## **Okanagan Region**

# MANAGEMENT DIRECTION STATEMENT

March, 2003

# for **Mount Kobau Site** South Okanagan Grasslands

Protected Area



Ministry of Water, Land and Air Protection Environmental Stewardship Division

## Mount Kobau Site South Okanagan Grasslands Protected Area

## Forward and Approvals Page

#### Forward

The Richter Pass area has long been a priority for conservation efforts in the Okanagan. The dry grasslands and open forests in this area represent one of the four most endangered ecosystems in Canada. Partners and programs of the inter-agency-supported South Okanagan - Similkameen Conservation Program have worked to promote the conservation of the natural heritage of this area. Scientific research has complemented these conservation efforts, through universities and Provincial and Federal government sponsorship.

The Mount Kobau Site and three nearby Sites (Chopaka East and Chopaka West to the south, and Kilpoola to the southeast) form the South Okanagan Grasslands Protected Area. The 4710 hectare Mount Kobau Site lies between Highway 3 in the Similkameen Valley on the west and Richter Pass on the southeast, and extends east over the height of land towards Highway 97 in the Okanagan Valley. Adjacent lands to the north are Crown Land in the Ashnola and Okanagan Provincial Forests, and the Lower Similkameen Indian Reserve #6; to the northeast, Crown and private; to the east, private rangelands; to the south, Crown and private rangelands; and to the west, the Lower Similkameen Indian Reserve #2 and private lands, some undeveloped and some in agriculture.

The Site contributes significantly to the Protected Areas Strategy goals for ecosystem representation and the protection of grasslands and open forest.

Approvals

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Date: March 7, 2003

Date: Mar. 3/ 103

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## Introduction

#### **Purpose of the Management Direction Statement**

A management direction statement (MDS) provides strategic management direction for a protected area. A MDS also describes protected area values, management issues and concerns; a management strategy focused on immediate priority objectives and directional statements from other planning processes. While strategies may be identified in the MDS, the development and implementation of all these strategies is subject to funding. In addition, all development associated with these strategies within the protected area is subject to the BC Parks' Impact Assessment Policy.

This MDS was developed through direction received from the Okanagan-Shuswap Land and Resource Management Plan (OSLRMP), as well as comments from stakeholders and interest groups. The MDS is intended to provide direction and guidelines for future management of the Mount Kobau Site.

