

APPENDIX A

TABLE A: IDENTIFYING EXPERT FEDERAL AUTHORITIES

The following reference information is offered to assist proponents in establishing contact with appropriate review agencies when certain situations are identified which result in various types of environmental impacts. The examples which follow are not expected to be comprehensive and the proponent is responsible to determine the appropriate agency to contact when different situations arise and different environmental impacts are identified.

ENVIRONMENTAL ISSUES	EXPERT FEDERAL AUTHORITY
1. Environmental Effects (from definition of "environment" in the <i>Canadian Environmental Assessment Act</i>)	
Changes in the environment:	
2. general	Environment Canada
3. air	Environment Canada
4. land	Environment Canada Natural Resources Canada
5. wildlife	Environment Canada
6. fish and fish habitat	Fisheries and Oceans Canada
7. soil	Agriculture Canada
8. forest resources	Natural Resources Canada
9. humans	Health Canada
10. water	Environment Canada Fisheries and Oceans Canada Natural Resources Canada
Related changes in:	
11. sustainable use	Environment Canada
12. human health conditions	Health Canada
13. socio-economic conditions	Agriculture Canada Environment Canada Fisheries and Oceans Canada Health Canada Indian and Northern Affairs Canada Industry, Science and Technology Canada Natural Resources Canada
14. cultural resources	Canadian Heritage Indian and Northern Affairs Canada
15. aboriginal resource use	Indian and Northern Affairs Canada
16. aboriginal land use	Health Canada
17. historical, archaeological, paleontological and architectural resources	Canadian Heritage Natural Resources Canada Public Works Canada
18. management of protected areas – national parks, national historic sites, historic rivers and heritage canals	Canadian Heritage
19. CEAA Process and Procedures	Canadian Environmental Assessment Agency Environment Canada
20. International Environmental Issues	Foreign Affairs and International Trade Canada Canadian International Development Agency

TABLE B: POTENTIAL CANADIAN ENVIRONMENTAL ASSESSMENT ACT TRIGGERS

This table is to be read in conjunction with Section 1.2.5 and Appendix C. This table is not all inclusive. It is the Responsible Authority’s responsibility to confirm the application of the CEAA and to determine the scope of assessment that is to be conducted. Proponents are therefore encouraged to contact Responsible Authorities early in the process.

Potential Project Trigger	Provisions of Act	Responsible Authority	Comments
A CEAA SCREENING IS TRIGGERED IF THE PROJECT:			
· is being funded with federal money	CEAA s.s. 5(1)b	the funding department	· Act is triggered where federal money is being provided (e.g., Infrastructure Program projects)
· is on federal land	CEAA s.s.5(1)c	Federal department responsible for the implicated lands	· this would affect projects crossing federal lands such as national parks (Heritage Canada), Indian reserves (Department of Indian Affairs and Northern Development) or national defence bases (Department of National Defence)
· is likely to affect a line or property, regulated by the NEB, that is used for the transmission of oil or gas	<i>National Energy Board Act</i>	National Energy Board	· may apply to highway projects requiring the re-location of a pipeline that is regulated by the NEB
· is likely to affect the operation of a railway company or property	<i>Canadian Transportation Act</i>	Transport Canada, Canadian Transportation Agency	· generally will apply to projects where a rail line crossing is contemplated
· involves the temporary storage of explosives on-site	<i>Explosives Act</i> , par. 7(1)a	Natural Resources Canada	· projects which involve blasting and will store the explosives on-site require a permit under the Explosives Act
· involves the federal government in the acquisition, administration or disposal of real property for which a license for any use or occupation of real property is required	Federal Real Property Regulations, par. 4(2)a	Various – the Federal Department providing the licence	· would apply to projects which propose to use or occupy federal real property
· is likely to affect fish or fish habitat, affect the quantity or quality of water available for fish or result in the destruction of fish	<i>Fisheries Act</i> , s.s. 35(2)	Department of Fisheries and Oceans –Habitat Management and Enhancement	· authorization is required to harmfully alter fish habitat (e.g., in the construction of stream crossings)
· is likely to affect the navigability of a water body	<i>Navigable Waters Protection Act</i> , s.s. 5(1)a	Department of Fisheries and Oceans – Canadian Coast Guard	· this would apply to projects potentially affecting the navigability of navigable rivers through the construction or alteration of works on, over, under, through or across a navigable waterway (e.g., bridges)
· is likely to take place in, involve dredge and fill operations, draw water from or discharge to a historic canal operated by Parks Canada	I.A. and N.D. Canal Land Regulations Public Lands Licensing Order Heritage Canal Regulations	Heritage Canada – Parks Canada	· potentially triggered by projects crossing the Trent Severn Waterway and Rideau Canal. The Canal Land Regulations and Public Lands Licensing Order address drainage into a canal (e.g., stormwater drains) and the Heritage Canal Regulations address dredge and fill activities (e.g., construction of bridge piers)
· is likely to affect Indian reserve lands	<i>Indian Act</i> , s.s. 28(2), 35(1), 35(2) and 39	Department of Indian Affairs and Northern Development	· would only apply to projects that are located on, or require access through, Indian reserves

APPENDIX B

BASELINE ENVIRONMENTAL INVENTORY

SECTION I - Location - To include the following:

- Name of Watershed and Tributary/Shoreline Reach
- Site location - Municipality, Lot, Concession, street name, or GIS Coordinates, to aid in identification
- Landowners - identify affected landowners, or users of property
- Mapping at appropriate scale eg. 1:10,000 to locate site, and establish study area eg. valley or shoreline system.

SECTION II - Environmental Description

The broad definition of environment, as provided in the **Environmental Assessment Act**, must be applied. For those elements for which a given project is likely to have an impact, baseline conditions will be determined. These are outlined on the checklist provided. A photographic record of the site should be taken at this time. Where applicable, the sources of this information (eg. individuals, groups, agencies, published literature) shall be noted.

BASELINE ENVIRONMENTAL INVENTORY CHECKLIST

Presence and
Extent of:

Physical

- unique landform
- existing mineral or aggregate resources extraction industries
- Earth Science - Areas of Natural and Scientific Interest (ANSI's)
- specialty crop areas
- agricultural lands or production
- Niagara Escarpment
- Oak Ridges Moraine
- environmentally sensitive/significant areas - physical
- air quality
- agricultural tile or surface drains
- noise levels & vibration
- high/storm water flow regime
- low/base water flow regime
- existing surface drainage and groundwater seepage
- groundwater recharge/discharge zones
- littoral drift
- other coastal processes
- water quality
- soil/fill quality
- contaminated soils/sediments/seeps
- existing transportation routes
- constructed crossings (e.g. bridges, culverts)
- geomorphology
- other

Presence and
Extent of:

Biological

- wildlife habitat
- habitat linkages or corridors
- significant vegetation communities
- environmentally sensitive/significant areas - biological
- fish habitat such as, spawning or feeding areas, restriction of movement, environmental conditions (e.g. flow, temperature, oxygen levels)
- species of concern (e.g. Species at Risk, Vulnerable/Threatened/Endangered Species, conservation priorities - either flora or fauna)
- exotic/alien and invasive species
- wildlife/bird migration patterns
- wildlife populations
- wetlands
- microclimate, (e.g. wind screening, snow accumulation, shading)
- Life Science ANSI's
- unique habitats
- other

Presence and
Extent of:

Cultural

- traditional land uses (e.g. harvesting)
- aboriginal reserve or community
- outstanding native land claim
- transboundary water management issues
- riparian uses (e.g. water access, navigation, boating, fishing, cottages)
- recreational or tourist use of water body and/or adjacent lands (e.g. canoeing, trails)
- recreational or tourist use of existing shoreline access locations
- aesthetic or scenic landscapes or views
- archaeological resources, built heritage resources and cultural heritage landscapes
- historic canals
- federal property
- heritage river systems
- other

Presence and
Extent of:

Socioeconomic

- surrounding neighbourhood or community
- surrounding land uses or growth pressure
- existing infrastructure, support services, facilities (education, water supply, sewage)
- pedestrian traffic routes
- property values or ownership
- existing tourism operations
- property/farm accessibility
- other

Presence and
Extent of:

Engineering/ Technical

- rate of erosion in ecosystem
- sediment deposition zones in ecosystem
- flood risk in ecosystem
- slope stability
- existing structures
- hazardous lands
- hazardous sites
- other

APPENDIX C

REFERENCE INFORMATION

The following reference information is offered to assist proponents in establishing contact with appropriate agencies when certain situations are identified which result in various types of environmental impacts. The examples which follow are not expected to be comprehensive and the proponent is responsible to determine the appropriate agency to contact when different situations arise and different environmental impacts are identified.

