

MISSISSIPPI VALLEY CONSERVATION AUTHORITY
BOARD OF DIRECTORS MEETING

MVCA Boardroom

July 17, 2019

1:00 p.m.

AGENDA

ROLL CALL

Adoption of Agenda

Declaration of Interest (written)

Minutes

1. Minutes – Board of Directors Meeting – May 15, 2019
2. Minutes – Policy and Priorities Advisory Committee Meeting – May 15, 2019

Invited Guest Presentations

3. Board Fiduciary Duties (Presentation by Helmut R. Brodmann, Bell Baker LLP)
4. Board Financial Responsibilities (Presentation by Glenn Street, CPA, Cross Street)

Business Arising

5. Hardwood Creek Floodplain (Staff Report # 3015/19)
6. Quarterly Update on Motions (Attached)

Information Items

7. Conservation Ontario Report (Staff Report # 3016/19)
8. Q2 Budget Control Report (Staff Report # 3017/19)

Decision Items

9. Shabomeka Lake Dam (Staff Report #3018/19)
10. Shoreline and Watercourses Policies (Staff Report # 3019/19)

Information Items

11. Mississippi River Watershed Plan, Work Plan (Staff Report # 3020/19)
12. Results of Spring Inspection Post April Flood; and Watershed Conditions Report (Staff Report # 3021/19)

Other Business

13. MVCA Update
14. Draft meeting and agenda Sept/Oct

ADJOURNMENT

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”

MISSISSIPPI VALLEY CONSERVATION AUTHORITY
POLICY AND PRIORITIES ADVISORY COMMITTEE

MVCA Boardroom

MINUTES

May 15, 2019

MEMBERS PRESENT:

J. Atkinson, Chair;
K. Thompson, Vice-Chair;
F. Campbell;
R. Darling;
T. Fritz;
G. Gower;
J. Hall;
B. Holmes;
J. Inglis;
J. Karau;
J. Mason.

STAFF PRESENT:

S. McIntyre, General Manager;
M. Craig, Manager, Planning and Regulations;
S. Gutoskie, Community Relations Coordinator;
S. Kolsters, Site Supervisor, Mill of Kintail;
A. Millar, Treasurer;
E. Levi, Recording Secretary.

OTHERS PRESENT:

K. Giles, Consultant;
W. Morrison, MOK Museum Advisory Board Member.

J. Atkinson called the meeting to order at 3:50 p.m.

BUSINESS:

J. Atkinson suggested that Item 5 be switched with Item 4 to give the visitors present for that matter the option to leave.

1. **PPAC05/15/19-1**

MOVED BY: K. Thompson

SECONDED BY: F. Campbell

Resolved, That the Agenda for the Policy and Priorities Advisory Committee meeting be adopted as amended.

“CARRIED”

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

PPAC05/15/19- 2

MOVED BY: J. Karau

SECONDED BY: J. Hall

Resolved, That the minutes of the Policy & Priorities Advisory Committee meeting held April 5, 2019 be received and approved as printed.

“CARRIED”

3. Proposed Revisions of MVCA Development Interference with Wetlands and Alterations to Shorelines and Watercourses Policies – Alterations to Shorelines

M. Craig gave a presentation regarding Staff Report 3013/19 attached.

J. Hall commented that the report states no policies are being changed, however then the recommendation notes revisions. S. McIntyre explained that it was solely to clarify the policy, not to change the intent. M. Craig further clarified that the amendments reflect the practices already in place.

PPAC05/15/19-3

MOVED BY: F. Campbell

SECONDED BY: R. Darling

Resolved, That the Policies and Priorities Committee approve for circulation and comment draft revisions to MVCA's Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Policies that deal with Alterations of Shorelines (Section 10.2 and Appendix H.)

“CARRIED”

4. Mill of Kintail Museum – Draft Strategic Plan

S. McIntyre gave a presentation regarding the Mill of Kintail Draft Strategic Plan. She noted it will be circulated to member municipalities and the County of Lanark.

J. Atkinson commented that it was a draft plan and the intent is to fill any potential gaps with public feedback.

J. Karau noted he was pleased with the draft as it captures the essence of what the site is about.

5. Mississippi River Watershed Plan – Work Plan Update

A. Symon reviewed Staff Report 3014/19 which provided a status update on the project and outlined a proposed plan for next two years (see attached handouts).

S. McIntyre noted that there are currently no public advisory committees to the Authority. This Plan provides an opportunity to establish a committee that could continue after completion of the Watershed Plan.

J. Karau raised questions regarding roles and responsibilities of the Public Advisory Committee (PAC) and the Technical Advisory versus the CA and questioned having a power generator as co-chair and one co-chair unspecified.

S. McIntyre responded by clarifying each party's role and how they each fit into the watershed plan. She noted the possibility of changing the role of the chair if desired, and

endorsed having a Board member as co-chair.

J. Atkinson solicited interest from members and J. Karau volunteered to be co-chair.

J. Mason questioned how the changes in legislation affect this plan.

S. McIntyre advised that there will be no change this year, but 2020 may change depending on what transpires.

J. Mason asked whether there was an integrated watershed plan in place in another CA that could be reviewed and used as examples. S. McIntyre advised that there are many and they are being reviewed to capture what will work for our CA. A. Symon indicated she will provide samples to J. Mason for review.

PPAC05/15/19-4

MOVED BY: F. Campbell

SECONDED BY: R. Darling

Resolved, That the Committee approve the Mississippi River Watershed Plan Work Plan as amended by the Committee.

“CARRIED”

ADJOURNMENT

The meeting was adjourned at 4:53 p.m.

PPAC05/15/19-5

MOVED BY: T. Fritz

SECONDED BY: J. Hall

Resolved, That the Policy and Priorities Advisory Committee meeting be adjourned.

“CARRIED”

“E. Levi, Recording Secretary

J. Atkinson, Chair”

REPORT

3015/19

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 – Supplementary Analysis
DATE:	July 8, 2019

Recommendation:

That the Board of Directors

- a) 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.
- b) direct staff to provide the results of this analysis to the City of Ottawa.

1.0 PURPOSE

At the May Board of Directors meeting staff presented the analysis and findings of the *Harwood Creek Flood Plain Mapping Study*. The report and flood plain mapping indicated a significant water level increase south of March Road through the Marchvale/Landel Road area. In response to concerns raised by area residents, the Board of Directors directed staff to review the impact, on calculated water elevations, of twinning the culverts under March Road and the embankment, located immediately upstream. This report presents the results of that analysis.

2.0 BACKGROUND

Harwood Creek is a tributary to Constance Lake (Figure 1). With a total drainage area of approximately 14 sq. km. the main channel of Harwood Creek extends approximately 7.5 km

from Ridgeside Farm Drive, at the upstream end, through rural areas and the Provincially Significant Mud Pond Wetland before discharging to Constance Lake.

