

MISSISSIPPI VALLEY CONSERVATION AUTHORITY
BOARD OF DIRECTORS MEETING

MVCA Boardroom

May 15, 2019

12:30 p.m.

AGENDA

ROLL CALL

Adoption of Agenda

Declaration of Interest (written)

ITEMS FOR DECISION

1. Minutes – Board of Directors Meeting – April 17, 2019
2. Minutes – Source Protection Meeting – April 17, 2019
3. Business Arising from the Minutes
4. Harwood Creek Flood Plain Mapping (Staff Report #3009/19)
5. 2019 Flood Event, Preliminary Report and Recovery Plan (Staff Report #3010/19 to follow)
6. Strategic Plan for Community Museum Operating Grant, Dr. R. Tait McKenzie & Dr. James Naismith Museums (Staff Report #3011/19)

ITEMS FOR INFORMATION

7. Changes to CA Act and Section 28 Regulations (Staff Report #3012/19 to follow)
8. Update: Management of the Ottawa River Basin (Presentation)
9. Other Business

ADJOURNMENT

Mississippi Valley Conservation Centre
Carleton Place

MINUTES

April 17, 2019

MEMBERS PRESENT:

J. Mason, Chair;
J. Hall, Vice-Chair;
J. Atkinson;
E. Burke;
F. Campbell;
R. Darling;
E. El-Chantiry;
T. Fritz;
G. Gower;
B. Holmes;
J. Inglis;
J. Karau;
P. Kehoe;
C. Lowry;
G. McEvoy;
P. Sweetnam;
K. Thompson.

STAFF PRESENT:

S. McIntyre, General Manager;
A. Millar, Treasurer;
A. Broadbent, Information Technology Supervisor;
M. Craig, Manager, Planning and Regulations;
R. Fergusson, Operations Supervisor;
S. Gutoskie, Community Relations Coordinator;
G. Mountenay, Water Management Supervisor;
J. Price, Director, Water Resource Engineering;
E. Levi, Recording Secretary.

VISITORS PRESENT:

R. Bolivar, Consultant, Bolivar=Phillips;
S. Levine, Federation of Canadian Municipalities;

J. Mason called the meeting to order at 1:00 p.m.

B04/17/19-1

MOVED BY: F. Campbell

SECONDED BY: R. Darling

Resolved, That the agenda for the April 17, 2019 meeting of the Mississippi Valley Conservation Authority Board of Directors be adopted as presented.

“CARRIED”

BUSINESS:

1. Minutes – Board of Directors Meeting – March 20, 2019

B04/17/19-2

MOVED BY: T. Fritz

SECONDED BY: C. Lowry

Resolved, That the Minutes of the Mississippi Valley Conservation Authority Board of Directors meeting held on March 20, 2019 be received and approved as printed.

“CARRIED”

2. Minutes – Policy & Priorities Advisory Committee Meeting – April 5, 2019

B04/17/19-3

MOVED BY: J. Karau

SECONDED BY: J. Atkinson

Resolved, That the Minutes of the Mississippi Valley Conservation Authority Policy & Priorities Advisory Committee meeting held on April 5, 2019 be received as amended by the Board of Directors.

“CARRIED”

3. Business Arising

S. McIntyre reviewed the following Policy and Priorities Advisory Committee recommendations regarding Administrative By-Law Amendments:

- Secretary-Treasurer
- Voting by Proxy
- Invited Members

B04/17/19-4

MOVED BY: E. El-Chantiry

SECONDED BY: K. Thompson

Resolved, That:

- 1. The General Manager be appointed as Secretary-Treasurer of the MVCA; and further that**
- 2. The Administrative By-Law be amended and approved as recommended by Staff Report #2999/19 and by the Policy and Priorities Advisory Committee.**

“CARRIED”

Mr. Sweetnam proposed that future consideration be given to proxy voting via phone if weather is a factor impeding member attendance at meetings.

B04/17/19-5

MOVED BY: F. Campbell

SECONDED BY: G. Gower

Resolved, That the amendments to the Mississippi Valley Conservation Administrative By-law regarding voting by Proxy be approved as recommended by Staff Report #3000/19 and amended by the Policy and Priorities Advisory Committee.

“CARRIED”

E. El-Chantiry noted that it should be strictly voting members sitting around the table in meetings.

P. Sweetnam noted there were many past members who have provided sage advice.

J. Karau commented that both past and future members will recognize that many others have experience providing valuable input on specific topics when required.

B04/17/19-6

MOVED BY: E. El-Chantiry

SECONDED BY: T. Fritz

Resolved, That:

- 1. The Administrative By-law remain silent on Invited Members; and further that**
- 2. The General Manager or their delegate be identified as the official liaison between the MVCA Board and the MVCF Board.**

“CARRIED”

4. Report from Conservation Ontario meeting April 1, 2019

J. Mason reviewed the attached Report #3002/19 providing an update from the Conservation Ontario meeting held April 1, 2019.

P. Sweetnam inquired as to the annual levy paid to Conservation Ontario. S. McIntyre will advise.

S. McIntyre gave a presentation on Staff Report #3008/19 attached. The report outlined proposed legislative and regulatory changes affecting conservation authorities, and the recently announced cut in provincial transfers to CAs.

S. McIntyre advised that authorities have until May 21, 2019 to provide comments back to the Minister responsible. R. Darling asked whether municipalities will have input prior to the May 21 deadline and whether the Authority would be seeking municipal letters of support or solely representative support in the Board capacity. S. McIntyre noted that anyone may comment prior to that date and municipal letters of support in addition to Board support would be appreciated. She also advised that an *ad hoc* committee of board members was being proposed to generate a formal response.

J. Karau noted that similar considerations came up in the recent *Conservation Authorities Act* review. He advised that there is some relevant material available from those correspondences.

5. Asset Management for Conservation Authorities

J. Price gave an overview of Staff Report #3003/19 attached. He introduced Roddy Bolivar of Bolivar=Phillips who gave a presentation regarding asset management training for conservation authorities and municipal water resource managers being carried out in Eastern Ontario.

E. El-Chantiry expressed concern about liabilities and risk in identifying needs where a potential lack of resources to repair exists. S. McIntyre advised that the liability exists either way as owners are required to know the condition of property and any repairs needed. She noted that having needs assessed and prioritized allows for preparation of a plan that phases repairs/renewal projects in an affordable manner.

6. Budget Control Report

A. Millar presented Staff Report #3004/19 regarding year-to-date expenditures, as attached.

F. Campbell sought clarification of the \$6,028,733 listed under other revenues for the Administration Office. S. McIntyre explained that it was appearing in a column outlining 2011-2018 budgets when the loan was previously received for construction of the office building.

7. Quarterly Update

S. McIntyre reviewed Staff Report #3005/19 attached, referencing a 2-page summary highlighting long and short-term initiatives and planned activities for the Authority. Members were provided with copies of the summary and asked to distribute to their respective council colleagues.

8. Watershed Conditions Report

G. Mountenay discussed Staff Report #3006/19 attached. He reviewed the Flood Warning for Mississippi and Carp River watersheds and the Flood Watch for the Ottawa River, both issued April 17, 2019.

G. Mountenay also provided a comparison of current water levels and flows to historical averages at specific areas within the watershed.

S. McIntyre advised members to update their municipal websites with sandbagging information and arrange for stockpiling and distribution of (non-salted) sand.

9. Ontario Regulation 153/06 Permit Update

Staff Report #3007/19, as attached, was provided to the Board. It was noted that any questions should be directed to M. Craig following the meeting.

10. Other Business

J. Mason commented that members should use caution when opening emails from other board members as email addresses are publicized and are susceptible to malicious use.

ADJOURNMENT

The meeting was adjourned at 2:50 p.m.

B04/17/19-7

MOVED BY: P. Kehoe

SECONDED BY: G. McEvoy

Resolved, That the Mississippi Valley Conservation Authority Board of Directors meeting be adjourned.

“CARRIED”

“E. Levi, Recording Secretary

J. Mason, Chair”

Mississippi Valley Conservation Centre
Carleton Place

MINUTES

April 17, 2019

MEMBERS PRESENT:

J. Mason, Chair;
J. Hall, Vice-Chair;
J. Atkinson;
E. Burke;
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M. Craig, Manager, Planning and Regulations;
R. Fergusson, Operations Supervisor;
S. Gutoskie, Community Relations Coordinator;
G. Mountenay, Water Management Supervisor;
J. Price, Director, Water Resource Engineering;
E. Levi, Recording Secretary.

VISITORS PRESENT:

M. Livingston, Project Manager, Mississippi-Rideau
Source Protection.

BUSINESS:

J. Mason called the meeting to order at 2:55 p.m.

SPA04/17/19-1

MOVED BY: T. Fritz

SECONDED BY: R. Darling

Resolved, That the agenda for the April 17, 2019 meeting of the Mississippi Valley Conservation Source Protection Authority be adopted as presented.

“CARRIED”

S. McIntyre gave a brief presentation to members regarding the background of Source Water Protection and the role of the Source Protection Authority.

1. Minutes – Source Protection Authority Meeting – October 17, 2018

SPA04/17/19-2

MOVED BY: F. Campbell

SECONDED BY: K. Thompson

Resolved, That the Minutes of the Mississippi Valley Source Protection Authority meeting held on October 17, 2018 be received and approved as printed.

“CARRIED”

2. Source Protection Annual Progress Report

M. Livingston presented the attached Staff Report SPA61/19, regarding Source Protection Authorities required submissions of Annual Progress Reports, under Section 46 of Ontario’s Clean Water Act. The report is to be submitted to the Ministry of Environment, Conservation and Parks.

G. Gower asked how this year’s results compared to last year. M. Livingston advised the program was progressing well and there were no major changes in reporting results from the previous year.

SPA04/17/19- 3

MOVED BY: J. Karau

SECONDED BY: P. Sweetnam

Resolved, That the Mississippi Valley Source Protection Authority receive the 2018 Source Protection Annual Progress Report (public facing report and supplemental form), including the Source Protection Committee comments and grading; and further

Resolved, That the Mississippi Valley Source Protection Authority direct staff to submit the Annual Progress Report (public and supplemental form) to the Ministry of the Environment, Conservation and Parks as required by the Clean Water Act and Regulations.

