



ANNUAL REPORT

2019

February 2020



Chair's Report

JANET MASON

Flood of Change

2019 was an extraordinary year of change and transition for MVCA. I served on the board for four years between 2015 and 2018. There were some challenges - the extension of wetland regulation to meet our mandate being the greatest - but I have to say that the organization otherwise operated as it had done for many years. Not so for 2019. We had what I call a Flood of Change.

1. We had the retirement of four long term staff members.
 - General Manager and Secretary-Treasurer retired in the first quarter of 2019.
 - Our Water Management Manager and Our Director of Water Resources Engineering retired at the end of the year.
 - Collectively well over 130 years of experience and knowledge left the building.
3. We had a brand-new general manager start in February.
4. We had a brand-new Chair - me - also start a year ago at the AGM in February.
5. We had a brand-new Treasurer start at the end of March.
6. Then in April/May we had the flood of 2019 - which staff and local people compared to the legendary flood of 1998 in terms of its breadth and impact on the Mississippi watershed and on our area of responsibility along the Ottawa River at Constance Bay. Staff responded with their usual professionalism and worked long hours to coordinate with municipalities and communicate with residents. Since then permit applications have doubled over normal volume.
7. We had Bill 108 - More Homes, More Choice Act - that caused a great of time to be spent on reviewing, understanding, and commenting on it - - at least by Sally and me. We are still awaiting the regulations that will determine MVCA's mandate.
8. Due to Bill 108, we had uncertainty and apprehension in the community about the future of the cherished museums at the Mill of Kintail. Looking for solutions has taken a large amount of time of some board members, Sally, and staff. Thank you to Christa, Jeff, and Bev for your leadership.
9. As an indicator of change to come...

We completed the four Backgrounder documents that will form the foundation for the Mississippi River Watershed Management Plan, to be developed in 2020. The Plan will guide our actions in the watershed over decades. The Backgrounder effort was a huge amount of work by staff, particularly Alyson Symon, in a short period of time. Thanks also go to John Karau as the Board lead for this initiative.

I think you will be impressed with the quality and depth of content. You will learn new things about our watershed - in particular how connected we are. Actions taken in one place - even remote areas - can greatly affect water quality and quantity nearby or downstream or in ground water.

We are all neighbours, from the Addington Highlands to the Ottawa River. I encourage you to take the time to thoughtfully read all four backgrounder documents and think about how what's in them will affect decisions your municipalities take in the future.

I think that MVCA has weathered this flood of change very well. And keep in mind that change is not necessarily good or bad, but it is necessary. It's necessary because we need to evolve and improve as an organization. If we're not responding to changes in our environment - climate, population, politics, culture, technology - then we become ineffective and possibly irrelevant.

I am very proud of staff for rising to the challenges that the organization faced in 2019. I know this has taken a toll in terms of work load and stress. There are plans being developed to address this and I appreciate your patience.

In closing I would like to thank the Board, Sally, Angela, and especially all of the dedicated staff for your hard work and for caring about our river, our watershed, our well-being, and our future.

General Manager's Report SALLY MCINTYRE

Highlights from 2019

Baptism by fireflood

The flood of 2019 peaked at Constance Bay on the Ottawa River at 60.77 m on May 1, 2019, and at the outlet of Dalhousie Lake on the Mississippi River at 158.13 m on April 28, 2019, almost 8 weeks to the day that I started with MVCA. During the spring freshet and the weeks that followed I witnessed the skill, knowledge, helpfulness and dedication of MVCA's team of employees.

Kudos is owed to our operations group who with Gord Mountenay, Water Management Supervisor ensured that the system was readied and adjusted to best handle the deluge of flows. As well, thanks are due to Shannon Gutoskie who produced a series of videos and notices to help warn people of the coming flood and how to mitigate risks, and explain how MVCA would be managing the system. And, lastly to the outstanding effort of our planning and regulations team led by Matt Craig and our administrative staff who worked with impacted landowners to assess options and process a record number of permit applications to address flood impacted shorelines and structures.

Table 1 and Figure 1 show the significance of the 2019 freshet and how it compared to previous events on the Mississippi River.

