

Water and Wastewater Servicing Component

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Servicing Component

- Servicing Component is being led by Peel Region
- Two separate Class Environmental Assessment Studies will be completed for:
 - Water Supply Improvements
 - Wastewater Servicing

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Environmental Assessment Process

- Class EA process is being followed for all improvements to water and wastewater systems
- This presentation is focused on wastewater, water supply improvements will be discussed in the next presentation

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Environmental Assessment Process

- Information on water system improvements Class EA will be discussed in a separate presentation
- Implementation of a preferred solution identified by this EA will be subject to receiving technical approvals from relevant approval agencies and funding approvals

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Class EA Process

PHASE 1 Identify problem or opportunity

We are here

PHASE 2 Identify and evaluate alternative solutions to the problem or opportunity
Public Information Centre
Select a preferred solution

PHASE 3 Identify and evaluate alternative design concepts for the preferred solution
Public Information Centre
Select preferred design concept

PHASE 4 Complete Environmental Study Report (ESR)
ESR placed on public record

PHASE 5 Complete contract drawings and tender documents
Proceed to construction and operation
Monitor for environmental provisions and comments

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Existing Wastewater Systems

- Currently wastewater generated in the Village is treated through on-site private disposal systems (septic systems)
- Effluent from these systems is discharged to the sub-surface



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Short Listed Wastewater Alternatives

- Upgrade existing on-site private disposal systems and construct new on-site private disposal systems for new growth
- Construct new communal wastewater system to service existing residents and new growth
- Construct new communal wastewater system to service new growth and upgrade existing on-site private disposal systems

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Evaluation Process

- Screening of long list of alternatives and selection of short listed alternatives presented to public on July 30, 2009
- Each short listed alternative was evaluated against a series of evaluation criteria
- Criteria address natural, social, technical and economic environmental impacts and were presented for public comment at the July 30, 2009 public meeting

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Alternative No. 1 – Private On-Lot Disposal Systems

- Upgrade existing private on-lot disposal systems to meet current Town, Regional and Provincial guidelines and standards
- Construct new private on-lot disposal systems for new development to meet current Town, Regional and Provincial guidelines and standards

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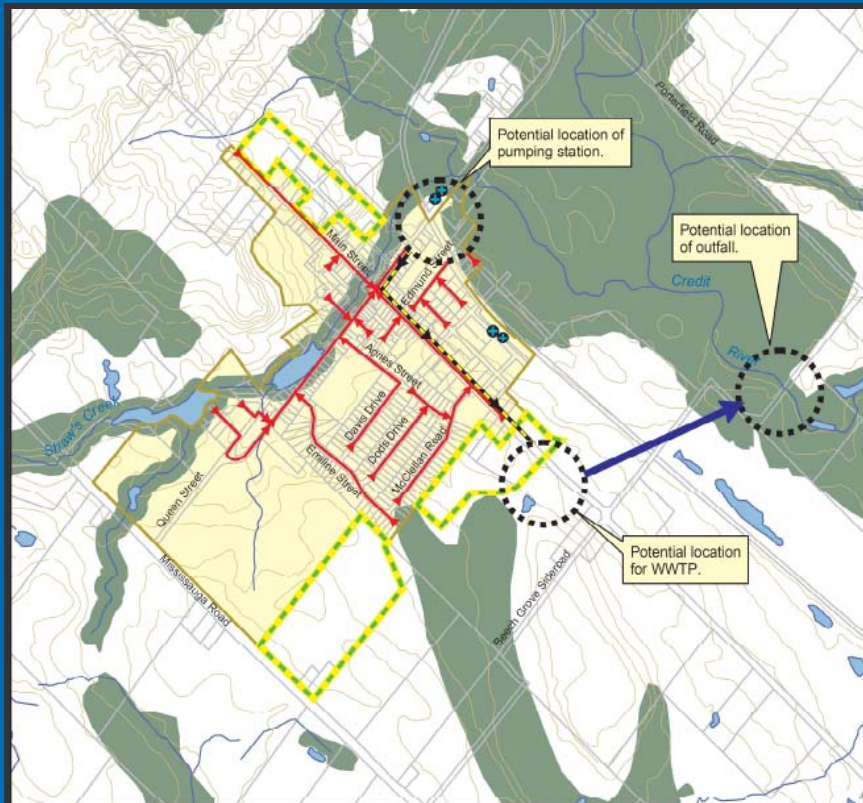
Alternative No. 2 – New Communal Wastewater System

- Construct new communal wastewater collection and treatment system to treat wastewater from existing and new growth areas

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Alternative No. 2



- Key Elements
 - New sewers
 - New pumping station and forcemain
 - Best Available Technology treatment plant
 - New treated flow outfall sewer to Credit River
- Final location of major facilities (pumping stations, treatment plant, outfall) to be determined in Phase 3 of the EA study.

