

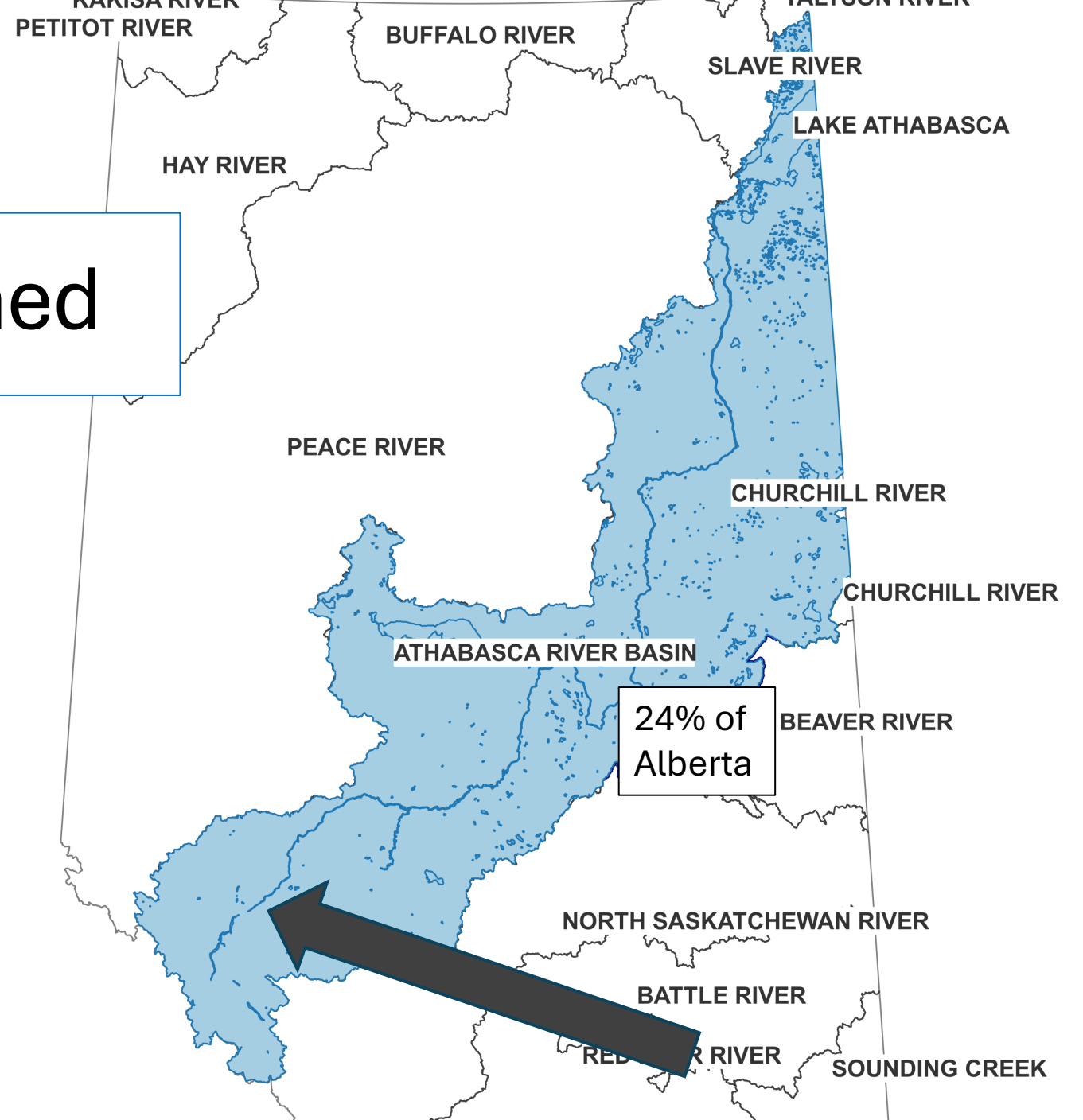


Healthy Shorelines Initiative

Sarah Shortt | *Watershed Science Coordinator*
September 19, 2024



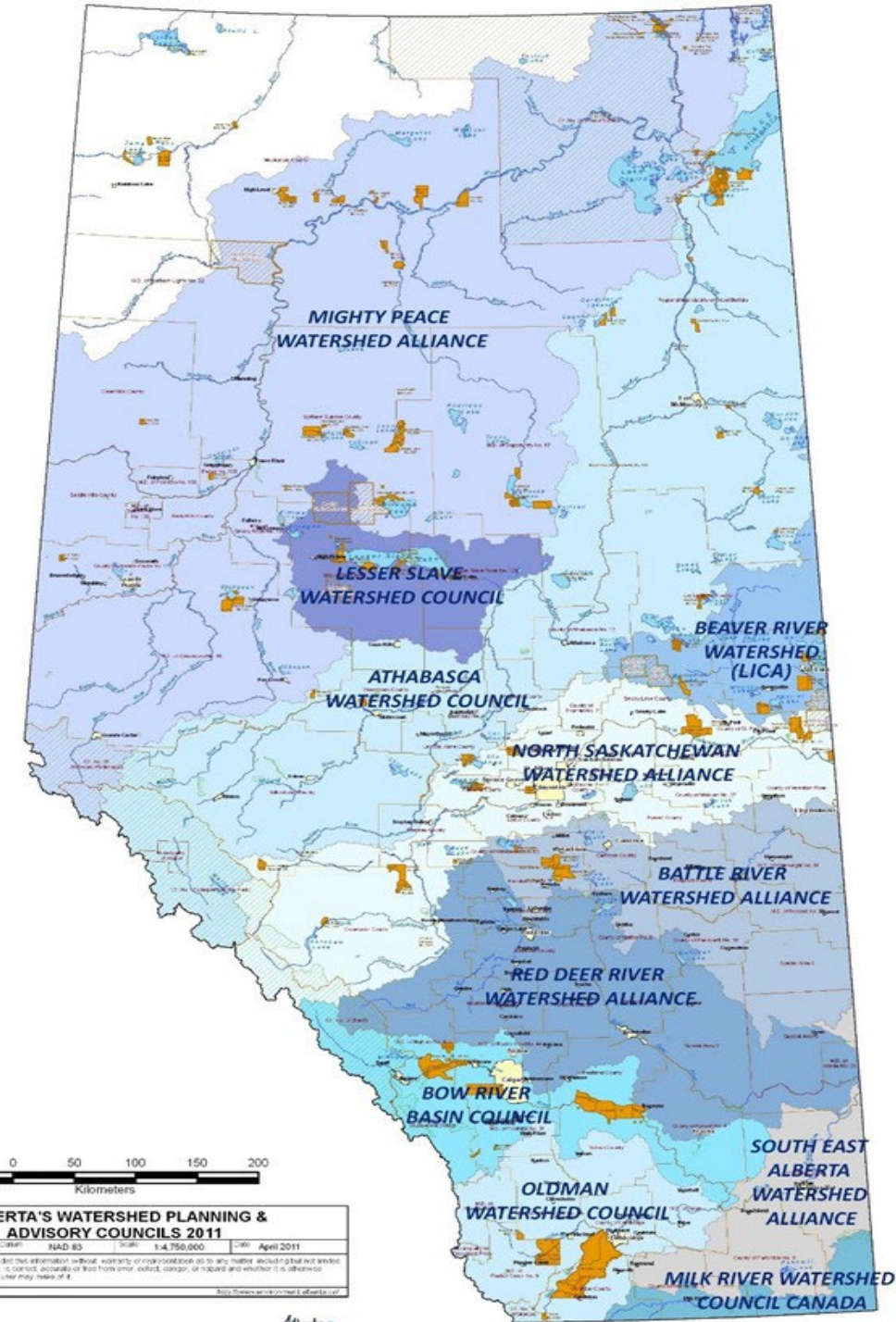
Athabasca watershed



Watershed Planning and Advisory Councils

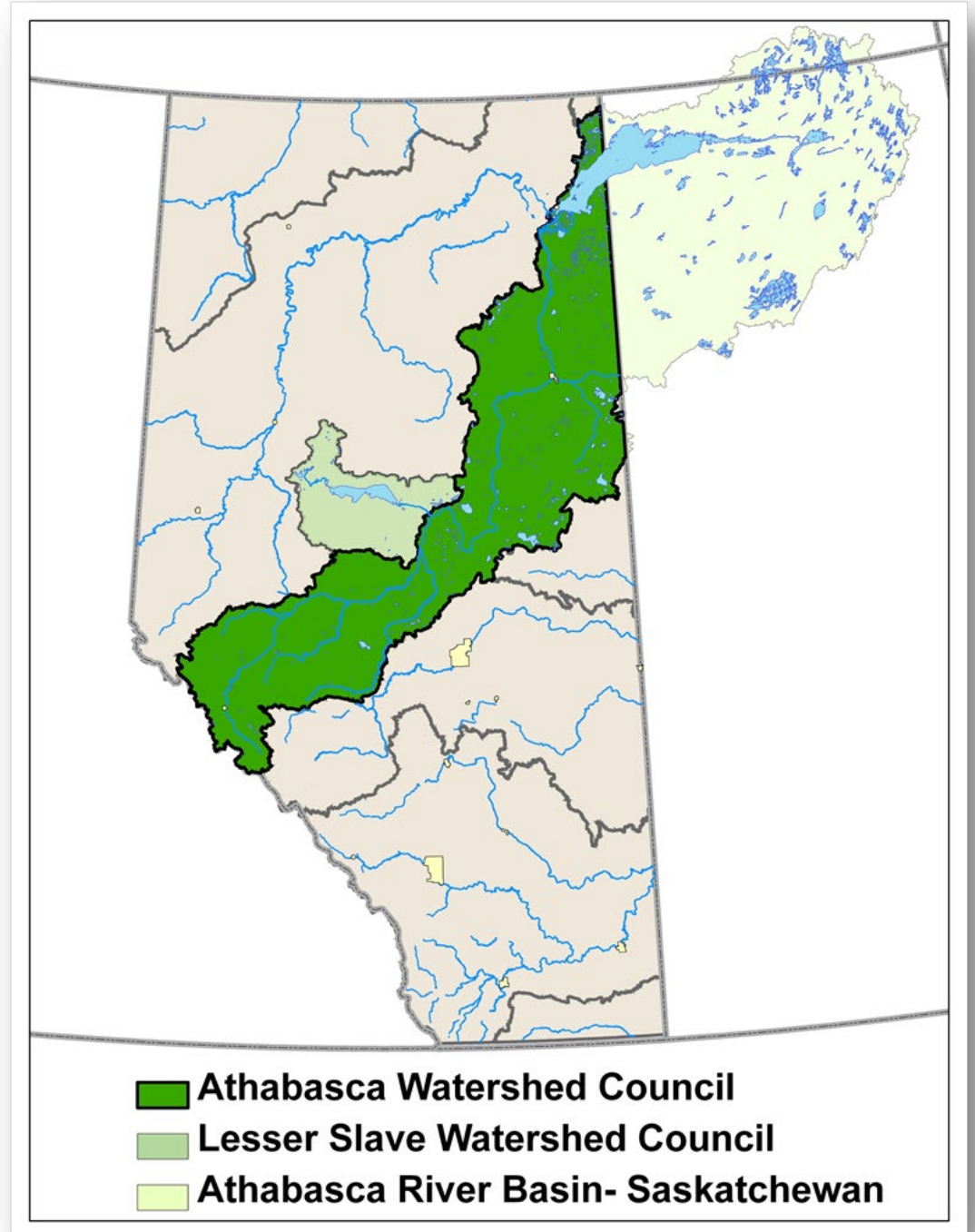
11 Watershed Planning and Advisory Councils (WPACs) based their work on the *Water for Life* strategy (2003) for their Watershed:

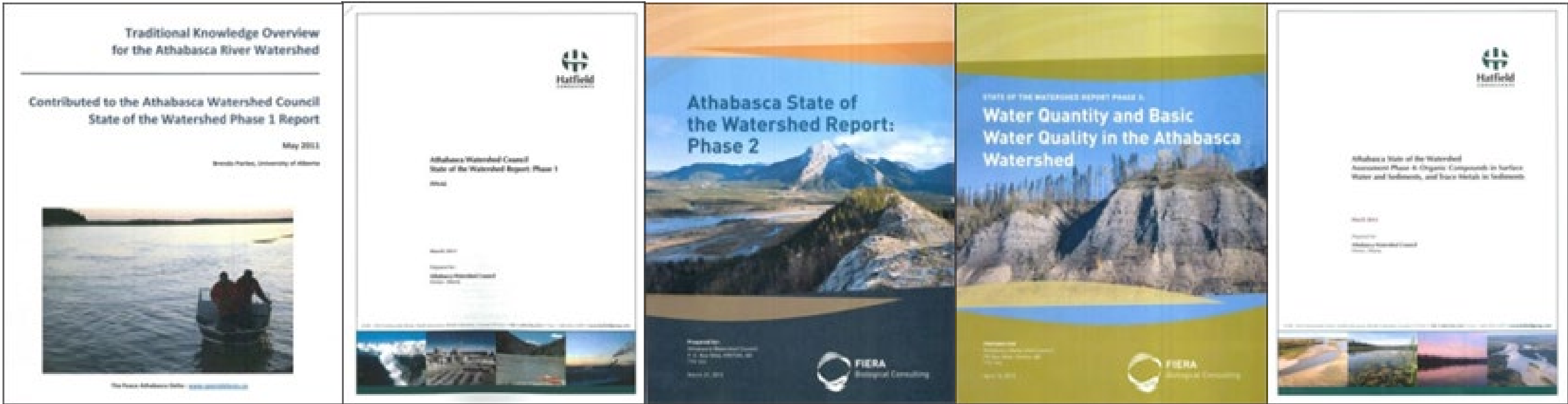
1. Safe, secure drinking water,
2. Healthy aquatic ecosystems,
3. Reliable quality water supplies for a sustainable economy.



