/ Victor Street Erosion Projects Map
 Kam River Speed Limit Restriction Area Map

**Broadway Avenue /
Victor Street
Erosion Projects**



Legend

-  2015 Soil Nailing Site
-  2014 Soil Nailing Sites
-  Rip Rap Erosion Protection, 1984
-  Retaining Wall, 1985
-  Bank Stabilization
-  Rip Rap Erosion Protection, 1981
-  Soil Nailing Sites, 2004-2005
-  City Owned Property
-  LRCA Owned Property

0 50 100 150 200 m

1:6,000

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Thunder Bay, ON
P7B 6T8

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Projection: UTM Zone 16N
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LRCA Acquired At Risk Home Locations

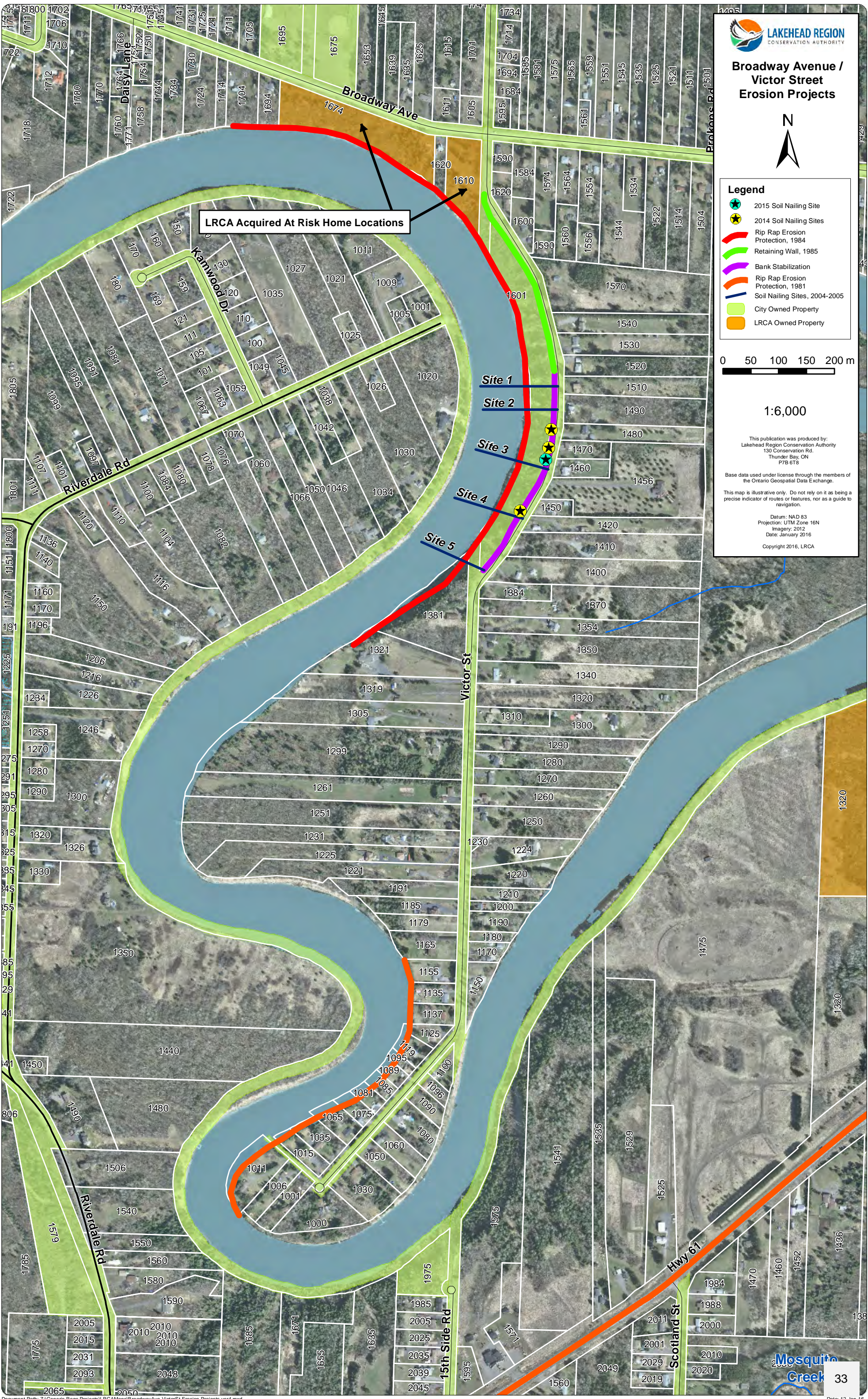
Site 1

Site 2

Site 3

Site 4

Site 5



Kaministiquia River Restricted Speed Area



Legend

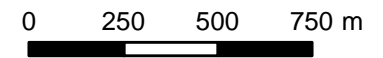
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- Parcels

Drainage

- Water Body
- Wetland
- Provincially Significant Wetland
- Stream
- River
- Ditch

Roads

- Highway
- Road
- Street



1:20,000

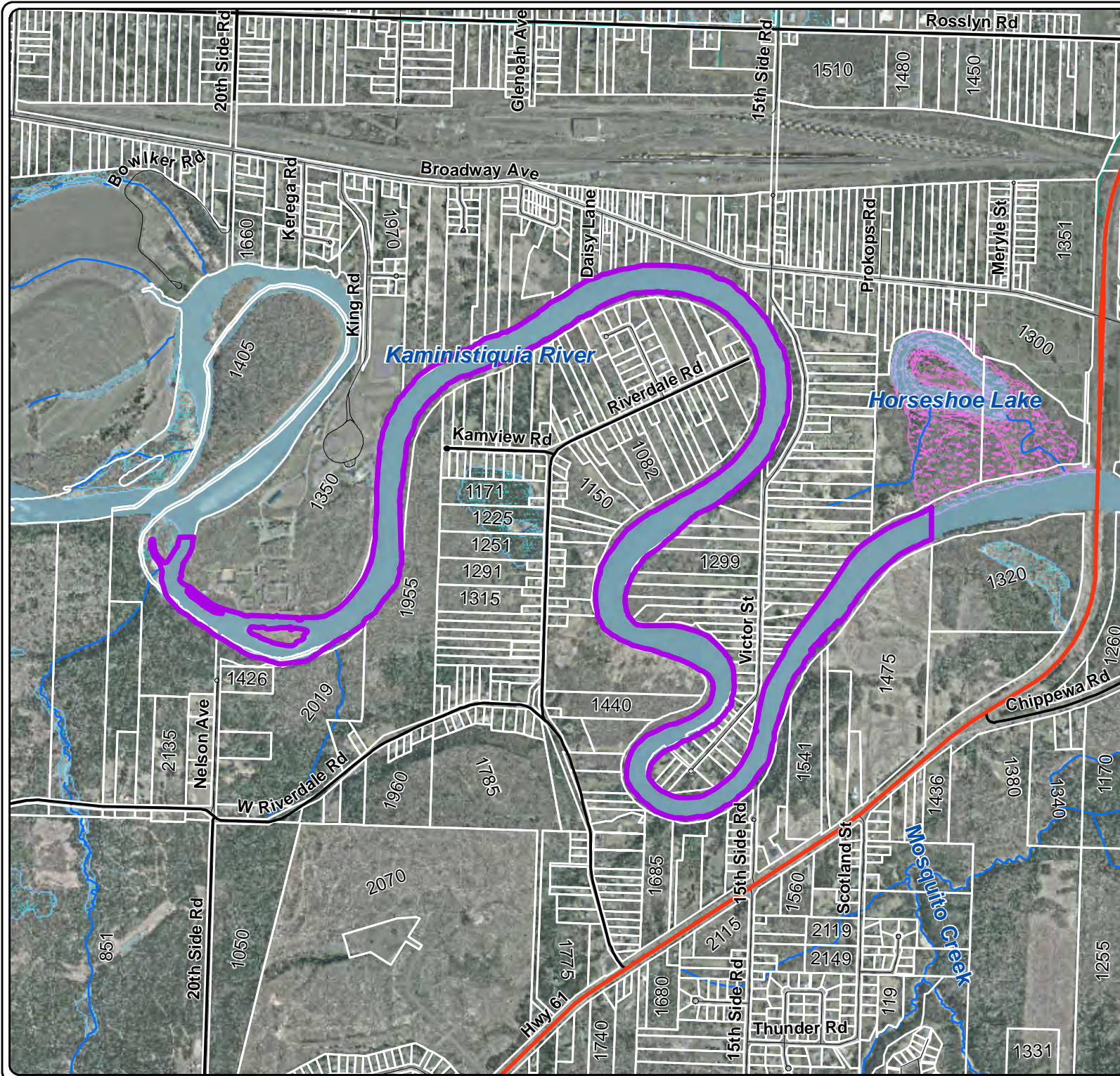
This publication was produced by:
Lakehead Region Conservation Authority
130 Conservation Rd.
Thunder Bay, ON
P7B 6T8

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This map is illustrative only. Do not rely on it as being a
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navigation.

Datum: NAD 83
Projection: UTM Zone 16N
Date: January 2016

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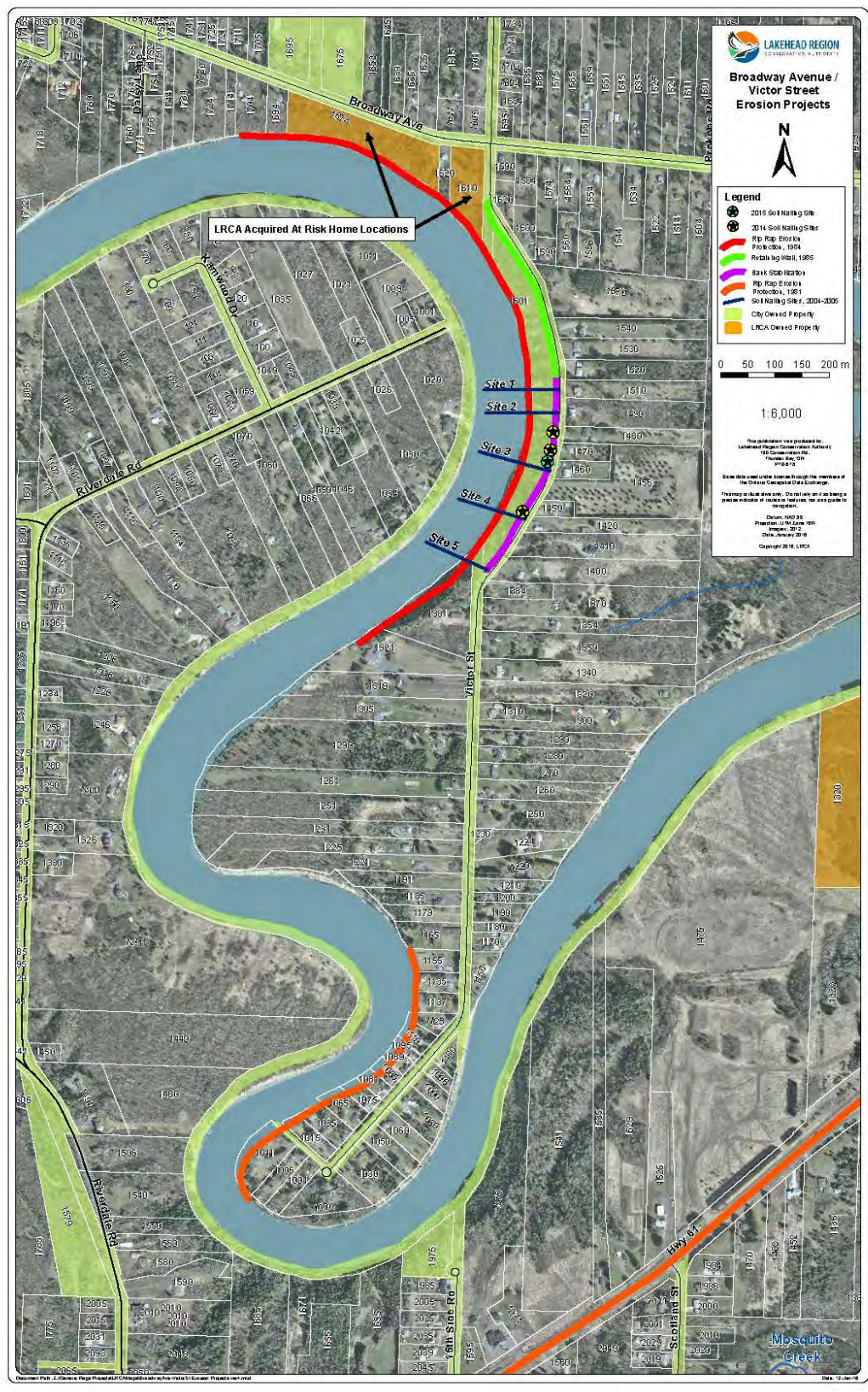
August 10, 2021

MEMO TO: File
 FROM: Jessie McFadden, Watershed Stewardship Technician
 RE: Victor Street – Vegetation Assessment & Proposed Plants

Vegetation along the Kaministiquia River at Victor Street is a combination of native and non-native species. Erosion is present along the bank, and Purple Loosestrife (invasive) was observed at Site 2 (see map below), across from 1480 Victor Street. The Purple Loosestrife is present in scattered groups, and about 10 plants in total were noted; management via hand pulling is recommended.

Based on the existing vegetation and growth conditions along the Kaministiquia Riverbank, the following species are recommended and compose the revegetation plan for soil nail sites 1, 2 and 4.

Site 1 – wet meadow	Site 2 – sandy slope	Site 4 – compacted soils
- Speckled alder (<i>Alnus incarna</i>)	- Red pine (<i>Pinus resinosa</i>)	- Red osier dogwood (<i>Cornus stolonifera</i>)
- Red osier dogwood (<i>Cornus sericea</i>)	- Jack pine (<i>Pinus banksiana</i>)	- Northern bush honeysuckle (<i>Diervilla lonicera</i>)
- Canadian bluejoint	- Northern bush honeysuckle (<i>Diervilla lonicera</i>)	- Fireweed (<i>Chamaenerion angustifolium</i>)
- Joe-pye weed (<i>Eutrochium maculatum</i>)	- Common juniper (<i>Juniperus communis</i>)	- Canada goldenrod (<i>Solidago canadensis</i>)
- Common boneset (<i>Eupatorium perfoliatum</i>)	- Fireweed (<i>Chamaenerion angustifolium</i>)	- Switchgrass (<i>Panicum virgatum</i>)
- Swamp milkweed (<i>Asclepias incarnata</i>)	- Canada goldenrod (<i>Solidago canadensis</i>)	- Canada wild rye (<i>Elymus canadensis</i>)





Victor Street riverbank; view upstream from 1610 Victor Street (refer to Site Map above).



Erosion at 1610 Victor Street along Kaministiquia Riverbank.



Planted White Spruce at 1610 Victor Street.



Site 1 where rip rap, geotextile, and adjustments to soil nail are needed.



Purple Loosestrife (invasive) at Site 1 across from 1480 Victor Street.



Soil nails and mesh requiring alterations at Site 1.



Site 2; add topsoil, fill and level. Keep existing young conifers and add vegetation to slope.



Reed Canary Grass (invasive) across from 1450 Victor Street at Site 4.



Site 4; rip rap and gravel. Add hardy native shrubs.



PROGRAM AREA	Operation and Maintenance of Erosion Control Structures	REPORT NO.	KAMEC-02-2022
DATE PREPARED	April 14, 2022	FILE NO.	9-15-1
MEETING DATE	April 27, 2022		
SUBJECT	2021 Victor Street Monitoring Report		

RECOMMENDATION

Suggested Resolution:

“THAT Staff Report KAMEC-02-2022 and the Victor Street Slope Monitoring Report, dated March 28, 2022 be received.”

LINK TO STRATEGIC PLAN (2018 – 2022)

Protect & Support:

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

EXECUTIVE SUMMARY

In November 2021, Englobe Corporation (formerly DST Consulting Engineers) completed the annual monitoring of the banks of the Kaministiquia River at 1620 Broadway Avenue and the five (5) 2005 soil nail sites across from 1510, 1480, 1460, 1420 and 1400 Victor Street, in the City of Thunder Bay. The report indicates that all monitoring sites are in good condition and no horizontal and vertical movement was detected. Minor maintenance works is recommended at Site #2, which includes placing a small amount of new topsoil on the slope and rip-rap treatment in a localized area at the bottom of slope. LRCA staff will complete the minor repair in the fall of 2022.

DISCUSSION

The Victor Street monitoring program for 1620 Broadway Avenue and for the five (5) 2005 soil nail sites across from 1510, 1480, 1460, 1420 and 1400 Victor Street was completed on November 10, 2021. The Englobe Corporation (formerly DST) Victor Street Slope Monitoring Report concludes that the treated slopes at all sites appear to be in stable condition and the vegetation covers the areas providing protection against erosion. No significant movement has been detected with the instrument on the treated areas.

Areas with asphalt roadway deterioration at the sites have been repaired with cold asphalt patch and remain in good condition.

An inspection of the bank crest at the Hill's residence located at 1620 Broadway Avenue was carried out as part of the Report. The property has previously been slated for acquisition by the LRCA once the residence is less than 10 meters from the crest of the bank. At the time of inspection, the residence was 12.45 metres from the slope crest with no evidence of new erosion.

Site #2, which consists of the treated areas at 1480 and 1470 Victor Street will require minor maintenance works (with rip-rap) on the slopes, and additional topsoil (2 cubic metres) to replace lost soil and promote growth of vegetation in that area.

FINANCIAL IMPLICATIONS

The City of Thunder Bay is designated as the sole benefitting municipality for the Victor Street monitoring. The 2022 budget includes funds to complete annual inspections and required minor maintenance work.

CONCLUSION

All five (5) soil nailed sites monitored along Victor Street are continuing to function as designed. Minor maintenance work will be carried out in 2022 by LRCA staff, which includes new topsoil in a small area on the slope, and rip-rap treatment at the bottom of slope at Site #2 (across from 1470 and 1480 Victor Street). The residence at 1620 Broadway Avenue continues to be within an acceptable distance from the current crest of the bank.

BACKGROUND

In order to protect City of Thunder Bay infrastructure along Victor Street (i.e. road surface and water mains), the LRCA has completed soil nailing at several erosion sites along the Kaministiquia River banks on land owned by the City.

Five sites were treated in 2005 and three sites were treated in 2014/2015 with DST Consulting Engineer's proprietary soil nail stabilization system SNART (Soil Nail and Root Technology), which is comprised of steel bars inserted into the soil extended below all potential failure surfaces. The nails are typically installed on a 1 to 1.5 metre grid to varying depths up to 11.0 metres. Vegetation is then planted over the area. The design life of the soil nailed areas is estimated to be 50 to 100 years.

Monitoring has been carried out since the 2005 installation, with minimal movement detected in the treated sections.

The soil nailing was funded partially by the City of Thunder Bay and through funds received from the Water and Erosion Control Infrastructure (WECI) fund administered by the Ministry of Natural Resources and Forestry.

REFERENCE MATERIAL ATTACHED

Full report to be circulated at the meeting.

PREPARED BY: Gail Willis, Watershed Manager

<p>THIS REPORT SIGNED AND VERIFIED BY:</p> <p><i>Tammy Cook</i></p> <p>Tammy Cook Chief Administrative Officer</p>	<p>DATE: April 20, 2022</p>
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PROGRAM AREA	LRCA Administrative Building	REPORT NO.	LM-05-2022
DATE PREPARED	April 20, 2022	FILE NO.	70-7-2
MEETING DATE	April 27, 2022		
SUBJECT	LRCA Administration Building Electrical Upgrade – Contract Administration		

RECOMMENDATION

Suggested Resolution

“THAT: the Contract for LRCA Administration Building Electrical Upgrade for Contract Administration be awarded to TBT Engineering for a cost of \$16,000.00, not including HST **AND FURTHER THAT** funds will be appropriated from the Administrative Facility Maintenance Reserve.”

LINK TO STRATEGIC PLAN

Links to the Strategic Plan (2018-2022):

Conserve and Sustain:

- *Manage future growth through a systematic evaluation of assets and landholdings.*

EXECUTIVE SUMMARY

A Request for Proposal package was released on March 31, 2022 to hire a Contract Administrator for the LRCA Administration Building Electrical Upgrade. Three bids were received by the closing date. The bids have been reviewed and it is recommended to award the Contract to the lowest bidder, TBT Engineering, in the amount of \$16,000.00, plus HST.

DISCUSSION

Based on identified work within the 2021 Asset Management Plan (AMP) a Request for Proposal was released on March 31, 2022 to hire a Contract Administrator to oversee the entirety of the electrical upgrade project. The LRCA reached out to six engineering firms to bid, including: TBT Engineering, WSP, Kozar Engineering, AG Engineering, Automation Now and KGS Group.

Bids were received from three contractors:

- TBT Engineering - \$16,000.00 + HST
- Kozar Engineering - \$27,885.00 + HST
- KGS Group - \$39,580.00 + HST

LRCA has reviewed the bid proposals and recommends that the Contract be awarded to TBT Engineering, who submitted the lowest bid. The Contract Administrator will work with LRCA staff to determine final scope of the upgrade and hire a contractor.

FINANCIAL IMPLICATIONS

Funding for the LRCA Administration Building Electrical Upgrade will be taken from the Administrative Facility Maintenance Reserve. An estimate of \$137,000 was determined for the project, by KGS Group as identified within the 2021 Asset Management Plan Update.


CONCLUSION

Staff recommend that TBT Engineering be awarded the Contract as the Contract Administrator to oversee the LRCA Administration Building Electrical Upgrade Project.

BACKGROUND

All electrical recommendations for the LRCA Administration Building Electrical Upgrade were identified within the 2021 Asset Management Plan Update conducted by KGS Group.

PREPARED BY: Ryne Gilliam, Lands Manager

THIS REPORT SIGNED AND VERIFIED BY:  Tammy Cook Chief Administrative Officer	DATE: April 20, 2022
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PROGRAM AREA	CONSERVATION AREAS	REPORT NO.	CONAREA-01-2022
DATE PREPARED	April 20, 2022	FILE NO.	17-17-1
MEETING DATE	April 27, 2022		
SUBJECT	Silver Harbour Dive Park Access Project		

RECOMMENDATION

Suggested Resolutions

“THAT: Staff Report CONAREA-01-2022 be received **AND FURTHER THAT** the CAO and Chair are authorized to apply for funding from NOHFC: Enhance your Community Program related to the Silver Harbour Dive Park Access Project in collaboration with Thunder Country Diving.”

LINK TO STRATEGIC PLAN

Connect & Explore:

- *Emphasize a sense of place through positive and equitable interactive experiences.*
- *Strengthen a shared interest in conservation through collaboration with existing and new partners.*
- *Manage recreational areas for current and future generations.*

EXECUTIVE SUMMARY

Thunder Country Diving is requesting to collaborate with the LRCA to enhance the dive park access at Silver Harbour Conservation Area. As part of the project they are requesting that the LRCA apply to the NOHFC: Enhance Your Community Program for funding as part of their proposal to improve the access to the dive area at Silver Harbour Conservation Area, as they are not eligible to apply for the funding. Staff recommend that the LRCA collaborate with Thunder Country Diving as part of the Silver Harbour Dive Park Access Project, including applying for funding where applicable and creating signage in the area.

DISCUSSION

In 2019, the LRCA approved diving as a permitted use at Silver Harbour Conservation Area. In an effort to improve and create a safe access point for divers to enter and exit the water, Thunder Country Diving has developed a proposal, as outlined in the attached summary (Attachment #1). This project was initially outlined in 2019 during the approval process allowing diving to be permitted at the Conservation Authority.

The project involves hiring a crane to move large boulders from the shoreline and place a railing to improve the ease of entering and exiting the water. Staff previously reviewed the project on

site with Thunder Country Diving and support the plan as it will improve access, thereby reducing potential liability and will encourage divers to use the intended access point rather than the docking facilities.

The project is estimated to cost \$19,700.00. Thunder Country Diving has secured an in-kind donation from Big Lake LTD for underwater assistance in the amount of \$5,000.00 (see attached letter of support, Attachment #2), plans on fundraising \$1,970.00 and applying the CEDC for \$6,500.00 in funding; however, has requested that the LRCA apply to the NOHFC: Enhance Your Community Program, for \$5,930.00 in funding, as they are not eligible to apply. Additionally, the LRCA would commit to developing signage and fund acquiring the sign, estimated to cost \$300.00, which the LRCA would have installed regardless of this project.

FINANCIAL IMPLICATIONS

Minimal financial impacts are anticipated to apply for funding for the project. Signage costs will be incorporated into the current budget. Improving the access to the dive area is considered to reduce potential liability related to the use of the area.

CONCLUSION

Staff recommend collaborating with Thunder Country Diving to acquire funding to improve the access to the dive area at Silver Harbour Conservation Area.

BACKGROUND

On June 26, 2019 resolution #78/19 was carried:

“THAT: Staff Report CONAREA-02-2019 be received AND FURTHER THAT the activity of SCUBA diving is recognized as a permitted activity at Silver Harbour and Little Trout Bay Conservation Areas AND FURTHER THAT an agreement between the LRCA and Wally Peterson outlining Mr. Peterson’s request to train divers as well as for the development of a dive park at Silver Harbour Conservation Area is drafted for future Board approval.”

No agreement with Wally Peterson has been developed yet as the COVID-19 pandemic impacted diving training. The development of an Agreement will be pursued as part of this project, if warranted.

REFERENCE MATERIAL ATTACHED

Attachment #1 – Silver Harbour Dive Park Access Proposal Summary, Thunder Country Diving, April 2022

Attachment #2 – Big Lake LTD, Letter of Support

Attachment #3 – Map, Silver Harbour Conservation Area

PREPARED BY:

Tammy Cook, CAO

REVIEWED BY:

Ryne Gilliam, Lands Manager

<p>THIS REPORT SIGNED AND VERIFIED BY:</p> <p><i>Tammy Cook</i></p> <p>Tammy Cook Chief Administrative Officer</p>	<p>DATE: April 21, 2022</p>
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Silver Harbour Dive Park Access

A Local Collaboration

The Silver Harbour Conservation Area is a popular diving location due to the underwater dive park and nearby historical shipwreck Gordon Gauthier. The Silver Harbour Dive Park is an ideal location for novice divers to enjoy, as it is easily navigated and debuts eight wrecks of various sizes. Currently, there is no direct access to the dive park. Increasing concerns of swimmers and divers around the boat launch and docking facilities have prompted the need for a safe access point to the dive site. The Silver Harbour Dive Park Access Project provides an effective solution that will provide safe access to the popular dive site and boost visitor numbers to the conservation area. Thunder Country Diving would like to partner with the LRCA to create an access point near the location of the dive park (Appendix 1). The Silver Harbour Dive Park Project aims to promote safe diving within a popular conservation area, while providing access to culturally significant shipwrecks. Working together, the LRCA and Thunder Country Diving will produce a unique diving experience unlike any other conservation area in Ontario.

Project Goals and Objectives:

The goal of the project is to build a safe access point for divers to enter and exit the water near the already developed dive park. The primary objective is to continue to comply with the Lakehead Region Conservation Authority's rules and regulations while improving safety for the continued enjoyment of the historical wrecks.

Benefits:

The major benefit of the project is the improved safety for divers and increased accessibility to the existing dive park. Having a safe access point will deter divers from utilizing the boat launch or docking area to access the water. The project will also benefit the City of Thunder Bay and the Municipality of Shuniah by increasing recreational opportunities, further attracting tourists to the area. It is expected that the dive park will not only boost the economy but it will increase the revenue the LRCA will receive from visitors for conservation area maintenance.

The access point will also provide a safe exit for anyone who may be in the water or under distress. While it is not encouraged by the LRCA OR Thunder Country Diving, the cliffs are still utilized by many for jumping into the beautiful waters of Lake Superior. Previous incidences have occurred from swimmers' inability to get out of the water in rough conditions. An exit point along the waterfront of the Silver Harbour allows for an additional safety margin for anyone in distress in the water.

Associated Costs:

The Silver Harbour Dive Park Access Project is expected to cost approximately \$19,700.00. The initial cost inquiry indicated that it would cost \$7,000.00 a day to rent a crane. It is expected that the project will take two days, totaling to \$14,000 for the crane rental. The handrail is expected to cost \$300.00 to \$400.00, including the drilling required to ensure it is stably attached throughout the season. Big Lake LTD has agreed to donate their time and equipment should it be required to install the railing to reduce costs, a fee which would normally cost \$5000.00 for underwater assistance.

Thunder Country Diving is committed to providing the funding for 10 percent of this project and has liability insurance to cover dives who are present at the dive site with the company. Additional funding will be sought out from the Northern Ontario Heritage Fund Corporation (NOHFC), the Community Economic Development Commission, and local fundraising through the Dive Shop. The total costs and funding sources can be seen in Table 1 below.

Table 1: Silver Harbour Dive Park Access Project Budget

Source	Amount	Reason	Current Status & Contingencies, if any
CDEC MAT	\$6,500.00	Crane Rental	Pending
NOHFC: Enhance Your Community Program	\$5,930.00	Crane Rental	Pending
Thunder Country Diving - Fundraising	\$1,970.00	Crane rental Purchase of Railing Installation of Railing	Pending
Big Lake LTD (if applicable)	In kind donation - \$5,000.00	Underwater Assistance	Approved
LRCA	\$300.00	Signage	Pending
TOTAL			\$19,700.00

Project Steps:

The project encompasses four key activities to complete the project. The project is both brief and simple to complete, providing the optimal outcome of increasing safety for divers and boaters utilizing the conservation area. The key activities are as follows:

Step One: A crane will be rented to remove and replace large blocks of armor stone. Rather than providing picnic tables that are subject to vandalism, the large blocks will be placed along the entrance to be utilized for gear setup. The large stone will line either side of the trail leading to the popular diving area. Big Lake LTD will assist with the positioning of the blocks underwater to resemble a staircase or ramp entry depending on the size of the blocks at the site.

Step Two: Once the rocks have been moved, William Peterson owner of Thunder Country Diving, will take measurements of the entrance to get a railing made to be installed in August. Once the railing has been received, it will immediately be installed at the dive site with the assistance of Big Lake LTD.

Step Three: Signage must be placed to advise of diving hazards, liability, and expected use of the dive park. The LRCA will take responsibility for creating signs outlining the rules, regulations, and expected conduct when visiting the dive park. The LRCA will not be liable for divers. Divers are expected to have their own recreational insurance (Divers Alert Network), except when diving with Thunder Country Diving. Further, divers must carry a dive flag or carry a surface marker buoy to notify boaters that there are divers in the water.

Step Four: Thunder Country Diving will be responsible for the railing each season, removing it in the fall and replacing it in the spring. Maintenance of the dive park will be provided by both the LRCA's maintenance crew and Thunder Country Diving. The dive site will be monitored for hazards, vandalism, and litter routinely to ensure that the location remains visitor friendly.

Risk Management:

Divers assume all risks associated with the sport of Scuba Diving (injury, illness, and death, caused by scuba diving and all related activities). Divers must be fully certified as an Open Water Diver through a recognized training facility to dive at the Silver Harbour dive park. It is up to the individual performing the activity to correctly identify and quantify the extent of such risk. Divers are expected to have their own insurance (ie. Divers Alert Network) for injury or equipment loss. Divers in attendance with Thunder Country Diving will be covered under the dive shop's liability and insurance.

Currently, there are two boulders in place to prevent visitors from driving to the base of the mining area. These boulders will be removed for crane access and replaced once the project is completed. Divers will be expected to carry or trolley their equipment to the dive site. It is agreed that the placement of these boulders prevents unwanted vehicle access and should remain in place.

