NORTH BAY-MATTAWA CONSERVATION AUTHORITY
MINUTES
of the

ELEVENTH meeting of the North Bay-Mattawa Conservation Authority held at 4:00 p.m. on December 11, 2024 in the NBMCA's Marc Charron Boardroom, 15 Janey Avenue, North Bay Ontario.

MEMBERS PRESENT:

Bonfield, Township of	-	Steve Featherstone
Callander, Municipality of	-	Grant McMartin
Calvin, Township of	-	Bill Moreton
Chisholm, Township of	-	Nunzio Scarfone
East Ferris, Municipality of	-	Steve Trahan
Mattawan, Municipality of	-	Michelle Lahaye
North Bay, City of	-	Peter Chirico
North Bay, City of	-	Chris Mayne
North Bay, City of	-	Lana Mitchell
Papineau–Cameron, Township of	-	Shelley Belanger

MEMBER(S) ABSENT:

Mattawa, Town of	-	Loren Mick
Powassan, Municipality of	-	Dave Britton

ALSO PRESENT:

Robin Allen, Interim CAO - Secretary Treasurer
Rebecca Morrow, Human Resources Coordinator/Executive Assistant/Deputy CAO
Aaron Lougheed, Manager, Finance
Hannah Wolfram, Regulations Officer
Githan Kattera, Water Resources Coordinator/Regulations Officer
Kevin Taylor, Senior Manager, Lands & Stewardship
Angela Mills, Water Resource Specialist

1. Acknowledgement of Indigenous Traditional and Treaty Lands

Michelle Lahaye read a statement acknowledging Indigenous and Treaty Lands.

2. Approval of the Agenda

After discussion the following resolution was presented:

Resolution No.135-24, Mitchell-Moreton
THAT the agenda be approved as presented.

Carried Unanimously

3. Declaration of Pecuniary Interest

None declared.

4. Delegations

None

5. Adoption of Previous Minutes of November 13, 2024

After discussion the following resolution was presented:

Resolution No. 136-24, Featherstone-Mayne
THAT the minutes of the meeting held November 13, 2024 be adopted as presented.

Carried Unanimously

6. Correspondence

None presented.

7. Section 28 Permits

Githan Kattera presented the report to the Members. After discussion, the Members thanked Githan and the following resolution was presented:

Resolution No. 137-24, McMartin-Trahan
THAT the Prohibited Activities, Exemptions and Permits report is received and appended to the minutes of this meeting.

Carried Unanimously

8. Conservation Authorities (CA) Act deliverables

Kevin Taylor and Githan Kattera presented the CA Act deliverables reports to members. After discussion, the members thanked Kevin and Githan and the following resolution was presented:

Resolution No. 138-24, Featherstone-Chirico
THAT the six deliverables under the Conservation Authorities Act:

1) Ice Management Plan
2) Natural Hazzard Infrastructure Operational
3) Asset Management Plan
4) Lands Inventory
5) Conservation Area Strategy
6) Watershed Based Resource Management Strategy

Be received and appended to the minutes of this meeting;

AND THAT the Conservation Area Strategy and the Watershed Based Resource Management Strategy be posted to the Website in accordance with the requirements of the Conservation Authorities Act.

Carried Unanimously

9. 2025 Board Meeting schedule and Office Closures

Rebecca Morrow presented the report on the 2025 Board Meeting schedule and Office Closures. Afterwards members thanked Rebecca and the following resolution was presented:

Resolution No. 139-24, Belanger-McMartin

THAT the NMBCA Members set the meeting schedule and office closure dates for 2025 as listed in this report and that staff are directed to make necessary arrangements to schedule meetings for the recommended dates and times;

AND THAT this Board Report is received and appended to the minutes of this meeting.

Carried Unanimously

10. Engineering Report

Githan Kattera presented the Engineering Report. After discussion, the members thanked Githan and the following resolution was presented:

Resolution No. 140-24, Chirico-Belanger

THAT the NBMCA Floodplain Mapping and Infrastructure Improvement Projects as presented is received and appended to the minutes of this mee□ng.

Carried Unanimously

11. Closed session of Committee of the Whole

After discussion, the following resolutions were presented:

Resolution No. 141-24, Mayne-Chirico

THAT the meeting move into a closed session of “Committee of the Whole” to discuss personnel, property and legal matters at 4:36 pm.

Carried Unanimously

Resolution No. 142-24, Mitchell-Scarfone

THAT the meeting move out of a closed session of "Committee of the Whole" and back into an open meeting at 5:15 pm.

Carried Unanimously

Resolution No. 143-24, Chirico-Scarfone

THAT THAT the recommendations outlined in the report titled "Personal Policy Update" dated December 11, 2024 be added to the 2025 budget and staff work to make the necessary changes in the Personnel Policy.

Carried Unanimously

Resolution No. 144-24, Belanger-Moreton

THAT the following minutes be received and approved as presented:

- April 4, 2024 – closed meeting
- April 10, 2024 – closed meeting
- April 18, 2024 – Human Resources Meeting
- May 1, 2024 – Closed Special Meeting

Carried Unanimously

12. New Business

Members discussed the Draft 2025 Budget. It was explained that the Budget is currently in the public consultation process and that any comments received will be brought forward to the December 16, 2024 Board meeting.

The Interim CAO presented her report to members. After discussion, the members thanked Robin and the following resolution was presented:

Resolution No. 145-24, Mayne-Scarfone

THAT the Interim CAO's Report dated December 10, 2024 be received and appended to the minutes of this meeting.

Carried Unanimously

13. Adjournment (5:21 p.m.)

As there was no further new business, the following resolution was presented:

Resolution No. 146-24, Feathertone-Moreton

THAT the meeting be adjourned, and the next meeting be held at 4:00pm on December 16, 2024 or the call of the Chair.

Carried Unanimously

Michelle Lahaye, Chair

Robin Allen, Interim Chief Administrative Officer, Secretary Treasurer

NORTH BAY - MATTAWA CONSERVATION AUTHORITY

TO: The Chairperson and Members of the Board of Directors,
North Bay-Mattawa Conservation Authority

ORIGIN: Githan Kattera, Regulations Officer / Water Resources, M.Eng.
Hannah Wolfram, Regulations Officer

DATE: November 26, 2024

SUBJECT: Report on O. Reg. 41/24: Prohibited Activities, Exemptions and Permits (Ontario Regulation 41/24)

Background:

Section 28 of the *Conservation Authorities Act* empowers each Conservation Authority to prevent the loss of life and property due to flooding and erosion, and to conserve and enhance natural resources. On April 1, 2024, the *Conservation Authorities Act* was amended, and Ontario Regulation 41/24 (Prohibited Activities, Exemptions and Permits) was enacted. This regulation continues to be used as the tool by which the NBMCA manages issues related to development in natural hazard areas, including areas with floodplains, wetlands, and steep slopes. Within this regulation, an Authority may issue a permit to a person to engage in an activity specified in the permit that would otherwise be prohibited by Section 28 if, in the opinion of the authority

(a) The activity is not likely to affect the control of flooding, erosion, dynamic beaches or unstable soil or bedrock;
(b) The activity is not likely to create conditions or circumstances that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property; and
(c) Any other requirements that may be prescribed by the regulations are met. 2017, c. 23, Sched. 4, s. 25; 2022, c. 21. Sched.2, s. 9 (1)

On March 28, 2024, the Chief Administrative Officer, Secretary-Treasurer received delegation from the Board of Directors to issue permits under the amended Ontario Regulation 41/24.

As such, this Board Report is being presented to the NBMCA Board of Directors for information purposes.

Monthly Analysis:

Since the approval of the previous minutes, the Conservation Authority has issued **seven** new permits and **one** permit extension. Additionally, some properties have been classified as exemptions under Ontario Regulation 41/24. A formal email has been sent to the respective applicants, indicating that a permit is not required and that an email confirmation from our office will suffice. Table 1., below summarizes the details of the permits issued.

Among the newly issued permits, three are for small projects, one is for a standard project, two are for large projects, and one is for a major project.

Recommendation:

THAT the members receive and approve the Prohibited Activities, Exemptions and Permits report as presented.

Recommended Resolution:

THAT the Prohibited Activities, Exemptions and Permits report is received and appended to the minutes of this meeting.

_____

Githan Kattera, Regulations Officer/ Water Resources Coordinator

File No.	Municipality	Name of Regulated Features	Nature of Work	Date Complete Application Received	Prohibited Activities, Exemptions and Permits: Permit #/Date Issued
RNB-24-56	North Bay	Escarpment	Construct a new dwelling	October 21, 2024	**#78-24** October 31, 2024
REF-24-20	East Ferris	Island, Floodplain	Construction of utility shed	October 18, 2024	**#79-24** November 04, 2024
RNB-24-57	North Bay	Chippewa Creek Floodplain	Construct an addition to an existing building	October 31, 2024	**#80-24** November 12, 2024
RCALL-24-10	Callander	Wetland	Place or dump fill	November 12, 2024	**#81-24** November 26, 2024
RCHI-24-05	Chisholm	Wasi Lake Floodplain	Replacement of concrete steps into lake	November 15, 2024	**#82-24** November 26, 2024
RNB-24-58	North Bay	Lake Nipissing Floodplain	Repair the existing retaining wall	November 15, 2024	**#83-24** November 26, 2024
RNB-24-60	North Bay	Shoreline/La Vase Floodplain	Reconstruction of Premier Road, Culvert and sidewalk	November 13, 2024	**#84-24** November 19, 2024

North Bay – Mattawa Conservation Authority

Ice Management Plan

Draft December 2024

North Bay-Mattawa Conservations Authority

15 Janey Ave, North Bay, ON

P1C 1N1

Prepared by:
Githan Kattera
Water Resources Coordinator / Regulations Officer
Email: githan.kattera@nbmca.ca

Assisted by:
Hannah Wolfram, Regulations Officer
Angela Mills, Water Resources Specialist

Reviewed by:
Robin Allen, Interim CAO-Secretary Treasurer
Kevin Taylor, Senior Manager Planning & Water Resources
Layne Duquette, Lead Hand
Paula Loranger, Community Relations Coordinator

Approved by the Board of Directors:

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1.0 Introduction

North Bay-Mattawa Conservation Authority (NBMCA) Ice Management Plan outlines protocols and strategies for managing ice buildup within Parks Creek, North Bay. This plan's primary goal is to prevent potential flood hazards and property damage due to ice obstruction during the spring freshet, particularly given the limited hydraulic gradient in downstream reaches of Parks Creek.

NBMCA operates the Parks Creek Backflood Structure located within Eva Wardlaw Conservation Area, which mitigates flood risks by preventing sewer backflow during high-water events. Ice formation near the structure and in Parks Creek can obstruct flow, increasing flood risks and possibly damaging both public and private infrastructure. This plan establishes steps for monitoring, assessing, and removing ice when necessary to maintain safe flow conditions.

2.0 Objectives

The objectives of this Ice Management Plan are to:

- **Ensure unobstructed spring runoff**: Facilitate free flow of spring meltwater from Parks Creek into Lake Nipissing, minimizing flood risks.
- **Minimize flood risk and property damage**: Reduce the likelihood of overflow and flooding in the lower creek sections.
- **Establish ice monitoring and removal protocols**: Define assessment metrics and methods for monitoring ice thickness, quality, and removal.
- **Provide safe access for operations**: Ensure safe equipment access and adherence to environmental and infrastructure protection protocols.
- **Engage stakeholders**: Coordinate with local residents, businesses, and stakeholders during emergency responses.
- **Identify areas for future improvements**: Document gaps in current processes and recommend strategies to improve ice management.

3.0 Ministry of Natural Resources Mandate

- The Ministry of Natural Resources and Forestry (MNRF) is the lead administrative ministry having overall government responsibility for natural hazard management policies/programs, which includes flood management.
- To maintain a Provincial Flood Warning System and notify Conservation Authorities of flooding potential in their jurisdiction.
- To organize the Provincial response, in support of jurisdictional municipalities having to contend with a flood emergency.

- To respond to jurisdictional municipality requests for Provincial assistance to flood emergencies, providing:
    - the total resources of, and available to the municipality under its Flood Contingency Plan have been committed, or are inadequate to manage the current conditions,
    - the municipality has declared that an emergency exists within its jurisdiction, and the declaration has been made by the head-of-council or designated alternate in conformity with a pre-established Flood Contingency Plan
    - the need for Provincial Assistance is originated by the head-of-council or designated alternate, d) the MNRF puts together a declaration that a provincial emergency exists.
- In a declared Provincial emergency by the MNRF, to employ a Provincial Flood Contingency Plan and coordinate delivery of the Provincial response.

4.0 Conservation Authority Mandate Ice management

The conservation authority must provide ice management programs and services if it determines these are necessary to reduce risks from natural hazards.

If such programs are required, the conservation authority must create an ice management plan by December 31, 2024. This plan should:

- Explain how ice might increase natural hazard risks in the area.
- Outline steps to reduce these risks, including the equipment and resources required.

The authority can update this plan as needed in the future.

Maintain a flood forecasting and warning system to promptly notify municipal representatives, media, local and Ontario Provincial Police, the Ministry of Natural Resources and Forestry, and other relevant agencies through Watershed Condition Statements.

Offer technical guidance to jurisdictional municipalities on measures to limit or reduce the impacts of ice jams.

After consulting with jurisdictional municipalities, inform the local Response Coordinator when the emergency status can be lifted by issuing an All Clear Watershed Condition Statement.

5.0 Ice Formation Monitoring

NBMCA's Water Resources Department monitors snowpack, precipitation, temperatures, and water levels as part of its Flood Forecasting and Warning Program. Key metrics used for ice management include:

- **Ice Thickness**: Measure in late winter (February-March).
- **Ice Quality**: Assess brittleness, density, and composition.
- **Extent of Ice Cover**: Record the spatial coverage of ice within Parks Creek.

- **Decay Status**: Note the level of ice degradation or melting.
- **Weather Forecast**: Monitor short-term temperature trends and rainfall predictions to determine the timing and need for ice removal.

Site Inspections are scheduled from late February or early March, depending on winter conditions. Frequent monitoring is essential to assess changes in ice conditions and ensure timely response.

6.0 Ice Management Strategy

The **ice management plan** is implemented in a straightforward, efficient manner:

- **Contracting**: Parks Creek Ice Removal invitation to quote will be circulated and posted annually, regardless of ice removal outcome. Selection is based on contractor experience, equipment specifications, and bid compliance.
- **Timing**: Ice removal is scheduled once yearly, typically in early to late March, as conditions allow.
- **Environmental Protocols**:
    1. Protect surrounding ecosystems and water quality by minimizing disturbances.
    2. Ensure equipment access and operations comply with environmental regulations.
- **Removal Requirements**:
    1. Ice must be removed efficiently and placed safely along banks or other designated areas.
    2. Contractors must submit a detailed removal and disposal plan for NBMCA approval before work begins.
- **Emergency Protocols**: Contingency measures must be established for unanticipated weather or operational delays.

7.0 Mapping Ice Jamming Potential

Ice-related flooding tends to be local and highly site-specific. While ice jams may be relatively common at a given site, they cannot be predicted with certainty in any given year.

The areas where ice jams may occur are generally characterized by fluctuations in channel cross-sectional morphology—such as areas that narrow, widen, or bend, or where the creek breaches onto a floodplain. These morphological features can significantly lower the hydraulic conveyance capacity, allowing ice and water to accumulate.

Most ice breakup events occur during warming periods (thermal breakup), when the strength of the ice cover deteriorates due to increasing temperatures. This is often exacerbated by increased creek

flows (mechanical breakup) caused by snowmelt and precipitation. Consequently, the majority of ice breakups happen between thermal and mechanical breakups.

When ice flows exceed the hydraulic conveyance capacity of the creek, they may accumulate and jam in areas where the creek's morphology obstructs ice migration. This accumulation can persist until creek flows intensify, increasing the hydraulic transport capacity to move the jammed ice.

Figure 1 - Parks Creek Ice Management Area overview (red line) downstream of Marshall Ave to outlet with Lake Nipissing with municipal linear infrastructure. Blue line signifies watermain; green line signifies storm sewer; orange line signifies sanitary sewer.