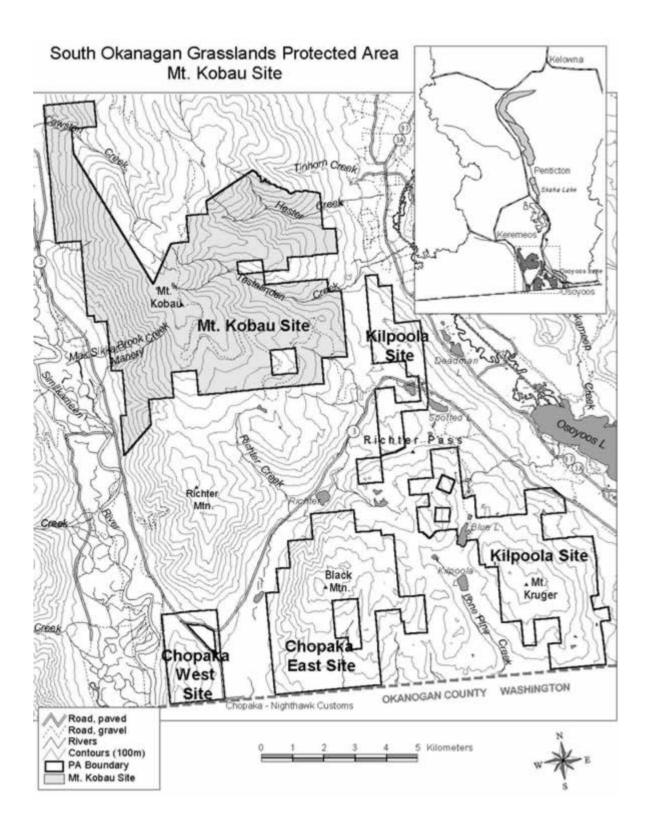
#### **Setting and Context**

The provincial Protected Areas Strategy (PAS) provided the framework for identifying areas that would contribute towards ecological representation within the province. As part of that strategy, the provincial government undertook many strategic level regional planning initiatives (Strategic Land Use Plans), throughout the province. The Okanagan-Shuswap Land and Resource Management Plan concluded that a number of protected areas should be established to protect natural, cultural and recreational values. The LRMP Table used the Protected Areas Strategy as a guide in the selection of protected areas and in providing direction for their management. With respect to the South Okanagan Grasslands Protected Area, the OSLRMP plan recognized the primary need for conservation of its red-and blue-listed plants and animals.

The South Okanagan Grasslands Protected Area was recommended for protection by the OSLRMP in 2000. It was formally established as a protected area on April 18, 2001 by Order in Council under the *Environment and Land Use Act*. The *Park Act* and regulations apply as if the protected area is a Class A Provincial park. The intent is to transfer the protected area to Class A provincial park status by including it in Schedule D of the *Protected Areas of British Columbia Act*.

This area has long been recognized to be important for conservation by the Provincial and Federal governments, non-government agencies, the scientific community, and interest groups. The site's ecological value is increased by the fact that it is the largest "unfragmented" site in the South Okanagan Grasslands Protected Area, closely linked to the Kilpoola Site, and bordered by Crown land to the north, and Crown and private rangelands to the south.

The 4,700-hectare Mount Kobau Site is situated on the height of land between the Okanagan and Similkameen valleys and forms the northern slope of Richter Pass (Figure 1). The Site is within the Okanagan Range and Southern Okanagan Basin ecosections and consists of six biogeoclimatic subzones. Four of the province's red-listed plants and animals, and seven blue-listed, are found within the protected area.



## **Protected Area Attributes**

#### Conservation

- spans two ecosections, 13% of the Site is in the South Okanagan Basin and 87% is in the Okanagan Range
- comprised of the very hot, xeric subzones of the Bunchgrass (BGxh1), Ponderosa Pine (PPxh1) and Interior Douglas-fir (IDFxh1) biogeoclimatic zones, the dry cool Interior Douglas-fir subzone (IDFdk1), very dry cool Montane Spruce (MSxk) subzone and the Very Dry Cold Engelmann Spruce-Subalpine Fir (ESSFxc) subzone; about 70% of the Site is within the PPxh1 and IDFxh1
- elevational gradient with many low elevation species found at high elevation, giving an unusual assemblage of species; highest elevation breeding population of Brewer's sparrow (red-listed)
- diversity of age classes in ponderosa pine, Douglas-fir, lodgepole pine, spruce stands, extensive birch and grasslands provides a varied mosaic of habitats
- all aspects are represented at all elevations, and combined with glacial, erosional and depositional history, provide distinct soils and habitats, including black Chernozemic soils at unusually high elevation
- excellent example of mid- and high-elevation climax grasslands/sagebrush communities
- 33% is grassland communities extending over the entire elevational gradient; 54% is forested; 11% is rocky habitat, concentrated mostly on the western slopes (Appendix IV)

Habitat Type	BGxh1 (%	PPxh1 (%	IDFxh1	IDFdkh1	MSxk (%	ESSFxc	Total
	of PA)	of PA)	(% of PA)	(% of PA)	of PA)	(% of PA)	
Grassland	2.5	15.3	5.2	0.6	0.0	0.0	23.6
Sagebrush Shrub-Steppe	0.4	0.1	0.0	0.0	0.0	0.0	0.5
Vasey's Sage Grassland	0.0	0.0	2.4	3.9	1.7	0.9	9.0
Rocky Habitats	0.2	7.5	1.8	0.7	0.6	0.2	11.0
Wetland	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Riparian	0.0	0.2	0.8	0.6	0.3	0.0	2.0
Forest	0.1	14.7	20.4	10.4	6.2	1.6	53.5
Other	0.0	0.0	0.2	0.0	0.0	0.0	0.3
Total	3.3	37.9	30.8	16.3	8.9	2.7	100.0

Compiled from Terrestrial Ecosystem Mapping (1:20,000).