“CARRIED”

3. Section 34 Amendments

M. Livingston reviewed Staff Report SPA62/19 attached, recommending submission of the Authority’s proposed Section 34 amendments.

SPA04/17/19- 4

MOVED BY: K. Thompson

SECONDED BY: G. Gower

Resolved, That the Mississippi Valley Source Protection Authority receive this update and direct Source Protection staff to proceed with a Section 34 amendment for the Lemieux Island Intake Improvement Project, the DNAPL policy revision and for the North Grenville well.

“CARRIED”

4. Risk Management Official Annual Reports

The Clean Water Act requirement for Risk Management Officials to submit an annual report summarizing the actions taken by risk management staff was reviewed by M. Livingston in Staff Report SPA63/19, attached.

SPA04/17/19- 5

MOVED BY: F. Campbell

SECONDED BY: T. Fritz

Resolved, That the Mississippi Valley Source Protection Committee receive for information the Risk Management Official Annual Reports for the 2018 calendar year.

“CARRIED”

5. Appointment of Source Protection Committee Members

M. Livingston presented the attached Staff Report SPA64/19 regarding appointment of Source Protection Committee Members.

SPA04/17/19- 6

MOVED BY: J. Karau

SECONDED BY: C. Lowry

Resolved, That the Mississippi Valley Source Protection Authority officially appoint the following individuals to the Mississippi-Rideau Source Protection Committee for a term of 5 years:

- **Drew Lampman—Economic**
- **Peter McLaren—Economic**
- **Randy Malcolm—Public**
- **Patricia Larkin—Public**
- **Michel Kearney—Municipal, City of Ottawa**
- **Eleanor Renaud—Municipal, Municipalities with no municipal system**
- **Scott Bryce—Municipal, Groundwater**

“CARRIED”

ADJOURNMENT

The meeting was adjourned at 3:26 p.m.

SPA04/17/19-7

MOVED BY: K. Thompson

SECONDED BY: P. Sweetnam

Resolved, That the Mississippi Valley Source Protection Authority meeting be adjourned.

“CARRIED”

REPORT

3009/19

TO:	The Chair and Members of the Mississippi Valley Conservation Authority Board of Directors
FROM:	John Price, P. Eng., Director, Water Resources Engineering
RE:	Harwood Creek Flood Plain Mapping Study
DATE:	May 9, 2019

Recommendation:

That the Board of Directors adopts the report *Harwood Creek Flood Plain Mapping Study* dated March 2019 and the associated GIS-based flood hazard limit lines and flood plain maps as the delineation of areas along the Harwood Creek that are susceptible to flooding during the Regional flood standard as defined in Schedule 1 of Ontario Regulation 153/06, and that the report, maps and Regulation Limit be used in the implementation of Ontario Regulation 153/06.

1.0 PURPOSE

The purpose of this report is to summarize the analysis completed and findings documented in the *Harwood Creek Flood Plain Mapping Study* report.

2.0 BACKGROUND

Located in the northeast end of the City of Ottawa, Harwood Creek is tributary to Constance Lake (Figure 1). With a total drainage area of approximately 14 sq. km. the main channel of Harwood Creek extends a distance of approximately 7.5 km from Ridgeside Farm Drive, at the upstream end, to its outlet at Constance Lake. The outlet of Harwood Creek discharges to Constance Lake through the Provincially Significant Mud Pond Wetland.

In co-operation with and funding support from the City of Ottawa, Mississippi Valley Conservation Authority (MVCA), Rideau Valley Conservation Authority, and South Nation Conservation undertook a five year program of updating the flood hazard maps throughout the City of Ottawa. The study report was prepared by MVCA and is the summary of analysis and findings for the flood plain analysis of Harwood Creek. In addition to the funding support detailed above, there was also financial assistance, for the completion of this flood plain

mapping study, from the federal Government under the National Disaster Mitigation Program (NDMP)

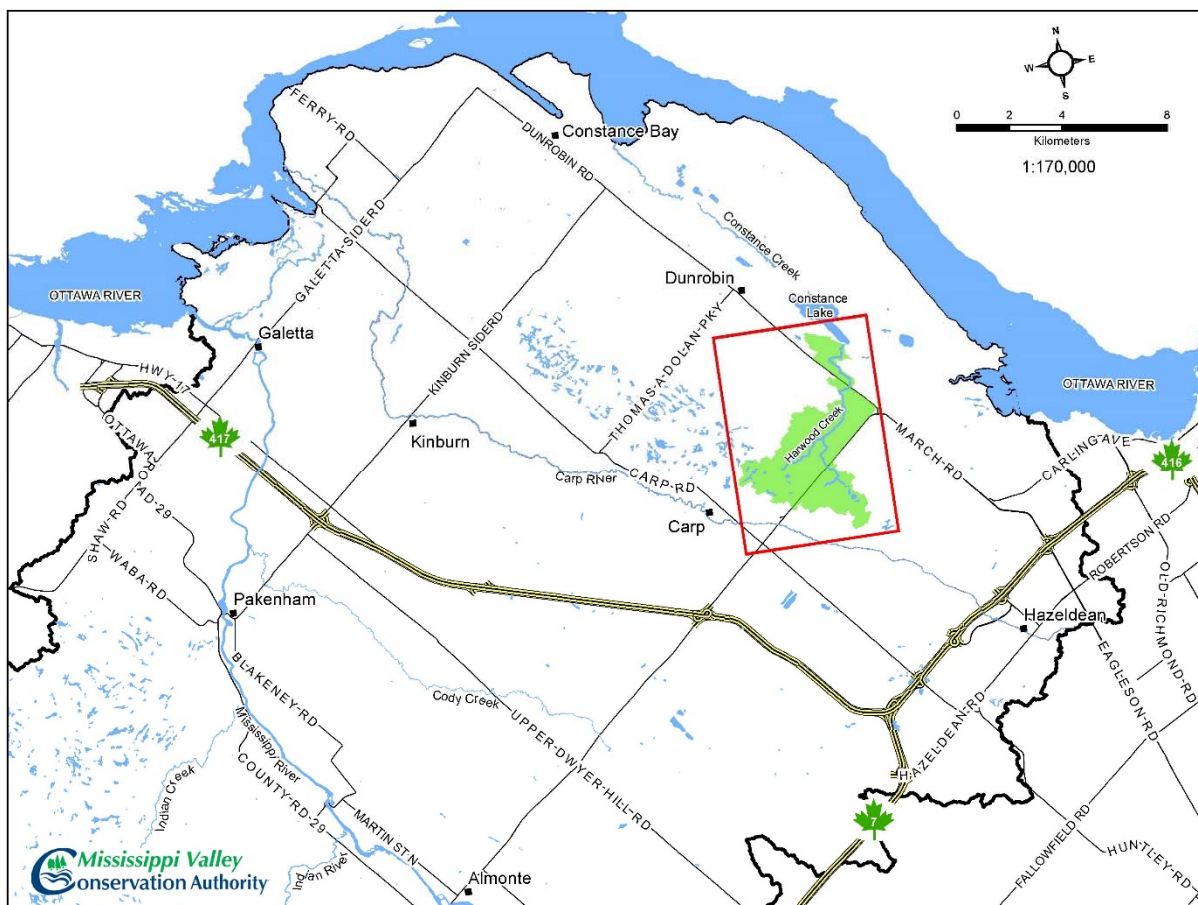


Figure 1: Harwood Creek Watershed Location Plan

3.0 ANALYSIS AND FINDINGS

The hydrologic and hydraulic analysis and the flood plain maps were completed in accordance with the standards found in Technical Guide River & Stream Systems: Flooding Hazard Limit (OMNR 2002). The accompanying engineering report documents the work completed for this project. The total watershed area and sub-catchment delineation are shown in Figure 2.

Major components of the project were:

- Preparation of topographic mapping based on LiDAR ((Light Detection and Ranging laser technology) flown in 2012 and 2017 DRAPE aerial photography;

- Hydrologic analysis to estimate flood discharge/flows for various return periods at key points along the creek. This was completed employing the SWMHYMO hydrologic model;
- Hydraulic calculations using the HEC-RAS backwater program to estimate flood levels associated with the flood flows;
- The delineation and plotting of flood lines on the topographic maps to delineate areas that are susceptible to flooding during the Regulatory (1:100 year) flood event and definition of the Regulation Limit based on provincial standards.