Athabasca Watershed Council

- **Founded in 2009, the AWC undertakes four foundational roles in various levels under the *Water for Life Strategy*:**
 - Convener and Collaborator
 - Monitoring and Reporting
 - Policy and Planning
 - Education and Literacy





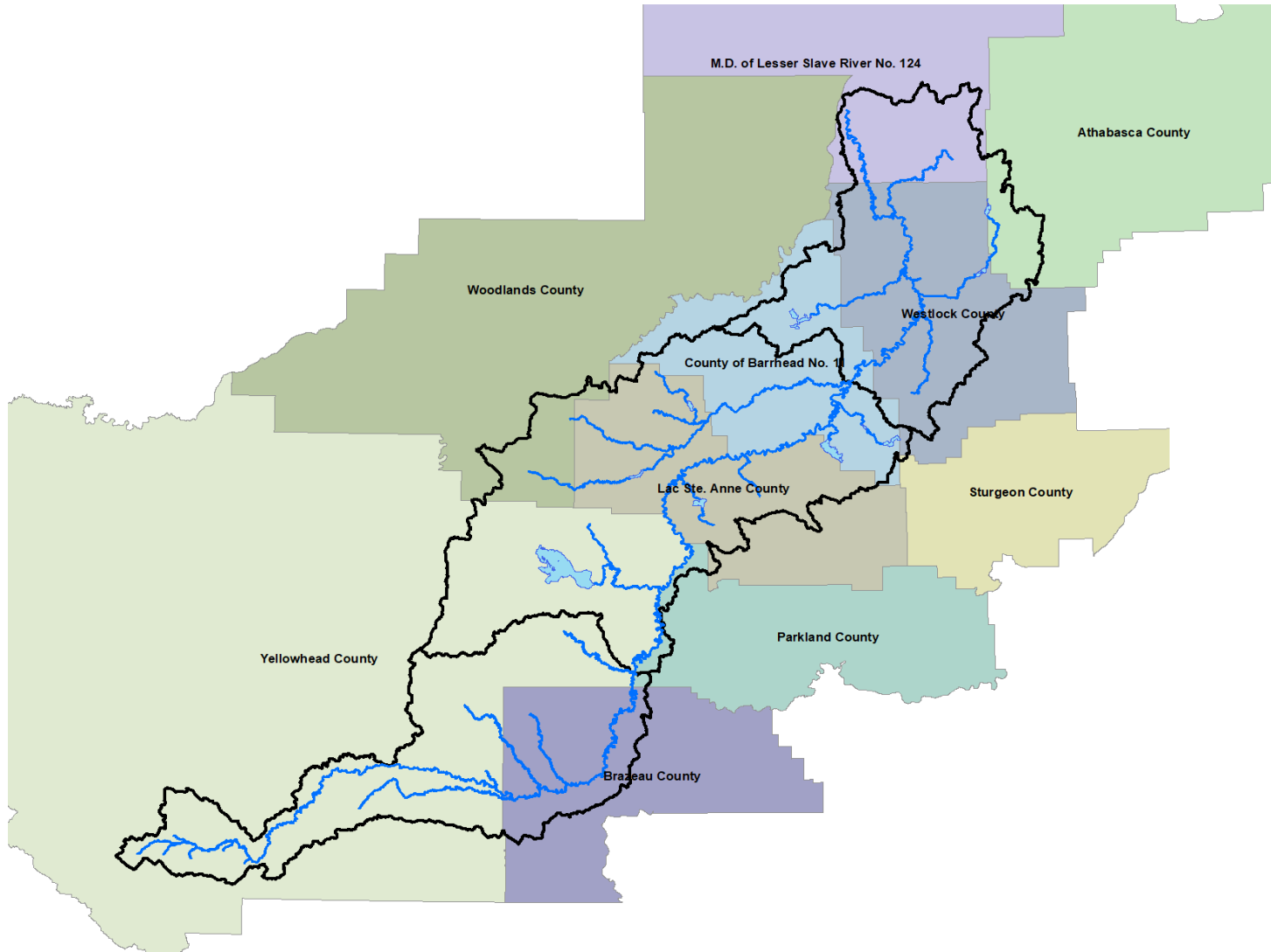
State of the Watershed Reports

State of the Watershed Reports 1-4 and a Traditional Knowledge Overview



Pembina River watershed

- 10% of the Athabasca watershed
- Covers an area of 14,296 km²
- 10 Counties and 3 towns within the Pembina watershed





