

Attachment 1 - Mississippi River Watershed Plan: Implementation Status

DRAFT February 2024

Activity / Recommendation	Status				Comments	Category		
	Compl.	WIP	On Hold	Cancel.		1	2	3
Integrated Management and Collaboration								
1. Extend the role of the MVCA Public Advisory Committee (PAC) for the implementation and updating of the Watershed Plan.	X				Committee formed and appointed.		X	
2. Undertake meaningful engagement and establish new relationships with Indigenous partners through implementation of an Indigenous Engagement Plan and through ongoing engagement in watershed initiatives.		X			IEP carried out during development of the Watershed Plan and ongoing through the promotion of stewardship programs such as Shoreline Planting Program and Green Acres; focused bi-monthly updates to Indigenous communities during the Kashwakamak EA; enhancement of an Indigenous Engagement page on MVCA's website; and initiation of a newsletter: Connect, Share, Collaborate.	X		X
3. Continue to collaborate with and promote collaboration among lake associations through networking groups, direct partnerships and stewardship programs.		X			Continue to support and attend Lake Links and to attend annual general meetings, and promote and deliver lake tree days with lake associations.			X
Climate Change								
Apply a climate change lens to all strategic directions within this Plan.		X			MVCA considers the potential impact of climate change when preparing flood plain mapping, in its capital planning, when advising applicants regarding development proposals, and in the development and implementation of stewardship and communications programs.			X
Growth and Development								
Work with all partners to continue to support environmentally sustainable growth for risk mitigation and the protection of watershed values and features.		X			MVCA is currently modeling the potential impact of wetland loss in the Carp River watershed with the hope of extrapolating findings to other similar areas in our jurisdiction. We are also reviewing opportunities to mitigate flooding in the Clyde River system. Other work includes development a Land Conservation strategy that is including identification of priority wetland areas for conservation and risk mitigation purposes.	X	X	X

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Water Management								
1. Prepare a Mississippi River Watershed Model incorporating historical, near real-time, and projected future hydro-climatic data, based on up-to-date information and science.		X			The Mississippi River watershed model is updated as new information is obtained through other studies, for example preparation of the flood plain mapping for the Lower Clyde River and the collection of bathymetric data associated with projects such as the Kashwakamak Lake Dam EA.	X		
2. Update the Mississippi River Water Budget to better evaluate water needs and use and incorporate climate change considerations.		X			RVCA has initiated this work for the entirety of the Mississippi-Rideau Source Protection Region (MRSPR). An interim report is expected in March 2024.	X		
3. Undertake a Water Storage Capacity and Management Study that considers both man-made (dams and reservoirs) and natural storage (wetlands) options and capacity.		X			As referred to above, MVCA is examining the impact that wetlands have on flood mitigation and flow augmentation in the Poole Creek system; and opportunities for optimizing storage in the Clyde River system has begun.	X		
4. Update the Mississippi River Water Management Plan to build on modelling, water budget and storage assessments completed under Actions WM1, WM2, and WM3.			X		MVCA and other dam operators are to prepare an Implementation Report in 2024 for submission to the province. MVCA has recommended that future updates address the impacts of climate change and will be meeting with hydro producers this year to reiterate that concern.	X		
5. Develop and implement an Asset Management Plan for the water control structures.		X			Work is progressing and a final document it to be tabled with the Board in the fall.	X		
6. Improve the MVCA hydrometric (water level and flow monitoring) network, to enhance automated monitoring capabilities and overall efficiency.		X			MVCA prepared a monitoring network workplan in 2022 that has been implemented as follows: every station and improvements made as needed including re-wiring power systems and installing cellular antennas; in 2023, the network was expanded to include a new rain gauge at Shabomeka Lake Dam and five new stations in the Carp River watershed. Over the past two years staff developed a low-cost open-source datalogger using a microcontroller (Arduino) to update and improve its aging infrastructure.	X		
7. Work with municipalities, agriculture and development communities, landowners and other partners to quantify, value and protect wetlands as hydrologic and natural assets.		X			As referred to above, MVCA is examining the impact that wetland have on flood mitigation and flow augmentation in the Poole Creek system, and in the process of identifying priority wetland areas for conservation and risk mitigation purposes. Staff also recently provided wetland training to municipal staff and consultants and participated in wetland workshops in Lanark County.	X	X	X