This information is considered current as of the date of writing.

The proponent Conservation Authority is responsible for ensuring that the undertaking meets the requirements of all legislation which is applicable at the time of planning and carrying out the undertaking.

SITUATION	MITIGATION REQUIRED	CONTACTS	LEGISLATION /APPROVALS /INFORMATION
Physical			
Unique Landforms	ensure physical characteristics of the landform are maintained	Ministry of Natural Resources (MNR) Municipality Conservation Authority	Watershed Management Plans
Existing Mineral or Aggregate Resources Extraction Industries	minimize or avoid impacts to existing operations	MNR Local operator Municipality	Aggregate Resources Act Planning Act, Provincial Policy Statement
Earth Science - Areas of Natural and Scientific Interest (ANSI's)	retain present characteristics	MNR Conservation Authority	Planning Act, Provincial Policy Statement
Specialty Crop Areas	ensure project has no long term effect on viability, avoid or reduce short term impacts	Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), Local Agricultural Representatives	Planning Act, Provincial Policy Statement
Agricultural Lands or Production	avoid or reduce impacts to agricultural land	OMAFRA, Local Agricultural Representatives	Planning Act, Provincial Policy Statement
Niagara Escarpment	comply with the requirements of the Niagara Escarpment Planning and Development Act	Niagara Escarpment Commission(NEC) Conservation Authority	Niagara Escarpment Planning and Development Act
Oak Ridges Moraine	ensure project complies with existing guidelines	Regional Municipality Conservation Authority	Oak Ridges Moraine Interim Implementation Guidelines (Ministry of Municipal Affairs and Housing (MMAH), 1991) Regional Official Plan Watershed Management Plans
Environmentally Sensitive/Significant Areas (physical)	ensure function and form retained	Municipality Conservation Authority	Official Plan Watershed Management Plan

SITUATION	MITIGATION REQUIRED	CONTACTS	LEGISLATION /APPROVALS /INFORMATION
Air Quality	ensure equipment exhaust, dust and odour are controlled during construction	Ministry of the Environment (MOE)	
Agricultural Tile or Surface Drains	avoid or reduce impacts to existing drains avoid impacts to fisheries habitat	OMAFRA, Municipality, Local Agricultural Representative, Department of Fisheries & Oceans (DFO)	Drainage Act Federal Fisheries Act; all projects for which the CA is the proponent will be reviewed in accordance with "A Protocol Detailing the Fish Habitat Referral Process in Ontario" (August 2000) as amended.
Noise Levels & Vibration	conform with local bylaws as to hours of construction	Municipalities	Municipal Bylaws
High/Storm Water Flow Regime	ensure no adverse impacts on water levels, flood levels and on in stream erosion occur, both upstream and downstream of the project	Conservation Authority Municipality Environment Canada MTO District Office	Conservation Authorities Act Watershed Management Plans Ontario Water Resources Act Canada Water Act MTO Drainage Manual (3 volumes)
Low/Base Water Flow Regime	ensure no adverse impacts on water levels, base flow, water taking permits are taken into account in project design	Conservation Authority MOE Municipality Environment Canada	Conservation Authorities Act Watershed Management Plans Ontario Water Resources Act Canada Water Act
Existing Surface Drainage and Groundwater Seepage	ensure surface drainage patterns are maintained or compensated for	MNR MOE Environment Canada Conservation Authority MTO District Office	Lakes and Rivers Improvement Act Ontario Water Resources Act Canada Water Act Conservation Authorities Act Watershed Management Plans Fisheries Management Plans Public Transportation and Highway Improvement Act (PTHIA) MTO Drainage Manual (3 volumes)
Groundwater Recharge/Discharge Zones	retain/enhance recharge/discharge characteristics and ensure any potential adverse impacts on connected aquifer systems are examined and avoided	Municipality Conservation Authority	Aquifer Management Plan Watershed Management Plans
Littoral Drift	ensure impacts on littoral drift are examined and compensated for	Conservation Authority Municipality	Shoreline Management Plans Planning Act, Provincial Policy Statement
Other Coastal Processes	ensure impacts on wave activities are examined and compensated, (e.g. increased wave reflection and diffraction)	Conservation Authority Municipality	Shoreline Management Plans Planning Act, Provincial Policy Statement

SITUATION	MITIGATION REQUIRED	CONTACTS	LEGISLATION /APPROVALS /INFORMATION
Water Quality	ensure contamination of water does not occur	MOE Environment Canada Municipality Conservation Authority	Canadian Environmental Protection Act Canada Water Act Federal Fisheries Act, section 36(3) Water Management Policies/Guidelines, Provincial Water Quality Objectives, MOE 1994 Evaluating Construction Activities Impacting on Water Resources guideline (February 1994) Fill Quality Guidelines for Lakefilling in Ontario: Application of Sediment and Water Quality Guidelines to Lakefilling, (June 1992) Planning Act, Sect. 2.4.1 Provincial Policy Statement Conservation Authorities Act Watershed Management Plans
Soil/Fill Quality	ensure contamination of soil/fill does not occur	MOE	Fill Quality Guidelines for Lakefilling in Ontario: Application of Sediment and Water Quality Guidelines to Lakefilling, (June 1992) Evaluating Construction Activities Impacting on Water Resources guideline (February 1994).
Contaminated Soils/Sediments/ Seeps	ensure contaminated soils are not present or are dealt with appropriately	MOE Environment Canada	Federal Fisheries Act; subsection 36(3) Canadian Environmental Protection Act Environmental Protection Act Guideline for use at Contaminated Sites in Ontario
Existing Transportation Routes	eliminate or reduce impediments to present traffic flow	Ontario Provincial Police (OPP) MTO District Office Municipality	Public Transportation and Highway Improvement Act (PTHIA) MTO Drainage Manual (3 volumes)
Constructed Crossings (e.g. Bridges, Culverts)	ensure impacts on existing crossings are determined, and either avoided or compensated for	MTO District Office Municipality	Public Transportation and Highway Improvement Act (PTHIA) MTO Drainage Manual (3 volumes)
Geomorphology	ensure impacts are examined and avoided or compensated for	MNR Conservation Authority	Natural Channel Systems, June 1994 Provincial Policy Statement, Planning Act Watershed Management Plan Fisheries Management Plan
Biological			
Wildlife Habitat	ensure disturbance to habitat is minimized or avoided	MNR Environment Canada Conservation Authority	Fish and Wildlife Conservation Act, Migratory Birds Convention Act Canadian Biodiversity Strategy Planning Act, Provincial Policy Statement Watershed Management Plans Fisheries Management Plans
Habitat Linkages or Corridors	ensure disturbance to habitat in minimized or avoided	MNR, Environment Canada Conservation Authority	Canadian Biodiversity Strategy Fish and Wildlife Conservation Act, Migratory Birds Convention Act Fisheries Management Plan Planning Act, Provincial Policy Statement Watershed Management Plan

