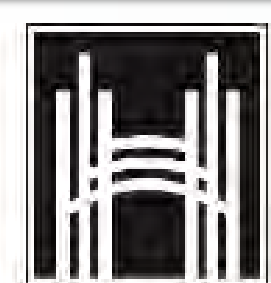


Welcome to the Public Information Centre for Municipal Class Environmental Assessment Phases 3 & 4 Greenville Municipal Backup Well



Hamilton

Hamilton Water Division
Public Works, City of Hamilton
www.hamilton.ca



Welcome to the Public Information Centre

Tonight, we invite you to....

 01

Sign-in and
take a
comment sheet

 02

Learn about
the process.

 03

Review
findings of
previous
studies.

 04

Learn about
possible
alternatives.

 05

Discover the
problems and
opportunities
being
addressed.

 06

Ask questions
and provide
insight.

 07

Provide
feedback.

 08

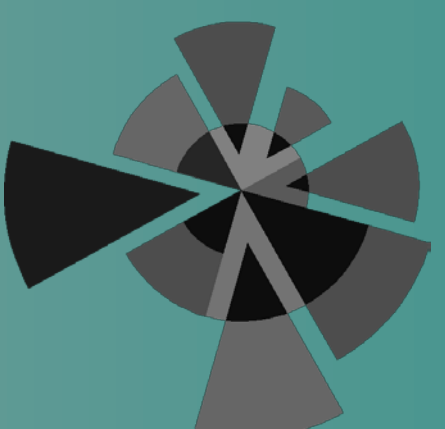
Let us know
what is most
important to
you.

 09

Find out where
the study is
going next...

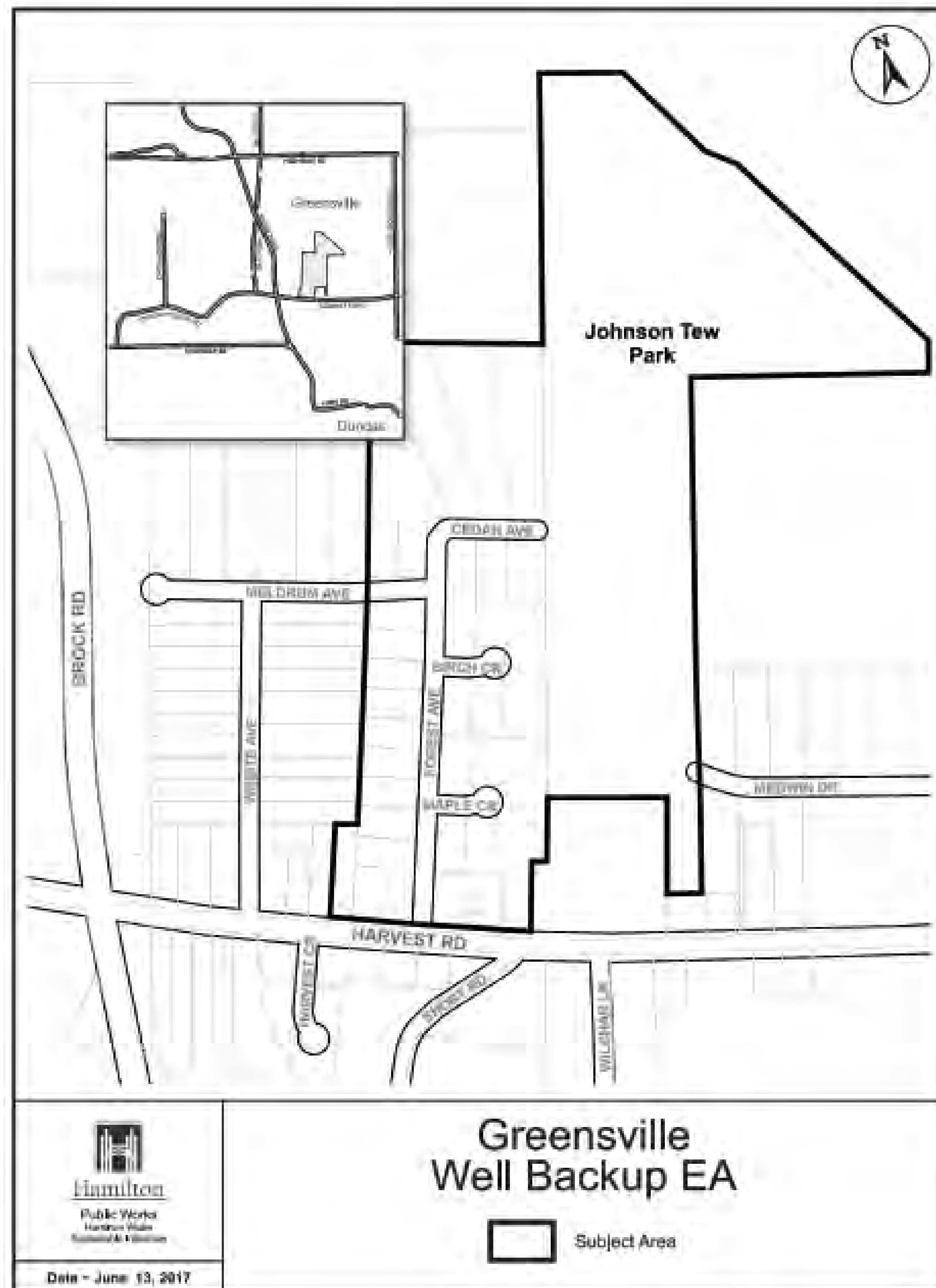
Your feedback is important, and will be incorporated and considered in the design process!