Conclusion:

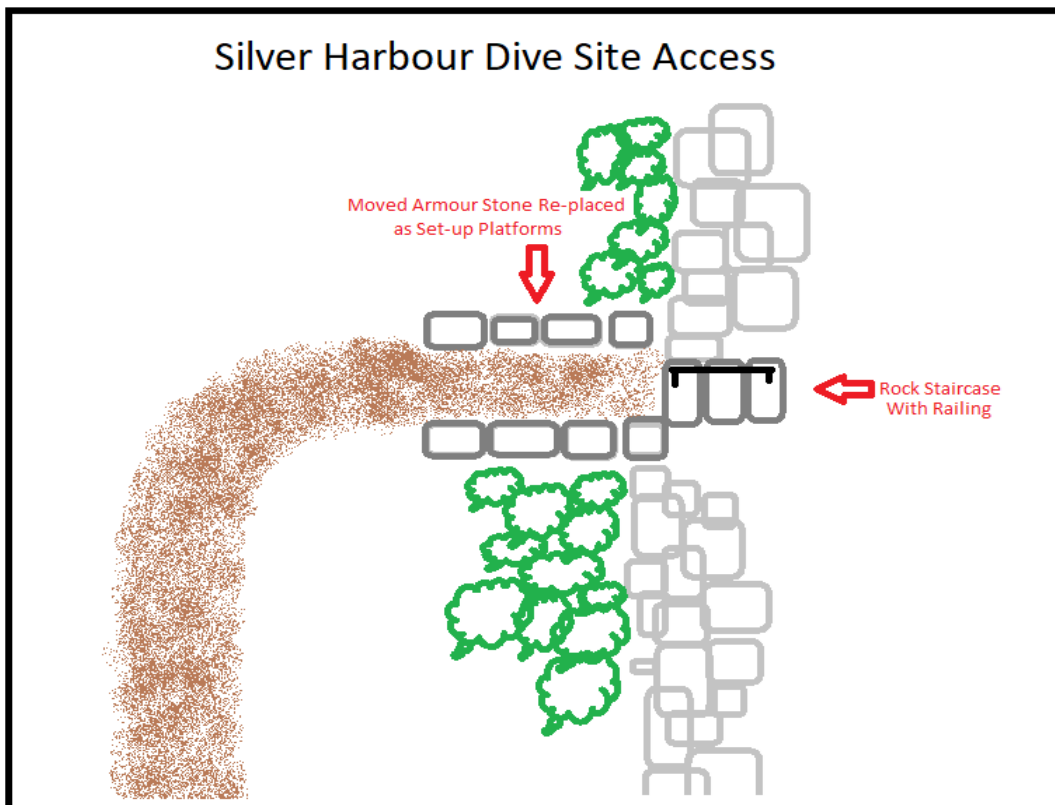
The Silver Harbour Conservation Area is already a popular public waterfront access point along the North Shore of Lake Superior. It is heavily utilized by the surrounding community due to its boat launch, neat history, natural aesthetics, and beautiful waters. The project builds on the recreational needs of the area and optimizes safety within the location. While diving is permitted within the Conservation Area, there is no current infrastructure to provide accessibility or safety when attempting to access the dive park. Often swimmers or divers will utilize the boat launch or docks which is a conflict of interest that this project could resolve. Having a safe exit point along the long shoreline is not just beneficial for divers, but it increases the overall safety of the Silver Harbour waterfront.

Appendix

Appendix 1: Silver Harbour Dive Park Access Location



Appendix 2: Diagram of Dive Park Access Plan.





MAT MARINE CONTRACTING LTD.

1401 Hamilton Ave.
Thunder Bay, ON P7E 4X8
TELEPHONE: 807-627-7631
E-mail: judson@biglakedive.com



www.biglakedive.com

To whom it may concern,



Big Lake Dive and Marine is committed to offering an in-kind donation of commercial diving services to assist in the completion of the Silver Harbour Dive Park Access project. Should the Silver Harbour Dive Park Access project require underwater commercial work to install the handrail or ensure the entrance is safe for use, Big Lake Dive and Marine is dedicated to donating the time, equipment, and personnel necessary to complete the project. The in-kind donation is approximately \$5,000.00 in value for a full day of commercial diving services. If there are any questions or concerns, please feel free to contact project head Wally Peterson at tcdiving@tbaytel.net for a full outline of the project.

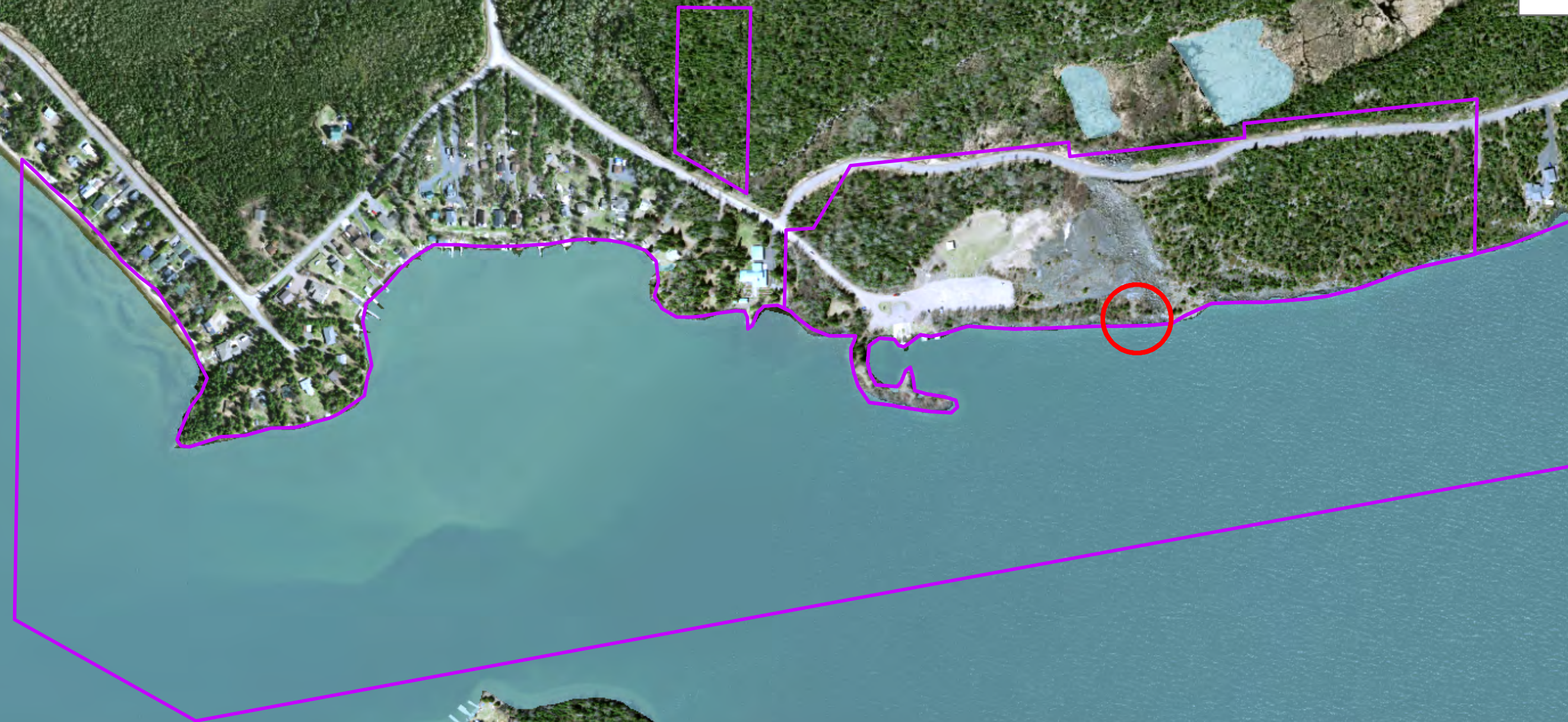
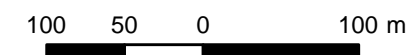
Regards,

Judson Beals
President
Big Lake Dive & Marine

Silver Harbour Conservation Area

Legend

-  LRCAProperty
-  Diving Location





PROGRAM AREA	Plan Input and Review	REPORT NO.	PIR-01-2022
DATE PREPARED	April 21, 2022	FILE NO.	11-6-3
MEETING DATE	April 27, 2022		
SUBJECT	2021 Plan Input and Review Summary		

RECOMMENDATION

“THAT: Staff Report PIR-01-2022 be received.”

LINK TO STRATEGIC PLAN

Links to the Strategic Plan (2018 – 2022):

Protect and Support:

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

EXECUTIVE SUMMARY

In 2021, a total of 184 Plan Input and Review comments were provided by LRCA staff, which is lower than the 10-year average. Comments were provided on the following planning applications: 29 Official Plan/Zoning By-Law Amendments, 2 Comprehensive Official Plan Reviews, 2 Comprehensive Zoning By-Law Reviews, 79 Consents and Minor Variances, 1 Plan of Subdivision/Campground, 7 clearance letters, 20 Realty Services requests, 30 Lawyer requests and 14 Letters of Opinion.

The 30 lawyer requests in 2021 generated a revenue of \$3,100.00 and seven clearance letters generated \$700.00 (\$100.00 per review). Effective January 1, 2021, proponents applying for *Planning Act* applications were charged a fee for LRCA’s comments on the application based on the type of application. LRCA fees for service collected by Member Municipalities/Townships and Lakehead Rural Planning Board generated \$25,005.00. Official Plan Comprehensive Review is partially funded by the MNR Section 39 Transfer Payment, when applicable. The \$28,805.00 in self-generated revenue will be used to fund the mandatory Plan Review program to offset required municipal levy.

DISCUSSION

In 2020, the Ontario government updated the Provincial Policy Statement (PPS) to support goals related to increasing housing, supporting jobs, and reducing red tape. LRCA has the delegated responsibility to review planning documents and applications on behalf of the Province to ensure that adherence to Section 3.1 (natural hazards) of the PPS is met.

The following tables outlines a summary of Plan Input and Review in 2021.

Plan Input and Review Summary	2021
Comprehensive Official Plan Reviews	2
Comprehensive Zoning By-Law Reviews	2
Official Plan/Zoning By-Law Amendments	29
Consents and Minor Variances	79
Plans of Subdivisions/Campgrounds	1
Clearances	7
Realty Services	20
Lawyer Inquiries	30
Letters of Opinion	14
Total	184

Attached (Attachment #1) is the 2021 Plan Input Summary Report, which summarizes the Plan Input Administration for the last 10 years. In the City of Thunder Bay, Authority staff now only comment on applications that have LRCA regulated area on the subject site and as such, the number of comments provided are approximately 40% lower than the 10-year average of 308 (i.e., 184 compared to 308).

Also attached (Attachment #2) is the 2021 Plan Input and Review Summary summarized by Municipality. Similar to previous years, the City of Thunder Bay and Municipality of Oliver Paipoonge received the most Plan Input and Review comments with a total of 81 and 61, respectively. Municipality of Neebing received 17 Plan Input and Review comments, and comparatively Municipality of Shuniah received 12 in 2021.

Effective January 1, 2021, proponents applying for *Planning Act* applications were charged a fee for service for LRCA's comments based on the type of application. All Member Municipalities, Townships, and the Lakehead Rural Planning Board (LRPB) remitted the collected fees to the LRCA at the time of application submission. The LRCA's Plan Review *Planning Act* fees for service recover, and partially fund the costs associated with administering and delivering the Plan Review program. The program is partially funded by municipal levy. See Attachment #3 – 2021 Plan Review Program Revenue Summary.

FINANCIAL IMPLICATIONS

A fee of \$100 plus HST is charged for a lawyer request or a clearance letter (for private landowners only). In 2021, the 30 lawyer requests generated an income of \$3,100.00 and seven clearance letters generated \$700.00.

Fees for LRCA comments relating to *Planning Act* applications were collected by Member Municipalities/Townships and LRPB generated \$25,005.00 in revenue. Official Plan Comprehensive Review is partially funded by the MNRF Section 39 Transfer Payment, when applicable. The \$28,805.00 in self-generated revenue will be used to fund the mandatory Plan Review program to offset required municipal levy.

CONCLUSION

In 2021, there were no major issues noted with the operation of the Plan Input and Review Program. A total of 184 comments were issued by LRCA staff in 2021, including 29 Official Plan/Zoning By-Law Amendments, 2 Comprehensive Official Plan Reviews, 2 Comprehensive Zoning By-Law Reviews, 79 Consents and Minor Variances, 1 Plans of Subdivision, 7 Clearance Letters, 20 Realty Services requests, 30 Lawyer requests, and 14 Letters of Opinion. Total number of planning comments provided were less than the 10-year average due to staff only commenting on applications with LRCA regulated area on the subject site.

BACKGROUND

Through a Memorandum of Understanding between Conservation Ontario, Ministry of Natural Resources and Forestry and Municipal Affairs and Housing, Conservation Authorities are delegated the responsibility to represent the provincial interest in regard to natural hazards encompassed by Section 3.1 of the Provincial Policy Statement.

Effective January 1, 2021, the Plan Review program transitioned to a fee for service in an effort to reduce municipal levy. All *Planning Act* applications are charged a fee for LRCA comments based on the type of application, which is collected at the time of submission and remitted to the LRCA to fund the Plan Review Program. In February 2022, the Plan Review Fee Schedule was amended to provide a discounted fee when Official Plan and Zoning By-Law Amendment applications were submitted at the same time.

Conservation Authorities review and provide comments on municipal planning documents and applications (i.e., minor variances, consents, amendments to the zoning by-law, etc.) submitted pursuant to the *Planning Act* as part of the Provincial One-Window Plan Review service. Comments are also provided on comprehensive zoning by-law and Official Plan updates undertaken by a Township or Municipality. Comments are to ensure that planning decisions take into consideration and are consistent with the natural hazard policies contained within Section 3.1 of the Provincial Policy Statement.

Comments are provided by the LRCA, as a commenting agency, on all planning documents and applications submitted to the planning authorities within the Area of Jurisdiction of the LRCA.

Comments are provided which advise whether the application meets the intent of Section 3.1 of the Provincial Policy Statement.

The applicable delegated approval authority (i.e., Municipality, Committee of Adjustment or Municipal Affairs and Housing) considers comments provided by all commenting agencies and makes their decision and imposes conditions based on a review of all sections of the Provincial Policy Statement and other applicable Provincial Plans.

The LRCA provides a service to Realtors and Solicitors when they are representing their clients during Real Estate transactions. Realtors or Solicitors may request information regarding whether subject properties are regulated under Ontario Regulation 180/06.

The LRCA will also provide written clearance letters that indicate that a proposed development is outside of the Regulated Area and a permit is not required, when necessary.

REFERENCE MATERIAL ATTACHED

Attachment #1 - 2021 Plan Input and Review Administration Summary

Attachment #2 - 2021 Plan Input and Review Summary Report

Attachment #3 - 2021 Plan Input and Review Revenue Summary

PREPARED BY: Gail Willis, Watershed Manager

THIS REPORT SIGNED AND VERIFIED BY: <i>Tammy Cook</i> Tammy Cook Chief Administrative Officer	DATE: April 21, 2022
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2021 Plan Input and Review Administration Summary

In 2021, Authority staff continued to provide Plan Input and Review to the member Municipalities. The following summarizes the Plan Input and Review Administration by Municipality in 2021.

Municipality	Minor Variance (A)	Consent (B)	Official Plan		Zoning By-Law (Z)		Subdivisions	Clearances	Reality Service	Lawyer Inquires	Letter of Opinion (Other)	Total
			Comprehensive Review	Amendment	Comprehensive Review	Amendment						
City of Thunder Bay	7	13	0	3	0	6	1	3	20	22	6	81
Oliver Paipooonge	2	41	0	0	0	13	0	2	0	0	3	61
O'Connor	0	0	0	0	0	0	0	0	0	1	0	1
Neebing	1	4	1	0	1	2	0	1	0	5	2	17
Shuniah	3	1	0	0	0	4	0	1	0	2	1	12
Conmee	0	0	0	0	0	0	0	0	0	0	0	0
Gillies	0	0	0	0	0	0	0	0	0	0	1	1
Dorion	0	2	1	0	1	1	0	0	0	0	1	6
Rural Planning Board	0	5	0	0	0	0	0	0	0	0	0	5
Total	13	66	2	3	2	26	1	7	20	30	14	184



2021 Plan Input and Review Summary Report

In 2021, Authority staff continued to provide Plan Input and Review to the member Municipalities. The following summarizes Plan Input for 2021, compared to the past 10 years.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Clearances	22	22	13	5	4	8	1	5	4	3	7
Consents and Minor Variances	150	123	171	208	166	181	131	114	132	119	79
Official Plan/Zoning By-Law Amendments Total	49	41	32	48	43	46	35	30	22	32	29
Comprehensive Official Plan Review							2	0	2	1	2
Comprehensive Zoning By-Law Review							0	2	0	0	2
Plans of Subdivision/Campgrounds	4	2	4	7	6	7	3	5	2	3	1
Letter of Opinion	35	23	25	27	14	20	18	25	16	26	14
Realty Services	22	23	32	20	42	20	38	27	17	29	20
Lawyer Inquiries	54	52	40	85	67	88	60	55	42	29	30
Total	336	286	317	400	342	370	288	263	237	242	184
10 Year Average	308										

*As of 2021 LRCA no longer comments on unregulated City of Thunder Bay Planning Applications.

*As of January 1st, 2021 Applicants are charged a fee per applications.

2021 - Plan Review Program Revenue Summary

	Consent	Minor Variance	Offical Plan	Zoning Bylaw	Total
City of Thunder Bay	2,200	550	990	1035	4,775
Municipality of Shuniah	275	825		345	1,445
Township of Dorion	550				550
Municipality of Neebing	825				825
Lakehead Rural Planning Board	1,375				1,375
Municipality of Oliver Paipaoonge	11,000	550		4,485	16,035
Lawyer Inquiry					3,100
Clearance Letter					700
	16,225	1,925	990	5,865	28,805

**2022 TREASURER'S REPORT
MONTHLY EXPENSES**

	2022 BUDGET	March	TOTAL TO DATE	BALANCE REMAINING
REVENUE				
Provincial Grants	843,613	4,700	48,900	794,713
Municipal Levy	1,733,332	-	1,733,332	-
Self Generated	233,788	21,935	124,678	109,110
Other Revenue	585,429	1,140	19,153	566,276
TOTAL REVENUE	3,396,162	27,776	1,926,062	1,470,100
EXPENSES				
Core Mandate Operating				
Administration	530,632	47,598	117,978	412,654
Community Relations	125,005	7,576	23,664	101,341
Natural Hazard and Protection Management	659,676	45,374	121,846	537,830
Conservation and Management of Cons. Auth. Lands	284,006	19,960	48,607	235,399
Drinking Water Source Protection	56,343	5,685	15,789	40,554
Total Core Mandate Operating	1,655,662	126,194	327,883	1,327,779
Non Core Mandate Operating				
Other Programming	248,099	61,434	81,709	166,390
Total None Core Mandate	248,099	61,434	81,709	166,390
Total Core and Non Core Mandate Operating	1,903,761	187,628	409,593	1,494,168
Core Mandate Capital				
Natural Hazard and Protection Management Authority Office	1,049,401	317	6,786	1,042,615
Authority Office	195,500	-	-	195,500
Conservation and Management of Cons. Auth. Lands	247,500	327	1,144	246,356
Total Core Mandate Capital	1,492,401	644	7,930	1,484,471
Total Operating and Capital	3,396,162	188,272	417,523	2,978,639



PROGRAM AREA	FINANCE	REPORT NO.	FIN-07-2022
DATE PREPARED	April 11, 2022	FILE NO.	Audit File
MEETING DATE	April 27, 2022		
SUBJECT	Purchase of Office Furniture		

RECOMMENDATION

Suggested Resolution

“THAT: the CAO is authorized to purchase office furniture as outlined in Staff Report FIN-07-2022 AND FURTHER THAT the purchase will be funded from the Operating Capital Reserve.”

LINK TO STRATEGIC PLAN

Priority:

EXECUTIVE SUMMARY

In reviewing current available space for meetings and staff, while giving consideration to the on-going COVID-19 pandemic, it is recommended to purchase a versatile table system for the Multi-purpose room. The purchase of new furniture was not included in the 2022 budget; therefore, staff are recommending funding the purchase (\$9,115.56 including LRCA applicable HST) from the Operating Capital Reserve.

DISCUSSION

With the transition back to in-person meetings and consideration given to the on-going COVID-19 pandemic, larger gatherings, including Board Meetings, will be held in the Multi-purpose Room in the future. In-order for the room to continue to function for a variety of uses (i.e. meeting space, open house venues, educational events, training, etc.), it is proposed to purchase a table that is multi-functional. Staff have acquired a quote from Lowery’s for a “Bungee” versatile table system, that has the ability to be configured in a multitude of configurations, can be flipped up and stacked vertically, and moved easily as all pieces are on castors. It is proposed to purchase 10-60 inch by 24-inch rectangular tables and two half moon tables for a price of \$9,115.56. If needed in the future, additional pieces can be purchased to add to the versatile table.

FINANCIAL IMPLICATIONS

The price to purchase the Bungee Board Room Table is \$9,115.56 (including LRCA applicable HST). The furniture was not included in the 2022 budget; therefore, it is recommended to purchase the furniture using funds from the Operating Capital Reserve, which has adequate funds to

accommodate the purchase, while still remaining above the specified target reserve level. Specified appropriations from this reserve include “unforeseen costs in the Administration Budget”.

CONCLUSION

Staff recommend purchasing a new Bungee table and office furniture utilizing funds from the Operating Capital Reserve.

BACKGROUND

None.

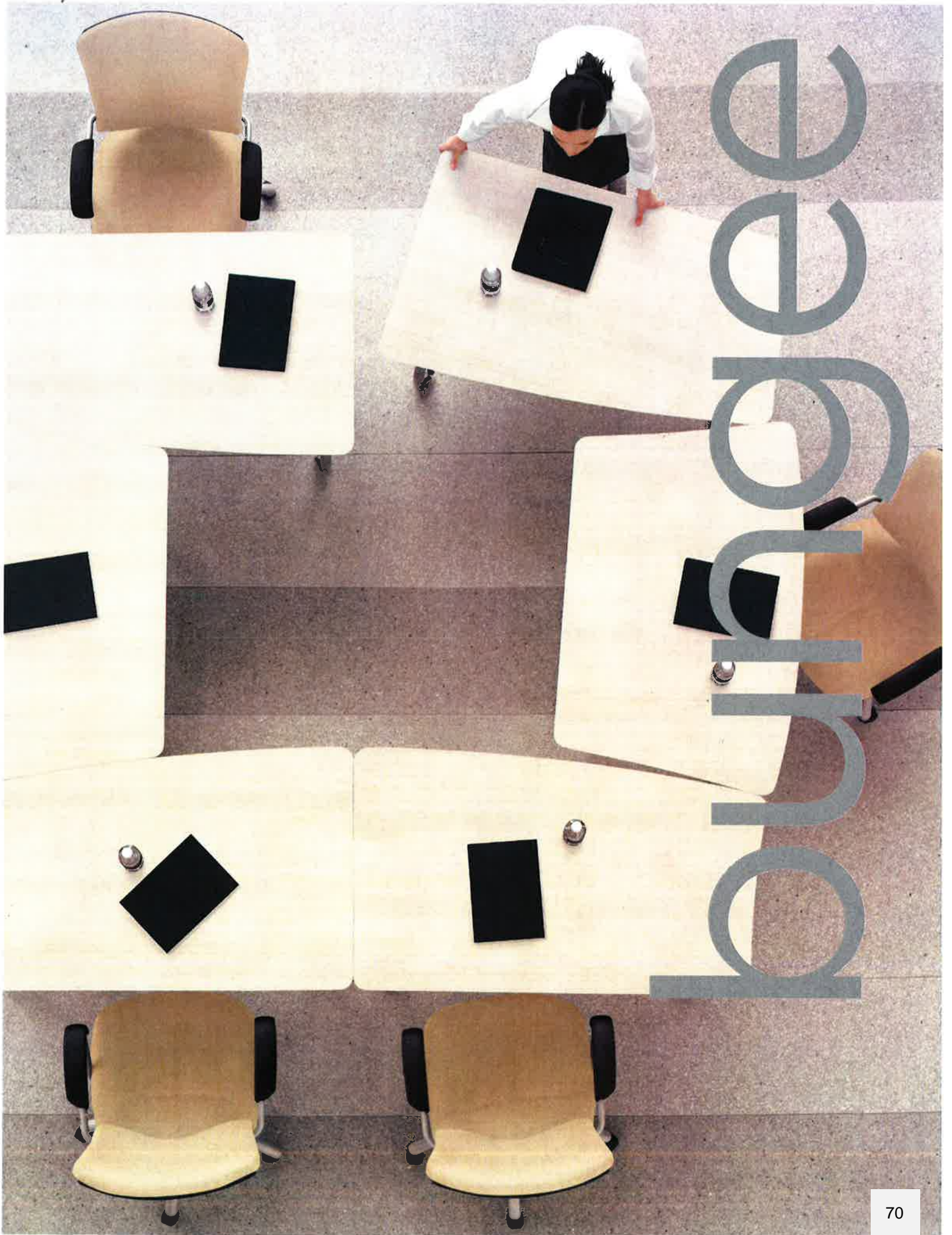
REFERENCE MATERIAL ATTACHED

Bungee - Brochure

PREPARED BY: Tammy Cook, CAO

REVIEWED BY: Mark Ambrose, Finance Manager

THIS REPORT SIGNED AND VERIFIED BY: <i>Tammy Cook</i> Tammy Cook Chief Administrative Officer	DATE: April 20, 2022
--	-------------------------



The Bungee family - versatile, efficient, economical



The Bungee™ family of tables comes complete with a selection of table top shapes and legs to meet a spectrum of planning possibilities. Versatile, affordable and efficient, Bungee is ideal for classrooms, training settings, boardrooms, flex spaces or any other settings where flexibility and growth need to be accommodated.

Bungee tables shown in Avant Honey with Silver legs. Global Accord seating shown.

bungee



Powering collaboration



Bungee SL tables incorporate power and data capabilities to support semi-permanent applications, while maintaining the flexibility to grow and reconfigure. An integrated design aesthetic ensures all Bungee and Bungee SL tables complement each other, effortlessly, within and across office settings.

Bungee SL tables shown in Dark Espresso with Silver legs.

Simple and easy to use



Flip-tops



Easy to operate flip-top lever, left or right side

Bungee cords



Tool free ganging

Bungee tables can be quickly arranged and reconfigured. Bungee cords connect and disconnect tables without the use of tools. The unique bubble mold edging assists in self-aligning the tables when joining them together and minimizes seams for a clean look.

Additional information can be found on the Global [website](#).

Maximize your space and flexibility



Discussion groups



Large team presentation



Lecture



Meeting open hierarchy



Meeting with leader



Small team presentation



From meeting to training to teaming and back again, it's easy with Bungee.

Bungee tables can be ordered individually or as a package. Individual tables are available in a wide range of surface shapes that can be combined to suit whatever setting is required. Packages provide a range of preplanned configurations, optimizing planning flexibility. Optional rectangular shaped modesties provide seated privacy. When the day is done, Bungee can be nested and stored.

Modular solutions for any setting



Bungee SL tables incorporate power and data to bring you added functionality where you need it. A modular solution, you can easily add on or take away tables. Optimize space and simplify components by sharing legs to accommodate more people comfortably in a smaller footprint.

Bringing power and data to group settings



Aluminum laminate face panels



Laminate face panels



Center spine

Partner Bungee SL with Divide, our modular desk-mounted panel system, to create simple benching, touchdown stations or collaborative open plan solutions. Bring power to the table by way of a four wire distribution system carried through an optional power trough.

Additional information can be found on the Global [website](#).

It's in the details

Edge details



Flat split edge, Silver accent



Flat split edge, Black accent



Bubble split edge, Silver accent



Bubble split edge, Black accent



Flat edge



Bicut edge

Leg options



Tapered legs with optional locking casters
(Bungee)



Spider legs with optional locking casters
(Bungee)



Tapered legs with leveler glide
(Bungee, Bungee SL)



Spider legs with leveler glide
(Bungee, Bungee SL)

Surface shapes



Rectangular
(Bungee, Bungee SL)



Half moon
(Bungee, Bungee SL)



Keystone
(Bungee, Bungee SL)



Wedge
(Bungee)



Trapezoid
(Bungee)



Tear drop
(Bungee)

Feet Finishes



Silver



Black nickel



Please visit globalfurnituregroup.com for additional product information including environmental certifications.
Cover: Bungee tables shown in White Chocolate laminate with Supra seating.



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PROGRAM AREA	Finance	REPORT NO.	FIN-08-2022
DATE PREPARED	April 20, 2022	FILE NO.	Audit File
MEETING DATE	April 27, 2022		
SUBJECT	2021 Audited Financial Statements		

RECOMMENDATION

Suggested Resolution

“THAT: the 2021 Audit Report and Financial Statements are adopted as presented AND FURTHER THAT each Member Municipality will be forwarded a copy of the final version.”

LINK TO STRATEGIC PLAN

Govern and Enhance:

- *Build a resilient financial model based on capacity, capabilities and transparency.*

EXECUTIVE SUMMARY

The draft 2021 Financial Statements have been completed by Grant Thornton, who have concluded that the financial position of the Authority has been presented fairly, in all material aspects. Once approved by the Board, copies of the final statements will be provided to all Member Municipalities, other government agencies as required, and posted on LRCA website.

DISCUSSION

The 2021 audited Financial Statements have been completed by the audit firm of Grant Thornton for the December 31, 2021 year end. The auditors have determined that the financial position of the Authority has been presented fairly, in all material respects as of December 31, 2021. The audit was performed using general accepted auditing standards. The audit consists of identifying and assessing risk of material misstatement of the financial statements, review internal controls, evaluate the accounting policies adopted by the Authority, and evaluate the overall presentation of the financial statements.

A representative of Grant Thornton will present the statements at the Board Meeting. Once approved by the Board, Grant Thornton will forward a final version, which will be distributed to all Member Municipalities, other government agencies as required, and will be posted on the LRCA website.

FINANCIAL IMPLICATIONS

The Authorities financial position for 2021 has been concluded by Grant Thornton to present fairly in all material respects.

CONCLUSION

Each year the LRCA is required to have an audit of the Authority’s financial records. The audit ensures that the financial position of the Authority represents fairly in all material respect. The 2021 audited financial position of the Authority, as determined by Grant Thornton, has determined that the LRCA has presented fairly, in all material respects, for the year 2021.

BACKGROUND

Per the LRCA Administrative By-Law:

The Authority’s accounts and transactions will be audited by a person licensed under the *Public Accounting Act, 2004* and shall ensure that the annual audit is prepared in accordance with generally accepted accounting principles for local governments recommended by the Public Sector Accounting Board of the Chartered Professional Accountants of Canada.

The General Membership shall receive, consider and if appropriate approve the Audited Financial Statements and Report of the Auditor annually for the previous year at the April Board Meeting.

The Authority shall forward copies of the Audited Financial Statements and Report of the Auditor to Participating Municipalities and the Minister in accordance with Section 38 of the Act and shall make the Audited Financial Statements available to the public on the Authority’s website within sixty (60) days of receiving the Auditor’s Report.

REFERENCE MATERIAL ATTACHED


2021 - Audited Financial Statements

Grant Thornton, Report to the Board of Directors of the LRCA, Audit strategy and results, for the year ended December 31, 2021

Internal Control Letter

PREPARED BY:

Mark Ambrose, Finance Manager

THIS REPORT SIGNED AND VERIFIED BY:  Tammy Cook Chief Administrative Officer	DATE: April 21, 2022
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Financial Statements

Lakehead Region Conservation Authority

December 31, 2021

DRAFT

Contents

	Page
Independent Auditor's Report	1 - 2
Statement of Financial Position	3
Statement of Operations and Accumulated Surplus	4
Statement of Changes in Net Financial Assets	5
Statement of Cash Flows	6
Notes to the Financial Statements	7 - 13
Schedule 1 – Accumulated Surplus	14
Schedule 2 – Water and Related Land Management and Conservation and Recreation Land Management Expenses	15
Schedule 3 – Tangible Capital Assets	16

Independent Auditor's Report

To the Members of Lakehead Region Conservation Authority

Opinion

We have audited the financial statements of Lakehead Region Conservation Authority ("the Authority"), which comprise the statement of financial position as at December 31, 2021, and the statements of operations and accumulated surplus, changes in net assets, and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of Lakehead Region Conservation Authority as at December 31, 2021, and its results of operations, and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Authority in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Authority's ability to continue as a going concern, disclosing, as applicable, matters relating to a going concern and using the going concern basis of accounting unless management either intends to liquidate the Authority or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Authority's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Authority's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Authority to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Thunder Bay, Canada
DATE

Chartered Professional Accountants
Licensed Public Accountants

Lakehead Region Conservation Authority

Statement of Financial Position

As at December 31

2021

2020

Financial assets

Cash and cash equivalents	\$ 6,411,305	\$ 5,786,546
Accounts receivable <i>[note 3]</i>	<u>187,631</u>	<u>325,474</u>
Total financial assets	<u>6,598,936</u>	<u>6,112,020</u>

Liabilities

Accounts payable and accrued liabilities	94,229	114,770
Deferred revenue – projects <i>[note 9]</i>	<u>3,501,789</u>	<u>2,885,247</u>
Total liabilities	<u>3,596,018</u>	<u>3,000,017</u>
Net financial assets	<u>3,002,918</u>	<u>3,112,003</u>

Non-financial assets

Tangible capital assets - net <i>[note 2] [schedule 3]</i>	4,722,018	4,940,091
Prepaid expenses	<u>6,917</u>	<u>8,715</u>
	<u>4,728,935</u>	<u>4,948,806</u>

Accumulated surplus <i>[schedule 1]</i>	<u>\$ 7,731,853</u>	<u>\$ 8,060,809</u>
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See accompanying notes to the financial statements.

