

# RIPARIAN ASSESSMENT

Riparian areas are the biologically rich and productive shoreline areas at the edges of lakes, streams, wetlands and rivers.

A GIS-based method and data set was created to assess riparian intactness (or condition) at a watershed scale, including lakeshores and streams. The riparian area was assessed for 50 metres back from the water line and given an intactness rating based on what is visible from satellite imagery.

## INTACTNESS RATING



HIGH

Vegetation present.  
Little or no human footprint.



LOW

Vegetation present.  
Human footprint prevalent.



MODERATE

Vegetation present.  
Some human footprint.



VERY LOW

Vegetation mostly clear.  
Human footprint dominant.

## Summary of Results

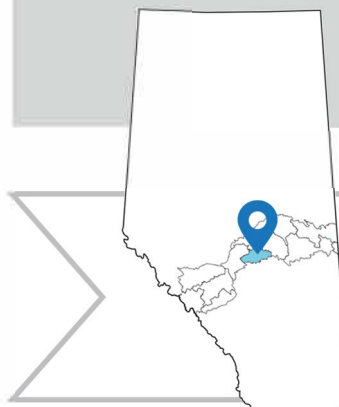
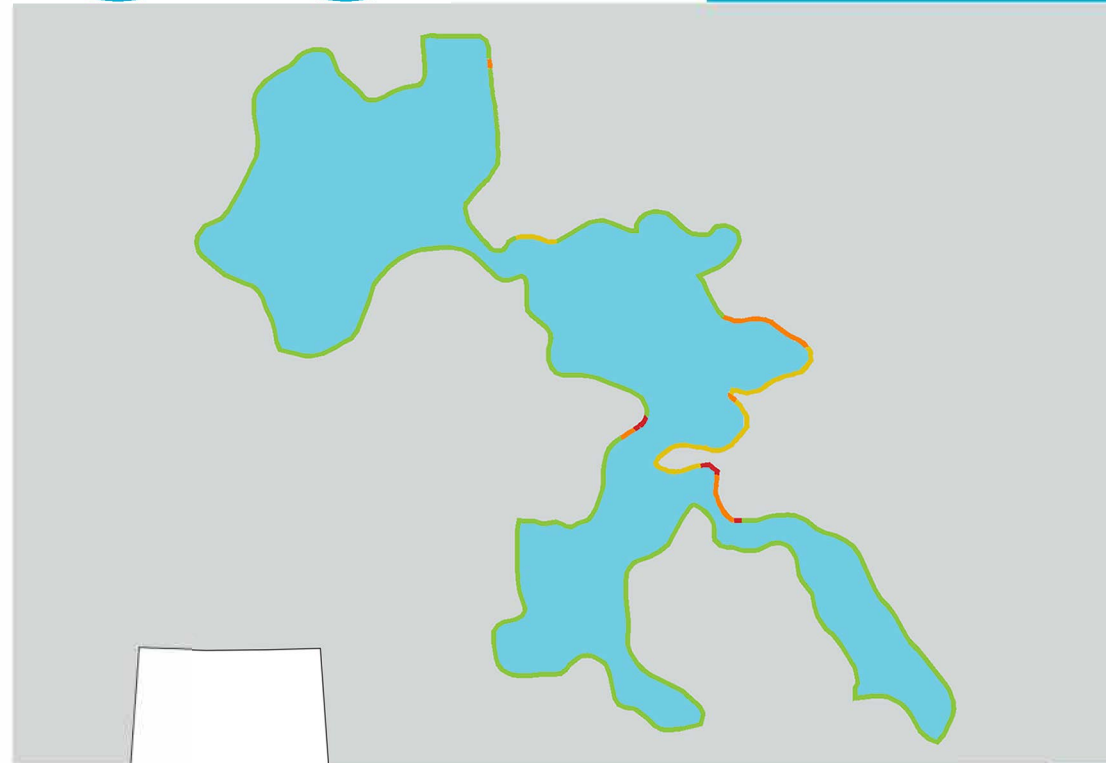
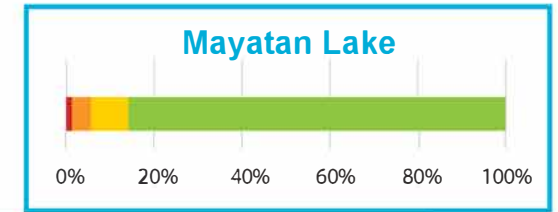
Data Year: 2018

Riparian areas in Mayatan Lake were assessed across 13km of shoreline. Approximately 85% of the shoreline had a high intactness score, which is higher than the average for the Modeste subwatershed (72%). Approximately 8% was moderately intact, 5% of the shoreline was assessed as low, and 1.5% as very low intactness.

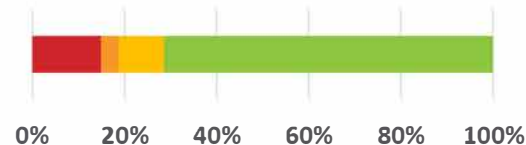
# Mayatan Lake

**13**  
Kilometres  
Assessed

**85%**  
Overall Stream  
High Intactness



## Modeste Subwatershed



## LEGEND

-  Lake
-  Watershed
-  Watershed Boundary
-  Stream

# 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;

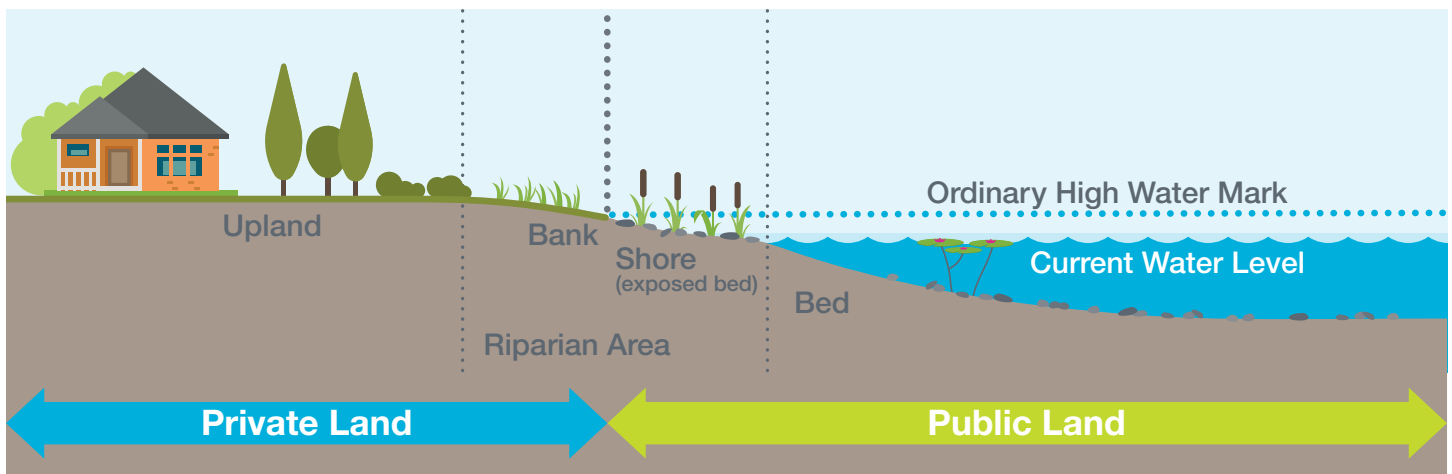


**PROVIDE AESTHETICALLY PLEASING AREAS** for recreation or cultural activities; and



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

## Where is a riparian area?



## 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](https://alberta.ca) search "riparian"