Comment Deadline is August 1, 2017



Study Area and Structure

- Within Hamilton, Ontario
- The Harvest Road Water Supply System (HRWSS) currently services 36 homes
- Study area consists of Johnson Tew Park and the 36 homes serviced by the HRWSS



Project Timeline and Environmental Assessment Process

Phase 1
Problem or Opportunity - Complete

Phase 2
Alternative Solutions - Complete

July 2017
PIC # 1

WE ARE HERE

Phase 3
Alternative Design Concepts for the Municipal Well

Included in this EA

September/October 2017
PIC # 2

Phase 4
Environmental Study Report

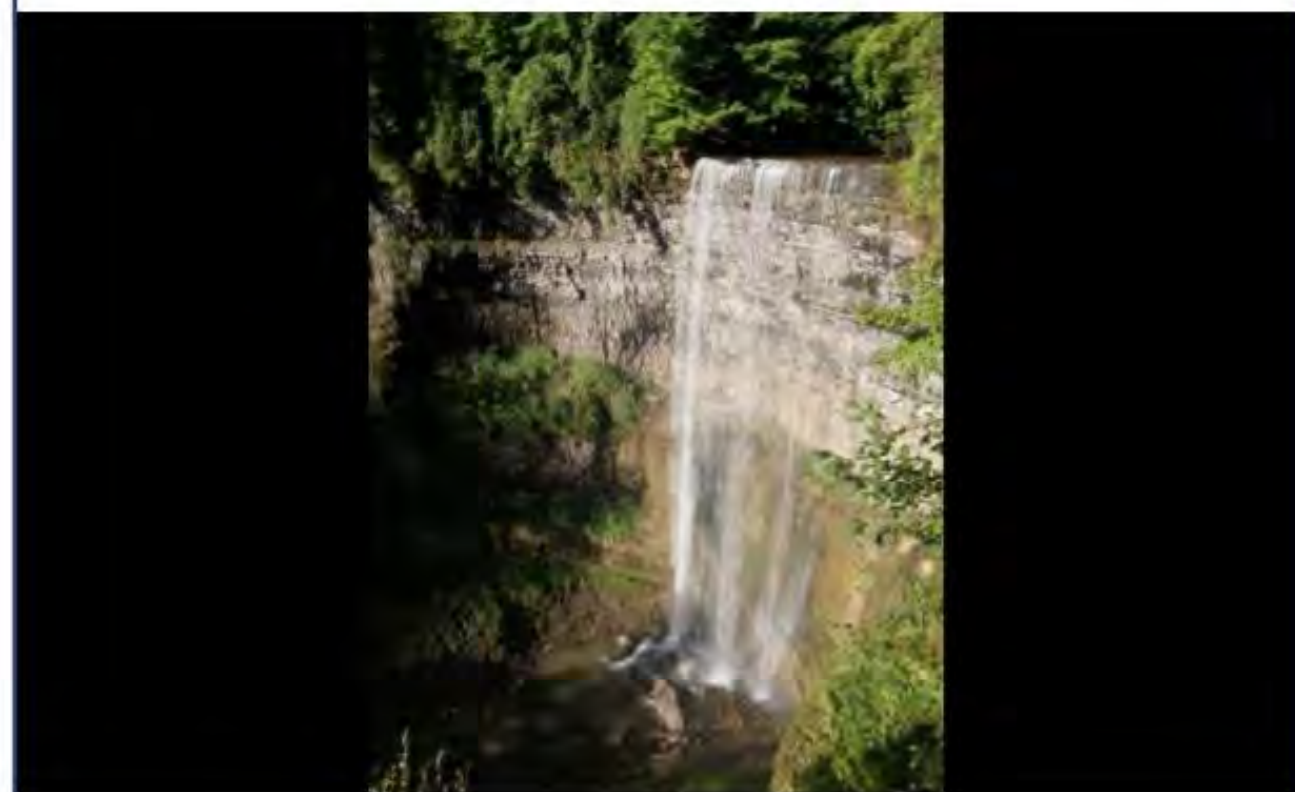
February 2018
30 Day Review

Phase 5
Implementation

Public input is an important and mandated component of the EA process.
Your opinions matter.
To stay up-to-date with project progress and join the discussion, please join the project mailing list.

