

MISSISSIPPI VALLEY CONSERVATION AUTHORITY
BOARD OF DIRECTORS

Mississippi Valley Conservation Centre
Carleton Place

MINUTES

May 15, 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;
A. Hewitt, GIS Specialist;
G. Mountenay, Water Management Supervisor;
J. Price, Director, Water Resource Engineering;
A. Playfair, Recording Secretary.

VISITORS PRESENT:

D. Bradley, Merchant Estates;
S. Dolan, Resident – Ottawa;
M. Kubasiewicz, Resident-Ottawa;
P. Bradley, Homeowner;
E. Veoriculet, Homeowner;
M. Kieuz, Laudel Drive Homeowner;
M. Duford; Laudel Drive Homeowner;
J. Bocherts, ON. Landowner.

J. Mason called the meeting to order at 12:35 p.m.

E. El-Chantiry declared a conflict of interest for Agenda Item number 5: 2019 Flood Event. He acknowledges that he shall not take part in the discussion or vote on any question in respect of this matter and shall not attempt in any way influence the voting during the meeting.

B05/15/19-1

MOVED BY: F. Campbell

SECONDED BY: P. Kehoe

Resolved, That the agenda for the May 15, 2019 meeting of the Mississippi Valley Conservation Authority Board of Directors be adopted as presented.

“CARRIED”

BUSINESS:

1. Minutes – Board of Directors Meeting – April 17, 2019

B05/15/19-2

MOVED BY: T. Fritz

SECONDED BY: C. Lowry

Resolved, That the Minutes of the Mississippi Valley Conservation Authority Board of Directors meeting held on April 17, 2019 be received and approved as printed.

“CARRIED”

2. Minutes – Source Protection Authority Meeting – April 17, 2019

B05/15/19-3

MOVED BY: J. Karau

SECONDED BY: K. Thompson

Resolved, That the Minutes of the Mississippi Valley Source Protection Authority Board of Directors meeting held on April 17, 2019 be received and approved as printed.

“CARRIED”

3. Harwood Creek Flood Plain Mapping

J. Mason informed the members that a resident of Harwood Creek had requested to speak on the subject of the Harwood Creek Flood Plain Mapping study and would be given 10 minutes to present following J. Price.

J. Price reviewed and presented staff report #3009/19 Harwood Creek Flood Plain Mapping Study. He mentioned copies of the flood plain maps were printed and displayed on the tables and scrolling on the screen in the back of the room for members and the public to view after the meeting.

Mr. Price noted the major components of the study and findings. He concluded that the analysis, documented in *Harwood Creek Flood Plain Study* report, met 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 are suitable for use in MVCA's Regulation mapping as well as for municipal land use planning purposes.

Mr. Don Bradley, landowner of Landel Drive presented concerns of the proposed Harwood Creek Flood Plain Mapping Study specifically, he contested the approach methodology and findings of MVCA stating that the creek had never in his experience reached the level predicted by the MVCA model and was unlikely to ever do so.

A discussion was held regarding modeling results and study findings.

S. McIntyre confirmed that the approach and methodology used reflected industry practice, had been reviewed by third party experts, and confirmed to be appropriate. Furthermore, that the recent spring freshet as experienced on Hardwood Creek did not represent a 1:100 year event.

The Board questioned the potential impact on water levels should the restrictions at the berm or March Road be reduced. J. Price advised that removing one or both restrictions would likely lessen the impact. S. McIntyre stated that the berm was owned by the residents and the road right of way by the City of Ottawa.

The Board determined that it would defer adopting the study and associated regulation limits until the modeling of twinning the culverts was carried out and the potential impacts on the floodplain of Landel Drive understood. J. Price stated that until such physical works were carried out, the limits set by this study would apply. Specifically, following adoption of the report, the floodplain maps and Regulation Limit would be used in the implementation of Ontario Regulation 153/06 and forwarded to the City of Ottawa for inclusion in its Zoning By-law.

B05/15/19-4

MOVED BY:

J. Inglis

SECONDED BY:

E. El-Chantiry

That consideration of the motion (to adopt the Harwood Creek Flood Plain Mapping Study and the associated GIS-based flood hazard limit lines and flood plain maps) be deferred until consideration has been given to the impact of twinning the culverts at March Road.

“CARRIED”

4. 2019 Flood Event, Preliminary Report and Recovery Plan

G. Mountenay discussed Staff Report #3010/19 attached. He summarized the flood events of the Mississippi River Watershed September 2018 to May 2019.

In response to a question, G. Mountenay noted that most but not all lakes have reached summer target levels and the system will be operated when needed.

S. McIntyre informed the members of the Recovery and Rebuild Plan for permits that addresses MVCA structures, time and budget impacts, aerial photography, staffing for permit review and permit fees, as contained in Staff Report #3010/19.

In response to a question, S. McIntyre noted the authority had funds in the operating reserve that could cover the cost for the aerial photography of the Ottawa River and temporary staff to address additional permit applications up to \$50,000, if that was the recommendation from the Board.

The Board discussed the potential 50% fee reduction outlined in Staff Report #3010/19 and agreed to add a motion to this effect. J. Hall recommended against the use of the reserves to offset the reduction in fees as they are difficult to replenish. He recommended that the MVCA run a deficit in 2019 and recover lost revenues in 2020 via a special levy, if needed.

