

Lisa Marshall

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From: Lisa Marshall  
Sent: August 25, 2023 12:53 PM  
To: [REDACTED]  
Cc: Juraj Cunderlik; Ramy Saadeldin; Sally McIntyre; Lauren Walker  
Subject: Kashwakamak Lake Dam Class EA - Call for Community Liaison Committee Members  
Attachments: MVCA\_Kashwakamak Dam EA\_CLC TOR\_ August 2023.pdf

Hello [REDACTED]

The MVCA is establishing a Community Liaison Committee (CLC) for the Kashwakamak Lake Dam Class Environmental Assessment (Class EA). The purpose of the CLC is to provide opportunities for stakeholders to meet with the project team outside of mandatory points of consultation to discuss the project, hear each other's perspectives, and help inform the EA process for the Kashwakamak Lake Dam. MVCA is seeking up to 3 members of the public who have expressed an interest in the project and that own or lease property abutting or within 20 km of the Kashwakamak Lake Dam to form part of the committee. More information regarding the role and responsibilities of the CLC can be found in the attached Terms of Reference.

Proposed Schedule:

Expression of Interest by: September 29<sup>th</sup>, 2023

MVCA/McIntosh Perry Inform Selected Members of Committee and next steps by: October 6<sup>th</sup>, 2023

CLC Meeting #1: Week of November 13<sup>th</sup>, 2023 (tentative)

- Present Problem/Opportunity Statement, Alternative Solutions, Criteria, Evaluation, Impacts and Mitigation, and review Preliminary Preferred Alternative Solution(s). Provide time for open discuss and comments.

Public Information Centres (PICs): Week of November 27<sup>th</sup>, 2023 (tentative)

CLC Meeting #2: Week of February 19<sup>th</sup>, 2024 (tentative)

- Present Review Preferred Solutions, Alternative Design Concepts, Criteria, Evaluation, Impacts and Mitigation, and review Preliminary Preferred Design Concept(s). Provide time for open discuss and comments.

If you are interested in becoming a member of the CLC, please contact Ramy Saadeldin at [rsaadeldin@mvc.on.ca](mailto:rsaadeldin@mvc.on.ca) or the undersigned by September 29<sup>th</sup>, 2023.

Regards,

**PURPOSE**

The *Class Environmental Assessment for Remedial Flood and Erosion Control Projects*, 2013 states that a Community Liaison Committee (CLC) may be established on a project-by-project basis for each undertaking in accordance with the Class EA. The purpose of a CLC is to provide opportunities for stakeholders to meet with the project team outside of mandatory points of consultation to discuss the project, hear each other's perspectives, and help inform the EA process for the Kashwakamak Lake Dam.

**SCOPE**

The three key advisory functions of the Community Liaison Committee (CLC) will be:

- to review information and provide comments during the planning and design process;
- to identify items of public concern related to the impact and design of the project; and,
- to offer potential advice or solutions to resolve these concerns.

**MEMBERSHIP**

The MVCA will strive to achieve a cross-section of stakeholders on the CLC. Stakeholder groups and individuals that have expressed an interest in the Kashwakamak Lake Dam Class EA will be contacted regarding potential participation. Membership shall be limited to the following:

- Up to 3 members of the public who have expressed an interest in the project and that own or lease property abutting or within 20 km of the Kashwakamak Lake Dam;
- One (1) member representing the Township of North Frontenac;
- One (1) member representing the Kashwakamak Lake Association (KLA), and
- One (1) member representing each of the identified Indigenous Communities.

The following sections summarize the roles and responsibilities of CLC members and proposed meeting format.

**CODE OF CONDUCT**

CLC members must be committed to listening and engaging in discussions in a respectful and constructive manner. While opinions and ideas may differ, all perspectives will be listened to and considered. Disrespectful language and behaviors towards others will not be tolerated and will result in dismissal from the CLC.

Members shall inform the Project Team of any situation that may be either a conflict of interest or a potential conflict of interest with their CLC obligations and if required recuse themselves from discussion of those matters.

Some information and findings being presented will be draft and not for public distribution. Participants will be expected to treat information as confidential unless informed otherwise.

## **MEMBER ROLES AND RESPONSIBILITIES**

CLC Members will be responsible for:

- Attending all CLC meetings (members may send one (1) alternate in their place if they are not able to attend a meeting);
- Listening to/reviewing and considering the information provided by the Project Team;
- Participating in discussions;
- Listening to and considering the opinions of other CLC members;
- Providing constructive feedback on Project Team suggestions for improvements;
- Preparing for meetings by reviewing any materials provided in advance by the Project Team;
- Participating in the evaluation of preliminary alternatives and preferred alternative; and
- Using community networks to share information and solicit broader feedback when requested.

## **LENGTH OF TERM**

Participation on the CLC will be for the duration of the Kashwakamak Lake Dam Class EA, which is expected to conclude no sooner than Spring 2024. Members may be released at any time during the term by written resignation or by expressing their intent at a CLC Meeting.

## **MEETINGS & FORMAT**

Two (2) meetings are planned during the EA process:

- To provide an overview of the project, objectives and process.
- To consider proposed solutions and preliminary design alternatives.

These meetings will be:

- Conducted in a local facility or using an on-line meeting tool;
- Scheduled at least two (2) weeks in advance of the proposed meeting date;
- Approximately two (2) hours in length, and
- Documented in minutes and published as part of the EA record.

MARSHALL Lisa

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From: MARSHALL Lisa  
Sent: February 8, 2024 9:17 AM  
To: [REDACTED]  
Cc: Juraj Cunderlik; Jane Cho; Lauren Walker  
Subject: Kashwakamak Lake Dam Environmental Assessment - Community Liaison Committee Meeting Notice

Good morning,

MVCA and Egis (formerly McIntosh Perry) would like to formally invite you to the first Community Liaison Committee (CLC) meeting for the Kashwakamak Lake Dam Environmental Assessment. During the meeting, we will present the Problem Statement, identify proposed Alternative Solutions, review the evaluation, and identify the recommended Preferred Alternative Solution(s). The meeting will provide an opportunity for CLC members to participate in the project's planning process and provide valuable input/feedback into the evaluation of the alternative solutions.

Meeting details:

Date: February 26, 2024

Time: 2:00 - 4:00 pm

Location: Virtual Meeting/Presentation (Teams meeting invite to follow this email)

If you are unable to attend the virtual meeting, the presentation can be made available to you and we can answer any follow up questions you may have.

Should you have any questions or comments, please do not hesitate to reach out to Mr. Juraj Cunderlik, MVCA, Director of Engineering, at [jcunderlik@mvc.on.ca](mailto:jcunderlik@mvc.on.ca), or Ms. Lisa Marshall, McIntosh Perry Project Manager, at [lisa.marshall@egis-group.com](mailto:lisa.marshall@egis-group.com).

We appreciate your commitment to this important initiative and look forward to your contributions during the meeting.

Thank you,  
Lisa



**Lisa Marshall, P.Eng.**

Manager, Environmental Engineering

Phone: +1.613.714.0815 | Mobile: +1.613.852.1148

## Meeting Minutes

Date and Time: February 26, 2024, 2:00 – 4:00 PM

Location: Teleconference Call via Teams

List of Attendees: **Mississippi Valley Conservation Authority (MVCA)**

Juraj Cunderlik, Director, Engineering  
Jennifer North, Water Resources Technologist  
Jane Cho, Water Resources EIT  
Alana Perez, Water Resources Engineer  
Kelly Stiles, Biologist  
Sally McIntyre, General Manager

**Egis**

Lisa Marshall, P.Eng., Project Manager (PM) Lead Environmental Planner  
Mustafa Sasal, Lead Sr. Water Resources Engineer  
Monika Orwin, Water Resources Engineering Intern

**Committee Members**

Mayor Gerry Lichy, Mayor, Township of North Frontenac  
Tom Cowie, Hiawatha First Nation



Subject: Kashwakamak Lake Dam Class EA  
Community Liaison Committee (CLC) Workshop Meeting #1

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### 1.0 INTRODUCTION

- Introduction was provided for all MVCA, Egis, and CLC meeting participants.
- A brief overview of the project and site background was provided.
- Egis Project Manager (PM) provided overview of meeting agenda.

## 2.0 PROJECT OVERVIEW

- Egis PM provided presentation to CLC Members:
  - Review of Study Area
  - Conservation Authority Environmental Assessment (EA) Process
  - Consultation Program
  - Problem Statement
  - Field Investigations
    - Natural Environmental Assessment
    - Archaeological and Cultural Heritage – The area has archaeological potential and will progress to a Stage 2 assessment. No construction will take place until the study is completed.
    - Hydrology and Hydraulic Assessment
    - Geotechnical Investigation
  - Proposed Alternative Solutions
  - Proposed Evaluation Criteria and Evaluation Matrix
    - It was noted that Alternative 2b was not carried forward at this point as it does not meet the needs of the Watershed Management Plan (WMP) nor does it address the Problem Statement.
  - Recommended Preferred Alternative Solution
    - Alternative 4 – Replace Existing Dam at the same location.
  - Next Steps

## 3.0 OPEN DISCUSSION

- CLC member (██████) – when will construction start on the dam?
  - Egis PM noted that following consultation and public input, the evaluation matrix will be updated accordingly, and the Technically Preferred Alternative (TPA) will be selected. Egis and MVCA will then prepare a Concept Design for the TPA and will place the Project File Report on public record for 30 days for review and comment by agencies, stakeholders, First Nations, the public, etc. Once the EA is completed (Summer 2024), MVCA will need to undertake the preliminary and detailed design.
  - MVCA noted that construction on the dam will likely start in 2-3 years (fall 2026 or 2027) after the completion of the EA, the design, the tendering process, and obtaining permits.

- CLC member (Tom C.) – when was the Species at Risk (SAR) investigation completed for this EA?
  - Egis PM noted that a desktop review was completed prior to undertaking a single field visit in the early spring/summer.
  - MVCA noted that they have completed monitoring programs over the past 20 years including sampling the lake for baitfish and near-shore species but no sample SAR such as turtles or bats.
- CLC member (Tom C.) – can MVCA and Egis expand on the potential impacts of the dam on Manòmin?
  - MVCA responded that the data collected cannot be correlated since they do not typically survey the downstream area and they do not have data from before the dams were built to establish a baseline condition.
  - However, there is another dam located between Kashwakamak Lake Dam and the Ardoch community to allow for buffering and additional protection of the Manòmin.
  - MVCA also noted that in the structure operating plan, there are certain times of year when there needs to be stable flow and water levels to maintain the rice crop populations, and the dam is operated accordingly.
  - Egis noted that the Manòmin is being considered as part of this assessment.
- CLC member (Tom C.) noted that the territory mentioned in the report should be reaffirmed.
  - MVCA and Egis will confirm and update the territory names accordingly.
- CLC member (██████████) - are butternut trees in the area?
  - Egis acknowledged that there are butternut trees, however, none were identified within the study area.
  - A CLC member added that they could still be impacted during construction due to the risk of spillage.
  - Egis will identify the species present and ensure the appropriate mitigation measures are in place.
- MVCA requested that Egis explain the current Kashwakamak Lake Dam conditions and operations.
  - Egis explained the current Kashwakamak Lake Dam conditions, including the elevations of the stop log gates, the overflow weir, the north and south embankments, the saddle dam, and the fluctuations of the water surface elevations between winter and summer settings (approximately 1.5 m).
  - In the case of overflow, it occurs through the weir and no overtopping of the saddle dam has been recorded. The saddle dam is built up from the low area near the dam to prevent spillage of the lake.
- CLC member (██████████) - how the water level will be controlled during the replacement of the dam?
  - Egis responded that a diversion plan for flow mitigation will be considered during later stages of the detailed design.

