

**North Bay-Mattawa Conservation Authority  
Board of Directors Meeting  
February 22, 2023 at 4:00 pm  
NBMCA's Marc Charron Boardroom (upstairs)  
15 Janey Avenue, North Bay, Ontario**

**AGENDA**

**Procedural Matters**

1. Acknowledgement of Indigenous Traditional and Treaty Lands
2. Delegations
3. Declaration of Pecuniary Interest
4. Approval of the Agenda
5. Adoption of Previous Minutes from January 25, 2023
6. Correspondence

**Presentations**

7. Watershed Wonders Photo Contest Results
8. Board Orientation

**Business Reports**

9. Section 28 Permits Report **(Report #1)**
10. Watershed Report Card **(Report#2)**
11. Kate Pace Way Trail Report **(Report #3)**
12. Budget 2023 **(Report #4)**

**Other Business**

13. Closed Session of Committee of the Whole related to personnel matters
14. New Business
  - Hammond Street Bridge, North Bay
15. Adjournment

**NORTH BAY-MATTAWA CONSERVATION AUTHORITY  
MINUTES  
of the**

**SECOND** meeting of the North Bay-Mattawa Conservation Authority held at 4:00 p.m. on February 22, 2023 in the NBMCA’s Marc Charron Boardroom, 15 Janey Avenue, North Bay Ontario.

**MEMBERS PRESENT:**

<b>Bonfield, Township of</b>	-	<b>Steve Featherstone</b>
<b>Callander, Municipality of</b>	-	<b>Irene Smit</b>
<b>Calvin, Township of</b>	-	<b>Bill Moreton</b>
<b>Chisholm, Township of</b>	-	<b>Nunzio Scarfone</b>
<b>East Ferris, Municipality of</b>	-	<b>Steve Trahan</b>
<b>Mattawa, Town of</b>	-	<b>Loren Mick</b>
<b>Mattawan, Municipality of</b>	-	<b>Michelle Lahaye</b>
<b>North Bay, City of</b>	-	<b>Peter Chirico</b>
<b>North Bay, City of</b>	-	<b>Lana Mitchell</b>
<b>Papineau –Cameron, Township of</b>	-	<b>Shelley Belanger</b>

**MEMBER(S) ABSENT:**

<b>Powassan, Municipality of</b>	-	<b>Dave Britton</b>
<b>North Bay, City of</b>	-	<b>Chris Mayne</b>

**ALSO PRESENT:**

**Chitra Gowda**, CAO, Secretary-Treasurer  
**David Ellingwood**, Manager, Source Water Protection  
**Helen Cunningham**, Manager, Finance & Human Resources  
**Paula Loranger**, Community Relations Coordinator  
**Rebecca Morrow**, Administrative Assistant  
**Sue Buckle**, Manager, Communications and Outreach  
**Dave Dale**, Media  
**Chris Chartrand**, Member of the public  
**Kaye Edmonds**, Member of the public  
**Ken Sitter**, Member of the public  
**Kevin Lalonde**, Member of the public  
**Megan Johnson**, Member of the public  
**Michael de Morée**, Member of the public  
**Natalie Seidler**, Member of the public  
**Raj Rajesh**, Member of the public  
One unnamed member of the public

**1. Acknowledgement of Indigenous Traditional and Treaty Lands**

Irene Smit read a statement acknowledging Indigenous and Treaty Lands.

**2. Delegations**

There were no delegations.

**3. Declaration of Pecuniary Interest**

Peter Chirico declared a pecuniary interest in agenda item 11 – Kate Pace Way Trail report, and did not vote, or participate in the discussions on this item.

**4. Approval of the Agenda**

After discussion the following resolution was presented:

Resolution No. 19-23, Chirico-Moreton

**THAT** the agenda be approved as presented.

**Carried Unanimously**

**5. Adoption of Previous Minutes of January 25, 2023**

After discussion the following resolution was presented:

Resolution No. 20-23, Smit-Moreton

**THAT** the minutes of the meeting held January 25, 2023 be adopted as written.

**Carried Unanimously**

**6. Correspondence**

None.

**7. Watershed Wonders Photo Contest Results**

Sue Buckle presented to members the Watershed Wonders Photo Contest results which included the winning photos and the winners for each category. Shelley Belanger, Acting Chair, congratulated each winner and presented them with a token of recognition. Afterwards a group photo was taken. After the photo, the members congratulated each winner and thanked Sue for her presentation. Michael de Morée, a judge in the Watershed Wonder Photo Contest, also congratulated all the winners.

## **8. Board Orientation**

Chitra Gowda provided introductory orientation to Board Members through a presentation about the role and responsibility of the NBMCA; areas of jurisdiction under the Conservation Authorities Act, Clean Water Act, 2006 and the Ontario Building Code Act; relationship between the Board and staff through the CAO; and an overview of the programs and services at NBMCA. Chitra indicated that at each regular board meeting, program specific orientation would be provided.

## **9. Section 28 Approvals Report**

Chitra Gowda informed members that Valerie Murphy is away and presented the report to the Members. After discussion, the Members thanked Chitra and the following resolution was presented:

### Resolution No. 21-23, Chirico-Smit

**THAT** the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses members report is received and appended to the minutes of this meeting.

**Carried Unanimously**

## **10. Watershed Report Card**

Angela Mills presented the Watershed Report Card. After discussion a request was made to share the past scores with members. The Members then thanked Angela for her presentation and the following resolutions were presented:

### Resolution No. 22-23, Mick-Moreton

**THAT** the draft North Bay-Mattawa Watershed Report Card 2023 and the draft 2023 Watershed Report Card Explanatory Document are received and appended to the minutes of this meeting;

**AND THAT** the members direct staff to complete minor edits and AODA compliance edits and publicly release the final North Bay-Mattawa Watershed Report Card 2023 and 2023 Watershed Report Card Explanatory Document on March 22, 2023.

**Carried Unanimously**

## **11. Kate Pace Way Trail Report**

Mayor Peter Chirico declared a pecuniary interest on this item. He left the room before the report was presented by staff. He did not participate or vote on this item.

Chitra Gowda presented the report to members. After discussion it was determined that a clearer map was required. The members thanked Chitra and the following resolution was presented:

Resolution No. 23-23, Smit-Moreton

**THAT** the NBMCA Board approve the land transfer in principle pending staff providing a clear map;

**AND THAT** this report be received and appended to the minutes of this meeting.

**Carried Unanimously**

**12. Budget 2023**

Chitra Gowda presented the draft 2023 budget to members, thanking the Executive Committee for its meetings and recommendations to the Board. Chitra offered to take a voluntary pay reduction by \$7,000 to help reinstate an Employee Assistance Program (EAP/EFAP) in 2023, for the health and wellness of staff. The members discussed updating the budget levy further for \$10,000 to \$12,000 to reinstate the EFAP. The members thanked Chitra and staff for their efforts in preparing the draft budget and the following resolutions were presented:

Resolution No. 24-23, Chirico-Lahaye

**THAT** the members receive and accept this Report and that it be appended to the minutes of the meeting;

**AND THAT** staff post the updated Onsite Sewage System (OSS) fee schedule for 2023;

**AND THAT** staff post the approved 2023 Budget with edits to show:

- the matching levy (i.e the levy is matching with the Ministry of Natural Resources and Forestry transfer payment amount of \$133,490.00) and non-matching levy amounts;
- the revenue amounts on the pie chart of revenue sources; and
- the sole-benefitting levy to the City of North Bay in the amount of approximately \$110,000.00 towards the potential operation of the Parks Creek Backflood control structure in the event of an extreme weather event.

**AND THAT** staff undertake a feasibility study on the main office building and property operations and maintenance by the June 2023 Board meeting;

**AND THAT** staff begin discussions with the City of North Bay staff about the transfer of the Parks Creek backflood control structure lands and operations to the City of North Bay, and

**THAT** an additional \$10,000.00 – 12,000.00 be added to the budget for an EFAP (Employee and Family Assistance Program).

**Carried Unanimously**

Peter Chirico left at this point in the meeting (5:55pm).

Resolution No. 25-23, Trahan-Scarfone

**THAT** as part of the 2023 NBMCA Budget, the matching levy of \$133,490.00 is approved, (i.e the levy is matching with the Ministry of Natural Resources and Forestry transfer payment amount of \$133,490.00), and

**FURTHER THAT** the each member municipality is to be advised of their apportionment of the matching levy.

**Carried Unanimously**

Resolution No. 26-23, Trahan-Mick

**THAT** the Board of Directors approves a non-matching levy to the member municipalities in the amount of \$1,568,716.00 as specified in the Draft 2023 Budget Report, and

**FURTHER THAT** the each member municipality is to be advised of their apportionment of the non-matching levy.

**Weighting Recorded Vote Results:**

Municipality	Member	Vote %	Vote (Yes/No)	Present/Absent
Powassan	Dave Britton	0.10		Absent
Mattawan	Michelle Lahaye	0.15	Yes	
Bonfield	Steve Featherstone	8.27	Yes	
North Bay	Chris Mayne	16.61		Absent
Mattawa	Loren Mick	2.35	Yes	
Papineau/Cameron	Shelley Belanger	1.89	Yes	
North Bay	Peter Chirico	16.61		Absent
Callander	Irene Smit	15.78	Yes	
Calvin	Bill Moreton	2.98	Yes	
Chisholm	Nunzio Scarfone	3.52	Yes	
North Bay	Lana Mitchell	16.61	Yes	
East Ferris	Steve Trahan	15.14	Yes	

**Carried**

**13. Closed Session of Committee of the Whole**

After discussion, the following resolutions were presented:

Resolution No. 27-23, Mick-Smit

**THAT** the meeting move into a closed session of “Committee of the Whole” to discuss personnel matters.

**Carried Unanimously**

Resolution No. 28-23, Smit-Moreton

**THAT** the meeting out of a closed session of “Committee of the Whole” and back into an open meeting. (6:37pm)

**Carried Unanimously**

**14. New Business**

Chitra Gowda informed the members of a priority project concerning property located at Third Avenue and Hammond Street, North Bay. The City of North Bay has requested the NBMCA to sell a portion of this property to facilitate a City of North Bay infrastructure project. After discussion, the following resolution was presented:

Resolution No. 29-23, Smit-Trahan

**THAT** the Board approve NBMCA staff to engage the President of the North Bay & Area Realtors Association for real estate considerations to help inform a staff report to the board; and begin discussions with the City of North Bay staff regarding the city’s potential purchase of NBMCA land adjacent to Third Ave/Hammond St North Bay;

**AND THAT** this report be appended to the minutes of this meeting.

**Carried Unanimously**

**15. Adjournment (6:55 p.m.)**

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

Resolution No. 30-23, Moreton- Smit

**THAT** the meeting be adjourned, and the next meeting be held at 4:00 pm Wednesday March 29th, 2023 or at the call of the Chair.

**Carried Unanimously**



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Shelley Belanger, Acting Chair



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Chitra Gowda, Chief Administrative Officer,  
Secretary Treasurer

**Report #1  
02-22-2023**

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

**ORIGIN:** Valerie Murphy, Regulations Officer

**DATE:** February 8, 2023

**SUBJECT:** Report on Development, Interference with Wetlands and Alterations to Shorelines  
and Watercourses Permits

**Background:**

Section 28 of the *Conservation Authorities Act*, and subsequently Ontario Regulation 97/04 empowers each Conservation Authority to establish their own regulation to prevent the loss of life and property due to flooding and erosion, and to conserve and enhance natural resources. On May 4, 2006, the North Bay-Mattawa Conservation Authority (NBMCA) received its regulation entitled the Development, Interference with Wetlands, and Alterations to Shorelines and Watercourse Regulation (Ontario Regulation 177/06). This regulation will continue 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, a permit may be given by an Authority for development applications within the Authority's jurisdiction for:

28(1)(b) prohibiting, regulating or requiring permission of the authority for straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream or watercourse, or for changing or interfering in any way with a wetland;

28(1)(c) prohibiting, regulating, or requiring the permission of the authority for development if, in the opinion of the authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land may be affected by the development (Conservation Authorities Act, R.S.O. 1990, Chapter C.27).

On February 8, 2013, the amended Ontario Regulation 177/06 came into effect. These amendments were approved by the NBMCA Board of Directors on December 19, 2012. One of the amendments that was included, and which was approved by the NBMCA Board of Directors, included the delegation of approvals of permit applications to the following designated employees:

- Chief Administrative Officer, Secretary-Treasurer
- Director, Planning & Development

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

**Analysis:**

Six new permits have been issued by the Conservation Authority since the previously approved minutes as per the policies, procedures, and guidelines of the NBMCA under Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation. A table summarizing the details of these permits is attached to this report.

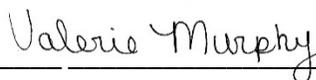
Of the newly issued permits, two were issued for dredging activities and one permit was issued for each of the following activities: construct a boat house, grade for a new driveway, reconstruction of an existing dwelling and the construction of municipal sidewalks.

**Recommendation:**

**THAT** the members receive and approve the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Permits as presented.

**Recommended Resolution:**

**THAT** the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Permits report is received and appended to the minutes of this meeting.



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**Valerie Murphy, Regulations Officer**

File No.	Name of Applicant	Municipality	Legal Description/ Address	Name of Regulated Feature	Nature of Work	Date Complete Application Received	Development, Interference with Wetlands and Alterations to Shorelines and Watercourses
							Permit No./Date of Issuance
<b>RBO-22-11</b>	Kirk Mechefske	Bonfield	286 Shields Point Road	Lake Talon	To construct a new boat house	January 9, 2023	<b>#02-23</b> January 18, 2023
<b>RNB-23-02</b>	Julie Hardwick	North Bay	Vacant lot Highway 63	Unevaluated wetland	To clean existing ditches, to install new drainage culvert and grade new driveway	January 10, 2023	<b>#03-23</b> January 18, 2023
<b>REF-23-01</b>	Grant Bailey	East Ferris	667 MacPherson	Trout Lake	To demolish existing dwelling, construct new dwelling and site grading	January 17, 2023	<b>#04-23</b> January 25, 2023
<b>RNB-22-62</b>	Rhyan Tourout	North Bay	1161 Premier Road	Lake Nipissing	To dredge to remove invasive vegetation from shoreline	January 24, 2023	<b>#05-23</b> January 25, 2023
<b>RNB-22-57</b>	Ian Killgour	North Bay	1149 Premier Road	Lake Nipissing	To dredge shoreline to remove vegetation that has overtaken beach	January 24, 2023	<b>#06-23</b> January 25, 2023

<b>RNB-23-03</b>	City of North Bay c/o Gerry McCrank	North Bay	Road right of way – Prince Edward between Georgian and Marshall	Parks Creek Regulatory Floodplain	Construct new sidewalk with curb and gutters. Realign ditches where required but maintain existing drainage patterns	January 24, 2023	<b>#07-23</b> February 1, 2023
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**TO:** The Chairperson and Members  
of the Board of Directors,  
North Bay-Mattawa Conservation Authority

**ORIGIN:** Angela Mills, Water Resources Specialist  
Chitra Gowda, Chief Administrative Officer, Secretary Treasurer

**DATE:** February 22, 2023

**SUBJECT:** 2023 Watershed Report Card

**Background:**

Watershed Report Cards (WRC) provide a look at the health of Ontario's watersheds, using a set of key environmental indicators with a focus on local conditions. Conservation Authorities across Ontario have collaborated with Conservation Ontario to publish WRC every 5 years since 2013. WRC review surface water quality, groundwater quality, forest condition, and wetland cover. The next set of WRC will be released March 22, 2023, in recognition of World Water Day.

The North Bay-Mattawa Conservation Authority (NBMCA) WRC is prepared for the 20 subwatersheds in NBMCA's jurisdiction based on the environmental indicators mentioned below.

- Stream and river water quality grades are based on a 5-year period (2017-2021) of total phosphorus (TP) concentrations and benthic macroinvertebrates (small creatures with no spine living in stream sediments) at several stations across the watershed. Overall watershed grades are a weighted averaged by subwatershed size (i.e., larger subwatersheds have stronger influence).
- Lake water quality is based on spring TP concentrations at local Lake Partner Program stations for a 5-year period (2017-2021). Overall watershed grades are a weighted averaged by lake size.
- Groundwater quality is based on nitrate+nitrite and chloride concentrations from annual or biannual sampling at four Provincial Groundwater Monitoring Network (PGMN) wells over a 10-year period (2012-2021). The overall groundwater grade is an average of individual well grades.
- Forest condition is based on analysis of overall percent forest cover, percent interior forest (more than 100 m inside the forest edge) and percent of forested riparian areas (within 30 m of lakes, rivers, and streams). In our area, the best available data is from the Provincial Land Cover Database which has not been updated since 2000. The overall forest condition grade is based on landscape cover of the NBMCA watershed.
- Wetland cover is the percent of land within a watershed that is covered by wetlands. Our data was updated through a 2018 project that improved wetland detection and the accuracy of wetland boundary mapping. The overall wetland cover grade is based on landscape cover of the NBMCA watershed.

New, for the 2023 WRC, benthic macroinvertebrate data is included in the stream and river water quality grades for 10 subwatersheds. Note that chloride levels in stream and river water were compared to Canadian Water Quality Guidelines for the Protection of Aquatic Life for long-term, chronic exposure or short-term, acute exposure. Historic chloride data was only available for the 7 PWQMN stations. Additional chloride sampling began in 2022 at the 12 NBMCA stations, and it is anticipated that chloride will be part of the grading system for the next WRC.

**Analysis:**

The 2023 Watershed Report Card grades are summarized by subwatershed in Table 1. Overall NBMCA grades are B (Good) for stream, river, and lake water quality; and A (Excellent) for groundwater quality, forest condition, and wetland cover. The blank, grey shaded cells indicate that no data is available for the reporting period.

**Table 1: NBMCA 2023 Watershed Report Card Grades by Subwatershed**

Subwatershed	Stream & River Quality	Lake Water Quality	Groundwater Quality	Forest Condition	Wetland Cover
Amable du Fond River	A			A	B
Boom Creek	C			A	A
Burford Creek	C			A	A
Callander Bay/ South Shore		C		A	A
Chippewa Creek	C	C	A	B	C
Duchesnay Creek	B			A	A
Jessups Creek	D			A	A
Kaibuskong River	C	B		A	B
La Vase River	C			A	A
Lake Nipissing Shoreline/ North Bay		B		C	A
Lake Talon		B		A	D
Mattawa River	A	B		A	C
North River	A			A	C
Parks Creek	D	B	A	B	A
Pautois Creek	B	A		A	B
Sharpes Creek	B		A	A	B
Trout Lake	B	A	A	A	B
Turtle Lake		A		A	A
Windsor/ Boulder/Bear Creeks	C			A	A
Wistiwasing (Wasi) River	C	C		A	A
<b>OVERALL GRADES</b>	<b>B</b>	<b>B</b>	<b>A</b>	<b>A</b>	<b>A</b>

To elaborate, the overall watershed grade for stream and river water quality decreased to a B (Good) in the 2023 WRC compared to the 2018 WRC. This is mainly due to the expanded sampling network rather than landscape changes in the watershed. The overall watershed grades for lake water quality, groundwater quality, and forest condition remained unchanged from the 2018 WRC with grades B, A, and A, respectively. With better wetland detection and mapping available, there were many changes (mostly improvements) to wetland cover grades and the overall watershed grade increased to an A.

Chloride data is not included in the grading system at this time, but none of the 7 sites with available data exceeded the long-term, chronic exposure guideline. Chippewa Creek is, however, approaching the long-term, chronic exposure guideline, with individual samples exceeding it.