Athabasca WATERSHED COUNCIL

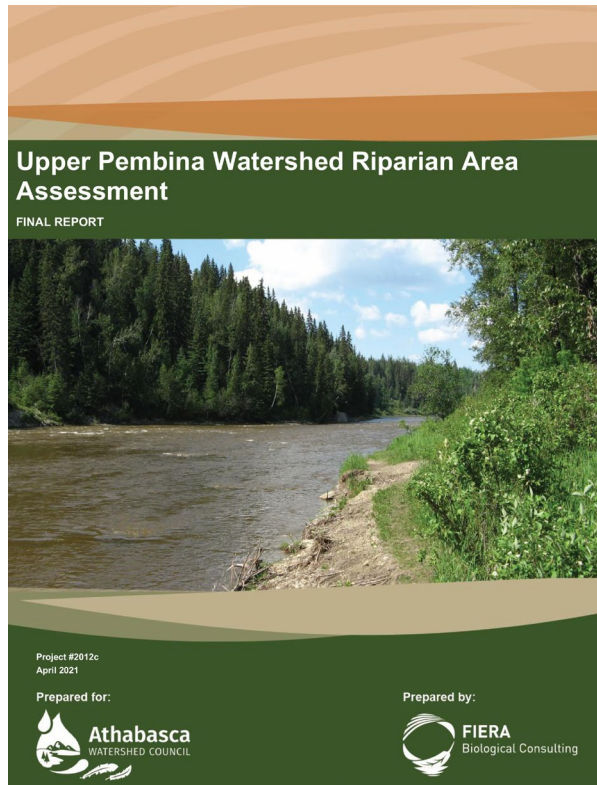
healthy

SHORELINES INITIATIVE




A stylized graphic of a river winding through a landscape. In the center of the river, there is a water drop containing a small scene with mountains and trees. To the right of the water drop, there is a feather.


Riparian Areas Assessments




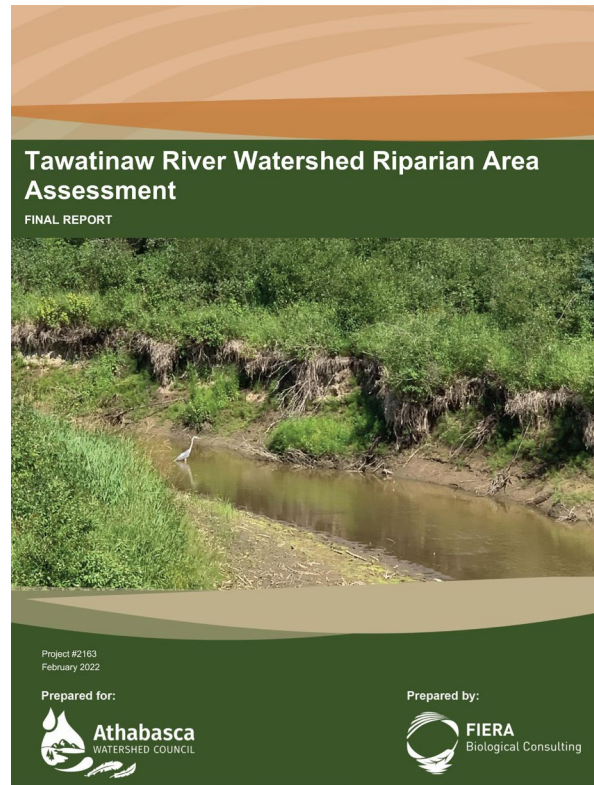
Upper Pembina Watershed Riparian Area Assessment
FINAL REPORT




Project #2012c
April 2021

Prepared for:  Athabasca
WATERSHED COUNCIL


Prepared by:  FIERA
Biological Consulting




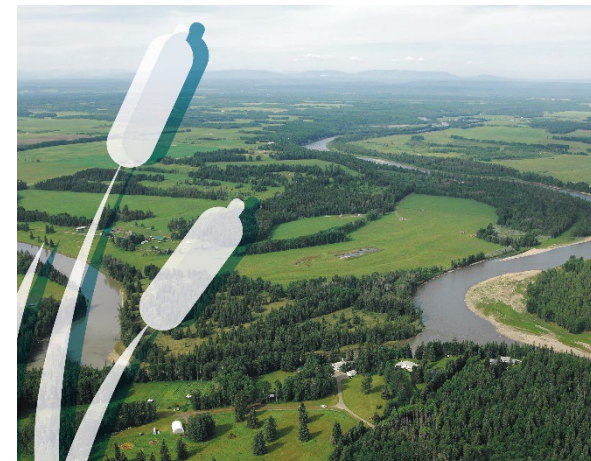
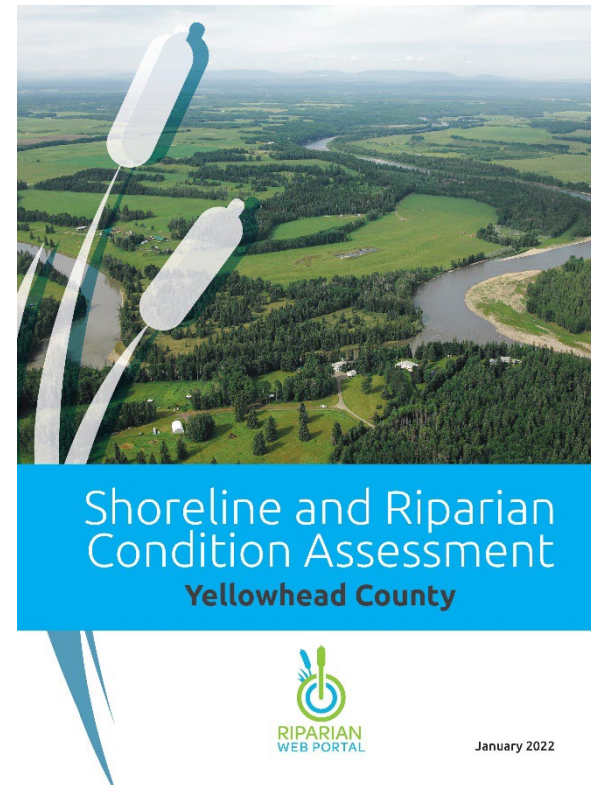
Tawatinaw River Watershed Riparian Area Assessment
FINAL REPORT




