

October LRCA Board Meeting

Lakehead Region Conservation Authority
Oct 25, 2023 at 4:30 PM
130 Conservation Road/Microsoft Teams

Agenda

1. CALL TO ORDER

Declaration: "The Lakehead Region Conservation Authority respectfully acknowledges that the lands on which we live and work are the traditional lands of the Anishinabek Nation and the traditional territory of Fort William First Nation, signatory to the Robinson-Superior Treaty of 1850.

As Partners in the conservation and protection of the Lakehead Watershed along with the First Nations communities, the Metis Nation of Ontario, and other Indigenous peoples, the LRCA is committed to the common vision of a healthy, safe and sustainable Lakehead Watershed."

2. ADOPTION OF AGENDA

THAT: the Agenda be adopted as published.

3. DISCLOSURE OF INTEREST

4. MINUTES OF PREVIOUS MEETING4

THAT: the Minutes of the Lakehead Region Conservation Authority Eighth Regular Meeting held on September 27, 2023 be adopted as published.

5. IN-CAMERA AGENDA

No In-Camera Meeting will be held.

6. BUSINESS ARISING FROM PREVIOUS MINUTES

None.

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None.
8. STAFF REPORTS
8.1. Conservation Areas Water Quality Monitoring Report 202310
THAT : the Staff Report WM-02-2023 be received AND FURTHER THAT the recommendations contained therein are endorsed.
 Funds and personnel permitting, bacteriological water quality and cyanobacteria monitoring in Conservation Areas should be continued in the summer of 2024. Further testing of field parameters should be continued in succeeding years to determine normal ranges and trends for monitored Conservation Areas. Amalgamate the E. coli and cyanobacteria Field Data Sheets and transition into using iPads and Survey 123 as a more efficient way of data collection. The cyanobacteria sampling season should be extended to the same time frame as the E. coli Program (June 1 to August 31, 2024) to capture bloom events that are occurring outside of the established sampling timeline.
8.1.1. Traffic Counter Report 202217
THAT : the Staff Report CONAREA-03-2023 be received AND FURTHER THAT the recommendations contained therein be endorsed.
 Personnel and funding permitting, continue the annual vehicle counts at the Conservation Areas, Continue developing the marketing strategy with a focus on increasing yearly payment revenue for all Conservation Areas, and creating public awareness of LRCA owned Conservation Areas and associated costs, Continue to promote the sale of Explore Card Parking Passes, and Develop a strategy to track usage of Explorer Card users.
9. CHIEF ADMINISTRATIVE OFFICER'S REPORT
9.1. Monthly Treasurer's Report26

THAT: staff are permitted to be paid out up to five days of banked overtime or vacation as a special pay on November 10, 2023 AND FURTHER THAT the LRCA pay date will be moved forward one-week to incorporate a one-week hold back for all staff.

9.2. Pay Date Adjustment27

10. PASSING OF ACCOUNTS30
THAT : having examined the accounts for the period September 1, 2023 to September 30, 2023 cheque #3012 to #3038 for \$148,563.79 and preauthorized payments of \$118,235.38 for a total of \$266,799.17, we approve their payment.
11. REGULATORY ROLE
Plan Review program comments and Section 28 permits issued since last meeting summaries.
11.1. Plan Review Commenting Summary31
11.2. Section 28 Permit Summary33
12. PROJECTS UPDATE
12.1. Communications Manager Projects Update35
12.2. Lands Manager Projects Update36
12.3. Watershed Manager Projects Update38
13. NEW BUSINESS
14. NEXT MEETING
The next meeting will be held on November 29, 2023 at 4:30 p.m.
15. BOARD TRAINING
The second date for the Conservation Area Tour will be confirmed.
16. ADJOURNMENT
THAT: the time being p.m. AND FURTHER THAT there being no further business we adjourn.



LRCA Board Meeting Minutes September 27, 2023 at 4:30 PM 130 Conservation Road/Microsoft Teams

Members Present:

Albert Aiello, Donna Blunt, Robert Beatty, Rudy Buitenhuis, Dan Calvert, Sheelagh Hendrick, Greg Johnsen, Brian Kurikka, Jim Vezina

Members Present (Remote):

Grant Arnold, Trevor Giertuga

Also Present:

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

1. CALL TO ORDER

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

2. ADOPTION OF AGENDA

THAT: the Agenda be adopted as published.

Motion: #87/23

Motion moved by Dan Calvert and motion seconded by Albert Aiello. CARRIED.

3. DISCLOSURE OF INTEREST

None.

4. MINUTES OF PREVIOUS MEETING

THAT: the Minutes of the Lakehead Region Conservation Authority Seventh Regular Meeting held on August 30, 2023 be adopted as published.

Motion: #88/23

Motion moved by Dan Calvert and motion seconded by Albert Aiello. CARRIED.

5. IN-CAMERA AGENDA

THAT: we now go into Committee of the Whole (In-Camera) at 4:31 p.m.

Motion: #89/23

Motion moved by Albert Aiello and motion seconded by Dan Calvert. CARRIED.

THAT: we go into Open Meeting at 5:00 p.m.

Motion: #90/23

Motion moved by Albert Aiello and motion seconded by Dan Calvert. CARRIED.

THAT: the In-Camera Minutes of the Lakehead Region Conservation Authority June 21, 2023 meeting be adopted as published.

Motion: #91/23

Motion moved by Dan Calvert and motion seconded by Albert Aiello. CARRIED.

THAT: Staff Report CORP-09-2023 is received **AND FURTHER THAT** the Information Systems Coordinator position succession plan as outlined in the report is approved.

Motion: #92/23

Motion moved by Robert Beatty and motion seconded by Greg Johnsen. CARRIED.

THAT: effective January 1, 2024, the Watershed Stewardship Technician position will become a permanent full-time position **AND FURTHER THAT** the position title will change to Watershed Biologist.

Motion: #93/23

Motion moved by Sheelagh Hendrick and motion seconded by Brian Kurikka. CARRIED.

THAT: the CAO is authorized to apply for funding under the Northern Ontario Heritage Fund Corporation, under the Workforce Development Stream, to hire a Watershed Stewardship Technician Intern.

Motion: #94/23

Motion moved by Albert Aiello and motion seconded by Rudy Buitenhuis. CARRIED.

6. BUSINESS ARISING FROM PREVIOUS MINUTES

None.

7. CORRESPONDENCE

7.1 Resolution passed by Hamilton Conservation Authority related to recent changes to the Conservation Authorities Act and natural heritage.

Members were provided with the resolution passed by Hamilton Conservation Authority related to the recent changes to the *Conservation Authorities Act* and natural heritage.

8. STAFF REPORTS

8.1 POLICY-HS-25_27_28_29-2023 Various Policies

Members reviewed and discussed the Staff Report related to various Health and Safety Policies.

THAT: Health and Safety Policy HS-25: First Aid be adopted.

Motion: #95/23

Motion moved by Rudy Buitenhuis and motion seconded by Robert Beatty. CARRIED.

THAT: Health and Safety Policy HS-27: Health & Safety Communication be adopted.

Motion: #96/23

Motion moved by Jim Vezina and motion seconded by Brian Kurikka. CARRIED.

THAT: Health and Safety Policy HS-28: Health & Safety Participation be adopted.

Motion: #97/23

Motion moved by Robert Beatty and motion seconded by Brian Kurikka. CARRIED.

THAT: Health and Safety Policy HS-29: Needlesticks/Sharps Policy be adopted.

Motion: #98/23

Motion moved by Rudy Buitenhuis and motion seconded by Robert Beatty. CARRIED.

9. CHIEF ADMINISTRATIVE OFFICER'S REPORT

9.1 Monthly Treasurer's Report

Members were provided with the monthly Treasurer's Report for August's Administration and Capital.

9.2 Conservation Authorities Act - Progress Report #6

Members reviewed and discussed Staff Report CORP-10-2023: *Conservation Authorities Act* Progress Report #6.

THAT: Staff Report CORP-10-2023: Conservation Authorities Act Progress Report #6 be received **AND FURTHER THAT** Progress Report #6 be approved **AND FURTHER THAT** the report be forwarded to the Ministry of Natural Resources and Forestry.

Motion: #99/23

Motion moved by Brian Kurikka and motion seconded by Rudy Buitenhuis. CARRIED.

10. PASSING OF ACCOUNTS

THAT: having examined the accounts for the period August 1, 2023 to August 31, 2023 cheque #2986 to #3011 for \$342,819.24 and preauthorized payments of \$156,196.80 for a total of \$499,016.04, we approve their payment.

Motion: #100/23

Motion moved by Jim Vezina and motion seconded by Rudy Buitenhuis. CARRIED.

11. REGULATORY ROLE

Members were provided with the summaries for the Plan Review program and Section 28 permits issued since the last meeting.

12. PROJECTS UPDATE

12.1 Communications Manager Projects Update

It was noted that 34 people participated in the popular Fall Mushroom Hike led by Dr. Leonard Hutchison of Lakehead University.

It was noted that 17 people participated in the Neebing Birding Day and Sandhill Crane Festival.