Attached to this report are the draft 2023 Watershed Report Card and Explanatory Document. The latter provides a comprehensive description of the methods, grades, changes since 2018, and data gaps. Minor edits and AODA compliance edits may be made to these documents before they are launched publicly on our website on March 22, 2023. The 2023 Watershed Report Card will be promoted through a media release and our various social media platforms. Information from our Watershed Report Card will be combined with that of the other Conservation Authorities in Conservation Ontario's Story Map.

**Recommendation:**

**THAT** the members receive and approve the draft 2023 North Bay-Mattawa Watershed Report Card and draft 2023 Watershed Report Card Explanatory Document.

**Recommended Resolution:**

**THAT** the draft North Bay-Mattawa Watershed Report Card 2023 and the draft 2023 Watershed Report Card Explanatory Document are received and appended to the minutes of this meeting.

**AND THAT** the members direct staff to complete minor edits and AODA compliance edits and publicly release the final North Bay-Mattawa Watershed Report Card 2023 and 2023 Watershed Report Card Explanatory Document on March 22, 2023.

**Submitted by:**

**Angela Mills, Water Resources Specialist**

Chitra Gowda, Chief Administrative Officer, Secretary Treasurer

# North Bay-Mattawa Watershed Report Card 2023



North Bay-Mattawa Conservation Authority has prepared this report card as a summary of the state of our surface water, groundwater, forest and wetland resources.



# WHERE ARE WE?



## What is a Watershed?

A watershed is an area of land that drains into a body of water such as a creek, stream, river, or a lake. A watershed contains multiple smaller subwatersheds, such as a lake or river with multiple in-flowing streams. Everything in a watershed is connected. Our upstream actions can affect downstream conditions.

## Why Measure?

Measuring helps us better understand our watershed. We can target our work where it is needed and track progress.

## We Measure:



Stream & River Water Quality



Lake Water Quality



Groundwater Quality



Forest Conditions



Wetland Cover

## GRADING

**A** Excellent

**B** Good

**C** Fair

**D** Poor

**F** Very Poor

Insufficient Data

## What is a Watershed Report Card?

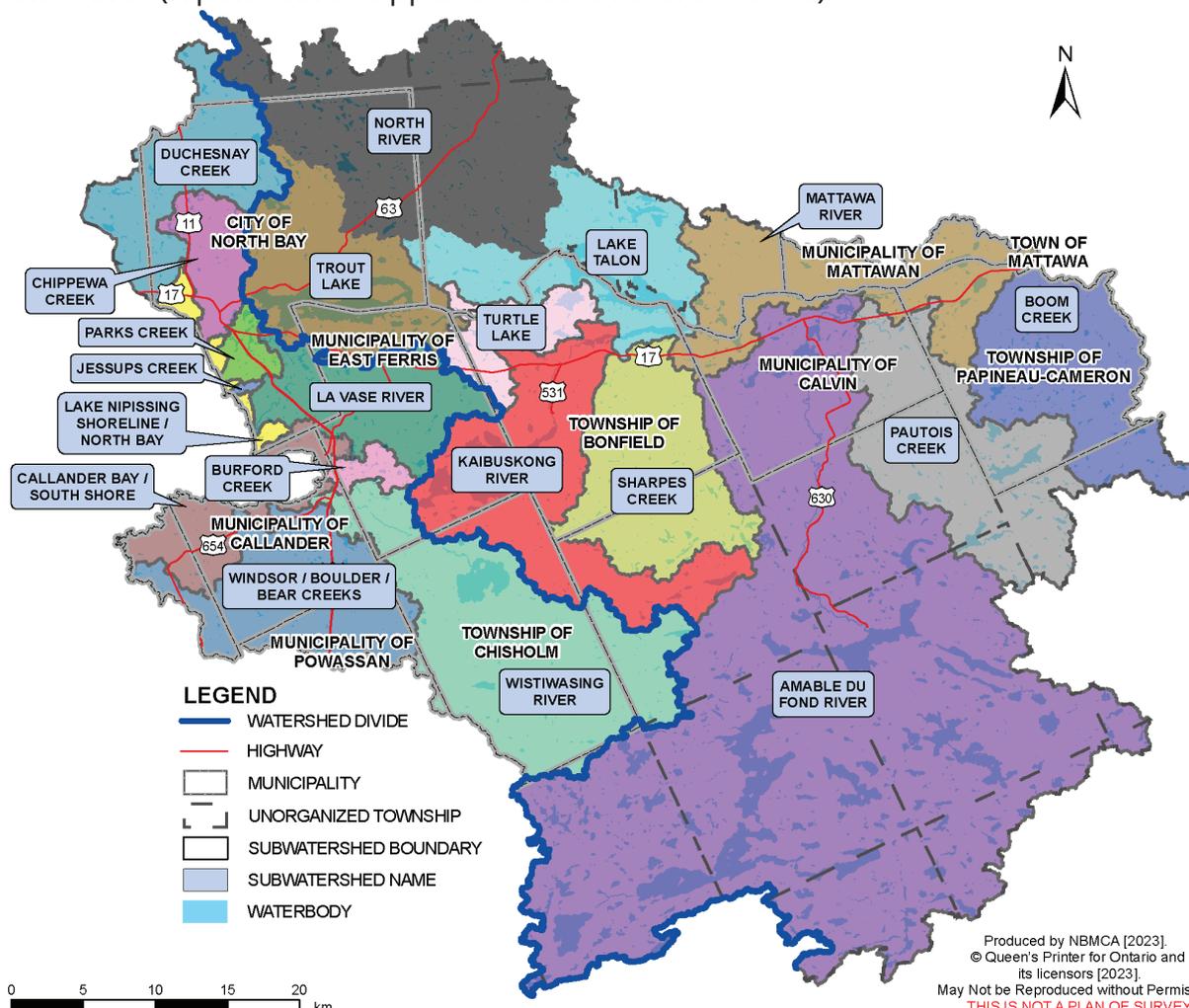
Ontario's Conservation Authorities report a snapshot of watershed conditions every five years. The watershed report cards use Conservation Ontario guidelines and standards developed by Conservation Authorities and their partners.

# WHAT DO WE DO?



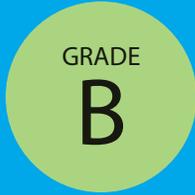
## Our 20 Subwatersheds

North Bay-Mattawa Conservation Authority (NBMCA) is a community-based, environmental organization dedicated to conserving, restoring, developing, and managing renewable natural resources on a watershed basis. NBMCA's watershed jurisdiction covers 2,900 km<sup>2</sup>, including 20 subwatersheds draining into Lake Nipissing (French River watershed) and the Mattawa River (Kipawa River-Upper Ottawa River watershed).





# North Bay-Mattawa STREAM & RIVER WATER QUALITY

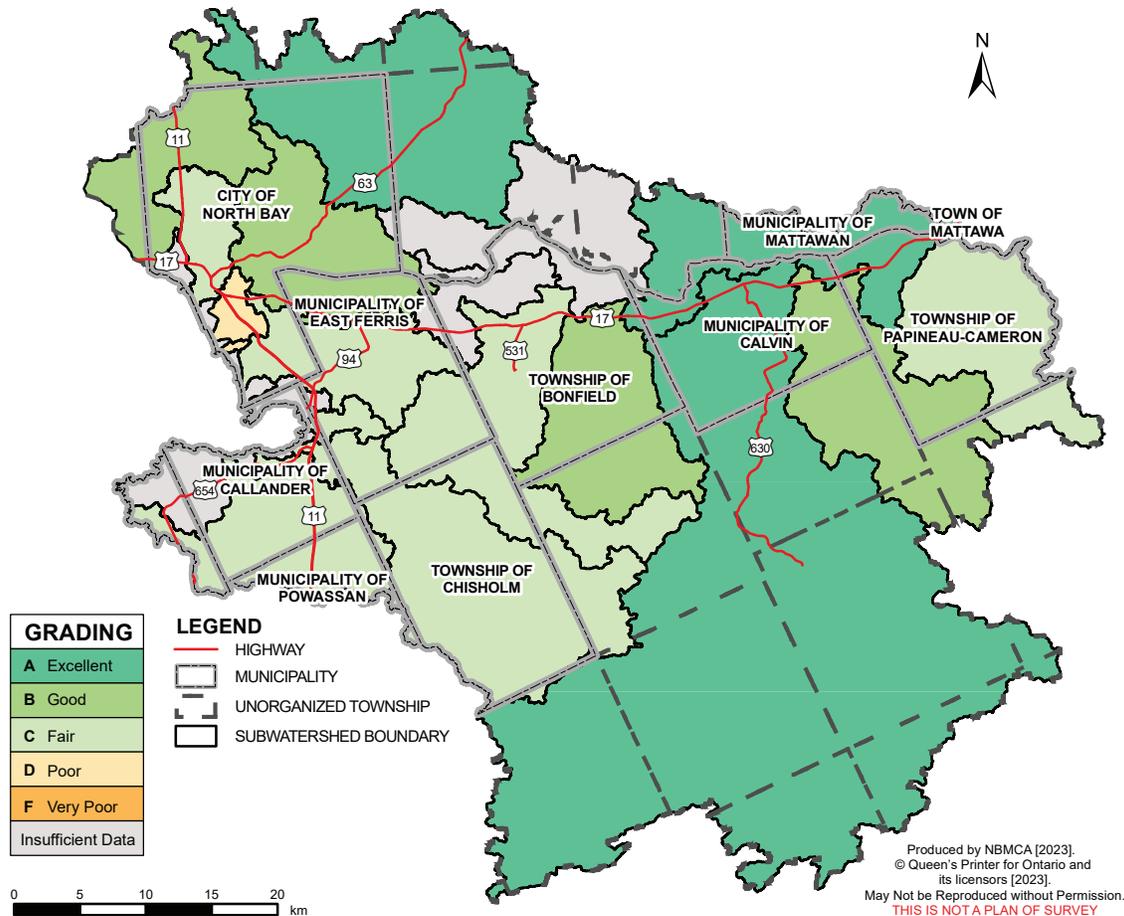


Total phosphorus (TP) and benthic macroinvertebrates (BMI) are indicators of stream and river health. TP was measured at 19 stations. BMI (small, aquatic creatures with no spine) were sampled at 10 stations.

Chloride, an emerging water quality concern, is compared to Canadian Water Quality Guidelines for the Protection of Aquatic Life. It may be included in future grading.

## What Did We Find?

- Using 2017-2021 data, the overall grade for stream and river water quality is B (Good). This is a change from the 2018 Watershed Report Card (WRC) grade of A (Excellent), to reflect additional data from 10 new stations.
- Chloride was sampled at 7 stations and were below the guidelines. Some individual samples on Chippewa Creek were above the long-term guideline.
- The Trout Lake subwatershed stream water quality grade decreased from the 2018 WRC due to the additional BMI data collected. Phosphorus is unchanged from the 2018 WRC.





# North Bay-Mattawa LAKE WATER QUALITY

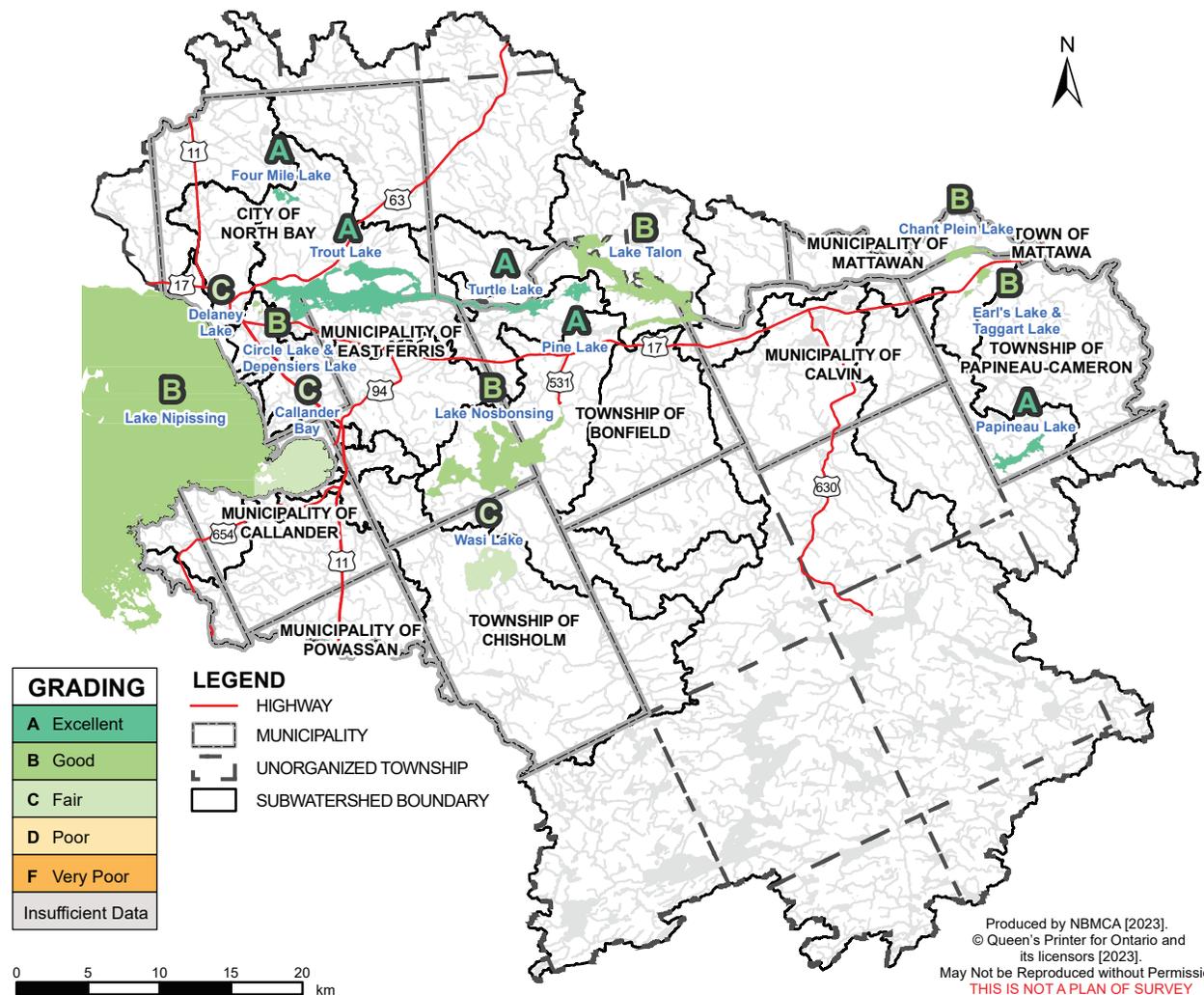
GRADE

**B**

Total phosphorus (TP) contributes to excess plant and algae growth and is an indicator of lake health. It is measured through the MECP Lakes Partner Program during the spring at one or more stations on 16 lakes in the NBMCA watershed. In some lakes, TP can be much higher in late summer than in the spring.

## What Did We Find?

- Using 2017-2019 data, the overall grade for lake water quality is B (Good). No data was available for 2020-2021, mainly due to the pandemic.
- Wasi Lake, Callander Bay, and Delaney Lake have a grade of C (Fair)
- The grade for Callander Bay changed from B (Good; 17.4 mg/L) to C (Fair; 20.3 mg/L).
- The grade for Papineau Lake changed from B (Good) to A (Excellent).





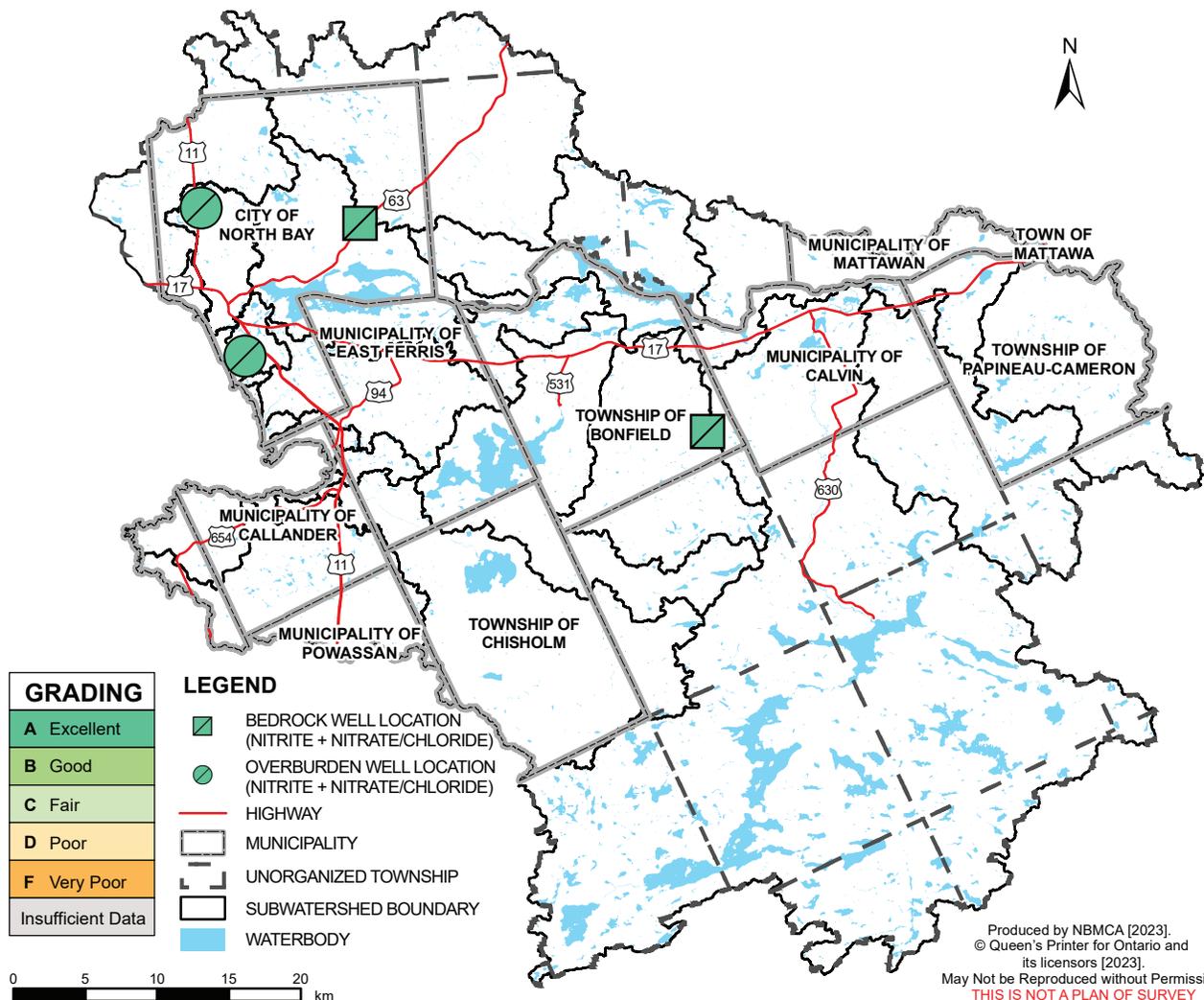
# North Bay-Mattawa GROUNDWATER QUALITY



Groundwater is an important resource used by many local residents as a water supply. Nitrate and chloride are indicators of drinking water quality. High levels of nitrate are a health concern while chloride can damage plumbing. NBMCA samples groundwater at 4 Provincial Groundwater Monitoring Network wells for general chemistry. Groundwater quality changes with location and depth and these results are not a substitute for sampling private wells.

