



# *Challenges in Finding and Connecting New Water Sources*

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## The Process

- Process to find and connect a new water source is a good news / bad news story.
- Good news is there is a process that is available.
- Bad news is there will be challenges that have the potential to make the process lengthy, litigious, and/or acrimonious.
- But in the end a decision will be made.



## The Planning Process for a New Water Source

- Required to follow the Municipal Class Environmental (EA) process under Environmental Assessment Act.
- Connecting a new water source is a Schedule C project under the Class EA process.
- Schedule A projects are pre-approved.
- Schedule B projects are subject to public consultation and screening.
- Schedule C projects involve a 5 phase planning and implementation process that includes significant public consultation .

**PHASE 1**

**PROBLEM OR OPPORTUNITY**

**PHASE 2**

**ALTERNATIVE SOLUTIONS**

**PHASE 3**

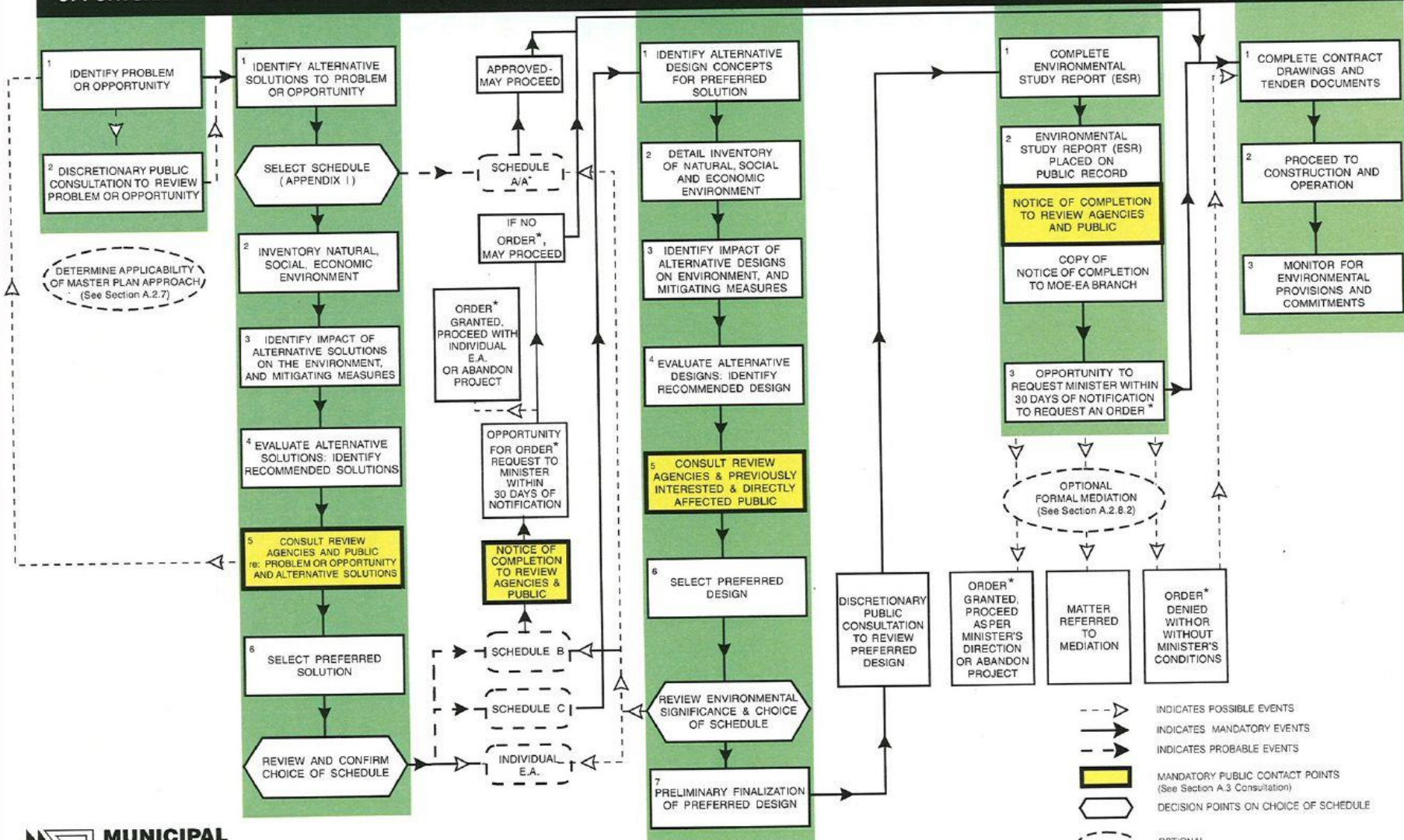
**ALTERNATIVE DESIGN CONCEPTS FOR PREFERRED SOLUTION**

**PHASE 4**

**ENVIRONMENTAL STUDY REPORT**

**PHASE 5**

**IMPLEMENTATION**



- - -> INDICATES POSSIBLE EVENTS
- INDICATES MANDATORY EVENTS
- - -> INDICATES PROBABLE EVENTS
- MANDATORY PUBLIC CONTACT POINTS (See Section A.3 Consultation)
- ⬡ DECISION POINTS ON CHOICE OF SCHEDULE
- OPTIONAL
- \* PARTII ORDER (See Section A.2.8)



## The Steps in the Process

- Formulate the problem statement.
- Determine how much water is needed.
- Identify the options.
- Set out the steps in the process.
- Assess the challenges.



## Formulate Problem Statement

- The problem statement is preferably concise and to the point.
- Two examples:
  - “To identify additional supply capacity to service lands designated for development in the Town’s Official Plan”; or
  - “To identify additional supply capacity to provide a sustainable supply for the existing community”.
- The Tier 3 Groundwater Quantity Risk Assessment work can be used as a basis for the problem statement.



## Determine How Much Water is Needed?

- Determine how much water will be needed to meet the future demand based on the municipality's Official Plan or to ensure a sustainable supply for existing community.
- For Orangeville, the current supply capacity is approximately 16,000 m<sup>3</sup>/day.
- 5 year average max day demand is approximately 13,000 m<sup>3</sup>/day.
- At build out, Orangeville will need an additional 4,000 m<sup>3</sup>/day +/- to service the planned growth , and assuming no loss in supply capacity.



## Determine How Much Water is Needed - Other Considerations

- What population is the municipality going to be servicing?
- Does that future population meet the Places to Grow targets?
