

Class Environmental Assessment – Embro Dam Public Input Form

The Class Environmental Assessment (EA) was initiated to address the concerns regarding spillway capacity and embankments stability of the Embro Dam, which were identified as part of the Dam Safety Assessment (Acres, 2007). Potential alternatives will be identified and evaluated through the study to address the concerns.

The EA is being undertaken under the Conservation Ontario Class Environmental Assessment for Remedial Flood and Erosion Control Projects document (June 2013). Any feedback and comments received will become a part of the public record for the project. Please provide your input below.

Criteria Weighting

The Environmental Assessment process requires alternatives to be evaluated based on four categories of criteria. The sum of weight of each category must add up to 100%. Given the project purpose and site considerations, what do you think is a fair weighting for each category (Note: no category can be assigned zero percentage)?

Criteria Category	Weight (%)
Technical Feasibility	
Natural Environment	
Social/Cultural Environment	
Economic	
Sum	100

Alternatives

Considering the evaluation criteria required to be assessed through the Environmental Assessment process, what I like and/or dislike about each alternative for the Embro Dam is as follows:

Alternative 1 – Do Nothing

Alternative 2 – Repair Dam

Alternative 3 – Remove Dam and Construct a Natural Channel

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

Alternative 5 – Lower Dam Crest and Outlet and Naturalize New Pond Perimeter

Alternative Evaluation

Each of the alternatives will be evaluated by ranking a set of criteria that were selected, based on requirements of the Conservation Ontario Class EA process. A numerical ranking system is used to evaluate the criteria of each alternatives with respect to improvements compared to existing conditions that will enable the problem statement to be addressed. A rank of 1 denotes the least positive impact and 5 denotes the most positive impact. Two alternatives may receive the same ranking for a criterion if both are considered to be similar with respect to relative positive impact. **If you would like to complete a ranking of the criteria for each alternative, please complete the attached table.**

General Comments:

Other things that have not been discussed but which the study team should consider?

Community Liaison Committee Participation

UTRCA is seeking expressions of interest from interested persons, interest groups, Indigenous communities, or agencies to be a part of a Community Liaison Committee (CLC). The purpose of CLC is to obtain additional public input concerning the planning and design process of the project, and to review information and provide input to the Conservation Authority throughout the process. Please check the following box if you are interested in being a part of CLC:

Yes, I'm Interested

Please print your name and contact information below. Please e-mail the completed form and the evaluation sheet to singhs@thamesriver.on.ca.

Name: _____

Address and Postal Code: _____

E-mail Address: _____

Phone _____

Please submit comments by February 13, 2023

Thank you for your participation.

For further Information, or to join the project mailing list, please contact:

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Personal information on this form is collected under the authority of the Conservation Authorities Act and will be used for the purposes of the Embro Dam Class EA only. Questions about the collection of personal information should be directed to: General Manager, Upper Thames River Conservation Authority, 1424 Clarke Rd., London, Ontario. N5V 5B9 (519) 451-2800.

Embro CA Dam EA Evaluation Matrix

Scoring: See Notes below

Criteria	Description	Alternative 1 Do Nothing	Alternative 2 Repair Dam	Alternative 3 Remove Dam and Construct a Natural Channel	Alternative 4 Remove Dam and Construct Offline Pond(s) or Wetland(s)	Alternative 5 Lower Dam Crest and Outlet and Naturalize New Pond Perimeter
TECHNICAL/ENGINEERING						
Flooding Impacts/Enhancement	Effectiveness of the alternative to manage or reduce flooding, or not cause negative impacts to flooding					
Dam Safety/Integrity	Effectiveness of the alternative to address dam safety requirements, reduce risk of failure					
Protection of Properties	Effectiveness of the alternative in mitigating risk (flooding, failure) to adjacent properties					
Constructability	Potential to construct the project using conventional, accepted construction and engineering practices					
Implementability	Potential to implement the alternative, based on common accepted management practise					
Approvability	Potential for regulatory agencies to grant approval for implementation					
TOTAL CATEGORY SCORE						
NORMALIZED CATEGORY SCORE (X% WEIGHTING)						
CATEGORY RANKING (1 = least preferred; 5 = most preferred)						
NATURAL ENVIRONMENT						
Aquatic (Creek) Habitat Impacts/Enhancement	Effectiveness of the alternative to enhance fisheries resources; fish diversity, food source, and fish passage					
Aquatic (Pond) Habitat Impacts/Enhancements	Effectiveness of the alternative to enhance pond habitat (fish, fowl, wildlife) resources, diversity, food source					
Terrestrial Habitat Impacts/Enhancement	Potential for impact and/or enhancement to connectivity and terrestrial habitat (amphibian, avian, mammal) due to implementation of the alternative					
SAR Impacts/Enhancement	Potential for impact and/or enhancement to potential Species at Risk in the project area					
Geomorphology/Sediment Transport	Effectiveness of the alternative to promote dynamic stability of channel processes and mitigate sediment impacts					
Groundwater Impacts/Enhancement	Potential for impact and/or enhancement to groundwater regimes in the project area (baseflow, recharge, water table, etc.)					
Water Quality Impacts/Enhancement	Effectiveness of the alternative to improve water quality, temperature, TSS, phosphorous, nutrient uptake					
TOTAL CATEGORY SCORE						
NORMALIZED CATEGORY SCORE (X% WEIGHTING)						
CATEGORY RANKING (1 = least preferred; 5 = most preferred)						
SOCIAL / CULTURAL ENVIRONMENT						
Impact to Private Property	Measure of the impact to adjacent private property (i.e., loss of property, access to property)					
Impact to Public Access	Measure of impact to public access (e.g., trails, recreation - picnic, fish, boat)					
Impact to Public Safety	Measure of the impact to public safety in the surrounding area resulting from the alternative					
Impact to Cultural/Heritage Features	Potential impact to existing cultural and/or heritage features in the project area					
Recreational Impacts/Enhancement	Measure of the impact to existing recreation and opportunities to enhance recreational activities in the project area					
TOTAL CATEGORY SCORE						
NORMALIZED CATEGORY SCORE (X% WEIGHTING)						
CATEGORY RANKING (1 = least preferred; 5 = most preferred)						

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ECONOMIC						
Construction Costs	Relative measure of the initial costs to install/construct the proposed works, including environmental mitigation, sediment management, etc.)					
Maintenance/Future Costs	Relative measure of the ongoing maintenance costs following implementation (or continued maintenance)					
Availability of Funding	Estimate of the availability for funding to implement the alternative					
TOTAL CATEGORY SCORE						
NORMALIZED CATEGORY SCORE (X% WEIGHTING)						
CATEGORY RANKING (1 = least preferred; 5 = most preferred)						
OVERALL NORMALIZED CATEGORY SCORE (100% WEIGHTING)						
PREFERRED OVERALL RANKING (1 = least preferred; 5 = most preferred)						

Notes: Scoring ranks alternatives in their potential to address the criteria from a least positive to a most positive impact, 1 being the least positive and 5 being the most positive. The alternatives presented are envisioned as improvements to the existing conditions which are anticipated to address the problem statement. Negative impacts that may be involved in some alternatives, such as site disturbance, are temporary and are seen as mitigatable impacts.