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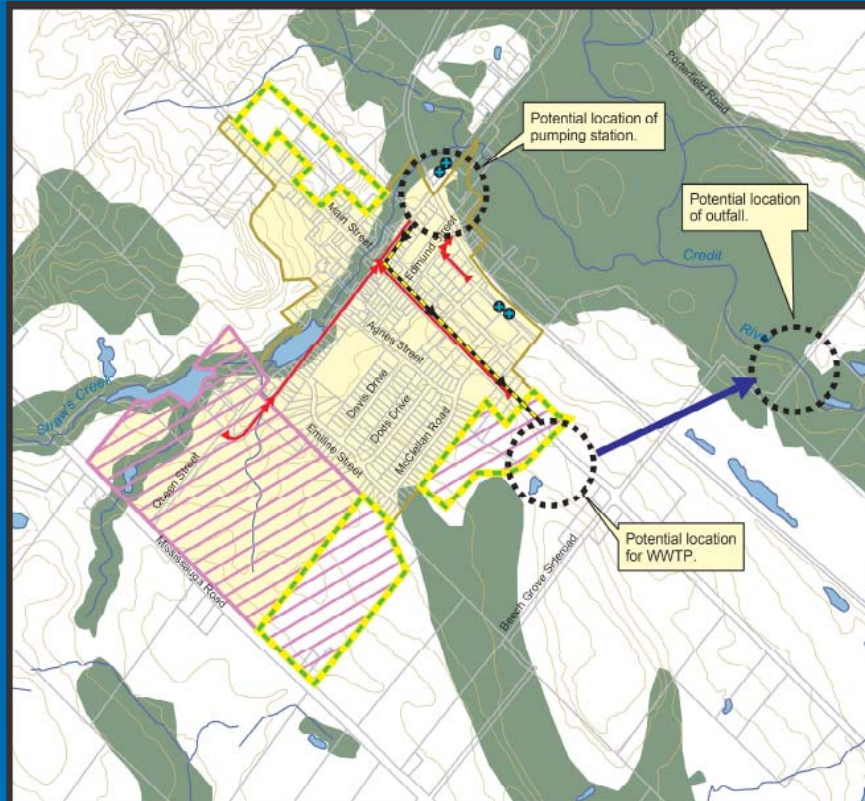
Alternative No. 3 – New Communal Wastewater System for New Growth Areas

- Construct new communal wastewater collection and treatment system to service new growth areas only
- Upgrade existing private on-lot disposal systems to meet current Town, Regional and Provincial guidelines and standards

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Alternative No. 3



➤ Key Elements

- New Sewers on Main and Queen Streets
- New Pumping Station
- New forcemain
- New Best Available Technology treatment plant
- New treated flow outfall sewer to Credit River

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Evaluation of Alternatives

- Alternatives were evaluated using 15 evaluation criteria to identify impacts on the natural, social/heritage, technical and economic environments
- Alternatives were scored against each criteria with a score of 1 assigned for insignificant impacts and a score of 5 assigned for significant impacts
- Detailed evaluation results are presented on the presentation boards

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Evaluation of Alternatives – Natural Environment

- Alternative 1
 - Will increase discharge of pollutants to local groundwater systems. Local groundwater systems are the source of drinking water for Alton Village.
- Alternative 2
 - Will increase direct discharge of pollutants to Credit River.
 - Siting of new wastewater treatment plant and pumping station to minimize impacts on terrestrial features
- Alternative 3
 - Will increase discharge of pollutants to local groundwater systems. Local groundwater systems are the source of drinking water for Alton Village.
 - Siting of new wastewater treatment plant and pumping station to minimize impacts on terrestrial features

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Evaluation of Alternatives

-Social/ Heritage

➤ Alternative 1

- Significant disruption to land owners and users is anticipated with upgrade of existing on-lot private disposal systems on private property.
- Not consistent with Provincial Policy Statement that indicates a preference for communal systems.

➤ Alternative 2

- Noise, dust, traffic and visual construction disruptions mitigated through good design and construction practices.
- Elimination of agricultural land use at new WWTP site.

➤ Alternative 3

- Significant disruption to land owners and users is anticipated with upgrade of existing on-lot private disposal systems on private property.
- Noise, dust, traffic and visual construction disruptions mitigated through good design and construction practices
- Elimination of agricultural land use at new WWTP site.
- Not consistent with Provincial Policy Statement that indicates a preference for communal systems.

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Evaluation of Alternatives -Technical

- Alternative 1
 - No change to existing system complexity or operating requirements. Private property owners will continue to maintain private on-lot disposal systems.
 - Limited ability to integrate with other Regional initiatives such as water conservation.
- Alternative 2
 - Increased system complexity and operating requirements.
 - Ability to integrate with other Regional initiatives such as water conservation.
- Alternative 3
 - Increased system complexity and operating requirements.
 - Existing residents will continue to maintain private on-lot disposal systems.
 - Some ability to integrate with other Regional initiatives such as water conservation.

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Evaluation of Alternatives -Economic

- Alternative 1
 - Alternative has medium capital cost
 - Alternative has low operating costs
- Alternative 2
 - Alternative has medium capital cost
 - Alternative has medium operating costs
 - Property required for new WWTP and Pumping Station
- Alternative 3
 - Alternative has high capital cost
 - Alternative has medium operating costs
 - Property required for new WWTP and Pumping Station

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Alternative Scoring

Alternative/ Evaluation Criteria Group	Alternative No. 1	Alternative No. 2	Alternative No. 3
Natural Environmental Impacts	8	8	9
Social/ Heritage Environmental Impacts	18	12	18
Technical Impacts	9	5	5
Economic Impacts	8	13	18
Total Alternative Score	43	38	50

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Recommended Preferred Alternative

- Based on the evaluation results, the recommended preferred alternative is a new communal wastewater collection and treatment system to service both existing and new growth
- We are seeking your input on the evaluation and selection of the recommended preferred alternative

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Recommended Preferred Alternative

- Implementation of a preferred alternative will not proceed without a number of technical approvals from the relevant approval agencies and funding approvals
- Funding mechanisms will be explored and evaluated in later phases of this project.

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Next Steps

PHASE 1

PHASE
2

PHASE
3

PHASE
4

PHASE
5



1. Select a preferred alternative based on our findings and public input
2. Develop and evaluate alternative design concepts for the preferred alternative
3. Select and present a recommended preferred alternative design concept to the public for input
4. Finalize selection of the preferred alternative design concept based on public input

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