



WILDCAT SHALE PIT REMEDIATION AND WETLAND EXPANSION PROJECT

Atlantic Chapter of Canadian Land Reclamation Association 2016

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November, 2016

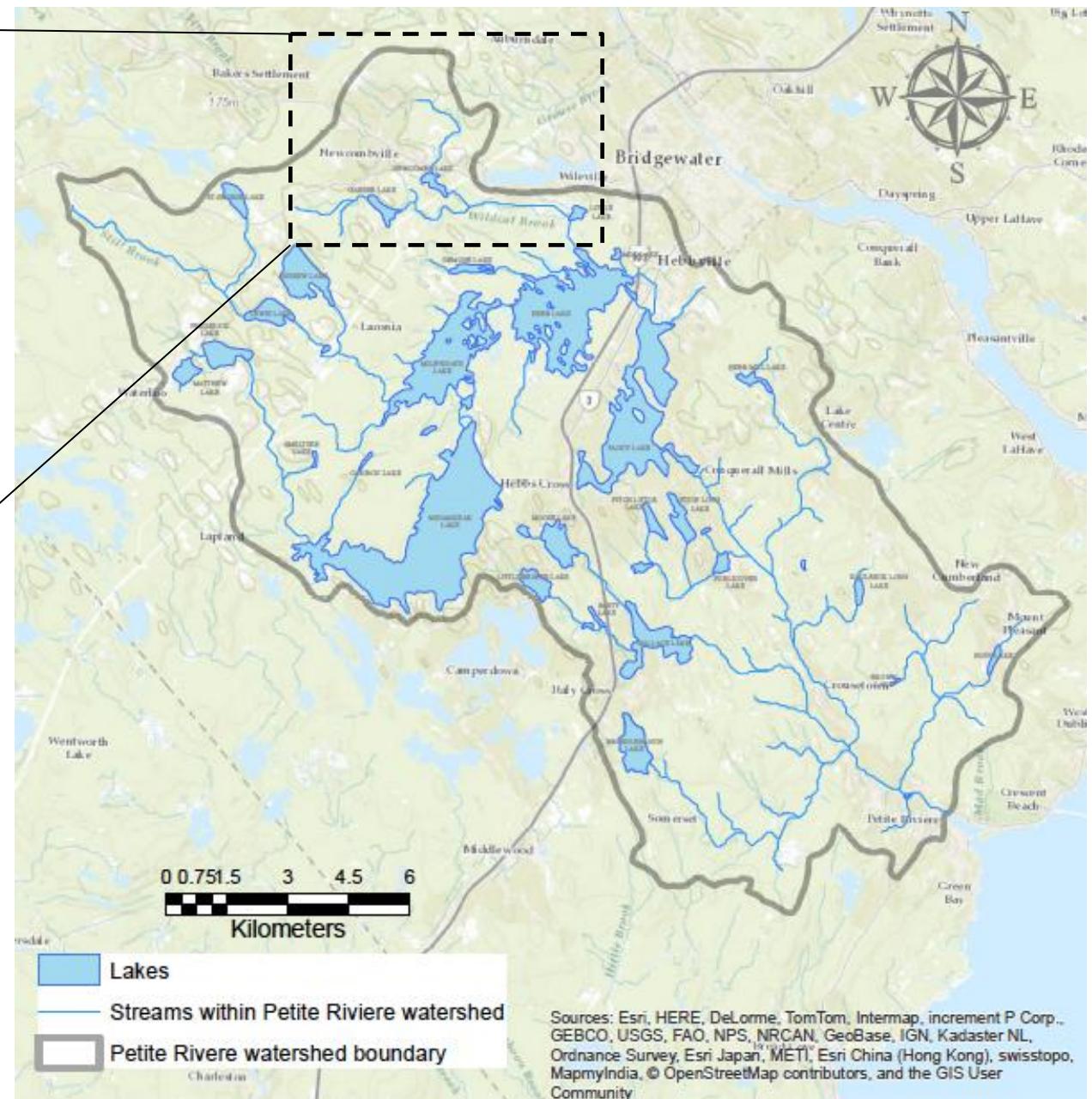
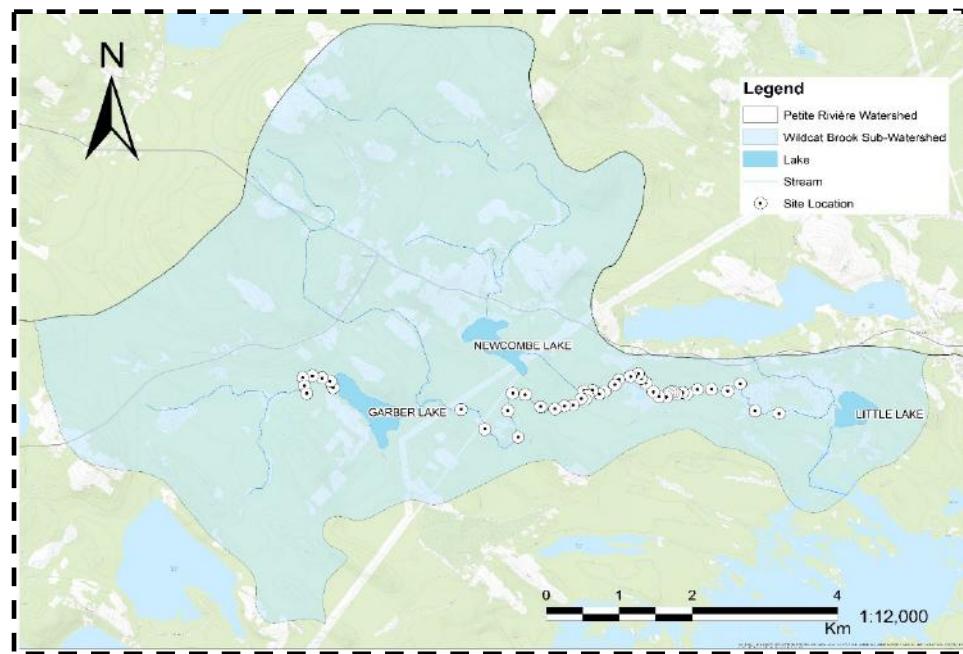