SITUATION	MITIGATION REQUIRED	CONTACTS	LEGISLATION /APPROVALS /INFORMATION
Significant Vegetation Communities	minimize clearing and provide for revegetation following construction	MNR Municipality Conservation Authority	Canadian Biodiversity Strategy Forestry Act, Woodlands Improvements Act, Agreement Forests, Trees Act, Municipal Bylaws Planning Act, Provincial Policy Statement
Environmentally Sensitive/Significant Areas (<i>biological</i>)	ensure function and form is retained	Municipality Conservation Authority	Official Plan Conservation Authority ESA Plan Watershed Management Plans
Fish Habitat	ensure spawning, feeding, and movement are not restricted, comply with the requirements of the Fisheries Act	MNR DFO Conservation Authority	Federal Fisheries Act; all Class EA projects for which the CA is the proponent will be reviewed in accordance with "A Protocol Detailing the Fish Habitat Referral Process in Ontario" (August 2000) as amended. Watershed Management Plans Fisheries Management Plans
Species of Concern	avoid impacts on species(e.g. Species at Risk, Vulnerable/Threatened/Endangered Species, Conservation priorities)_ of both flora and fauna	Environment Canada MNR Conservation Authority	Accord for the Protection of Species at Risk Canadian Biodiversity Strategy Canada Wildlife Act Endangered Species Act Planning Act, Provincial Policy Statement Watershed Management Plans Fisheries Management Plans
Exotic/Alien and Invasive Species	eliminate or reduce risk of spreading or introduction	Environment Canada MNR Conservation Authority	Canadian Biodiversity Strategy
Wildlife/ Bird Migration Patterns	ensure disturbance to habitat is minimized or avoided; including seasonal habitat used for reproduction and /or stopover areas by migratory birds	Environment Canada	Migratory Birds Convention Act
Wetlands	ensure function and form is retained, comply with the requirements of-PPS	MNR/MMAH Municipality Environment Canada Conservation Authority	Planning Act, Section 2.3 Provincial Policy Statement (PPS), Official Plan Federal Policy on Wetland Conservation Watershed Management Plans Fisheries Management Plans
Microclimate	ensure impacts regarding windscreening, snow accumulation, shading are considered and accounted for		
Life Science ANSI's	retain characteristics	MNR	Planning Act, Provincial Policy Statement
Unique Habitats	retain/enhance present characteristics and functions	Municipality MNR Conservation Authority	Official Plan Planning Act, Provincial Policy Statement Watershed Management Plans Fisheries Management Plans

SITUATION	MITIGATION REQUIRED	CONTACTS	LEGISLATION /APPROVALS /INFORMATION
Cultural			
Traditional Land Uses	ensure interests are identified and dealt with according to present guidelines	Ontario Native Affairs Secretariat (ONAS) Local Representatives	Aboriginal Policy Framework (ONAS)
Aboriginal Reserve or Community			
Outstanding Native Land Claim			
Transboundary Water Management Issues	Ensure in-water work in interconnecting channels of international boundary waters (e.g. St Mary's River, Detroit & St. Clair Rivers, Niagara River and St. Lawrence River) does not impact water levels, flow, and quality.	Environment Canada Foreign Affairs & International Trade (FAIT)	Boundary Waters Treaty Act
Riparian uses	ensure impacts are reduced to water access, boating, cottages	Landowners Municipality Conservation Authority	
Recreational or Tourist Use of Water Body and/or adjacent lands	avoid impacts to existing routes for navigation and existing or planned trails	Federal Department of Transport Regional Ministry of Tourism, Culture and Recreation (MTCR) office Municipal or Area Tourism Trade Association Relevant Local Recreational Associations	Navigable Waters Protection Act, approval of construction in a water body and of shoreline construction for navigation safety
Recreational or Tourist Use of Existing Shoreline Access Locations	avoid or minimize impacts	Municipal or Area Tourism Trade Association Relevant Local Recreational Associations Regional MTCR office Local Tourist Operators	
Aesthetic or Scenic Landscapes or Views	ensure that impacts to views are examined and accounted for	Municipality Community	

SITUATION	MITIGATION REQUIRED	CONTACTS	LEGISLATION /APPROVALS /INFORMATION
Archaeological Resources, Built Heritage Resources and Cultural Heritage Landscapes	ensure resources are protected ensure that impact to archaeological potential areas where identified are adequately assessed	Regional MTCR office Municipality Local Historical Board or Organization Local Architectural Advisory Committee Conservation Authority	Ontario Heritage Act Historic Sites and Monuments Act Historic Parks Act Planning Act, Provincial Policy Statement Guidelines for Preparing the Cultural Resource Component of Environmental Assessments (Ontario Ministry of Culture and Communications/ Ministry of the Environment, 1992 Guidelines on the Man-Made Heritage Component of Environmental Assessments (Ontario Ministry of Culture and Recreation, reprinted 1981)
Historic Canals	comply with provisions	Canadian Heritage	Special Provisions may apply to specific Canals e.g. Canada - Ontario Rideau Trent Severn (CORTS) Agreement
Federal Property	comply with Federal requirements	Owner	Canadian Environmental Assessment Act
Heritage River Systems	retain characteristics	MNR Conservation Authority	
Socioeconomic			
Surrounding Neighbourhood or Community	minimize impacts to existing community	Municipality	Planning Act
Surrounding Land Uses or Growth Pressure	evaluate the effect of the project on land use and growth pressure, avoid or minimize negative effects	Municipality	Planning Act
Existing Infrastructure, Support Services, Facilities	avoid conflicts with existing facilities	Ministry of Community and Social Services	
Pedestrian Traffic Routes	provide safe access to pedestrians during construction, restore access following completion	Community Municipality	
Property Values or Ownership	consider effects of project on property value, in the case of instream work contact MNR re ownership of bed of watercourse	Municipality Local Real Estate Board MNR	Public Lands Act Lakes and Rivers Improvement Act; permit or license required if Crown owned.
Existing Tourism Operations	avoid or reduce negative impacts of project on surrounding operations	Ministry of Tourism and Recreation (MTR) Owners and Operators	
Property/Farm Accessibility	ensure access is maintained or compensated for	Private Landowners	
Engineering/Technical			
Rate of Erosion in Ecosystem	ensure no adverse impacts on erosion in ecosystem	Conservation Authority	Conservation Authorities Act
Sediment Deposition Zones in Ecosystem	ensure no adverse impacts on stability of dynamic deposition zones (e.g. beach)	Conservation Authority Municipalities	Conservation Authorities Act Planning Act, Provincial Policy Statement

SITUATION	MITIGATION REQUIRED	CONTACTS	LEGISLATION /APPROVALS /INFORMATION
Flood Risk in Ecosystem	ensure flooding susceptibility is not increased	Conservation Authorities Municipalities	Conservation Authorities Act Planning Act, Provincial Policy Statement
Slope Stability	ensure no adverse impacts on slope stability	Conservation Authorities Municipalities	Conservation Authorities Act Geotechnical Principles for Stable Slopes Great Lakes-St.Lawrence River, Shoreline Policy (Terraprobe, 1994) Planning Act, Provincial Policy Statement
Existing Structures	ensure structural integrity of existing structures before and after project via the owner of the structure	Owner of Structure	
Hazardous Lands	ensure development complies with Provincial Policy Statement requirements	Conservation Authority Municipality	Conservation Authorities Act Planning Act, Provincial Policy Statement Understanding Natural Hazards (MNR, 2001)
Hazardous Sites	ensure development complies with Provincial Policy Statement requirements	Conservation Authority Municipality	Conservation Authorities Act Planning Act, Provincial Policy Statement Understanding Natural Hazards (MNR, 2001)

APPENDIX D

PROJECT PLAN FORMAT

1. Introduction

- Explanation of Project Plan and relationship of the undertaking to the **Environmental Assessment Act**;
- Purpose of the undertaking;
- Description of the study area;
- General description of the undertaking;
- Rationale for the undertaking;

2. Background

- Explanation of the history of the problem;
- Identification of previous studies;
- Justification of Conservation Authority involvement given the nature of the undertaking and its direct relationship to the policies, programs and watershed or shoreline plan or strategy of the Conservation Authority.

3. Baseline Inventory

- As on file; (see Section 3.5 “Preparation of a Baseline Environmental Inventory”)

4. Examination of Alternatives

- As on file; (see Section 3.6 “Evaluation of Alternative Methods for Carrying Out Remedial Project” and Section 3.7 “Selection of a Preferred Alternative”)

5. Environmental Screening

- As on file; (see Section 3.7.1 “Detailed Environmental Analysis of the Preferred Alternative”)

6. Summary

- Comments received from screening;
- Discussion of how any concerns have been addressed;
- Outline of monitoring program which will be implemented (see Section 3.9).

