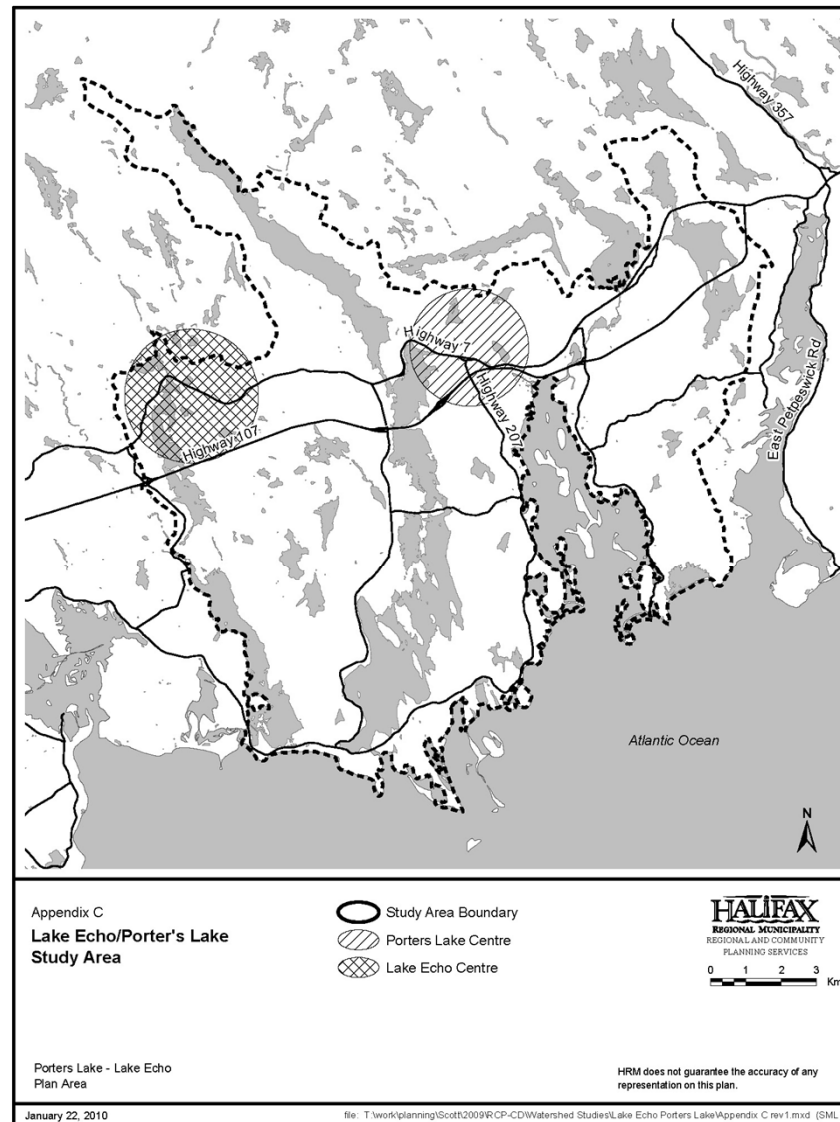


Porter's Lake and Lake Echo Watershed Studies



Presentation to Marine Drive, Valley and Canal
Community Council, November 22, 2010

Porter's Lake & Lake Echo Watershed Study Area



Watershed Studies – A Requirement for Future Plan Reviews

- Regional Plan approved in 2006
- Plan Policy G-11 requires community visioning (for designated growth centres)
- Plan Policy E-17 requires watershed studies prior to undertaking comprehensive secondary planning processes to carry out community visions

Study Purpose

- Background Study for Community Visioning and Secondary Planning
- Determine environmental capacity of land and receiving waters

Watershed Assessment

- Groundwater resources
- Water quality objectives
- Identify sources of contamination
- Identify remedial measures
- Stormwater management
- Environmental functions
- Protection of habitat
- Appropriate riparian buffers
- Land suitability
- Regulatory measures & monitoring plan

Porter's Lake Servicing Component Study

- Examine options for provision of central sewer and water to Porter's Lake Rural Commuter Centre
- Undertake assimilative capacity studies to determine appropriate level of treatment
- Examine alternative central sewer treatment options and associated costs
- Recommend a Service Area Boundary and discharge locations for treated effluent discharge
- Assess suitability of lands to support cluster septic systems in areas outside of SAB