Lakehead Region Conservation Authority

Statement of Operations and Accumulated Surplus

Year ended December 31	2021	2021	2020
	Budget <i>[note 7]</i>	Actual	Actual
REVENUES			
Government grants			
Government of Canada	\$ 29,000	\$ 29,466	\$ 34,892
NDMP	—		1,527
Province of Ontario			
MNRFP transfer payments	150,940	150,940	150,940
Provincial Grants Other	80,000	96,356	
Weci funding			70,000
MECP SWP	56,107	53,258	54,090
	<u>316,047</u>	<u>330,020</u>	<u>311,449</u>
Municipal levies			
Administration <i>[note 4[a]]</i>	467,135	358,150	327,462
Capital projects <i>[note 4[b]]</i>	1,201,267	806,888	920,285
	<u>1,668,402</u>	<u>1,165,038</u>	<u>1,247,747</u>
Other			
Contributions from others	357,869	222,652	118,238
Interest income	65,000	44,640	69,320
Miscellaneous	213,229	88,899	58,778
Vehicle and equipment	39,600	26,626	25,889
	<u>675,698</u>	<u>382,817</u>	<u>272,225</u>
Total revenues	<u>2,660,147</u>	<u>1,877,875</u>	<u>1,831,421</u>
EXPENSES			
Administration	641,365	514,124	473,222
Amortization of tangible capital assets	237,331	237,331	242,147
Water and related land management and conservation and recreation land management <i>[schedule 2]</i>	1,979,181	1,436,458	1,154,100
	<u>2,857,877</u>	<u>2,187,913</u>	<u>1,869,469</u>
Other			
Vehicle and equipment	23,475	18,918	18,060
Total expenses <i>[note 6]</i>	<u>2,881,352</u>	<u>2,206,831</u>	<u>1,887,529</u>
Annual surplus (deficit)	(221,205)	(328,956)	(56,108)
Accumulated surplus, beginning of year,	—	8,060,809	8,116,917
Accumulated surplus (deficit), end of year	<u>\$ (221,205)</u>	<u>\$ 7,731,853</u>	<u>\$ 8,060,809</u>

See accompanying notes to the financial statements.

Lakehead Region Conservation Authority Statement of Changes in Net Financial Assets

Year ended December 31	2021	2021	2020
	Budget <i>[note 7]</i>	Actual	Actual
Annual surplus (deficit)	\$ (221,205)	\$ (328,956)	\$ (56,108)
Acquisition of tangible capital assets	—	(19,258)	(23,209)
Amortization of tangible capital assets	—	237,331	242,147
Use of prepaid expenses	—	1,798	2,753
(Decrease) increase in net financial assets	<u>(221,205)</u>	<u>(109,085)</u>	<u>165,583</u>
Net financial assets, beginning of year	—	<u>3,112,003</u>	<u>2,946,420</u>
Net financial assets (deficit), end of year	<u>\$ (221,205)</u>	<u>\$3,002,918</u>	<u>\$ 3,112,003</u>

See accompanying notes to the financial statements.

Lakehead Region Conservation Authority Statement of Cash Flows

Year ended December 31

	2021	2020
Operations		
Annual surplus (deficit)	\$ (328,956)	\$ (56,108)
Non-cash charges		
Amortization of tangible capital assets	237,331	242,147
Donated asset	<u>—</u>	<u>—</u>
	(91,626)	186,039
Net change in non-cash working capital balances		
Decrease (increase) in accounts receivable	137,843	(16,105)
Increase (decrease) in accounts payable and accrued liabilities	(20,541)	(105,105)
Increase in deferred revenue - projects	616,543	453,069
Decrease in prepaid expenses	1,798	2,753
Cash provided by operating transactions	<u>644,017</u>	<u>520,651</u>
Capital		
Acquisition of tangible capital assets	<u>(19,258)</u>	<u>(23,209)</u>
Cash used in capital transactions	<u>(19,258)</u>	<u>(23,209)</u>
Increase in cash and cash equivalents	624,759	497,442
Opening cash and cash equivalents	<u>5,786,546</u>	<u>5,289,104</u>
Closing cash and cash equivalents	<u>\$ 6,411,305</u>	<u>\$ 5,786,546</u>

See accompanying notes to the financial statements.

Lakehead Region Conservation Authority

Notes to the Financial Statements

December 31, 2021

Nature of business

The Lakehead Region Conservation Authority (the "Authority") is established under the Conservation Authorities' Act of Ontario and its principal activities include water and related land management, and conservation and recreation land management.

1. Significant accounting policies

Basis of accounting

The financial statements of the Authority are prepared by management in accordance with accounting policies generally accepted for organizations operating in the local government sector as prescribed by the Public Sector Accounting Board ("PSAB") of CPA Canada. The more significant accounting policies are as follows:

[a] Cash and cash equivalents

Cash and cash equivalents consist of cash on hand and in banks.

[b] Accrual accounting

The Authority uses the accrual basis of accounting which recognizes the effect of transactions and events in the period in which the transactions and events occur, regardless of whether there has been a receipt or payment of cash or its equivalent. It recognizes a liability until the obligation or conditions underlying the liability is partly or wholly satisfied and recognizes an asset until the future economic benefit underlying the asset is partly or wholly used or lost.

[c] Deferred revenue

Deferred revenue reflects unexpended capital advances that have been allocated to specific capital projects.

[d] Interest income

Interest income earned on surplus funds is reported as revenue in the period earned to be applied toward the reduction of costs of programs and operations.

[e] Revenue recognition

Government transfers

Government transfers are transfers of monetary assets or tangible capital assets from a government to an individual, an organization or another government that are not the result of an exchange transaction, expected to be repaid in the future or expected to produce a direct financial return. Government transfers received are recognized in the financial statements as revenue when the transfers are authorized, and all eligible criteria have been met except when there is a stipulation that gives rise to an obligation that meets the definition of a liability. In that case, the transfer is recorded as a liability and recognized as revenue as the stipulations are met.

Lakehead Region Conservation Authority

Notes to the Financial Statements

December 31, 2021

Government transfers made to a recipient by the Authority are recorded as an expense when they are authorized, and the recipient meets all eligible criteria.

Municipal levies

Municipal levies are recognized as revenue in the period in which the budgeted expenditures occur. Unexpended levies for specific purposes are deferred for future expenses.

Other revenues

Contributions from others, miscellaneous, and vehicles and equipment revenues are recognized as revenue in the period in which the related expenses are incurred.

[f] Use of estimates

The preparation of financial statements in conformity with Canadian public sector accounting standards requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates. The most significant estimate in these financial statements include allowance for doubtful amounts receivable and estimated useful lives of assets.

[g] Non-financial assets

Non-financial assets are not available to discharge existing liabilities and are held for use in the provision of services. They have useful lives extending beyond the current year, and are not intended for sale in the ordinary course of operations. The change in non-financial assets during the year, together with the annual surplus, provides the change in net financial assets for the year.

Tangible capital assets

Tangible capital assets are recorded at cost, which includes all amounts that are directly attributable to acquisition, construction, development or betterment of the asset. The cost, less residual value, of the tangible capital assets are amortized on a straight-line basis over their estimated useful lives as follows:

Buildings	5 to 50 years
Flood control	10 to 50 years
Land improvements	10 to 20 years
Vehicles and equipment	5 years

Assets under construction are not amortized until the asset is available for productive use, at which time they are capitalized.

Lakehead Region Conservation Authority

Notes to the Financial Statements

December 31, 2021

2. Tangible capital assets

Schedule 3 provides information on the tangible capital assets of the Authority by major asset class, as well as accumulated amortization of the assets controlled.

There were no write-downs of assets in 2021 [2020 - \$nil].

Interest capitalized during 2021 was \$nil [2020 - \$nil].

There were no contributed tangible capital assets in 2021 [2020 - \$nil].

Certain assets have been recorded at a nominal value due to the difficulty in determining an appropriate value. This includes land inherited and purchased before 1974. Land purchased after 1974 is recorded at original cost. Land improvements that were completed before 1998 may also have a nominal value due to the difficulty in determining an appropriate value.

3. Accounts receivable

Included in accounts receivable are government remittances receivable of \$33,111 [2020 - \$11,604].

Lakehead Region Conservation Authority

Notes to the Financial Statements

December 31, 2021

4. Revenue from participating municipalities

	<u>2021</u>	<u>2020</u>
[a] Administration		
Thunder Bay	\$ 308,233	\$ 291,508
Shuniah	17,543	12,742
Oliver-Paipoonge	19,331	13,876
Neebing	7,881	5,677
Dorion	1,026	742
O'Connor	1,674	1,180
Conmee	1,567	1,100
Gillies	895	637
	<u>358,150</u>	<u>327,462</u>
	<u>\$ 358,150</u>	<u>\$ 327,462</u>
[b] Capital projects		
Thunder Bay	\$ 1,233,990	\$ 1,300,807
Shuniah	33,985	37,157
Oliver-Paipoonge	48,452	49,654
Neebing	15,266	16,555
Dorion	1,987	2,163
O'Connor	3,242	3,440
Conmee	3,037	3,208
Gillies	1,735	1,862
	<u>1,341,694</u>	<u>1,414,846</u>
Deferred revenue, beginning of year	2,790,949	2,296,389
Deferred revenue, end of year	<u>(3,325,755)</u>	<u>(2,790,949)</u>
	<u>(534,806)</u>	<u>(494,560)</u>
	<u>\$ 806,888</u>	<u>\$ 920,285</u>

Lakehead Region Conservation Authority

Notes to the Financial Statements

December 31, 2021

5. Continuity of reserves

	2021										2020	
	Operating Reserve	Administrative Reserve Maintenance	Administrative Reserve New Facility	Vehicle and Equipment	Insurance Fund	Legal Fees Reserve	Conservation Area Capital	Hazelwood Lake Reserve	Forest Management Reserve	Land Acquisition Reserve	Total	Total
Balance, beginning of year	\$ 1,213,249	\$ 531,621	\$ 32,311	\$ 102,792	\$ 30,000	\$ 100,000	\$ 522,246	\$ 100,000	\$ 153,283	\$ 251,296	\$ 3,036,798	\$2,897,308
Appropriations to reserves	—	15,050	—	7,707	1,000	—	92,442	—	—	—	116,199	142,674
Appropriation from reserves	—	—	—	—	(1,000)	—	(102,869)	(100,000)	(12,612)	—	(216,481)	(3,184)
Net appropriations to (from) reserves	—	15,050	—	7,707	—	—	(10,427)	(100,000)	(12,612)	—	(101,282)	139,490
Balance, end of year	<u>\$ 1,213,249</u>	<u>\$ 546,671</u>	<u>\$ 32,311</u>	<u>\$ 110,499</u>	<u>\$ 30,000</u>	<u>\$ 100,000</u>	<u>\$ 511,819</u>	<u>\$ —</u>	<u>\$ 140,671</u>	<u>\$ 251,296</u>	<u>\$2,936,516</u>	<u>\$3,036,798</u>

Lakehead Region Conservation Authority

Notes to the Financial Statements

December 31, 2021

6. Expenditures by object

	<u>2021</u>	<u>2020</u>
Salaries, wages and employee benefits	\$ 1,111,462	\$ 1,009,727
Materials, services and rents	858,038	635,655
Amortization	<u>237,331</u>	<u>242,147</u>
	<u>\$ 2,206,831</u>	<u>\$ 1,887,529</u>

7. Budget figures

The operating budget approved by the Authority for 2021 is reflected on the statement of operations and accumulated surplus. The budget established for capital investment in tangible capital assets are on a project-oriented basis, the costs of which may be incurred over a number of years and therefore may not be comparable with the current year's actual expenses.

Public Sector Accounting Standards require a comparison of the results for the period with those originally planned on the same basis as that used for actual results. The fiscal plan in the statement of operations and accumulated surplus has been adjusted to be presented on a consistent basis as actual results. Below is a reconciliation of the figures from the approved fiscal plan per the financial statements.

	Approved 2021 Budget \$	PSAB Adjusted Budget \$
Revenues	\$ 2,660,147	\$ 2,660,147
Expenses	<u>2,644,021</u>	<u>2,881,352</u>
Annual income (deficit)	16,126	(221,205)
Less:		
Acquisition of tangible capital assets	—	—
Add:		
Amortization of tangible capital assets	<u>—</u>	<u>237,331</u>
Increase (decrease) in net financial assets	<u>\$ 16,126</u>	<u>\$ 16,126</u>

Lakehead Region Conservation Authority

Notes to the Financial Statements

December 31, 2021

9. Deferred revenue

	<u>2021</u>	<u>2020</u>
City of Thunder Bay	\$ 2,552,769	\$ 2,104,766
Municipality of Oliver Paipoonge	-	9,776
All municipalities	582,470	466,444
Other	<u>366,550</u>	<u>304,261</u>
	<u>\$ 3,501,789</u>	<u>\$ 2,885,247</u>

10. COVID-19

Since December 31, 2020, the spread of COVID-19 has severely impacted many local economies around the globe. In many countries, including Canada, businesses are being forced to cease or limit operations for long or indefinite periods of time. Measures taken to contain the spread of the virus, including travel bans, quarantines, social distancing, and closures of non-essential services have triggered significant disruptions to businesses worldwide, resulting in an economic slowdown. Global stock markets have also experienced great volatility and a significant weakening. Governments and central banks have responded with monetary and fiscal interventions to stabilize economic conditions.

The Authority is monitoring the current situation but does not anticipate any significant financial impact in 2020 as a result of COVID-19.

The financial position and results of operations as of and for the year ended December 31, 2021 have not been materially impacted by COVID-19. The duration and impact of the COVID-19 pandemic, as well as the effectiveness of government and central bank responses, remains unclear at this time. It is not possible to reliably estimate the duration and severity of these consequences, as well as their impact on the financial position and results of the Authority for future periods.

Lakehead Region Conservation Authority
Accumulated Surplus

Schedule 1

Year ended December 31

2021

2020

General	\$ 73,319	\$ 83,920
Investment in capital assets	<u>4,722,018</u>	<u>4,940,091</u>
	<u>4,795,337</u>	<u>5,024,011</u>
Reserves set aside for specific purposes [note 5]		
For operating reserve	1,213,249	1,213,249
For administrative reserve maintenance	546,671	531,621
For administrative reserve new facility	32,311	32,311
For vehicle and equipment reserve	110,499	102,792
For insurance reserve	30,000	30,000
For legal fees reserve	100,000	100,000
For conservation area maintenance capital reserve	511,819	522,246
For hazelwood lake dam reserve	—	100,000
For forest management reserve	140,671	153,283
For land acquisition reserve	<u>251,296</u>	<u>251,296</u>
	<u>2,936,516</u>	<u>3,036,798</u>
Accumulated surplus, end of year	\$ <u>7,731,853</u>	\$ <u>8,060,809</u>

**Lakehead Region Conservation Authority
Water and Related Land Management and
Conservation and Recreation Land Management
Expenses**

Schedule 2

Year ended December 31	2021	2021	2020
	Budget <i>[note 7]</i>	Actual	Actual
Authority office	\$ 25,200	\$ 10,150	\$ 15,670
Conservation area site development	252,345	157,193	9,066
Conservation area maintenance	204,996	419,402	244,556
Flood plain mapping	38,600	21,625	88,747
Operations and maintenance of erosion control structures	48,114	39,321	147,018
Operations and maintenance of flood control structures	602,608	188,277	176,613
Source water protection	56,107	53,404	54,324
Stewardship program	382,608	205,222	106,063
Watershed monitoring	<u>368,603</u>	<u>341,864</u>	<u>312,043</u>
Total	<u>\$ 1,979,181</u>	<u>\$ 1,436,458</u>	<u>\$ 1,154,100</u>

Lakehead Region Conservation Authority
Tangible Capital Assets

December 31, 2021

Schedule 3

						2021	2020
	Land	Buildings	Vehicles and Equipment	Land Improvements	Flood Control	Total	Total
Net book value, beginning of year	<u>\$ 2,163,258</u>	<u>\$ 439,505</u>	<u>\$ 17,180</u>	<u>\$ 245,367</u>	<u>\$ 2,074,781</u>	<u>\$ 4,940,091</u>	<u>\$ 5,159,029</u>
Cost							
Balance, beginning of year	2,163,258	1,175,175	163,875	588,931	8,669,031	12,760,270	12,737,061
Add: Additions	—	—	—	19,258	—	19,258	23,209
Less: Disposals	—	—	—	—	—	—	—
Balance, end of year	<u>2,163,258</u>	<u>1,175,175</u>	<u>163,875</u>	<u>608,189</u>	<u>8,669,031</u>	<u>12,779,528</u>	<u>12,760,270</u>
Accumulated amortization							
Balance, beginning of year	—	735,670	146,695	343,564	6,594,250	7,820,179	7,578,032
Add: Amortization	—	24,427	11,191	30,580	171,133	237,331	242,147
Less: Accumulated amortization disposals	—	—	—	—	—	—	—
Balance, end of year	<u>—</u>	<u>760,097</u>	<u>157,886</u>	<u>374,144</u>	<u>6,765,383</u>	<u>8,057,510</u>	<u>7,820,179</u>
Net book value, end of year	<u>\$ 2,163,258</u>	<u>\$ 415,078</u>	<u>\$ 5,989</u>	<u>\$ 234,045</u>	<u>\$ 1,903,648</u>	<u>\$ 4,722,018</u>	<u>\$ 4,940,091</u>

Lakehead Region Conservation Authority

For the year ended December 31, 2021

Report to the Board of Directors of Lakehead Region Conservation
Authority

Audit strategy and results

Purpose of report and scope

The purpose of this report dated April 20, 2022 is to engage in an open dialogue with you regarding our audit of the financial statements of Lakehead Region Conservation Authority (the "Authority") for the year ended December 31, 2021. This communication will assist you in understanding our overall audit strategy and results. The information in this document is intended solely for the information and use of management and those charged with governance and should not be distributed to other parties.

The purpose of our audit, our responsibilities and your responsibilities were communicated to you in our signed engagement letter dated February 22, 2022.

We were engaged to provide the following deliverables:

- Audit of the Financial Statements for the year ended December 31, 2021
- Preparation of the annual charity return

Audit approach

Our audit approach involves identifying and assessing risks of material misstatement of the financial statements, whether due to fraud or error. Misstatements, including omissions, are material if they could reasonably be expected to influence the economic decisions made by users based on the financial statements. Ultimately, materiality is a measure of the significance of items to financial statement users, taking both quantitative and qualitative considerations into account. Without this concept, auditors would need to verify every transaction, which would not generally be practical, useful or cost effective. We apply a materiality threshold as a basis for focusing our audit work and, ultimately, to determine what matters will be brought to your attention and what adjustments need to be made to the financial statements.

The greater the risk of material misstatement associated with an area of the financial statements, the greater the audit emphasis placed on it in terms of verification. Where the nature of a risk is such that it requires special audit consideration, it is classified as a significant risk.

Due to the inherent limitations of an audit, there is an unavoidable risk that some material misstatements may not be detected and this is particularly true in relation to fraud. The primary responsibility for the prevention and detection of fraud rests with you.

Status of our audit

We have substantially completed our audit of the financial statements of the Authority and the results of that audit are included in this report. We will finalize our report upon resolution of the following items that are outstanding as at April 20, 2022:

- Receipt of signed management representation letter
- Approval of the financial statements by the Board of Directors of Lakehead Region Conservation Authority
- Final inquiries regarding subsequent events

Audit results

Area of focus	Matter, response and findings
Significant risk: fraud via management override of internal control	<p>Per the Canadian auditing standards, this is a presumed significant risk. The risk relates to management's ability to override the controls surrounding financial reporting in order to report improved financial results, manipulate particular financial statement areas, or perpetrate other financial fraud.</p> <p>Our audit procedures included testing journal entries, testing and analyzing significant accounting estimates for evidence of management bias, and reviewing significant transactions outside the normal course of business. Our audit procedures did not uncover any significant issues.</p>
Significant risk: fraud in revenue recognition	<p>Per the Canadian auditing standards, there is a presumed significant risk of fraud in revenue recognition. The risk is presumed to apply because past history indicates that, in financial statement frauds, revenue is an area that is commonly manipulated.</p> <p>Our audit procedures included testing revenue-related journal entries, determining that revenue recognition policies were reasonable based on the accounting standards followed by the Authority, and were consistently applied, and testing large/unusual revenue transactions near end of period. Our audit procedures did not uncover any significant issues.</p>
Accounting practices	<p>As part of our audit, we considered the Authority's significant accounting practices, including accounting policies, accounting estimates and financial statement disclosures. The accounting practices applied are consistent with those applied in the prior year and appear to be appropriate based on the Authority's circumstances.</p>

COVID-19 impact on audit risks and responses

Area of focus	Matter	Our response and findings
Going concern	<p>Due to the impact of COVID-19 and the negative effects it may have on the Authority's financial health, Grant Thornton extended some of their procedures to analyze the financial welfare of the Authority in fiscal 2021.</p> <p>A material uncertainty around the going concern assumption is not expected, however due to COVID-19 and its impact on both the local and global economy, it was pertinent to review various financial areas where the Authority may be more susceptible to the effects of COVID-19, such as accounts receivable and collections, reduction in revenues or any unique costs relating to the pandemic.</p> <p>As a result of these procedures completed, no material uncertainty has been disclosed in the financial statements, which have continued to be prepared on a going concern basis.</p>	<p><i>Our audit procedures included:</i></p> <p>Discussions were held with management regarding the impact of COVID-19 on the Authority's operations and finances.</p> <p>Investigated unusual variances from prior year and budget and corroborated where applicable.</p> <p>Reviewed 2022 draft budget to identify any unusual expectations that may be anticipated and budgeted for as a result of COVID-19. Inquired of management regarding any anticipated issues relating to COVID-19 that may not be reflective in the financial information, budgeted or actual, at this point.</p> <p>Additionally, we completed heightened subsequent event procedures to ensure management has correctly addressed subsequent event measures at year-end.</p> <p><i>Our audit findings:</i></p> <p>After completing the procedures mentioned above, we did not note anything that would impact our auditor's report.</p>
Disclosures and subsequent events	<p>The spread of COVID-19 has severely impacted many local economies around the globe. In many countries, including Canada, businesses were forced to cease or limit operations for long periods of time. Measures taken to contain the spread of the virus, including travel bans, quarantines, social distancing, and closures of non-essential services have triggered significant disruptions to businesses worldwide, resulting in an economic slowdown. Global stock markets have also experienced great volatility and a significant weakening. Governments and central banks have responded with monetary and fiscal interventions to stabilize economic conditions.</p>	<p>We discussed with management and reviewed the disclosure. Discussions held with management specifically on the following financial statement areas:</p> <ul style="list-style-type: none"> • Accounts Receivable – We inquired of management whether COVID-19 has impacted the collections and valuation of the Authority's receivables. Management has not identified any issues. • Accounts Payable and Accrued Liabilities: We performed subsequent payment testing and inspected accruals to ensure amounts were complete as there may be an increased chance for unrecorded liabilities with regards to COVID-19. Through our procedures, it appears there have been no significant impacts and all liabilities have been disclosed and/or recorded. • Revenue – We performed further substantive procedures to ensure revenue recognition was appropriate and accurate. No issues were identified during our procedures. • Expenses – As a result of the fluctuations in certain expense accounts compared to prior period, we performed further substantive procedures to ensure expenses were complete and accurate. No issues were identified during our procedures. <p>It appears that management's assessments noted above are reasonable, which supported no significant changes that warrant any adjustments or additional disclosure at yearend.</p>

We are required to report to you all significant findings from our audit, including identified or suspected fraud, non-compliance with laws or regulations, unreasonable requests by management not to send confirmation requests, major adjustments to opening balances, related party matters, going concern issues and significant audit difficulties encountered. Our audit did not identify any significant findings.

Uncorrected misstatements

Increase (Decrease)	Balance sheet			Income effect
	Assets	Liabilities	Closing equity	Earnings
Description				
Expense underaccrual	-	(2,914)	-	2,914
Total uncorrected misstatements	-	(2,914)	-	2,914

During the course of the audit we identified one item that has been adjusted for by management:

- Excess insurance proceeds recognized as revenue and transferred to reserve rather than deferral of revenue.

Other matters

Internal control

We obtain an understanding of internal control over financial reporting to the extent necessary to plan the audit and to determine the nature, timing and extent of our work. If we become aware of a deficiency in your internal control over financial reporting, the auditing standards require us to communicate to the Board of Directors of Lakehead Region Conservation Authority those deficiencies we consider significant. However, a financial statement audit is not designed to provide assurance on internal control.

Independence

We have a rigorous process where we continually monitor and maintain our independence. We have identified no information regarding our independence that in our judgment should be brought to your attention.

Technical updates

Refer to Appendix A that outlines PSAS Accounting Developments.

Appendix A – PSAS

Accounting developments

Public Sector Accounting Standards [updated December 31, 2021]

Effective date

Section PS 1150 *Generally Accepted Accounting Principles*

Section PS 1150 has been amended to require public sector entities to look to accounting pronouncements published by the International Public Sector Accounting Standards Board (IPSASB) as the first accounting framework to consult in situations not covered by primary sources of GAAP. When a standard from the IPSASB exists, it must be consulted first before standards issued by other bodies authorized to issue accounting standards.

Fiscal years beginning on or after April 1, 2021.

This amendment would only be applied only to new transactions or other events after the effective date for which the entity has no existing accounting policy. It also does not require the revision of existing accounting policies.

Section PS 3450 *Financial instruments* and Section PS 2601 *Foreign currency translation*

PS 2601 *Foreign currency translation* has been amended:

- To provide an irrevocable accounting policy election for all financial assets and financial liabilities arising from a foreign currency transaction. This election allows a public sector entity to elect on initial recognition to recognize their exchange gains and losses on a financial asset or financial liability directly in the statement of operations. If this election is not chosen, unrealized foreign exchange gains and losses are included in remeasurement gains and losses until they are realized, upon which they are reclassified to the statement of operations
- to require for financial assets and financial liabilities in the fair value category, that the exchange gain or loss component of the change in fair value is separated and recognized directly in the statement of operations in cases where the above accounting policy election was made and amounts subject to this election would not be considered remeasurement gains and losses

For those public sector entities that applied PS 2601 to fiscal years beginning on or after April 1, 2012, the election may be made on a one-time basis, at the beginning of the fiscal year, for existing financial assets and financial liabilities arising from a foreign currency transaction. For any financial asset or financial liability for which this election is made, cumulative unrealized exchange gains and losses arising at the date of the election are recognized as an adjustment to the accumulated surplus or deficit at the beginning of the fiscal year in which this election is applied. Disclosure is required to indicate the use of this election and any adjustment to the accumulated surplus or deficit in the year of application.

As a result of accounting policy election in PS 2601 noted above, PS 3450 has also been amended to require the disclosure of the carrying amounts of financial assets and financial liabilities in which exchange gains and losses are recognized directly in the statement of operations

For those public sector entities that applied PS 2601/PS 3450 to fiscal years beginning on or after April 1, 2012, the election in paragraph PS 2601.19A may be made on a one-time basis, at the beginning of the fiscal year, for existing financial assets and financial liabilities arising from a foreign currency transaction. This election may be applied no later than the fiscal year beginning on or after April 1, 2022. Earlier application is permitted.

Section PS 3160 Public Private Partnerships

New Section PS 3160 *Public Private Partnerships* establishes standards on how to account for public private partnerships between public and private sector entities where infrastructure is procured by a public sector entity using a private sector partner that is obligated to design, build, acquire or better infrastructure; finance the infrastructure past the point where the infrastructure is ready for use and operate and/or maintain the infrastructure. Infrastructure typically includes items such as tangible capital assets (i.e., complex network systems), but may also include items that are intangible in nature. The main features of the new Section are:

- The infrastructure is recognized as an asset when the public sector entity acquires control of the infrastructure. A liability is also recognized when the public sector entity recognizes an asset.
- The infrastructure asset and corresponding liability are initially measured at the cost of the infrastructure asset.
- Subsequent measurement of the infrastructure asset is based on the asset cost amortized in a rational and systematic manner over the useful life of the asset.
- Subsequent measurement of the financial liability is at amortized cost using the effective interest method. When all or a portion of the liability represents a performance obligation, revenue is recognized, and the liability reduced in accordance with the substance of the public private partnership agreement (as performance is achieved).
- Retrospective or prospective application is permitted.

Fiscal years beginning on or after April 1, 2023.

Earlier adoption is permitted.

Section PS 1000 Financial statement concepts, Section 1201 Financial Statement Presentation, and PSG-8 Purchased intangibles

Section PS 1000 has been amended to remove the prohibition of recognition of purchased intangibles in public sector financial statements. Consequentially, Section PS 1201 has also been amended to remove disclosure requirements for unrecognized purchased intangibles since entities can now recognize purchased intangibles in their financial statements. Entities still reporting in accordance with Section PS 1200 *Financial Statement Presentation* can also adopt the amendments and recognize purchased intangible assets. New Public Sector Guideline, PSG-8 *Purchased intangibles*, has been issued to explain the scope of the intangibles that are allowed to be recognized in the financial statements given this amendment to Section PS 1000. However, it is important to note that no further recognition, measurement, disclosure and presentation guidance has been provided.

The main features of PSG-8 include:

- A definition of purchased intangibles
- Examples of items that are not purchased intangibles
- References to other guidance in the PSA Handbook on intangibles
- Reference to the asset definition, general recognition criteria and the GAAP hierarchy for accounting for purchased intangibles
- Retrospective or prospective application is permitted.

Fiscal years beginning on or after April 1, 2023.

Earlier adoption is permitted.

2019-2020 Annual Improvements

Effective immediately

The following significant amendment has been made to PSAS as a result of the annual improvements process:

- A clarification has been added to the *Introduction to Public Sector Accounting Standards* to require public sector entities to adopt all related consequential amendments when they early adopt a new or amended standard. Consequential amendments are not available for early adoption if the related amended standard has not been early adopted

Section PS 3400 Revenues

New Section PS 3400 *Revenue* establishes standards on how to account for and report on revenue. It does not apply to revenues for which specific standards already exist, such as government transfers, tax revenue or restricted revenues. The Section distinguishes between revenue that arises from transactions that include performance obligations (i.e., exchange transactions) and transactions that do not have performance obligations (i.e., non-exchange transactions). The main features of the new Section are:

- Performance obligations are defined as enforceable promises to provide specific goods or services to a specific payer
- Revenue from transactions with performance obligations will be recognized when (or as) the performance obligation is satisfied by providing the promised goods or services to the payer
- Revenue from transactions with no performance obligations will be recognized when a public sector entity has the authority to claim or retain the revenue and identifies a past transaction or event that gives rise to an asset

Fiscal years beginning on or after April 1, 2023.

Earlier adoption is permitted.

(NOTE: The effective date was previously April 1, 2022, but in August 2020, as a result of the COVID-19 pandemic, the Public Sector Accounting Board (PSAB) has deferred the effective date by one year.)

Section PS 3280 Asset retirement obligations

New Section PS 3280 *Asset Retirement Obligations* establishes standards on how to account for and report a liability for asset retirement obligations. An asset retirement obligation is a legal obligation associated with the retirement of a tangible capital asset.

Asset retirement costs associated with a tangible capital asset increase the carrying amount of the related tangible capital asset and are expensed in a rational and systematic manner, while asset retirement costs associated with an asset no longer in productive use are expensed. Measurement of the liability for an asset retirement obligation should result in the best estimate of the amount required to retire a tangible capital asset at the financial statement date. A present value technique is often the best method to estimate the liability. Subsequent measurement of the liability can result in either a change in the carrying amount of the related tangible capital asset, or an expense, depending on the nature of the remeasurement or whether the asset remains in productive use.

As a result of the issuance of Section PS 3280, the Public Sector Accounting Board (PSAB) approved the withdrawal of Section PS 3270 *Solid waste landfill closure and post-closure liability* as asset retirement obligations associated with landfills will be within the scope of PS 3280. PS 3280 does not address costs related to remediation of contaminated sites, which will continue to be addressed in Section PS 3260 *Liability for contaminated sites*. Some consequential amendments have been made to PS 3260 to conform with PS 3280 and further clarify the scope of each standard.

Fiscal years beginning on or after April 1, 2022.

Earlier adoption is permitted.

(NOTE: The effective date was previously April 1, 2021, but in August 2020, as a result of the COVID-19 pandemic, the PSAB has deferred the effective date by one year.)

Section PS 3450 Financial instruments, Section PS 2601 Foreign currency translation, Section PS 1201 Financial statement presentation, and PS 3041 Portfolio investments

PS 3450 *Financial instruments* is a new Section that establishes standards for recognizing and measuring financial assets, financial liabilities and non-financial derivatives. Some highlights of the requirements include:

- a public sector entity should recognize a financial asset or a financial liability on its statement of financial position when it becomes a party to the contractual provisions of the instrument
- financial instruments within the scope of the Section are assigned to one of two measurement categories: fair value, or cost / amortized cost
- almost all derivatives are measured at fair value
- fair value measurement is required for portfolio investments in equity instruments that are quoted in an active market
- other financial assets and financial liabilities are generally measured at cost or amortized cost
- until an item is derecognized, gains and losses arising due to fair value remeasurement are reported in the statement of remeasurement gains and losses when the public sector entity defines and implements a risk management or investment strategy to manage and evaluate the performance of a group of financial assets, financial liabilities or both on a fair value basis, the entity may elect to include these items in the fair value category

The new requirements are all required to be applied at the same time.

For governments - Fiscal years beginning on or after April 1, 2022.

For government organizations that applied the CPA Canada Handbook – Accounting prior to their adoption of the CPA Canada Public Sector Accounting Handbook - Fiscal years beginning on or after April 1, 2012.