More detailed habitat representation is tabulated in Appendix IV

- many of the red- and blue-listed plant communities identified in the Penticton Forest District potentially occur in the Site, depending on range condition, including grassland/shrub-steppe, dry forest and riparian ecosystems (Appendix III)
- although only 2% of the Site is wetland and riparian habitat, these habitats are essential for many wildlife species in this arid area
- the snow pack is carried by seven feeder streams to both the Okanagan and Similkameen rivers; this water is vital for human consumption and habitat for salmonids and wildlife
- one red-listed and three blue-listed wildlife species have been recorded in or adjacent to the Site (within 500 metes), as well as three red-listed and two blue-listed plant species, and one red-listed (interim) plant community (Appendix III); additional species are expected to occur
- bighorn sheep range with limited lambing capability along the steep western slopes overlooking the Similkameen Valley and Class 1 mule deer winter range on slopes with warm aspects

- rare and unusual invertebrates, including at least one new to science; insect fauna of the sagebrush habitat is rich and unique
- rare terrestrial lichens, including species new to Canada and to science

#### **Recreation/Tourism**

- Mount Kobau road provides easy access for many recreational activities
- general sightseeing, appreciation of the aesthetic qualities, superb views of the surrounding landscapes
- study and appreciation of nature by amateurs and professionals; photography and wildlife viewing, especially bird watching, are valued activities
- excellent opportunities for interpretation of natural history and cultural and geological features
- potential destination for local and tourism-based wildlife viewing tours and other types of tours
- Canada's premium location for astronomical viewing; annual star party, involving observers from throughout western North America
- hiking, horseback riding, mountain biking, and snowmobiling are ongoing activities
- hunting is a valued, high level use in the fall

#### **Cultural Heritage**

- the Site has an overall rating of moderate for cultural heritage; however, systematic archaeological surveys are lacking and additional sites are likely to be present
- traditional Aboriginal use not known during preparation of this MDS
- long-standing use for astronomical observation
- mining history

#### Scientific

- limited surveys of wildlife, including invertebrates, and plants have been conducted
- history of range research
- astronomical interests, significant in Western Canada; attributes including a high proportion of clear nights per year, exceptional atmospheric steadiness, and absence of artificial lighting; chosen site for construction of a proposed, major national observatory, but project cancelled
- federal environmental monitoring station for ozone, radiation, and astronomical information

#### Significance in the Protected Areas System

- contributes ecological significance to the South Okanagan Grasslands Protected Area, in combination with the three other Sites (Chopaka West, Chopaka East, and Kilpoola)
- the Site lies within two ecosections: the South Okanagan Basin (SOB), which is the fourth smallest ecosection in the province, yet hosts the highest number of red- and blue-listed plant and animal species; and the Okanagan Range, including very hot dry Ponderosa Pine not protected elsewhere in the ecosection, except in Chopaka East; the South Okanagan Grasslands Protected Area is the largest contributor of protected area in the SOB ecosection accounting for 4,481 hectares (46.1%); for the OKR ecosection, the protected area is a moderately small contributor (5,013 hectares, 6.4%) compared to Cathedral Park (42%), Snowy Protected Area (32.5%) and E. C. Manning Park (18.7%); the Site (consisting of 13% SOB and 87% OKR ecosections) makes a small but important contribution to the SOB ecosection and a minor contribution to the OKR ecosection
- grassland habitats occur over a unique elevational gradient; a range of 6 biogeoclimatic zones is present from the low-elevation Bunchgrass zone to the high elevation Engelmann Spruce Subalpine Fir zone
- the Vasey's sagebrush community, found at the upper elevations on the Site, is probably the most extensive and accessible for study and viewing in southern British Columbia

