

Appendix L

Community Liaison Committee

1. Embro EA CLC1 Meeting Notes (September 2023)
2. Embro EA CLC2 Meeting Notes September 2023)
3. Embro Dam EA CLC - CLC2 Meeting 2 (November 22, 2023)
4. Presentation - Embro CLC2 (November 22, 2023)

Embryo EA CLC1 Meeting Notes (September 2023)

Embro Dam EA Community Liaison Committee (CLC) Meeting

September 8, 2023 – Virtual

Notes

In Attendance: Michael Kukhta, Zorra Heritage Committee; Andrew Coghill, Embro Pond Association; Don MacLeod, CAO, Township of Zorra; Phil Holst, Ducks Unlimited (by phone); Sarbjit Singh, Project Manager, UTRCA; Jill Smith, UTRCA; Chris Tasker, UTRCA; Vanni Azzano, UTRCA

Introductions

Sarbjit welcomed everyone to the meeting and had committee members introduce themselves.

Terms of Reference Review

Committee reviewed the Terms of Reference: Purpose, Scope, Membership and Tentative Schedule. Meetings may include presentations by UTRCA staff and/or project consultant.

Question regarding clarification about the Notice of Filing. The Notice of Filing will be submitted to the local press, social media, etc. after the draft report has been completed and reviewed. The Notice of Filing notifies the public that the report has been sent to the Ministry of the Environment, Conservation and Parks and will be subject to a 30-day commenting period by the public. Any comments may lead to addendums to the report. At the end of the project, a Notice of Approval will be issued.

Question whether there are any members representing the community of Embro. The important aspect was to have the Embro Pond Association (EPA) on the committee as the local community input. The current committee selection was based on the immediate use of the area, i.e., EPA, Zorra Heritage Committee and the Township of Zorra.

Oneida First Nation has been contacted and is interested in attending CLC meetings. Future meetings will be scheduled so that they can attend.

Meeting Logistics

CLC will continue to meet virtually with the flexibility to change to in-person meetings. When appropriate. Public input sessions will be in-person. Benefit in having a meeting at the pond.

Planned Meetings

Schedule is included below. There might be unplanned meetings scheduled in between any phases of the process.

Question regarding whether the Township of Zorra has any input into the design from a cost perspective. Before the Notice of Filing, a presentation will be made to Zorra council and their input will be incorporated into the final report.

UTRCA is presently in talks with the consultant to finalize the scope of the project. Once this is completed, the project schedule will be devised.

Overview of Next Steps

Finalize scope with the consultant for the next stage and finalize draft report. A CLC meeting will be scheduled for the consultant to present the draft report.

Question regarding how much of the previous work will be utilized in the new process. The consultant will rely heavily on the materials that have already been produced and will incorporate newer input.

Sarbjit will send links to previous reports to the CLC members will include a site history presentation at the next meeting.

Sarbjit will notify the CLC members when the draft report is ready and will set the next meeting date.

Tentative Schedule

Meeting	Description	Timeline	Meeting Agenda/Comments
1	Initial Meeting	September 2023	<ul style="list-style-type: none">• Introductions• Review of Terms of Reference• Meeting logistics (virtual meetings or in-person)• Planned meetings• Provide overview of next steps
2	Draft Report Presentation	September – October 2024	<ul style="list-style-type: none">• Presentation of the draft report

			<ul style="list-style-type: none"> • Presentation of the Final Report and Project Plan
Notice of Filing		November 2023 – January 2024	<ul style="list-style-type: none"> • 30-day commenting period after the issuance of the notice.
Notice of Approval		February 2024	
Engage consultant		2024	<ul style="list-style-type: none"> • Schedule of this and subsequent items is dependent on funding
3	Preliminary Design Concepts	TBD	<ul style="list-style-type: none"> • Presentation of the Final Report and Project Plan • Review of the preliminary design concepts. • Provide input for the final design
4	Final Design	TBD	<ul style="list-style-type: none"> • Review final design • Review and provide input on final design, Trail, Interpretative signs (cultural heritage, natural heritage, etc.)
Tentative meetings			
Regular Progress meetings		Quarterly or semi-annual	<ul style="list-style-type: none"> • At discretion of facilitator
Project wrap-up Meeting			

Embro EA CLC2 Meeting Notes September 2023)

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September 8, 2023 – Virtual

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Embro Dam EA CLC - CLC2 Meeting 2 (November 22, 2023)

Emburo Dam Class Environmental Assessment

Meeting Agenda for Second Meeting of the Community Liaison Committee

November 22, 2023

Agenda:

1. Introductions
2. Presentation by Matrix Solutions Inc.
3. Q/A
4. Instructions on how to provide comments
5. Closing

Presentation - Embro CLC2 (November 22, 2023)

Embro Dam Class Environmental Assessment


Community Liaison Committee Meeting No. 2

Scott Robertson, P.Eng.