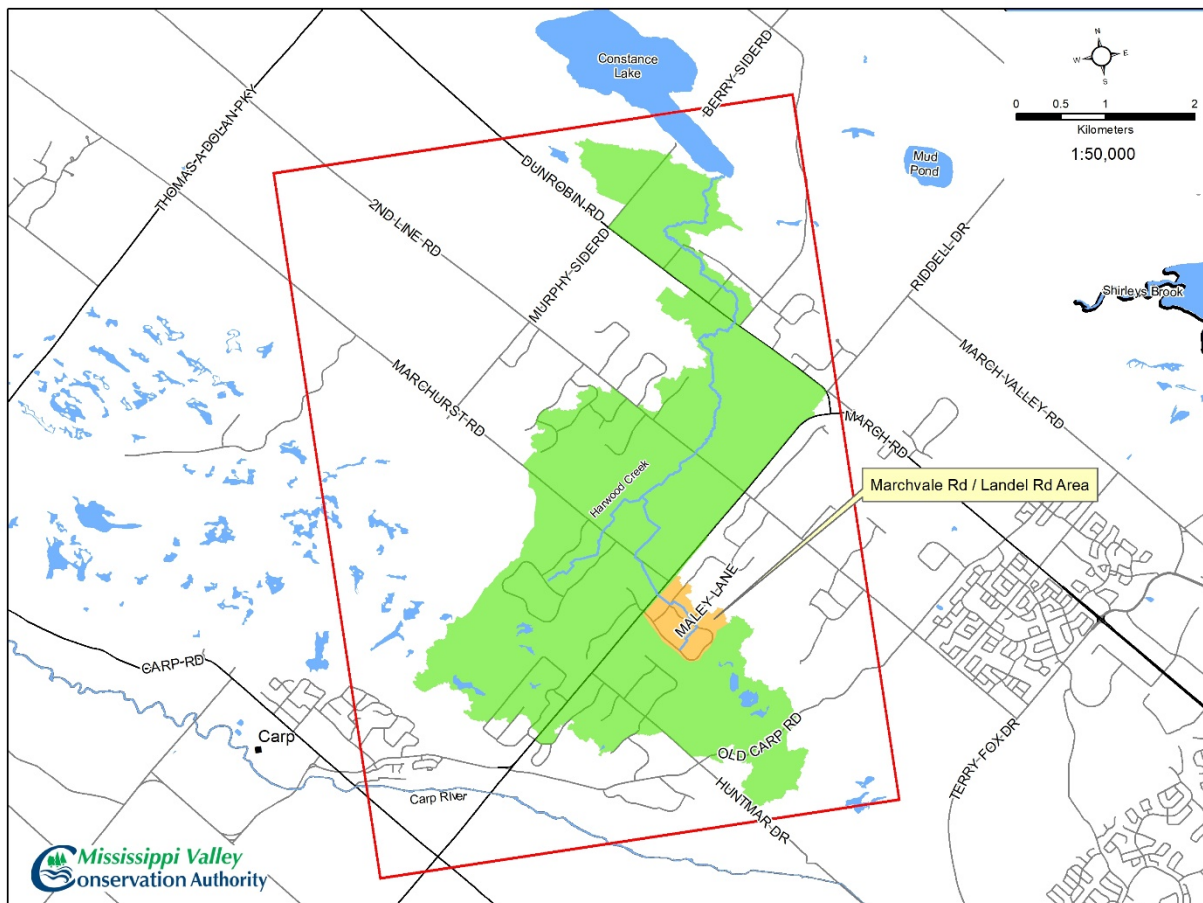


Figure 1: Harwood Creek Watershed Location Plan

The Regulatory (1:100 year) flood plain is quite extensive within a **residential subdivision south of March Road** in the Marchvale Drive/Landel Road area (Map Sheet 1). Two watercourse crossings: March Road and a sound barrier embankment, will cause a substantial increase in water levels during flood events. There are six homes on Landel Drive that will become “islands” above the predicted Regulatory flood elevation, with water on other parts of the lots 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 objective of assessing the impact of twinning the culvert structures was to determine the degree to which impacts on these properties may be lessened. Neither structure is owned by the Mississippi Valley Conservation Authority (MVCA) and such works would have to be carried out by others.

MAP No.
CARTE No.

1

FLOOD RISK MAP
HARWOOD CREEK
CARTE DU RISQUE D'INONDATION

LEGEND / LÉGENDE

- Regulatory Flood plain/ La Crue Régulatrice
- Regulatory Limit / Limite Réglementaire
- Contours / Courbes
- Stream / Ruisseau
- Cross Sections / La coupe transversale

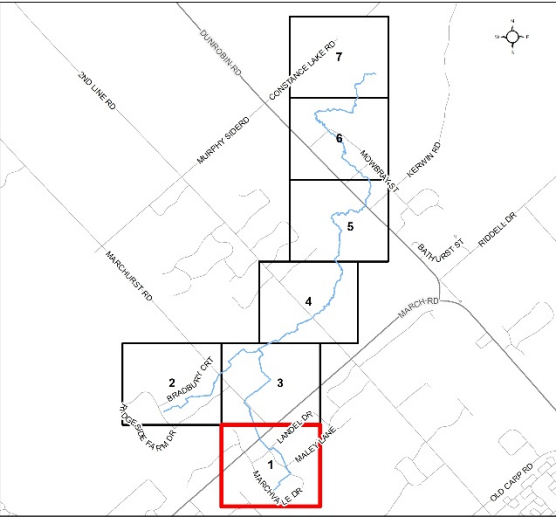
Cross Section Number 1743
Regulatory Flood Elevation (m) 102.11
Nombre de la coupe transversale
Niveau de la crue régulatrice (m)

INDEX CONTOUR INTERVAL 2 METRES
WITH 0.5 METRE INTERMEDIATE CONTOUR
NORTH AMERICAN DATUM 1983
COURBES DE NIVEAU PRINCIPALES DE 2.0 MÈTRE
AVEC COURBES DE NIVEAU INTERMÉDIAIRES DE 0.5 MÈTRES
SYSTÈME DE RÉFÉRENCE GÉODÉSIQUE NORD-AMÉRIQUE 1983

GENERAL INFORMATION
Vertical Datum: CGVD28
Horizontal Datum: North American 1983
Map Projection: Ottawa Transverse Mercator Projection
RENSEIGNEMENTS GÉNÉRAUX
Niveau de référence vertical: CGVD28
Niveau de référence horizontal: Nord-américain 1983
Projection cartographique: Projection Mercator Transverse d'Ottawa



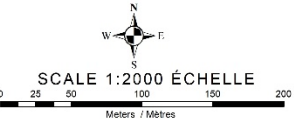
SHEET INDEX / TABLEAU D'ASSEMBLAGE



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3.0 ANALYSIS AND FINDINGS

The existing culvert under March Road is a 1.4 m diameter corrugated steel pipe (CSP); and under the private embankment is a 1.3 m diameter concrete pipe culvert. Table 1 shows the calculated water elevations for four scenarios:

- 1) Existing Conditions - Existing culverts as listed above;
- 2) Twin Culvert Under March Road - Two 1.4 m diameter culverts under March Road and the single existing culvert under the embankment;
- 3) Twin Culvert Under Embankment - Two 1.3 m diameter culverts under the embankment and the single existing culvert under March Road; and
- 4) Twin Culvert Under Both March Road and Embankment - Two 1.4 m diameter culverts under March Road and two 1.3 m diameter culverts under the embankment.

Table 1 shows the calculated Regulatory (1:100 year) water elevations at the cross-section locations shown on Map 1. The hi-lighted cross-sections in the table represent the reach through the lots on the north side of Landel Drive (points A, B, C, D on Map 1).

As shown in Table 1, for existing conditions (column 1), the March Road crossing results in a 1:100 year water elevation of 103.11 m, which ponds and extends for a substantial distance upstream (south) of Landel Drive. Adding a second culvert under March Road (column 2) reduces the calculated upstream water elevation by approximately 1.5 m, but, only reduces the 1:100 year water elevation, through the subject properties, by approximately 20 cm due the restriction at the upstream embankment. Adding a second culvert under the embankment, without addressing March Road (column 3) has essentially no impact on the calculated 1:100 year water elevations. Twinning the culverts under both March Road and the upstream embankment (column 4) results in a reduction in the calculated 1:100 year water elevations by approximately 1.0 m on the subject properties and by approximately 0.6 m upstream of Landel Drive. The depth of water on Landel Drive during the 1:100 year flood event would also be reduced to approximately 15 cm.

Table 1: Harwood Creek 1:100 year Flood Elevations (m)				
Cross-Section	Existing Conditions	Twin Culvert Under March Road	Twin Culvert Under Embankment	Twin Culvert Under Both March Road and Embankment
1349	101.05	101.05	101.05	101.05
1377	101.08	101.08	101.08	101.08
1403 D/S Side of March Road	101.08	101.13	101.08	101.13
1429 U/S Side of March Road	103.10	101.63	103.10	101.63
1454 U/s Side of Embankment	103.11	102.92	103.10	102.07
1470 (A)	103.11	102.92	103.10	102.11
1499 (B)	103.11	102.92	103.10	102.11
1539 (C)	103.11	102.92	103.10	102.10
1563 (D)	103.11	102.92	103.10	102.13
1587 D/S Side of Landel Drive	103.11	102.92	103.11	102.14
1604 U/S side of Landel Drive	103.11	102.92	103.11	102.46
1657	103.11	102.92	103.11	102.46
1678	103.11	102.92	103.11	102.47
1717	103.11	102.92	103.11	102.51
1760	103.11	102.93	103.11	102.59
1801	103.11	102.93	103.11	102.64
1826	103.12	102.95	103.12	102.74
1867	103.16	102.98	103.13	102.83
1900	103.16	103.06	103.16	103.02

4.0 CONCLUSION

The above analysis shows that there would be a substantial reduction in flood elevations in the Marchvale/Landel area if an additional culvert was added under both March Road and the upstream embankment. However, flood plain analysis and mapping must be completed based upon existing conditions. If in the future any of the above works are completed, the flood analysis and delineated Regulatory flood line can be re-visited and revised according.

The flood plain 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 of the report by the MVCA Board of Directors the flood plain 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.

