

INFORMATION PACKAGE - TEXT DISPLAY BOARDS PUBLIC INFORMATION CENTRE #1

LONG TERM WATER SUPPLY PROJECT - LAKE ONTARIO
WATER SUPPLY VIA DURHAM WEST

FEBRUARY, 1998

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1 - Welcome

Welcome to the first set of Public Information Centres for the preparation of a Terms of Reference for the development of an Individual Environmental Assessment for the Region of York's Long Term Water Supply Project - Lake Ontario Water Supply via Durham West.

PLEASE SIGN IN HERE

Members of the Project Team are available to discuss and answer any questions you may have.

We Want Your Advice

We want to hear your comments. Please fill out a comment sheet and place it in the box provided or mail it to us later. Copies of the text display board material, the Public Consultation Document, and the MOE Quick Summary of Terms of Reference Process are also available.

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2- Background Information

In July of 1997, York Region completed a Master Plan to identify a strategy to meet future regional water demands. Copies of the report are available for review at the Region of York as well as Libraries in York Region, Pickering and the City of Toronto.

The Master Plan was undertaken in accordance with the Municipal Class Environmental Assessment for Water and Wastewater Projects. A Public Consultation Program was also undertaken as part of the Master Plan.

The recommended strategy includes the following principal components:

1. Expansion of Water Supply from Metro Toronto
2. Implementation of Water-Use Efficiency Program
3. Construction of Lake Simcoe Water Treatment Facility
4. Implementation of a New Great Lakes Supply

In addition, the following two aspects are associated with the strategy which will complement the expansion of supplies:

1. A strategy for the continued use of groundwater
2. Changes and expansion to the systems for distribution of water within the Region's boundaries

Fourteen new supply alternatives were considered for the overall strategy. A supply from Lake Ontario via the western part of Durham Region ("the Durham West Solution") was identified as the preferred alternative for the Great Lakes Supply.

Planning for the Durham West Project will be undertaken as an Individual Environmental Assessment.

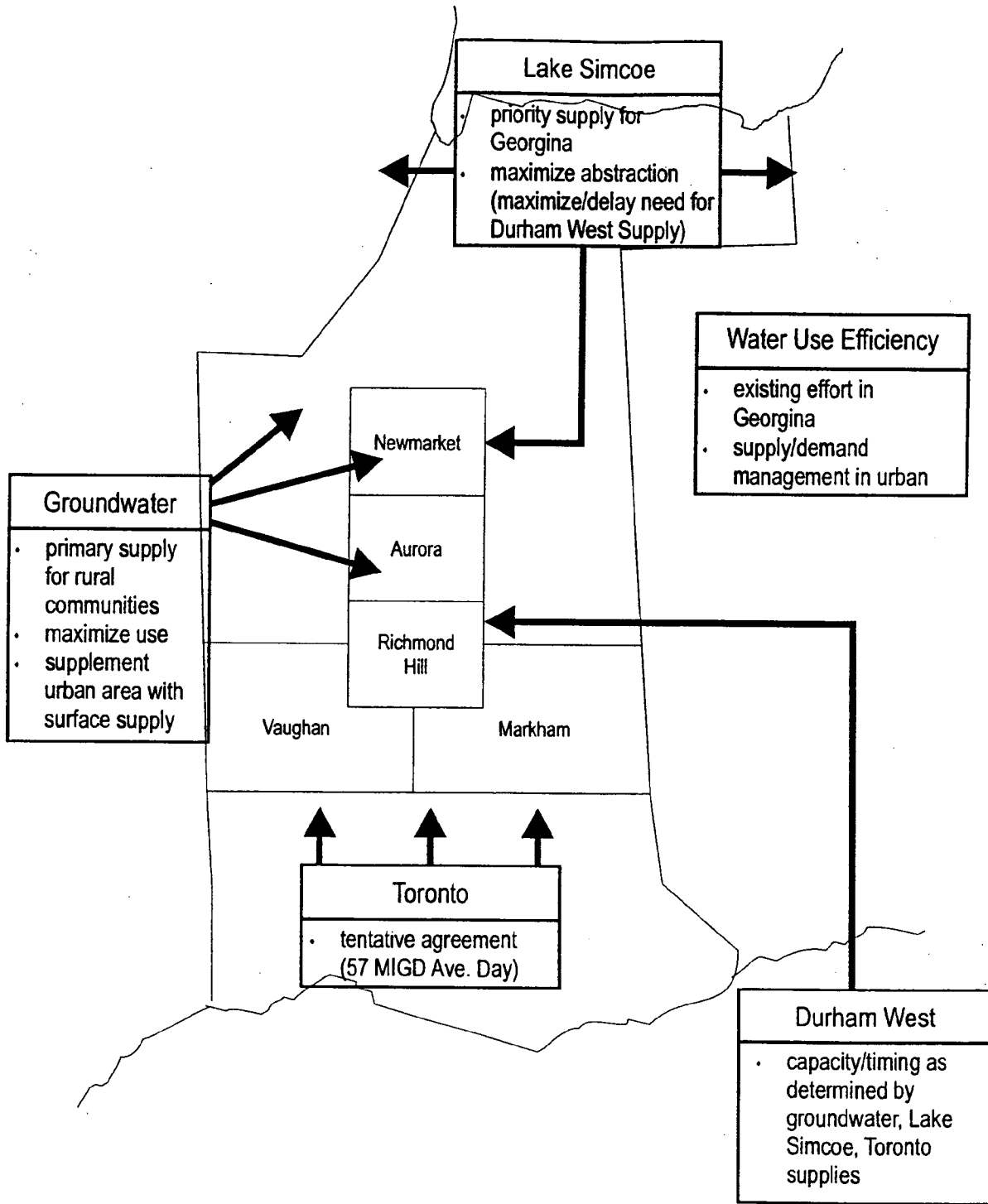
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3 - Supply Philosophy for York Region