## What Did We Find?

- Using 2012-2021 data, the overall grade for groundwater quality is A (Excellent) for both nitrite+nitrate and chloride at all wells.
- There are no changes in grades since the 2018 WRC.





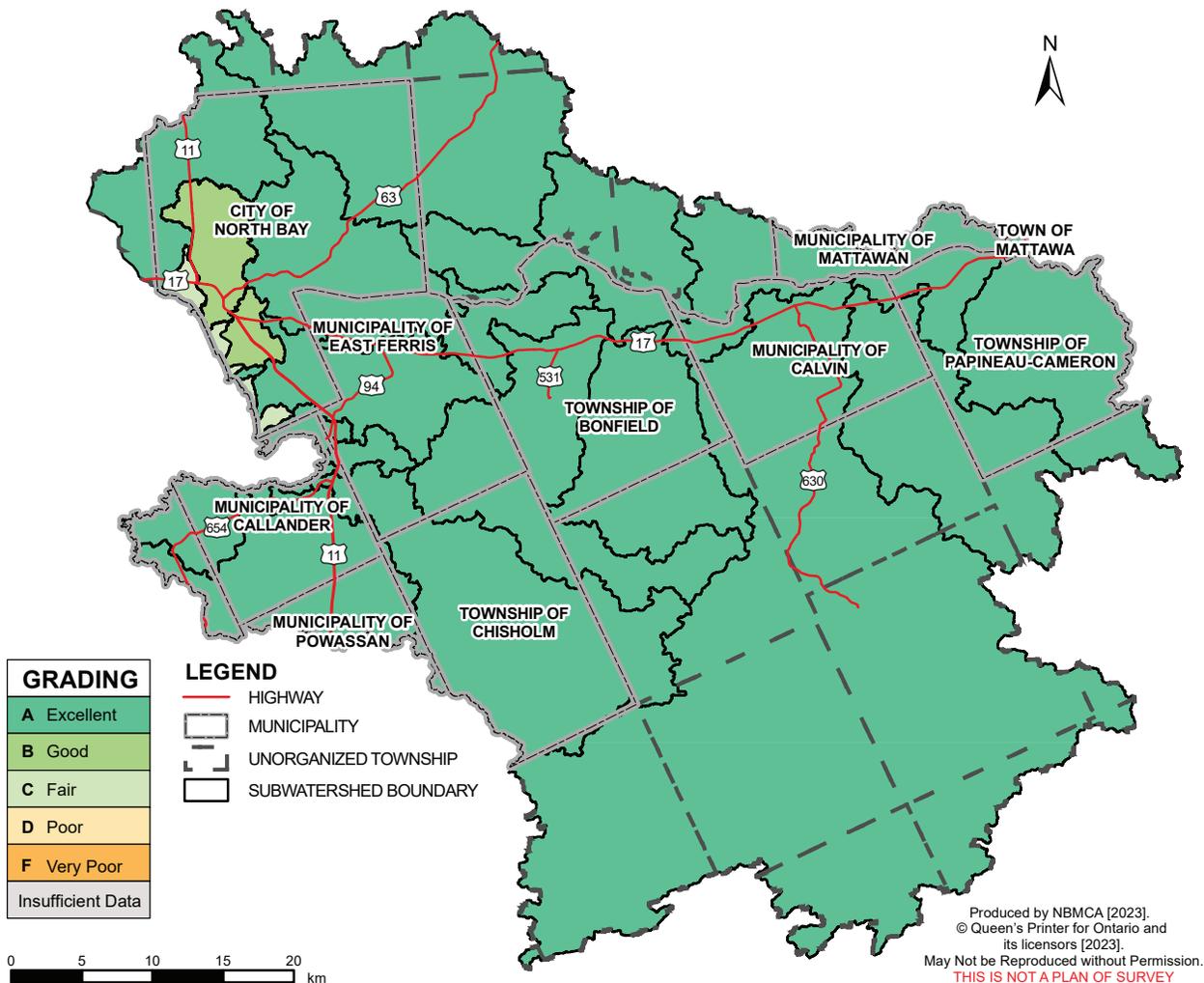
# North Bay-Mattawa FOREST CONDITIONS

GRADE  
**A**

Forests provide resiliency to climate change. They help clean the air, protect biodiversity, prevent soil erosion, mitigate flooding and regulate ecosystems. Forest conditions are evaluated by the amount of forest cover, forest interior (100 m from edges), and riparian (streamside) forest cover, measured using Geographic Information Systems (GIS). The NBMCA watershed has substantial forest cover, at 84% of the area.

## What Did We Find?

- The overall grade is A (Excellent).
- Grades of C (Fair) in Lake Nipissing Shoreline/North Bay subwatershed and B (Good) in Chippewa Creek and Parks Creek subwatersheds reflect urban land use.
- Note that there is no updated Provincial Land Cover mapping available for the NBMCA watershed since 2000.





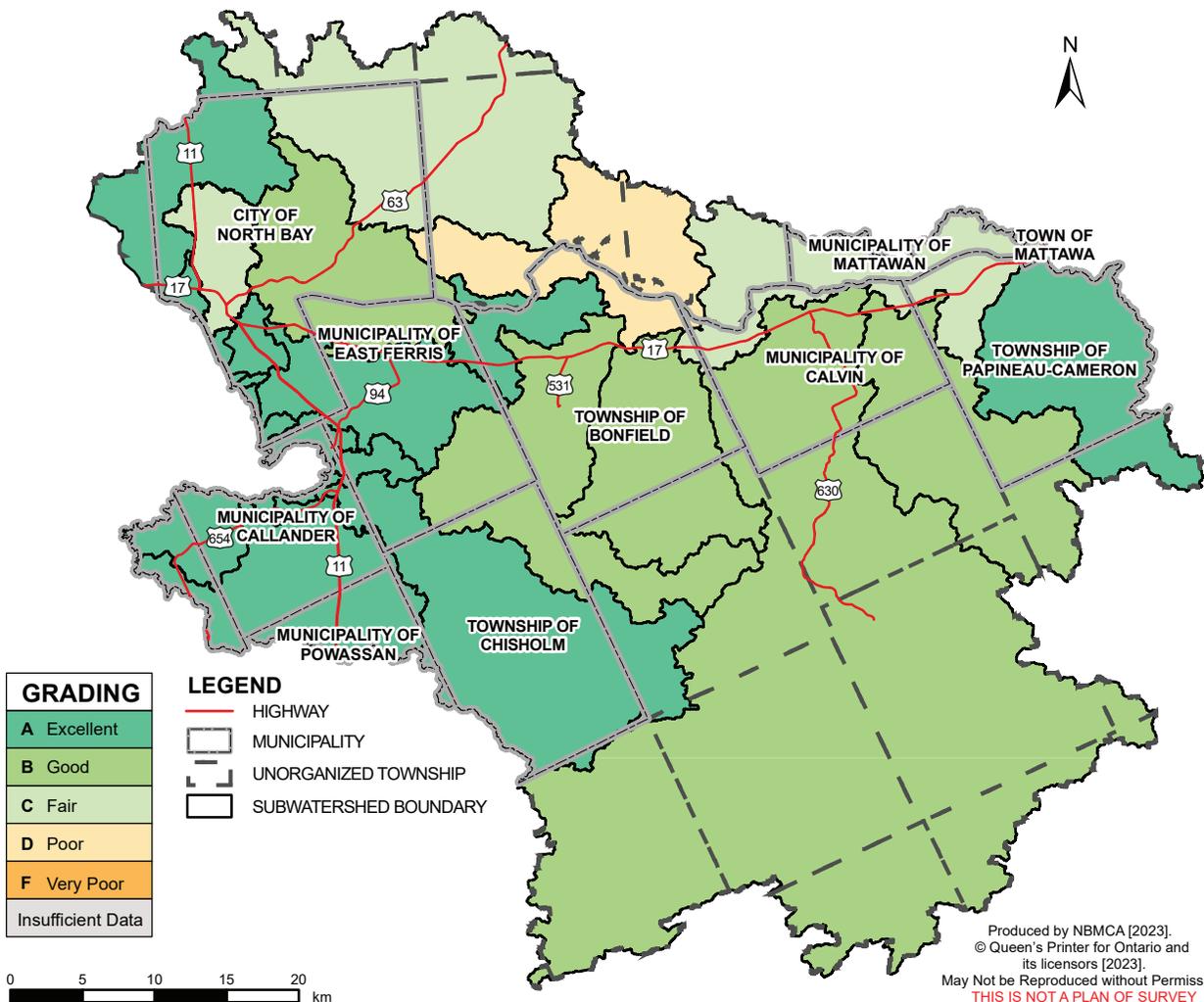
# North Bay-Mattawa WETLAND COVER



Wetlands provide nature-based solutions for climate change. They are diverse habitats including marshes, swamps, bogs, and fens that help protect land from flooding and also improve water quality. There are 33,627 hectares of wetlands within the NBMCA watershed; approximately 12% of the land. Subwatershed wetland cover ranges from 5 to 31%.

## What Did We Find?

- The overall grade for wetland cover is A (Excellent). This is a change from B (Good) in the 2018 WRC. The change in grade is due to improved mapping based on refined wetland boundaries.
- The North River, Lake Talon, and Mattawa River subwatersheds' grades range from C (Fair) to D (Poor) due to natural conditions including lakes and large hilly regions.



# WHAT IS OUR WATERSHED'S KEY ISSUE?



## Climate Change

Climate change refers to shifts in long-term temperature and weather patterns. Shifts may be natural; some are the result of human activities.

What does science tell us about climate change in Ontario? Weather events are less predictable. Weather extremes occur more often and storms are more powerful. Droughts and low water levels are more frequent. Snow is melting faster. Together these changes in climate impact water quality and alter the natural hazards on the landscape.

To help better understand those climate shifts, NBMCA monitors and analyzes water quality, stream flow, lake levels, snow depth and water content, and other indicators, such as those reported in this Watershed Report Card.

By knowing what's happening on the natural landscape, we can - together with municipal decision makers - educate, inform, and manage the human activities that can help prevent and mitigate the impacts of climate change on our communities.

## So... what can you do in your own backyard?

When we manage what happens on our own property, we help manage the impacts of climate change on our community and the environment. You can...

- Direct downspouts to lawns and gardens or build a rain garden to slow runoff from your property.
- Leave, enhance, or create a natural buffer between your property and adjacent lakes or streams to slow and filter runoff, reducing soil erosion and phosphorus movement into our waterways.
- Use native plants in your lawn and garden. They are adapted to our climate and don't have the same need for watering or fertilizer.
- If you have a septic system, be septic smart: inspect it, maintain it, and pump it out regularly to prevent malfunctions.

# HOW CAN WE ENHANCE THE WATERSHED?



## At Home You Can...

- Plant native trees and shrubs. Leave a natural buffer area between your yard and water bodies. At the very least, have a “no mow zone” along the water’s edge.
- Use environmentally friendly products to clean and maintain your home, car, cottage, or boat.
- Store agricultural manure away from creeks and ditches, preventing nutrients from being carried away from your property during rain events.
- Take your family on a hike in one of NBMCA’s 15 Conservation Areas to appreciate what our natural environment has to offer!

## At Work You Can...

- Start the conversation about the Watershed Report Card.
- Initiate and/or support eco-friendly best practises.
- Coordinate a volunteer initiative to support a local environmental group or initiative.
- Fundraise to support an environmental not-for-profit organization.

## In the Community You Can...

- Stay on trails when hiking, keep your dogs on a leash, and scoop the poop!
- Support your community’s clean-up initiatives.
- Inspect and clean boats and trailers before and after visiting lakes or rivers to prevent invasive species from escaping into our waterways.
- Report and remove invasive plant species to prevent spread.  
<https://www.ontario.ca/page/managing-invasive-species-ontario>



*Do you have questions not answered by this summary document?  
Visit [nbmca.ca](http://nbmca.ca) for the "Explanatory Document" or  
contact NBMCA for more information:*

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*The 2023 Watershed Report Card is available online and in other formats upon request.  
Learn more about the health of Ontario's watersheds. Visit [watershedcheckup.ca](http://watershedcheckup.ca)*

Ten member municipalities - City of North Bay, Municipality of Callander, Municipality of Calvin, Municipality of East Ferris, Municipality of Mattawan, Municipality of Powassan, Town of Mattawa, Township of Bonfield, Township of Chisholm, Township of Papineau-Cameron



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# 2023 Watershed Report Card Explanatory Document

Completed by Angela Mills

March 2023



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**Alternative Formats:** If you require this document in an alternative format, please contact the North Bay-Mattawa Conservation Authority (NBMCA) at [nbmca@nbmca.ca](mailto:nbmca@nbmca.ca) or 705-474-5420.

Cover photo taken by A. Mills at Johnson Creek, Laurentian Escarpment Conservation Area

## Overview

The purpose of the Watershed Report Card is to report on the health of Ontario’s watersheds using a set of key environmental indicators with a focus on local conditions. Conservation Authorities across Ontario collaborate with Conservation Ontario to publish Watershed Report Cards every five years.

The purpose of this explanatory document is to provide an explanation on how the reported grades were calculated, explain the grades presented in the 2023 Watershed Report Card for the North Bay-Mattawa Conservation Authority, highlight the changes since the 2018 Watershed Report Card, and review known data gaps. Guidelines for watershed report cards were developed by Conservation Ontario (2022) in partnership with the 36 Conservation Authorities in Ontario.

## Grading methods

There are four types of environmental resources that are included in Watershed Report Cards: surface water (streams, rivers, and lakes), groundwater, forests, and wetlands. The indicators used and their grading systems are outlined in Table 1.

**Table 1: Watershed Report Card grading breakdown by indicator.**

Grade	Streams & Rivers		Lakes	Groundwater		Forests			Wetlands
	Total Phosphorus (mg/L)	Benthic Macroinvertebrate (Family Biotic Index)	Total Phosphorus (mg/L)	Nitrite+ Nitrate (mg/L)	Chloride (mg/L)	Forest Cover (%)	Forest Interior (%)	Forested Riparian (%)	Wetland Cover (%)
A	< 0.020	0.00-4.25	< 0.010	≤ 2.5	≤ 62.5	> 75.0	> 11.5	>57.5	> 11.5
B	0.020-0.030	4.26-5.00	0.010-0.020	2.6-5	62.5-125.0	65.1-75.0	8.6-11.5	42.6-57.5	8.6-11.5
C	0.031 – 0.060	5.01-5.75	0.020-0.040	5.1-7.5	125.1-187.5	55.1-65.0	5.6-8.5	27.6-42.5	5.6-8.5
D	0.061 – 0.180	5.76-6.50	0.040-0.050	7.6-10.0	187.6-250.0	45.1-55.0	2.5-5.5	12.5-27.5	2.5-5.5
F	> 0.180	6.51-10.00	> 0.050	> 10.0	> 250.0	< 45.1	< 2.5	< 12.5	< 2.5

The overall grades in the 2023 Watershed Report Card (WRC) are B (Good) for surface water resources (streams, rivers, and lakes) and A (Excellent) for groundwater, forest, and wetland resources. These results reflect the conditions based on the specific data periods mentioned below. Noted changes in this document are compared to the grades from the 2018 WRC. Long-term trends have not been evaluated.

## Stream & River Water Quality

Indicators from the Conservation Ontario (2022) guidelines for surface water reflect key issues of nutrients (total phosphorus; TP) and aquatic health (benthic macroinvertebrates; BMI). Chloride is an emerging concern and is analyzed and described in the 2023 WRC but has not yet been incorporated into grading system. Data included in the 2023 WRC were collected between 2017 and 2021. Due to the pandemic, no samples were collected in 2020.

Routine sampling for stream and river chemistry occurs monthly April through November each year by NBMCA staff as part of the Provincial Water Quality Monitoring Network (PWQMN), in partnership with the Ministry of Environment, Conservation and Parks (MECP). Sampling expanded in 2017 with the reactivation of a PWQMN station, and again in 2018, adding nine NBMCA stations for TP sampling. Chloride

results are available historically from the seven PWQMN stations only. Chloride sampling began in 2022 at the 12 NBMCA stations and results will be included in the next WRC.

The 75<sup>th</sup> percentile is the point where 75 % of data are lower and 25 % are higher than that value. The 75<sup>th</sup> percentile is used for TP and chloride analyses, based on the Conservation Ontario (2022) guidance document. It is used because samples are more often collected during dry weather which may not capture conditions that could result in higher TP or chloride levels (e.g., during or immediately after large storm or snow melt events, which can flush nutrients or contaminants from the landscape into the streams and rivers). The 75<sup>th</sup> percentiles of available data over the five-year period (2017-2021) were used to compare to the WRC grading system for TP (see Table 1) or the Canadian Water Quality Guidelines for the Protection of Aquatic Life for long-term (120 mg/L) and short-term (640 mg/L) chloride exposure<sup>1</sup>. For TP, 0.03 mg/L is the threshold to eliminate excessive plant growth in rivers and streams, based on the Ontario Provincial Water Quality Objective<sup>2</sup>.

Benthic macroinvertebrates (BMI) are the creatures living in the streambed, have no spine, and are large enough to be seen without magnification. They include insects and their larvae, molluscs, worms, etc. BMI are a good indicator of aquatic health over long-term conditions because they are not very mobile in the streams and different types of BMI have different tolerance levels for water quality. BMI samples are collected in the spring and identified to family level taxonomy using a microscope. This is the first NBMCA WRC where BMI data was analyzed for the grades. Historically, only one subwatershed had been sampled for BMI; now, results from 10 subwatersheds are included (see Table 4). Where possible, BMI are collected from the same stations as water chemistry sampling, but not all of these sites are suitable for BMI sampling (i.e., too deep or fast to sample safely). Some stations are sampled every year and others on a rotational basis. The WRC guidelines use a Family Biotic Index, combining the number of individual BMI from each family with their known tolerance value, scored from 0 (extremely sensitive/high quality) to 10 (not sensitive/low quality). Grade intervals are based on Hilsenhoff (1998) water quality thresholds. In slow moving water such as the Kaibuskong River, aquatic health may appear lower with this index.

The subwatershed grades for stream and river water quality are calculated by averaging the individual grades for TP and BMI where both datasets are available. The overall NBMCA watershed grade is a weighted average based on watershed size (i.e., grades in larger subwatersheds have a stronger influence than grades in smaller subwatersheds).

## Lake Water Quality

Nutrients such as total phosphorus (TP) are an indicator of lake health. TP reflects the natural geology, human disturbance, and headwater (source area) water quality. High concentrations of TP can cause excessive plant and algae growth and contribute to blue-green algae blooms in lakes. TP is sampled in partnership with the provincial Lakes Partner Program (LPP). Many of the lakes included in this report were sampled by NBMCA staff, but some were sampled by other LPP partners.

TP concentrations are generally higher in spring than through the summer, therefore only spring TP results are included in the grading calculations. Spring sampling is collected generally two to three weeks after the ice melts from the lakes and while the water column is mixed. Only the first sample of the year taken

<sup>1</sup> [https://sustainabletechnologies.ca/app/uploads/2014/05/CWQG\\_chlorides.pdf](https://sustainabletechnologies.ca/app/uploads/2014/05/CWQG_chlorides.pdf)

<sup>2</sup> <https://www.ontario.ca/page/lakeshore-capacity-assessment-handbook-protecting-water-quality-inland-lakes-ontarios-precambrian#section-1>

on or before May 31<sup>st</sup> is included in the Watershed Report Card grade analysis. Spring TP concentrations are generally higher than through the summer, though both Wasi Lake and Callander Bay have had higher concentrations in the late summer. Data included in the 2023 WRC were collected between 2017 and 2019. Due to the pandemic, no samples were collected in 2020. Samples collected in 2021 did not meet the May 31<sup>st</sup> cut-off date for inclusion.