- consists of provincially and regionally significant ecosystems
- the dry grassland, shrub steppe and forested habitats of the Site host a large number of rare vertebrate species significant in the province (one red-listed, four blue- listed), and a number of rare invertebrates, as well as three red-listed and three blue-listed plants, and at least one red-listed (interim) plant community (Big Sage/Bluebunch Wheatgrass Balsamroot)
- provides low-intensity and low-impact recreational opportunities
- protects Aboriginal and early settlement cultural features

Ecosystem	Province	% within	% within	% within	% Protected	% of	% of Total
Classification	(ha)	OSLRMP	existing	OSLRMP	(existing +	Protected	within
			Protected	Goal 1 <sup>3</sup>	Goal 1)	within	Mount
			Areas			Mount	Kobau
			System <sup>3</sup>			Kobau	
Ecosection <sup>1</sup>							
SOB	78739	100	NA	13.02	NA	NA	0.8
OKR	258650	68	NA	24.9	NA	NA	1.6
Biogeoclimatic Unit <sup>2</sup>							
BGxh1	61913	100	0.7	4.1	4.8	13.2	0.6
PPxh1	110292	100	2.9	5.8	8.7	6.8	0.6
IDFxh1 *	241392	71	2.3	3.7	6.0	13.0	0.8

Sources of areas for area calculations:

<sup>1</sup> Ecoregion mapping (1:250,000), WLAP

<sup>2</sup> BEC mapping (1:250,000), MOF <sup>3</sup> Multiple Accounts Analysis, OSLRMP

\* includes only Protected Areas within OSLRMP

## **Other Land Uses and Interests**

#### Access

The main access to the Site is from Highway 3 to the south via the Mount Kobau road. Recreationalists often access the Site from the north on a non-status road that connects the Mount Kobau road with the Fairview-Cawston road to the north. This non-status road passes through the Site to connect with the Mount Kobau road at the summit. A number of other non-status roads and trails, some used by tenure-holders and recreationalists, are present in the Site.

#### **Existing Tenures, Alienations and Encumbrances**

All existing liens, charges, and encumbrances other than those applying to commercial logging, mining or energy exploration and development will continue to be authorized through issuance of park use permits (PUPs). This policy recognizes all existing *Land Act* tenures, special use permits (SUPs), water rights, trapping licences and other legal tenures and rights. Most tenure holders require motorized access into or through the Site. Tenure holders are included in Appendix II.

Recognized tenures in the Site include:

- 1. eleven water licences in or adjacent to the Site for irrigation and stock watering
- 2. two registered traplines
- 3. a guide outfitter has a non-transferable sundry permit for the Mount Kobau area that is reviewed and issued annually; the license will not be issued to another person when the present tenure holder decides to not actively guide in the area

- 4. four ranch operations have pastures through Range Use Permits; range improvements consist mostly of fencing and livestock water developments
- 5. licence of occupation to the RCMP for a communication site
- 6. right-of-way to West Kootenay Power for a utility power line
- 7. map reserve to Environment Canada for an environmental monitoring station
- 8. access for communication site users on the Site and immediately to the north
- 9. Ministry of Forests tenure for fire lookout cabin

Untenured interests in the protected area include:

10. Canadian Helicopters has a long history of using the area for mountainous helicopter training

#### **Adjacent Patterns of Land Use**

Adjacent lands to the north are Crown land in the Ashnola and Okanagan provincial forests and the Lower Similkameen Indian Reserve #6; to the northeast, Crown and private; to the east, mostly rangelands; to the south, Crown and private rangelands; to the southwest a proposed Goal 2 protected area (Richter Grasslands); and to the west, Lower Similkameen Indian Reserve #2 and private lands, some undeveloped and some in agriculture.