APPENDIX E

SAMPLE NOTICE OF INTENT

(to be published in the local press, sent to Contact Group and sent to Conservation Ontario)

_____ Conservation Authority

The _____ Conservation Authority has commenced a study regarding _____ located _____. This project is being considered in order to provide protection for _____ which currently _____.

The Conservation Authority invites you to participate in this study, which is subject to the Class Environmental Assessment for Remedial Flood and Erosion Control Projects approved for this type of undertaking. Your input will be incorporated in the planning and design process for this project.

If you wish to be involved in this study, or to receive further information, please contact _____ at this office or visit our WEBSITE.

Conservation Authority Name: _____
Telephone: _____
Fax: _____
Address: _____

Email: _____
WEBSITE: _____

Subject to comments received as a result of this study and the receipt of necessary approvals and funding, the Conservation Authority intends to proceed with the construction of this project.

SAMPLE NOTICE OF FILING DOCUMENT FOR REVIEW

(in the case of a Project Plan this is sent to all who expressed an interest in the project and Conservation Ontario)

(in the case of an ESR this is to be published in the local press and sent to Contact Group, all who expressed an interest in the project and Conservation Ontario)

_____ Conservation Authority

The _____ Conservation Authority has now completed the Environmental Study Report (ESR) regarding _____ located _____. The ESR has been prepared in accordance with the Class Environmental Assessment for Remedial Flood and Erosion Control Projects, approved for projects of this type.

As described in the ESR, the Conservation Authority is proposing to _____.

Interested persons are invited to review this document at the Conservation Authority office. Copies are also available for review at (local municipal office, library, WEBSITE, etc.). You may provide written comments to this office, within 30 calendar days from the date of this notice.

Conservation Authority Name: _____
Telephone: _____
Fax: _____
Address: _____

Email: _____
WEBSITE: _____

Subject to comments received as a result of this study and the receipt of necessary approvals and funding, the Conservation Authority intends to proceed with the construction of this project. If any individual feels that serious environmental concerns remain unresolved after consulting with Conservation Authority staff, it is their right to request that the project be subject to a Part II Order by the Minister of the Environment. Part II Order requests must be received by the Minister, with a copy to the Conservation Authority, at the following address within 30 calendar days following the date of this Notice:

Minister of the Environment
135 St. Clair Avenue West, 15th Floor
Toronto, Ontario
M4V 1P5

SAMPLE NOTICE OF FILING OF AN ADDENDUM FOR REVIEW

(in the case of a Project Plan this is sent to all who expressed an interest in the project and Conservation Ontario)

(in the case of an ESR this is to be published in the local press and sent to all who expressed an interest in the project and Conservation Ontario)

_____ Conservation Authority

The _____ Conservation Authority has completed a review of the Environmental Study Report (ESR) regarding _____ located _____. The ESR has been prepared in accordance with the Class Environmental Assessment for Remedial Flood and Erosion Control Projects, approved for projects of this type.

As a result of comments received during the review of this document, changes have been proposed in order to address issues of concern. These changes have been outlined in an Addendum to the ESR. Interested persons are invited to review this addendum document at the Conservation Authority office. Copies are also available for review at (local municipal office, library, WEBSITE, etc.). You may provide comments to this office, within 15 calendar days from the date of this notice.

Conservation Authority Name: _____
Telephone: _____
Fax: _____
Address: _____
Email: _____
WEBSITE: _____

Subject to comments received as a result of this review and the receipt of necessary approvals and funding, the Conservation Authority intends to proceed with the construction of this project. If any individual feels that serious environmental concerns remain unresolved after consulting with Conservation Authority staff, it is their right to request that the project be subject to a Part II Order by the Minister of the Environment. Part II Order requests must be received by the Minister, with a copy to the Conservation Authority, at the following address within 15 calendar days following the date of this Notice:

Minister of the Environment
135 St. Clair Avenue West, 15th Floor
Toronto, Ontario
M4V 1P5

SAMPLE NOTICE OF PROJECT APPROVAL

(to be sent to all who expressed an interest in the project and Conservation Ontario*)

_____ Conservation Authority

The _____ Conservation Authority has now completed the planning and design process approved under the *Environmental Assessment Act* in the *Class Environmental Assessment for Remedial Flood and Erosion Control Projects* for undertaking a remedial project regarding _____ located _____.

We thank you for your interest, and for your participation in the planning of this project.

(*NOTE: Within 30 days of the "Notice of Project Approval", the "Proponent Conservation Authority Evaluation Form: Part A" (Appendix F) must be completed and submitted to Conservation Ontario.)

SAMPLE NOTICE OF PROJECT COMPLETION

(to be sent to all who expressed an interest in the project and Conservation Ontario*)

_____ Conservation Authority Remedial Project Name: _____

This project has been completed in accordance with the *Class Environmental Assessment for Remedial Flood and Erosion Control Projects*, approved under the *Environmental Assessment Act* for projects of this type. All monitoring program commitments have been met for the approved project [INCLUDE IF APPROPRIATE: including any conditions requiring monitoring that were imposed on the project as part of the Minister's denial of a Part II Order request (Section 7.0, #8)].

_____ responsible project manager _____ Date

(*NOTE: Within 30 days of the "Notice of Project Completion", the "Proponent Conservation Authority Evaluation Form: Part B" (Appendix F) must be completed and submitted to Conservation Ontario.)

APPENDIX F

Proponent Conservation Authority Evaluation Form

The Proponent Conservation Authority Evaluation Form: Part A and Part B is a necessary part of evaluating the effectiveness of this Class Environmental Assessment and will be used by Conservation Ontario to deliver on commitments made in Sections 10 and 11 of this Class EA. It is a necessary part of retaining our approval under the Environmental Assessment Act for this class of undertakings.

Part A:

This part of the evaluation form must be completed and submitted to Conservation Ontario within 30 days of the date stated on the “Notice of Project Approval”.

_____ Conservation Authority Remedial Project Name: _____

This project has been planned in accordance with the *Class Environmental Assessment for Remedial Flood and Erosion Control Projects*, approved under the *Environmental Assessment Act* for projects of this type.

_____ responsible project manager _____ Date

Please rate your satisfaction level with the following stages of the Class EA Process.

		<u>Least</u>				<u>Most</u>
		<u>Satisfied</u>				<u>Satisfied</u>
Initiation of the Class EA Process	1	2	3	4	5	5
Examination of Environmental Planning & Design Principles	1	2	3	4	5	5
Review of Selection of Preferred CA Program	1	2	3	4	5	5
Preparation of a Baseline Inventory	1	2	3	4	5	5
Evaluation of Alternative Methods	1	2	3	4	5	5
for Carrying out Remedial Project	1	2	3	4	5	5
Selection of Preferred Alternative Method	1	2	3	4	5	5
Detailed Environmental Analysis of the	1	2	3	4	5	5
Preferred Alternative Method	1	2	3	4	5	5
Selection of Documentation Level	1	2	3	4	5	5
Report Preparation (level of detail required)	1	2	3	4	5	5
Notification Requirements	1	2	3	4	5	5
Requests for Part II Orders (if applicable)	1	2	3	4	5	5
Amendment Process (if applicable)	1	2	3	4	5	5
Participation Levels (level of interest, ability to resolve issues)	1	2	3	4	5	5
Class EA Effectiveness Monitoring	1	2	3	4	5	5
(Conservation Ontario Annual Effects Monitoring Report, Five Year Review Report)						

Additional detail explaining the satisfaction level assigned may be attached to this form. Where your satisfaction level rates 1 or 2, additional detail should be attached and contribute to:

- Clarification of ambiguous areas of the document and procedure
- Improvement or streamlining of the planning and design process in areas where problems may have arisen
- Identification of need to extend the Class EA to undertakings that were not previously included
- Identification of need to withdraw the Class EA from undertakings which were previously included
- Updating information provided in the document (e.g. Appendix C)

Part B:

This part of the evaluation form must be completed and submitted to Conservation Ontario within 30 days of the date stated on the “Notice of Project Completion”.

