

LIVESTOCK AND WATERSHEDS

IMPACTS ON WATERSHEDS

Poor grazing system management can negatively impact sensitive riparian areas and the watershed as a whole.

- Soil compaction from trampling reduces infiltration of rain water and spring runoff into the ground, leading to increased erosion and flooding.
- Trampling and overgrazing of willows and other vegetation, that stabilize banks, damage sensitive riparian area plants, reduce the overall amount of vegetation, and change the types of plants found in riparian and upland areas.
- An excess of livestock feces in the water and soil can cause possible E. coli contamination as well as nutrient overload resulting in reduced water quality and increased algae blooms.
- Trampling can increase exposed soil in riparian areas, resulting in erosion of banks and sedimentation of the water.
- Invasive weeds are introduced or spread. Biodiversity loss can change physical aspects of watersheds such as surface hydrology and regeneration of ground water.

WATERSHEDS

A watershed is an area of land that drains all of the water in that area into a single larger body of water (such as a larger river, lake or ocean).



According to the North Saskatchewan Watershed Alliance, the physical characteristics of a land (topography, geology, soils and ecosystems) form the watershed.

Edmonton and area exists in the North Saskatchewan River watershed, which has various subwatersheds.

Stretching from Banff past the Saskatchewan border, this watershed encompasses over 57,000 kilometers of land in Alberta.

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HEALTHY WATERSHEDS

Fortunately, landowners can reduce the negative impacts that livestock have on a watershed, and create safe habitats for wildlife while keeping their livestock healthy.

- Use wildlife-friendly fencing to fence off water bodies like wetlands and streams to prevent unwanted access by livestock. Wildlife-friendly fences allow wild animals to jump over or crawl under easily, but still keep livestock contained. Add fence reflectors to fences, especially near wetlands.
- Use seasonal or rotational grazing systems to reduce livestock impacts on small or intermittent wetlands.
- Provide an alternate water source. When given a choice, cattle will drink from a trough eight times out of ten, even if they have access to surface water. Cattle gain more weight when clean water is available to them, compared to watering directly from a pond or dugout.
- Maintain a well-vegetated buffer zone around water bodies to maintain or improve water quality in the watershed. You can accomplish this by planting riparian plants, such as willows, near your water body.
- Contact the ALUS Canada to find out how you may qualify to restore, retain or protect wetlands, riparian areas and other natural features of your land.

FOR MORE INFORMATION

Cows and Fish (formally known as the Alberta Riparian Habitat Management Society) specializes in working with communities and producers on riparian awareness and promoting riparian and watershed health. See their website for more information: www.cowsandfish.org.

ALUS Canada invests in farmers and ranchers who are producing acres of clean air, clean water, wildlife habitat and other ecosystem services in communities across Canada. See their website for more information: www.alus.ca.

Visit EALTs Hazardous Habitats webpage to learn more about reducing hazards for wildlife on your land, such as through wildlife friendly fencing, covering open posts, and adding reflectors to fences near wetlands or wildlife crossings to alert wildlife. See www.ealt.ca/hazardous-habitats for more information.