If there is more than one station on a lake (e.g., Trout Lake has eight stations, Lake Nosbonsing has seven stations, and other lakes each have one to three stations), results from all stations are averaged for each year, and then averaged across years when sampled in multiple years in the five-year reporting period. Trout Lake, Callander Bay, Wasi Lake, and Lake Nosbonsing have been sampled annually. Other area lakes are sampled on a rotational basis and may have only one year of data reported in the 2023 WRC.

Provincial Water Quality Objectives for TP in lakes are < 0.01 mg/L to provide a high level of protection against aesthetic deterioration and <0.02 mg/L to avoid nuisance algae growth for the ice-free period<sup>3</sup>. The overall watershed grade is weighted based on lake size (i.e., grades in larger lakes have a stronger influence than grades in smaller lakes).

### Groundwater Quality

Groundwater is an important resource that is used by many watershed residents for water supply. There are six Provincial Groundwater Monitoring Network wells in the NBMCA watershed (see Table 2). Water level is monitored at all six wells. Water quality sampling is done at four of these wells; the other two wells are not sampled due to location and technical configuration.

**Table 2: Monitoring well overview.**

Well Name	Location	Depth (m)	Sample Frequency
W272-1	City of North Bay	25.3	Not sampled
W274-1	City of North Bay	5.2	Every year
W277-1	City of North Bay	10.0	Every year
W390-1	Township of Chisholm	140.8	Not sampled
W391-1	Township of Bonfield	73.8	Every 2 years
W392-1	City of North Bay	86.0	Every 2 years

Groundwater quality can vary greatly with distance between wells and with depth, especially in different aquifers (the water-bearing layers in the soil and bedrock). Findings presented here may not be representative of water quality at other wells in this area. Pathogens such as *Escherichia coli* (*E. coli*) are not included in this testing.

The indicators analyzed for groundwater quality are the 75<sup>th</sup> percentile of nitrate+nitrite (reported together from the MECP lab) and chloride concentrations. Groundwater wells are sampled up to once per year and a 10-year sample period (2012-2021) is used for the 2023 WRC. No samples were collected in 2020 due to the pandemic.

<sup>3</sup> <https://www.ontario.ca/page/lakeshore-capacity-assessment-handbook-protecting-water-quality-inland-lakes-ontarios-precambrian#section-1>

The grading system is based on the Ontario Drinking Water Quality Standards. High nitrate causes health problems, and its Maximum Allowable Concentration for drinking water is 10 mg/L<sup>4</sup>. High chloride can damage plumbing systems and the aesthetic objective for chloride is ≤ 250 mg/L<sup>5</sup>. Grades for both indicators have been evenly distributed through this range (see Table 1). The overall grade is averaged based on the results from the 4 wells.

## Forest Condition

Forests provide resiliency to climate change. They help improve air quality, protect biodiversity, prevent soil erosion, mitigate flooding, and regulate ecosystems. To characterize forest conditions, three indicators have been used: overall percent forest cover of each subwatershed, percent forest interior, and percent of forested riparian zone. To be included, a forest must be more than 0.5 ha in size. Windbreaks, urban street trees, shrublands, thickets, and newly maturing woodlands or plantations do not count as forest cover for the purposes of the WRC. Interior forest is the portion of a forest that is more than 100 m from the forest edge and is a habitat indicator of whether the forest is continuous or broken into smaller pieces across the landscape. Forested riparian zone is an indicator of natural vegetation within 30 m of lakes, rivers, and streams, and the protection it provides.

Environment Canada's (2013)<sup>6</sup> *How Much Habitat is Enough?* publication provides targets of 30 % forest cover in Southern Ontario which would not be a suitable target in Northern Ontario. An alternate grading system was developed for use in Northern Ontario, placing 70 % in the middle of the grade B range. The Environment Canada (2013) report also targets 10 % forest interior to support species habitat requirements, which is placed in the middle of the grade B range. It also recommends 75 % of stream length be naturally vegetated, and this is typically split between 50 % forest cover and 25 % marsh, meadow, and thicket in healthy systems. This 50 % forest cover is the target placed in the middle of the grade B range for forested riparian cover. These three indicators are averaged to calculate the Forest Condition grade for each subwatershed.

The forest indicators are calculated using the best available Geographic Information System (GIS) data from the Provincial Land Cover database<sup>7</sup>. The available Provincial Land Cover GIS layers for this area have not been updated since 2000. The watershed grade is based on overall forest conditions.

## Wetland Cover

Wetlands provide nature-based solutions for climate change. They are an important landscape feature, providing diverse habitat, improving water quality, and help protect land from flooding. Wetlands are special areas that cross the boundary between aquatic (i.e., lakes or ponds, and rivers or streams) and upland terrestrial landscapes, including marshes, swamps, bogs, and fens. Swamps, thickets, and closed bogs are wetlands dominated by trees and are also included in the forest cover indicators. Wetland cover

<sup>4</sup> <https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidelines-canadian-drinking-water-quality-guideline-technical-document-nitrate-nitrite/page-2-guidelines-canadian-drinking-water-quality-guideline-technical-document-nitrate-nitrite.html#a3>

<sup>5</sup> <https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidelines-canadian-drinking-water-quality-guideline-technical-document-chloride.html>

<sup>6</sup> <https://publications.gc.ca/site/eng/9.652667/publication.html>

<sup>7</sup> <https://geohub.lio.gov.on.ca/documents/lio::provincial-land-cover/about>

is calculated using the best available GIS information. A wetland delineation project in 2018 improved mapping based on refined wetland boundaries.

Environment Canada (2013)<sup>8</sup> recommends restoring wetlands to 6 % of subwatersheds and 10 % of major watersheds, or to 40 % of the historical percent of wetlands of the landscape. Landscapes dominated by steep and hilly terrain may naturally have lower wetland cover compared to lower, flat landscapes. The 10 % target is used as the middle of the grade B range. The watershed grade is based on overall wetland cover.

## Subwatershed Grade Overview

The grades are provided by subwatershed and by indicator in Table 4. This table also provides:

- the name of the body of water or groundwater well where samples are collected,
- the number of years of data for each indicator and station,
- the 75<sup>th</sup> percentile concentration of chloride, phosphorus, and nitrate+nitrite,
- the BMI Family Biotic Index value,
- the percent land cover for forest and wetland indicators, and
- the resulting letter grade, based Table 1 (duplicated below as Table 3 for convenience).

**Table 3: Watershed Report Card grading system by indicator. Duplicated from Table 1.**

Grade	Streams & Rivers		Lakes	Groundwater		Forests			Wetlands
	Total Phosphorus (mg/L)	Benthic Macroinvertebrate (Family Biotic Index)	Total Phosphorus (mg/L)	Nitrite+Nitrate (mg/L)	Chloride (mg/L)	Forest Cover (%)	Forest Interior (%)	Forested Riparian (%)	Wetland Cover (%)
A	< 0.020	0.00-4.25	< 0.010	≤ 2.5	≤ 62.5	> 75.0	> 11.5	>57.5	> 11.5
B	0.020-0.030	4.26-5.00	0.010-0.020	2.6-5	62.5-125.0	65.1-75.0	8.6-11.5	42.6-57.5	8.6-11.5
C	0.031 – 0.060	5.01-5.75	0.020-0.040	5.1-7.5	125.1-187.5	55.1-65.0	5.6-8.5	27.6-42.5	5.6-8.5
D	0.061 – 0.180	5.76-6.50	0.040-0.050	7.6-10.0	187.6-250.0	45.1-55.0	2.5-5.5	12.5-27.5	2.5-5.5
F	> 0.180	6.51-10.00	> 0.050	> 10.0	> 250.0	< 45.1	< 2.5	< 12.5	< 2.5

<sup>8</sup> <https://publications.gc.ca/site/eng/9.652667/publication.html>

Table 4: 2023 Watershed Report Card grade by indicator and subwatershed. Letter grades provided in brackets.

Subwatershed	Stream & River Water Quality								Lake Water Quality			Groundwater Quality				Forest Condition				Wetlands
	Stream or River Name	No. years	Chloride (mg/L)	No. years	Total Phosphorus (mg/L)	No. years	Benthic Macroinvertebrate (Family Biotic Index)	Overall Grade <sup>9</sup>	Lake Name	No. years	Total Phosphorus (mg/L)	Well ID	No. years	Nitrate+Nitrite (mg/L)	Chloride (mg/L)	Forest Cover (%)	Forest Interior (%)	Forested Riparian Zone (%)	Overall Grade <sup>10</sup>	Wetland Cover (%)
Amable Du Fond River	Amable Du Fond River	4	1.76 (<long-term)	4	0.0124 (A)			A							85.6 (A)	71.5 (A)	83.5 (A)	A	10.2 (B)	
Boom Creek	Boom Creek			3	0.0105 (C)	1	5.52 (C)	C							93.0 (A)	75.8 (A)	90.3 (A)	A	14.9 (A)	
Burford Creek	Burford Creek			3	0.0410 (C)	1	5.60 (C)	C							91.1 (A)	72.5 (A)	83.1 (A)	A	21.1 (A)	
Callander Bay/South Shore									Callander Bay	3	0.0203 (C)				74.4 (B)	40.2 (A)	62.9 (A)	A	26.1 (A)	
Chippewa Creek	Chippewa Creek	4	103.50 (<long-term)	4	0.0273 (B)	4	6.31 (D)	C	Delaney Lake	1	0.0361 (C)	W277-1	8	1.89 (A)	17.90 (A)	49.9 (D)	21.3 (A)	51.9 (B)	B	8.3 (C)
Duchesnay Creek	Duchesnay Creek	4	18.15 (<long-term)	4	0.0255 (B)			B							87.6 (A)	66.7 (A)	82.5 (A)	A	17.1 (A)	
Jessups Creek	Jessups Creek			3	0.0920 (D)			D							80.1 (A)	53.5 (A)	90.6 (A)	A	31.2 (A)	
Kaibuskong River	Kaibuskong River	4	6.21 (<long-term)	4	0.0209 (B)	1	5.76 (D)	C	Lake Nosbonsing	3	0.0154 (B)				75.9 (A)	56.2 (A)	73.5 (A)	A	11.2 (B)	
La Vase River	La Vase River	4	29.80 (<long-term)	4	0.0489 (C)			C							80.7 (A)	53.8 (A)	76.1 (A)	A	17.5 (A)	
Lake Nipissing Shoreline/North Bay									Lake Nipissing	1	0.0111 (B)				39.3 (F)	23.5 (A)	53.5 (B)	C	15.2 (A)	
Lake Talon									Lake Talon	2	0.0110 (B)				83.8 (A)	69.5 (A)	80.9 (A)	A	5.4 (D)	
Mattawa River	Mattawa River	4	4.20 (<long-term)	4	0.0132 (A)			A	Earl's Lake	1	0.0177 (B)								A	5.8 (C)
									Chant Plein Lake	1	0.0131 (B)									
									Taggart Lake	1	0.0176 (B)									
North River	Balsam Creek			3	0.0193 (A)			A							94.5 (A)	78.7 (A)	91.1 (A)	A	8.0 (C)	
	North River			3	0.0204 (B)	1	4.86 (B)													
Parks Creek	Parks Creek			3	0.0345 (C)	1	6.71 (F)	D	Circle Lake	1	0.0141 (B)	W274-1	8	0.95 (A)	8.30 (A)	58.7 (C)	27.7 (A)	62.4 (A)	B	19.0 (A)
									Depensiers Lake	1	0.0178 (B)									
Pautois Creek	Pautois Creek			3	0.0255 (B)	1	4.39 (B)	B	Papineau Lake	2	0.0083 (A)				89.1 (A)	74.3 (A)	84.0 (A)	A	10.1 (B)	
Sharpes Creek	Sharpes Creek			3	0.0250 (B)	1	4.98 (B)	B				W391-1	4	0.07 (A)	1.45 (A)	86.8 (A)	72.4 (A)	85.9 (A)	A	9.1 (B)
Trout Lake	Four Mile Creek			3	0.0195 (A)	1	4.57 (B)	B	Four Mile Lake	1	0.0082 (A)	W392-1	5	0.05 (A)	14.00 (A)	69.8 (B)	46.9 (A)	68.2 (A)	A	8.7 (B)
	Lees Creek			1	5.86 (D)	Trout Lake	3		0.0053 (A)											
Turtle Lake									Pine Lake	1	0.0072 (A)								A	12.5 (A)
									Turtle Lake	1	0.0062 (A)									
Windsor/Boulder/Bear Creeks	Bear Creek			3	0.0640 (D)			C							83.6 (A)	59.7 (A)	79.4 (A)	A	22.3 (A)	
	Boulder Creek			3	0.0585 (C)															
	Windsor Creek			3	0.0385 (C)															
Wistiwasing (Wasi) River	Wasi River	4	5.47 (<long-term)	4	0.0436 (C)	1	5.79 (D)	C	Wasi Lake	3	0.0205 (C)				78.6 (A)	59.6 (A)	76.3 (A)	A	15.2 (A)	

<sup>9</sup> Overall stream water quality grade averages Total Phosphorus (TP) and benthic macroinvertebrates grades, where both are available. If more than one stream was sampled in a subwatershed, grades were averaged by indicator category before averaging to get overall grade. Chloride is not included in overall grades but is compared to long-term and short-term Canadian Water Quality Guidelines for the Protection of Aquatic Life.

<sup>10</sup> Overall Forest Condition averages the three indicator category grades.

## Changes in results since the 2018 Watershed Report Card

The following summarizes notable changes in subwatershed grades between the 2018 and 2023 Watershed Report Cards (WRC). Long-term trends have not been statistically evaluated.

### Stream & River Water Quality

- Since the 2018 WRC, 10 stations have been added on Parks Creek, Jessups Creek, La Vase River, Boulder Creek, Bear Creek, North River, Balsam Creek, Sharpes Creek, Pautois Creek, and Boom Creek. This has helped to fill data gaps.
- Total phosphorus (TP) levels in Chippewa Creek improved from 0.043 mg/L (grade C in 2018 WRC) to 0.027 mg/L (grade B in 2023 WRC). For the 2023 WRC, benthic macroinvertebrate (BMI) data (grade D) was included. When considering both TP and BMI data, the subwatershed grade remains at C.
- Total phosphorus (TP) levels in the Trout Lake subwatershed (sampled at Four Mile Creek) remained at 0.019 mg/L (grade A for both 2018 and 2023 WRC). For the 2023 WRC, benthic macroinvertebrate (BMI) data for Four Mile Creek (B) and Lees Creek (D) was included. When considering both TP and BMI data, the subwatershed grade decreases to B.
- Total phosphorus (TP) levels in the Kaibuskong River increased from 0.016 mg/L (grade A in 2018 WRC) to 0.021 mg/L (grade B in 2023 WRC). For the 2023 WRC, benthic macroinvertebrate (BMI) data (grade D) was included. When considering both TP and BMI data, the subwatershed grade decreased to C. Note in slow moving water such as the Kaibuskong River, aquatic habitat may appear lower in quality with the BMI indicator.
- The grade for Windsor/Boulder/Bear Creeks subwatershed was previously based only on samples from Windsor Creek. In Table 4 above, the results for each of the three creeks is shown. The results for these creeks are averaged for the subwatershed grade in the 2023 WRC and remains at C.
- The overall watershed grade for stream and river water quality decreased from an A (based only on TP in the 2018 WRC) to B (in the 2023 WRC considering both TP and BMI). This change is mainly due to the 10 additional stations sampling for TP.

### Lake Water Quality

- Since the 2018 WRC, five additional stations were added on Lake Nipissing, Pine Lake, Taggart Lake, and Lake Chant Plein for a more comprehensive picture of watershed lake quality. These stations were sampled by NBMCA staff. Other Lake Partner Program (LPP) participants sampled Delaney Lake, Circle Lake, and Depensiers Lake. Four Mile Lake, Lake Talon, and Papineau Lake were sampled by both NBMCA staff and other LPP partners in different years.
- Kawawaymog Lake and Smith Lake were graded in the 2018 WRC and have been sampled since 2017 but did not meet the May 31<sup>st</sup> spring cut-off for inclusion in the 2023 WRC.
- TP levels in Callander Bay increased from 0.017 mg/L (grade B in 2018 WRC) to 0.020 mg/L (grade C in 2023 WRC)
- TP levels in Papineau Lake decreased from 0.014 mg/L (grade B in 2018 WRC) to 0.008 mg/L (grade A in 2018 WRC)
- The overall grade for watershed lakes was “B+” in 2018. For consistency with other WRC grading systems, the “+” or “-” has been removed. Overall grade for watershed lakes the 2023 WRC remains B.

## Groundwater Quality

- No changes in grades; grade remains A.

## Forest Condition

- No changes in grades; grade remains A.

## Wetland Cover

- All changes in grades since the 2018 WRC are from improved wetland detection and watershed boundary mapping rather than changes to the landscape. Note the landscape in subwatersheds such as North River, Lake Talon, and Mattawa River is rural with lakes and vast hilly regions of higher elevation. Their grades reflect natural landscape condition rather than human influence.
- Amable du Fond River subwatershed grade increased from C to B.
- Chippewa Creek subwatershed grade decreased from B to C.
- Lake Talon subwatershed grade decreased from C to D.
- Mattawa River subwatershed grade increased from D to C.
- Trout Lake subwatershed grade increased from C to B.
- Turtle Lake subwatershed grade increased from B to A.
- Overall watershed grade for wetland cover increased from B to A.

## Watershed Data Opportunities

Understanding watershed conditions depends on the quality and quantity of available data. In turn, it is prudent to identify opportunities for improvements in sampling and therefore data collection. Relevant observations are provided below.

### Stream & River Water Quality

- Spatial gaps in total phosphorus data were considerably reduced in 2017 and 2018 by adding 10 sample stations. The following may further enhance spatial coverage:
  - Stations in the Callander Bay/South Shore subwatershed were sampled until 2016 and included in the 2018 WRC. The focus at the time was primarily Cranberry Creek, which is influenced by the sewage lagoons and not representative of the subwatershed. It is recommended that new stations be identified to help represent the Callander Bay/South Shore subwatershed.
  - The Trout Lake subwatershed grade is based mostly on data from Four Mile Creek which may not be representative of the other streams flowing into Trout Lake. Additional stations on streams feeding into Trout Lake would support analysis of subwatershed conditions.
  - Currently, there are no sample stations on inflowing streams to the Turtle Lake and Lake Talon subwatersheds due to a lack of road access. The opportunity to add sample stations can be examined in the future. Note that although the North River, Kaibuskong River, and Sharpes Creek flow into Lake Talon, they are not included in the Lake Talon subwatershed and are reported on separately in the 2023 WRC.
- Currently, most BMI stations are rotational and only have one sample year in the five-year period. It would be ideal if one station per subwatershed were sampled every year.

## Lake Water Quality

- Some of the lakes included in the 2023 WRC were sampled by other partners of the Ontario Lakes Partner Program (LPP) and when available, this data is included. These lakes may not be routinely sampled. NBMCA will continue partnership with LPP and review opportunities for additional lake sampling.
- Total phosphorus in the water column is expected to be highest when the lake is mixed, generally two to three weeks after the ice melts in the spring. Sampling completed by May 31<sup>st</sup> of that year is included in the WRC as spring data. A comparison of sample timing relative to ice melt and the influence on laboratory results can be examined in the future.