Figure 2 - Parks Creek municipal linear infrastructure (outlet at Lake Nipissing). Blue line signifies watermain; green line signifies storm sewer; orange line signifies sanitary sewer.

Figure 3 - Parks Creek municipal linear infrastructure (upstream of Figure , through Marshall Park Dr). Blue line signifies watermain; green line signifies storm sewer; orange line signifies sanitary sewer.

Figure 4 - Parks Creek municipal linear infrastructure (upstream of Figure, downstream of Marshall Ave). Blue line signifies watermain; green line signifies storm sewer; orange line signifies sanitary sewer.

8.0 Special Instructions for Ice Removal

This section defines **specific requirements** for ice removal operations within Parks Creek and its outlet to Lake Nipissing:

8.1 Site Setup and Preparation

- **Stockpiling Ice**: All ice piles stored on NBMCA property, including Eva Wardlaw Conservation Area, must be clearly marked. Markers should be visible before, during, and after excavation, especially when near the lake.

8.2 Ice Removal Specifications

- **Extent of Removal**: Removal will extend up to 50 meters into Lake Nipissing where feasible, allowing sufficient meltwater conveyance. Work area spans approximately 1.4 kilometers, from Marshall Avenue to Lake Nipissing, with a width of 4.5 meters.
- **Ice Placement**: Ice should be placed on designated banks along the creek and lake. Contractors must avoid obstructing natural flow paths.

8.3 Equipment Requirements

- **Excavator Specifications**: A hydraulic excavator with a “thumb” attachment and a minimum reach of 9.75 meters is required. Specifications of the equipment, including model and make, must be documented, and photographs may be requested.
- **Infrastructure Protection**: Excavator travel on paved surfaces requires protective measures for asphalt and curbing. Where ice conditions are unsuitable, the equipment must be floated as needed (e.g., between Franklin Motel and Shopping Centre).

8.4 Operational Guidelines

- **Bridge Exclusion Zones**: Ice removal under bridges is strictly prohibited.
- **Service Crossing Setbacks**: Maintain a 20-meter setback from municipal water lines, marked by NBMCA.
- **Permits and Access**: Contractors are responsible for obtaining city permits. NBMCA will coordinate access points and identify private versus public land boundaries.

8.5 Environmental Compliance

- **Creek Bed Protection**: Disturbances to the creek bed is prohibited.
- **Weather Stoppages**: Operations must cease during heavy rainfall or increased runoff.

9.0 Roles and Responsibilities

- **Flood Duty Officers**: Responsible for monitoring weather and reporting significant changes.
- **NBMCA Engineer and Operations Lead**: Oversee tendering, contractor coordination, and onsite supervision during the ice removal process.
- **Leadership Team**: CAO and Water Resources Manager will be responsible for the final decisions.

10.0 Studies and Assessments of Parks Creek

Over the years, multiple studies have been conducted to understand and mitigate flooding risks in the Parks Creek area:

- **Floodplain Mapping:** Detailed mapping of the Parks Creek floodplain was completed to delineate areas at risk of flooding. This study aids in identifying high-risk zones and informs NBMCA's flood management strategies.
- **Hydrological and Hydraulic Studies:** These studies were conducted to understand water flow characteristics, peak discharge rates, and overall water balance in Parks Creek. The insights gained help in designing effective ice management and flood mitigation measures.
- **Parks Creek Back Flood Control Structure Capacity Study:** This study evaluated the capacity and operational efficiency of the backflood control structure. Findings support decision-making for structural upgrades and adjustments to improve resilience against ice blockages and flood surges.
- **Operational Study of Parks Creek Backflood Control Structure:** This study reviewed the operational practices and maintenance needs of the control structure, ensuring readiness for extreme weather events and identifying potential points for automation or enhanced response.

11.0 Emergency Response Plan

NBMCA issues an annual ice removal tender in mid-winter. Key emergency response criteria include:

- **Ice Thickness Triggers**: Ice categorized as "moderate to thick" by visual and metric assessment necessitates removal.
- **Scope of Removal**: Ice removal extends approximately 1.3 kilometers from Marshall Ave to Lake Nipissing, maintaining a 4.5-meter width.
- **Conditions for Extended Removal**: Ice removal extends up to 50 meters into Lake Nipissing based on ice stability.

- **Equipment Floatation**: Excavator must be floated in areas where ice cannot support equipment weight.
- **Setback for Safety**: A 20-meter setback from city service crossings ensures infrastructure protection.

The work schedule is **7:00 am to 7:00 pm, Monday to Friday** and excludes heavy rainfall days.

Figure 5 - Excavator at mouth of Parks Creek at Lake Nipissing, March 2022. Photo Credit P. Loranger.

Figure 6 - Eva Wardlaw Conservation Area Parks Creek ice removal, March 2022. Photo Credit P. Loranger.

Figure 7 - Ice on banks of Parks Creek upstream of pedestrian bridge, April 2022. Photo Credit A. Mills

Figure 8 - Parks Creek, City of North Bay

12.0 Ice Management Best Practices

NBMCA adheres to best practices for environmental and public safety during ice management:

- **Ice Thickness Standards**: Maintain consistent standards to assess ice thickness and ensure removal timing aligns with safety protocols.
- **Environmental Buffer Zones**: Create buffer zones to limit environmental impact and avoid sensitive areas near wetlands or habitats.
- **Timely Monitoring and Assessment**: Frequent monitoring ensures ice removal timing aligns with seasonal melt and runoff patterns.

13.0 Environmental and Public Safety Considerations

- **Ecosystem Protection**: All ice removal activities prioritize minimal disruption to aquatic ecosystems. Sediment control and habitat protection are mandatory.
- **Public Access Restrictions**: Safety barriers should be placed in areas accessible to the public to prevent accidental injury during operations.
- **Water Quality Safeguards**: Prevent contaminants from entering water bodies by employing clean equipment and adhering to spill prevention protocols.

14.0 Future Improvements

The NBMCA aims to continuously enhance the ice management process with the following future plans:

- **Enhanced Monitoring Technologies**: Implement remote sensing tools to track ice formation, quality, and decay in real-time, improving response times and accuracy.
- **Optimal Ice Placement Locations**: Identify and establish designated areas for ice placement away from banks to prevent erosion and potential hazards. This will provide a safer and more efficient means of managing ice removal.
- **Increased Collaboration with Local Stakeholders**: Strengthen partnerships with municipal and provincial agencies, as well as property owners, to streamline communication and emergency response during critical ice-related incidents.
- **Training for Contractors and Staff**: Develop regular training programs to ensure all parties involved in ice removal are up to date on best practices, safety protocols, and environmental considerations. This will enhance operational efficiency and safety.
- **Seasonal Evaluation and Updates to Protocols**: Conduct a post-season evaluation to identify gaps in current procedures and refine protocols for the following season, based on feedback from contractors and stakeholders. This continuous improvement approach will ensure the ice management strategy remains effective and responsive to changing conditions.

15.0 Historical Context and Previous Operations

Over recent years, NBMCA has successfully conducted ice removal operations in Parks Creek, with an emphasis on environmental protection and public safety. **Lessons learned** from past operations have led to improved contractor selection, equipment requirements, and environmental safeguards. Regular reviews and stakeholder feedback have allowed for incremental updates to the ice management approach.

16.0 Emergency Contact Information

Table 1: Emergency Contact

NBMCA Contact	Primary Phone Number	Secondary Phone Number
NBMCA CAO	705-474-5420 ext. 2003	705-774-8448
NBMCA Senior Manager	705-474-5420 ext. 2018	705-303-3281
NBMCA Engineer	705-474-5420 ext. 2020	705-498-1462
NBMCA Operational Lead	705-474-5420 ext. 2023	n/a
NBMCA Flood Duty Officers	705-474-5420 ext. 2020 or ext. 2012	705-498-14[illegible] 705-497-4668
NBMCA Office	705-474-5420	n/a
NBMCA Community Relations Coordinator	705-474-5420 ext. 2002	705-494-5115

17.0 Review and Evaluation

Upon completion, NBMCA will conduct a **post-operation assessment**:

- **Effectiveness Evaluation**: Assess removal effectiveness, safety measures, and contractor compliance.
- **Environmental Impact Analysis**: Determine if environmental protection protocols were successful and identify improvement areas.
- **Documentation for Future Planning**: Record findings to enhance future planning and response strategies.

18.0 Conclusion

The **NBMCA Ice Management Plan** for Parks Creek is a critical component of the broader flood mitigation strategy. By maintaining clear protocols, environmental protections, and emergency response criteria, this plan ensures that NBMCA can efficiently manage ice buildup and minimize flood risks to public and private property. Through continuous improvement and coordination with contractors and local stakeholders, NBMCA aims to refine its approach and maintain effective flood management practices year-round.

APPENDIX A

Ice Monitoring Form

Parks Creek Ice Monitoring Form

North Bay Mattawa Conservation Authority

* Ice monitoring includes measurements taken for ice thickness and quality of ice.

* Drill and record at the following locations on the downstream side of bridges.

* Lakeshore Drive may be an exception because of hazards and water flows.

Recorded by:	first / last name	Date:	mm/dd/year
2nd Observer:	first / last name		

Environmental Conditions

Outside Temperature:	C degrees	Atmospheric Observations (circle one)	
Other:	Sunny	Partial Cloud	Overcast Cloud

Locational Observations

(1) Marshall Bridge (near fire station)		(2) Marshall Park Bridge	
Total Ice	cm	Total Ice	cm
White Ice	cm	White Ice	cm
Black Ice	cm	Black Ice	cm
Total Distance from Top of ice to the Creek Bottom	cm	Total Distance from Top of ice to the Creek Bottom	cm
(3) Pedestrian Bridge Crossing (behind Metro property)		(4) Lakeshore Drive (Parks Creek Conservation Authority side)	
Total Ice	cm	Total Ice	cm
White Ice	cm	White Ice	cm
Black Ice	cm	Black Ice	cm
Total Distance from Top of ice to the Creek Bottom	cm	Total Distance from Top of ice to the Creek Bottom	cm

(5) Culvert Observations:	open / flowing/ snow covered
(6) Parks Creek BackFlood Control Structure: General Observations	jamming, condition, unusual, normal, overflowing

North Bay – Mattawa Conservation Authority

Natural Hazard Infrastructure Operational and Asset Management Plan

Draft December 2024

North Bay-Mattawa Conservations Authority

15 Janey Ave, North Bay, ON

P1C 1N1

Prepared by:

Githan Kattera
Water Resources Coordinator / Regulations Officer
Email: githan.kattera@nbmca.ca

Hannah Wolfram
Regulations Officer
Email: hannah.wolfram@nbmca.ca

Reviewed by:

Robin Allen, Interim CAO-Secretary Treasurer
Kevin Taylor, Senior Manager Planning & Water Resources
Layne Duquette, Lead Hand
Paula Loranger, Community Relations Coordinator

Approved by the Board of Directors:

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1.0 Introduction

Parks Creek is an urban watercourse in the City of North Bay and a tributary of Lake Nipissing (Figure 1). Parks Creek flows from the northeast through the West Ferris region of North Bay and outlets at the Eva Wardlaw Conservation Area on Lakeshore Drive.

In 1991, North Bay-Mattawa Conservation Authority (NBMCA) engaged Totten Sims Hubicki Associates to prepare a Parks Creek Flood Damage Reduction Program for the Parks Creek Steering Committee and a Public Liaison Committee. The purpose of the study[1] was to define the Parks Creek hydrology, evaluate possible flood damage reduction alternatives, and undertake environmental analyses related to the preferred alternative.

Following from this work and professional analysis, a recommendation was made to proceed with the implementation of the Parks Creek Backflow Control Structure. The construction took place in the fall and winter of 1994 and 1995 by Cecchetto & Sons of Sudbury, Ontario. The structure is owned by the NBMCA and in operation since 1996.

This natural hazard infrastructure operational management plan outlines the procedures and strategies for the effective management of the Parks Creek Backflood Control Structure to mitigate risks associated with natural hazards. This plan also provides a framework for maintaining the structure, responding to emergencies, and ensuring the safety of the community and staff. Regular reviews and updates will ensure the continued effectiveness of this plan.

[1] Parks Creek Watershed Flood Damage Reduction Program – Environmental Assessment Study. July 22, 1992

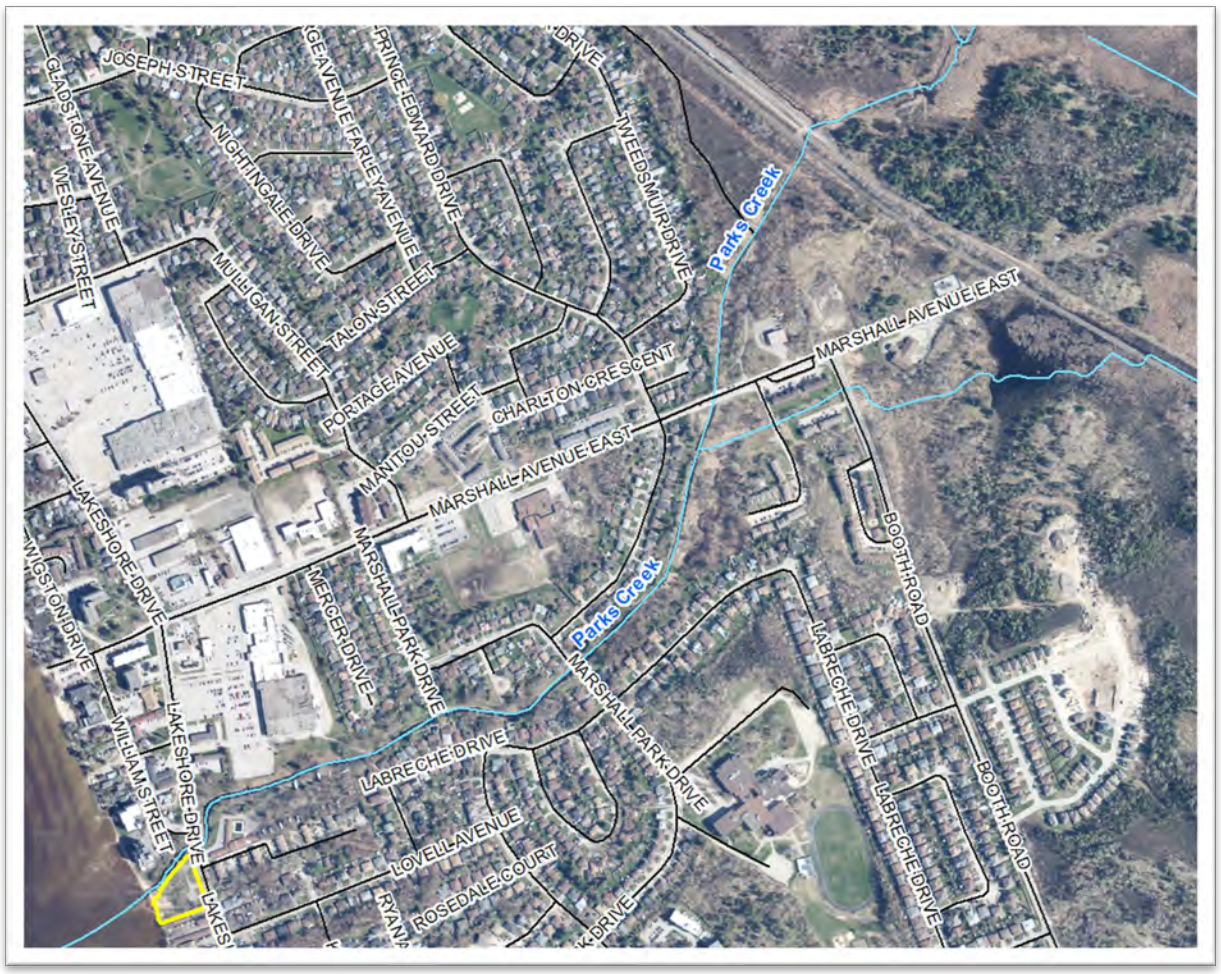


Figure 1: Location of Parks Creek in the City of North Bay

1.1 Purpose and Function

The primary purpose of the Parks Creek Backflow Control Structure is to prevent overcharging and back up of municipal sewers. Its secondary purpose is to prevent annual spring surface flooding of private properties in the Parks Creek floodplain and watershed area (Figure 2). These outcomes can be achieved through effective and timely maintenance and operation of the structure to ensure that extreme weather conditions and high-water events are responded to accordingly.

Figure 2: Parks Creek watershed map

1.2 Location

The structure is situated downstream, to the west of the Lakeshore Drive bridge over Parks Creek, within the Eva Wardlaw Conservation Area in the City of North Bay (see Figure 3).

Figure 3: Location of Parks Creek Backflood Control Structure (Eva Wardlaw Conservation Area boundary shown in yellow)

1.3 Access

The structure can be accessed directly from Lakeshore Drive through the Eva Wardlaw Conservation Area. A set of all keys is kept on the structure site in the control panel and a duplicate set is kept at the NBMCA office. Signage and barricades shall be erected as needed restricting public access to the Parks Creek Backflood Control Structure during high-water events.

1.4 Infrastructure

1.4.1 Flow Barrier Components

- Concrete Abutments and Retaining Walls
- Concrete Piers
- Stoplogs (21)

1.4.2 Barrier Movement Equipment

- Sluice Gate
- Portable Hand Crank Winches

1.4.3 Water Movement Equipment

- Pump Station
- Submersible Pumps
- Concrete Outfall Structure (Steel liner discharge plate and armored stone retaining wall)
- Concrete Pump Chamber

1.4.4 Auxiliary Equipment

- Beacons
- Inertial Barrier Modules (4)
- Galvanized Metal Deck, Supports and Barrier Railings
- Exterior Lighting
- Manhole Cover

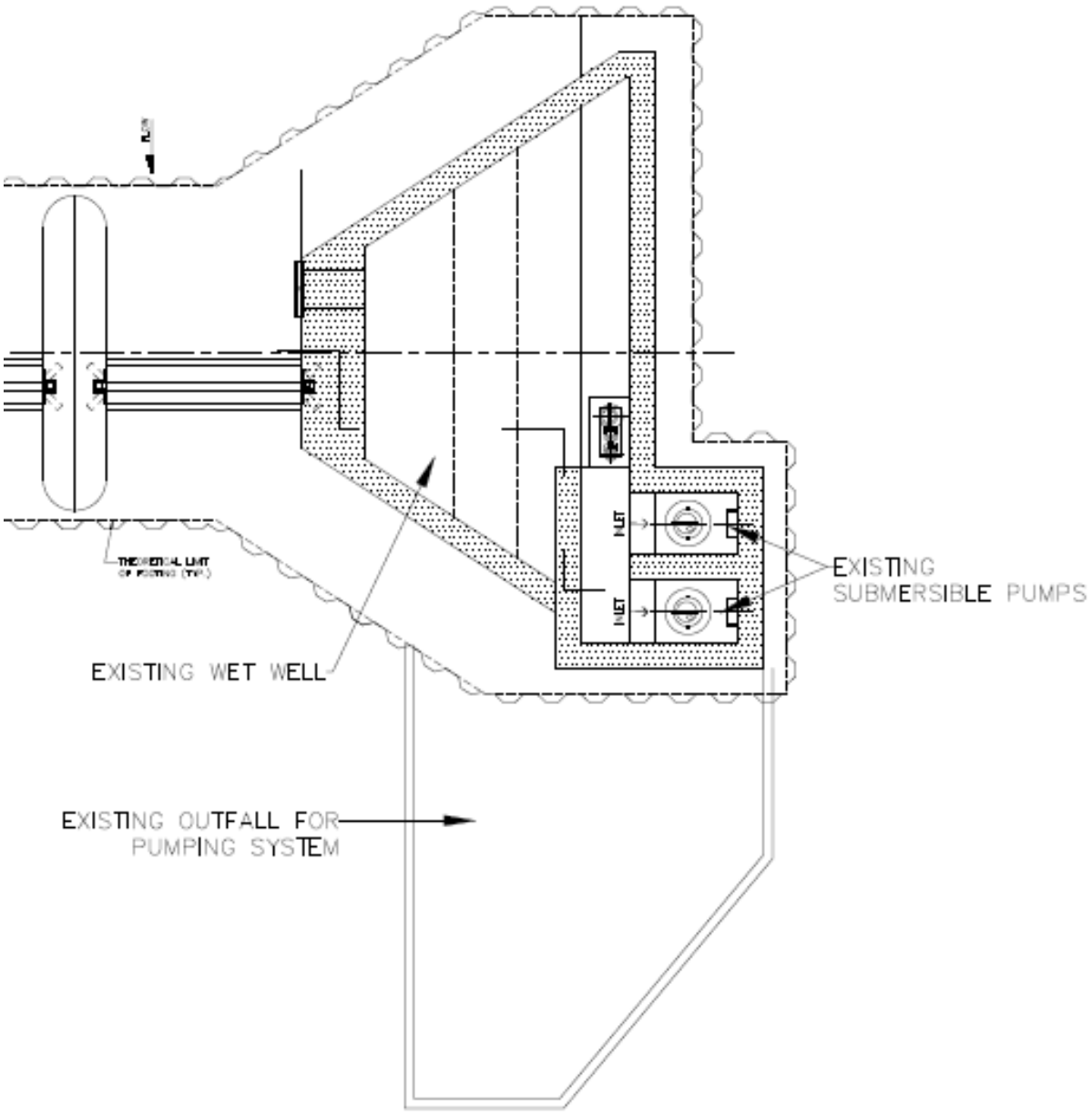
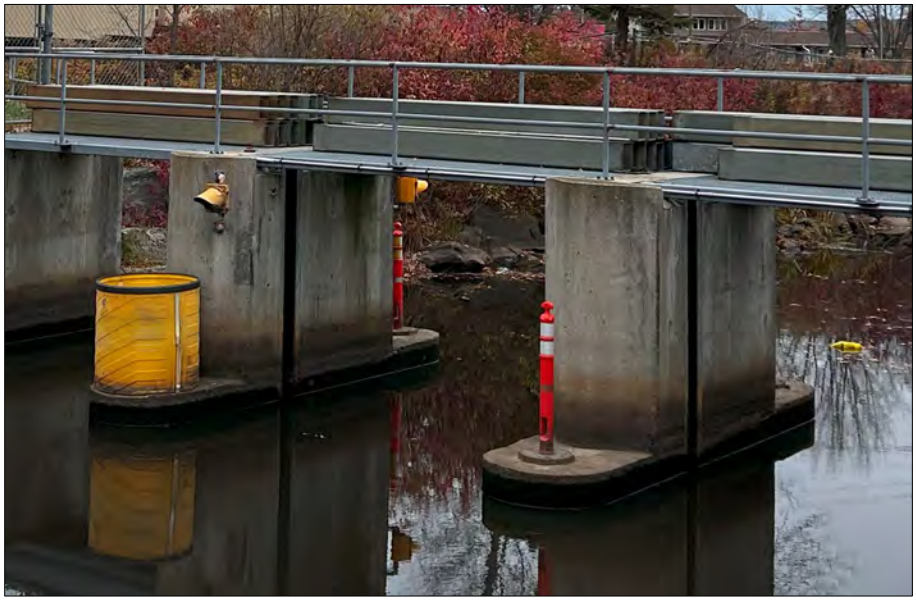


Figure 4. Existing Backflood Control Structure overview

Table 1: Key components of the Parks Creek Backflood Control Structure Infrastructure

Flow Barrier Components
 Concrete Abutments and Retaining Walls
 Concrete Piers

Stoplogs (21)

Barrier Movement Equipment

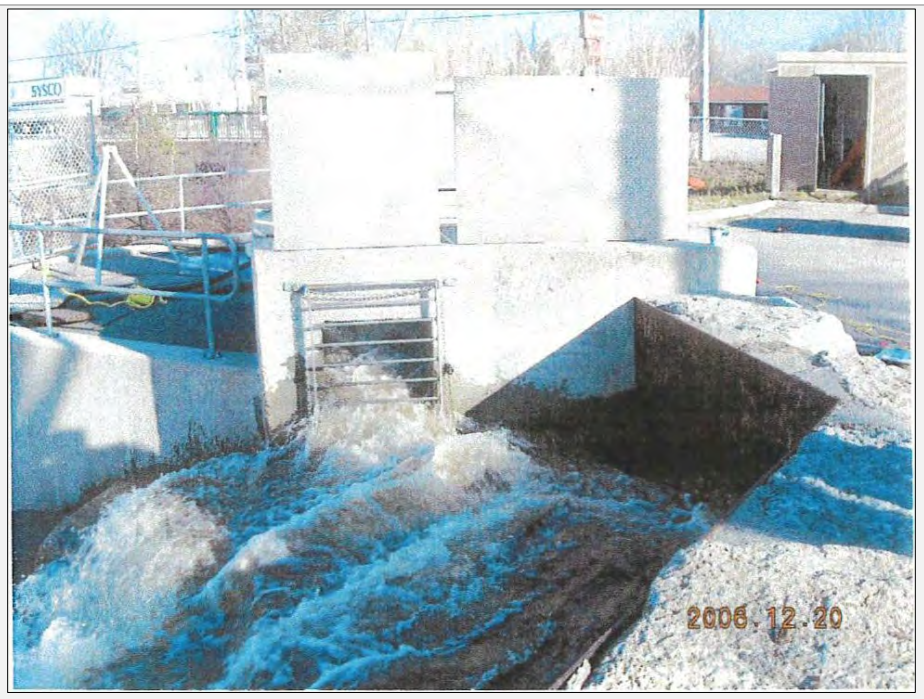
Sluice Gate

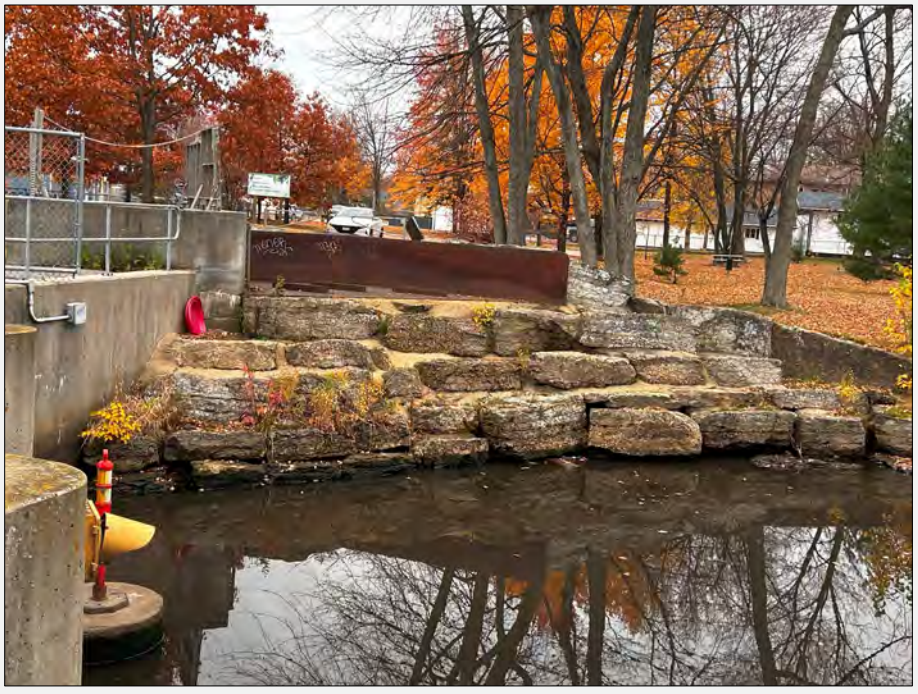
Portable Hand Crank Winches

Water Movement Equipment

Pump Station

Submersible Pumps





Concrete Outfall Structure

Concrete Pump Chamber

Auxiliary Equipment

Beacons

Inertial Barrier Modules

Galvanized Metal Deck, Supports and Barrier Railings

Exterior Lighting

Manhole Cover

2.0 Operation

2.1 Roles and Responsibilities

Flood Duty Officers are responsible for checking the weather conditions and reporting back to the NBMCA Team. NBMCA Engineer and Operation Lead are responsible for structure and pump operations. Trained NBMCA staff will assist where required and to provide support and 24/7 site supervision during pump operations.

2.2 Operating Procedures

2.2.1 Normal Operations

Lake Nipissing water levels are regulated by Public Services and Procurement Canada and measured at three water level gauges located in North Bay, West Bay, and French River. From early fall, the lake level is drawn down throughout the winter to a target level of 194.5m by early March. Spring runoff in March and April raises the lake level with the summer operating target range between 195.75m and 195.95m until the end of September. A winter drawdown cycle begins again in November.

The dynamic water levels on Lake Nipissing are a function of outlet structure operations, amount of natural and controlled flows from the Sturgeon River system, local precipitation and evaporation around the lake, wind push and wave action.

A metric staff gauge is installed at the downstream north abutment of the structure for lake level reference. The control building door must always be locked when the control panel is not being operated. The electrical master switch must be double checked in the off position and secured by a locked door or guarded by a staff member while maintaining, inspecting or working in the electric pump wells. The deck grate openings for stoplog operations must be locked when not in use.

During regular operations, the following actions can be undertaken:

- Regularly monitor water levels and structural conditions on an annual basis prior to and following flood or high-water operations
- Ensure gates and sluice systems are functional
- Ice handling – refer to Ice Management Plan
- Debris removal and dredging to be conducted as needed outside of high-water operations
- The intake trash rack, gate opening, electrical pump forebay gallery and pump chamber should be inspected prior to commencing operations

2.2.2 Flood/High-water Operations

Steps to be followed before turning on pumps

The NBMCA should be on standby during the amber condition and prepared to immediately insert stoplogs according to the design sequence when the condition is red or imminently red.

Boating through the structure will be totally restricted at a red alert condition and at least partially restricted during an amber condition. Appropriate signage should be hung from the handrails on upstream and downstream sides of the structure warning boaters and regarding the appropriate bays to use.

Review normal/typical values and extreme upstream and downstream values for both Lake Nipissing and Parks Creek. Check weather conditions and Public Services and Procurement Canada report.

The basic premise of inserting logs is to minimize lake induced flooding of the Parks Creek floodplain, but logs should not be placed much higher than Lake Nipissing levels in case significant flows occur from Parks Creek requiring log removal to enable positive flow through the structure into the lake (assisted by pumping).

Stops Logs

Prior to inserting stoplogs in any bay, stoplog seals, guides and sills must be clean of sediment and debris. Seals must be securely fastened to each log. Logs should be lowered and raised by simultaneous winching of two staff personnel working in tandem. A third staff member should be in the creek to ensure proper log sealing and seal and to disconnect the cable hooks from the log in play. Add logs incrementally to each bay to keep slightly above the forecasted lake level (Figure 4), continue pumping as necessary.

Pumps

Water levels at the structure should be monitored and recorded every 30 minutes in flood conditions on staff gauges located at each upstream and downstream bridge abutment. Water levels should be recorded every 15 minutes in extreme flood conditions.

With electrical systems and master pumphouse switch off, the oil and general electrical systems in the pumps wells should be checked. If no one is above ground during the inspection, the door to the electrical control building should be locked to ensure the power stays off.

The two pump turbines must be manually turned to ensure there has been no jamming caused by rust or debris. This can be accomplished by using a large screwdriver inserted and pushed gently against the impeller vanes accessed from the top of the pumphouse.

Increase monitoring frequency and activate emergency response if water levels exceed threshold levels and communicate with local authorities.

In the event that the submersible pumps fail (e.g. power outage), the deployment of The City of North Bay's backup diesel pump to Parks Creek shall be requested by NBMCA. Additional pumps can be rented where and when deemed necessary.

