Jan Lake
Representative Area
-- Concept Management Plan --

Saskatchewan Environment and
Resource Management
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Saskatchewan's Representative Areas Network Program

The government of Saskatchewan, through Saskatchewan Environment and Resource Management(SERM), is committed to the establishment of a system of ecologically important land and water areas across the province by the year 2000. This system is called the "Representative Areas Network".

Saskatchewan is made up of various landscapes. A representative area is a sample or piece of a particular landscape identified because of its important land-forms, wetlands, soils, plants, animal resources or cultural values. Representative areas are intended to allow for natural processes to occur. They can also serve as test sites that can be studied and monitored to measure how well we are managing natural resources and ecosystems elsewhere in the province.

As its name suggests, the Representative Areas Network must include land and waters that represent a broad range of ecological diversity. Saskatchewan's landscapes have been divided into 11 distinct "ecoregions", each characterized by it's geology, soils, climate, plants and animals. The Jan Lake Representative area lies within the Churchill River Upland Ecoregion, an ecoregion that is currently under-represented within the provincial Network.

Just as the reasons for choosing a particular site, so too, do the uses that are acceptable within new sites. In some sites, human activities and access may be limited so that the area's ecological resources and integrity can be managed or restored. In the majority of sites, however, land uses that are compatible with the program's ecological objectives can be accommodated. Suggestions and needs identified by local interest groups and users will largely determine the kinds and levels of activity that may occur within a particular site.

Consultation and input from local users helps to determine the best option for each site. Through these discussions, specific needs, concerns or issues can be addressed on a site-by-site basis and outlined in a management plan or strategy for the area.

First Nations people of the Peter Ballantyne Cree Nation and a wide range of users interested in this site, have been meeting and discussing potential uses within the Jan Lake area for the past year. Through these discussions, recommendations have been made to SERM regarding use, future management, and designation of the Jan Lake Representative Area. These recommendations, achieved through a group consensus process, are documented within this Concept Management Plan.

Description of the Churchill River Upland Ecoregion

The Churchill River Upland Ecoregion is located along the southern edge of the Precambrian Shield in north-central Saskatchewan. It is a horn-shaped area, with Wollaston and Amisk lakes on the rim and Turnor Lake, in the northwestern part, at the mouth. This is the largest ecoregion in the province, occupying 11.3 million hectares or 17% of the total area of Saskatchewan.

Gently rolling hills that slope gradually from 550 m in a central highland around and west of Cree Lake, to 300 m in the southeast around Amisk Lake, and to 275 m in the northwest around Lake Athabasca, reflect the major influence that bedrock has on the landscapes and drainage characteristics of this region.

The hills comprise a complex series of ridges, valleys, and shallow basins that are largely a reflection of folding, faulting, and fracturing of the bedrock. Other ridges and valleys are related to differential erosion of the various rock units. Much of this occurred in the vast periods of time prior to glaciation as the former mountains eroded to a peneplain. The glacial ice completed the process by scouring out low-lying areas, especially in zones of more easily eroded rock, thus enhancing the relief. The ice also smoothed and polished the faces and crests of resistant bedrock knobs and hills, while simultaneously plucking rock from the lee sides.

Present-day drainage of the south and eastern parts of these rolling hills to Hudson Bay via the Churchill and Nelson rivers, and of the northwestern parts to Lake Athabasca and Beaufort Sea, further demonstrates the control that bedrock has on the characteristics of the ecoregion.

