

Forum Notes: Biodiversity & Recreation

Biodiversity

- **Definitions:** Biodiversity is the variety of life in all its forms from genes to species through to ecosystems. The variability of living things and their relationship with other living things, and the habitat and ecological processes that support them.
- The Battle River Watershed is located in the Parkland Natural Region. The Parkland Region is a transition zone between grassland and boreal forest. It is generally wetter & cooler than grasslands to south, being flat to gently rolling and having thousands of wetlands, mostly small.
- The Parkland Region is the most DIVERSE natural region in Alberta. It occupies 37,000 km² most of which is private land. 67% of the Region's total area falls within the Battle Watershed.
- Less than 12% of Parkland Region's native vegetation remains. 4.4% is water, and the remaining 82% has been cultivated or turned into urban or industrial land. The majority of the remaining natural land is on rougher terrain or poorer soils. Less than 2% of the Region is protected, with most (84%) found on private land.
- The Parkland Region is made up of 4 major habitats: fescue grasslands, aspen woodlands, creeks & rivers, and lakes, sloughs & wetlands. There are 148 plant species found in the fescue grasslands alone. Some of the common wildlife found in the Parkland Region include: white-tailed deer, moose, elk, black bear, badgers, beaver and Canada & white-fronted geese. Wild bison, wolf and grizzly are no longer found in the Region.
- *Endangered* species found in Parkland Region include: Piping Plover, Bison*, Whooping Crane*. *Threatened* species include: Northern Leopard Frog**, Peregrine Falcon, Trumpeter Swan*, Ferruginous Hawk and Burrowing Owl. Species of *Special Concern* include: Spragues Pipit, Loggerhead Shrike, Long-billed Curlew, White-winged Scoter and Prairie Falcon.

Recreation

- At present, current recreation activities in the Battle River Watershed are not heavily dependent on water allocations. Recreational activities associated with water can be classified as consumptive and non-consumptive uses of water.
- Non consumptive uses of water includes recreation uses including boating, fishing and various winter sports and do not require a Water Act licence. In summary, these activities focus on the enjoyment of the natural features in the watershed.
- There are six major water features that are favourable for recreation within the Battle River watershed. These include Battle River itself and five lakes: Battle, Coal, Driedmeat, Miquelon and Pigeon. Although a number of smaller lakes are found throughout the basin, very few have recreational facilities associated with them.
- Many of the water bodies found within basin provide habitat for waterfowl, upland and game bird species, and consequently support hunting and can be considered to support recreational activities. The Battle Watershed is one of the most productive waterfowl areas in Alberta. Hunters take over 100,000 ducks and geese annually. Hunters in the watershed also take more than 10,000 moose, elk and deer annually.
- Some consider that the non-consumptive recreational values, opportunities and attractions are currently available because of the relative health of the Battle River watershed - where landscape beauty and biological diversity are still prominent. Although the watershed may not be managed for recreational opportunities, or even ecosystem health, recreational opportunities provide an indirect measure for ecosystem health and the intrinsic values associated with such.
- Recreational features like golf courses, ski hills, municipal parks and recreation areas that draw water for use in ponds or irrigation are identified as consumptive uses of water. These activities represent about 2 % of

* No longer found in Battle River Watershed

** May no longer occur in the Battle River Watershed – report sightings

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consumptive uses of Battle River watershed surface water and do require a Water Act licence. (1,195/59,975 dam³)

- Future demand for water for recreational purposes will depend on future participation in the two major recreational uses of water: golf courses and ski hills. Historical trends in Albertan participation in these activities show that participation in downhill skiing has declined steadily since 1984, while the demand for golfing has climbed steadily. Forecasts of water demands for recreational (golf course) purposes by 2030 show an 11% increase in demand over 2004 (current) uses – but that the increased demand would be for groundwater rather than surface water.

Parks & Protected Areas

- Alberta Parks have nine parks and protected areas in the Battle River Watershed. These include the following:
 - **Mount Butte Natural Area** is located at the upper end of Battle Lake. This area includes 157 acres with another 5.5 quarter sections in reserve status, embracing the upper end of Battle Lake. It consists of Dry Mixedwood Boreal Forest - black spruce tamarak fen, dwarf birch-willow shrubland, sedge wetland, Battle Creek meanders, Battle Lake shoreline, upland aspen-poplar-birch-white spruce. Mount Butte contains excellent wildlife habitat with information recreation opportunities
 - **Pigeon Lake Provincial Park** consists of 1,095 acres and 410 campsites on the northwest shore of Pigeon Lake. The parks receives about 70,000 visitors per year, and is a popular recreation destination for water based recreation activities such as fishing, boating, waterskiing, swimming etc.
 - **Peaceful Valley Provincial Recreation Area** is located just downstream of Battle Lake. It consists of 12.5 acres, with a day use area/lodge overlooking Battle River Valley. This site was donated for use by elderly, physically challenged or terminally ill people. It is a quiet place to immerse oneself in the beauty of nature and the river valley.
 - **Coal Lake Provincial Recreation Areas (North & South)** are situated on the Coal Lake reservoir on Pipestone Creek NE of Wetaskiwin. The northern recreation area consists of 14.5 acres designated for day use and fishing access. The southern recreation area consists of 41.6 acres, including 14 campsites, a day use area and access for fishing and boating.
 - **Miquelon Provincial Park** is the largest provincial park in the basin (2065 acres). Located north of Camrose on the northern boundary of the watershed, it has 275 campsites, running water, flush toilets, showers, and an amphitheater for park interpretation programs. Over 120,000 campers and day users visit the park annually.
 - **Big Knife Provincial Park** is the only Provincial Park on the Battle River main stem. It consists of 729 acres along Battle River and top end of Forestburg Reservoir. The park has a boatlaunch, day use area, and 50 campsites, visited by 7,500 to 8,000 people per year. Activities include recreational boating, canoeing, bird watching, front country walking trails, wildlife watching, bird habitat.
 - **Ribstone Creek Heritage Rangeland Natural Area** is a major and very significant natural heritage land base established for its ecological values. Its 20,577 acres protect a diverse complex of sand plains, active dunes, calcerous fens and riparian wetlands. The Natural Area is co-managed with Public Lands who oversees the grazing leases. The area is used by hunters, naturalists and some quadders.
 - **Wainwright Dunes Ecological Reserve borders** the SE boundary of the military base. It consists of 6,970 acres, it is isolated with no facilities and poor access. The reserve's purpose is preservation of its unique ecosystem. There is no recreation, but research and grazing (managed by Public Lands) do take place.
- **Driedmeat Lake** and **Battle Lake** are also important recreation areas with camping, fishing and wildlife viewing. Neither have facilities run by the Province.