Public Sector Accounting Standards [updated December 31, 2021]	Effective date
<ul style="list-style-type: none"> additional disclosures with respect to financial instruments will be required, including the nature and extent of risks arising from a public sector entity's financial instruments <p>PS 2601 <i>Foreign currency translation</i> revises and replaces Section PS 2600 <i>Foreign currency translation</i>. Some highlights of the requirements include:</p> <ul style="list-style-type: none"> the deferral and amortization of foreign exchange gains and losses relating to long-term foreign currency denominated monetary items is discontinued until the period of settlement, foreign exchange gains and losses are recognized in the statement of remeasurement gains and losses rather than the statement of operations, unless an irrevocable election is made at initial measurement to recognize exchange gains and losses on a financial asset or financial liability directly in the statement of operations. <p>PS 1201 <i>Financial statement presentation</i> revises and replaces Section PS 1200 <i>Financial statement presentation</i>. The main amendment to this Section is the addition of the statement of remeasurement gains and losses.</p> <p>PS 3041 <i>Portfolio investments</i> revises and replaces Section PS 3040 <i>Portfolio investments</i>.</p> <p>The issuance of these new sections also includes consequential amendments to:</p> <ul style="list-style-type: none"> <i>Introduction to accounting standards that apply only to government not-for-profit organizations</i> PS 1000 <i>Financial statement concepts</i> PS 1100 <i>Financial statement objectives</i> PS 2125 <i>First-time adoption by government organizations</i> PS 2500 <i>Basic principles of consolidation</i> PS 2510 <i>Additional areas of consolidation</i> PS 3050 <i>Loans receivable</i> PS 3060 <i>Government partnerships</i> PS 3070 <i>Investments in government business enterprises</i> PS 3230 <i>Long-term debt</i> PS 3310 <i>Loan guarantees</i> PS 4200 <i>Financial statement presentation by not-for-profit organizations</i> <p>PSG-6 <i>Including results of organizations and partnerships applying fair value measurement</i> was withdrawn as a result of the issuance of these sections.</p> <p>In April 2020, the PSAB issued amendments to clarify aspects of Section PS 3450's application and add new guidance to its transitional provisions.</p> <p>The amendments introduce changes to the accounting treatment for bond repurchase transactions. Specifically, the amendments no longer require bond repurchase transactions to be treated as extinguishments, unless they are discharged or legally released from the obligation or the transactions meet certain criteria to be considered an exchange of debt.</p> <p>The amendments also provide clarification on the application of certain areas of Section PS 3450, these include:</p> <ul style="list-style-type: none"> Section PS 3450 does not apply unless a contractual right or a contractual obligation underlies a receivable or payable how a transfer of collateral pursuant to a credit risk management mechanism in a derivative contract is accounted for, and derecognition of a financial asset does not occur if the transferor retains substantially all the risks and benefits of ownership <p>Finally, the amendments have added new guidance to the transitional provisions as follows:</p>	<p>For all other government organizations - Fiscal years beginning on or after April 1, 2022.</p> <p>Earlier adoption is permitted.</p> <p>(NOTE: For public sector entities other than government organizations that applied the CPA Canada Handbook – Accounting prior to adopting the CPA Canada Public Sector Accounting Handbook, the effective date was previously April 1, 2021, but in August 2020, as a result of the COVID-19 pandemic, the PSAB has deferred the effective date by one year.)</p>

Public Sector Accounting Standards [updated December 31, 2021]**Effective date**

- controlling governments should use the carrying values of the financial assets and liabilities in the records of its government organizations when consolidating a government organization
 - any unamortized discounts, premiums, or transaction costs associated with a financial asset or financial liability in the cost/amortized cost category should be included in the item's opening carrying value, and
 - in cases where derivatives were not recognized or were not measured at fair value prior to adopting PS 3450, any difference between the previous carrying value and fair value should be recognized in the opening balance of accumulated remeasurement gains and losses
-

Strategic plan for not-for-profit organizations in the public sector

Since 2012, government not-for-profit organizations (GNPOs) have been required to adopt PSAS but were given the option of applying the specific GNPO accounting standards in PSAS. Some GNPOs have utilized those standards, while others have not. The PSAB recognized that a “one-size-fits-all” approach may not be appropriate for all stakeholders. As a result, in PSAB’s 2017-2022 Strategic Plan, the Board signaled intent to understand the needs and concerns of GNPOs and consider if some standards should be applied differently by them. In 2018, PSAB consulted with over 100 GNPO stakeholders to understand their fiscal and regulatory environment, their financial reporting needs, and their financial reporting perspectives in its first Consultation Paper. Diversity in the financial reporting framework, presentation of net debt and fund accounting, the impact of balanced budget requirements and endowments were some of the items stakeholders raised. In January 2021, PSAB released a second Consultation Paper. The purpose of the paper was to:

- summarize the feedback to Consultation Paper I;
- describe the options considered for a GNPO Strategy;
- describe the decision-making criteria used to evaluate the options; and
- propose a GNPO Strategy.

The deadline to respond to the Consultation paper ended June 30, 2021 and the PSAB is deliberating the feedback received.

International strategy

The PSAB has reviewed its current approach towards International Public Sector Accounting Standards (IPSAS) with the intent of developing options for its International Strategy. At its May 2020 meeting, PSAB decided that it will adapt IPSAS principles when developing future Canadian Public Sector Accounting Standards for the Public Sector Accounting Handbook. PSAB has issued a brief document summarizing its decision and what it means, entitled [In Brief – A plain and simple overview of PSAB’s 2020 decision to adapt IPSAS principles when developing future standards](#), as well as the [Basis for Conclusions](#) on how it reached its decision. This decision applies to all projects beginning on or after April 1, 2021.

Concepts underlying financial performance

In response to feedback from stakeholders, the PSAB is proposing changes to its conceptual framework and its reporting model with a focus on measuring the financial performance of public sector entities. A conceptual framework is a clear set of related concepts that act as the foundation for the development of standards and the application of professional judgment. In January 2021, PSAB issued four important exposure drafts:

- *The Conceptual Framework for Financial Reporting in the Public Sector* - PSAB has proposed to issue a revised Conceptual Framework that would include 10 chapters:
 - Chapter 1: Introduction to the Conceptual Framework
 - Chapter 2: Characteristics of public sector entities
 - Chapter 3: Financial reporting objective
 - Chapter 4: Role of financial statements
 - Chapter 5: Financial statement foundations
 - Chapter 6: Financial statement objectives
 - Chapter 7: Financial statement information
 - Chapter 8: Elements of financial statements
 - Chapter 9: Recognition and measurement in financial statements
 - Chapter 10: Presentation concepts for financial statements

The proposed Conceptual Framework would replace the existing conceptual framework in Section PS 1000 *Financial Statement Concepts* and Section PS 1100 *Financial Statement Objectives*

- *Financial Statement Presentation, Proposed Section PS 1202* – PSAB has proposed replacing the existing reporting model standard in Section PS 1201 *Financial Statement Presentation*. The proposed changes would make some significant changes to financial presentation for public sector entities
- *Consequential Amendments Arising from the Proposed Conceptual Framework* – This Exposure Draft will summarize the implications for the rest of the CPA Canada Public Sector Accounting (PSA) Handbook; and
- *Consequential Amendments Arising from the Financial Statement Presentation Standard, Proposed Section PS 1202* – This Exposure Draft will summarize the implications for the rest of the PSA Handbook as a result of new proposed Section PS 1202.

The deadline for responses to the exposure drafts was June 30, 2021 and the PSAB is deliberating the feedback received.

April 20, 2022

Management and the Board of Directors
Lakehead Region Conservation Authority
P.O. Box 10427
130 Conservation Road
Thunder Bay, ON P7B 6T8

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979 Alloy Drive
Thunder Bay, ON
P7B 5Z8
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Dear Management and the Board of Directors:

In connection with our audit of the financial statements of Lakehead Region Conservation Authority (the "Authority") as of December 31, 2021 and for the year then ended, we considered internal control over financial reporting ("internal control") as a basis for designing appropriate audit procedures. The purpose of our audit was to express an opinion on the financial statements, not to identify internal control matters. Therefore, we express no opinion on the effectiveness of internal control and it would be inappropriate to conclude that no internal control matters, including significant control deficiencies, exist beyond those included in this communication.

A deficiency in internal control exists where the design, implementation, operation or absence of a control means that internal controls are unable to prevent, or detect and correct, misstatements in the financial statements on a timely basis. The Canadian Auditing Standards require that, where we identify internal control deficiencies during an audit, we assess their importance and severity and communicate them to management and those charged with governance, as appropriate. Deficiencies that are of sufficient importance to merit the attention of those charged with governance are described as "significant deficiencies".

Significant control deficiencies

Lack of segregation of duties in the accounting function and in relation to journal entries

There is currently a lack of segregation of duties within the organization. The Finance Manager has total access to and control over the Authority's accounting program and record-keeping as well as being responsible for initiating, reviewing, and posting most standard and non-standard journal entries. A lack of segregation of duties increases the risk of errors or fraud going undetected and it also increases the risk of management override of internal controls.

Given the small size of the organization, it may not be possible to segregate the duties surrounding journal entries appropriately. The Authority has implemented compensating controls to mitigate the risk of significant override of controls:

- All cheques require dual signatures;
- CAO reviews a report of all general journal entries created and posted by the Finance Manager and Finance Assistant at the end of each month; and
- Disbursements listings are reviewed and approved by the Board at monthly meetings.

We bring these matters to your attention as controls over segregation of duties are in place to protect not only the Authority, but also the staff involved in the finance and accounting functions. We recommend continued attention to compensating controls and the Board of Directors oversight.

Conclusion

The matters reported in this communication are limited to those deficiencies we identified during the audit that we considered to be of sufficient importance to communicate to management and, in the case of significant deficiencies, those charged with governance. Had we performed more extensive procedures on internal control, including procedures subsequent to March 18, 2022 we might have identified more deficiencies or reached different conclusions about the deficiencies included in this communication.

This communication is intended solely for the information and use of management, those charged with governance, and others within the Authority and is not intended to be and should not be used by anyone other than these specified parties.

Yours sincerely,

Grant Thornton LLP

The logo for Grant Thornton LLP, written in a black, cursive script font.

Rosy Brizi, CPA, CA
Partner
(807) 346-7208

/eb



LAKEHEAD REGION
CONSERVATION AUTHORITY

April 27, 2022

Moved By _____
Seconded By _____

“THAT: having examined the accounts for the period March 1, 2022 to March 31, 2022 cheque #2522 to #2552 for \$85,813.03 and preauthorized payments of \$74,607.90 for a total of \$160,420.93, we approve their payment.”

2522	CDS Consulting Limited: Kam River breakwater proposal Resolute	1,028.30
2523	Upper Thames River CA: Wiski Hub 2022 Membership	3,500.00
2524	Superior Outdoors Inc. The Walleye: 1/4 page Ad in Walleye	175.15
2525	Lowery's: Office Supplies and Photocopying	1,474.21
2526	2611943 Ontario Ltd.: Garbage removal Mission and Cascades	452.00
2528	City of Thunder Bay - Provincial Taxes: Various Property Taxes	3,347.78
2529	Conservation Ontario: First Levy Installment	11,131.00
2530	Englobe Corp.: Victor Street Monitoring	2,892.80
2531	Grant Thornton LLP: Interim billing 2021 Audit	5,650.00
2532	Innovated Solutions: April Cloud Protection	133.34
2533	Lowery's: Photocopying charges Feb	243.31
2534	Northern Wildflowers: Deposit on various vegetation	2,000.00
2535	Pine View Nurseries: Deposit various vegetation	5,000.00
2537	Sportop Marketing: Clothing and Toques	1,840.40
2538	Thunder Bay Answering Service Inc.: March Answering Services	239.56
2539	Creekside Nursery and Garden Centre: Plowing month of February	3,678.15
2540	Avista Realty Group Ltd.: Letter of Opinion Lathem property	565.00
2541	Central Carwash: Fuel Costs Feb	746.23
2542	CDS Consulting Limited: Breakwater Structure Kan River review	2,056.60
2543	City of Thunder Bay: Water bill	1,205.33
2544	Conservation Ontario: ESRI Licence	2,949.57
2545	Englobe Corp.: Victor Street Monitoring	1,344.70
2546	EOR Canada Inc.: Floodway Mouth Planning and Design, Mountadale	24,271.28
2547	Francotyp-Postalia Canada Inc.: Postage reset	66.11
2548	Northern Turf Equipment: Equipment repairs	130.63
2549	SGC Inc.: Top Soil Triangle property	6,780.00
2550	Thunder Bay Broom & Chemicals: Janitorial Supplies	328.26
2551	Township of Dorion: Property Tax Bill	97.32
2552	Harris Ecological Consulting: Floodway Corridor Consulting	2,486.00
		<hr/> 85,813.03

Chair

PA	Payroll and Per Diems	52,769.84
PA	Royal Bank Group Retirement RRSP and TFSA	8,124.64
PA	RWAM and Lifeworks Benefits	3,488.29
PA	Enbridge	1,376.94
PA	Synergy North	499.06
PA	Visa Routine Monthly Expenses	7,601.18
PA	Banking and Visa Fees	461.05
PA	Photocopier Lease	286.90
		<hr/> 74,607.90
		<hr/> 160,420.93

Chair

Res# _____/22

Monthly Plan Input/Review and Fill Regulations Administration
March 1 to 31, 2022

Municipality	Minor Variance (A)	Consent (B)	Official Plan	Official Plan/ Zoning By-Law Comprehensive Review	Zoning By-Law (Z)	Subdivisions	Clearances	Reality Services	Lawyer Inquiries	Letter of Opinion (Other)	Total
City of Thunder Bay		B-17-2022	Amendment No. 6 *	2022 Zoning By-Law Draft *	Z-09-2020	58T-00501				227 Camelot Street	Notice of Study Highway 61 & Arthur St
		B-14-2022							325 Archibald Street		
		B-07-2022									
Total	0	3	1	1	1	1	0	0	2	1	10
Oliver Paipoonge		1B/04/22								38 Haniak Road	
		1B/05/22									
		1B/06/22									
		1B/07/22									
Total	0	4	0	0	0	0	0	0	0	1	5
O'Connor											
Total	0	0	0	0	0	0	0	0	0	0	0
Neebing											
Total	0	0	0	0	0	0	0	0	0	0	0
Shuniah		B1/22									
		B2/22									
Total	0	2	0	0	0	0	0	0	0	0	2
Conmee											
Total	0	0	0	0	0	0	0	0	0	0	0
Gillies											
Total	0	0	0	0	0	0	0	0	0	0	0
Dorion											
Total	0	0	0	0	0	0	0	0	0	0	0
Rural Planning Board		1B/02/22									
		1B/03/22									
		1B/07/22									
		1B/08/22									
Total	0	4	0	0	0	0	0	0	0	0	4
Monthly Total	0	13	1	1	1	1	0	0	2	2	21

Monthly Plan Input/Review and Fill Regulations Administration
April 1 to April 19, 2022

Municipality	Minor Variance (A)	Consent (B)	Official Plan	Official Plan/ Zoning By-Law Comprehensive Review	Zoning By-Law (Z)	Subdivisions	Clearances	Reality Services	Lawyer Inquiries	Letter of Opinion (Other)	Total
City of Thunder Bay									693 Dalhousie Drive	Phase I ESA - 639 McLaughlin St	
Total	0	0	0	0	0	0	0	0	1	1	2
Oliver Paipoonge		1B/08/22									
Total	0	1	0	0	0	0	0	0	0	0	1
O'Connor											
Total	0	0	0	0	0	0	0	0	0	0	0
Neebing										Pine River Bridge Highway 595	
Total	0	0	0	0	0	0	0	0	0	1	1
Shuniah	A5/22 A4/22										
Total	2	0	0	0	0	0	0	0	0	0	2
Conmee											
Total	0	0	0	0	0	0	0	0	0	0	0
Gillies											
Total	0	0	0	0	0	0	0	0	0	0	0
Dorion											
Total	0	0	0	0	0	0	0	0	0	0	0
Rural Planning Board											
Total	0	0	0	0	0	0	0	0	0	0	0
Monthly Total	2	1	0	0	0	0	0	0	1	2	6



Development, Interference with Wetlands and Alterations to Shorelines and Watercourses O.Reg. 180/06
Year: 2022

Permit #	Category	Fee	Applicant Name	Municipality	Subject Property Address	Type of Work	Key Dates				
							Rec'd at LRCA	Permit Issued	Days to Issue Permit	Reason for Timeline	Approved by:
#1/22	Standard Works	\$300.00	Alex Hitback	City of Thunder Bay	Central Ave Vacant Lot	Garage	6/1/2022	14/1/22	8		Staff
#2/22	Major Works	\$1,000.00	Enbridge Gas Inc	City of Thunder Bay	Kam River Crossing/Victor/Riverdale	Directional Drilling For Gas Pipeline	27/01/22	28/01/22	1		Staff
#3/22	Standard Works	\$600.00	James Ward	City of Thunder Bay	1391 Arthur St W.	Fill Placement & Site Grading	24/01/22	28/01/22	4		Staff
#4/22	Small Works	\$150.00	Gerald Champagne	City of Thunder Bay	400 Lyon Blvd.	Water Park Cement Anchors	8/2/2022	14/02/22	6		Staff
#5/22	Small Works	\$150.00	Glen McLeod	Municipality of Shuniah	1369 Silver Beach Dr	Erosion Protection	28/02/22	03/03/22	3		Staff
#6/22	Major Works	\$2,000.00	Di Gregorio Developments	City of Thunder Bay	Weiler Blvd & Cougar Cres.	Fill Placement & Site Grading	22/02/22	29/02/22	5		Staff
#7/22	Standard Works	\$300.00	Andrew Potter	City of Thunder Bay	890 Gratton Road	Dwelling Construction & Fill Placement	9/3/2022	11/03/22	3		Staff
#8/22	Standard Works	NA	City of Thunder Bay	City of Thunder Bay	971 Alloy Drive	Outfall Installation	24/03/22	08/04/22	11		Staff
#9/22	Standard Works	NA	City of Thunder Bay	City of Thunder Bay	350 Legion Track Dr.	Outfall Installation	4/6/2022	04/12/22	6		Staff



Monthly Project Update

MEETING DATE	April 27, 2022
STAFF NAME	Ryan Mackett
POSITION	Communications Manager

2021 Annual Report

Included is the 2021 Annual Report for Board approval. The Report will be printed by Lowerys and distributed via the Chronicle Journal on Saturday, May 28, 2022. The other physical copies the Authority is obligated to provide will be mailed out as soon as possible.

Please note that the final numbers regarding visitation will be confirmed prior to supplying the Report to the printers. The deadline for the final Annual Report file to the printers is Monday, May 9, 2022.

Suggested Resolution:

“THAT: the 2021 Lakehead Region Conservation Authority Annual Report be approved.”

2022 Dorion Birding Festival

Staff met with Rob Swainson and Brian Ratcliff to plan and coordinate a modified, in-person birding event for Saturday, May 28, 2022, for the 2022 Dorion Birding Festival. This one-day birding event will see participants register for one of two timeslots (7:00 a.m. – 9:00 a.m. and 9:30 a.m. – 11:30 a.m.) for a two-hour guided birding session at Hurkett Cove Conservation Area, led by expert guides. Once the registered timeslot is over, participants from that session will follow guide vehicles for a self-drive caravan to other birding hotspots in Dorion that are traditionally part of the regular Festival (including Pawluck’s Farm, Hurkett Dock, Gulch Lake and Ouimet Canyon). Depending on guide availability, a third timeslot may be added. There will be a minimal fee of \$10.00 +HST per participant; this fee, along with the \$3,500.00 donation from Enbridge will make the event cost-neutral, including staff time. First chance at tickets is being given to participants who had purchased tickets for the 2020 Festival, who had been refunded due to its cancellation.

Tickets went on sale on Tuesday, April 19, at 10:00 a.m. A verbal update on ticket sales will be provided at the Meeting.

The 2020 Dorion Birding Festival was cancelled due to COVID-19 (and all registrants were issued refunds). In 2021, staff conducted a virtual Birding Festival via Microsoft Teams consisting of presentations and talks, as the Provincial stay-at-home orders at the time of the 2021 Festival prohibited an in-person event. Staff anticipate a return to the regular Festival format in 2023.

2022 Neebing Sandhill Crane Festival

A second birding event is set to occur in September 2022 in Neebing. Staff met with Neebing Municipality staff and the Mayor of Neebing to discuss how this event will work. Plans are underway to provide a self-guided tour of the Neebing area to look for flocks of Sandhill Cranes, which are common in the fields in Neebing during the month of September. The event will primarily be self-guided, with an in-person birding event scheduled for Wednesday, September 14 at the Memory Road Nature Conservancy of Canada property at their end of the James Duncan Memorial Trail, which can see some excellent birding in the fall. More information will be provided to Board Members as event planning progresses.

Superior Country Partnership Memorandum of Understanding

Further to discussion regarding the placement of a picnic table at Hurkett Cove Conservation Area at the last Board Meeting, staff received a Memorandum of Understanding from Suzanne Kukko of Superior Country for their North Shore Tourism Superior Picnics program. The MOU is revised from the original MOU between Dorion Township and Superior Country to include the LRCA as a third partner. Dorion has paid the required \$300.00 fee to Superior Country for participation in the picnic bench program, and the LRCA will be responsible for the upkeep and maintenance of a picnic table to be installed at Hurkett Cove Conservation Area.

Suggested Resolution:

“THAT: the Chair and CAO are authorized to enter into an agreement with Superior Country for the placement of a picnic table at Hurkett Cove Conservation Area.”

Walk with Doc

The LRCA will once again be hosting an evening walk as part of the Northern Hearts Walk with Doc program. LRCA staff will be co-hosting the event with a local doctor on the evening of Tuesday, June 28 at 7:00 p.m. at Prince Arthur’s Landing. This excellent partnership gives staff the opportunity to speak about the Authority, as well as to encourage outdoor recreation for physical and mental health benefits and to profile the Conservation Areas.

Navy Presentation

On Tuesday, April 12 staff conducted a presentation to the Navy at the HMCS Griffon, at their request. Numerous potential partnership opportunities were discussed. The local Navy regiment is able and willing to assist the LRCA with various programs and events, and may be able to

provide possible fundraising opportunities, etc. More information will be provided to Members as warranted.

2022 Tree Seedling Program

The Tree Seedling Program is currently underway in partnership with Hill's Greenhouses. Seedling bundles are available at a cost of \$10.00 +HST per bundle and can be ordered through the LRCA's webstore. Species for 2022 include:

- 2-year-old bundles of White Spruce (4 seedlings per bundle)
- 1-year-old bundles of White Spruce (25 seedlings per bundle)
- 1-year old bundles of Black Spruce (25 seedlings per bundle)
- 1-year old bundles of Jack Pine (25 seedlings per bundle)

Seedling orders close on May 11. Tree Seedling Pick-Up Day will be held from 9:00 a.m. – 7:00 p.m. on Wednesday, May 18 at the LRCA Administrative Office.

Complementary Education Programs

The LRCA's complimentary in-class Watershed Connections (April 19-22) and Arbor Week (May 9-13) programs will be held in-person this year, similarly to the Spring Water Awareness Program (SWAP). For your information, SWAP reached 269 students from 16 classes at 8 schools during the week of March 21-25. The Watershed Connections program is currently booked for 192 students from 14 classes at 8 schools, for the week of April 19-22.

For your information, Ontario Power Generation (OPG) has given verbal indication that they will be sponsoring the LRCA's complimentary school programming for 2022, in addition to the typical programs already sponsored by OPG (i.e., Water Festival, Waterfowl Viewing Day/Bird Festival, Viewing Scopes, Calendar, etc.). While staff have not yet officially received a cheque from OPG, it is anticipated that the OPG sponsorship will amount to approximately \$15,000.00. The LRCA is grateful for OPG's continued generous support.

Watershed Explorers Program

The LRCA was successful in receiving \$3,700.00 in funding from the TD Friends of the Environment Fund (TD FEF) for the 2022 Watershed Explorers program. This amount is less than what TD FEF has typically provided for this program in the past, however the budget still allows for the planned programs to go ahead. The guided hike programs will run during the months of May - October, with LRCA staff and an invited expert guest speaker leading a guided hike at one of the LRCA's Conservation Areas or Forest Management Properties. Topics for this program include:

- Owl Prowl

- Frogs
- Birds & Birding
- Wildflowers
- Butterflies
- Fish & Aquatics
- Photography
- Trees & Fall Colours
- Archaeology

The Communications Manager, Education Coordinator and Watershed Stewardship Technician will all be involved in delivering the program alongside experts and guests from the Thunder Bay Field Naturalists, Lakehead University, and MNRF. The LRCA thanks the TD FEF for its continued generous support.

Northern Newcomers Program

The LRCA was successful in receiving \$10,000.00 from the TD Friends of the Environment Fund (TD FEF) for the Northern Newcomers program, which targets new immigrants and refugees to Northwestern Ontario. The event is being held in partnership with the Thunder Bay Multicultural Association and will be held across two days this September. Updates will be provided to the Board as warranted.



LAKEHEAD REGION CONSERVATION AUTHORITY
2021 ANNUAL REPORT





Great Blue Heron along the Lake Superior shoreline

LAKEHEAD REGION CONSERVATION AUTHORITY

VISION

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

MISSION

To lead the conservation and protection of the Lakehead Watershed.



11 BOARD MEMBERS

Donna Blunt, Chair	Municipality of Shuniah
Grant Arnold, Vice-Chair	Township of Conmee
Joel Brown	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

STAFF MEMBERS 15

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
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.



Hazelwood Lake 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 on-going 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.

On-going 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.

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.



CONSERVE & SUSTAIN

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

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.



Photos (left to right): planting volunteers; rehabilitated McVicar Creek shoreline; remediation work at Fisherman's Park West; Jessie McFadden, Watershed Stewardship Technician; plantings at Mission Island Marsh Conservation Area; Michelle Willows, Environmental Planner; Superior Stewards logo.

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.

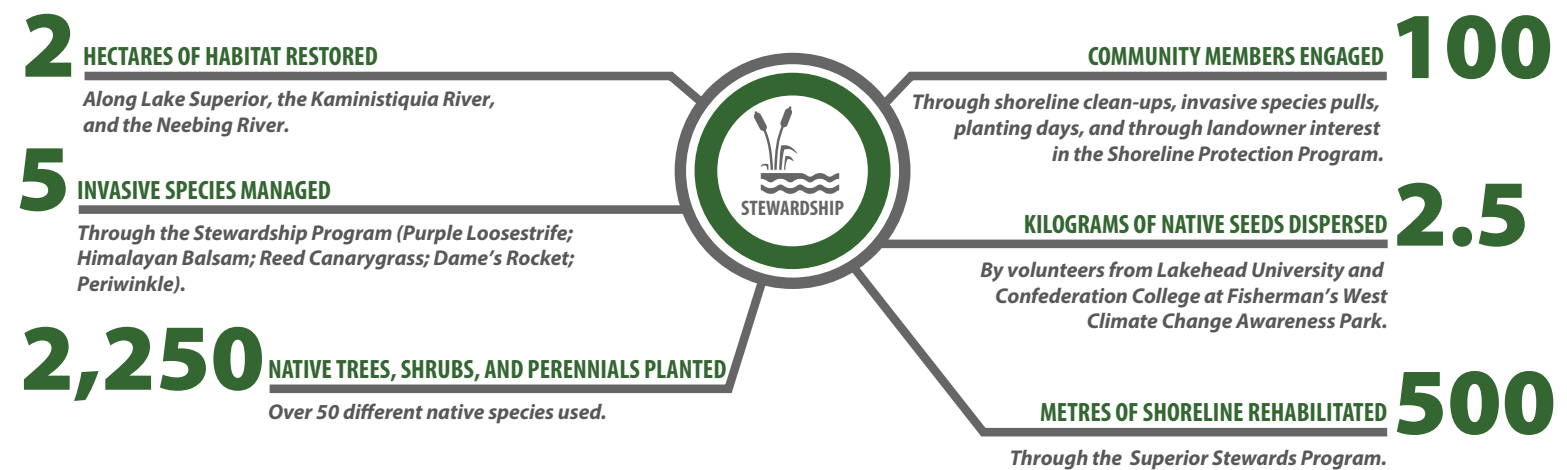
Shoreline protection and habitat creation efforts were carried out at Mission Island Marsh Conservation Area, with over 275 native shoreline plants installed along the shoreline. Access to Lake Superior and views of the Sleeping Giant have been maintained through the planting of low-lying shrubs and 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.



8 Member Municipalities

+2,700 km² Area of Jurisdiction

+151,000 Trees planted through the Private Landowners Tree Seedling Assistance Program



Planting wildflowers helps attract pollinators. 120 bees.



PROTECT & SUPPORT

Safeguard people, property and communities through robust watershed management.

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.



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 quiet 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 Statements 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.

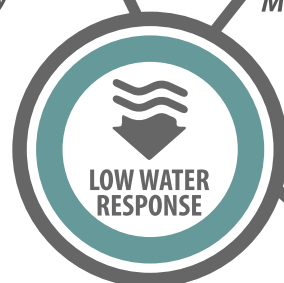
In order to maintain the LRCA's assets, it has prepared an Asset Management Plan and undertakes routine inspections of all infrastructure. As identified in the Plan, repairs were completed on the Hazelwood Lake Dam in 2021.

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.

10 WEEKS AT A LEVEL I CONDITION

The potential for water supply problems is identified.



LOW WATER RESPONSE

8 WEEKS AT A LEVEL II CONDITION

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

0 WEEKS AT A LEVEL III CONDITION

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

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

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 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.

3 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.

0 LAKE SUPERIOR SHORELINE CONDITIONS STATEMENTS

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

0 FLOODWAY DIVERSIONS

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



FLOOD MESSAGES

62 PERMITS ISSUED

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

184 COMMENTS MADE ON PLANNING ACT APPLICATIONS

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

863 PROPERTY MAPS ISSUED

Maps are provided to illustrate regulated features or properties.

430 GENERAL INQUIRIES

Property and permit con: 121 ons.



REGULATIONS

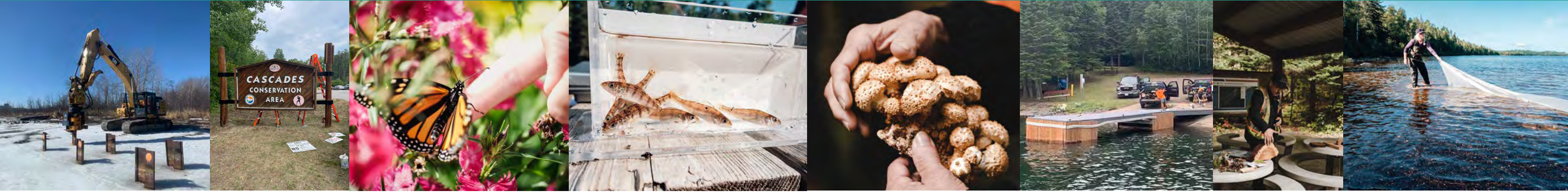


CONNECT & EXPLORE

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.



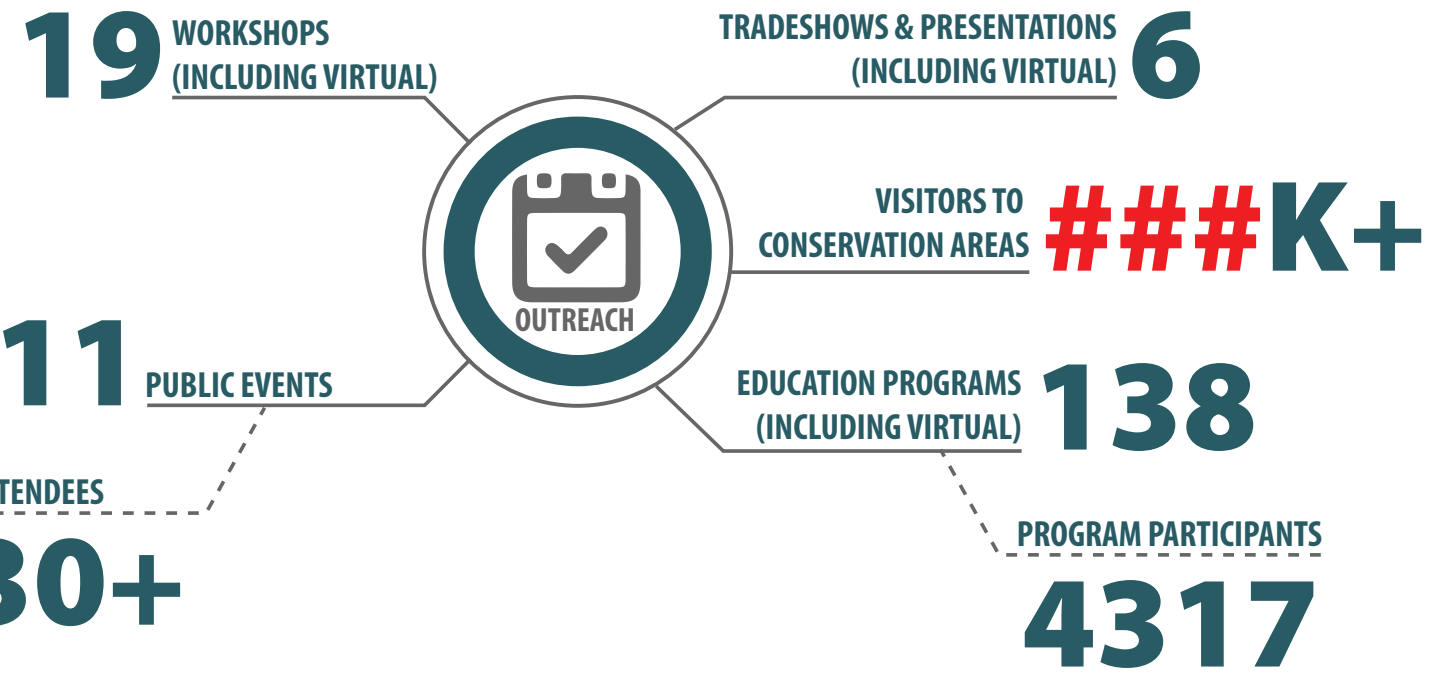
Photos (left to right): sheet steel piling removal at Mission Island Marsh; restored Cascades entrance sign; Monarch butterfly in the LRCA's pollinator garden; learning about fish at a Watershed Explorer program; fungi specimen at the Fall Mushroom Hike; dock repairs at Little Trout Bay; LU's Ryan Wilkie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

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

The Lands Manager and Field Operations Lead Hand positions underwent training and were designated as 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*.