12.2 Lands Manager Project Updates

It was noted that the Cyanobacteria (blue-green algae) at Hazelwood Lake Conservation Area that was reported to the MECP on August 24, 2023 had an advisory posted until September 15, 2023 advising of the presence of the algae.

12.3 Watershed Manager Projects Update

Members were advised that the CAO, Watershed Manager, Development Regulations Offices and GIS/Water Resources Technologist attended the Flood Forecasting Workshop organized by the Provincial Flood Forecasting and Warning Committee. Professionals in flood forecasting from across the industry were in attendance.

It was noted that Lake Superior water levels remain above average.

It was noted that LRCA's area of jurisdiction remained in a Level 1 Low Water Condition.

13. NEW BUSINESS

It was noted that the LRCA will celebrate its 70th Anniversary in 2024. A 70th Anniversary event will be planned at the Authority Office on Thursday, July 18, 2024.

It was noted that Competent Supervisor training will be held at the LRCA Administrative Building on November 2nd and 3rd and that Member Municipalities will be invited to send staff.

It was noted that the Board Members were encouraged to begin considering the upcoming 2024 Board elections, taking into consideration the legislated limitations on the term of Chair and Vice-Chair.

14. NEXT MEETING

The next meeting will be held on October 25, 2023 at 4:30 p.m.

15. BOARD TRAINING

A second Board tour will occur in the fall to tour the remaining Conservation Areas.

16. ADJOURNMENT

THAT: the time being 5:37 p.m. AND FURTHER THAT there being no further business we adjourn.						
Motion: #101/23						
Motion moved by Brian Kurikka and motion seconded by Robert Beatty. <i>CARRIED</i> .						
						
Chair	Chief Administrative Officer					



PROGRAM AREA	WATERSHED MONITORING	REPORT NO.	WM-02-2023		
DATE PREPARED	October 13, 2023	FILE NO.	5-12-2		
MEETING DATE	October 25, 2023				
SUBJECT	Conservation Area Water Quality Monitoring Report				

RECOMMENDATION

Suggested Resolution:

"THAT: the Staff Report WM-02-2023 be received **AND FURTHER THAT** the recommendations contained therein are endorsed."

- Funds and personnel permitting, bacteriological water quality and cyanobacteria monitoring in Conservation Areas should be continued in the summer of 2024.
- Further testing of field parameters should be continued in succeeding years to determine normal ranges and trends for monitored Conservation Areas.
- Amalgamate the E. coli and Cyanobacteria Field Data Sheets and transition into using iPads and Survey 123 as a more efficient way of data collection.
- The cyanobacteria sampling season should be extended to the same time frame as the E. coli Program (June 1 to August 31, 2024) to capture bloom events that are occurring outside of the established sampling timeline.

LINK TO STRATEGIC PLAN (2023 – 2027)

Connect & Explore:

 Manage recreational areas for current and future generations through robust land management, efficient maintenance programs, and reinvestment in the land.

EXECUTIVE SUMMARY

The Lakehead Region Conservation Authority (LRCA) monitors water quality at four conservation areas: Hazelwood Lake, Hurkett Cove, Mission Island Marsh and Silver Harbour. *E. coli* levels are monitored at Hazelwood Lake and Mission Island Marsh under the Thunder Bay District Health Unit's Bathing Beach Program. Cyanobacteria and algae blooms are monitored at all four sites, with the assistance of Blue Green Labs to conduct micrology assessments.

E. coli test results for Hazelwood Lake and Mission Island Marsh were within acceptable levels (≤ 200 counts of *E. coli* per 100 millilitres of water) for the entire season. As a result, there were no beach advisories posted in the summer of 2023 for *E. coli* exceedances.

The LRCA continued the cyanobacteria monitoring program in 2023 as a protective measure to better understand the presence of cyanobacteria. During the 2023 cyanobacteria monitoring

season, from July 17 to August 15, 2023, at least one genus of cyanobacteria was identified at all selected sample locations; however, the Eurofins Algal Toxin (Microcystins) Recreational Water Test Strips Kit tests did not exceed the Health Canada Recreational Guidelines of 10 μ g/L.

In 2023, two algal blooms occurred outside of the study timeline (July 24 and August 24). The blooms were reported to the Ministry of Environment, Conservation and Parks (MECP), and samples were sent to the ministry's lab for toxin analysis. The bloom on July 24, 2023, was not confirmed and all toxin concentrations were below their respective detection limits. The toxicology results for the bloom on August 24, 2023, indicated that the total Microcystins concentration in the sample was 3.44 micrograms per liter (μ g/L), which is above the Ontario Drinking Water Standard, but below the Health Canada guideline for total Microcystins in recreational waters used for primary contact recreation of 10 μ g/L. A beach advisory was posted on August 30, 2023, for a total of 14 days, as recommended by the Thunder Bay District Health Unit.

DISCUSSION

The Lakehead Region Conservation Authority (LRCA) monitors water quality at four conservation areas: Hazelwood Lake, Hurkett Cove, Mission Island Marsh and Silver Harbour. *E. coli* levels are monitored at Hazelwood Lake and Mission Island Marsh under the Thunder Bay District Health Unit's Bathing Beach Program. Cyanobacteria and algae blooms are monitored at all four sites, with the assistance of Blue Green Labs to conduct micrology assessments.

Hazelwood Lake *E. coli* levels were well below the PWQO criterion of 200 counts per 100 millilitres (mL) of water for the entire sampling season. The highest geometric mean of the year was 14 counts per 100 millilitres of water which occurred on June 5 and reoccurred on July 23, 2023.

Based on the historical bathing beach data for Hazelwood Lake, there does not seem to be an indication of improvement or deterioration of water quality at this Conservation Area. Since 1994, Hazelwood Lake has exceeded the applicable *E. coli* criterion during four sampling periods. In 1998 and 1999, Hazelwood Lake exceeded the applicable *E. coli* criterion once each year: August 5, 1998 (138.78 counts per 100 millilitres of water) and July 6, 1999 (97.36 counts per 100 millilitres of water). In 2006, the applicable criterion was exceeded five times resulting in a closure from July 28 until August 16, 2006; the highest exceedance was >10³ counts per 100 millilitres of water and was directly attributed to a large flock of Canadian geese, low lake levels and warm water temperatures. In 2007 the applicable criterion was exceeded twice: July 9 (486.63 counts per 100 millilitres of water), and August 27 (271.81 counts per 100 millilitres of water).

At Mission Island Marsh, *E. coli* levels approached the criterion throughout the sampling season but did not exceed. While some sampling locations had *E. coli* levels greater than 200 counts per 100 mL the geometric mean for the sample set was always below the criterion. The highest geometric mean of the year occurred on July 11, 2023, with 194 counts per 100 mL of water.

Based on the historical bathing beach data for Mission Marsh, there does not seem to be an indication of improvement or deterioration of water quality at this Conservation Area. Since

1994, Mission Marsh has exceeded the applicable *E. coli* criterion during three sampling periods. In 1998, the applicable *E. coli* criterion was exceeded once on August 5 (119.07 counts per 100 millilitres). In 1999, the applicable criterion was exceeded twice: July 6 (126.17 counts per 100 millilitres), and July 8 (158.22 counts per 100 millilitres). In 2008, the applicable criterion was exceeded once on August 18 (373.31 counts per 100 millilitres) resulting in a closure from August 19 to August 21, 2008. All other analyzed samples at Mission Marsh from 1994 to 2023 were within acceptable levels of *E. coli* (no sampling was undertaken between 2009 to 2021).

Beginning in 2021, the LRCA has been taking progressive steps to further understand and analyze cyanobacteria within the conservation areas where visitors recreate in open water. Cyanobacteria blooms have been observed and documented in Hazelwood Lake, initially in 2021, 2022, and again in 2023. During July and August 2023, the LRCA conducted weekly testing, using Algal Toxin Test Strips and a microscope analysis of samples to understand the phytoplankton community at the four conservation areas. The results of the Algal Toxin Test Strips indicated that the total concentration for microcystins was zero ppb for all sites for the five-week testing period. The test results do not indicate the absence of microcystins, rather that the concentrations are too low to be considered toxic or result in a Harmful Algae Bloom (HAB).

Various genera of cyanobacteria were observed and recorded across all sample locations selected for water quality monitoring in 2023. A total of five genera of cyanobacteria were observed as dominant, secondary, or tertiary within the study including Dolichospermum, Worinchinia, Microcystis, Snowella, and Merismopedia. While Microcystins are regarded as the most prevalent and significant of the cyanotoxins, it's important to monitor for other known cyanotoxins produced by the genus of cyanobacteria observed as they too can also produce harmful health effects.