Addressed through the Subwatershed Study

MID-SPENCER/GREENSVILLE RURAL SETTLEMENT AREA
SUBWATERSHED STUDY
April 2016



Prepared for:
The City of Hamilton

Prepared By:
Aquafor Beech Limited
2600 Skyway Avenue
Building 6, Suite 202
Mississauga, Ontario
L4W 5B2
Aquafor Beech

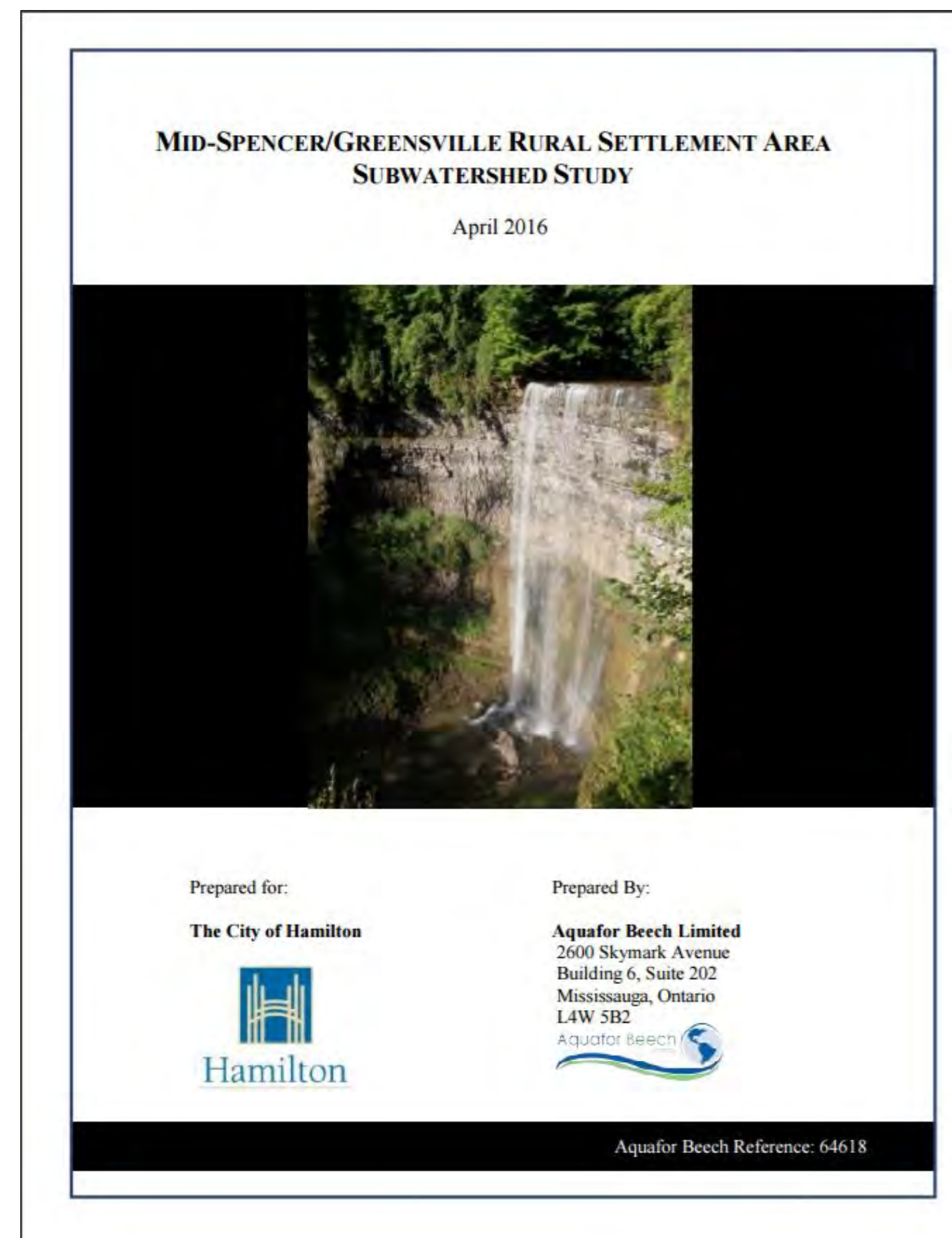
Aquafor Beech Reference: 64618

Presented to council for approval prior to 30 day review.