+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 small-scale 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



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; new, clear signs 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 will be required to meet the requirements of the new regulations.

In the Authority's on-going 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.

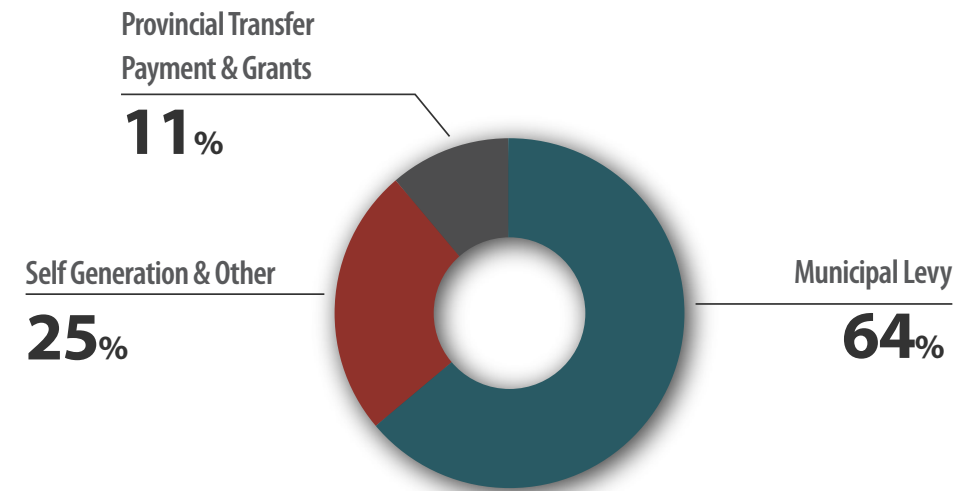
1 of 2 Conservation Authorities on the Lake Superior shoreline

1 of 5 Conservation Authorities in Northern Ontario

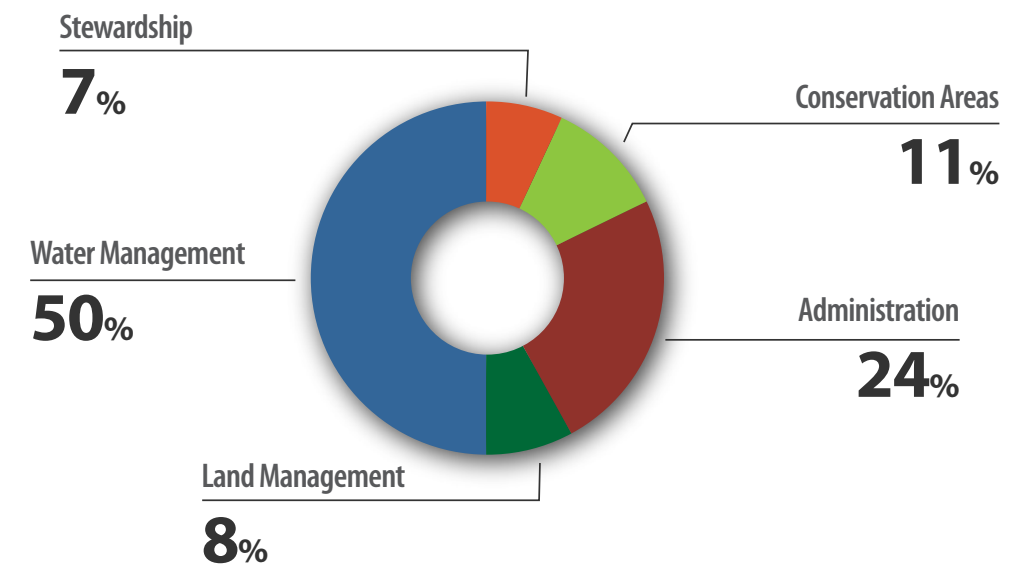
1 of 36 Conservation Authorities in the Province of Ontario

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

REVENUE

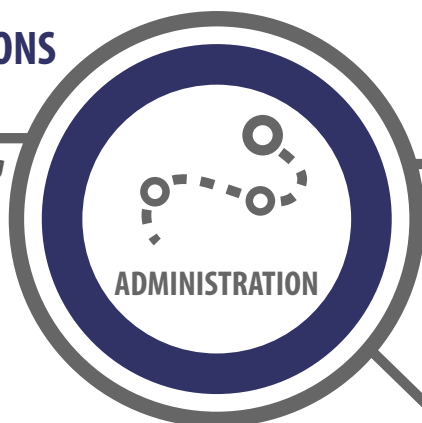


EXPENDITURES



65 STAFF TRAINING SESSIONS (INCLUDING VIRTUAL)

Commitment of ongoing learning and development of staff.



ADMINISTRATION

6 NEW HEALTH & SAFETY POLICIES CREATED

Continued commitment to the Health and Safety of Staff.

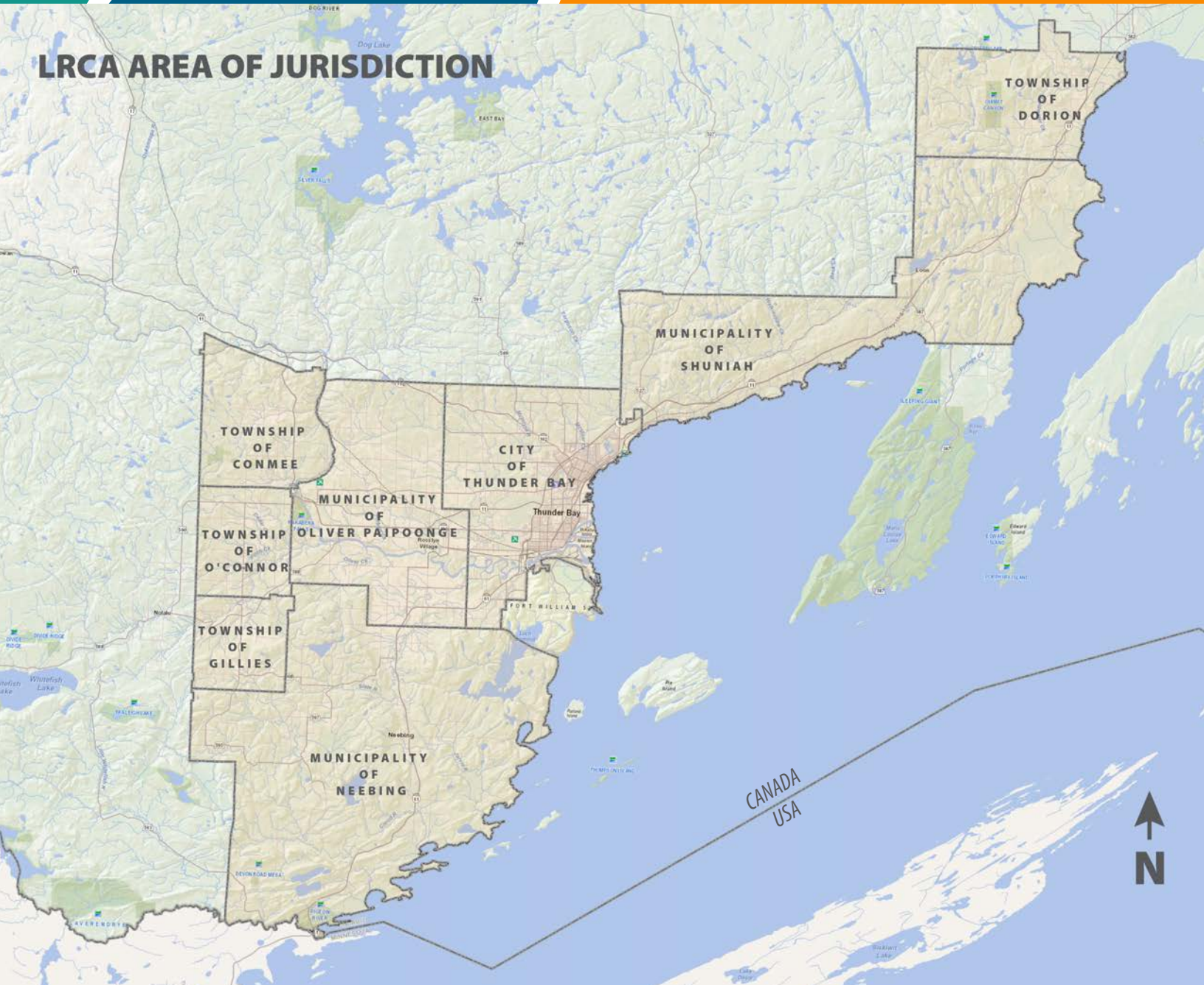
8 POLICIES CREATED & AMENDED

Continued effort to improve accountability and transparency.



Little Trout Bay Conserv Area 123

LRCA AREA OF JURISDICTION



"CONSERVE TODAY... FOR A BETTER TOMORROW"

Member of



**Conservation
ONTARIO**
Natural Champions

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

f @lakeheadregion

This AGREEMENT made as of the 21st of April, 2022 is BETWEEN:

The Township of Dorion

(herein referred to as “Dorion” or the “Partners”)

-and-

Lakehead Region Conservation Authority

(herein referred to as “LRCA” or the “Partners”)

-and-

North of Superior Travel Association Inc.

(herein referred to as “Superior Country”)

1. **Name and Objective of Partnership: Superior Picnics via the Lake Superior North Shore Tourism (LSNST) Project**– Objective is to work with Communities, Organizations, and Businesses to develop product under the culinary tourism pillar. The purpose of this partnership is to work with The Partners on the implementation of Superior Country’s **Superior Picnics program** which will see the installation of Picnic Tables throughout the Lake Superior North Shore region and the development of marketing materials.

2. **Term of the Agreement**

The term of the Agreement shall commence on **April 21st, 2022, for the life of the Superior Picnics program.**

3. **Payment**

- Dorion shall pay a onetime sum of **\$300** to Superior Country by February 20th, 2022, that will be used towards the Superior Picnics program. **This payment has been received.**

4. **Use of Funds**

- The funds Dorion contributes shall be used towards the approximate \$45,000 cost of establishing and marketing the Superior Picnics program.

5. **Liability**

- The Partners shall indemnify and hold harmless Superior Country and its directors, officers, employees, and representatives from and against all costs, claims, demands, expenses, actions, cause of action, and for all liabilities for damage to property and injury to persons (including death) howsoever caused, which arise out of, relate to, or result from to the contribution, the Recipient, or the payment or non-payment of the contribution to the Recipient. Superior Country holds this indemnity in trust for parties who are not part to this agreement.

6. Roles and Responsibilities:

- The LRCA agrees to maintain the condition of the table (i.e. removing graffiti in a timely matter, replacing branded plate as required, etc.) to the best of its ability, for the life of the Superior Picnics program.
- The LRCA will retain ownership of the branded Superior Picnic table. In the event the table is destroyed or stolen, it will be at LRCA's discretion if they wish to replace the branded table at approximate cost of \$1,700. It is understood that in the absence of a branded picnic table, the LRCA will not be included in the Superior Picnics itinerary. At its discretion and as resources permit, Superior Country may assist the LRCA with the replacement of a destroyed or stolen branded Superior Picnics table.
- The Partners and Superior Country have established that the appropriate location for the Superior Picnics spot and installation of a branded table, should be at the Hurkett Cove Conservation Area. Should The LRCA wish to leave the partnership and/or release ownership of the table, ownership of the table shall revert to the Township of Dorion and the new location for the branded table must be approved by Superior Country by December 31st, of each year.
- In all marketing materials (including digital and print) for Superior Picnics produced by Superior Country, when referring to the Hurkett Cove Conservation Area, the \$5. LRCA Parking Fee shall be noted.

7. Governance Structure and Reporting

This partnership shall be managed by Suzanne Kukko, North Shore Tourism Coordinator, Superior Country, or her designate, and Mavis Harris, Clerk-Treasurer, Township of Dorion, or her designate, and Ryan Mackett, Communications Manager, LRCA, under the guidance of the Lake Superior North Shore Tourism Project steering committee.

8. Recognition

The Partners agree to acknowledge the contribution of Superior Country on all materials and all actions related to the promotion of the Superior Picnics program, including advertisements, media releases, radio/television interviews, etc.

The Partners agree to obtain approval from Superior Country in the event The Partners wish to produce advertisements of any kind with respect to the Superior Picnics program, including posters, radio, digital, social media posts, etc.

9. Entire Agreement

The Agreement constitutes the entire agreement between the Parties with respect to the subject matter contained in the Agreement and supersedes all prior oral or written representations and agreements. The Parties have executed the Agreement on the dates set out below.

Dan Bevilacqua, Executive Director
I/We have authority to bind the Partner.

Date

Superior Country
1 Maata's Rd
Nipigon, Ontario P0T 2J0
Tel: (807) 887-3188 / Fax: (807) 887-3189

Mavis Harris, Clerk-Treasurer
I/We have authority to bind The Partner

Date

Township of Dorion
170 Dorion Loop Road
Dorion, Ontario P0T 1K0
Tel: (807) 857-2289/Fax: (807) 857-2203

Tammy Cook, CAO

Date

Donna Blunt, Chair

Date

We have authority to bind the Partner

Lakehead Region Conservation Authority
130 Conservation Road
Thunder Bay, Ontario P7B 7A4
Tel: (807) 344-5857





Monthly Project Update

MEETING DATE	April 27, 2022
STAFF NAME	Gail Willis
POSITION	Watershed Manager

Source Protection Authority Meeting

A Source Protection Authority Meeting will be held immediately after the April 27, 2022 Board Meeting. This meeting will be to receive and adopt the seventh annual progress report, which is prepared annually by the Source Protection Authority and submitted to the Director of the Ministry of Environment, Conservation and Parks prior to May 1st, as required in the *Clean Water Act*.

Watershed Conditions – Flood Forecasting

On April 12th, a forecasted winter storm event resulted in LRCA Staff issuing a local Flood Outlook Watershed Condition Statement, which warranted additional monitoring of weather conditions.

A prolonged mixed precipitation event was expected, with a potential of over 30 millimetres of mixed precipitation (rain, freezing rain, and snow). Area watercourses were partially open and water levels were observed to be within streambanks; however, due to concerns with frozen ground and above average snowpack, the rain was anticipated to result in a rise in flowing water in waterways, ponding in low lying areas, and areas with frozen culverts and blocked ditches.

Prior, during, and after this storm event, LRCA staff closely monitored conditions, and issued a Watershed Conditions Statement Flood Outlook on April 12th, 2022 to communicate the potential watercourse flooding and public safety conditions. There were no reports, observations, or expectations of significant watercourse flooding.

Further, on April 11th and April 15th a Provincial Watershed Conditions Statement was issued for all regions of Ontario, as well as a Provincial Flood Watch on April 12th, by the Surface Water Monitoring Centre of the Ministry of Northern Development, Mines, Natural Resources and Forestry.

Watershed Conditions – Snow Surveys and Lake Superior Levels

Staff conduct snow surveys on a bimonthly basis on the 1st and 15th of the month between November and May of each year. There are three historical snow survey locations which are located at Hazelwood Lake Conservation Area (Current River), Madeline Street (McVicar Creek),

and Vibert Road (Pennock Creek). Snow depth and weight (water content) are collected and forwarded to the MNR's Surface Water Monitoring Centre as part of the Flood Forecasting Program.

The April 14, 2022 snow surveys indicate that the snow survey locations are significantly above average for snow depth and water content, when compared to the historical averages for April 15. The snow depth results were: McVicar Creek – 63.8 centimetres (cm) (652% above average), Pennock Creek – 63.6 cm (995% above average), and Current River – 107.0 cm (405% above average), which averages to 684% above the historical average for depth for April 15. The water content results were, on average, 809% above average for the three snow courses, with an equivalent water content ranging from 273.3 millimetres (mm) at McVicar Creek, 219.5 mm at Pennock Creek and 325.2 mm at Hazelwood (Current River). The next snow survey measurements will be taken on April 30, 2022.

Lake Superior's beginning of April water level was 6 centimetres (cm) below its period-of-record (1918-2021) beginning of month average, and 44 cm lower than the record high of 2019. Lake Superior's beginning of April water level is the lowest since 2013. The current water level is approximately 109 centimetres lower than the 100-year flood level for Lake Superior. Ice cover on Lake Superior as of April 14 was 10%, which is slightly below average; however, still considerably less than the over 90% ice cover experienced in 2019.

33rd Annual Spring Melt Meeting

Attached on pages 3 to 50 is the Spring Melt Meeting Minutes and presentation slide deck. The Authority held the 33rd Annual Spring Melt Meeting on April 7, 2022. Due to the ongoing pandemic, the meeting was held online via Microsoft Teams and the meeting presentation and minutes was emailed to member municipalities and flood partners on April 14, 2022. The annual updates to the Flood Warning System Binder along with copies of the 2022 Flood Contact Booklet will be mailed separately.

Thirty-three people attended the online meeting from the Municipalities of Oliver Paipoonge, the City of Thunder Bay, and the Townships of Gillies, and Neebing, as well as from the Ontario Power Generation, Fort William Historical Park, Ministry of Transportation, Ministry of Northern Development, Mines, Natural Resources and Forestry, and staff from the LRCA.

Media Release for Improvements at Mounddale Boat Launch Project

On April 14, the City of Thunder Bay and LRCA issued a media release for the public view the concept plan and comment on the future improvements at the Mounddale Boat Launch through the City's Get Involved website. The LRCA's goal of the project is to improve water quality and re-establish ecosystem function along the Kaministiquia River, as well as manage urban stormwater runoff and sedimentation to the waterway. The online survey is available at www.getinvolvedthunderbay.ca until April 30, 2022.



Our File: 18-10-4

**Lakehead Region Conservation Authority
33rd Annual Spring Melt Meeting
2022 Meeting Minutes**

Meeting Date: April 7, 2022, at 10:00 am

Location: Lakehead Region Conservation Authority, Meeting via MS Teams

In Attendance: Vanessa Sticca, City of Thunder Bay
David Warwick, City of Thunder Bay
Dennis Brescacin, City of Thunder Bay
Joshua Daniels, City of Thunder Bay
Leslie McEachern, City of Thunder Bay
Devon McCloskey, City of Thunder Bay
Karen Lewis, City of Thunder Bay
Kayla Dixon, City of Thunder Bay
Jacob Porter, City of Thunder Bay
Jeff Track, City of Thunder Bay
Adam Oatman, City of Thunder Bay
Sean Horan, Municipality of Oliver Paipoonge
Chris Bowles, Municipality of Oliver Paipoonge
Wendy Wright, Township of Gillies
Laura Bruni, Township of Gillies
Jason Bailey, Ontario Power Generation
Dave Pacholczak, Ontario Power Generation
Tana-Leigh Harty, Ontario Power Generation
Regan Lord, Ontario Power Generation
Jamie Mucha, Ministry of Northern Development, Mines, NRF
Marek Klich, Ministry of Northern Development, Mines, NRF
Patrick Morash, Fort William Historical Park
Peter Boyle, Fort William Historical Park
John McClelland, Ministry of Transportation
Erwin Butikofer, LRCA Board Member
Scott Drebit, Lakehead Region Conservation Authority
Ryan Mackett, Lakehead Region Conservation Authority
Ryne Gilliam, Lakehead Region Conservation Authority
Michelle Sixsmith, Lakehead Region Conservation Authority
Mark Ambrose, Lakehead Region Conservation Authority
Gail Willis, Lakehead Region Conservation Authority
Jessie McFadden, Lakehead Region Conservation Authority
Rachael Z. Bezanson, Lakehead Region Conservation Authority

Spring Melt Meeting Minutes – April 7, 2022
Lakehead Region Conservation Authority

Regrets:

Donna Blunt, LRCA Board Member
Umed Panu, LRCA Board Member
Andrew Foulds, LRCA Board Member
Grant Arnold, LRCA Board Member
Trevor Giertuga, LRCA Board Member
Rudy Buitenhuis, LRCA Board Member
Jim Vezina, LRCA Board Member
Allan Vis, LRCA Board Member
Andrea Goold, LRCA Board Member
Joel Brown, LRCA Board Member
Tammy Cook, Lakehead Region Conservation Authority
Norm Gale, City of Thunder Bay
Lyle Pert, City of Thunder Bay
Shawn Trediak, City of Thunder Bay
Adam Tempelman, City of Thunder Bay
Ian Spoljarich, City of Thunder Bay
Aaron Ward, City of Thunder Bay
Keri Marshall, City of Thunder Bay
Michelle Warywoda, City of Thunder Bay
John Piccinin, City of Thunder Bay
Wayne Hanchard, Municipality of Oliver Paipoonge
Don LaDelle, Municipality of Oliver Paipoonge
Leonard Arps, Township of Conmee
Shara Lavallee, Township of Conmee
Don Fredrickson, Township of Dorion
Mavis Harris, Township of Dorion
James Gillies, Township of Gillies
Art Labelle, Township of Gillies
Kelly Johnson, Township of O'Connor
Lorna Buob, Township of O'Connor
Erika Kromm, Municipality of Neebing
Barry Livingston, Municipality of Neebing
Paul Greenwood, Municipality of Shuniah
Craig Baumann, Municipality of Shuniah
Blair Arthur, Municipality of Shuniah
Kevin Brown, Ministry of Northern Development, Mines, NRF
Leona Tarini, Ministry of Northern Development, Mines, NRF
Scott Galloway, Ministry of Northern Development, Mines, NRF
Rik Aikman, Ministry of Northern Development, Mines, NRF
Emily Hawkins, Ministry of Northern Development, Mines, NRF
Ken Mossop, Ministry of Transportation
Cathy Seeley, Ministry of Transportation
Jason Boesche, Fort William Historical Park
Shawn Waino, Fort William Historical Park
Tom Aaltomaa, Ontario Power Generation

Item 1: Overview of the Provincial Flood Warning System

- A brief overview of the Flood Forecasting Program was given:
- *MNR Role*
 - Maintain streamflow and precipitation networks.
 - Analyze streamflow and weather conditions and provide flood criteria mapping and daily precipitation forecasts.
 - Responsible to provide Provincial Flood Messaging to Conservation Authorities and MNR Districts.
 - Provide Flood Forecasting to areas outside the jurisdiction of Conservation Authorities.
- *LRCA Role*
 - Maintain streamflow and precipitation networks.
 - Monitor and collect data related to rainfall, snow, ice conditions, groundwater levels and streamflow.
 - Monitor forecasted weather and runoff to predict the flows of rivers and streams in our area of jurisdiction.
 - Issue Watershed Condition Statements/Watch/Warning messages to Member Municipalities, affected agencies and news media.
 - Promote and participate in the development of Emergency Plans with Member Municipalities.
 - Participate in the Kam River Dam Safety Preparedness and Emergency Response Plan.
 - Interact with Provincial and Municipal Officials during an event.
 - Host annual Spring Melt Meeting.

Flood Warning System

FLOOD MESSAGE TERMINOLOGY:

- A Watershed Conditions Statement – **Water Safety** may be issued to advise of high flows, unsafe banks, melting ice or other factors that could be dangerous for recreational users such as anglers, canoeists, hikers, children, pets, etc. Flooding is not expected.
- A Watershed Conditions Statement – **Flood Outlook** may be issued to give early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high wind or other conditions.
- A Shoreline Conditions Statement – **Lake Superior (High) Static Water Level** may be issued to give early notice of the potential for flooding on Lake Superior based on lake levels, weather, and lake conditions.
- A **Flood Watch** indicates that there is the potential for flooding within specific watercourses and municipalities.
- A **Flood Warning** indicates that flooding is imminent or occurring in specific watercourses or municipalities.
- The warning status will remain in effect until a Termination Message is issued.

- It was noted that Environment Canada has their own specific public altering criteria. An Environment Canada Weather Statement does not always result in a local LRCA issued Flood Message, as the expected rainfall may not result in riverine flooding.
- *Message Distribution*
 - All messages will be sent via fax and email to contacts.
 - Messages will be posted on the LRCA social media accounts on Facebook and Twitter (@lakeheadregion).
 - Fax and email contact information has been verified (annually updated).
 - In the event of a “Flood Watch”, verbal confirmation will be made with the City of Thunder Bay’s Pollution Control Plant, as well as the Reeve of Gillies when a certain water level is reached (10 year return period) on the Whitefish River (as per their request).
 - In the event of a “Flood Warning”, verbal confirmation will be made with a Municipal contact in each Member Municipality, MNRF, OPG and Fort William Historical Park. The City of Thunder Bay Police Water Commander and the Ontario Provincial Police will also receive verbal communication of a “Flood Warning”.
 - Messages are posted on the LRCA website and on social media.
 - Messages are posted on the MNRF Surface Water Monitoring Centre website.
- Flood Warning System Binder
 - Updated annually and will be distributed to Plan Holders by mail in 2022.
- *Road Superintendents Role*
 - Report observed flooding to the LRCA Duty person.
 - If possible, document the event with photographs.
 - Municipalities are responsible to implement their Emergency Plans and conduct any remedial measures (i.e., sand bagging) if warranted.

Item 2: 2021 Year in Review

2021 Summary:

- Uneventful year in 2021.
- Issued one (1) Water Safety Message in the spring, and three (3) Flood Outlook messages in November and December due to above average snowpack and some rainfall.
- Below average precipitation 9 out of 12 months.
- Low Water Condition July to December.
- Below average precipitation for the year (584 versus 722 mm average).
- Neebing-McIntyre Floodway did not divert in 2021.

Item 3: Current Conditions

Ontario Power Generation Update

- Kam Basin temperature averaged in the normal range in 2021. Colder than normal weather experienced in 2022 starting in January.
- Received 10 months of below normal precipitation, 4 months of above normal precipitation, and one month of normal precipitation out of the last 15 months.
- Kam River basin snow survey indicated that snowpack and water content was significantly above average as of April 1, 2022.
- The Dog Lake draw down has been below the preferred elevation and expect to be just below the peak around April 1 when Dog Lake will begin its refill.
- Kam River Flows below the Kakabeka Falls GS has been very dry and been running at almost near minimum flow all winter long.
- OPG has simplified public access to water level data online at OPG.com. Current watershed conditions and water levels at the OPG sites are available for download.

LRCA Summary

Snow surveys – April 1, 2022 snow survey

- Above average depth and water content in the snowpack for this time of year at Hazelwood, McVicar, and Pennock.
- April 1, 2022 snow surveys indicated 74 to 100 centimetres of snowpack, with 219 to 234 millimetres of water equivalent. Historical averages for April 1 are 21 to 46 centimetres of snowpack and 58 to 126 millimetres of water equivalent.

Provincial Groundwater Network Monitoring Wells – spring levels

- March groundwater levels are higher in all the wells compared to 2021 levels, except for Murillo and Birch Beach which are lower.
- 2021 levels compared to 2020 levels:
 - Murillo -0.48 m
 - Kakabeka +0.02 m
 - Loon Lake +0.39 m
 - Birch Beach -0.07 m
 - Wishart +0.06m
 - Hazelwood +0.27 m

Area Watercourses - review of series of photographs from March 21, 2022

- McVicar Creek near Jean Street – snow covered, no open channel.
- Kam River - Harstone Bridge – snow covered, no open channel.
- Neebing Weir – mostly snow free, channel starting to open.

Future Forecasts (as of April 6, 2022)

- 54 mm precipitation/snow melt predicted to be required in 24 hours for flash flooding.
- 4 mm forecasted for next 5 days.
- Long term forecast indicating generally below to normal average temperatures for daytime highs and near average temperature for nighttime lows for next two weeks.

- 3-month temperature forecast (Env. Canada) – normal to above normal average temperatures forecast for next 3 months (April, May, June 2022).
- 3-month precipitation forecast (Env. Canada) – normal precipitation forecast for next 3 months (April, May, June 2022).

Current Conditions Summary (as of April 7, 2022)

- Uneventful spring freshet so far (from a riverine perspective).
- Above average snow depth and water content for this time of year.
- Ground is still frozen.
- Watercourses are starting to open up.
- Area watercourses below bank full conditions.
- No observed or reported ice jamming at this time.
- Ice jamming possible in the usual locations.
- Slow snowmelt with minimal precipitation forecasted for the next 2 weeks.
- Predicted normal temperatures and precipitation for the next 3 months.

Item 4: Lake Superior Levels

- Lake Superior water levels continue to be below average.
- The lake level is 26 cm below last year's beginning of April level and is 6 cm below the beginning of April average.

Lake Superior Ice Coverage

- As of April 6, 2022, the Great Lakes total ice cover was 11.8% and Lake Superior had approximately 18.6% ice cover remaining, compared to 1.3% in 2021.

Item 5: LRCA Updates

LRCA will be dredging the CPR sediment trap on the Neebing-McIntyre Floodway this year starting in July. Approximately 4,500 cubic metres of sediment will be removed and placed on LRCA owned property on William Street (beside Roofmart). In-water work will be completed by September 1, 2022.

Item 6: Flood Warning System Contact Booklet

- The updated Flood Warning Contact Booklet will be distributed by mail. An electronic version in pdf format can be sent by request, if needed.
- Copies will be mailed to those not in attendance who are a holder of a Flood Warning System Binder.

Minutes recorded by Gail Willis, LRCA.

Please report any errors or omissions immediately.



LAKEHEAD REGION
CONSERVATION AUTHORITY

33rd Annual Spring Melt Meeting

April 7th at 10:00 am via MS Teams



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1



LAKEHEAD REGION
CONSERVATION AUTHORITY

Traditional Land Acknowledgement

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 are 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 Nation 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.

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2



33rd Annual Spring Melt Meeting

AGENDA

1. **Overview of the Provincial Flood Forecasting and Warning System**
 - MNDMNR Role
 - Lakehead Region Conservation Authority Role
 - Flood Warning system
 - Road Superintendents Role
2. **2021 Year in Review**
3. **Current Conditions**
 - Ontario Power Generation Kaministiquia River Overview
 - Snow Data
 - Ground Water Conditions
 - Area watercourses
 - Future Forecasts
 - Current Conditions Summary
4. **Lake Superior Levels**
5. **LRCA Updates: Neebing-McIntyre Floodway Dredging 2022**
6. **Flood Warning System Contact Booklet**
 - Distribution of Booklet

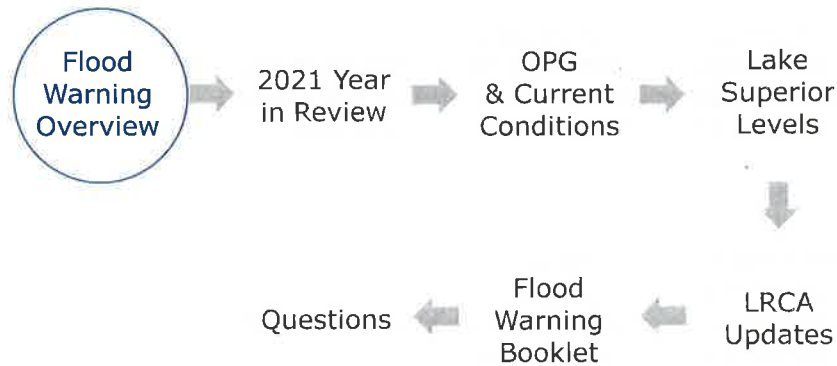
We hope that as a result of this meeting that the lines of communication will be maintained should a flood event occur.

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3



33rd Annual Spring Melt Meeting



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4



Goal of the Flood Forecasting Program:

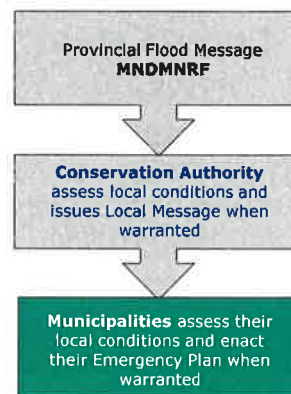
Reduce the loss of life and property damage from the hazards of riverine flooding and/or erosion.



5



- **MNDMNR** has a Provincial mandate for flood emergency management that includes flood forecasting and warning at the Provincial level.
- **Conservation Authorities** deliver flood forecasting and warning services in areas under their jurisdiction at the local level.
- Outside Conservation Authorities the MNDMNR is responsible for the delivery of flood forecasting and warning services (i.e. unorganized Townships).
- **Member Municipalities** administer their Emergency Response Plans for flooding and other high-risk emergencies.