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4 - Purpose of This Study

The purpose of this study is to develop the Terms of Reference for the Individual Environmental Assessment and obtain approval of the Terms of Reference from the Minister of the Environment.

Purpose of this Set of Public Information Centres

The purpose of this set of Information Centres is to:

- Introduce the Study;
- Identify the work that is proposed to complete the Terms of Reference;
- Present the Study Process and Schedule; and,
- Obtain comments on this information and identify issues and concerns relevant to the preparation of the Terms of Reference.

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5 -What is a Terms of Reference?

For an Individual Environmental Assessment, the Environmental Assessment Act requires that the proponent prepare a Terms of Reference to define the scope of a proposed Environmental Assessment Study.

The Terms of Reference is intended to provide certainty to the proponent and all stakeholders that the Environmental Assessment will be prepared to an acceptable level of detail.

The Terms of Reference require approval by the Minister of the Environment. The subsequent Environmental Assessment is then prepared in accordance with the approved Terms of Reference.

	1998	1999	2000	2001	2002	2003
Terms of Reference						
Individual Environmental Assessment						
Potential Start of Design and Construction						

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6 - Contents of a Terms of Reference

The Ministry of the Environment recommends that a Terms of Reference should include:

- 1 A description and purpose of the undertaking;
- 2 A description of the environment and potential effects;
- 3 A description of the alternatives that will be considered;
- 4 A Consultation Plan;
- 5 An Environmental Assessment Work Plan that will identify the scope of the technical studies required to assess the impacts of the various alternatives;
- 6 Any other approvals required; and,
- 7 A proposed schedule.

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7 - Purpose and Description of the Undertaking

Purpose of the Undertaking

The proposed purpose of the undertaking is to develop a Great Lakes Water Supply to satisfy the future water requirements for York Region. This supply is proposed to be developed via the Durham West Corridor.

General Description of the Undertaking

The following briefly describes the five components which are proposed to be included in the undertaking. Alternative locations within the Infrastructure Corridor Study Area and construction methods will be examined during the subsequent Environmental Assessment.

1. Raw Water Intake

A raw water intake will be required to draw water from Lake Ontario. This intake is proposed to be constructed into Lake Ontario in the vicinity of West Pickering.

2. Raw Water Pumping Station

A raw water pumping station will be required to pump the water from the Lake to a water treatment plant. The raw water pumping station will likely be located between Highway 401 and Lake Ontario.

3. Transmission Water Mains

Transmission water mains will convey water from the Raw Water Pumping Station to the Water Treatment Plant and reservoir.

Potential coordination with Durham Region's water infrastructure requirements, the utilization of a single main (approximately 2 m diameter) versus a twinned facility, and the potential for interim pumping stations will be examined during the subsequent Environmental Assessment.

4. Water Treatment Plant

A plant could be located as far north as Whitchurch-Stouffville. It could be located within Durham Region, particularly if it is found advantageous to service both York and Durham Regions from this undertaking.