Directions from the Board

Status Report

July 10, 2019

Date	No.	Motion	Status/Comments
March 20, 2019		No directions to staff.	
April 17, 2019	B04/17/19-4	1.The General Manager be appointed as Secretary-Treasurer of the MVCA; and further that	Completed
		2. The Administrative By-Law be amended and approved as recommended by Staff Report #2999/19 and by the Policy and Priorities Advisory Committee.	Completed
	B04/17/19-5	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.	Completed
	B04/17/19-6	1. The Administrative By-law remain silent on Invited Members; and further that	Completed
		2. The General Manager or their delegate be identified as the official liaison between the MVCA Board and the MVCF Board.	Completed
May 15, 2019	B05/15/19-4	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.	Completed
	B05/15/19-5	That costs for aerial photography of the Ottawa River be paid from the Operating Reserve.	N/A - City of Ottawa waived the costs
	B05/15/19-6	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.	Current plan is to reallocate existing staff and to retain additional part-time administrative support when demand increases. The amount required will depend on duration of need.
	B05/15/19-7	That staff provide a 50% reduction in fees for the 2019 flood event to applicants for shoreline and rebuild permits until October 31, 2020.	Completed - Press release issued; website updated.
	B05/15/19-8	That the General Manager inform municipalities of the impact of the flood event on MVCA's budget and reserves.	Pending. The volume of applications expected has not materialized. Should be able to provide reasonable estimate to municipalities by the end of August.

REPORT

#3016/19

TO:	The Members of the Mississippi Valley Conservation Authority Board of Directors
FROM:	Janet Mason, Chair of the Mississippi Valley Conservation Authority
RE:	Conservation Ontario Council Meeting – 24 June 2019 Attendees: Janet Mason, Sally McIntyre, Jeff Atkinson
DATE:	July 10, 2019

Recommendation:

That the Board receive this report for information.

Conservation Ontario's (CO) main activities in last three months have been:

- providing comments on changes to the Conservation Authorities Act, which are primarily focused on defining the core mandatory programs and services provided by conservation authorities;
- advocating the critical role that CAs play as watershed and natural resource management agencies and the need for the addition of "conserving natural resources" as a core mandatory program; and
- progressing the client service and streamlining initiative (development of templates for planning reviews, permitting).

The role of CO as the voice representing 36 Conservation Authorities is more important than ever right now for discussions with the Province. Hiring of government relations advisor, John Matheson (Strategy Corp), in the last two years has provided valuable intelligence and access to ministers and their staff. CAs' willingness to work with the government's agenda is helping. "Relationships are being nurtured and discussions are generally more positive."

Summary of Key Issues:

1. **Bill 108 - More Homes, More Choice** - received royal assent in June.

- Bill amends 13 different statutes that impact municipalities and land use planning processes.
- Schedule 2 amends the Conservation Authorities Act. It defines the three types of programs and services that CAs can deliver:

1. **Mandatory Programs and Services** prescribed in regulation (municipal levy applies)
 - Natural Hazards management
 - Source Protection Authority
 - Management of conservation-owned/controlled Lands
 - Lake Simcoe
 - Programs and services related to the authority's responsibilities under an Act.
 - Program or service not identified (time-limited; within 1 year of transition period).
 2. **Municipal Programs and Services** (individual municipal MOU or agreement)
 - e.g. plan review services.
 3. **Other Programs and Services** (non-mandatory; as determined by the Board as advisable; municipal levy ONLY through Agreement).
 - watershed management services: monitoring, education, stewardship, fish and wildlife habitat management, etc.
- Regulations, i.e. legal wording, must be put in place before the bill is enacted, which is expected by year end.
 - CAs will have a Transition Period (18 or 24 months) starting in Jan 2020 to address the changes

2. There are still many TBDs:

- Mandatory Program and Service Regulations - the details are unknown.
- Transition timeline (18 or 24 months?).
- Municipal Levy Regulation update.
- Municipal MOU duration (4 years or 8 years?).
- Fees Policy update.
- Funding source for Source Protection Authority.

Schedule 2 Impact on Conservation Authorities, CA boards, and member municipalities:

- No change in CA operation in 2019. Likely little change in operation and levy structure in 2020.
 - Possible exceptions in: Source Protection Authority funding source, WECl funding for capital improvements, potential further reduction in provincial transfer payment.
- More work for staff and the board as we develop the Transition Plan: new policies and new budgets.
 - Significant work for Finance Committee and Policy and Priorities Committee.
 - Post-Transition Plan budget cannot straddle old levy model and new one.
- CA Board Governance - must address how to deal with non-mandatory services.
- Non-mandatory services - primarily related to watershed management - must be negotiated with each municipality.
 - Significant work for CA staff, municipal CAOs and Councils in discussing non-mandatory service agreements.
- Potential downloading of Source Protection Authority funding to municipal levy - will the Province download the cost to municipalities through the CAs?
- Potential impact on the ability of CAs to charge fees.

CO's client service and streamlining initiative:

- All 36 CA boards endorsed the initiative, which is a commitment to improving plan review and permitting.
- Focus on early implementation by “high growth area CAs”.
- Three activities:
 1. Develop Templates: CA-Municipal Memorandum of Understanding Template (Planning and Development), Client Service Standards for Conservation Authority Plan and Permit Review, and a Guideline for CA Fee Administration Policies for Plan Review and Permitting.
 2. Increase speed of approvals – CO held a process flow workshop with municipal and industry groups.
 3. Reduce Red tape and Regulatory burden - exemptions for “low risk” activities.
- CO has solicited input from:
 - Association of Municipalities of Ontario (AMO),
 - Residential Construction Council of Ontario (RESCON),
 - the Building Industry and Land Development Association (BILD), and
 - Ontario Home Builders Association (OHBA).
- BILD requested a further reduction in proposed review and approval timelines.
- CO is recommending significant tightening of permit timelines (although not to the extent recommended by BILD).
 - Minor applications go from 72 to 42 calendar days.
 - Major applications go from 132 to 63 calendar days.
 - The extent of permit timeline reductions generated significant discussion at our meeting. A vote to make the reductions less aggressive (54 days and 100 days respectively) was defeated.
- It is not clear if the timelines will appear in the new regulations since these goals currently fall under a CO initiative.
- Some CAs expressed concerns about the ramifications of failure to meet the timelines during high permit volume and low staff situations, but the majority voted in favour of supporting them.
- Pre-consultation with CAs and high quality of industry submissions will be needed to meet goals.

Other Information:

- New Minister of Environment, Conservation, and Parks - Jeff Yurek. Was MNRF critic when in opposition.
- Development industry appears to have greater influence than insurance sector.
- Breakout Session valuable
 - Meeting split in two to provide feedback to CO staff on multiple Bill 108 issues.
 - Better exchange of ideas; easier to be heard.
 - Former Liberal MP and government minister, Andy Mitchell (now in municipal government and on Otonabee CA board), stated that current government seems to respond to pressure and push-back.

Timeline Recap for Reference:

- Apr 5 - Two Environmental Registry of Ontario postings

- Modernizing CA operations
 - Focusing CAs on permits for protection of people and property
- Apr 12 - CA transfer payments cut roughly in half. (MVCA's payment reduced by \$120K to \$128K from \$248K.)
- Late April, early May - Flooding
- 2 May - Bill 108 introduced
 - Bill amends 13 different statutes that impact municipalities and land use planning processes.
 - Schedule 2 amends the Conservation Authorities Act.
- 6 June - Bill 108 received royal assent.
 - Regulations, i.e. legal wording, must be put in place before the bill is enacted.
- Summer 2019 - Province drafts regulations
- Sept and October - Consultations, regulation amendments
- Dec 2019 - Expect Bill 108 to be enacted by end of 2019.
- Transition Period - either 18 or 24 months
 - Complete by Dec 2021 (if 24 months)
 - "Status quo" conduct of business by CAs with respect to levies during this period.
 - CAs prepare Transition Plan
 - Review and update policies, governance, and funding
 - Consultation with member municipalities to determine options for delivery of non-mandatory services

REPORT

#3017/19

TO:	The Chair and Members of the Mississippi Valley Conservation Authority Board of Directors
FROM:	Angela Millar, Treasurer
RE:	Q2 Budget Control Report
DATE:	July 10, 2019

Recommendation:

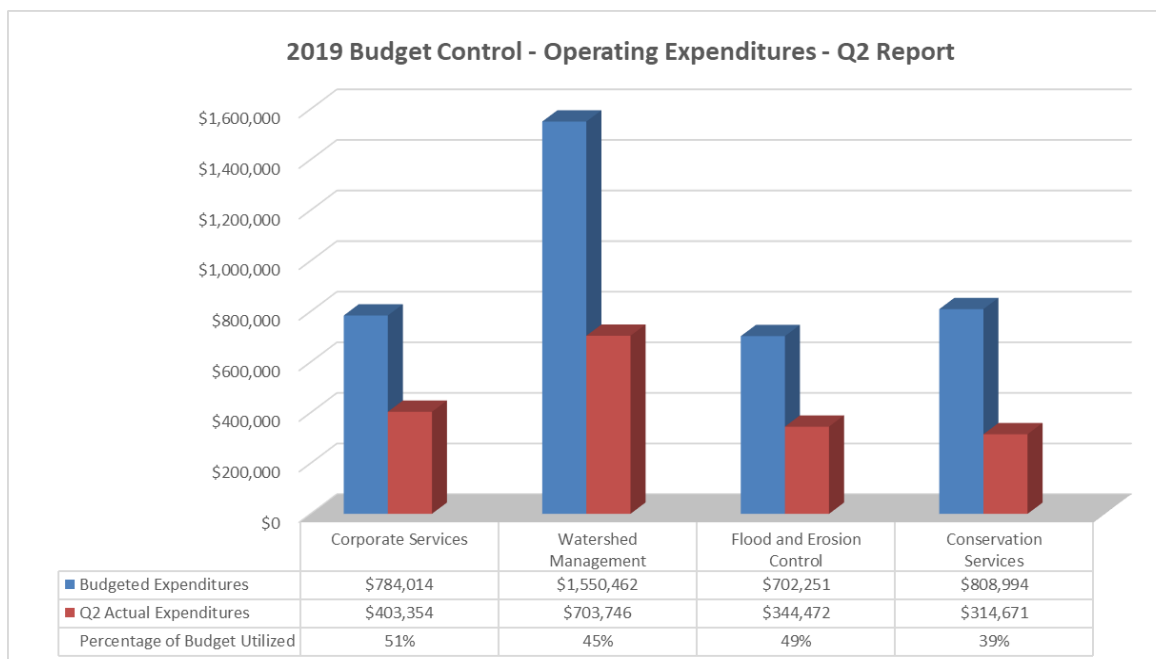
That the Board receive the Q2 Budget Control Report for information purposes.

1.0 PURPOSE

The purpose of this report is to provide a comparison of year-to-date expenditures to the approved 2019 Budget. Due to the financial pressures being experienced at this time, the report also addresses financial risks and mitigating measures, as well as overall financial health of the Authority.

2.0 FINDINGS

This Q2 Budget Control report reflects that expenditures are on target for this time of year. The summer months are much busier with program and project expenditures than the first quarter of the year therefore, subsequent reports will provide a better indication of budget to actual variances.



Only one of 2 applications to the Canada Summer Job program was approved to cover a student for 16 weeks. All other student funding applications submitted were declined (i.e. Summer Experience Opportunity (MNR-SEO), Ontario Federation of Anglers & Hunters (OFAH), and Young Canada Works (YCW).) As many of our student / temporary positions are funding dependent, this placed several projects at risk. While volunteers have stepped in to help with some conservation area and trail maintenance activities, tasks such as brush trimming and minor building maintenance tasks have not been completed in the same capacity as other years; the automated sensing project has been scaled back; and there has been no progress made on automation and digitalization of current processes.

As previously discussed, the Ministry of Natural Resources and Forestry annual operating transfer payment was reduced for 2019. This annual transfer was fixed at \$248,792 since 2000 and previously constituted **6.5% of the annual Operating Revenue**. The provincial transfer has been reduced almost in half to \$128,438 for 2019 and there is speculation that this could be further reduced or eliminated in the future.

The MVCA 2019 Capital Budget included \$165,322 in revenues from the provincial Water & Erosion Control Infrastructure (WECI) cost shared program, (which provides 50% funding), or just **over 26% of our Capital Revenue** for 2019. The WECI allocation notice received June 10, 2019 did not award funding for the Shabomeka Lake Dam Design Study. Therefore, the total funding awarded was only \$130,325. Staff are tabling options to the Board's for completion of the Shabomeka Lake Dam Design Study under a separate report.

Expenses related to the flood event this year have been tracked and recorded separately to quantify budget implications to the organization. As at June 30th, expenses related to the flood were just over \$5,000 (excluding repairs required to the Mazinaw Lake Dam), with staff salaries and benefits attributable to the event exceeding \$94,000. Staff will continue to track the expenses related to the flood event for reporting to the Board and member municipalities. (Note: only staff OT will place a financial pressure on the organization. Total time allocation is being tracked to determine the level of effort expended for future analysis and business planning.)

Planning permit revenues have not increased as projected in the Q1 report, although the number of enquiries received suggests that we are witnessing a delay and that permit revenues will increase in coming months.

On a positive note, the City of Ottawa waived the portion of costs to be paid by MVCA, the Rideau Valley CA, and South Nation Conservation for aerial photography of the Ottawa River during the peak of the spring freshet flood event.

3.0 RISK MITIGATION

The uncertainty that surrounds the future Water & Erosion Control Infrastructure (WECI) and the reduction in the Ministry of Natural Resources and Forestry annual transfer payment will impact the 2019 and 2020 budget. Steps being taken to mitigate this risk are the following:

- Conservation Ontario has and is continuing to press the provincial government through meetings and correspondence to maintain funding to the WECI program.
- Sally McIntyre, GM, attended the Task Force meeting held in Ottawa May 24, 2019 and conveyed this message directly to the Ministers and MPPs in attendance.
- Janet Mason, Chair, issued a letter on behalf of the Board to provincial ministers and area MPPs stating, amongst other things, that the province should retain the WECI program.

Within MVCA, the 2019 provincial transfer funding shortfall of \$120,354 will be offset by drawing from unspent compensation (approximate value of \$148,000.) As well, management is committed to reviewing all assets as part of the following programs:

- Watershed Management Plan
- Mill of Kintail Museum Strategic Plan
- MVCA Asset Management Plan

Furthermore, staff will conduct the following activities this year to help offset impacts of provincial cuts on 2019 and 2020 revenues:

- Review of fees across all operations. Staff will bring forward the recommended 2020 fee schedule in advance of the 2020 budget to allow for implementation January 1, 2020.
- Renegotiation of communications service contracts is on-going.
- Review of other service contracts for potential savings opportunities.
- Continued identification and application to other organizations for project and program-specific financial support.

4.0 OVERALL FINANCIAL HEALTH

The following table provides the balances of the Restricted Reserves as at December 31, 2018 along with the 2019 Budget allocations. The Authority has one million dollars (\$1,000,000) of the Restricted Reserves invested until the funds are required. These invested funds are split in half and mature annually to provide the Authority with flexibility when the funds are required.

	Balances as at December 31, 2018	2019 Budget - Contributions To Reserves	2019 Budget - Contributions From Reserves	December 31, 2019 Reserve Balances (as per 2019 Budget)
Restricted Reserves				
Building	298,701	40,000		338,701
Information Technology	24,000			24,000
Museum Building & Art	2,868			2,868
Sick Pay	73,843			73,843
Vehicles	36,903		18,000	18,903
Water Control Structures	75,385	14,679		90,064
Water Management Priorities (Glen Cairn Property Proceeds)	697,000		125,128	571,872
Conservation Areas	-	17,000		17,000
Total Restricted Reserves	1,208,700	71,679	143,128	1,137,251

The projected capital ten-year demand on capital to 2028 totals \$7,687,848. At the direction of the Board, a fixed Capital Levy was assessed in 2019 that is to be sustained going forward to mitigate significant year over year variances in levies on member municipalities.

It was also decided that any surplus in a given year would be directed to a Capital (restricted) Reserve for future year projects, and that the Authority's General Operating Surplus would be used to temporarily finance projects when sufficient reserve funds are not available in that particular year.

Based on projected expenditures, the General Operating Surplus will be reduced from its current amount of \$719,411 to approximately \$294,738 by 2024. The General Operating Surplus is typically used for cash-flow management, i.e. to finance operating expenses until municipal levies and provincial transfer payments are received, and until investment funds have matured and become available.

5.0 NEXT STEPS

The next scheduled report will provide results as of August 31st, and will offer the Board with a more realistic forecast of the year end position.