6



MNDMNF Role in Flood Forecasting

MNDMNR RESPONSIBILITIES

1. Maintain Provincial streamflow and precipitation networks.
2. Provide Flood Forecasting and Warning for flooding in areas outside the jurisdiction of Conservation Authorities (i.e., Nalalu, etc.), and they issue Provincial flood messages
3. Maintain the Surface Water Monitoring Centre:



- Analysis and interpretation of streamflow and weather conditions
- Provide Flood Criteria mapping (i.e., estimates of required precipitation/snow melt required in a 24-hour period for flash flood potential)
- Provide daily precipitation forecasts (updated 2x per day)
- Responsible for Provincial Flood Messages to Conservation Authorities and MNDMNR Districts.

While the responsibilities of the Surface Water Monitoring Centre involve assessing the potential for floods and low water and issuing early warning the agency is also in the forefront of flood and low water. It also assists the provincial and its partners in many other water management and environmental monitoring activities.



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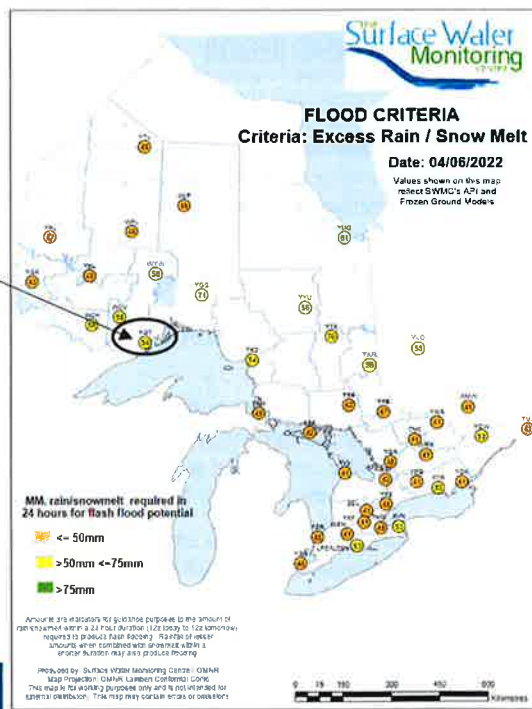


Example Flood Criteria Map:

Thunder Bay

54 mm of rain/snow melt in a 24 hour period is estimated to be required for flash flooding.

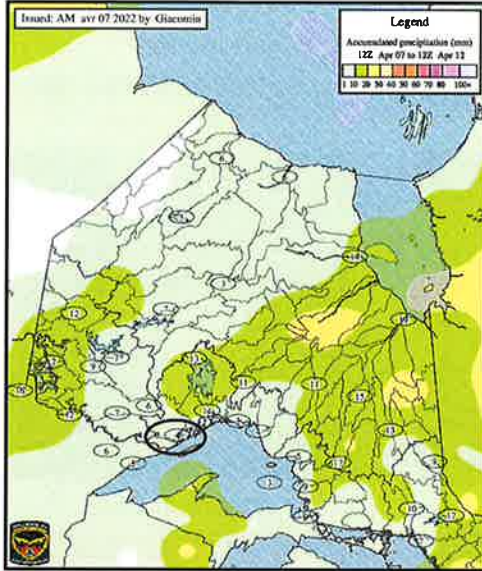
Rainfall amounts within a shorter duration may also produce flooding.



8



5 Day Precipitation Forecast



Example of 5-day map:

Thunder Bay is forecasted to receive 4 mm of precipitation in the next five days



LRCA RESPONSIBILITIES

1. Maintain local streamflow and precipitation networks in our jurisdiction.
2. Monitor and collect local data related to rainfall, snow, ice conditions, groundwater levels and streamflow.
3. Monitor forecasted weather and runoff to predict the flows of rivers and streams in our area of jurisdiction.
4. Issue Watershed Condition Statements/Watch/Warning messages to Municipalities, affected agencies and the media.
5. Participate in the development of Emergency Plans with our Member Municipalities.
6. Participate in OPG's Kam River Dam Safety Preparedness and Emergency Response Plan.
7. Interacting with Provincial and Municipal Officials during an event to notify key individuals or agencies.
8. Hold Spring Melt Meeting Annually

RESPONSIBILITIES:

1. Maintain local precipitation and streamflow monitoring networks.
 - In co-operation with Environment Canada and the MNDMNR, the LRCA utilizes nine streamflow / precipitation gauges in our area.



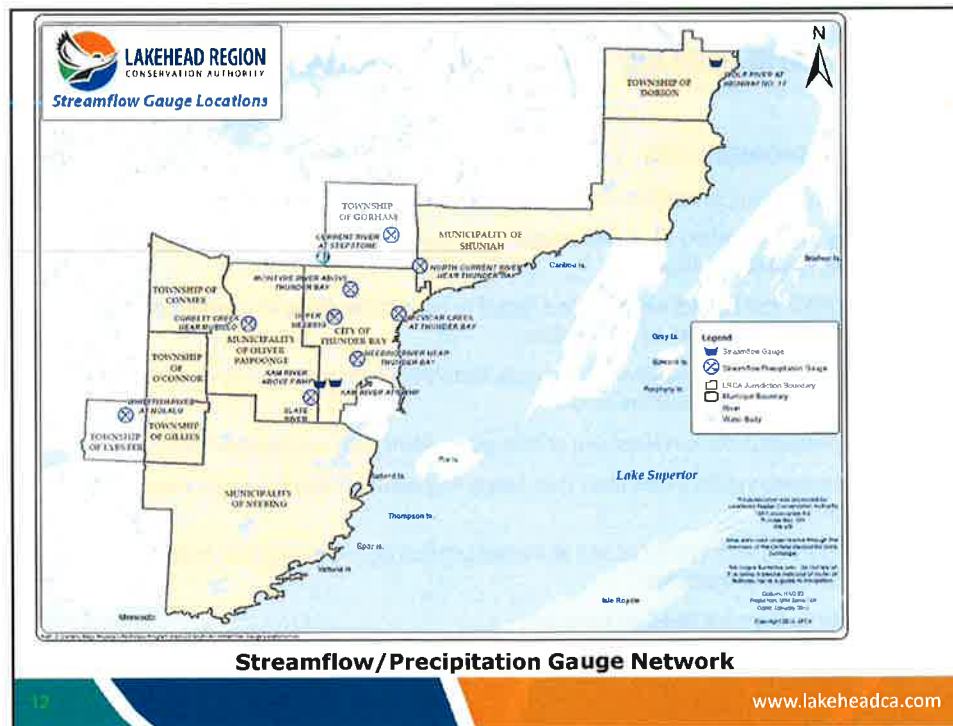
Corbett Creek



Whitefish River

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11



12



Neebing River Climate Change Station

- Neebing River Gauge located behind Arthur Street Market Place has been selected as one of five stations in the Province as a Climate Change Detection and/or Adaptation Monitoring site
- Important to have a Northern Ontario Station so that new standards are not only based on Southern Ontario monitoring
- Parameters monitored include:
 - Stream level (existing)
 - Precipitation (existing)
 - Groundwater levels – installed 2011
 - Soil Moisture - 2012
 - Water Quality – 2012
 - Air and Water Temperature - 2012
 - Turbidity – 2012
 - Barometric Pressure - 2016



Geonor Precipitation and CoCoRaHS Gauge





Streamflow/Precipitation Gauge Network

- Each gauge records the stream level and received precipitation every 15 minutes.
- Tipping Bucket Gauges do not operate in the winter.
- WISKI – Water Information System
- Internet based and can access data from multiple devices (do not have to be in the office)
- In a flood event, rivers can be “watched” remotely from the LRCA office.
- Fort William Historical Park has installed two streamflow gauges on the Kam River. One upstream and one downstream of their facility.
- Gauges are downloaded every hour.
- Alarm Manager – will receive a notice when a gauge reaches a pre-determined highwater level or flow, or a rate of precipitation is achieved.



RESPONSIBILITIES:

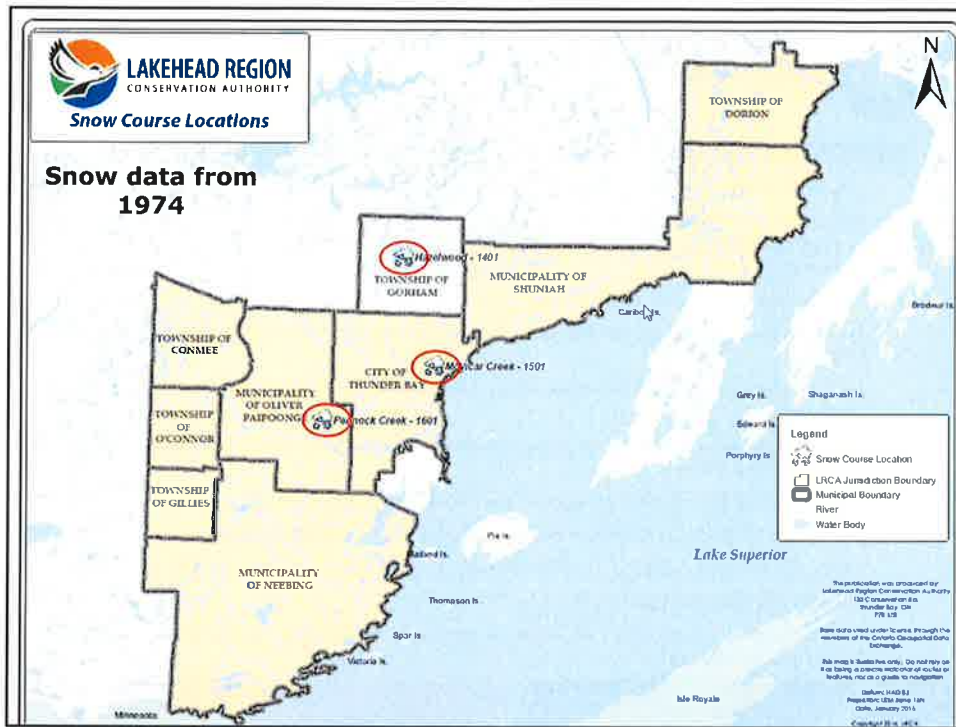
2. Monitor and collect data related to rainfall, snow, ice conditions, groundwater levels and streamflow.



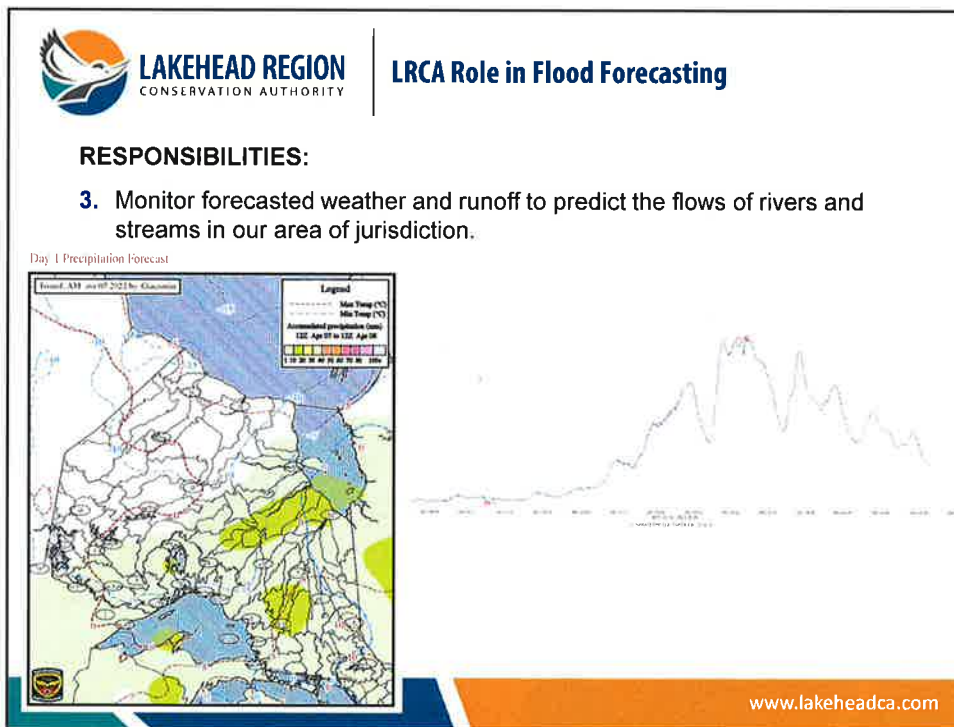
Snow Surveys



Groundwater Monitoring Well



17



18

RESPONSIBILITIES (cont.): Daily Monitoring

- LRCA staff monitor weather forecasts a minimum of twice daily.
- MNDMNRFC SWMC issues weather maps to Conservation Authorities twice daily, which predicts the expected precipitation as well as an estimate as to how much rain or snowmelt is required in 24 hours for flash flooding.
- Other weather forecasts are also monitored.
- The SWMC has daily briefings with Meteorologists and provide updates on forecasts during events to LRCA staff.
- LRCA staff assesses the weather forecasts along with local conditions and issue local Flood Messages as warranted.
- Streamflow gauges and precipitation gauges are downloaded every hour and can be accessed using WISKI software as needed.
 - Gauges are used to determine whether rivers are still rising or have crested .
- LRCA flood duty person assigned for each month for after hours, holidays and weekends.
- LRCA staff will visually monitor certain flood damage centres during flood events (i.e. McVicar Creek).
- The LRCA has an answering service 24 hours.
- NOTE: MNDMNRFC is responsible for flood forecasting outside the jurisdiction of the LRCA, and issues Provincial flood messages.

RESPONSIBILITIES:

4. Issuing of Watershed Condition Statements/Watch/Warning messages to Municipalities, affected agencies and the media. Messages issued by fax and email. Messages are posted on the LRCA website.

**** Flood messages are related to riverine flooding not urban flooding.**



FOR IMMEDIATE RELEASE
WATERSHED CONDITIONS STATEMENT – FLOOD OUTLOOK

December 15, 2021 – 10:00 a.m.

**LAKEHEAD REGION CONSERVATION AUTHORITY
WATERSHED CONDITIONS STATEMENT
FLOOD OUTLOOK**

The Lakehead Region Conservation Authority has issued a Flood Outlook Statement for the Lakehead Region including: City of Thunder Bay, Municipalities of Neething, Oliver, Paipooonge, Shuniah and the Townships of O'Connor, Conmee, Gillies and Dorion.

Approximately 15 to 25 millimetres of precipitation is expected overnight, which will combine with snowmelt due to above freezing temperatures. It is expected that the snowpack will absorb the majority of the precipitation; however, ponding in low-lying areas and ditches is likely. The return to below freezing temperatures by the weekend will result in the rapid accumulation of ice, which may result in blocked culverts and ditches.

The public is advised to exercise caution due to fast changing conditions. Ponded water and icy banks will pose hazards. Parents and caregivers are advised to keep children away from all waterways and discuss the hazards of cold water and icy banks.

A Watershed Conditions Statement- Flood Outlook provides early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high wind or other conditions.

As part of the Authority's Flood Warning System, staff will continue to monitor conditions and issue updated Flood Messages as warranted.

-30-

CONTACT:
Tammy Cook, Chief Administrative Officer 344-5857



RESPONSIBILITIES:

- 5. Promoting and participating in the development of Emergency Plans with our Member Municipalities.

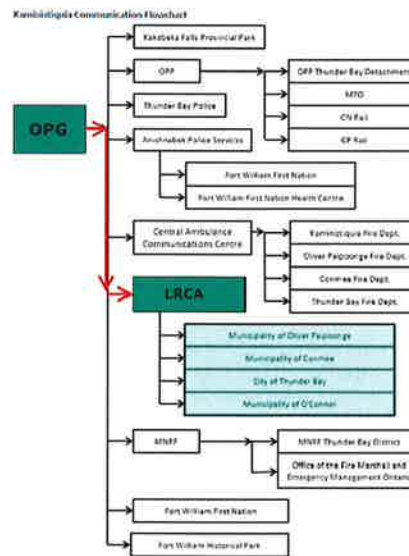


RESPONSIBILITIES:

- 6. Participate in OPG's Kam River Dam Safety Preparedness and Emergency Response Plan.

- LRCA has a call out responsibility under the plan. Once call received from OPG, LRCA calls:

- Affected Member Municipalities:
 - Oliver Paipoonge
 - Conmee
 - City of Thunder Bay
 - O'Connor



RESPONSIBILITIES:

7. Interacting with Provincial and Municipal Officials during an event to notify key individuals or agencies.



23

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23

RESPONSIBILITIES:

8. Hold Annual Spring Melt Meeting.
 - Review Flood Forecasting System
 - Discuss Spring Freshet and potential for Spring Flooding
 - Review previous year
 - Distribute Contact Booklets
 - Invitation to Spring Melt Meeting sent annually to Member Municipalities, affected agencies and partner ministries.



24

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24



Flood Message Terminology

NORMAL:	Conditions are within NORMAL limits. No flooding is expected.
WATERSHED CONDITIONS STATEMENT	Water Safety: <i>(former Bulletin)</i> High flows, unsafe banks, melting ice or other factors could be dangerous for recreational users such as anglers, canoeists, hikers, children, pets, etc. Flooding is not expected.
WATERSHED CONDITIONS STATEMENT	Flood Outlook: <i>(former Bulletin)</i> Early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high wind or other conditions.
SHORELINE CONDITIONS STATEMENT	Lake Superior (High) Static Water Level: Early notice of the potential for flooding on Lake Superior based on lake levels, weather, and lake conditions.
FLOOD WATCH: <i>(former Flood Advisory)</i>	Indicates that there is the potential for flooding within specific watercourses and municipalities.
FLOOD WARNING:	Indicates that flooding is imminent or occurring within specific watercourses and municipalities.



Environment Canada has their own public altering criteria:

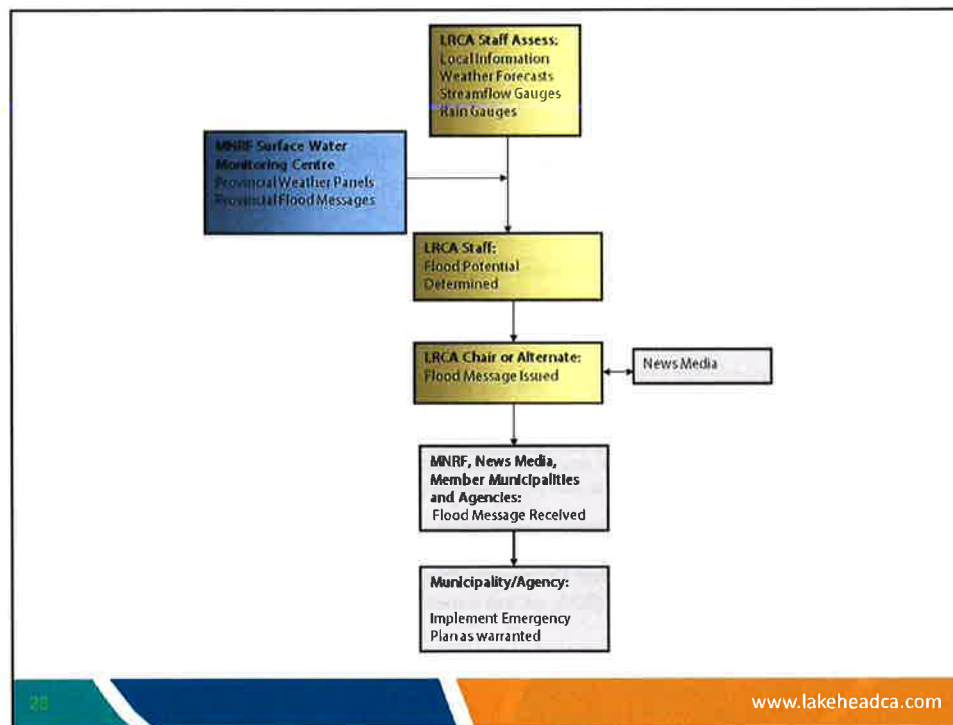
SHORT DURATION RAINFALL EVENT WARNING (heavy downpour): Issued when 50 mm or more of rain is expected within one hour.
LONG DURATION RAINFALL WARNING SUMMER: Issued when 50 mm or more of rain is expected within 24 hours; or when 75 mm of rain is expected within 48 hours.
LONG DURATION RAINFALL WARNING WINTER: Issued when 25 mm or more of rain is expected within 24 hours.
SEVERE THUNDERSTORM WATCH: When conditions are favourable for the development of severe thunderstorms with one or more of the following conditions: wind gusts of 90 km/hr or greater; hail of two cm or larger in diameter; or heavy rainfall, per rainfall criteria (excluding winter).
SEVERE THUNDERSTORM WARNING: When there is evidence based on radar, satellite pictures, or from a reliable weather spotter that any one or more of the above listed conditions in the "severe thunderstorm watch" are imminent or occurring.

An Environment Canada Weather Statement does not always result in a local Flood Message being issued by the LRCA, as the expected rainfall may not result in riverine flooding.

LRCA's Flood Message Distribution

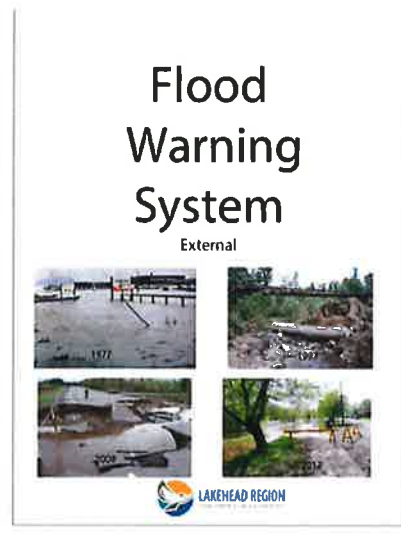
- All flood messages are sent via **fax** and **email** to contacts.
- Email and fax numbers are confirmed with Municipalities/agencies every spring.
- In the event of a "Flood Watch" the City's Pollution Control Plant receives verbal confirmation of the message. If it's a 10-year return period on the Whitefish River, then the Reeve of Gillies is called.
- In the event of a "Flood Warning" verbal confirmation will be made with a Municipal contact in each Member Municipality.
 - Clerk
 - Mayor or Reeve
 - LRCA Board Member
 - Road Superintendent
- In the event of a "Flood Warning", phone calls are also made to the Ontario Provincial Police and the Thunder Bay Police Watch Commander
- All flood messages are posted on the LRCA website and on the MNMNR SWMC website.
- All flood messages are posted to the LRCA social media accounts:
 - Facebook
 - Twitter

27

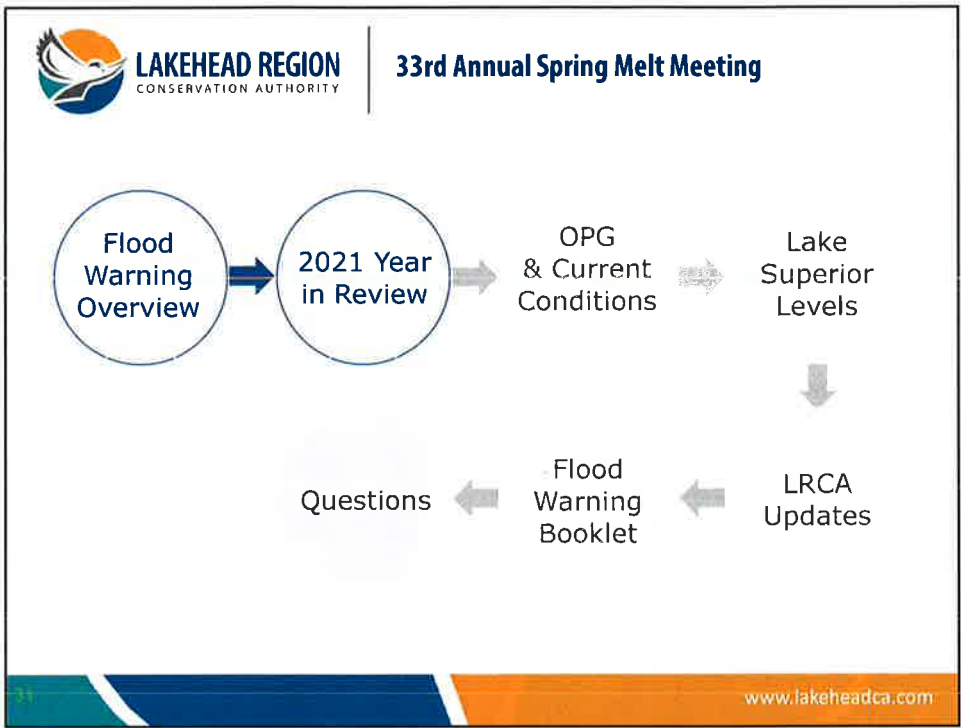


28

- Updated and distributed to Plan Holders
 - Member Municipalities
 - OPG
 - FWHP
 - MNDMNRF
- Flood Warning System
 - Overview of system
 - Maps
 - Plan Holders
 - Flood Damage Centres
 - Contact Booklet
 - LRCA Duty Roster
 - Flood Watch Call Out
 - Flood Warning Call Out
- Internal more comprehensive version developed for LRCA staff
- Updated annually



- Road Superintendents are usually the first to know or hear about localized flooding.
- The LRCA requests that any flooding observations/reports, etc. are reported to the LRCA Duty Person.
- Localized flooding may be a pre-warning to large scale flooding.
- Small streams contribute to larger streams, the compounding effect can be substantial.
- Precipitation is very often very localized (i.e., rain in the rural areas and none in Thunder Bay).
- Photographs are important in documenting high water marks along watercourses.
- Municipalities are responsible to implement their Emergency Plans as required and conduct any remedial measures (i.e., sand bagging, etc.).



31



32

2021 Year in Review

- LRCA Issued Messages:
 - 4 Watershed Condition Statements
 - 1 Water Safety Message in April
 - 3 Flood Outlook Messages (Nov, Dec)
- Level I & II Low Water conditions were declared
 - From July to December (18 weeks)
- Below average precipitation 9 out of 12 months.
- Below average precipitation for the year (584 mm actual versus 722 mm average).
- Neebing-McIntyre Floodway did not divert in 2021.



FOR IMMEDIATE RELEASE
WATERSHED CONDITIONS STATEMENT – FLOOD OUTLOOK

December 15, 2021 – 10:00 a.m.

LAKEHEAD REGION CONSERVATION AUTHORITY
WATERSHED CONDITIONS STATEMENT
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A Watershed Conditions Statement- Flood Outlook provides early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high wind or other conditions.

As part of the Authority's Flood Warning System, staff will continue to monitor conditions and issue updated Flood Messages as warranted.

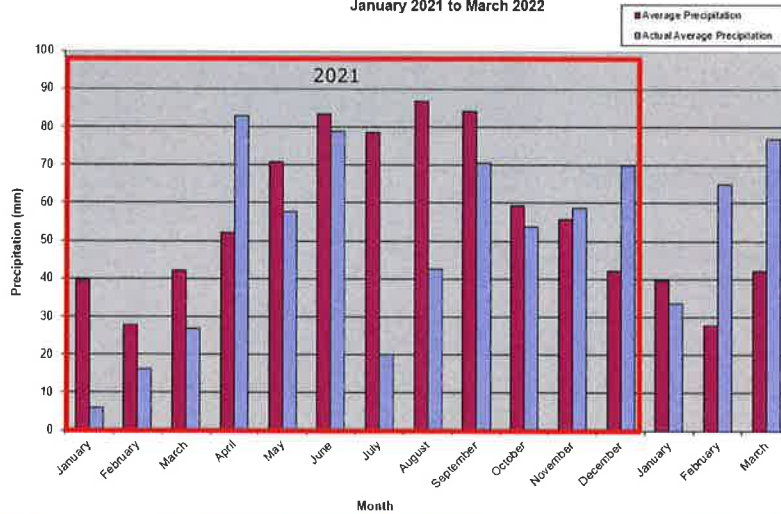
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CONTACT
Tammy Cook, Chief Administrative Officer 344-5857

33

Average Monthly Precipitation

Monthly Actual Precipitation vs. Average
January 2021 to March 2022



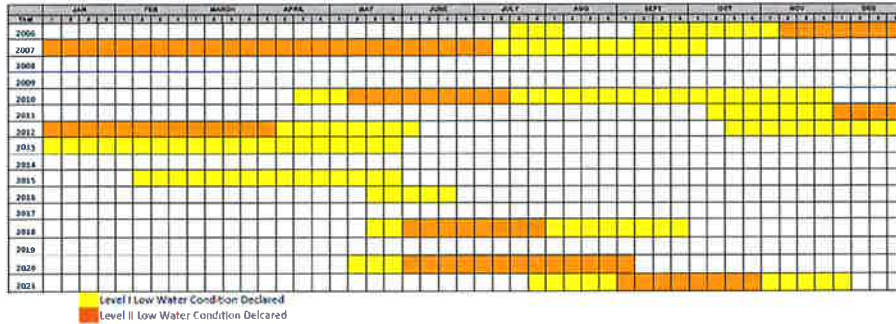
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34



Level I & Level II Low Water Conditions in 2021

Lakehead Region Conservation Authority, Summary of Declared Low Water Conditions



File No. 0102 / Vers. 1.1 / 102

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35



2021 Local Flood Messages by LRCA

- 1 – Watershed Conditions – Water Safety
- 2 – Watershed Conditions – Flood Outlook
- 1 – Watershed Conditions – Flood Outlook Update

Flood Message Type	Provincial Messages received from the Provincial Surface Water Monitoring Centre within the LRCA Area of Jurisdiction	Local Flood Messages released by the LRCA within the LRCA Area of Jurisdiction
Watershed Conditions Statement	March 9, 2021 – province wide March 19, 2021 – province wide	April 13, 2021 – Water Safety November 10, 2021 – Flood Outlook November 11, 2021 – Flood Outlook Update December 15, 2021 – Flood Outlook
Shoreline Conditions Statement		
Flood Watch	March 22, 2021 – province wide March 25, 2021 – province wide November 10, 2021 – northwestern Ontario	
Flood Warning		

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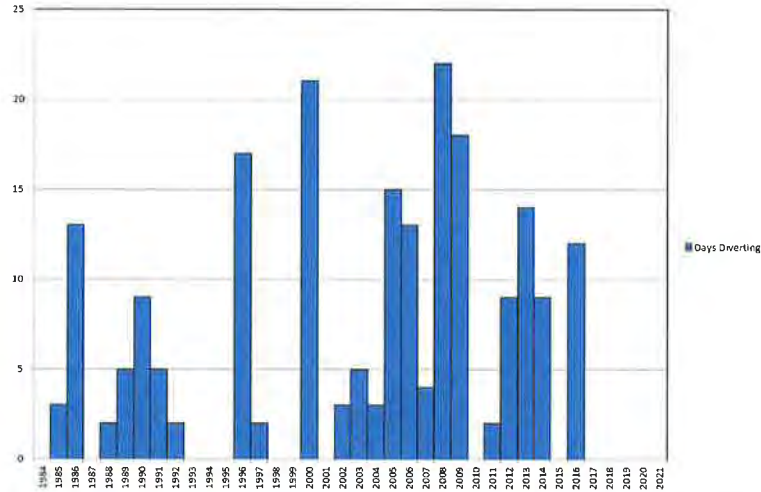
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LAKEHEAD REGION
CONSERVATION AUTHORITY

Neebing-McIntyre Floodway did not divert in 2021

Neebing-McIntyre Floodway
Number of Days Diverting 1984 - 2021



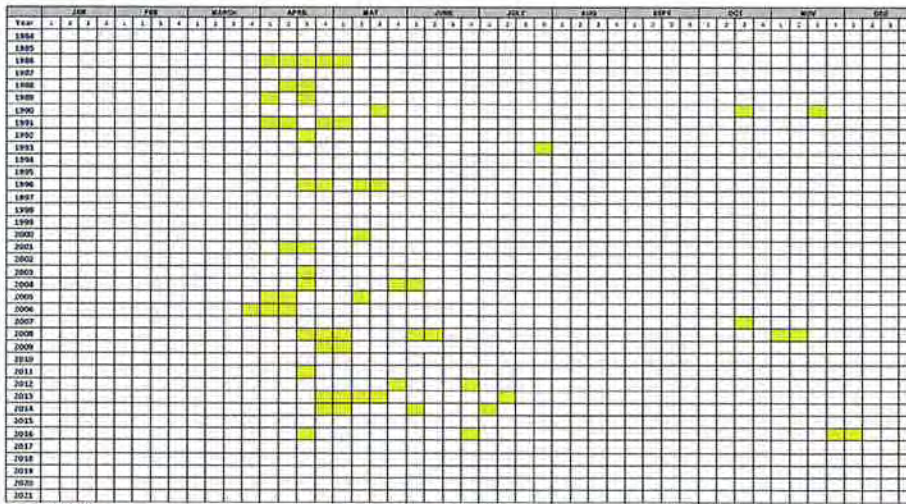
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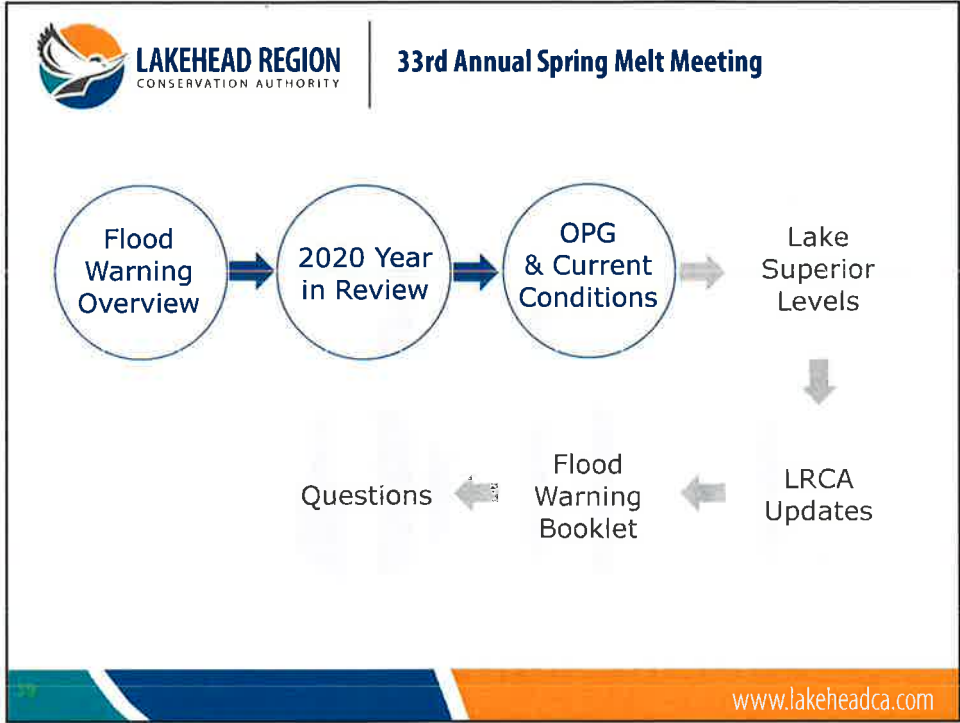
LAKEHEAD REGION
CONSERVATION AUTHORITY

Neebing-McIntyre Floodway did not divert in 2021

Lakehead Region Conservation Authority, Summary of Floodway Diversion



38



39



40

Agenda

- 1 | Kaministiquia River System Overview
- 2 | Temperature and Precipitation
- 3 | Snow Surveys
- 4 | Satellite Images
- 5 | Dog Lake Levels
- 6 | Kakabeka Flows
- 7 | Finding river data at OPG.com
- 8 | Stay Clear. Stay Safe.



