SOUTH ALCONA FLOOD RELIEF PROJECT

LSRCA Board of Directors

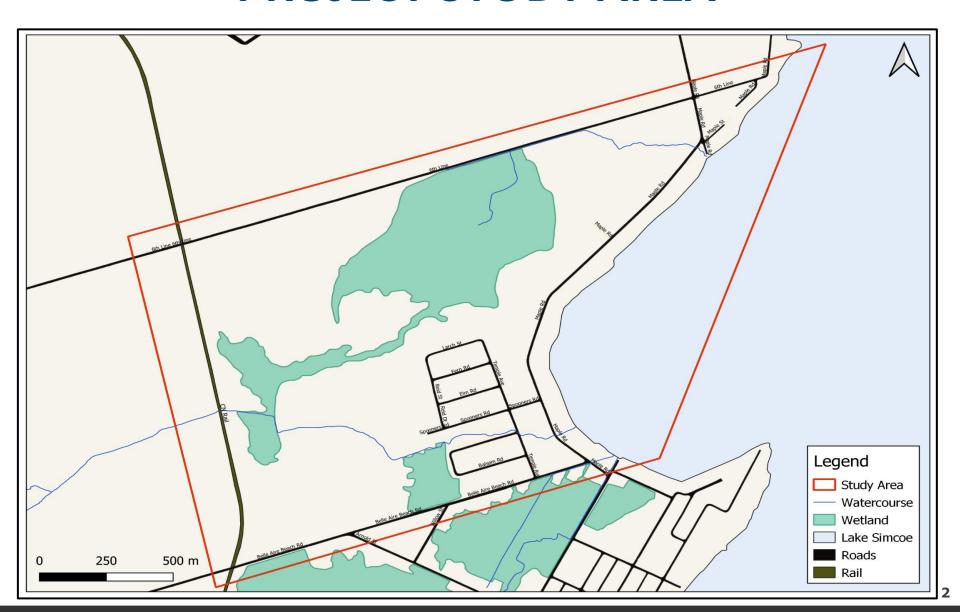
April 24, 2020

Bhavika Patel, Restoration Engineer





PROJECT STUDY AREA



PROJECT PARTNERS



Lake Simcoe Region Conversation Authority



Greenland Engineering - Consultant Town of Innisfil: Landowner



Province of Ontario through National Disaster Mitigation Program

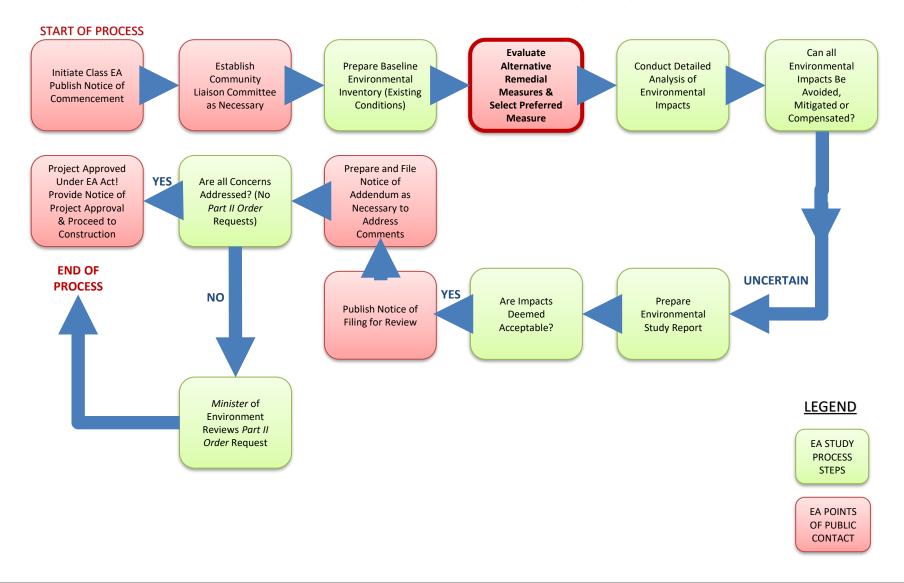


PROJECT STATEMENT

Develop an engineering design solution to reduce flooding within the study area by maximizing green infrastructure to enhance water quality and infiltration before discharge to Lake Simcoe



CONSERVATION AUTHORITY ENVIRONMENTAL ASSESSMENT (EA) FLOW CHART



ENVIRONMENTAL ASSESSMENT MILESTONES

Notice of Study Commencement

September 20, 2019

Public Information Centre 1

December 10, 2019, 4:00 PM – 7:00 PM

Public Information Centre 2

March 10, 2020, 4:30 PM – 7:30 PM

Notice of Study Completion

March 30, 2020

Environmental Study Report (ESR) for Review and input

April 1 to April 30, 2020

FLOOD REDUCTION OPTIONS EVALUATION PROCESS

Natural Environmental Impacts

Impact to vegetation and wildlife

Surface/Groundwater quality and quantity considerations

Social / Cultural Impacts

Land Use &
Archaeological
Considerations
(Including First
Nations)

Interuption to residents

Visual landscape and aesthetics

Economical Impacts

Capital and construction costs

Long-term operation and maintenance costs

STUDY AREA PHOTOS



Figure A 1 Belle Aire creek near 1056 Spruce Road - limited conveyance canacity



Figure A 3 Culverts along Belle Aire creek - Inadequate size



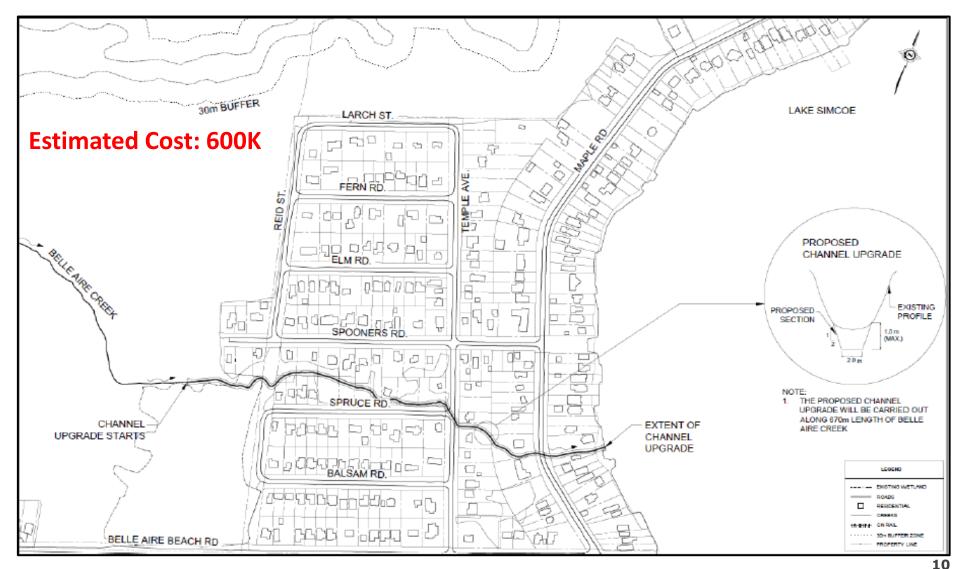
Figure A 2 Belle Aire creek near 1056 Spruce Road - channel near full during lean period flow

PREFERRED DESIGN OPTIONS

 CONVEYANCE OPTION- Upgrade Belle Aire Creek Channel and Culverts Capacity to Convey Existing 2year Storm

 STORAGE and BYPASS OPTION- By-Pass Flows Above 2-year Storm to Existing Wetland via New Green Infrastructure Bypass / Storage Channel in 30m Buffer

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