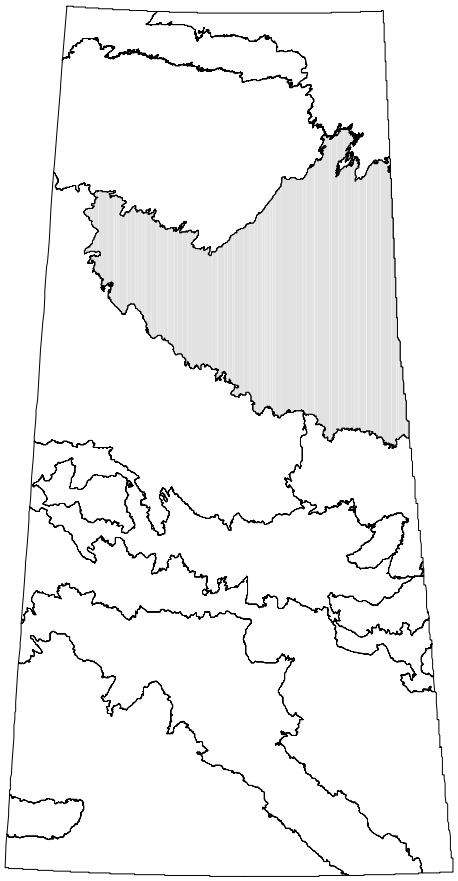
Black spruce dominates the region, with significant stands of jack pine on dry sand plains. A mosaic of forest types in various stages of succession is common because the rate of recovery of a burned area is dictated by timing and severity of fire, as well as by the supply of decolonizing material in adjacent unburned vegetation. As a result, there are six vegetation associations in the Churchill River upland; black spruce forest, jack pine forest, white spruce forest, mixedwood forest, peatlands, and wetlands.

Wildlife populations and the number of species found in the Churchill River Upland are higher than elsewhere on the Shield. This is largely due to the higher diversity of plant life which provides similarly varied habitat. An estimated 41 mammal species occur in the Ecoregion, with moose and black bear the most common. Woodland and barren-ground caribou also utilize the area. There are 204 bird species in the Ecoregion, with the Churchill River system containing the second highest concentration of nesting bald eagles in North America.

This ecoregion also contains the largest areas of base metal potential in the province. Gold and uranium are in a mining development phase. Forestry also has the potential to be a major employer in this area. Fishing, hunting, and trapping are other important resource uses.

Ecoregions of Saskatchewan

Map of Ecoregions



Jan Lake Representative Area

Important Features and Topography

The Jan Lake area is representative of natural ecosystems occurring within the southern reaches of the Churchill River Upland ecoregion. Although this site contains only one enduring feature type, it is a feature which is fairly extensive in this area of the ecoregion, thus making this site representative of a large portion of the landscape. The Jan Lake Representative Area is 32,905 ha./81,275 ac. in size.

Enduring features are used to guide selections in the Representative Areas Network program. Enduring features are specific rock, soil and land-form types that are very stable over long periods of time, and are likely to support characteristic plant and animal communities. Enduring Features are defined based on four specific factors:

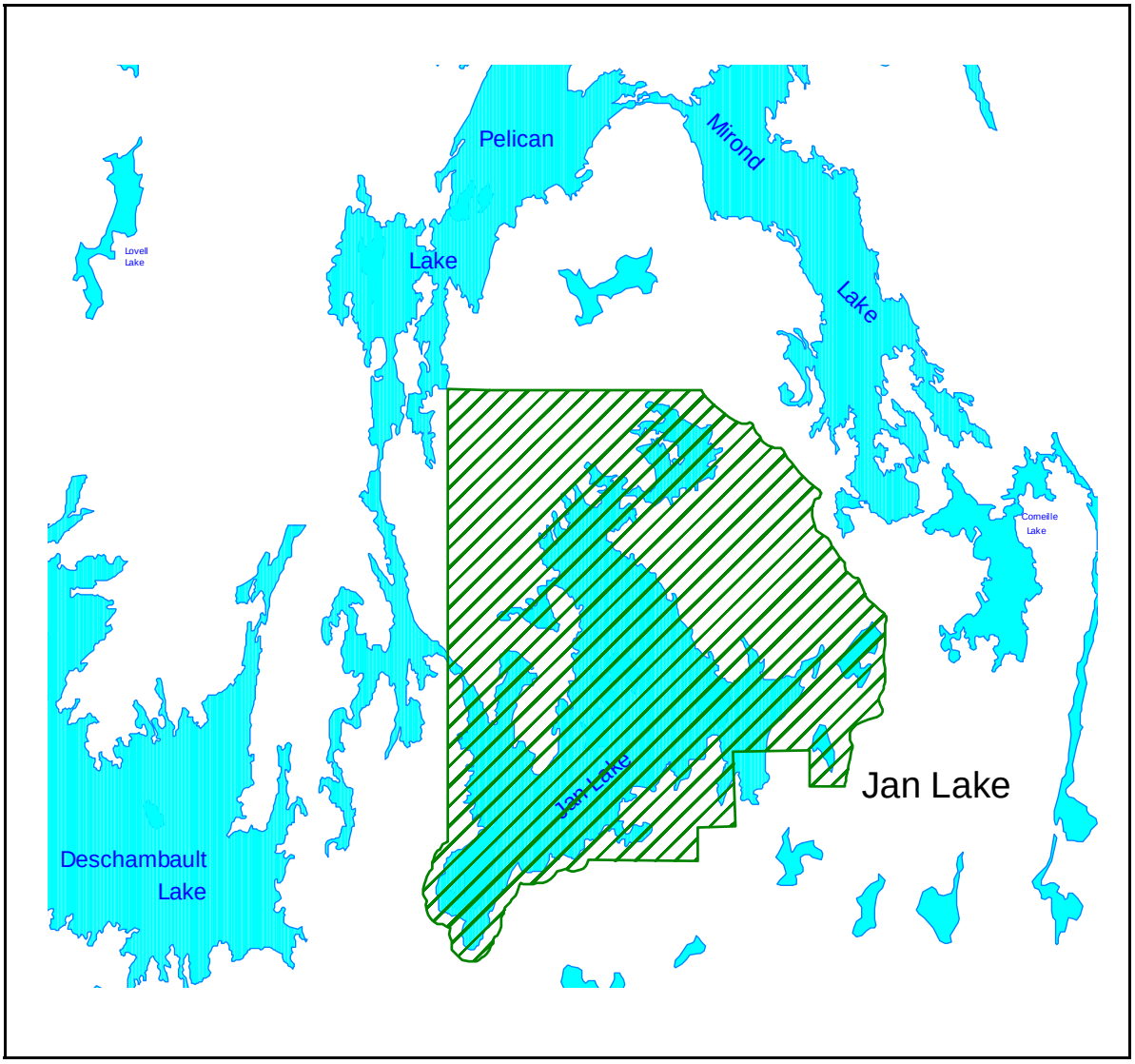
- the origin of the parent material: this relates to the method by which material such as soil, gravel or rocks was deposited (i.e. wind, water, glacial melt water)
- soil development: how soils were formed through various factors like climate, soil organisms, the nature of the parent material, the topography of the area, and time
- surface form: physical landscape features such as eskers or potholes
- slope: refers to the steepness or grade of the surface terrain

The Jan Lake site is comprised of extensive bedrock outcrops which, in combination with thin glacial till deposits, forms a rugged, rolling landscape. Jack pine and black spruce dominate the rocky ridges while some mixed forests of pine, black and white spruces, aspen and birch are supported on the thin soils between large outcrops. The landscape is also dotted with occasional lowlying pockets of black spruce and tamarack bogs and fens, often associated with small open waterbodies.

Indicative of the surrounding area in the Churchill River Upland, the site provides habitat for moose, woodland caribou, bear, wolves, beaver, marten and fisher, just to name a few. Also present are a mix of forest bird species, as well as numerous birds associated with a large waterbody - Jan Lake, including loons, mergansers, grebes, ducks and bald eagles. The large waterbody, with a number of inlet streams, also provides aquatic habitat for game fish such as northern pike, walleye, perch and lake trout, and associated forage species such as shiners, sticklebacks, and sculpin.

The boundary of the Jan Lake Representative Area is shown on the following map.