- Is it practical to try to obtain enough water to meet those targets?
- If a new water source can be found and connected, will there be adequate sewage treatment capacity for the growth the additional water supply capacity will support?





## What are the Options?

- Class EA process requires proponent to consider the ‘Do Nothing’ option.
- Generally, not practical as it means lands designated for development could not be serviced or the additional water is needed to make up lost supply cannot be found.
- Increase the available supply by optimizing the use of existing supply and facilities .
- Introduce or expand conservation opportunities.
- But in the end, new sources will likely need to be found, and for Orangeville those new sources will be outside its municipal boundaries.



## Set Out the Steps in the Process

- Assess the “environment” and identify alternative solutions; ie, different well locations.
- Consult the “Public” on the problem statement and the alternative solutions.
- “Public” includes all parties who may be affected by the undertaking; the public at large, other municipalities, regulatory agencies, special interest groups, etc.
- At the first mandatory consultation, the problem statement is identified and options that will be considered are identified.



## Set Out the Steps in the Process (Cont'd)

- Evaluate the alternative solutions and determine which one will be recommended.
- Consult the “Public” and present the recommended alternative.
- Finalize the preferred design and prepare the Environmental Study Report which documents the planning process and the preferred design.
- Issue the notice of completion.
- Public has 30 days to request the Minister of the Environment for a Part II order; effectively the appeal process .
- The Part II order can be denied, referred to mediation, or granted in which case an individual EA is required.



## The Challenges

- Evaluation of the alternatives requires consideration of three environments:
  - Natural;
  - Social; and
  - Economic
- As it would relate to Orangeville, the following discussion relates to finding and connecting a new well.



## Natural Environment

- Will there be any effect on the natural environment; streams and fish habitats, wet lands, wood lots, etc?
- What is the geological and hydrogeological setting; is the well site secure from contamination?



## Summary and Conclusions

- There is a process that a municipality can use to deal with the challenges in finding and connecting new water sources.
- There will be a greater number of issues when the new water source is outside a municipality's boundary.
- As an observation, the formidable task I see the Source Protection Committee having is to develop policies that will be as fair and equitable as they can be for everyone involved.