



## Board of Directors Meeting

MVCA Administration Building

1:00 pm

April 17, 2023

### AGENDA

#### ROLL CALL

**Declarations of Interest (written)**

**Agenda Review**

#### MAIN BUSINESS

1. Approval of Minutes: Board of Directors Committee Meeting Minutes, March 13, 2023, Page 3
  - a) Receipt of Finance and Administration Advisory Committee Meeting Minutes, November 21<sup>st</sup>, 2022, Page 9
2. Fiduciary Responsibility, Report 3306/23 (C. Watson, Legal Counsel), Page 15
3. State of the Watershed Update, Report 3307/23 (J. North), Page 21
4. Daily Planning Cycle (DPC) Web Tool Presentation, Report 3308/23 (D. Post), Page 22

#### *Rising from the Finance and Administration Advisory Committee Meeting*

5. Update to 10-Year Capital Plan, Report 3309/23 (S. Millard), Page 25
6. Tangible Capital Asset Policy Amendment, Report 3310/23 (S. Millard), Page 38
7. City of Ottawa Flood Plain Mapping Contract, Report 3311/23 (S. McIntyre & J. Cunderlik), Page 46
8. Sale of K&P Trail, Report 3312/23 (S. Lawryk & S. McIntyre), Page 82
9. Long-Term Disability Benefit Amendment (*Discussion in Camera*), Report 3313/23 (S. Millard), Page 87

10. Psycho-Stress Assessment Results, Report 3314/23 (S. McIntyre & A. Broadbent), Page 88
11. Wetland Overview and Regulations, Report 3315/23 (K. Stiles & M. Craig), Page 92
12. CO AGM Briefing, Report 3316/23 (S. McIntyre), Page 95

**BY CONSENT**

13. Kashwakamak Lake Dam Funding Motion, Report 3317/23 (J. Cunderlik), Page 105
14. Registered Use of the K&P, Lanark Highlands Township, Report 3318/23 (S. Lawryk), Page 106
15. GM Update, Report 3319/23 (S. McIntyre), Page 115

**ADJOURNMENT**



## MINUTES

Via Zoom and In Person

Board of Directors Meeting

March 13, 2023

### **MEMBERS PRESENT**

J. Atkinson, Chair  
J. Mason, Vice-Chair  
D. Comley (remote)  
B. Holmes  
J. Karau  
P. Kehoe  
C. Kelly (remote)  
R. Kidd  
S. Lewis (remote)  
M. Souter  
H. Yanch  
A. Vereyken

### **MEMBERS ABSENT**

C. Curry  
G. Gower  
R. Huetl  
C. Kelsey  
A. Kendrick  
T. Popkie

### **STAFF PRESENT**

S. McIntyre, General Manager  
J. Cunderlik, Director of Engineering  
J. North, Engineering Technologist  
S. Lawryk, Property manager  
A. Broadbent, Manager of Information, Communications and Technology  
R. Clouthier, Recording Secretary

J. Atkinson called the meeting to order at 1:00 pm.

1. Declarations of Interest (written)

Members were asked to declare any conflicts of interest and informed that they may declare a conflict at any time during the session. No declarations were received.

2. Agenda Review

Board members had no comments on the agenda for the March 13, 2023 meeting.

**B23/03/13-1**

**MOVED BY: B. Holmes**

**SECONDED BY: H. Yanch**

**Resolved, That the agenda for the March 13, 2023 Board of Directors Meeting be adopted as presented.**

**“CARRIED”**

**MAIN BUSINESS**

1. Approval of Minutes: Annual General Board of Directors Meeting on February 22, 2023

**B23/03/13-2**

**MOVED BY: J. Karau**

**SECONDED BY: P. Kehoe**

**Resolved, That the minutes of the Mississippi Valley Conservation Authority Annual General Board of Directors Meeting held on February 22, 2023 be received and approved as printed.**

**“CARRIED”**

2. Watershed Conditions, Report 3291/23

J. North presented current conditions and spring outlook for the watershed. Current snow conditions are sitting above normal for most of the winter season. The provincial Water Conditions Flood Outlook report was published on March 3<sup>rd</sup> and will be updated on March 16<sup>th</sup>. Local messages will be posted as needed. We are expecting above average conditions for the spring but will continuously monitor the system so we are in a good position for the upcoming spring freshet.

J. Cunderlik added that there are over 40 water control structures within the watershed. Only 12 are identified in the Water Management Plan and, of those, only 6 have water storage capacity. The structures were designed and built for flow augmentation, largely for logging or recreation; not for flood control. Winter dam operations need to be done very carefully as ice

conditions can become unsafe and ice breakup can potentially lead to property damage. Though recent conditions and flow rates are considered unusual they may normalize.

R. Kidd asked how frost affects flooding. J. North responded that it is not a significant factor at present. Frost can limit infiltration, but is not present this year. However, there was significant rainfall late in the season and the ground is considered saturated and beyond the point of absorbing more runoff. If water does not infiltrate, more runoff and can contribute to flooding.

J. Atkinson asked about the long-term climate forecast, and what solutions we should be looking at. J. Cunderlik responded that finding more capacity is one potential solution; and that we need to revisit winter targets and consider storing more water in the winter to alleviate drought in the summer.

3. Contract Award - Kashwakamak Lake Dam Class Environmental Assessment, Report 3292/23

**B23/03/13-3**

**MOVED BY: H. Yanch**

**SECONDED BY: B. Holmes**

**Resolved, That the Board of Directors award the Kashwakamak Lake Dam Class Environmental Assessment Project to McIntosh Perry in the amount of \$101,410.00 plus HST.**

**“CARRIED”**

P. Kehoe asked if McIntosh Perry has experience with working on dams. J. Cunderlik answered that they do have experience with dams owned by MNRF and have very strong Class Environmental Assessments experience, which is the focus of this contract.

4. Contract Award – Mill of Kintail Roof Replacement, Report 3293/23

**B23/03/13-4**

**MOVED BY: P. Kehoe**

**SECONDED BY: M. Souter**

**Resolved, That the Board of Directors endorse the award of the Mill of Kintail Roof Replacement Project to Remember Me Roofing in the amount of \$36,019.50 plus HST; and authorize an \$8,000.00 contingency fund to deal with unexpected expenses that may be incurred.**

**“CARRIED”**

S. Lawryk outlined why MVCA would like to install composite shingles in lieu of a steel roof, and stated that the contingency amount is for remedial work that may be required once existing materials are exposed during work on the eavestroughs.

J. Mason asked what the fire protection is of the composite shingles. S. Lawryk responded that the composite shingles seem to be engineered to be a part of new fire regulations and believes them to be the best option.

B. Holmes asked about the roofing company's experience and how long the composite shingles have been around. S. Lawryk stated that the roofing company came recommended from a trusted contractor and has an established track record. Their proposal was thorough and their quote within our budget. The composite shingles are becoming more popular and both companies that provided quotes recommended the composite shingles.

J. Karau asked if solar panels being installed has been discussed and how the composite shingles will affect that. S. Lawryk responded that solar panels have been placed on shingles before but MVCA has not discussed this as the museum would not be an ideal location due to trees and elevation.

H. Yanch agreed with the proposal and has heard of a solar shingle and suggested that MVCA should be looking into solar opportunities. S. McIntyre noted that the museum is not open year-round and wouldn't benefit from solar and suggested the headquarters as a more suitable sites for solar installation for example in the parking lot, which is south facing and could serve EVs in the future.

#### 5. Need Assessment Update, Report 3294/23

S. McIntyre summarized the purpose of the needs assessment and approach used to rate the various projects.

P. Kehoe asked if there is an oversight to ensure consistency on the ranking of the Needs Assessment Update. S. McIntyre confirmed that she has reviewed the document and she is comfortable with the assessment and rankings, citing some examples that may appear insignificant but that are actually important due to health and safety or industry standards.

B. Holmes asked about the Land Conservation Inventory. S. McIntyre noted that it is almost finished and that requirements dealing with land development potential are not expected to affect MVCA.

#### 6. 2023 Work Plan, Report 3295/23

S. McIntyre overviewed the Work Plan Update and noted that the engineering department has evolved over recent years to better address the "asset management" goal of the Strategic Plan.

J. Karau asked for updates on the following projects:

a) The Land Inventory and the Land Use Update and how their data will be used.

S. McIntyre responded that the Land Use Assessment is being done in partnership with RVCA and SNC using LiDAR (elevation) data and DRAPE (photographic) data to updated our existing land use map. It as a critical tool for watershed modelling by the engineering department. Data can also be used for future environmental report cards and support municipal planning.

b) Review of wetlands in growth areas.

S. McIntyre noted that work on the project began last year with funding from the Foundation. The project focused on wetlands under growth pressure, which were identified and mapped. Protection of wetlands upstream of communities is important because of the significant role they play in water storage to mitigate flooding and flow augmentation during droughts. The first round of analysis was completed, and work is now needed to prioritize areas for stewardship and outreach.

c) Utilization of equipment for communications.

S. McIntyre replied that we can do virtual tours of the conservation areas with the drone and are looking at using the drone to support all CA programs and services. Staff are interested in holding another trade show or to participate in Doors Open for the public.

R. Kidd asked if the wetland study was done on zoned wetlands or not-zoned wetlands. S. McIntyre noted that study is on lands defined as wetlands under Section 28 and the regulations. Zoning is at the discretion of municipalities.

R. Kidd asked if Board members can get a copy of the wetland study. S. McIntyre will present the wetland findings at a future Board meeting.

R. Kidd said that all municipal politicians should be invited to the next trade show. M. Souter supported that sentiment and said that inviting more politicians would be very beneficial in terms of outreach.

#### 7. Update on Watershed Plan Activities, Report 3296/23

S. McIntyre provided background on the development and structure of the Mississippi River Watershed Plan, and highlighted key activities carried out since it was approved in 2021.

R. Kidd called attention to the uncertainty of climate change impacts when conducting watershed modelling. S. McIntyre said that MVCA started doing this kind of analysis about 10 years ago. There is always uncertainty with data but with the new data we have provides a better idea of the trends and what direction the future scenarios will direct flows. J. Mason added that uncertainty can be mitigated by modeling multiple scenarios that account for different stressors, and probability analysis used to identify the most likely outcomes.

#### 8. Update on Municipal MOU/CAA Discussions. Report 3297/23

S. McIntyre stated that work on MOUs took a hiatus in the fall due to Bill 23. All municipalities with the exception of N. Frontenac have confirmed they are interested in maintaining current programming and levels of support, assuming the City of Ottawa continues its support. N. Frontenac is to return to council with a recommendation.

S. McIntyre will be engaging with RVCA, SNC and the City to confirm its preferred approach. Staff are also continuing to look into other funding sources.

S. McIntyre will reach out to CAOs and provide financial impact of the City removing funding for one or more programs.

#### 9. 2022 Annual Report, Report 3298/23

S. McIntyre noted highlights from the 2022 Annual Report for Board members, and the Board recognized the tremendous accomplishments of staff during 2022.

10. GM Update, Report 3299/23

J. Atkinson and S. McIntyre congratulated S. Lawryk on obtaining a new vehicle for the fleet and highlighted other MVCA achievements.

**ADJOURNMENT**

The meeting was adjourned at 2:18 pm.

**B23/03/13-5**

**MOVED BY: P. Kehoe**

**SECONDED BY: H. Yanch**

**Resolved, That the Board of Directors meeting be adjourned.**

**“CARRIED”**

R. Clouthier, Recording Secretary

J. Atkinson, Chair



**FINANCE AND ADMINISTRATION ADVISORY COMMITTEE**

**MINUTES**

November 21, 2022

**MEMBERS PRESENT:** C. Lowry, Chair  
P. Sweetnam, Vice-Chair  
J. Mason  
B. King  
E. El-Chantiry

**MEMBERS ABSENT:** P. Kehoe  
A. Tennant  
J. Atkinson

**STAFF PRESENT:** S. McIntyre, General Manager  
S. Millard, Treasurer  
T. Fragnito, Finance Assistant  
M. Craig, Planning and Regulations Manager  
S. Lawryk, Property Manager  
A. Broadbent, IC&T Manager  
P. Tapley, Recording Secretary

C. Lowry called the meeting to order at 3:00 pm.

**FAAC11/21/22-1**

**MOVED BY:** P. Sweetnam

**SECONDED BY:** B. King

**Resolved, That the Agenda for the November 21, 2022 Finance & Administration  
Advisory Committee meeting be adopted as presented.**

**“CARRIED”**

**BUSINESS**

1. Approval of Minutes from Finance & Administration Advisory Committee meeting held October 11, 2022.

**FAAC11/21/22-2****MOVED BY: J. Mason****SECONDED BY: B. King**

**Resolved, That the Minutes of the Finance & Administration Advisory Committee meeting held October 11, 2022 be received and approved as printed.**

**“CARRIED”**

2. Alternate Work Arrangements Policies, Report 3261/22

S. McIntyre presented two policies: Work from Home Policy and Compressed Work Week Policy. These policies were developed in accordance with the 2021 *Workforce Plan* to improve work life balance. Both were trialed during the pandemic and although there were challenges implementing a hybrid approach, there were also many benefits. For employees who cannot work from home (i.e. field crews and front desk staff), a compressed work week approach was developed. Both forms of work arrangements were well received by staff.

A staff working group discussed issues and specific needs. The attached policies were circulated to all employees and no comments were received.

P. Sweetnam asked if staff were satisfied with these alternate work arrangements? S. McIntyre confirmed that they are supportive of these alternative work arrangements.

**FAAC11/21/22-3****MOVED BY: P. Sweetnam****SECONDED BY: J. Mason**

**Resolved, That the Finance & Administration Committee recommend that the Board approve amendment of section 2.3.1 of the Employee Manual as set out in this report; and add Attachment 1 to the Employee Manual as Appendix 13.5 and Attachment 2 as Appendix 13.6.**

**“CARRIED”**

### 3. Cell Phone Policy, Report 3262/22

S. McIntyre presented the new cell phone policy that was developed because most employees use personal cell phones for work or while working from home. The lack of a cell phone policy has led to inconsistencies and confusion in compensation and became a greater issue during COVID. She explained that a working group was established to consider options and a cost analysis was undertaken. The proposed policy provides for three levels of cellular cost support and is not expected to have a significant cost impact.

J. Mason asked if there was a Level 0, meaning are there any employees not eligible for the plan. S. McIntyre stated that there was only one position that may not require a cell phone, but in the spirit of fairness and the potential to work from home in the future, it would be beneficial for all employees to be under this Policy.

E. El-Chantiry asked if staff checked with Ottawa, Carleton Place, or other larger municipalities to determine if there was a possibility of joining or bundling with their plans for potential cost savings. S. McIntyre responded the current plan is very cost effective and no change is recommended at this time, but that option would be investigated if things change.

P. Sweetnam asked if the current plan was shared? S. McIntyre explained that the current plan provides each individual with 6 GB of data and unlimited calling and texting in Canada at a cost of \$25/month/person.

B. King raised concerns with respect to Freedom of Information and privacy issues due to mixing of company and personal information on the same phone; and questioned what problems could arise if an employee is terminated. He stated that if a cell phone is required for work it should be supplied by the employer. S. McIntyre stated that consideration was given to the use of shared corporate phones for field use but that was impractical for work from home situations. She acknowledged that the policy does not address confidentiality and that staff could revisit the policy if desired by the Committee.

#### **FAAC11/21/22-4**

**MOVED BY: E. El-Chantiry**

**SECONDED BY: B. Sweetnam**

**Resolved, That the Finance & Administration Committee recommend that the Board approve amendment of Section 2.7 Technology – Internet, E-Mail, Cell Phones as set out in this report and addition of Attachment 1 to the Employee Manual as Appendix 13.7.**

**“CARRIED”**

#### 4. Fee Policy and Schedule, Report 3263/22

S. McIntyre outlined that new regulations require update of MVCA's Fee Policy, which is proposed to replace them in its entirety as it is very dated. She explained that the recommended policy is based upon three key principles: recover full-costs where feasible; balance user-pay principle with maintaining affordable access for all; and harmonized fees with neighboring conservation authorities in shared municipalities where feasible.

M. Craig tabled the 2023 Fee Schedule for approval and confirmed that the fees align with the new regulations. He highlighted the following key changes: Stewardship Program fees for supplies; the addition of septic program fees due to implementation of the expanded program; addition of a \$30 fee for providing written technical responses to a map queries; and a fee for 'Shoreline alteration/protection, channelization permits' that had accidentally been deleted from 2022 Fee Schedule.

S. McIntyre noted that Fee Appeals will be submitted to the GM and not to the Board of Directors. Given the 30-day appeal period, she stated that a special meeting late in December would be required if there were any major objections to the Policy.

P. Sweetnam asked if fees would be fully cost recovered in 2023 and could they be raised via this Policy. S. McIntyre responded that full cost recovery would not be achieved in 2023.

J. Mason asked for clarification on the scope of what was being approved as the Board already approved the 2023 fees in October. S. McIntyre confirmed that the Board is only approving the specific changes identified by M. Craig, and the new Fee Policy as required by regulation.

#### FAAC11/21/22-5

**MOVED BY: P. Sweetnam**

**SECONDED BY: J. Mason**

**Resolved, That the Finance & Administration Committee recommend that the Board:**

- a) approve in principle the Fee Policy and additions to the 2023 Fee Schedule as presented herein.**
- b) authorize enactment of the Fee Policy and 2023 Fee Schedule upon completion of the 30-day notification period if no major concerns are raised by stakeholders.**
- c) Direct staff to return to the Board upon completion of the 30-day review period if any major concerns are raised by stakeholders.**

**"CARRIED"**

5. Draft 2023 Budget, Report 3264/22

S. McIntyre reviewed proposed expenditures and revenues as set out in the Draft 2023 Budget. She outlined that the proposed municipal levy increase aligns with direction received from the Board in October:

- 3% to the operating budget for inflation;
- 4.5% to the capital budget to implement the 10-year Capital Plan;
- 1.5% increase to both to provide for assessment growth;

and, previous Board decisions to hire/retain staff to meet workload demands, and to phase those costs onto the levy over a period of years while maintaining the Operating Reserve balance in a target range.

S. McIntyre explained that the base budget pressure equals a combined increase of 4.5%; and, that the levy pressure increases to 7.66% when a third (1/3) of payroll costs are moved from the Operating Reserve onto the levy, as previously approved.

S. McIntyre outlined specific pressures on the operating and capital programs; and as directed by the Board in October, she tabled several options to reduce pressures on municipal levies.

P. Sweetnam requested that the “Glen Cairn Reserve” be included under ‘Reserve Investments’. S. McIntyre explained that it had been renamed to “Category 1 Priority Projects” during review of reserve funds earlier in the year. The change was made to reflect how monies in that restricted reserve can be used rather than how the original funds were obtained.

J. Mason asked how draft budgets of RVCA and South Nation compare to MVCA’s draft budget. S. McIntyre reported that they had tabled a 2.5-3.0% cost of living increase plus growth. She added that MVCA has significantly higher capital requirements; and that the other two CAs have larger baseline operating budgets and staff complement.

A discussion took place on the budget, the options, and the pros and cons of establishing a new upset limit to the municipal levy. As the Board had already given sign off on the budget envelope, members agreed to elevate the budget as proposed along with the options to reduce operating and capital levies.

B. King stated that he would like to have seen more options to reduce the Operating budget. Further, he requested a tally of all MVCA salaries and wages from 2022 and 2023. S. McIntyre will provide to the Board with the next version of the Budget.

P. Sweetnam raised the point that J. Karau had identified previously regarding the need for a Communications person for outreach and related organizational activities. S. McIntyre acknowledged the need and stated that MVCA has an agreement with RVCA to provide social media support, that their role is being expanded to include other communications services, and the arrangement is working well.

E. El-Chantiry mentioned there is an upcoming meeting on flood plain mapping where a federally funded group are speaking on the subject of Property Evaluations and wondered if members were aware. S. McIntyre asked to have the details forwarded to her attention and will follow up.

#### **FAAC10/11/22-6**

**MOVED BY: J. Mason**

**SECONDED BY: P. Sweetnam**

**Resolved, That the Finance & Administration Committee recommend that the Board:**

- a) Direct staff to adjust the Draft 2023 Budget by reducing the capital levy by \$120,000 and reducing the operating levy by \$56,000.**
- b) Recommend the revised Draft 2023 Budget be presented to the Board for consideration and circulation to member Municipalities.**
- c) Direct staff to continue to identify alternative cost savings options for operating and capital levies.**

**“CARRIED”**

#### **ADJOURNMENT**

The meeting was adjourned at 5:00 pm.

P. Tapley, Recording Secretary

C. Lowry, Chair

---

**REPORT****3306/23**

TO:	The Chair and Members of Mississippi Valley Conservation Authority Board of Directors Committee
FROM:	Charlotte Watson, Bell Baker LLP
RE:	<b>Fiduciary Responsibility</b>
DATE:	April 17, 2023

**For Information.**

---

See attached PowerPoint presentation from Charlotte Watson, Bell Baker LLP.

# FIDUCIARY DUTIES: AN OVERVIEW

# WHAT IS A FIDUCIARY DUTY?

- Fiduciary obligation refers to a relationship in which one party (the fiduciary) is responsible for looking after the best interests of another party (the beneficiary)
- A fiduciary must act honestly, in good faith, and strictly in the best interests of the beneficiary
- As a Director, you owe a fiduciary duty to the MVCA. You must act impartially, place the interests of the MVCA first, and your decisions must not be tainted by self interest or self dealing



# BREACHES OF FIDUCIARY DUTIES & CONFLICTS OF INTEREST

- A fiduciary cannot take advantage of their position for personal gain. Profit cannot be made at the MVCA's expense. A fiduciary may not compete with the MVCA to their own advantage.
- A fiduciary must avoid conflicts of interests between the MVCA and any opposing interests, including the fiduciary's own interests
- Conflict occurs when your personal interests are at odds with the best interest of the MVCA. Actual conflict and the appearance of conflict must be avoided



# HOW TO AVOID CONFLICTS OF INTEREST

- Conflicts of interest must be disclosed to the MVCA. You must disclose to the MVCA all information about agreements you intend to enter or transactions in which you are involved that are potentially relevant to the MVCA
- A Director in conflict should not make any decisions relating to the conflicting issue and should not attend any meeting at which the conflicting issue is discussed
- After making full disclosure of a conflict of interest to the Board, you may be permitted to proceed with the disclosed transaction or activity without breaching your fiduciary duty. However, disclosure does not relieve you of your continuing duty to put the company's interests ahead of your own
- You must not disclose the MVCA's confidential information. The duty of confidentiality continues indefinitely even after you are no longer a member of the Board



## DUTY OF CARE

- In exercising your powers and discharging your duties, you must exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances
- While perfect decisions are not required, allowances are not made for lack of experience and poor judgment. Directors must make sufficient inquiries to inform themselves and consider all available information prior to acting



---

**REPORT****3307/23**

TO:	The Chair and Members of the Mississippi Valley Conservation Authority Board of Directors
FROM:	Jennifer North, Water Resource Technologist
RE:	<b>State of Mississippi Watershed</b>
DATE:	April 13, 2023

**For Information.**


---

Spring has sprung! The rainfall/ice received on April 5th triggered the spring freshet and brought levels in some parts of the watershed to above average flood conditions quite quickly. We issued a Flood Watch on April 6th followed by a Flood Warning for Dalhousie and the Clyde river on April 8th.

We utilized the lakes in the upper part of the watershed to minimize downstream flooding, particularly at the bottleneck of the system which is Dalhousie Lake. Weather was indeed on our side with multiple, slightly warm days without rain, this allow a large percentage of the snow pack to gradually melt and come into the system at a slow pace. This gradual melt left most rivers at a long, drawn out, lower peak instead of a quick sharp one.

