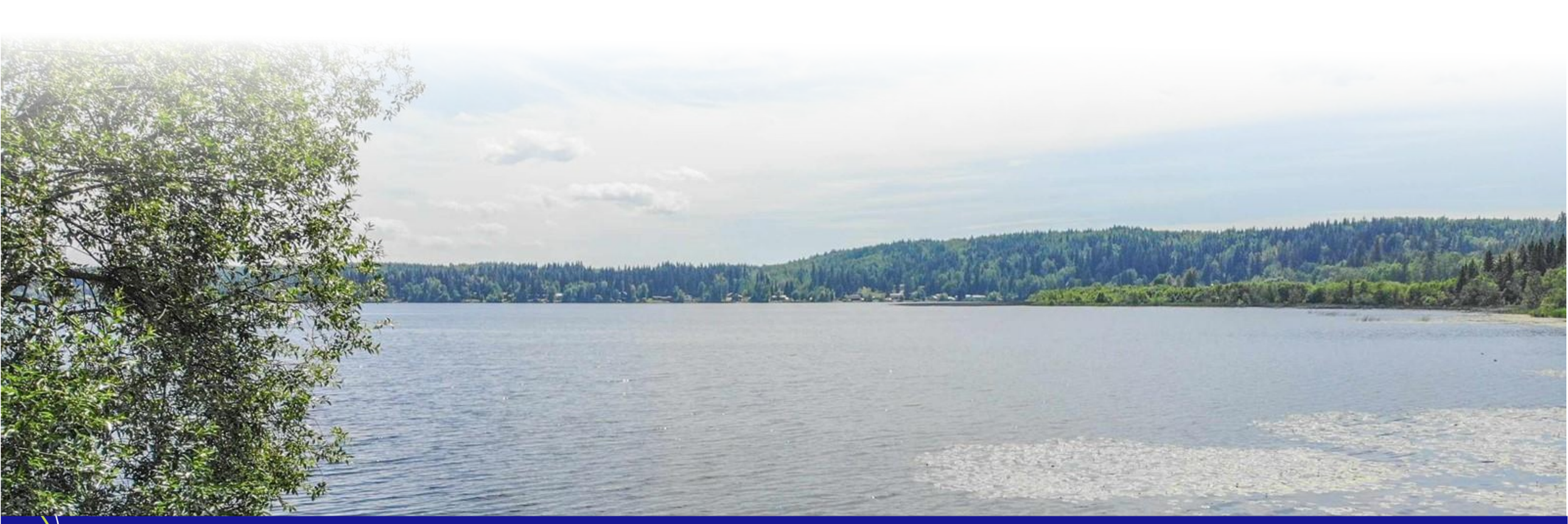
Bouchie Lake Sewer System
Pre-Feasibility Engagement

What input are we looking for?

- your input on the health of Bouchie Lake watershed and the future of a proposed sewer system for the surrounding community
- the desires of the community and whether there is support for a feasability study for such a system
- changes to land use planning and development
- advocacy to provincial government and Northern Health

Why is this option being considered?

- Bouchie Lake suffers from seasonal algae blooms, which present health, safety and environmental hazards for humans and animals
- A study completed in 2009 by the B.C. Ministry of Environment and Climate Change Strategy indicated that these algae blooms were the result of excessive levels of phosphorus and nitrogen entering the watershed
- A significant amount comes from septic systems along the lake which are in various stages of repair.
- This proposal is being considered as one workable option to reduce the amount of nutrient inflow into Bouchie Lake



What would this process look like?

A feasibility study would be done to understand the capital costs involved, the type of systems that would be appropriate, and the taxation implications.

If the community supports a feasability study, other actions would have to be taken following the completion of the study before the project would proceed:

- Official Community Plan amendments to add a sewer system plan and land use policies;
- Engineering designs and drawings for a collection and treatment system;
- Consultation with First Nations and relevant provincial agencies;
- Confirm financing, including any local area taxation, borrowing, and grant funds; and
- Hold a referendum to seek approval for the service being established.

How can I have my say?