Table 1: 2019 vs. Historic Peaks

Lake	2019 Peak	Date	Previous Peak	Date
Shabomeka	271.28 m	April 22, 2019	271.44 m	June 18, 2002
Mazinaw	268.59 m	April 22, 2019	268.37 m	June 19, 2002
Kashwakamak	261.50 m	April 26, 2019	261.40 m	June 19, 2002
Mississagagon	268.50 m	May 2, 2019	268.42 m	June 18, 2002
Big Gull	253.70 m	April 27, 2019	253.73 m	May 9, 2017
Crotch	240.40 m	April 26, 2019	240.50 m	June 21, 2002
Palmerston	272.08 m	April 22, 2019	272.19 m	May 9, 2017
Dalhousie	158.13 m	April 28, 2019	157.86 m	April 2, 1998
Mississippi	135.67 m	April 25, 2019	135.73 m	April 5, 1998

Figure 1: Myers Cave Gauge 2019 and Historic Peaks

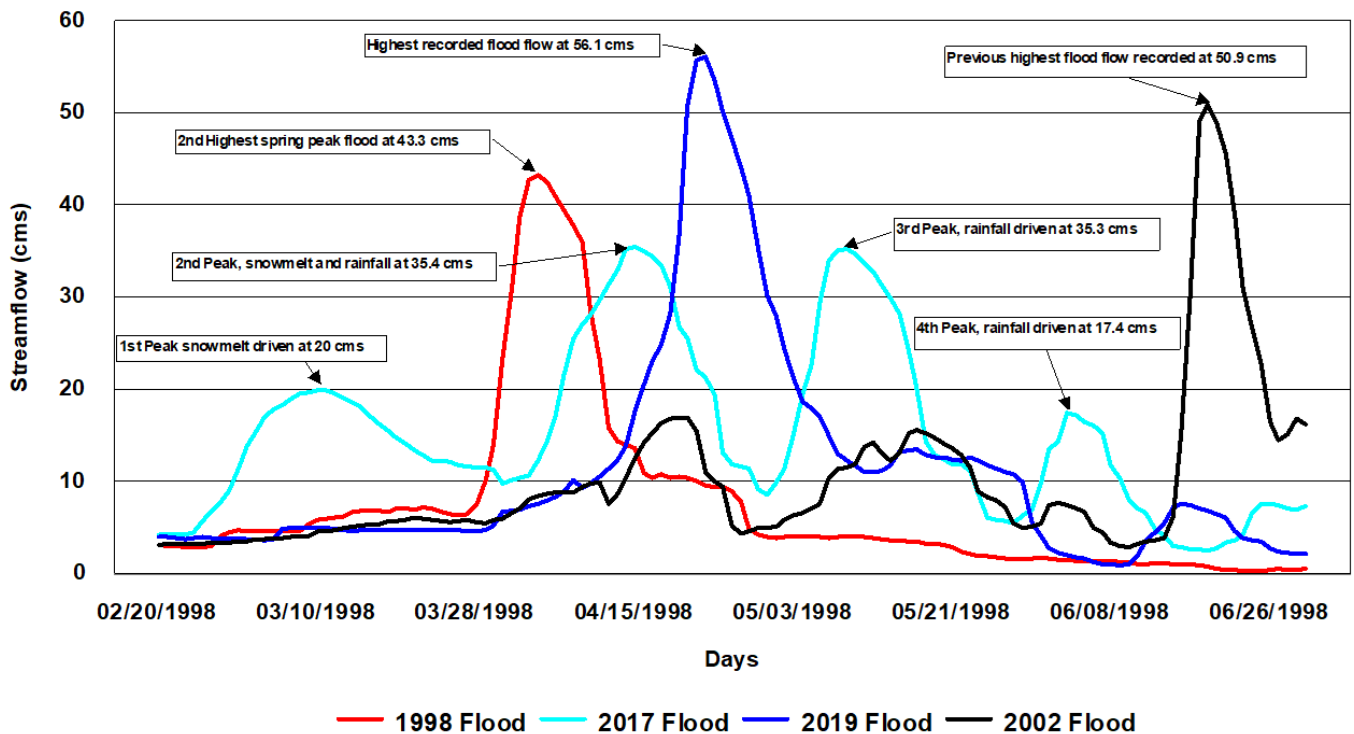


Figure 2 illustrates the impact that significant rainfall had on water flows in the upper watershed, and the associated single large peak of the 2019 freshet.

The following are key activities carried out to prepare for, mitigate, and support recovery from the 2019 flood:

- Issued 18 watershed condition / flood advisories between March 1 and May 31
- Issued 9 informational videos over same period
- Inspected dams and flood zones for flood damage
- Repaired overflow at Mazinaw Lake Dam
- Hosted three post-flood information sessions for affected landowners/communities
- Attended event post-mortem hosted by County of Lanark
- Prepared report on Spring 2019 Flood
- Record number of reconstruction and other permit applications (>290)

Flooding and management of the Mississippi River

The Mississippi River has a long history of flooding dating back to the 1870s. More often than not, today's flood damages are results of man's settling on the river's natural flood plain.