5. Water Storage Reservoir

A water storage reservoir could either occupy the same site as the water treatment plant or a different site elsewhere in the Infrastructure Corridor Study Area.

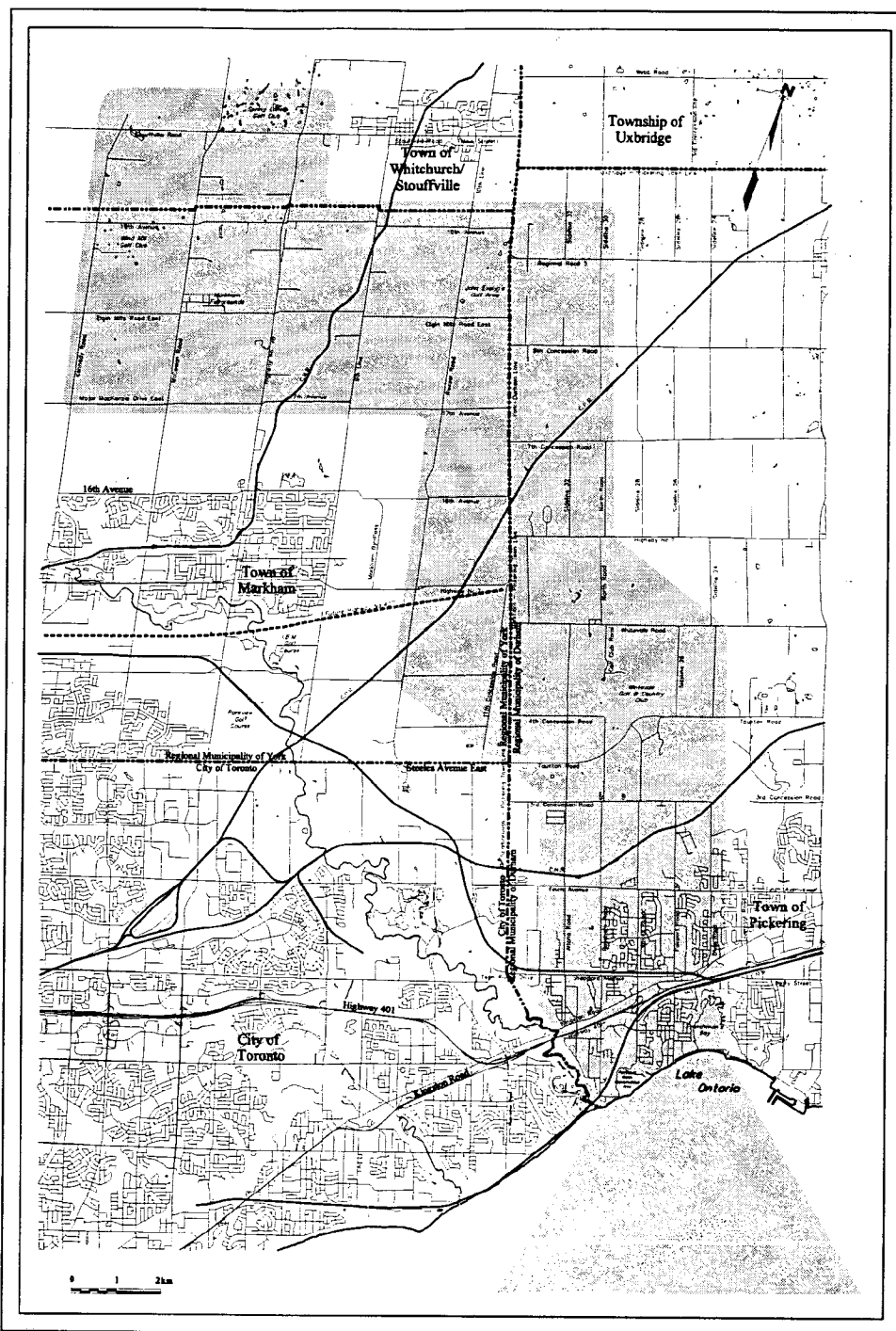
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8 - Infrastructure Corridor Study Area



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9 - Technical Studies - Terms of Reference

As part of this study the following technical studies are proposed to be completed to help confirm that a reasonable range of alternatives can be identified during the subsequent Environmental Assessment and identify the additional studies required during the preparation of the Environmental Assessment:

Natural, Social, Economic Environment Studies

- Terrestrial
- Aquatic
- Groundwater
- Land Use/Agriculture
- Socio-Economic
- Realty
- Site Specific Ownership
- Archaeology
- Heritage
- Financial Analysis

Geology/Soils Studies

- Seismic
- Geology

Pre-Engineering Studies

- Lakeshore Constraints and Conditions
- Lake Modelling
- Intake
- Low Lift Pumping Station
- Site Requirements
- Demand Analysis
- Treatment Objectives & Technologies
- Treatability & Water Chemistry
- Transmission Mains
- Security of Supply
- Scheduling of Infrastructure Requirements
- Constructability

Do you think these studies address all the issues? Please note any additional issues or studies you feel are required on Question 5a of the comment sheet.

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10 - Criteria for Consideration in the Generation of Raw Water Intake Alternatives

During the subsequent Environmental Assessment a reasonable range of alternative sites for the Raw Water Intake will be generated. Alternative technologies and construction methods (i.e. tunneling vs. conventional cut and cover) will also be considered during the Environmental Assessment.

The following criteria are being suggested for consideration:

Primary:	Criteria which must be observed because non-adherence could preclude project development <ul style="list-style-type: none">• availability of acceptable raw water quality• geotechnically suitable area for construction of the intake• avoidance of recognized major physical, natural and cultural environmental constraints
Secondary:	Criteria which should be observed, to the extent possible <ul style="list-style-type: none">• minimization of system costs in terms of construction, operation and maintenance• avoidance of unstable areas (e.g. those subject to erosion such as long steep slopes)• suitability for application of alternative construction methods• avoidance of other recognized environmentally sensitive areas such as designated ESAs and ANSIs• avoidance of areas where habitats of rare, threatened, or endangered plant or animal species exist• minimization of construction impacts on neighbouring land uses• avoidance of special land use areas

Do you think there are other criteria that should be considered? Please note any additional criteria you feel are required on Question 2 of the comment sheet.

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11 - Criteria for Consideration in the Generation of Raw Water Pumping Station, Water Treatment Plant and Water Storage Reservoir Alternatives

During the subsequent Environmental Assessment a reasonable range of alternative sites for the Raw Water Pumping Station, Water Treatment Plant and Water Storage Reservoir will be generated.

The following criteria are being suggested for consideration:

Primary:	Criteria which must be observed because non-adherence could preclude project development <ul style="list-style-type: none">• site area of suitable size (and elevation for reservoir only)• access to the site for connections to the intake and transmission mains• access to the site for construction and maintenance/delivery vehicles• avoidance of recognized major physical, natural and cultural environmental constraints
Secondary:	Criteria which should be observed, to the extent possible <ul style="list-style-type: none">• minimization of distance to end users (for Water Treatment Plant only)• availability of a power source• minimization of distance to existing or proposed sewer facilities for waste discharges• minimization of impact on distribution system (for Water Treatment Plant and Water Storage Reservoir only)• minimization of system costs in terms of construction, operation and maintenance• use of existing right-of-ways, if available, and where practical• avoidance of other recognized environmentally sensitive areas such as designated ESAs and ANSIs• avoidance of areas where habitats of rare, threatened, or endangered plant or animal species exist• minimization of construction impacts on neighbouring land uses• avoidance of special land use areas• avoidance of unstable areas (e.g. those subject to erosion such as long steep slopes or poor soil conditions)• avoidance of known areas of contaminated soil• minimization of use of areas with shallow bedrock formations• avoidance of areas with high groundwater table

Do you think there are other criteria that should be considered? Please note any additional criteria you feel are required on Question 2 of the comment sheet.

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12 - Criteria for Consideration in the Generation of Transmission Water Mains Alternatives

During the subsequent Environmental Assessment a reasonable range of alternative routes for the Transmission Water Mains will be generated. Alternative technologies and construction methods (i.e. tunneling vs. conventional cut and cover) will also be considered during the Environmental Assessment.