Project #2163
February 2022

Prepared for:  Athabasca
WATERSHED COUNCIL

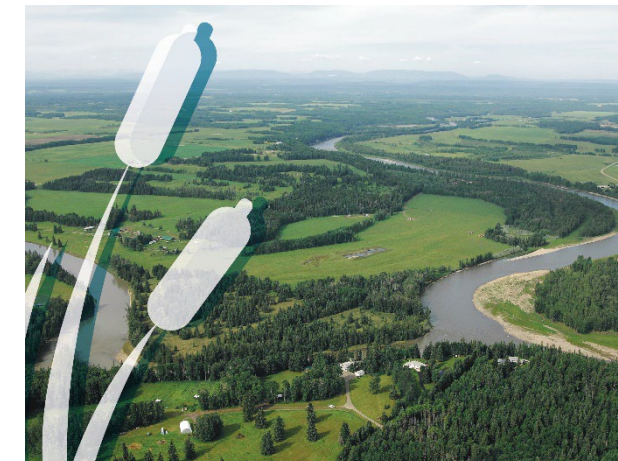
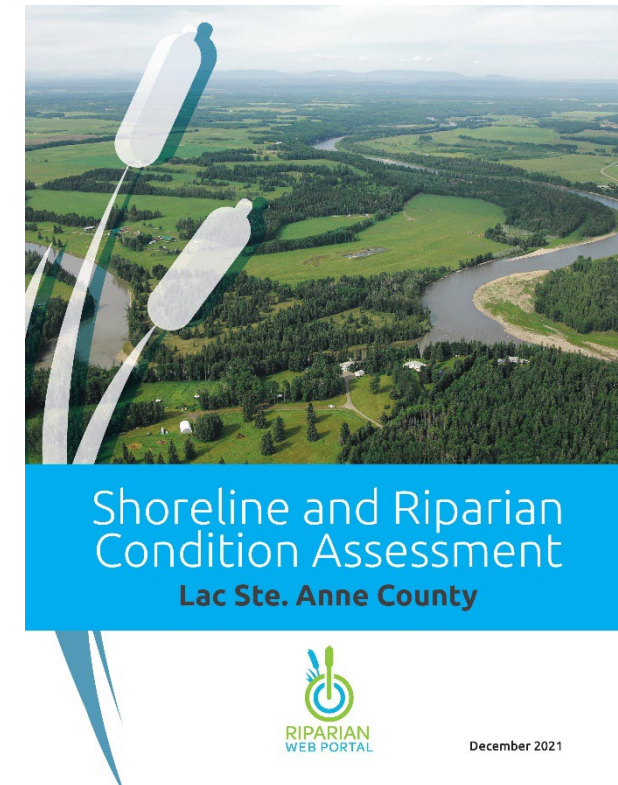
Prepared by:  FIERA
Biological Consulting




**Shoreline and Riparian
Condition Assessment**
Yellowhead County



January 2022



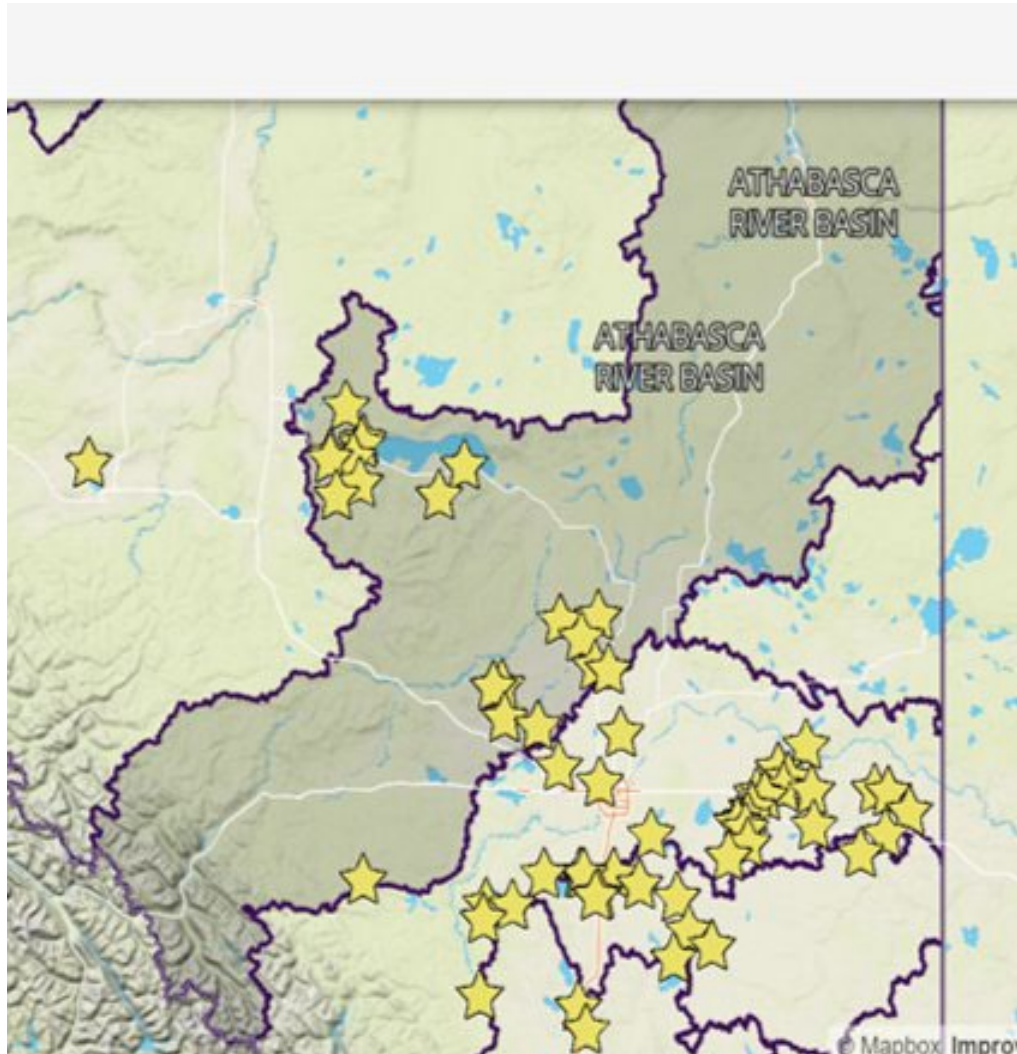
**Shoreline and Riparian
Condition Assessment**
Lac Ste. Anne County