**Mississippi Valley Conservation Authority
2019 Budget Control
Operating Program**

Expenditures	2018 Actual	2019 Budget	Year-To-Date as at: June 30 2019
Corporate Services			
Administration	\$496,204	\$654,536	\$361,924
Communications	\$95,797	\$94,698	\$43,776
Operations	\$26,029	\$34,780	(\$2,346)
Sub-total	\$618,030	\$784,014	\$403,354
Watershed Management			
Information Management	\$191,077	\$209,346	\$88,873
Watershed Planning	\$316,661	\$351,473	\$151,088
Watershed Monitoring	\$221,896	\$294,580	\$118,889
Studies	\$130,074	\$137,352	\$67,790
Plan Review	\$207,772	\$230,728	\$112,433
Section 28 Regulations	\$348,410	\$326,983	\$164,673
Sub-total	\$1,415,890	\$1,550,462	\$703,746
Flood and Erosion Control			
Flood Forecasting & Warning	\$222,646	\$233,873	\$108,420
O&M Flood Control Structures	\$309,327	\$330,921	\$174,605
Prev. Maintenance of FCS	\$122,771	\$137,457	\$61,447
Sub-total	\$654,744	\$702,251	\$344,472
Conservation Services			
Conservation Services	\$83,664	\$237,043	\$40,335
Land Management	\$299,757	\$313,260	\$154,907
Conservation Education	\$103,886	\$110,708	\$53,162
Visitor Services	\$132,086	\$147,983	\$66,268
Sub-total	\$619,393	\$808,994	\$314,671
Total Operating	\$3,308,057	\$3,845,721	\$1,766,243
Revenues	2018 Actual	2019 Budget	As at June 30 2019
Municipal Levy			
- General benefiting	\$2,430,442	\$2,500,845	\$1,511,471
- Special benefiting	\$0	\$0	\$0
Sub-total	\$2,430,442	\$2,500,845	\$1,511,471
Provincial Transfer Payment	\$248,792	\$248,792	\$0
Special Grants	\$19,216	\$28,909	\$11,716
User Fees & Contract Revenue	\$428,074	\$416,000	\$170,407
Special Reserves	\$0	\$136,228	\$0
Other	\$247,013	\$514,947	\$72,650
Total Revenues	\$3,373,537	\$3,845,721	\$1,766,243
Surplus/(Deficit)	\$65,480	\$0	\$0

**Mississippi Valley Conservation Authority
2019 Budget Control
Capital Program**

Water & Erosion Control Infrastructure			
Expenditures	2018 Actual	2019 Budget	Year-To-Date as at: June 30 2019
Water & Erosion Control Infrast	\$125,542	\$330,643	\$6,998
Revenues	2018 Actual	2019 Budget	Year-To-Date as at: June 30 2019
WECI Grant	\$44,942	\$165,322	\$0
General Benefiting levy	\$80,600	\$165,322	\$6,998
Special Benefiting levy	\$0	\$0	\$0
Deferred Revenue - WECI	\$0	\$0	\$0
Water Control Structure Reserve	\$0	\$0	\$0
Other	\$0	\$0	\$0
Total Revenue	\$125,542	\$330,643	\$6,998

Administration Office			
Expenditures	2011-18 Actual	2019 Budget	Year-To-Date as at: June 30 2019
Administration Office	\$6,316,326	\$277,005	\$138,502
Revenues	2011-18 Actual	2019 Budget	Year-To-Date as at: June 30 2019
Provincial Transfer Payment	\$0	\$0	\$0
General Benefiting levy	\$287,593	\$277,005	\$0
Special Benefiting levy	\$0	\$0	\$0
Special Reserves	\$0	\$0	\$0
Other	\$6,028,733	\$0	\$0
Total Revenue	\$6,316,326	\$277,005	\$0

Conservation Areas Development			
Expenditures	2018 Actual	2019 Budget	Year-To-Date as at: June 30 2019
Conservation Areas - Office Trails	\$11,467	\$18,000	\$2,352
Revenues	2018 Actual	2019 Budget	Year-To-Date as at: June 30 2019
General Benefiting levy	\$10,507	\$13,000	\$2,352
Other	\$960	\$5,000	\$0
Total Revenues	\$11,467	\$18,000	\$2,352

REPORT

3018/19

TO:	The Chair and Members of the Mississippi Valley Conservation Authority Board of Directors
FROM:	John Price, P. Eng., Director, Water Resources Engineering
RE:	Shabomeka Lake Dam Rehabilitation
DATE:	July 10, 2019

Recommendation:

That the Board of Directors approve the withdrawal of \$33,000.00 from the Water Control Structures Reserve to complete detailed design of the rehabilitation of Shabomeka Lake Dam.

1.0 PURPOSE

Earlier this year, the Mississippi Valley Conservation Authority (MVCA) submitted its annual application for capital funding to the provincial Water and Erosion Control Infrastructure (WECI) program for work at the following facilities:

- Mazinaw Lake Dam
- Kashwakamak Lake Dam
- Widow Lake Dam
- Shabomeka Lake Dam

Only the first three projects were approved for funding.

The purpose of this report is to explain why the Shabomeka Lake Dam project should proceed in 2019-20 despite the lack of WECI funding.

2.0 BACKGROUND

The Water and Erosion Control Infrastructure (WECI) program is a Ministry of Natural Resources and Forestry (MNR) capital cost share program that provides matching funds to Conservation Authorities for major maintenance or related studies of water or erosion control structures that are either owned or maintained by Conservation Authorities. For many years, annual funding available under this program has been fixed at \$5.0 million, and is allocated amongst all the 36

Conservation Authorities under 50/50 cost sharing agreements. This funding is separate from the provincial transfer provided to support operating costs under Section 39. The WECl program has two project categories:

- **Repairs** – generally 80% of the total funding, includes major maintenance, safety projects and removals;
- **Studies** – generally 20% of the total funding.

Each year, a committee consisting of the following representatives review and score funding applications and recommends funding allocations:

- Five Conservation Authority representatives;
- One MNRF representative; and
- One Conservation Ontario (CO) staff representative.

It is our understanding that the committee did not approve funding for any “studies” in 2019—the category under which the Shabomeka Lake dam project was submitted.

3.0 ANALYSIS

The Shabomeka Lake dam was built in the 1950’s with earth embankments and a wooden sluiceway, which was later changed to concrete. Rehabilitation work completed in 1988, by Ontario Hydro, added a clay backfill was added to reduce seepage. However, Ontario Hydro subsequently determined that the dam did not meet either generally accepted community engineering standards or Ontario Hydro dam safety standards under overturning and sliding conditions. Ontario Hydro recommended the replacement of the existing structure. Since 1989, no work has been performed on the dam.

In 1991 the MVCA assumed ownership and operation of the dam from the Mississippi River Improvement Company (MRIC). In 2005 Trow Associates Inc. completed a Dam Safety Assessment of the Shabomeka Lake dam for the MVCA and recommended various remedial works including repairing settlement of the embankment and adding erosion protection. In 2016 a further assessment of the dam was completed by Houle Chevrier Engineering. The assessment recommended modifications to the earth embankment and rebuilding the concrete control structure at a location slightly to the north of the existing structure. It was also recommended that a structural engineer be retained to review the potential for sliding of the structure under various operational conditions and the adequacy of the steel braces if dam replacement was deferred for more than 2 year

Based on these various assessments the Shabomeka Lake dam is considered beyond the end of its expected life span and needs major rehabilitation. While it is not in imminent danger of

failure, staff cannot warrant how long the dam can be operated safely in its current condition. For this reason, it is recommended that construction work proceed in 2020 as planned.

To meet this timeline, detailed design and the preparation of tender drawings and tender documents must be completed by early 2020 in order to tender the work in the spring of 2020.

The MVCA is in the process of completing a Class Environmental Assessment (EA) for the Shabomeka Lake Dam Rehabilitation. After filing the Notice of Completion of the Project Plan report in January 2019, the MVCA received requests for additional studies from the province:

1. The MNRF requested additional fisheries assessment be completed this fall, downstream of the dam. The MNRF believes that there may be fall spawning fish such as lake whitefish or cisco utilizing the area below the dam and therefore the timing of the proposed construction and/or the construction mitigation measures may be impacted.
2. The Ministry of Tourism Culture and Sport (MTCS) requires a Cultural Heritage Evaluation Report (CHER) to be completed since the existing dam is over 40 years old. Unless the dam structure itself is found to have cultural heritage value, the additional information requested is not expected to impact the Preferred Alternative documented in the Project Plan report.

Staff does not believe that either of these investigations will impact the Preferred Alternative documented in the Project Plan report, but will address the outcome of their analyses and submit an addendum, if required. To meet the overall construction schedule of Fall 2020, work on these studies should proceed in parallel to the EA process and detailed design.

Below is the budget that was submitted as part of the WECl application. As shown, the budget includes an allocation for the above two Ministry requests.

Shabomeka Lake Dam Final Design Study		
Budget Item	Estimated Total Cost	Provincial Contribution
Analysis, Review and Drawing Preparation Option Analysis and Design	\$25,000.00	\$12,500.00
Complete <i>Cultural Heritage Evaluation Report</i> (CHER)	\$5,000.00	\$2,500.00
Complete Fisheries Assessment Downstream of Dam	\$5,000.00	\$2,500.00
Prepare Draft Final Design Report and Engineering Drawings	\$20,000.00	\$10,000.00

Shabomeka Lake Dam Final Design Study		
Budget Item	Estimated Total Cost	Provincial Contribution
Prepare Final Report, Tender Drawings and Tender Document	\$5,000.00	\$2,500.00
Project Management (CA staff)	\$6,000.00	\$3,000.00
Total	\$66,000.00	\$33,000.00

The MVCA portion of \$33,000 was included in the approved 2019 MVCA budget. Therefore, staff request that \$33,000 be withdrawn from the Water Control Structures Reserve to cover the provincial portion in order to complete the detailed design. The reserve has a current balance of \$75,385.

