

Wapawekka Hills
Representative Area

-- Concept Management Plan --

**Saskatchewan Environment and
Resource Management
January, 1999**

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 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 lands and waters that represent a broad range of ecological diversity. Saskatchewan's landscapes have been divided into 11 distinct "ecoregions", each characterized by its geology, soils, climate, plants and animals. The Wapawekka Hills Representative Area lies within the Mid-boreal Upland Ecoregion, an ecoregion that is currently under-represented within the provincial Network.

Just as the reasons for choosing a particular site vary, 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.

The Wapawekka Hills Local Stakeholder Advisory Committee, which includes representatives from a wide range of users, the Lac La Ronge Indian Band, and other people interested in this area, have been meeting and discussing potential uses within the Wapawekka Hills area for more than two years. Through these discussions, recommendations have been made to SERM regarding use, future management, and designation of the Wapawekka Hills Representative Area. These recommendations, achieved through a facilitated group consensus process, are documented within this Concept Management Plan.

Description of the Mid-boreal Upland Ecoregion

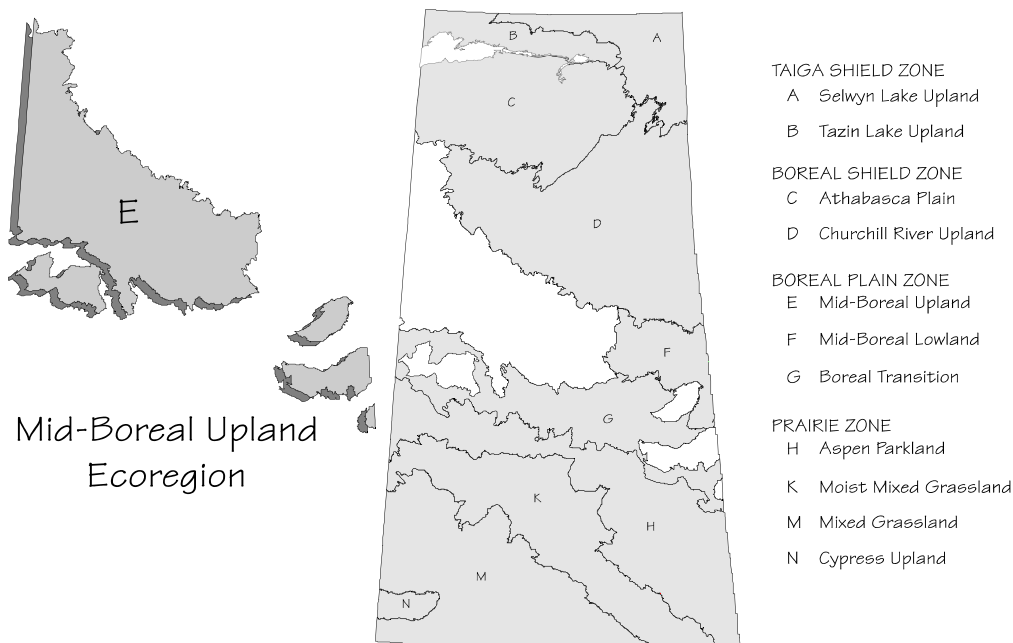
The Mid-boreal Upland Ecoregion occupies over 10 million hectares or 16% of the province. It includes rolling uplands and undulating plains in the north, as well as distinct, rolling uplands and unique escarpments in the more southerly portions. Most of the ecoregion contains well-drained sandy or silty soil types.

Within various parts of the ecoregion, largely dependent on moisture levels and nutrient richness, eight major forest growth types are supported: aspen forest, jack pine forest, white spruce forest, mixedwood forest, black spruce-jack pine forest, black spruce forest, peatlands and other boreal wetlands.

The ecoregion is home to a wide variety of wildlife including moose, black bear, woodland caribou, white-tailed deer, mule deer, elk, muskrat, gray wolf, beaver, meadow vole, northern flying squirrel and least chipmunk. Bird species include ruffed grouse, chimney swift, whip-poor-will, great gray owl, blue jay, sharp-shinned hawk, broad-winged hawk, yellow-bellied sapsucker, common goldeneye, sandhill crane and many species of warblers, solitary vireo, western tanager, rose-breasted grosbeak, and ruby-throated hummingbirds.

The combination of cold climate, sandy soils, hilly landscapes and the number of water bodies make the Mid-boreal Upland Ecoregion less attractive for agricultural uses like livestock management or crop production and more commonly used for forestry, water-oriented recreation, hunting and trapping activities.