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8. Work with municipalities, agriculture and development communities, and other landowners and partners to enhance on-site retention and infiltration of water.		X			MVCA promotes the use and implementation LID and protection of green assets during the development review and permitting process. We have educational materials on our website.			X
9. Enhance response planning and readiness through the Low Water Response Team and ensure it includes representation from all key water use sectors. (CA responsibility falls under Ontario Low Water Response Strategy).			X		Work on this has yet to begin.	X		
10. Support Hydro Producers and municipalities in undertaking an Ice Risk Assessment where deemed beneficial.		X			MVCA developed and is piloting an ice monitoring program to support development of an Ice Management Strategy, which is to be tabled with the Board this summer.	X		
Natural Hazard								
1. Maintain up to date hazard mapping to identify and map flood and erosion risk areas, including effects of climate variability and change.		X			Flood plain mapping was updated for the lower Mississippi River in April 2022, and the lower Clyde River in December 2023. Other flood plain mapping will be prepared or updated as resources allow.	X		
2. Work with MNR to assess and update the current floodplain standard (100 Year), policies, and floodproofing measures.		X			The province recently updated flood plain mapping standards for all conservation authorities. MVCA's standard remains at the 1:100 event, but with the inclusion of wave uprush allowance. No change in methodology has been approved at this time.	X		
3. Work with municipalities to undertake a roadway flood vulnerability assessment to identify flood prone roadways; and properties potentially impacted by unsafe access; and to develop a strategy to address properties potentially impacted by unsafe access.		X			MVCA provided an initial assessment of roads around Mississippi Lake in partnership with the lake association. Results were shared with the three abutting municipalities and the County of Lanark.	X		
4. Develop methodologies for identifying and mitigating potential risks associated with unstable slopes and unstable soils throughout the watershed.		X			New staff are attending training and MVCA's regulations policies are undergoing review. Work has begun in partnership with RVCA, SNC and the City of Ottawa on a methodology to be applied in this area of E. Ontario.	X		
5. Support waterfront property owners in implementing adaptive management measures to address potential impacts of variable water levels.		X			MVCA's stewardship programs include: Shoreline Planting Program, Green Acres, City Stream Watch, ORCWP- supporting Forest Management Plans, Watercourse Buffers, Windbreaks, etc.			X

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Water Quality								
1. Continue to support the Ministry of Environment, Conservation and Parks (MECP) Provincial Water Quality Monitoring Network (PWQMN) in collecting baseline surface water quality data.		X			MVCA continues to provide this service to the Province and also collects baseline water quality data for the City, and delivers Stream Watch programs to monitor smaller systems. Findings are reported through annual reports and the Watershed Report Card.	X		X
2. Improve the groundwater monitoring program to meet municipal and private source water protection needs.			X		No further work has occurred on this item.			X
3. Continue to support municipalities in actions prescribed by the Mississippi-Rideau Source Protection Program.		X			RVCA delivers program support under the MRSP to Mississippi Mills and Carleton Place in accordance with their bilateral agreements.		X	
4. Support municipalities in assessing and enhancing stormwater management in new and existing developments.		X			MVCA supports municipalities through the development review and Section 28 permitting. MVCA can only comment on stormwater quantity matters, and is prevented by legislation and regulation from commenting on water quality issues.		X	
5. Work with municipalities and the province to improve application and coordination of regulatory tools for the protection of water quality, shoreline and riparian areas.		X			MVCA is prevented by legislation and regulation from commenting on water quality and natural heritage protection matters during development reviews under the Planning Act, and the review of permit applications. CAs can only provide educational support on these matters. To that end, MVCA created a Shoreline Information Package in January 2024.			X
6. Continue to offer Septic Approval and Re-Inspection Programs for municipalities and encourage all municipalities to implement septic re-inspection programs in high priority areas such as waterfront and rural settlements.		X			The Mississippi-Rideau Septic System Office (MRSSO) provides septic approval under Part 8 of the <i>Building Code</i> , and in some cases re-inspection services, on behalf of several municipalities that entered into Category 2 bilateral agreements with MVCA or RVCA.		X	
7. Review existing and potential environmental monitoring programs and identify opportunities for improvement/ collaboration.	X				MVCA completed a review of its monitoring program in 2023. The updated program can be found here: https://mvc.on.ca/plans/			X
8. Continue annual analysis and reporting of water quality conditions.		X			MVCA implementing water monitoring activities per the above plan, and reports findings annually. Reports can be found here: https://mvc.on.ca/reports/ MVCA's 11 member-municipalities entered into		X	X

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					bilateral agreements effective January 1, 2024 to continue these programs for the next five years.			
Natural Systems & Land Conservation								
1. Develop a Land Conservation Strategy to mitigate flood, erosion and other natural hazards, and to support the ecological services provided by natural systems.		X			Work began in 2022 and will be completed by December 2024	X		
2. Encourage and support studies that quantify the ecosystem services and climate resiliency provided by natural asset features and functions (wetlands, woodlands, etc.).			X		It is hoped that the Land Conservation Strategy and wetlands risk assessment will provide an opportunity to begin to quantify ecosystem services.	X		X
3. Work with municipalities and public agencies to improve the application and coordination of regulatory tools for the protection of wetlands, woodlands and natural systems.		X			Initiated a review of available and existing tools in use by member municipalities.	X		X
Education and Outreach								
1. Develop and implement a 3-Year MVCA Stewardship Program Pilot for hazard mitigation, climate change resiliency, and the protection of water quality, wetland cover, forest cover, and other environmental features and functions.	X				The 3-year Stewardship Program pilot was a success. The program has been extended for the next five years per bilateral agreements with MVCA's 11 member-municipalities.			X
2. Develop and implement an MVCA Communication Strategy in support of mandatory programs and services.		X			The focus 2022-24 has been on improving MVCA's social media communications and maintaining the website to ensure it is current and useful, and engaging with Indigenous communities. Work in 2024 will continue to focus on Indigenous outreach as well as on Stewardship outreach.	X		
3. Develop and implement an MVCA Education Strategy		X			A consultant has been retained and is currently reviewing education programming opportunities. Draft findings and recommendations are to be received by the end of April.			X