Lake Echo Servicing Component Study

- Assess options for servicing lands with central water and on-site or cluster on-site septic systems
- Undertake assimilative capacity studies to determine appropriate level of treatment
- Identify locations where on-site or cluster septic systems maybe supported

Assimilative Capacity Study (ASC) Approach

- Examine existing water quality of Lake Echo and Porter's Lake
- Determine desired WQO
- Assess if there is any additional assimilative capacity to support wastewater systems
- Determine what level of treatment required to meet WQO

Difference Between Porter's Lake and Lake Echo ACS

- Porter's Lake will assess alternative treatment technologies for wastewater management within a SAB
- Lake Echo will look at this question in general but will not assess the impact of alternative treatment technologies to service any particular development in a specified area

Porter's Lake Study Schedule

- Study Completion

- Study Commenced
- WQO Survey
- Data Collection and Analysis
- Servicing Alternative Analysis
- Community Meeting
- Sanitary Survey
- Report Writing and review

Jan 2012

May 2010

Aug – Nov 2010

May 2010 – Jan 2011

Oct – Dec 2011

Spring 2011

Summer 2011

Nov 2011 – Jan 2012

Lake Echo Lake Study Schedule

- Study Completion

- Study to commence
- WQO Survey
- Data Collection and Analysis
- Community Meeting
- Sanitary Survey
- Servicing Alternative Analysis
- Report Writing and review

Jan 2012

April 2011

Apr – May 2011

May – Sep 2011

Fall 2011

Summer 2011

Oct – Nov 2011

Nov 2011 – Jan 2012

Porter's Lake Watershed Study

Water Quality Objectives Questionnaire Results Summary

101015.00 • Draft • November 2010

ISO 9001
Registered Company

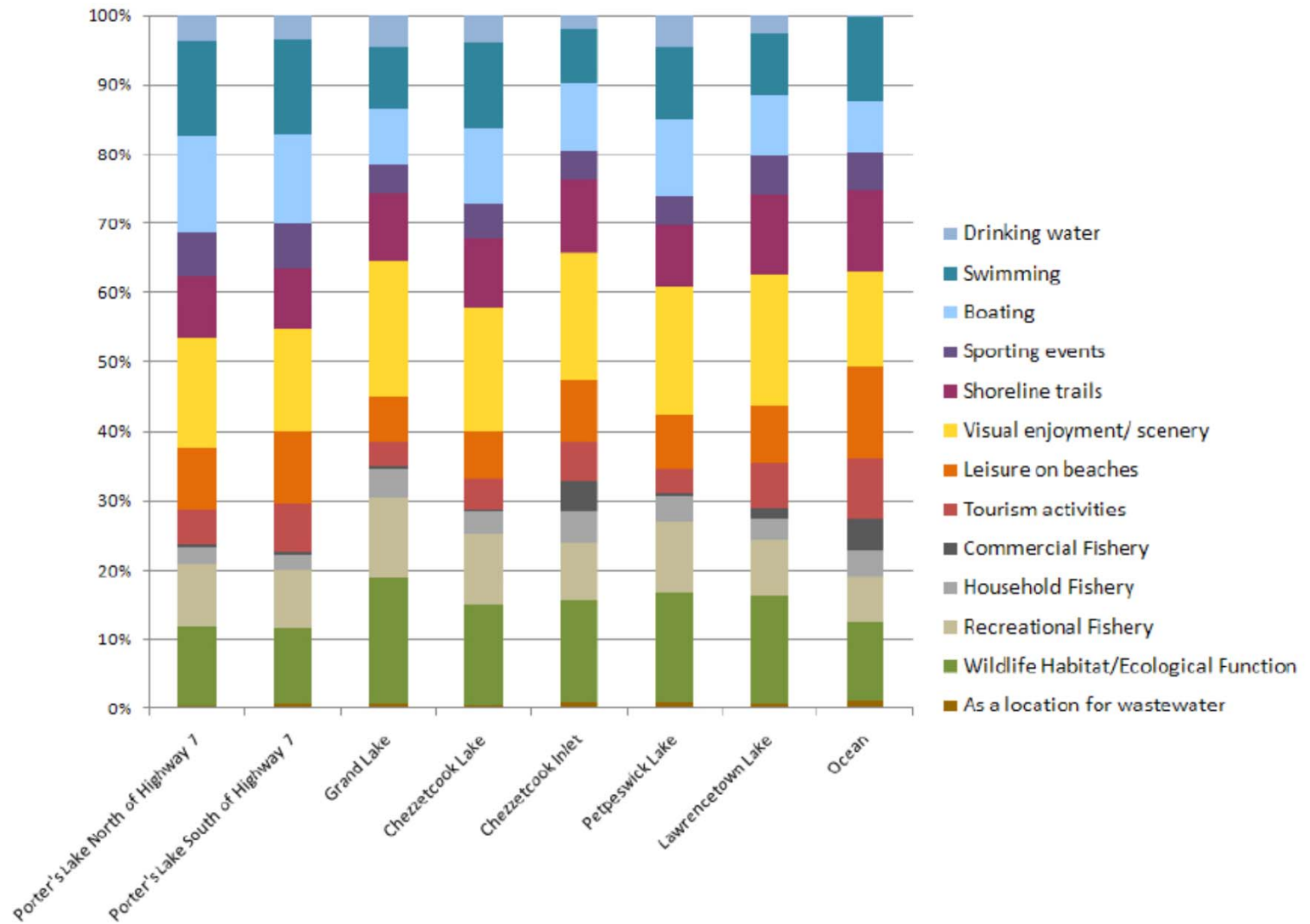
Prepared for:
**Halifax Regional
Municipality**

Prepared by:
CBCL
CBCL LIMITED
Consulting Engineers

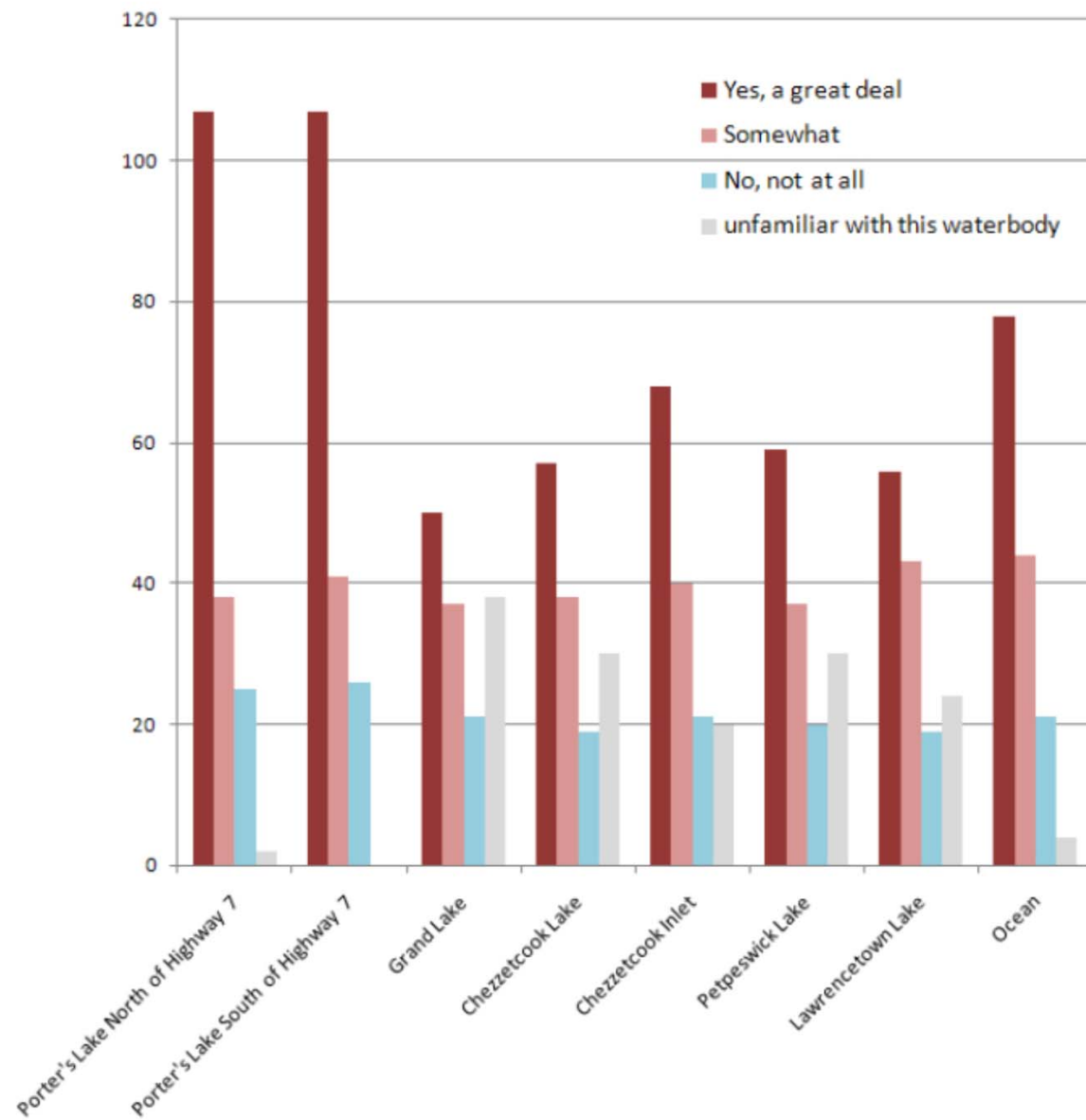
WQO Survey for Porter's Lake

- Designed to gather community input on desired future water use
- On-line survey August 5 – Nov 10, 2010
- Notices through email distribution list, posters and Eastern Gazzett
- 197 Responses Received

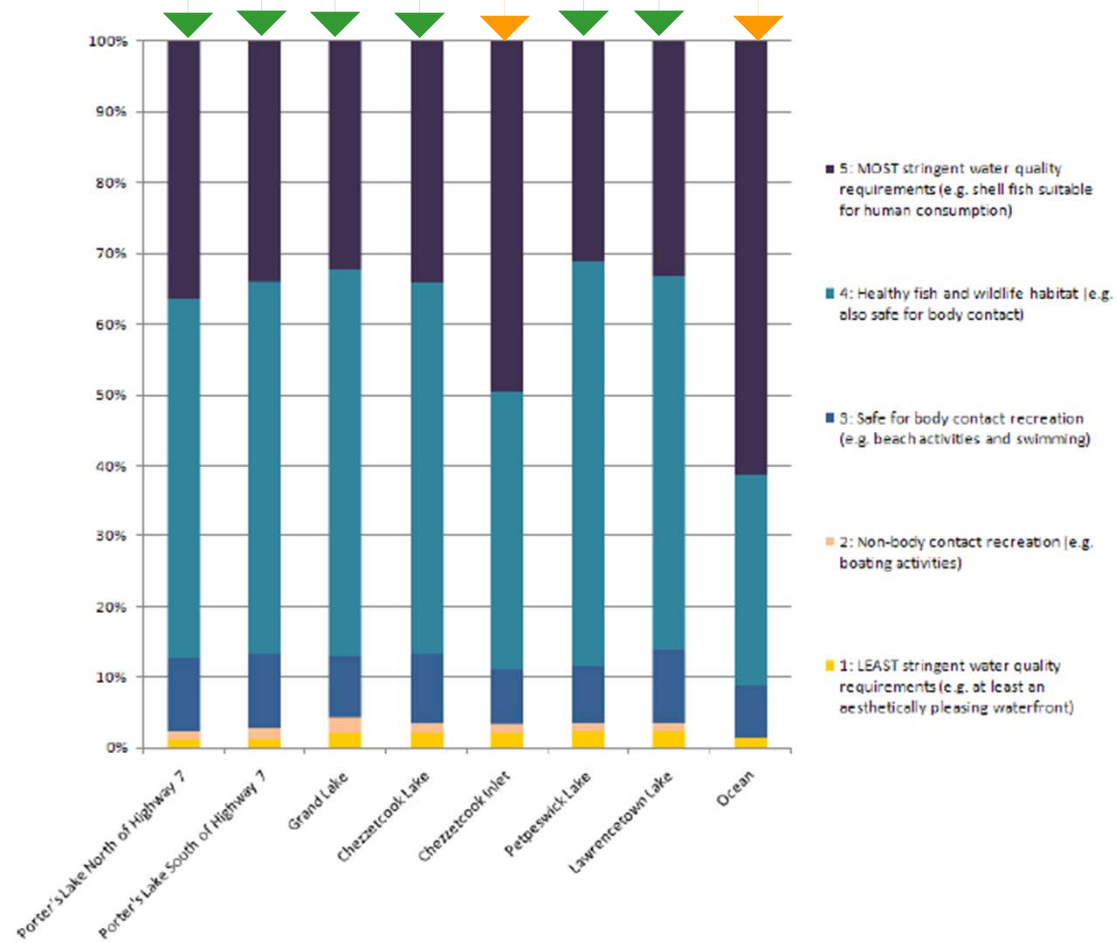
Importance of Waterbodies

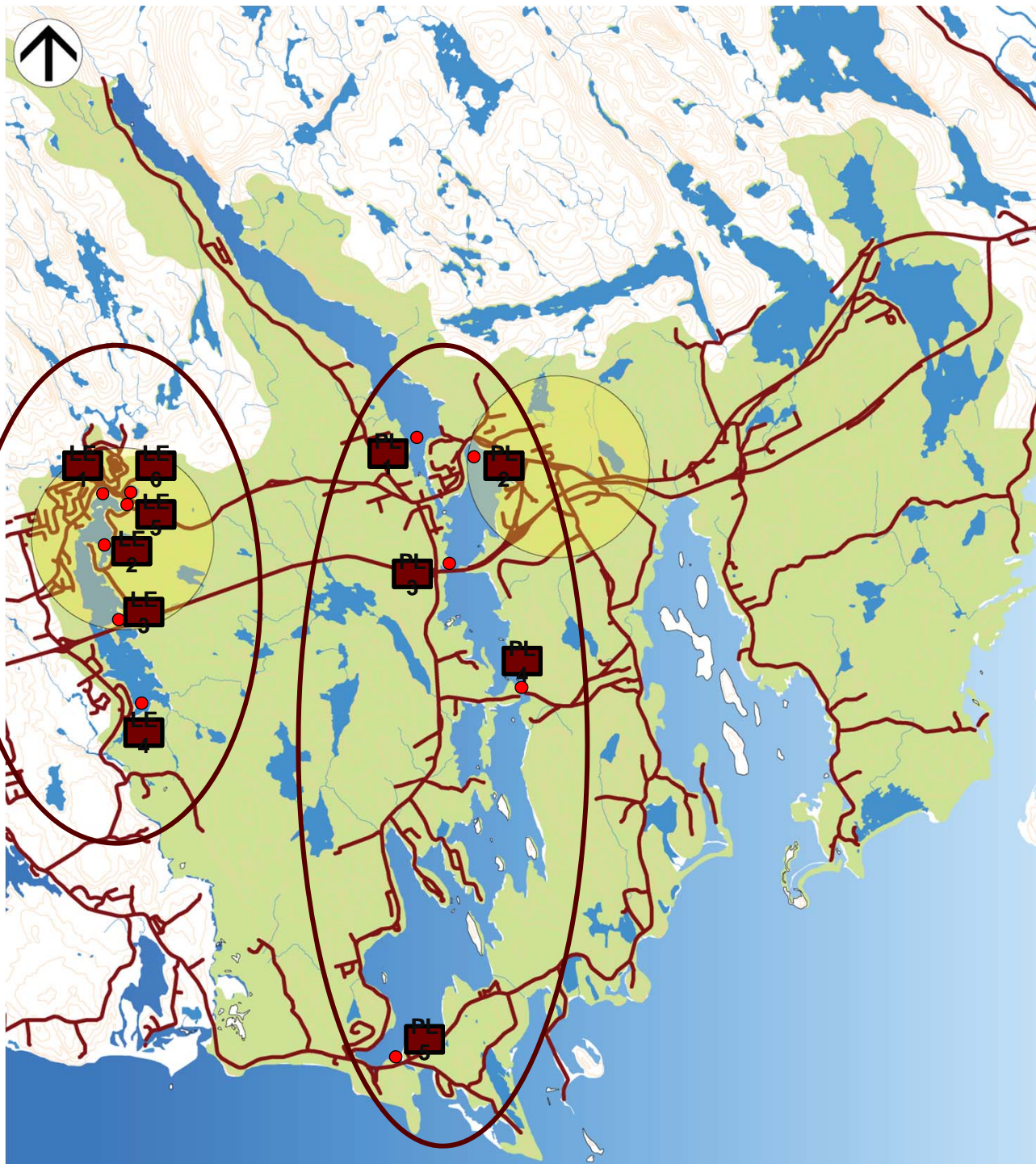


Concerns



Desired WQO







Sampling at PL5, the southernmost station



Taking waters samples fro chlorophyll analysis



PL5 during an incoming tide



Outflow from McCoys Pond (LE6)

Thank-you

MAUREEN RYAN, SENIOR PLANNER
490-4799