It was suggested that the MVCA write a letter to the municipalities stating the emergency event in 2019 and ask for funding to replenish the loss.

B05/15/19-5

MOVED BY: J. Karau
SECONDED BY: R. Darling

Resolved, 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, to be taken from operating reserves.
3. That staff provide a 50% reduction in fees for the 2019 flood event to applicants for shoreline and rebuild permits until October 31, 2020.
4. That the General Manager inform municipalities of the impact of the flood event on MVCA's budget and reserves.

“CARRIED”

5. Strategic Plan for Community Museum Operating Grant, Dr. R. Tait McKenzie & Dr. James Naismith Museums

S. Gutoskie reviewed staff report #3011/19 Strategic Plan for Community Museum Operation Grant, Dr. R. Tait McKenzie and Dr. James Naismith Museums. She advised the report was provided to 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.

The next steps are for staff to consult with stakeholders and amend the Strategy and present the final version to the board at the July meeting for approval. Once approved the finalize Strategic Plan will be submitted CMOG by July 31, 2019.

B05/15/19-6

MOVED BY: B. Holmes
SECONDED BY: K. Thompson

Resolved, 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.

“CARRIED”

6. Changes to CA Act and Section 28 Regulations

S. McIntyre presented Staff report #3012/19, Bill 108 Proposed Changes to Conservation Authorities Act and Regulations. S. McIntyre noted the purpose of the report was 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.

S. McIntyre advised the members that a Task Force had been formed to address the risk of flooding and a meeting had been scheduled for Friday May 24th, 2019. Conservations Authorities were not informed of the task force, of the meeting or agenda, and had not been invited at this time. The Authority is waiting to hear if it is invited to attend.

R. Darling mentioned that Tay Valley Township passed 3 motions at its last meeting to support the Conservation Authority, however it was not a unanimous vote and other municipalities could be the same.

B05/15/19-7

MOVED BY: R. Darling

SECONDED BY: J. Inglis

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.**
- “CARRIED”**

7. Update: Management of the Ottawa River Basin

The presentation for Management of the Ottawa River Basin was deferred to a future meeting.

8. Other Business

ADJOURNMENT

The meeting was adjourned at 3:37 p.m.

B05/15/19-8

MOVED BY: J. Atkinson

SECONDED BY: F. Campbell

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

“CARRIED”

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 turnaround 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.

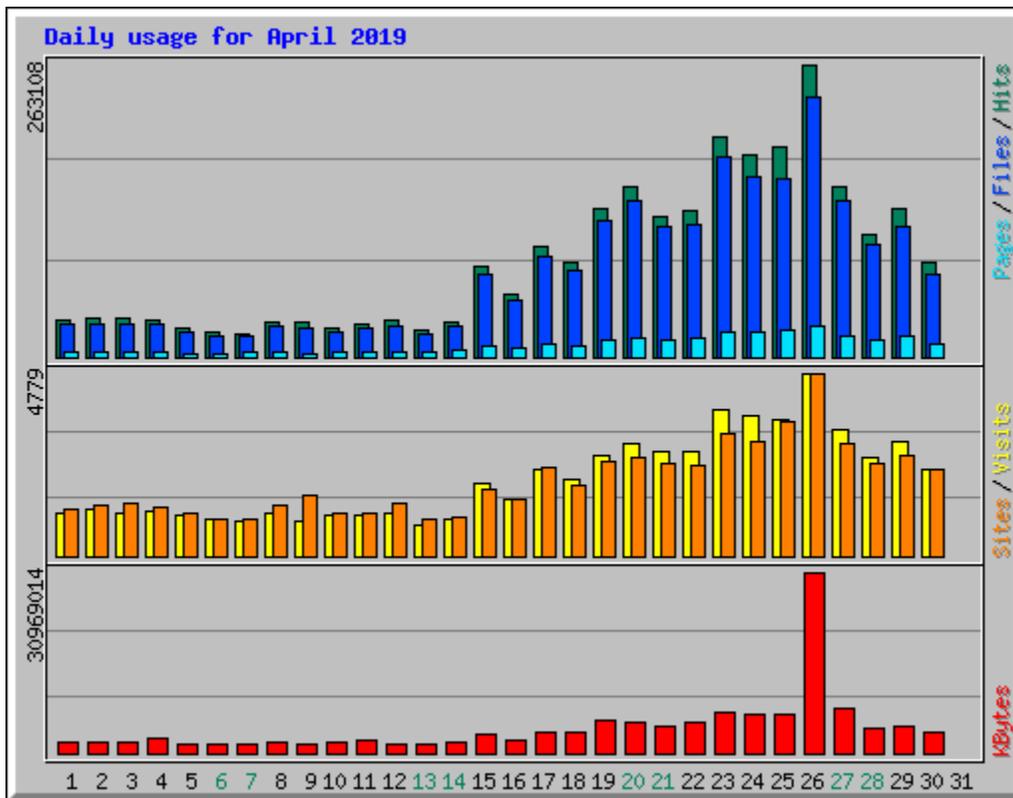
Facebook and Twitter Metrics

- 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