Mariëtte Pushkar, M.Sc., P.Geo

Jeff Prince, P.Eng.

November 22, 2023



Traditional Land Acknowledgement

Agenda

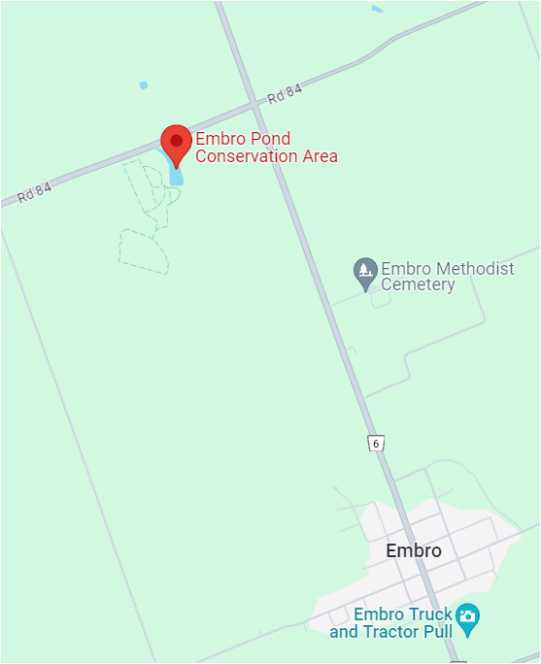
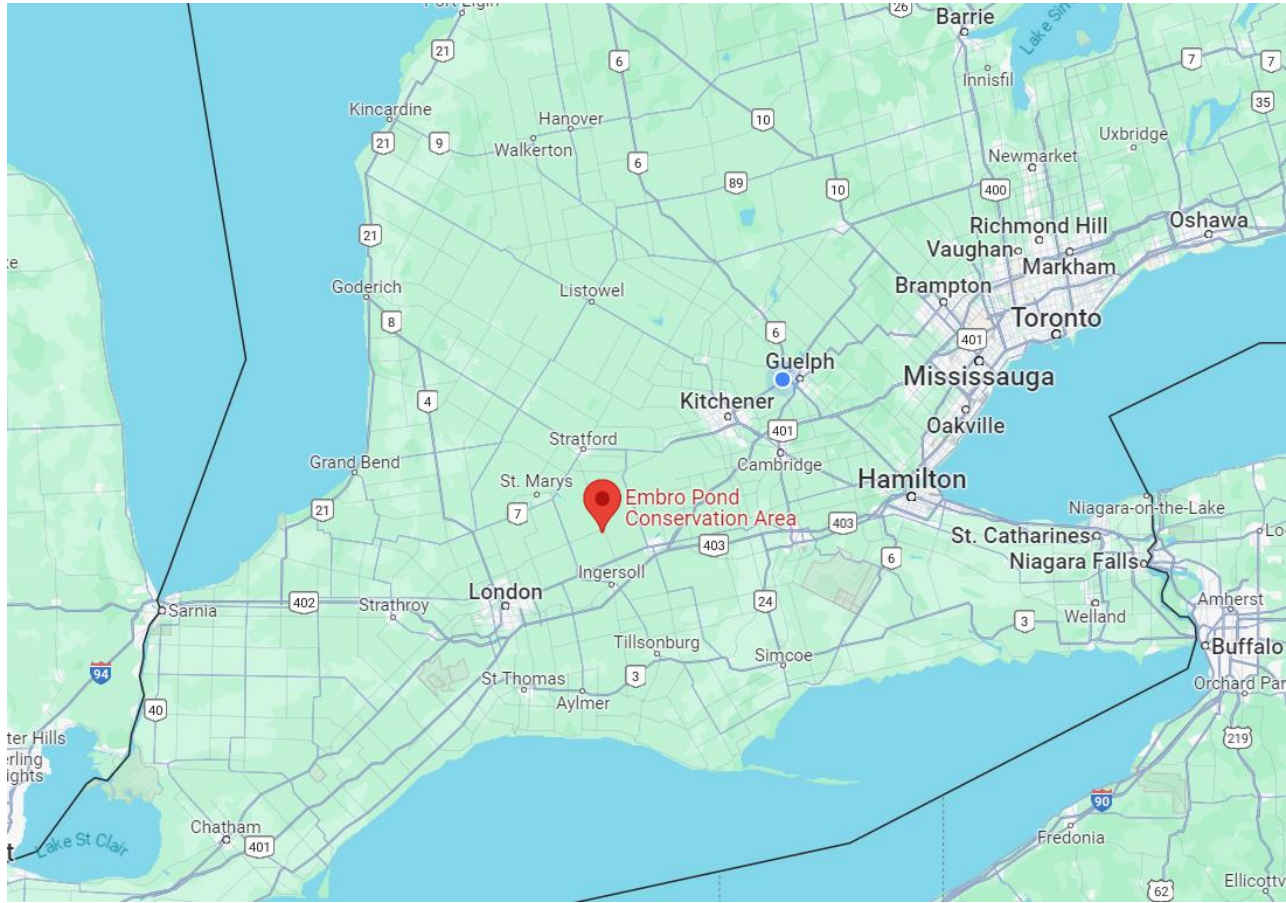
- Environmental Assessment Study
- DRAFT Project Implementation Plan
- Next Steps



Environmental Assessment Study



STUDY LOCATION



STUDY LOCATION

Embro Dam was acquired by UTRCA in 1958 and reconstructed in 1959. The dam is located on Spring Creek, also known as Youngsville Drain, and is a tributary of North Branch Creek.