- MVCA noted that the installation of temporary coffer dams with a staged construction plan to maintain water levels during replacement or other construction works would likely minimize impacts.
- CLC member ( [REDACTED] )– The water levels this winter seem lower than normal?
  - MVCA noted that the levels are currently above the main target level, but that the fall was relatively dry which could have resulted in lower levels than normal. Construction works would likely take place after the fall drawdown to minimize impacts on the lake.
- CLC member ( [REDACTED] ) – has consideration been given to creating a power supply with the Kashwakamak Lake Dam which could become a revenue source?
  - MVCA noted there have been studies across the watershed to evaluate opportunities for power generation moving forward; however, Kashwakamak Lake Dam was determined to be not suitable due to the lack of infrastructure and hydro lines. MVCA will consider the option however do not think it will be feasible.
- Closing comments:
  - MVCA noted that any changes in the expected timeline for water level drawdowns will be communicated to the community so that plans can be made accordingly.
  - Egis confirmed there will be notification periods as part of the process. In addition to communicating directly with the members of the lake association and the Township.
  - KLA noted that there is a Facebook page and bulletin boards in the main lake cottages that can be used to provide updates to the public.
  - The Township of North Frontenac Mayor also added that there are periodic mailouts that can be used to distribute information.

## 4.0 NEXT STEPS

- Update the evaluation matrix based on input received from the CLC.
- Prepare the Public Information Centre (PIC) material and a Notice of PIC for MVCA for review and for public circulation. The meeting will likely take place in May 2024.
- Develop the proposed Alternative Design Concepts for the TPA. It will be updated based on the community input gathered from consultation and further assessment.
- Schedule CLC Meeting #2 – to review the proposed Alternative Design Concepts and environmental impact screening. The meeting will likely take place in May 2024.
- The presentation slides will be distributed to the meeting participants. However, it was asked that material not be further distributed to community members to minimize confusion.
- Egis and MVCA will provide continued opportunities for the public to comment on the EA process.



The meeting was adjourned at 3:35 pm.  
For any errors or omissions, please contact the undersigned.

Lisa Marshall, P.Eng.  
Project Manager  
Email - [lisa.marshall@egis-group.com](mailto:lisa.marshall@egis-group.com)



# Kashwakamak Lake Dam Class Environmental Assessment

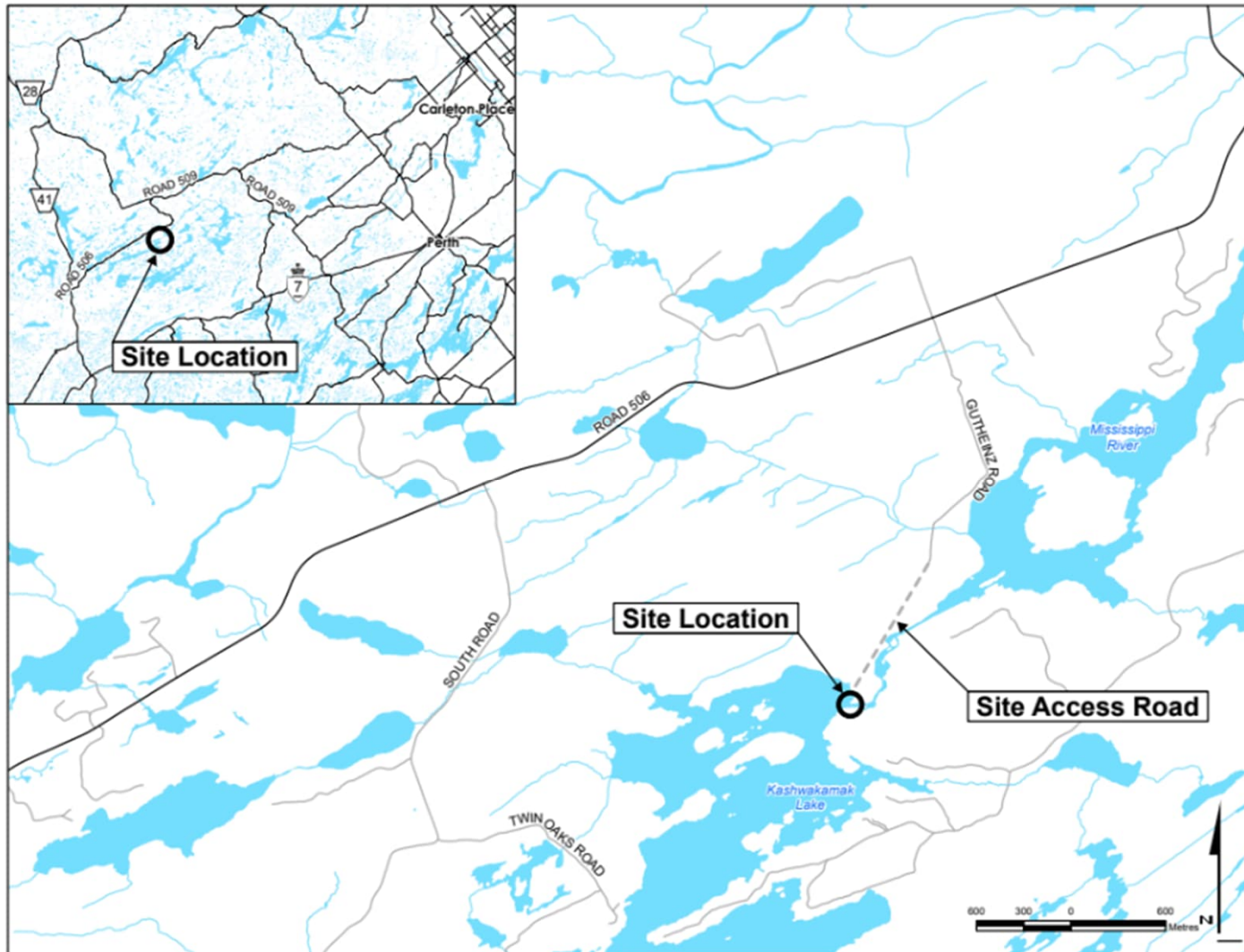
## Community Liaison Committee Workshop #1

February 26, 2024

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- 1 Study Area
- 2 Class Environmental Assessment Process
- 3 Consultation Program
- 4 Project Rationale Statement
- 5 Inventory Studies
- 6 Proposed Alternative Solutions
- 7 Evaluation Criteria and Matrix
- 8 Next Steps

# STUDY AREA



# CLASS ENVIRONMENTAL ASSESSMENT PROCESS

This project is to be completed in accordance with the Conservation Ontario's Class Environmental Assessment for Remedial Flood and Erosion Control Projects.

Stage 1	Stage 2	Can all Environmental Impacts be Avoided, Mitigated or Compensated?		
<b>Environmental Assessment Process</b>				
Project Initiation	Alternative Solutions	Yes	Uncertain	No
<b>Technical Process</b>				
Prepare Rationale Statement  Establish Community Liaison Committee  Prepare Baseline Environmental Inventory	Identify and Evaluate Alternative Solutions  Identify Impacts and Mitigation Measures  Select Preferred Solution  Conduct Detailed Analysis of Environmental Impacts	Prepare Project Plan  Are all Concerns Addressed? (No Part II Order Requests)	Prepare Environmental Study Report (ESR)  Are Impacts Deemed Acceptable?	Prepare Individual Environmental Assessment OR Reassess Program Option
<b>Consultation Process</b>				
Notice of Intent	Agencies, Stakeholder, First Nations and Public Workshops (as required)  Public Information Centre #1	Provide Notice of Filing to Interested Persons/Parties  Provide Notice of Project Approval & Proceed to Construction	Publish Notice of Filing for Review	Continue Consultation as Required during Detail Design

We Are Here

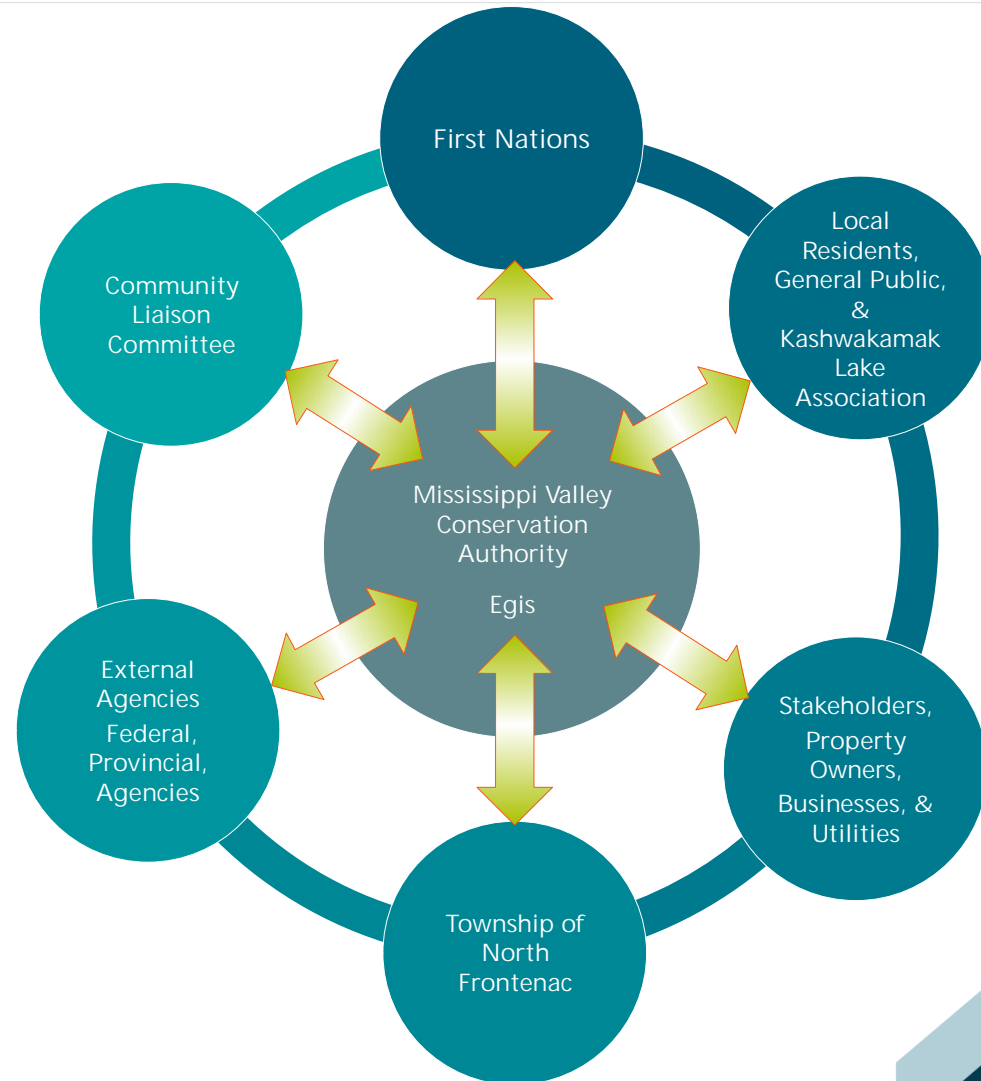
# CONSULTATION PROGRAM

Consultation completed to-date as part of the Environmental Assessment Process:

- Notice of Intent;
- Preliminary Consultation with fourteen (14) Indigenous Communities;
- Expression of Interest to Join Community Liaison Committee (CLC); and
- CLC Workshop Meeting.

General comments received have noted:

- Requests to stay involved with the study and be able to provide input;
- Request from Hiawatha First Nation and Mississaugas of Scugog Island First Nation to be involved in study and receive Archaeological Assessment reports;
- Alderville First Nation has requested to be involved in the Stage 2 Archaeological Assessment;
- Concerns pertaining to changes in water levels, as well as the ability of the proposed alternative to continue to mitigate flood and drought risk, and
- The current dam controls the water levels & maintains the water level for both the safety and recreational/tourism purposes for hundreds of people who either live or own seasonal cottages on the lake.



# PROJECT RATIONALE STATEMENT



The existing Kashwakamak Lake Dam was built more than 100 years ago (built in 1910) and is well beyond its design life. Based on the findings of the 2022 Dam Safety Review, the dam is showing signs of deterioration, especially the overflow weir. A decision needs to be made on whether to decommission, repair, or replace the dam. Given the age and condition of the structure, its natural heritage features, and its function as one of the six major dams managed to alleviate flooding and drought along the Mississippi River, the future of the dam must consider several constraints and opportunities such as public safety, riverine processes, flooding, climate change, cultural heritage, Indigenous rights, natural habitat, public uses and aesthetics. The Preferred Alternative must address the problem while balancing study area constraints and opportunities, in order to best meet the needs of the various stakeholder groups and interested parties.

# INVENTORY STUDIES



## Natural Environment Assessment

Existing Conditions Inventory to inspect and document the study area for any natural environmental features.

Environmental Impact Assessment - identification of potential environmental impacts and provide mitigation measure recommendations that are appropriate to the site features and landscape.



## Archaeological and Cultural Heritage

Land and Marine Archaeological Assessment – to determine if the site has any archaeological potential both on land and within the watercourse.

Cultural Heritage Evaluation Report - to determine if the dam retains any cultural heritage value or interest (CHVI) under the Ontario Heritage Act.



## Hydrology and Hydraulic Assessment

A hydrologic and hydraulic assessment was undertaken using an existing model made available from the MVCA. The assessment evaluated existing conditions and proposed alternative solutions to determine impacts on surface water flows, elevations and velocities.



## Geotechnical Investigation

A geotechnical investigation was undertaken to explore the subsurface conditions of the study area and provide design recommendations for the proposed alternative solutions for Kashwakamak Lake Dam.



# NATURAL ENVIRONMENT

## Fish and Fish Habitat

- Kashwakamak Lake is identified as having a cool/warmwater thermal regime.
- The lake, and the Mississippi River downstream of the dam, provide permanent fish habitat and suitable spawning habitat.
- Significant fish habitat in the form of sport fish and baitfish spawning is located immediately downstream of the Dam: Walleye, White Sucker and several baitfish species.
- Kashwakamak Lake has a large population of Walleye, as well as Bass, Northern Pike, baitfish and non-sport fish species.

## Wetlands

- There are no significant wetlands present within the study area.
- Several small wetlands around the perimeter of the lake and downstream (Mud Lake Provincially Significant Wetland (PSW) which provide overwintering habitat for turtles such as the Blanding's Turtle.
- The Manòmin, wild rice crops, are located approximately 7.0 km downstream of the Kashwakamak Lake dam.
  - Manòmin is an aquatic annual species of grass and has a cultural significance to the Ardoch Algonquin First Nation, Alderville First Nation, and potentially other First Nations.
  - Changes in water elevations at certain times of the year can have potential impacts on the Manòmin.



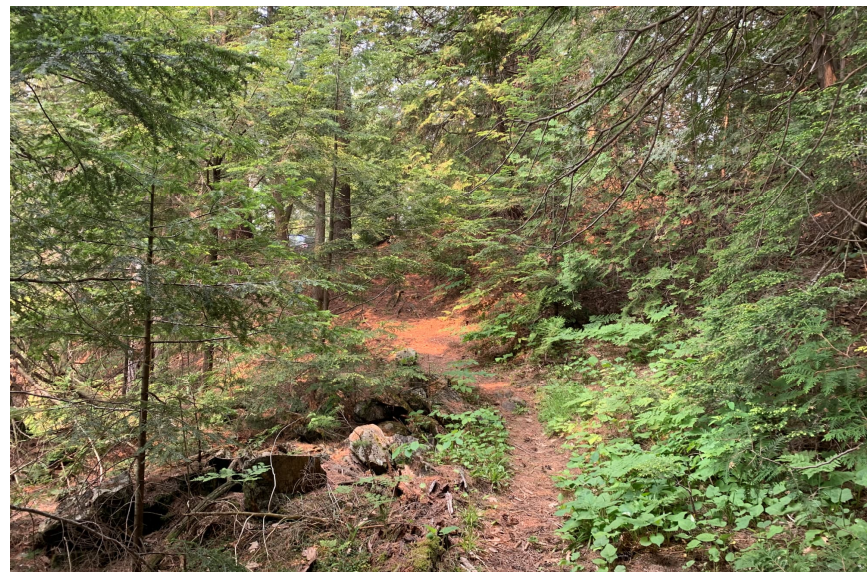
# NATURAL ENVIRONMENT

## Wildlife Habitat

- Significant Wildlife Habitat (SWH): Bat Maternity Colonies, Turtle Wintering Area, Special Concern and Rare Wildlife Species, and Turtle and Lizard Nesting Habitat.
- Suitable habitat may be present within the Mixed Forest community for species such as Eastern Wood-pewee, Red-headed Woodpecker, Eastern-whip-poor and Wood Thrush;
  - These species are known to habitat in mid-canopy layer mixedwood forests, as well as open woodlands and forest edges.
- Rock structures (i.e., rocky outcroppings) may also be utilized by Milksnake and Five-lined Skink.

## Vegetation

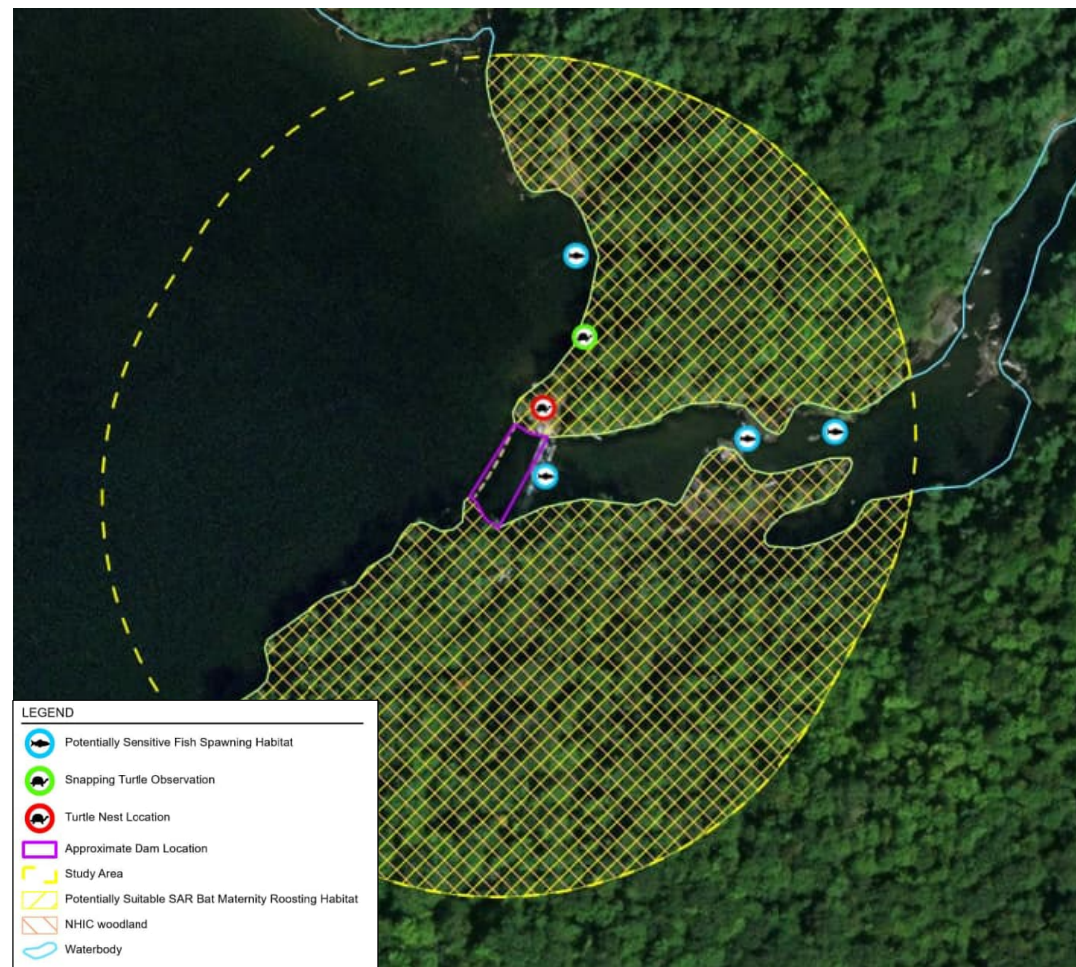
- The study area consists mainly of Mixed Forest including species such as Eastern hemlock, Eastern white cedar American elm, American beech, white pine, red oak, and paper birch.
- NHIC (2023a) identifies woodlands as being present within the study area, however, does not identify the woodlands as being significant.
- No invasive and/or noxious plant species were observed on site.