December 2021

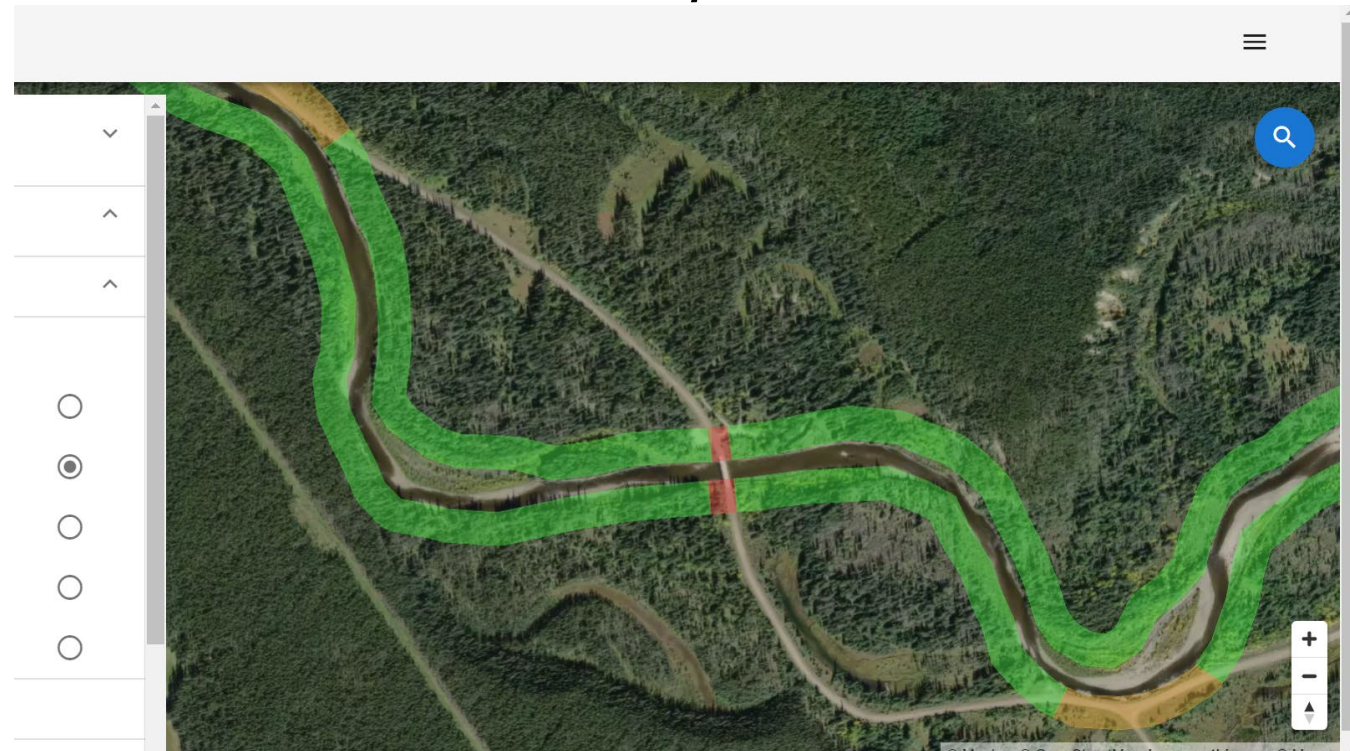


Riparian Web Portal



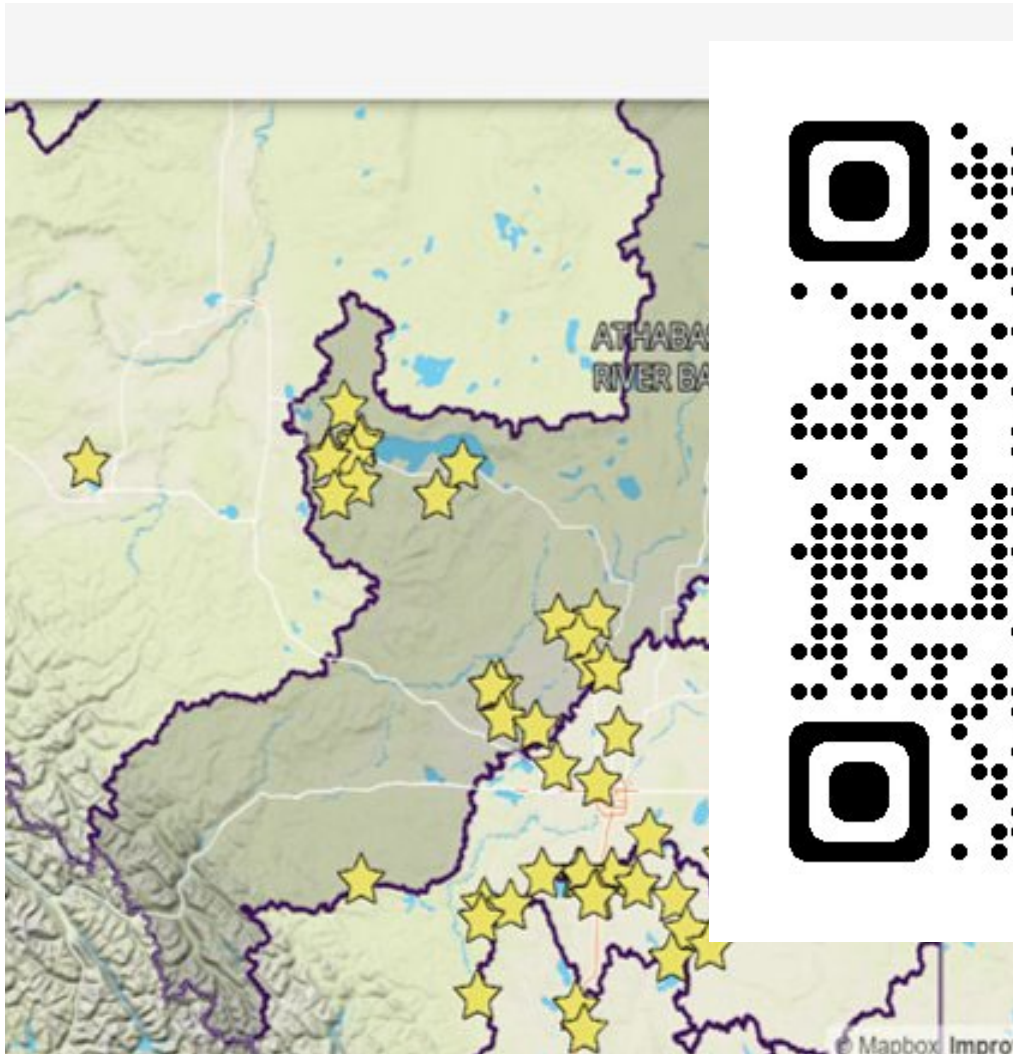
www.riparianresourcesab.info

/

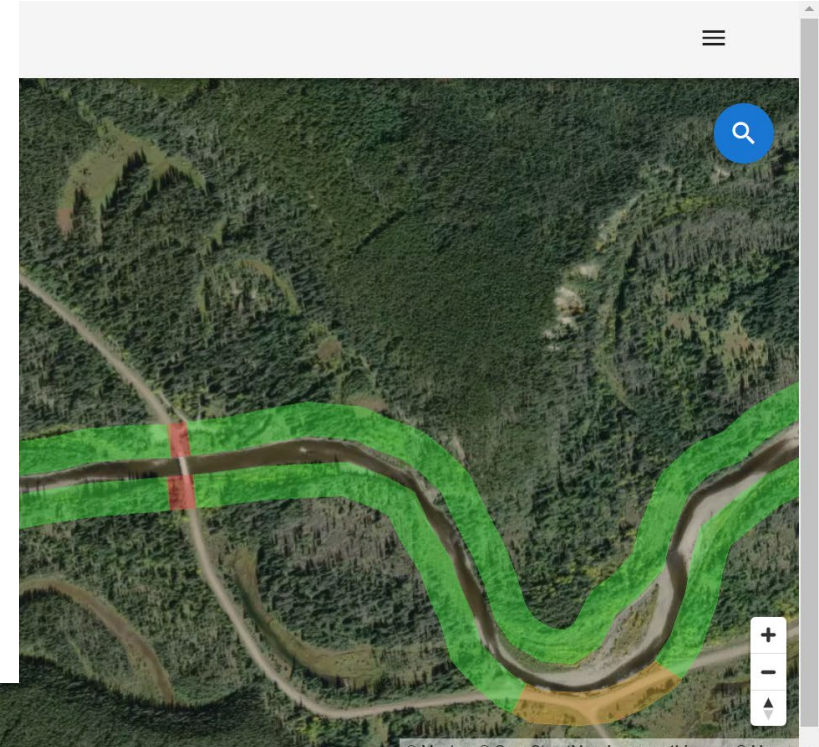




Riparian Web Portal



anresourcesab.info





Map & Tools



Map Layers



Basemaps

Streets



Satellite



Outdoors



Light



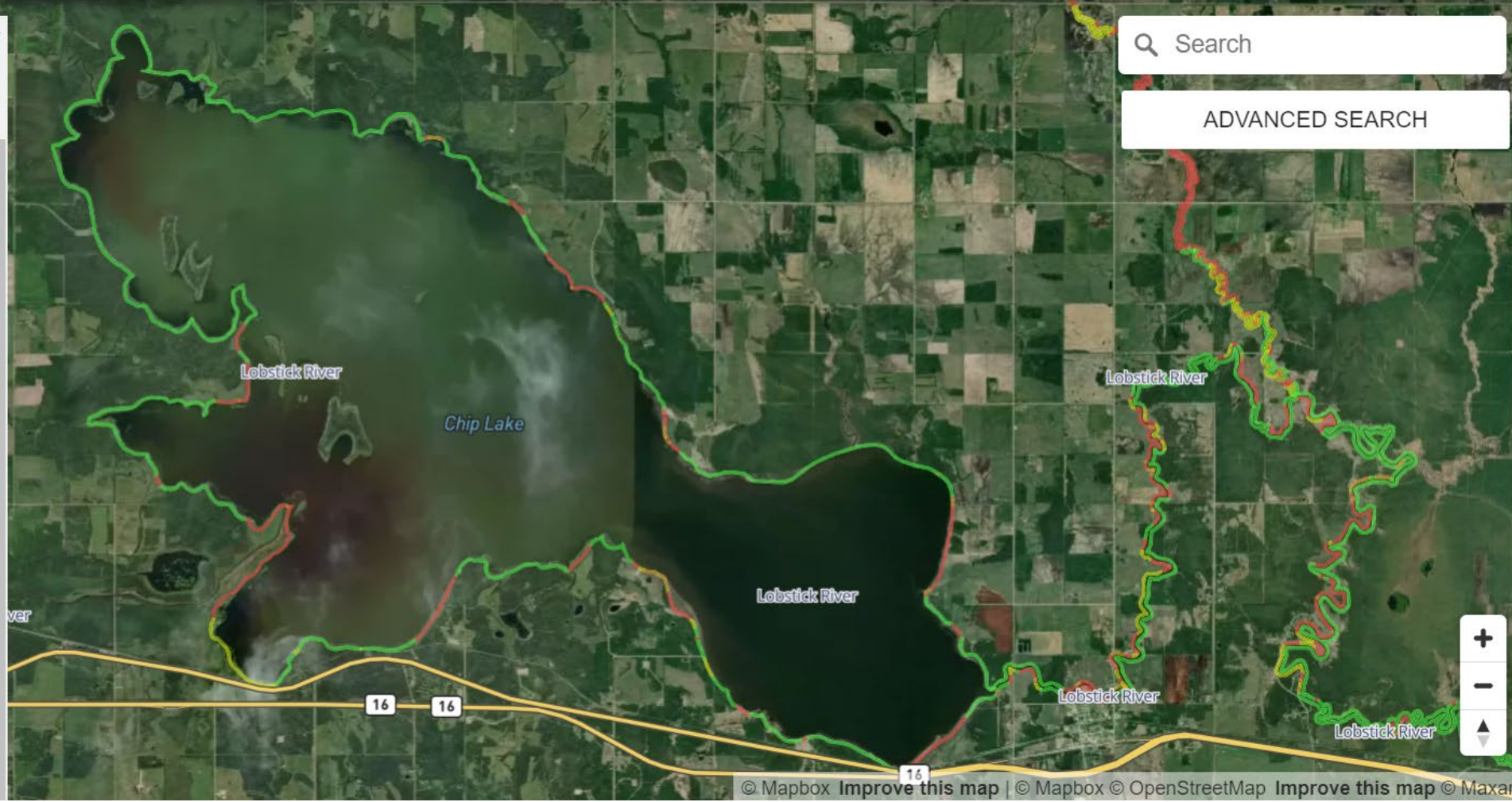
Dark



Layers



Tools



Search

ADVANCED SEARCH

RIPARIAN ASSESSMENT



Chip Lake

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

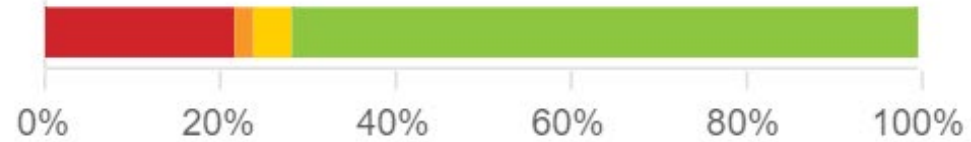
A GIS-based method and dataset was created to assess riparian intactness (or condition) at the watershed scale, including lakeshores and streams. The riparian area was assessed 50 metres back from the water line and given an intactness rating based on what is visible from satellite imagery.