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41

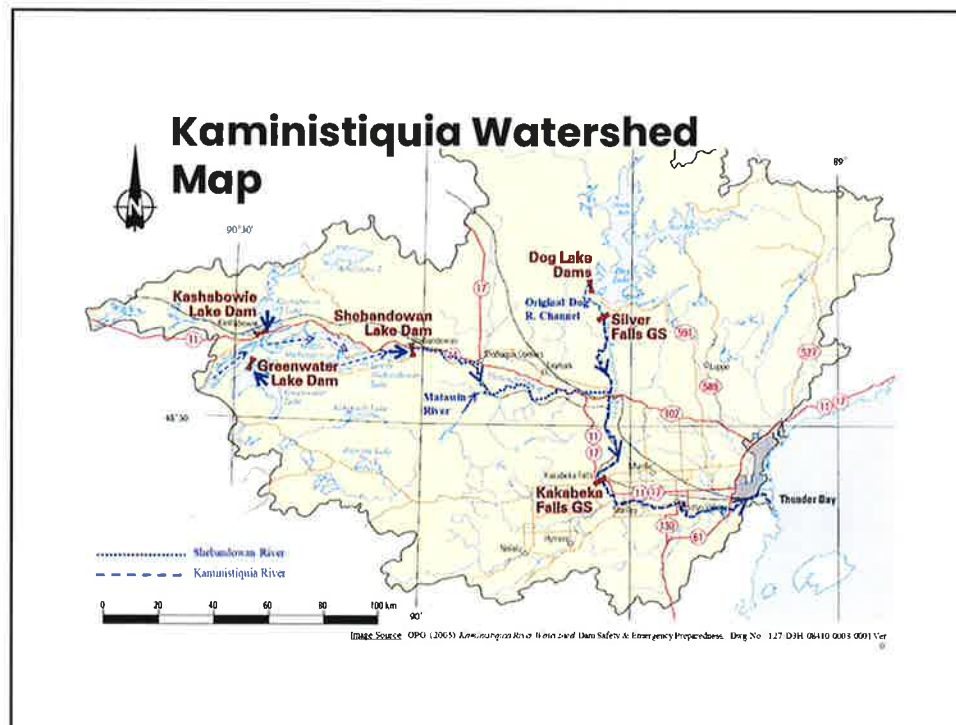
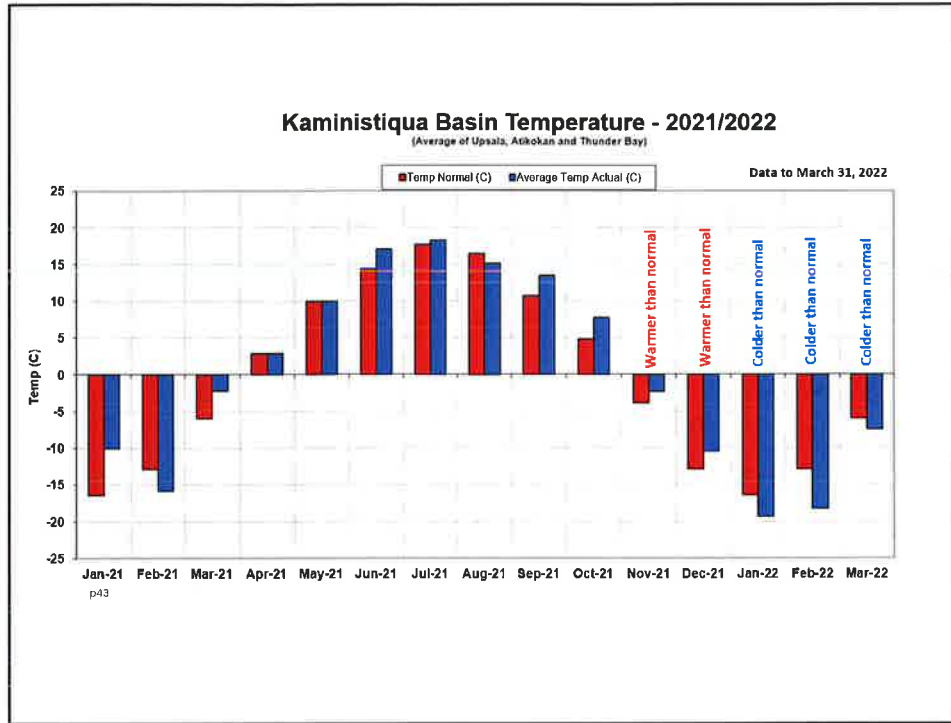
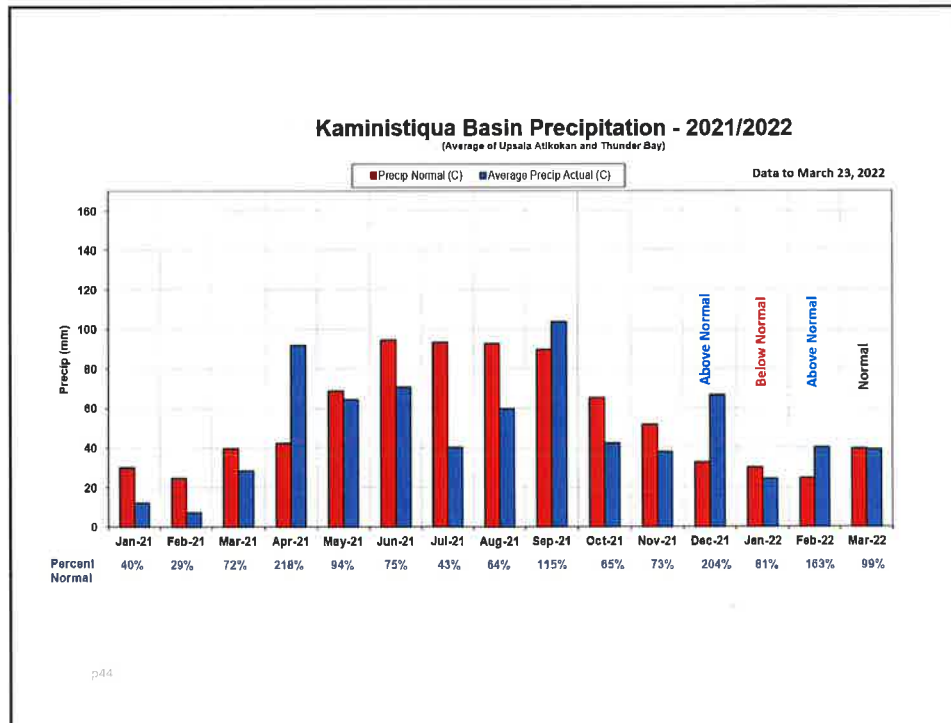


Image Source: OPG (2005) Kaministiquia River Flooded Dam Safety & Emergency Preparedness. Draw No. 127-D36-06-110-0003-0001 Ver. 0

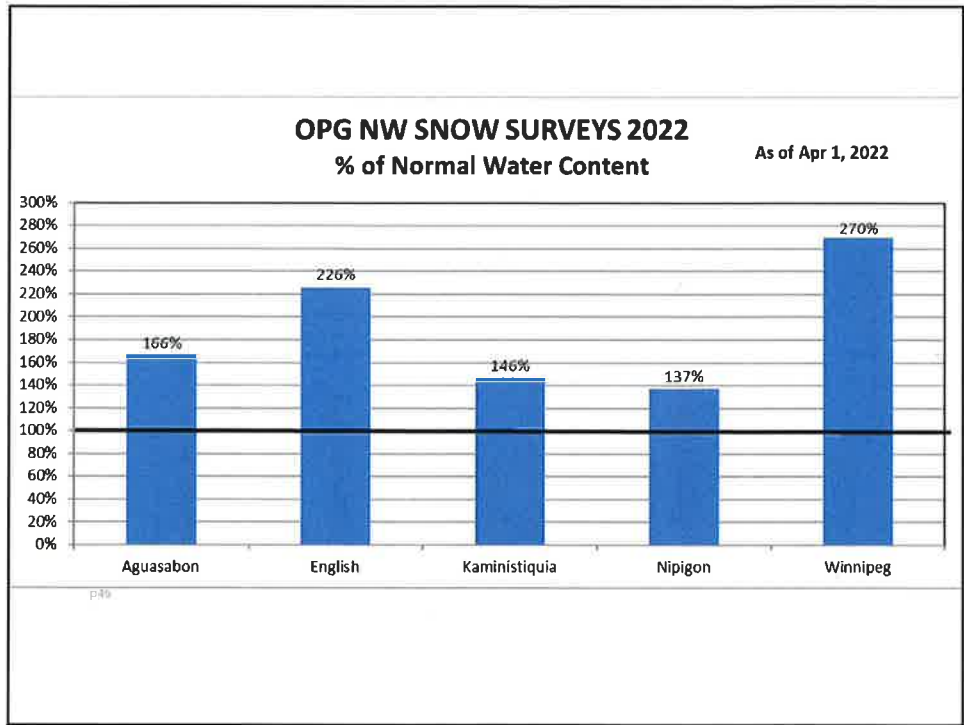
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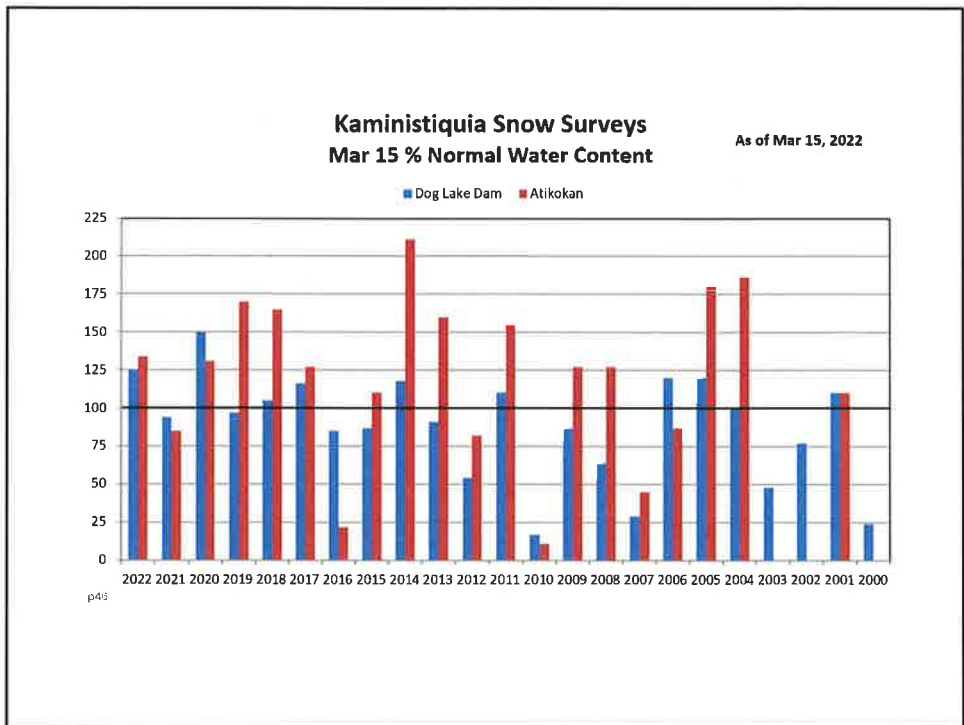
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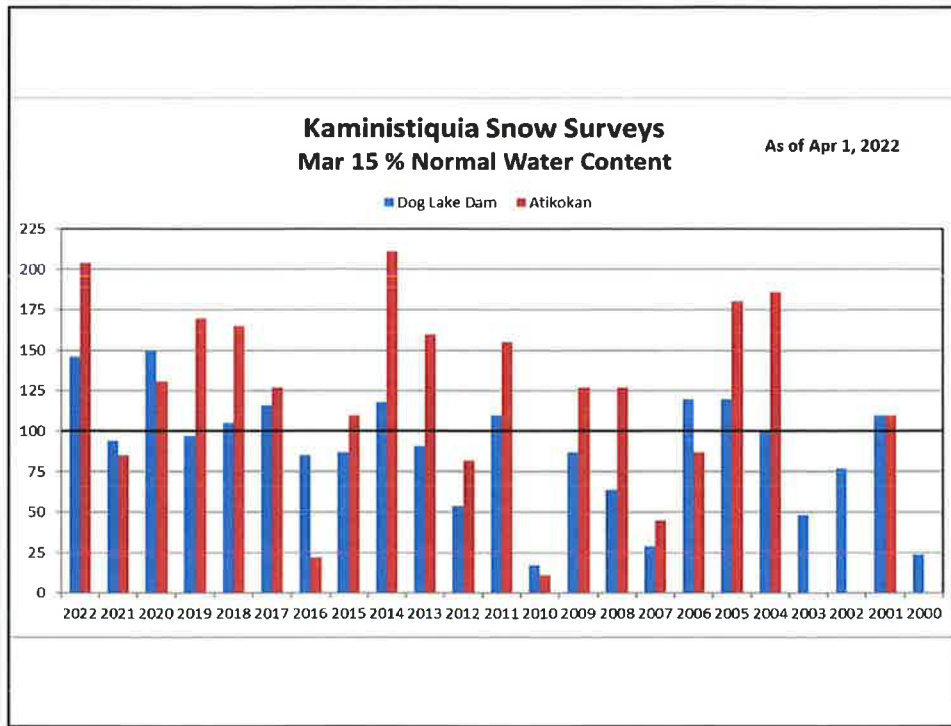
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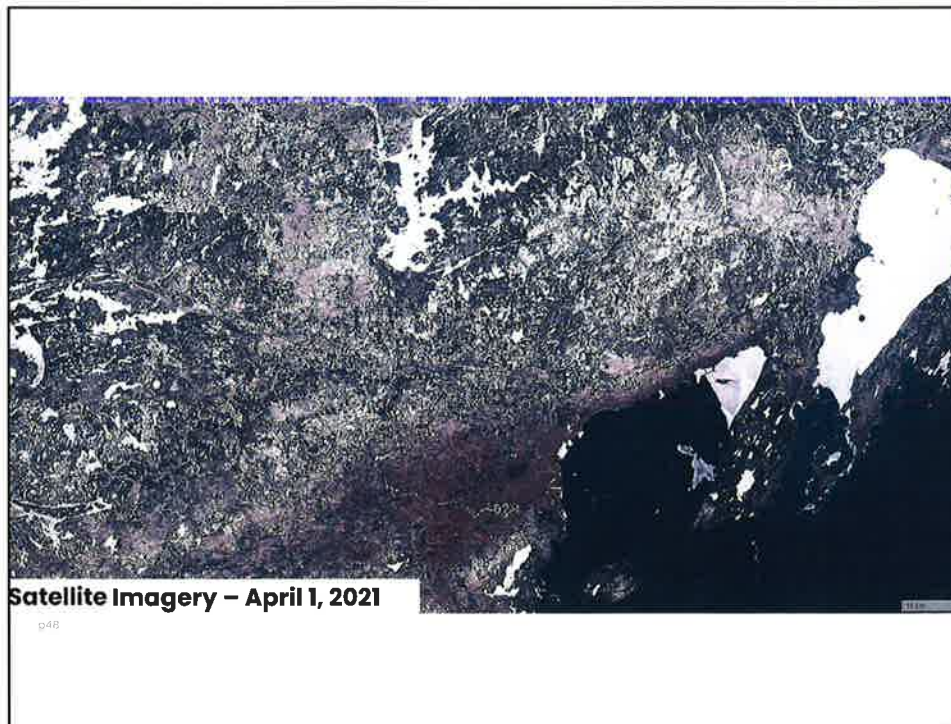
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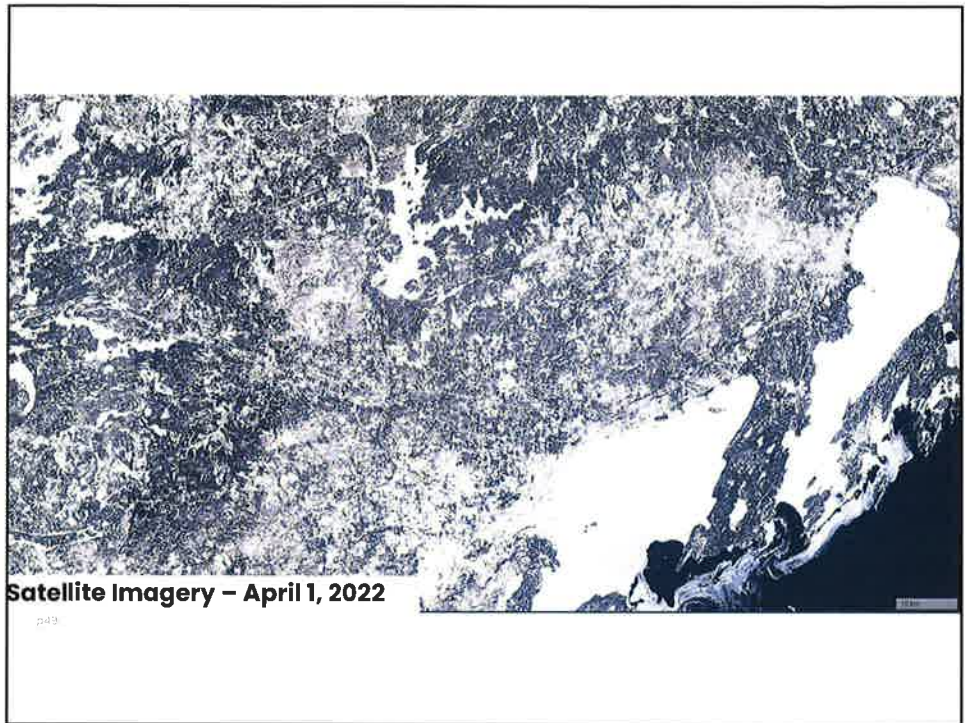
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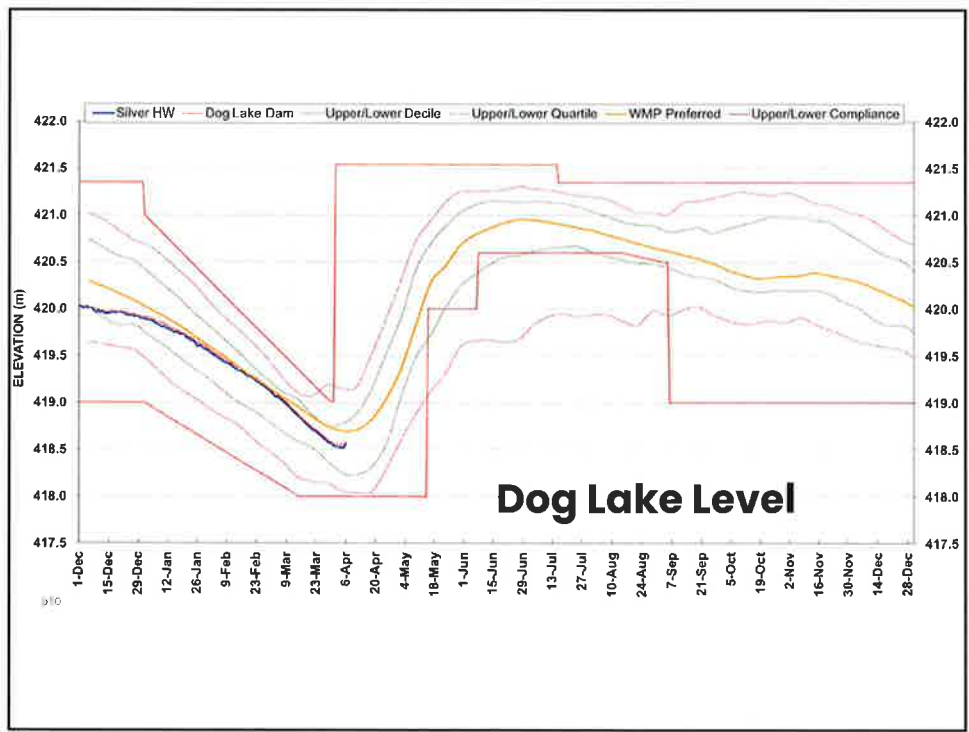
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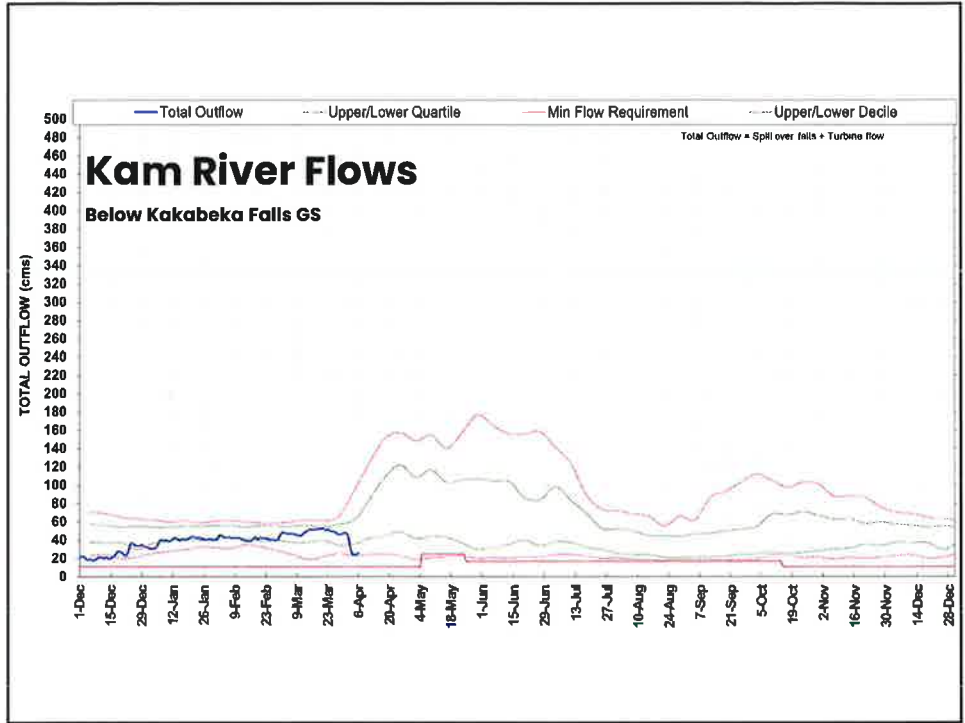
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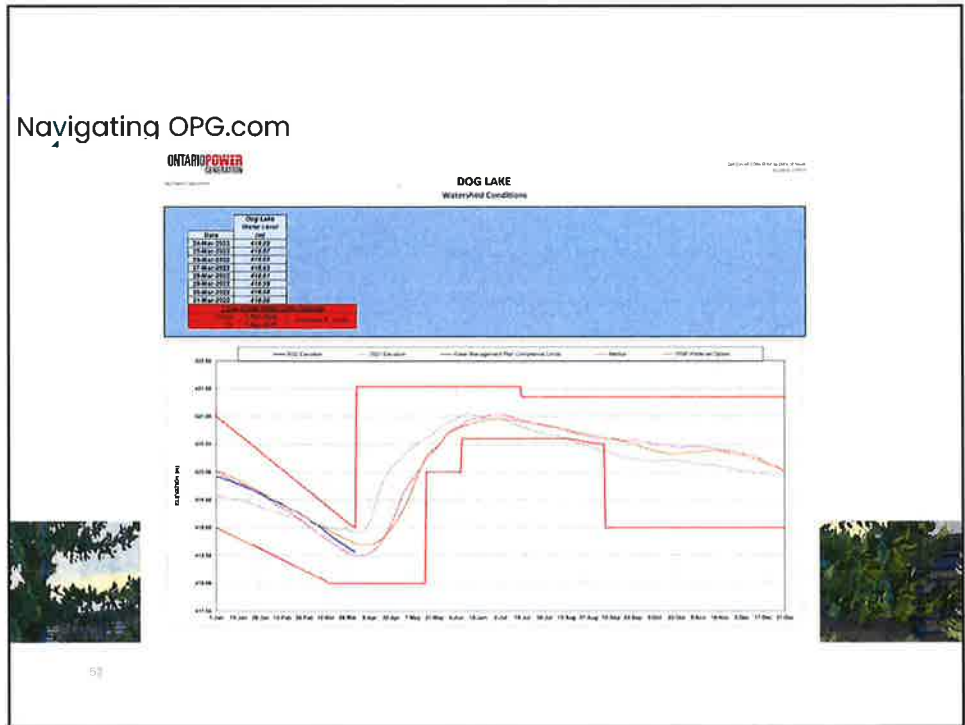
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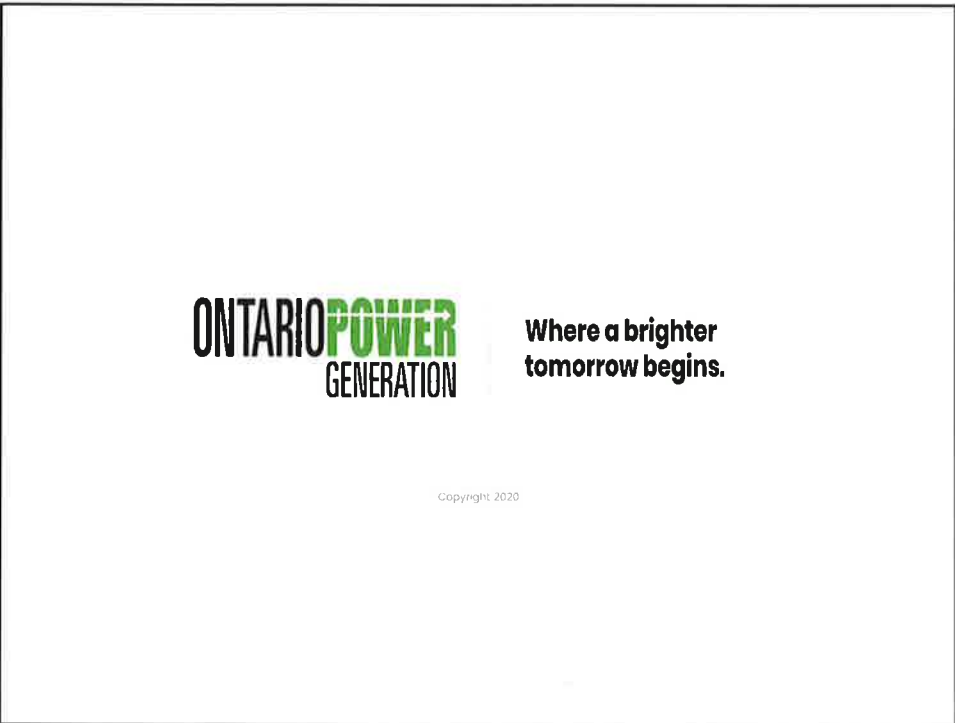
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52



53



54



Current Watershed Conditions



Kaministiquia River March 21, 2022

55



Current Snow Conditions

Snow Survey Data – April 1, 2022

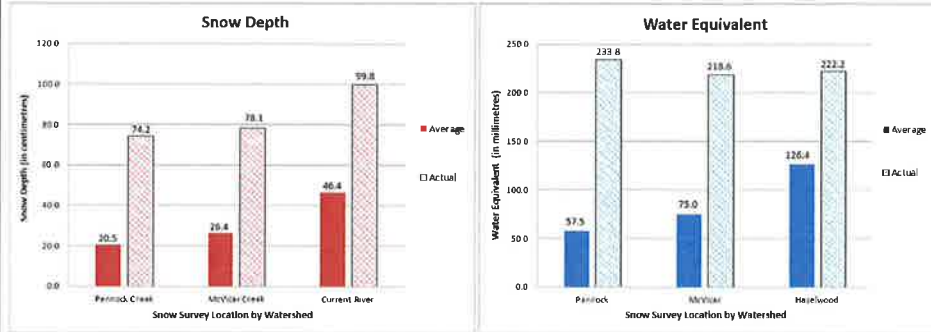
	Hazelwood Lake		McVicar Creek		Pennock Creek	
	Snow Depth (cm)	Water Equivalent (mm)	Snow Depth (cm)	Water Equivalent (mm)	Snow Depth (cm)	Water Equivalent (mm)
April 1, 2022	99.8	222.2	78.1	218.6	74.2	233.8
Average Annual (April 1)	46.4	126.4	26.4	75.0	20.5	57.5
April 1, 2022 % Annual Average	215%	176%	295%	292%	362%	407%
Last Year % Annual Average	78%	82%	28%	31%	7%	8%

- ABOVE average snow depth and water content compared to April 1st averages
- ABOVE our 1996 record high snow depth and water content for April 1st (since 1974-75)

56



Current Snow Conditions – April 1, 2022

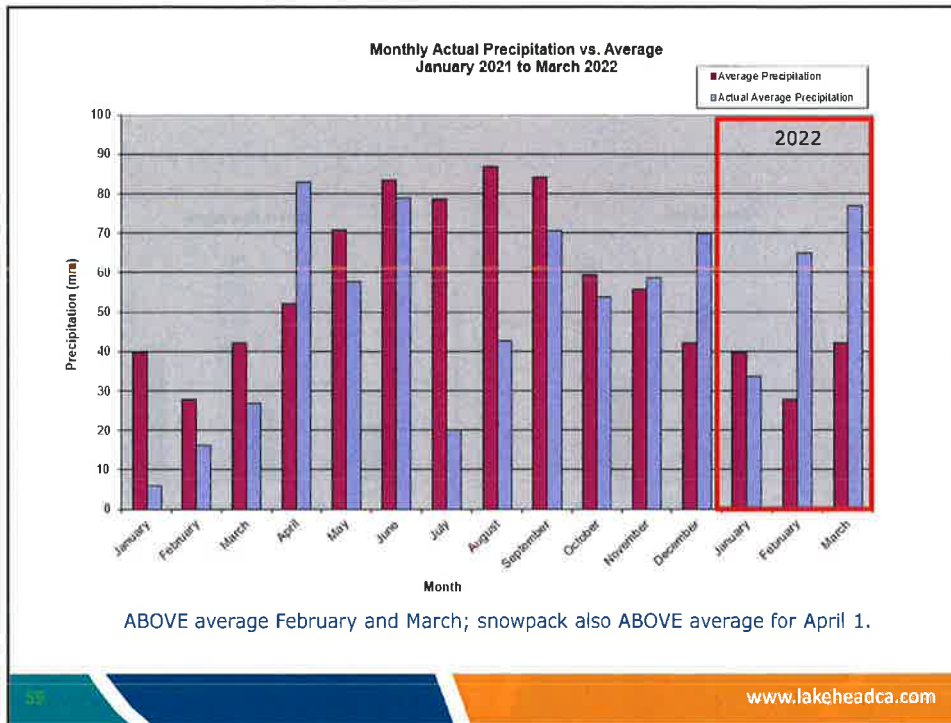


Snow Water Weight – Equivalent Water

Snow Course	Water Equivalent (mm) (as of April 1)
Hazelwood (Gorham)	222
Pennock (Oliver Paipoonge)	234
McVicar (City of Thunder Bay)	219

Current API – 54 mm (amount of rain or snow melt required in 24 hours for flash flooding)

NOTE: Regional Storm = 193 mm in 12 hours
 June 6th, 2008 = 56 mm - 105 mm
 May 28th, 2012 = 5.8 mm - 88.8 mm (saturated conditions)
 July 13, 2015 (Whitefish Gauge) = 120 mm



59

LRCRA - Superior Low Water Regional Monthly Summary - March 2022

Current Exceeded Low Water Conditions	Date Declared
LRCRA Area of Jurisdiction	

LRCA Low Water (Last 60 days)

Area	LRCA	LRCA	LRCA
LRCA	100%	100%	100%
LRCA	100%	100%	100%

Precipitation Summary - March 2022

Area	12 Month Actual (mm)	12 Month Average (mm)	Percentage	LRCA Condition
LRCA	712	612	116%	OK
LRCA	712	612	116%	OK

Flow Summary - March 2022

Flow One Month Summary - Based on 12 Month Average Summary Flow	Percentage of Actual Flow compared to 12 Month Average Summary Flow for one Grouped Stream	LRCA Condition
LRCA	116%	OK

Flow One Month Summary - Based on Environment Canada Summary Flow

Flow One Month Summary - Based on Environment Canada Summary Flow	Percentage of Actual Flow compared to 12 Month Average Summary Flow for one Grouped Stream	LRCA Condition
LRCA	116%	OK

Page 8 of 8

CORA - Kaministiquia River Summary

Flow One Month Summary	12 Month Average	Percentage	LRCA Condition
LRCA	100%	100%	OK

Lake Superior Summary - March 2022

Area	LRCA
LRCA	100%

Notes

1. The 2022 year flow level on Lake Superior at Thunder Bay is 632 M3/day. Values are based on the 12 month average reported in International Great Lakes Survey (IGLS) 0-91 matrix published from 1982 data by Hydrological Centre and converted to gswdms.