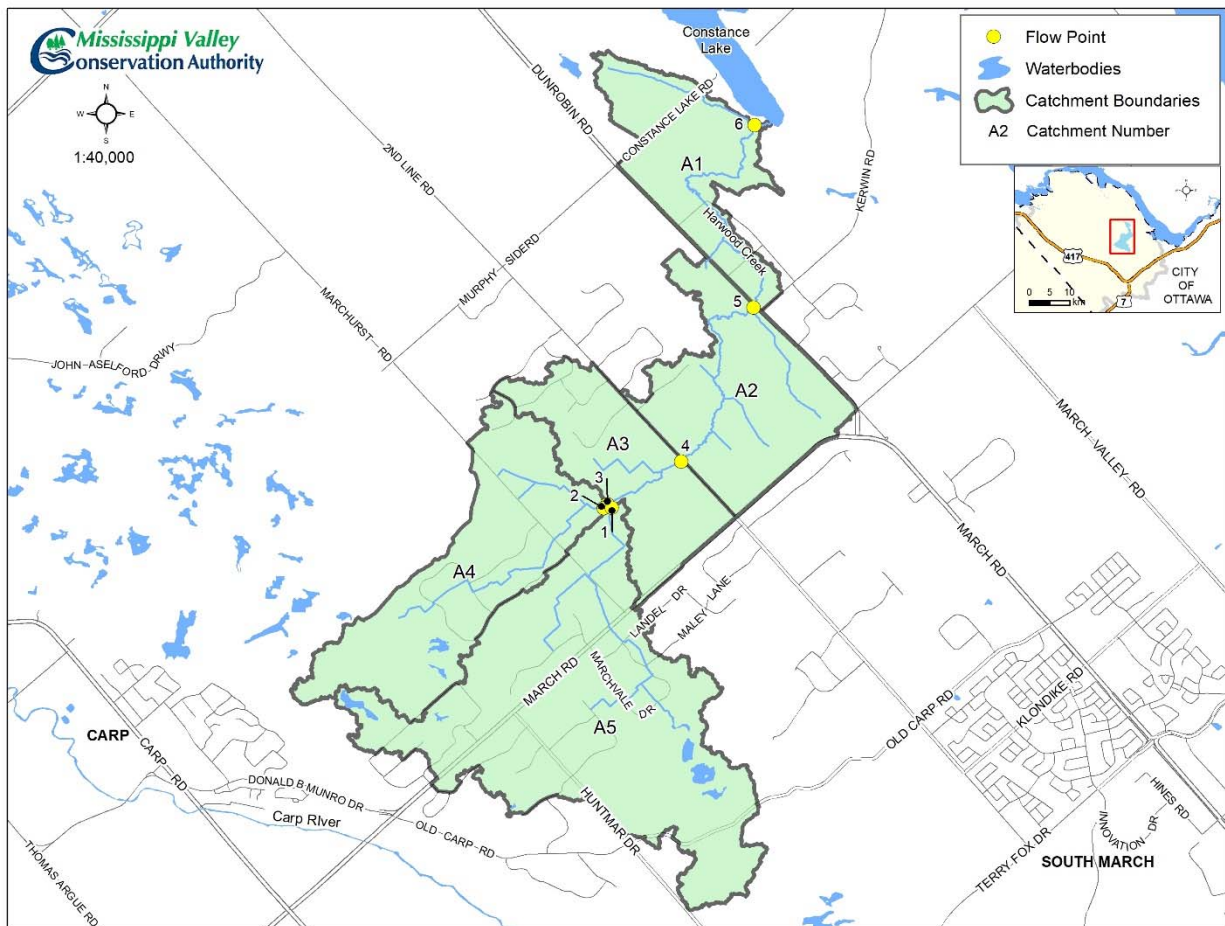


Figure 2: Harwood Creek Watershed Delineation

An Open House was held on March 20, 2019 at the Dunrobin Community Centre, 1151 Thomas Dolan Parkway to show the draft flood plain maps to the public and answer questions. The Open House was advertised in West Carleton Online, Your Community Voice and on the MVCA website and over 100 letters were mailed to affected landowners. Draft flood plain maps were

also available on the MVCA website prior to the Open House. Eleven people attended the Open House including Councillor Eli El-Chantiry.

A technical review of the analyses and report was completed by J. F. Sabourin and Associates Inc., under a separate contract administered by the City of Ottawa, and comments were incorporated and addressed in the final report.

The report provides the technical basis for the associated maps defining areas subject to flood hazards along Harwood Creek, during a Regulatory (1:100 year) flood event.

The final products of this project are:

1. The *Harwood Creek Flood Plain Mapping Study* dated March 2019
2. Flood hazard limit lines in GIS format (shape files)
3. The SWMHYMO and HEC-RAS model files
4. The mapping schedules (7 flood plain maps) prepared at a scale of 1:2000.

PDF copies of the maps will be posted and be available for download from the MVCA website. The report will be available to the public upon request. The model files will be available, subject to the acceptance of the standard “terms of use” that apply to the release of MVCA data and information.

The seven flood plain maps show a wide flood plain, in many locations along the Harwood Creek study reach with some spill locations. There are no existing houses entirely within the Regulatory (1:100 year) flood plain and few roads over topped during the Regulatory (1:100 year) flood event.

Although there are limited numbers of flood prone structures or roads along Harwood Creek, there are three areas of potential concern and/or areas that will require further review:

- 1) The **residential subdivision west of Marchurst Road** in the Ridgeside Drive area (Map Sheet 2). There is one existing house that is located on an “island” above the 1:100 year flood elevation and Bradbury Crescent and Ridgeside Farm Drive could be flooded by a depth of approximately 0.5 m during the 1:100 year flood event. These flooded roads could result in access issues during flood events.
- 2) The **residential subdivision south of March Road** in the Marchvale Drive/Landel Road area (Map Sheet 1). There are two watercourse crossings, March Road and a sound barrier embankment, in close proximity that cause a substantial backwater increase. There are six existing homes on the north or south side of Landel Drive which are located on “islands” above the Regulatory flood elevation. The flood depths on other parts of these lots could be as deep as 1-2 m. The analysis also demonstrates that

Landel Drive could be flooded/overtopped by a flood depth of approximately 0.8 m during the 1:100 year flood event.

- 3) The **topography on the lots along Headley Drive** (Map Sheet 5) should be reviewed since the lots are presently under development and the topography may have changed since 2012, when the LiDAR data was produced which is the basis of the DEM used in the analysis.

4.0 LANDOWNER CONCERNS & FOLLOW-UP

Further review of as-built drawings for the two estate residential subdivisions listed above (Ridgeside Farm Drive and Marchdale Drive/Landel Road area) have generally confirmed the topographic information employed in the analysis and shown on the maps. However, further surveys of the profiles of impacted roads will be completed to verify flooding depths.

MVCA staff have been in contact with the landowners of lots along Headley Drive to obtain permission to complete additional surveys on their properties to confirm the present topography. These follow up surveys are planned for the first or second week of June. The topographic information shown on the flood plain maps and employed in the delineation of the flood line is correct for the 2012 base of the LiDAR data and thus the study as a “point in time” analysis is accurate. Based on the information obtained from the follow up surveys, any appropriate revisions will be made to the flood plain analysis and/or maps and this will be completed prior to forwarding the flood plain information to the City of Ottawa for their consideration under their Zoning By-law.

One landowner, who resides on Landel Drive, has questioned the accuracy of the flood plain analysis and the delineation of the Regulatory (1:100 year) flood line. As shown on Map Sheet 1 the Regulatory flood line (red line) is very wide upstream (south) of March Road and there are six existing homes on the north or south side of Landel Drive which are located on “islands” above the Regulatory flood elevation. The flood depths on other parts of these lots could be as deep as 1-2 m. The analysis also demonstrates that Landel Drive could be flooded/overtopped by a flood depth of approximately 0.8 m during the 1:100 year flood event.

The main reason for this backup of flood water is that there are two watercourse crossings; March Road and an upstream embankment, within a short distance (approximately 6 m) of each other. These crossings are both single culverts and there is an approximate 2.0 m increase in calculated 1:100 year water elevation from the downstream to the upstream side of March Road. March Road is overtopped, in the one small area, as shown, by a flood depth of approximately 0.05 m and thus essentially all the flow must be conveyed through the culvert. Then, immediately upstream of the March Road watercourse crossing, there is the second culvert under the embankment which presents a second impediment to flow. The culverts

under March Road, the embankment and Landel Drive are the smallest in the immediate area and thus have lowest flow capacity. By comparison the two upstream road crossings Manley Lane and Marchvale Drive are twin 0.85 m and 0.9 m diameter culverts, respectively, and the downstream road crossing, Marchurst Road is a 2.59 m wide by 1.6 m high pipe arch culvert.

The Landel Drive landowner did not believe that flood waters could ever get as high as shown on the flood plain map and thought that the slope of Landel Drive would convey water east out of the Harwood Creek watershed. He was also concerned with the restrictions the Mississippi Valley Conservation Authority (MVCA) regulation policies would place on further development of his lot.

Since the Open House MVCA staff have:

- Met with the landowner and explained, in detail, the analysis procedure to define and delineate the Regulatory (1:100 year) flood plain and forwarded a copy of the report.
- Confirmed, though comparison to the as-build drawings for the subdivision, the topography shown on the flood plain maps and used in the analysis, including the crossing information collected during the field survey and the profile of Landel Drive. There is a possibility of some flow leaving the Harwood Creek watershed through the roadside ditches, but, this would not have a substantial impact on the delineation of the extent of the Regulatory (1:100 year) flood plain shown on the maps nor the depth of flooding in the lots along Landel Drive.
- Verified the 1:100 year water elevation calculated by the HEC-RAs hydraulic model at the upstream side of March Road through another calculation method.
- Verified that flow values calculated in this study are reasonable estimates through comparisons with flow values calculated in other studies for watersheds of similar size and land use.
- Reviewed the available rainfall records, in the area of Harwood Creek, for dates suggested by the landowner when it was thought that substantial rainfall occurred close to a 1:100 year event. This review confirmed that there is no indication that a 1:100 year flood event has previously occurred on Harwood Creek.
- MVCA staff also completed field measurements at various road crossings in the upper Harwood Creek watershed, including in the Marchvale subdivision area, on April 15th and 20th 2019. Comparing the total rainfall depth employed in the flood plain analysis

to the recorded rainfall and/or water equivalent in the snow, the rainfall/runoff events prior to the two monitoring periods would essentially be a 2 year event and the resulting runoff and water levels would be considered equivalent to a 2 year return period flood event. Therefore the flood events reviewed in the mid-April time period represented average spring flooding conditions.

The measured water elevations at the crossing locations reviewed were comparable to the 2 year water calculated in the *Harwood Creek Flood Plain Mapping Study* within reasonable standard deviation and typical engineer standards.

The results of these reviews, measurements and verifications were documented in two memorandums that were forwarded to the landowner.

5.0 CONCLUSION

The analysis, documented in *Harwood Creek Flood Plain Study* report, meets the standards found in the *Technical Guide River & Stream Systems: Flooding Hazard Limit* (OMNR 2002) and therefore, the resulting Regulatory (1:100 year) flood plain and Regulation Limit delineation is suitable for use in MVCA's Regulation mapping as well as for municipal land use planning purposes.

After the adoption by the MVCA Board of Directors the report, maps and Regulation Limit will be used in the implementation of Ontario Regulation 153/06 and forwarded to the City of Ottawa for inclusion in their Zoning By-law document.