63.5

Kilometres
Assessed

71.7%

High
Intactness



INTACTNESS RATING



HIGH

Vegetation present.
Little or no human footprint.



LOW

Vegetation present.
Human footprint prevalent.



MODERATE

Vegetation present.
Some human footprint.

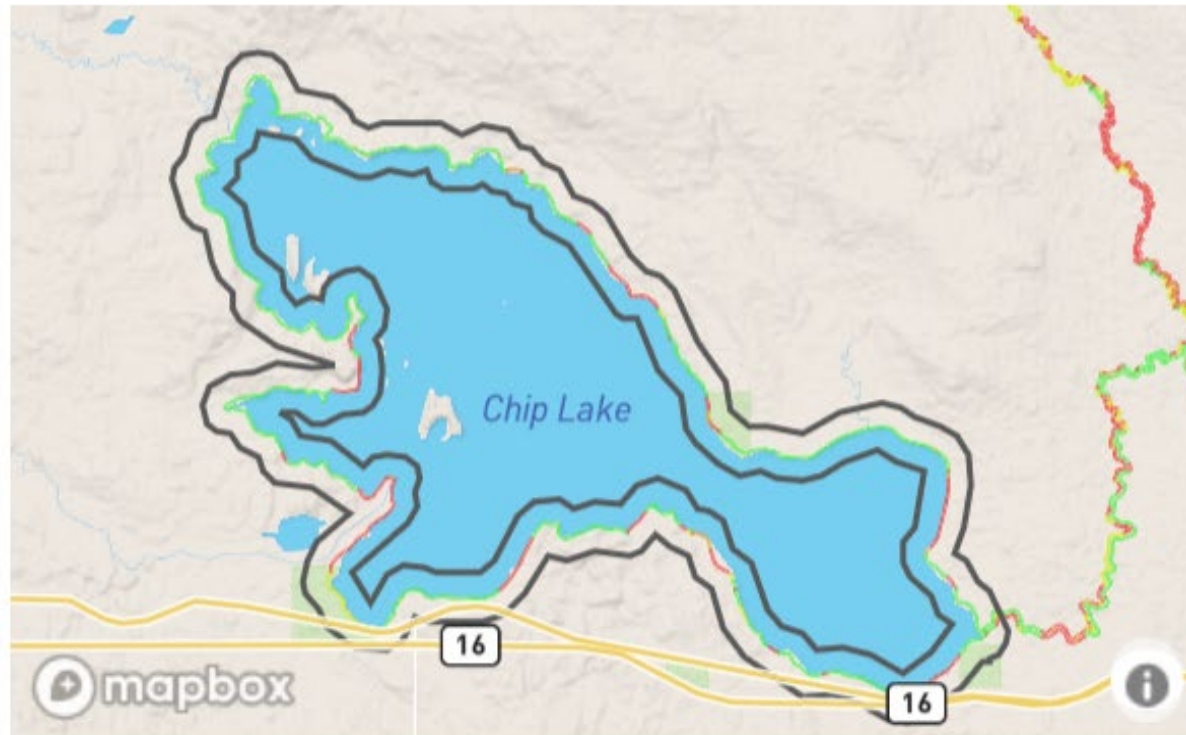


VERY LOW

Vegetation mostly clear.
Human footprint dominant.

Summary of Results

Out of the 63 km of shoreline assessed, 71.7% was considered to have high intactness, 4.4% was moderate, 2.2% was low, and 21.7% was very low.



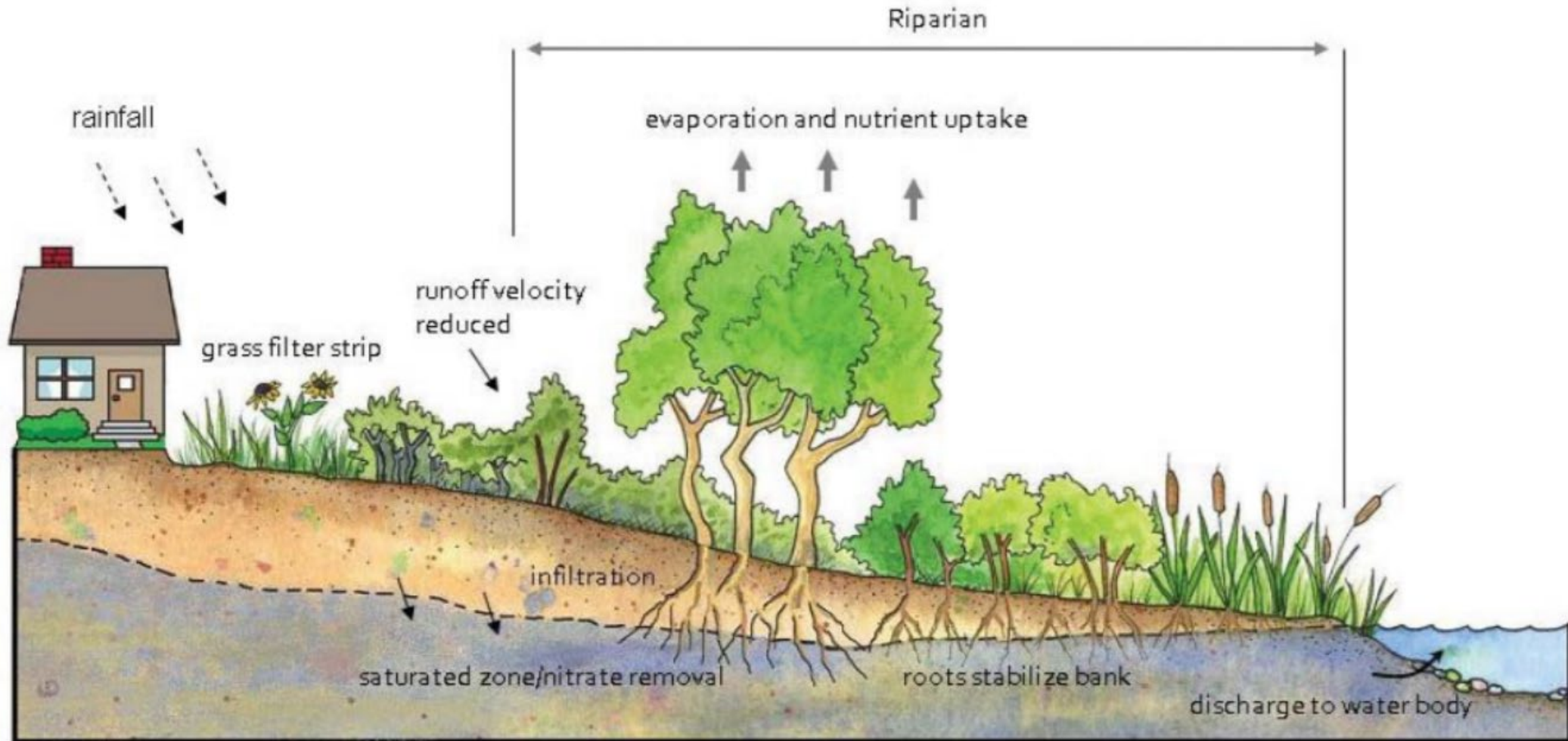
What is Riparian Intactness?



Illustration by: Terra Simieritsch



Why riparian (shoreline) areas?