If, during (the spring), a heavy rainfall should occur, the resulting flows would pass through already filled reservoirs unchecked and cause flooding.

(MNR Vol. 1 Report, 1970)

Due to the extent and impact of the flooding throughout Ontario in 2019, the province appointed a special advisor to investigate the causes and make recommendations to mitigate future such events. His report tabled later that year found that:

Based on an analysis of the information available for all of the systems that experienced flooding in 2019, nothing points to human error or the negligent operation of water control structures as the cause of the flooding.

The sheer amount of water (snow and rainfall) on the landscape directly contributed to the flooding. Measures taken by water managers everywhere were effective in reducing the magnitude of flooding and associated damages throughout the drainage basins.

(Special Advisor on Flooding, 2019 report)



Fitzroy Harbor
Ottawa River



Constance Bay
Ottawa River



Dalhousie Lake
Mississippi River



McCann Road
Mississippi Lake

Other risk management activities carried out in 2019 included the following:

- Daily planning and operation of 11 MVCA, 5 MNRF and 2 OPG facilities, with 280 log operations in 2019 compared to 197 in 2018
- Surveyed > 300 cross-sections of the Mississippi River, Harwood Creek, and Casey Creek
- Carried out hydrologic and hydraulic modelling and delineation of flood plains and regulated areas on Mississippi R. from Carleton Place to its outlet on the Ottawa River; Harwood Creek, and Casey Creek
- Reviewed and commented on >186 *Planning Act* applications
- Carried out 160 permit inspections and issued 19 Non-compliance Notices
- Won legal case against major landowner for filling a regulated wetland
- Filed Shabomeka Dam Reconstruction EA and Addendum
- Implemented hand-held data acquisition system for field operations
- Installed seven auto-gauges across the watershed

Conservation Areas & Programming

As noted by the Chair, legislative changes approved this year may have longer-lasting impacts than the flood due to changes in the funding model for a selection of Authority programs and services. In the fall, MVCA prepared a *Strategic Plan for the Mill of Kintail Museum* to ensure continued eligibility for key grants while also striking an advisory committee to work with staff and the Board to identify funding opportunities and options moving forward.

The Raptor's NBA win brought special attention to our Naismith collection resulting in a record number of museum attendees (~8,700 museum visitors, and 38,000 total visits to the Mill of Kintail.) Other important work carried out at our conservation areas in 2019 included:

- Rebuilt retaining wall protecting Mill structure
- Rebuilt 10 m section of Morris Island Bridge Decking
- Constructed 600 m trail and 50 m boardwalk in Roy Brown Park
- Delivered curriculum-based outdoor education programs to nearly 7000 students across six boards of education in more than 60 schools.
- Hosted 146 events (rentals)



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Source Water Protection

2019 was the 5th year implementing the *Mississippi Rideau Source Protection Plan*. Work included:

- 2 Risk Management Plans for significant threats negotiated with landowners in Almonte WHPZ (11 total in MRSWPA)
- New municipal drinking water system added for Municipality of North Grenville
- Reviewed and updated Dense Non-Aqueous Phase Liquids (DNAPL) policy

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- Began update of the Technical Assessment Reports and the Source Protection Plan
 - Consulted with the province on proposed amendments to the Director's Technical Rules
 - Extended Part IV Agreements (Source Protection Officer) with Municipality of Mississippi Mills and Town of Carleton Place (and 10 others in MRSWPA)

System Monitoring

Monitoring programs allow MVCA to provide users to learn about and participate in monitoring the health of their lake. In 2019, our monitoring program focused on the following areas:

- Main River Lakes: Mazinaw, Crotch, Dalhousie and Mississippi Lakes
- Clyde River Subwatershed Lakes: Palmerston, Canonto, Sunday, Clyde, Flower Round, Widow, Joe's, Robertson and Kerr Lakes
- Electro-fishing on the following creeks:
 - City of Ottawa sites: Poole Creek, Feedmill Creek, Shirley's Brook, Carp River
 - Clyde Subwatershed: Easton's Creek, Graham Creek, Sunday Creek
 - Other: Bolton Creek, Limekiln Creek, Indian River, Long Sault Creek, Paul's Creek

We also completed Year-2 of Mississippi Lake Algae Monitoring Project, and initiated special study of impact of Low Impact Developments in the Carp River watershed with Ottawa University.