4.0 CONCLUSION

The condition of the dam warrants proceeding with design in 2019 and construction in 2020 despite the lack of WECl funding. There is sufficient money in reserves to cover the provincial portion; design work can proceed concurrent to the studies requested by the province.

REPORT

3019/19

TO:	The Chair and Board of Directors of the Mississippi Valley Conservation Authority
FROM:	Matt Craig, Manager of Planning and Regulations
RE:	Revisions of MVCA Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Policies – Alterations to Shorelines
DATE:	July 10, 2019

Recommendation:

That the Board of Directors approve the revisions to *Section 10.2 Alterations to Shorelines* and *Appendix H* to the ***MVCA Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Policies***.

1.0 ISSUE

The Board of Directors is being requested to approve changes to the ***MVCA Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Policies***. Staff have been working on updating the entire policy document for the past year.

2.0 BACKGROUND

After the 2017 flood event, MVCA received over 90 shoreline applications related to flood damage. The shoreline policies required updating and staff have focused policy revisions to this section of the document given the anticipation of shoreline applications due to the 2019 flood. The adoption of the revised policies will:

- 1) Provide landowners and staff with clear, concise direction on acceptable shoreline erosion protection measures.
- 2) Provide consistency in approval and reviews.
- 3) Allow for faster processing times.
- 4) Reflect current practices of shoreline protection and practices.

The draft policies were presented to the Policy & Priorities Advisory Committee on May 15, 2019. The policies were circulated to the following agencies for comment:

- Neighbouring Conservation Authorities
- Member municipalities.

A notice regarding the draft policies was posted on the MVCA website, and raised at public open houses held in June and July.

3.0 CONCLUSION AND RECOMMENDATION

MVCA staff engaged neighbouring CA's and member municipalities for feedback. We received written and verbal feedback and have incorporated comments received into the attached policies. There were no significant changes or recommendations arising from consultation. The policies are consistent with adjacent CA shoreline practices and the policies are formally adopting existing practices.

4.0 ATTACHMENTS:

- Section 10.2 Alterations to Shorelines (Existing)
- Section 10.2 Alterations to Shorelines (Proposed)
- Appendix H Guidelines for In-Water and Shoreline Works

10.2 Shoreline Alterations / Modifications (Existing)

- (i) Where natural conditions cannot be re-established due to site-specific constraints, the proposal may be permitted provided that:
 - a) upstream water levels (backwater effects) will not be increased;
 - b) alignment will not affect river hydraulics;
 - c) the transition from proposed protection to abutting shoreline properties must be designed so that local erosion, debris accumulation or undesirable changes in local currents or sediment transport will not occur;
 - d) where the shoreline is in the vicinity of marginally stable or unstable slopes, professional geotechnical engineering input may be required at the Authority's discretion and at the landowner/applicant's expense.
- (ii) Floating docks or docks supported by pipes or stilts (less than 15 centimeters in diameter) are generally exempt from approval by the Authority but may require approval by others. The attachments for these docks to the shore require Authority approval. Other types of permanent or fixed docks also require Authority approval.

10.2 Alterations to Shorelines (Proposed)

Shorelines are the interface where land meets a body of water. *Shorelines* are dynamic in nature and are subject to fluvial and coastal processes. They act as a natural water quality filter for surface runoff and often absorb certain nutrients and contaminants, as well as trap sediment.

Naturalized *shorelines* with an abundance of vegetation provide *erosion* protection by assisting with the mitigation of surface runoff. Plant and tree root systems also bind the soil in place preventing further *erosion* of earthen material that is often lost due to natural processes such as wave action or changes in water level.

- 1) In general, alterations to a shoreline shall not be permitted.
- 2) In general, shoreline hardening will not be permitted unless there is active erosion occurring along a shoreline or watercourse and the site is not suitable for bio-engineering or the re-establishing of natural conditions are not feasible options.
- 3) Notwithstanding Section 10.2 2), where natural conditions cannot be re-established due to active erosion or site-specific constraints, shoreline alteration proposals may be permitted provided that:
 - a) upstream water levels (backwater effects) will not be increased;
 - b) alignment will not affect river hydraulics or base flows;
 - c) proposed protection will not alter local erosion, debris accumulation or undesirable changes in local currents or sediment transport nor impact abutting shoreline properties.
 - d) where the shoreline is in the vicinity of marginally stable or unstable slope, professional geotechnical engineering input may be required at the Authority's discretion and at the landowner/applicant's expense; and
 - e) the shoreline alterations are constructed in accordance with Appendix H.
- 4) Notwithstanding Section 10.2 1) & 2), an alteration to a shoreline or development that by its nature is located along the shoreline such as the construction or reconstruction of a marine facility and erosion control measures may be permitted if it has been demonstrated to the satisfaction of the MVCA that the control of flooding, erosion, pollution, dynamic beaches or the conservation of land will not be adversely affected. The MVCA may request a technical study to ensure that the development is not subject to unacceptable risk. The submitted plans must demonstrate that:
 - a) the potential for surficial erosion has been considered and addressed;
 - b) impacts of ice force on the development have been considered and addressed;
 - c) wave uprush impacts have been considered and addressed;
 - d) structures and erosion control measures meet requirements under Appendix H.
- 5) Notwithstanding Section 10.2 1), dredging may be permitted along the shoreline if it has been demonstrated to the satisfaction of the MVCA that the interference will not be adversely affect the natural features and hydrologic and ecological functions of the *watercourse* and the control of flooding, erosion, pollution, dynamic beaches or the conservation of land. The submitted plans must demonstrate that:
 - a) all dredged material is removed from the waterbody and placed in an upland area (i.e., outside of the regulatory flood plain and/or a minimum of 30 metres from the watercourse);
 - b) the dredged material is transported in a contained fashion; and
 - c) Appropriate *erosion* and sediment control measures are implemented.

APPENDIX H: GUIDELINES FOR IN-WATER AND SHORELINE WORKS

Introduction

Alterations or works within or along a watercourse or shoreline require written permission from MVCA prior to the works being undertaken, in accordance with Ontario Regulation 153/06. In-water works are often required to realign watercourse, protect shorelines, repair and replace infrastructure and for water taking activities.

These guidelines apply to in-water and shoreline works, and related activities. They will be used by MVCA to review permit applications to ensure that these proposed activities meet the intent of the Section 28 Program Objectives for implementing of Ontario Regulation 153/06.

1.0 General Guidelines

The following general guidelines will be considered in reviewing applications under Ontario Regulation 153/06 for all in-water, watercourse alterations and shoreline works.

- a) Base flows must not be adversely affected by any watercourse or shoreline alterations.
- b) The design of projects involving shoreline or watercourse alterations where natural heritage features, such as *Areas of Natural or Scientific Interest (ANSI)* and shoreline wetlands, may be present will be required to take into consideration the ecological functions of the watercourse and related features while allowing for compatible development.
- c) Timing windows restrict in-water work related to an activity during certain periods in order to protect fish and/or other species from impacts of works or undertakings in and around water during spawning migrations and other critical life stages. In or near-water works must respect the timing window guidelines for fish spawning and turtle nesting (as established by the Ontario Ministry of Natural Resources and Forestry) and species listed as threatened or endangered under the *Endangered Species Act* (administered by MECP) or *Species at Risk Act* (administered by DFO for aquatic species).
- d) Erosion and sediment control (ESC) measures must be installed before, during and post construction and remain until the site is permanently stabilized. ESC measures may include the use and maintenance of check dams, silt fences or barriers, inlet screens, sediment ponds, buffer strips or other effective measures deemed necessary by the MVCA. Ontario Provincial Standard Drawings (OPSD) for ESC measures can be used as a reference for installation and application of control measures.
- e) The use of materials that may result in *pollution* will not be permitted for the construction of near or in-water structures that will be temporarily or permanently inundated with water (i.e. railway ties, pressure treated lumber). Native, untreated materials (i.e. white cedar, hemlock) will be required in these applications.
- f) All on site activities, including maintenance procedures, are to be conducted in a manner that will prevent the entry of petroleum products, debris, rubble, concrete or other deleterious substances into the water.
- g) It will be the responsibility of the landowner/applicant to provide any studies or reports necessary for the Authority's review and evaluation of the proposal.

2.0 Shoreline Alterations / Modifications

These works include bio-engineering, rip-rap and vertical shoreline walls usually composed of armour stone, masonry rock, concrete, steel, wood and plastic or gabion baskets.

While vertical shore walls have short term benefits, the retention of existing emergent aquatic vegetation and planting of trees and shrubs on the shoreline bank is the preferred method of shoreline protection. Retention of existing shoreline vegetation can be an effective method of preventing erosion and shall be incorporated into shoreline alteration proposals. Rip-rap, which is the placement of clean angular stone or rock rubble on a slope, may be used in combination with bio-engineering methods where bio-engineering methods alone would be ineffective. Properly sized rip-rap placed along the waterfront over a geotextile filter fabric dissipates wave action, and prevents soil particles from washing out while allowing land-based moisture to naturally infiltrate back into the waterbody.