Table 2: Preliminary Operation Schedule for Stoplog Control Structure

Condition	Action
Lake Nipissing Water Level ≤ 196.0m	Leave one stoplog in each bay
Lake Nipissing Water Level > 196.0m No flood flows predicted for Parks Creek	Put stoplogs in bays in accordance with Figure 4 and ensure pumps are operable
Lake Nipissing Water Level >197.0m No flood flows predicted for Parks Creek	Ensure all stoplogs are in bays and pumps are operable to remove base flows
Lake Nipissing level > 197.0m Flood flows predicted for Parks Creek	Remove stoplogs when Parks Creek water level equals Lake Nipissing water level and replace after flood has receded so that pumps may dewater floodplain

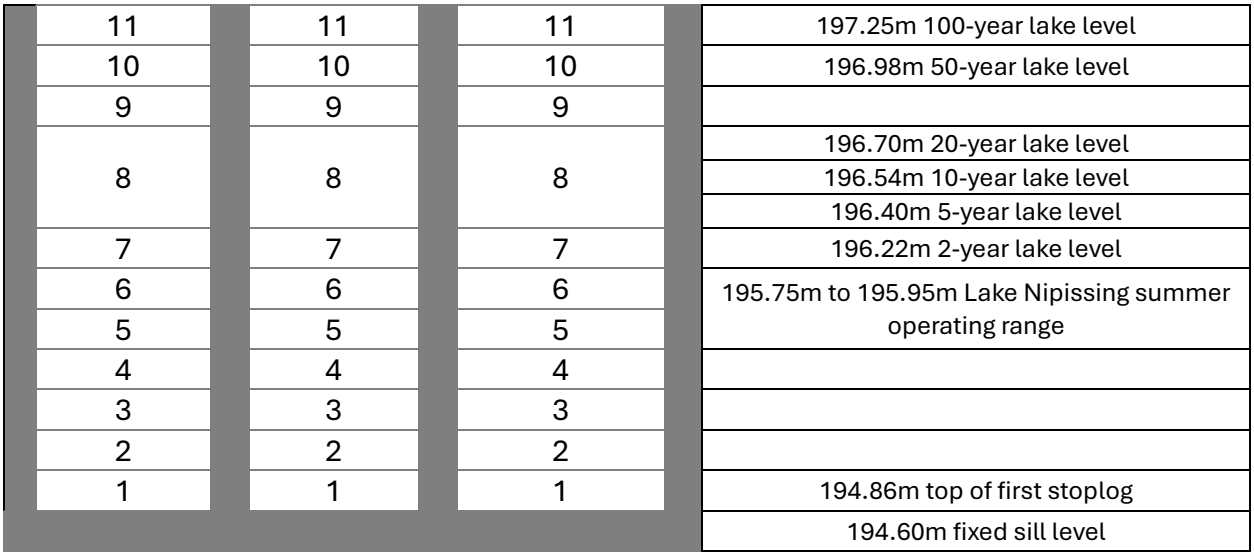


Figure 4: Parks Creek Structure schematic showing key Lake Nipissing water level references in meters in relation to stoplogs. Eleven stoplog place holders are shown in each of the three bays.

2.2.3 Emergency Operations and Contingency Planning

A basic premise of structure operation during emergency conditions is that is it imperative to remove all stop logs which would maintain flood levels in Parks Creek exceeding Lake Nipissing flood levels.

NBMCA maintains a list of contingency operations and suppliers for additional pump rental availability and rates, sandbag material suppliers, and toxic spill containment contingencies. In the event of emergency conditions, crew will be deployed for immediate action, residents in affected areas will be notified, and NBMCA will coordinate with emergency services where required.

2.3 Risk Assessment

2.3.1 Operational Risk

Operator Safety

- Structural failures
- maintenance issues
- equipment malfunction
- public interaction on site

Public Safety

The green, amber and red flood warning preparedness conditions form guidelines for a variety of safety procedures, structure operations and associated public access and passage issues.

Site Security

- locked control boxes
- anchored stop logs
- fencing
- signage
- security dispatched as needed

2.3.2 Environmental Risk

Potential environmental impacts to:

- Wildlife (including species at risk) and their habitat
- Fish and fish habitat
- Vegetation removal or loss
- Lake Nipissing shoreline erosion
- erosion/sedimentation upstream and downstream of the structure
- barriers to wildlife passage
- flooding

3.0 Record Keeping/Logs

All documentation must be maintained in the Operational Room located within the Parks Creek Backflood Control Structure. The forms listed below, which can be found in the binder, should be completed according to the specified schedule.

- Maintenance/Inspection Logs (see Appendix 1) – to be completed annually
- Stoplogs Operations Log (see Appendix 2) – to be completed when there is an alteration to stoplog configuration in the bays
- Water Level Monitoring Logs (see Appendix 3) – to be completed every 30 minutes during pumping
- Pumps Operational Logs (see Appendix 4) – to be completed during pumping

4.0 Maintenance

4.1 Inspection and Maintenance Schedule

Annual and routine inspection and maintenance should be undertaken according to the service manuals. Additionally, annual inspections should follow significant weather events where appropriate. Table 3 outlines a general inspection and maintenance schedule for equipment and components.

Table 3: Inspection and maintenance schedule overview

Equipment/Element	Component	Inspection Frequency	Maintenance Schedule	Comments
Electric Pumps (x2)	All components	Major inspection in early fall, annually	Routine monthly inspections during the summer months to ensure that it does not get clogged with debris and/or silt	Inspections to be completed before activating power by Xylem
Pump switch floats	All components	Annually	As needed	n/a
Signage	Pedestrian	Winter, annually	Removed and stored when not in use	n/a
	Boaters			n/a
Stoplogs (x21)	Logs	Spring, annually	As needed	Seal components are especially vulnerable to deterioration or damage and need regular maintenance
	Hoists			
	Sills			
	Guides			
	Seals (screws and adhesive)			
Overhead flashing lighting on dam	All components	Spring, annually	As needed	n/a
Inflow Gate	Valve stem wheel	Annually	Removed and stored when not in use	n/a
Water inlet gate seal	All components	Annually	As needed	n/a
Trash rack	All components	Annually	As needed	n/a
Manhole cover	All components	Annually	As needed	n/a

5.0 Review and Improvement

5.1 Staff Training and Exercises

An annual operation and training drill, including plans for mobilization of necessary ancillary equipment such as electric pumps, stop log hoists, and stop logs should be conducted.

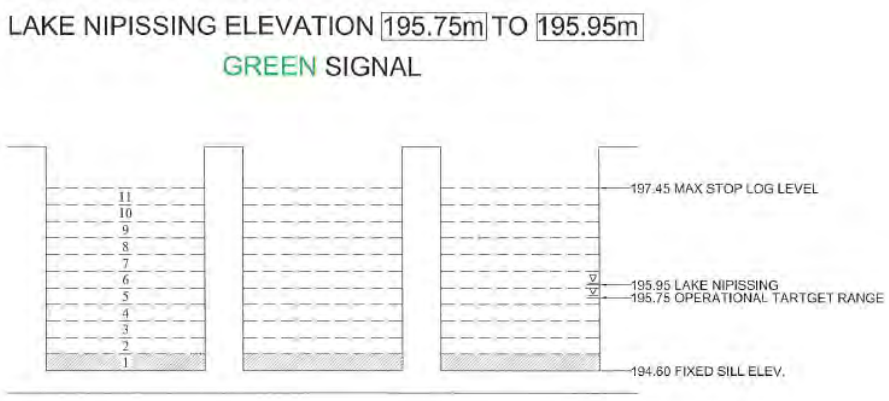
5.2 Studies and Assessments of Parks Creek

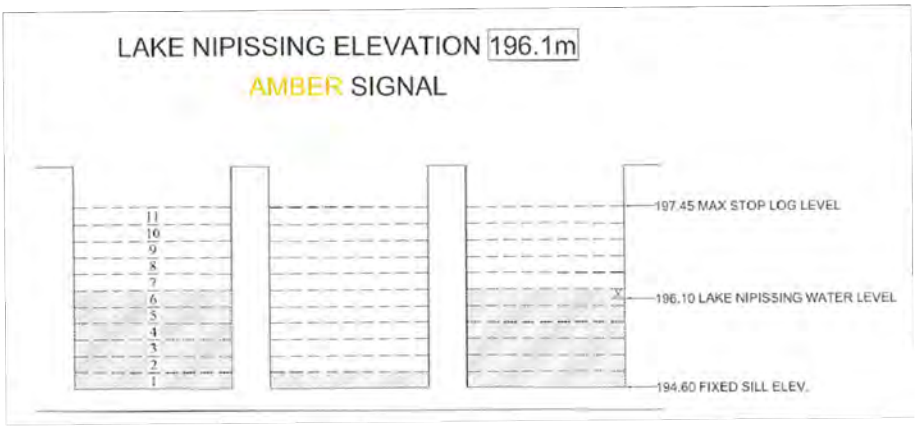
- The **Floodplain Mapping:** Detailed mapping of the Parks Creek floodplain was completed to delineate areas at risk of flooding. This study aids in identifying high-risk zones and informs NBMCA's flood management strategies.
- **Hydrological and Hydraulic Studies:** These studies were conducted to understand water flow characteristics, peak discharge rates, and overall water balance in Parks Creek. The insights gained help in designing effective ice management and flood mitigation measures.
- **Parks Creek Back Flood Control Structure Capacity Study:** This study evaluated the capacity and operational efficiency of the backflood control structure. Findings support decision-making for structural upgrades and adjustments to improve resilience against ice blockages and flood surges.
- **Operational Study of Parks Creek Backflood Control Structure:** This study reviewed the operational practices and maintenance needs of the control structure, ensuring readiness for extreme weather events and identifying potential points for automation or enhanced response.

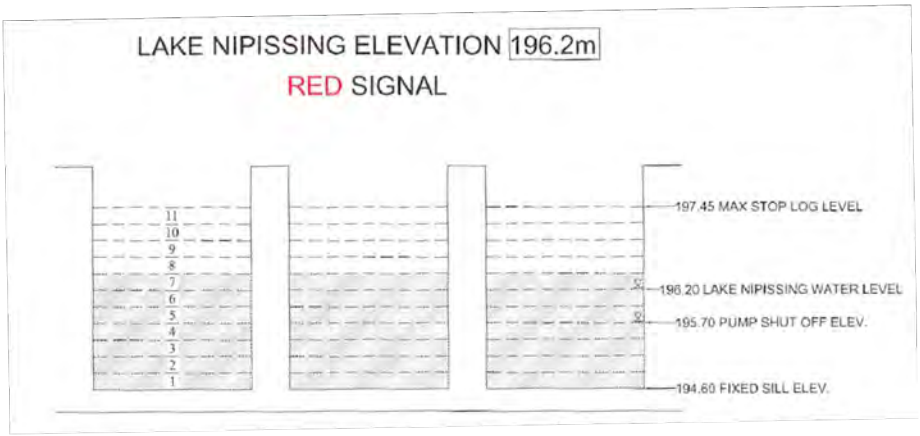
6.0 Communication Plan

6.1 Beacon Alert System

Beacons indicate green, amber, and red alert conditions for both Lake Nipissing levels and Parks Creek flows. These signals represent low, moderate, and high operational alert and preparedness status for stoplog and/or pumping operation requirement. This three colour alert system is described by the following schematics:







6.2 Stakeholders

The NBMCA maintains ongoing communications regarding Lake Nipissing level forecasts through Sturgeon-North Bay Forecast (SNF), Ministry of Natural Resources and Forestry (MNRF), and The City of North Bay and surrounding municipalities. NBMCA will update the forecast status on a weekly basis and more often during flood conditions. The status will be refined and updated on an ongoing basis as needed by NBMCA staff.

Parks Creek flood plain landowners will be informed and warned accordingly through press releases, social media, and website updates.

6.3 Emergency Contact Information

Table 4: Emergency Contact

Contact	Primary Phone Number	Secondary Phone Number
NBMCA CAO	705-474-5420 ext. 2003	705-774-8448
NBMCA Senior Manager	705-474-5420 ext. 2018	n/a
NBMCA Engineer	705-474-5420 ext. 2020	705-498-1462
NBMCA Operational Lead	705-474-5420 ext. 2023	n/a
NBMCA Flood Duty Officers	705-474-5420 ext. 2020 or ext. 2012	705-498-1462 705-497-4668
NBMCA Community Relations Coordinator	705-474-5420 ext. 2002	705-494-5115
NBMCA Office	705-474-5420	n/a
Xylem (Alan Fey)	705-688-8700	n/a
City of North Bay Public Works (Jason Seguin)	705-498-7760	n/a

7.0 Compliance and Regulations

7.1 Federal Legislation

Fisheries Act

In emergency situations, the following information will be required to be provided to Fisheries and Oceans Canada, as per SCHEDULE 2 (Section 3 and paragraph 5(c)) "Emergency Situations" of the *Fisheries Act*.

- The applicant's and, if applicable, their representative's name, address and telephone number.
- A detailed description of the proposed work, undertaking or activity, a description of the applicable situation referred to in paragraphs 3(a) to (c) of these Regulations and the reasons why the proposed work, undertaking or activity needs to be carried on without delay.
- The timeline for carrying on the proposed work, undertaking or activity.

- A description of the location of the proposed work, undertaking or activity, including its geographic coordinates and the name of any water sources and water bodies that are likely to be affected.
- A detailed description of the death of fish and the harmful alteration, disruption or destruction of fish habitat that are likely to result from the proposed work, undertaking or activity.

Where non-emergency in-water works are proposed, Fisheries and Oceans Canada standards and codes of practice should be applied. Where these protection measures cannot be implemented completely, a review of the project should be requested from Fisheries and Oceans Canada.

7.2 Provincial Legislation

Lakes and Rivers Improvement Act

Owners of infrastructure are responsible for the safe management of their structures and for ensuring their structures remain in compliance with the LRIA, associated regulations and approvals issued there under.

Endangered Species Act (ESA)

There are no endangered species that are known to occur within 2km of the site. Suitable habitats for Blanding's turtle and Eastern hog-nosed snake are known to occur within 2km of the site. Special concern species known to occur within 2km of site include:

- Evening Grosbeak
- Canada Warbler
- Snapping Turtle
- Silver Lamprey
- Northern Brook Lamprey

Where the risk to the health or safety of humans or animals is imminent (e.g. responding to a natural disaster or public emergency), a permit/registration under the Endangered Species Act is not required, as outlined in Section 8 of Ontario Regulation 242/08 (General) (April 1, 2024, currency date).

Routine maintenance of the structure and surrounding areas, vegetation clearing, shoreline dredging and movement of fill, and other non-emergency works that have the potential to impact the above noted species or their habitat may require authorization under the ESA.

Public Lands Act

Crown land work permits shall be obtained by NBMCA for shoreline works, including but not limited to dredging and placement of fill on shorelands.

8.0 Future Improvements

The 2024 Backflood Control Structure Capacity Study by EXP Services Inc. recommends doubling the current pumping capacity based on a thorough hydrology and hydraulic analysis of Parks Creek and Lake Nipissing.

As a future improvement, NBMCA staff have suggested installing remote data collection sensors upstream and downstream of the existing structure to enable real-time water level monitoring.

9.0 Conclusions

Effective management of the Parks Creek Backflood Structure minimizes the flood risk in the Parks Creek subwatershed each spring in North Bay. This plan provides a framework for maintaining the structure, responding to emergencies, and ensuring the safety of the community and NBMCA staff. Regular reviews and updates will ensure the continued effectiveness of this plan.