REPORT **3010/19**

TO:	The Chair and Members of the Mississippi Valley Conservation Authority Board of Directors
FROM:	Sally McIntyre, General Manager and Gord Mountenay, Water Management Supervisor
RE:	Spring 2019 Flood Event Preliminary Report
DATE:	May 14, 2019

Recommendation:

That the Board receive this report for information and direct:

1. That costs for aerial photography of the Ottawa River be paid from the Operating Reserve.
2. That the General Manager be authorized to retain temporary support, if required, at a cost of up to \$50,000 in order to support timely processing of permit applications arising from the flood event.

1.0 PURPOSE

To provide a preliminary report to the Board on the recent 2019 spring freshet flood event, and the planning underway to support efficient recovery and reconstruction. A more comprehensive report will be prepared and provided to the Board and public later in the year.

The background and event summary sections focus on the Mississippi Valley watershed, while the balance of the report address matters across the entire jurisdiction of MVCA.

2.0 BACKGROUND

The Mississippi River watershed has seven lakes that provide a total of 131 Mm³ storage capacity. None of the dams operating at these lakes is considered large enough to be included in the Ottawa River Regulatory Committee map of the watershed. For comparison purposes, Bark Lake reservoir on the Madawaska River, *on its own*, has a capacity of 374 Mm³. In short, our watershed has very little storage capacity and, once it is used, operations must focus on safely channeling excess flows not trying to hold them.

3.0 EVENT SUMMARY (Mississippi River Watershed September 2018 to May 2019)

The 2019 spring freshet was an extraordinary event in several ways and resulted from watershed conditions extending back to the summer of 2018. The following is a summary of why severe flooding occurred:

- 2018 was a drought year. Water levels in the upper lakes were drawn down the top of winter operating level in case the drought extended into spring 2019 to ensure sufficient summer lake levels in 2019. (Winter holding levels have a range of only 10 cm.)
- Drought conditions extended into January with limited snow cover and no thaw. In the absence of snow cover, most lakes formed ice at the top end of the 10 cm operating range, with anecdotal information indicating thicknesses on many lakes much greater than normal.
- By March 1st, snow pack had increased and was showing significant water equivalents in the upper watershed. Storage capacity was increased in Mazinaw Lake by removing a log, something rarely done at that time of year.
- Logs were also removed from Carleton Place Dam in mid-March and again in late March prior to any runoff occurring. This rendered the bridge at Bridge Street as the sole restriction controlling water levels on Mississippi Lake and the river upstream.
- By April 1st, winter snow pack in parts of the upper Mississippi River watershed was deeper than normal at 0.5 m, with a water content equivalent of 200 mm. Thick ice cover remained solid on all of the lakes.
- April began with ideal weather to mitigate flooding—single-digit daytime highs and below freezing temperatures at night with no rainfall, which allowed for the slow release of snow and ice melt into receiving water bodies.
- Only Big Gull and Mississagagon dams were operated in an effort to achieve target summer levels. All other dams were left at winter levels due to rain in the 7-day forecast and the presence of solid ice on the lakes.
- By mid-April, river flows had begun to increase as a result of snowmelt but were still well below normal spring peak conditions. Dams along the Clyde River were operated to allow flows to pass as they increased.
- Between April 15 and 20, significant rainfall (in excess of 100 mm) coupled with warmer weather generated a quick melt and release of water at very high flow rates.
- The upper part of the watershed experienced the greatest amount of precipitation, snow melt, and ice melt, generating flows that had to be conveyed through the entire length of the river concurrent to flows coming off the land downstream.
- The duration, intensity, and physical extent of rainfall over the 5 days coupled with the release of water from snow in the upper watershed and ice off of all the lakes generated

flows that could not be substantially mitigated through the operation of dams on the system.

- In the case of Mazinaw Lake, despite removing all remaining logs on April 19 and 20 (something never done previously), and water overtopping the emergency bypass channel crest, water levels on the lake *rose* 30 cm over 12 hours on Sunday April 21.
- Record water levels were established on almost all of the upper lakes over the ensuing days despite pulling logs to lower levels. Wherever possible, logs put in or left in, upstream to mitigate downstream flooding.

Attachment 1 presents peak 2019 water levels and flows compared to those on record. At present, all reservoirs are full and staff are operating dams as needed to achieve target levels across the watershed and in response to direction received from OPG.

4.0 FLOOD MESSAGING

By early March it was evident that, depending on spring weather, there potential for a severe spring flood. The following messages were issued to inform residents of the potential flooding hazard:

- The first Flood Outlook notice for the Mississippi River was issued on March 4th and updated March 19th.
- The first Watershed Conditions Statement – High Water Safety was issued March 22nd with three updates issued over the subsequent two weeks.
- The first FLOOD WATCH for Dalhousie Lake was issued April 12th with updates issued on the 14th and upgraded to a FLOOD WARNING on the 15th.
- The FLOOD WARNING message was expanded to include the entire watershed on April 17th and seven updates were issued between then and April 29th.
- The FLOOD WARNING was terminated on May 3rd.

The above notices were e-mailed to member municipalities, media and other stakeholders, and shared on social media. In addition to these regulated notices, the following actions were taken:

- Daily water levels were posted on the MVCA website for the public to monitor their lake levels and stream flows.
- Informational videos were developed and shared on social media and by e-mail on a variety of flood management matters.
- The MVCA home page was updated to focus on flood mitigation and response matters.
- Information regarding the flood risk was provided at the March 20th and April 17th Board meeting for members to communicate to their CAOs and Councils.

Attachment 2 provides additional details on event communications, and web and social media uptake.

5.0 RECOVERY AND REBUILD PLAN

5.1 Permits

Unlike the May 2017 flood event on the Ottawa River, the April 2019 event has affected property owners throughout the entire Mississippi watershed as well as Constance Bay and environs. Following the 2017 event, MVCA received 55% more permits than the previous 3-year average. Given the extent of the 2019 event we expect the number of applications to potentially double the annual average. With that in mind, staff are examining ways to improve the intake and processing of permit applications as described below:

Communications

- Updating the MVCA web home page to provide easy access to flood recovery and permit information.
- Planning Open Houses to be held in three locations across in the Mississippi watershed to provide information to the public on the event and the opportunity to speak with staff on reconstruction and shoreline restoration permits.
- Coordinating an Open House with the City of Ottawa to be held in the Constance Bay area following flood abatement and recovery activities.

Permit applications

- Developing easy step-by-step instruction sheets on shoreline restoration and rebuilding.
- Simplifying forms and providing example drawings/diagrams.
- Exploring on-line completion and tracking of permit applications.

Business processes

- Realigning existing resources to enhance permit review capacity.
- Streamlining field operations to increase the number of sites visited in a day.
- Investigating grant opportunities to secure temporary staff to support timely turn-around of permit applications.

5.2 MVCA Structures

Dam structures are inspected every fall, usually after drawdowns are complete and before snowfall occurs. A second, less detailed inspection occurs each spring in preparation for the start of the dam operation season. Due to the severity of the 2019 flood, all dams will be inspected at the conclusion of the event. Issues at some dams have already been observed, for example:

- Mazinaw Lake Dam (erosion to the crest of the bypass channel, already inspected by a consultant);
- Kashwakamak Lake Dam (a small sump hole has appeared below the side block dam);
- Farm Lake Dam (the staff gauge has been destroyed and there appears to be a missing piece of plywood on the crest of the dam); and
- Several stoplogs have been lost from various dams either due to water pressure causing them to “pop” out of the dam or vandalism.

Damage arising from the flood may have affected other MVCA assets at the Mill of Kintail, Purdon, and Morris Island conservation areas, however, we have not had the opportunity to inspect and assess as of the writing of this report. Wash-out of a section of the K&P trail occurred and damage to a trail storm culvert was reported to MVCA and an initial assessment has been completed.

6.0 TIME AND BUDGET IMPACTS

2019 on-call and overtime costs were normal for freshet conditions, however, the scale of the event coupled with on-going and projected recovery and rebuild requirements warrants separate cost tracking. A cost centre has been established for the event and will be used for future reporting and grant application purposes. Additional costs, known and potential, are outlined below.

6.1 Aerial Photography

In the lead-up to the first peak on the Ottawa River, MVCA partnered with the City of Ottawa, Rideau Valley Conservation, and South Nation Conservation to have the entire shoreline of the Ottawa River flown on Sunday May 5, 2019. This will provide MVCA with photos and x-y-z coordinates of the flood inundation that will aid discussions with residents, and enable further model calibration. While final costs have yet to be confirmed, according to last estimates MVCA’s share will be in the order of \$5,000. It is recommended that costs for this activity be paid from the Operational Reserve.

6.2 Staffing – Permit Review

While every effort is being made to stream-line permit processes, each permit must still be fully assessed with many requiring site visits to review site conditions, and construction opportunities and constraints. Our current processing time standard is under 30 days from receipt of a complete application package (i.e no missing information and with appropriate drawings.) Due to the projected volume of applications, it is likely that we will be unable to meet this standard, and some property owners will be unable to complete planned works this construction season.

To mitigate this, it is recommended that the General Manager be authorized to retain temporary support, if required, for a period of up to 8 months in order to provide timely review and approval of permit applications. The cost estimate for this is approximately \$50,000. **Attachment 2** shows how this cost would be distributed across member municipalities if implemented.

6.3 Permit Fees

Following the 2017 flood of Constance Bay, the Board reduced permit fees for shorelines from \$240.00 to \$25.00, and for reconstruction by 50% (this charge would vary depending upon project scope.) While initially only applied to Constance Bay applicants, the discount was eventually extended to others in the watershed, with many property owners taking the opportunity to complete planned works. The estimated value of lost revenues between 2017 and 2018 was \$24,000.

Table 1 shows how the average number of permit applications changed between the period 2014-2016 and 2017-2018. An even higher number are expected in 2019-2020 due to extent of flooding and damage throughout both the Mississippi and Ottawa watershed.