Restoration Initiatives By Year




28 Projects at
9 Wetlands **1** Lake **18** Streams
  

4 in sub basins with **40** landowners in **4** counties


restoring & rehabilitating **495** acres of land and improving the health and functionality of **31** kilometers of riparian area


4 Restoration Initiatives

10 Fences Installed 
3 Invasive Species Pulls 
9 Offsite Waterers Installed 
11 Planting Projects 

5 Years of progress in **3** sub watersheds


5334km of shoreline data available on the **RIPARIAN WEB PORTAL**


\$107,000 in kind hours donated by **17** partners


Shoreline Packages and Information

Information Package
for
Lake Owners



Information Package
for
**Agricultural
Producers**



Information Package
for
Acreage Owners



The Impact on Community Stewardship



Pembina River Watershed Technical Advisory Committee



LEPA



Trout Unlimited
CANADA



Truite Illimitée
CANADA



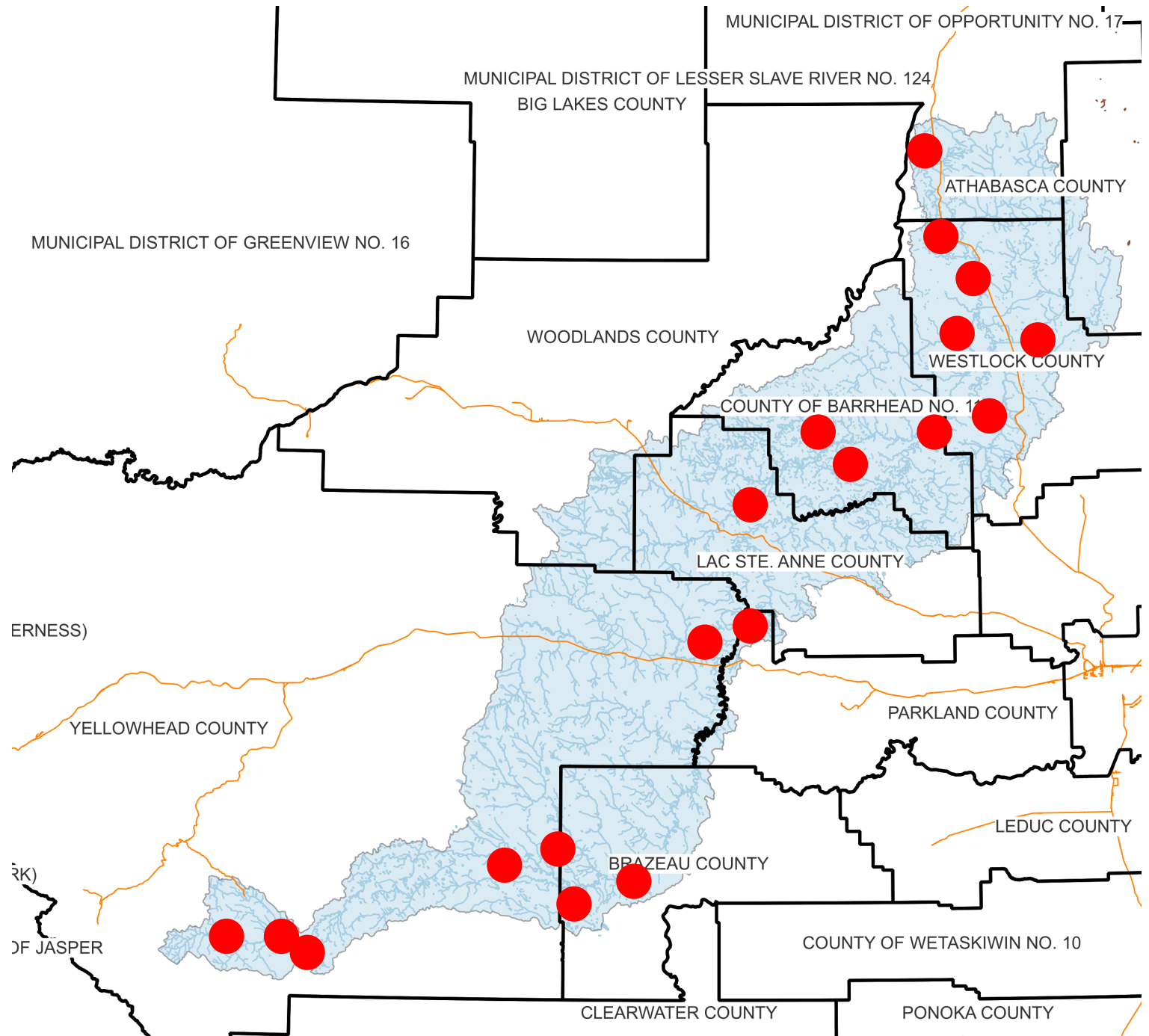
Lac Ste. Anne Métis



ALEXIS NAKOTA
SIOUX NATION

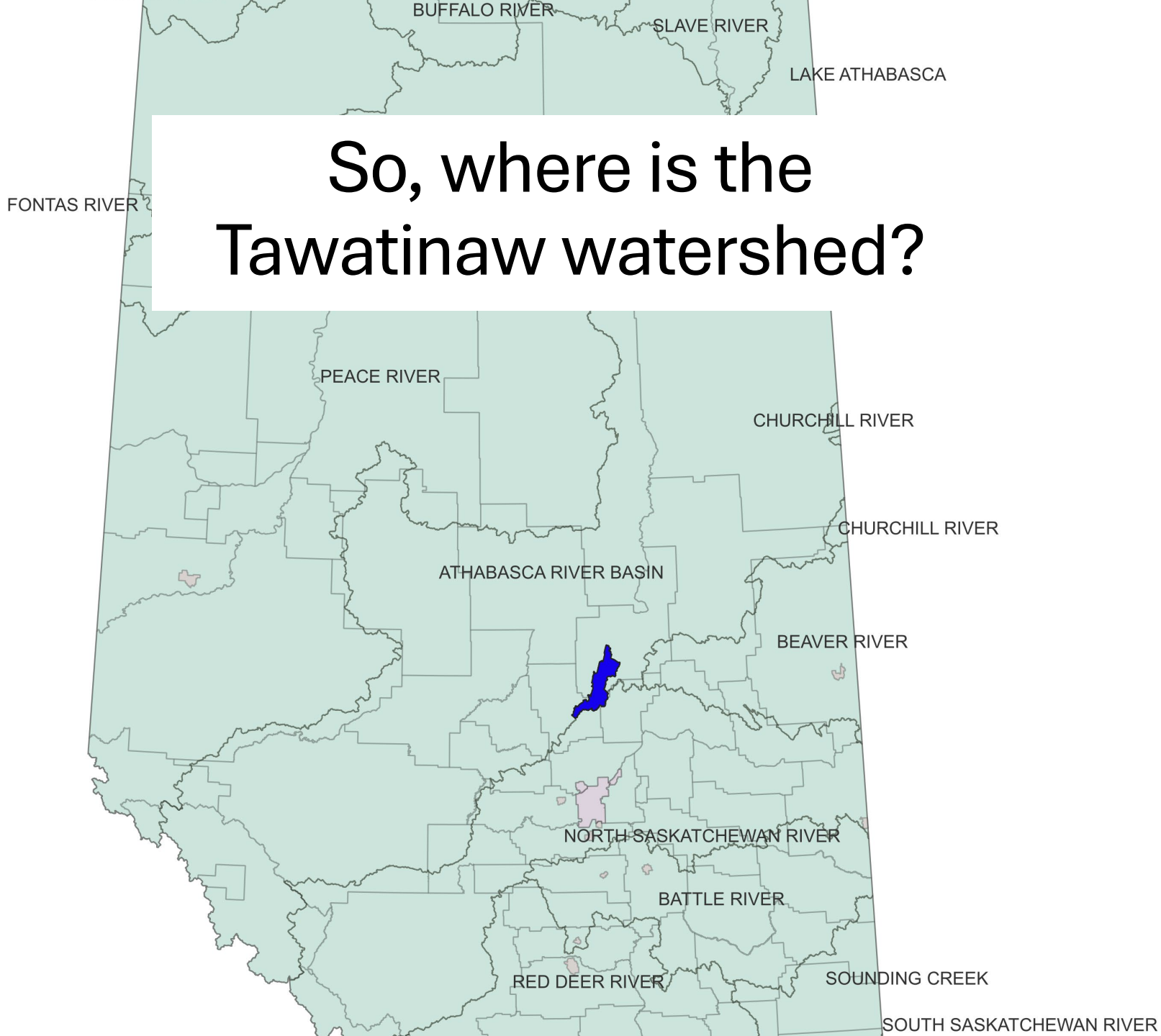


2-Year Water Quality Monitoring Program in the Pembina River watershed

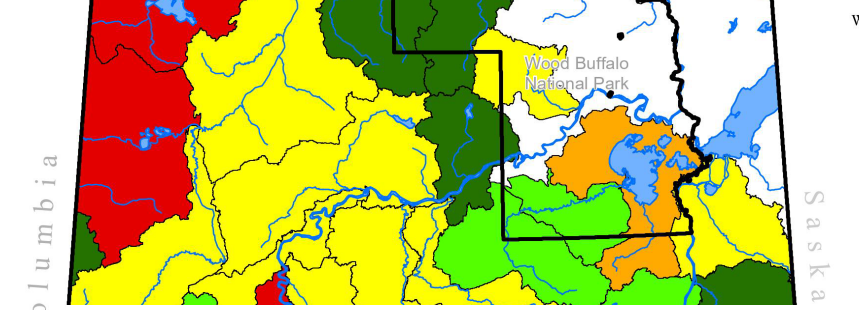


Tawatinaw Watershed Working Group

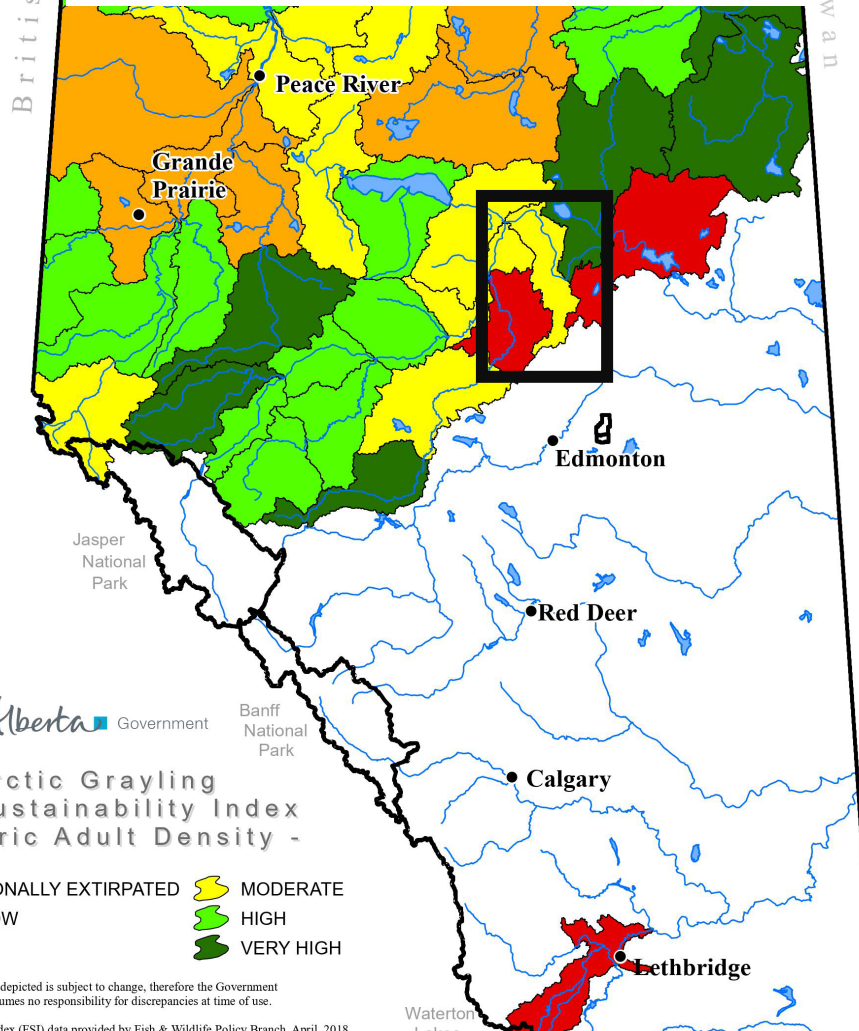