The following criteria are being suggested for consideration:

Primary:	Criteria which must be observed because non-adherence could preclude project development <ul style="list-style-type: none">• avoidance of recognized major physical, natural and cultural environmental constraints• compliance with connection requirements such as take-off and delivery points, which are considered fixed points on the pipeline system• adherence to existing rights-of-way, if available, and where practical
Secondary:	Criteria which should be observed, to the extent possible , <ul style="list-style-type: none">• avoidance of unstable areas (e.g., those subject to erosion such as long steep slopes or karst topography)• minimization of system costs in terms of construction, operation and maintenance• avoidance of known areas of contaminated soil• avoidance of provincially significant wetlands• avoidance of habitats known for rare, threatened and endangered plant or animal species (e.g., designated wetlands known to have such species)• avoidance of wildlife management areas, and known waterfowl nesting and/or staging habitats or deer wintering yards• avoidance of other recognized environmentally sensitive areas such designated ESAs and ANSI• avoidance of special land use areas or features such as mineral resource areas• avoidance of specialized agricultural uses (e.g., orchards, market gardens, poultry operations, etc.)• minimization of impacts on existing and proposed future residential, commercial, industrial and institutional developments, in addition to communications facilities, waste disposal areas and cemeteries• avoidance of designated areas in official plans which zoning by-laws and Ministerial Zoning Orders indicate are incompatible with the proposed facilities

Do you think there are other criteria that should be considered? Please note any additional criteria you feel are required on Question 2 of the comment sheet.

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13 - Description of Environment and Potential Effects

The Terms of Reference will include a commitment to evaluate alternatives based on impacts to the environment as well as technical criteria. At this time we have identified the following components of the environment that could be potentially affected. These will form the basis for the environmental evaluation criteria in the subsequent Environmental Assessment.

1.0 NATURAL ENVIRONMENT

1.1 Terrestrial Environment

- Surface Vegetation
- Woodlots
- Wetlands
- Valley Lands
- Wildlife

1.2 Aquatic Environment

- Rivers
- Streams
- Lake Ontario

1.3 Groundwater

2.0 SOCIO-ECONOMIC ENVIRONMENT

2.1 Land Use

- Existing Development
- Future Development
- Noise
- Air Quality
- Aesthetics
- Traffic Impacts

2.2 Financing

2.3 Agriculture

- Soil, Soil Productivity and Farm Land
- Artificial Drains

2.4 Built Heritage

- Heritage Features

2.5 Archaeology

- Known Sites
- Areas with Potential for Archaeological Finds

Are there additional components that we should consider? Please note any additional components that should be considered on Question 5b of the comment sheet.

The following maps outline existing conditions within the study area.

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14 - Public Consultation During the Preparation of the Terms of Reference

Public consultation is an essential part of the planning process for both the preparation of the Terms of Reference and the subsequent Environmental Assessment.

First Set of Public Information Centres

The purpose of this set of Information Centres is to:

- Introduce the Study;
- Identify the work that is proposed to complete the Terms of Reference;
- Present the Study Process and Schedule; and,
- Obtain comments on this information and identify issues and concerns relevant to the preparation of the Terms of Reference.

Follow-up Activities

Other consultation activities will be held as required, depending on the issues/concerns raised. These activities will be held in the Spring and Summer of 1998 (between the first and second sets of Public Information Centres). These activities may include Workshops, Field Trips, Informal Meetings/Kitchen Table Meetings

Second Set of Public Information Centres

A second set of Public Information Centres will be held in September, 1998. The purpose of that set of Information Centres will be to:

- Present the Results from the First Public Information Centres;
- Present the Draft Terms of Reference
- Obtain comments on this information and identify issues and concerns relevant to the preparation of the Terms of Reference.

Presubmission Review of the Draft Terms of Reference

A draft of the Terms of Reference will be available at the second set of Public Information Centres. At the same time a draft will be circulated to the Government Core Review Team. We are allowing 30 days for review and submission of comments. The Terms of Reference will then be finalized and submitted to the Minister of Environment for a decision on approval.

Please provide us with your comments on the proposed Consultation Plan for the Terms of Reference on Question 3 of the comment sheet.

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15 - Public Consultation During the Preparation of the Environmental Assessment

The following outlines a proposed plan for Public Consultation during the preparation of the Environmental Assessment. At this time we suggest that public consultation focus on achieving four objectives:

1. Development of Alternative Routes and Facility Sites

The public will be asked to comment on the development of alternative routes and facility sites.

2. Application of Evaluation Criteria to Select a Preferred Alternative

The public will also be asked to comment on and influence the application of criteria to evaluate and select a preferred route and facility sites. *What social, environmental and economic factors associated with each route/ alternative location are most important?*

3. Selection of a Preferred Alternative

The evaluation criteria will be applied to allow the selection of a preferred alternative, including a specific pipeline route and facility sites. The public will be asked to comment on the analysis, evaluation and the rationale for the preferred alternative.