Majority of the snow pack throughout the watershed is now depleted and with no significant rainfall in the forecast, it is expected that flows and levels will peak in the next day or two and start to slowly decrease over the next week.

As we finish filling our headwater lakes and reach summer target levels, we plan to maintain stable levels and flows over the next two months to meet the requirements of fisheries (walleye and bass) and wildlife (nesting loons, ducks etc.) while ensuring summer levels are set for the long weekend of May.

The Ottawa River is just beginning its freshet. Water levels and flows on the main stem of the Ottawa River have begun increasing due to snowmelt over the southern part of the basin. Levels and flows are expected to increase gradually over the next week and are expected to see seasonal freshet values.

---

**REPORT****3308/23**

TO:	The Chair and Members of the Mississippi Valley Conservation Authority Board of Directors
FROM:	Daniel Post, Full Stack Developer
RE:	<b>Daily Planning Cycle (DPC) Web Tool</b>
DATE:	April 17, 2023

**For Information.**

---

**1.0 INTRODUCTION**

Flood forecasting and warning involves data collection and analysis. Data comes from the MVCA's monitoring network, our partners' stations, and weather forecasts. All this data must be presented to the MVCA's Engineering staff in a way that allows them to easily interpret the data. The MVCA follows a "Daily Planning Cycle" (DPC) during which a daily check of the data - levels, flows, weather (observed and forecast), snowpack, and more - is made. The staff consider the data to plan dam operations, predict flood and low water status, and prepare watershed messaging.

In the recent past, gauge stations were phoned and data was hand-written in a log book. The DPC involved looking at the data as numbers in a table (Figure 1). Retrieving data has since been automated and the DPC web tool (Figure 2) was built to replace the data table.

**2.0 WEB TOOL BENEFITS**

The web tool is simple and easy to use. It presents past, current, and trending conditions and is capable of handling large volumes of data in a responsive way. The web tool can be accessed by staff anywhere they have an internet connection, and works well on any device.

Most importantly the web tool allows for data visualization and interaction that was not possible with a static data table. For example, flood thresholds appear as lines on the graph and can be observed compared to past levels to determine trends. Historical high, average, and low levels can be compared to current conditions. Daily precipitation appears on the same date-time axis as level so that watershed response to rainfall is directly observed.

The web tool is time efficient, accessible, and contains all data sets in one place. These benefits offer a more effective decision-making tool when it comes to managing the system.

## Daily Water Levels - Caution: Provisional Data

Lake Gauge	Date	Time (EST)	Stage m	Level m	Previous Date
Shabomeka Lake	11-Aug-22	5:00 AM		271.05	10-Aug-22
Mazinaw Lake		12:00 AM			10-Aug-22
Kashwakamak Lake		12:00 AM			10-Aug-22
Farm Lake	11-Aug-22	5:00 AM		247.75	10-Aug-22
Mississagagon Lake	11-Aug-22	5:00 AM		268.13	10-Aug-22
Big Gull Lake	11-Aug-22	5:00 AM		253.35	10-Aug-22
Crotch Lake	11-Aug-22	4:59 AM		239.05	10-Aug-22
High Falls	10-Aug-22	12:00 PM			09-Aug-22
Dalhousie Lake	11-Aug-22	5:00 AM	6.382	156.38	10-Aug-22
Palmerston Lake		12:00 AM			10-Aug-22
Canonto Lake	11-Aug-22	5:00 AM		268.24	10-Aug-22
Widow Lake	11-Aug-22	5:00 AM		184.13	10-Aug-22
Lanark	11-Aug-22	5:00 AM		144.09	10-Aug-22
Sharbot Lake	11-Aug-22	5:00 AM	1.005	191.67	10-Aug-22
Bennett Lake	11-Aug-22	5:00 AM	1.010	153.00	10-Aug-22
Mississippi Lake	11-Aug-22	5:00 AM		134.05	10-Aug-22
C.P. Dam	11-Aug-22	5:00 AM		134.05	10-Aug-22
Carp River at Maple Grove		12:00 AM			10-Aug-22
Ottawa River at Constance Bay	11-Aug-22	5:00 AM		57.98	10-Aug-22

Figure 1-Until recently, daily data was displayed in Excel tables.

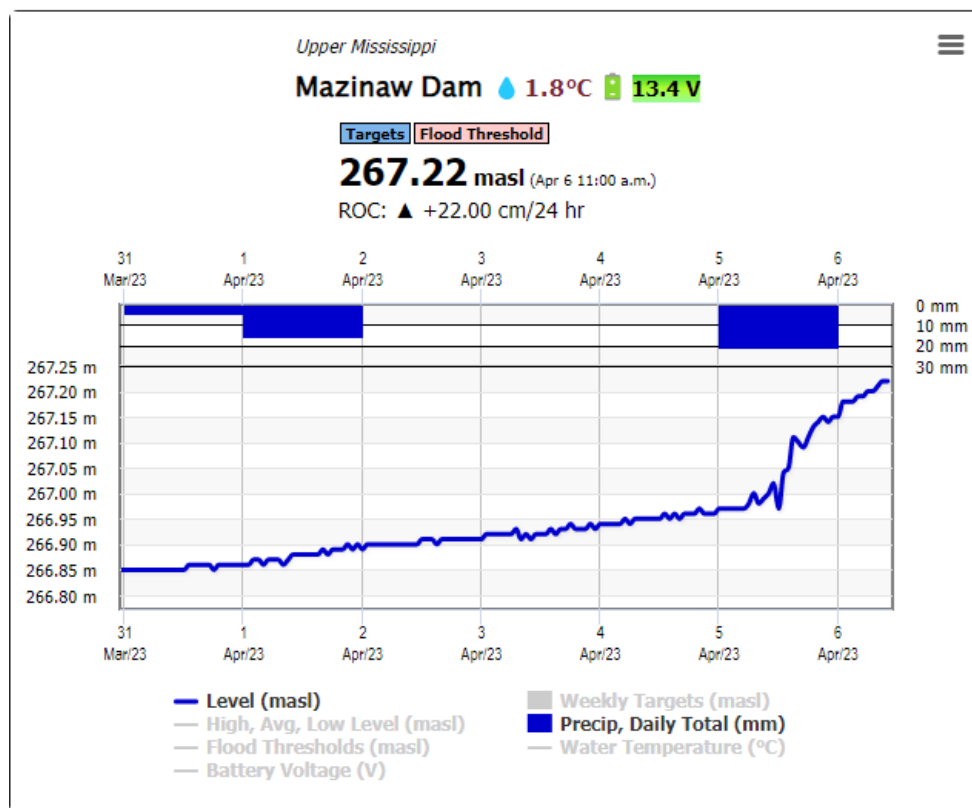


Figure 2-The DPC web tool display includes current conditions, historical data, targets, and warnings.

### 3.0 NEXT STEPS

The web tool's weather forecasting will leverage raster data (Figure 3) to evolve beyond text-based bulletins. The federal government provides public access to Environment and Climate Change Canada (ECCC) data via web services. That data will provide a watershed-focused understanding of surface temperature, winds, and precipitation, along with real-time weather alerts.

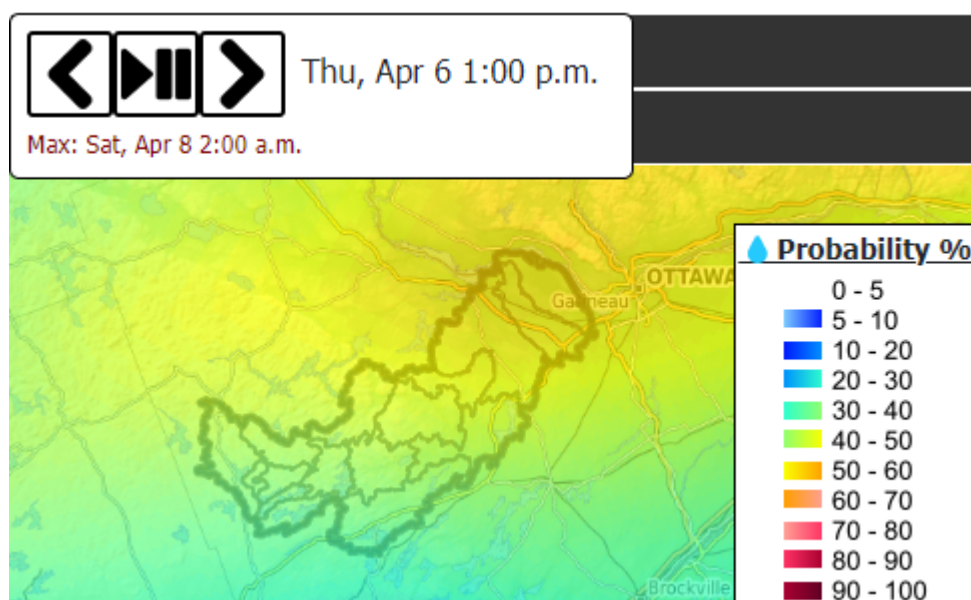


Figure 3-Precipitation forecast overlaid on the MVCA's watershed boundary.

Continuous improvements will be made to the web tool as new data and technologies become available.

## REPORT

3309/23

TO:	The Chair and Members of the Mississippi Valley Conservation Authority Board of Directors
FROM:	Sally McIntyre, General Manager and Stacy Millard, Treasurer
RE:	<b>10-year Capital Plan and Capital Reserves Update</b>
DATE:	April 17, 2023

## RECOMMENDATION

**That the Board of Directors approve the 10-year Capital Plan update and schedule of capital levy increases.**

## 1. BACKGROUND

In 2016, MVCA's Auditor recommended that *"the Authority develop an asset management plan to identify future asset replacement needs and required reserve allocations to meet those replacement needs"*. MVCA approved its first 10-year Capital Plan in 2018.<sup>1</sup> In 2020, an *Interim Financial Plan* (IFP) was approved that included a capital plan of \$11.4 million for the period 2021-2030.<sup>2</sup> The 2020 IFP assumed capital levy increases as shown in Table 1.<sup>3</sup>

**Table 1: Projected Annual Capital Levy Increases (2020)**

<b>2021</b>	2.5%
<b>2022</b>	4.5%
<b>2023</b>	4.5%
<b>2024</b>	5.5%
<b>2025</b>	6.5%
<b>2026</b>	6.5%
<b>2027</b>	5.5%
<b>2028</b>	5.5%
<b>2029</b>	3.5%
<b>2030</b>	3.5%

<sup>1</sup> Staff Report 2979/18.

<sup>2</sup> Staff Reports 3092/20 and 3095/20.

<sup>3</sup> The City of Ottawa's *Long Range Finance Plan* assumed a 12% increase for stormwater infrastructure and programming in 2023, inclusive of COLA, inflation, and growth. In 2023, MVCA saw an all-in increase of 6.5%

Update of the 10-Year Capital Plan is warranted at this time due to:

- New information obtained regarding assets and the recommended scope and timing of expenditures;
- Cost pressures arising from inflation and the above changes; and
- Board approval of policies governing the management of reserve funds.

The building of capital reserves is essential to delivery of the capital program. In 2022, the Board of Directors approved policies to guide annual contributions to reserves and to enhanced reserve management. The policies reflect a Pay As You Go (PAYGO) approach to capital asset replacement, and do not set aside funds for long-term asset replacement. In summary:

- *“Water and erosion control asset reserve funds should have a balance equal to or greater than 50% of the approved 8-year capital program, up to a maximum of \$500,000 per project. For projects greater than \$500,000, add the annual cost to carry 50% of the project cost at 5% interest paid monthly, amortized over 20 years.*
- *All other reserve funds established for Tangible Capital Assets should have a balance equal to or greater than the approved 5-year capital program for those assets, or as specified...”*

## 2. UPDATE OF THE 10-YEAR CAPITAL PLAN

See Attachment 1 for the updated 10-year Capital Plan and supporting tables.

### 2.1. Expenditures

Following update of the *Capital Needs Assessment*<sup>4</sup>, the management team updated capital project schedules and cost estimates for the period 2023-2032. The total value of the Plan has risen by ~\$5.2 million since 2020. Key reasons for this increase are summarized in Table 2.

**Table 2: Major Pressures and Changes to the Capital Plan**

Program/Project	Increase	Explanation
Inflation	\$1,102,110	The 2020 10-year Capital Plan did not inflate values year over year. The 2023 Plan includes a 5% per annum inflation rate. This rate is significantly below recent trends and is considered to be possible but optimistic. <sup>5</sup>

<sup>4</sup> Refer to Staff Report 3294/23.

<sup>5</sup> The composite Census Metropolitan Area for non-residential construction cost increased 12.5% in 2022 compared with 2021. This was the highest annual increase since the beginning of the Non-Residential Building Construction Price Index in 1981. Non-residential building construction costs increased the most in Toronto (+16.2%), followed by Ottawa (+13.6%). Source: <https://www150.statcan.gc.ca/n1/daily-quotidien/230208/dq230208d-eng.htm>.

Program/Project	Increase	Explanation
<b>Kashwakamak Lake Dam</b>	\$3,947,500	Initial estimates assumed repair of the existing dam and did not include pre-construction and other related costs (e.g. EA and engineered design.) Subsequent site investigations concluded that complete reconstruction of the 113-year old is needed. The current Plan allows for reconstruction and includes all project related costs.
<b>Fleet</b>	\$157,200	The Plan now allows for phased acquisition of EVs as old fleet is retired; and installation of a charging station.

## 2.2. Revenues

The Updated 10-year Capital Plan applies a uniform annual Growth Rate of 1.3% to the Capital Levy, which is lower than recent growth rate increases.<sup>6</sup> This is considered prudent given active fiscal policy at the federal level to slow economy and what staff have observed in the past six months. This increase is also considered to be revenue neutral as it is paid through increased assessment value associated with newly developed lots and their property taxes.

To mitigate the impact of budget increases on the Capital Levy, the Updated Plan transfers existing and projected reserve surpluses (above policy targets) from the Operating Reserve and the Priority Projects Reserve to the Water & Erosion Control Structure Reserve. These internal transfers total \$842,000. As well, the Plan dedicates all annual reserve contributions to the Water Control Structure Reserve 2024-2027 making all other programs dependent upon current reserve balances and the annual capital levy over this period. For example, if there are insufficient funds to buy a vehicle, the Authority would lease a vehicle until funds become available.<sup>7</sup>

Despite these measures, reserve balances in key areas are projected to be well below policy targets unless there are further increases to the Capital Levy. For this reason, the Updated Plan recommends a 2% increase to the levies shown in Table 1. This would allow the Authority to achieve 54% of its targeted reserve balance, as explained in the following section.

## 3. RESERVE FUND MANAGEMENT

Continued building of reserves is essential to asset renewal as they allow MVCA to access grants that require at least 50% matching dollars from MVCA; and because not all capital projects are eligible for grants. Table 3 provides targeted year-end reserve balances for 2027—the mid-point of the Updated 10-year Capital Plan. Targets were calculated by applying Board-approved policies.

<sup>6</sup> The approved 2023 growth rate was 1.5%; 1.4% in 2022; 1.5% in 2021; and 1.5% in 2020.

<sup>7</sup> Staff have begun work on a fleet management plan to optimize the number, type, and acquisition of vehicles.

Table 3 also shows projected reserve balances for two scenarios and their variance from the desired target:

- Status quo Capital Levy increases (as shown in Table 1.)
- Table 1 Capital Levy increases plus 2% (i.e. 4.5% becomes 6.5%).

As shown, implementation of the capital increases shown in Table 1 will result in a 2027 reserve balance equalling ~52% of the target. Raising the annual capital levy each year by a further 2% will allow MVCA to achieve ~54% of the Board's targeted reserve balance by 2027. Continuation of this practice over the full 10-years would allow the Authority to reach ~76% of its target reserve balance by 2032.<sup>8</sup> The difference of \$149,478 would be allocated to the Water Control Structure Reserve and move it from 47% to 54% of the 2027 target level. This is critical for achieving the second 5-year period of the Capital Plan, from 2028-2032.

**Table 3: Targeted versus Projected Reserve Balances, 2027**

<b>RESERVE FUND</b>	<b>AUDITED YEAR-END BALANCE, 2022</b>	<b>TARGETED YEAR-END BALANCE, 2027<sup>9</sup></b>	<b>PROJECTED <u>BALANCE</u> <u>STATUS QUO</u> LEVY INCR.</b>	<b>PROJECTED <u>VARIANCE</u> <u>STATUS QUO</u> LEVY INCR.</b>	<b>PROJECTED <u>VARIANCE</u> <u>STATUS QUO</u> LEVY INCR.</b>	<b>PROJECTED <u>BALANCE</u> SQ LEVY <u>+2%</u></b>	<b>PROJECTED <u>VARIANCE</u> SQ LEVY <u>+2%</u></b>
OPERATING RESERVE	1,496,074	850,850	851,074	224	100%	851,074	100%
HQ BUILDING RESERVE	573,701	1,487,640	338,701	(1,148,939)	23%	338,701	23%
CONSERVATION AREAS	185,700	165,210	185,700	20,490	112%	185,700	112%
INFORMATION TECHNOLOGY	80,158	58,710	80,158	21,448	137%	80,158	137%
VEHICLES & EQUIPMENT RES.	263,537	622,040	213,537	(408,503)	34%	213,537	34%
WATER CONTROL STRUCTURES	514,391	1,999,593	934,300	(1,065,293)	47%	1,083,777	54%
PRIORITY PROJECTS RESERVE	438,836	150,000	150,086	86	100%	150,086	100%
<b>TOTAL</b>	<b>3,552,396</b>	<b>5,334,044</b>	<b>2,753,556</b>	<b>(2,580,488)</b>	<b>52%</b>	<b>2,903,033</b>	<b>54%</b>

<sup>8</sup> This assumes an average capital program roughly equivalent to today, inflated over time.

<sup>9</sup> Based upon the recommended 10-year capital program and calculation of target balances using the methods set out in MVCA's 2022 reserve policies.

### 3.1. Impact on the Capital Levy

In 2023, the Capital Levy constituted 17.6% of the Municipal Levy. Table 4 shows projected financial impacts to each municipality associated with increasing the capital levies using the two scenarios discussed above.

**Table 4: Capital Levy Increases, Total Cost 2024-2027**

	<b>Status Quo<sup>10</sup> Capital Incr.</b>	<b>Status Quo Capital Incr. + 2%</b>	<b>Total Difference over 4-years</b>
Addington Highlands, Township of	\$4,794	\$5,030	\$236
Beckwith Township	\$20,605	\$21,619	\$1,014
Carleton Place, Town of	\$77,051	\$80,843	\$3,792
Central Frontenac, Township of	\$13,233	\$13,884	\$651
Drummond/ North Elmsley, Twp. of	\$14,822	\$15,551	\$729
Greater Madawaska, Township of	\$1,063	\$1,116	\$53
Lanark Highlands, Township of	\$34,073	\$35,750	\$1,677
Mississippi Mills, Municipality of	\$83,075	\$87,164	\$4,089
North Frontenac, Township of	\$28,194	\$29,582	\$1,388
Ottawa, City of	\$2,741,245	\$2,876,153	\$134,908
Tay Valley Township	\$19,120	\$20,061	\$941
<b>TOTAL</b>	<b>\$3,037,275</b>	<b>\$3,186,753</b>	<b>\$149,478</b>

## 4. CORPORATE STRATEGIC PLAN

Implementation of the 10-year Capital Plan Update aligns with Goal 1: Asset Management – revitalize watershed management activities and invest in our legislated mandate; and objectives:

- a) Implement the five-year capital program
- e) Plan for the next phase of asset development and management.

<sup>10</sup> Per scheduled increases shown in Table 1.

CAPITAL PLAN SUMMARY											
Water Control Structures	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10 Yr Total
Shabomeka Lake Dam	-	-	-	-	-	-	-	35,178	36,936	155,133	227,247
Mazinaw Lake Dam	-	-	-	-	-	-	100,507	35,178	147,746	-	283,430
Kashwakamak Lake Dam	120,000	115,500	110,250	173,644	3,152,719	3,310,355	-	-	-	-	6,982,468
Big Gull Lake Dam	-	-	-	-	-	-	100,507	35,178	147,746	-	283,430
Mississagagon Lake Dam	-	5,250	-	-	-	-	-	-	-	-	5,250
Farm Lake Dam	-	-	11,025	-	-	-	-	-	73,873	775,664	860,562
Pine Lake Dam	-	5,250	-	-	-	-	-	-	-	-	5,250
Carleton Place Dam	280,000	-	-	-	-	-	-	-	-	-	280,000
Lanark Dam	-	78,750	27,563	115,763	-	-	-	-	-	-	222,075
Widow Lake Dam	-	78,750	55,125	405,169	-	-	-	-	-	-	539,044
Bennett Lake Dam	-	-	-	-	-	-	-	105,533	36,936	155,133	297,602
Glen Cairn Detention Basin	-	-	-	-	-	-	-	-	-	-	-
MacLarens Landing	-	-	-	-	-	-	-	-	-	-	-
Proposed Debt Repayment	35,412	35,412	35,412	35,412	77,340	77,340	77,340	77,340	77,340	95,046	623,394
Subtotal	435,412	318,912	239,375	729,987	3,230,059	3,387,695	278,354	288,405	520,577	1,180,976	10,609,752
Watershed Monitoring	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10 Yr Total
Gauge Network	30,750	34,125	35,831	37,623	39,504	41,479	43,553	45,731	48,017	50,418	407,032
Survey & Flow Equipment	67,000	-	-	-	-	-	-	-	-	-	67,000
Subtotal	97,750	34,125	35,831	37,623	39,504	41,479	43,553	45,731	48,017	50,418	474,032
Conservation Areas	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10 Yr Total
Mill of Kintail - Visitor Services	113,500	-	22,050	-	60,775	31,907	13,401	84,426	-	-	326,059
Mill of Kintail CA	30,000	97,350	16,538	11,576	-	-	-	-	14,775	-	170,238
Purdon	18,000	66,675	31,421	11,576	12,155	21,697	-	-	-	23,270	184,794
K&P Trail	-	2,100	2,205	2,315	8,509	40,841	2,680	2,814	-	-	61,464
Morris Island	5,000	15,750	11,025	11,576	12,155	-	-	7,036	29,549	7,757	99,848
Roy Brown Trail	-	21,000	5,513	5,788	6,078	-	-	7,036	-	7,757	53,170
Subtotal	166,500	202,875	88,751	42,832	99,672	94,445	16,081	101,311	44,324	38,783	895,574
Vehicles & Equipment	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10 Yr Total
Vehicles	50,000	71,400	99,225	57,881	115,473	76,577	87,106	91,462	96,035	124,106	869,265
Equipment	-	8,400	-	40,517	30,388	76,577	46,903	-	-	23,270	226,055
Subtotal	50,000	79,800	99,225	98,398	145,861	153,154	134,010	91,462	96,035	147,376	1,095,320
HQ Building	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10 Yr Total
Debt payment	277,005	277,005	277,005	277,005	277,005	277,005	277,005	277,005	277,005	277,005	2,770,050
Sewer and water connection	357,500	-	-	-	-	-	-	-	-	-	357,500
Other	-	15,750	16,538	-	91,163	19,144	40,203	21,107	22,162	-	226,066
Subtotal	634,505	292,755	293,543	277,005	368,168	296,149	317,208	298,112	299,167	277,005	3,353,616
Information Technology	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10 Yr Total
Hardware	27,450	29,925	20,948	9,261	6,078	6,381	6,700	7,036	7,387	7,757	128,922
Data Acquisition	-	18,375	-	-	-	-	23,452	-	-	-	41,827
LIDAR	-	-	-	-	-	-	-	-	-	-	-
Subtotal	27,450	48,300	20,948	9,261	6,078	6,381	30,152	7,036	7,387	7,757	170,749
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10 Yr Total
Total	1,411,617	976,767	777,672	1,195,106	3,889,341	3,979,304	819,358	832,056	1,015,506	1,702,315	16,599,042