## Groundwater Quality

- There are currently four groundwater monitoring wells sampled across the NBMCA watershed, and three of these are within the City of North Bay. In order to reflect the broader watershed conditions, the addition of more monitoring wells could be explored in partnership with the Province of Ontario and municipalities.

## Forest Conditions

- The best available Geographic Information System (GIS) information available from the Province of Ontario for the NBMCA watershed has not been updated since 2000. Should the funding opportunity arise, satellite orthoimagery can be reviewed and the mapping can be updated manually.

## Wetland Cover

- The 2018 wetland delineation project improved wetland detection and the accuracy of mapped wetland boundaries. A comparison to the historical wetland cover changes through time can be made in a future project.
- The wetland cover WRC grading system was developed with consideration for the Southern Ontario landscape, where many of the naturally occurring wetlands have been lost to agriculture and urbanization. The grading system may not reflect subwatersheds that are naturally low in wetland cover due to landscape topography. A separate methodology could be developed through the provincial working group.

## Acknowledgements

Angela Mills, Water Resources Specialist at the NBMCA, is the primary author of this document and the NBMCA 2023 Watershed Report Card. Shawn Kozmick, Paula Loranger, Sue Buckle, and Chitra Gowda are acknowledged for their significant contributions. As well, current and former NBMCA staff are appreciated for their monitoring efforts.

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

**ORIGIN:** Troy Storms, Manager Lands & Stewardship

**DATE:** February 22, 2023

**SUBJECT:** Land Transfer – Kate Pace Way

**Background:**

The Kate Pace Way is a twelve-kilometre pathway, named in honour of Olympic skier Kate Pace. This paved surface pathway is a multi-use recreational trail for walking, jogging, cycling, and inline skating, and is intended for shared use. The popular, well used pathway winds through a variety of environments including sections surrounded by trees, streams, and nature, roadways, and residential areas as well as North Bay’s waterfront. The Kate Pace Way is also recognized as part of the “Great Trail” (Trans Canada Trail) and is part of the active transportation corridor between Callander and the City of North Bay. The lands on which the Kate Pace Way trail is located are owned mostly by NBMCA with a small portion owned by Callander Bay Development in the vicinity of Cranberry Road.

The lands from Gibson Road in North Bay to Cranberry Road in Callander were purchased by NBMCA in October 1999 from The Canadian Pacific Railway company (CPR). The last 600 metres of trail included in the purchase and sale was underwater and currently still is. To have a recreational trail for users and to utilize the property for a recreational purpose, NBMCA and Callander Bay Developments came to a verbal agreement to use a portion of Callander Bay Development lands which was dry and flat. At the time, the agreement allowed trail users to easily get to Cranberry Road and construction began soon after.

NBMCA completed the construction of the Kate Pace Way trail to Cranberry Road within Callander Bay Developments land. In turn the verbal agreement was expanded to include that: golf carts would be permitted to travel along the Kate Pace Way between Osprey Links golf course and Pinewood Hotel and Resort Golf Club for tournaments from time to time.

Early in December 2022, NBMCA was approached by Miller & Urso Surveying Inc., a representative of Callander Bay Development. Miller & Urso indicated that Callander Bay Development is prepared to transfer the 66-foot-wide old rail line of the Kate Pace Way to NBMCA. In return, NBMCA would transfer the underwater portion to Callander Bay Development as a land exchange.

Callander Bay Developments Lands – NBMCA Kate Pace Way Lands



This 66-foot-wide parcel referred to as “existing Kate Pace Way” depicted on the map above (yellow dotted line), will have no title encumbrances, liens or easements, no claim to right to use the property with Callander Bay Developments. The parcel to be obtained by NBMCA is considered narrow at 66’ and will not support future housing development.

**Analysis:**

The costs for the transfer of land from Callander Bay Development to NBMCA are reflected in the table below. There are considerable savings in transferring these lands to the NBMCA compared to purchasing the lands in the future.

Table 1: Estimated Cost to NBMCA for the Kate Pace Way trail land transfer from Callander Bay Development

<b>Item</b>	<b>Estimated cost of land transfer</b>	<b>Estimated cost of land purchase</b>
Purchase Parcel from Calendar Bay Developments	\$0	100,000.00
Surveyor – ground truthing evidence gathering create plan, install survey monuments, prepare refence plan,	\$6900.00	\$6900.00
Consent application for CNB	\$2800.00	\$2800.00
Application hearing fees	\$750.00	\$750.00
Legal solicitor transfer fees – Purchase and sale documents, legal transfer	\$3300.00	\$3300.00
<b>Total (not including hst)</b>	<b>\$13,750.00</b>	<b>*\$113,750.00</b>
*Saving to NBMCA is estimated to be \$100,000.00 by a land transfer		

There are considerable cost savings to the NBMCA with this land transfer as noted above. Additionally, all current infrastructure that is in place will also be transferred as part of the existing trail.

NBMCA and citizens within the NBMCA’s watershed jurisdiction can be assured that the property will become part of NBMCA Conservation Areas Land holdings and provide continued recreational opportunities for years to come.

**Recommendation:**

That staff utilize the lands Acquisition Reserve funds to pay for the services outlined above and to begin initiating the Land Transfer process with Miller & Urso Surveying Inc.

**Recommended Resolution:**

**THAT** NBMCA staff move forward to obtain legal ownership as described in this report, and to complete the land transfer with Callander Bay Developments using the NBMCA solicitor.

**Submitted by:**

**Troy Storms, Manager Lands & Stewardship**

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

**REPORT # 4  
04-22-2023**

**ORIGIN:** Chitra Gowda, Chief Administrative Officer, Secretary Treasurer and  
Helen Cunningham, Manager, Finance and Human Resources

**DATE:** February 22, 2023

**SUBJECT:** Budget 2023

**Background:**

Per the preliminary capital budget and draft budget reports presented to the Board at its December 2022 and January 2023 meetings, staff met the Executive Committee at two meetings in February 2023 to prepare the annual budget in time for the February 2023 Board meeting. The Executive Committee provided guidance and recommendations to staff and as a result, Budget 2023 is presented through this Report.

Note that the recent changes to the Conservation Authorities Act result in a categorization of programs and services into:

- **Category 1:** Mandatory programs and services (including plan input and review, Section 28 permits, drinking water source protection)
- **Category 2:** Municipal programs and services (i.e. CA provides on behalf of the municipality)
- **Category 3:** Other programs and services.

For the 2024 year, the development of the annual budget and apportionment will follow O. Reg. 402/22 (which comes into force on July 1, 2023) under the Conservation Authorities Act.

**Analysis:**

Below is a review of NBMCA reserve accounts, 2022 surplus and deferred revenue.

**Table 1: Reserve Accounts as of 2022 Year End (Unaudited)**

<b>Reserve Account</b>	<b>Amount</b>
NBMCA Lands Capital - Acquisition Reserve	\$76,781
NBMCA Onsite Sewage System (OSS) Reserve <i>(only for OSS program use per the Building Code Part 8)</i>	\$464,461
<b>NBMCA Reserves</b>	<b>\$541,242</b>
Laurentian Snowboarding Club and Ski Hill Operating	\$64,592
Laurentian Snowboarding Club and Ski Hill Capital	\$90,875
<b>Ski Hill Reserves</b>	<b>\$155,467</b>

**Table 2: Deficit & Surplus 2022 (Unaudited)**

Type	Type	Amount
Deficit	In the flood control, erosion control, administration, water quality programs (Oak Street underpass pumps ops, property maintenance, repairs, hydro, taxes, insurance, wages, etc.)	\$29,272
Surplus	Compared to 2022 expenses	\$52,134
	<b>Net available for the 2023 budget</b>	<b>\$22,862</b>

**Table 3: Deferred Revenue (Unaudited)**

Program	Amount available for 2023*
Ice Management (operations)	\$4,250
Central Services (capital)	\$45,235
Lands and Properties (capital)	\$166,239
Water and Erosion Control Infrastructure (WECI) (capital)	\$488,540
S.28 Development, Interference, Alteration (DIA) (capital)	\$96,056
Integrated Watershed Management (IWM) (capital)	\$112,278
NBMCA Onsite Sewage System (OSS)	\$85,000

\*For ongoing, multi-year capital and special projects and operations for the respective program

In order to maintain municipal levy increases at 3%, it becomes necessary to use available revenue sources including reserves, surplus and deferred revenue. As well, non-mandatory watershed monitoring will be paused in 2023 to allow staff to analyze long term data trends and also to assist with the new legislated deliverable: Watershed Based Resource Management Strategy. The mandated monitoring programs including Provincial Water Quality Monitoring and Provincial Groundwater Monitoring will continue as legislated.

As discussed at the February 2023 Executive Committee meetings, the following updates are made in the Budget 2023 for clarity:

- A new capital budget account is added to distinguish the mortgage principal repayment amounts from other expenses, based on advice from the auditor.
- The ski hill operating account that has been in place is now shown in the budget book.
- An updated Onsite Sewage System (OSS) Program fee schedule for 2023 will be posted upon Board approval.

The OSS program fees are proposed to be increased as shown in the table below. There were no fee increases made in 2021-2022. Note that the Minister's fee freeze does not apply to the OSS program, which is carried out by NBMCA under the Building Code Act.

**Table 4: Onsite Sewage System (OSS) Program Fee schedule 2023**

<b>NBMCA Onsite Sewage System (OSS) Program Activity Type</b>	<b>2021-2022 Fee</b>	<b>Proposed 2023 Fee</b>
Class 2	540	560
Class 3	540	560
Class 4/5 <3K flow	920	960
Class 4/5 >3k flow	1000	1100
Non residential	1000	1100
Alternative Solutions	1200	1300
Tank only	400	425
Decommission	155	160
Change of Owner	100	125
Permit Extension	165	175
Amendment	165	175
Conditional Notice of Completion	165	175
Additional Inspection due to deficiencies	165	200
Ontario Building Code (OBC) Clearance	100	150
OBC Clearance with site inspection	260	300
Copy of permit	90	90
Legal inquiry (lawyer real estate)	160	175
File Review with Permit provided by owner	180	200
Additional fee for copy of use permit (File Review + price of permit)	270	290
Planning Act review (\$200 for application, plus \$100 for each additional lot, min. \$300. For lots >4ha, \$200)	300	400
Planning - no inspection	200	200
Subdivision Vacant Land Condo 10 lots	1200	1300
Additional lots	60	75
Review of lands to be sold or developed	270	300
Review lands to be sold developed with DIA permit	560	560
Mandatory Maintenance Inspection (MMI)	140	140
Late fee for MMI	50	50

## Budget 2023

The 2023 Budget document contains details for the NBMCA planned operations and capital activities. The 2023 Budget has been set at \$4,708,635 which includes:

- A general levy of \$904,756 to all member municipalities;
- A sole-benefitting levy of \$767,450 to the City of North Bay (which includes \$60,000 to support the Laurentian Ski Hill's operating costs); and
- A sole-benefitting levy of \$30,000 to the Municipality of Callander (floodplain mapping).

Further, the Laurentian Ski Hill requests NBMCA member municipalities for an annual amount of \$65,000 to help support the ski hill's capital costs.

To apportion the general levy (and to estimate the ski hill's request for capital cost) to the 10 member municipalities, the Modified Current Value Assessment (MCVA) provided by the Ontario Ministry of Natural Resources and Forestry (MNRF) is used. The budget results in a 3% increase in general levy and a portion of the sole-benefitting levy compared to 2022. See the table below for levy apportionment by municipality.

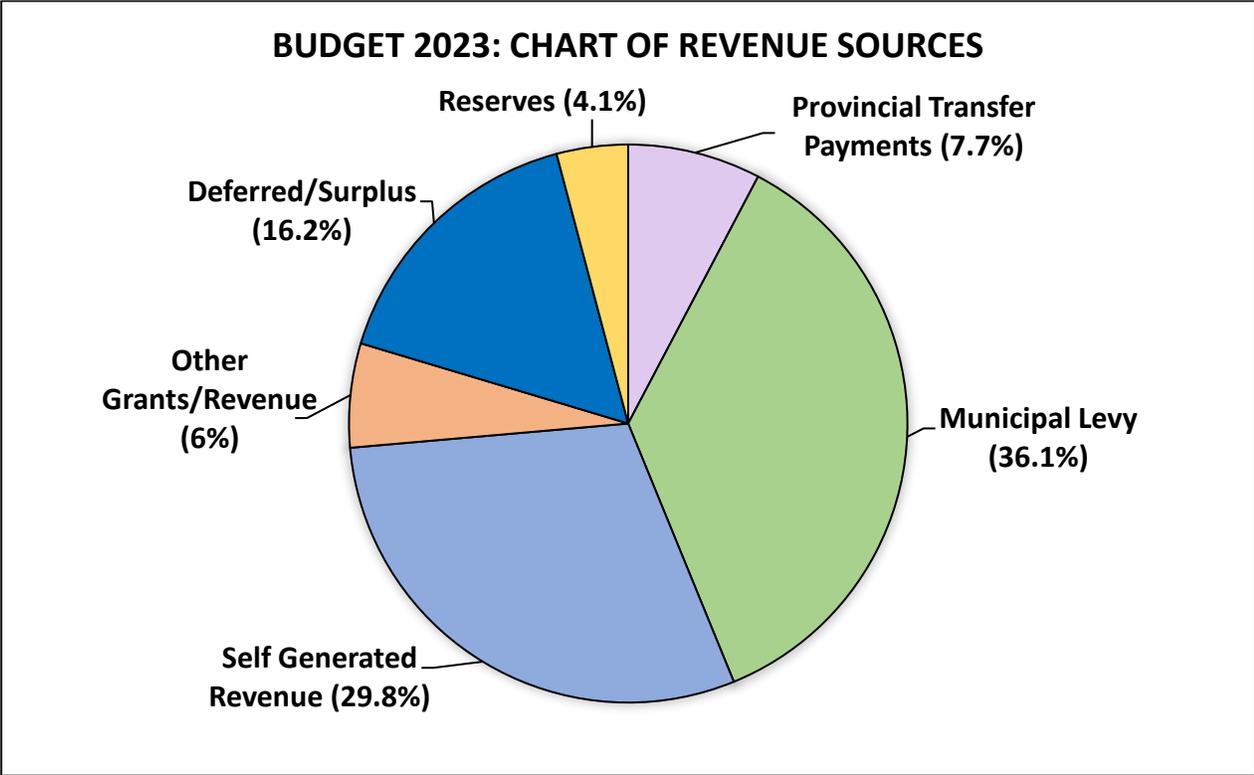
**Table 5: 2023 Budget Levy Overview**

Municipality	MCVA Based Apportionment Percentage	2023 Levy				Ski Hill Request - Capital
		General (3% increase)	Sole-benefitting (3% increase)	Sole-benefitting (other)	TOTAL	
Bonfield	3.4402	\$31,125			\$31,125	\$2,236
Calvin	1.2457	\$11,271			\$11,271	\$810
Chisholm	1.4676	\$13,278			\$13,278	\$954
East Ferris	6.2544	\$56,587			\$56,587	\$4,065
Mattawa	0.9891	\$8,949			\$8,949	\$643
Mattawan	0.0626	\$566			\$566	\$41
North Bay	79.2088	\$716,646	\$623,450	\$144,000	\$1,484,096	\$51,486
Papineau-Cameron	0.8018	\$7,254			\$7,254	\$521
Callander	6.4893	\$58,712		\$30,000	\$88,712	\$4,218
Powassan	0.0405	\$366			\$366	\$26
	<b>TOTAL</b>	<b>\$904,756</b>	<b>\$623,450</b>	<b>\$174,000</b>	<b>\$1,702,206</b>	<b>\$65,000</b>

- **General Levy:** apportioned to all municipalities using the MCVA provided by MNRF.
- **Sole-Benefitting Levy:** for work undertaken by NBMCA that solely benefits a municipality.

Other revenue sources include transfer payments from provincial and federal governments, grants, fees, donations, property rent, and other sources. For the 2023 Budget, the surplus and deferred revenue from 2022 and program reserves are tapped into. See the figure below for an overview of the revenue sources and their estimated percentages.

**Figure 1: Chart of Budget 2023 Revenue Sources**



Note that the above figure does not include the Laurentian Ski Hill request to NBMCA member municipalities for an annual amount of \$65,000 to help support the ski hill’s capital costs.

An overview of the 2023 Budget expenditures is provided below.

- Annual programming/operations and administration:
  - Corporate Services
  - Planning and Development
  - Flood Forecasting and Warning
  - Ice Management
  - Low Water Response
  - Environmental Monitoring
  - Drinking Water Source Protection
  - Conservation Lands
  - Communications and Outreach.
- Capital improvements:
  - North Bay main office - tower deck repairs, tower roof shingles, HVAC, boiler
  - Kinsmen Bridge repair in North Bay

- Culvert repair/replacement at Kinsman/Kate Pace Way
- Signage for conservation areas
- Kate Pace Way land exchange.
- Special projects and studies:
  - Asset Management Plan
  - Floodplain mapping - Lansdowne Creek (multi-year), Chippewa Creek, Jessup Creek, Parks Creek, La Vase River
  - Parks Creek Backflood Control Structure Capacity Upgrade Study
  - Chippewa Creek Erosion Control Project (multi-year)
  - Mattawa Natural Hazard Risk Study Terms of Reference (multi-year)
  - Conservation Areas Inventory and Strategy Projects (multi-year)
  - Watershed Based Resource Management Strategy (multi-year).

Overall, the 2023 Budget shown in Table 6 below reflects the annual objectives of the NBMCA and also considers long-term requirements to support the health and climate resiliency of watershed residents.

Table 6: Budget 2023 Summary

<u>OPERATIONS</u>	<b>2022 Budget</b>	<b>2023 Budget</b>
<b>A) Programs Eligible for Transfer Payments</b>		
Administration Operating	\$295,568	\$316,963
Watershed Planning Operating	\$123,500	\$134,438
Flood Control Operating	\$143,735	\$146,720
Erosion Control Operating	\$59,380	\$60,647
Flood Forecasting Operating	\$100,951	\$103,059
Ice Management Operating	\$11,078	\$13,479
Source Water Protection Operating	\$196,685	\$199,564
<b>Sub-Total</b>	<b>\$930,897</b>	<b>\$974,870</b>
<b>B) Other Programs</b>		
On-site Sewage Systems Program Operating	\$1,063,896	\$1,242,780
Section 28 Regulations Operating	\$56,804	\$62,125
Water Quality Operating	\$9,851	\$9,997
Interpretive Centre Operating	\$198,050	\$223,632
Lands and Property Operating	\$112,945	\$183,932
Outreach Operating	\$176,749	\$111,404
Ski Hill Operating	\$60,000	\$60,000
<b>Sub-Total</b>	<b>\$1,678,295</b>	<b>\$1,893,870</b>
<b><u>CAPITAL PROJECTS AND STUDIES</u></b>		
<b>A) Capital Projects</b>		
Lands and Property	\$522,750	\$542,934
Water and Erosion Control Infrastructure (WECl)	\$708,002	\$500,050
Central Services	\$86,860	\$77,892
<b>Sub-Total</b>	<b>\$1,317,612</b>	<b>\$1,120,876</b>
<b>B) Studies and Special Projects</b>		
Section 28 Technical	\$298,189	\$242,932
Integrated Watershed Management (IWM)	\$369,430	\$456,988
Mortgage Principal Repayment		\$19,100
<b>Sub-Total</b>	<b>\$667,619</b>	<b>\$719,020</b>
<b>NBMCA BUDGET TOTAL</b>	<b>\$4,594,423</b>	<b>\$4,708,635</b>
<b><u>OTHER</u></b>		
Ski Hill Capital Request	\$65,000	\$65,000
<b>NBMCA BUDGET TOTAL including Ski Hill Request</b>	<b>\$4,659,423</b>	<b>\$4,773,635</b>

**Recommendation:**

It is recommended that staff post the fee schedule for the OSS program by March 1, 2023 and post the final 2023 Budget. It is recommended that staff engage City of North Bay staff regarding the transfer of Parks Creek backflood control structure. It is also recommended that staff prepare a business plan for the maintenance and operation of the North Bay main office building.