_____ Conservation Authority Remedial Project Name: _____

This project has been completed in accordance with the *Class Environmental Assessment for Remedial Flood and Erosion Control Projects*, approved under the *Environmental Assessment Act* for projects of this type. All monitoring program commitments have been met for the approved project [INCLUDE IF APPROPRIATE: including any conditions requiring monitoring that were imposed on the project as part of the Minister’s denial of a Part II Order request (Section 7.0, #8)].

_____ responsible project manager _____ Date

Please rate your satisfaction level with the following stages of the Class EA Process.

	Least				Most
	Satisfied	2	3	4	Satisfied
Construction Monitoring	1	2	3	4	5
Amendment Process (if applicable)	1	2	3	4	5
Report Preparation (level of detail required)	1	2	3	4	5
Project Results (outcomes of the monitoring report; issues successfully resolved)	1	2	3	4	5
Notification Requirements	1	2	3	4	5
Class EA Effectiveness Monitoring (Conservation Ontario Annual Effectiveness Monitoring Report, Five Year Review Report)	1	2	3	4	5

Additional detail explaining the satisfaction level assigned may be attached to this form. Where your satisfaction level rates 1 or 2, additional detail should be attached and contribute to:

- Clarification of ambiguous areas of the document and procedure
- Improvement or streamlining of the planning and design process in areas where problems may have arisen
- Identification of need to extend the Class EA to undertakings that were not previously included
- Identification of need to withdraw the Class EA from undertakings which were previously included
- Updating information provided in the document (e.g. Appendix C)

APPENDIX G

ENVIRONMENTAL STUDY REPORT FORMAT

1. Introduction

- Explanation of an ESR and relationship of the undertaking to the **Environmental Assessment Act**;
- Purpose of the undertaking;
- Description of the study area;
- General description of the undertaking;
- Rationale for the undertaking;

2. Background

- Explanation of the history of the problem;
- Identification of previous studies;
- Justification of Conservation Authority involvement given the nature of the undertaking and its direct relationship to the policies, programs and watershed or shoreline plan or strategy of the Conservation Authority.

3. Baseline Inventory

- As on file; (see Section 3.5 “Preparation of a Baseline Environmental Inventory”)

4. Examination of Alternatives

- As on file; (see Section 3.6 “Evaluation of Alternative Methods for Carrying Out Remedial Project” and Section 3.7 “Selection of a Preferred Alternative”)

5. Environmental Screening

- As on file; (see Section 3.7.1 “Detailed Environmental Analysis of the Preferred Alternative”)

6. Summary

- Comments received from screening;
- Discussion of how the concerns that have been addressed, and what value judgements have been made, ie. the acceptability of the net impact due to the merits of the project;
- Outline of monitoring program which will be implemented (see Section 3.9).

APPENDIX H

**COMMUNITY LIAISON COMMITTEE REPORT
EXAMPLE FORMAT**

As per Section 4.1.3, members of a Community Liaison Committee may submit an assessment to the Conservation Authority, after Notice of Project Completion, commenting on the effectiveness of the Class EA process for meeting public concerns for the specific project and, where relevant, identify possible improvements.

Please rate the Committee's satisfaction level with the following as it pertains to the Class Environmental Assessment Process to address concerns associated with this project.

	Least			Most	
	Satisfied			Satisfied	
Initiation of the Class Environmental Assessment Process	1	2	3	4	5
Examination of Environmental Planning and Design Principles	1	2	3	4	5
Review of Selection of Preferred Conservation Authority Program	1	2	3	4	5
Preparation of a Baseline Inventory	1	2	3	4	5
Evaluation of Alternative Methods for Carrying Out Remedial Project	1	2	3	4	5
Selection of Preferred Alternative Method	1	2	3	4	5
Detailed Environmental Analysis of the Preferred Alternative Method	1	2	3	4	5
Selection of Documentation Level	1	2	3	4	5
Report Preparation	1	2	3	4	5
Notification	1	2	3	4	5
Participation Levels	1	2	3	4	5
Conservation Authority's Ability to Understand Concerns	1	2	3	4	5
Conservation Authority's Accommodation of Concerns	1	2	3	4	5
Provision of Sufficient Education Opportunities to Increase Your Level of Understanding	1	2	3	4	5
Project Results	1	2	3	4	5

Please outline any areas of problems or concerns or points where expectations were not addressed by the Class Environmental Assessment process.

APPENDIX I

COMMUNITY LIAISON COMMITTEE, GUIDELINES FOR ADMINISTRATION AND OPERATION

The Class Environmental Assessment states that a Community Liaison Committee (CLC) shall be established on a project by project basis for each remedial flood and erosion control work undertaken in accordance with the Class Environmental Assessment. The formality of a CLC's structure and composition should be proportional to the amount of public interest in an undertaking. (A CLC for a non-controversial project plan, for example, should be less structured than for a more substantial undertaking generating more public concern.) With this in mind, the following are presented as guidelines only. The Conservation Authority will establish specific Terms of Reference for the CLC's on a project by project basis.

Purpose

As outlined in the text of this document, key functions include:

- to assist the Conservation Authority in obtaining public input
- to identify issues of concern regarding a remedial project
- to review information and provide comments to the Conservation Authority to be utilized during the planning and design process
- to disseminate information

Membership

The Conservation Authority shall strive to ensure that the membership of the CLC is representative of all views respecting a proposed project. The number of members will be determined on a project by project basis. The Conservation Authority has the discretion to select members of the Committee, but shall do so through an open and accountable forum.

Members may include:

- individuals or representatives of groups who expressed an interest in the remedial project
- members of the Conservation Authority Boards

(not to be confused with technical advisory committees, or review agency staff)

Administration

With the establishment of a CLC, the Conservation Authority will determine the level of formality of the CLC's structure and composition.

This will result in:

- A timetable of meeting dates established
- In more formalized cases, rules of order for meetings would be established, and the election of a Chairman would occur

The support to be offered by the Conservation Authority, to the CLC, will also be determined, in most instances on a case by case basis. Individual Conservation Authorities may establish their own guidelines relating to this matter.

As a minimum, the Conservation Authority will provide:

- meeting facilities
- clerical support, wordprocessing, copying etc.

APPENDIX J

GLOSSARY OF TERMS

Alternative Methods/Designs: Alternative methods of carrying out an undertaking.

Alternative Remedial Measures: Alternative ways of approaching a problem situation once it is determined that an undertaking under the Class EA is appropriate. Each type of remedial measure has a number of method/design alternatives that can be considered.

Alternative Solutions: Alternative ways of solving a documented deficiency, including the alternative of doing nothing. An assessment of alternative solutions must precede determination of alternative remedial measures and alternative methods/designs.

Aquatic Vegetation: Plants growing in the water.

Archaeological Potential: The possibility of a previously unidentified archaeological resource existing in an area is evaluated by determining the area's archaeological potential. Geographical and historical factors associated with human settlement are indicators of archaeological potential. In areas of significant archaeological potential, an archaeological assessment should be conducted to check for the existence of an archaeological resource.

Archaeological Resource: The remains of any building, structure, activity, place or cultural feature, which because of the passage of time is on or below the surface of the land or water. Significant archaeological resources are those which have been identified and evaluated and determined to be significant to the understanding of the history of a people or place.

Armour Stone: Quarried rock material that is used in the construction of shoreline or streambank protection devices. When used as shore protection it dissipates wave energy and reduces erosion.

Artificial Nourishment: The provision of additional beach material to areas where there is a deficiency in the sediment supply.

Backwater: Water moved or held back.

Beach: The zone of unconsolidated material that extends landward from the average annual low water level to either the place where there is marked change in material or physiographic form, the line of permanent vegetation, or the high water mark.

Berm: An embankment built around a low lying area.

Bioengineering: see "Soil Bioengineering"

Biophysical: The combination of biological and physical characteristics.

