

Riparian Areas & Grazing Management

Canada has the most wetlands of any country in the world, making up 4% of the world's and 14% of Canada's landscape. While we may not typically think 'wet' when we talk about the southern region of the Prairie Provinces, 5-25% of this region is covered in freshwater marshes and shallow open waters. This is significant because half of the migratory birds on the continent pass through this region and use our wetlands. It also has a huge impact on agricultural producers, their practices and grazing management requirements.

So, what is a wetland?

According to the **Alberta Wetland Policy (2013)** a wetland is defined as:

Land saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, hydrophytic vegetation, and various kinds of biological activity that are adapted to a wet environment.

Is a slough a wetland?

Yes! A slough is another name for a mineral wetland like a marsh or shallow water wetland.

What is a riparian area?

The **Alberta Water Council** defines a riparian areas as:

- transitional areas between upland and aquatic ecosystems
- have variable width and extend both above and below ground
- influenced by and/or exert an influence on associated water bodies, which includes alluvial aquifers and floodplains, when present
- Riparian lands usually have soil, biological and other physical characteristics that reflect the influence of water and/or hydrological processes.

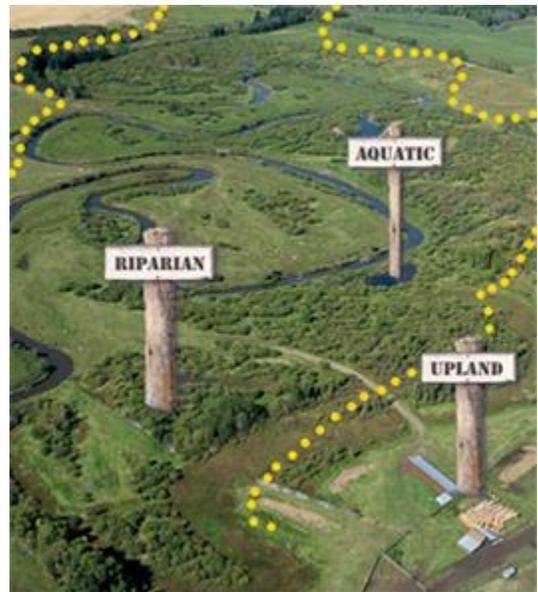


Image from: <http://cowsandfish.org/riparian/riparian.html>



These are all examples of riparian areas

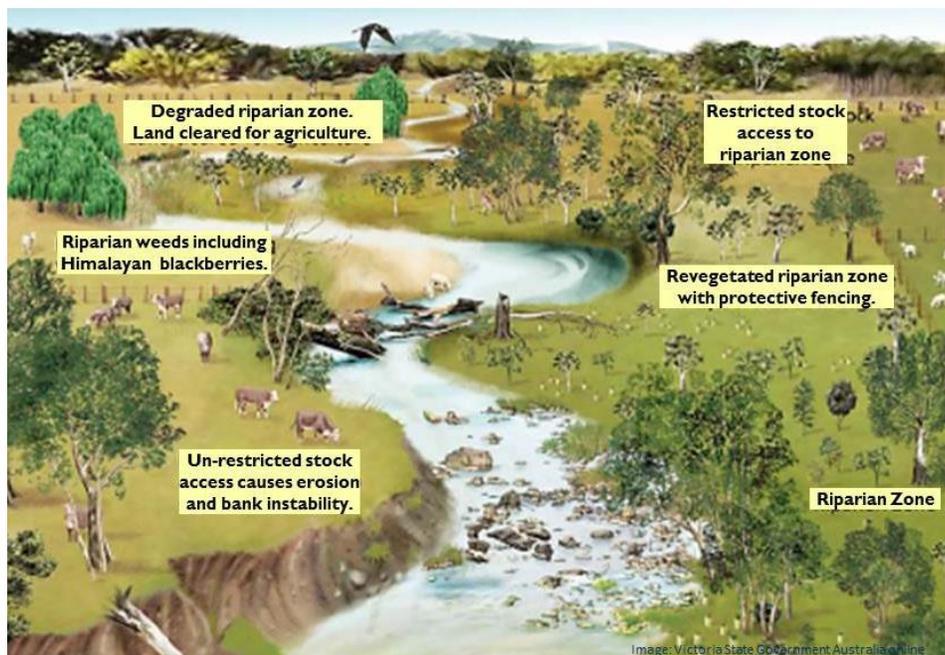
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Why protect your riparian areas?

Riparian areas are key to the ecosystem working properly. These unique areas can trap sediments, recharge groundwater, provide primary productivity and support biodiversity. If a riparian area is compromised, the watershed may experience:

- reduced water quality
- increased runoff, erosion and sedimentation
- reduced groundwater storage
- higher peak flows and lower base flows
- increased flood and drought frequency
- reduced habitat quality and food supplies

Degraded Riparian Area versus Healthy Riparian Area



Grazing Management

Grazing management has a huge impact on the health of a riparian area. Because of the migratory manner of the bison herds in Alberta, our riparian areas adapted to a grazing-rest management situation. This meant that there was never year-round constant grazing pressure on one riparian area, as the bison herds were always on the move. Today, in a fenced and settled landscape, we need to remember the grazing-rest management style in order to keep our riparian areas and water bodies healthy. When grazing is too intense at vulnerable periods, without rest, riparian health and functions will decline.

Plants require sufficient time to regrow and store energy that will allow them to regrow the following year. Producers need to therefore balance the needs of the animals with the available forage supply, distribute stock evenly, provide sufficient rest periods through the growing season and avoid grazing areas during fragile periods.

For more information check out these great links:

[AAF- Economics of Riparian Area Grazing](#)

[Society for Range Management](#)

[SK Prairie Conservation Action Plan](#)

[USDA Natural Resources Conservation Science](#)

Growing Forward Grants

There is Growing Forward 2 grant money available to agricultural producers to help protect their wetlands and riparian areas. Examples of projects that may be eligible include:

[On-Farm Water Management](#)

Construction, expansion or rehabilitation of wells, dugouts, dams, springs, etc to minimize impacts of livestock on riparian areas.

Fencing around water bodies to protect riparian areas.

[Regional Water Supply](#)

Strategic studies leading to the construction or capacity expansion of rural multi-user water supply infrastructure or pipelines to improve rural residents' access to water.

[Agricultural Watershed Enhancement](#)

This program facilitates the delivery of targeted, comprehensive extension programs, increased uptake of wetland restoration and riparian health beneficial management practices, with the objective of realizing significant and measurable changes within high risk watershed areas, focussed on addressing water quality issues.