**Recommended Resolution:**

**THAT** the members receive and accept this Report and that it be appended to the minutes of the meeting;

**AND THAT** staff post the updated Onsite Sewage System (OSS) fee schedule for 2023;

**AND THAT** staff post the approved 2023 Budget;

**AND THAT** staff undertake a feasibility study on the main office building and property operations and maintenance by the June 2023 Board meeting;

**AND THAT** staff begin discussions with the City of North Bay staff about the transfer of the Parks Creek backflood control structure lands and operations to the City of North Bay.

**Submitted By:**

**Chitra Gowda**

Chief Administrative Officer, Secretary Treasurer

**Helen Cunningham**

Manager, Finance and Human Resources



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# 2023 Budget

February 22, 2023

Prepared by

Chitra Gowda, Chief Administrative Officer, Secretary Treasurer

Helen Cunningham, Manager, Finance and Human Resources

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NORTH BAY - MATTAWA  
**CONSERVATION  
AUTHORITY**

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## Executive Summary

The North Bay-Mattawa Conservation Authority (NBMCA) was formed under the Conservation Authorities Act of Ontario in 1972. As a community-based, environmental organization in Ontario, the NBMCA is a leader in watershed management, dedicated to conserving, restoring, developing and managing renewable natural resources on a watershed basis. NBMCA is governed by a 12-member Board of Directors appointed by the 10 member municipalities.

The 2023 Budget document contains details for the NBMCA planned operations and capital activities. The 2023 Budget has been set at \$4,708,635 which includes:

- A general levy of \$904,756 to all member municipalities;
- A sole-benefitting levy of \$767,450 to the City of North Bay (which includes \$60,000 to support the Laurentian Ski Hill's operating costs); and
- A sole-benefitting levy of \$30,000 to the Municipality of Callander (floodplain mapping).

Further, the Laurentian Ski Hill requests NBMCA member municipalities for an annual amount of \$65,000 to help support the ski hill's capital costs.

To apportion the general levy (and to estimate the ski hill's request for capital cost) to the 10 member municipalities, the Modified Current Value Assessment (MCVA) provided by the Ontario Ministry of Natural Resources and Forestry (MNRF) is used. The budget results in a 3% increase in general levy and a portion of the sole-benefitting levy compared to 2022. See the table below for levy apportionment by municipality.

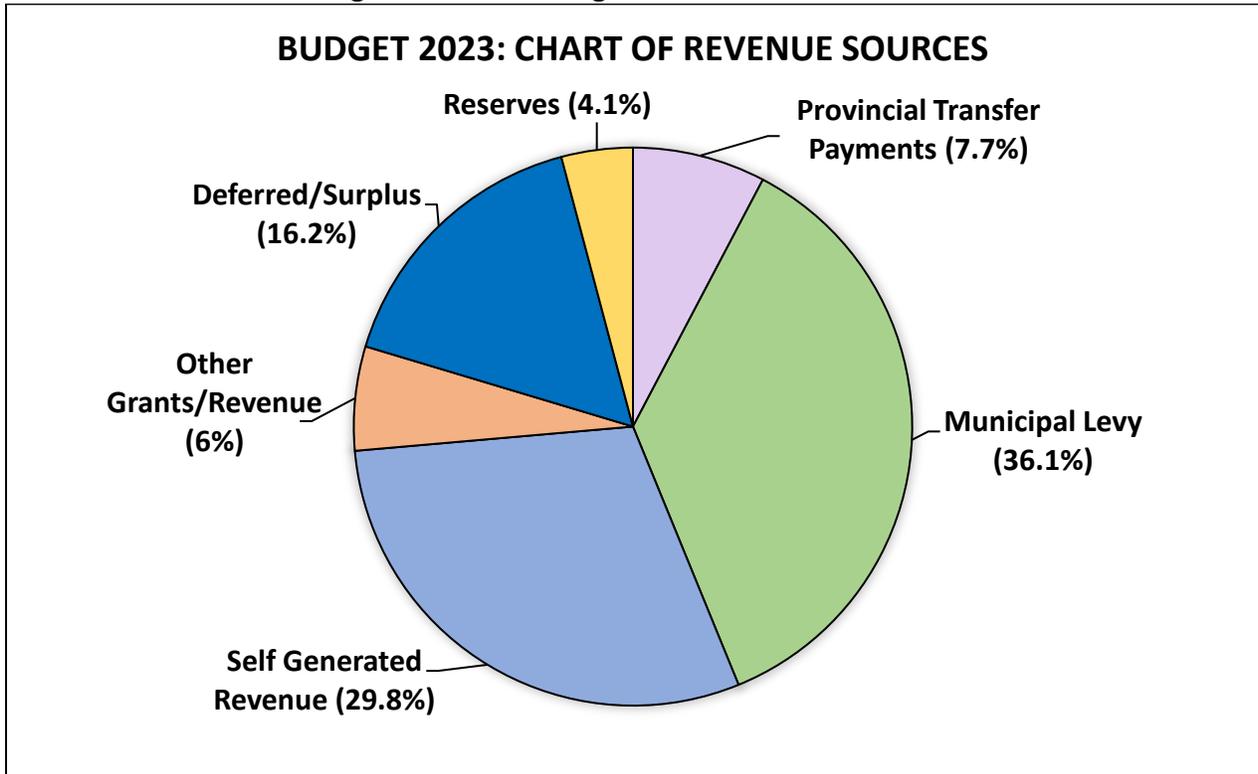
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Other revenue sources include transfer payments from provincial and federal governments, grants, fees, donations, property rent, and other sources. For the 2023 Budget, the surplus and deferred revenue from 2022 and program reserves are tapped into. See the figure below for an overview of the revenue sources and their estimated percentages.

**Figure: Chart of Budget 2023 Revenue Sources**



Note that the above figure does not include the Laurentian Ski Hill request to NBMCA member municipalities for an annual amount of \$65,000 to help support the ski hill’s capital costs.

Financial pressures anticipated in 2023 include: costs of major repairs for the main office building in North Bay, significant increases to insurance and fuel costs, and increased costs of goods and services due to inflation. Per Statistics Canada, the Consumer Price Index (CPI) rose 6.8% on an annual average basis in 2022, a 40 year high. Other factors for increased expenditures include the implementation of the revised wage grid approved in summer 2022 based on wage rate and pay equity analysis conducted by a third-party consultant; mortgage loan interest payment increase due to interest rate renewal; new requirements of the OMERS pension plan; and reinstating an Employee and Family Assistance Program (EAP) to support the health and wellness of staff.

Changes made to the Conservation Authorities Act and related direction from the provincial government are considered in the Budget. A Minister’s direction is in effect to freeze fees for planning and development related services through 2023. Note that the fee freeze does not affect the NBMCA On-site Sewage System (OSS) program carried out under the Building Code Act, and staff propose a fee increase for this program. Other notable changes to the

Conservation Authorities Act include the CA review and commenting role which is now scoped to focus on natural hazards and drinking water source protection with respect to development applications and land use planning policies under prescribed Acts.

An overview of the 2023 Budget expenditures is provided below.

- Annual programming/operations and administration:
  - Corporate Services
  - Planning and Development
  - Flood Forecasting and Warning
  - Ice Management
  - Low Water Response
  - Environmental Monitoring
  - Drinking Water Source Protection
  - Conservation Lands
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  - North Bay main office - tower deck repairs, tower roof shingles, HVAC, boiler
  - Kinsmen Bridge repair in North Bay
  - Culvert repair/replacement at Kinsman/Kate Pace Way
  - Signage for conservation areas
  - Kate Pace Way land exchange.
- Special projects and studies:
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  - Floodplain mapping - Lansdowne Creek (multi-year), Chippewa Creek, Jessup Creek, Parks Creek, La Vase River
  - Parks Creek Backflood Control Structure Capacity Upgrade Study
  - Chippewa Creek Erosion Control Project (multi-year)
  - Mattawa Natural Hazard Risk Study Terms of Reference (multi-year)
  - Conservation Areas Inventory and Strategy Projects (multi-year)
  - Watershed Based Resource Management Strategy (multi-year).

Overall, the 2023 Budget reflects the annual objectives of the NBMCA and also considers long-term requirements to support the health and climate resiliency of watershed residents.

**Table B: Budget 2023 Summary**

<b><u>OPERATIONS</u></b>	<b>2022 Budget</b>	<b>2023 Budget</b>
<b>A) Programs Eligible for Transfer Payments</b>		
Administration Operating	\$295,568	\$316,963
Watershed Planning Operating	\$123,500	\$134,438
Flood Control Operating	\$143,735	\$146,720
Erosion Control Operating	\$59,380	\$60,647
Flood Forecasting Operating	\$100,951	\$103,059
Ice Management Operating	\$11,078	\$13,479
Source Water Protection Operating	\$196,685	\$199,564
<b>Sub-Total</b>	<b>\$930,897</b>	<b>\$974,870</b>
<b>B) Other Programs</b>		
On-site Sewage Systems Program Operating	\$1,063,896	\$1,242,780
Section 28 Regulations Operating	\$56,804	\$62,125
Water Quality Operating	\$9,851	\$9,997
Interpretive Centre Operating	\$198,050	\$223,632
Lands and Property Operating	\$112,945	\$183,932
Outreach Operating	\$176,749	\$111,404
Ski Hill Operating	\$60,000	\$60,000
<b>Sub-Total</b>	<b>\$1,678,295</b>	<b>\$1,893,870</b>
<b><u>CAPITAL PROJECTS AND STUDIES</u></b>		
<b>A) Capital Projects</b>		
Lands and Property	\$522,750	\$542,934
Water and Erosion Control Infrastructure (WECI)	\$708,002	\$500,050
Central Services	\$86,860	\$77,892
<b>Sub-Total</b>	<b>\$1,317,612</b>	<b>\$1,120,876</b>
<b>B) Studies and Special Projects</b>		
Section 28 Technical	\$298,189	\$242,932
Integrated Watershed Management (IWM)	\$369,430	\$456,988
Mortgage Principal Repayment		\$19,100
<b>Sub-Total</b>	<b>\$667,619</b>	<b>\$719,020</b>
<b>NBMCA BUDGET TOTAL</b>	<b>\$4,594,423</b>	<b>\$4,708,635</b>
<b><u>OTHER</u></b>		
Ski Hill Capital Request	\$65,000	\$65,000
<b>NBMCA BUDGET TOTAL including Ski Hill Request</b>	<b>\$4,659,423</b>	<b>\$4,773,635</b>

## 1. Introduction

The North Bay-Mattawa Conservation Authority (NBMCA) provides leadership through coordination of watershed planning, implementation of resource management programs and promotion of conservation awareness in collaboration with others.

NBMCA is one of 36 Conservation Authorities on Ontario and was established under the Conservation Authorities Act in 1972 by member municipalities. NBMCA is a member of Conservation Ontario. Historically Conservation Authorities were administered by the Ministry of Natural Resources and Forestry (MNRF). In 2018, Conservation Authorities were moved under the Ministry of Environment, Conservation and Parks (MECP). In September 2022, Conservation Authorities were moved back under the administration of MNRF.

NBMCA is governed by a 12-member Board of Directors, appointed by the 10 member municipalities. A preliminary capital budget 2023 was presented by staff to the NBMCA Board of Directors at its December 2022 meeting. A preliminary operating and capital budget 2023 was presented to the Board at its January 2023 meeting, followed soon after by two consecutive Executive Committee meetings in February 2023 where 3% and 4% levy increase scenarios were discussed. Lastly the Board of Directors met in February 2023 to finalize the Budget 2023.

The NBMCA 2023 Budget has been set at **\$4,708,635** which includes:

- A general levy of \$904,756 to all member municipalities;
- A sole-benefitting levy of \$767,450 to the City of North Bay (which includes \$60,000 to support the Laurentian Ski Hill's operating costs); and
- A sole-benefitting levy of \$30,000 to the Municipality of Callander.

Additionally, the Laurentian Ski Hill requests NBMCA member municipalities for a separate annual amount of \$65,000 to help support the ski hill's capital costs.

## 2. Status of Reserves, Surplus and Deferred Revenue

The status of the reserve accounts and 2022 surplus and deferred revenue are provided below. In order to bridge the gap between estimated revenue and expenses for 2023, portions of these amounts are being used.

**Table 1: Reserve Accounts as of 2022 Year End (Unaudited)**

<b>Reserve Account</b>	<b>Amount</b>
NBMCA Lands Capital - Acquisition Reserve	\$76,781
NBMCA Onsite Sewage System (OSS) Reserve <i>(only for OSS program use per the Building Code Part 8)</i>	\$464,461
<b>NBMCA Reserves</b>	<b>\$541,242</b>
Laurentian Snowboarding Club and Ski Hill Operating	\$64,592
Laurentian Snowboarding Club and Ski Hill Capital	\$90,875
<b>Ski Hill Reserves</b>	<b>\$155,467</b>

**Table 2: Deficit & Surplus 2022 (Unaudited)**

Type	Type	Amount
Deficit	In the flood control, erosion control, administration, water quality programs (Oak Street underpass pumps ops, property maintenance, repairs, hydro, taxes, insurance, wages, etc.)	\$29,272
Surplus	Compared to 2022 expenses	\$52,134
	<b>Net available for the 2023 budget</b>	<b>\$22,862</b>

**Table 3: Deferred Revenue (Unaudited)**

Program	Amount available for 2023
Ice Management (operations)	\$4,250
Central Services (capital)	\$45,235
Lands and Properties (capital)	\$166,239
Water and Erosion Control Infrastructure (WECl) (capital)	\$488,540
S.28 Development, Interference, Alteration (DIA) (capital)	\$96,056
Integrated Watershed Management (IWM) (capital)	\$112,278
NBMCA Onsite Sewage System (OSS) (operations)	\$85,000

The deferred revenue is for committed projects spanning multiple years; for programs funded on a different fiscal year (usually provincial or federal initiatives); and planned activities that were not completed in the year budgeted for various reasons.

### 3. Status of the Mortgage Loan

The TD Bank mortgage loan on the North Bay administrative office (the “Interpretive Centre”) came up for renewal in 2022. It was renegotiated in late June 2022 with an increased, fixed interest rate of 4.65% per annum, expiring June 22, 2027. The previous interest rate was 2.59%. The mortgage loan amount has decreased from \$572,994.02 (at the start of 2022) to \$553,741.23 (at the end of 2022). The blended payments comprise of principal and interest amounts.

- **Principal payments in 2023:** The total estimated mortgage principal payment for 2023 is: \$19,100. These payments will be expensed monthly to a “Mortgage Principal Repayment” capital budget.
- **Interest payments in 2023:** The total estimated mortgage interest payment for 2023 is \$25,500. These payments will be expensed monthly to the “Interpretive Centre” operating budget.

## 4. Revenue Sources

### 4.1 General Information

Generally, NBMCA funding comes from several sources:

- **Transfer Payments** (if applications submitted are approved)
  - MNRF: Provincial Section 39 Transfer Payment
  - MNRF: Water and Erosion Control Infrastructure (WECI)
  - MNRF: Flood Hazard Identification and Mapping Program (FHIMP).
  - MECP: Drinking Water Source Protection
- **Municipal Levy**
  - General Levy: apportioned to all municipalities using the Modified Current Value Assessment (MCVA) provided by MNRF
  - Sole-Benefitting Levy: applied to a single municipality for work undertaken by NBMCA upon which the municipality is solely benefitting.
- **Self Generated Revenue**
  - Fees for the Septic System Program, Regulation Permit, Plan Review
  - Natural Classroom user fees (main office in North Bay)
  - Property Rentals
  - Interest earned
  - Donations.
- **Other Grants/Revenue** (programs/available funds vary from year to year)
  - Sponsorships
  - Canada Summer Jobs funding
  - Northern Ontario Heritage Fund Corporation (NOHFC) funding
  - Other.

In some of the previous years, deferred revenue, surplus and reserve amounts were partially used to make those budgets work. As well, NBMCA has a line of credit of \$300,000 to bridge periods of tight cash flow, for example when levies or transfer payments are delayed.

### 4.2 All Revenue Sources

The 2023 Budget has been set at **\$4,708,635**. An overview of the Budget 2023 revenue sources is provided below. The ski hill request for capital cost support is shown separately.

**Table 4: Budget 2023 Revenue Sources**

Source	Amount	%
Transfer Payments	\$363,054	7.7
Municipal Levy	\$1,702,206	36.1
Self Generated Revenue	\$1,403,828	29.8
Other Grants/Revenue	\$284,081	6.0
Deferred Revenue and Surplus	\$764,686	16.2
Reserves	\$194,780	4.1
<b>TOTAL</b>	<b>\$4,708,635</b>	<b>100</b>
<i>Municipal Levy (ski hill request)</i>	<i>\$65,000 (for capital costs)</i>	

### 4.3 Municipal Levy Amounts

The 2023 Budget results in a 3% increase in general levy and a portion of the sole-benefitting levy compared to 2022. Helpful definitions are provided below.

- **Modified Current Value Assessment (MCVA):** data provided by MNRF annually and used to calculate the general levy for each member municipality.
- **General Levy:** apportioned to all municipalities using the MCVA provided by MNRF.
- **Sole-benefitting Levy:** applied to a municipality for work undertaken by NBMCA that solely benefits that municipality.

The 2023 Budget of \$4,708,635 includes municipal levy amounts as follows:

- A general levy of \$904,756 to all member municipalities;
- A sole-benefitting levy of \$767,450 to the City of North Bay (which includes \$60,000 to support the Laurentian Ski Hill’s operating costs); and
- A sole-benefitting levy of \$30,000 to the Municipality of Callander (for a floodplain mapping project).

Further, the Laurentian Ski Hill requests NBMCA member municipalities for an annual amount of \$65,000 to help support the ski hill’s capital costs.

To apportion the general levy (and to estimate the ski hill’s request for capital cost) to the 10 member municipalities, the MCVA provided by MNRF is used. See the table below.

**Table 5: Budget 2023 Municipal Levy Amounts**

Municipality	MCVA Based Apportionment Percentage (from MNRF)	2023 LEVY				Ski Hill Request - Capital
		General (3% increase)	Sole-benefitting (3% increase)	Sole-benefitting (other)	TOTAL	
Bonfield	3.4402	\$31,125			\$31,125	\$2,236
Calvin	1.2457	\$11,271			\$11,271	\$810
Chisholm	1.4676	\$13,278			\$13,278	\$954
East Ferris	6.2544	\$56,587			\$56,587	\$4,065
Mattawa	0.9891	\$8,949			\$8,949	\$643
Mattawan	0.0626	\$566			\$566	\$41
North Bay	79.2088	\$716,646	\$623,450	\$144,000	\$1,484,096	\$51,486
Papineau-Cameron	0.8018	\$7,254			\$7,254	\$521
Callander	6.4893	\$58,712		\$30,000	\$88,712	\$4,218
Powassan	0.0405	\$366			\$366	\$26
	<b>TOTAL</b>	<b>\$904,756</b>	<b>\$623,450</b>	<b>\$174,000</b>	<b>\$1,702,206</b>	<b>\$65,000</b>

#### 4.4 Self Generated Revenue - Fees

Fees generated by the Planning and Development business unit at NBMCA are a major contributor to NBMCA revenue, at close to 25% of the 2023 Budget. Most of these fees are from the NBMCA On-site Sewage System (OSS) program carried out under the Ontario Building Code. This program regulates the installation and maintenance of private on-site sewage (septic) systems within Nipissing District and Parry Sound District except for the Township of the Archipelago. A marked increase in growth and development since 2020 has resulted in notably high numbers of permit applications received and issued, with this trend expected to continue through 2023. However, there were no fee increases made in 2021-2022. Staff propose a reasonable fee increase in 2023 in order to support the OSS program budget.