## Revenues &amp; Reserves

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Base Capital Levy Increase	4.5%	5.5%	6.5%	6.5%	5.5%	5.5%	3.5%	3.5%	3.5%	3.5%	
Growth Assumption	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
Additional Capital Levy Increase		2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Revenue Summary											
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10 Yr Total
Grants Based on Availability											-
Provincial WECI Grant (50%)	178,000	113,400	74,419	312,559	945,816	1,187,600	100,507	105,533	221,618	155,133	3,394,584
Federal Grants	44,000	46,200	44,100	69,458	1,261,088	935,155	-	-	-	-	2,400,000
Municipal Levy - Capital Levy	634,628	690,475	758,142	832,440	905,695	985,396	1,052,403	1,123,966	1,200,396	1,282,023	9,465,564
Debt Financing					472,908	593,800				387,832	1,454,540
Other Donations/Grants	49,987	55,000	32,050	10,000	70,775	41,907	23,401	94,426	10,000	10,000	397,547
Operating Reserve		645,000									645,000
HQ Building Reserve	235,000						(50,000)	(200,000)	(100,000)	(25,000)	(140,000)
Conservation Areas Reserve									(25,000)		(25,000)
Information Technology Reserve							(20,000)	(20,000)	(10,000)	(10,000)	(60,000)
Vehicle & Equipment Reserve	50,000						(50,000)	(50,000)	(30,000)	(47,673)	(127,673)
Water Control Structure Reserve	128,252	(770,308)	(131,039)	(29,350)	233,059	235,446	(236,953)	(221,869)	(251,508)	(50,000)	(1,094,270)
Priority Projects Reserve	91,750	197,000									288,750
Total	1,411,617	976,767	777,672	1,195,106	3,889,341	3,979,304	819,358	832,056	1,015,506	1,702,315	16,599,042

Reserve Summary											
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Operating Reserve (Surplus)	1,496,074	851,074	851,074	851,074	851,074	851,074	851,074	851,074	851,074	851,074	
HQ Building Reserve	338,701	338,701	338,701	338,701	338,701	338,701	388,701	588,701	688,701	713,701	
Conservation Areas Reserve	185,700	185,700	185,700	185,700	185,700	185,700	185,700	185,700	210,700	210,700	
Information Technology Reserve	80,158	80,158	80,158	80,158	80,158	80,158	100,158	120,158	130,158	140,158	
Vehicles & Equipment Reserve	213,537	213,537	213,537	213,537	213,537	213,537	263,537	313,537	343,537	391,210	
Water Control Structures Reserve	386,139	1,156,447	1,287,486	1,316,836	1,083,777	848,331	1,085,284	1,307,153	1,558,661	1,608,661	
Priority Projects Reserve	347,086	150,086	150,086	150,086	150,086	150,086	150,086	150,086	150,086	150,086	
Total	3,047,395	2,975,703	3,106,742	3,136,092	2,903,033	2,667,587	3,024,540	3,516,409	3,932,917	4,065,590	

Water and Erosion Control Structures and Monitoring											
Water and Erosion Control Structures											
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10 Yr Total
Shabomeka Lake Dam	-	-	-	-	-	-	-	35,178	36,936	155,133	227,247
Mazinaw Lake Dam	-	-	-	-	-	-	100,507	35,178	147,746		283,430
Kashwakamak Lake Dam	120,000	115,500	110,250	173,644	3,152,719	3,310,355	-	-			6,982,468
Big Gull Lake Dam	-	-	-	-	-	-	100,507	35,178	147,746		283,430
Mississagagon Lake Dam		5,250	-	-	-	-	-	-			5,250
Farm Lake Dam*			11,025			-	-	-	73,873	775,664	860,562
Pine Lake Dam*		5,250	-				-	-			5,250
Carleton Place Dam	280,000	-	-	-	-	-	-	-			280,000
Lanark Dam	-	78,750	27,563	115,763	-	-	-	-			222,075
Widow Lake Dam	-	78,750	55,125	405,169	-	-	-	-			539,044
Bennett Lake Dam	-	-	-	-	-			105,533	36,936	155,133	297,602
Glen Cairn Detention Basin	-	-	-	-	-	-	-	-			-
MacLarens Landing	-	-	-	-	-	-	-	-			-
Preventative Maintenance											-
Proposed Debt Financing	35,412	35,412	35,412	35,412	77,340	77,340	77,340	77,340	77,340	95,046	623,394
Total	435,412	318,912	239,375	729,987	3,230,059	3,387,695	278,354	288,405	520,577	1,180,976	10,609,752
Watershed Monitoring											
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10 Yr Total
Gauge Network											
WSC Gauges	6,000	7,875	8,269	8,682	9,116	9,572	10,051	10,553	11,081	11,635	92,834
MVCA Gauges	24,750	26,250	27,563	28,941	30,388	31,907	33,502	35,178	36,936	38,783	314,197
Survey & Flow Equipment	67,000										67,000
Total	97,750	34,125	35,831	37,623	39,504	41,479	43,553	45,731	48,017	50,418	474,032
Total WCS and Monitoring	533,162	353,037	275,206	767,610	3,269,563	3,429,174	321,907	334,136	568,594	1,231,394	11,083,783

Vehicles & Equipment Replacement											
Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10 Yr. Total
Vehicles											
Vehicle purchase	50,000	71,400	99,225	57,881	115,473	76,577	87,106	91,462	96,035	124,106	869,265
Equipment Purchase											-
- EV Charging Station				57,881							57,881
- ATV				40,517							40,517
Tracks for ATV		8,400									8,400
- Tractor						76,577					76,577
- Boat & Motor							46,903				46,903
- Tandem utility trailer										23,270	23,270
Riding Lawn mower					30,388						30,388
<b>Sub-Total Equipment</b>	-	8,400	-	40,517	30,388	76,577	46,903	-	-	23,270	226,055
<b>Total</b>	50,000	79,800	99,225	98,398	145,861	153,154	134,010	91,462	96,035	147,376	1,379,255

<b>Administration Office</b>											
<b>Administration Office</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>10 Yr Total</b>
Debt payment	277,005	277,005	277,005	277,005	277,005	277,005	277,005	277,005	277,005	277,005	2,770,050
Sewer and water connection	357,500										357,500
OTHER CAPITAL											-
Condition Assessment			16,538								16,538
Painting and Restoration		15,750			72,930				22,162		110,842
HVAC replacements					18,233	19,144	40,203	21,107			98,686
SUB-TOTAL OTHER CAPITAL	-	<b>15,750</b>	<b>16,538</b>	-	<b>91,163</b>	<b>19,144</b>	<b>40,203</b>	<b>21,107</b>	<b>22,162</b>	-	226,066
Total	634,505	292,755	293,543	277,005	368,168	296,149	317,208	298,112	299,167	277,005	3,353,616

Information and Communications Systems											
Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10 Yr Total
<b>HARDWARE</b>											
Computers/monitors	7,250	5,250	5,513	5,788	6,078	6,381	6,700	7,036	7,387	7,757	65,139
Servers	20,200		15,435								35,635
Printers											-
Storage				3,473							3,473
Audio Visual		24,675									24,675
<b>Total Hardware</b>	<b>27,450</b>	<b>29,925</b>	<b>20,948</b>	<b>9,261</b>	<b>6,078</b>	<b>6,381</b>	<b>6,700</b>	<b>7,036</b>	<b>7,387</b>	<b>7,757</b>	<b>128,922</b>
<b>DATA ACQUISITION</b>											
DRAPE		18,375					23,452				41,827
<b>Total Data Acquisition</b>	<b>-</b>	<b>18,375</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>23,452</b>	<b>-</b>			<b>41,827</b>
<b>LIDAR</b>											-
<b>Total</b>	<b>27,450</b>	<b>48,300</b>	<b>20,948</b>	<b>9,261</b>	<b>6,078</b>	<b>6,381</b>	<b>30,152</b>	<b>7,036</b>	<b>7,387</b>	<b>7,757</b>	<b>170,749</b>

Conservation Areas											
Mill of Kintail Conservation Area	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10 Yr. Total
Museum											
Balcony repairs				28,941							28,941
Replace wooden shingle roof	48,000										48,000
Repoint stone work	10,000										10,000
Replace riverside look out											-
Replace play structure wood chips											-
Replace septic system					60,775						60,775
Museum roadway retaining wall											-
Building Condition Assessment			22,050								22,050
Gatehouse											
- Repoint stone work	24,000					31,907					55,907
- Replace veranda joists and flooring	5,000										5,000
Security and accessibility upgrades	6,500										6,500
- Replace windows	20000										20,000
Septic replacement								84,426			84,426
Ed Center											
Accessibility doors and ramps											-
Replace siding							13,401				13,401
<b>MOK - Visitor Services Subtotal</b>	<b>113,500</b>	<b>-</b>	<b>22,050</b>	<b>-</b>	<b>60,775</b>	<b>31,907</b>	<b>13,401</b>	<b>84,426</b>	<b>-</b>	<b>-</b>	<b>326,059</b>
Site General											
Construct dog park											-
Parking Upgrades		5,250									5,250
Pedestrian bridge deck replacement			16,538								16,538
Resurface roadway and parking lot				11,576					14,775		26,351
Signage		2,100									2,100
Construct flush washrooms	30,000	90000									120,000
Develop site work shop											-
<b>MOK- CA Subtotal</b>	<b>30,000</b>	<b>97,350</b>	<b>16,538</b>	<b>11,576</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>14,775</b>	<b>-</b>	<b>170,238</b>

<b>Purdon Conservation Area</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>10 Yr. Total</b>
Replace sections on Boardwalk	18,000	19,425	20,396								57,821
Replace stairs		5,250	5,513	5,788	6,078	6,381					29,010
Replace site signage											-
Highland Trail Improvments			5512.5	5,788	6,078						17,378
Replace main look-out						15,315					15,315
Replace finger look-out		42,000								23,270	65,270
<b>Subtotal</b>	<b>18,000</b>	<b>66,675</b>	<b>31,421</b>	<b>11,576</b>	<b>12,155</b>	<b>21,697</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>23,270</b>	<b>184,794</b>
<b>K&amp;P Trail Conservation Area</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>10 Yr. Total</b>
Trail improvements											-
Condition Assessment					6,078						6,078
Bridge deck & handrail upgrades						38,288					38,288
Beaver management		2,100	2,205	2,315	2,431	2,553	2,680	2,814			17,098
<b>Subtotal</b>	<b>-</b>	<b>2,100</b>	<b>2,205</b>	<b>2,315</b>	<b>8,509</b>	<b>40,841</b>	<b>2,680</b>	<b>2,814</b>	<b>-</b>	<b>-</b>	<b>111,464</b>
<b>Morris island Conservation Area</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>10 Yr. Total</b>
Trail brushing/improvements		5,250	5,513	5,788	6,078						22,628
Parking meter											-
Signage											-
Trail Bridge repairs	5,000	5,250	5,513	5,788					29,549	7,757	58,856
Road maintenance		5,250			6,078			7,036			18,363
<b>Subtotal</b>	<b>5,000</b>	<b>15,750</b>	<b>11,025</b>	<b>11,576</b>	<b>12,155</b>	<b>-</b>	<b>-</b>	<b>7,036</b>	<b>29,549</b>	<b>7,757</b>	<b>72,542</b>
<b>Roy Brown Park (with Carleton Place)</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>10 Yr. Total</b>
Trail construction	-	-	5,513	5,788	6,078	-	-	-		7,757	25,135
Signage	-	-	-	-	-	-	-	-			-
Construct lookout	-	21000		-	-	-	-	7,036			28,036
<b>Subtotal</b>	<b>-</b>	<b>21,000</b>	<b>5,513</b>	<b>5,788</b>	<b>6,078</b>	<b>-</b>	<b>-</b>	<b>7,036</b>	<b>-</b>	<b>7,757</b>	<b>45,414</b>
<b>Total</b>	<b>53,000</b>	<b>202,875</b>	<b>66,701</b>	<b>42,832</b>	<b>38,896</b>	<b>62,538</b>	<b>2,680</b>	<b>16,885</b>	<b>44,324</b>	<b>38,783</b>	<b>584,452</b>

## REPORT

3310/23

TO:	The Chair and Members of the Mississippi Valley Conservation Authority Board of Directors
FROM:	Stacy Millard, Treasurer
RE:	<b>Tangible Capital Asset Policy Amendment</b>
DATE:	April 17, 2023

**RECOMMENDATION:**

**That the Board of Directors approve amendment of Appendix 6 Accounting for Tangible Capital Assets of MVCA's Administrative By-law as set out in this report.**

Current asset management policies and thresholds were established in 2008. The purpose of this report is to update the schedule of asset classes, capitalization thresholds, and amortization periods and related policies related to a selection of MVCA's assets for the following reasons:

- MVCA's schedule of assets includes "Roads & Bridges". Section 3150 of the *Public Sector Accounting Handbook* indicates that is meant for major roads and bridges, and is not appropriate for MVCA's trails and boardwalks.
- Land Improvements are not currently tracked separately from Land. Whereas Land Improvements can be amortized, Land cannot be.
- Dams are not clearly defined, are limited in scope, and do not address the various types of water control structure that MVCA manages.

Appendix 1 is the updated policy. It contains edits to items 2, 3, and 4 of the Policy Procedures section (on p. 3), and replaces them with Attachment 1 to the policy—a chart that has an updated asset list, description/notes, thresholds, and amortization rates.

**CORPORATE STRATEGIC PLAN**

Implementation of the 10-year Capital Plan Update aligns with Goal 1: Asset Management – "revitalize watershed management activities and invest in our legislated mandate"; and "Objective: e) Plan for the next phase of asset development and management."



# **ACCOUNTING FOR TANGIBLE CAPITAL ASSETS**

**Policy Effective: January 1, 2008**

**Updated: March 2023**

**Purpose:**

The purpose of this policy is to set out the procedures used by the Authority to track and report tangible capital assets. Accounting for tangible capital assets will follow standard PS 3150 Tangible Capital Assets as per the CICA Public Sector Accounting Handbook.

**Definitions:***Tangible Capital Assets*

Tangible capital assets are non-financial assets having physical substance that:

- are held for use in the production or supply of goods and services, for rental to others, for administrative purposes or for the development, construction, maintenance or repair of other tangible capital assets;
- have useful economic lives extending beyond one year;
- are used on a continuing basis;
- are not for resale in the ordinary course of operations; and
- meet the capitalization threshold.

*Capitalization Threshold*

Capitalization threshold is the minimum dollar value for which this policy will apply. Capital assets that do not meet the capitalization threshold will be expensed in the period.

*Betterments*

Subsequent expenditures on tangible capital assets that:

- increase previously assessed physical output or service capacity;
- lower associated operating costs;
- extend the useful life of the asset; or
- improve the quality of the output.

*Fair Value*

Fair value is the amount of consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

### *Capital Lease*

A capital lease is a lease with contractual terms that transfer substantially all the benefits and risks inherent in ownership of property to the Authority. For substantially all of the benefits and risks of ownership to be transferred to the Authority, one or more of the following conditions must be met:

- There is reasonable assurance that the Authority will obtain ownership of the leased property by the end of the lease term.
- The lease term is of such duration that the Authority will receive substantially all of the economic benefits expected to be derived from the use of the leased property over its life span.
- The lessor would be assured of recovering the investment in the leased property and of earning a return on the investment as a result of the lease agreement.

### *Amortization*

Write off of the cost of a tangible capital asset over its estimated useful life.

Amortization is charged to expense in the current year and accumulated amortization is shown as a reduction from the cost of tangible capital assets to arrive at net book value. Straight line amortization is calculated as cost divided by the useful life.

### **Policy Procedures:** (amended March 2023)

1. This policy is effective January 1, 2008.
2. Asset categories, Thresholds and Useful Life will be determined as required by the Treasurer. These are outlined in Attachment 1.
3. Capitalization thresholds are based on single assets. Major assets need not be broken down into components. Similarly, minor assets need not be pooled. Capitalization thresholds can be adjusted on individual basis with the approval of the General Manager.
4. Betterments and capital leases are to be treated as tangible capital assets.
5. Acquisitions of tangible capital assets must be authorized by the General Manager or designate. Tangible capital assets to be acquired shall be flagged and recorded as such through the acquisition process.
6. The Treasurer is responsible for maintaining an asset register. The asset register would include: acquisition date, description, cost, asset category, amortization rate, asset location.
7. Tangible capital assets should be recorded at cost plus all ancillary charges necessary to place the asset in its intended location and condition for use.
8. For purchased assets, cost is the gross amount of consideration paid to acquire the asset. It includes all non-refundable taxes and duties, freight and delivery

- charges, installation and site preparation costs, etc. It is net of any trade discounts or rebates. The cost of land includes purchase price plus legal fees, land registration fees, transfer taxes, etc. Costs would include any costs to make the land suitable for intended use, such as pollution mitigation and demolition. When two or more assets are acquired for a single purchase price, it is necessary to allocate the purchase price to the various assets acquired. Allocation should be based on the fair value of each asset at the time of acquisition or some other reasonable basis if fair value is not readily determinable.
9. For acquired, constructed or developed assets, cost includes all costs directly attributable (e.g., construction, architectural and other professional fees) to the acquisition, construction or development of the asset. Carrying costs such as internal design, inspection, administrative and other similar costs may be capitalized. Capitalization of general administrative overheads is not allowed. Capitalization of carrying costs ceases when no construction or development is taking place or when the tangible capital asset is ready for use.
  10. Borrowing costs incurred by the acquisition, construction and production of an asset that takes a substantial period of time to get ready for its intended use should be capitalized as part of the cost of that asset. Capitalization of interest costs should commence when expenditures are being incurred, borrowing costs are being incurred and activities that are necessary to prepare the asset for its intended use are in progress. Capitalization should be suspended during periods in which active development is interrupted. Capitalization should cease when substantially all of the activities necessary to prepare the asset for its intended use are complete. If only minor modifications are outstanding, this indicates that substantially all of the activities are complete.
  11. For donated or contributed assets, the costs that meet the criteria for recognition are equal to the fair value at the date of construction or contribution. Fair value may be determined using market or appraisal values. Cost may be determined by an estimate of replacement cost. Ancillary costs should be capitalized.
  12. Disposals of tangible capital assets must be authorized by the General Manager or designate. When tangible capital assets are taken out of service, destroyed or replaced due to obsolescence, scrapping or dismantling, the General Manager or designate must notify the Treasurer of the asset description and effective date. The Treasurer is responsible for adjusting the asset registers and accounting records recording a loss/gain on disposal.

## Attachment 1 – Asset Classes, Thresholds, Useful Lives (amended March 2023)

Asset Class	Description/Notes	Capitalization Threshold	Amortization Rate# (Straight-Line)
Land	<ul style="list-style-type: none"> <li>Real property in the form of a plot, lot or area</li> <li>Includes the purchase price and all closing costs to acquire the land</li> <li>Costs associated with the permanent improvements of the land, such as re-grading or filling, are added to the cost of the land</li> <li>Examples: Conservation Area, Beach Property, Undeveloped Site, Playgrounds, Look Out Site, Heritage Area/Historic Sites, Ecological Reserve. Excludes land held for resale</li> </ul>	n/a	n/a
Land Improvements	<ul style="list-style-type: none"> <li>Includes all costs <u>excluding</u> land and buildings incurred in the development of land to facilitate various recreation and economic pursuits</li> <li>Examples include but are not limited to site development, driveways, parking lots, bike paths, sidewalks, fences, ball diamonds soccer fields, camp sites</li> <li>Playground structures – 10 yrs</li> <li>Soccer field &amp; ball diamonds – 20 yrs</li> <li>Basketball Courts - 10 yrs</li> <li>Running Track - 10 yrs</li> <li>Campgrounds/Picnic Sites - 20 yrs</li> <li>Trails &amp; Boardwalks – walking, biking, ski &amp; skidoo - 20 yrs</li> <li>Fencing – 10 yrs</li> <li>Fountains – 20 yrs</li> <li>Outdoor lighting – 20 yrs</li> <li>Landscaping – 30 yrs</li> <li>Retaining walls – 15 yrs</li> <li>Pavilion/Gazebo - 15 yrs</li> <li>Parking lots: <ul style="list-style-type: none"> <li>Gravel – 10 yrs</li> <li>Asphalt – 20 yrs</li> <li>Concrete – 30 yrs</li> </ul> </li> </ul>	\$5,000	10 – 30 years

Asset Class	Description/Notes	Capitalization Threshold	Amortization Rate# (Straight-Line)
Buildings	<ul style="list-style-type: none"> <li>All buildings, which function independent of an infrastructure network and are made of a solid construction</li> </ul>	\$10,000	40 years
Leasehold Improvements	<ul style="list-style-type: none"> <li>Costs to renovate, modify or improve accommodations leased by the municipality</li> </ul>	\$5,000	Over the lease term
Dams and Water Structures	<ul style="list-style-type: none"> <li>Dams and other structures that are used to control or divert surface water such as dams, canals, dikes, ditches (not already capitalized as part of road grade), diversions, cut-offs and wells – 50 year</li> <li>Water intake/supply structures, including drilled and dug</li> <li>Useful life determined at time of construction based on type – recommended by Director of Engineering and approved by General Manager</li> </ul>	\$10,000	20 to 50 years
Vehicles	<ul style="list-style-type: none"> <li>Automobiles, cars, vans, trucks, trailers, snowmobiles, ice resurfacing machine, ATV</li> <li>Watercraft: Motor Boat, Zodiac</li> </ul>	\$5,000	5 years
Machinery & Equipment	<ul style="list-style-type: none"> <li>All types of machinery or equipment, other than machinery and equipment used in road construction and maintenance</li> <li>Garden maintenance equipment (including mowers, ride on mowers, trimmers, shovels, picks, wood chippers, outside sprinklers)</li> <li>Recreational equipment (including scoreboards, bleachers nets, picnic tables, tents, canoes/kayaks)</li> <li>Welding equipment, generators, audio visual equipment &amp; stage, hand tools, power tools, snow blowers, equipment, safety equipment, fuel tanks, pumps, key locksystem, incinerator, surveying &amp; engineering equipment</li> </ul>	\$2,500	10 years

Asset Class	Description/Notes	Capitalization Threshold	Amortization Rate# (Straight-Line)
Computer Hardware & Software & Communication Equipment	<ul style="list-style-type: none"> <li>• Purchase installation of personal PC computers, peripherals and LAN servers</li> <li>• Off-the-shelf and related upgrades or licenses for individual personal computers, as well as LAN or communication software</li> <li>• Does not include the purchase, design and development of major applications. All major applications should be evaluated individually.</li> <li>• Examples: Personal computers, laptops, printers, scanners, fax machines, photocopiers, software, telephones, cell phones, 2-Way radios, satellite phones, paging systems, blackberry, cameras</li> </ul>	\$1,000	5 years
Furniture & Fixtures	<ul style="list-style-type: none"> <li>• Examples: Desks, Chairs, File Cabinets, Kitchen Appliances, Water Dispenser</li> </ul>	\$1,000	10 years

---

**REPORT****3311/23**

TO:	The Chair and Members of the Mississippi Valley Conservation Authority Board of Directors
FROM:	Sally McIntyre, General Manager
RE:	<b>City of Ottawa Flood Plain Mapping Contract</b>
DATE:	April 17, 2023

**RECOMMENDATION:**

**That the Board of Directors approve execution of a five-year Flood Plain Mapping agreement with the City of Ottawa.**

---

**1.0 BACKGROUND**

Since 2012, the Mississippi Valley, Rideau Valley and South Nation Conservation Authorities have been updating and producing new floodplain mapping in the City of Ottawa along several watercourses in accordance with a contribution agreement between the three CAs and the City. Mapping work has focused on high growth areas and other areas of concern, with work ongoing at MVCA to prepare and update mapping of the Carp River. The last contribution agreement was signed in 2017 and the City of Ottawa has proposed continuation and update of the agreement.