Ecoregions of Saskatchewan:



Wapawekka Hills Representative Area

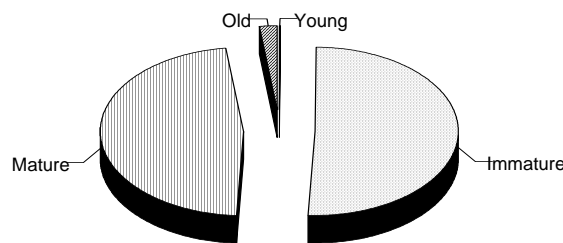
Important Features and Topography

The Wapawekka Hills site (67,715 ha/167,321 ac) is representative of the mid-boreal upland of Canada's Boreal Plain Ecozone. The Wapawekka Hills contain an extremely rich mixture of plants and animals that occur here because of the types and range of forested habitats that also occur here. These varied forest habitats are the result of disturbances such as fire, insect outbreaks, wind and other natural processes.

The site contains a variety of unique geological features which cover the Wapawekka Plateau, the Wapawekka Escarpment and the Wapawekka Lake Plain. The Wapawekka Hills rise from 457 to 805 meters (1500 to 2640 feet) above sea level, which is the highest elevation in the province next to the Cypress and Pasquia Hills. The upland is a gently undulating to hilly plain, with strongly dissected north and east-facing slopes. Surface deposits contain mainly loam and clay loam textured glacial till, and smaller amounts of sandy glaciofluvial and organic deposits. The southern part of the area is underlain mainly by sandstones and shales. Shale outcrops are particularly prominent in the Hague Creek area.

The fluted glacier-deposited debris on the plateau of the hill contain open bogs mixed with black spruce ridges. Upland coniferous stands of jack pine and black spruce, and mixedwood stands of white spruce and aspen dominate the hill slopes, while lowland bogs of black spruce and treed muskeg cover much of the lake plain. A number of the forest stands on this site are in the early to mid growth stages, being between 40 and 100 years of age, although there is an unusually high proportion of mature/old forest in the Hills compared to surrounding forested areas. Along with the typical understory vegetation of common herbs, grasses and mosses, a large number of provincially rare species also occur here, such as northern twayblade, lady fern and golden saxifrage.

Age Classes



Enduring features are used to guide site 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 an area, and time
- < surface form: physical landscape features such as eskers or potholes
- < slope: refers to the steepness or grade of the surface terrain