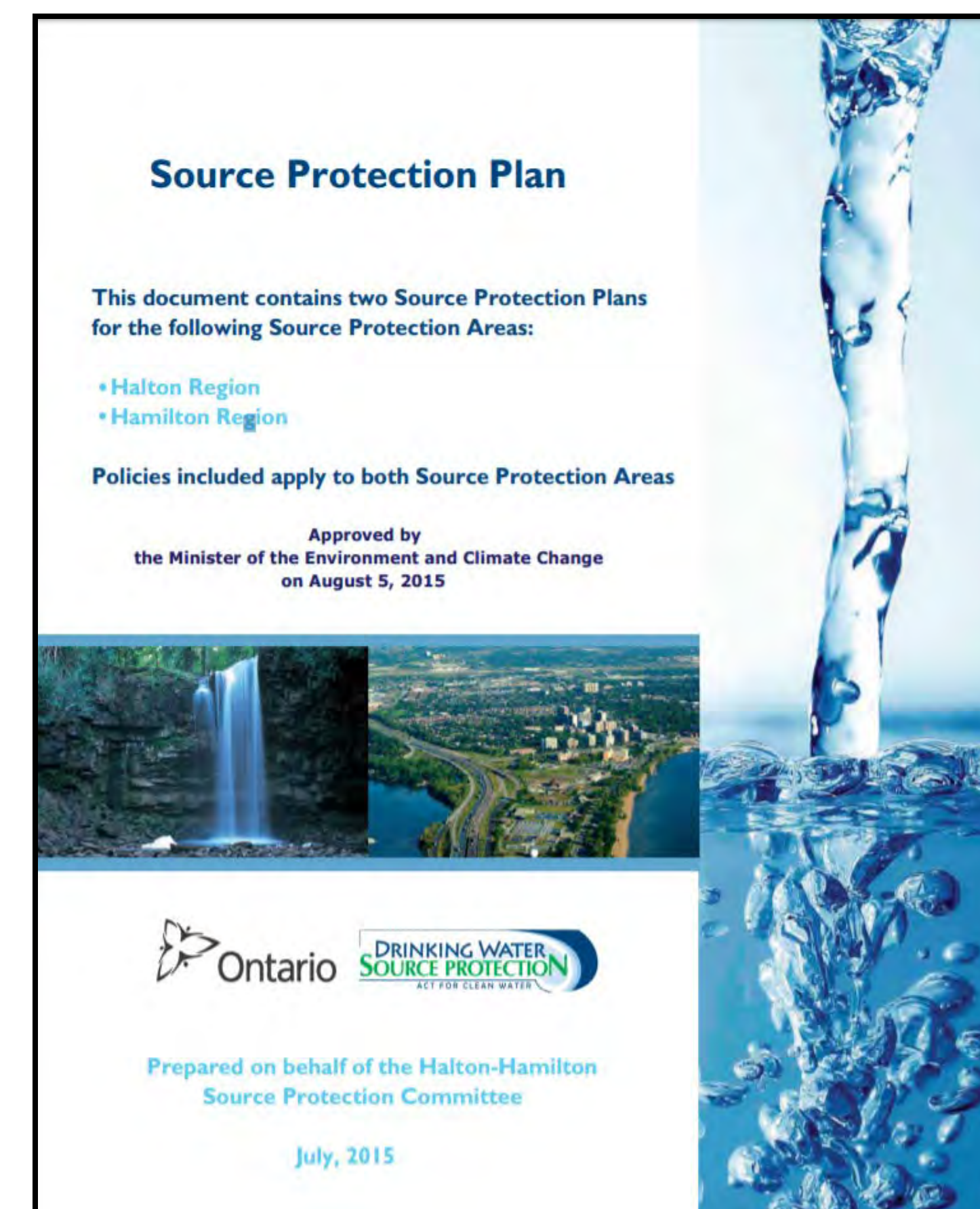


Planning and Policy Context

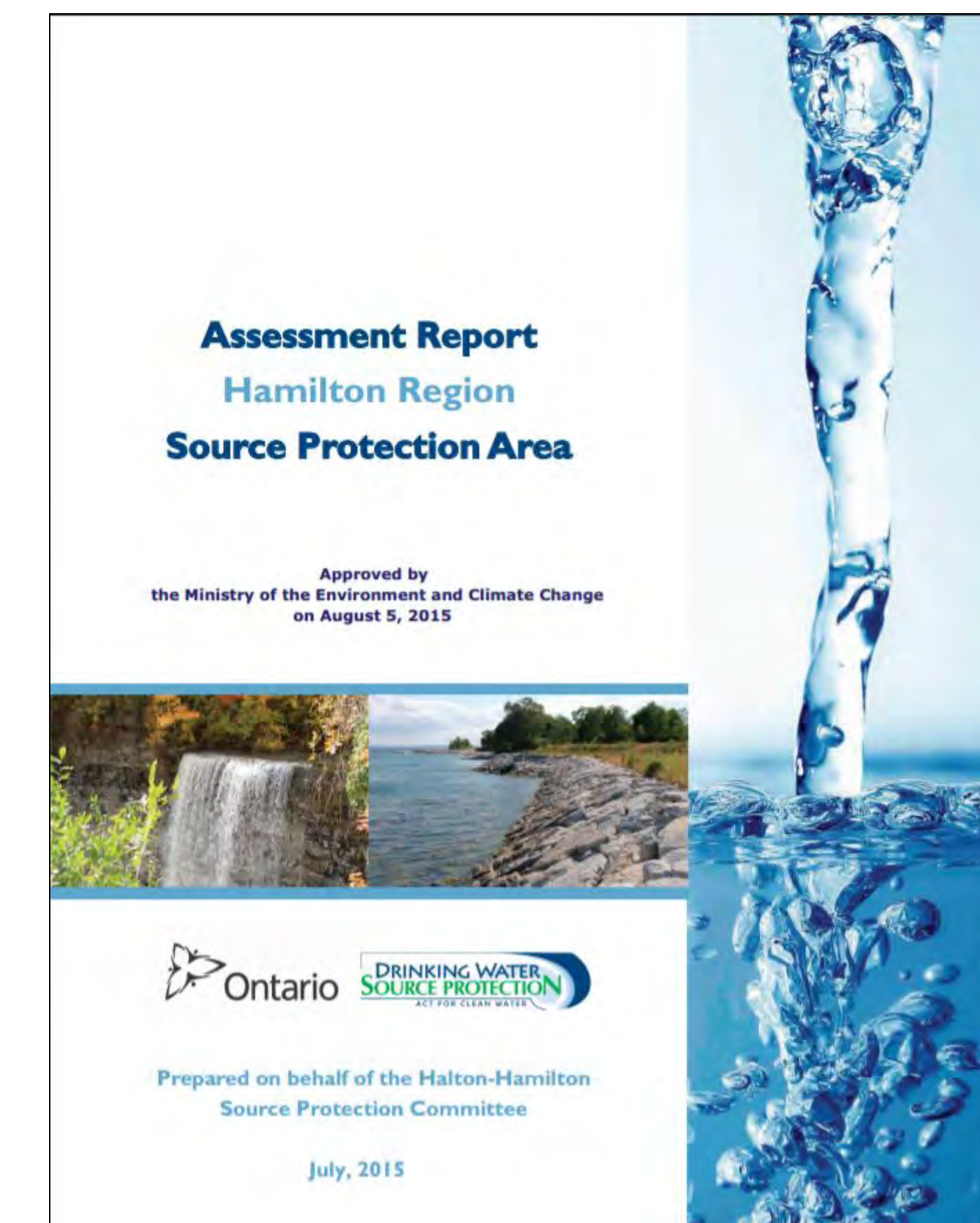
The current EA Study builds upon several other studies including:



- Recommendation included maintaining status quo and add a backup city well.



- Contains policies to ensure that activities that pose threats to drinking water sources in the Hamilton Source Protection Area cease to exist/ never become significant.



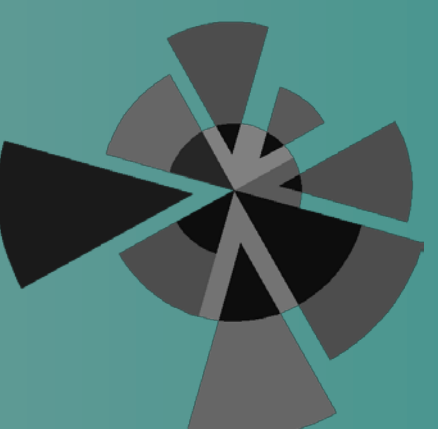
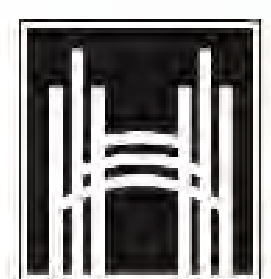
- Identifies existing stresses on drinking water sources, particularly within the Greenville Wellhead Protection Area for groundwater quality.