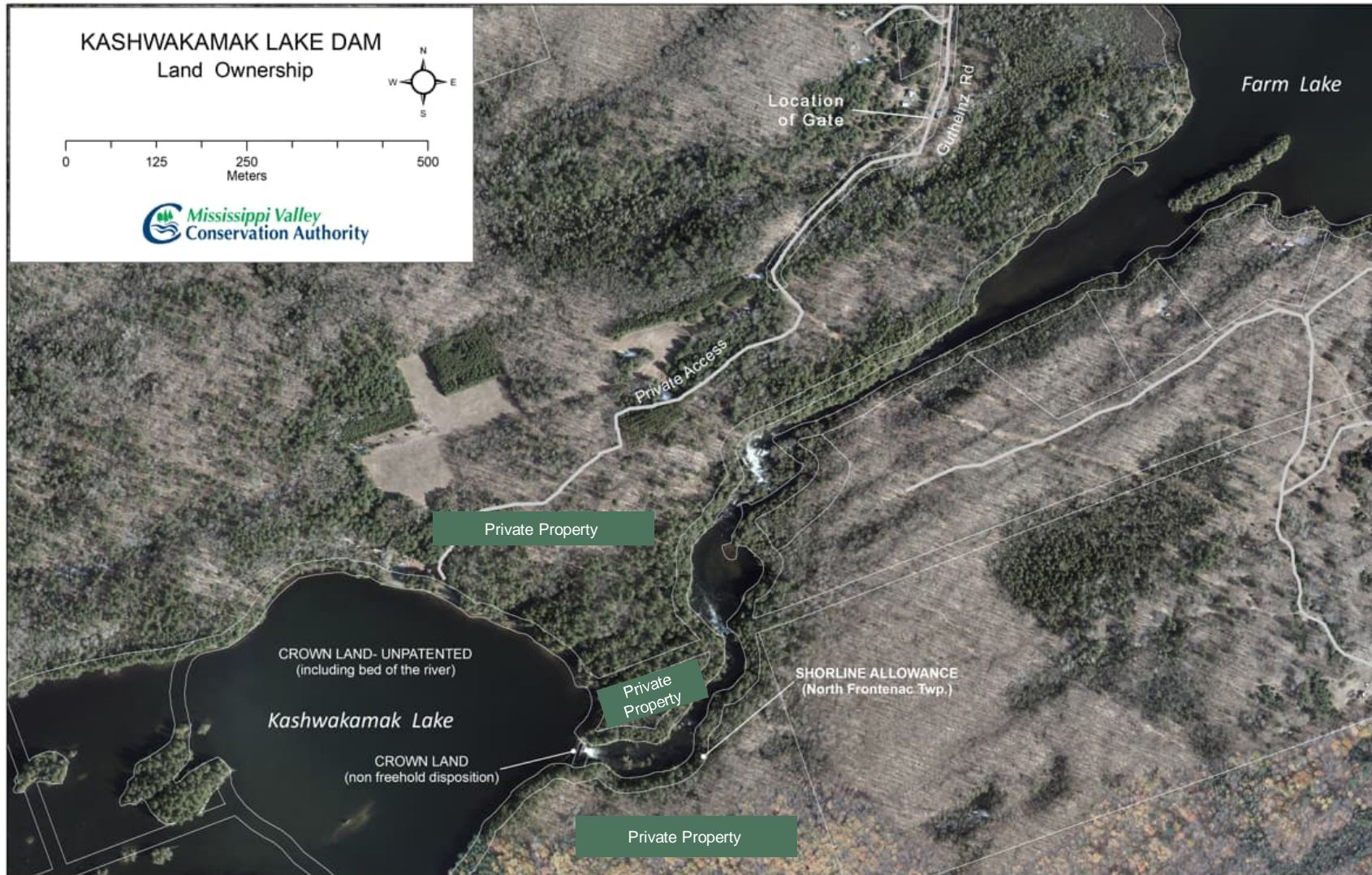
# NATURAL ENVIRONMENT

## Species at Risk (SAR)

- Bats
  - Given the presence of forests, high-quality maternity roosting trees in the study area, Little Brown Myotis, Northern Myotis, and Tri-colored Bat, have a moderate potential of occurring during their active season (April - September 30).
- Herptiles:
  - Potentially suitable nesting and overwintering habitat for Blanding's Turtle, Midland Painted Turtle and Snapping Turtle to occur within the study area.
  - Given the location of the study area (i.e., within Frotenac Arch) and the presence of rock features on the edge of Kashwakamak Lake, Milksnake and Five-lined skink have the potential to occur within the study area as suitable habitat is present.
- Vegetation:
  - No Butternut or Black Ash were observed during the site visit.
- Birds
  - The forested area within the study area could provide potentially suitable breeding habitat (i.e., nesting) for Red-headed Woodpecker, Eastern Whip-poor-will and Wood Thrush.



# SOCIO-ECONOMIC ENVIRONMENT



# ARCHAEOLOGICAL & BUILT CULTURAL HERITAGE

## Land Archaeological

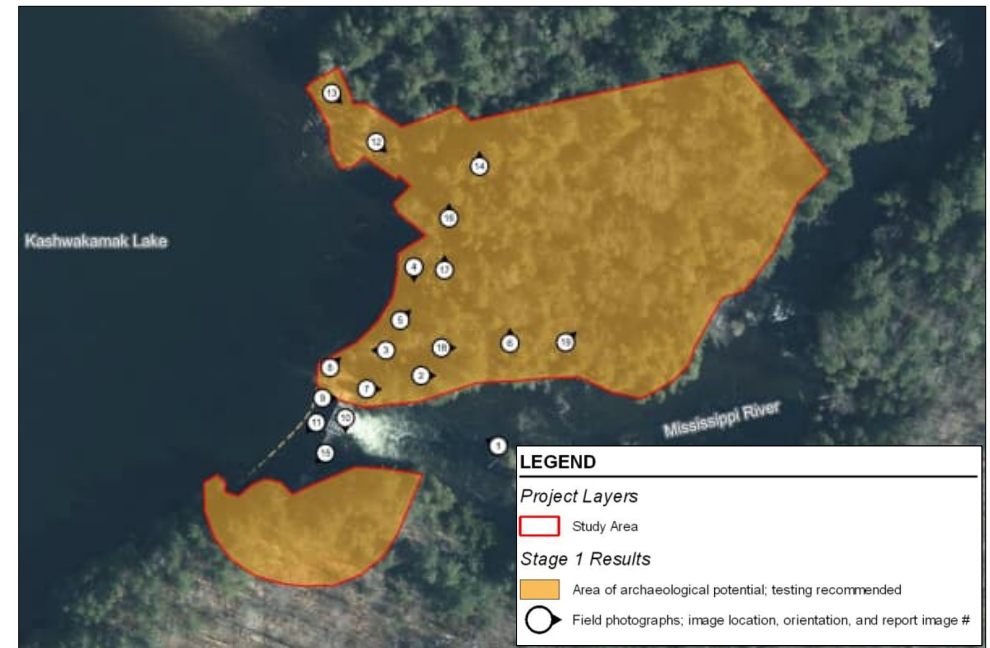
- Based on the findings of the Stage 1 Archaeological Assessment, the study area has been determined to exhibit archaeological potential.
- A Stage 2 Archaeological Assessment will be undertaken once the recommended preferred alternative solution has been identified and prior to the initiation of below-grade soil disturbances or other alterations.

## Marine Archaeological

- Through the archaeological assessment it was determined that the study area is considered to be free of any archaeological features and concerns.

## Built Cultural Heritage

- Kashwakamak Lake Dam was determined to not retain any cultural heritage value or interest (CHVI) under the Ontario Heritage Act.



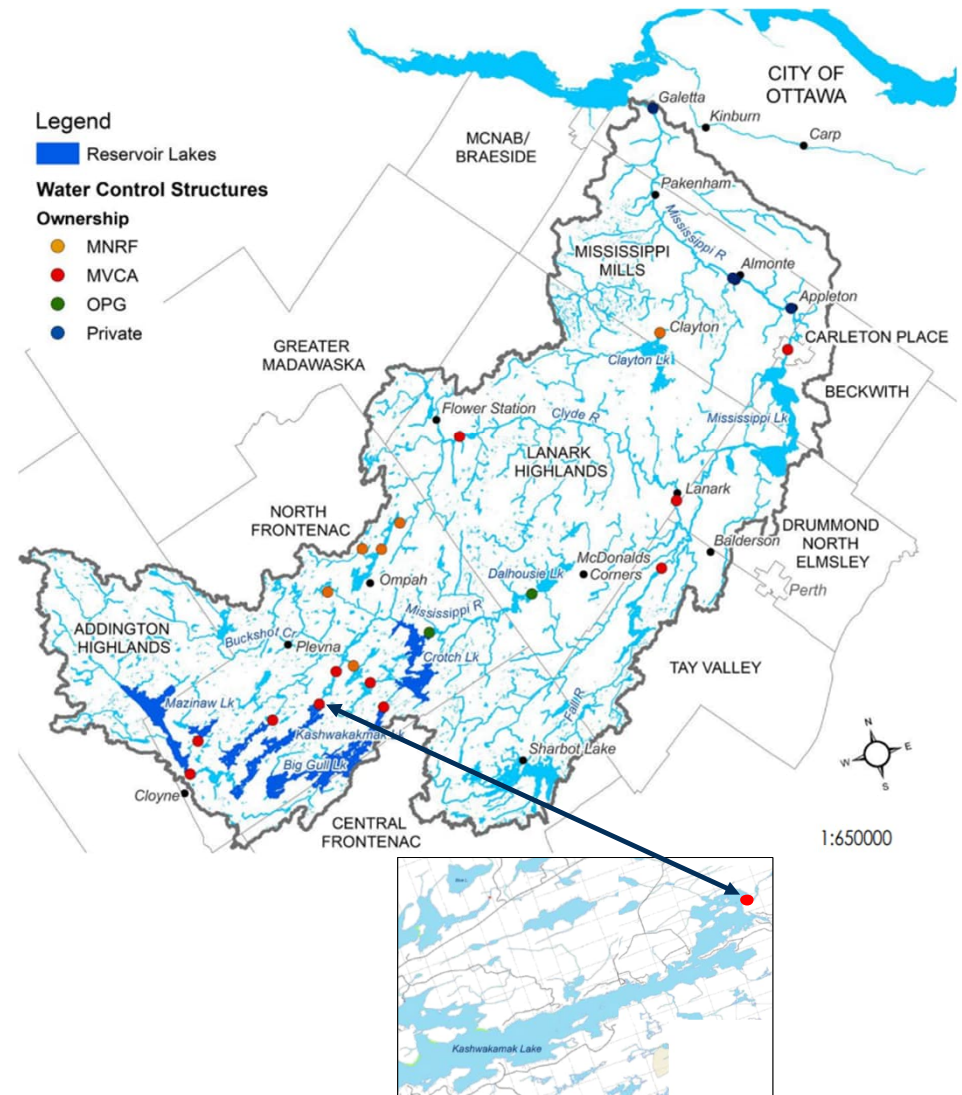
# Watershed Management

## Mississippi River

- The Mississippi River system is composed of a complex network of rivers, streams, rapids and over 250 lakes located in Eastern Ontario.
- The Mississippi River is a managed system with a watershed area of 3765 km<sup>2</sup>.
- Several dams and weirs along the system regulate flows and manage water levels.
- The dams and weirs along the Mississippi River mitigate drought and flooding and maintain stable water levels for recreational activities.