Table 1: Average Number of Permit Applications per Year

	Total Permits	Shorelines	Rebuild / Septic
2014-2016 (3 years)	428 (142/year)	54 (18/year)	117 (39/year)
2017-2018 (2 years)	441 (220/year)	124 (62/year)	92 (41/year)
Projected 2019-2020	500-600	150-170	92*

* It is difficult to estimate the number of rebuilds until it is known whether the province will fund “buy-outs” to encourage people to move rather than rebuild.

If the same discounts were offered again lost revenues would be in the order of \$82,400. **Attachment 3** shows how this cost would be distributed across member municipalities.

ATTACHMENT 1: Peak water levels and flows, Mississippi River, Spring 2019

Table 1: DAILY FLOWS Cubic meters per second (cms)	2019 SPRING PEAK	AVG. SPRING PEAK	HISTORICAL MAX
Buckshot Creek near Plevna	Not Recorded	11.3	32.5 (April 1998)
Carp River below Kinburn	58.83	44	85 (April 1972)
Clyde River at Gordon Rapids	71.41	28	92.3 (April 1998)
Clyde River at Herron Mills	132	62	168 (April 1998)
Fall River at Bennett Lake	26.02		
Indian River at Mill of Kintail	44.2	20	46.4 (April 1998)
Mississippi River at Appleton	277	151	282 (April 1998)
Mississippi River at Dalhousie Lake	136		
Mississippi River at Ferguson Falls	282	137	303 (April 1998)
Mississippi River at High Falls	108		
Mississippi River near Myers Cave	62.2	21.4	50.9 (June 2002)

Table 2: DAILY LAKE WATER LEVELS Meters (m)	2019 PEAK	HISTORICAL MAX	TARGET LEVEL*
Bennett Lake	153.72		153.6
Big Gull Lake	253.70	253.73 (May 2017)	253.4
Canoto Lake	268.46	268.47 (April 1998)	
Carleton Place Dam	134.58		
Crotch Lake	240.4	240.5 (June 2002)	240
Dalhousie Lake	158.13	157.86 (April 1998)	
Farm Lake	Gauge Failed		
Kashwakamak Lake	261.50	261.42 (June 2002)	261.13
Clyde River in Lanark Village	146.15		144.1-144.3
Mazinaw Lake	268.59	268.37 (June 2002)	267.8
Mississagagon Lake	268.50	268.42 (June 2002)	268.2
Mississippi Lake	135.67	135.73 (April 1998)	134.35
Ottawa River at Constance Bay	60.75		
Palmerston Lake	272.08	272.19 (May 2017)	271.85
Shabomeka Lake	271.28	271.44 (June 2002)	271
Sharbot Lake	192.41		
Widow Lake	184.76		

***Target level**

These are operational targets designed to support summer recreational use across the watershed. Achieving these target levels in the spring allows the MVCA to release water downstream as needed to address losses due to evaporation during the summer. Crotch Lake is the only lake that has enough volume and operating range (4 m draw down twice a year) to make an appreciable impact on downstream flows. Under drought conditions and years with limited snow, storage capacity can become depleted and summer lake levels will drop below ideal conditions.

ATTACHMENT 2: Flood Event Communications & Metrics

TABLE 1: Watershed Conditions Statements Issued

NOTICE TYPE	LOCATION	DATE(S)
Flood Outlook	Mississippi River	March 4 and 19
Water Safety	Mississippi River	March 29, April 2 and 5
Flood Watch	Dalhousie Lake	April 12 and 14
Flood Warning	Dalhousie Lake	April 15
Flood Watch	Ottawa River	April 17
Flood Warning	Mississippi River	April 17
Flood Watch	Ottawa River	April 18
Flood Warning	Ottawa River	April 19
Flood Warning	Mississippi River	April 20
Flood Warning Updates	Mississippi & Ottawa Rivers	April 21, 23, 25 and 27
Flood Warning Update	Ottawa River	April 29 and May 1
Flood Warning Update	Mississippi River	May 1
Flood Warning Terminated	Mississippi River	May 3
Flood Warning Update	Ottawa River	May 3, 7 and 9
High Water	Mississippi River	May 9

TABLE 2: Facebook (FB) and YouTube Video Analytics (as of May 7)

VIDEO	DATE	FB LIKES	FB SHARES	FB VIEWS	FB PEOPLE REACHED	FB ENGAGEMENT	YOUTUBE VIEWS
Flood Forecasting	Mar 11	12	10	N/A	2,338	303	205
Dam Operations	Mar 14	27	47	4,000	6,946	1,269	54
Municipal Preparedness	Mar 21	4	5	N/A	781	27	188
Snow Courses	Mar 28	11	9	N/A	1,422	82	13
Sump Pump Ready	Apr 4	5	6	N/A	1,394	67	30
Homeowner Prep	Apr 11	16	15	2,900	4,165	717	27
Floodplain Mapping	Apr 18	13	18	2,100	3,345	258	19
Watershed Flooding	Apr 25	11	38	N/A	7,786	1,102	162
Stop Log Safety	May 2	27	44	3,200	5,524	1,298	31

- Views: Page views are the number of times a Page's profile has been viewed by people, including people who are logged into Facebook and those who aren't.
- People Reached: Reach is the number of people who had any content from your Page or about your Page enter their screen.
- Engagement: When people perform actions on your Page. They may like a post, click on a link or comment on an image for example.

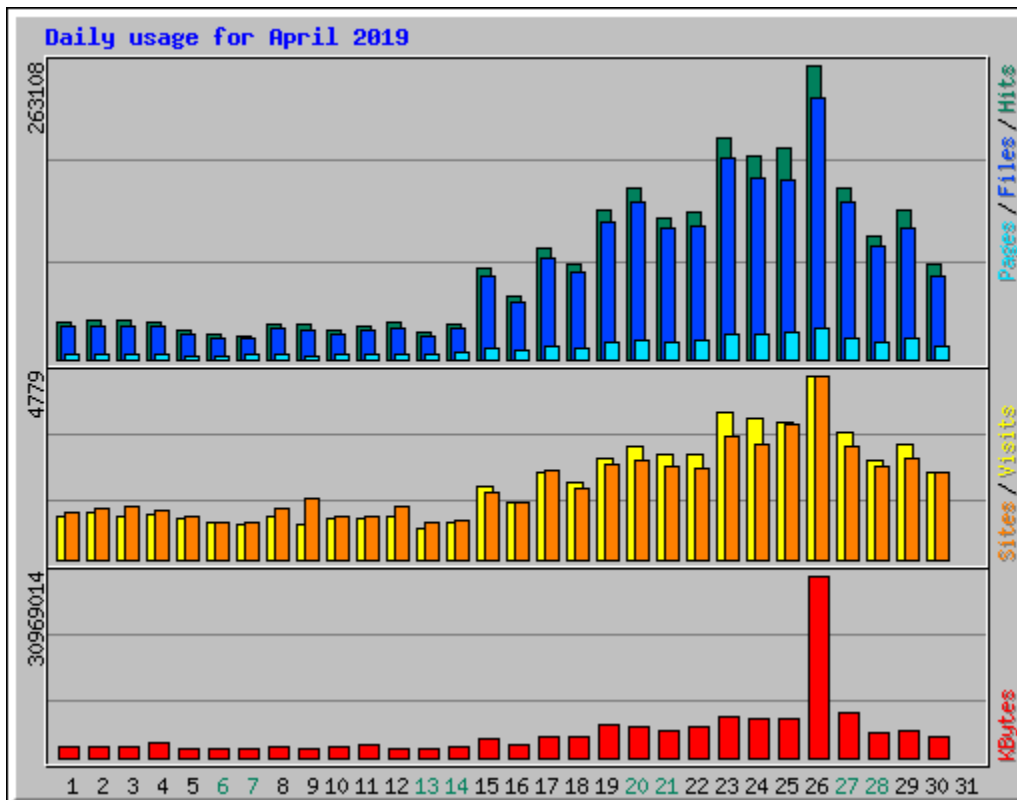
Facebook and Twitter Metrics

- MVCA Facebook account – gained 300 followers March 4 – May 7
- MVCA Twitter account – gained 101 followers April 5 – May 7

Website Metrics – April, 2019

CATEGORY	April 1-30	Definition
Total Hits	86,403	A single file request in the access log of a Web server.
Total Pages	10,816	This measures how many times someone has viewed an entire page including all text, images, etc.
Total Visits	1,998	This is defined as a series of hits from any particular IP address. If any two hits are separated by 30 minutes or more, two visitors are counted. "Visitors" represent an extrapolated number.

TOP URL	HITS
Water Levels	119,238
Home Page	66,884



April 26: Flood Warning Update # 5- Dalhousie Lake Levels Expected To Increase 5–10 cm
 Video # 8 - Watershed Flooding

ATTACHMENT 3: Potential Cost Allocations Arising from Temporary Staff and Permit Discounts

	<i>CVA Based Apportionment Percentage</i>	<i>Cost Allocation Temporary Staff</i>	<i>Cost Allocation Reduced Fees</i>	<i>Total Potential Cost Allocation</i>
<i>North Frontenac</i>	0.9648	\$ 482	\$ 795	\$ 1,278
<i>Central Frontenac</i>	0.4447	\$ 222	\$ 366	\$ 589
<i>Tay Valley</i>	0.6620	\$ 331	\$ 546	\$ 877
<i>Beckwith</i>	0.6476	\$ 324	\$ 534	\$ 857
<i>Carleton Place</i>	2.3766	\$ 1,188	\$ 1,959	\$ 3,147
<i>Drummond/North Elmsley</i>	0.4990	\$ 250	\$ 411	\$ 661
<i>Lanark Highlands</i>	1.1324	\$ 566	\$ 933	\$ 1,499
<i>Mississippi Mills</i>	2.6379	\$ 1,319	\$ 2,174	\$ 3,493
<i>Addington Highlands</i>	0.1611	\$ 81	\$ 133	\$ 213
<i>Ottawa</i>	90.4380	\$ 45,219	\$ 74,530	\$ 119,749
<i>Greater Madawaska</i>	0.0359	\$ 18	\$ 30	\$ 48
	100	\$ 50,000	\$ 82,410	\$ 132,410

REPORT

3011/19

TO:	The Chair and Members of the Mississippi Valley Conservation Authority Board of Directors
FROM:	Shannon Gutoskie, Community Relations Coordinator & Stephanie Kolsters, Museum Curator
RE:	Strategic Plan for Community Museum Operating Grant, Dr. R. Tait McKenzie & Dr. James Naismith Museums
DATE:	May 9, 2019

Recommendation:

That the Board receive this report and direct that the Ministry of Tourism, Culture & Sport be notified that submission of the Mill of Kintail Museum Strategic Plan will occur by July 31, 2019.