*Monthly updates on the LRCRA website.

Low Water status calculated monthly. Declaration of a Low Water condition, if warranted will occur after spring freshet.

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60

- LRCA in partnership with the MECP has installed groundwater monitoring wells in the Thunder Bay area.
- The wells are used to collect groundwater quality and level data.
- Level loggers are installed in the wells which record the groundwater level every hour. Water quality is tested once per year in the fall.
- Groundwater data collection began in the summer of 2006.
- Once sufficient groundwater data has been collected, groundwater levels may be used in the OLWR program as an additional trigger to identify low water events (currently we just use precipitation and streamflow data).

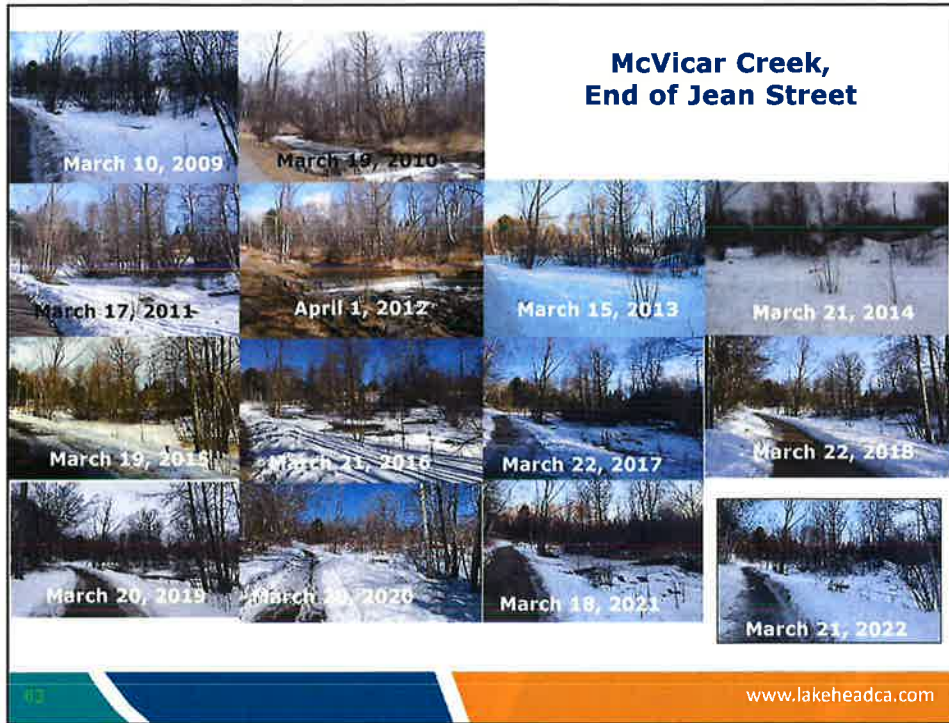


Year	Murillo	Kakabeka	Loon	Birch Beach	Wishart	Hazelwood
2007 (March)	3.188	9.628	7.555	3.075	11.085	2.670
2008 (March/April)	1.566	9.427	5.424	2.937	10.740	1.880
2009 (March)	2.675	9.509	5.27	2.904	10.381	1.764
2010 (March)	1.676	9.447	5.876	2.905	10.711	1.405
2011 (Feb/March)	2.725	9.55	6.032	2.027	10.983	1.155
2012 (March)	1.993	9.511	7.160	2.893	11.119	1.414
2013 (Feb)	2.816	9.574	6.337	2.832	11.178	1.929
2014 (Jan)	2.824	9.520	5.111	2.730	10.521	1.536
2015 (Feb)	2.812	9.055	5.586	2.280	10.299	1.739
2016 (Feb)	2.061	9.043	4.183	2.615	10.047	1.033
2017 (Feb)	2.129	9.409	4.534	2.711	10.162	1.301
2018 (Feb)	2.624	9.509	5.601	2.629	10.536	1.802
2019 (Jan)	2.331	9.466	4.864	2.651	10.313	1.330
2020 (Jan)	2.364	9.447	5.191	2.957	10.395	1.414
2021 (March)	2.249	9.554	6.663	2.765	11.039	2.111
2022 (March)	2.733	9.535	6.273	2.839	10.979	1.839
2021 vs 2022	-0.484	+0.019	+0.390	-0.074	+0.060	+0.272

*2007 and 2010, 2011/2012, 2013, 2015, 2-016, 2018, 2020, 2021 – Low Water Conditions declared

*Red indicates lowest levels recorded in March/April *raw data from manual water level measurements (measured from top of casing)

•2022 groundwater levels are above 2021 levels; Murillo and Birch Beach are below 2021 levels



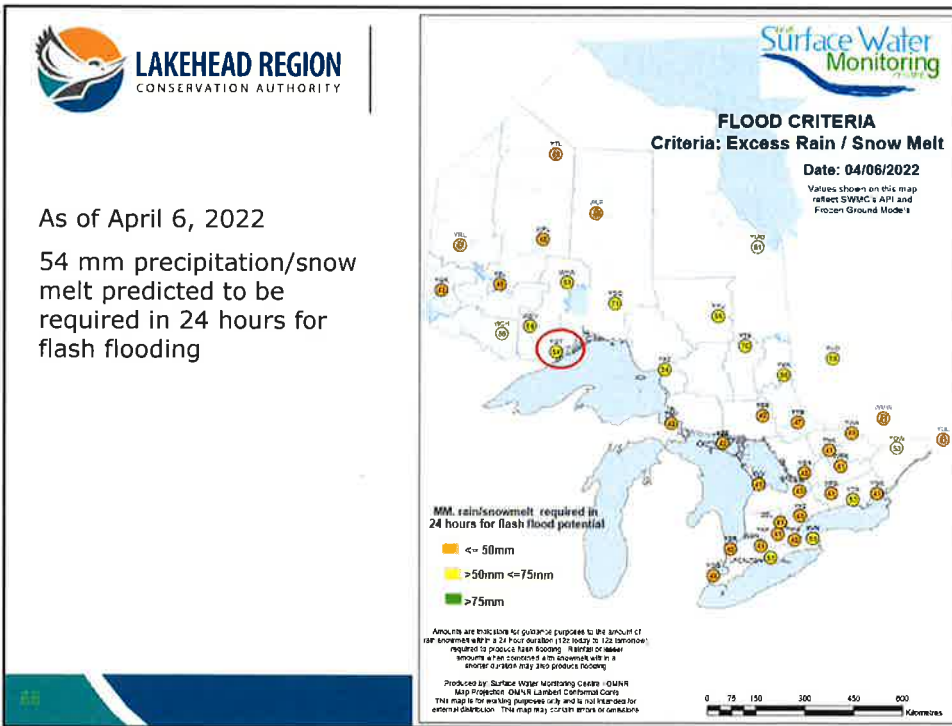
63



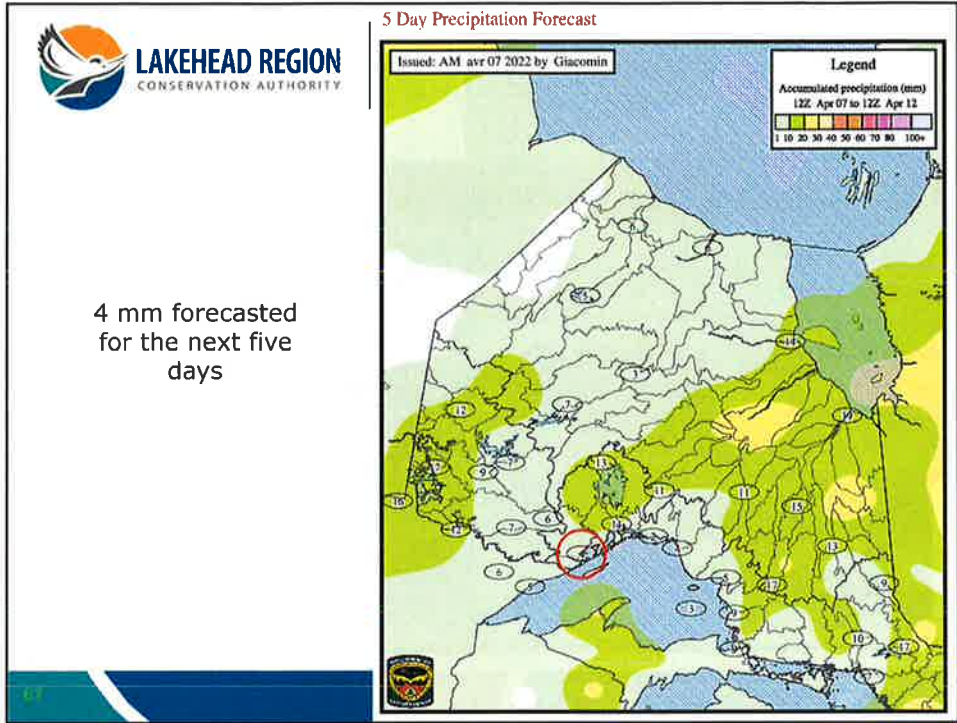
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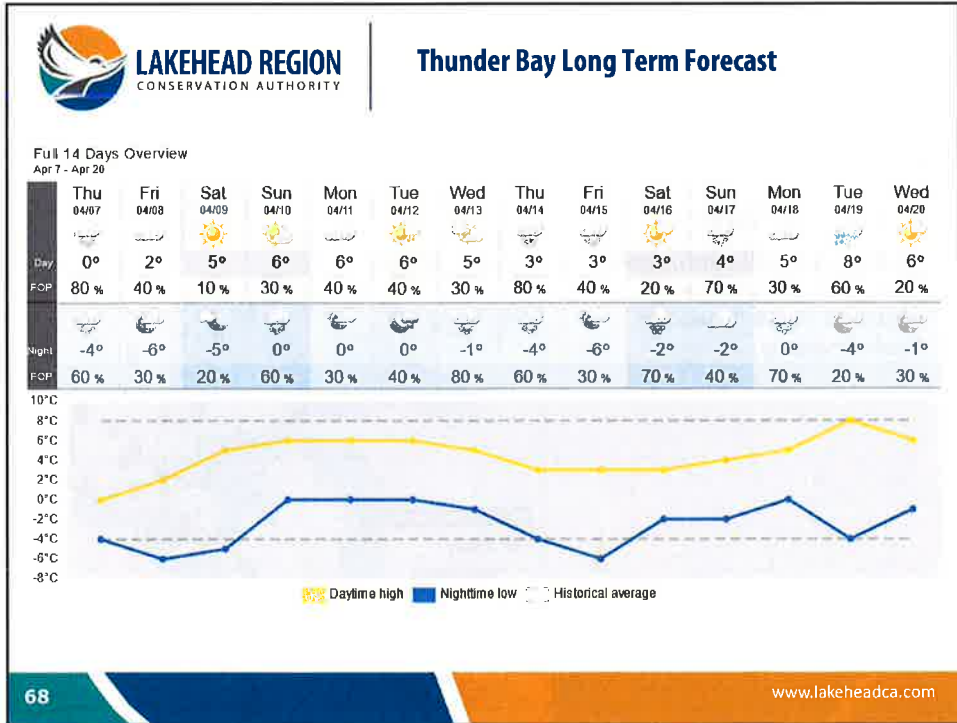
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67

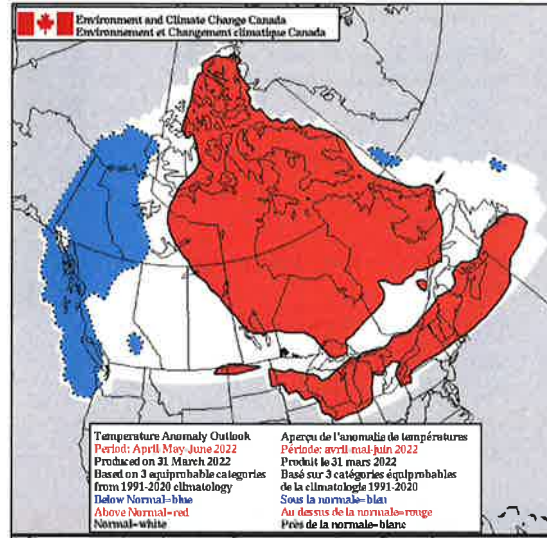


68

Temperature Deterministic Forecast

Normal to Above Normal Temperatures forecast for next 3 months
– April, May, June 2022

Historical Percent Correct
Thunder Bay 45-50%
Canada 50.9%

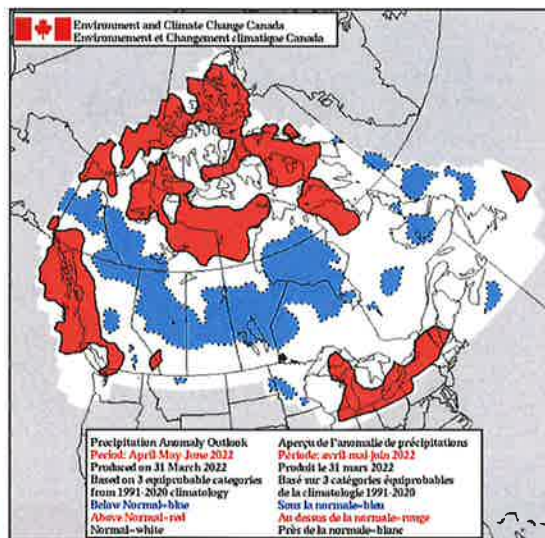


69

Precipitation Deterministic Forecast

Normal Precipitation forecast for next 3 months – April, May, June 2022

Historical Percent Correct
Thunder Bay 0-40%
Canadian Average 35.8%



70



Current Conditions Summary

- Uneventful spring freshet so far (from a riverine perspective).
- ABOVE average snow depth and water content for this time of year
- Ground still frozen.
- Watercourses are starting to open up.
- Area watercourses below bank full conditions.
- No observed or reported ice jamming at this time.
- Ice jamming possible in the usual locations.
- Next 2 weeks, weather forecasts predict slow melt, minimal precipitation.
- Predicted normal temperatures and precipitation for April, May and June



Neebing River March 21, 2022



33rd Annual Spring Melt Meeting



Lake Superior Levels

IN MARCH:

Lake Superior was 26 cm **below** last year's beginning of March level and was 8 cm **below** the monthly average for March.

Lake	March 2022 Monthly Mean Level			
	Compared to Monthly Average (1918-2021)	Compared to Last Year (2021)	Compared to Record High (1918-2021)	Notes
Superior	8 cm below	26 cm below	45 cm below	31 st lowest on record
Michigan-Huron	21 cm above	42 cm below	69 cm below	34 th highest on record
St. Clair	39 cm above	22 cm below	51 cm below	21 st highest on record
Erie	43 cm above	5 cm below	42 cm below	17 th highest on record
Ontario	30 cm above	50 cm above	38 cm below	19 th highest on record
Montreal Harbour*	27 cm below	37 cm above	116 cm below	20 th highest on record

BEGINNING OF APRIL:

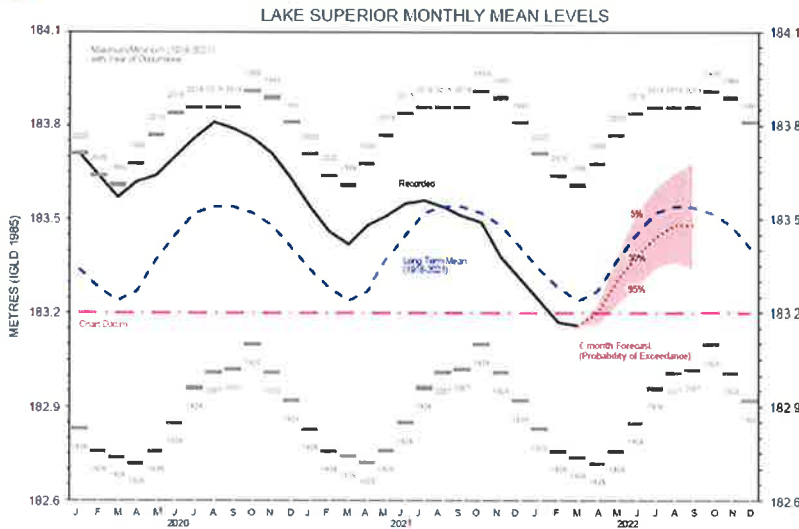
Lake Superior is 26 cm **below** last year's beginning of April level and is 6 cm **below** the beginning of month average for April.

Lake	Beginning-of-April 2022 Level			
	Compared to Beginning-of-Month Average (1918-2021)	Compared to Last Year (2021)	Compared to Record High (1918-2021)	Notes
Superior	6 cm below	26 cm below	44 cm below	Lowest since 2013
Michigan-Huron	25 cm above	35 cm below	69 cm below	Equivalent to 2017
St. Clair	33 cm above	24 cm below	63 cm below	Lowest since 2015
Erie	39 cm above	5 cm below	50 cm below	Similar to 2021
Ontario	31 cm above	52 cm above	41 cm below	Equivalent to 2017; 6 cm higher than 2019

**Lake Superior beginning of April water level is the lowest since 2013.

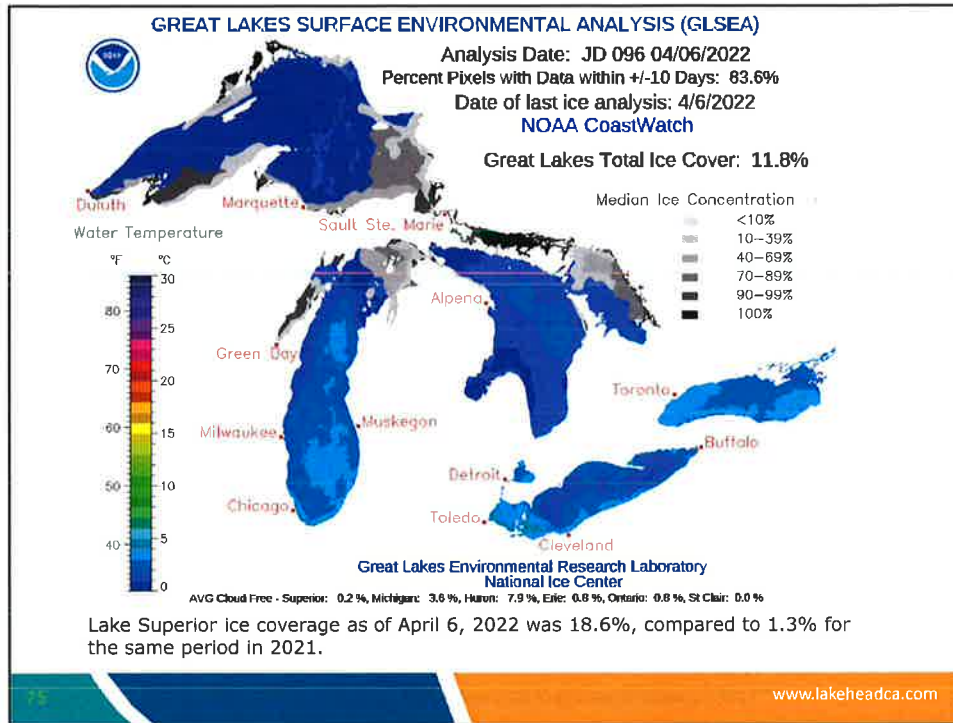
73

Lake Superior Monthly Mean Levels

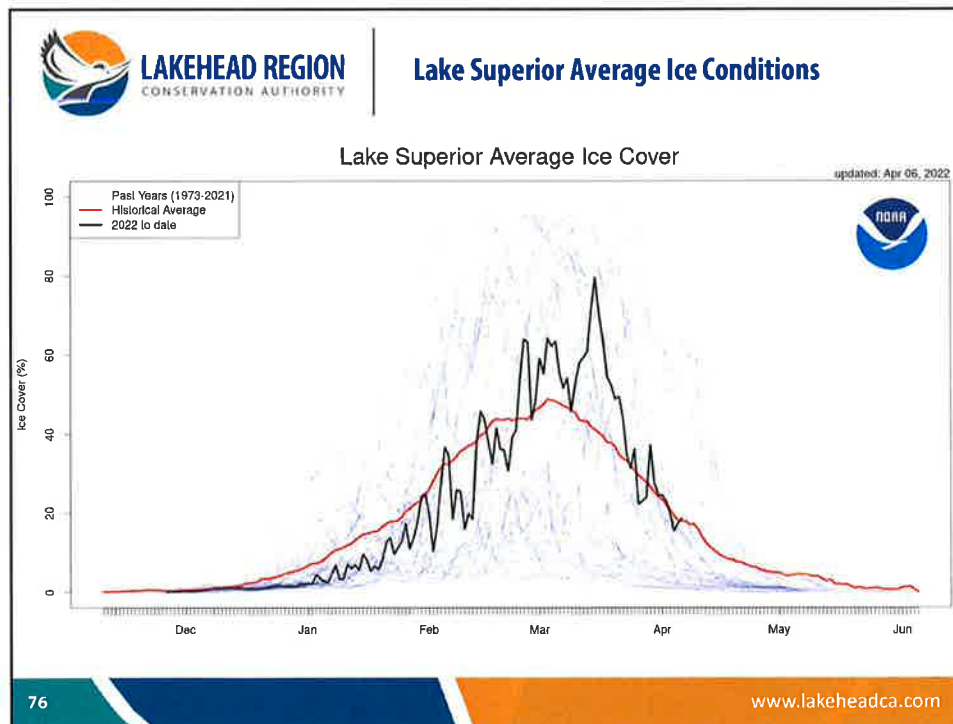


74

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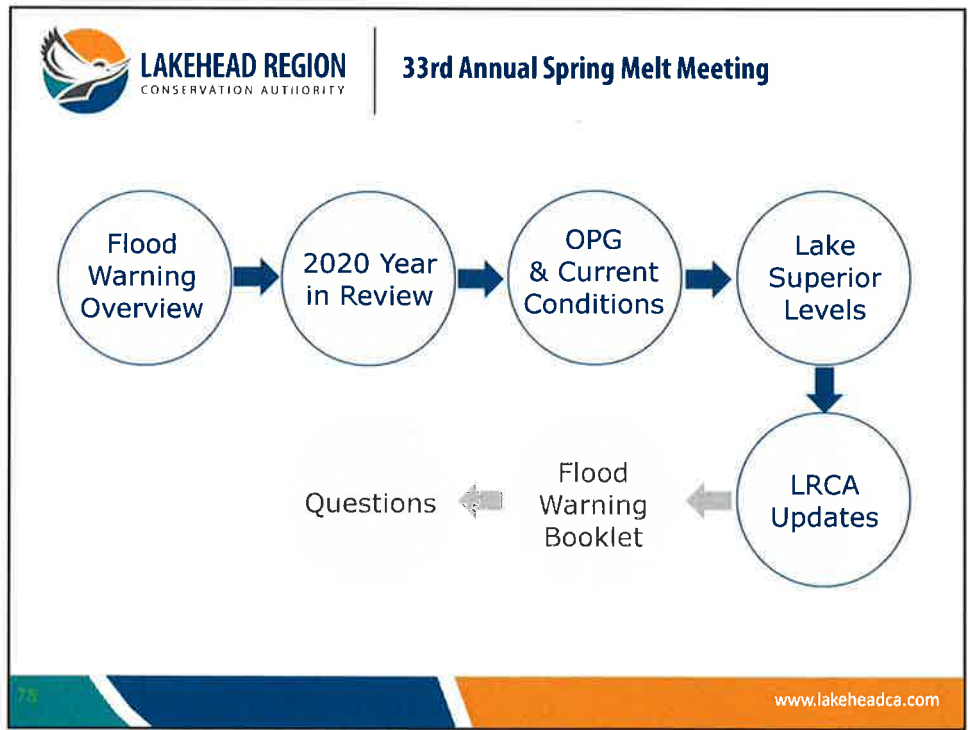
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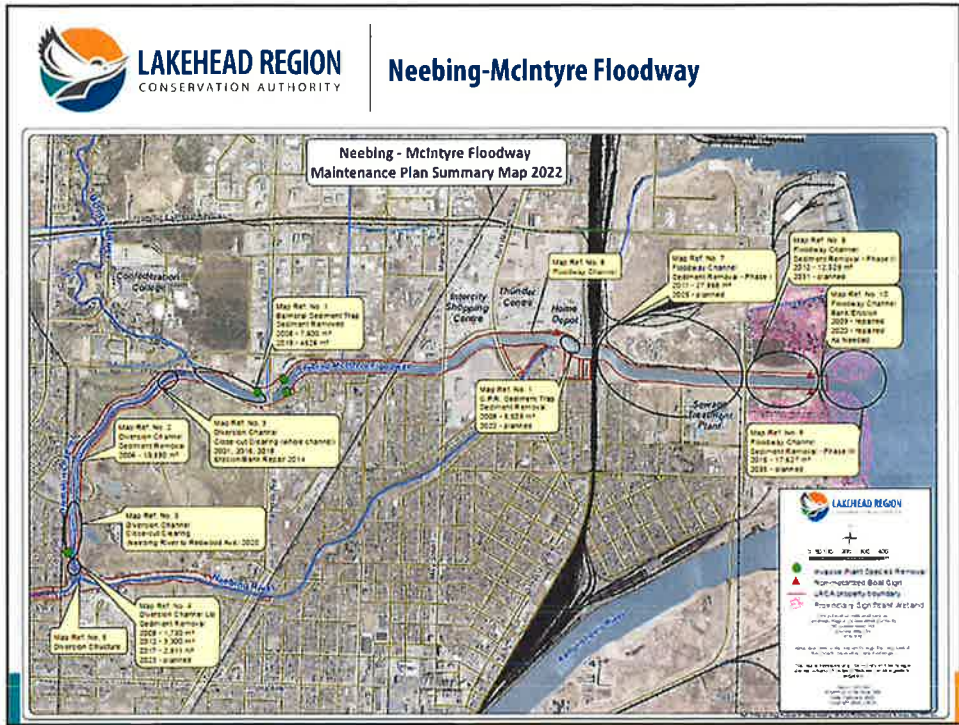
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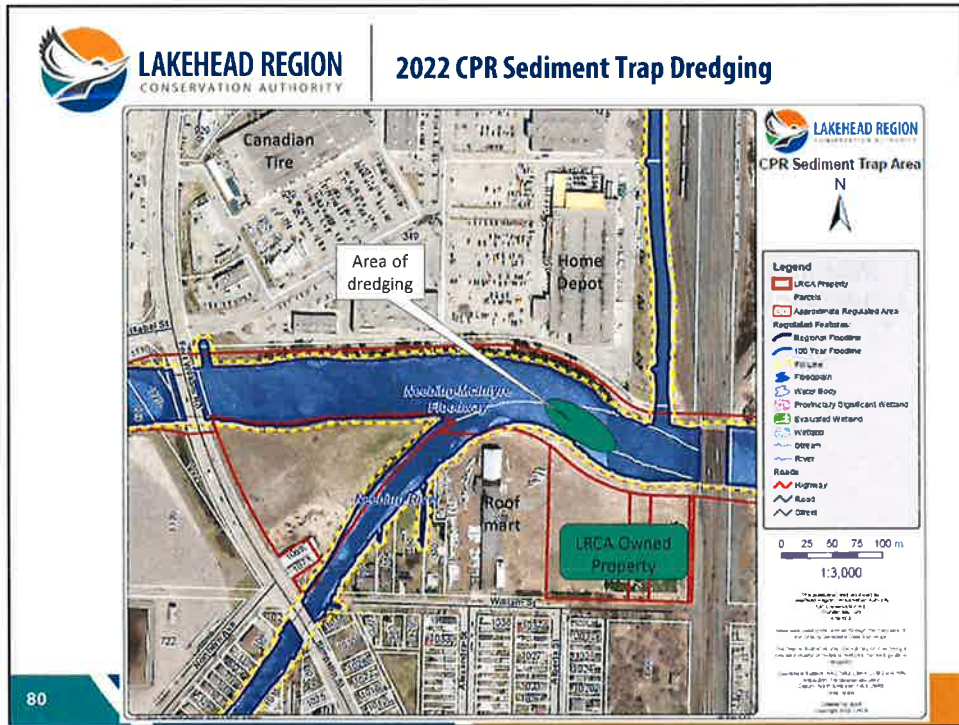
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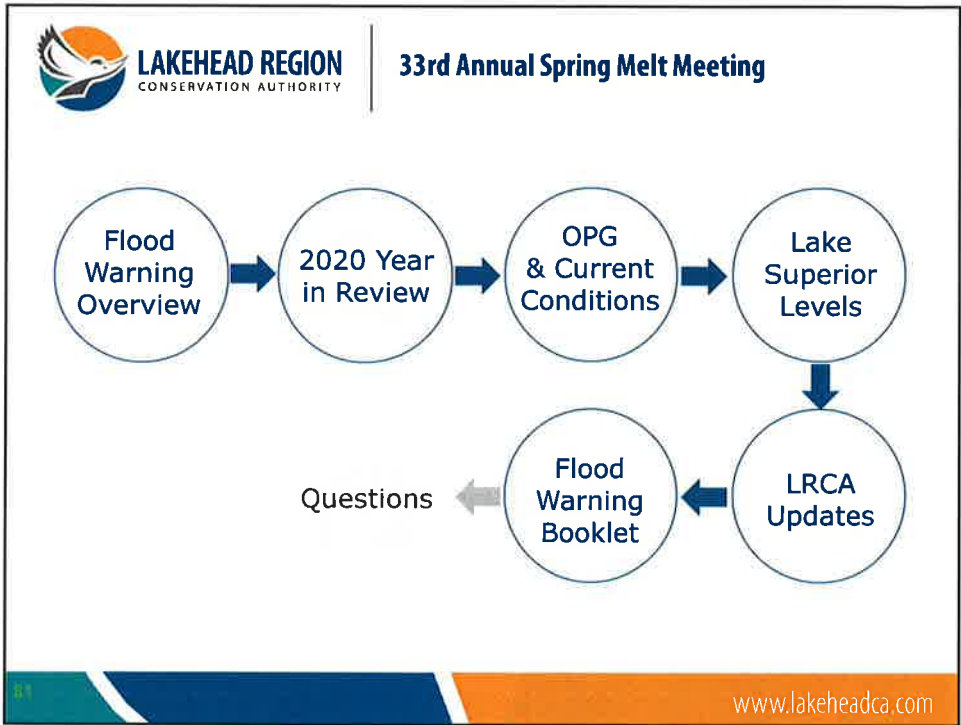
78



79



80



81

LAKEHEAD REGION
CONSERVATION AUTHORITY

2022
Flood Warning System
Contact Booklet

Kaministiquia River at Fort William Historical Park
June 7, 2020

Authority Office located at Corner of Edouard Road & Cliff Links Road
Access via Conservation Road (off of Oliver Road)
Ph. (807) 344-5857 Fax (807) 343-9156
www.lakeheadca.com
Facebook, Instagram and Twitter: @lakeheadregion

Flood Warning System Contact Booklet

- Updates to the Flood Warning System Binder and Contact Booklets will be mailed out each Member Municipality and partner for distribution.
- Copies can be requested by emailing info@lakeheadca.com.

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82



"We do not learn from experience...
we learn from reflecting on experience."
- John Dewey