## Kashwakamak Lake

- The Kashwakamak Lake dam is located in the upper reaches of the Mississippi River, within the Township of North Frontenac with a catchment area of 415 km<sup>2</sup>.
- It is one of several reservoir lakes that serve a critical storage function along the Mississippi River, to alleviate flooding and drought.
- The Kashwakamak Lake Dam is essential to maintaining stable water surface elevations in Kashwakamak Lake, improving conditions for recreational activities at the lake.



Kashwakamak Lake Dam

Source: Mississippi River Watershed Plan (MVCA, 2021)

# EXISTING DAM STRUCTURES AND CONDITIONS

## Main Kashwakamak Lake Dam Structure

- The dam consists of two structures, the main control dam and a secondary side block dam.
- The main structure consists of two bulkhead walls, three concrete piers forming the two sluiceways, and a broad crested concrete weir.
- The crest elevation of the dam is 261.63 m.
- Based on previous dam inspections (2016) and the 2022 Dam Safety General Inspection Report, it was noted that the dam is in fair to poor condition.
- Outdated methods and materials used to originally construct the dam may pose significant challenges.

## Saddle Dam

- There is an existing Saddle dam located approximately 60 m to the north of the Kashwakamak Lake dam
- The site access road is located adjacent to the Saddle Dam.
- Failure of the Saddle Dam would result in overtopping of the access road which limits access to the Kashwakamak Lake dam to perform emergency maintenance or operations during a significant storm event.
- During a field investigation (June 2023), seepage was noted on the downstream (eastern) side of the access road, as well as evidence of settlement of the access road adjacent to the saddle dam.
- Outdated methods and materials used to originally construct the dam may pose significant challenges.









# PROPOSED ALTERNATIVE SOLUTIONS

Alternative Solution No.	Alternative Solution	Alternative Solution Description	
		Kashwakamak Lake Dam	Saddle Dam
1	Do Nothing	No change made within the Study Area (status quo). No improvements are made, and no measures are proposed to address the deteriorated structural condition of the dam.	No change made within the Study Area (status quo). No improvements are made, and no measures are proposed to address the deteriorated structural condition of the dam.
2a	Decommission the Existing Dam and Construct Passive Control System	This alternative involves decommissioning of the dam and creating a passive water control system (such as an overflow weir).	Saddle Dam would need to be repaired or placed under this scenario to add in flood and drought control. Failure of the Saddle Dam would result in overtopping of the access road which limits access to the Kashwakamak Lake dam to perform emergency maintenance or operations during a significant storm event.
2b	Decommission the Existing Dam and Reinststate Natural Watercourse	This alternative involves decommissioning/full removal of the existing dam and reinstating a natural watercourse/channel.	Saddle Dam would be decommissioned as access to the Kashwakamak Lake Dam would no longer be required.
3	Rehabilitation of the Existing Dam	Rehabilitation of the Dam would consist of salvaging elements of the existing dam and preserving the structure in a stable state similar to the existing condition.	Rehabilitation of the Saddle Dam would consist of salvaging elements of the existing dam and preserving the structure in a stable state similar to the existing condition.
4	Replace the Existing Dams at the Same Location	Construction of a new dam within a similar alignment to that of the existing dam. For the purpose of this evaluation, the removal of the existing dams in its entirety was considered, with new footings and anchors installed at bedrock.	Replacement of the Saddle dam within a similar alignment to that of the existing dam. The type of structure and function is dependent on the Kashwakamak Lake Dam replacement design which will be further evaluated upon selection of Preferred Alternative Solution.
5	Construct New Dam Downstream	Construct a new dam immediately downstream of the existing dam. This alternative will allow the existing Kashwakamak Lake dam to remain in place during construction to aid in the management of flow.	Replacement of the Saddle dam within a similar alignment to that of the existing dam. The type of structure and function is dependent on the Kashwakamak Lake Dam replacement design which will be further evaluated upon selection of Preferred Alternative Solution.



# EVALUATION CRITERIA

Function/Technical	Natural Environment	Social Environment
<p>Criteria to evaluate the function, technical suitability and engineering characteristics of the alternative solutions, as well as adaptation to Climate Change.</p>	<p>Criteria to evaluate the proposed alternative solutions effects on the natural environment and habitat, and water quality within the study area</p>	<p>Criteria to evaluate the proposed alternative solutions effects on residents/cottagers, businesses and social features (i.e. recreational and tourism), as well as potential property impacts within the study area.</p>
 <ul style="list-style-type: none"> <li>▪ Hydraulic Function/Flooding and Drought</li> <li>▪ Geomorphology/Sediment Transport</li> <li>▪ Dam Safety</li> <li>▪ Durability/ Service Life</li> <li>▪ Climate Change Adaptation</li> <li>▪ Implementation/Constructability</li> </ul>	 <ul style="list-style-type: none"> <li>• Fisheries/Aquatic Impacts</li> <li>• Terrestrial Habitat (Wildlife and Vegetation)</li> <li>• Species at Risk</li> <li>• Existing Watercourses Quality and Quantity</li> </ul>	 <ul style="list-style-type: none"> <li>▪ Private Property Impacts During Construction and Commissioning</li> <li>▪ Temporary/Permanent Property Agreements/ Acquisitions</li> <li>▪ Recreational Impacts/Enhancement</li> <li>▪ Tourism Impacts</li> </ul>
Cultural Environment	First Nations	Economic Environment
<p>Criteria to evaluate the proposed alternative solutions effects on archaeological, built and cultural heritage features and resources within the study area.</p>	<p>Criteria to evaluate the proposed alternative solutions effects on First Nation and Harvesting Rights.</p>	<p>Criteria to evaluate the financial implications of the proposed alternative solutions.</p>
 <ul style="list-style-type: none"> <li>▪ Archaeological Resources</li> <li>▪ Built Heritage Resources and Cultural Heritage Landscapes</li> </ul>	 <ul style="list-style-type: none"> <li>▪ Lands Rights</li> <li>▪ Harvesting Rights (wild rice crops)</li> </ul>	 <ul style="list-style-type: none"> <li>▪ Capital Costs</li> <li>▪ Operational and Maintenance Costs</li> </ul>

Category	Alternative 1 Do Nothing	Alternative 2a Decommission the Existing Dam and Construct Passive Control System	Alternative 3 Rehabilitation of the Existing Dam	Alternative 4 Replace the Existing Dam at the Same Location	Alternative 5 Construct New Dam Downstream
Functional / Physical	Not Preferred	Less Preferred	Less Preferred	Preferred	Preferred
Natural Environment	Less Preferred	Less Preferred	Preferred	Preferred	Less Preferred
Social Environment	Less Preferred	Not Preferred	Preferred	Preferred	Less Preferred
First Nations/Cultural Environment	Preferred	Less Preferred	Preferred	Preferred	Less Preferred
Economic Environment	Less Preferred	Preferred	Not Preferred	Less Preferred	Not Preferred
<b>Summary (Key Pros/Cons):</b>	<b>Not Recommended – Does not address the PS.</b>	<b>Not Recommended – Does not address the PS.</b>	<b>Not Recommended – Does not address the PS.</b>	<b>Recommended – Addresses the PS.</b>	<b>Not Recommended – Addresses the PS; Undue impacts to natural environment, property and cost prohibitive.</b>
<p><b>Abbreviation Legend:</b></p> <p>PS – Problem Statement</p> <p>WMP - Watershed Management Plan</p> <p>SAR – Species at Risk</p> <p><b>Ranking:</b></p>	<p><b>Pros:</b></p> <ul style="list-style-type: none"> <li>Existing conditions remain the same from a natural and social environment perspective until potential dam failure.</li> <li>No changes to First Nation lands.</li> </ul> <p><b>Cons:</b></p> <ul style="list-style-type: none"> <li>No changes to the size in of the spillway means less resiliency to larger storm events (climate change).</li> <li>Condition of the dam will continue to deteriorate.</li> <li>Continued risk of dam failure which results in impacts to property, environment, shoreline, recreational, tourism and potential risk to public safety/loss of life.</li> <li>Will maintain current WMP until potential failure of the dam.</li> </ul>	<p><b>Pros:</b></p> <ul style="list-style-type: none"> <li>Relatively low/moderate cost pending the proposed design.</li> <li>Property acquisition most likely not required.</li> <li>A portion of the existing dam can be utilized as a bypass during construction.</li> </ul> <p><b>Cons:</b></p> <ul style="list-style-type: none"> <li>Reduction/limited ability to mitigate floods/droughts and maintain current WMP.</li> <li>Limited ability to fully adapt to Climate Change.</li> <li>High fluctuation in water levels which will impact the environment (fish habitat and spawning, SAR shoreline, recreation, tourism, etc.).</li> <li>Potential impacts on Ardoch Algonquin First Nation's and the Manòmin with reduction in water levels/water flow downstream.</li> </ul>	<p><b>Pros:</b></p> <ul style="list-style-type: none"> <li>Maintains current WMP.</li> <li>Maintains existing conditions up and downstream from a natural and social environment perspective.</li> <li>No significant change to water elevation and volume in Kashwakamak Lake.</li> </ul> <p><b>Cons:</b></p> <ul style="list-style-type: none"> <li>No changes to the size of the spillway means less resiliency to larger storm events (climate change).</li> <li>Temporary impacts to the natural and social environment during construction.</li> <li>This alternative still poses a potential risk to public safety as the dam will continue to deteriorate.</li> </ul>	<p><b>Pros:</b></p> <ul style="list-style-type: none"> <li>Maintains current WMP.</li> <li>Dam to be designed to accommodate larger storm events and adapt to climate change. Reduces the risk of downstream flooding.</li> <li>Downstream geomorphology will be maintained.</li> <li>New dam will meet safety guidelines.</li> <li>Sensitive fish spawning habitat will be maintained downstream.</li> <li>No long term impacts to First Nation Lands including Manòmin.</li> <li>No permanent property impacts anticipated.</li> </ul> <p><b>Cons:</b></p> <ul style="list-style-type: none"> <li>There will be temporary impacts due to construction activities (i.e. property, recreational, tourism, etc.).</li> </ul>	<p><b>Pros:</b></p> <ul style="list-style-type: none"> <li>Maintains current WMP.</li> <li>Dam to be designed to accommodate larger storm events and adapt to climate change.</li> <li>New dam will meet safety guidelines.</li> <li>No direct or indirect impacts to the recreational/tourism use of the lake.</li> </ul> <p><b>Cons:</b></p> <ul style="list-style-type: none"> <li>Larger structure would be required to extend across the wider channel cross-section.</li> <li>Significant cost.</li> <li>Additional property requirements/acquisition, tree removal, and access road construction required.</li> <li>Impacts to sensitive fish spawning habitat.</li> <li>Unaltered lands and watercourse will be impacted to construct the new dam downstream.</li> </ul>

## NEXT STEPS

- Continue consultation with governing agencies, CLC, First Nations, stakeholders, residents/cottagers and the public;
- Update evaluation criteria and matrix, and confirm selection of Recommended Technically Preferred Alternative Solution;
- Undertake Stage 2 Archaeological Assessment (Spring 2024);
- Conduct detailed analysis of environmental impacts and develop mitigation measures for Recommended Technically Preferred Alternative Solution;
- Public Information Centre - Selection of Preferred Alternative Solution, and
- Select the Technically Preferred Solution(s) to address the Problem Statement identified for this project.