Hazelwood Lake Conservation Area received two reports of blue-green algae blooms, the first on July 24, 2023, and the second on August 24, 2023. MECP laboratory analysis did not detect a bloom on July 24, 2023, and the sample results were below their respective detection limits. On August 24, 2023, LRCA staff reported a bloom to MECP via their Spills Action Hotline. A sample was collected and provided to both MECP and Blue Green Labs for algae identification and toxin analysis. MECP's labs and Blue Green Labs confirmed that the sample was indicative of a cyanobacterial bloom, specifically Dolichospermum. The ministry's toxicology results indicated:

- O Anatoxin-A concentrations were below the reported detection limit (0.20 μg/L)
- O Microcystin-LR was reported at 1.2 μ g/L, which is just below the Ontario Drinking Water Standard for Microcystin-LR of 1.5 μ g/L;
- O The total microcystins concentration in the sample was 3.44 μ g/L, which is above the Ontario Drinking Water Standard and below the Health Canada guideline for total Microcystins in recreational waters used for primary contact recreation of $10~\mu$ g/L .

As reported by the MECP, the toxin results are higher than typically observed but given there are no drinking water intakes in the immediate area of the beach area, the Health Canada recreational guideline for total Microcystins is considered to be more applicable (for swimming).

The results were below the recreational guideline (of 10 μ g/L); however, the LRCA issued an advisory on August 30, 2023, once the bloom had been confirmed by MECP and publicized by the TBDHU. In order to understand the potential contributing factors to the blooms, it is recommended that the LRCA investigate the contributing factors that are causing cyanobacteria blooms at the Hazelwood Lake beach, along with what rehabilitation techniques can be applied to reduce runoff and nutrient loading.

FINANCIAL IMPLICATIONS

Water quality analysis is conducted by the Ministry of Health laboratory under the Thunder Bay District Health Unit's Bathing Beach Program.

The total cost associated with the cyanobacteria monitoring in 2023 was \$2,552.27 including: the purchase of Abraxis Microcystins Recreational Water Test Kit (20 tests) (\$824.65); and consultant costs for Blue Green Labs to for materials, microscopy work, analysis (20 hours), and report writing (\$1,727.62).

CONCLUSION

All analyzed samples for Hazelwood Lake and Mission Island Marsh were within acceptable levels for *E. coli* for the 2023 bathing beach season. While various genera of cyanobacteria were observed and recorded across the sample locations, the Hazelwood Lake Conservation Area was the only location that received reports of blooms and required a closure in 2023. Future efforts should be focused on addressing cyanobacteria blooms at Hazelwood Lake and seeking funding to employ the necessary rehabilitation techniques. Funds and personnel permitting, monitoring of bacteriological water quality and cyanobacteria should be continued in the summer of 2024. Further testing of field parameters should be continued in succeeding years to determine normal ranges and trends for the selected conservation areas. LRCA staff will continue to contact the Spills Action Centre if blue-green algae blooms are suspected during monitoring.

BACKGROUND

Since 1994, the LRCA has annually monitored the water quality of the beach waters at the Hazelwood Lake Conservation Area. In 2022 the monitoring program was expanded to include Mission Island Marsh Conservation Area after monitoring had ceased in 2008. Sampling at the beach area was previously discontinued after it was classified as a 'non-bathing beach' due to a low usage of the water for swimming/bathing purposes. An increase in non-bathing activities and the expansion of the program to test for other water quality parameters warranted the return of the monitoring program to Mission Island Marsh Conservation Area in 2022.

The main contaminant of concern at bathing beaches is *Escherichia coli (E. coli)*. *E. coli* is naturally found in the intestines of humans and warm-blooded animals. Unlike other bacteria in this family, *E. coli* does not usually occur naturally on plants or in soil and water. The inability of *E. coli* to grow in water combined with its short survival time in water environments means that detecting *E. coli* in a water system is a good indicator of recent fecal contamination. These bacteria can cause irritation of the skin and eyes when contact is made and can cause serious illness when ingested. When *E. coli* criterion is exceeded, a Beach Advisory is posted at the facility.

Emerging reports of cyanobacteria, also referred to as blue-green algae, heightened the need for monitoring at conservation areas where visitors recreate in open water. These microscopic plant-like organisms are naturally found within natural streams, rivers, and lakes. Blooms occur when the populations rise rapidly, creating a large floating mass that can be bluish-green, brown, red, or yellow. Changes in cyanobacteria populations can be an indicator of water quality issues. Cyanobacteria can produce a range of cyanotoxins and variants of these cyanotoxins which can have different negative health effects. Exposure is often related to recreational activities within a water system. Exposure to cyanotoxins during recreational activity can result in hay fever-like symptoms, skin rashes, respiratory issues, and gastrointestinal distress. When blue-green algae is suspected, the Spills Action Centre is contacted.

REFERENCE MATERIAL ATTACHED

Executive Summary, Conservation Area Water Quality Monitoring, 2023.

A copy of the full report will circulate at the meeting and can be made available electronically.

PREPARED BY: Michelle Willow, Environmental Planner

THIS REPORT SIGNED AND VERIFIED BY: Jammy Cook	DATE: October 17, 2023
Tammy Cook	
Chief Administrative Officer	



EXECUTIVE SUMMARY

Water quality sampling of the bathing beach at Hazelwood Lake Conservation Area and non-bathing beach at Mission Island Marsh Conservation Area was undertaken by the Lakehead Region Conservation Authority (LRCA) throughout the summer of 2023. Collected water samples were analyzed by the Public Health Ontario laboratory for *Escherichia coli (E. coli)* bacterial concentrations and compared to the bathing beach criterion published in the Ministry of Health and Long-Term Care (MOHLTC), Operational Approaches for Recreational Water Guideline, 2018. Additionally, the LRCA has continued the cyanobacteria monitoring program in 2023 as a protective measure to better understand the presence of cyanobacteria within four conservation areas. In 2023, cyanobacteria monitoring, sampling, and cyanotoxin testing were conducted weekly as part of the Beach Bathing Program from July 17 to August 15, 2023. The conservation areas selected for assessment include Hazelwood Lake, Hurkett Cove, Mission Island Marsh, and Silver Harbour.

E. coli test results for both conservation areas were within acceptable levels (≤ 200 counts of *E. coli* per 100 millilitres of water) for the entire season. As a result, there were no beach advisories posted in the summer of 2023 for *E. coli* exceedances. Previously, the Hazelwood Lake beach had swimming advisories posted in 1998, 1999, 2006, and 2007, while the Mission Island Marsh beach had one swimming advisory posted in 2008 when the analyzed water samples resulted in *E. coli* levels above the applicable criteria; however, no sampling was conducted between 2009 and 2021. It is noted that prior to 2018, the criterion was <100 counts of *E. coli* per 100 millilitres of water.

Field parameters, which included water temperature, turbidity, pH, dissolved oxygen and conductivity, were measured as additional indicators of water quality. Testing of these field parameters began in 2005. The water quality parameters for all four sites were within the acceptable criterion for the Provincial Water Quality Objectives (PWQO). Testing of field parameters should be continued as part of the bathing beach program in succeeding years to help clarify normal ranges and trends for both the monitored conservation areas.

During the 2023 cyanobacteria monitoring season, at least one genus of cyanobacteria was found at all selected sample locations. The observable trend for all sites over the month was an increase in the dominance of cyanobacteria in the phytoplankton community during late July and early August. However, the Eurofins Algal Toxin (Microcystins) Recreational Water Test Strips Kit tests did not exceed the Health Canada Recreational Guidelines of 10 μ g/L. The micrology analysis of the samples revealed that the most common freshwater diatoms were Asterionella, Fragilaria, and Tabellaria, respectively. Of the observed cyanobacteria, the most abundant was Dolichospermum



followed by Woronichinia. This is concerning as Dolichospermum is a well-documented producer of the cyanotoxin Microcystin-LR and the Anatoxin-a group.

In 2023, two algal blooms occurred outside of the study timeline (July 24 and August 24). The blooms were reported to the Ministry of Environment, Conservation and Parks (MECP) and samples were sent to the ministry's lab for toxin analysis. The bloom on July 24, 2023, was not confirmed and all toxin concentrations were below their respective detection limits. The bloom on August 24 was reported and sampled by LRCA Staff. The sample was provided to MECP and Blue Green Labs. The toxicology results indicate that the total Microcystins concentration in the sample was 3.44 micrograms per liter (μ g/L), which is above the Ontario Drinking Water Standard, but below the Health Canada guideline for total Microcystins in recreational waters used for primary contact recreation of 10 μ g/L. A beach advisory was posted on August 30, 2023, for a total of 14 days as recommended by the Thunder Bay District Health Unit.

Funds and personnel permitted, bacteriological water quality and cyanobacteria monitoring should continue in the summer of 2024. As these programs progress forward, data collection should be streamlined using available technology (iPads and Survey 123). Should a cyanobacteria bloom be encountered during sampling activities, LRCA staff will report to the Spills Action Centre.



PROGRAM AREA	CONSERVATION AREAS	REPORT NO.	CONAREA-03-2023
DATE PREPARED	October 18, 2023	FILE NO.	28-25-2
MEETING DATE	October 25, 2023		
SUBJECT	Traffic Counter Report - 2022		

RECOMMENDATION

Suggested Resolution:

"THAT: the Staff Report CONAREA-03-2023 be received AND FURTHER THAT the recommendations contained therein be endorsed."

- Personnel and funding permitting, continue the annual vehicle counts at the Conservation Areas,
- Continue developing the marketing strategy with a focus on increasing yearly payment revenue for all Conservation Areas, and creating public awareness of LRCA owned Conservation Areas and associated costs,
- Continue to promote the sale of Explore Card Parking Passes, and
- Develop a strategy to track usage of Explorer Card users.

LINK TO STRATEGIC PLAN (2018 – 2022)

Connect & Explore:

• Manage and enhance recreational areas for current and future generations through robust land management programs and reinvestment into the land.

EXECUTIVE SUMMARY

In 2022, TRAFx G3 vehicle counters were deployed at Cascades, Mission Island Marsh, Hazelwood Lake, Silver Harbour, Little Trout Bay, Cedar Falls, Hurkett Cove and Mills Block Forest Conservation Areas. A seasonal trail counter was deployed on the Forest Community Trail at Hazelwood Lake Conservation Area.

In 2022, it is estimated that 190,749 vehicles visited the ten conservation areas, which corresponds to 419,648 people, assuming a count of 2.2 people per vehicle. Wishart and McKenzie Point Conservation Areas are not monitored using traffic counters; however, vehicle counts and visitor numbers were estimated to provide a more accurate reflection of conservation area usage in 2022. Additionally, data gaps at the surveyed areas were also included in the total visitor estimates.

Mission Island Marsh Conservation Area was the most visited area (29.1%), followed by Cascades Conservation Area (24.4%), Silver Harbour Conservation Area (21.3%), Mills Block Forest (16.4%), Hazelwood Lake Conservation Area (4.0%), Little Trout Bay Conservation Area (2.3%), Cedar Falls Conservation Area (1.4%), and Hurkett Cove Conservation Area (1.2%). The average monthly vehicle count decreased by approximately 4,725 vehicles from 19,250 in 2021 to 14,525 in 2022.

Total revenue from all coin boxes and pay and display units in 2022 amounted to \$30,302.72, which equates to approximately 3.2% of people paying the parking fee by coin box or Pay and Display. In 2022, 1,935 Explore Cards were purchased and 30 were donated as promotional items with a revenue of \$77,400.00. It is estimated that 51.5% of visitors to the areas pay for their parking using an Explore Card (assuming each card holder visits an area 50 times in a year), which results in an estimated 54.7% of all visitors paying to park in the areas. Total revenue generated from coin boxes and Explorer Cards increased by approximately 28% (\$23,777.65) in 2022 when compared to 2021 (i.e., \$83,942.62 in 2021 compared to \$107,702.27 in 2022).

It is estimated that the total number of visitors to Conservation Areas decreased by 18% in 2022, when compared to 2021; however, usage remains higher than pre-pandemic numbers.

A total of 32 parking infractions were given out throughout 2022; 31 at Cascades Conservation Area and one at Mission Island Marsh Conservation Area. It appears that enforcement has resulted in increased compliance in the areas, as evident by the increase in revenue, despite the decease in the number of visitors.

DISCUSSION

Annual vehicle traffic counter studies of Cascades, Mission Island, Hazelwood Lake, Silver Harbour, Little Trout Bay, Cedar Falls, Hurkett Cove and Mills Block Forest Conservation Areas were completed in 2022. A seasonal trail counter was deployed on the Forest Community Trail at Hazelwood Lake Conservation Area.

Methodology

The TRAFx G3 vehicle counters were placed underground in plastic valve boxes that provided protection from the surrounding soil and were covered with approximately 10 centimetres of native soil or rock on top. The counters were placed in Ziploc bags that have desiccant moisture control packets to control the moisture levels in the bag. A PVC junction box is utilized at Hazelwood Lake, which has been installed on the side of the guardrail along the hill prior to the causeway.

The counters cannot distinguish direction of traffic (i.e., in or out); therefore, areas that only have one entrance to both enter and exit the area had their counts divided by two. The vehicle counters also do not give an estimate of the number of people per vehicle. Since the traffic counters only count vehicles, any visitors who bike or walk to the area would not be included in the usage summary. Traffic counts were not reduced for Authority vehicles visiting the areas.

The following table summarizes the circumstance and the data factor that was applied in calculating usage at the areas:

Table 1: Usage Factors

Circumstance	Data factor	Area Applied
Only one way into and out of area	All counts are divided by 2	All areas except Little Trout Bay
Only one way into and out from boat launch to parking lot	All counts are divided by 4	Little Trout Bay
Estimate number of people per vehicle	Multiply by a factor of 2.2	All areas
Authority maintenance staff entering area	Not factored into estimates	All areas

Volume of Visitors to Conservation Areas

Throughout the 2022 study period, 174,296 vehicles were counted by the traffic counters at the eight Conservation Areas that were assessed. It is noted that there were periods of data gaps due to traffic counter malfunction and that two areas did not have traffic counters deployed as their locations are not suitable for the installation of the counters. In order to provide a more accurate estimate of actual usage, the missing data was estimated.

The total vehicle count in 2022 including the estimated missing data is 190,749. Using a factor of 2.2 people per vehicle, it is estimated that the number of visitors in 2022 was 419,648. Based on these estimates, approximately 40,248 fewer vehicles visited Conservation Areas compared to 2021, which equates to an 18% decrease in usage. This is lower than the last two previous yearly studies but higher than the yearly studies between 2016 and 2018 (i.e., pre-pandemic) as shown in Table 2: Annual Total Vehicles and Visitors to the Conservation Areas.

Table 2: Annual Total Vehicles and Visitors to Conservation Areas

Year	Total Vehicle Count	Total Estimated Visitors
2015	138,306	304,273
2016	137,331	302,128
2017	143,297	315,253
2018	147,559	324,630
2019	n/a	n/a
2020	214,128	471,082
2021	230,997	508,193
2022	190,749*	419,648*
Average	171,767	377,887

^{*}includes missing data due to data gaps and unsurveyed Areas

Trends in Usage

In 2022, Mission Island Marsh Conservation Area was the most visited area (29.1%), followed by Cascades Conservation Area (24.4%), Silver Harbour Conservation Area (21.3%), Mills Block Forest (16.4%), Hazelwood Lake Conservation Area (4.0%), Little Trout Bay Conservation Area (2.3%), Cedar Falls Conservation Area (1.4%) and Hurkett Cove Conservation Area (1.2%).

Overall, Sundays (18.1%) are the day of the week that sees the most visitors, followed by Saturday (16.3%), Monday (14.4%), Friday (13.4%), Tuesday (13.2%), Thursday (12.4%), and Wednesday (12.1%).

The average monthly vehicle count from January to December 2022 was 14,525 compared to 19,250 in 2021, this is a decrease of 4,725 vehicles per month. The highest recorded monthly vehicle count was at Mission Island Marsh with 6,147 vehicles visiting the area in May. The lowest recorded monthly vehicle count was at Hurkett Cove with 1 vehicle visiting the area in April.

The average monthly trail count during the 2022 study period was 164.2 at Hazelwood Lake Conservation Area Community Forest Trail. The highest monthly trail count was recorded in September, with 203 people walking the trail. The lowest monthly trail count was recorded in July, with 137 people walking the trail.

Estimate of Visitors paying Parking Fee

An analysis of the estimated number of vehicles paying the \$5.00 parking fee was also conducted. Based on the collected revenue of \$30,302.72, 6,061 vehicles paid the \$5 parking fee, which equates to 3.2% of the vehicles paying the parking fee by coin box or Pay and Display Unit. If every Explore Card pass holder visited the area 50 times per year (i.e., 1,965 cards x 50 visits/year = 98,250 vehicles), it is estimated that a total 51.5% of visitors are paying to park in the areas by Explore Card. Therefore, it is estimated that 54.7% of visitors pay either in the coin box or by Explore Card to park in the Conservation Areas.

Enforcement

Parking enforcement was conducted at Cascades and Mission Island Marsh Conservation Areas throughout 2022, under the City of Thunder Bay Parking By-Law. Vehicles were given a parking infraction if they did not display an Explore Card or printed ticket from the Pay and Display Unit. A total of 32 parking infractions were issued throughout 2022 (32 at Cascades and one at Mission Island). While issuing tickets, if a vehicle displayed an Explore Card or a paid parking receipt, a "thank you" slip was placed on their windshield, which provided a "thank you" but also an indication that enforcement had taken place. Staff not designated as parking enforcement employees of the LRCA, would also place "Did You Forget To Pay" slips on vehicles, when noncompliance was observed in the areas.

Additional Pay and Display Unit Installations

A third Pay and Display Unit was installed at Silver Harbour Conservation Area in August 2023, which is the third most highly visited Conservation Area after Mission Island Marsh and Cascades. The additional Pay and Display Unit is anticipated to increase revenue generation in this area; however, a full analysis of this will not be possible until a full year of collection has occurred (i.e., in 2024). The installation of a forth unit will be considered during the plans for future development at Mills Block Conservation Area.

FINANCIAL IMPLICATIONS

Total revenue from all coin boxes and Pay and Display units in 2022 amounted to \$30,302.72, equating to 6,061 vehicles paying the \$5.00 parking fee (i.e., 3.2% of people paying via coin box and Pay and Display). In 2022, 1,935 Explore Cards were purchased with revenue of \$77,400.00, and 30 additional Explore Cards were donated as promotional items. If it is assumed that each Explore Card holder visited the areas 50 times per year, the estimated percentage of people paying by Explore Card is 51.5%, equating to an estimated 54.7% of all visitors paying.

The total revenue from coin boxes and Explore Cards in 2022 was \$107,702.27, which was an increase of \$23,760.46 as compared to 2021, which represents a 28% increase in revenue.

This increased trend in revenue generation implies that visitors to the Conservation Areas are becoming more aware of the requirement to pay to visit the areas, which will result in minimizing the amount of municipal levy required to maintain Conservation Areas. Designated LRCA Staff continue enforcement efforts to encourage compliance. Additional areas will be considered in future years for the installation of Pay and Display units.

CONCLUSION

Based on a review of the 2022 traffic counter data, 190,749 vehicles visited Conservation Areas, which corresponds to an estimated 419,648 people visiting the area in 2022. In 2022, visitors to the area decreased by 18%; however, revenue increased by 28%, when compared to 2021.

The study found that Mission Island Marsh and Cascades Conservation Area continue to be the most visited areas, and Sundays are the most utilized day of the week.

BACKGROUND

In an effort to estimate the usage of Conservation Areas, the Lakehead Region Conservation Authority conducts vehicle counts in its various areas.

Between 2001 and 2013, the Authority undertook seasonal traffic studies utilizing a JAMAR style counter at two Authority owned properties during the summer and fall of the given year. The JAMAR counter utilized a pressure hose that detected the depression of the hose by the tires of the vehicle. The JAMAR study period typically ran from June to September/October with all equipment removed prior to any snowfall.

In 2014, in an effort to collect annual versus seasonal vehicle count data, the Authority purchased five TRAFx G3 vehicle counters. The TRAFx G3 vehicle counter utilizes a tiny magnetometer and embedded software to detect passing vehicles. The counter is contained in a small weatherproof box and is installed either above or below ground for the entire year. Counters are downloaded in the field with the TRAFx Dock and the data is transferred to the traffic software program at the office. The software program allows for interpretation of the data with various graphing/analyzing options.

REFERENCE MATERIAL ATTACHED

Executive Summary, 2022 Traffic Counter Report

A copy of the full report will circulate at the meeting and can be make available electronically.

PREPARED BY: Michelle Willows, Environmental Planner

Ryne Gilliam, Lands Manager

THIS REPORT SIGNED AND VERIFIED BY:	DATE:
Tammy Cook	October 18, 2023
Tammy Cook	
Chief Administrative Officer	



Executive Summary

The Lakehead Region Conservation Authority conducts vehicle counts at eight Conservation Areas to estimate the usage and income from each location. Wishart Conservation Area and McKenzie Point Conservation Areas are not monitored using traffic counters, however, vehicle counts and visitor numbers have been estimated to provide a more accurate reflection of conservation area usage in 2022.

In 2014, in an effort to collect annual versus seasonal vehicle count data, the Authority purchased five TRAFx G3 vehicle counters. Two additional counters were purchased in 2016 and one in 2021. The TRAFx G3 vehicle counter utilizes a tiny magnetometer and embedded software to detect passing vehicles. The counter is contained in a small weather-proof box and can be either installed above or below ground for the entire year. Counters are downloaded in the field with the TRAFx Dock and the data is transferred to the traffic software program at the office. The software program allows for interpretation of the data with various graphing/analyzing options.

In 2022 the counters were deployed at Mills Block, Cascades, Mission Island Marsh, Hazelwood Lake, Silver Harbour, Little Trout Bay, Cedar Falls, and Hurkett Cove Conservation Areas. A seasonal trail counter was deployed on the Forest Community Trail at Hazelwood Lake Conservation Area. Visitor estimates were established for the Wishart and Mackenzie Point Conservation Areas based on existing data and staff observation to provide a more accurate calculation of conservation area usage.

Based on a review of the eight studied areas in 2022, Mission Island Marsh Conservation Area is the most highly visited area with 29.1% of vehicle traffic per area. The second most visited area is Cascades Conservation Area (24.4%), followed by Silver Harbour Conservation Area (21.3%), Mills Block Forest (16.4%), Hazelwood Lake Conservation Area (4.0%), Little Trout Bay Conservation Area (2.3%), Cedar Falls Conservation Area (1.4%) and Hurkett Cove Conservation Area (1.2%).

Overall, Sundays (18.1%) are the day of the week that sees the most visitors, followed by Saturdays (16.3%), Mondays (14.4%), Fridays (13.4%), Tuesdays (13.2%), Thursdays (12.4%) and Wednesdays (12.1%).

Throughout the 2022 study period, the ten Conservation Areas were visited by approximately 190,749 vehicles. Utilizing an assumed factor of 2.2 people per vehicle, an estimated 419,648 people attended the ten areas throughout the year. The total is lower than the two previous yearly studies but higher than the studies between 2016 and 2018. In 2022, approximately 40,248 fewer vehicles visited Conservation Areas compared to 2021, which equates to an 18% decrease in usage. However, since 2016 the total number



of vehicles and visitors has gradually increased yearly from 137,331 visitors to an estimated 190,749 in 2022. The sharp incline in visitor usage in 2020 and 2021 is correlated with the COVID-19 Pandemic, where Conservation Areas were still accessible by the public to recreate during the mandated lockdown. As the borders opened and travel was once again permitted, it can be expected to see a slight decline in visitor numbers.

The average monthly vehicle count from January to December 2022 was 14,525, indicating a decline from 2020 and 2021 vehicle counts, but higher than the surveys from 2016 and 2018. The highest recorded monthly vehicle count was at Mission Island Marsh with 6,147 vehicles visiting the area in May. The high volume of visitors is attributed to birders observing the spring migration and the influx of kiteboarders accessing the waterfront. The lowest recorded monthly vehicle count was at Hurkett Cove with one vehicle visiting the area in April. The access roads are not maintained to Hurkett Cove in the winter, therefore access to the Conservation Area is the primary factor in the low vehicle count.

A trail counter was installed on the Forest Community Trail at the Hazelwood Lake Conservation Area in 2022. The average monthly trail count was 164.2 (Figure 17). The highest monthly trail count was recorded in September, with 203 people walking the trail. The lowest monthly trail count was recorded in July, with 137 people walking the trail.

In 2022, a total of 1935 Explore Cards were purchased and 30 additional Explore Cards were given away as promotional with revenue of \$77,400. The sale of Explore Cards has increased significantly since their introduction in 2003, when the average sales were below 200 cards. Promotional advertising and awareness have increased the sale of Explore Cards substantially. Total revenue from all coin boxes in 2022 amounted to \$30,302.72, which equates to 6,061 vehicles paying the \$5.00 parking fee during the entire year, compared to an estimated 190,749 vehicles visiting the areas. The total revenue from coin boxes and Explore Cards in 2022 was \$107,702.27, compared to \$83,942.62 in 2021, \$18,504 in 2020, \$10,269.86 in 2019, \$9,039.29 in 2018, and \$7,590,53 in 2017. This equates to a percentage of approximately 3.2% of people who pay the parking fee by coin box/pay and display. If it is assumed that each Explore Card purchaser visited the areas 50 times per year, the estimated percentage of people paying by Explore Card is 51.5%, equating to 54.7% of all visitors paying.

In 2021, the parking fee was increased to \$5.00 per vehicle/day-use fee. Pay and display units were installed at Mission Island Marsh and Cascades Conservation Areas and coinboxes were installed at Mills Block Forest, Wishart Forest, and Little Trout Bay Conservation Area in an effort to increase the generation of revenue to reduce the dependence on municipal levy to subsidize the operation of the areas. The LRCA has



continued to promote parking fees and the necessity of a user-pay model, including the installation of large \$5.00 parking fee signage in the areas and increased advertising on social media.

It is recommended that personnel and funding permitting, staff continue the annual vehicle counts at the Conservation Areas; continue developing the marketing strategy with a focus on increasing revenue for all Conservation Areas and creating public awareness of LRCA owned Conservation Areas and associated costs; continue to promote the sale of Explore Card Parking Passes; and develop a strategy to track usage of Explorer Card users. In response to the increased revenue from Explore Card sales and coinboxes, consideration will be given to improving recreational opportunities at Conservation Areas during the updating of the LRCA's Strategic Plan for the next five-year period (2023-2027). The addition of the new Environmental Planner position in 2023 has provided the capacity for the Authority to achieve identified initiatives and actions in the Strategic Plan.