**2.0 PROPOSED 2023-2027 AGREEMENT**

Staff have been working with the City of Ottawa to finalize a third agreement including the required deliverables and budget. Under the new agreement, a draft of which is attached for your consideration, the City of Ottawa will contribute 50% of the total project cost of \$628,838 to undertake the work while MVCA would be responsible to cover the remaining 50% over a period of five years. Refer to Table 1 for the draft list of projects, timing, and costs.

This work allows for accelerated completion of projects identified in last year's Flood Risk Report; and will offset future Category 1 costs by helping to fund core staff of the organization. Savings to MVCA over the five years will be a minimum of ~\$54,500 and a maximum of ~\$88,000 per year.

Table 1: DRAFT List of Projects, Schedule and Budget									
Year	<u>Floodplain Mapping Studies</u>	Budget	<u>Flood Lines, Depth Maps, and Inventory of Flood Vulnerable Areas</u>	Budget	<u>Erosion Hazard Mapping</u>	Budget	Maintenance	Total Budget	50% Funding
1 (2023)	Carp River Additional Studies	\$70,000					\$0	\$70,000	\$35,000
2 (2024)	Upper Shirley's Brook & Update	\$55,547	Shirley's Brook	\$0	Shirley's Brook	\$0	\$5,000	\$108,986	\$54,493
	Upper Feedmill Creek	\$22,665							
	<i>Kizell Drain/Watts Creek Update*</i>	\$25,774							
3 (2025)	Upper Shirley's Brook & Update	\$56,658	Upper Shirley's Brook	\$10,000	Upper Shirley's Brook	\$3,000	\$5,000	\$134,566	\$67,283
	Upper Feedmill Creek	\$23,118	Upper Feedmill Creek	\$7,500	Upper Feedmill Creek	\$3,000			
	<i>Kizell Drain/Watts Creek Update*</i>	\$26,290	<i>Kizell Drain/Watts Creek</i>	\$0	<i>Kizell Drain/Watts Creek</i>	\$0			
4 (2026)	Carp River Tributaries	\$88,525					\$5,000	\$139,299	\$69,650
	Kinburn Drain	\$45,774							
5 (2027)	Carp River Tributaries	\$90,297	Carp River Tributaries	\$17,500	Carp River Tributaries	\$6,000	\$5,000	\$175,987	\$87,994
	Kinburn Drain	\$46,690	Kinburn Drain	\$7,500	Kinburn Drain	\$3,000			
<b>Total</b>		<b>\$551,338</b>		<b>\$420,500</b>		<b>\$15,000</b>	<b>\$20,000</b>	<b>\$628,838</b>	<b>\$314,420</b>

### 3.0 CORPORATE STRATEGIC PLAN

This project aligns with Goal 1: Asset Management – “revitalize watershed management activities and invest in our legislated mandate”; and “Objective b) Strengthen our risk analysis and management capacity to include climate change and development impacts.”



A Proposal for the

# **Delineation of Floodplain and Erosion Hazards within the City of Ottawa**

---

December 2022

Prepared by:



SOUTH NATION  
CONSERVATION  
DE LA NATION SUD

THIS PAGE WAS INTENTIONALLY LEFT BLANK

## Table of Contents

1.0	Background .....	1
2.0	Floodplain Mapping Studies .....	2
2.1	Floodplain Mapping Methodology .....	3
3.0	Additional Products for Floodplain Mapping Projects .....	5
3.1	Delineation of Additional Flood Lines .....	5
3.2	Flood Depth Maps.....	7
3.3	Inventory of Flood Vulnerable Areas .....	7
4.0	Riverine Erosion Hazard Delineation .....	8
5.0	Mapping Maintenance .....	8
6.0	Conservation Authority – Scope of Work .....	9
6.1.	Mississippi Valley Conservation Authority .....	9
6.2.	Rideau Valley Conservation Authority .....	10
6.3.	South Nation Conservation.....	10
7.0	Data Transfer from City of Ottawa to Conservation Authorities .....	11
8.0	Deliverables .....	11
8.1	Flood Hazard .....	11
8.2	Erosion Hazard .....	11
8.3	Additional Products .....	12
8.4	Maintenance .....	12
8.5	Project Management.....	12
8.6	Public Communications and Consultation .....	12
9.0	Schedule and Budget .....	13
10.0	Prerequisites .....	13

## Appendices

Appendix A: Maps .....	15
Appendix B: Budget and Schedule.....	19
Appendix C: Detailed Floodplain Mapping Prioritization Methodology .....	26

## 1.0 Background

Conservation Authorities (CA) have been delegated floodplain management responsibilities by the Ontario Ministry of Natural Resources and Forestry on a watershed scale. Specifically, within the City of Ottawa, three CAs have floodplain management responsibilities, including South Nation Conservation (SNC), Rideau Valley Conservation Authority (RVCA), and Mississippi Valley Conservation Authority (MVCA). Their responsibilities include the identification of lands that are subject to flood hazard; supporting regulations made under Section 28 of the *Conservation Authorities Act*; and supporting Official Plan land use designations and zoning by-laws adopted by municipalities in accordance with the Planning Act and the associated Provincial Policy Statement.

Accurate, engineered flood mapping is the foundation for effective flood hazard management. In Eastern Ontario, the 1:100-year floodplain is the regulatory standard, calculated as having a 1% Annual Exceedance Probability (AEP). Outdated floodplain mapping is difficult to defend on technical grounds. There are floodplain maps within the city's boundary that were created 20 to 30 years ago and require attention. In addition to the need to periodically review and update inventories of existing flood maps, CAs are also faced with the need for floodplain analysis and mapping of rivers and streams that have yet to be covered by such mapping throughout their respective jurisdictions.

The perception that the existing floodplain mapping is out of date also weakens the City's ability to effectively implement floodplain provisions in the Zoning By-law.

SNC, MVCA, and RVCA are soon to complete a second successful 5-year agreement that addresses updating and maintaining a floodplain mapping program within the City of Ottawa to ensure the data is accurate and to produce necessary floodplain mapping where it currently does not exist. This proposal will address the next steps to ensure floodplain mapping updates and/or new mapping in areas under development pressure.

As requested by the City of Ottawa, this proposal will include the delineation of erosion hazard for the priority streams. The proposed budget does not include special studies that may be required for priority streams including, soils, slope stability, etc. If they are required, they will be submitted under another proposal.

This proposal addresses an additional 5-year partnership agreement and includes the following priorities:

- Completion of new or updated floodplain mapping studies and reports for priority watercourses within the City of Ottawa;
- Delineation of additional products for emergency purposes, including, flood lines for 1:5 years, 1:20 years, 1:25 years, 1:50 years and 1:350 years events; flood depth maps for each event; and inventory of flood vulnerable areas for each event, and production of associated reports;
- Maintenance of floodplain maps completed under these agreements; and
- Delineation of riverine erosion hazard for the proposed priority watercourses based on toe erosion, stable slope, erosion access and meander belt allowances according to Ontario Regulation 153/06, Ontario Regulation 174/06, and Ontario Regulation 170/06, and produce associated reports;

It should be noted that to accommodate future project funding applications (i.e., Flood Hazard Identification Mapping Program), additional storm events may be required to meet funding guidelines.

The extent of regulation mapping for associated erosion and flood hazards are at the discretion of each Conservation Authority and are not included in this proposal.

## 2.0 Floodplain Mapping Studies

While floodplain mapping studies were completed for many watercourses within the City of Ottawa under the first and second agreements, there are additional watercourses where new or updated studies are required.

A total of 58 watercourses or reaches of watercourse were originally identified within the City of Ottawa that may require floodplain mapping updates or production, where the mapping currently does not exist. A prioritization ranking system was created in 2012 to ensure the watercourses most in need of accurate floodplain mapping are completed within the allocated budget.

The three CAs ranked all their watercourses in the same manner so that priorities for floodplain mapping are consistent across the entire city. Although the same ranking system was used by all three CAs, it should be noted that the existing and future development pressures within the three CAs' jurisdictional watersheds, within the City of Ottawa, are different. The RVCA watershed includes the oldest urban development (the old City of Ottawa) and the most hydraulically complicated floodplain areas (e.g., spills). The SNC watershed includes many villages on various watercourses, and thus development pressures are spread out across the city. The MVCA's development pressure is concentrated on fewer watercourses and much of it on the Carp River. The proposed City of Ottawa expansion areas were considered for future development needs.

All remaining watercourses were evaluated for the presence and intensity of existing development and the predicted intensity of future development. In addition, the usability of the existing mapping was considered based on staff experience when reviewing planning applications and permit approvals.

Based on the above, watercourses or watercourse reaches were ranked to determine priorities. A detailed description of the Floodplain Mapping Prioritization can be found in Appendix C, Tables 1 – 3 show the proposed priority watercourses and their reaches.

## 2.1 Floodplain Mapping Methodology

The methodology for completing floodplain studies and mapping is standardized throughout Canada and the United States. The methodology for the completion of floodplain studies and the production of floodplain maps is described in the following documents:

- MNR (1986). Floodplain Management in Ontario: Technical Guidelines Ontario Ministry of Natural Resources, Conservation Authorities and Water Management Branch, Toronto.
- MNR (2002). River and Stream Systems Technical Guide: Flooding Hazard Limit. Ontario. Ministry of Natural Resources, Water Resources Section, Peterborough, Ontario, 2002.
- Conservation Ontario (2005). Guidelines for Developing Schedules of Regulated Areas—Section 3.0. Conservation Ontario and the Ministry of Natural Resources, October 2005.

There are three major components of the technical work needed for floodplain mapping:

### Step 1: Estimation of design floods

Various hydrologic methods are available for estimating flows to be used in floodplain mapping. Depending on the available data, the analyst can use any of the following: single station or regional flood frequency analysis, data transposition, area pro-rating method, event, or continuous watershed modeling, etc. The CAs are proposing to complete a hydrologic analysis in areas where it currently does not exist or requires updating.

### Step 2: Computation of the water surface level corresponding to design floods

Hydraulic computations are necessary to calculate the water levels for designed floods. Usually, data describing the river configuration and associated crossings is necessary. There are a host of hydraulic tools that can be used, although simple, steady-state river models such as HEC-RAS have become the norm. In the case of lakes, other types of hydraulic calculations are used, depending on the outlet condition. As infrastructure has been changing over the years, the current models need to be updated to reflect the current conditions. Therefore, field surveys

and ground-truthing will be required for municipal and private structures. Based on the collected data, hydraulic computation will be conducted or revised, where necessary.

### **Step 3: Plotting flood lines**

Once the hydraulic computation is completed, delineate flood lines corresponding to the regulatory (1:100 year) flood elevation using available topography adjacent to rivers and lakes. Flood line delineation can be automated using computer programs and the Digital Elevation Model (DEM) or done manually by interpolating contour lines.

### 3.0 Additional Products for Floodplain Mapping Projects

While flood hazard mapping serves as a valuable piece of information in understanding the extent of flooding for specific events, flood hazard mapping alone does not provide the information required to fully understand flood risk. Flood risk is a combination of the likelihood and consequence of flooding associated with communities, buildings, and infrastructure. Therefore, the additional products listed below will also be completed as part of this agreement.

There will be floods greater than the 1:100 and delineating a more severe flood event (the 1:350 year as described below) will assist in gaining insights into risks beyond the 1:100 for emergency management and assessment of mitigation measures. The purpose of the additional flood lines is for scoping analyses only and not for defining specific or regulatory limits. Therefore, the level of effort and exactness in delineating these additional flood events will also be consistent with the purpose of framing the risk zone.

The preparation of the flood depth products is to provide a screening-level assessment of the extent of flooding over roadways as well as an inventory of communities, buildings, and dwelling units lacking access and egress. The main users of these maps will be emergency management and asset management personnel.

#### 3.1 Delineation of Additional Flood Lines

For the floodplain mapping studies completed under the first and second agreements, the “final product” was the production of floodplain maps showing the delineation of a flood line with a 1% annual exceedance probability (AEP), corresponding to a 1:100 year flood event. The 1:100 year flood is the flood hazard criteria for eastern Ontario as defined in the *Technical Guide River and Stream Systems: Flood Hazard Limit* (MNR 2002) and is defined as the flood event standard in all three of the CA regulations approved by the Minister of Natural Resources and Forestry under Section 28 of the *Conservation Authorities Act*. This proposal includes the delineation of the 1:100 year floodplain, however, the delineation of the regulatory extent associated with these systems are at the discretion of each CA and are not included in this proposal.

In addition to the 1:100 year flood line, the City of Ottawa requested the following flood lines be delineated for emergency planning purposes:

- 1:5 year; 20% AEP
- 1:20 year; 5% AEP
- 1:25 year; 4% AEP
- 1:50 year; 2% AEP
- 1:350 year; 0.29% AEP

The return periods, as noted above, were chosen to provide a distinguishable range of flood lines, also considering:

- The 1:5 year flood would be a nuisance or minor classification of flood events in the context of flood forecasting and warning, and this could represent a “frequent” event.
- The 1:25 year, 1:50 year, and 1:100 year are used as the design return periods in the design of bridges and culverts, based on the functional road classification by the Ontario Ministry of Transportation.
- The 1:350 year return period flood event
  - i. Has a 25% chance of occurring or being exceeded in the next 100 years;
  - ii. Is comparable to the return period of Hurricane Hazel or the Timmins Storm, already used to guide development in other areas in Ontario;
  - iii. International practice often includes flood hazard mapping ranging between 1:300 years to 1:1,000 years (e.g., Germany and the United Kingdom);
  - iv. The 1:350 year is the standard recommended for creating flood hazard maps in the *National Floodplain Mapping Assessment* report prepared for Public Safety Canada; and
  - v. 1:350 was identified by the City of Ottawa Climate Strategy as City-wide climate resilience strategy and flood protection criteria.

These additional flood lines will generally be produced from existing information and will be generated through a desktop GIS exercise. Therefore, no allowance has been included in the budget for additional field surveys. The delineation of the additional flood lines will require some additional hydrologic and hydraulic calculations, and these calculations will follow the same general procedures as contained in the original reports.

It should be noted that project funding applications (i.e., Flood Hazard Identification and Mapping Program), may require the inclusion of additional storm events with different annual exceedance probabilities (AEPs) than those listed above. They are not included in this proposal.

### 3.2 Flood Depth Maps

To develop a more comprehensive floodplain management database, another additional product that will be produced are maps showing the depth of flooding under various flood events. As requested by the City of Ottawa for emergency planning purposes, these maps will be produced for the following events:

- 1:5 year; 20% AEP
- 1:20 year; 5% AEP
- 1:25 year; 4% AEP
- 1:50 year; 2% AEP
- 1:100 year; 1% AEP
- 1:350 year; 0.29% AEP

It should be noted that these products will utilize information produced during the original studies and analysis completed as described in Section 2.1. Discussions with the City of Ottawa staff will determine the depth that will be shown on the maps.

### 3.3 Inventory of Flood Vulnerable Areas

For emergency planning purposes, the City of Ottawa requested that inundated roads, buildings and flood vulnerable areas be identified for storms with a 20%, 4%, 2% and 1% AEP. These areas will be identified on maps by color-coding the affected location(s) and compiling a database that includes the following information:

- Total number of buildings;
- Number of dwellings;
- Hospitals and nursing homes;
- Schools; and
- Roads and driveways flooded by more than 0.3 m.

## 4.0 Riverine Erosion Hazard Delineation

Erosion hazards are defined by the loss of land due to human or natural processes that can pose a threat to life and property. The delineation of riverine erosion hazard ensures safe development.

Delineation of riverine erosion hazard includes the following steps:

- Review all digital elevation models (DEM), contour maps, recent surficial geological maps, hydro-stratigraphic maps (thickness of main soil units), and historical aerial imagery to identify any potential issues with regards to unstable soils (this also provides a general understanding of the study reach where the potential unconfined and confined areas could be identified);
- Identify valley toe and top of slope (DEM, contours, GIS tools, and aerial photography);
- Develop slope profiles every 10 m (GIS tools and DEM) within identified confined areas to determine if the slope heights are non-apparent (< 3 m) or apparent (3 m or greater); and
- Once “confined vs unconfined” and “apparent vs non-apparent” characteristics have been determined, delineate the regulation limit according to toe erosion, stable slope, erosion access and meander belt allowances according to Ontario Regulation 153/06, Ontario Regulation 174/06, and Ontario Regulation 170/06.

## 5.0 Mapping Maintenance

After the floodplain maps, under the City of Ottawa/Conservation Authority agreement, are completed, there will be a requirement to maintain the integrity of the information shown on the maps. While the initial production of the floodplain maps requires a review and/or major update of all components (e.g., hydrology, hydraulics, topographic information) for the entire watercourse reach, the maintenance of the maps, if completed on an ongoing basis, will only need to address one or two components of the input to the floodplain maps and/or will address a specific area or reach of the watercourse or watershed.

Since the flood lines shown on the maps are a combination of hydrologic, hydraulic, and topographic information, there are many triggers that necessitate **maintenance updates**.

These include:

- **Changes in Land Use**

Changes in land use, such as the conversion of rural areas to urban development, the expansion of the general urban boundary or a village boundary or the conversion of existing hydrologic “storage” areas (e.g., deforestation, loss of wetlands) that impact the magnitude, timing or volume of peak flows.

- **Drainage Basin Revisions**

Changes or revisions to drainage basin areas (i.e., diversions) that impact the magnitude, timing, or volume of peak flows.

- **Crossing Structure Changes**

Upgrading, reconstruction, or replacement of watercourse crossings that impact water levels and flow regimes.

- **Changes in Regulatory Standards**

Changes in the regulatory standards used in the production of floodplain maps.

- **Changes in Topography**

Changes in topography in the floodplain area or channel because of filling, grading, or excavation.

- **Age of the Floodplain Maps**

To ensure the general integrity of the floodplain maps, it is recommended that the need for a maintenance update of the floodplain maps be reviewed every 10 years.

For any maps or studies completed under this or the previous agreement, maintenance of the products will be included. The budget for maintenance is approximately 1.25% of the total funding invested in floodplain mapping products within the City of Ottawa and has been distributed over the last three years of the agreement.

## 6.0 Conservation Authority – Scope of Work

### 6.1. Mississippi Valley Conservation Authority

Four priority watercourses have been selected for flood and erosion hazard mapping within the MVCA's jurisdiction. Their priority has been ranked as Medium (See Appendix C, Table 1). The Upper Shirley's Brook and Upper Feedmill Creek projects will extend existing flood and erosion hazard limits to address headwater development pressures. The Kinburn Drain project will map hazards in the Village of Kinburn. The Carp River Tributaries is the largest project and includes three City Stream Watch (CSW) watercourses – CSW A, B and C.

As part of this agreement, existing Shirley's Brook floodplain mapping will also be updated to reflect recent development in the watershed. This project will be executed together with the Upper Shirley's Brook hazard mapping. The Kizell Drain/Watts Creek update was included as a provisional project, subject to potential development drainage changes in the watershed. Additional studies required for the Carp River floodplain mapping project are also included in Table 1.

See Appendix C, Table 1 for details.

## 6.2. Rideau Valley Conservation Authority

Six streams have been identified within RVCA's jurisdiction for flood and erosion hazard mapping. Most systems have several aspects that will make hazard mapping a challenge. For example, Sawmill Creek has about 35 road crossings, a water diversion structure, and many stormwater facilities. Stillwater Creek has a few erosion control structures. Graham Creek has several flood and erosion control structures, some of which are quite old and are being rehabilitated. Faulkner Drain watershed has a highly urbanized area at the upper end and ongoing modification of the municipal drain itself. Greens Creek is deeply entrenched and has many erosion issues. It is anticipated that Brassils Creek will be free of these complicating factors, however, there is a large degree of uncertainty in terms of data availability for this system.

The RVCA has therefore adopted an approach, whereby it will start all projects at the beginning. RVCA shall execute and complete them as permitted by data availability and other constraints. RCVA anticipates that some projects will move faster than others. The scope and budget are also subject to adjustments as progress is made.

See Appendix C, Table 2 for details.

## 6.3. South Nation Conservation

Six priority watercourses have been identified within SNC's jurisdiction. Four of them, South Castor River, Dalmeny Creek, Swerdferger Creek and Quaile Creek, are located within the Castor River watershed. Several watercourses were studied within the Castor River watershed in the past 10 years. SNC's budget includes the development of one hydrology and one hydraulic model for the Castor River watershed which includes the three main branches of the Castor, North, Middle, and South. The development of these two models will include 2D modeling for two spill areas within the Cassidy and McCooeye Creeks and within John Boyce and Osgoode Garden Cedar Acres Creeks. Floodplain and erosion hazard will be prepared for all watercourses.

The other two watercourses, Lepage Charbonneau Creek and Bickerton Creek, do not have floodplain mapping. These watercourses are located within the McKinnon's Creek Subwatershed, a Subwatershed that is within an urban expansion area in the City of Ottawa.

See Appendix C, Table 3 for details.

## 7.0 Data Transfer from City of Ottawa to Conservation Authorities

The following information will be provided by the three CAs to the City:

- Additional data collected on public and private structures;
- Technical reports prepared following industry-standard formatting for each watercourse or reach of watercourses; and
- Updated 1:100 year floodplain mapping in a suitable GIS layer format
  - The City may make the floodplain layer publicly available; however, this information shall only be used for information purposes.
- File Geodatabase information as detailed in Sections 2.1.

All information and data developed under the 'City of Ottawa Floodplain Mapping - Review and Maintenance' project will be owned by each respective CA. Any data/model file requests need to be made to each CA and will be subjected to a user-share agreement.

## 8.0 Deliverables

### 8.1 Flood Hazard

The deliverables are floodlines for storms with a 20%, 5%, 4%, 2%, 1%, and 0.29% annual exceedance probability for every watercourse included in this proposal, as well as associated reports, as described in Section 3. The extent of regulation mapping derived from delineated flood hazards are at the discretion each Conservation Authority and will be completed outside of this project.

### 8.2 Erosion Hazard

The deliverable is the riverine erosion hazard line for every watercourse as described in Section 4. The extent of regulation mapping derived from delineated erosion hazards are at the discretion each Conservation Authority and will be completed outside of this project.

### **8.3 Additional Products**

The additional products detailed in Sections 3.1, 3.2, and 3.3 will generally be produced from existing information. A technical memorandum will be produced to document any additional hydrologic and hydraulic calculations and all procedures used in the process of delineating the additional flood lines and flood depths, identifying the flood vulnerable areas, and creating the inventory database. Since the original floodplain mapping report included a technical review and this work is simply an extension of the original analysis, an additional technical review is not required.

Maps will be produced, and flood line and flood depth maps will be provided in a File Geodatabase format for use by the City of Ottawa and the Conservation Authorities.

The products described in Sections 3.1, 3.2, and 3.3 will be prepared for all the watercourse reaches included in this proposal.

### **8.4 Maintenance**

The deliverable is the floodplain mapping maintenance as described in Section 5.

### **8.5 Project Management**

To successfully execute the work plan and to ensure all 3 CAs and the City of Ottawa are informed of the project's progress, a representative from each CA and the project lead from the City of Ottawa will meet at a minimum of quarterly intervals. Items that may be discussed at the meetings include project status, progress, results, unexpected challenges, work plan, and any proposed variances from the proposed work schedule and budget.

Each CA will keep records of all expenditures related to this project, including staff time. Quarterly reports will be sent to the city on the status and expenditures of the project.