**Thank you, your input is important to us!**

**Lisa Marshall, P. Eng.**  
Consultant Project Manager  
Egis  
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Carp, Ontario, K0A 1L0  
Phone: 613-714-0815  
Lisa.MARSHALL@egis-group.com



**Juraj Cunderlik, PhD., P.Eng.**  
Director, Engineering  
Mississippi Valley Conservation Authority  
10970 Highway 7  
Carleton Place, ON, K7C 3P1  
Phone: 613-253-0006 Ext. 233  
jcunderlik@mvc.on.ca

MARSHALL Lisa

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From: MARSHALL Lisa  
Sent: July 9, 2024 3:52 PM  
To: [REDACTED]  
Cc: Juraj Cunderlik; Alana Perez  
Subject: Kashwakamak Lake Dam Environmental Assessment - Notice of Community Liaison Committee Meeting #2

Good afternoon,

MVCA and Egis would like to formally invite you to the final Community Liaison Committee (CLC) meeting for the Kashwakamak Lake Dam Environmental Assessment. During the meeting, we will provide an update on the Public Information Centre and Stage 3 Archaeological Assessment requirements, as well as identify the selected Preferred Alternative Solution(s). The meeting will provide an opportunity for the CLC members to participate in the project's planning process and provide valuable input/feedback.

Meeting details:

Date: August 13, 2024

Time: 1:00 - 3:00 pm

Location: Virtual Meeting/Presentation (Teams meeting invite to follow this email)

If you are unable to attend the virtual meeting, the presentation can be made available to you, and we can answer any follow-up questions you may have.

Should you have any questions or comments, please do not hesitate to reach out to Mr. Juraj Cunderlik, MVCA, Director of Engineering, at [jcunderlik@mvc.on.ca](mailto:jcunderlik@mvc.on.ca), or Ms. Lisa Marshall, McIntosh Perry Project Manager, at [lisa.marshall@egis-group.com](mailto:lisa.marshall@egis-group.com).

We appreciate your commitment to this important initiative and look forward to your contributions during the meeting.

Thank you,  
Lisa



Lisa Marshall, P.Eng.

Manager, Environmental Engineering, North America

Phone: +1 613-714-0815, Mobile: +1 613-852-1148



# Kashwakamak Lake Dam Class EA Community Liaison Committee Meeting #2 Minutes

Date and Time: Tuesday August 13, 2024, 1:00 – 3:00 PM

Location: Teleconference Call via Teams

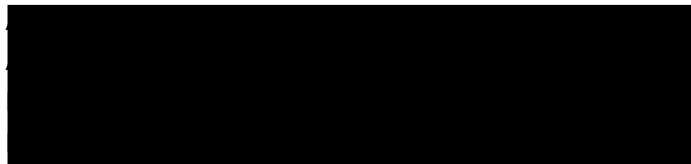
List of Attendees: **Mississippi Valley Conservation Authority (MVCA)**

Juraj Cunderlik, Director, Engineering  
Jennifer North, Water Resources Technologist  
Alana Perez, Water Resources Engineer  
Kelly Stiles, Biologist  
Sally McIntyre, General Manager

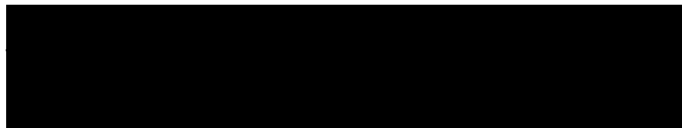
**Egis**

Lisa Marshall, P.Eng., Project Manager (PM) Lead Environmental Planner  
Monika Orwin, Water Resources Engineering Intern

**Committee Members**



List of Regrets:



Subject: Kashwakamak Lake Dam Class Environmental Assessment  
Community Liaison Committee (CLC) Meeting #2

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## 1.0 INTRODUCTION

- The Mississippi Valley Conservation Authority (MVCA) General Manager (GM) provided the land acknowledgment for the project.
- An introduction was provided for all MVCA, Egis, and CLC meeting participants.
- The Egis Project Manager (PM) provided a brief overview of the project, the site background, and the meeting agenda.

## 2.0 PROJECT OVERVIEW

- The Egis PM provided the Community Liaison Committee (CLC) presentation to meeting participants.

*Action: Egis*
- As part of the Class Environmental Assessment processes, it has been determined that the impacts can be avoided, mitigated, or compensated. The technical process will now involve preparing a project plan and addressing concerns.
- A Notice of Completion will be circulated to interested persons/parties and will provide them with an opportunity to review and comment on the Project File Report.
- A summary of the comments received during the Public Information Centre (PIC) Meeting was provided as follows:
  - Will the water levels be maintained at the same level?
    - The new dam will ensure that water levels and the water management plans be maintained and even improved as a result of the new structure functioning and operating more efficiently.
  - What mitigation measures will be implemented during consultation?
    - The mitigation measures will be further outlined and assessed during the design stage. However, it is anticipated that it will include the implementation of a temporary bypass system to dewater and reroute the water prior to construction, and a sediment and erosion plan to mitigate erosion impacts during construction. From a Natural Heritage perspective, timing windows and a few other mitigation measures will be implemented to protect fish, bats, turtles, vegetation and other species.
    - Mitigation measures will be outlined in the Project File Report
  - What are “temporary impacts”?
    - One temporary impact during construction may include considering an earlier drawdown of the lake.
    - Earlier drawdown of the lake levels could occur in the fall around September-October.
  - Will notification be given prior to change in water levels?
    - We acknowledge that the lake is widely used for many recreational and tourist activities and therefore MVCA will have a plan in place to inform everyone affected by the earlier changes in water level.
    - MVCA will try to choose the timing that will have the least impact and accommodate the users of the lake.
    - We have also made note that adequate notification needs to be given to the local marina prior to reducing water levels, so they are prepared for the surge of boats at that time.
  - Is there an immediate risk of the dam failing?

- The existing dams have significant deficiencies due to their age, which pose a greater risk of dam failure.
  - Proceeding with this project is a top priority for MVCA and is part of the 10-year capital plan to avoid the risk of losing the dam and lake.
  - As previously noted, the dam is continuously observed and monitored by the MVCA as part of a monthly monitoring program.
- Further consideration should be given to building new dam downstream of the existing one and use old dam as the cofferdam?
  - Alternative Solution 5 has some benefits with regards to construction, however, the channel downstream is considerably wider relative to where the current dam is placed. This would mean that the cost of the project would approximately double due to needing a larger/longer structure to accommodate the wider channel.
  - We acknowledge that using the existing dam as a cofferdam would be ideal, however from a hydraulic perspective, it could result in additional properties flooding due to elevation differences and topography at other possible dam locations downstream, as well as natural and socio-economic environmental impacts downstream of the structure.
- What is the timeline for the whole project getting underway, including the demolition and lowering of lake levels?
  - The next phase of the project will be preliminary and detailed design, which MVCA will be initiating in 2025-2026.
  - Following that there will be acquiring permits for the project. Therefore, construction is currently expected to occur in in the Fall of 2026 at the earliest.
- How will this project be funded, and will there be additional impact on the municipality in terms of additional pressure on their budgets?
  - MVCA noted that they were successful in securing both federal and provincial funding for the project and provided further explanation as follow;
    - MVCA has been granted federal funding through the *Disaster, Mitigation, and Adaptation Fund* program, which is run by Infrastructure Canada. Federal funding is provided for up to 40% of the project balance.
    - MVCA has also been granted provincial funding through the *Water, Erosion, and Control Infrastructure* program, which is delivered through a municipal-provincial-conservation authority partnership. Provincial funding is provided for up to 50% of the project balance.
    - The remainder of the project costs are assumed by the MVCA. The project is eligible for *Category 1* funding, meaning that all of the member municipalities within the jurisdiction contribute towards the reconstruction/rehabilitation of the dam to some level.

### 3.0 OPEN DISCUSSION

- CLC member (██████) – will the saddle dam be raised and/or replaced?
  - Egis and MVCA confirmed that the saddle dam will be replaced and raised.
- CLC member (██████) - noted that cottagers have expressed concerns about lowering the lake's water level too much, as it could cause the pumps that draw water from the lake to freeze. Some cottages rely on this water source and have already extended their pumps. Additionally, it would be ideal to minimize impacts on the fish populations in the lake.
  - MVCA noted that they will follow up with the lake association to get further information to determine a feasible plan to address the impacts.

**Action: MVCA GM**

- Is there a contingency plan in place if the dam is not completed on schedule or if the water levels rise earlier than expected?
  - Egis PM confirmed that there will be a contingency plan, however it will be developed during detailed design. MVCA also confirmed that it is too early in the project to provide details on construction planning, but a contingency plan will be developed in the coming stages of the project.
- CLC member (██████) – will the existing dam and saddle dam be connected along the shoreline?
  - Egis PM noted that the current plan is not to connect them, but to have them remain within their current alignment.
- CLC member (Bernie H.) – is there a possibility that the saddle dam could be a canoe route?
  - MVCA noted that it will need to be looked into further. As part of the detailed design, options for how people can safely bypass the dam can be explored, however typical guidelines are for them to avoid the structure due to the associated safety risks.
- CLC member (Lawrence F.) – is there any movement towards Hydro One being a source of funding?
  - MVCA noted that they are currently developing a policy document that considers land-based assets and cost-recovery. Kashwakamak Lake Dam is one of five major structures that provide flood control, and because it is a flood-based issue, there currently is not an intention to change the funding for this project.
- CLC member (██████) – asked for clarification on the definition of freeboard.
  - Egis and MVCA noted that it is the additional height of the dam above the lake surface water level required for a safety factor and to prevent overtopping from wave and wind effects.
- CLC member (██████) – Is there a plan in place to manage invasive species during construction?
  - Egis confirmed that mitigation for invasive species will be documented within the Project File Report.



- CLC member (██████) – inquired about which downstream community would be most affected by a dam failure.
  - MVCA noted that the community of Ardoch is the closest downstream and that any breach wave impact would likely be mitigated by the Crotch Lake Dam. Dam failure during construction is not anticipated, and the construction process, which will be carried out in stages, is not expected to increase the risk of failure.

## 4.0 NEXT STEPS

- The next steps include:
  - Updating the evaluation matrix, and confirming the selection of Technically Preferred Alternative Solution based on consultation;
  - Conducting detailed analysis of environmental impacts and develop mitigation measures for Technically Preferred Alternative Solution;
  - Presenting to MVCA Board of Directors; and
  - Preparing Project Plan and issuing Notice of Completion (30-day review period).
- A third CLC meeting may be held before closing out the project. If it is not necessary, an email will be circulated to the CLC members to provide an update.

The meeting was adjourned at 2:00 pm.

For any errors or omissions, please contact the undersigned.

Lisa Marshall, P.Eng.

Project Manager

Email - [lisa.marshall@egis-group.com](mailto:lisa.marshall@egis-group.com)



**MISSISSIPPI VALLEY CONSERVATION AUTHORITY**

**KASHWAKAMAK LAKE DAM  
CLASS ENVIRONMENTAL ASSESSMENT**

**COMMUNITY LIAISON COMMITTEE - WORKSHOP MEETING #2**

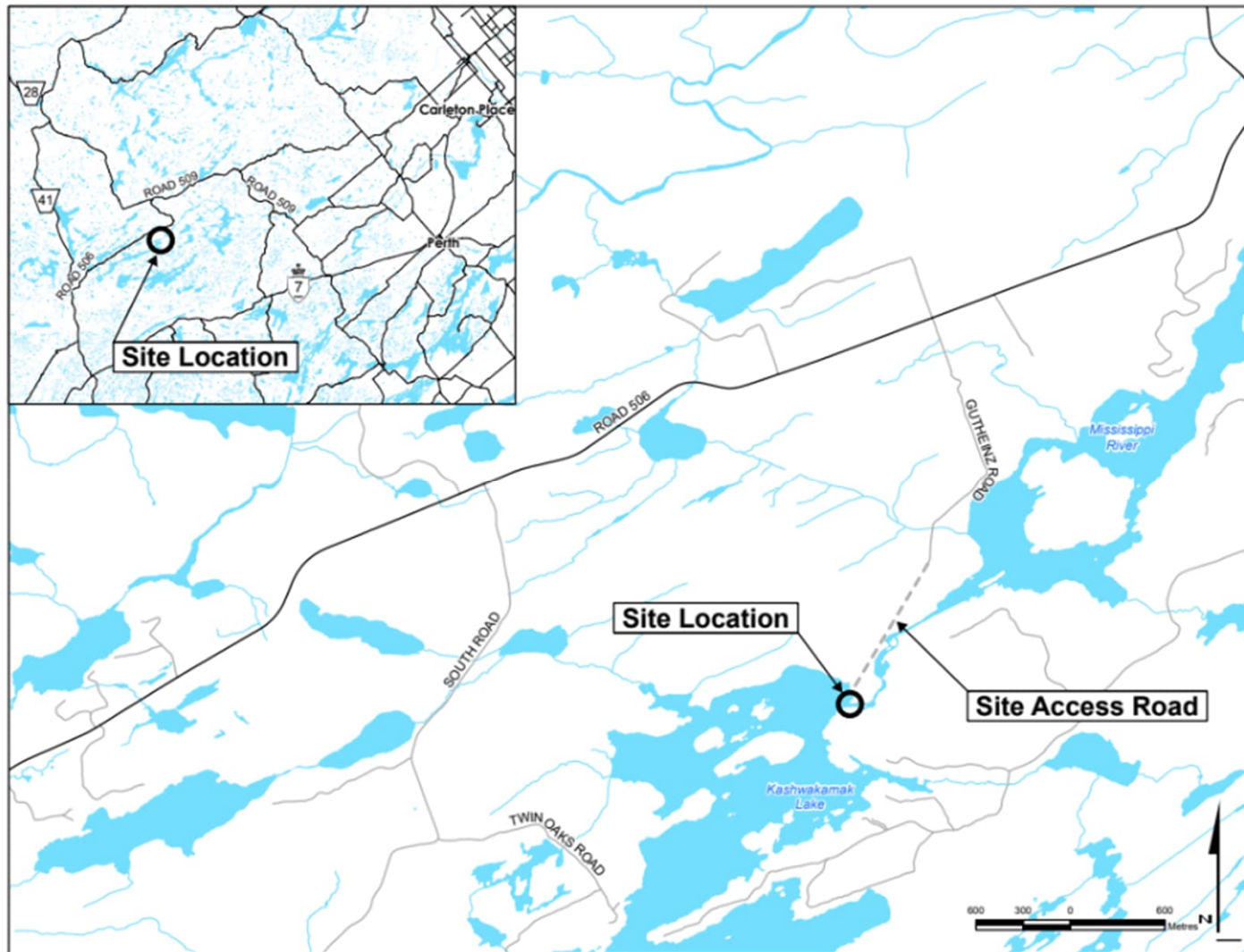
**August 13, 2024**



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- 1 Study Area
- 2 Class Environmental Assessment Process
- 3 Project Rationale Statement
- 4 Consultation Summary
- 5 Archaeological Assessment Update
- 6 Technically Preferred Alternative
- 7 Next Steps

# STUDY AREA



Main Kashwakamak Lake Dam Structure



Saddle Dam

# CLASS ENVIRONMENTAL ASSESSMENT PROCESS

Conservation Ontario's Class Environmental Assessment for Remedial Flood and Erosion Control Projects

Stage 1	Stage 2	FINDINGS: Can Impacts be Avoided, Mitigated or Compensated?		
Environmental Assessment Process				
Project Initiation	Alternative Solutions	Yes	Uncertain	No
Technical Process				
<ul style="list-style-type: none"> <li>✓ Prepare Problem Statement</li> <li>✓ Prepare Baseline Environmental Inventory</li> </ul>	<ul style="list-style-type: none"> <li>✓ Identify and Evaluate Alternative Solutions</li> <li>✓ Identify Impacts and Mitigation Measures                             <ul style="list-style-type: none"> <li>▪ Detailed Analysis of Environmental Impacts</li> <li>▪ Select Preferred Alternative</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ Prepare Project Plan</li> <li>▪ Are all Concerns Addressed? (No Section 16 Requests)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Prepare Environmental Study Report (ESR)</li> <li>▪ Are Impacts Deemed Acceptable?</li> </ul>	<ul style="list-style-type: none"> <li>▪ Prepare Comprehensive Environmental Assessment (former Individual Environmental Assessment)</li> <li>OR</li> <li>▪ Reassess Program Option</li> </ul>
Consultation Process				
<ul style="list-style-type: none"> <li>✓ Notice of Intent</li> <li>✓ Establish Community Liaison Committee (CLC)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Host CLC meeting #1</li> <li>✓ Engage public agencies, stakeholder, First Nations and general public</li> <li>✓ Public Information Centre</li> <li>✓ Host CLC meeting #2</li> </ul>	<ul style="list-style-type: none"> <li>▪ Notice of Completion to</li> <li>▪ Provide Notice of Project Completion &amp; Proceed to Construction</li> </ul>	<ul style="list-style-type: none"> <li>▪ Notice of Completion</li> </ul>	<ul style="list-style-type: none"> <li>▪ Consultation required with Ministry of the Environmental, Conservation and Parks</li> </ul>

# PROJECT PROBLEM STATEMENT

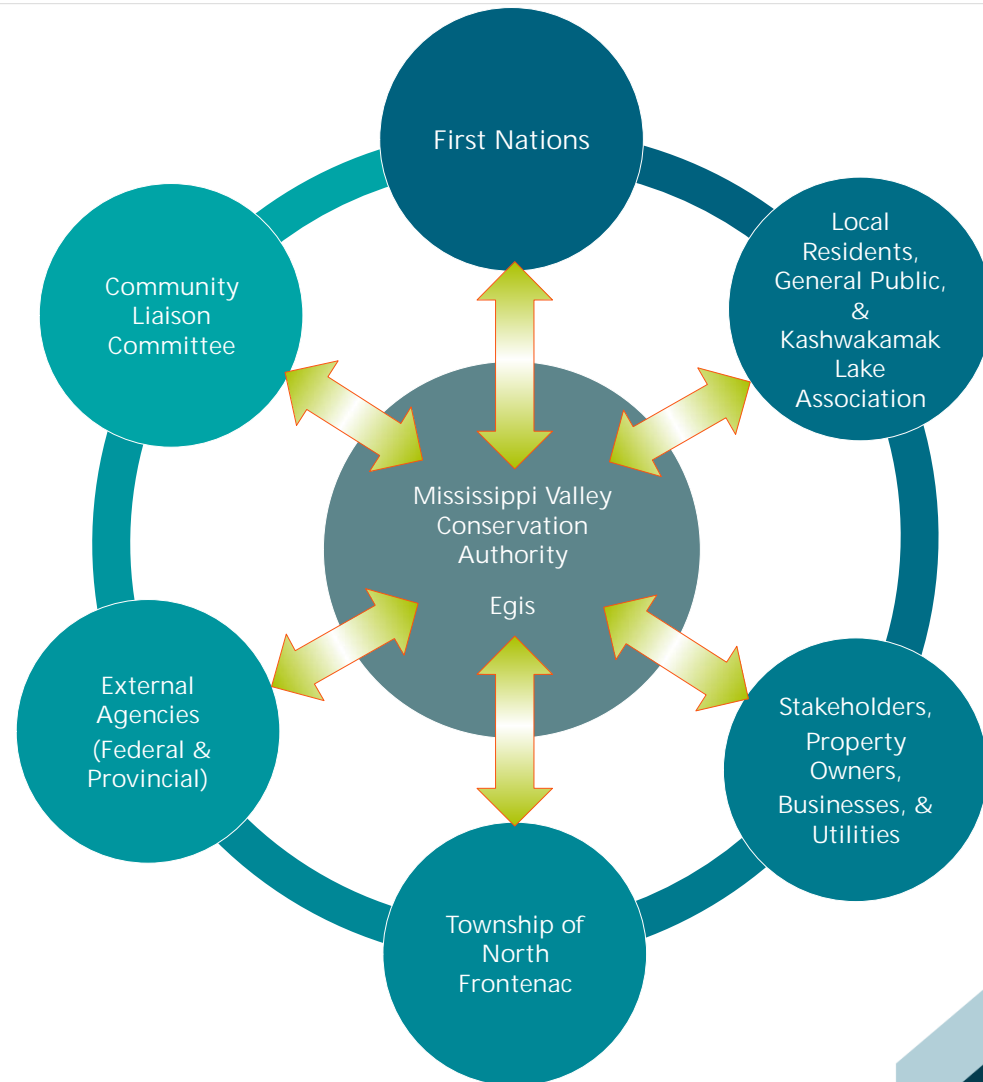


- The existing Kashwakamak Lake Dam is well beyond its design life.
- The 2022 Dam Safety Review identified significant deterioration, especially the overflow weir.
- A decision needs to be made on whether to decommission, repair, or replace the dam.
- Selection of the Preferred Alternative must consider several constraints and opportunities such as public safety, riverine processes, flooding, climate change, cultural heritage, Indigenous rights, natural habitat, public uses and aesthetics.
- The Preferred Alternative must address the problem while balancing study area constraints and opportunities, in order to best meet the needs of the various stakeholder groups and interested parties.