The dam controls a drainage area of 7 km² of mostly agricultural lands, forming a small reservoir of approximately 0.8 ha with an estimated volume of 3,000 m³.

The dam structure consists of a 100 m long earthen embankment (4.5 m approx. height) with a concrete bottom draw inlet with an inverted V-shaped trash-rack anchored to the top of the outlet. An emergency spillway is located on the east embankment.



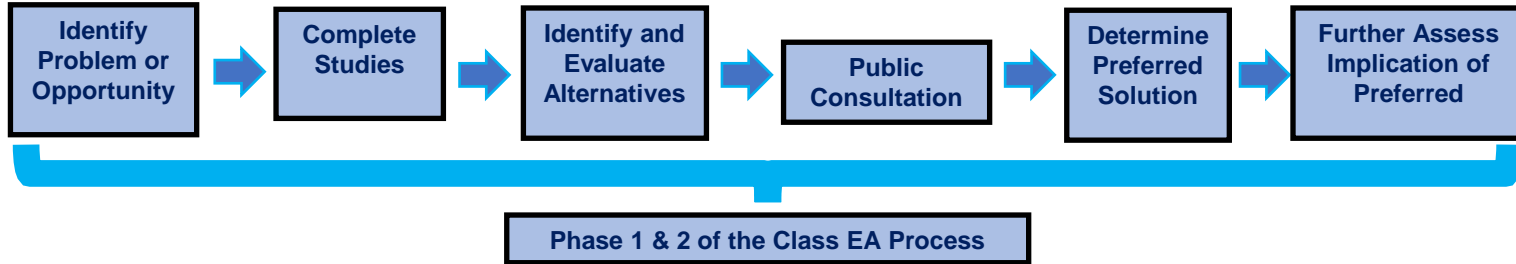
PROJECT HISTORY AND PROBLEM STATEMENT

- **Dam safety and stability assessment studies (2007/2008) identified related concerns with the structure.**
 - **Class EA project initially commenced in 2015**
 - **Draft EA project file report completed in 2017**
 - **Per comments received, UTRCA undertook additional cultural heritage assessments**
 - **EA process recommenced Fall 2022**
-

Significant concerns related to the structural integrity and hydraulic capacity of the Embro Dam have been identified through recent engineering assessments.

A Class Environmental Assessment was initiated to evaluate a range of alternatives to address the identified issues in consideration of the environmental, social, economic, and technical aspects of the dam.

CLASS ENVIRONMENTAL ASSESSMENT PROCESS



Conservation Ontario Class Environmental Assessment for Remedial Flood and Erosion Control Projects process requires the establishment of a Community Liaison Committee (as necessary).

OVERVIEW OF KEY FINDINGS

Dam

- 100m long crest, does not meet current safety or stability standards

Pond

- Reservoir of approximately 0.5 ha, 27-35% of available pond volume has filled with sediment

Hydrology

- Upstream drainage area is 7 km²; watercourse has high resiliency to drought / low flow conditions



OVERVIEW OF KEY FINDINGS

Geomorphology

- Channel downstream of Embro Dam degrading, channel upstream of road is aggrading

Natural Heritage

- 8 fish species upstream of pond, 21 fish species downstream of pond, confirmed or candidate Species at Risk (SAR; barn swallow, bats) and Species of Conservation Concern (SOCC; Snapping turtle)

Water Quality

- Water temperature is higher downstream of the dam (up to 7°C measured in 2016)
- Other water quality parameters are within range of watershed



Brook Trout

Image Source: Mandrak and Crossman, 1992

OVERVIEW OF KEY FINDINGS

Social

- Conservation area used for passive recreation, hiking trails, cross country skiing trails and picnic areas