### **8.6 Public Communications and Consultation**

The CAs will coordinate the necessary landowner contact and permissions for access to private lands if necessary, following standardized communications plans for updating natural hazard mapping.

Public communications and consultation will include letters, newspaper advertisements, social media campaigns, open houses, and individual meetings with interested stakeholders and property owners.

CAs will be responsible for translating communication materials as needed and will coordinate and issue all advertisements, articles, social media updates, and public consultation activities (including open houses).

## 9.0 Schedule and Budget

A cost estimate and schedule were prepared, as shown in Appendix B, Tables 1, 2, and 3, for the duration of the agreement. The budgets shown are preliminary and subject to review and adjustment. It is anticipated that pertinent City and CA staff will be consulted from time to time to assess and adjust the scope and budget of the projects as needed.

The budget for new floodplain mapping studies includes all the additional products detailed in Sections 3.1, 3.2, and 3.3, and the reporting for these additional products will be as documented in Section 3.0. The budgets include an increase in inflation over the duration of the agreement. The City of Ottawa will continue the provision and management of the technical review for new floodplain mapping studies, and thus the budgets shown do not include an allowance for this review.

The new agreements for RVCA, SNC and MVCA are scheduled to start in 2023. Appendix B, Table 4 shows the summary of total yearly budget and funding for all three CAs.

The three CAs are proposing a 5-year project at an approximate cost of \$100,000 - \$150,000 per year per CA. The CAs and the City of Ottawa will review the work plan and budget annually; any proposed changes will be presented to the City for approval.

## 10.0 Prerequisites

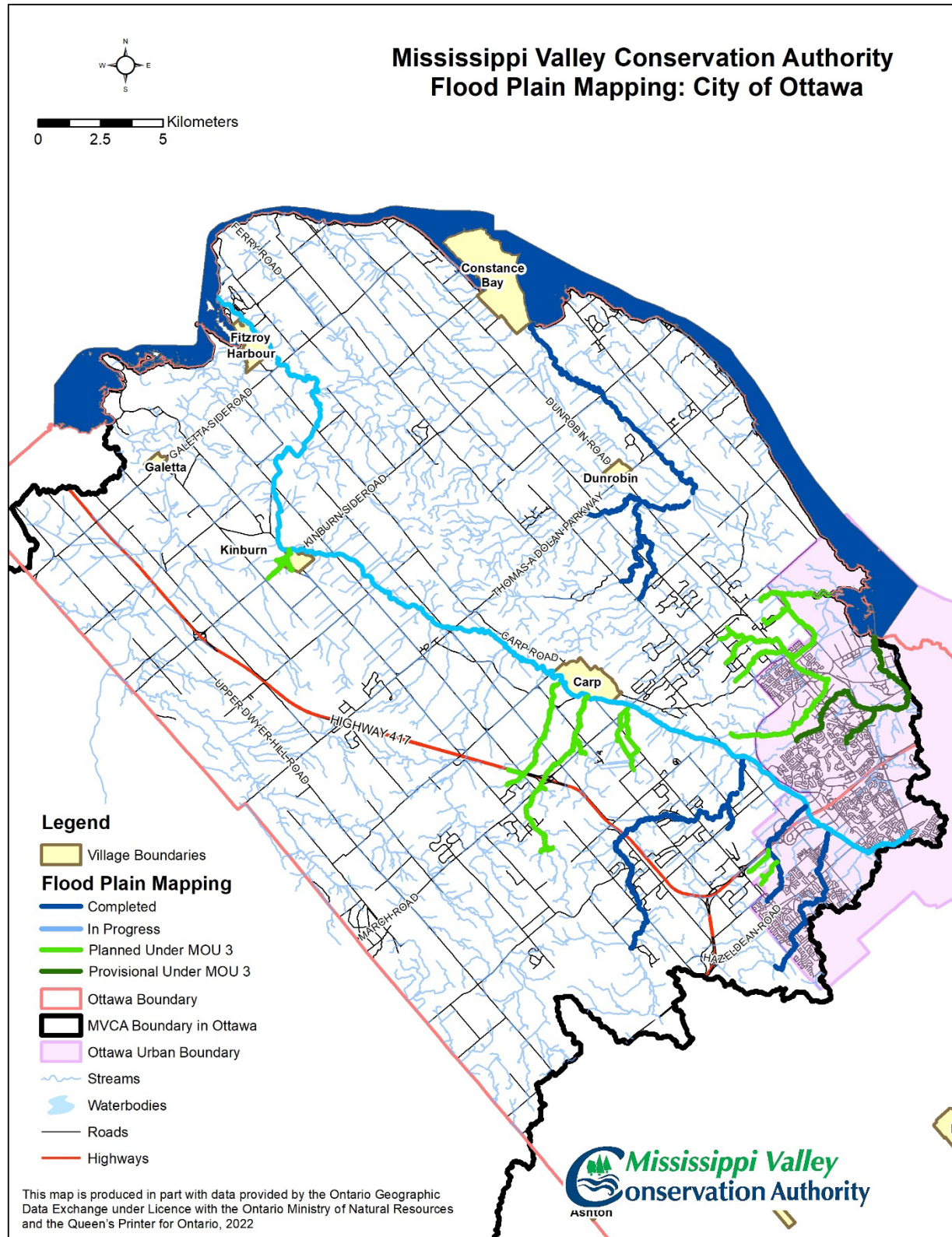
**Prior to commencing the 5-year project, the following must be obtained:**

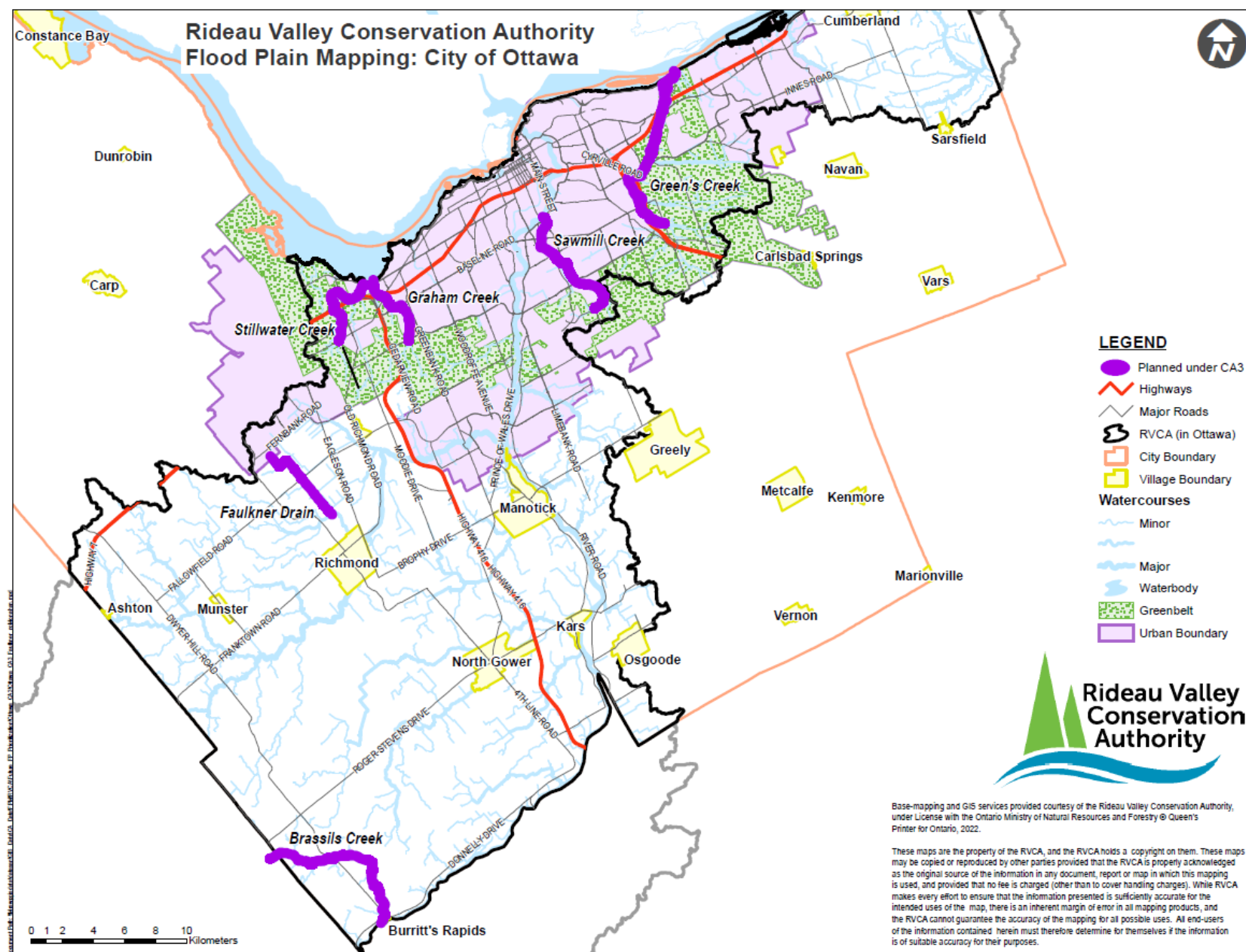
1. Contribution Agreement between Conservation Partners (or each CA) and the City of Ottawa for the administration and execution of the City of Ottawa Floodplain Mapping Review and Maintenance, which will acknowledge:
  - a) A 50% cost-share partnership between each CA and the City of Ottawa, up to \$150,000 per year per CA; and
  - b) The City's allocated funds will be provided to the CAs at the onset of every year described in the work plan.
2. Necessary data transfers from the City to the CAs.

Once the commitments have been finalized, the 5-year work plan described in Section 6.0 of this document may be initiated. Yearly start and end dates will be identified in the Contribution Agreement.

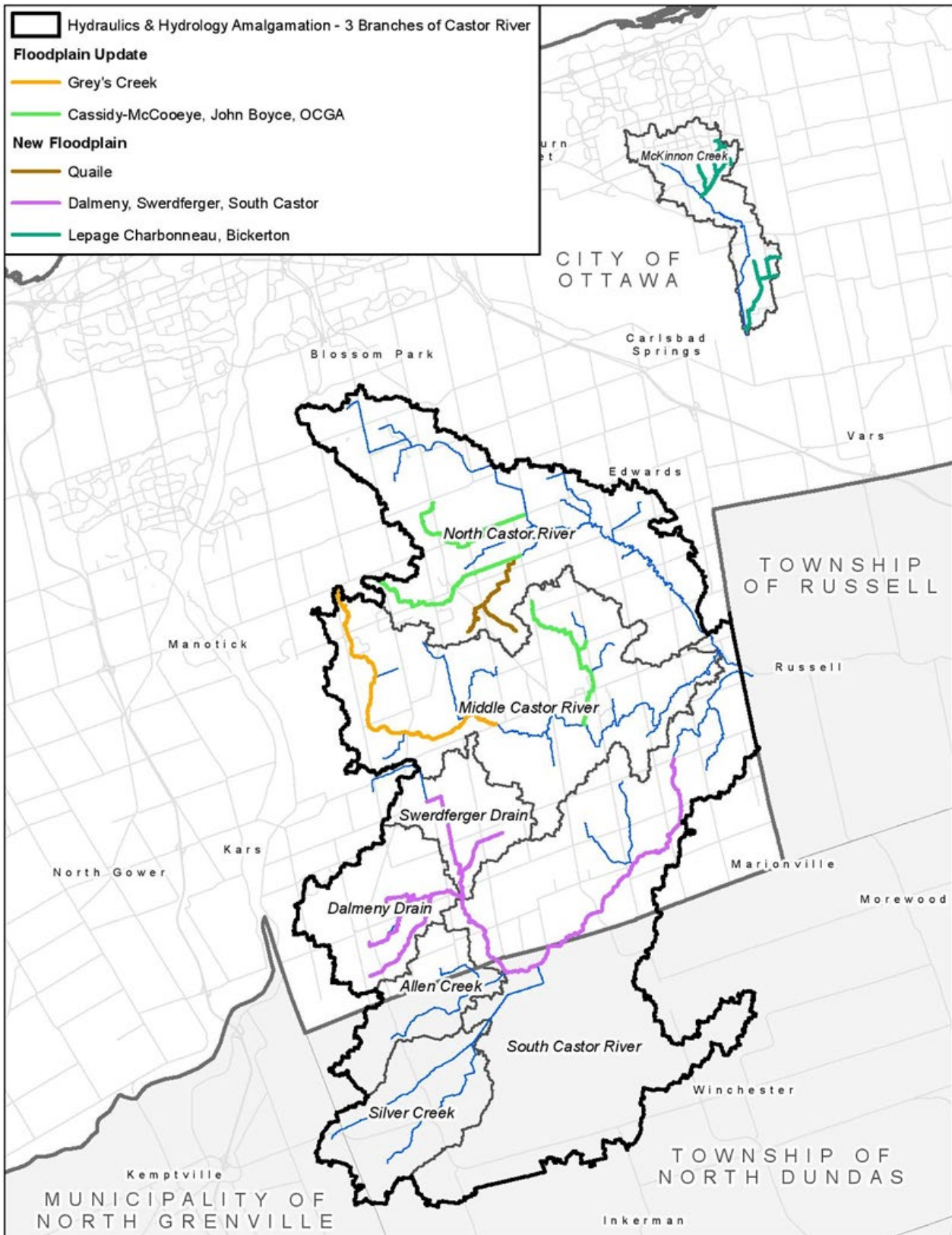
## APPENDICES

## **APPENDIX A: MAPS**





## South Nation Conservation Floodplain Mapping: City of Ottawa



## **APPENDIX B: BUDGET AND SCHEDULE**

Table 1: Budget and Schedule

## Mississippi Valley Conservation Authority

Year	Floodplain Mapping Studies	Budget	Additional Flood Lines, Flood Depth Maps and Inventory of Flood Vulnerable Areas	Budget	Erosion Hazard Mapping	Budget	Maintenance	Total Budget	50% Funding
1 (2023)	Carp River Additional Studies	\$70,000					\$0	\$70,000	\$35,000
2 (2024)	Upper Shirley's Brook & Update	\$55,547	Shirley's Brook	\$0	Shirley's Brook	\$0	\$5,000	\$108,986	\$54,493
	Upper Feedmill Creek	\$22,665							
	<i>Kizell Drain/Watts Creek Update*</i>	\$25,774							
3 (2025)	Upper Shirley's Brook & Update	\$56,658	Upper Shirley's Brook	\$10,000	Upper Shirley's Brook	\$3,000	\$5,000	\$134,566	\$67,283
	Upper Feedmill Creek	\$23,118	Upper Feedmill Creek	\$7,500	Upper Feedmill Creek	\$3,000			
	<i>Kizell Drain/Watts Creek Update*</i>	\$26,290	<i>Kizell Drain/Watts Creek</i>	\$0	<i>Kizell Drain/Watts Creek</i>	\$0			
4 (2026)	Carp River Tributaries	\$88,525					\$5,000	\$139,299	\$69,650
	Kinburn Drain	\$45,774							
5 (2027)	Carp River Tributaries	\$90,297	Carp River Tributaries	\$17,500	Carp River Tributaries	\$6,000	\$5,000	\$175,987	\$87,994
	Kinburn Drain	\$46,690	Kinburn Drain	\$7,500	Kinburn Drain	\$3,000			
Total		\$551,338		\$420,500		\$15,000	\$20,000		
							Grand Total	\$628,838	\$314,420

\* Provisional project, subject to potential development drainage changes in the watershed.

Table 2: Budget and Schedule

## Rideau Valley Conservation Authority

Year	Floodplain Mapping Studies	Budget	Additional Flood Lines, Flood Depth Maps and Inventory of Flood Vulnerable Areas	Budget	Erosion Hazard Mapping	Budget	Maintenance	Total Budget	50% Funding
1 (2023)	Sawmill Creek *	\$50,000	\$0	\$0	\$0	\$0	\$0	\$230,000	\$115,000
	Graham Creek *	\$30,000							
	Stillwater Creek	\$35,000							
	Greens Creek	\$30,000							
	Faulkner Drain *	\$45,000							
	Brassils Creek	\$40,000							
2 (2024)	Sawmill Creek *	\$50,000	\$0	\$0	\$0	\$0	\$0	\$230,000	\$115,000
	Graham Creek *	\$30,000							
	Stillwater Creek	\$30,000							
	Greens Creek	\$35,000							
	Faulkner Drain *	\$45,000							
	Brassils Creek	\$40,000							
3 (2025)	Sawmill Creek *	\$50,000	\$0	\$0	\$0	\$0	\$0	\$230,000	\$115,000
	Graham Creek *	\$30,000							
	Stillwater Creek	\$25,000							
	Greens Creek	\$50,000							
	Faulkner Drain *	\$45,000							
	Brassils Creek	\$30,000							
4 (2026)	Sawmill Creek *	\$50,000	\$0	\$0			\$25,000	\$230,000	\$115,000
	Graham Creek *	\$20,000							
	Stillwater Creek	\$20,000							
	Greens Creek	\$29,000							

Table 2: Budget and Schedule

## Rideau Valley Conservation Authority

Year	Floodplain Mapping Studies	Budget	Additional Flood Lines, Flood Depth Maps and Inventory of Flood Vulnerable Areas	Budget	Erosion Hazard Mapping	Budget	Maintenance	Total Budget	50% Funding
	Faulkner Drain *	\$35,000							
	Brassils Creek	\$45,000			Brassils Creek	\$6,000			
5 (2027)	Sawmill Creek *	\$50,000	\$0	\$0	\$0	\$0	\$25,000	\$230,000	\$115,000
	Graham Creek *	\$53,000							
	Stillwater Creek	\$30,000							
	Greens Creek	\$36,000							
	Faulkner Drain *	\$36,000							
	Brassils Creek								
6 (2028)	Sawmill Creek	\$40,000	\$0	\$0	Sawmill Creek	\$6,000	\$0	\$180,000	\$90,000
	Graham Creek	\$57,000			Graham Creek	\$6,000			
	Stillwater Creek	\$35,000			Stillwater Creek	\$6,000			
	Greens Creek	\$20,000			Greens Creek	\$10,000			
	Faulkner Drain *								
	Brassils Creek								
Total		\$1,246,000				\$34,000	\$50,000		
Grand Total							\$1,330,000	\$665,000	

\* The scope, methodology, budget, and workplan of these projects cannot be accurately predicted at this time. Therefore, the budget shown is only preliminary and subject to review and adjustment. It is anticipated that pertinent City and RVCA staff will be consulted from time to time to assess and adjust the scope and budget of the project as more information is collected and analyzed. MNRF and other stakeholders may also be consulted if needed.

Table 3: Budget and Schedule

## South Nation Conservation

Year	Floodplain Mapping Studies	Budget	Additional Flood Lines, Flood Depth Maps and Inventory of Flood Vulnerable Areas	Budget	Erosion Hazard Mapping	Budget	Maintenance	Total Budget	50% Funding
1 (2023)	3 branches of the Castor hydrology update	\$130,692	3 branches of the Castor hydrology update		3 branches of the Castor hydrology update			\$240,000	\$120,000
	3 branches of the Castor hydraulics update. Spill areas 2D modeling	\$109,308	3 branches of the Castor hydraulics update. Spill areas 2D modeling		3 branches of the Castor hydraulics update. Spill areas 2D modeling				
2 (2024)	3 branches of the Castor hydraulics update. Spill areas 2D modeling	\$15,610	3 branches of the Castor hydraulics update. Spill areas 2D modeling	\$13,545	3 branches of the Castor hydraulics update. Spill areas 2D modeling	\$28,465	\$3,000	\$240,000	\$120,000
	Quaile Creek	\$133,329	Quaile Creek	\$12,000	Quaile Creek	\$9,377	\$5,000		
	South Castor River and Tributaries	\$19,675	South Castor River and Tributaries		South Castor River and Tributaries				
3 (2025)	South Castor River and Tributaries	\$194,237	South Castor River and Tributaries	\$14,735	South Castor River and Tributaries	\$21,385		\$240,000	\$120,000
	Dalmeny Creek	\$9,642	Dalmeny Creek		Dalmeny Creek				
4 (2026)	Dalmeny Creek	\$88,571	Dalmeny Creek	\$9,975	Dalmeny Creek	\$10,925	\$7,000	\$240,000	\$120,000

Table 3: Budget and Schedule

## South Nation Conservation

Year	Floodplain Mapping Studies	Budget	Additional Flood Lines, Flood Depth Maps and Inventory of Flood Vulnerable Areas	Budget	Erosion Hazard Mapping	Budget	Maintenance	Total Budget	50% Funding
	Swerdferger Creek	\$94,965	Swerdferger Creek	\$9,660	Swerdferger Creek	\$11,813			
	Lepage Charbonneau Creek	\$7,092	Lepage Charbonneau Creek		Lepage Charbonneau Creek				
5 (2027)	Lepage Charbonneau Creek	\$170,433	Lepage Charbonneau Creek	\$14,500	Lepage Charbonneau Creek	\$8,233	\$10,000	\$240,000	\$120,000
	Bickerton Creek	\$36,834	Bickerton Creek		Bickerton Creek				
6 (2028)	Bickerton Creek	\$141,874	Bickerton Creek	\$14,500	Bickerton Creek	\$9,611		\$165,985	\$82,992
<b>Total</b>			<b>\$1,152,261</b>		<b>\$88,915</b>		<b>\$99,809</b>		
							<b>Grand Total</b>	<b>\$1,365,985</b>	<b>\$682,992</b>

Table 4: Annual Budget and Funding														
Summary of 3 Conservation Authorities														
CAs	2023		2024		2025		2026		2027		2028		Total/CA	Partners Allocation
	Total	50% funding	Total	50% funding	Total	50% funding	Total	50% funding	Total	50% funding	Total	50% funding		
MVCA	\$70,000	\$35,000	\$108,986	\$54,493	\$134,566	\$67,283	\$139,299	\$69,650	\$175,987	\$87,994			\$628,838	\$314,420
RVCA	\$230,000	\$115,000	\$230,000	\$115,000	\$230,000	\$115,000	\$230,000	\$115,000	\$230,000	\$115,000	\$180,000	\$90,000	\$1,330,000	\$665,000
SNC	\$240,000	\$120,000	\$240,000	\$120,000	\$240,000	\$120,000	\$240,000	\$120,000	\$240,000	\$120,000	\$165,985	\$82,993	\$1,365,985	\$682,993
Annual Total	\$540,000	\$270,000	\$578,986	\$289,493	\$604,566	\$302,283	\$609,299	\$304,650	\$645,987	\$322,994	\$345,985	\$172,993	\$3,324,823	\$1,662,413

## **APPENDIX C: DETAILED FLOODPLAIN MAPPING PRIORITIZATION METHODOLOGY**

### **Detailed Floodplain Mapping Prioritization Methodology:**

Through discussion with the 3 CAs, it was determined that the importance of having updated floodplain mapping for the purposes of this project is dependent on the presence of existing development, the probability of future development, and the quality of existing mapping. If there were other constraints that would restrict or prevent development, then the importance of this should decrease.

Each of these components (Existing Development, Future Development, and usability) was given a value of High, Medium, and Low. For consistency, these values were defined as:

Existing Development (choices influenced by existing zoning; dominant condition was employed):

- None – No development; vacant land, unused farmland, etc.: EP, AG
- Low-Rural (anything else not listed)
- Medium – Estate Residential, ICI: I(any), RC, RG, RH, RI, LC, GM, TM, AM, MC, MD
- High – Urban, village, or Waterfront development: R1-5, RM, T1, T2, V(any), DR, adjacent to Major River/Lake

Future Development (choices made by Official Plan or other source of plan; the highest condition was used):

- None – other constraints: Sand/Gravel/Limestone resource area, Greenbelt, Major Open Space
- Low – restricted development: Rural Natural Feature
- Medium – Previously approved development: Carp Corridor, Carp Airport, known developments
- High – Within urban/village boundary

Usability:

- None – Never been mapped
- Low – Unacceptable; decisions should not be made using this information.
- Medium – Satisfactory; generally a reasonable representation of reality
- Good – Easy to use; high confidence that what is shown accurately represents existing conditions.