APPENDIX A

Maintenance and Inspection Logs

PARKS CREEK BACK FLOOD CONTROL STRUCTURE
MAINTENANCE / INSPECTION REPORT

Date: _____ Time: _____ Page: _____

Inspector (s): _____

Observations:

Action:

Signature: _____

APPENDIX B

Stoplogs Operations Log

Parks Creek Control Structure - Stop Logs Operations Log

Date (DD/MMM/YYYY): _____

Time start (24h clock): _____
Time end (24h clock): _____

Operator: _____
Assistant: _____

Water Level - Lake side: _____ Water Level - Creek side: _____

	EXISTING Stop Logs Settings			NEW Stop Logs Settings		
	North	Centre	South	North	Centre	South
Shade Boxes	11	11	11	11	11	11
	10	10	10	10	10	10
	9	9	9	9	9	9
	8	8	8	8	8	8
	7	7	7	7	7	7
	6	6	6	6	6	6
	5	5	5	5	5	5
	4	4	4	4	4	4
	3	3	3	3	3	3
	2	2	2	2	2	2
	1	1	1	1	1	1
No. Logs	_____	_____	_____	_____	_____	_____

Comments: _____

Date (DD/MMM/YYYY): _____

Time start (24h clock): _____
Time end (24h clock): _____

Operator: _____
Assistant: _____

Water Level - Lake side: _____ Water Level - Creek side: _____

	EXISTING Stop Logs Settings			NEW Stop Logs Settings		
	North	Centre	South	North	Centre	South
Shade Boxes	11	11	11	11	11	11
	10	10	10	10	10	10
	9	9	9	9	9	9
	8	8	8	8	8	8
	7	7	7	7	7	7
	6	6	6	6	6	6
	5	5	5	5	5	5
	4	4	4	4	4	4
	3	3	3	3	3	3
	2	2	2	2	2	2
	1	1	1	1	1	1
No. Logs	_____	_____	_____	_____	_____	_____

Comments: _____

APPENDIX C

Water Level Monitoring Logs

Parks Creek Water Level Monitoring

Date/Time (24h)	Name	Lake Level (staff gauge)	Creek level (staff gauge)	Creek Flow Forecast	Comments
				☐ Rising ☐ Falling ☐ Stay the same	
				☐ Rising ☐ Falling ☐ Stay the same	
				☐ Rising ☐ Falling ☐ Stay the same	
				☐ Rising ☐ Falling ☐ Stay the same	
				☐ Rising ☐ Falling ☐ Stay the same	
				☐ Rising ☐ Falling ☐ Stay the same	
				☐ Rising ☐ Falling ☐ Stay the same	
				☐ Rising ☐ Falling ☐ Stay the same	
				☐ Rising ☐ Falling ☐ Stay the same	
				☐ Rising ☐ Falling ☐ Stay the same	
				☐ Rising ☐ Falling ☐ Stay the same	

APPENDIX D

Pumps Operational Logs

Parks Creek Control Structure - Pumps Operations Log

Date (dd/mmm/yyyy): ____________________

	Yesterday	Current	Today forecast	Tomorrow
Weather				
Wind Speed (direction)				
Precipitation (mm)				

Yesterday's conditions from "North Bay Airport": https://climate.weather.gc.ca/historical_data/search_historic_data_e.html

Current conditions from "Lake Nipissing at North Bay": https://wateroffice.ec.gc.ca/report/real_time_e.html?stn=02DD006

Date/Time (24h)	Name	Lake Level (staff gauge)	Creek level (staff gauge)	Creek Flow Forecast	Pump settings	Signal Light	Comments
				□ Rising □ Falling □ Stay the same	1. □ OFF □ Automatic □ Manual 2. □ OFF □ Automatic □ Manual 3. □ OFF □ ON 4. □ OFF □ ON 5. □ OFF □ ON 6. □ OFF □ ON	□ Green □ Amber □ Red	
				□ Rising □ Falling □ Stay the same	1. □ OFF □ Automatic □ Manual 2. □ OFF □ Automatic □ Manual 3. □ OFF □ ON 4. □ OFF □ ON 5. □ OFF □ ON 6. □ OFF □ ON	□ Green □ Amber □ Red	
				□ Rising □ Falling □ Stay the same	1. □ OFF □ Automatic □ Manual 2. □ OFF □ Automatic □ Manual 3. □ OFF □ ON 4. □ OFF □ ON 5. □ OFF □ ON 6. □ OFF □ ON	□ Green □ Amber □ Red	
				□ Rising □ Falling □ Stay the same	1. □ OFF □ Automatic □ Manual 2. □ OFF □ Automatic □ Manual 3. □ OFF □ ON 4. □ OFF □ ON 5. □ OFF □ ON 6. □ OFF □ ON	□ Green □ Amber □ Red	
				□ Rising □ Falling □ Stay the same	1. □ OFF □ Automatic □ Manual 2. □ OFF □ Automatic □ Manual 3. □ OFF □ ON 4. □ OFF □ ON 5. □ OFF □ ON 6. □ OFF □ ON	□ Green □ Amber □ Red	
				□ Rising □ Falling □ Stay the same	1. □ OFF □ Automatic □ Manual 2. □ OFF □ Automatic □ Manual 3. □ OFF □ ON 4. □ OFF □ ON 5. □ OFF □ ON 6. □ OFF □ ON	□ Green □ Amber □ Red	

NORTH BAY - MATTAWA CONSERVATION AUTHORITY

TO: The Chairperson and Members
of the Board of Directors,
North Bay-Mattawa Conservation Authority

ORIGIN: Kevin Taylor: Senior Manager Planning & Water Resources

DATE: November 27, 2024

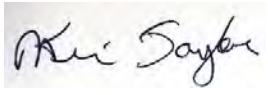
SUBJECT: CA Act Deliverables, **#5 Conservation Area Strategy**

Background:
O. Reg. 686/21 sets out the mandatory programs and services which must be delivered by CAs in Ontario. Specifically, subsection 9(1)1 sets out the required (mandatory) components of the Conservation and Management of Lands program and service area for all CAs. As outlined in subsection 9(1)1, each CA is required to prepare a "conservation area strategy" on or before December 31, 2024. The required components of the Strategy are further outlined in subsection 10(1) of the regulation. While these components must be included in each Conservation Authority Strategy, the framework / formatting of the Strategy may be determined by each individual Conservation Authority.

Analysis:
The objective of the Strategy is to ensure NBMCA has a documented and current set of objectives to inform decision-making related to the land they own or manage. As part of the regulatory requirements, the Conservation Area Strategy will also inform the mandatory CA Land Inventory, through establishing land use categories for the lands it owns.

Recommendation:
THAT the members receive and approve the Conservation Area Strategy as presented.

Recommended Resolution:
THAT the Conservation Area Strategy is received and appended to the minutes of this meeting.



Kevin Taylor
Senior Manager Planning & Water Resources

Laurentian Escarpment Conservation Area

Conservation Area Strategy

December 2024 DRAFT

NORTH BAY - MATTAWA
CONSERVATION
AUTHORITY

Table of Contents

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Acknowledgement of Traditional, Ancestral and Treaty Lands

As we work towards reconciliation with Indigenous people, we respectfully acknowledge that we are in Robinson-Huron Treaty territory and the land on which we live and work is the Traditional Territory and Treaty Lands of the Nbisiing Anishinaabeg (ah-nish-nah-beg) as well as the unceded and ancestral Traditional Territory of the Algonquin People and the Metis Nation.

As shared stewards of Ontario's land and water resources – along with these First Nations communities – the North Bay-Mattawa Conservation Authority appreciates and respects the history and diversity of the land and its peoples and are grateful to have the opportunity to live in this Territory.

1.0 Conservation Area Strategy Overview

1.1 Purpose

Under the Conservation Authorities Act, Ontario Regulation 686/21: Mandatory Programs and Services, each Conservation Authority in Ontario is required to prepare a Conservation Areas Strategy (Strategy) and Land Inventory (Inventory). The purpose of the Conservation Areas Strategy is to satisfy provincial regulatory requirements and provide an integrated, high-level framework that helps guide and inform future decision making on all NBMCA-owned and controlled lands. For the purposes of this Strategy, this includes lands categorized as conservation areas, conservation lands, controlled/limited access lands and nature preserves. The Land Inventory provides information on each NBMCA property and is the basis for the Strategy and management of NBMCA lands.

1.2 Goal

The Conservation Area Strategy is to provide a framework for the protection of North Bay-Mattawa Conservation Authority's significant and representative ecosystems and offer sustainable natural heritage appreciation and recreational benefits to its residents and visitors.

The Strategy reflects the importance of protecting the natural heritage within a watershed, while recognizing the need to provide for public interaction with natural heritage through appreciation and recreation opportunities. While significant features warrant the greatest attention, there is also a need to include examples of representative landscapes that define the character of the NBMCA Watershed.

Conservation Authorities are unique in that they manage natural environmental systems within the units that nature defines – watersheds – rather than by social or geo-political boundaries. Within this context, the primary goal of this Strategy is:

- Promote sustainable management of conservation authority lands – as it is used in the goal statement, sustainable means that development and use of conservation areas for public benefit must be accomplished in a manner that does not reduce the quality of the natural heritage features.
- Manage conservation areas in a manner that meets the needs of both residents and visitors in the watershed.

2.0 Legislative Background

North Bay-Mattawa Conservation Authority (NBMCA) was formed under the Conservation Authorities Act of Ontario in 1972 at the request of its member municipalities. NBMCA is a community-based, environmental organization dedicated to conserving, restoring, developing, and managing renewable natural resources on a watershed basis. It is one of 36 conservation authorities (CAs) in Ontario, governed by a Board of Directors comprised of its ten member municipalities. It is a member of Conservation Ontario, the network organization of all CAs.

The Conservation Authorities Act, and accompanying regulations have been amended by the Province of Ontario since 2017, including the following updates made in 2021. O. Reg. 686/21 sets out the mandatory programs and services which must be delivered by CAs in Ontario.

Conservation Area (CA) programs and services are categorized as follows per legislation:

- **General Functions:** Corporate-wide services that support several/all program areas
- **Category 1:** Mandatory programs and services
- **Category 2:** Municipal programs and services provided on behalf of a municipality
- **Category 3:** Programs and services advisable by the Conservation Authority to implement in the CA's jurisdiction

Subsection 9(1)1 sets out the required (mandatory) components of the Conservation and Management of Lands program and service area for all CAs. As outlined in subsection 9(1)1, each CA is required to prepare a "conservation area strategy" on or before December 31, 2024. The required components of the Strategy are further outlined in subsection 10(1) of the regulation, as reproduced below.

> *Objectives established by the authority that will inform the authority's decision-making related to the lands it owns and controls, including decisions related to policies governing the acquisition and disposition of such lands.*
>
> 2. *Identification of the mandatory and non-mandatory programs and services that are provided on land owned and controlled by the authority, including the sources of financing for these programs and services.*
>
> 3. *Where the authority considers it advisable to achieve the objectives referred to in paragraph 1, an assessment of how the lands owned and controlled by the authority may,*
>
> i. *augment any natural heritage located within the authority's area of jurisdiction, and*
>
> ii. *integrate with other provincially or municipally owned lands or other publicly accessible lands and trails within the authority's area of jurisdiction.*

4. *The establishment of land use categories for the purpose of classifying lands in the land inventory described in section 11 based on the types of activities that are engaged in on each parcel of land or other matters of significance related to the parcel.*

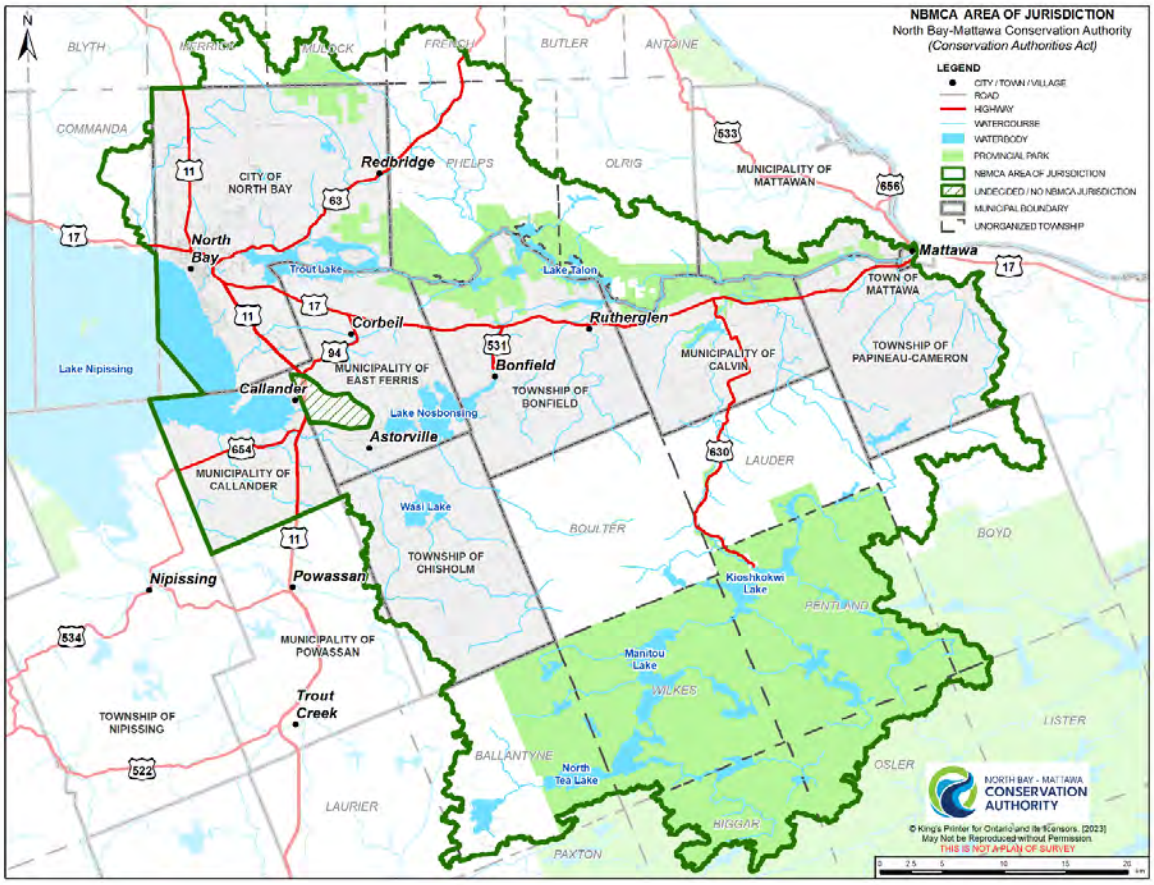
5. *A process for the periodic review and updating of the conservation area strategy by the authority, including procedures to ensure stakeholders and the public are consulted during the review and update process.*

The objective of the Strategy is to ensure NBMCA has a documented and current set of objectives to inform decision-making related to the land they own or manage. As part of the regulatory requirements, the Conservation Area Strategy is accompanied by a inventory of CA owned or managed lands (Land Inventory **ONTARIO REGULATION 686/21** (S11). The inventory contains confidential information and will not be made publicly available.

3.0 Jurisdiction

NBMCA was formed under the Conservation Authorities Act of Ontario in 1972 at the request of its member municipalities. NBMCA administers its objectives and responsibilities as defined in the Conservation Authorities Act within a 2900 sq km area, based on the watersheds within the Lake Nipissing and the Ottawa River Basins. Highlights of the NBMCA's jurisdictional area include the shoreline of Lake Nipissing with the City of North Bay and the Municipality of Callander, Trout Lake, Wasi Lake, the Mattawa River, the North Bay Escarpment, and parts of Algonquin Park. NBMCA owns and manages lands within its jurisdiction. **See Figure 1.**

Figure 1: North Bay-Mattawa Conservation Authority Area of Jurisdiction



4.0 NBMCA Landholdings

4.1 History of Land Acquisition

NBMCA acquired several properties for flood control purposes, whereas some properties were acquired as they are natural hazard lands. Recreational and natural heritage lands were also acquired for protection and to support resource management and outdoor recreation. NBMCA properties were acquired through financial support from provincial government, purchased from private landowners or donated by municipalities, conservation organizations, or watershed residents.

4.2 Current Landholdings

NBMCA owns 700 hectares of land within the North Bay-Mattawa watersheds. **See Table 1.**

Table 1: Conservation Areas and Lands Sources of Funding for the Conservation and Management of Lands

Conservation Areas (see map above for location using number below)	**Classification**	**Size (ha)**	**Activities permitted**	**Funding/Programs and Services Support**
6. Corbeil Conservation Area (2 parcels)	Passive Recreation	37.64	Hiking, Biking, Snowshoeing, Wildlife Viewing, Photography	Category 1 - Municipal Levy
8. Eau Claire Gorge Conservation Area (6 parcels)	Passive Recreation	147.0	Hiking, Snowshoeing, Wildlife Viewing, Photography, Portage access	Category 1 - Municipal Levy
12. Elks Lodge 25 Family Park Conservation Area	Passive Recreation	0.4	Swimming, Canoeing/Kayaking, Stand-up paddle boarding, Wildlife viewing, photography, picnic area	Category 1 - Municipal Levy
11. Eva Wardlaw Conservation Area	Passive Recreation	0.49	Swimming, Canoeing/Kayaking, Stand-up paddle boarding, Wildlife viewing, photography, picnic area	Category 1 - Municipal Levy
10. JP Webster Nature Preserve (3 parcels)	Passive Recreation	111.0	Hiking, Biking, Snowshoeing, Wildlife Viewing, Photography	Category 1 - Municipal Levy
3. Kate Pace Way (4 parcels)	Passive Recreation	7.0	Accessible multi-use trail (biking, walking, in-line skating), photography, picnic area	Category 1 - Municipal Levy Co -managed with the City of North Bay
4. Kinsmen Trail (section from Thomspon Park to Lake Nipissing at	Passive Recreation	7.51	Accessible multi-use trail (biking, walking, in-line skating),	Category 1 - Municipal Levy

Chippewa Creek EcoPath) (56 parcels)			photography, picnic area	Co -managed with the City of North Bay
5. La Vase Portages Conservation Area	Passive Recreation	42.83	Hiking, Snowshoeing, Wildlife Viewing, Photography, Portage access	Category 1 - Municipal Levy
1. Laurentian Escarpment Conservation Area (4 parcels)	Passive Recreation	3.61	Hiking, Biking, Snowshoeing, Wildlife Viewing, Photography	Category 1 - Municipal Levy
1. Laurentian Escarpment Administrative Office	Administration Areas	48.21 (includes ski hill)	Office supports the administration and operation of NBMCA.	Category 1 - Municipal Levy
1. Laurentian Ski and Snowboarding Club	Active Recreation	48.21 (includes admin offices)	Downhill skiing and snowboarding	Category 3 – Self Generated Fees
2. Laurier Woods Conservation Area (7 parcels)	Passive Recreation	100.0	Hiking, Biking, Snowshoeing, Wildlife Viewing, Photography, picnic areas	Category 1 - Municipal Levy Co-own with Friends of Laurier Woods
14. Mattawa Island Conservation Area	Passive Recreation	4.446	Swimming, Canoeing/Kayaking, Stand-up paddle boarding, Wildlife viewing, photography, picnic area, ball hockey, tennis, basketball	Category 1 - Municipal Levy Co-managed with the Town of Mattawa
15. Papineau Lake Conservation Area	Passive Recreation	4.942	Swimming, Canoeing/Kayaking, Stand-up paddle boarding, Boating, Wildlife viewing, Fishing	Category 1 - Municipal Levy
9. Powassan Mountain Conservation Area	Passive Recreation	2.312	Hiking, Biking, Snowshoeing, Wildlife Viewing, Photography	Category 1 - Municipal Levy

7. Shields McLaren Conservation Area (6 parcels)	Management Area	66.0	No maintained/marked trails	Category 1 - Municipal Levy
13. Shirley Skinner Conservation Area	Management Area	18.958	No maintained/marked trails	Category 1 - Municipal Levy
NBMCA Owned Lands (not mapped)	**Classification**	**Size**	**Activities permitted**	**Funding/Programs and Services Support**
Chippewa Creek Property (7 parcels)	Management Area	1.5	None	Category 1 - Municipal Levy
Chippewa Creek – Tupper Drive	Management Area	0.042	None	Category 1 - Municipal Levy
Chippewa Creek – Vanier Street	Management Area	0.053	None	Category 1 - Municipal Levy
Chippewa Creek – Dudley & Hutcheson Avenue (4 parcels)	Management Area	0.24	None	Category 1 - Municipal Levy
Chippewa Creek – Cassells Street	Management Area	0.118 ha	None	Category 1 - Municipal Levy
Chippewa Creek – Fisher Street	Management Area	0.020 ha	None	Category 1 - Municipal Levy
Chippewa Creek – Second Avenue (3 parcels)	Management Area	0.134	None	Category 1 - Municipal Levy
Chippewa Creek – Regina Street (3 parcels)	Management Area	0.101	None	Category 1 - Municipal Levy
Chippewa Creek – Worthington Street East	Management Area	0.023	None	Category 1 - Municipal Levy
Chippewa Creek – Queen Street (2 parcels)	Management Area	0.075	None	Category 1 - Municipal Levy
Bonfield Waterfront (2 parcels)	Passive Recreation	0.197	None	Category 1 - Municipal Levy
Lovell Property	Management Area	46.1	None	Category 1 - Municipal Levy
Premier Road Property	Management Area	0.389	None	Category 1 - Municipal Levy

PGWMN Property	Management Area	22.976	None	Category 1 - Municipal Levy
Wasi River Property	Management Area	13.43	None	Category 1 - Municipal Levy
Eastview Tributary – Laurentian Avenue (9 parcels)	Management Area	2.43	None	Category 1 - Municipal Levy
Johnston Creek Tributary – Ski Club Road (3 parcels)	Management Area	0.66 ha	None	Category 1 - Municipal Levy
Trout Lake Tributary – Carriere Road	Management Area	1.75	None	Category 1 - Municipal Levy

4.3 Conservation Areas

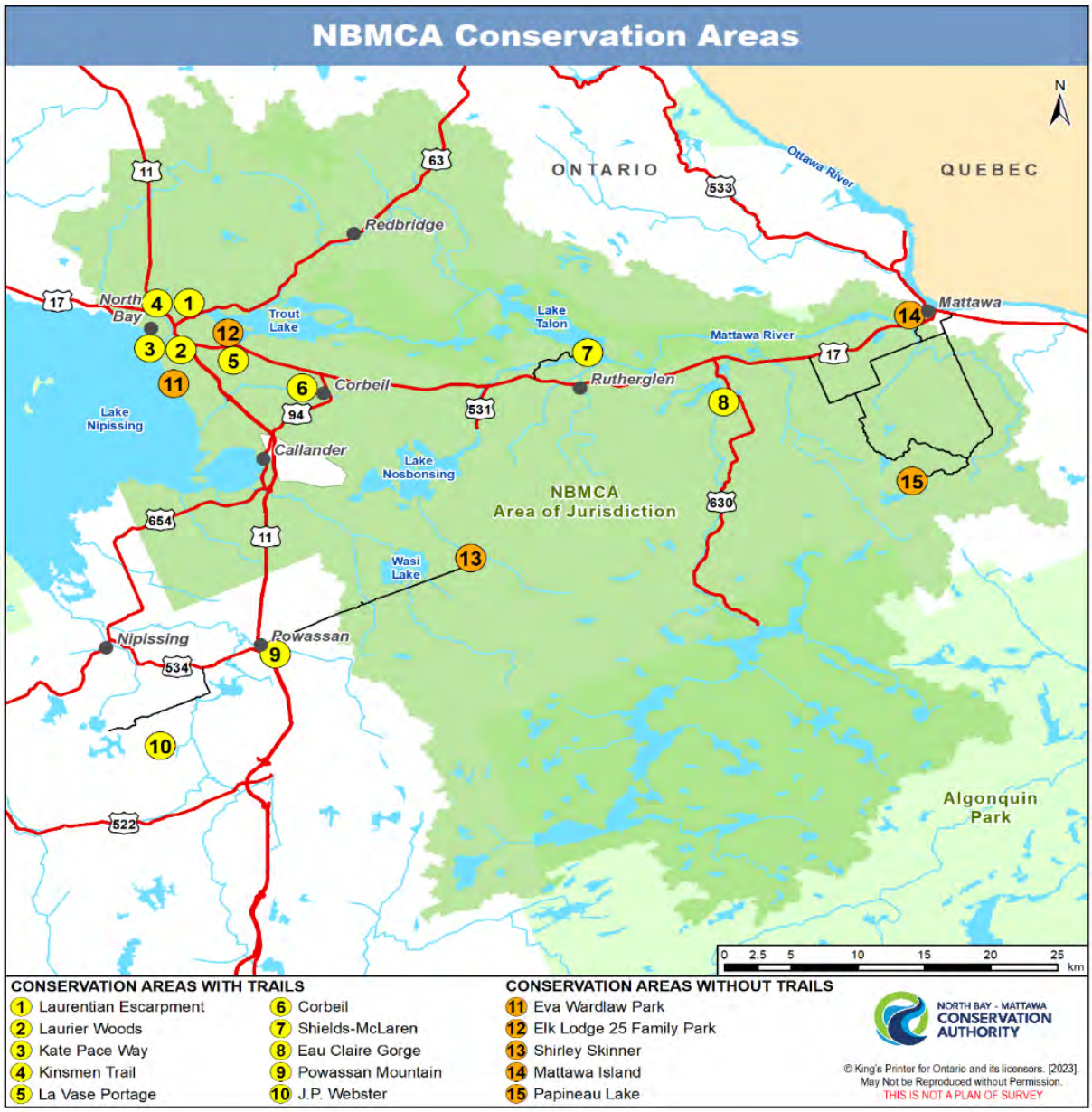
Conservation Areas encourage people to get outdoors and be active, as well as enjoy and appreciate nature! They provide outdoor recreational opportunities for people of all ages and a range of abilities, including picnicking, geocaching, birdwatching, boating, swimming, hiking, fishing, cycling, snowshoeing, cross-country skiing and mountain biking. Although some Conservation Areas have limited access to protect sensitive lands and/or wildlife, many provide important public recreational opportunities at no cost.

NBMCA owns and operates 15 conservation areas throughout our watershed. They are classified as :

- Conservation Areas (Active Recreation, Accessible to the Public)
- Conservation Areas (Passive Recreation, Accessible to the Public)
- Management Areas (Public Accessibility Varies) (e.g., Natural Heritage Lands, Natural Hazard Lands, Water Management Areas, Forest Management Lands, Environmentally Sensitive Lands, etc.)
- Conservation Authority Administration Areas.

All Conservation Areas are passive recreation and accessible to the public, with two having no trails. The Laurentian Ski Hill within the Laurentian Escarpment Conservation Area is active recreation and the office at Laurentian Escarpment Conservation Area would be Conservation Authority Administration Areas. **See Figure 2.**

Figure 2: NBMCA Conservation Areas



4.4 Land Acquisition or Disposition

Land acquisitions have been more opportunistic than planned. The authority has not developed a land acquisition strategy to guide its decision making and fundraising.

NBMCA currently doesn't have a Land Disposition Policy to outline the framework, criteria and process for disposition of NBMCA lands.

5.0 Guiding Principles and Objectives

5.1 Guiding Principles

The following are the guiding principles of the NBMCA's Conservation Area Strategy:

- The Conservation Area Strategy forms the basis of conservation, restoration, development, and management of natural resources which are owned, or managed by NBMCA.
- NBMCA lands are vital natural assets that help manage climate change impacts, mitigate natural hazards, filter contaminants, assimilate waste, sustain biodiversity, and provide green spaces for recreation and other community benefits.
- The Conservation Area Strategy is the framework to identify and assess resource conditions, trends, risks, and issues that may impact NBMCA lands, and to implement programs and services to manage them.
- The Conservation Area Strategy informs policy and decision-making by NBMCA and others.
- Conservation area management decisions are transparent and take into consideration a broad range of community uses, needs, and values, including ecosystem needs.
- The Conservation Area Strategy guide and manage Conservation Authority properties in a financially sustainable manner with a variety of funding mechanisms.

5.2 Objectives and Actions

The intent of this Strategy is to ensure NBMCA has a documented and current set of objectives to inform decision-making related to the land we own and or manage. The objectives are aligned to the legislated scope of the Conservation Area Strategy, reflecting Category 1 programs and services and, where supported through agreements, Category 2 and 3 programs and services. Appendix 2.

Objective 1: Protection: Protect significant and representative natural heritage and cultural features, habitats and species through selective acquisition and resource management of NBMCA properties. This ensures that all present and future Conservation Authority's land holdings contribute to the goals and objectives of the Conservation Authority and support an integrated watershed management approach.

Action:

- Inventory the management areas and conservation areas to characterize their environment and condition.
- Develop and implement management plans for each conservation area.
- Develop policies, strategies, and procedures for the acquisition/disposition of land to support programs and services, including working with partners to identify opportunities to connect greenspaces to support the protection of lands.

- Determine current uses and user groups and identify opportunities and actions to preserve natural features while considering population growth, increased need for greenspace and visitor impact management.

Objective 2: Recreation: Provide high quality, accessible, affordable, and sustainable outdoor recreational opportunities in active and passive conservation areas.

Action:

- Develop management plans for each conservation area based on asset management plans and user surveys. NBMCA will ensure assets are managed for sustainable use while considering added opportunities.

Objective 3: Awareness and Education: Aim to provide the public with knowledge and understanding of the conservation area lands. This includes cultural and natural heritage features sites, their significance, sensitivities, and their ecological functions. Through Stewardship programs NBMCA will provide protection of lands, opportunities for education and awareness, promoting better understanding, and appreciation of NBMCA lands. Publicly accessible natural areas also provide places for mental and physical health and wellbeing.

Action:

- Develop and implement strategies and plans for education, communication, outreach and engagement that will help NBMCA promote and build community awareness of conservation lands and permitted uses and gain support for conservation land management objectives.
- Communicate and engage with the public to strengthen understanding, appreciation and support for conservation land stewardship and management.

Objective 4: Tourism: The Strategy will leverage NBMCA's natural assets to support and provide opportunities which promote sustainable ecotourism within the province. NBMCA will work with community partners, to market conservation lands, and to cross promote lands that are identified as opportunities for tourism.

Action:

- Develop management plans and policies for the management of NBMCA lands that balance park development, social demand, tourism, cultural heritage, and the environment.
- Seek partners to provide new and improved recreational opportunities

6.0 Implementation

Objectives will primarily be implemented through management plans, policies, procedures, strategies, visioning. Each of these management plans includes deliverables and metrics informed by the objectives and specific action areas to meet the needs of that NBMCA property. These more specific implementation measures will be enabled through the annual budget and yearly workplans.

7.0 Process for Review

Public Consultations were held in June 2024 for 30 days. The invitation to comment was posted on NBMCA's website and social media. No public comments were received.

This strategy will inform and guide NBMCA's conservation and management of lands over a period of five years and will be made available on NBMCA's website. Throughout this five-year period, revisions that do not alter the strategy in any significant way may be completed, as necessary. Subsequently, every five years the strategy will be reviewed in its entirety. If this formal review results in minor changes, consultation may not be undertaken, and the revised strategy will be made available online. If the review process leads to significant changes, NBMCA will engage with partners, stakeholders and the public to solicit feedback; an updated Conservation Area Strategy will then be presented to the NBMCA Board with a summary of changes and posted online. NBMCA will continue to leverage all suitable tools and platforms (e.g., targeted outreach via email, broad engagement via social media) to gather feedback from partners, stakeholders, and the public. Ongoing feedback will be especially important to the more visionary goals, objectives, and actions described in NBMCA's Conservation Area Strategy.

NORTH BAY - MATTAWA CONSERVATION AUTHORITY

TO: The Chairperson and Members
of the Board of Directors,
North Bay-Mattawa Conservation Authority

ORIGIN: Kevin Taylor: Senior Manager Planning & Water Resources

DATE: November 27, 2024

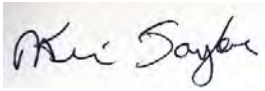
SUBJECT: CA Act Deliverables, **#4 Lands Inventory**

Background:
Under CA Act S. 21.1(1), O. Reg. 686/21 S. 9(1)3, S.11 The Conservation Authority shall develop a land inventory that will include: location, date obtained, method and purpose of acquisition and land use.

Analysis:
This information was assembled by GIS and water resources staff to the best of their abilities. This is a great starting point for the land's administrator. There is no requirement to share this report.

Recommendation:
THAT the members receive and approve the Lands Inventory as presented.

Recommended Resolution:
THAT the Lands Inventory is received and appended to the minutes of this meeting.