So, where is the
Tawatinaw watershed?



Historic Adult Density

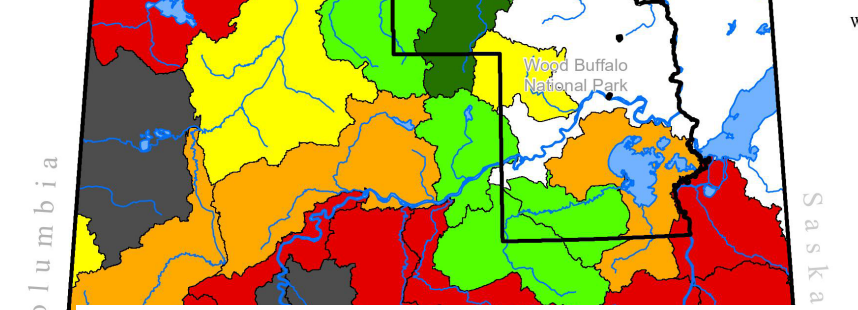


Alberta Government

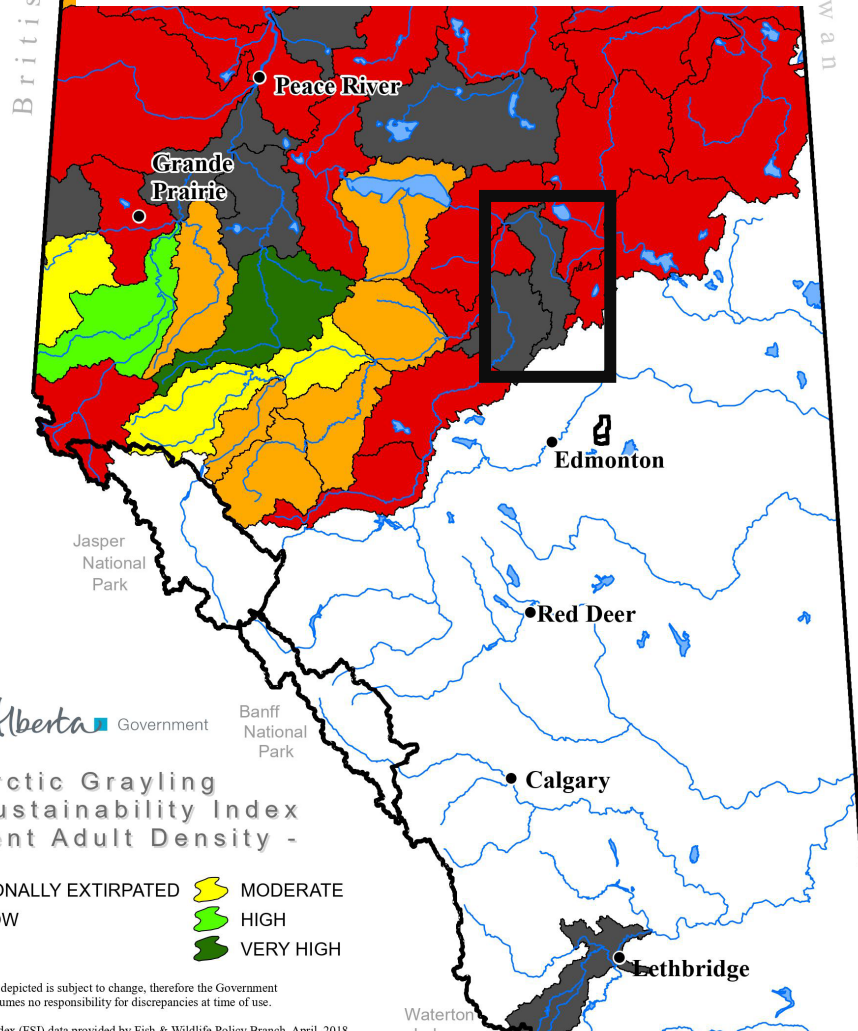
Arctic Grayling
Fish Sustainability Index
- Historic Adult Density -

- FUNCTIONALLY EXTIRPATED
- VERY LOW
- LOW
- MODERATE
- HIGH
- VERY HIGH

Information as depicted is subject to change, therefore the Government of Alberta assumes no responsibility for discrepancies at time of use.



Current Adult Density



Alberta Government

Arctic Grayling
Fish Sustainability Index
- Current Adult Density -

- FUNCTIONALLY EXTIRPATED
- VERY LOW
- LOW
- MODERATE
- HIGH
- VERY HIGH

Information as depicted is subject to change, therefore the Government of Alberta assumes no responsibility for discrepancies at time of use.

Tawatinaw Watershed Historical Video

A project from the Tawatinaw Watershed Working Group, aimed at communicating past efforts and encouraging further volunteer involvement in the Tawatinaw Watershed.

(Ethan Zapach)





Thank you!

Contact Information:

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Athabasca Watershed Council

(780) 213-4550

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