Cultural

- Site does not meet O.Reg. 9/06 and therefore is not considered a landmark

Archaeology

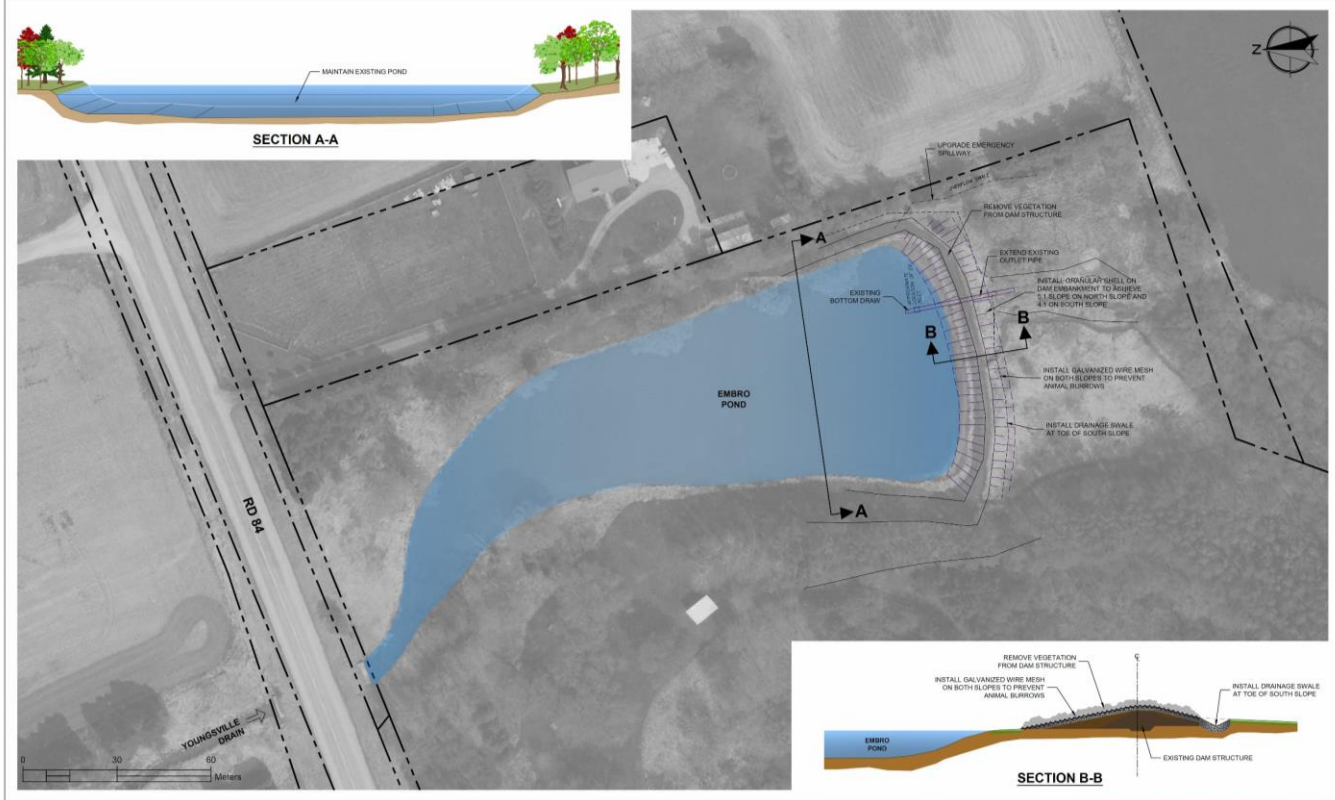
- Site has a reduced archaeological potential



ALTERNATIVE – DO NOTHING



ALTERNATIVE 2 – REPAIR / RECONSTRUCT EXISTING DAM



ALTERNATIVE 3 – REMOVE DAM & CONTRUCT NATURAL CHANNEL



ALTERNATIVE 4 – REMOVE DAM & CONSTRUCT OFFLINE POND(S) WETLAND(S)



ALTERNATIVE 5 – LOWER DAM CREST AND OUTLET & NATURALIZE NEW POND PERIMETER



ALTERNATIVE EVALUATION CRITERIA

Four primary categories

- **Technical**
 - ability to reduce flooding impacts, improve safety, constructability, approvability
- **Natural Environment**
 - benefits to aquatic and terrestrial ecology, geomorphology, water quality
- **Social/ Cultural Environment**
 - impacts to cultural / heritage features, to public / private property, to recreational opportunities
- **Financial**
 - capital outlay, reduced short- and long-term operational costs, ability to access external funding


PUBLIC CONSULTATION

Public Information Centre #4 (Jan 30, 2023)

- 21 public participants
- Open-house format, display boards
- UTRCA and Matrix staff were present
- Public comments received using input forms and evaluation charts
- UTRCA invited “expressions of interest” from the public to engage in a Community Liaison Committee (CLC)
- Notice for public input issued Jan. 31, 2023 via e-mail and media release.
- 2-weeks comment period (Feb 13, 2023 deadline)

Results

- Input received from 8 individuals
- Public provided input to weighting of evaluation criteria
- 6 expressed interest in joining the CLC



Scan me for more info!

Upper Thames River Conservation Authority
Embro Dam
Class Environmental Assessment Continuation

Notice of Public Information Center #4

The Upper Thames River Conservation Authority (UTRCA), through their consultant Matrix Solutions Inc., is continuing work on the Class Environmental Assessment (EA) for the Embro Dam within the Township of Zorra. This work is the continuation of the 2015 Embro Dam Class EA. For more information, please visit: www.bit.ly/3QkrmzA


A fourth Public Information Centre (PIC) is being held to provide information on the project background, current project status, and receive public feedback on the proposed alternatives. The PIC will be an informal open house with presentation boards; project and UTRCA staff will be available to discuss the project with the visitors as they drop in.

Date/ Time
Monday, January 30th, 2023, 4 pm to 7 pm

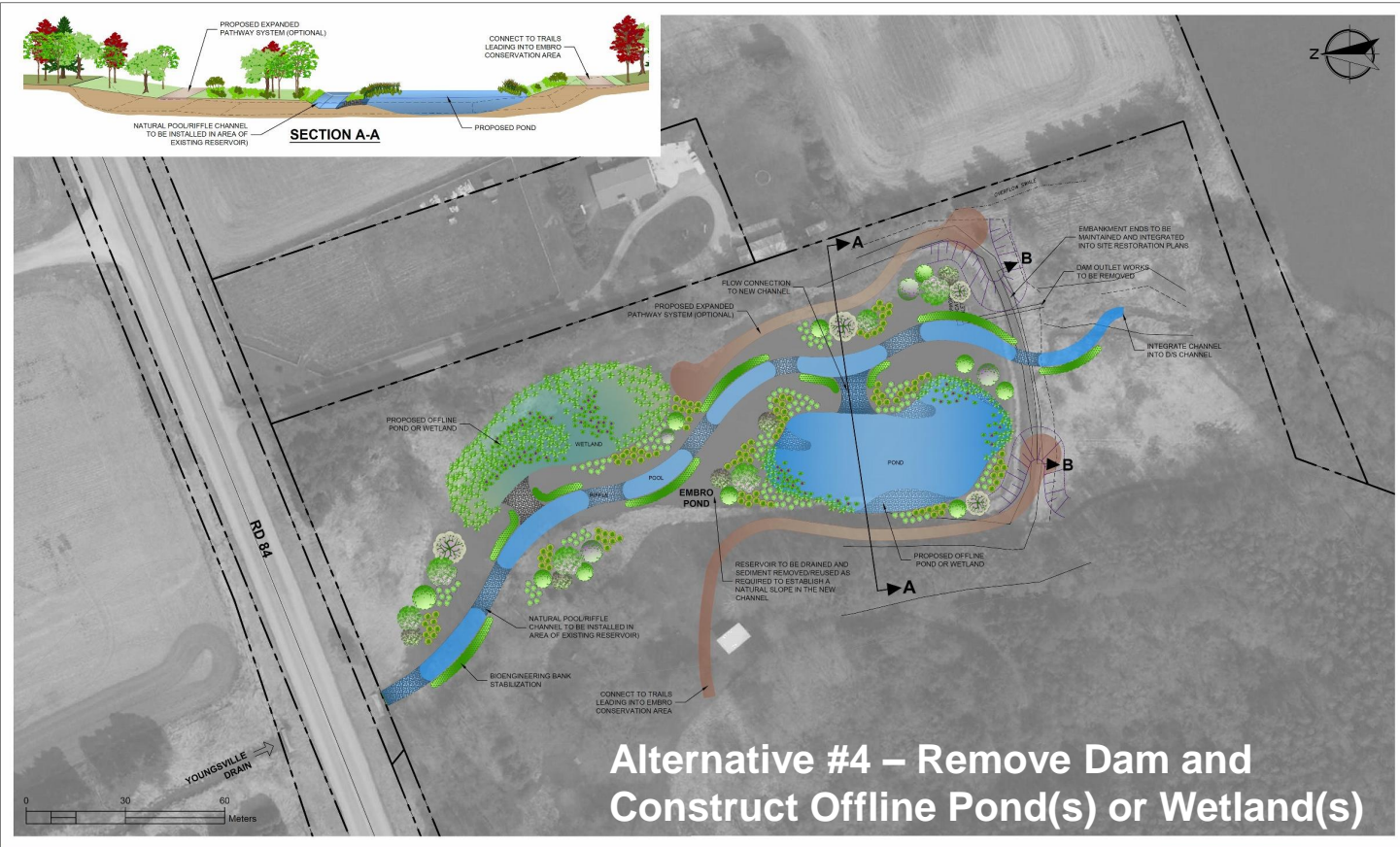
Location
Embro Zorra Community Centre (EZCC), Small Hall
355644 35th Line, Embro, ON N0J 1J0

The Project Team invites public input and comments which will help inform the planning and design of this project. We will also invite expressions of interest from the interested stakeholders who would like to participate on the Community Liaison Committee during the EA and subsequent design stages. To submit comments, request further information, or to join the project mailing list, please contact:

Sarjit Singh, E.I.T. Water Control Structures Technologist UTRCA 1424 Clarke Road, London, ON N5V 5B9 Tel: 519-451-2800 ext.245 srjts@thamesriver.on.ca	David Charles, P.Eng. Supervisor, Water and Erosion Control Structures UTRCA 1424 Clarke Road, London, ON N5V 5B9 Tel: 519-451-2800 ext.244 charlesd@thamesriver.on.ca
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PREFERRED ALTERNATIVE



Alternative #4 – Remove Dam and Construct Offline Pond(s) or Wetland(s)

Examples

Hodges Pond Removal



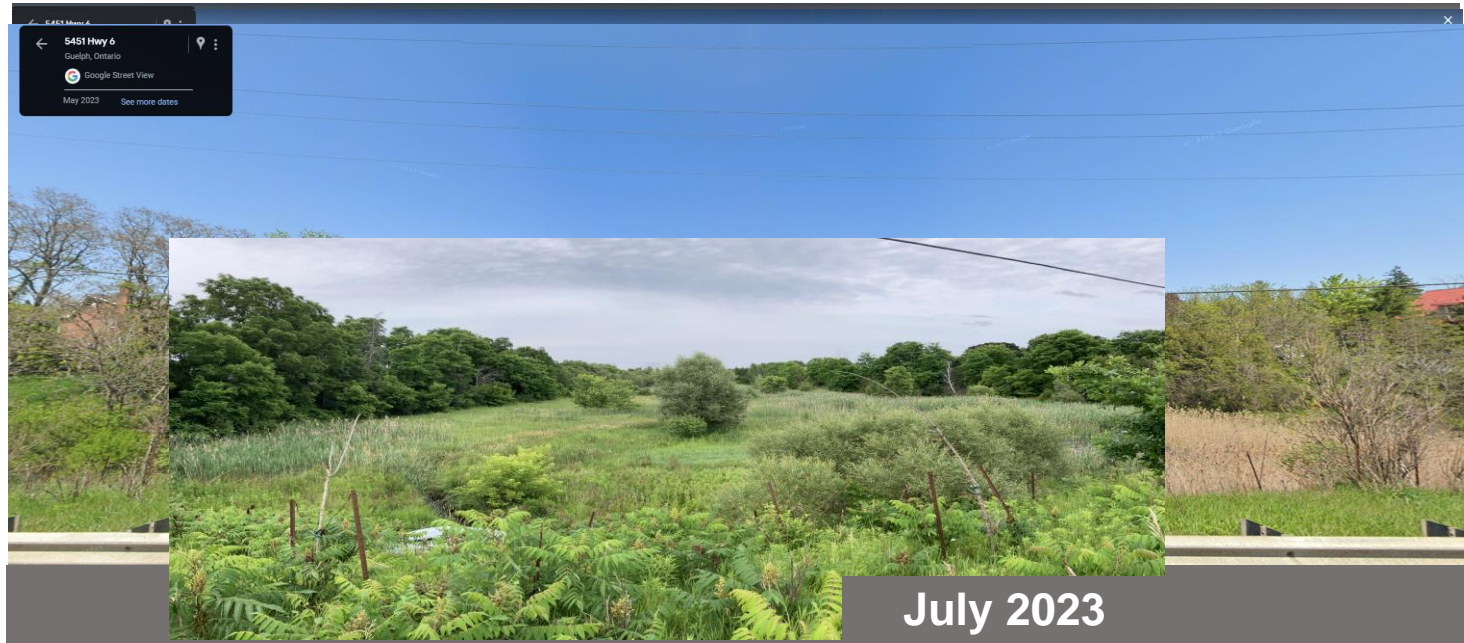
Cedar Creek Restoration



Example – Marden Creek/Pond Removal



Example – Marden Creek/Pond Removal



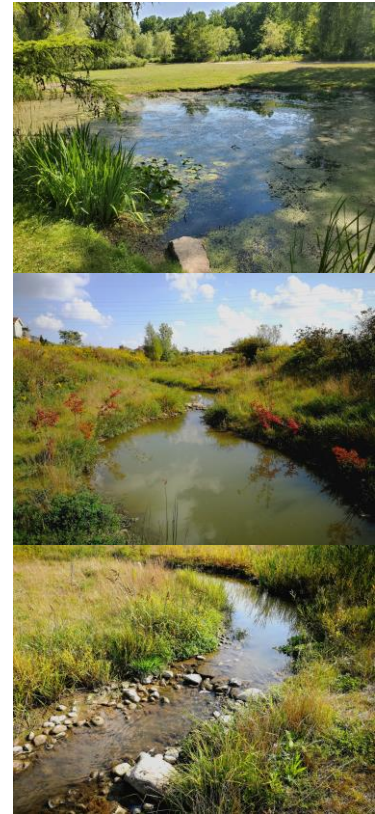
IMPACTS OF PREFERRED ALTERNATIVE

Technical

- May interfere with nearby shallow groundwater wells
- Eliminates dam safety hazard

Environmental

- Enhances terrestrial corridor and vegetation diversity
- Improved water cooling
- Removes fish migration impediment, improve species diversity
- Enhances aquatic habitat through channel restoration
- Re-adjustment to an unattenuated flow regime



IMPACTS OF PREFERRED ALTERNATIVE

Social/ Cultural

- Recreational opportunities will change
- Loss of still water fishing and recreation boating
- Possible trail enhancement, educational signage, and 'birding'/viewing of wildlife species

Financial

- Larger capital outlay, reduced short- and long-term operational costs



Project Implementation Plan - DRAFT



Planning Steps

- Technical Assessments
- Consultation
- Detailed Design
- Permits and Approvals
- Implementation
 - Site preparation
 - Fish rescue
 - Phased removal
 - Post-Construction Monitoring / Management





Technical Studies

- Contributory watershed hydrology review
- Archaeology – Stage 2
- Hydrogeology – adjacent wells
- Sediment characterization (if off-site transport required)

Continued Consultation

- Indigenous communities
- Community Liaison Committee (CLC)
- Regulatory agencies



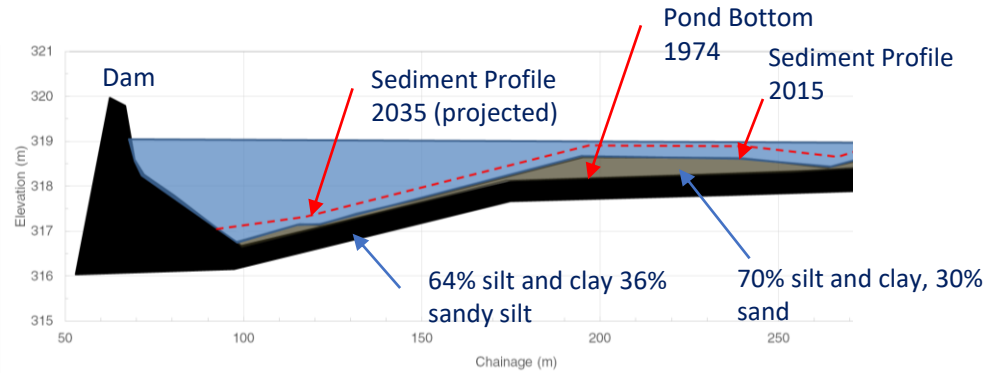
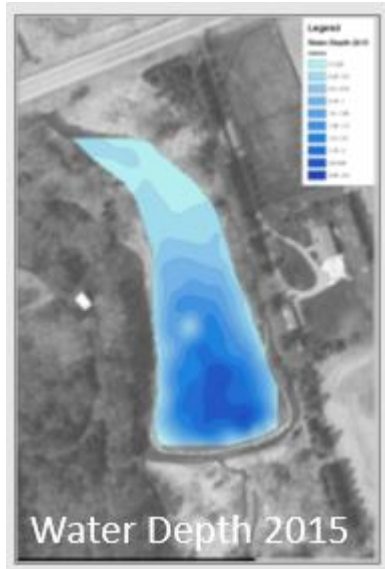
Detailed Design

- Dam decommissioning
- Channel configuration (section, profile)
- Project phasing
- Erosion and sediment control
- Recreational planning for the Embro CA (e.g., trails / viewing platforms)

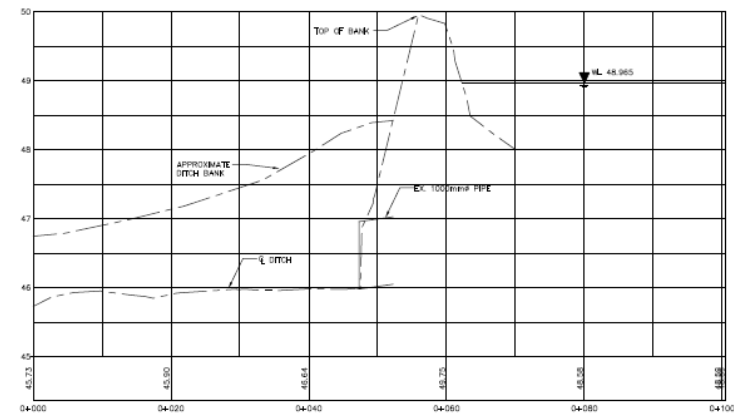
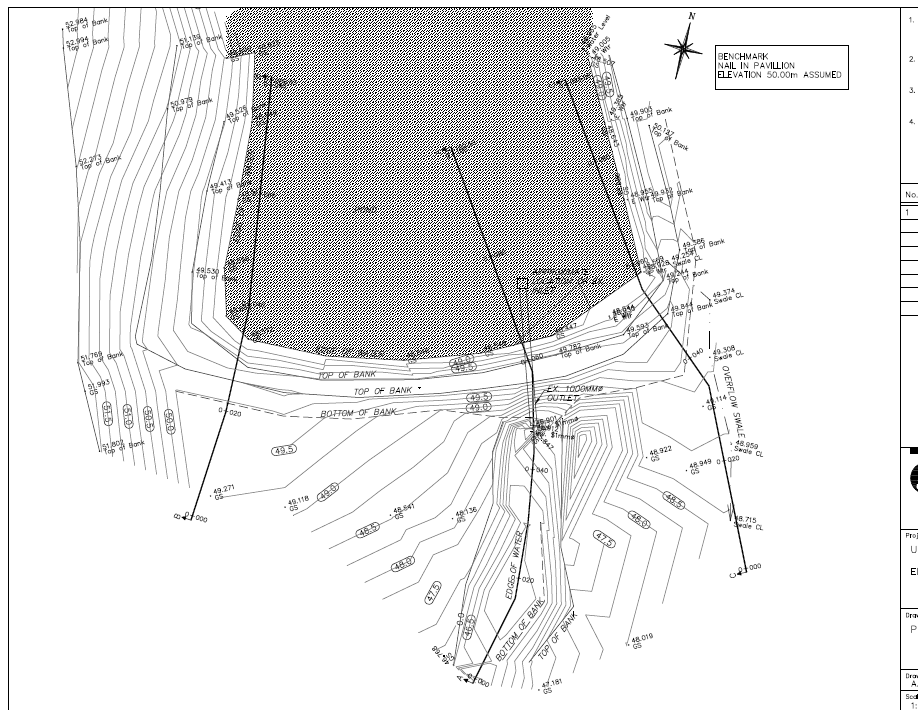
Initial Project Phasing: Pre-design

- Draw down of pond (fall 2023)
- Agency consultation (DFO, MNR, MTSC, MECP, UTRCA)
- Potential staged removal of sill within the outlet structure (late spring 2024 (June?)) to maximum extent possible
- Opportunity to seed exposed sediment during drawdown period

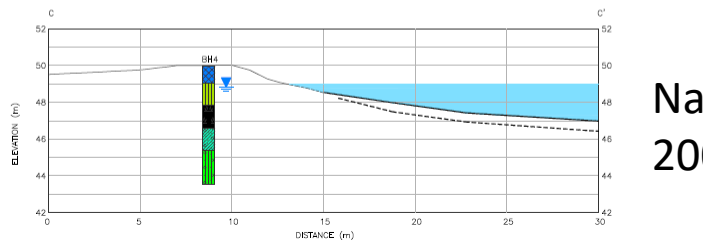
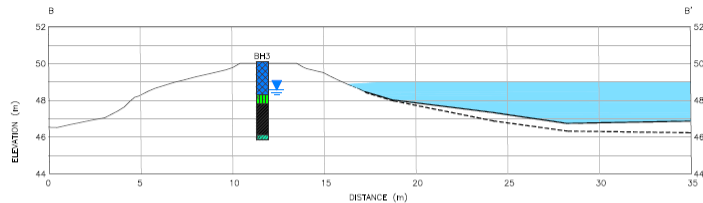
Sediment Profile



Burnside (2008) drawing



SECTION 'A-A'
DISTANCE (m)

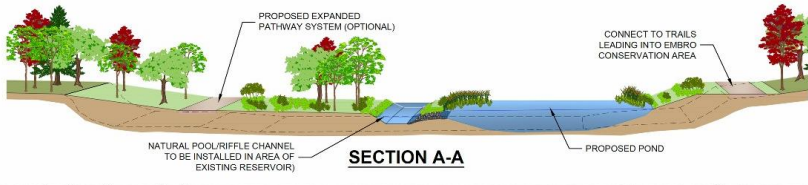


Naylor,
2008

Design

- Based on visual observation after drawdown and initial stabilization
- Design elements (where, what):
 - Channel sections, profile, planform, substrate
 - Wetland location, configuration
 - Dam embankment removal
 - Stockpile material location
 - Erosion and sediment control
 - Trails and educational signage
- Approvals





Regulatory Agency Permits



Implementation

- Pre-design drawdown and initial agency consultation (2024)
- Tender documents and contractor
- Detailed design and agency approvals (2024/25)
- Construction (TBD: could be multiple phasing)
- Key: Adaptive Management

Monitoring / Management

- Ensure disturbed areas / exposed sediments are stabilized/planted
- Monitor new (in pond) / existing (upstream / downstream) watercourses:
 - Sections, profile
 - Recovery of aquatic habitat and fish populations (diversity, species)
- Invasive species management (e.g., phragmites)
- Longer-term planning



Possible Funding Sources



Next Steps and Contact

- **Update Project Plan**
- **Meet with Zorra Township**
- **Meet with UTRCA Board**
- **Finish and File EA**
- **Obtain Funding**
- **Detailed Design**
- **Construction**



QUESTIONS?

Contact Us

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