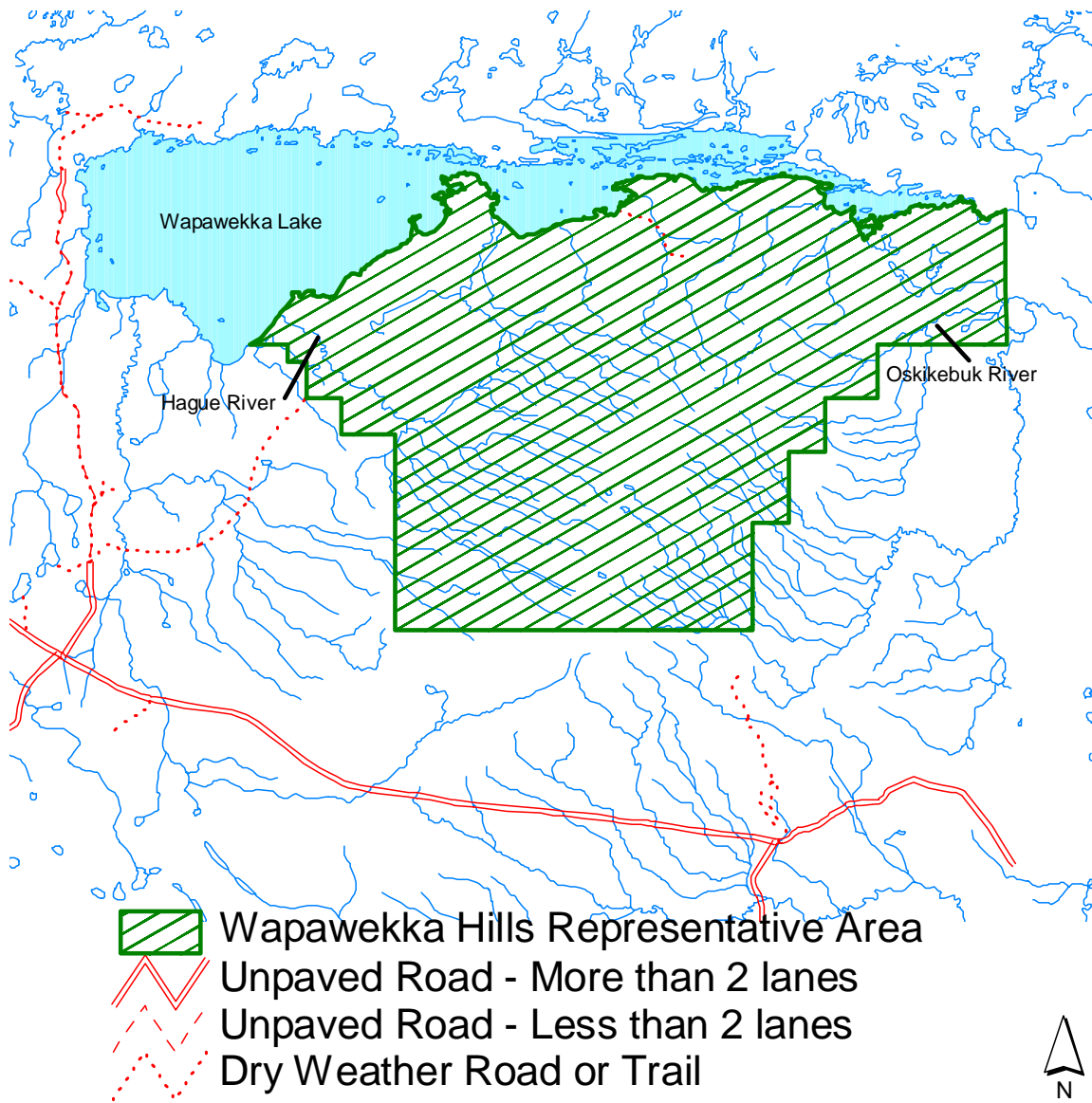
Within the overall Representative Areas Network, the Wapawekka Hills Representative Area is important because of the number and diversity of enduring features represented in the site. Six different enduring feature types occur within this relatively large (67,715 ha/167,321 ac) area.

Preliminary field assessments have identified a variety of mammals including black bear, woodland caribou, moose, white-tailed deer, beaver, muskrat, fisher and red fox. Red-tailed hawks, bald eagles, ospreys, loons, woodpeckers, a variety of song birds, and nesting sandhill cranes have also been noted on-site.

This representative area contains watersheds important to the region. The area is dissected by numerous streams originating on the Wapawekka Plateau, which flow northwest towards Wapawekka Lake and southeast into the Bear and Oskikebuk Rivers. Smaller streams in the proposed area provide limited spawning habitat for fish species due to steep slopes and physical barriers. Larger streams provide good spawning and year-round habitat for walleye, northern pike, suckers and whitefish. The Oskikebuk River is an important walleye spawning river; portions of it are closed to fishing from March 1 to June 15 annually.

The boundary of the Wapawekka Hills Representative Area is shown on the following map.

WAPAWEKKA HILLS REPRESENTATIVE AREA:



Site Condition

Significant portions of the Hills remain virtually untouched by humans, making this area pristine and unique. Most likely due to its rough topography, the site has not had any significant road or major trail development. A few bush trails provide limited access to only a portion of the site, leaving most of the area largely undisturbed. The forest is a mixture of spruce, aspen, birch, and balsam fir, and includes a number of mature stands that have not been subjected to major fires or other disturbances for an unusually long time - often over 60 years and up to 140 years.

Current Uses

The Wapawekka Hills have been used for many generations for traditional hunting, trapping and gathering purposes. There are several trappers who annually set traplines throughout the Hills. 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.

One wild rice licence has been issued by SERM for the Horn Bay area located at Wapawekka Lake's southeastern reaches.

Two outfitters are licensed within the proposed representative area. One of these is entitled to outfit for bear (including the setting of baits) within a portion of the Wapawekka Hills area, although no camps or fixed-roof facilities are located within the site. The second outfitter maintains a base fishing camp located on a one-acre privately-owned land parcel lying just inside the northeastern boundary of the site, although as a fishing outfitter, all client activity occurs on Wapawekka Lake outside of the representative area boundary. One recreational lease holder is also located just inside the boundary of the representative area, immediately adjacent to the fishing outfitter camp.

SERM maintains a tower within the site which is operated in conjunction with forest fire monitoring and suppression activities. Activities like mushroom and berry picking have taken place in the Hills for several years.