2023 TREASURER'S REPORT MONTHLY EXPENSES				
	2023		TOTAL	BALANCE
	BUDGET	September	TO DATE	REMAINING
REVENUE				
Provincial Grants	337,909	-	381,744	- 43,835
Municipal Levy	1,793,799	-	1,793,799	-
Self Generated	408,570	50,177	457,105	- 48,535
Other Revenue	352,206	6,995	162,722	189,484
TOTAL REVENUE	2,892,484	57,172	2,795,371	97,113
EXPENSES				
Category 1 Mandatory Programs and Services				
Corporate Services	867,959	74,980	699,143	168,816
Risk of Natural Hazards	1,097,542	88,102	361,327	736,215
Conservation and Management of Lands owned and controlled by the Authority	563,411	97,692	811,377	- 247,966
Source Water Protection	58,974	5,528	39,661	19,313
Other Programs and Services	19,625	1,990	13,737	5,888
Total Category 1 Mandatory Programs and Services	2,607,511	268,292	1,925,245	682,266
Category 2 Non-Mandatory Programs and Services at the Request of a Municipality				
Mapping Services	16,311	1,408	11,621	4,690
Total Category 2 Non-Mandatory Programs and Services at the Request of a Municipality	16,311	1,408	11,621	4,690
Category 3 Non-Mandatory Programs and Services				
Education	100,438	6,183	45,395	55,043
Stewardship	158,224	29,206	142,502	15,722
Other	10,000	513	9,344	656
Total Category 3 Non-Mandatory Programs and Services	268,662	35,902	197,241	71,421
Total All Expenses	2,892,484	305,602	2,134,108	758,376



PROGRAM AREA	FINANCE	REPORT NO.	FIN-13-2023
DATE PREPARED	October 13, 2023	FILE NO.	17-7-1
MEETING DATE	October 25, 2023		
SUBJECT	Pay Date Adjustment		

RECOMMENDATION

Suggested Resolution

"THAT: staff are permitted to be paid out up to five days of banked overtime or vacation as a special pay on November 10, 2023 AND FURTHER THAT the LRCA pay date will be moved forward one-week to incorporate a one-week hold back for all staff."

LINK TO STRATEGIC PLAN

Govern and Enhance:

- Continue to commit to accountable and transparent organizational governance.
- Find and implement efficiencies and streamline processes across all program areas.
- Maintain a stable model of financial resiliency based on capacity, capabilities and public expectations by maximizing new funding opportunities, fundraising and self-generated revenue.

EXECUTIVE SUMMARY

The 2024 budget and beyond requires accountability related to the use of municipal levy for non-mandatory programs. In order to document the charging of staff time to program areas, the LRCA will be requiring all staff to use time sheets, where time is charged to the appropriate program. In order to incorporate time sheets into the payroll system, the current pay date, which currently does not include a holdback is required to be moved ahead by one-week. In order to reduce the financial hardship associated with the one-time requirement of three weeks between pay dates, staff will be given the option to receive a one-week special pay using paid out vacation or banked over-time.

DISCUSSION

The Lakehead Region Conservation Authority must be accountable for the use of municipal levy, as outlined in Ontario Regulation 402/22: Budget and Apportionment, specifically in regard to the use of municipal levy for Category 2 and 3 programs (non-mandatory programs). To document which programs staff are charged to, staff will be required to complete time sheets, effective November 11, 2023. Work weeks will begin on the Saturday of the given week and

time will be charged to the applicable program where the work was completed (i.e., Plan Review, Section 28, Conservation Areas, Stewardship, etc.). Time sheets will be accessed through the existing PayWorks module, where staff access their current pay stubs. Additionally, the LRCA will be moving away from the existing Time-Off Manager program to PayWorks, to record the use and banking of overtime, vacation, sick-time, etc.

In order to facilitate the move to timesheets, there is a need to rectify the issue that full-time staff currently do not have a hold back (i.e., staff are paid right up to the paid date). Currently, Finance Staff process payroll on the Monday of a pay week (i.e., before the staff have worked the days they are being paid for). Contract staff have a one-week holdback and are not paid before they work their shifts.

To incorporate a one-week hold back, the second pay in November will be pushed one week ahead (i.e., 3 weeks between pay), and pay dates will be permanently changed to the new biweekly schedule to allow for the submission of timesheets prior to processing payroll.

To minimize financial hardship to staff, staff will be provided the option to be paid for five days of overtime or vacation, which will then result in no loss of salary in the year (i.e., will still be paid 52 weeks). Staff with not enough banked time will be permitted to make arrangements to make up the time.

In the month of November, the following changes will be made to staff payroll dates in order implement a one-week holdback:

Pay Day	Type of pay	Contract Staff	Full-time staff
November 10, 2023	Regular Pay	Pay period – Oct. 21 to Nov. 5	Pay period – Oct. 28 – Nov. 10
November 10, 2023	Special Pay - 1 week	Pay period – Nov. 6 to Nov. 10	5 days paid – banked overtime, vacation pay, arrangement to make up time (only if no banked time), or no pay
December 1, 2023	Regular Pay	Pay period – Nov. 11 to Nov. 24	Pay period – Nov. 11 to Nov. 24
Every 2 weeks	Regular Pay	One-week hold-back	One-week hold-back

Staff have all received a memo advising of the changes and have provided written confirmation acknowledging the changes and indicating their preference for the November 10, 2023 special pay (i.e., overtime/vacation pay-out or no special pay).

Currently, budgets are prepared using estimated staff time annual percentages for program areas from previous time studies completed. The use of timesheets will allow for better estimates of staff program costs in future budgets.

Staff have consulted with the Grant Thornton, the Authority's audit firm, and they have indicated they are supportive of instituting a one-week hold back for payroll.

FINANCIAL IMPLICATIONS

By incorporating a one-week hold back, the financial risk of overpaying employees should they terminate their employment unexpectedly will be eliminated. Additionally, the incorporation of timesheets will provide documentation of which programs staff have been charged to and will provide data for budget preparation in future years.

CONCLUSION

The LRCA will be moving to a one-week payroll hold back for all staff to incorporate the use of timesheets. In order to facilitate the pay date move, staff will be given the option to receive a one-time five-day payout of banked overtime or vacation in order to reduce the financial hardship related to the one-time requirement of three weeks between pay dates.

BACKGROUND

Policy PP-05: Overtime, permits the banking of time worked outside of normal working hours, and permits the pay out of accumulated banked overtime in the month of December of a given year. A maximum of three days of banked overtime can be carried forward to the next year.

REFERENCE MATERIAL ATTACHED

None.

PREPARED BY:

Tammy Cook, CAO

THIS REPORT SIGNED AND VERIFIED BY:	DATE: October 16, 2023
Tammy Cook	
Tammy Cook Chief Administrative Officer	



October 25, 2023	
Moved By	
Seconded By	

"THAT: having examined the accounts for the period September 1, 2023 to September 30, 2023 cheque #3012 to #3038 for \$148,563.79 and preauthorized payments of \$118,235.38 for a total of \$266,799.17, we approve their payment."

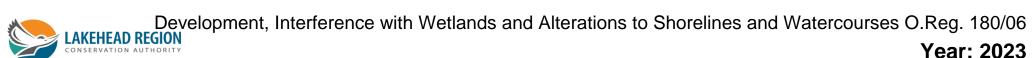
3012	2611943 Ontario Ltd.	Garbage removal Cascades	452.00
3013	ALS Sewage Services	Mills Block porta unit July 30 - Aug 29, 2023	203.40
3014	Clow Darling	Backflow Testing	362.73
3015	Francotyp-Postalia Canada Inc.	Quarterly Meter Rental Sep-Dec 2023	67.63
3016	Hatch Ltd.	Design, admin Cascades Paving Project	12,204.00
3017	Innovated Solutions	Firewall Security	937.90
3017	KGS Group Consulting Engineers	Neebing McIntyre Floodway Integrity Evaluation Study	23,933.58
3019	MacKay Meters	Gateway hosting July - October 2023 Pay and Display	23,933.36
3020	Michelle Willows	Flight to Toronto CA Workshop - Michelle Willows	147.04
3021	Northern Turf Equipment	Riding mower	5.038.67
3022	Superior Outdoors Inc. The Walleye	September ad	175.15
3023	Thunder Bay Answering Service Inc.	Answering Service September 2023	258.72
3024	Thunder Bay Broom & Chemicals	Office and CA supplies	369.04
3025	City of Thunder Bay	Water Aug 31	1,322.27
3026	Lakehead Conservation Foundation	Balance owed to LCF	16,421.48
3027	Lowery's	Photocopy charges Aug 9 - Sep 8, 2023	216.51
3028	Melissa Hughson	Travel Expenses Flood Forecasting Workshop Sep 17-19, 2023 - Melissa	114.40
3029	Michelle Sixsmith	Travel Expenses Flood Forecasting Workshop Sep 17-19, 2023 - Michelle Sixsmith	111.00
3030	Nor Col EZ Dock	Balance re Invoice 863 Dock	436.35
3031	Northern Turf Equipment	Equipment part	72.14
		Plants for Fisherman's Park West Westland Plants for Boulevard Shoreline	
3032	Pine View Nurseries	Naturalization project	13,872.72
3033	Prezio Electric	Electrical Upgrades - Progress 3	57,806.28
3034	Rutter Urban Forestry	fell 3 large trees at the Clayte Hartviksen property right next to neighboring property	1,065.31
3035	Scott Drebit	Travel Expenses Flood Forecasting Workshop Sep 17-19, 2023 - Scott Drebit	140.00
3036	SGC Inc.	Fisherman's Park West -Wetland Project	12,292.14
3037	Tammy Cook	Travel Expenses Flood Forecasting Workshop Sep 17-19, 2023	190.20
3038	Thunder Bay Broom & Chemicals	Janitorial Supplies	104.53
		-	148,563.79
PA	Payroll and Per Diems		85,311.55
PA	Royal Bank Group Retirement RRSP and	d TFSA	2,480.76
PA	RWAM and Lifeworks Benefits		3,049.92
PA	Enbridge		37.81
PA	Synergy North		688.61
PA	Esso		1,956.52
PA	Visa Routine Monthly Expenses		12,208.93
PA	Banking and Visa Fees		233.12
PA	Postage		-
PA	OMERS August		11,981.26
PA	GIC Purchase		,5520
PA	Photocopier Lease		286.90
1.7	i notocopiei Lease	-	118,235.38
		-	266,799.17
		<u> </u>	200,799.17

Chair

200#	/23	

Monthly Plan Input/Review and Fill Regulations Administration September 1 to 30, 2023 Official Plan/ **Minor Variance** Official Plan **Letter of Opinion** Municipality Consent Zoning By-Law **Zoning By-Law** Subdivisions Clearances **Reality Services** Lawyer Total Comprehensive (B) (Z) Inquiries (Other) 712 Macdonell Street 28 Cumberland Street S City of Thunder Bay A-48-2023 1580 Arthur Street W 645 Cumberland St N 676 Squier St Total Oliver Paipoonge 1B/13/23 ZBLA05-2023 Subdivision 2-2023 Total O'Connor Total Neebing Total Shuniah Total Conmee Total Gillies Total Dorion Total **Rural Planning Board** Total Monthly Total

Monthly Plan Input/Review and Fill Regulations Administration October 1 to 17, 2023											
Municipality	Minor Variance (A)	Consent (B)	Official Plan	Official Plan/ Zoning By-Law Comprehensive	Zoning By-Law (Z)	Subdivisions	Clearances	Clearances Reality Services Lawyer Inquiries			Total
City of Thunder Bay								76 & 72 Junot Ave S			
-											
Total	0	0	0	0	0	0		0	1	0 (0 1
Oliver Paipoonge		1B/11/23								Highway 130/Arthur St W	
		1B/12/23 1B/14/23									
		1B/15/23									
		, -									
Total	0	4	0	0	0	0		0	0	0 1	1 5
O'Connor											
		_	_	_		_		-	_	-	_
Total Neebing	B08-2023	B07-2023	0	0	0	0		0	0 Margaret Street	0 0	0 0
Needing	DU0-2023	BU7-2023							O Margaret Street		
Total	1	. 1	0	0	0	0		0	0	1 (0 3
Shuniah											
_											
Total	0		0	0	0	0		0	0	0 (0 0
Conmee	U		0	U	U	0			U		0
Total	0	0	0	0	0	0		0	0	0	0 0
Gillies											
Total	0	0	0	0	0	0		0	0	0	0 0
Dorion										Hwy 11/17 4 Laning	
-					_				0		1
Total Rural Planning Board	0	0	0	U	0	0			U	1	1
nurai Flailling Dualu											
Total	0	0		0	0	0			0		0 0
Monthly Total	1	. 5	0	0	0	0		0	1	1 2	2 10



Year: 2023

Permit #	Category	Fee	Applicant Name	Municipality	Subject Property Address	Type of Work	Key Dates				
							Rec'd at LRCA	Permit Issued	Days to Issue Permit	Reason for Timeline	Approved by:
#1/23	Standard	\$300.00	Debra Reith	Municipality of Shuniah	99 West Loon Road	Cottage Re-Construction	9/1/2023	12/01/23	4		Staff
#2/23	Standard	\$300.00	Tim Van Reenen	City of Thunder Bay	1560 Riverdale Road	House, Garage & Fill Placement	12/1/2023	13/01/23	1		Staff
#3/23	Standard	\$600.00	Skylar Hendrickson	Municipality of Oliver Paipoonge	5200 Dawson Road	Dwelling Addition	9/2/2023	10/02/23	1		Staff
#4/23	Standard	\$300.00	Alex Hitback	City of Thunder Bay	1281 Central Ave	Dwelling & Fill Placement	13/2/2023	14/02/23	1		Staff
#5/23	Standard	\$300.00	Josh Busniuk	Municipality of Oliver Paipoonge	3336 Hwy 130	Driveway Construction - Fill and Site Grading	23/2/23	06/03/23	12		Staff
#6/23	Standard	\$300.00	Craig Pylypochuk	City of Thunder Bay	2854 Dawson Road	Garage Construction	6/3/2023	10/03/23	5		Staff
#7/23	Standard	\$1,000.00	Thunder Valley Developmen	t Municipality of Oliver Paipoonge	325-50 Hwy 130	Fill Placement for Parking Lot Expansion	13/3/2023	14/03/23	1		Staff
#8/23	Standard	NA	City of Thunder Bay	City of Thunder Bay	Youge Street at Kam River	Bank Repair	4/4/2023	06/04/23	2		Staff
#9/23	Standard	\$300.00	Derek Gascoigne	City of Thunder Bay	3028 Alice Ave	Garage Construction	6/4/2023	18/04/23	12		Staff
#10/23	Standard	\$300.00	Pierre Gagne Contracting	City of Thunder Bay	490 Maureen St	Dredging-Midcontinent Terminal	21/4/2023	24/04/23	3		Staff
#11/23	Standard	\$300.00	Enbridge Gas Inc	Municipality of Oliver Paipoonge	Veley Lane	Gas Main Extension	21/4/2023	25/04/23	4		Staff
#12/23	Small Works	\$150.00	Wally Peterson	City of Thunder Bay	Marina Park, Pool 6	Fill Placement	10/5/2023	15/05/23	5		Staff
#13/23	Standard	\$300.00	Dana Yacuk	Municipality of Oliver Paipoonge	S. of 955 Hwy 130 Lot	Fill Placement	11/5/2023	17/05/23	6		Staff
#14/23	Standard	\$300.00	Gerald Gosselin	City of Thunder Bay	111 Herrick Place	Deck Addition	17/05/23	24/05/23	8		Staff
#15/23	Large	\$600.00	Rudolf Novak	City of Thunder Bay	734 Fieldstone Place	House and Fill	19/05/23	29/05/23	10		Staff
#16/23	Standard	\$300.00	Tiffany Holmwood	Municipality of Oliver Paipoonge	339 Mud Lake Road	Garage & Fill Placement	1/6/2023	05/06/23	4		Staff
#17/23	Standard	\$300.00	Rob Frattaroli	Municipality of Shuniah	226 Bass Lake Road	Site Grading, Rock Placement & Garage	6/6/2023	06/06/23	1		Staff
#18/23	Standard	NA	City of Thunder Bay	City of Thunder Bay	2031 Loch Lomond Rd	Culvert Replacement	1/6/2023	06/06/23	5		Staff
#19/23	Small Works	\$150.00	Diane Mehagan	Municipality of Shuniah	3500 Hwy 11-17	Dock Reconstruction	31/5/2023	08/06/23	6		Staff
#20/23	Standard	\$300.00	Joe Sgambelluri	City of Thunder Bay	817 Toms Road	Garage	7/6/2023	08/06/23	1		Staff
#21/23	Standard	\$300.00	Thunder Bay Terminals	City of Thunder Bay	375 Island Dr.	Dredging	31/5/2023	09/06/23	9		Staff
#22/23	Standard	\$0.00	Municipality of Oliver Paipoonge	Municipality of Oliver Paipoonge	Vibert Road & 3405 Rosslyn Rd	Storm Pipe Outlet	13/6/2023	15/06/23	7		Staff
#23/23	Small Works	\$150.00		City of Thunder Bay	161 Kivikoski Road	Deck Construction	16/6/2023	19/06/23	4		Staff
#24/23	Standard	\$300.00	Enbridge Gas Inc	Municipality of Oliver Paipoonge	Harstone Rd, Lot 23, Con. 1	Gas Main Extension	5/6/2023	16/06/23	14		Staff
#25/23	Standard	\$150.00	Scott Taylor	Municipality of Neebing	14 Margaret St. N.	Erosion Protection	13/6/2023	26/06/23	14		Staff
#26/23	Standard	\$150.00	Statton Eade	Municipality of Shuniah	523 Fisherman's Point Rd	Erosion Protection & Retaining Wall Repair	5/6/2023	26/06/23	12	_	Staff
#27/23	Standard	\$300.00	Mobilex Terminal LTD	City of Thunder Bay	174 Darrel Ave	Maintenance Dredging	26/6/2023	26/06/23	1		Staff

#28/23	Standard	\$150.00	Robert Doan	Municipality of Shuniah	2609 Birch Beach Rd	Two Dock Cribs & Boat Ramp	23/6/2023	27/06/23	4	Staff
#29/23	Standard	\$600.00	Fred Hopper	Municipality of Shuniah	563 No.5 Road South	Bridge Construction	23/6/2023	27/06/23	4	Staff
#30/23	Standard	\$0.00	Township of Gillies	Township of Gillies	Leeper Road South	Culvert Replacement	5/7/2023	06/07/23	1	Staff
#31/23	Small Works	\$0.00	City of Thunder Bay	City of Thunder Bay	400 West Ktib Bkvd	Fill Placement and Regrading	28/6/2023	05/07/23	8	Staff
#32/23	Standard	\$300.00	Kirby Petrich	City of Thunder Bay	1430 Riverdale Road	House Construction	4/7/2023	06/07/23	2	Staff
#33/23	Small Works	\$150.00	Allen Barrie	Municipality of Neebing	56 Island Avenue	Site Grading & Concrete Bunker	30/6/2023	10/07/23	11	Staff
#34/23	Standard	\$150.00	Pauline Mccormack	City of Thunder Bay	309 Hartviksen St	Sunroom Addition	5/7/2023	11/07/23	6	Staff
#35/23	Standard Works	NA	Municipality of Neebing	Municipality of Neebing	Sturgeon Bay Rd	Culvert Replacement	11/8/2023	14/08/23	3	Staff
#36/23	Standard Works	\$0.00	Township of O'Connor	Township of O'Connor	Blaikie, Diana & Haarstone Roads	Bank Stabilization & Erosion Control	20/7/2023	27/07/23	7	Staff
#37/23	Standard Works	\$600.00	Sam Leon	City of Thunder Bay	4701 Oliver Road	Dwelling & Garage Construction	26/7/2023	31/07/23	5	Staff
#38/23	Small Works	\$150.00	Peter Aalbers	Municipality of Oliver Paipoonge	Lot 18, Con 2, Blindline Road	Agriculture Tile Draining	4/8/2023	08/08/23	4	Staff
#39/23	Small Works	\$150.00	Henry Aalbers	Municipality of Oliver Paipoonge	Lot 15, Con 2, Blindline Road	Agriculture Tile Draining	4/8/2023	08/08/23	4	Staff
#40/23	Standard Works	\$300.00	Karen Potec	Municipality of Neebing	142 Little Trout Bay Road	Dwelling & Garage, Site Grading & Fill Placement	4/8/2023	09/08/23	6	Staff
#41/23	Standard Works	\$300.00	Linda Baca	Township of Conmee	5107 Hwy 11/17	Deck, Geodome & Fill Placement	9/8/2023	10/08/23	2	Staff
#42/23	Standard Works	\$150.00	Gaetan Galarneau	Municipality of Shuniah	Vacant Land btw 582 & 584 Green Point Road	Rock Protection & Drainage Swale	14/8/2023	15/08/23	1	Staff
#43/23	Standard Works	NA	City of Thunder Bay	City of Thunder Bay	975 Mountain Rd	Drainiage Improvements	14/8/2023	17/08/23	4	Staff
#44/23	Standard Works	\$300.00	Thunder Bay Port Authority	City of Thunder Bay	100 Main Street	Dredging at Keefer Terminal	22/8/2023	23/08/23	1	Staff
#45/23	Small Works	\$150.00	Barb Rees	City of Thunder Bay	3105 Government Road	Bridge Maintenance & Erosion Repair	28/08/23	29/08/23	2	Staff
#46/23	Small Works	\$300.00	Brad McKibbon	City of Thunder Bay	1685 Mountain Rd	Driveway & Fill	26/08/23	31/08/23	6	Staff
#47/23	Standard Works	NA	Township of Conmee	Township of Conmee	Lundstrum Rd	Culvert Installation	6/8/2023	07/08/23	1	Staff
#48/23	Standard Works	\$300.00	Confederation College	City of Thunder Bay	1450 Nakina Dr	Sidewalk & Ramp	13/08/23	15/08/23	2	Staff
#49/23	Standard Works	\$300.00	Confederation College	City of Thunder Bay	1450 Nakina Dr	Indigenous Gathering Outdoor Area	3/10/2023	04/10/23	2	Staff
#50/23	Small Works	\$300.00	Kevin Lawrence	Ciity of Thunder Bay	1040 Brookview Place	Culvert Installation & Fill Placement	1010/23	13/10/23	3	Staff



Monthly Project Update

MEETING DATE	October 25, 2023
STAFF NAME	Ryan Mackett
POSITION	Communications Manager

Conservation Areas Workshop

The Communications Manager, Field Operations Lead Hand, and Environmental Planner are currently attending the annual Conservation Areas Workshop, being held in Orillia. Workshop topics at this year's conference include Indigenous Engagement, Encampment case studies and Encampment Engagement, Stewardship Projects, Event Planning, Building Partnerships, Sustainable Trail Construction, Land Management Strategies, Crawford Lake, Staff Recruitment and Retention, CAs Public Consultation Requirements, and more. An update from the Communications Manager will be provided at a future meeting. (Note that the Communications Manager is on the Conservation Areas Workshop Planning Committee and will receive a 50% discount on his workshop registration.)

2024 Conservation Dinner & Auction

Staff have begun tentative planning for the 2024 Conservation Dinner & Auction, which is scheduled to occur on Friday, February 9, 2024, at The Da Vinci Centre. More information will be provided to Members at future Meetings.



Monthly Project Update

MEETING DATE	October 25, 2023
STAFF NAME	Ryne Gilliam
POSITION	Lands Manager

2023 Structure Inspections

In 2023, KGS was hired to conduct structural inspections of the LRCA owned Diversion Structure, Hazelwood Dam, Neebing River Weir and Mission Island Marsh Boardwalk.

The Neebing-McIntyre Floodway Diversion Structure's overall condition remains good. Replacing a missing nut and bolt at the steel lifting frame, as well as monitoring of minor cracks near a fence post and vertical crack at the north retaining wall was recommended.

The Hazelwood Lake Dam's overall condition is good. It was recommended to replace four missing bolts, one section of handrail and remove vegetation at the south abutment wingwall. Additional concrete patch repair was also identified to completed at the southwest wing wall.

The Neebing River Weir's overall condition remains good. All identified recommendations such as gabion basket repair will be addressed through the installation of a new permanent sea lamprey trap which will be completed by the Department of Fisheries and Oceans.

The on-grade boardwalk is in poor condition and the elevated boardwalk is in fair condition at Mission Island Marsh. This is due to the overall weathering of deck planks and the light surface corrosion of the sheet piles throughout. The boardwalk will require on-going monitoring and deck plank replacements that will likely be a constant maintenance item.

LRCA staff undertook an inspection at the Hazelwood Lake Causeway in 2023. The overall condition of the causeway, embankment and culvert is good. Damage to four cedar posts as part of the guiderail system were damaged and Wilco Contractors were hired to repair the damage.

LRCA Staff have begun and will continue to complete the minor repairs as recommended.

Infographic Sign Installations

Infographic Signs have been installed in all Conservation Areas that provide graphics related to permitted and prohibited activities specific to each area. These signs will limit the number of required individual pieces of signage, thus reducing sign pollution within the Conservation Areas.



Greenworks Collaboration

The LRCA staff assisted Greenworks employees in creating video content for promotion of Greenworks trolling motors. As thanks for the assistance, Greenworks Canada donated to the LRCA a battery operated trolling motor, chainsaw, earth auger and grass trimmer along with batteries and charging units.

Electrical Update

Synergy North has determined that the new transformer that was installed as part of the electrical upgrade to 400 AMP service does not meet the grounding requirement due to the existing poor sub-grade rocky surroundings: therefore sediment will be removed around the existing transformer to allow for the placement of Bentonite Clay around the current ground rods and plates along with the installation of additional grounding rods and plates.



Monthly Project Update

MEETING DATE	October 25, 2023
STAFF NAME	Melissa Hughson
POSITION	Watershed Manager

Source Water Protection – Additional Funding

The LRCA submitted a request for additional funding to MECPs Drinking Water Source Protection program in April 2023 to complete an education and outreach project aimed at non-municipal drinking water users in the Lakehead Region. The project was recently approved by MECP; \$7,550.69 of additional funding will be added to LRCAs 2022-2024 Transfer Payment Agreement (TPA) for the special project. The purpose of the project is to inform and educate homeowners on the importance of maintaining their drinking water systems by providing general information to members of the public on non-municipal drinking water systems (i.e., residents with wells) regarding safe drinking water, well water testing, treatment options available, etc.

Conservation Authorities University (CAU)

The Watershed Manager will be completing the Conservation Authorities University (CAU) Executive Development Program organized by Conservation Ontario. The training program involves eight days of instruction over one year for new and experienced senior managers and department heads throughout the conservation authorities' network. Training topics include governance, finance, public administration, and key conservation authority business areas such as natural hazards management, source water protection, conservation land management, watershed-based resource management, etc. The program aims to help build strong, knowledgeable, management leadership in the conservation authority community. Current employees who have completed the training previously include the CAO, Finance Manager, and the Communications Manager.

Ontario Low Water Response

LRCA's area of jurisdiction remains in a Level 1 Low Water advisory. MRNFs Surface Water Monitoring Centre (SWMC) was notified of our area of jurisdiction Level 1 advisory on August 3, 2023; LRCA's website is updated with our Monthly Summary. The LRCA will continue to monitor water levels and will update the advisory when warranted.