- (i) Preservation or enhancement of natural vegetated shorelines and buffers is encouraged and may be required before other alternatives are considered.
- (ii) Where the only alternative to preventing shoreline erosion is shoreline hardening, the accepted method is rip rap, which is defined as angular blast rock backed with non-woven geotextile filter fabric, placed on a 2:1 (H:V) slope, following the natural contour of the shoreline and supplemented with native vegetation along the top.
- (iii) Where required the upland slope shall be excavated to create the appropriate slope angle. Filling, excavation or dredging of the lake or river bed to accommodate rip-rap shall not be permitted.
- (iv) The construction of vertical structures (retaining walls (concrete, armour stone), gabion baskets, etc.), will not be permitted immediately along the shoreline of a lake, river or watercourse where it can be expected that under normal conditions, the structure will be in contact or inundated by water for an extended period of time.
- (v) The replacement of a vertical structure is deemed to be new construction, in which, the reestablishment of natural conditions is required to be achieved or a less invasive form of erosion control (i.e. rip rap, bioengineering) shall be installed, if feasible.
- (vi) The construction of a vertical structure may be permitted along the shoreline of a watercourse if the following conditions are met and it has been deemed acceptable by the MVCA:
 - a) The vertical structure is located above the normal high water mark of the watercourse or an area that is seasonally or temporarily inundated with water;
 - b) Encroachment on the bed of or into the watercourse will not occur to minimize placement of fill in the flood plain;
 - c) The height of the vertical structure does not exceed the existing grade of the property if it is located within an identified regulatory flood plain;
 - d) The toe of the vertical structure is protected with rip rap or a natural vegetated buffer along the base of the retaining wall;
 - e) Filter cloth shall be installed behind the shore wall to prevent the migration of fines into the water;
 - f) All backfill shall be clean imported material;
 - g) Any material excavated as part of construction should be removed off site in a contained manner and disposed of outside of the regulatory flood plains or a minimum distance of 30 metres from the watercourse; and
 - h) Construction of a vertical structure is the only effective option to repair active erosion due to the site conditions (bank height, soil type)
- (vii) Vertical structures that exceed 1.0 metres (3.3 feet) in height, must be designed and approved by a Professional Engineer.
- (viii) Erosion control measures shall not be placed or encroach beyond the existing toe of the shoreline slope.

- (ix) Encroachment of rip-rap up to 1 metre onto the lake or riverbed may be supported if the encroachment is required to protect trees that support shoreline stabilization.
- (x) A proposal will be considered a repair if the proposed work affects less than 50% of the existing erosion protection along the shoreline and there is no change in the dimensions (width, height, length) of the existing erosion protection.

REPORT

3020/19

TO:	The Chair and Members of the Mississippi Valley Conservation Authority Board of Directors
FROM:	Alyson Symon, Watershed Planner
RE:	Mississippi River Watershed Plan - Work Plan Update
DATE:	July 5, 2019

Recommendation:

That the Board receive this report for information. (An earlier draft was presented at the Policy and Priorities Committee May 15, 2019.)

1.0 PURPOSE

In October 2016, the Mississippi Valley Conservation Authority (MVCA) Board of Directors approved the Terms of Reference for the development of a Mississippi River Watershed Plan. Staff were asked to provide an updated work plan to guide the development of the Mississippi River Watershed Plan over the next two years. The purpose of this document is to provide an update on progress to date and to provide an updated work plan.

2.0 BACKGROUND

MVCA has the responsibility for flood and erosion control, flood forecasting and warning, and in providing expertise on, and regulating land use planning matters related to flood and erosion hazards for the Mississippi River watershed. MVCA has provincially assigned responsibilities in monitoring low water events to assist in guiding the local response, as well as a role in the protection of drinking water, both surface and groundwater. MVCA also monitors and reports on waters quality and delivers stewardship and education programs aimed at protecting the health of the watershed.

The Mississippi River Watershed Plan will provide for integration of these management activities at the watershed scale. It will also provide for the consideration of climate change vulnerabilities and the inclusion of adaptation tools in MVCA's other guiding documents such as the Mississippi River Water Management Plan, the Mississippi Rideau Source Protection Plan, MVCA's Monitoring Strategy and various Plan Review guidelines.

Goal of the Mississippi River Watershed Plan (MRWP)

The Goal of the Mississippi River Watershed Plan is to examine long term stressors affecting the natural resources of the watershed, to provide a forum for government and the public to articulate a vision for the desired state of those resources, and to develop a collaborative action plan to achieve that vision.

Current Status of the MRWP

The watershed planning process involves three key phases: Scoping and Characterization; Analysis and Evaluation; and Watershed Plan Development. MVCA is nearing completion of the first phase, Scoping and Characterization. This has entailed the gathering of a broad range of information to characterize the watershed. A series of draft “chapters” (listed pg. 4) have been prepared to form the basis for the MRWP Background/ Characterization Report.

3.0 STAKEHOLDERS

Stakeholder engagement will form a key component of the watershed planning process. Watershed residents, Indigenous communities, government, industry, environmental groups and other interested parties will be consulted at various stages throughout the watershed planning process. A number of these groups will also be involved in ongoing implementation and review of the watershed plan.

3.1 Technical Advisors

The Technical Advisors group will comprise representatives from the indigenous communities, municipal government and provincial government, with an interest and expertise in various aspects of the MRWP. These individuals will be called upon to provide information, technical expertise and broad guidance in the development and implementation of the plan.

This group will be consulted, as required, either through one-on-one consultation or in small groups and include representatives from the following groups/organizations:

- Mississippi Valley Conservation Authority (Board of Directors and staff)
- Municipalities (e.g. Municipal Planners)
- First Nations (Shabot Obaadjiwan First Nation and Ardoch Algonquin First Nation)
- Ontario Ministries of: Natural Resources & Forestry (MNRF); Environment, Parks & Conservation (MECP); Agriculture, Food and Rural Affairs (OMAFRA); and Municipal Affairs and Housing (MMAH)

3.2 Public Advisory Committee (PAC)

The Public Advisory Committee (PAC) will provide a mechanism for the public to contribute to the development of the watershed plan and its implementation. It will also take on the function

of the Mississippi River Water Management Advisory Committee. The PAC will report directly to the Mississippi Valley Conservation Authority Board of Directors.

The role of the Public Advisory Committee is to provide comments, information and recommendations to the MVCA Board of Directors. The Committee will operate according to the following guidelines:

- Comprised of Non-Government Organizations and individuals representing a broad range of interests throughout the watershed, including:
 - Aggregates/Mining
 - Agriculture
 - Developers
 - Environmental Groups
 - Forestry
 - Hydro-Power Producers
 - Lake Associations
 - Local Commerce
 - Watershed Ratepayers
- It will be comprised of 11 members including two Chairs: one representing the MVCA Policy & Priorities Committee, and a Co-Chair selected by the PAC.
- MVCA's General Manager will act as Committee Secretary as a non-voting member.
- Members will sit for 2-year terms (initial membership will have half the committee starting at a 1-year term and half at 2-years).

Other individuals or organizations with an interest in the Mississippi River Watershed Plan will be identified and included as part of the stakeholder engagement outlined in the Work Plan.

4.0 WATERSHED PLAN PROCESS

The Watershed Plan process consists of three key phases shown in Figure 1. The attached Work Plan Schedule outlines the framework for the remaining steps in the planning process.