Breakwater: A structure protecting a shore area, harbour, anchorage, or basin from wave action.

Built Heritage Resource: One or more buildings, structures, monuments, installations, or remains associated with architectural cultural, social, political, economic or military history.

Channel: A natural stream that conveys water; a ditch or channel excavated for the flow of water.

Channel Capacity: The maximum flow that is contained within a natural or engineered channel that does not overflow the adjacent lands.

Channel Alterations: The alteration of the flow characteristics of a channel by clearing, excavation, realignment, lining, or other means, in order to increase its capacity.

Class EA Document: A report documenting the EA process for a class of undertakings which is formally submitted for approval under the *Environmental Assessment Act*. Once the Class EA document is approved, specific projects covered by the Class EA can be implemented by proponents without having to obtain separate approval. This is provided that the approved planning and design process is followed, and there is compliance with the Notice of Approval.

Class Environmental Assessment (EA) Process: A planning and design process used for a group of undertakings which have a generally predictable range of effects, and have relatively minor environmental significance.

Cohesive Shoreline: Many of the shorelines in the Great Lakes are cohesive shores (clay, silt, glacial till) and not sandy shorelines. At first glance they may appear to be like sandy shorelines, but the sand is usually a thin veneer and is not of significant enough thickness to provide protection. The processes along cohesive shorelines are different and it is very important to note when carrying out sediment transport studies.

Conservation: The wise use and management of natural resources to maintain, restore, enhance and protect the quantity and quality of the resources for sustained benefit.

Cultural Heritage Landscape: A geographic area of heritage significance, which has been modified by human activities. Such an area is valued by a community and is of significance to the understanding of the history of a people or place.

Dike: An earthen berm constructed for the purpose of holding back floodwater.

Design Storm: A storm of a magnitude which will generate specified flows given certain conditions. This is used as a design standard for protective measures.

Drop Structures: One, or a series of, erosion resistant steps, constructed across the width of a stream or river.

Dry Dams: A dam designed to retain water upstream only during a specified high flow event. The reservoir of these dams remains dry during periods of normal flow.

Dune: A nearly horizontal part of the beach, formed by the deposition of material by wind action.

Earth Science ANSI (Area of Natural or Scientific Interest): Areas designated by the Ontario Ministry of Natural Resources as containing natural features that have values related to protection, natural heritage appreciation, scientific study or education.

Ecosystem: A dynamic totality comprised of interacting living and non-living components which encompasses the interacting components of sunlight, air, water, soil, plants, and animals (including humans), within the system.

Ecosystem Planning: An approach to planning that considers the interactions between all physical and biological factors.

Environment: As defined in the **Environmental Assessment Act** subsection 1.(1) “environment” means:

- a) air, land or water,
- b) plant and animal life, including human life,
- c) the social, economic and cultural conditions that influence the life of humans or a community,
- d) any building, structure, machine or other device or thing made by humans,
- e) any solid, liquid, gas, odour, heat, sound, vibration or radiation resulting directly or indirectly from human activities, or
- f) any part or combination of the foregoing, and the interrelationships between any two or more of them, in or of Ontario

Environmentally Sensitive Area/Environmentally Significant Area: An area which contains significant natural features, ecosystems and/or ecological functions which warrant identification, Conservation and protection in the long term interest of the environment and the public at large.

Erosion: A term used in this document collectively referring to a) The wearing away of the land surface by running water, wind, ice or other geological agents; b) Detachment and movement of soil or rock fragments by water, wind, ice or gravity; c) Instability of a slope.

Exempt Undertaking: Refers to an undertaking for which an exemption from the requirements of the **Environmental Assessment Act** has been granted by the Minister of the Environment, in consultation with Cabinet.

Fauna: A collective term for animal species present in an ecosystem.

Fill: Any material deposited by any agent so as to fill or partly fill a channel, valley, or other depression.

Fill Regulation: The regulation of the placing of fill by the Authority through the requirement of a proponent to obtain permission as set out under subsection 28 (1) of The Conservation Authorities Act.

Flood: A rise in the water level resulting in the inundation of areas adjacent to a lake or stream channel not ordinarily covered by water.

Flood Event: Riverine A flood occurrence typically measured by return period. (i.e., a 100-year return period has a 1% probability of being equalled or exceeded in any given year.)

Flood Event: Shoreline The 100 Year Flood Level means the peak stillwater level due to the combined occurrences of mean monthly lake levels and wind setup which is equalled or exceeded in one percent of all the years. In connecting channels and the St. Lawrence River, the 100 Year Flood Level is the peak instantaneous stillwater level that is equalled or exceeded in one percent of all the years.

Flood Plain: The area adjacent to a watercourse which is inundated as a result of flows exceeding the channel capacity of the watercourse. Floodplain can be defined according to design storms which inundate specified areas depending on certain conditions.

Flood Proofing: A combination of structural changes and/or adjustments incorporated into the basic design and/or construction or alteration of individual buildings, structures or properties subject to flooding so as to reduce or eliminate flood damages.

Flora: The collective term for the plant species present in an ecosystem.

Frazil Ice: Surface ice which forms on rapidly flowing rivers, the movement of the water preventing the ice crystals from forming a solid sheet.

Gabion: A rectangular or cylindrical wire mesh cage filled with rock and used in protecting against erosion.

Geomorphology: The physical features of the earth and ongoing processes which shape landforms.

Gradient: Change of elevation, velocity, pressure or other characteristics per unit length; slope.

Grassed Waterway: A natural or constructed waterway, usually broad and shallow, covered with erosion-resistant grasses, used to conduct surface water.

Groundwater: Subsurface water in zone of saturation.

Groyne: A shore protection structure built (usually perpendicular to the shoreline) to trap littoral drift or retard erosion. The resulting beach provides shore protection.

Groyne Field (groyne system): A series of groynes acting together to protect a section of shore.

Habitat: The place or site where an animal or plant community naturally or normally lives. The environment in which the life needs of a plant or animal organism, population, or community are supplied.

Hazardous Lands: Property or lands that could be unsafe for development due to naturally occurring processes. Along shorelines of large inland lakes, this means the lands including that covered by water, between a defined offshore distance or depth and the furthest landward limit of the flooding, erosion, or dynamic beach hazard. Along river and stream systems, this means the land, including that covered by water, to the farthest landward limit of the flooding or erosion hazard limits.

Hazardous Sites: Property or lands that could be unsafe for development and site alteration due to naturally occurring hazards. These may include unstable soils (sensitive marine clays (leda), organic soils) or unstable bed rock (karst topography).

Headland: A hard structure constructed perpendicular to the shoreline, for the purpose of building or protecting a beach by trapping littoral drift.

Hydraulic: The movement of water through conveyance systems.

Hydrogeology: The occurrence, distribution, and movement of water below the ground surface.

Hydrology: The occurrence, distribution and movement of the waters of the earth and their environmental relationships.

Ice Control Boom: A line of connected floating timbers stretched across a watercourse for the purpose of modifying ice formation and/or break-up processes.

Impervious/Impermeable Soil: A soil through which water, air or roots cannot penetrate.

Individual Environmental Assessment: Refers to an environmental assessment for a specific undertaking to which Part II of the **Environmental Assessment Act** applies and which is neither exempt nor covered by Class EA approval.

Island: A method of shoreline protection, viewed as a wide ultimate off-shore breakwater, mostly circular or oval in shape. Islands are used predominantly to provide habitat improvements as well as to protect the shoreline from the erosive forces of wave action by dissipating the wave energy before the wave intercepts the shore.

Jurisdiction: The extent of territory over which authority may be legally exercised.

Landform: A discernible natural landscape, such as a floodplain, stream terrace, plateau, or valley.

Lee: Shelter, or part or side sheltered from wind and waves

Life Science ANSI (Area of Natural and Scientific): Areas designated by the Ontario Ministry of Natural Resources as containing natural features that have values related to protection, natural heritage appreciation, scientific study or education.

Littoral Cell: A self contained coastal sediment system that has no movement of sediment across its boundaries. The longshore limits are defined by natural or artificial barriers where net sediment movement changes direction or becomes zero.