4. Mitigation of the Preferred Alternative

This final step will address specific features of the preferred alternative that will require mitigation during minor (property-level) route adjustments, construction practices. The subjects to be addressed during this stage will include public comments on such issues as landowner communication and public liaison during construction, traffic management and safety plans.

It is proposed that three series of Information Centres will be held as part of the environmental assessment study. The Information Centres will coincide with:

1. The alternative route and siting identification stage;
2. The analysis and evaluation stage and;
3. The preliminary design of the preferred alternative.

The Public Information Centres may be augmented by follow-up activities (workshops, field trips and informal/kitchen table meetings). It is anticipated that these will occur following the first and second set of Public Information Centres.

Please provide us with your comments on the proposed Consultation Plan for the Environmental Assessment on Question 4 of the comment sheet.

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16 - Environmental Assessment Work Plan

The following outlines the proposed studies required to assess the various alternatives:

Aquatic

- impact on fish habitat
- lake water currents and their resultant impact on the raw water quality
- potential impact of treated process waste discharges to surface waters

Natural Landscape

- vegetation and wildlife habitat affected in woodlots, wetlands, groundwater and valley corridors
- streams and associated aquatic habitats affected

Socio-Economic

- residential, commercial, industrial and community features affected (existing & proposed)
- heritage resources affected
- archaeological resources affected
- agricultural land uses affected and the prevalence of artificial drainage
- potential effects of facility locations and construction
- financial analysis of capital, operating and maintenance costs

Other Technical Studies

- evaluation of alternatives to determine the preferred alternative
- comprehensive treatability studies to more precisely determine the treatment process required
- site assessments to determine whether contaminated soils exist at selected sites
- evaluation of construction methods and mitigation measures

Are there any additional studies that should be undertaken during the preparation of the Environmental Assessment? Please note any additional studies that should be undertaken on Question 5b of the comment sheet.

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17 - Proposed Schedule

The Terms of Reference are to be prepared during 1998. A draft Terms of Reference will be available for comment at the second set of Public Information Centres (scheduled for September, 1998). At the same time copies of the Draft Terms of Reference will also be provided to the Core Government Team for review. After a 30 day review and comment period, the intention is to submit the final Terms of Reference to the Ministry of the Environment for a Core Government Review in October 1998. A decision on approval by the Minister of the Environment is anticipated in January 1999. Following an approval, work can begin on the Environmental Assessment. The schedule for the preparation of the Terms of Reference is shown below:

	1997		1998												1999		
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan		
Initial Notification																	
Data Collection	█																
PIC #1			●														
Follow-up Activities (consultation)					█												
Technical Studies			█														
Draft Terms of Reference									█								
PIC #2																	
Submit Draft Terms of Reference to Core Review Team																	
Refine and Finalize Terms of Reference																	
Submit Terms of Reference to Minister of Environment																	
Decision by Minister of the Environment																	

The following schedule outlines the a preliminary plan for the preparation of the Environmental Assessment assuming that an approval of the Terms of Reference is obtained by the end of January 1999.

	1999					2000					2001										
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
Develop Alternatives	█																				
PIC #1																					
Refine Alternatives																					
Analysis and Evaluate Alternatives																					
PIC #2																					
Refine Preferred Alternative																					
Prepare Preliminary Design																					
PIC #3																					
Prepare EA Report																					
Public and Agency Review of Draft EA Report																					
Finalize EA Report																					
MOE APPROVAL PROCESS																					
Public and Agency Review of EA (7 weeks)																					
EA Review/Notice of Completion (5 weeks)																					
Final Public Comment Period (5 weeks)																					
Minister's Decision on Approval (13 weeks)																					

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18 - What's Next

The following tasks will be completed over the next few months:

- Compile Public/Agency Input
- Hold follow-up consultation activities (workshops) as required
- Complete Technical Studies
- Prepare a Draft Terms of Reference

The Draft Terms of Reference will be presented at the second set of Public Information Centres (scheduled for September, 1998) and be submitted to the Core Government Review for review and comment.

Following the receipt of comments from second set of Public Information Centres and the Government Core Review, the Terms of Reference will be finalized and submitted to the Minister of the Environment for a decision on approval.

Make sure to fill in Question 7 of the comment sheet if you are interested in becoming involved in workshops dealing with the project.

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