

# PURPOSE STATEMENT

February 2007

for Big White Mountain  
Ecological Reserve



Ministry of Environment,  
Environmental Stewardship  
Division

Big White Mountain  
Ecological Reserve

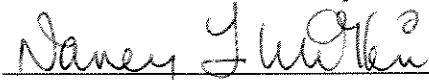
# Purpose Statement

Approved by:



Date: Feb. 15, 2007

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Environmental Stewardship Division



Date: Mar. 8, 2007

Nancy Wilkin  
Assistant Deputy Minister  
Environmental Stewardship Division

# Big White Mountain Ecological Reserve

## Purpose Statement

### Background Summary

The 951 hectare Big White Mountain Ecological Reserve lies on the northern flank of Big White Mountain about 42 km east of Kelowna. In addition to the mountain top at 2,315 metres, the Ecological Reserve includes, on the east side, a very small portion of the upper Whitefoot Creek and on the north side the upper-most portion of a tributary of the West Kettle River. The Ecological Reserve abuts Big White Ski Resort which is accessed off Highway 33.

The Ecological Reserve has no direct road access from the ski resort side but the ski area lift terminals are located at several points along the Ecological Reserve's southern boundary. A logging road terminates on the northern edge of the Ecological Reserve.

Some ski use of the upper portion of the Ecological Reserve from the Big White resort area occurs although it is outside the ski area boundary. In the past the public was invited to use the lifts during special summer promotional efforts which resulted in some hiking use of the upper portions of the Ecological Reserve. The lifts do not presently operate in the summer. The logging road access on the north side has resulted in some snowmobile use of the lower portion of the Ecological Reserve.

### Primary Role

The primary role of Big White Mountain Ecological Reserve is to protect a small example of the Engelmann spruce-Subalpine Fir and Alpine Tundra zones in the southern interior. The Ecological Reserve protects old growth stands of Engelmann spruce and sub-alpine fir and high elevation wetlands. It is also representative of the only true alpine in the Northern Okanagan Highland Ecoregion with large areas of krummholz. Known rare species include Engelmann's sedge (*Carex engelmannii*), Elmer's Indian paintbrush (*Castilleja elmeri*), alpine Indian paintbrush (*C. rhexifolia*) and alpine-wintergreen (*Gaultheria humifusa*).

## Protected Area Values and Significance Summary Matrix

### Conservation:

#### Representation

Ecosection



Northern Okanagan Highland – a small protected area contributing 3.64% of the protected areas system representation of this ecosection, which is under – represented in the protected areas system (only 3.48% protected).

Biogeoclimatic subzone/variant



IMAun – minimal (0.2%) contribution to the protected areas system representation of this subzone/variant. This subzone/variant is very well represented (29.8%) in the protected areas system.

ESSFdcw - small contribution (2.96%) to the protected areas system representation of this subzone/variant. This subzone/variant is very well represented (36.7%) in the protected areas system.

ESSFdcp - moderate contribution (7.4%) to the protected areas system representation of this subzone/variant. This subzone/variant is very well represented (43.4%) in the protected areas system.

ESSFdc1 – contributes 1.4% to the protected areas system representation of this subzone/variant. This subzone/variant is moderately represented (9.2%) in the protected areas system.

Special Features



Mountain top and headwaters of 2 streams, alpine ecosystem on north aspect (potential climate change refugium).

Rare/Endangered Values



Engelmann's sedge (*Carex engelmannii*), Elmer's Indian paintbrush (*Castilleja elmeri*), alpine Indian paintbrush (*C. rhexifolia*) and alpine-wintergreen (*Gaultheria humifusa*).

Scientific/Research Opportunities



Monitor effects of climate change on alpine vegetation community.

### Cultural Heritage:

Representation

Special Feature

**Other Management Considerations:**

Other Designations

Relationship to Other Protected Areas

Collaborative Management Arrangements

Partnerships

Vulnerability

Relationship to Other Strategies

**Area:** 951 hectares.

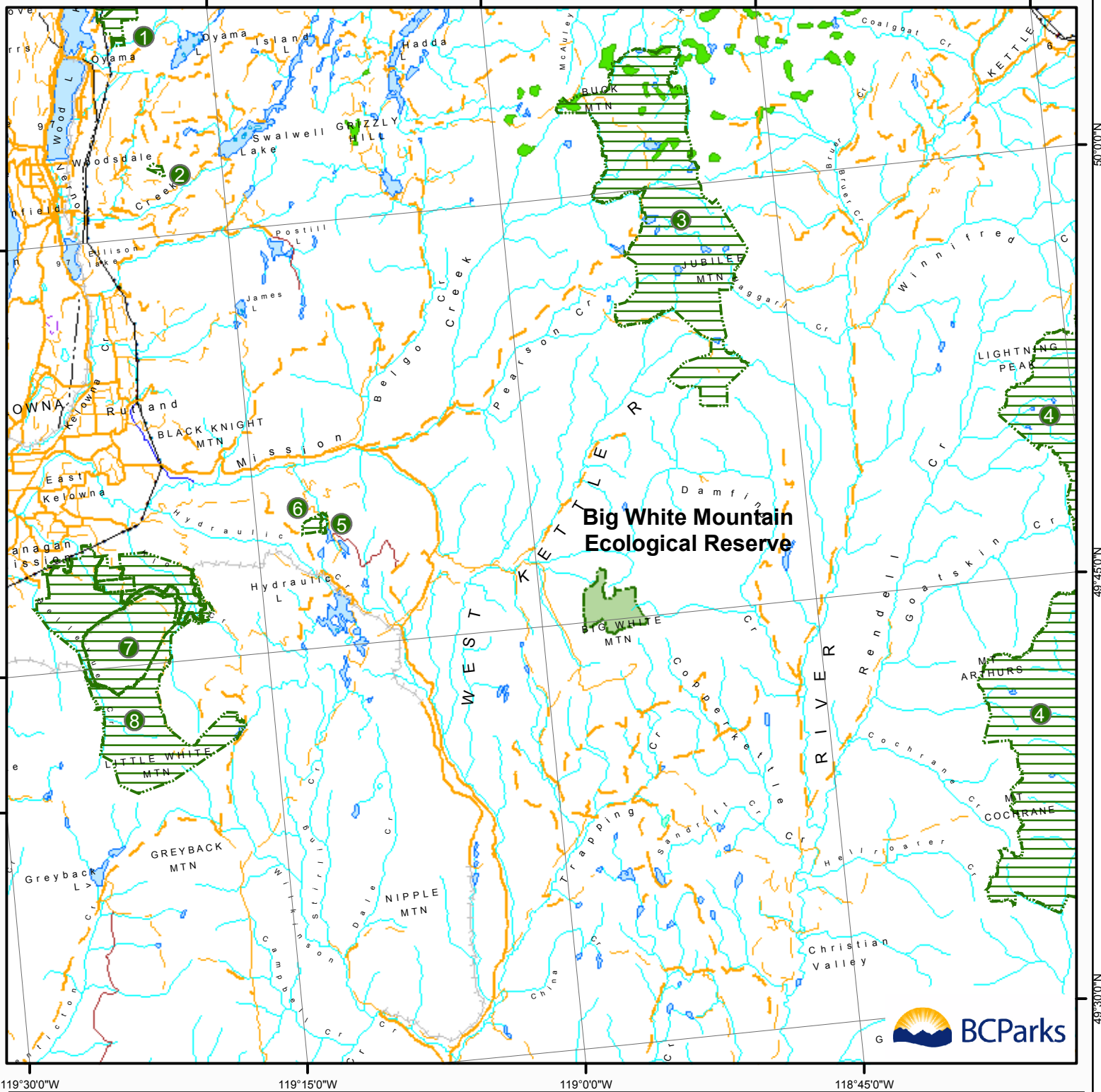
**Date of establishment:** March 24, 1972.





**Management Issues**

| Known Management Issues  | Response  |
|--|---|
| Recreational use of the Ecological Reserve impacts its conservation values.  | <ul style="list-style-type: none"><li>• Work with Big White Ski Resort to increase public awareness of the ecological reserve and to discourage public use. Install signs along the ecological reserve boundary, particularly in the area of the lift terminals, the north side forest road terminus and at other potential access points.</li></ul>  |
| Big White Ski Resort has expressed interest in exchanging land on the eastern side of their area for Ecological Reserve land on the west side adjacent to the resort's Gem Lake lift terminal. | <ul style="list-style-type: none"><li>• A change to the boundary of the Ecological Reserve would require a legislative amendment. If Big White Ski Resort formally proposes a land exchange, the proposal will be reviewed to determine whether the conservation values of the Ecological Reserve land are matched or improved by the land offered for trade, and the overall effect on the values of the Ecological Reserve.</li></ul> |

**Figure 1: Regional Context**

**Big White Mountain Ecological Reserve**

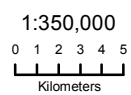


-  Big White Mountain Ecological Reserve
-  Other Protected Areas
-  Highway
-  Road

**Other Provincial Protected Areas**

-  1 Kalamalka Lake Protected Area
-  2 Wrinkly Face Park
-  3 Graystokes Park
-  4 Granby Park
-  5 Browne Lake Park
-  6 Browne Lake Ecological Reserve
-  7 Myra Bellevue Protected Area
-  8 Myra Bellevue Park

Produced in February 2007 for  
 Ministry of Environment  
 by Ministry of Agriculture and Lands  
 Integrated Land Management Bureau



Projection: UTM Zone 11  
 Datum: NAD83

This is a visual representation  
 only and should not be used for  
 legal purposes