Littoral Drift: The movement of sediment along a shoreline by prevailing currents and oblique waves.

Microclimate: The climatic condition of a small area resulting from the modification of the general climatic conditions.

MNR: Ontario Ministry of Natural Resources.

MOE: Ontario Ministry of the Environment.

Offshore Breakwater: A method of shoreline protection, defined as a shore parallel structure, separated from the shore under all water levels. Offshore breakwaters are used to protect shorelines from the erosive forces of wave action by dissipating the wave energy before the wave intercepts the shore.

Outfall: Point where water flows from a conduit or drain.

Part II Order: The legal mechanism whereby the status of an undertaking can be elevated from an undertaking within a Class EA to an Individual Environmental Assessment.

Permeable/Pervious: Capable of transmitting air or liquid.

Pier: A structure, usually of open construction, extending out into the water from the shore to serve as a landing place, a recreational facility or other use.

Pile: A long, heavy timber or section of concrete or metal to be driven into the ground or lakebed to provide support or protection.

Proponent: For the Class EA document, are the Conservation Authorities of Ontario. For a specific undertaking planned in accordance with the approved Class EA, it is the individual Conservation Authority.

Public: Includes interest groups, associations, and individuals.

Regulations: Statutory controls, enacted through legislation, for the purpose of controlling land and water use.

Regulatory Erosion Standard: The approved standard(s) used to define shore land erosion limits, based on recession rates, for regulatory purposes.

Regulatory Flood Standard: The approved standard(s) used to define shore land flood limits for regulatory purposes. Currently the regulatory flood standard for Southern Ontario (zone 1) is that flood produced by the Hurricane Hazel storm or the 100 year flood, whichever is greater; for northern Ontario (zone 3) it is that flood produced by the Timmins storm or the 100 year flood, which ever is greater; for Eastern Ontario (zone 2) it is the 100 year flood.

Regulatory Shore Lands: Land, including that covered by water, between the international boundary and the furthest landward limit of the regulatory flood standard, the regulatory erosion standard or the dynamic beach.

Remedial Projects: Non-structural/structural works which are intended to reduce risk of damages to human life and property caused by flooding, erosion and/or other water related hazards.

Reservoir: Impounded body of water or controlled lake in which water is collected or stored.

Revegetation: The provision of plant materials to an area presently devoid of such.

Revetment: A sloped facing of stone, concrete etc. built to protect an embankment or shore structure against erosion and failure by wave action or currents.

Rip-rap: A protective layer of quarystone, usually of mixed size, graded within wide size limit, placed to prevent erosion, scour, or sloughing of an embankment or bluff.

Riparian Owner: The owner of land containing or directly abutting a natural lake or water course.

Risk: The chance that is associated with any action where harm or loss can be encountered. The risk associated with building in the floodplain can be assigned a percentage value based upon the degree of flood susceptibility of the proposed development.

River Reach: A section of a watercourse containing a set of specified characteristics, depending on the criteria (eg. geomorphology, aquatic habitat, etc.)

Riverine: Of or pertaining to inland streams or rivers as opposed to lakeshores.

Rock Ramps: Sloped, riffle-like grade control structures made of rocks and installed on the channel bed. Rock ramps are designed to give a natural appearance and provide erosion control, enhanced aquatic habitat, free upstream and downstream movement of aquatic organisms, and oxygenation of stream water.

Runoff: The conveyance of surface water caused by precipitation and/or snowmelt.

Seawalls: Hard, impermeable structures, built parallel to the shore, designed to withstand extreme wave action.

Sediment: Solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site or origin by air, water, gravity or ice and has come to rest on the earth's surface either above or below sea level.

Sediment Sink: A point at which sediment settles out in the coastal system.

Sheet Pile: A steel pile with a slender, flat, cross section to be driven into the ground or lakebed and linked or interlocked with like members to form a vertical wall or bulkhead.

Shore: The area of interface between land and water extending from the lakeward limit of the littoral zone landward to the first major change in terrain.

Shore Reach/Shoreline Reach: Portions of the shoreline containing similar physiographic or biological characteristics and shore dynamics such as erosion rates, similar flood elevations, etc., and include shore alignment, offshore bathymetry, fetch characteristics, sediment transport rates, flood susceptibility, land use suitability, and environmental similarity.

Shorewall: A structure separating land and water areas, primarily designed to prevent erosion and other damage due to wave action.

Slope: The degree of deviation of a surface from horizontal, measured in a numerical ratio, percent or degrees.

Slope Failure: Common types of slope failures include transitional slides, rotational slides (circular, shallow, noncircular), successive slips, retrogressive slides, (transitional, rotational) and flows (mud, earth, sheet)

Soil Bioengineering: The use of woody vegetative plants and cuttings often in combination with structural measures, for the purpose of stabilizing eroding slopes. The vegetative matter serves as a structural component, drain, and barrier to earth movement.

Stable Slope: The angle a slope would achieve when toe erosion is absent.

Still Water Level: The result of the combined occurrence of the static water level and a storm surge.

Storm Event: A rainfall event where the amount of rain that falls is measured as opposed to the volume of runoff. One storm referred to is the **1:100 Year Storm:** the storm that produces an amount of rainfall that based on historical data occurs on the average once in 100 years.

Surface Runoff: That component of precipitation that results in overland flow and becomes a temporary part of streamflow.

Storm Surge: A rise above the normal water level on the shoreline due to the action of wind stress on the water surface.

Toe Erosion: The erosion which occurs at the toe of slopes, largely as a result of the continuous removal of earthen material by waves and currents.

Topography: The relative positions and elevations of the natural or built features of an area that describe the configuration of its surface.

Undertaking: An undertaking is an enterprise or activity or a proposal, plan or program in respect of an enterprise or activity which a proponent initiates.

Urban Runoff: Storm water generated from urban or urbanizing areas.

Watershed: The area drained by a river or lake system. A drainage area, drainage basin or catchment area.

Watershed Jurisdiction: The area over which a single Conservation Authority has jurisdiction.

Watershed Planning: Planning developed by a Conservation Authority to set goals, objectives and strategy for the conservation and development of water and land resources within a watershed or watershed jurisdiction.

Weathering: Mechanical and chemical processes that fragment and decompose rock materials.

Weir: Device for measuring or regulating the flow of water.

Wet Dams: Water control structures, fitted with control gates or other mechanisms that allow adjustments to be made to control the quantity of flow. The dams control some volume of water throughout the year.

Wetlands: Lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface. In either case, the presence of abundant water has caused the formation of hydric soils and has favoured the dominance of either hydrophytic or water-tolerant plants. The four major types of wetlands are swamps, marshes, bogs and fens. Land being used for agricultural purposes, that are periodically 'soaked' or 'wet', are not considered to be wetlands in this definition. Such lands, whether or not they were wetlands at one time, are considered to have been converted to other uses.

Wildlife: A term used in this document to refer to all forms of animal life including insects amphibians, reptiles, birds, and mammals.