1.0 PURPOSE

The purpose of this report is to provide the Board with a summary of the Community Museum Operating Grant (CMOG) application process and to receive support in postponing the submission of a strategic plan until stakeholders have been consulted and the final version approved by the Board.

2.0 BACKGROUND

The Ministry of Tourism, Culture & Sport provides annual operating grants to eligible community museums across Ontario. These museums contribute to their communities' economic well-being as employers and tourist attractions. This support strengthens their role in their communities as custodians and interpreters of the province's irreplaceable heritage collections. Museums that receive this support are required to meet the criteria established in **Regulation 877**, "Grants for Museums" under the **Ontario Heritage Act** and this ministry's **Standards for Community Museums in Ontario**. MVCA receives approximately \$14,000/year from this grant.

3.0 SUMMARY

In late 2018, MVCA staff was notified that in order for the museum to apply for the grant, a five year strategic plan would be required for 2019. In January of 2019 Kristy Giles was hired to

work with staff, volunteers and the Mill of Kintail Advisory Committee to complete this Plan. Deadline submission for the grant is June 30, 2019. However, the Ministry informed MVCA that the Plan does not have to be submitted at the same time as the application, and that an extension would be given if a signed letter from our governing body accompanies the application.

4.0 NEXT STEPS

Staff will consult with stakeholders and amend the Strategy as needed prior to tabling with the Board in July. Once approved, staff will issue the attached letter, indicating that the Board confirms that staff is finalizing the Strategic Plan and it will be submitted by July 31, 2019.

ATTACHMENTS

- Draft letter from the Chair, Board of Directors to CMOG indicating that the Board approves submission of the Mill of Kintail Museum Strategic Plan by July 31, 2019.

May 15, 2019

To: Museum and Heritage Programs Advisor, Libraries, Arts, and Heritage Services Unit
Ministry of Tourism, Culture & Sport
401 Bay Street Toronto, ON M7A 1A1

Attn: Elka Weinstein, MMSt, Ph.D.

From: Mississippi Valley Conservation Authority Board of Directors

Dear Dr. Weinstein,

Re: Strategic Plan for Community Museum Operating Grant

As you are aware, Mississippi Valley Conservation Authority (MVCA) has been the fortunate recipient of the Community Museum Operating Grant (CMOG) for the past several years.

Staff is currently working on a five-year strategic plan as required by CMOG for the Dr. R. Tait McKenzie and Dr. James Naismith Museums, located onsite at the Mill of Kintail Conservation Area.

As a Board, we are supportive of staff submitting the grant application prior to the June 30, 2019 deadline while continuing to work towards finalizing the strategic plan.

It is anticipated the Board of Directors will review the finalized version at our July 17, 2019 meeting. Any changes to the document will be made shortly thereafter and will be submitted to CMOG by July 31, 2019.

Yours Truly,

Janet Mason, MVCA Board Chair

REPORT

3012/19

TO: The Chair and Members of the Mississippi Valley
Conservation Authority Board of Directors

FROM: Sally McIntyre, General Manager

RE: **Bill 108 Proposed Changes to *Conservation
Authorities Act* and Regulation**

DATE: **May 14, 2019**

Recommendation:

That the Board direct staff to:

1. Prepare and send a letter on behalf of the Board of Directors to the Ministers of Natural Resources & Forestry, Municipal Affairs & Housing, and Environment, Conservation and Parks that endorses the Conservation Ontario recommendations and outlines the concerns contained in this report.
2. Continue to identify and implement cost effective and safe ways to deliver programs and service in a manner that achieves the following objectives:
 - a) improve client service and accountability
 - b) increase speed of approvals
 - c) reduce “red tape”
3. Share the above letter and motion with member municipalities and key stakeholders.

1.0 PURPOSE

The purpose of this report is to brief the Board on proposed changes to the *Conservation Authorities Act* and implied changes to regulations under Section 28; the potential impact of those changes on MVCA operations and funding; as well as potential impacts on area municipalities and risk management in the watershed. The report also outlines the rationale for the second motion, which is being adopted by the 36 conservation authorities.

2.0 BACKGROUND

The *Conservation Authorities Act* underwent significant public review between 2015 and 2017, and was updated in December 2017. Amendments provided clarity and direction on issues

such as governance, transparency, and mandate. While adopted in its entirety, not all amendments were proclaimed.

With the change in government in October 2018, Conservation Ontario on behalf of the 36 conservation authorities pursued discussions with the new government to provide information and support transition and implementation of the new legislation. Between October 2018 and March 2019 there were strong indications that the new government intended to move in a different direction, potentially curtailing the mandate and powers of conservation authorities.

On April 4, 2019, conservation authorities were notified of two postings on the Environmental Registry of Ontario (ERO): *Modernizing conservation authority operations - Conservation Authorities Act*; and *Focusing conservation authority development permits on the protection of people and property*), and were informed that comments would be received until May 20, 2019. At that time, it was indicated that legislation would be forthcoming in the summer and regulations in the fall.

On May 2, 2019, before conclusion of the commenting period, the government gave 1st reading to Bill 108, *More Homes, More Choice Act, 2019*. The omnibus Bill proposes amendments to 13 statutes. Schedule 2 to the Bill specifies changes to the *Conservation Authorities Act* and to regulations under Section 28 of the Act regarding the CA permit process that limits development in regulated areas. Other statutes affected by the Bill include but are not limited to the *Endangered Species Act*, *Environmental Protection Act*, and the *Planning Act*. The comment period for the draft legislation ends June 1, 2019.

3.0 SUMMARY

The stated intents of the April Environmental Registry of Ontario (ERO) postings are to “help conservation authorities focus and deliver on their core mandate, and to improve governance”, and “make rules for development in hazardous areas more consistent to support faster, more predictable and less costly approvals.” The stated purpose of Bill 108 is to “make it easier for municipalities, non-profits and private firms to build housing.” While the **mandate** of conservation authorities under Section 20 (1) is unchanged, changes affecting the delivery and cost recovery of programs and services are significant and are summarized below.

Section 20 (1): “to provide, in the area over which it has jurisdiction, programs and services designed to further the conservation, restoration, development and management of natural resources other than gas, oil, coal and minerals.”

Mandatory/core services - the legislation prescribes that conservation authorities shall provide programs and services related to:

- risk of natural hazards;
- the conservation and management of lands owned or controlled by the authority;
- the authority's responsibilities as a source protection authority under the *Clean Water Act*; and
- the authority's duties, functions and responsibilities under an Act prescribed by the regulations.

General levy – only the above mandatory/core programs and services may be included.

Other programs and services – are permitted under its mandate but will require fixed-term bilateral memoranda of understanding between the CA and each member municipality.

Transition Plan – regulations expected later this year will provide a date by which CAs will need to inventory and allocate programs and services between mandatory and optional, apportion costs, consult with member municipalities and secure agreements with each municipality to deliver optional services.

Apportionment of Capital and Operating Costs – a municipality may only be apportioned capital and operating costs for programs and services defined as mandatory, and for optional programs and services for which a bilateral agreement exists.

Powers of the Lieutenant Governor in Council – Amendments to Section 40 adopted in 2017 will be proclaimed, and the following additional powers added:

- To place limits on delineation of river and stream valleys
- To change definitions of:
 - development activity
 - hazardous land
 - watercourse
 - wetland
 - pollution
- To prescribe activities, types of activities, and areas exempt, or exempt with conditions, from permit requirements for building on or in regulated areas.
- To limit permitting powers of authorities, namely to refuse permits, prescribe requirements for their issuance, issue conditions, and to cancel or have permits expire.

4.0 ANALYSIS

The *Conservation Authorities Act* as in force today recognizes that an action upstream can affect a community downstream and encourages municipalities to jointly manage water and land resources on a watershed basis for mutual benefit. It also recognizes that the best form of

natural risk management is prevention, as achieved through development controls in regulated areas, the protection of natural resource functions, and water and land stewardship to promote on-site management of water and mitigate erosion and soil loss. Accordingly, the Act and implementing regulations allow for implementation of a range of programs and services that support watershed-wide water and land management, and the sharing of those costs amongst member municipalities.

The proposed legislative and regulatory changes will move Ontario away from watershed-based risk and resource management with the following potential consequences:

- From a risk management perspective, the legislation and proposed regulations will likely have the following affect:
 - increased development on or in currently regulated areas;
 - increased natural hazard risks to people and property from such development;
 - reduced conservation of natural system features and functions that provide flood relief by storing water, recharging groundwater systems, and through evapotranspiration;
 - increased shoreline hardening and reduced fish habitat with potential impacts on commercial fishing; and
 - reduced coordinated watershed-based risk management with potential impacts on water allocations under changing climatic conditions.
- From a governance perspective, the Board of Directors will have less control over the scope of programs and services delivered by the CA. The Board of Directors will make recommendations to member municipal councils who in turn will decide whether to opt in or out of non-core activities. It is unclear whether the Board of Directors will have the right to determine what is “core”, and how prescriptive the province will be in this regard.
- From an affordability perspective, to the degree that one or more municipalities chooses *not* to participate in an optional program or service, the cost effectiveness and affordability of program delivery could diminish for the *remaining* municipalities within the CA’s jurisdiction. Depending on the number and relative apportionment of those opting out, programs and services offered today may no longer be affordable. Depending on the wording of the new regulations, the following programs and services could be impacted:
 - Modeling that assesses the changing conditions on municipal water intakes and wastewater discharges, summer recreational lake levels, and agricultural irrigation sources;
 - Studies of watershed-interest such as algae growth in recreational lakes;
 - Regular monitoring of lakes, streams, and coldwater streams that support sport fishing;
 - Support to lake associations in the development of Lake Management Plans;
 - Watershed planning to identify and prioritize conservation and restoration needs;

- Watershed planning and technical services to guide land and water management;
 - Delivery of the Rural Clean Water Program and Green Acres planting program;
 - Delivery of shoreline naturalization projects;
 - Delivery of educational programs to school children; and
 - Monitoring ground water levels and quality for long-term water balance management.
- The financial impact of these changes will be two-fold: municipalities choosing to opt out of a program or service will see a reduction in transfers to the CA, while those choosing to opt in could see an increase in costs. However, municipalities that opt out of an optional program or service are unlikely to find a more affordable service delivery method, in which case taxpayers and residents could see a net increase in costs, or a reduction in level of service.
- In some cases, a reduction in level of service will transfer risk assessment responsibilities from conservation authority professionals to municipal staff that may not have the same specialized technical expertise.
- From a fairness perspective, it could mean that only wealthy jurisdictions receive the full scope of services, exacerbating the urban/rural divide, and with potential impacts to rural communities due to lack of technical oversight.
- From an administrative perspective, financial management will become significantly more onerous, requiring costs to be distributed, by program, to only those municipalities that signed bilateral agreements for such. It is unclear how these higher administrative costs are to be apportioned.
- From an operational perspective, resource management could become more challenging as most staff support a combination of what may be considered core and optional functions that allows movement of resources seasonally and in response to peaks in workloads.

5.0 TASK FORCE ON FLOOD MITIGATION

On May 10, 2019 the province announced that it is “initiating an internal task force that will consult with our municipal partners and other stakeholders in (flood) impacted areas on ways to improve the province's resilience to flooding.” Yesterday, the province announced a meeting to be held in Ottawa on May 24, but CAs have yet to receive any form of notification or invitations regarding either the task force or the events. None of the related press releases (Attachment 1) makes no mention of conservation authorities or the role they play in flood risk management. Staff will follow-up with the City of Ottawa to ensure we are present at the May 24 event.

6.0 RESPONDING TO THE ERO POSTINGS AND BILL 108

Comments on the ERO postings are due May 20, 2019, and on Bill 108 by June 1, 2019.

6.1 Ad hoc committee

Per the analysis contained in Section 4.0, the *ad hoc* committee struck by the Board identified three key themes:

- proposed changes in legislation moves Ontario away from a prevention focused, watershed-based approach to hazard management;
- changes in regulations will likely lessen the effectiveness of Section 28 permits by allowing more development within currently designated regulated areas; and
- the new funding model coupled with recent reductions in provincial transfers reduces the affordability of CA programs and services by eroding base funding and downloading costs onto individual municipalities.

The committee also reviewed draft analysis completed by Conservation Ontario that included specific recommendations and generally agreed with their proposed direction. Finalized comments submitted by Conservation Ontario on May 10, 2019 (Attachment 2) contained the following high level recommendations:

1. Schedule 2 of Bill 108 dealing with the Conservation Authorities Act (CAA) should be deferred from enactment to provide CAs with adequate opportunity to consult with municipalities.
2. The list of mandatory programs and services should include conserving natural resources.
3. The scope of standards and requirements to be prescribed in regulations should include watershed management, climate change adaptation, and other activities that support delivery of mandatory programs and services. Furthermore, that the detailed list should be developed in consultation with conservation authorities, municipalities, and other stakeholders.
4. The requirement for individual Municipal Council budget agreement should be removed for watershed-based programs referred to as “other programs and services” or “non-mandatory.” Furthermore, that updates to the regulation be developed in collaboration with conservation authorities and municipalities.
5. The Province should continue to invest in core mandatory programs and services to be delivered by conservation authorities and support CA eligibility for other provincial funding programs (including disaster mitigation and response programs, and new funding to be made available under proposed amendments to the *Species at Risk Act*.)
6. CAs should have the option of using self-generated revenues to support core programs such as conservation (owned) land management, in addition to municipal levies.

7. In relation to investigative powers proposed under Sections 23.1 and 14.1, it is suggested that triggers for an investigation be established and that a process be developed that allows for initial consideration and redress by the Board.

In order to demonstrate to the province our commitment to improving the quality and timeliness of permit review processes, Conservation Ontario has asked all conservation authorities to endorse a motion that directs staff to examine ways to streamline business processes. MVCA management fully supports this request and has prepared a motion for the Board's consideration.

It is recommended that a letter be drafted on the Board's behalf that outlines the concerns identified in this report and endorses the recommendations of Conservation Ontario, with the above referenced motion attached.

7.0 MUNICIPAL ENGAGEMENT

At the direction of the Board, a draft Council motion was prepared for endorsement by member municipalities that addressed the cut in base funding and requested existing provincial *Water and Erosion Control Infrastructure* funding for capital works be retained. To date there has not been significant uptake by member municipalities, and staff require direction on whether there is value in preparing a similar motion or letter on the proposed legislative and regulatory changes.

South Nation Conservation took the approach of providing letters to member municipalities that allow them to endorse the role of conservation authorities and the benefits municipalities have derived from working with them, without commenting on the proposed changes.

8.0 OTHER STAKEHOLDER ENGAGEMENT

The short review and response time provided by the government coupled with ongoing flood response requirements had provided limited time to engage with stakeholders in the watershed. It is suggested that the conservation authority's response to the province be shared with lake associations and similar organizations that may have a direct interest in what may be considered optional services under the new regulation.

ATTACHMENT 1: Press Release re: Internal Task Force



NEWS

Ministry of Natural Resources and Forestry

Ontario Putting People First by Reviewing Flood Mitigation
May 10, 2019 11:55 A.M.

TORONTO - Today Premier Doug Ford and John Yakabuski, Minister of Natural Resources and Forestry, issued the following statement on the flooding situation in Ontario:

"Over the past couple of weeks, we have seen first-hand the devastating effect of flooding on our communities. The people of Ontario can't go through this every year. Something needs to change.

Our government is committed to protecting what matters most - that includes protecting our homes, businesses, and infrastructure that keeps our economy moving.

Our government is demonstrating leadership by initiating an internal task force that will consult with our municipal partners and other stakeholders in impacted areas on ways to improve the province's resilience to flooding.

Our number one priority is the safety of the public and the protection of our communities. We want to assure the people of Ontario that our government is taking action to better plan for and reduce the impacts of flooding.

We have been in contact with municipal representatives in the Muskoka region and Pembroke, and will be reaching out to representatives in other areas of the Ottawa Valley as well, to discuss how we can move forward on this initiative in the most efficient and effective way possible.

We will continue to closely monitor weather and water conditions. We would like to thank all the staff and volunteers who have been working tirelessly to help those impacted by the flooding. Together, we will get through this and find a path forward."

Simon Jefferies Premier's Office
Simon.Jefferies@ontario.ca
Justine Lewkowicz Minister's Office
Justine.lewkowicz@ontario.ca
416-314-2106

ATTACHMENT 2: Conservation Ontario submission to the province



Key Recommendations for Modernization of Conservation Authority Operations and Schedule 2 of Bill 108

(ERO 013-5018)

Submitted May 10, 2019

The following are recommendations submitted by Conservation Ontario to Environmental Registry Posting 013-5018, Modernization of Conservation Authority Operations and to Schedule 2 Bill 108.

Recommendation #1: THAT Schedule 2 Conservation Authorities Act (CAA) of Bill 108 be deferred from enactment to provide CAs with an adequate opportunity to consult with their member municipalities

The ERO 45 day comment period and the introduction of amendments to the CAA as part of the Housing Supply Action Plan is not conducive to the conservation authorities' (CAs) abilities to explain or seek comment back from Boards of Directors or adequately communicate with member municipalities in a meaningful way. Especially not during operational pressures of the flood season and with the additional pressure of an in-year provincial funding cut of 50% to the flood management program. The conservation authorities are still trying to adapt to the loss of funding (and the ripple effects of other reductions such as the 50 million tree program) and how that will impact the member municipalities. Additionally, CAs have not had the opportunity to discuss the posting and proposed legislation as a collective (i.e. Conservation Ontario Council).

Recommendation #2: THAT the mandatory programs and services [proposed Section 21.1 (1)], to be prescribed in regulation, be supported and include the addition of: Conserving natural resources

Conservation authorities are concerned about defining and limiting a CA's core mandatory program to the items listed in the ERO and Bill 108 (i.e. natural hazards, conservation-owned lands, source water protection, Lake Simcoe watershed). While these are supported as core mandatory programs and services, they fail to recognize the critical role that CAs play as a watershed and natural resource management agencies. As outlined in the *Conservation Authorities Act (CAA)*, the objects of an authority are to "provide, in the area over which it has jurisdiction, programs and services designed to further the conservation, restoration, development and management of natural resources..." (Sec. 20(1)). Further, for the purposes of accomplishing its objects, an authority has the power to "study and investigate the watershed and to determine programs and services whereby the natural resources of the watershed may be conserved, restored, developed and managed" (Sec. 21(1)(a)). Watershed management has been the foundation for all CA programs and services since the inception of conservation authorities.

Residents of all watersheds rely on clean and sustainable drinking water, breathable air, green spaces and healthy rivers and streams for recreation, healthy soils, forests and wetlands that provide habitat for wildlife, as well as public health and many other benefits. Being in nature restores people and helps

them to stay active and healthy. The *Conservation Authorities Act* established in 1946 was predicated on responding to local issues on a watershed basis.

Including “conserving natural resources” as a mandatory program and eligible for municipal levy would recognize the important role that CAs play in protecting the function and resilience of natural resources at the watershed level. This would be consistent with the “Made-in-Ontario Environment Plan”, which states that conserving natural resources is part of a CA’s core mandate. CAs can assist the Province and local municipalities in addressing climate change and natural resource related issues at the watershed scale which is most cost efficient.