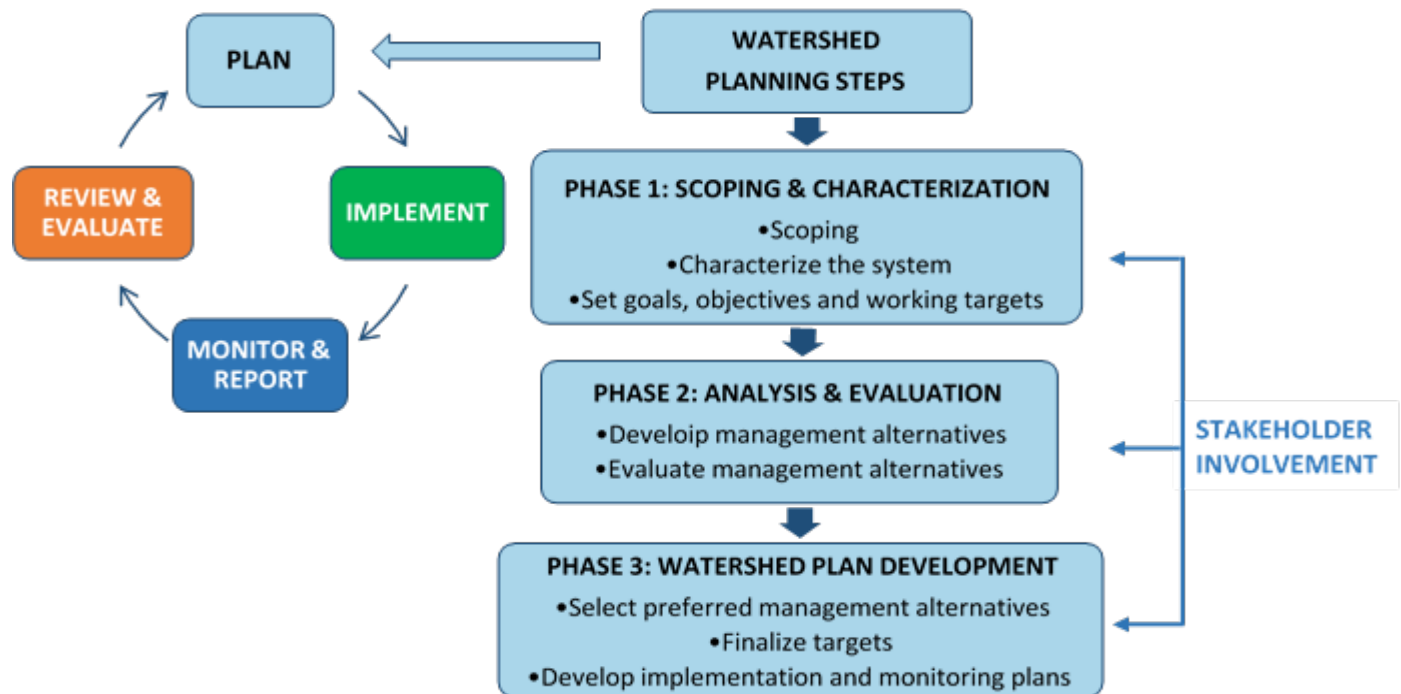
4.1 Phase One: Scoping and Characterization

(Ongoing to September 2019)

The Watershed Characterization Report of Phase 1 is nearing completion, with a series of chapters drafted under the headings:

- Physical Environment
- People and Property
- Natural Systems
- Capital Assets and System Operation

Figure 1: Watershed Planning Process



4.2 Phase Two: Analysis and Evaluation

(October 2019 to February 2020)

The characterization/background report will provide the framework for initial stakeholder engagement. Because of the large volume of background information, this consultation will be carried out in stages over a four-month period from October 2019 to February 2020. The information will be divided into four separate “Background Reports”:

Backgrounder One – Physical Environment

- Physiography, Geology and Hydrogeology
- Climate
- Surface Water Features and Hydrology
- Natural Hazard Features

Backgrounder Two – People & Property

- Population, Properties
- First Nations in the Watershed
- Land Use Planning and Regulations
- Source Water Protection
- Agriculture, Forestry, Minerals, Fishing/Recreation
- Conservation Areas, Crownland and Other Natural Areas

Backgrounder Three – Natural Systems

- Water Quality and Aquatic Features

- Wetlands and Other Natural Heritage Features

Backgrounder Four – Capital Assets & System Operations

As detailed in the attached work plan schedule, each successive Background Report will be released as follows:

1. Tabled at MVCA Policy and Priorities Committee
2. a) Provided to Public Advisory Committee (PAC) – in meeting format
b) Provided to Technical Advisors (MNRF, MOECC, OMAFRA, etc.) – in groups, one-on-one, online (webinar) formats
3. General Public (various formats,)

Throughout the consultation phase, stakeholders will be asked to assist in the identification of issues using a SWOB analysis and in the setting of goals, objectives and targets. They will also be provided with a list of management options to assist in framing the discussion. The results of these consultations will be used to develop a Discussion Paper for presentation to the MVCA Board of Directors.

4.3 Phase Three: Watershed Plan Development

(Mar 2020 to Oct 2020)

From March to June 2020, MVCA will host events at key locations throughout the watershed (e.g. Sharbot Lake, Plevna, Carleton Place and Pakenham.) The Discussion Paper will be presented, and the public will be asked to provide comments.

The Watershed Plan will be developed based on the information gathered throughout the consultations. The stakeholder review of the Discussion Paper will be used to select preferred management alternatives that will form the basis of the plan. A draft Mississippi River Watershed Plan will be tabled at a September 2020 meeting of the MVCA Policy and Priorities Committee and the October 2020 MVCA Board of Directors Meeting.

Attachment: Mississippi River Watershed Plan – Work Plan Schedule

REPORT

#3021/19

TO:	The Chair and Members of the Mississippi Valley Conservation Authority Board of Directors
FROM:	Gord Mountenay, Water Management Supervisor
RE:	Results of Spring Inspection Post April Flood; and Watershed Conditions Report
DATE:	July 10, 2019

Recommendation:

That the Board receive the synopsis of the post flood inspections of MVCA water control structures and updated on current watershed conditions.

1.0 PURPOSE

The following report summaries issues that have arisen at MVCA owned dams as a result of the flood of April 2019.

2.0 FINDINGS AND ANALYSIS

All MVCA owned dams were surveyed by staff May-June 2019. Staff are still working on completing the analysis but preliminary review indicates that there was no significant movement that would indicate a risk of failure at any structure. Some damage was observed at most facilities as described below.

Shabomeka Lake Dam: At the height of the high water on the lake, there was water bubbling along the north face of the control section. At the time of the post flood event, that was not observed. Seepage was identified at the base of both the north and south earth embankment but appears consistent with previous inspections. Seepage through the structure has been identified yearly



and several independent inspections have undertaken. The dam is scheduled to undergo major rehabilitation in 2020.

Mazinaw Lake Dam: Severe erosion to the crest of the bypass channel occurred as a result of the flood levels. The safety boom anchor on the west bank was also destroyed. An independent consultant investigation confirmed staff conclusions that the erosion was not impacting the overall structural stability of the dam. A project file was submitted to MNRF for WECI funding and permits have been requested as well to have the bypass channel and boom repaired, most likely being done in August.



Kashwakamak Lake Dam: A small depression appeared below the concrete side block dam. This is notable because a much larger sinkhole occurred last fall in close proximity to this one. The previous sinkhole was repaired shortly after it was discovered. This depression was repaired by staff and will be further reviewed under the WECI project to repair the weir later this year. Substantial debris has been caught up in the safety boom and is scheduled to be removed by staff as soon as they can get to it. No additional issues were identified.



Farm Lake Dam: 2 pieces of plywood have lifted off the crest of the dam and the staff gauge was destroyed by the ice/high flows. Neither issue affect the structural stability of the dam or the ability to maintain levels. Repairs to the crest of the dam were already scheduled to be done this summer so both issues will be resolved at that time.

Mississagagon Lake Dam: No additional issues were identified.

Pine Lake Dam: No additional issues were identified.



Big Gull Lake Dam: Seepage through the wing wall appears to remain unchanged. No additional issues were identified.

Widow Lake Dam: No additional issues were identified.

Lanark Dam: Detailed inspection of the embankments was not feasible due to the amount of growth on the banks. cursory inspections did not reveal any issues. Five stoplogs were lost during the event and have been replaced. Some of those stoplogs have been located and will be retrieved later this summer. No other issues were identified.

Bennett Lake Dam: Substantial debris has been caught up in the safety boom and is scheduled to be removed by staff as soon as they can get to it. No additional issues were identified.

Carleton Place Dam: No additional issues were identified.

3.0 WATERSHED CONDITIONS UPDATE

The flood of 2019 occurred primarily between April 15 and the end of May. It established many record high water marks on several lakes across the watershed. Flows in many of the larger tributaries were among the highest ever recorded. The entire watershed has returned to normal conditions and all lakes are at or very close to the established target levels. All dams are closed off, have been jacked and or sealed with sandbags and cinders and seepage is at a minimum.

Operation of the Crotch Lake reservoir has begun, with the purpose of augmenting downstream flows to attempt to maintain an average flow of 5 cms at High Falls throughout the summer.

Stream flows in all major tributaries and along the main stem of the Mississippi River are now below average. The flows and rainfall data do not currently indicate that the watershed is in a level one drought but the current trend is heading in that direction.

4.0 NEXT STEPS

The detailed report on the 2019 Flood will be tabled and presented at the September Board of Directors meeting.

Staff will undertake detailed inspections of all of the dams MVCA owns and or operates in the fall. Minor maintenance projects identified in previous inspections and included in this year's budget will be undertaken and completed by the end of the construction season.

Staff will continue to monitor streamflow and meteorological conditions with regard to the Drought Awareness program and establish the Low Water Response Team should conditions get to that stage.