- Complete the input survey prior to May 15th, 2024 at 4 p.m.
- Access the survey online at cariboord.ca/BouchieLakeSewer or by scanning the QR code with your mobile device
- Pick up a paper copy at today’s open house

Scan this code with your mobile device

cariboord.ca/BouchieLakeSewer

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P

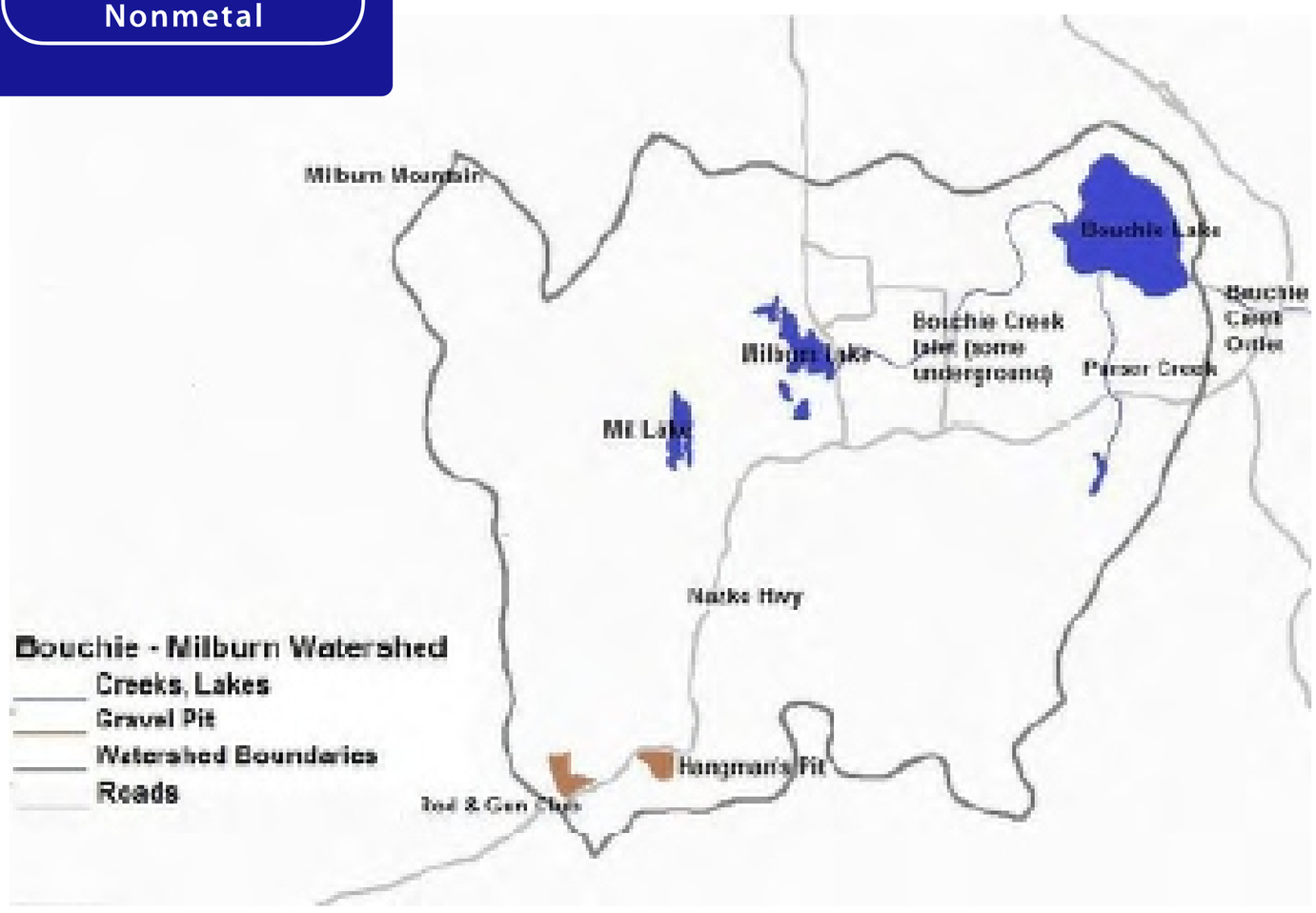
Phosphorus

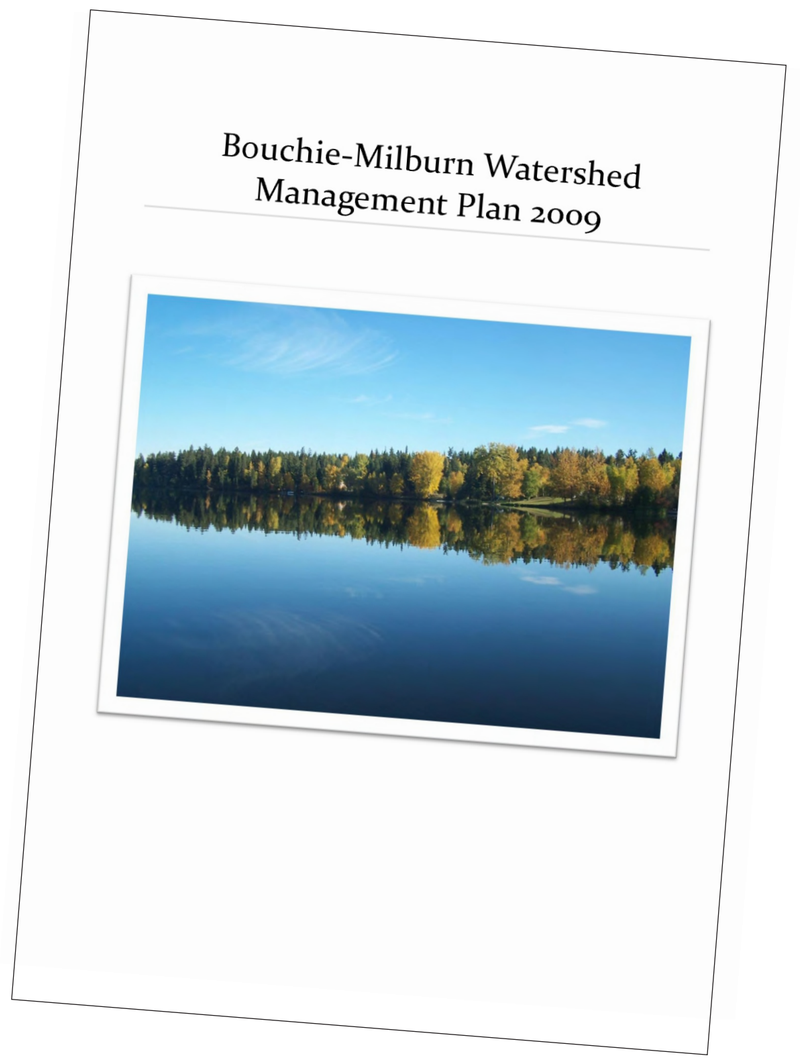
$[Ne]\ 3s^2 3p^3$

Nonmetal

Bouchie - Milburn Watershed

Phosphorus Input



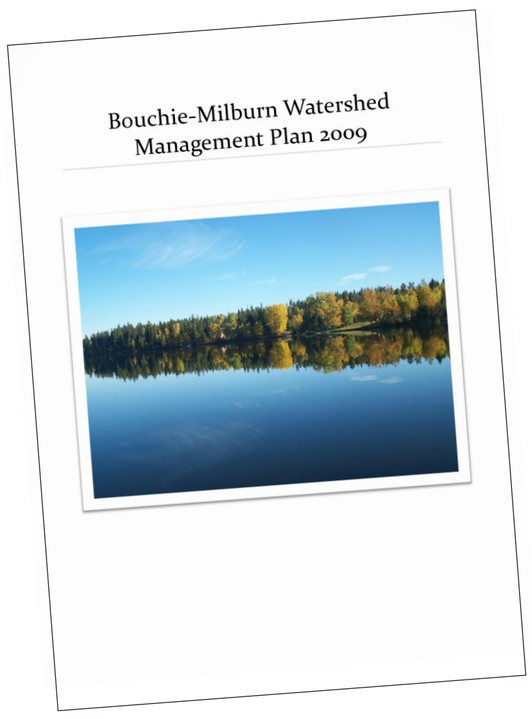


The Bouchie-Milburn Watershed encompasses the west side of Milburn Mountain, Mit Lake, Milburn Lake, Bouchie Lake, and all associated creeks. There is a sub-surface water connection between the outlet of Milburn Lake and the Inlet of Bouchie Lake. The main water bodies in the watershed are Milburn Lake and Bouchie Lake. Both lakes have development on the lakeshore to varying degrees.

An analysis was completed in 2002 by J.S. Hart and Associates to examine the phosphorus sources in the Bouchie-Milburn watershed. Annual phosphorus input to Bouchie Lake from the watershed is broken down as follows.

Phosphorus source	Annual phosphorus input to Bouchie Lake from the watershed	
	Amount (kg)	% of total
Agriculture land (including hobby farms)	190.2	42.2
Lakeshore sewage disposal systems	70.0	15.5
Livestock wintering areas	60.2	13.4
Crown land (excluding lakes and ponds)	37.6	8.3
Lakeshore residential land	36.0	8.0
Rural Residential land	28.2	6.3
Atmospheric contributions to lakes & ponds	28.2	6.3
Total	**450.3**	**100.0**

The above table represents inputs from lakeshore and upland sources only. Hart estimates an increase of 30.9% input from lakeshore sewage systems (to 91.6 kg/year) by 2027 assuming no further development and no upgrades to sewage systems.



Watershed Issues and Concerns

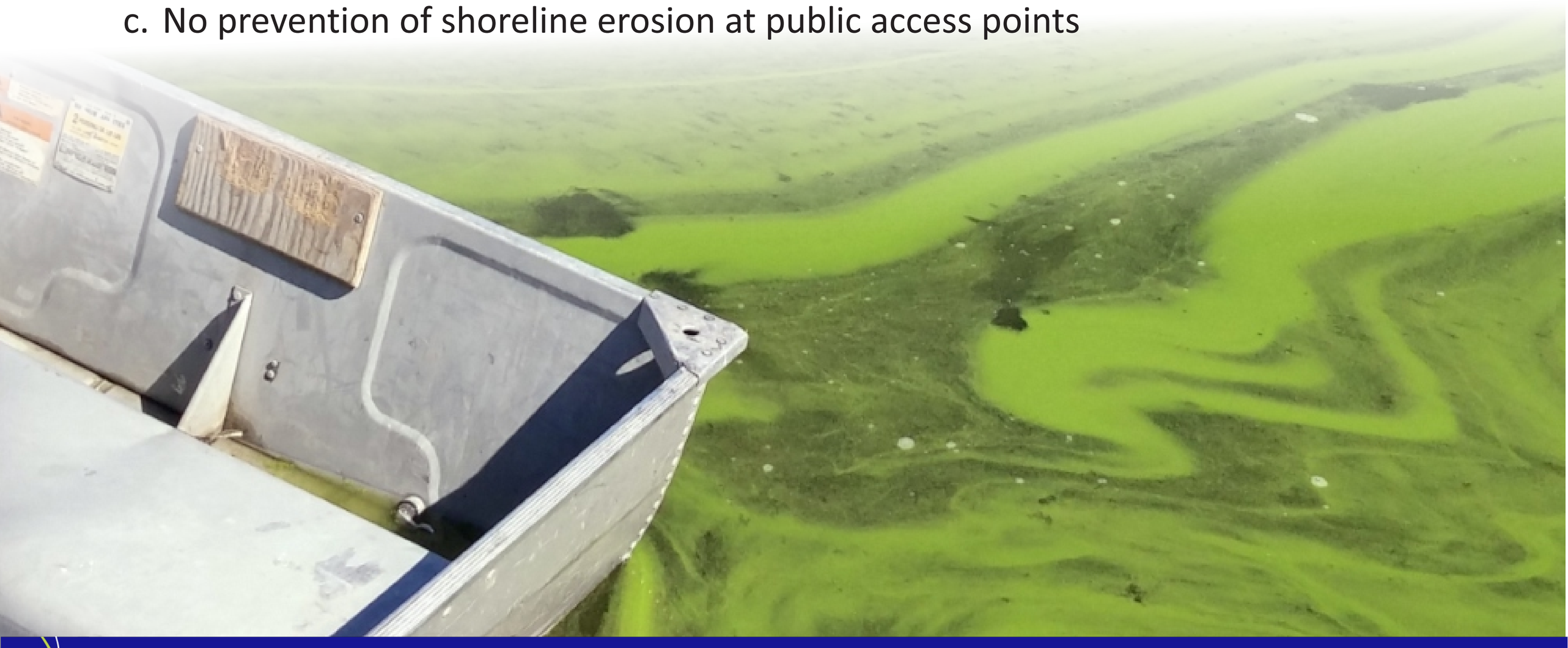
Through a series of community meetings and public consultations, the Bouchie Lake Stewardship Committee came up with a list of Issues and Concerns for stakeholders in the watershed in it's Bouchie-Milburn Watershed Management Plan 2009. Agencies identified for various actions included the Province of BC, Bouchie Lake Stewardship Committee, the Cariboo Regional District and various other groups. A copy of this plan can be viewed at www.cariboord.ca/bouchielakesewer

1. Access
   a. Improving access to the lake for the public
   b. Ensuring that public access points are restored and/or remain public
   c. Increase recreational usage of the lake by the public

2. Riparian Zone/Surrounding Area
   a. Protection of natural stream banks and lakeshores (riparian)
   b. Aquatic and terrestrial invasive plants
   c. Decrease in forest cover in surrounding area
   d. Resale value of homes/properties

3. Water Quality and the Lake
   a. Need for continued testing on water quality of the lake, inputs, and output
   b. Improve/eliminate algae and cyanobacterial blooms
   c. Shoreline erosion
   d. Phosphorus loading and sources

4. Enforcement
   a. Little or no action to prevent slides and sediment from Purser Creek going into Bouchie Lake
   b. Existing infrastructure not maintained (ie. Purser Creek culverts)
   c. No prevention of shoreline erosion at public access points



Proposed Conceptual Service Area