This role of CAs in undertaking programs on a watershed scale would be covered by mandatory programs and services under “conserving natural resources”. It would basically include the key elements of watershed management such as water quality and water quantity and vegetative cover monitoring and modelling on a watershed basis to support multiple objectives that are relevant to the watershed jurisdiction, including improvements to Great Lakes water quality, watershed resilience to climate change (e.g. flooding, biodiversity) and land use change (e.g. urbanization, agricultural intensification). In addition to education programs and community engagement, and land acquisition considerations, it would also include other watershed scale programs such as rural and urban stewardship with local landowners and agencies that improves and protects water quality and quantity and watershed biodiversity through restoration, rehabilitation and green infrastructure.

NOTE: In the absence of implementing the above mandatory program and service then it is imperative that the watershed management activities that advise or reinforce the ability to deliver on the mandatory programs (i.e. natural hazards, source water protection (including Great Lakes) and management of CA conservation areas/lands), be included in the prescribed regulations. These are further described in Recommendation #3 re: Standards and Requirements. In effect, as currently proposed, this would mean that watershed management programs and services related to biodiversity (e.g. management of fish and wildlife habitat, studies and advice on natural heritage, invasive species and endangered species management) and associated education programming would not be eligible for watershed-wide municipal levy support without the agreement of each individual municipality.

Recommendation #3: THAT the scope of standards and requirements to be prescribed in regulations capture all key elements of the mandatory program and service area, as well as, foundational watershed management and climate change adaptation activities required to support a CA’s ability to deliver on the mandatory program and service while respecting the fact that all eligible activities may not be relevant for every watershed

AND THAT these be developed in consultation with conservation authorities, municipalities, and other stakeholders.

Of critical importance will be the development of standards and requirements for each of the core mandatory program areas and what constitutes eligible activities within each of the mandated areas.

The core mandatory programs and services are supported and should include the following key elements:

1. **Natural hazards (management) - Natural Hazard Information and Management Actions; Flood Forecast and Warning; Ice Management; Section 28 Regulation under the *Conservation Authorities Act*; Plan Review and EA Review for Natural Hazards; Low Water Response; and, Flood and Erosion Control and Low Flow Augmentation Infrastructure**
2. **Conservation and management of conservation authority lands - Conservation Land Information and Management Plans; Section 29 Regulation under the *Conservation Authorities Act*; and, Recreation Water Control Infrastructure**
3. **Drinking water source protection - Administering Source Protection Committees (SPCs); Assisting the SPC in the latter's powers and duties to be carried out under the *Clean Water Act*; Assisting partner SP Authorities in the source protection region (SPR); Updating Source Protection Plans; Delivering annual progress reports; and, Policy implementation and integration**
4. **Protection of the Lake Simcoe watershed - that which is identified by the Lake Simcoe Region Conservation Authority.**

The standards and requirements need to be framed to allow the specifics of each CA's jurisdiction to dictate the relevance/applicability of each. For example, each CA has different natural hazards with different levels of risk based upon the specific geography of their jurisdiction and, as a further example, some CAs do not have flood and erosion control infrastructure (e.g. dams) to maintain or operate.

If "conserving natural resources" (see Recommendation 2) is not identified as a core program area to reflect the strong watershed management perspective of CAs, then foundational watershed management activities should be identified in the implementation regulations as key components required to carry out the proposed core program areas. As well, the activities described in regulation for each of these core mandatory programs and services should enable our ability to support climate change adaptation as per Ontario's Environment Plan. It is critical that the Ministry consult with conservation authorities, municipalities, and other stakeholders on the development of the regulations outlining the requirements for all mandatory program areas (listed above).

The following paragraphs summarize the relevance of the foundational watershed management activities to the proposed mandatory programs and services:

Watershed management provides the necessary understanding and knowledge of watershed natural resources to effectively make informed decisions and carry out natural hazard protection and management, conservation and management of conservation authority lands and source water protection. Watershed management involves examining the environment and human activities within a watershed area and assesses the relationships between these activities to determine how the natural hazards, conservation areas and water resources of the watershed should be managed to ensure the health and safety of people and the protection of property, that conservation lands retain and enhance their ecological integrity and source water is protected.

Natural Hazards - By applying a holistic approach to watershed management, a range of factors are taken into consideration such as water quality/quantity, significant water features, precipitation, climate water balance, water budgets and the hydraulic cycle. This work provides the foundation upon which natural hazards (e.g. flood and erosion) can be evaluated. Watershed management provides the necessary understanding of the overall system and subsequently guides management actions needed to reduce the risks of natural hazards.

Conservation and management of conservation authority lands - Conservation authority lands often include a watershed's most ecologically sensitive and robust areas. These areas support flood resiliency, filter air and water contaminants, and protect drinking water resources. Watershed management provides the necessary understanding of the overall health of the watershed and subsequently guides conservation and management actions needed to ensure the health of conservation areas.

Source Water Protection - The scientific work, modelling and data collection that is conducted through watershed management supports the science of source water protection. The water budgets, continued monitoring of water quality and water quantity as well as the modelling of surface water, groundwater and climate factors all provide the data and detail necessary to identify threats, risks and opportunities with respect to our drinking water resources. This information, consolidated with land use information, climate modelling and watershed stressors can identify potential future risks and threats to our drinking water resources and guides management actions needed to reduce the risks.

Recommendation 4: THAT the government remove the requirements for individual Municipal Council budget agreement for watershed-based programs called "other programs and services"/ non-mandatory

AND THAT updates to the municipal levy regulation and training be developed in collaboration with conservation authorities and municipalities

The ERO posting and Bill 108 propose to fundamentally change the CA/municipal funding relationship. As a general comment, it is agreed that CAs should be transparent in how they levy municipalities for both mandatory and non-mandatory programs and services. It is further agreed that CA budgets should be presented to their municipalities on an annual basis and distinguish levy funded programs from those that are not. Modern transparency standards for levy review and service agreements/memorandum of understandings for programs and services that the CA is undertaking on behalf of an individual municipality are supported.

The creation of conservation authorities recognized that water does not stop flowing at political boundaries and that there are economies of scale through cost sharing. Members of the Board of Directors are appointed by all involved municipalities, and this watershed management governance provides an essential multi-municipality perspective on which program investments will most benefit a watershed and should be supported by a municipal levy. The provincial proposal limits use of municipal levy to "mandatory programs and services" (standards and requirements to be prescribed in regulation) related to Natural Hazards, Conservation-owned Lands, Drinking Water Protection, and to Lake Simcoe

watershed protection. "Other programs and services"/non-mandatory identified by a CA Board for their watershed would need individual Municipal Council agreement on budget for them (21.1.2(2)) and accounting with each municipality that participates in order for a municipal levy to be applied. The proposal will consume resources and may unintentionally lead to financial inefficiencies and poor management of watershed resources. In effect it undermines the mandate, premise and value of the multi-municipality/watershed governance of conservation authorities.

The provision of a transition period and the ability to request an extension that has been provided in the proposed legislation is appreciated; however, this new administrative instrument appears cumbersome at best and prone to definitional challenges. It transfers components of budget decision making to municipal councils rather than with the Board of Directors. Instead we encourage a review of current training for CA Boards and municipalities with an emphasis on member roles, powers and responsibilities, as a reminder that program and budget control is already fully within their power. The existing governance structure was designed for this level of control; it seems more efficient to maximize the effectiveness of the existing governance structure through training than to create a new administrative tool that will greatly complicate the process, as well as create an additional administrative burden. It is unclear why a government that wants to reduce red tape and improve efficiencies is creating such a complicated and time consuming process for watershed management programs and services CA Boards deem necessary to provide.

NOTE: If Recommendation 2 is adopted then the administrative burden is reduced and this section could be retained to capture the rare circumstances when municipal levy is proposed to be used for "other programs and services".

Recommendation 5: THAT the Province continue to invest in the core mandatory programs and services to be delivered by conservation authorities and support CA eligibility for other provincial funding programs

There are currently provincial transfer payments to all CAs for natural hazards (Ministry of Natural Resources and Forestry) and source water protection (Ministry of Environment, Conservation and Parks). The Province's 'Made-in-Ontario Environment Plan' recognizes how issues such as climate change can impact and threaten Ontario's economic prosperity and the well-being of its people; and states that addressing these challenges is a shared responsibility. However, the 2019 Ontario budget cut 50% of the natural hazards program funding to conservation authorities. This seems to be a contradiction to the Environment Plan commitments and is a concerning signal that the Province is on a path to reducing the remainder of its natural hazards financial support responsibilities to municipalities who, themselves, have also seen a reduction in their own provincial transfer payments as well as cuts to public health and other shared cross sector programs. This is unfair and the province is encouraged to continue its investment in these core mandatory programs and services.

Additionally, individual CAs are important on-the-ground delivery agents for numerous provincial programs through special contracts for example and it should be ensured that the eligibility of CAs for

these other provincial funding opportunities is not negatively affected and in fact, is improved. This would include provincial funding programs such as the Trillium Fund and the Canada-Ontario Agreement for Great Lakes Water Quality.

Recommendation 6: THAT core mandatory programs may be applied to municipal levy or could utilize other sources of revenue.

Given the instability of provincial transfer payments and additional pressures on municipal budgets from provincial cuts, the CA/municipal budget relationship should retain the CA Board's ability to charge and use fee revenues. It is our request that these core mandatory programs may be applied to municipal levy or could utilize other sources of revenue. For example, CAs want the option of using self-generated revenue to support conservation (owned) land management, in addition to, or rather than, municipal levy.

Other Proposals – Appointment of an Investigator (proposed Section 23.1 (4 – 8)); Duty of Members (proposed Section 14.1)

These proposals are supported. With regard to investigations, it is assumed that given the costs of an investigation are to be borne by the Authority that some measures would be established to determine the reasons why an investigation may be initiated and whether or not concerns can be first addressed through a Board process.

Any questions regarding this submission can be directed to Bonnie Fox (Manager of Policy and Planning) at bfox@conservationontario.ca or 905-895-0716 ext 223.