Planning and Policy Context – Mid-Spencer/ Greensville Rural Settlement Area Subwatershed Study

- The City of Hamilton completed the Mid-Spencer/Greensville Rural Settlement Area Subwatershed Study in accordance with the Municipal Engineers Association's Class EA Master Plan process.
- Phase 1 - Problem and Opportunity Definition and Phase 2 - Evaluation Alternative Solutions were completed.
- Phase 1 included the characterization of the study area and identification of the problem.
- The Phase 2 Evaluation of Alternative Solutions developed and assessed alternatives for the Mid-Spencer/Greensville Subwatershed Area, specifically for the Greensville RSA:
 - ❖ Servicing Alternatives
 - ❖ Measures for Existing Homes
 - ❖ Municipal Operation & Maintenance Practices

Problem and Opportunity Statement

The Harvest Road Water Supply System (HRWSS) consists of a single well water supply system that services 36 homes in the Greensville RSA in the City of Hamilton. The system has historically had reliability issues in affecting levels of service to the homes. There is a need to provide reliability and redundancy to the water supply system.



Technical Studies Completed

- **Tier 3 Water Budget and Local Area Risk Assessment**

- ❖ Results of the revised Risk Assessment Analyses, updated water balances, and updated delineation of significant groundwater recharge areas using an updated model.

- **Flora, Amphibian, Breeding Bird Studies**

- **Bobolink Habitat Creation Study**

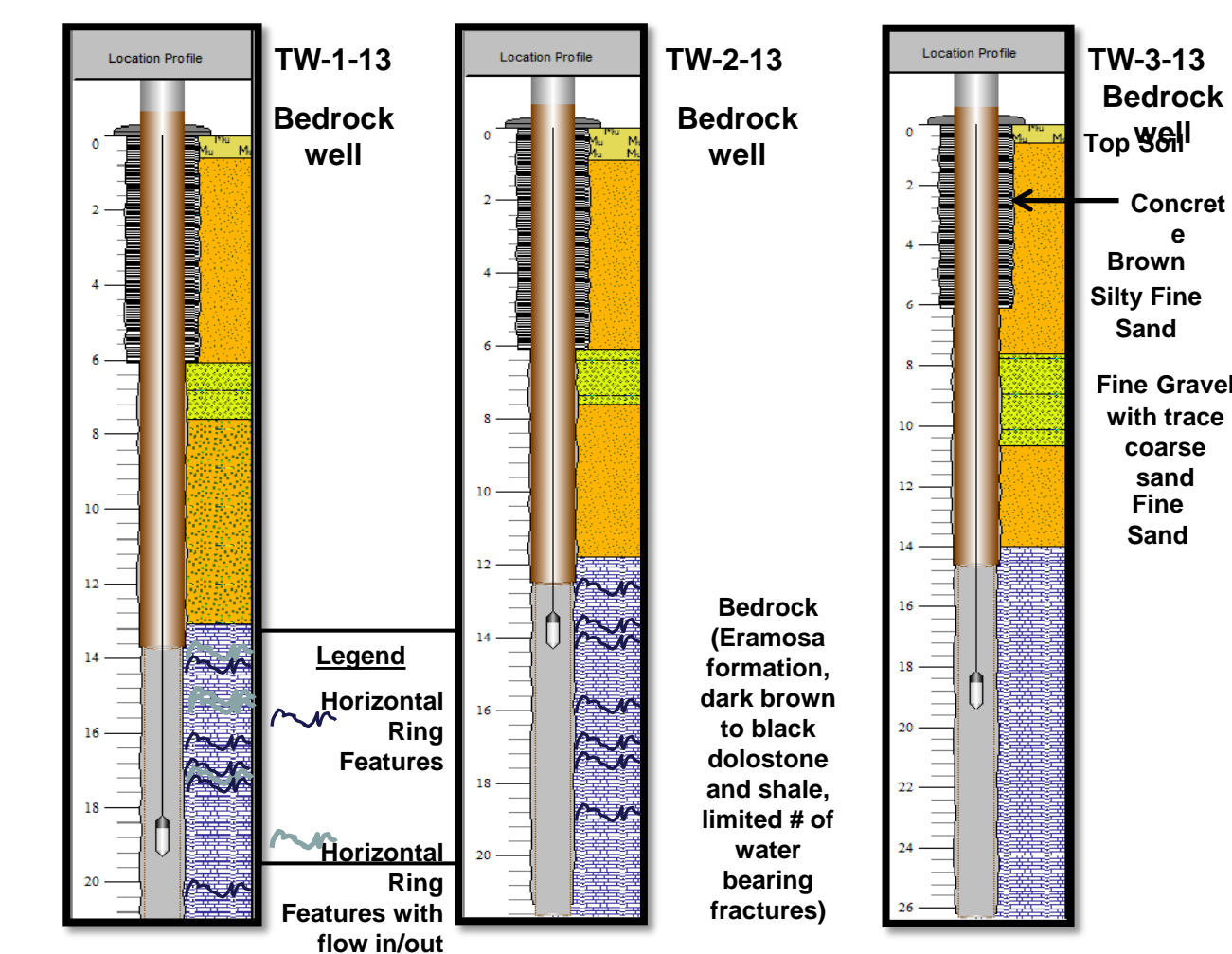
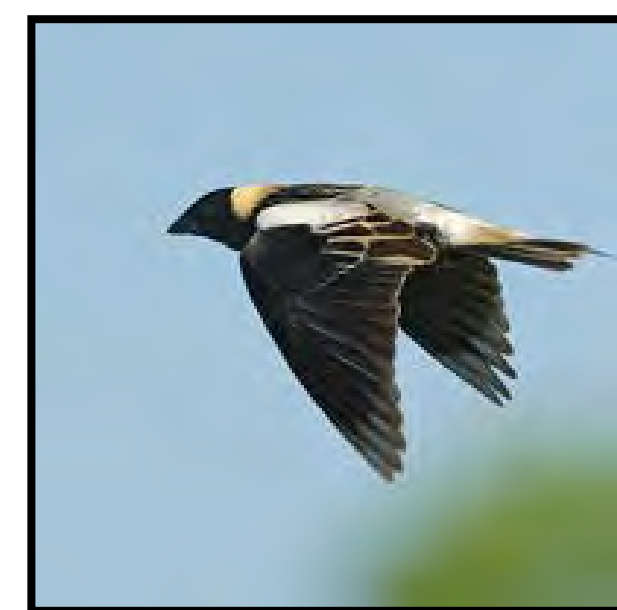
- ❖ The City was required to establish habitat compensation for Bobolink. Study recommends the Upper Ottawa Landfill for the Habitat Creation Initiative.