APPENDIX K

Issues and Outcomes of Class Environmental Assessment for Remedial Flood and Erosion Control Projects Review

<p align="center">Issues [Identified in the <i>Proposed Terms of Reference</i> (Conservation Ontario, May 19, 2000; Approved September 1, 2000)]</p>	<p align="center">Outcomes [As reflected in this Class EA document]</p>
<p>Updates/Clarification</p>	
<p>1) Flood & erosion control technical updates</p> <p>As indicated in this Class EA, Table 2.0 “Summary of the Class Undertakings” is not intended to be exhaustive since it cannot anticipate new, innovative approaches of addressing the four flood and erosion problem situations. Consideration, however, was given to the inclusion of alternative methods/designs to the Class EA document. For example, ice control booms were identified as a method to address riverine flooding.</p>	<p>Table 2.0, Part II, and the Appendix J: Glossary have been updated to reflect current practices and current technical terms.</p>
<p>2) Review/Updates of the Areas of Concern</p> <p>The areas of concern for staff to consider when reviewing a project are physical, biological, cultural, socioeconomic and engineering/technical. These same considerations are used for the environmental inventory, detailed environmental analysis, monitoring, and to identify reference information.</p>	<p>Table 3.0 and Appendix B and C have been updated to reflect current practices and technical terms</p>
<p>3) Updates resulting from amendments to the Conservation Authorities Act (CAA) and the Environmental Assessment Act (EAA) and Ontario Regulation 334/90</p>	<p>Updates specifically for: CAA - All Section 1 including 1.3 “Funding & Approval Mechanisms” EAA- Section 7.0 “Part II Orders”; Section 2.2 modified to make justification consistent with EAA Ont Regulation 334/90 under EAA - Table 1.0</p>
<p>4) Updates to reflect legislative changes</p>	<p>Appendix C has been updated including wording from Department of Fisheries and Oceans (DFO) to address current DFO/Conservation Authority agreements under section 35 of Federal Fisheries Act</p>
<p>5) Updates to reflect current discussions around role of First Nations in provincial environmental regulatory regimes</p>	<p>Section 4.1 has been updated to reflect current policy and information provided by Ontario Native Affairs Secretariat (ONAS)</p>

<p style="text-align: center;">Issues [Identified in the <i>Proposed Terms of Reference</i> (Conservation Ontario, May 19, 2000; Approved September 1, 2000)]</p>	<p style="text-align: center;">Outcomes [As reflected in this Class EA document]</p>
<p>6) Public Notification Methods</p> <p>Generally, practitioners and stakeholders are satisfied with the current levels of public consultation. The Class EA will be updated to include new venues for public consultation such as websites, newsletters, and/or cable channels. The Class EA will include a reminder that the proponent Conservation Authority should confirm whether some groups/associations have special timing requirements due to frequency of their meetings, etc. and that these requirements be given due consideration.</p> <p>Other improvements will be considered as they arise, such as a recommendation for an informal site meeting with the affected landowners so that possible alternatives can be discussed early in the process.</p>	<p>- addressed in Section 4.0, 4.2 “Public Notification Requirements”</p> <p>- addressed in Section 3.1.2 “Preliminary Site Analysis”</p>
<p>7) Federal Environmental Assessment Process: Triggers</p> <p>Some projects included in the class could potentially trigger a federal assessment under the <i>Canadian Environmental Assessment Act (CEAA)</i>. It is important that the relevant federal interests are addressed and the responsible federal agencies have been involved.</p>	<p>The Class EA planning and design process has been revised to include a new Section 1.2.5 “Status Under the CEAA”. It includes direction on assessing whether the CEAA is triggered by the class of undertakings. A detailed Table B is provided in Appendix A. This material was obtained through the Canadian Environmental Assessment Agency. The details on triggers will allow Conservation Authority staff to anticipate Federal involvement and allow Conservation Authority staff to notify them of projects early in the process.</p>
<p>8) Federal Environmental Assessment Process: Harmonization</p> <p>The Class EA Terms of Reference document indicated that the Class EA would address the need to harmonize both EA processes, and comply with the requirements of the pending federal-provincial agreement on harmonization.</p>	<p>The Federal and Provincial governments have not reached agreement on harmonization and amendments to the CEAA have been introduced in the Legislature. This Class EA will be amended, if necessary, to reflect approved amendments to the CEAA using the mechanisms provided in Section 11.0 of this Class EA.</p> <p>The Class EA planning and design process (Section 1.2.5) includes an explanation of the relationship to the Federal process and staff are encouraged to contact Federal Departments (Table A, Appendix A) early in the process. This material was obtained from the Canadian Environmental Assessment Agency and provides the best practice at this time for coordinating processes.</p>

<p style="text-align: center;">Issues [Identified in the <i>Proposed Terms of Reference</i> (Conservation Ontario, May 19, 2000; Approved September 1, 2000)]</p>	<p style="text-align: center;">Outcomes [As reflected in this Class EA document]</p>
<p>9) Operation, Maintenance & Retirement of Structure: Definitions and Examples</p> <p>- The definitions for operation, maintenance and retirement were examined and assessed against present-day activities. Consideration was given to whether examples were necessary.</p>	<p>- the definitions were considered to be clear and appropriate and examples were considered unnecessary. Additional direction is provided to Conservation Authorities through the following addition to Section 8.0:</p> <p><i>Conservation Authorities shall endeavour to review all opportunities for incorporating environmental enhancements as part of project operations, maintenance or retirement activities (e.g. using materials of equal or better properties, etc.).</i></p>
<p>10) Proponency under this Class EA</p>	<p>- updated and clarified in Section 2.4 "Proponents of the Class EA"</p>

<p style="text-align: center;">Issues [Identified in the <i>Proposed Terms of Reference</i> (Conservation Ontario, May 19, 2000; Approved September 1, 2000)]</p>	<p style="text-align: center;">Outcomes [As reflected in this Class EA document]</p>
<p>Increasing Efficiencies while Protecting the Environment</p>	
<p>1) Detailed Environmental Analysis - Considered a matrix as a tool for Conservation Authorities to record analysis and to illustrate link between detailed environmental analysis and monitoring and documentation</p>	<p>- included a matrix as a tool to assist Conservation Authority staff (see Table 3)</p>
<p>2) Master Planning Option - Considered opportunities for and whether a “sub/watershed master plan option” in the Class EA could increase efficiencies for the proponent Conservation Authority project manager by allowing the sub/watershed planning process to meet the requirements of the Class EA.</p>	<p>Master planning option has not been included because the watershed/subwatershed and shoreline management planning processes are undertaken at a broader scale and scope than the defined class of undertakings. It was considered that the best efficiencies can be achieved by ensuring that these broader planning initiatives involve the public and other agencies so that there is an awareness and knowledge of the problem situations. This knowledge base should result in improved efficiencies when implementing the Class EA process for a specific project. This is stated in Section 1.2.1 “Watershed Plans and Strategies”.</p>
<p>3) 45 (calendar) Day Review Period - Number of Conservation Authorities raised concerns with the length of the review period (in terms of project delays) and felt that 30 calendar days was adequate time for public review. - Review periods of other agencies were considered and 30 days was confirmed as a standard length of time.</p>	<p>- 30 days is provided for review periods in: Section 7.0 “Provision for Changing Project Status (Part II Order)”, Section 3.7.2.1 “Project Plan”, Section 3.7.2.2 “Environmental Study Report”, Section 3.8 and Appendix E</p>
<p>4) Class EA Effectiveness Monitoring by Proponent Agency - The Class EA process was initiated 46 times between 1993 and 1996 and has been initiated 5, 2, and 2 times in 1997, 1998 and 1999 respectively. For purposes of reviewing the 1993 Class EA, information was collected by detailed surveys in 1998 and 1999. As indicated above, there was limited activity under the Class EA. The Ministry of the Environment requires that all Parent Class EAs include a well-defined annual monitoring and reporting program.</p>	<p>- amendments made to Section 10 “Class EA Effectiveness Monitoring and Reporting” including the supporting cross-references to other Sections in this Class EA which are noted in Section 10.0</p>

<p style="text-align: center;">Issues</p> <p style="text-align: center;">[Identified in the <i>Proposed Terms of Reference</i> (Conservation Ontario, May 19, 2000; Approved September 1, 2000)]</p>	<p style="text-align: center;">Outcomes</p> <p style="text-align: center;">[As reflected in this Class EA document]</p>
<p>5) Class EA Amending Procedure</p> <p>- Based upon the responses received from the Conservation Authorities and the external stakeholders, the Class EA process is working well. An approval period of 5 years for the Class EA is too short and unnecessary when one considers the fourteen years of experience in using the Class EA approach to flood and erosion control projects, the anticipated limited use of the Class EA in the future, and the process involved in renewing the approval.</p>	<p>- addressed in Section 11</p> <p>- approaches taken by other agencies were examined and the Municipal Engineers Association example was followed</p> <p>- references to an approval period of five years have been deleted and replaced with an open ended approval subject to monitoring and reporting requirements outlined in Section 10.0</p>