Overview

- Who is Bluenose Coastal Action Foundation?
- The Petite Riviere Watershed Project
- Discovering the Need for Remediation
- Our Site & Pre-Remediation Work
- Restoration Work
- Results to Date
- Future Work





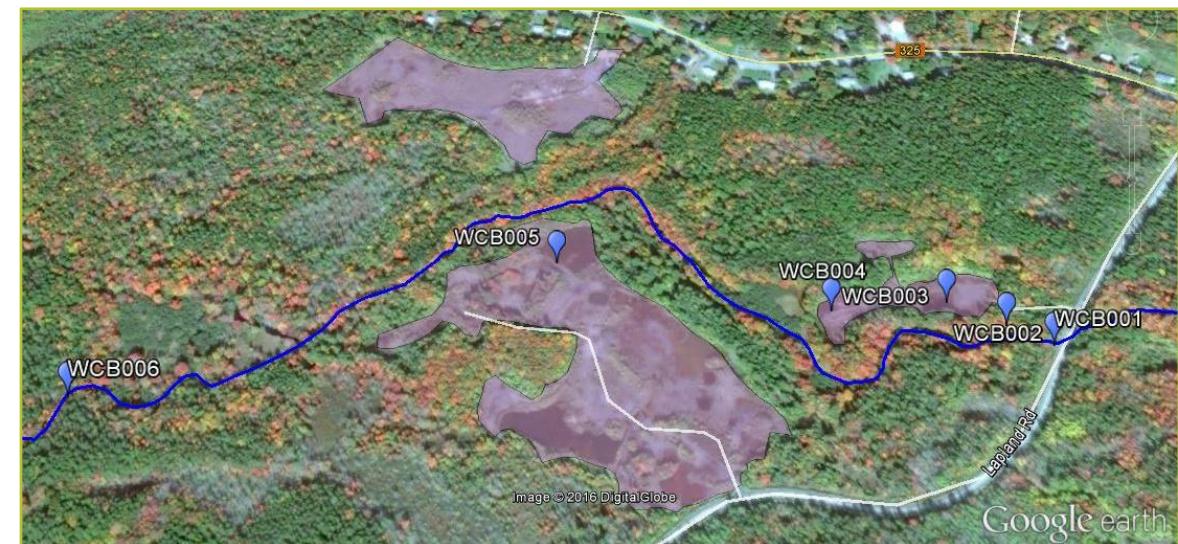
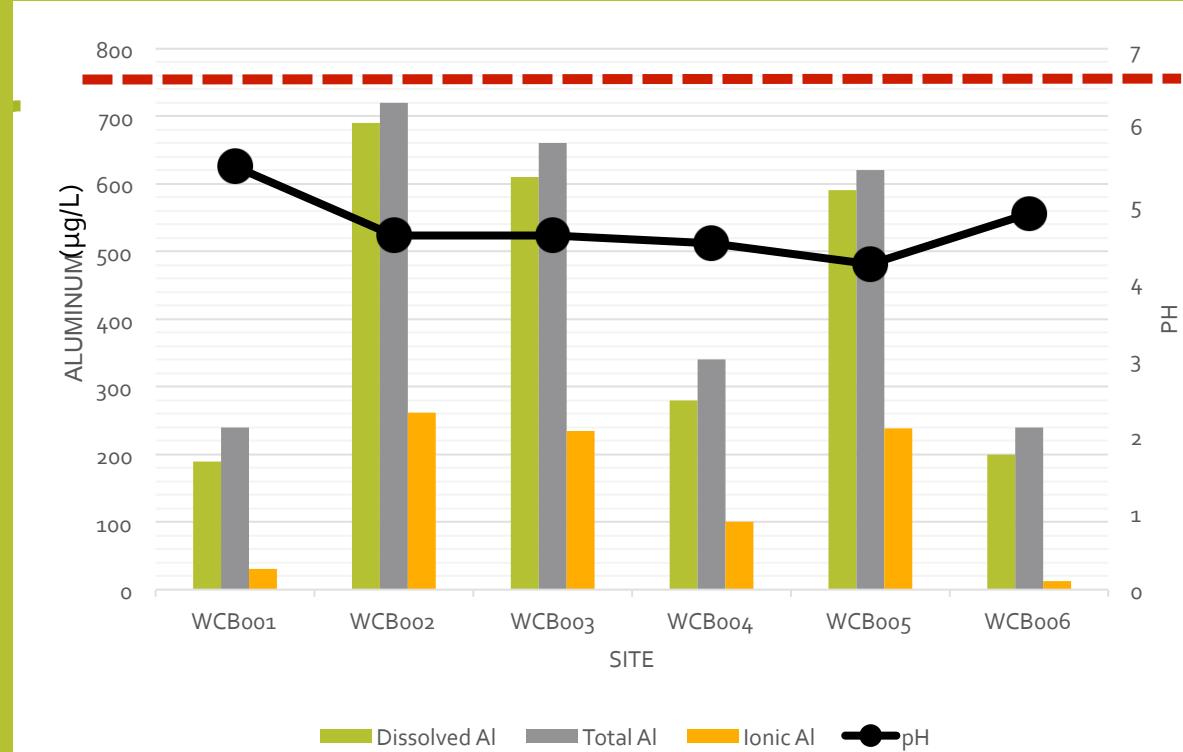


Petite Rivière Watershed

- 244 km²
- Water supply for the Town of Bridgewater
- Home to the endangered Atlantic whitefish
- Water quality sampling started in 2011
- Acidic waters in upper watershed

Discovering the Need for Remediation

- Monthly water quality sampling
- Stream assessments of Wildcat Brook
- Abandoned pyritic shale pit





OUR SITE: PRE-REMEDIATION WORK

- Barren landscape
- Lacking species diversity
- Low pH readings in static pools (average pH 4.2)
- Pre-remediation monitoring & surveys

REMEDIATION WORK



- Sourcing out organic material from development projects and municipal compost
- Landscaping
- Berm & weir construction
- Vegetating soil
- Attracting wildlife
- Installing monitoring wells for data loggers

Results to Date

Eastern Side (Lower Pit)

April 2015



October 2016



Western Side
(Lower Pit)

November
2015 –
October 2016



Northern End
(Upper Pit)

May 2016 -
October 2016



Future Work



- Remediation of two larger shale pits (Approx. 7 ha and 5 ha)
- Require significantly more organic soil in order to cover the exposed bedrock adequately.

Thank You!





Canada

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Nova Scotia Youth Conservation Corps