# CONSULTATION SUMMARY

Consultation completed to-date:

- Notice of Intent – May 25, 2023
- Community Liaison Committee (CLC):
  - Expression of Interest to join – August 24, 2023
  - CLC Workshop Meeting #1 – February 26, 2024
  - CLC Workshop Meeting #2 – August 13, 2024
- Marine Archaeological Assessment:
  - Invitation sent to First Nations to participate – August 30, 2023
  - Field Investigation – September 11, 2023
- Stage 2 Archeological Assessment:
  - Invitation sent to First Nations to participate – April 18, 2024
  - Field Investigation – May 2, 2024
- Public Information Centre:
  - Notice Circulation – May 2, 2024
  - Published in the North Frontenac News – May 9 & 16, 2024
  - Virtual Meeting – May 23, 2024
- Kashwakamak Lake Association Annual General Meeting – July 13, 2024



# PUBLIC INFORMATION CENTRE SUMMARY

- Number of Attendees of virtual Public Information Centre (PIC) = Fourteen (14) Attendees
- Comment period expired – July 20, 2024
- Number of comments received:
  - Fifteen (15) comments during the PIC, and
  - Three (3) written comments following PIC.



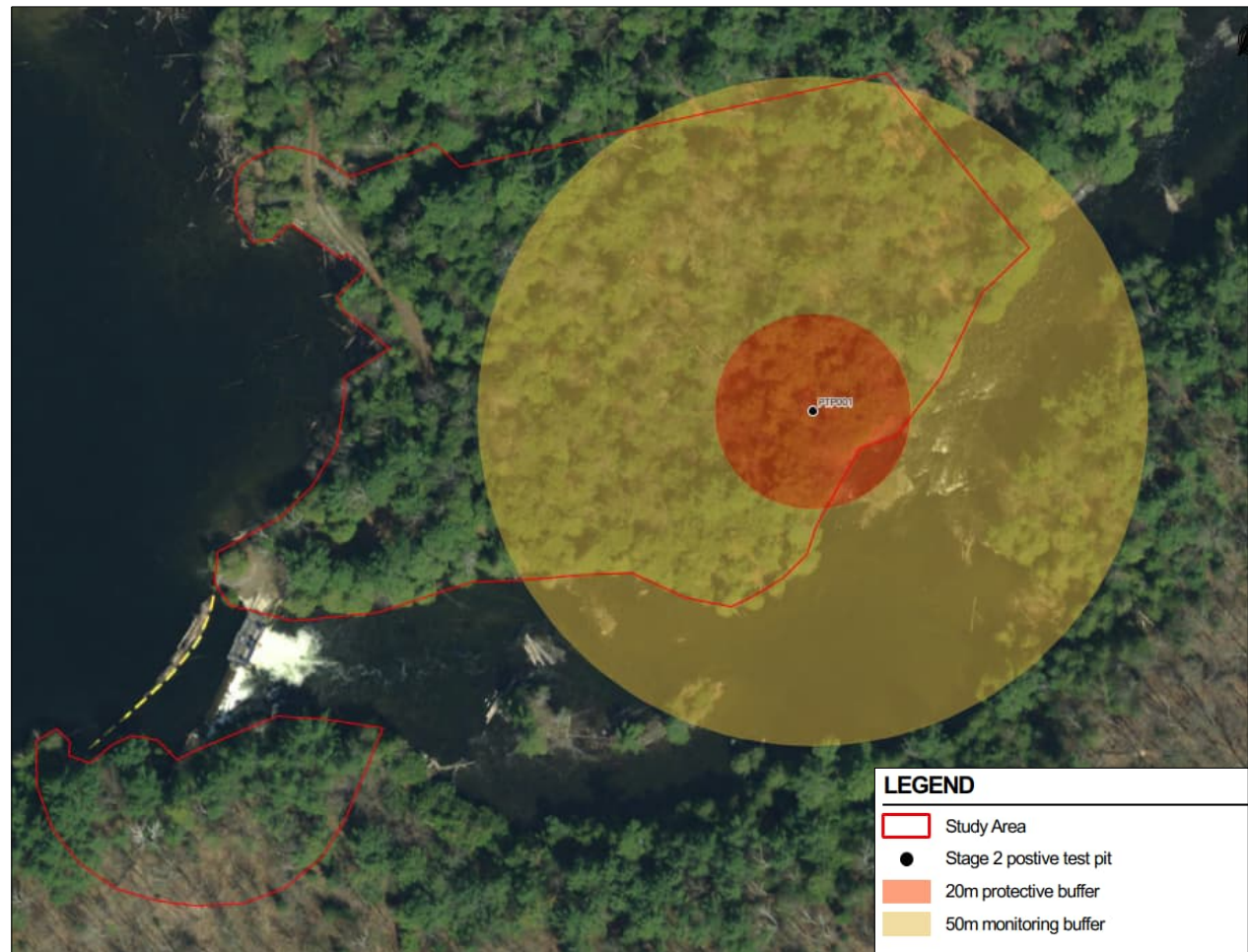
## PIC Comments

- If the dam is replaced:
  - Will the water levels be maintained at the same level?
  - What mitigation measures will be implemented during consultation?
  - What are potential temporary impacts?
  - Will notification be given prior to change in water levels?
- Is there an immediate risk of the dam failing?
- Further consideration should be given to building new dam downstream of the existing one and use old dam as the cofferdam?
- What are the timeline for the whole project getting underway, including the demolition and lowering of lake levels?
- How will this project be funded, and will there be additional impact on the municipality in terms of additional pressure on their budgets?



# ARCHAEOLOGICAL ASSESSMENT

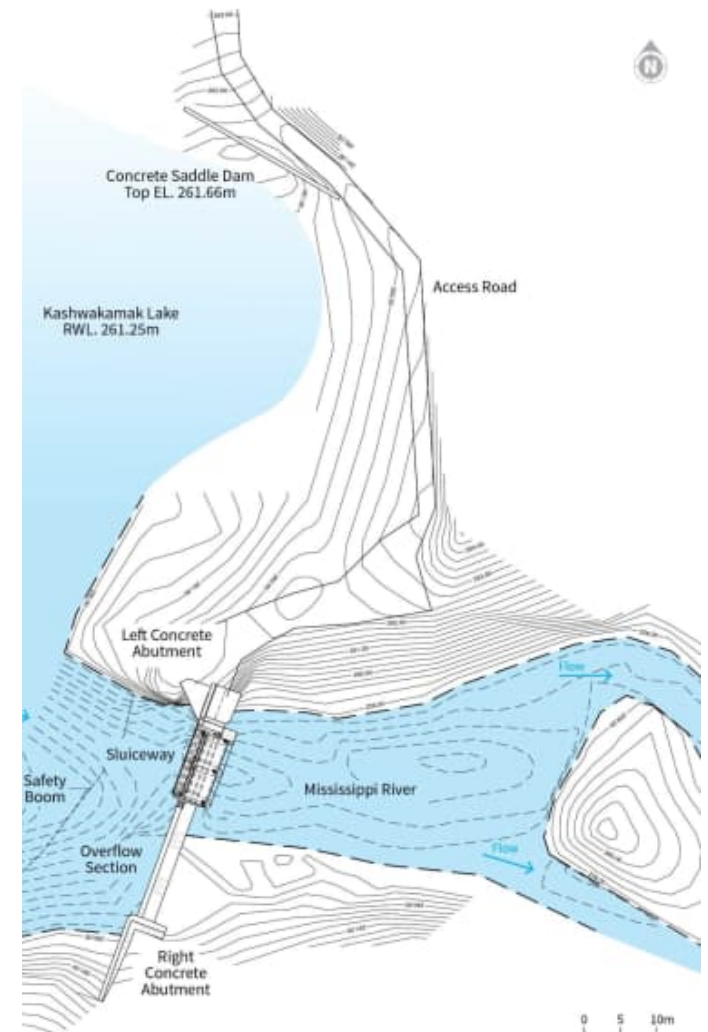
- Stage 1 Archaeological Assessment (June 6, 2023)
  - Study area exhibits archaeological potential.
- Stage 2 Archaeological Assessment (May 2, 2024)
  - Several First Nations showed interest in attending the field investigation.
  - A small Indigenous site along the water's edge was identified as requiring a Stage 3.
  - A request for Partial Clearance was submitted to Ministry of Citizenship and Multiculturalism (May 22, 2024)
- A Stage 3 Archaeological Assessment is scheduled for August 20 to 22, 2024.



# TECHNICALLY PREFERRED ALTERNATIVE

## Alternative 4 – Replace the Existing Dams at the Same Location

- Construction of a new main dam and saddle dam with similar alignments to that of the existing dams.
- The existing main dam will be removed in its entirety, with new footings and anchors installed at bedrock.
- New dams will be designed and constructed to current design and safety standards:
  - Design Storm:
    - Main Dam: 1000-year
    - Saddle Dam: 100-year
  - Freeboard will be increased to meet current standards, as well as take into consideration Climate Change.



## NEXT STEPS

- Undertake Stage 3 Archaeological Assessment;
- Confirm selection of technically preferred alternative;
- Detailed analysis of environmental impacts and mitigation measures for technically preferred alternative;
- Prepare Project File Report;
- Present to MVCA Board of Directors;
- Issue Notice of Completion (30-day review period), and
- Schedule 3<sup>rd</sup> and final CLC meeting (following the 30-day review period), if deemed required.

**Lisa Marshall, P. Eng.**  
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