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Kevin Taylor
Senior Manager Planning & Water Resources

NBMCA LAND INVENTORY 2024

Internal Use
Mandatory
Not Mandatory

GIS ID	NBMCA Owned Land	Land Type (Conservation Area or *Land*)	Municipality	PhysAdd (Physical Address)	Develop (Suitable For Development)
1	Corbeil Conservation Area	Conservation Area	East Ferris	HIGHWAY 94	No
2		Conservation Area	East Ferris	HIGHWAY 94	No
3	Eau Claire Gorge Conservation Area	Conservation Area	Calvin	GRAHAM RD	No
4		Conservation Area	Calvin	-	No
5		Conservation Area	Calvin	PEDDLERS DR	No
6		Conservation Area	Calvin	-	No
7		Conservation Area	Calvin	PEDDLERS DR	No
8		Conservation Area	Calvin	PEDDLERS DR	No
9	Elks Lodge 25 Family Park Conservation Area	Conservation Area	North Bay	1200 HIGHWAY 17 E	No
10	Eva Wardlaw Conservation Area	Conservation Area	North Bay	451 LAKESHORE DR	No
11	JP Webster Nature Preserve Conservation Area	Conservation Area	Nipissing	-	No
12		Conservation Area	Nipissing	-	No
13		Conservation Area	Nipissing	-	No
14	Kate Pace Way	*Conservation Land*	North Bay	LAKESHORE DR	No
15		*Conservation Land*	North Bay	LAKESHORE DR	No
16		*Conservation Land*	North Bay	DECAURE AVE	No
17		*Conservation Land*	North Bay	CRANBERRY RD	No
18	Chippewa Creek	*Conservation Land*	North Bay	TUPPER DR	No
19	Chippewa Creek	*Conservation Land*	North Bay	BAIN DR	No
20	Chippewa Creek	*Conservation Land*	North Bay	GOLF CLUB RD	No
21	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	AIRPORT RD	No
22	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	1515 MCKEOWN AVE	No
23	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	-	No
24	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	SHEA ST	No
25	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	-	No
26	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	CHAPLEAU ST	No
27	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	SHEA ST	No
28	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	RAMSEY ST	No
29	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	OBRIEN ST	No
30	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	1728 SHEA ST	No
31	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	1720 SHEA ST	No
32	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	1720 SHEA ST	No
33	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	ANGUS ST	No
34	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	CHAPLEAU ST	No
35	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	CHAPLEAU ST	No
36	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	CHAPLEAU ST	No

GIS ID	NBMCA Owned Land	Land Type (Conservation Area or *Land*)	Municipality	PhysAdd (Physical Address)	Develop (Suitable For Development)
37	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	215 RAMSEY ST	No
38	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	1440 SHEA ST	No
39	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	SHEA ST	No
40	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	EDWARD ST	No
41	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	OBRIEN ST	No
42	Chippewa Creek	*Conservation Land*	North Bay	VANIER ST	No
43	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	DUDLEY AVE	No
44	Chippewa Creek	*Conservation Land*	North Bay	DUDLEY AVE	No
45	Chippewa Creek	*Conservation Land*	North Bay	HUTCHESON AVE	No
46	Chippewa Creek	*Conservation Land*	North Bay	HUTCHESON AVE	No
47	Chippewa Creek	*Conservation Land*	North Bay	HUTCHESON AVE	No
48	Chippewa Creek	*Conservation Land*	North Bay	504 LANSDOWNE AVE	No
49	Chippewa Creek	*Conservation Land*	North Bay	1650 CASSELLS ST	No
50	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	190 RICHARDSON ST	No
51	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	212 RICHARDSON ST	No
52	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	1677 WYLD ST	No
53	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	1663 WYLD ST	No
54	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	RICHARDSON ST	No
55	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	228 CHIPPEWA ST E	No
56	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	1623 WYLD ST	No
57	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	1607 WYLD ST	No
58	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	218 DUKE ST E	No
59	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	264 DUKE ST E	No
60	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	295 DUKE ST E	No
61	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	274 PRINCESS ST E	No
62	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	278 PRINCESS ST E	No
63	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	1048 FISHER ST	No
64	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	1033 FISHER ST	No
65	Chippewa Creek	*Conservation Land*	North Bay	HAMMOND ST	No
66	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	802 HAMMOND ST	No
67	Chippewa Creek	*Conservation Land*	North Bay	FISHER STREET	No
68	Chippewa Creek	*Conservation Land*	North Bay	-	No
69	Chippewa Creek	*Conservation Land*	North Bay	839 FISHER ST	No
70	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	809 HAMMOND ST	No
71	Chippewa Creek	*Conservation Land*	North Bay	452 SECOND AVE E	No
72	Chippewa Creek	*Conservation Land*	North Bay	464 SECOND AVE E	No
73	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	476 SECOND AVE E	No
74	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	484 SECOND AVE E	No
75	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	488 SECOND AVE E	No
76	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	496 SECOND AVE E	No
77	Chippewa Creek	*Conservation Land*	North Bay	483 SECOND AVE E	No
78	Chippewa Creek	*Conservation Land*	North Bay	686 REGINA ST	No
79	Chippewa Creek	*Conservation Land*	North Bay	660 REGINA ST	No
80	Chippewa Creek	*Conservation Land*	North Bay	640 REGINA ST	No
81	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	502 SECOND AVE E	No

GIS ID	NBMCA Owned Land	Land Type (Conservation Area or *Land*)	Municipality	PhysAdd (Physical Address)	Develop (Suitable For Development)
82	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	514 SECOND AVE E	No
83	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	520 SECOND AVE E	No
84	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	682 JOHN ST	No
85	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	SECOND AVE E	No
86				JOHN ST	
87				THIRD AVE E	
88				THIRD AVE E	
89	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	JOHN ST	No
90					
91					
92	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	653 SECOND AVE E	No
93	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	WORTHINGTON ST E	No
94					
95	Chippewa Creek	*Conservation Land*	North Bay	637 WORTHINGTON ST E	No
96	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	638 MCINTYRE ST E	No
97	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	682 MCINTYRE ST E	No
98	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	670 MAIN ST E	No
99	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay	701 OAK ST E	No
100	Kinsmen Trail - Chippewa Creek	*Conservation Land*	North Bay		No
99	Chippewa Creek	*Conservation Land*	North Bay	679 QUEEN ST	No
100	Chippewa Creek	*Conservation Land*	North Bay	703 QUEEN ST	No
101	La Vase Portage Conservation Area	Conservation Area	North Bay	HIGHWAY 17	No
102	Laurentian Escarpment Conservation Area	Conservation Area	North Bay	SKI CLUB RD	No
103		Conservation Area	North Bay	-	No
104		Conservation Area	North Bay	SKI CLUB RD	No
105		Conservation Area	North Bay	SKI CLUB RD	No
106		Conservation Area	North Bay		No
107	Laurier Woods Conservation Area	Conservation Area	North Bay	143 BRULE ST	No
108		Conservation Area	North Bay	-	No
109		Conservation Area	North Bay	OLD CALLANDER RD	No
110		Conservation Area	North Bay	-	No
111		Conservation Area	North Bay	BRULE ST	No
112		Conservation Area	North Bay	OLD CALLANDER RD	No
113		Conservation Area	North Bay	-	No
114	Mattawa Island Conservation Area	Conservation Area	Mattawa	BISSETT ST	No
115	Papineau Lake Conservation Area	Conservation Area	Papineau-Cameron	3140 STURGEON LAKE RD	No
116	Powassan Mountain Conservation Area	Conservation Area	Powassan	14 MCRAE DR	No
117	Shields McLaren Conservation Area	Conservation Area	Bonfield	SHIELDS POINT RD	No
118		Conservation Area	Bonfield	MCLAREN DRIVE	No
119		Conservation Area	Bonfield	SHIELDS POINT RD	No
120		Conservation Area	Bonfield	SHIELDS POINT RD	No

GIS ID	NBMCA Owned Land	Land Type (Conservation Area or *Land*)	Municipality	PhysAdd (Physical Address)	Develop (Suitable For Development)
121		Conservation Area	Bonfield	SHIELDS POINT RD	No
122		Conservation Area	Bonfield	SHIELDS POINT RD	No
123	Shields McLaren Property	*Conservation Land*	Bonfield	134 GREY ROCK LANE	No
124	Shirley Skinner Conservation Area	Conservation Area	Chisholm	MEMORIAL PARK DR	No
125	Bonfield Waterfront	*Conservation Land*	Bonfield	MARK ST	No
126		*Conservation Land*	Bonfield	MARK ST	No
127	Lovell Property	*Conservation Land*	North Bay	0 CEDARHEIGHTS ROAD	No
128	Premier Road	*Conservation Land*	North Bay	PREMIER RD	No
129	Provincial Groundwater Monitoring Network	*Conservation Land*	Bonfield	GRAND DESERT RD	No
130	Wasi River	*Conservation Land*	East Ferris	LAKE NOSBONSING RD	No
131		*Conservation Land*	East Ferris	LAKE NOSBONSING RD	No
132	Eastview Tributary	*Conservation Land*	North Bay		No
133	Eastview Tributary	*Conservation Land*	North Bay		No
134	Eastview Tributary	*Conservation Land*	North Bay		No
135	Eastview Tributary	*Conservation Land*	North Bay		No
136	Eastview Tributary	*Conservation Land*	North Bay		No
137	Eastview Tributary	*Conservation Land*	North Bay		No
138	Eastview Tributary	*Conservation Land*	North Bay	LAURENTIAN AVE	No
139	Eastview Tributary	*Conservation Land*	North Bay	LAURENTIAN AVE	No
140	Eastview Tributary	*Conservation Land*	North Bay	LAURENTIAN AVE	No
141	Johnston Creek Tributary	*Conservation Land*	North Bay	SKI CLUB RD	No
142	Johnston Creek Tributary	*Conservation Land*	North Bay	SKI CLUB RD	No
143	Johnston Creek Tributary	*Conservation Land*	North Bay	JOHNSTON RD	No
144	Trout Lake Tributary - Carriere Road	*Conservation Land*	East Ferris	CARRIERE RD	No

NORTH BAY - MATTAWA
CONSERVATION
AUTHORITY

TO: The Chairperson and Members
of the Board of Directors,
North Bay-Mattawa Conservation Authority

ORIGIN: Rebecca Morrow, Human Resources Coordinator/Executive Assistant/Deputy CAO

DATE: December 11, 2024

SUBJECT: **2025 Board of Directors Meeting and Office Closure Dates**

Background:
This report provides for a review and discussion on proposed 2025 North Bay Mattawa Conservation Authority (NBMCA) Board meeting schedule and office closure days.

Analysis:

1. **Proposed 2025 NBMCA Board (Members) Meeting Schedule**

On or before the first meeting of the year, NBMCA Board of Directors (Members) set the meeting dates and times for the upcoming year. The Chair may call additional meetings, change and/or cancel meetings dates and locations.

The North Bay Mattawa Source Protection Authority (NBMSPA) Members meet to fulfill requirements of the Clean Water Act, 2006. Their meetings are less frequent than the NBMCA meetings, around 3 to 4 times a year. For the Members' convenience, they are scheduled on NBMCA Members meeting dates. The first meeting of the NBMSPA will be held on January 15th, 2024 and will be the Annual General Meeting (AGM) It is recommended that the remainder of the meetings be held at the call of the Chair. NBMSPA Members will be given five days notice in advance of any NBMSPA meeting that is to be called.

The Members meeting are held on the second Wednesday of each month, with two exceptions: January – 3rd Wednesday to allow staff additional time after the Holidays to prepare for the meeting; July - no meeting. All meetings will be held as a hybrid meeting allowing members to attend electronically with the following exceptions: Meetings where elections are required, and; meetings where the budget is being discussed or presented. Therefore the proposed meeting dates are as follows:

- Wednesday January 15, 2025 (NBMCA & NBMSPA AGM's)
- Wednesday February 12, 2025
- Wednesday March 12, 2025
- Wednesday April 9, 2025
- Wednesday May 14, 2025
- Wednesday June 11, 2025
- Wednesday August 13, 2025
- Wednesday September 10, 2025

- Wednesday October 8, 2025
- Wednesday November 12, 2025
- Wednesday December 10, 2025

The start time has been 4:00pm for each meeting, and it is recommended that 4:00pm meeting times remain for 2025.

2. NBMCA Office Closure Dates in 2025

a) NBMCA Board approved Holidays (for information)

The Collective Bargaining Agreement and the NBMCA Board approved Personnel Policy sets paid holidays for bargaining unit members. The NBMCA office is closed on those days. The corresponding 2025 dates are provided for your information in the table below. Note that the Collective Bargaining Agreement and the approved Personnel Policy specifies that holidays falling on a Saturday or Sunday shall be considered in accordance with the days designated by the Province of Ontario. The Personnel Policy does not recognize the National Day of Truth and Reconciliation as a Paid Holiday, but the Collective Bargaining Agreement does. It is proposed that all staff (both unionized and management) receive the National Day of Truth and Reconciliation as a paid Holiday and that the office be closed.

Holidays (previously approved by the NBMCA Board)	Corresponding Dates in 2024 (for information)
New Year's Day	Wednesday January 1, 2025
Family Day	Monday February 17, 2025
Good Friday	Friday April 18, 2025
Easter Monday	Monday April 21, 2025
Victoria Day	Monday May 19, 2025
Canada Day	Tuesday July 1, 2025
Civic Day	Monday August 4, 2025
Labour Day	Monday September 1, 2025
National Day of Truth and Reconciliation	Tuesday September 30, 2025
Thanksgiving Day	Monday October 13, 2025
Remembrance Day	Tuesday November 11, 2025
Christmas Day	Thursday December 25, 2025
Boxing Day	Friday December 26, 2025
New Year's Day	Thursday January 1, 2026

b) Proposed for 2025

The NBMCA Office is closed 12:00 noon on Wednesday December 24th, 2025 and remains closed between Christmas and New Year's. Staff are required to use their own vacation and/or overtime in order to take these days off: Monday December 29, 2025, Tuesday December 30, 2025, Wednesday December 31, 2025. The office will remain closed on Friday January 2, 2026 Work arrangements for staff who wish to work on January 2nd can be discussed with their supervisor. The office will reopen at 8:30 am on Monday January 5, 2026.

Recommendation:

It is recommended that the Board of Directors approves the following:

- The Board of Directors meeting schedule provided in this report with a start time of 4pm or as discussed.

- The office be closed from noon (12pm) on Wednesday December 24, 2025 through Thursday Friday January 2, 2026 for the Christmas holidays. The office will reopen on Monday January 5, 2026 at 8:30 am.

Recommended Resolution:

THAT the NMBCA Members set the meeting schedule and office closure dates for 2025 as listed in this report and that staff are directed to make necessary arrangements to schedule meetings for the recommended dates and times;

AND THAT this Board Report is received and appended to the minutes of this meeting.

Submitted by:

Rebecca Morrow, Human Resources Coordinator/Executive Assistant/Deputy CAO

Reviewed By:

Robin Allen, Interim CAO-Secretary Treasurer

NORTH BAY - MATTAWA CONSERVATION AUTHORITY

TO: The Chairperson and Members of the Board of Directors,
North Bay-Mattawa Conservation Authority

ORIGIN: Githan Kattera, Regulations Officer / Water Resources, M.Eng.

DATE: November 28, 2024

SUBJECT: NBMCA Engineering Projects Report

Executive Summary

The North Bay-Mattawa Conservation Authority (NBMCA) has been undertaking a series of floodplain mapping and infrastructure improvement projects over the past five years. These initiatives aim to enhance flood risk management, regulatory planning, and flood control infrastructure across five sub-watersheds in the NBMCA jurisdiction. The projects involve collaboration with various consulting firms, including Water's Edge Environmental Solutions, AHYTECH Geomorphic, and EXP. The reports and maps generated from these projects will be key in guiding future development, regulatory planning, and mitigation strategies.

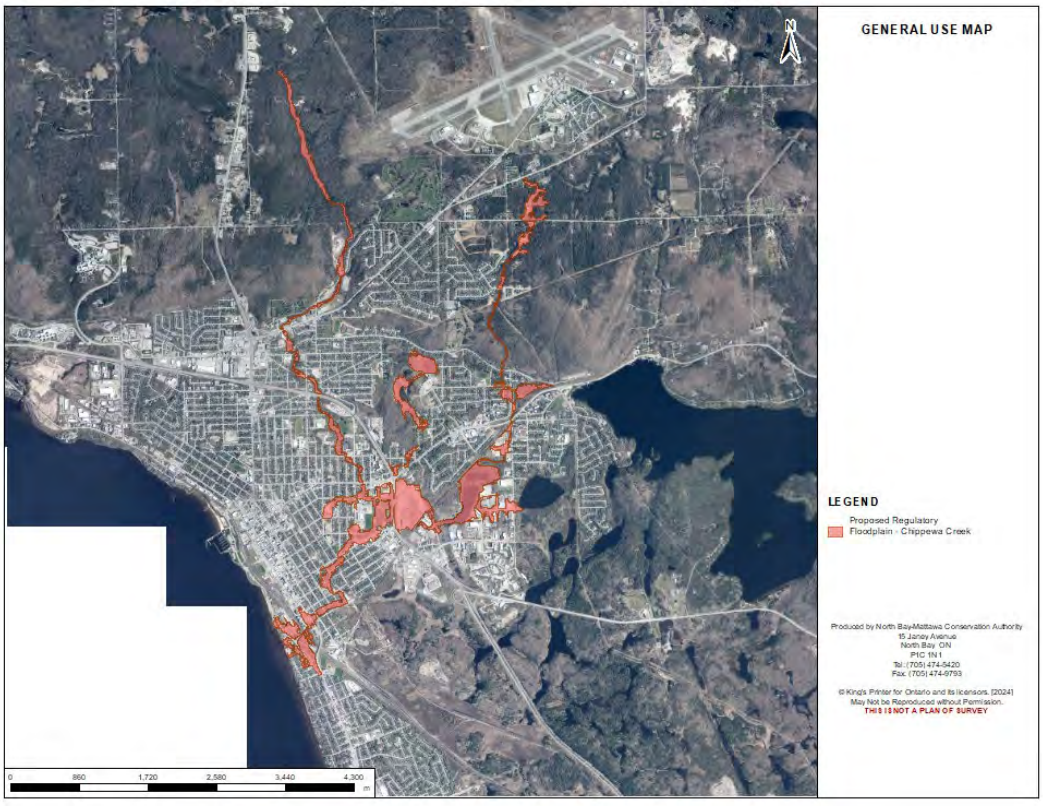
All projects have been presented to their respective municipalities, and their feedback has been incorporated. Once the municipalities were satisfied with the proposed changes, the projects were submitted to the Board for approval, which has now been granted. Subsequently, the projects were forwarded to Conservation Ontario and the Ministry of Natural Resources and Forestry (MNRF) for review. We are pleased to report that both organizations have expressed their approval and support for the projects.

The next steps involve taking the projects to the public for further consultation, followed by the integration of the floodplain mapping into planning, development, and regulatory frameworks.

Project Completed Details

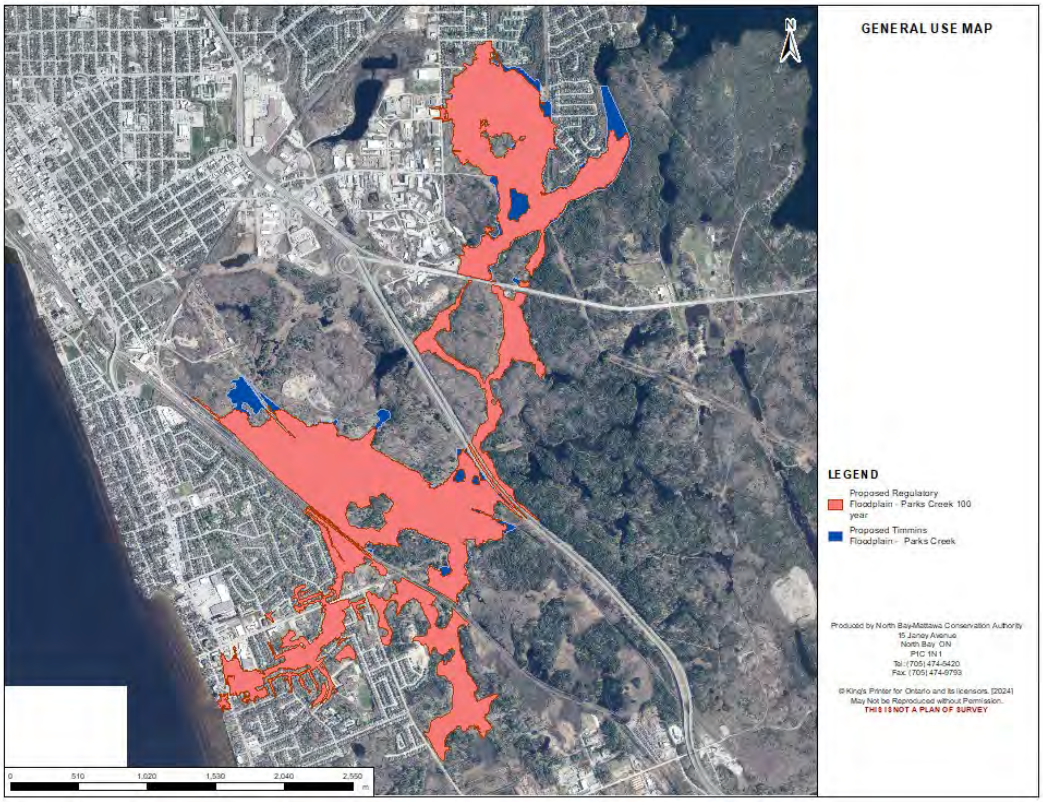
1. Chippewa Creek Floodplain Mapping

- **Location:** City of North Bay
- **Start Date:** 2018
- **Completion Date:** 2024
- **Project Manager:** Githan Kattera, Regulations Officer/Water Resources, M.Eng.
- **Consultant:** Water's Edge Environmental Solutions
- **Description:** The Chippewa Creek subwatershed originates above the North Bay escarpment and flows through the heart of the city before discharging into Lake Nipissing. Floodplain mapping was completed for the entire watershed, focusing on runoff response, precipitation events, and snowmelt. The mapping will guide urban planning and floodplain regulations.
- **Next Steps:** An open house will be conducted, and the updated floodplain maps will be integrated into our Planning, Development, and Regulations Program, along with other related initiatives, to guide decision-making and support ongoing efforts.



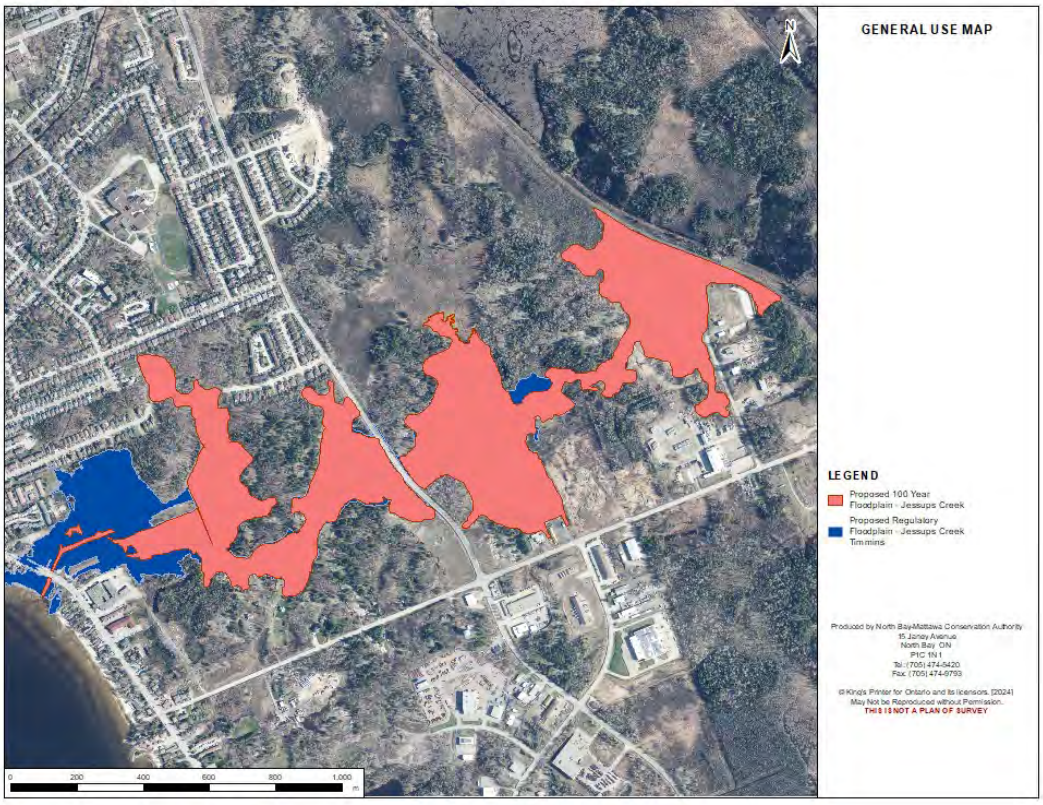
2. Parks Creek Floodplain Mapping

- **Location:** City of North Bay
- **Start Date:** 2019
- **Completion Date:** 2024
- **Project Manager:** Githan Kattera, Regulations Officer/Water Resources, M.Eng.
- **Consultant:** Water's Edge Environmental Solutions
- **Description:** Parks Creek flows southeast from Trout Lake and passes through a developed area around Circle Lake. This mapping project analyzed the flood risk for potential future developments and infrastructure within the subwatershed.
- **Next Steps:** An open house will be conducted, and the updated floodplain maps will be integrated into our Planning, Development, and Regulations Program, along with other related initiatives, to guide decision-making and support ongoing efforts.



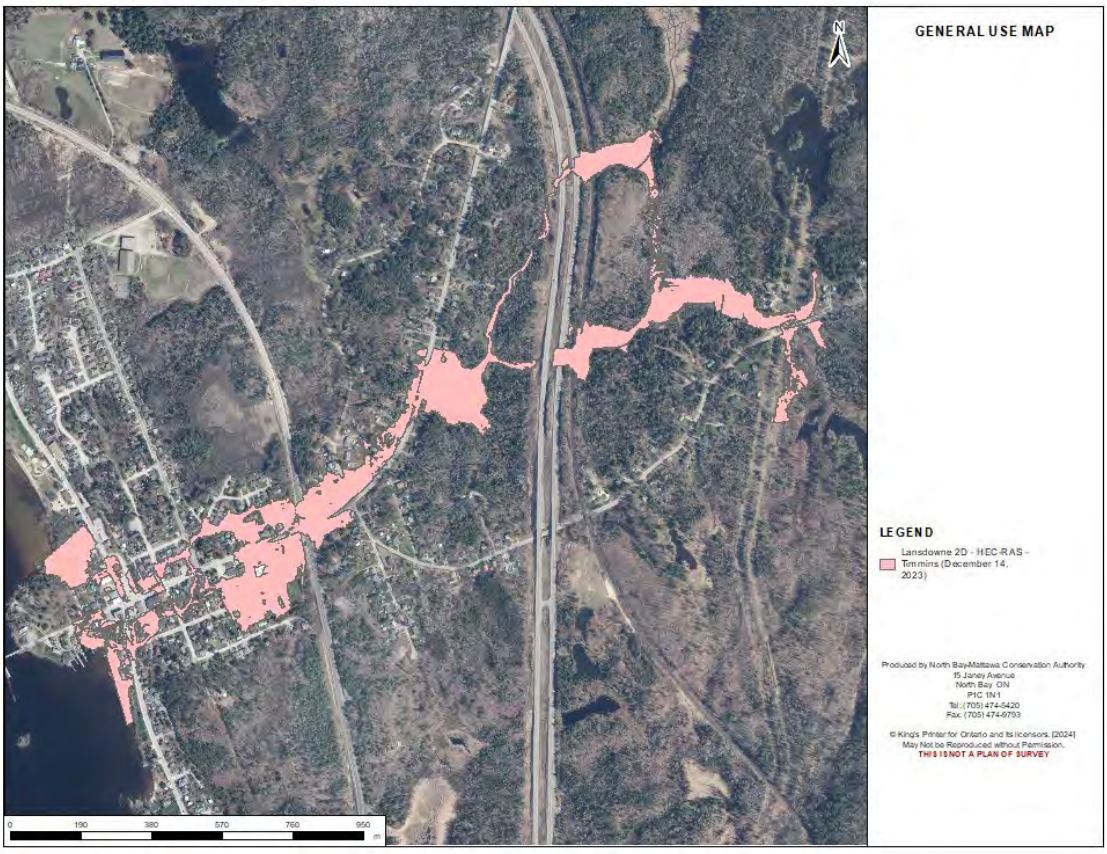
3. Jessup Creek Floodplain Mapping

- **Location:** South of Parks Creek, City of North Bay
- **Start Date:** 2019
- **Completion Date:** 2024
- **Project Manager:** Githan Kattera, Regulations Officer/Water Resources, M.Eng.
- **Consultant:** Water's Edge Environmental Solutions
- **Description:** The Jessup Creek subwatershed is the smallest of the NBMCA jurisdiction with significant potential for future development. This project assessed flood risk and provided maps for areas affected by flood events such as the 100-year flood.
- **Next Steps:** An open house will be conducted, and the updated floodplain maps will be integrated into our Planning, Development, and Regulations Program, along with other related initiatives, to guide decision-making and support ongoing efforts.



4. Lansdowne Creek Floodplain Mapping

- **Location:** Municipality of East Ferris and Municipality of Callander
- **Start Date:** 2023
- **Completion Date:** 2024
- **Project Manager:** Githan Kattera, Regulations Officer/Water Resources, M.Eng.
- **Consultant:** Water's Edge Environmental Solutions
- **Description:** Lansdowne Creek originates in East Ferris and drains through Callander into Callander Bay. This mapping project aims to assess flood risk in a smaller sub-watershed with implications for future planning and development in the area.
- **Next Steps:** An open house will be conducted, and the updated floodplain maps will be integrated into our Planning, Development, and Regulations Program, along with other related initiatives, to guide decision-making and support ongoing efforts.



5. Parks Creek Backflood Control Structure Capacity Study

- **Location:** Eva Wardlaw Conservation Area, North Bay
- **Start Date:** 2023
- **Completion Date:** 2024
- **Project Manager:** Githan Kattera, Regulations Officer/Water Resources, M.Eng.
- **Consultant:** EXP
- **Description:** This project studied the capacity of the Parks Creek Backflood Control Structure, located near the mouth of Parks Creek. The study aimed to evaluate the structure's ability to mitigate flood risks and protect the surrounding infrastructure.

6. Property Impact Analysis (Engineering Analysis)

- **Location:** Chippewa Creek, Parks Creek, Jessup Creek, and Lansdowne Creek watersheds
- **Start Date:** 2023
- **Completion Date:** 2024
- **Project Manager:** Githan Kattera, Regulations Officer/Water Resources, M.Eng.
- **Consultant:** Internal Team (NBMCA)
- **Description:** The Property Impact Analysis identified the number of properties at risk of flooding in the aforementioned sub-watersheds. The analysis categorized the properties based on flood vulnerability and provided a foundation for flood mitigation strategies and policy development.

Public Open House

The North Bay-Mattawa Conservation Authority will be organizing public open house events in early 2025. These sessions will provide detailed information and facilitate discussions on floodplain projects, including Chippewa, Parks, Jessups, and Lansdowne. Letters will be sent to all properties within the regulated areas to ensure that those affected are properly informed and have the opportunity to engage in the consultation process.

Recommendation: THAT the members receive and approve the NBMCA Floodplain Mapping and Infrastructure Improvement Projects as presented.

Recommended Resolution: THAT the NBMCA Floodplain Mapping and Infrastructure Improvement Projects as presented is received and appended to the minutes of this meeting.

Submitted By

Githan Kattera, Regulations Officer / Water Resources, M.Eng.

Reviewed By

Robin Allen, Interim CAO-Secretary Treasurer
Kevin Taylor, Senior Manager Planning & Water Resources
Rebecca Morrow, Human Resources Coordinator/Executive Assistant/Deputy CAO