- **Hydrogeology**

- ❖ A detailed hydrogeological study was completed for the backup water supply on three test wells within the study area.

- **Archaeology**

- ❖ Archaeological resources were documented and mitigated in the northern side of the Johnson Tew Park.



Preferred Solution

The Preferred Solution for the Greensville RSA as recommended through the Greensville Subwatershed Study process is to provide a fully redundant supply consisting of a back up well and pumping system.

Design Options



- **3 Wells have been drilled and evaluated**

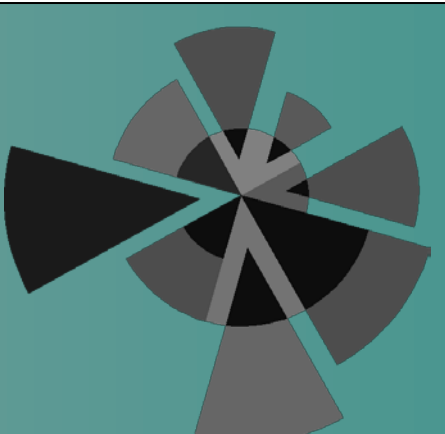
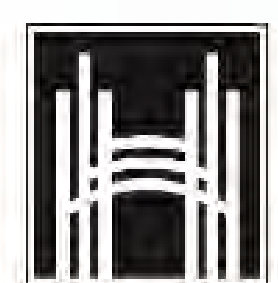
- The well yields were evaluated based on MOECC guidelines for groundwater supply systems in two background studies (Stantec 2014, and SNC-Lavalin 2017), each of which identified a feasible design approach.

Design Approach #1 - Combined Supply from Test Well #1, #2 (Stantec 2014)

- This solution requires the installation of a well pump and transmission line servicing wells #1 and #2. A pumping control and disinfection building is required to connect to meet drinking water quality requirements and to pump into the HRWSS distribution system.