Stewardship

Despite the impact of flooding in the Ottawa and Mississippi watersheds, staff still managed to deliver a variety of stewardship programs in 2019, including the following:

- Planted approximately 800 plants over 40 rural properties.
- Planted 70 trees and shrubs with students from St. Gregory Catholic School and Notre Dame Catholic High School at Centennial Park.
- Planted 30 trees and shrubs along a tributary at Pakenham Beach with students from Pakenham Public School.
- Planted 150 trees and shrubs along the Poole Creek outlet by approximately 25 volunteers.
- As part of the Upper Poole Creek Restoration Plan, planted 90 trees and shrubs, removed 7 blockages removed, installed a fish lunger, hosted 2 garbage clean up and invasive species removal events with 13 volunteers.
- Participated at three local events (~100 visitors) with EnviroCentre to promote stormwater awareness.
- Developed and delivered an education brochure to 90 property owners along the creek and incentive to order plants to be picked up in the spring.
- Provided Rural Clean Water Program support for 20 projects (forest management plans, erosion control, well decommissioning, and manure storage).

Financial Statements CROSS STREET, FEBRUARY 2020

Statement of Financial Position as at December 31,	2019	2018
ASSETS		
Current		
Cash	\$ 973,835	1,081,397
Term deposits (note 3)	1,096,421	1,071,454
Accounts receivable, trade and other (note 4)	401,631	200,052
Prepaid expenses and other assets	3,048	-
	<u>2,474,935</u>	<u>2,352,903</u>
Term deposits (note 3)	501,447	-
Capital assets (note 5)	<u>6,720,642</u>	<u>6,985,150</u>
	<u>7,222,089</u>	<u>6,985,150</u>
	<u>\$ 9,697,024</u>	<u>9,338,053</u>
LIABILITIES AND NET ASSETS		
Current liabilities		
Accounts payable and accrued liabilities	\$ 191,988	155,167
Current portion of long-term debt (note 7)	139,960	135,320
Deferred revenue (note 6)	<u>365,509</u>	<u>120,505</u>
	<u>697,457</u>	<u>410,992</u>
Long-term		
Long-term debt (note 7)	3,925,464	4,065,424
Deferred contributions for capital assets (note 8)	2,493,214	2,182,491
Retirement benefit liability (note 9)	<u>150,916</u>	<u>149,121</u>
	<u>6,569,594</u>	<u>6,397,036</u>
	<u>7,267,051</u>	<u>6,808,028</u>
Net assets		
Invested in capital assets	162,003	601,914
Reserves (note 10)	1,349,001	1,208,700
Unrestricted	<u>918,969</u>	<u>719,411</u>
	<u>2,429,973</u>	<u>2,530,025</u>
	<u>\$ 9,697,024</u>	<u>9,338,053</u>
Statement of Operations for the year ended December 31,	2019	2018
Revenue		
Municipal levy - general	\$ 3,027,850	2,798,554
Municipal levy - special	55,961	-
Deferred for capital contributions	<u>(527,005)</u>	<u>(277,005)</u>
	<u>2,556,806</u>	<u>2,521,549</u>
Other revenue (Schedule 1)	879,574	657,096
Government grant - Ministry of Natural Resources	128,438	248,792
Government grant - other provincial	13,445	13,445
Conservation area - fees, sales and rental	80,180	68,339
Supplementary programs	22,224	50,900
Donations	<u>8,582</u>	<u>1,325</u>
	<u>3,689,249</u>	<u>3,561,446</u>
Expenses		
Corporate services (Schedule 2)	705,061	568,534
Watershed management (Schedule 2)	1,515,467	1,410,001
Flood and erosion control (Schedule 2)	672,624	688,228
Conservation services (Schedule 2)	644,767	630,858
Supplementary programs (Schedule 2)	<u>22,224</u>	<u>50,900</u>
	<u>3,560,143</u>	<u>3,348,521</u>
Excess of revenue over expenses before capital items	<u>129,106</u>	<u>212,925</u>
Capital items		
Amortization of capital assets	(303,755)	(304,305)
Amortization of deferred contributions	216,282	210,362
Gain on disposal of assets	-	7,000
Interest on loan	<u>(141,685)</u>	<u>(146,171)</u>
	<u>(229,158)</u>	<u>(233,114)</u>
Deficiency of revenue over expenses	<u>\$ (100,052)</u>	<u>(20,189)</u>



April 2019, clockwise from top left: Mississippi River at Ferguson Falls, wash out of by-pass at Mazinaw Dam, Watts Creek outlet, Clyde River at Lanark Village

Your partner in risk management, resource conservation, and stewardship.



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