Jan Lake Representative Area



Site Condition

Due to the rugged nature of the area, it has undergone relatively little site altering disturbances. While the east side of the representative area is bounded by a major road, very few access trails have been developed off the main route. Access into the rest of the site is via Jan Lake and

adjoining water systems. As such the site remains relatively unaltered by human disturbances.

While the majority of the site is classed as immature and mature forests of jack pine and black spruce, some old stands dominated by white spruce and black spruce, do occur. These are showing signs of stand conversion to a late successional stage through the ingrowth of balsam fir. These old spruce stands are also showing some damage from spruce budworm.

Current Uses

The Jan Lake area has been used for many generations for traditional hunting, trapping and gathering purposes. There are several trappers who annually set traplines throughout the area. Associated with these traplines are several relatively primitive cabins that continue to be used on an annual basis. Many of these are covered by SERM-issued traditional use permits, with some others built and maintained as part of individual recognized treaty rights. Activities like mushroom and berry picking have taken place in the area for years. The Jan Lake Representative Area is bordered in the southeast by a provincial recreation site. This site draws in significant tourism for the area with a yearly visitation to the four main outfitters and campground of approximately 4,500 people.

The Jan Lake Representative Area lies within an area of Crown land that is currently being negotiated for a timber supply licence for the Peter Ballantyne Cree Nation / Ainsworth partnership.

Site Use and Management

Allowable Activities and Developments:

trapping
hunting
angling
bait fishing
mushroom picking, where mushrooms may be sold
berry picking, where berries may be sold
outfitting, including setting of bear bait stations
exercise of treaty rights
development of reasonable access to support traditional or treaty uses
hiking and backpacking on existing trails
existing wild rice growing
educational and research related activities

Carrying out of these activities would be subject to normal licensing or permitting requirements, as may be applicable

Activities and Developments Not Allowed:

commercial timber harvesting
new trails that could be used for recreational purposes by motorized vehicles
mineral development and/or mineral exploration
recreational cottage subdivisions
new residential and/or recreational cabin leases
new base camps to support tourism or commercial ventures
hydroelectric projects
gravel pits
new or expanded outfitting operations
new wild rice growing areas
weirs, dams or control structures on or in streams
commercial harvest of non-timber forest products
collection of rare and endangered plants
exotic fish introductions

Jan Lake Advisory Board

Saskatchewan Environment and Resource Management (SERM) will establish an advisory board comprised of representatives of the Peter Ballantyne Cree Nation, stakeholders, interest groups, users and/or other party recognized as having an interest or role in the ongoing management and use of the Jan Lake Representative Area.

The Jan Lake Advisory Board shall meet at the request of SERM to act in an advisory capacity to review and recommend specific activities, management tools, research and educational activities that may be considered for application within the representative area. Once the Board has been struck, a comprehensive Terms of Reference shall be established and adopted by the Board and SERM.

Activities and uses not specifically stated in the Concept Management Plan that are under consideration for the Jan Lake Representative Area shall be reviewed by the Advisory Board prior to implementation. An example would be construction of an access road through the north end of the Jan Lake Representative Area, linking the Sandy Narrows Reserve with Highway 135.

Site Designation

Formal designation of the surface area of the Jan Lake site is as a Representative Area, created by regulations established pursuant to *The Ecological Reserves Act.*

A representative area is legally protected natural area which may serve as a benchmark for measuring environmental changes and the ecological health of this and other areas in

Saskatchewan. Representative Areas can also be used to preserve ecological and geological features and provide opportunities for scientific research and study related to ecological health. The Jan Lake Representative Area contains features and resources that fit each of these ecological purposes.

The Crown minerals underlying the surface of the Jan Lake Representative Area will be managed by a Crown Minerals Reserve established by Saskatchewan Energy and Mines pursuant to *The Crown Minerals Act*. A Crown Reserve withdraws the minerals from disposition for exploration or development purposes, thereby affording maximum protection for the site's full range of resources.