**Table 6: 2023 Onsite Sewage System (OSS) Program Fee Schedule**

NBMCA Onsite Sewage System (OSS) Program Activity Type	2021-2022 Fee	2023 Fee
Class 2	540	560
Class 3	540	560
Class 4/5 <3K flow	920	960
Class 4/5 >3k flow	1000	1100
Non residential	1000	1100
Alternative Solutions	1200	1300
Tank only	400	425
Decommission	155	160
Change of Owner	100	125
Permit Extension	165	175
Amendment	165	175
Conditional Notice of Completion	165	175
Additional Inspection due to deficiencies	165	200
Ontario Building Code (OBC) Clearance	100	150
OBC Clearance with site inspection	260	300
Copy of permit	90	90
Legal inquiry (lawyer - real estate)	160	175
File Review with Permit provided by owner	180	200
Additional fee for copy of use permit (File Review + price of permit)	270	290
Planning Act review (\$200 for application, plus \$100 for each additional lot, min. \$300. For lots >4ha, \$200)	300	400
Planning - no inspection	200	200
Subdivision Vacant Land Condo 10 lots	1200	1300
Additional lots	60	75
Review of lands to be sold or developed	270	300
Review lands to be sold developed with DIA permit	560	560
Mandatory Maintenance Inspection (MMI)	140	140
Late fee for MMI	50	50

The Minister's direction for a fee freeze is in effect in 2023 for the other planning and development programs and services including plan review and Section 28 permits. Staff are exploring creative ways to sustainably increase self generated revenue for other program areas. Staff also continue to apply for funding opportunities such as: FedNor, NOHFC, ECO, Hydro One, TD Bank, Project Learning Tree, Canada Summer Jobs and Enbridge funds working with our partners including the North Bay Indigenous Friendship Centre and Clean Green Beautiful.

## 5. Expenditures

### 5.1 Overview of Expenditures

An overview of the 2023 Budget expenditures is provided below.

- Annual programming/operations:
  - Planning and Development
  - Flood Forecasting and Warning
  - Ice Management
  - Low Water Response
  - Environmental Monitoring
  - Drinking Water Source Protection
  - Conservation Lands (includes managing homeless encampments)
  - Communications and Outreach.
- Capital improvements:
  - North Bay main office major repairs
  - Kinsmen Bridge repair in North Bay
  - Culvert repair/replacement at Kinsman/Kate Pace Way
  - Signage for conservation areas and properties
  - Lighting at Parks Creek
  - Kate Pace Way land exchange.
- Special projects and studies:
  - Asset Management Plan
  - Floodplain mapping - Lansdowne Creek (multi-year), Chippewa Creek, Jessup Creek, Parks Creek, La Vase River
  - Parks Creek Backflood Control Structure Capacity Upgrade Study
  - Chippewa Creek Erosion Control Project (multi-year)
  - Mattawa Natural Hazard Risk Study Terms of Reference (multi-year)
  - Conservation Areas Inventory and Strategy Projects (legislated, multi-year)
  - Watershed Based Resource Management Strategy (legislated, multi-year).
- Corporate services/Administration:
  - Administration of staff and operations
  - Governance (Board of Directors, related committees) support
  - Strategic Planning and Budgeting
  - Finance
  - Human Resources
  - Geographic Information Systems (GIS)
  - Information Technology (IT).

## 5.2 Increased Expenditures

Financial pressures anticipated in 2023 include:

- Significant increases to insurance (by at least 10%), fuel (potentially by 40%), and goods and services due to inflation. Per Statistics Canada, the Consumer Price Index (CPI) rose 6.8% on an annual average basis in 2022, a 40 year high.
- Costs of major, priority repairs for the main office building in North Bay including tower deck repairs, tower roof shingles, replacement of two HVAC units by crane, replacement of one boiler unit (around \$250,000)
- Managing the increasing occurrences of encampments on NBMCA owned properties (around \$70,000).

Other factors for increased expenditures and efforts include:

- Implementing the updated wage grid approved in summer 2022 based on a wage rate and pay equity analysis conducted by a third-party consultant
- An increase in mortgage loan interest payment (by around \$500 per month) due to interest rate renewal
- Preparing an Asset Management Plan as a building block of sound financial planning, to help estimate when assets need repairs and replacements
- Leading a technical study to determine the Parks Creek Backflood Control Structure capacity upgrade needs (around \$80,000)
- Potential for use of three rental pumps at the Parks Creek Backflood Control Structure
- New, legislated Conservation Authorities Act deliverables due by December 31, 2024 (to increase staff resources capacity in 2023, grant funding opportunities such as NOHFC which provided up to 90% costs are being applied to)
- New requirements of the OMERS pension plan (to be offered to all employees)
- Reinstating an Employee and Family Assistance Program (EFAP) to support the health and wellness of staff (the EFAP has not been subscribed to since 2018)
- Retaining the services of a consultant guided by a Human Resources committee of the Board of Directors to support change management.

In order to bridge the gap between estimated revenue and expenses for 2023, net surplus, reserves, and deferred revenue amounts are being used. Table 7 provides an overview of the usage estimated for 2023. Note that deferred revenue is for committed projects spanning multiple years; for programs funded on a different fiscal year (usually provincial or federal initiatives); and planned activities that were not completed in the year budgeted for various reasons.

**Table 7: Estimated Use of Net Surplus, Reserves, and Deferred Revenue in 2023**

Program Area	Type of Funds	Available at start of 2023	Proposed to be used in 2023	Remainder
Net surplus from 2022	Net surplus from 2022	\$22,862.00	\$22,862.00	\$0.00
Lands Capital Acquisition	Reserve	\$76,781.00	\$61,000.00	\$15,781.00
On-site Sewage System Program	Reserve	\$464,461.00	\$143,780.00	\$320,681.00
Ice Management Operations	Deferred revenue	\$4,250.00	\$4,250.00	\$0.00
Central Services Capital	Deferred revenue	\$45,235.00	\$43,924.00	\$1,311.00
Lands Capital	Deferred revenue	\$166,239.00	\$166,239.00	\$0.00
Water and Erosion Control Infrastructure (WEIC) Capital	Deferred revenue	\$488,540.00	\$324,950.00	\$163,590.00
S. 28 DIA Capital	Deferred revenue	\$96,056.00	\$62,218.00	\$33,838.00
IWM Capital	Deferred revenue	\$112,278.00	\$55,243.00	\$57,035.00
On-site Sewage System Program	Deferred revenue	\$85,000.00	\$85,000.00	\$0.00
	<b>Totals</b>	<b>\$1,561,702.00</b>	<b>\$969,466.00</b>	<b>\$592,236.00</b>

### 5.3 Tangible Capital Assets Purchases

In 2009 the NBMCA and other public sector organizations adopted Section 3150, Tangible Capital Assets of the Public Sector Accounting Handbook. This change resulted in the disclosure of information on major categories of tangible capital assets and amortization of these assets in the audited financial statements. The details on how this was undertaken is described in the Board approved NBMCA Tangible Capital Asset Policy (TCAP).

As a result of the TCAP, it is the practice of NBMCA to pay for and record acquisition of capital assets as follows:

- Use of a one-time cost recovery method. This is accomplished by budgeting for the acquisition of the asset in the year it is acquired. This cost recovery method is typically used when NBMCA is constructing a facility, such as a building, flood and erosion control works, or purchasing a large piece of equipment.
- Use of a cost recovery over time method. This is accomplished by budgeting for the acquisition of an asset over its defined lifetime in years. Annual budgets include expenditures in the form of “internal leases” that are equal to the depreciation rate or life span of the asset. Typically, this method is best suited for smaller capital items with shorter life spans that are replaced on a regular basis such as vehicles, computers, plotters and so on.

The 2023 budget includes both methods of capital acquisition. The cost recovery over time method is being used to replace computers, laptops and most tablets. The use of the one-time cost recovery method is part of the capital and special projects program budgets.

#### 5.4 Ten-Year Capital Budget Projection

In the 2022 budget, the ten-year capital budget projection (2022 to 2031) did not factor in the significant increase in relevant costs such as materials and labour since the start of the COVID-19 pandemic. For example in 2022, the main office's tower deck repair was initially projected to be around \$200,000; however actual expenditures are in the \$350,000 range (spread over 2022 and 2023) which necessitate the use of another line item in the budget to make up the shortfall.

For the draft 2023 budget, the ten-year capital budget projection (2023– 2032) is provided in **Appendix A**. As indicated above, the ten-year capital projections in 2022 and prior years are based on pre-pandemic costs and this must be corrected to reflect the significant rise in costs, which are anticipated to continue through 2023. Without the correction, the ten-year projection will cease to be reasonable. Based on Statistics Canada information including the CPI and staff's experience with increased costs post-pandemic, it is recommended that a projected annual increase of at least 3% be applied (rather than 1-2%). The projections can be revisited each year.

## 6. Budget 2023 Summary

The Table 8 below provides a summary of Budget 2023 compared to Budget 2022.

**Table 8: Budget Summary**

<b><u>OPERATIONS</u></b>	<b>2022 Budget</b>	<b>2023 Budget</b>
<b>A) Programs Eligible for Transfer Payments</b>		
Administration Operating	\$295,568	\$316,963
Watershed Planning Operating	\$123,500	\$134,438
Flood Control Operating	\$143,735	\$146,720
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Flood Forecasting Operating	\$100,951	\$103,059
Ice Management Operating	\$11,078	\$13,479
Source Water Protection Operating	\$196,685	\$199,564
<b>Sub-Total</b>	<b>\$930,897</b>	<b>\$974,870</b>
<b>B) Other Programs</b>		
On-site Sewage Systems Program Operating	\$1,063,896	\$1,242,780
Section 28 Regulations Operating	\$56,804	\$62,125
Water Quality Operating	\$9,851	\$9,997
Interpretive Centre Operating	\$198,050	\$223,632
Lands and Property Operating	\$112,945	\$183,932
Outreach Operating	\$176,749	\$111,404
Ski Hill Operating	\$60,000	\$60,000
<b>Sub-Total</b>	<b>\$1,678,295</b>	<b>\$1,893,870</b>
<b><u>CAPITAL PROJECTS AND STUDIES</u></b>		
<b>A) Capital Projects</b>		
Lands and Property	\$522,750	\$542,934
Water and Erosion Control Infrastructure (WECl)	\$708,002	\$500,050
Central Services	\$86,860	\$77,892
<b>Sub-Total</b>	<b>\$1,317,612</b>	<b>\$1,120,876</b>
<b>B) Studies and Special Projects</b>		
Section 28 Technical	\$298,189	\$242,932
Integrated Watershed Management (IWM)	\$369,430	\$456,988
Mortgage Principal Repayment		\$19,100
<b>Sub-Total</b>	<b>\$667,619</b>	<b>\$719,020</b>
<b>NBMCA BUDGET TOTAL</b>	<b>\$4,594,423</b>	<b>\$4,708,635</b>
<b><u>OTHER</u></b>		
Ski Hill Capital Request	\$65,000	\$65,000
<b>NBMCA BUDGET TOTAL including Ski Hill Request</b>	<b>\$4,659,423</b>	<b>\$4,773,635</b>

**Bus. Unit:** NBMCA Operations (Eligible for Transfer Payment)  
**Name:** Administration  
**Account No:** 31-00

**Summary:** Administrative activities related to providing programs and services of NBMCA.

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
01	Transfer Payment	16,020.00
04	General Levy	112,191.00
13	Other Revenue	169,856.00
14	Interest Earned	18,896.00
	<b>Total Revenue</b>	<b>316,963.00</b>
<b>Expense:</b>		
30	Wages and Benefits	110,432.00
38	Per Diem	11,540.00
39	Members Mileage	5,500.00
40	Members Expense	2,200.00
41	Staff Mileage and Expense	3,200.00
42	Staff Certification and Training	6,388.00
43	Telephone	8,033.00
45	Insurance	9,891.00
48	Office Supplies	6,452.00
49	Postage	535.00
50	Equipment Purchase	250.00
51	Equipment Rental	2,420.00
52	Publications and Printing	1,500.00
58	Audit	11,139.00
60	Materials and Supply	3,000.00
61	Cons. Ontario Levy	28,618.00
62	Services	13,000.00
70	Rental Expense	85,824.00
73	Vehicle Gas	658.00
74	Accounting Services	1,680.00
78	Internal Chargeback	4,703.00
	<b>Total Expenses</b>	<b>316,963.00</b>
	 <b>Net</b>	 <b>0</b>

**Budget Notes:**

Other Revenue: Administrative Fee from capital budgets (WECl, Sect 28 Technical, Central Services, Lands Capital, IWM, DWSP)  
Accounting Services: Accounting Software and Professional Support  
Services: Employee & Family Assistance Program (EFAP), HR consultant, Actuarial services, subscriptions, memberships  
Internal Chargeback Chargebacks for purchased vehicles (\$542) & computers (\$4161) - Tangible Capital Assets.

**Bus. Unit:** NBMCA Operations  
**Name:** On-site Sewage Systems (OSS) Program  
**Account No:** 32-00  
**Summary:** Costs directly related to undertake private sewage system approvals, inquiries and investigations per Ontario Building Code Part 8.

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
05	Sole-benefitting Levy	9,000
06	Fees	1,050,000
13	Other Revenue	183,780
	<b>Total Revenue</b>	<b>1,242,780</b>
<b>Expense:</b>		
30	Wages and Benefits	983,956
41	Staff Mileage & Expense	3,000
42	Staff Certification & Training	10,000
43	Telephone	16,952
45	Insurance	19,782
47	Repair & Maintenance	10,000
48	Office Supplies	6,752
49	Postage	1,224
50	Equipment Purchase	5,000
51	Equipment Rental	4,493
52	Publications and Printing	500
54	Bank Charges	3,500
56	Credit Card Charges	24,000
58	Audit	4,774
59	Legal Services	1,500
60	Materials and Supplies	9,500
62	Services	23,000
64	Vehicle Lease	3,800
70	Rental Expense	62,450
73	Vehicle Gas	22,050
78	Internal Chargeback	26,547
	<b>Total Expenses</b>	<b>1,242,780</b>
	<b>Net</b>	<b>0</b>

**Budget Notes:**

Sole-benefitting Levy: From City of North Bay (\$9,000) for the re-inspection program as required by the City of North Bay Official Plan per the Trout Lake Management Plan.  
Fees: Based on a reasonable increase in fees to cover costs.  
Other Revenue: Deferred revenue, OSS Program Reserve  
Rental: NBMCA Office (\$43,000) and Parry Sound Office is (\$22,000).  
Internal Chargeback: Chargebacks for purchased vehicles (\$21,652) & computers (\$4,895) - Tangible Capital Assets.

**Bus. Unit:** NBMCA Operations  
**Name:** Section 28 Regulations  
**Account No:** 34-00

**Summary:** Activities required for undertaking Development, Interference and Alteration Regulations Program

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
06	Fees	62125
	<b>Total Revenue</b>	<b>62,125</b>
<b>Expense:</b>		
30	Wages and Benefits	54,200
42	Staff Certification & Training	1,000
49	Postage	101
60	Materials and Supplies	200
62	Services	800
73	Vehicle Gas	526
78	Internal Chargeback	5,298
	<b>Total Expenses</b>	<b>62,125</b>
	<b>Net</b>	<b>0</b>

**Budget Notes:**

Fees: Based on 2022 permit levels  
Internal Chargeback: Chargebacks for purchased vehicles (\$1,626) & computers (\$3,672) - Tangible Capital Assets.

**Bus. Unit:** NBMCA Operations (Eligible for Transfer Payment)  
**Name:** Watershed Planning  
**Account No:** 35-00

**Summary:** Planning and Development: application review for natural hazards etc.

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
01	MNRF Transfer Payment	22,690
04	General Levy	56,748
06	Fees	55,000
	<b>Total Revenue</b>	<b>134,438</b>
<b>Expense:</b>		
30	Wages and Benefits	123,034
41	Staff mileage and expense	1,862
42	Staff Certification & Training	1,500
60	Materials and Supplies	500
62	Services	7,000
78	Internal Chargeback	542
	<b>Total Expenses</b>	<b>134,438</b>
	 <b>Net</b>	 <b>0</b>

**Budget Notes:**

Fees: Based on 2022 permit levels  
Internal Chargeback: Chargebacks for purchased vehicles (\$542) - Tangible Capital Assets.

**Bus. Unit:** NBMCA Operations (Eligible for Transfer Payment)  
**Name:** Operation and Maintenance of Flood Control Structures  
**Account No:** 36-00

**Summary:** Activities to operate, repair and maintain dams, weirs, pumps, and operate flood control lands

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
01	MNRF Transfer Payment	44,245
04	General Levy	102,475
	<b>Total Revenue</b>	<b>146,720</b>
<b>Expense:</b>		
30	Wages and Benefits	107,250
44	Taxes	11,880
45	Insurance	19,780
47	Repairs and Maintenance	1,000
60	Materials and Supplies	150
62	Services	300
72	Hydro	1,100
73	Vehicle Gas	3,420
78	Internal Chargeback	1,840
	<b>Total Expenses</b>	<b>146,720</b>
	 <b>Net</b>	 <b>-</b>

**Budget Notes:**  
 Internal Chargeback Chargebacks for purchased vehicles (\$1,843) - Tangible Capital Assets.

**Bus. Unit:** NBMCA Operations (Eligible for Transfer Payment)  
**Name:** Erosion Control Maintenance  
**Account No:** 37-00

**Summary:** Activities involving the operation, maintenance and repair of erosion control structures and associated lands

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
01	MNRF Transfer Payment	17,150
04	General Levy	43,497
	<b>Total Revenue</b>	<b>60,647</b>
<b>Expense:</b>		
30	Wages and Benefits	35,137
44	Taxes	6,789
45	Insurance	14,837
60	Materials and Supplies	500
72	Hydro	900
73	Vehicle Gas	1,183
78	Internal Chargeback	1,301
	<b>Total Expenses</b>	<b>60,647</b>
	<b>Net</b>	<b>-</b>

**Budget Notes:**  
 Internal Chargeback Chargebacks for purchased vehicles (\$1,301) - Tangible Capital Assets.

**Bus. Unit:** NBMCA Operations (Eligible for Transfer Payment)  
**Name:** Flood Forecasting  
**Account No:** 38-00

**Summary:** Comprehensive flood forecasting and warning program to reduce risk of loss of life and property damage due to flooding. Includes the monitoring of weather and streamflow conditions, precipitation gauges, conducting snow surveys, decision making and issuing statements and warnings, member on spring freshet and dam safety related committees.

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
01	MNRF Transfer Payment	30,695
04	General Levy	72,364
	<b>Total Revenue</b>	<b>103,059</b>
<b>Expense:</b>		
30	Wages and Benefits	81,007
41	Staff Mileage & Expense	500
42	Staff Certification & Training	2,000
43	Telephone	8,354
47	Repairs and Maintenance	300
60	Materials and Supplies	900
62	Services	4,000
73	Vehicle Gas	1,050
78	Internal Chargeback	4,948
	<b>Total Expenses</b>	<b>103,059</b>
	<b>Net</b>	<b>-</b>

**Budget Notes:**  
 Internal Chargeback Chargebacks for purchased vehicles (\$542) & computers (\$4,406) - Tangible Capital Assets.

**Bus. Unit:** NBMCA Operations (Eligible for Transfer Payment)  
**Name:** Ice Management  
**Account No:** 39-00

**Summary:** Activities involving the monitoring and removal of ice at the Parks Creek Backflood Control Structure area for flood forecasting and prevention.

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
01	MNR Transfer Payment	2,690
04	General Levy	6,539
13	Other Revenue	4,250
	<b>Total Revenue</b>	<u>13,479</u>
<b>Expense:</b>		
30	Wages and Benefits	5,542
60	Materials and Supplies	600
62	Services	7,337
	<b>Total Expenses</b>	<u>13,479</u>
	 <b>Net</b>	 - <b>0</b>

**Budget Notes:**  
Other Revenue: From 2022 Deferred

**Bus. Unit:** NBMCA Operations  
**Name:** Water Quality Monitoring  
**Account No:** 42-00

**Summary:** Activities related to water quality monitoring program including trends analysis.

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
05	Sole-benefitting Levy	5,000
04	General Levy	4,997
	<b>Total Revenue</b>	<u>9,997</u>
<b>Expense:</b>		
32	Wages and Benefits	6,467
60	Materials and Supplies	1,500
62	Services	580
73	Vehicle Gas	1,450
	<b>Total Expenses</b>	<u>9,997</u>
	<b>Net</b>	-

**Budget Notes:**  
 Sole-benefitting Levy: City of North Bay amount of \$5,000 related to the Trout Lake Management Plan.  
 Services: Analysis Expense

**Bus. Unit:** NBMCA Operations  
**Name:** Interpretive Centre  
**Account No:** 56-00

**Summary:** Revenue and Expenses associated with ownership, operation and maintenance of Interpretive Centre including Mortgage Loan Interest

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
09	Property Rental Revenue - Internal	143,622
10	Property Rental Revenue - External	48,785
13	Other Revenue	31,225
	<b>Total Revenue</b>	<b>223,632</b>
<b>Expense:</b>		
30	Wages and Benefits	103,053
45	Insurance	16,815
46	Natural Gas	16,500
47	Repairs and Maintenance	2,000
55	Interest Expense	25,464
60	Materials and Supplies	8,300
62	Services	32,000
71	Water	3,500
72	Hydro	16,000
	<b>Total Expenses</b>	<b>223,632</b>
	<b>Net</b>	<b>-</b>

**Budget Notes:**  
Other Revenue From solar panels (\$6225) and Central Services deferred revenue (\$25,000)  
Interest Expense Mortgage Interest payments (North Bay office building "Intepretive Centre")  
Services HVAC, Security, Elevator Maintenance, Cleaners

**Bus. Unit:** NBMCA Operations  
**Name:** Outreach  
**Account No:** 57-00

**Summary:** Revenue and Expenses for Educational Outreach,  
 Communications and Community Partnering

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
03	Grants from Others	90,000
04	General Levy	13,404
06	Fees	1,000
07	Donations	2,000
13	Other Revenue	5,000
	<b>Total Revenue</b>	<b>111,404</b>
<b>Expense:</b>		
30	Wages and Benefits	13,550
41	Staff Mileage and Expense	500
53	Advertising	500
60	Materials and Supplies	854
62	Services	500
66	Consulting Services	95,000
TBD	Awards and Scholarships	500
	<b>Total Expenses</b>	<b>111,404</b>
	 <b>Net</b>	 <b>-</b>

**Budget Notes:**  
 Grants from Others: Tourism North Bay, Indigenous Friendship Centre  
 Other Revenue: Sponsorships  
 Services: Website consultant, printouts, banners, etc.  
 Consulting Services: Miskwaadesi project

**Bus. Unit:** NBMCA Operations  
**Name:** Lands and Properties Operations  
**Account No:** 70-00

**Summary:** Revenue and Expenses for activities that maintain, protect, repair facilities and administer to NBMCA-owned properties and lands.

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
04	General Levy	78,532
05	Sole-benefitting Levy	70,000
07	Donations	1,000
10	Property Rental Revenue - External	21,400
20	Shared Costs	13,000
	<b>Total Revenue</b>	<b>183,932</b>
<b>Expense:</b>		
30	Wages and Benefits	70,373
44	Taxes	15,275
45	Insurance	14,985
47	Repairs and Maintenance	1,500
50	Shared Cost LSHSC	8,313
52	Publications & Printing	2,500
60	Materials and Supplies	13,000
62	Services	48,000
64	Vehicle Lease	3,800
73	Vehicle Gas	4,560
78	Internal Chargeback	1,626
	<b>Total Expenses</b>	<b>183,932</b>
	<b>Net</b>	<b>-</b>

**Budget Notes:**

Sole-benefitting Levy: City of North Bay levy related to managing encampments on NBMCA properties in the City  
Rental Revenue: Pattison Signs \$19,835, Arugula Rent \$1,450, Day Care \$200  
Donations: From Drop Boxes and other Donors  
Shared Costs: From LSHSC (ski hill) for Hydro, Property Taxes, Security  
Services: Encampment response, Snow removal, Trail Pruning, Memberships  
Internal Chargeback: Chargebacks for purchased vehicles (\$1,626) - Tangible Capital Assets.

**Bus. Unit:** NBMCA Operations (Eligible for Transfer Payment)  
**Name:** Source Water Protection  
**Account No:** 83-00

**Summary:** Activities to prepare for implementing source protection planning for the watershed through the Drinking Water Act.

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
01	MOE Transfer Payment	199,563
	<b>Total Revenue</b>	<b>199,563</b>
<b>Expense:</b>		
30	Wages and Benefits	156,381
38	Per Diem	4,620
39	Members Mileage	1,680
40	Members Expenses	200
41	Staff Mileage & Expense	1,540
43	Telephone	2,892
45	Insurance	2,550
48	Office Supplies	630
49	Postage	255
51	Equipment Rental	503
53	Advertising/Communications	250
58	Audit	765
60	Materials and Supplies	2,352
62	Services	399
67	Admin Overhead	5,588
70	Rental Expense	14,886
73	Vehicle gas	261
78	Internal Chargeback	3,811
	<b>Total Expenses</b>	<b>199,563</b>
	<b>Net</b>	<b>0</b>

**Budget Notes:**  
Internal Chargeback Chargebacks for purchased vehicles (\$400) & computers (\$3411)  
- Tangible Capital Assets.

**Bus. Unit:** NBMCA Capital Project  
**Name:** Lands and Property Capital for Conservation Areas/Trails  
**Account No:** 86-00

**Summary:** Major Maintenance or Capital Expenditures on CA Lands or Properties as outlined in the Conservation Area Lands and Trails ten year capital forecast.

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
04	General Levy	131,583
05	Special Levy	149,350
13	Other Revenue	262,001
	<b>Total Revenue</b>	<b>542,934</b>
<b>Expense:</b>		
30	Wages and Benefits	119,300
41	Staff Mileage & Expense	1,200
50	Equipment Purchase	5,000
60	Materials and Supplies	71,838
62	Services	291,036
66	Consulting Services	1,000
67	Administrative Overhead	50,568
73	Vehicle Gas	1,582
78	Internal Chargeback	1,410
XX	Other Reserve	
XX	Other Surplus	
	<b>Total Expenses</b>	<b>542,934</b>
	<b>Net</b>	<b>-</b>

**Budget Notes:**  
Other Revenue: Deferred Revenue, Surplus 2022, OSS Reserve, Lands Capital Acquisition Reserve  
Material and Supplies: Safety, signage and brochures, Laurier Woods boardwalk repair, culvert replacement  
Consulting Services: Bridge Design/Construction, Forest Management Planning  
Services: Tower deck repair, tower roof shingles, 2 HVAC units, 1 boiler, Kinsmen bridge repair, hazard tree removal.  
Internal Chargeback Chargebacks for purchased vehicles (\$1410) - Tangible Capital Assets.  
Other Reserve: \$10,000 every year for approx. 900m of Kate Paceway trail  
Other Surplus: \$4,000 every year for 8 years to recover purchase expense for Shields McLaren

**Bus. Unit:** NBMCA Capital Project  
**Name:** Central Services  
**Account No:** 97-00

**Summary:** Major Maintenance, Capital Expenditures, Upkeep of Authority wide facilities and services that benefit multiple program areas.

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
04	General Levy	58,967
13	Other Revenue	18,924
	<b>Total Revenue</b>	<b>77,891</b>
<b>Expense:</b>		
30	Wages and Benefits	21,639
50	Equipment Purchase	500
60	Materials and Supplies	13,080
62	Services	5,000
66	Consulting Services	25,000
67	Administrative Overhead	9,000
78	Internal Chargeback	3,672
	<b>Total Expenses</b>	<b>77,891</b>
	 <b>Net</b>	 <b>- 0</b>

**Budget Notes:**

Other Revenue	Deferred revenue
Materials and Supplies	Software
Services	City of North Bay IT services
Consulting Services	Asset Management Plan
Internal Chargeback	Chargebacks for purchased computers (\$3672) - Tangible Capital Assets.

**Bus. Unit:** NBMCA Study & Special Projects  
**Name:** Section 28 Technical Project  
**Account No:** 98-00

**Summary:** Preparation of Screening Maps of Regulated Areas (Generic Regulations) to control development, interference with wetlands and alteration to watercourses. This multi year project will result in hydrology delineation study, a comprehensive review of existing mapping and written policies.

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
01	Transfer Payment	-
04	General Levy	180,714
13	Other Revenue	62,218
	<b>Total Revenue</b>	<u>242,932</u>
<b>Expense:</b>		
30	Wages and Benefits	98,422
41	Staff Mileage and Expense	1,500
42	Staff Certification and Training	2,500
60	Materials and Supplies	2,360
50	Equipment Purchase	4,500
52	Publications and Printing	1,500
62	Services	5,000
66	Consulting Services	100,000
67	Administrative Overhead	27,150
	<b>Total Expenses</b>	<u>242,932</u>
	 <b>Net</b>	 -

**Budget Notes:**  
 Transfer Payment: NDMP (MMAH) Intake 6 for the La Vase River floodplain mapping project  
 Other Revenue: Deferred Revenue from 2022  
 Equipment Purchase: Water level monitoring equipment  
 Consulting Services: Consulting Services funding for La Vase River Flood Plain Mapping

**Bus. Unit:** NBMCA Capital Project  
**Name:** Integrated Watershed Management  
**Account No:** 99-00

**Summary:** Multi Year Implementation of the NBMCA Watershed Strategy  
 GIS data management, Monitoring, Watershed Report Card,  
 Mattawa flood risk assessment

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
01	Transfer Payment	30,000
04	General Levy	42,745
05	Sole-benefitting Levy	329,000
13	Other Revenue	55,243
	<b>Total Revenue</b>	<b>456,988</b>
<b>Expense:</b>		
30	Wages and Benefits	273,500
41	Staff Mileage and Expense	1,000
42	Certification and Training	2,000
50	Equipment Purchase	25,000
51	Equipment Rental	4,250
53	Advertising	5,000
60	Materials and Supply	11,856
62	Services	8,000
66	Consulting Services	70,000
67	Administrative Overhead	51,300
78	Internal Chargeback	5,082
	<b>Total Expenses</b>	<b>456,988</b>
	<b>Net</b>	<b>-</b>

**Budget Notes:**

Transfer Payment: Anticipated in 2023

Sole-benefitting Levy: City of North Bay (\$299,000) and Callander (\$30,000) floodplain mapping

Other Revenue: Deferred Revenue from 2022

Equipment Purchase: Climate change station support equipment and installation

Equipment Rental: For Field Measurements (Surveying)

Advertising: Workshops, floodplain mapping consultations

Materials and Supply: Data software, water quality testing

Services: Fee review, watershed report card, lab analysis

Consulting Services: Callander floodplain mapping, Peer review of Kaibuskong River floodpain mapping

Administrative Overhead: Chargeback

Internal Chargeback: Chargebacks for purchased vehicles (\$1,410) and computers (\$3,672) - Tangible Capital Assets.

**Bus. Unit:** NBMCA Capital Project  
**Name:** WECI Project  
**Account No:** 109-00

**Summary:** Water and Erosion Control Infrastructure projects for major maintenance of and studies on flood and erosion control structures.

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
01	MNR Transfer Payment	
05	Sole-benefitting Levy	175,100
13	Other Revenue	324,950
	<b>Total Revenue</b>	<b>500,050</b>
<b>Expense:</b>		
30	Wages and Benefits	29,800
47	Repairs and Maintenance	302,000
66	Consulting Services	142,000
67	Administrative Overhead	26,250
	<b>Total Expenses</b>	<b>500,050</b>
	 <b>Net</b>	 <b>0</b>

**Budget Notes:**

MNR Transfer Payment: Application for 2023-24 fiscal year submitted to MNRF mid-Feb. 2023  
Sole-benefitting Levy: Applied to the City of North Bay  
Other Revenue: Deferred Revenue from 2022  
Repairs and Maintenance: Oak Street bridge project, Parks Street lighting, Chippewa Creek erosion control  
Consulting Services: Oak Street bridge replacement consultant, Parks Creek backflood control capacity upgrade study

**Bus. Unit:** NBMCA Capital Project  
**Name:** Mortgage Principal Repayment Capital  
**Account No:** 110-00

**Summary:** Principal Repayment for the North Bay office mortgage loan

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
13	Other Revenue	19,100
	<b>Total Revenue</b>	<b>19,100</b>
<b>Expense:</b>		
	Mortgage Principal	19,100
	<b>Total Expenses</b>	<b>19,100</b>
	<b>Net</b>	<b>-</b>

**Budget Notes:**  
 Other Revenue      Deferred revenue  
 Mortgage Principal      Principal Repayment for the North Bay office mortgage loan  
    Interest is paid through 56-Interpretive Centre Operations

**Bus. Unit:** Laurentian Ski Hill Operations  
**Name:** Laurentian Ski Hill Operating  
**Account No:** 114-00

**Summary:** Laurentian Ski Hill operations support

<u>Object Code</u>	<u>Revenue/Expense Category</u>	<u>2023 Budget</u>
<b>Revenue:</b>		
05	Sole-benefitting Levy	60,000
	<b>Total Revenue</b>	<b>60,000</b>
<b>Expense:</b>		
47	Ski Hill Operations	60,000
	<b>Total Expenses</b>	<b>60,000</b>
	<b>Net</b>	<b>-</b>

**Budget Notes:**

Sole-benefitting Levy: City of North Bay levy related to Laurentian Ski Hill operating costs

**NBMCA Capital  
Levy Forecast  
For the Ten Year Period of 2023 to 2032  
For Member Municipalities**

**NBMCA CAPITAL PROGRAM & SERVICE AREA**

Years	Lands and Property		WECI		Central Services		IWM		Section 28 Technical		Sub-Total	Sub-Total	Sub-Total	Ski Hill Assets	Total
	Sole-benefitting Levy	General Levy	Sole-benefitting Levy	General Levy	Sole-benefitting Levy	General Levy	Sole-benefitting Levy	General Levy	Sole-benefitting Levy	General Levy	Sole-benefitting Levy (North Bay)	Sole-benefitting Levy (Callander)	General Levy	Request (Not a Levy)	
2022	\$145,000	\$127,750	\$170,000	\$0	\$0	\$57,250	\$290,000	\$41,500	\$0	\$175,450	\$605,000		\$401,950	\$65,000	\$1,071,950
2023	\$149,350	\$131,583	\$175,100	\$0	\$0	\$58,968	\$329,000	\$42,745	\$0	\$180,714	\$623,450	\$30,000	\$414,009	\$65,000	\$1,102,459
2024	\$153,831	\$135,530	\$180,353	\$0	\$0	\$60,737	\$307,661	\$44,027	\$0	\$186,135	\$641,845		\$426,429	\$65,000	\$1,133,273
2025	\$158,445	\$139,596	\$185,764	\$0	\$0	\$62,559	\$316,891	\$45,348	\$0	\$191,719	\$661,100		\$439,222	\$65,000	\$1,165,321
2026	\$163,199	\$143,784	\$191,336	\$0	\$0	\$64,435	\$326,398	\$46,709	\$0	\$197,471	\$680,933		\$452,398	\$65,000	\$1,198,331
2027	\$168,095	\$148,097	\$197,077	\$0	\$0	\$66,368	\$336,189	\$48,110	\$0	\$203,395	\$701,361		\$465,970	\$65,000	\$1,232,331
2028	\$173,138	\$152,540	\$202,989	\$0	\$0	\$68,359	\$346,275	\$49,553	\$0	\$209,496	\$722,402		\$479,949	\$65,000	\$1,267,351
2029	\$178,332	\$157,116	\$209,079	\$0	\$0	\$70,410	\$356,663	\$51,040	\$0	\$215,781	\$744,074		\$494,348	\$65,000	\$1,303,421
2030	\$183,682	\$161,830	\$215,351	\$0	\$0	\$72,523	\$367,363	\$52,571	\$0	\$222,255	\$766,396		\$509,178	\$65,000	\$1,340,574
2031	\$189,192	\$166,685	\$221,811	\$0	\$0	\$74,698	\$378,384	\$54,148	\$0	\$228,922	\$789,388		\$524,454	\$65,000	\$1,378,841
2032	\$194,868	\$171,685	\$228,466	\$0	\$0	\$76,939	\$389,736	\$55,773	\$0	\$235,790	\$813,069		\$540,187	\$65,000	\$1,418,257
<b>Total Levy 2023</b>	<b>\$280,933</b>		<b>\$175,100</b>			<b>\$58,968</b>		<b>\$371,745</b>		<b>\$180,714</b>			<b>\$1,037,459</b>		

Last Year - 2022  
Current Year - 2023

**Descriptions:**

General Levy: levy apportioned to all member municipalities using the Modified Current Value Assessment provided by the Ministry of Natural Resources and Forestry (MNRF)

Sole-benefitting levy: for work undertaken by NBMCA that solely benefits a municipality

Lands & Property Activities in support of safe public access and use of CA owned properties including such things as trails, boardwalks, bridges, picnic tables, buildings, washrooms, signage, parking lots, roads and land acquisition.

WECI Water and Erosion Control Infrastructure activities to support major maintenance and capital improvements or repair to water and erosion control structures. This may include related studies. In 2023, it is planned to carry out a capacity upgrade study for the Parks Creek backflood infrastructure.

Central Services Capital or major maintenance in support of workshops, buildings and other types of infrastructure or equipment required as part the overall CA program

IWM Multi-year implementation of the Integrated Watershed Management Strategy and new CA Act deliverables (watershed-based strategy). Includes ongoing LaVase floodplain mapping, consultation for Chippewa Creek, Jessup/Parks Creek projects. In 2023 work will be initiated for the Town of Mattawa Flood Hazard Risk Assessment.

Section 28 Expenses related to the implementation of the DIA regulations of the conservation authority, mapping for regulated areas.

Ski Hill Assets For Improvement, Major Repair or Replacement of CA Owned Ski Hill Assets - not a levy