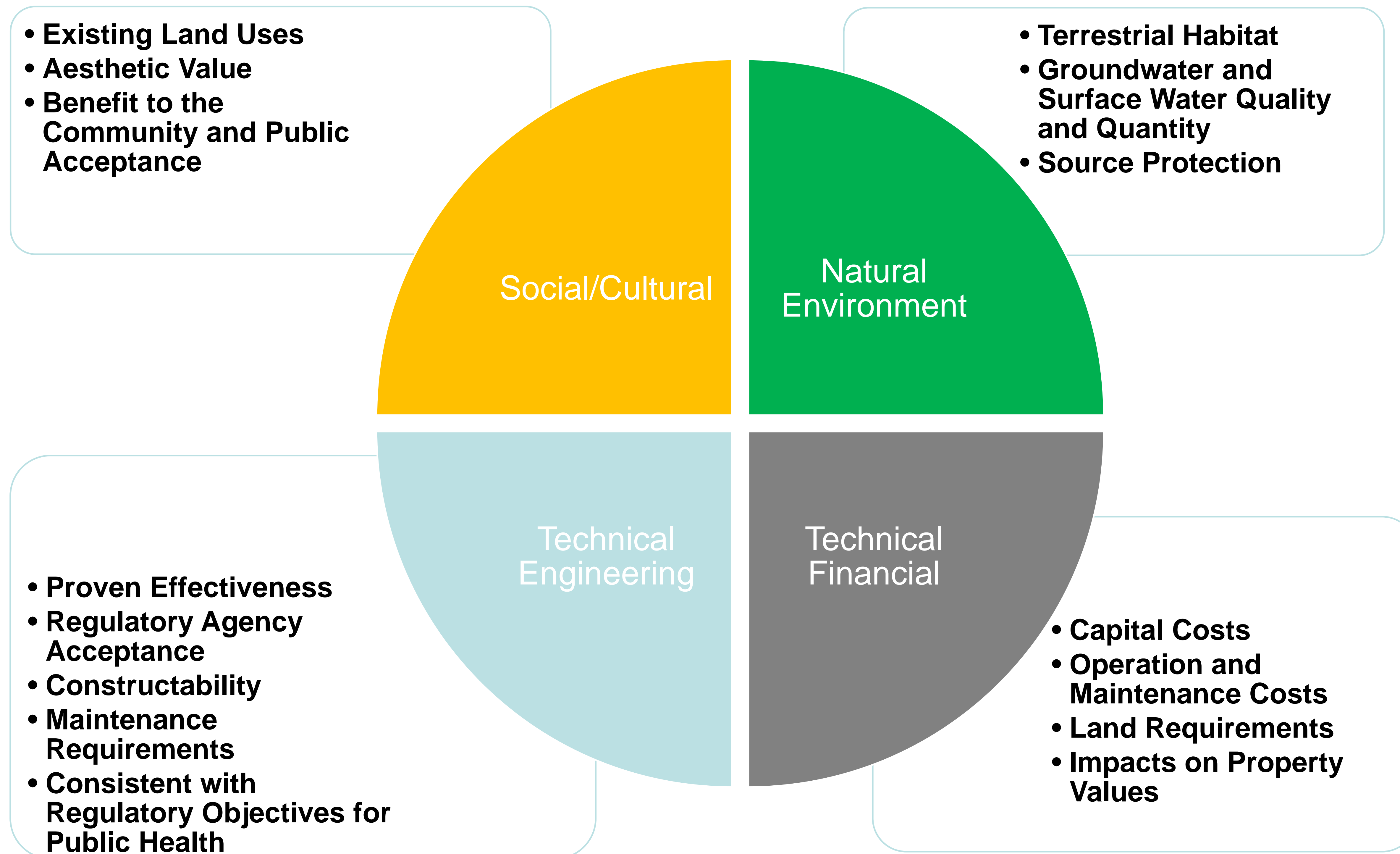
Design Approach #2 - Single Supply from Well #2 (SNC-Lavalin 2017)

- This solution requires the installation of a well pump and transmission line servicing well #2. The technical evaluation confirms that a long term water taking rate of 129,600 L/day from Well #2. A pumping control and disinfection building is required to connect to meet drinking water quality requirements and to pump into the HRWSS distribution system.



Moving Towards a Preferred Design

As we move towards a preferred design, alternatives will be evaluated according to the following criteria:



Thank you for your Participation !

Over the coming year, the Study Team will:

- 1. Develop the preferred location and design concepts for the pumping station.** Using comments received, the conceptual designs will be developed.
- 2. Present and gather input on the conceptual designs at PIC #2,** anticipated in **September/October 2017.**
- 3. Complete the conceptual designs** based on feedback from PIC#2, the conceptual designs will be chosen. Anticipated impacts and mitigation methods will be fully documented.
- 4. Prepare the Environmental Study Report (ESR)** and present to council for approval
- 5. Once approved, file the ESR** for review and comment during a 30 day review period.

The ESR will be available to the public for comment and if anyone is strongly opposed to the report, an appeal may be made to the Minister of the Environment and Climate Change under the EA Act.

We Want to Hear From You!

Let us know what is most important to you, your family and/or your business.

Please place comment sheets in the Comment Box or send to one of the mailing or email addresses listed on the comment sheet and project website.

Only those that express interest and provide contact information will be notified directly of future steps in the study process.

Comment
Deadline
August 1, 2017