Existing and Future development were each given a score of 0 (none) to 3 (High); usability was given a score of 4 (none) to 1 (High), and other constraints were given a score of 1 (no) or 0 (yes). Components were then combined using the formula:

Score = (Existing Development + Future Development) \* Usability

Final scores determine whether the watercourse/reach of watercourses is high, medium, or low in terms of requiring floodplain mapping:

- Low = Less than 10
- Medium = 10 to less than 20
- High = 20 and higher

Table 1: Floodplain Mapping Project Details							
Mississippi Valley Conservation Authority							
Watercourse/ Reach Name	Coverage	Total Length of Watercourse (km)	Length of Floodplain Mapping Reach (km)	Total Watercourse Drainage Area (km <sup>2</sup> )	# of Structures within Floodplain Mapping Reach	Previous Floodplain Mapping?	Comments
Upper Shirley's Brook & Update	Old 2nd Line Rd to Existing Shirley's Brook Study	22.8	22.8	31.2	20	Yes	No previous mapping for Upper Shirley's Brook
Upper Feedmill Creek	Carp Rd to Existing Feedmill Creek Study	3.9	3.9	1.1	4	No	
Carp River Tributaries	City Stream Watch Tributary A, B, C	34.5	21.8	81.3	21	No	
Kinburn Drain	Kinburn Sdrd at Mohrs Rd to Carp River	3.3	3.3	2	4	No	
Kizell Drain/ Watts Creek	Eagleson Rd/Walden Dr to Ottawa River	19.7	19.7	25	30	Yes	

Table 2: Floodplain Mapping Project Details							
Rideau Valley Conservation Authority							
Watercourse/ Reach Name	Coverage	Total Length of Watercourse (km)	Length of Floodplain Mapping Reach (km)	Total Watercourse Drainage Area (km <sup>2</sup> )	# of Structures within Floodplain Mapping Reach	Previous Floodplain Mapping?	Comments
Sawmill Creek	Rideau River to Lester Road	20	18	21	35	no	
Graham Creek	Ottawa River to Hunt Club Road	16	13	25	15	no	
Stillwater Creek	Ottawa River to Robertson Road	16	13	24	10	no	
Greens Creek	Ottawa River to Ramsayville Road	38	32	114	15	no	
Faulkner Drain	Flewellyn Road to Flowing Creek	7	6	14	5	no	
Brassils Creek	Rideau River to Roger Stevens Drive	25	23	68	6	no	

Table 3: Floodplain Mapping Project Details

South Nation Conservation							
Watercourse/ Reach Name	Coverage	Total Length of Watercourse (km)	Length of Floodplain Mapping Reach (km)	Total Watercourse Drainage Area (km <sup>2</sup> )	# of Structures within Floodplain Mapping Reach	Previous Floodplain Mapping?	Comments
3 Branches of the Castor and tributaries (North, Middle and South Castor)	<b>North:</b> Leitrim wetland(Start of Findlay/NC FP) to Boundary Road <b>Middle:</b> Southeast of Mitch Owens/Manotick Station Road (Start of Grey's Creek FP) to North Castor SW of Victoria St <b>South:</b> West of Gordon Murdoch Road (Dalmeny). North of Springhill Road (Swerdferger) to Boundary Road	208	88	420	107	Partial	Floodplain Mapping reaches include new and updated reaches
Quaile Creek	W of Bank/Sale Barn Road to North Castor	7	7	10	8	No	
South Castor and tributaries	South Castor Portion: S of Dalmeny Road to Springhill Road (Start of 2020 SC FP)	102	42	190	30	Partial	
Dalmeny Creek	NE of Dalmac/Forest to South Castor (S of Dalmeny Road)	15	15	31	18	No	
Swerdferger	E of Godron Murdoch Road to South Castor (S of Dalmeny Road)	9	9	25	12	No	
Lepage Charbonneau Creek	North of Wall Road and East of Avalon Subdivision to McKinnons Creek	8.5	8.5	4.2	8	No	
Bickerton Creek	W of Trim Road to Richard Clark Municipal Drain.	6.5	6.5	3.8	6	No	

---

**REPORT****3312/23**

TO:	The Chair and Members of Mississippi Valley Conservation Authority Board of Directors
FROM:	Sally McIntyre, General Manager AND Scott Lawryk, Property Manager
RE:	<b>K&amp;P Trail: Status and Next Steps</b>
DATE:	April 17, 2023

**RECOMMENDATION****That the Board of Directors:**

1. Reconfirm authorization to sell the K&P Trail to the counties of Lanark, Renfrew, and Frontenac for a nominal sum; and
2. Direct staff to:
  - (a) Seek coordinated disposal of the asset to the three counties; and
  - (b) Propose terms and conditions if there are cost implications to MVCA in excess of \$5,000; and
  - (c) Fulfil mandatory notification requirements.

---

**1. PURPOSE**

On March 22, 2023 the County of Lanark Economic Development Committee approved a recommendation to make an offer to purchase the Lanark segment of MVCA's K&P Trail for a dollar.<sup>1</sup> The purpose of this report is to provide context, analysis, and make a recommendation to the Board of Directors regarding the anticipated offer to purchase.

**2. BACKGROUND**

MVCA owns a 35 km section of the K&P Trail<sup>2</sup> that extends roughly from Snow Road to Barryvale. In November 2019, the Board authorized disposal of the property due to:

- insufficient resources to support appropriate management of the asset; and

---

<sup>1</sup> Report #CAO-02-2023 of Chief Administrative Officer. The report will rise to County Council next month.

<sup>2</sup> Approximately 20.7 km in Lanark Highlands, 7.9 km in North Frontenac, and 6.8 km in Greater Madawaska.

- increased interest, planning, and investment by local counties in the development of a comprehensive trail network since the property was acquired by MVCA in 1990s.

Staff were directed that the sale of the property come at no additional cost to MVCA.

Following Board approval, discussions began with the counties of Lanark, Frontenac, and Renfrew for potential purchase of the property, and a property valuation was obtained for the Trail. Official letters were sent to the counties in March 2021 soliciting interest in the property.

The County of Renfrew has relayed their continued interest in moving forward with the purchase of their portion of the trail. They are currently reviewing the County of Lanark report and will be discussing the details at a committee meeting in April. Discussions with the County of Frontenac last year indicate their continued use, and a status update has been requested.

### **3. ANNUAL OPERATING COSTS**

MVCA sets aside \$5,000 per year for annual maintenance of the K&P Trail. This budget does not allow for preventative maintenance or comprehensive asset management. All funds are expended on reactive maintenance to resolve issues identified by staff or trail users.

Actual trail maintenance costs over the last ten years ranged from ~\$300 to \$7,800 per year. In 2022, general maintenance costs were \$6,173. Annual property taxes have been relatively stable since 2012, and totaled \$1,166 in 2022. Total annual operating costs for 2022 were \$7,339. This is considered to be typical and indicative of the minimal investment made in the asset, which is reflected in the rustic condition of the trail.

### **4. OTHER EXPENSES**

Over the past ten years, MVCA has spent:

- ~\$160,000 in property survey and legal fees, of which \$131,000 was related to a claim by an adjacent landowner over a small section of the K&P.
- ~\$19,000 to investigate the Clyde River bridge condition and prepare engineered drawings for replacement of the railings; and
- ~\$5,000 to obtain a property valuation.

If MVCA were to retain the asset, further work is required at the Clyde River bridge crossing that has been valued at between \$125,000 and \$236,000 depending upon the standard to which the bridge is repaired.

### **5. LAND REGISTRATION**

While MVCA has composite survey plans with Instrument Numbers on file with the three registry offices located in Renfrew, Lanark, and Frontenac, the following issues were raised by legal counsel regarding establishing legal ownership:

- There are approximately 20 PINs associated with the MVCA portion of the K&P trail in Lanark County alone. A full search of all PINs may be required in order to determine if all parts of the K&P have been properly registered in the name of MVCA.
- Not all PINs were converted from the Land Registry to Land Titles and each unconverted property may require full searches to determine the reason why.
- Surveys may be required for those portions that were not converted to Land Titles.
- There may be issues associated with road rights-of-way (ROW) where ownership may not be clearly documented as resting with the local municipality.
- This, in turn, could necessitate conveyance of some portions of the trail to area municipalities prior to conveyance of the trail to the respective county.
  - The County of Renfrew also raised this point in respect to a portion of the trail within the boundaries of Greater Madawaska.

MVCA and the County of Lanark (and other counties) would need to agree on how to address these matters before proceeding with an Agreement of Purchase and Sale.

### **5.1. BELL Easement**

MVCA and Bell entered into an agreement that grants Bell an easement for use of a 3.3km section of the trail from Levant Station to Folger Station, in exchange for a yearly fee of \$1,821. This allows Bell to offer its services to the residents of Folger Station. MVCA and the County of Lanark would have to explore including this easement as part of the Purchase and Sale.

### **5.2. Temporary Easement**

MVCA is in the process of entering into an agreement that would grant the Township of Lanark Highlands a temporary easement to use a 3.2 km section of the trail to service the Village of Clyde Forks, while the Clyde Forks bridge is being replaced. This project will require Lanark Highlands to make some significant improvements to that section of the trail to be able to handle residential traffic and services during the timeframe of the bridge replacement.

### **5.3. Court Order**

MVCA is still working to resolve a matter with an adjacent property owner with 650 m of land fronting the Trail. The matter went before a judge in 2017, and the court decision was in MVCA's favour including award of costs. While MVCA agreed to provide and has surveyed an easement over the trail for the owners, they have refused the proposed terms and failed to comply with

the Court Order. Last year the landowners made an offer to purchase the section of the trail in question and MVCA's Board of Directors declined the offer.<sup>3</sup> Further action will be required to resolve this matter.

## 6. VALUATION AND SALE

MVCA purchased the K&P Trail in the 1990s for \$7,000, and received 50% funding from the Ministry of Natural Resources. The assessed value of the property in May 2021 was \$170,000.

The counties feel that the land should be transferred at nominal cost for the following reasons:

- It is a transfer of public land between public agencies.
- The counties will incur significant cost to bring the asset up to their current standards and to maintain that standard going forward. (For example, the County of Lanark expended net \$2.2 million on the Ottawa Valley Rail Trail (OVRT) and Tay-Havelock Trail over the period 2018-2020, including purchase of approximately 61 km from CPR for \$115,341.)
- The County of Lanark is estimating \$350,000 of survey and legal work to be able to correct existing title issues.

Provincial policies<sup>4</sup> allows for “nominal sum dispositions to municipalities” provided that “such transfers retain the lands in open space/conservation purposes” and that associated agreements “recognize the Provincial share towards the original acquisition of the land.” (This supersedes a previous policy that required the sale of conservation area properties at market rates.)

Accordingly, any agreement of the purchase and sale must provide MVCA with the “first right of refusal” to re-acquire the land should one or more of the counties decide to sell the land in future; and, require return of the Provincial investment to the Province at the “same proportion as the original acquisition” (i.e. 50%) should all or any portion of the land be subsequently sold.

## 7. NEXT STEPS

Assuming that Lanark County Council approves preparation of an offer to MVCA, it may be advantageous to negotiate an “Option to Purchase Agreement” with all three counties on the main terms. This would allow for consideration of the various matters identified in this report, time to resolve any outstanding matters, and support concurrent disposal of the asset to the three counties.

---

<sup>3</sup> Refer to Staff Report 3212/22.

<sup>4</sup> *Policies and Procedures for the Disposition of Conservation Authority Property*, 1999.

Once an agreement is in place, MVCA will need to issue a public notification and notify the Minister's office.

## **8. CORPORATE STRATEGIC PLAN**

Sale of the K&P Trail aligns with Goal 1: Asset Management – revitalize watershed management activities and invest in our legislated mandate; and objectives:

- e) Plan for the next phase of asset development and management.

## REPORT

3313/23

TO:	The Chair and Members of the Board of Directors
FROM:	Stacy Millard, Treasurer
RE:	<b>Coverage of Long-Term Disability Benefit, Amendment (In Camera Discussion)</b>
DATE:	April 17, 2023

**RECOMMENDATION:**

**That the Board of Directors approve amendment of Section 8.2.1 Long Term Disability of the Employee Manual as set out in this report.**

A former employee that has been on LTD for several years is still receiving Group Benefits, with MVCA paying the monthly Group Benefits cost. MVCA's Employee Manual is silent on how Group Benefits apply to those on Long Term Disability (LTD). Research indicates that most organizations impose time limits on group benefit coverage. Information obtained from three conservation authorities and three local municipalities were used for comparative purposes. Like MVCA, some are silent on this matter, while others put a limit on how long employees retain Group Benefits, typically two or three years.

To eliminate uncertainty and avoid this potential situation from reoccurring it is recommended that section 8.2.1 of the MVCA Employee Manual be amended to state that "Employees on long term disability (LTD) will have their Group Benefits coverage maintained for up to two years."

As the former employee is 63 years and 5 months of age, and the precedent of covering their Group Benefits is long standing, it is proposed to notify the them that Group Benefits coverage will cease on their 65<sup>th</sup> birthday in accordance with current practice around retirement. All other employees will be notified of the amendment to the Employee Manual.

This policy change aligns with Goal 3 of the Corporate Strategic Plan: "People and Performance – support the operational transformations required to achieve MVCA's priorities and to address legislative changes"; and "Objective b) Monitor the quality, efficiency and impact of what we do and modify to improve operational effectiveness."

## REPORT

3314/23

TO:	Board of Directors, Mississippi Valley Conservation Authority
FROM:	Sally McIntyre, General Manager and Alex Broadbent, Management Representative MVCA JH&SC
RE:	<b>Managing Stress in the Workplace – 2023 Survey Results</b>
DATE:	April 12, 2023

**For Information.****1.0 BACKGROUND**

In 2020, members of the Joint Health & Safety Committee (JH&SC) raised concerns regarding the psycho-social health of the organization—the organization had seen retirement and replacement of most of its management team, other key positions were vacant, workloads were climbing as a result of the 2019 flood and housing boom, and several legislative changes had been made that threatened funding and delivery of some programs.

Several actions were taken to address issues raised including the creation and staffing of positions to deal with workload demands; and a commitment was made to carryout a psycho-social survey of employees to better understand the problem. A confidential psycho-social survey of employees was carried out by Occupational Health Clinics for Ontario Workers Inc. (OHCOW) in August 2021. Results of the survey were shared with employees and Board, and was followed-up with five workshops with staff to flesh out issues identified by the survey.

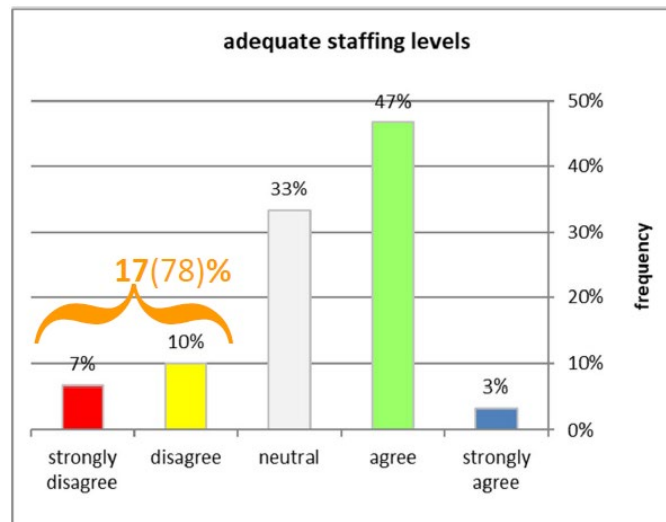
Based upon workshop results, an *Action Plan for Mitigating Workplace Stress* was prepared in consultation with the JH&SC and all employees that was approved by the Board in May 2022. The Plan included a commitment to undertake a follow-up survey to gauge what impact, if any, that changes in the workplace had on mitigating workplace stress. The purpose of this report is to present summary findings of the March 2023 psycho-social survey of employees; and to map out next steps in this ongoing effort to support employee and workplace health.

**2.0 2023 SURVEY RESULTS**

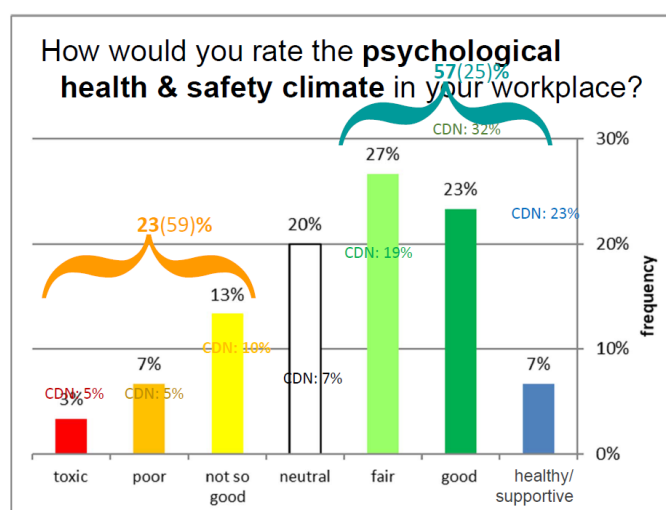
John Oyduk of OHCOW presented results at a meeting the JH&SC and Management Team on April 11, and highlighted the following:

- Survey participation rates were very high with over 90% of employees responding.
- There is a marked improvement in overall results between 2021 and 2023.
  - As shown in Figure 1, sentiments regarding staffing levels have improved significantly, with 78% disagreeing or strongly disagreeing in 2021 compared to 17% in 2023.
  - As shown in Figure 2, sentiments regarding the psychological health of the workplace have improved, with 59% rating the workplace as not good, poor or toxic in 2021, compared to 23% in 2023. While this a considerable improvement, it also illustrates that more work is needed to address the psychological health of the workplace.

**Figure 1: Is MVCA Adequately Staffed**

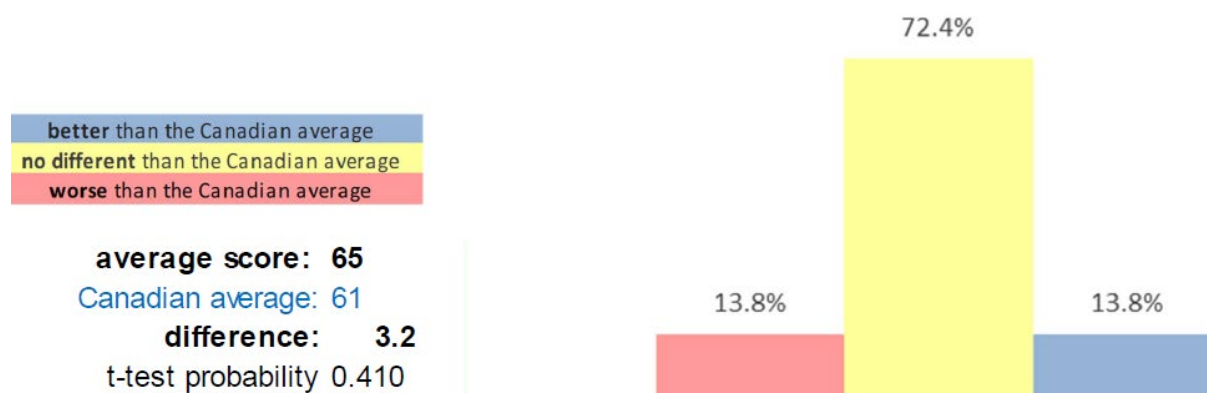


**Figure 2: Is MVCA a psychologically safe workplace**



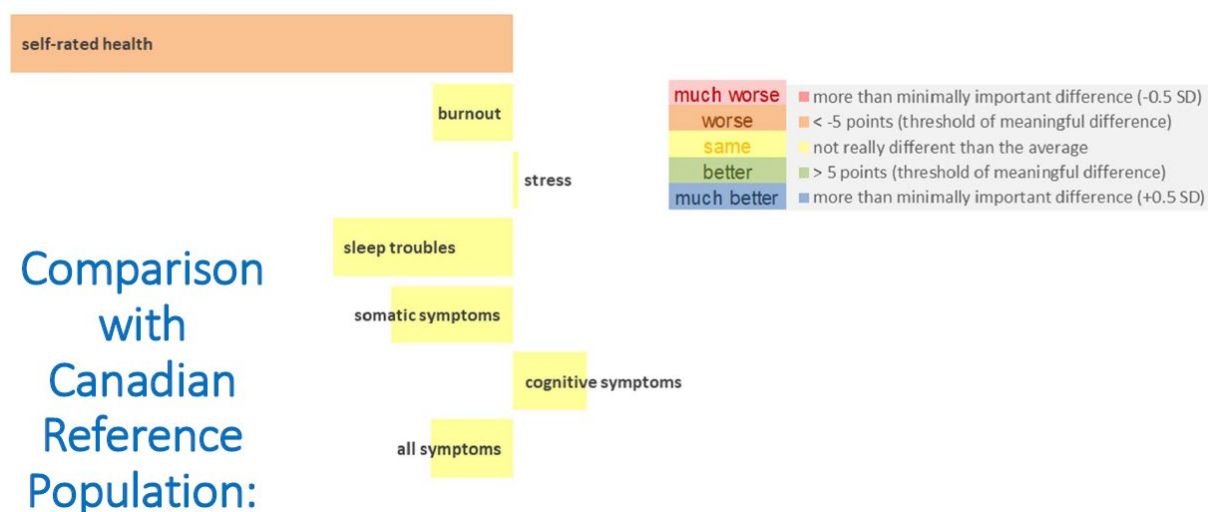
- As shown in Figure 3, employees feel more engaged than the average Canadian, meaning their workplace is important to them and that they would recommend a friend to work here. Again, while there was an improvement over 2021, we would like to see more people feeling positively about MVCA and need to determine how best make the workplace more desirable.

**Figure 3: Employee Engagement**



- Self-rated health has improved, but is still below the Canadian standard, and OHCOW emphasized that this is a strong predictor of mortality and morbidity and not to be underestimated. It was also shared that not all employees completed this section or felt that their health was solely a function of work and that other variables were affecting their health.

**Figure 4: Symptoms of Stress**



Full survey results can be shared confidentially with Board members upon request.

### 3.0 OCHOW RECOMMENDATIONS

Based upon their review of survey results it is recommended that MVCA focus on the following areas:

- Work Predictability
- Influence over work
- Recognition for work
- Vertical trust (aka communications)

Recognizing that comments received are largely received from those who are less satisfied, it is recommended that MVCA consider the following matters in particular:

- Lack of resources in specific areas of the organization;
- Further improving communications between management and employees;
- Addressing gaps in work instructions and business processes;
- Ensuring transparency in the development, modification and implementation of workplace policies;
- Managing workload distribution;
- Addressing biases in the workplace;
- Maintaining hardware and software currency.

### 4.0 NEXT STEPS

OHCOV will present results to non-management employees with Worker Reps of the JH&SC present. Thereafter, the JH&SC and the Management Team will review the current Action Plan in consultation with employees to identify opportunities for improvement, adjusting priorities, and adding or deleting items. Further survey work or workshops may be held to flesh out particular matters. Management will report back in the fall on actions taken and any recommended amendments to the Action Plan for Mitigating Workplace Stress.

---

**REPORT****3315/23**

TO:	The Chair and Members of the Mississippi Valley Conservation Authority Board of Directors
FROM:	Matt Craig, Manager, Planning and Regulations & Kelly Stiles, Biologist
RE:	<b>Wetlands and their Evaluation &amp; Regulation</b>
DATE:	April 13, 2023

**For Information**

---

The purpose of this report is to provide the Board with an overview of wetlands, why and how they are regulated, and to outline recent changes and their implications arising from Bill 23 and changes to the Ontario Wetland Evaluation System (OWES).

**1. BACKGROUND**

Wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time, because of their soil composition and their seasonal or year-round flooding, wetlands are considered hazardous lands. However, wetlands play a critical role on the landscape as they:

- temporarily retain excess runoff from rainfall or snowmelt allowing it to be released slowly as surface flow to downstream watercourses;
- replenish shallow aquifers and provide groundwater recharge to deeper aquifers for municipal and private well systems; and
- improve water quality through phosphorous removal;
- represent significant carbon stores that when disturbed or warmed release GHGs: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O);<sup>1</sup> and
- form a transition zone between terrestrial and aquatic environments;
- provide important habitat to an array of plants, birds, insects, amphibians, fish and other animals.

---

<sup>1</sup> <https://carbon2018.globalchange.gov/chapter/13/>

In short, wetlands are essential to sustaining healthy communities, enhancing climate change resilience and conserving biodiversity; but, also can constitute a risk to people and property when filled or otherwise developed outside of the approved regulatory framework.

## **2. WETLAND REGULATION**

The primary tools used to regulate wetland use and development in Ontario are:

- Section 28 of the *Conservation Authorities Act (CAA)*, and regulations thereunder (currently unique to each CA—MVCA’s regulation is O.Reg. 153/06.);
- Ontario Provincial Policy Statement (Natural Hazards and Natural Heritage sections)
- Ontario Wetland Evaluation System (OWES)

### **a. MVCA REGULATION AND POLICIES**

Wetlands represent approximately 13% of the total MVCA watershed area, of which 4% are rated as provincially significant. Environment Canada suggests that a minimum of 10% of a watershed or 40% of the historic wetland coverage in a watershed should be protected and restored.

In October 2017, the Board of Directors approved policies under Ontario Regulation 153/06 that require certain activities to be regulated in all wetlands greater than 0.5 hectares that exhibit hydraulic connectivity. Approximately 8% of MVCA’s jurisdiction is subject to these policies, which allow for the conservation and protection of hydrologic functions across the watershed as a whole, regardless of the classification received under the wetland evaluation system.

### **b. CHANGES TO THE ONTARIO WETLAND EVALUATION SYSTEM (OWES)**

The OWES is the official procedure used to:

- identify wetlands including Provincially Significant Wetlands (PSWs) based on a scoring system that considers biological, social, hydrological and special features;
- determine their boundaries including wetland “complexes” based on interconnected of wetlands with complementary and inter-related functions that contribute to the health and significance of the whole (i.e. the complex.)

Effective January 2023, the province implemented the following changes to the way in which wetlands are evaluated and classified:

- i. Wetland “complexes” are no long included in the OWES, however the new system does not negate existing wetland complexes currently identified and regulated;

- ii. Endangered and threatened species are no longer included in the evaluation system. The presence of endangered or threatened species previously contributed to scoring and evaluation of wetlands as provincially significant;
- iii. Provincial government oversight and coordination has been removed. No central agency is being assigned to coordinate or approve evaluations. Approval authority will be downloaded to municipalities, the onus is on wetland evaluators to inform the municipality and landowners in writing about the outcome of the evaluation or re-evaluation. As such, further review, confirmation or approval of the completed evaluation, re-evaluation or boundary change (mapping update) by the Province is not required.

**c. BILL 23**

Prior to Bill 23 Conservation Authorities provided advisory services on both the natural hazard and natural heritage properties and services provided by wetlands. Regulations under Bill 23 prohibit conservation authorities from commenting on natural heritage matters during the development review process. MVCA will still be involved in the review of Environmental Impact Statements (EISs) prepared in support of development proposals, but is only able to make comments related to flooding and hydrologic impact (water levels).

**3. CORPORATE STRATEGIC PLAN**

Implementation of new policies and regulations associated with the protection and management of wetlands aligns with Goal 3: People and Performance – “support the operational transformations required to achieve MVCA’s priorities and to address legislative changes”.

---

**REPORT****3316/23**

TO:	The Chair and Members of the Mississippi Valley Conservation Authority Board of Directors
FROM:	Sally McIntyre, General Manager
RE:	<b>Conservation Ontario AGM</b>
DATE:	April 17, 2023

**For Information.**

---

The purpose of this report is to summarize outcomes of the Conservation Ontario Annual General Meeting held April 3, 2023.

**1. BACKGROUND**

MVCA is one of 36 conservation authorities in the province. The mission of Conservation Ontario<sup>1</sup> (CO) is to “promote and continually strengthen a watershed-based conservation coalition in Ontario.” It does this by engaging and supporting the work of conservation authorities through training, the annual Latonell conference, and coordinating provincial interactions etc.. CO is governed by a Council comprised of elected municipal officials or senior staff from the 36 CAs, and a six-member elected Board of Directors. In February, MVCA’s Board appointed Jeff Atkinson as MVCA’s voting member on Council, and Janet Mason and Sally McIntyre as voting alternates. Sally McIntyre attended the April AGM on behalf of MVCA.

**2. AGM HIGHLIGHTS****a. Election of Board of Directors for 2023-23 and other Appointments**

The following were elected for this term, with Chis White chairing the meeting.

- Chris White (Grand River CA), Chair
- Pierre Leroux (South Nation CA), Vice Chair (EASTERN ONTARIO – Russell Twp.)
- Robert Rock (Kawartha Region CA), Vice Chair
- Rob Baldwin (Lake Simcoe Region CA), Director
- Linda Laliberte (Ganaraska Region CA), Director (EASTERN ONTARIO – Port Hope)
- Chandra Sharma (Niagara Peninsula CA), Director

---

<sup>1</sup> <https://conservationontario.ca/>

Other appointments were made to various standing committees such as Budget & Audit, Health & Safety, and to third party groups such as Ontario Dam Owners Association. Refer to Attachment 1.

## **b. Financial Statements**

Financial Statements were presented and approved. Conservation Ontario's annual budget is currently much higher than normal due two major grants it is administering over three years on behalf of the federal Nature Smart Climate Solutions<sup>2</sup> and Canada Nature Challenge Fund.

MVCA is receiving funding for two projects under the Nature Smart program: the ALUS agricultural grant project in Lanark County; and the Land Conservation Plan as recommended by the Mississippi River Watershed Plan.

## **c. Special Projects Budget**

Table 1 lists special projects to be carried out in 2023 and their respective budgets.

**Table 1: 2023 Special Project Budgets**

<b>Project</b>	<b>Proposed Budget</b>
A D Latornell Symposium	\$98,150.00
Conservation Area Maps	\$10,500.00
Conservation Ontario Training Strategy	\$8,260.00
Conservation Authority ESRI Maintenance Program	\$251,220.00
ECCC Nature Smart Climate Solutions	\$2,508,355.00 (Year 2) \$1,500,000.00 (Year 3)
ECCC Challenge Fund	\$3,355,057.00 (Year 2) \$721,500.00 (Year 3)
Flood Hazard Identification and Mapping Program (FHIMP)	\$52,500.00
Geowarehouse	\$8,384.00
Greenbelt Foundation	\$39,375.00
MECP – Source Water Protection	\$55,121.00
MNRF – Water and Erosion Control Infrastructure (WECI)	\$21,022.00
MNRF 2022/2023 TPA	\$28,000.00
NRCAN – Lidar	\$186,666.00
<i>OnBoard</i>	\$16,905.00
Training Regulatory Compliance CAA	\$60,255.00

<sup>2</sup> <https://conservationontario.ca/policy-priorities/climate-change/nature-based-climate-solutions>

#### d. Conservation Ontario Staff Reports

Staff provided reports on the following major initiatives carried out in 2022:

- Client Service Stream Lining Initiative: Tables 2 and 3 present the number and processing time of applications administered by conservation authorities in 2021 and 2022. Overall, the vast majority of permits are being processed within both provincial and CO best practice timelines. As reported in February<sup>3</sup>, MVCA had just 7 out of 202 permit applications that exceeded targeted processing timelines in 2022.

**Table 2: 2021 and 2022 Permit Volumes and Processing Times across 36 CAs**

<b>High-Growth Conservation Authorities (14 Total)</b>	<b>2021</b>	<b>2022</b>
Total Permits Issued	7,533	6,893
Total Major Permits Issued	2,546	2,192
Total Minor Permits Issued (Minor + Routine)	4,987	4,701
Percent of Total Issued Within <b>Provincial</b> Timelines	91%	92%
Percent of Total Issued Within <b>CO Best Practice</b> Timelines	84%	84%
<b>Non-High-Growth Conservation Authorities<sup>4</sup></b>	<b>2021</b>	<b>2022</b>
Total Permits Issued	4,192	4,895
Total Major Permits Issued	776	930
Total Minor Permits Issued (Minor + Routine)	3,416	3,965
Percent of Total Issued Within <b>Provincial</b> Timelines	93%	91%
Percent of Total Issued Within <b>CO Best Practice</b> Timelines	84%	84%

- Communications: 2022 Annual Report, Step into Nature campaign, Web site for conservation areas<sup>5</sup>.
- 2022 Watershed Report Cards<sup>6</sup> (MVCA will be tabling at the May Board meeting.)
- Drinking Water Source Protection
- Information Management & Data Analytics
- Grant Program - Nature Smart Climate Solutions

<sup>3</sup> Refer to Staff Report 3289/23.

<sup>4</sup> Reporting by Non-high growth CA is optional. 17 reported in 2021 and 22 in 2022.

<sup>5</sup> <https://ontarioconservationareas.ca/>

<sup>6</sup> <https://conservationontario.ca/policy-priorities/science-and-information-management/watershed-reporting>

### **e. Amendments to Conservation Ontario By-laws**

Modest amendments were made to address legislative changes, housekeeping matters of a legal nature, and to further implement CO governance and transparency initiative.

### **3. AGM DISCUSSION**

Though not a specific agenda item, the continued release of regulatory and policy changes from the province was discussed in connection with various topics. Key discussion points were the following:

- Concern for the dismantling of land use planning regulation and policies in Ontario.
- Expected release of a new Provincial Policy Statement before Easter weekend (this occurred, however the province did not include/release it proposed changes to Natural Heritage policies.)
- Release of new Section 28 regulations under the CA Act before Easter (this did *not* materialize.)
- Concern regarding protection of Crown lands; role of Indigenous communities and negotiations in protecting those lands.

### **4. 2023 COUNCIL MEETINGS**

Conservation Ontario's meetings are scheduled for: June 26, September 25, and December 11. Note, the December meeting conflicts with MVCA's Board of Directors meeting.

**Appendix A: TABLE 1. Standing Interagency Committees/Councils/Boards (ongoing)  
& Representatives for Related Working Groups (April 2022-March 2023)**

<b>Committee Name</b>	<b>Committee Purpose</b>	<b>CO Rep/ Membership</b>	<b>Date Endorsed or Est.</b>
<b>4R Nutrient Stewardship Advisory Committee (Ontario Ministry of Agriculture and Food)</b>	To develop and implement a 4R Nutrient Stewardship Certification program for Ontario agri-retailers.	P. Esson (TRCA)	Jun/15
<b>Biodiversity Council (Ministry of Natural Resources and Forestry)</b>	To promote the understanding that “Protecting the diversity of life on Earth – of which we humans are an integral part” – requires broad societal consensus and participation.	K. Gavine (CO) – 2022; A. Coleman (CO)	Apr/23 TBC
<b>Carolinian Canada Coalition, Board</b>	To advance a collaborative conservation strategy for healthy ecosystems in Ontario’s Carolinian Life Zone.	M. Veliz (ABCA)	Apr/17
<b>Certified Crop Advisory Association Board of Directors</b>	To provide oversight of certification and input to programs involving CCAs; CO holds a non-voting liaison members seat.	M. Dick (ERCA)	Oct/12 Dec/15 Apr/19
<b>Class Environmental Assessment Proponents Group (multi-stakeholder)</b>	To provide a discussion forum for staff representing EA proponent ministries and agencies to dialogue on items of common interest, to generate ideas on improving EA approaches used by respective proponents and to establish a network of contacts.	N. Fischer (CO), L. Rich (CO)-2022	Est. 2013
<b>Climate Proof Canada Coalition</b>	To protect Canadians from the growing effects of Climate Change and help communities prepare for and adapt to future challenges including the risk of natural disasters.	J. Rzadki (CO)	Apr/23 TBC
<b>Drains Action Working Group</b>	To protect fish and fish habitat in municipal drains without diminishing the need for improved drainage in Ontario.	L. Rich (CO), D. Heinbuck (ABCA)	Dec/07
<b>Drinking Water Source Protection (DWSP) Communications Working Group (multi-stakeholder)</b>	To collaborate on provincial scale communications messaging and products, share communications resources with partner stakeholders, and communicate on source water protection locally.	D. Balika (CO) Chair, A. McIntyre (CVCA), B. Carey (LTVCA), A. Richards (SVCA), C. Ropeter (SSMRCA), C. Jacques (CVC), A. Dickens (QCA), C. Ross (LTC), C. Percival (MRCA), D. Stuebing (ERCA), D. Clarkson (MVCA), E. De Cloet (SCRCA), E. Jackson (RVCA), E. Scime (Halton), E.	Est. 2013

		<p>Navarro (NPCA), I. Feldmann (GrandRCA), J. Thompson (MVCA), T. Bos (LTC), J. Stephens (KC), J. Chambers (KC), J. Mesman (SN), J. Welker (UTRCA), K. Gillan (GSCA), K. Halley (ORCA), K. Ebel (UTRCA), K. Stammier (ERCA), K. Taylor (LTCA), K. Guerette (CRCA), K. Holt (CVC), K. Geisler (Quinte), K. Fazackerley (CRCA), K. Bristow (CO), L. Vanderluit (TRCA), L. Dool (RVCA), L. Hastings (CLOCA), L. Stocco (GrandRCA), L. Van De Ligt (RRCA), M. Keegans (NDCA), M. Leung (NVCA), M. Livingston (MRCA), M.L. MacDonald (ABCA), M. Levogiannis (KCCA), M. Venne (NDCA), , M. Wilson (LSRCA), N. Mohammed (CO), C. Smith (GRCA), R. Hull (NPCA), R. Wellwood (CCCA), R. Post (NVCA), S. Gauden (HRCA), S. Gutoskie (SNC), S. Buckle (NBMCA), S. Jagminas (LSRCA), J. Doyley (LSRCA), T. Cook (LRCA), T. Cumming (ABCA), V. Pilon (RRCA), Z. Cox (LPRCA)</p>	
<b>DWSP Joint Advisory Committee (JAC) (CO co-chairs with Ministry of Environment, Conservation and Parks)</b>	To provide long term strategic direction recommendations for MECP senior management consideration, issues management, work planning discussions including eligibility criteria. Discussions include program streamlining, efficiencies and regulatory burden reduction.	S. Casgrain-Robertson (RVCA), C. Sharma (NPCA), C. Jorgensen (CS), S. Lawson (GRCA), D. Balika (CO), K. Gavine (CO) Apr-Jun/22	Est. Jan/13 Endorsed Dec/16 Apr/18 Jun/18 Sept/19 Apr/20 BOD
<b>DWSP Project Managers Working Group (multi-stakeholder)</b>	Forum for source protection Project Managers to collaborate on items that affect Source Protection Regions/Source Protection Areas across the province and receive regular updates on MECP and CO activities. The working group discusses the progress in DWSP technical studies, source protection plans, implementation, annual progress reporting. The working group also discusses long term program changes and needs, and feeds the DWSP Joint Advisory Committee through CO.	D. Balika (CO), K. Bristow (CO), A. Dickens (QCA), B. Thompson (LSRCA), B. Stratton (RVCA), C. Seider (GSCA), M. Keller (CH), C. Jacques (CVC), B. Doulatyari, C. Percival (MRCA), D. Ellingwood (NBMCA), D. Clarkson (MVCA), T. Cook (LHCA), I. Feldmann (GRCA), J. Ivey (CVC), J. Welker (UTRCA), K. Stammier (ERCA), K. Taylor (LTC), K. Guerette (CRCA), L. Van De Ligt (RRCA), M. Keegans (NDCA), M. Livingston (NDCA), M. McKinnon (SSMRCA), M.L. MacDonald (ABCA), R. Wilson (CO), T. Proks (NPCA)	Est. 2005
<b>EcoHealth Ontario Steering Committee</b>	To strengthen and build new collaborative relationships, build a common agenda, identify	Chair P. Ronan, N. Gaetz (TRCA), D. Cheriton (TRCA) J. Rzadki	2013

	knowledge gaps, and determine research needs, develop and promote policy and program tools as well as share communication, education and outreach tools.	(CO)	
<b>Ecohealth Ontario Communications Work Group (multi-stakeholder)</b>	To develop and implement a collaborative communications strategy to increase awareness of the benefits of healthy ecosystems and green spaces to human health among Ontario residents and the health, social, planning and environmental sectors.	J. Rzadki (CO), D. Cheriton (TRCA), N. Gaetz (TRCA)	Mar/14
<b>Forest Gene Conservation Association Board Representative</b>	To support a number of initiatives of importance to Forest conservation and management and specifically related to the maintenance of the genetic resource in the face of changing climate in Ontario.	R. Davies (UTRCA)	Apr/23 TBC
<b>Forests Ontario Board of Directors</b>	Given CAs are one of the largest tree planters for the 50 Million Tree Program (a key program for Forests Ontario), CO had an appointment on the Board of Directors until June 2022.	K. Gavine (CO) – Apr-Jun 2022	Mar/14
<b>Great Lakes Fishery Commission Committee - Canadian Advisors</b>	To provide advice to the Canadian section of the Great Lakes Fishery Commission.	B. McNevin (Quinte)	April/21
<b>Great Lakes Water Quality Agreement (GLWQA) Great Lakes Executive Committee (GLEC) (Env and Climate Change Canada co-chair)</b>	Binational committee to assist Canada and the US in making decisions for implementation of the Great Lakes Water Quality Agreement.	B. Fox (CO)	Apr/ 13
<b>GLWQA Annex 2 Lakewide Action Management Plans (LAMPs) Sub-Committee (Env and Climate Change Canada co-chair)</b>	Binational sub-committee to implement commitments under Annex 2 of the GLWQA related to nearshore assessments and development and implementation of LAMPs.	B. Fox (CO)	Jun/13
<b>GLWQA Annex 4 Nutrients Sub-Committee (Env and Climate Change Canada co-chair with US EPA)</b>	Binational sub-committee to implement commitments under Annex 4 of the GLWQA related to managing the impacts of phosphorus and other nutrients.	J. Rzadki (CO)	Jun/13
<b>GLWQA Annex 4 (Nutrients) Targets and Objectives Task Team</b>	To advise Annex 4 sub-committee on Nutrient Targets and Objectives for Lakes Erie and Lake Ontario.	M. Anderson (GrandRCA), S. Mugalingam (LTC), J. Diamond (NPCA), A. Wallace (TRCA)	Apr/20 BOD Sept/20

<b>GLWQA Annex 8 Groundwater Sub-Committee (Env and Climate Change Canada co-chair)</b>	Binational sub-committee to implement commitments under Annex 8 of the GLWQA related to groundwater quality.	K. Anderson (TRCA)	Jun/13 Dec/16
<b>GLWQA Annex 9 Climate Change Sub-committee (Env and Climate Change Canada co-chair)</b>	Binational sub-committee to implement commitments under Annex 9 of the GLWQA related to climate change.	S. Shifflett (GrandRCA) – 2022-Feb 2023 A. Singh (CVC)	Mar/14 Apr/23 TBC
<b>GLWQA Annex 10 Science Sub-Committee (Env and Climate Change Canada co-chair)</b>	Binational sub-committee to implement commitments under Annex 10 of the GLWQA related to science.	D. Balika (CO) – 22/23	Sept/14 Sept/20 Apr/23 TBC
<b>Green Infrastructure Ontario Coalition (GIOC) Steering Committee (multi-stakeholder)</b>	To promote awareness and understanding of green infrastructure, and to support policy and activities that increase implementation of green infrastructure across Ontario.	J. Rzaeki (CO)	Dec/15 Dec/21
<b>International Joint Commission (IJC) – Great Lakes Water Quality Board</b>	To assist the IJC and provide opinion or advice on matters related to the Great Lakes Water Quality Agreement including identification of emerging issues and recommended approaches for resolution	G. Wood (retired) – Apr-Oct 2022; B. Fox (CO)	Nov/22
<b>Lake Erie Action Plan Implementation Team</b>	Ontario Committee of Stakeholders signed on to implement actions in the Lake Erie Action Plan. Includes development of Implementation Plan and subcommittees to support implementation, evaluation and adaptation.	T. Byrne (ERCA), K. Phillips (SRCA), N. Drumm (alt) (SCRCA), S. Lawson (GRCA), M. Anderson (GrandRCA) T. Annett (UTRCA), T. Lozier (UTRCA), M. Peacock (LTVCA), J. Wintermute (LTVCA), J. Rzaeki (CO)	Apr/2019 Apr/23 TBC
<b>Latonnell Conservation Symposium Steering Committee (multi-stakeholder) (NOTE: J. Joudrey, Ontario Heritage Trust, 2023 Committee Chair)</b>	To plan and deliver a successful Latonnell Conservation Symposium that is relevant to conservation authorities and their partners.	2022 Past Chair: J. Ivey (GrandRCA) N. Mohammed (CO), L. McPherson (CO), E. VanHooren (KCCA), K. Furlanetto (CRCA), J. Stephens (SVCA), K. Bavrlic (CVC), S. Hodgkiss (UTRCA), C. Irvine (GrandRCA), D. Goodyear (LSRCA), C. Jones (CLOCA),	Apr/22

<b>Ontario Dam Owners' Advisory Committee (Ministry of Natural Resources and Forestry)</b>	To provide informed and direct input into the development and administration of government policies and initiatives, identify opportunities to clarify provincial requirements for the construction, operation and alteration of water control infrastructure, to provide a forum to raise new ideas for modernizing provincial policies and regulatory approaches, and to discuss other matters relating to the regulation of water control infrastructure in Ontario.	D. Boyd (GrandRCA) – Apr/22 – Jan/23, <b>K. Lynch (GrandRCA)</b>	Mar/14 Sept/19 <b>Apr/23 TBC</b>
<b>Ontario Hydrometric Program Coordinating Committee (Ministry of Natural Resources and Forestry and Water Survey Canada)</b>	This Committee gives CAs a direct voice on the day-to-day operation of the hydrometric network. It also is very important for maintaining working relationships with staff from MNRF and WSC as everyone tries to get information from the network to fulfill their individual mandates.	K. Watson (SNC) M. Churly (GrandRCA) E. DeCloet (SCRCA)	Jun/17 April/22 June/22 April/23
<b>Ontario Invasive Plant Council Board (OIPC)</b>	A multi-sector, non-profit group committed to the collaboration of organizations and citizens in order to more effectively respond to the threat of invasive plants in Ontario.	B. Williamson (UTRCA)-2021	Dec/18
<b>Ontario Society of Professional Engineers Land Drainage Committee</b>	To discuss current practices and activities involving Ontario drainage engineers and plan the annual Drainage Engineers Conference.	D. Heinbuck (ABCA)	Mar/06
<b>Provincial Flood Forecasting and Warning Committee (PFFWC) (Ministry of Natural Resources and Forestry)</b>	To guide the flood forecast and warning program. Represents the program partners, to review and make recommendations on matters of policy standards, agreements, criteria, funding, training requirements to facilitate discussion and dissemination of matters related to flood forecasting and warning which may include tech advancements, current challenges, training and education and other relevant topics to promote the PFFWC implementation guidelines.	South-West: D. Heinbuck (ABCA), E. De Cloet (SCRCA) South-Central: <b>K. Lynch (GrandRCA); V. Taleban (Grand RCA) - 2023</b> ; Northern: <b>T. Cook (Lakehead CA) - 2023</b> GTA: J. Wong (CVC); <b>M. Hartley (NVCA) - 2023</b> ; Eastern: K. Watson (SNC); <b>C. Phillibert (QC) - 2022/23</b>	Apr/19 Sept/19 Apr/20 BOD Apr/21 Apr/22 <b>Apr/23 TBC</b>
<b>The Ontario Aggregate Resources Corporation (TORAC) Board (multi-stakeholder)</b>	To develop systems for the collection and disbursement of aggregate resources charges. The Ontario Stone, Sand & Gravel Association is the sole shareholder of the corporation. However, the seven-member Board of Directors pursuant to the Trust	L. Burnside (HRCA)	Sept/16 Apr/20 BOD

	Indenture administers the affairs of the corporation. TORAC, in its role as trustee, is responsible only to fulfill the Trust purposes as outlined in Bill 52.		
<b>Water and Erosion Control Infrastructure (WECI) Committee - (Ministry of Natural Resources and Forestry)</b>	To provide and implement a transparent and coordinated process to review transfer payment funding submissions and Mid-Year status reports for infrastructure repairs or studies.	G. Rungis (GrandRCA, Chair) – 2022-Feb/23, C. Mitchell (TRCA, Chair – 2023+), S. Mancini (SNC), C. Tasker (UTRCA), M. Smith (QC) - Mar/23, G.Sankar (SCRCA) – Mar/23), B. Fox (CO), R. Wilson (CO) – database management	Sept/15 Sept/16 Apr/23 TBC

## REPORT

3317/23

TO:	The Chair and Members of the Mississippi Valley Conservation Authority's Board of Directors Committee
FROM:	Juraj Cunderlik, Director of Engineering
RE:	<b>MVCA's Commitment to Kashwakamak Lake Dam Replacement Project</b>
DATE:	April 11, 2023

**RECOMMENDATION:**

**That the Board of Directors confirm and direct staff to inform Infrastructure Canada of MVCA's commitment to proceed with replacing the Kashwakamak Lake Dam as set out in the November 2021 application for Disaster Mitigation and Adaptation Fund (DMAF) funding.**

In November 2021, MVCA applied for federal funding through Infrastructure Canada's *Disaster Mitigation and Adaptation Fund* to complete a multi-year, multi-phase replacement of Kashwakamak Lake Dam valued at ~\$6 million (all phases.) In late 2022, MVCA was informed that a funding contribution was approved in the amount of \$2,263,000 (40% of estimated eligible project expenditures).

Last month, the Board approved award of the Environmental Assessment phase of this project to McIntosh & Perry. However, Infrastructure Canada requires a motion of the Board committing to secure and allocate resources for the entirety of the project before providing federal funding. The purpose of this report is to secure that resolution.

**CORPORATE STRATEGIC PLAN**

This is a priority project of the organization and is being carried out in accordance with the following goal and objectives:

Goal 1: Asset Management – revitalize watershed management activities and invest in our legislated mandate.

- a) Implement the five-year capital program.
- e) Plan for the next phase of asset development and management.

---

**REPORT**
**3318/23**

TO:	The Chair and Members of the Mississippi Valley Conservation Authority Board of Directors Committee
FROM:	Scott Lawryk, Property Manager and Matt Craig, Manager of Planning & Regulations
RE:	<b>Requested Use of the K&amp;P, Lanark Highlands Twp.</b>
DATE:	April 17, 2023

**RECOMMENDATIONS****That the Board of Directors:**

- a) approve use of a 3.2 km section of the K&P Trail by non-commercial vehicles during reconstruction of the Clyde Forks Bridge by Lanark Highlands Township; and**
- b) direct staff to finalize and execute an agreement with Lanark Highlands Township for that purpose.**

---

On June 16, 2022, MVCA received a request from Safe Roads Engineering on behalf of Lanark Highlands Township to allow access to a 3.2 km section of the K&P Trail from Clyde Forks Road to Flower Station Road to provide alternative access during reconstruction of the Clyde Forks Bridge. The Township plans to complete the replacement of the bridge this Summer/Fall, with construction planned from July 4th to October 31st.

This area of Lanark Highlands has a limited road network, and in the absence of use of the K&P Trail or a temporary bridge, there is no other means of access for residents living in Clyde Forks, a community of ~17 households. The matter was brought to the Board in July 2022<sup>1</sup>, at which time the Board gave conditional approval and directed staff to seek legal counsel, obtain Township agreement to fund MVCA's legal costs, and to return to the Board with a draft agreement.

MVCA staff has worked with legal counsel and the Township to draft an agreement that mitigates the issues identified in the July 2022 report and that protects the interest of the Authority (see attachment 1). Staff are recommending that the Board of Director approve the use of the section

---

<sup>1</sup> Refer to Staff Report 3229/22.

of the K&P Trail to help service the village of Clyde Forks during the duration of the bridge replacement project; and direct staff to finalize and execute the agreement.

## TEMPORARY ACCESS AGREEMENT

### PARTIES

The parties to this Agreement are:

1. The Corporation of the Township of Lanark Highlands  
**("Municipality")**  
 75 George Street, P.O. Box 340, Lanark, Ontario K0G 1K0  
 Email: publicworks@lanarkhighlands.ca
2. Mississippi Valley Conservation Authority  
**("MVCA")**  
 10970 Highway 7, Carleton Place, Ontario K7C 3P1  
 Email: slawyrk@mvc.on.ca

### BACKGROUND:

1. The Municipality is the registered owner of, and the public authority having jurisdiction over, the following property:  
 Part Lot 17, Concession 5, Geographic Township of Lavant; Part Lot 18, Concession 5, Geographic Township of Lavant, being a Forced Road known as Folger Road to Flower Station Road, except Part 1 on 27R7923; Township of Lanark Highlands [being all of PIN #05003-0080 (LT)]  
**("Clyde Forks Road")**
2. MVCA is the registered owner of the following property, being part of the K&P Trail:  
 All in the Geographic Township of Lavant, now Township of Lanark Highlands and being:  
 Firstly: Part Lot 21, Concession 5; Part Lot 22, Concession 5, being Parts 13 & 14 on RN32300; except forfeited mining rights, if any [being all of PIN #05000-0025 (LT)]  
 Secondly: West half of Lot 20, Concession 5; Lot 19, Concession 5 [being all of PIN #05003-0030 (R)]  
 Thirdly: Part Lot 17, Concession 6; Part Lot 18, Concession 6; Part Lot 19, Concession 6 [being all of PIN #05003-0078 (R)]**("MVCA Property")**
3. The Municipality needs to replace the bridge at Clyde Forks and has requested temporary access from MVCA for themselves and the public over that part of the MVCA Property as set out in the Memorandum from Marc McIntosh at Safe Roads Engineering to Chad Kean at the Municipality dated December 19, 2022, a copy of which is attached as Schedule "A" **("Temporary Access Road")**. As there is some discrepancy as to the exact location of the MVCA Property, the location of the Temporary Access Road shall be the paramount description.
4. The Parties wish to enter into this agreement to outline, between the Parties hereto, the responsibilities and the rights of the users of the Temporary Access Route.

### AGREEMENT

In consideration of the premises and the mutual covenants and agreements herein contained, the Parties agree as follows:

1. MVCA consents to the Municipality constructing and using the Temporary Access Road as a temporary detour roadway in favour of the Municipality and the public in order to accommodate the replacement of the bridge at Clyde Forks, on the terms and conditions contained herein.
2. Prior to construction, the Municipality shall to the reasonable satisfaction of MVCA:
  - a. Prepare a plan setting out any recommendations and/or improvements that the Municipality requires in order to provide for safe passage by the public on the Temporary Access Road and, prior to implementing any improvements, the Municipality shall first obtain the written permission of MVCA;
  - b. Design a traffic safety plan that meets the standards of the governmental authority having jurisdiction;
  - c. Deliver to MVCA proof of insurance in accordance with paragraph 9 herein.

In addition to the above, as part of the construction is within a regulated wetland, prior to construction, the Municipality shall apply for and obtain all required, necessary and proper permits from MVCA and any other governmental authority.

3. The Municipality acknowledges and accepts that any damage to the MVCA Property and any improvements and/or repairs required to be made to allow for the safe passage of persons and vehicles using the Temporary Access Road shall be solely at the expense of the Municipality.
4. The Parties agree that Municipality (or its officers, employees, agents or anyone acting on behalf of the Municipality) may perform regular and reasonable maintenance and repair of all or part of the Temporary Access Road, consistent with the Municipality's standard for road maintenance, to allow for the safe passage of persons and vehicles. If the maintenance and repairs is within a regulated wetland, prior to any maintenance or repairs being performed, the Municipality shall apply for and obtain all required, necessary and proper permits from MVCA and any other governmental authority.
5. The Parties agree that the Municipality (or its officers, employees, agents or anyone acting on behalf of the Municipality) may snowplough and sand all or part of Temporary Access Road during the winter months so as to allow for the safe passage of persons and vehicles using the Temporary Access Road.
6. The Parties acknowledge that the use the of the Temporary Access Road by the Municipality is temporary and only during the period of time that the bridge at Clyde Forks is being replaced. To that end, the Parties acknowledge that the replacement of the bridge at Clyde Forks is expected to begin on July 4, 2023 and be completed on or before October 31, 2023.

7. The term of this Agreement shall commence on the date of this Agreement and shall terminate once the Municipality has secured a third-party assessment report on the condition of the Temporary Access Road and associated infrastructure, but in any event no later than October 31, 2023. The cost of the third-party assessment shall be borne by the Municipality.
8. Based on the results and recommendations of the third-party assessment report referred to in paragraph 7, at termination of this Agreement the Municipality shall be responsible to repair, reinstate, restore or remediate any damage caused to the Temporary Access Road, at the Municipality's expense, and leave the Temporary Access Road in the same or better condition than existed prior to the Municipality being permitted to use the Temporary Access Road. Any improvements to the Temporary Access Road shall become the ownership of MVCA, its successors and assigns, at the termination of this Agreement. This paragraph shall not merge on termination of this Agreement but shall continue in full force and effect.
9. The Municipality shall, at all times, maintain Commercial Generality Liability Insurance for the Temporary Access Road issued on an occurrence basis for an amount of not less than \$5,000,000 per occurrence/\$5,000,000 annual aggregate for any negligent acts or omissions.

Such insurance shall add MVCA as Additional Insured subject to a waiver of subrogation. This insurance shall be non-contributing with and apply as primary and not as excess of any insurance available to MVCA but only with respect to the operations of the Municipality, being the Named Insured. Such Additional Insured is not insured under the Municipality's policy for any of MVCA's acts or failures to act.

The Municipality is responsible for all deductibles and MVCA shall bear no cost towards the deductibles.

MVCA reserves the right to request additional insurance to address potential exposures.

The policies set out above shall not be cancelled unless the Insurer notifies MVCA in writing at least 30 days prior to the effective date of the cancellation. The insurance policy will be in a form and with a company which are, in all respects, acceptable to MVCA.

10. The Municipality shall defend, indemnify and save harmless MVCA, its elected officials, officers, and employees from and against any and all claims of any nature, actions, causes of action, losses, expenses, fines, costs including legal costs, interest or damages of every nature and kind whatsoever, including but not limited to bodily injury, sickness, disease or death or to damage to or destruction of tangible property including loss of revenue or incurred expense resulting from disruption of service arising out of allegedly attributable to the negligence, acts, errors, omissions, misfeasance, nonfeasance, fraud or wilful misconduct of the Municipality, its elected officials, employees, agents, contractors, guests, invitees or other parties which the Municipality is responsible or has permitted to use the Temporary Access Road. This indemnity shall be in addition to and not in lieu of any

insurance to be provided to MVCA in accordance with this Agreement and shall survive the termination of this Agreement.

11. The Municipality shall be responsible for all of MVCA's costs associated with this Agreement, including but not limited to all legal fees, disbursements and HST in respect to this Agreement.
12. While this agreement is in effect, it shall be binding on and run with the title to the MVCA Property.
13. The Municipality may, at its expense, register Notice of this agreement on title to the MVCA Property and/or \* Property pursuant to Section 71 of the *Land Titles Act*.

#### **MISCELLANEOUS**

14. In this Agreement, the number and gender shall be construed as the context may require.
15. The headings in this Agreement are for convenience only and do not constitute part of the terms of this Agreement.
16. The Background recitals are hereby incorporated into and form part of this Agreement, including all defined terms referenced therein.
17. Time shall be of the essence of this Agreement.
18. The invalidity or unenforceability of any provision of this Agreement will not affect the validity or enforceability of any other provision and any invalid provision will be severable.
19. Any dispute occurring among the Parties relating to the interpretation or implementation of any of the provisions of this Agreement shall be resolved in accordance with the following provisions:
  - a. The Parties shall first attempt in good faith to resolve such dispute by mediation.
  - b. If any issue in dispute is not resolved by mediation, it shall be submitted to arbitration. In that event, the following rules shall apply:
    - i. The arbitration shall be conducted by a single arbitrator appointed either by agreement between or among the disputing parties or, in default of such agreement, by a Judge of the Superior Court of Justice.
    - ii. Unless otherwise agreed by the disputing parties, the arbitration shall be conducted in the Town of Perth.
    - iii. The procedure to be followed shall be agreed upon by the disputing parties or, in default of such agreement, shall be determined by the arbitrator.
    - iv. The arbitration shall proceed in accordance with the provisions of the *Arbitration Act, 1991* (Ontario).
    - v. The decision arrived at by the arbitrator shall be final and binding and no appeal shall lie there from. Judgment upon the award rendered by the arbitrator may be entered in any court having jurisdiction.

20. This Agreement shall not be amended or modified in any respect otherwise than in writing and executed by the parties hereto.
21. The parties agree to execute all reasonably necessary documents in order to give effect to the terms and effect of this agreement.
22. This Agreement shall be governed by the laws of the Province of Ontario.
23. Execution of this Agreement and all subsequent notices, correspondence and documentation may be by way of facsimile transmission directed to the parties at the fax numbers listed on page 1 of this Agreement (if any) or by email to the email addresses listed on page 1 of this Agreement (if any).

Alternatively, any notice to the parties given pursuant to any provision of this Agreement may be given by personal delivery or by prepaid registered post addressed to the parties at their respective addresses on page 1 of this agreement.

If notice is given by prepaid registered post, it shall be deemed given seven days after the date of mailing.

A party may change his fax number, email address or postal address by notice to the other party at any time provided the other party has acknowledged the change or the party giving the notice has confirmation that the notice was received.

24. This Agreement shall **not** be assignable by any party without the written consent of the other parties.
25. This Agreement shall be binding upon the heirs, executors, administrators, successors and assigns respectively of each of the Parties hereto.
26. This Agreement may be executed in one or more counterparts, each of which shall constitute an original and all of which taken together shall constitute the same agreement.

27. The date of this Agreement is the date on which the last Party executes this Agreement or initials the final change to the Agreement and notifies the other Party.

**IN WITNESS WHEREOF** the Parties hereto have hereunto affixed their hands and seals.

**The Corporation of the  
Township of Lanark Highlands**

Per:

\* \_\_\_\_\_ Date: \_\_\_\_\_  
Peter McLaren, Reeve

\* \_\_\_\_\_ Date: \_\_\_\_\_  
Amanda Noël, Clerk  
We have authority to bind the corporation

**Mississippi Valley Conservation Authority**

Per:

\* \_\_\_\_\_ Date: \_\_\_\_\_  
Sally McIntyre, General Manager

\* \_\_\_\_\_ Date: \_\_\_\_\_

\*

We have authority to bind the corporation

Q:\Clients M\Mississippi Valley Conservation Authority 1497\22-261 - LH Temp Crossing\Temporary Access Agr't - v6 - Mar 22-23.doc

**Schedule “A”**

(Memorandum from Marc McIntosh at Safe Roads Engineering to Chad Kean at Township of  
Lanark Highlands dated December 19, 2022)

## REPORT

3319/23

TO:	The Chair and Members of the Mississippi Valley Conservation Authority Board of Directors
FROM:	Sally McIntyre, General Manager
RE:	<b>GM Update</b>
DATE:	April 17, 2023

**For Information.****EXTERNAL**

- 1. Bill 97** – Released April 6, 2023, this bill proposes consolidation and update of policies contained in the *Provincial Policy Statement, 2020* and the *A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2020*. The Environmental Registry posting can be found at: <https://ero.ontario.ca/notice/019-6813>.

Several changes are proposed that ease the ability to develop in Ontario, with the goal of increasing Ontario's housing stock. Staff have several concerns regarding the sustainability of proposed changes which, while facilitating development will also facilitate sprawl and could exacerbate urban-rural conflicts. Conservation Ontario will be coordinating comments to the province on behalf of the 36 CAs. The deadline to comment is June 5th.

- 2. Creating and Expanding Large Parks Across Canada Workshop**, April 21, 2023, 1 p.m. by Zoom – The Greenbelt Foundation, Toronto and Region Conservation Authority, and Cambium Indigenous Professional Services are hosting a workshop to present findings and receive input on a new project in a series about large parks that share case studies and recommendations about: large park governance, integrating private lands in park networks, and using access to nature and Canada's Biodiversity Target 1 to create and expand large parks. Participants will be contacted to identify which topic they would like to provide feedback on through breakout rooms during the workshop. [Register here](#).
- 3. Early Bird Notice - Latonnell Conservation Symposium** – October 23-24, 2023, Royal Botanical Gardens, Burlington. Virtual webinar events will also be held: September 26<sup>th</sup>, November 21<sup>st</sup>, and December 5th (webinar topics to be announced.)

4. **Ontario Parks recognition of Salamander Property** – this property was secured by Mississippi Madawaska Land Trust in partnership with MVCA with funding support under the federal Nature Smart Climate Action fund. See Attachment 1.

## INTERNAL

5. **Mill of Kintail Heritage Restoration Work** – MVCA has been in discussions with the Mississippi Mills Heritage Advisory Committee regarding restoration work needed at the Mill of Kintail Museum and the Gatehouse. Both buildings are designated Heritage Buildings and must be maintained in a historically appropriate condition in accordance with the Mississippi Mills By-law under *Ontario Heritage Act*. The Heritage Advisory Committee has approved MVCA's plan for the roof replacement on the Museum, repointing work on the Museum chimney and at the Gatehouse, as well as the improvements needed to the Gatehouse veranda. Discussions are ongoing regarding replacement of the windows on the Gatehouse as the Committee did not support MVCA's original proposal, and supplied alternative design criteria. Pricing is being obtained and initial findings indicate a budget pressure of \$15,000-\$20,000 from the original option. Staff will provide an update as details are confirmed.
6. **LiDAR data** – Project deliverables are being processed and collected for delivery to our Municipal funding partners, Lanark, Frontenac and Renfrew Counties. We have reached out and informed Lanark and Frontenac. Our Internal deadline is end of this month for Lanark, and early to mid May for Frontenac. We haven't heard back from Frontenac yet. These are large volume data deliveries and as such we need data storage space for each delivery as well as preparing the partners to receive.
7. **MFIPPA Reporting & Complaint** – MVCA completed its annual reporting to the Information & Privacy Commissioner of Ontario. Two requests were received in 2022. Both were successfully completed. We recently received an enquiry from the Ombudsman regarding disclosure of a name in association with a property abutting the K&P Trail. We have since removed reference to the owners in the report attached hereto.
8. **Conservation Ontario Annual Levy** – Our levy for 2023 is \$14,828. Levies are calculated as a percentage of population served by conservation authorities in the province.
9. **HQ water and sewer connection** – MVCA is in discussions with the Town of Carleton Place regarding connection fees. None of the parties involved in drafting the 2012 agreement work at either organization, and there is some ambiguity in the costs to be paid by MVCA.
10. **Response to MVCA's letter re: Bill 26** – See Attachment 2 for the Minister's response.
11. **Photos from our Trade Show** – See next page!



**From:** [Bjorgan, Laura \(MECP\)](#)  
**To:** [presidentjohnston@mmlt.ca](mailto:presidentjohnston@mmlt.ca)  
**Cc:** [Sally McIntyre](#); [Persaud, Anurani \(MECP\)](#)  
**Subject:** Ontario Protected and Conserved Areas  
**Date:** March 24, 2023 8:38:39 AM  
**Attachments:** [image001.png](#)

---

Hello Mr. Johnston,

I am writing to congratulate you on your efforts to contribute to the protection and conservation of greenspace in Ontario in 2022.

Ontario Parks in the Ministry of the Environment, Conservation and Parks is responsible for reviewing and confirming eligibility for protected and conserved areas, and for submitting areas that meet the pan-Canadian standards to the Canadian Protected and Conserved Areas Database (CPCAD).

In 2022, Mississippi Valley Conservation Authority assessed one of your properties (Salamander Forest) using a Decision Support Tool to determine if the property meets the pan-Canadian standards for protected areas or “other effective area-based conservation measures” (OECMs, or conserved areas). The site was found to meet the pan-Canadian standards and the eligible sites were successfully submitted to and incorporated into CPCAD. Salamander Forest now counts towards the total percentage of 10.9% protected and conserved areas in Ontario and Canada. More information on Ontario’s efforts towards land conservation and increasing greenspace can be found in two locations:

- [OntarioParks.com: State of Ontario’s Protected Areas Report page.](#)  
[Protected Area System indicator report](#)
- [Ontario.ca: Ontario’s parks and protected areas page.](#)

We recognize that your property is an important part of the network of protected and conserved areas in Ontario and would like to extend our sincere thanks to Mississippi Madawaska Land Trust for their significant contributions to nature conservation in Ontario.

Best regards,  
Laura Bjorgan

**Laura Bjorgan** (she/her) | Manager (A) – Protected Areas Section – Ontario Parks  
300 Water St., Peterborough, Ontario, K9J 3C7  
**P:** 705-772-6039 **W:** [OntarioParks.com](https://OntarioParks.com)



Ministry of the Environment, Conservation and Parks

**Please note:** As part of providing [accessible customer service](#), please let me know if you have any accommodation needs or require communication supports or alternate formats.

Ministry of Natural  
Resources and Forestry

Office of the Minister

99 Wellesley Street West  
Room 6630, Whitney Block  
Toronto ON M7A 1W3  
Tel: 416-314-2301

Ministère des Richesses  
naturelles et des Forêts

Bureau du ministre

99, rue Wellesley Ouest  
Bureau 6630, Édifice Whitney  
Toronto ON M7A 1W3  
Tél.: 416 314-2301



354-2022-1094

March 31, 2023

Sally McIntyre  
General Manager  
Mississippi Valley Conservation Authority  
[smcintyre@mvc.on.ca](mailto:smcintyre@mvc.on.ca)

Dear Sally McIntyre:

Thank you for your letter on behalf of the Mississippi Valley Conservation Authority (MVCA) Board of Directors.

I appreciate hearing that the MVCA supports the intent of the recent amendments to the *Conservation Authorities Act* as part of Bill 23, the More Homes Built Faster Act, 2022, and that it is committed to working with its member municipalities and the province to implement these changes.

The province is not planning to establish a working group currently, but I encourage you to continue to engage staff at the Ministry of Natural Resources and Forestry if you have questions about implementing the recent legislative amendments.

Thank you again for writing.

Yours Sincerely,

A handwritten signature in black ink, appearing to read "Graydon Smith".

The Honourable Graydon Smith  
Minister of Natural Resources and Forestry

c: Paul Lehman [paul.lehman@sympatico.ca](mailto:paul.lehman@sympatico.ca)