The southern shores of Wapawekka Lake, including Hague Creek, contain significant features that are an important part of Indian heritage and culture. Within this general area, medicinal plants are gathered in the traditional manner, as is pipestone which is used in carvings and craftwork. Several additional sites are known to contain native artifacts consistent with historical residency in the area, with one site still being used for traditional ceremonial purposes.

Three relatively small mineral claim areas lie within the boundaries of the representative area. These claims are active although two of them are due to lapse in early spring, 1999,

unless the claimant takes steps to renew them. The mineral resources have not been developed, meaning that surface disturbance has been minimal. Exploration activities associated with these mineral claims have been carried out through helicopter and pedestrian access.

Although the Wapawekka Hills Representative Area lies within the forest management area (FMA) of Weyerhaeuser Canada Ltd., it has not been commercially harvested. Weyerhaeuser Canada Ltd. and SERM have reached an agreement whereby all of the timber resources within the representative area have been relinquished by Weyerhaeuser. This means that no commercial forest harvesting will occur in this area in the future, a fact that is particularly important in ensuring the steep slopes of the Wapawekka Hills are preserved.

As is typical in the boreal forest, the Wapawekka Hills have periodically been subjected to forest fire disturbances, although it appears that the last major occurrence may have been more than 60 years ago.

Site Use and Management

Allowable Activities and Developments:

- U** trapping
- U** hunting
- U** fishing
- U** mushroom picking, where mushrooms may be sold
- U** berry picking, where berries may be sold
- U** outfitting, including setting of bear bait stations
- U** exercise of treaty rights
- U** development of reasonable access to support traditional or treaty uses
- U** hiking, backpacking and nature appreciation on existing trails
- U** zero impact mineral exploration (geological mapping, prospecting, geophysical surveys) in identified special management areas
- U** pipestone collection
- U** research (including determining the role of prescribed burns and/or tree cutting) and educational activities, subject to prior review and direction from Wapawekka Hills Advisory Board
- U** existing wild rice growing

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

Activities and Developments Not Allowed:

- Y** commercial timber harvesting
- Y** new trails that could be used for recreational purposes by motorized vehicles
- Y** disruptive mineral development and/or mineral exploration, except in identified special management areas and subject to SERM approval/conditions for surface access
- Y** livestock for personal transport
- Y** grazing or livestock containment areas/corrals
- Y** recreational cottage subdivisions
- Y** residential and/or recreational cabin leases
- Y** new base camps to support tourism or commercial ventures
- Y** hydroelectric projects
- Y** research/study plots that require major disturbance, disruption or destruction of ecological integrity of site
- Y** game ranching
- Y** gravel pits
- Y** new or expanded outfitting operations
- Y** new wild rice growing areas
- Y** fire salvage logging
- Y** weirs, dams or control structures on or in streams
- Y** fish introductions of exotic or non-native species in Wapawekka Lake or the streams running throughout the representative area
- Y** aquaculture (cage rearing) of exotic or non-native species in Wapawekka Lake
- Y** aquaculture (cage rearing) in the streams running throughout the representative area

Wapawekka Hills Advisory Board

Saskatchewan Environment and Resource Management (SERM) will establish an advisory board comprised of representatives of the Lac La Ronge Indian Band, stakeholders, interest groups, users, and/or any other party recognized as having an interest or role in the ongoing management and use of the Wapawekka Hills site.

The Wapawekka Hills 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 that are not specifically stated in this Concept Management Plan that are under consideration for the Wapawekka Hills Representative Area shall be reviewed by the Advisory Board prior to implementation.

Site Designation

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

A representative area is a legally protected natural area that 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 Wapawekka Hills contain features and resources that fit each of these ecological purposes.

The Crown minerals underlying the surface of the Wapawekka Hills site will be managed by zoning in two different categories:

- 1. The majority of the site's mineral resources fall under the protection of a Crown 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.**
- 2. A special management area encompasses approximately 20% of the Wapawekka Hills site. Future mineral exploration in the special management area would only occur subject to specific restrictions (including submission of an environmental protection plan and at certain times or via methods approved by SERM) in order to minimize surface disturbance and long-term impact on ecological resources in the area. Should a significant mineral find be discovered, de-regulation of the area to be developed may be considered at that time.**

These Crown mineral management zones are outlined on the following map:

WAPAWEKKA HILLS CROWN MINERALS MANAGEMENT ZONES:

