

SHORELINE ASSESSMENT

Pigeon Lake

Riparian areas are the biologically rich and productive shoreline areas at the edges of lakes, streams, wetlands and rivers. While these areas provide a wide range of benefits, the loss and impairment of riparian areas has been significant. Clearing vegetation, building structures, adding or removing rocks, using off-high-way vehicles or allowing heavy grazing by cattle all damage riparian areas and ultimately, the health of the lake.

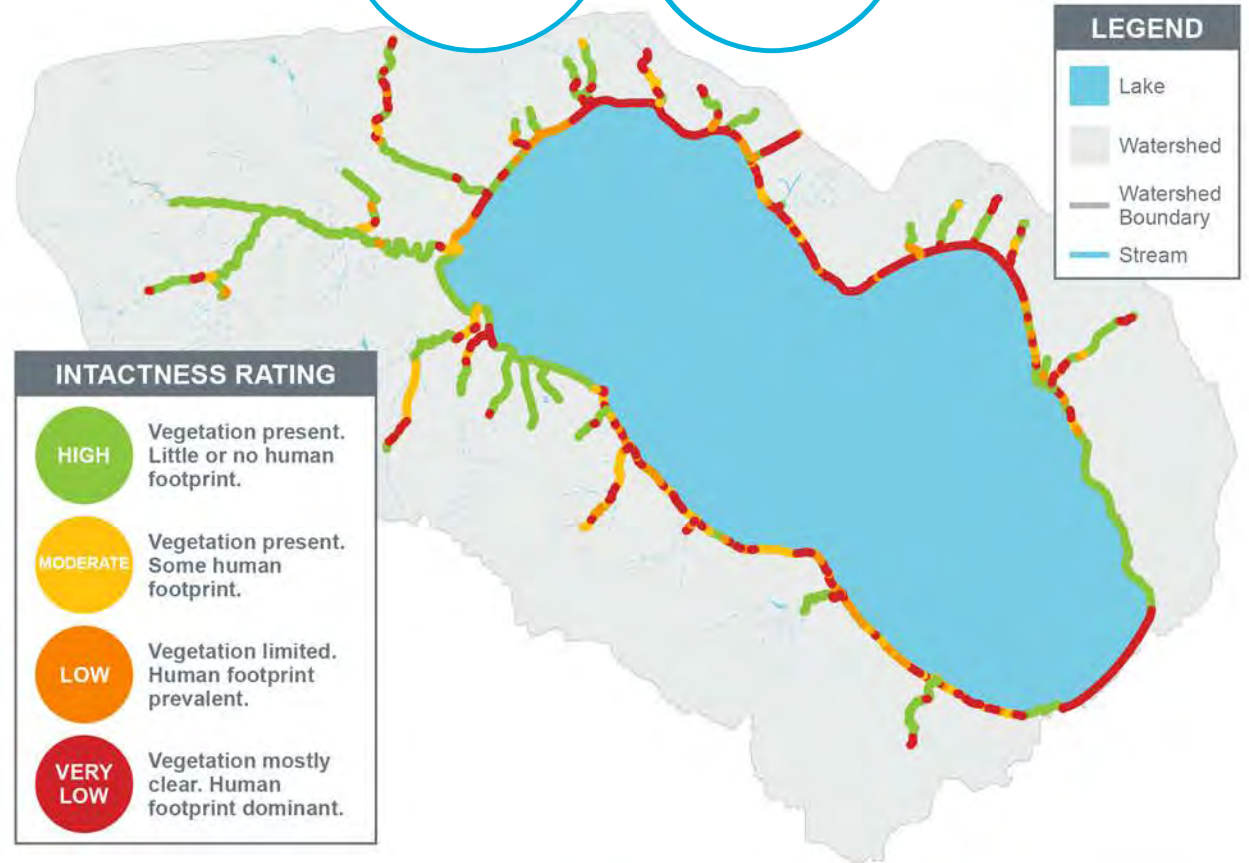
A GIS-based method and data set was created to assess riparian intactness (or condition) at a watershed scale, including lakeshores and streams. Riparian intactness refers to the extent to which natural habitat has been altered or impaired by human activity. The assessment was based on the cover of natural vegetation, woody vegetation and human impact and development visible from satellite imagery. The riparian area was assessed for 50 metres back from the water line, for the entire length of the lakeshore, as well as the right and left banks of the streams flowing into the lake.

Summary of Results:

Although there has been some improvement in lake riparian area intactness, its intactness levels remain lower than those of the streams flowing into the lake.

155
Kilometres
Assessed

56%
Overall Watershed
High Intactness



2018



Why are riparian areas important?



IMPROVE WATER QUALITY by trapping sediments, filtering nutrients and pollutants, reducing enrichment that leads to increased aquatic plant and algal growth;



MITIGATE FLOODS AND DROUGHTS by storing and slowing the release of water and reducing erosion;



IMPROVE BIODIVERSITY by providing fish and wildlife habitat and cooling water temperatures;



PROVIDE AESTHETICALLY PLEASING AREAS for recreation or cultural activities; and



ADD LOCAL ECONOMIC VALUE by increasing property values or providing areas for nature viewing.

How can you improve the health of your riparian area?

- Leave your shoreline natural—don't remove any plants, grasses or aquatic vegetation as they all play an important role in keeping your lake healthy.
- If your shoreline has been cleared of vegetation, replant with native plants as much as possible and watch for invasive species. Report as appropriate.
- Learn more about the health of your riparian area
- For larger areas, create a management plan to improve the intactness of the riparian area over time
- More resources are available at alberta.ca search "riparian"

Where is a riparian area?