#### **Aboriginal Interests**

- interests of Bands within the Okanagan Nation are unknown
- Lower Similkameen Band has two reserves adjacent to the Site

#### **Other Agency Interests**

- the South Okanagan Similkameen Conservation Program has a long-standing involvement with conservation and resource management on these lands
- important vegetation plots are situated within this Site (inter-agency)
- scientific research and inventory (multi-agency)
- Ministry of Forests manages existing grazing licences, in conjunction with the Environmental Stewardship Division under a protocol agreement
- Ministry of Forests has conducted range research on the Site (three transects) and may establish an exclosure
- Ministry of Forests assists with the management of forest health; it is not considered a serious concern at this time, due to the isolation of potentially at-risk stands (spruce and lodgepole pine) from commercial stands adjacent to the Site
- Ministry of Forests' Fire Protection Branch manages wildfire responses, prevention and assists prescribed burns; this agency has concerns about fire response (require a pre-attack plan) and fire prevention activities
- Ministry of Forests wants to ensure that access to the area of Provincial Forest immediately south of the southwest corner of the Site is maintained; the Mount Kobau road will be used as far as the junction with forest roads in Lot 260 and 261, outside of the Site
- South Okanagan Similkameen Weed Committee provides a venue for cooperative weed control; weed control has traditionally been undertaken through rancher initiatives and Ministry of Forests on these lands

#### **Public Stakeholder Interests**

Stakeholders consulted are listed in Appendix II. Overall interests include:

- casual outdoor recreation (sightseeing, hiking, picnicking, horseback riding, mountain biking and snowmobiling)
- nature viewing (casual and club-sponsored)
- recreational hunting

- amateur astronomy, including recreational and amateur scientific study and photography
- nature conservation and ecosystem management (non-government groups and organizations)
- fire management for ecosystem health and protection of adjacent private holdings
- bluebird trail nest box program conducted by the Southern Interior Bluebird Trail Society
- scientific research and inventory by universities and non-government organizations
- cultural and heritage sites appreciation

## **Role of Mount Kobau Site**

The primary role of the Mount Kobau Site is to protect red- and blue-listed plants and animals, and ecosystem representation. Grassland habitats occur over a unique elevational gradient, from the lowelevation Bunchgrass zone to the high elevation Engelmann Spruce - Subalpine Fir zone on the Site. A feature wildlife species is Brewer's sparrow, a rare grassland bird, and a feature rare plant community, the Vasey's big sagebrush plant community. The Site contributes to the ecological integrity of the South Okanagan Grasslands Protected Area (including Chopaka West, Chopaka East, and Kilpoola Sites). These combined holdings provide a unique opportunity for conserving expanses of low-elevation, arid grasslands. Cooperative management practices with private properties adjacent to the Site would increase the conservation values of the overall area.

The Site may contain regionally significant archaeological sites and be of special value for traditional aboriginal uses. Wildlife viewing, natural history appreciation and other limited-access recreation opportunities are ongoing, but there are significant opportunities for improving these experiences through interpretation. Commanding views and other aesthetic values add to the visitor's experience.

The importance and sensitivity of the arid grasslands and subalpine habitats requires that recreational and other uses of the site are of low-intensity and avoid impacting conservation values. Further ecological inventory and monitoring will be required to ensure that conservation objectives are being met.

## **Management Commitments and Issues**

#### Management Direction from Previous and Ongoing Planning

Management direction was originally provided through the now-defunct Oldtimers Coordinated Resource Management Plan (CRMP). High conservation values were first established through the South Okanagan Critical Areas Program (Erickson and Torrance 1989). Research and management strategies were developed and partly implemented by the South Okanagan Conservation Strategy (Hlady 1990). The area was long considered as the potential site for an ecological reserve for its unique landscape/vegetation pattern, soils, and rare flora and fauna, but inadequate inventory information has been available to establish the location. In 1993, the Mount Kobau Site was promoted for designation as a protected area through the Protected Areas Strategy. A summary of the area's values, attributes, issues and habitat management recommendations was prepared for the South Okanagan Conservation Strategy (Bryan 1996). All of these initiatives provide guidance for ecological management direction.

The OSLRMP provided statements of management direction for the interim management of the Site; these have been incorporated into the preparation of this MDS.

#### Management Issues

The following are over-riding management issues that have been identified through previous documentation and consultation with agencies and stakeholders:

- inadequate resource inventory of natural and cultural values to establish sensitive sites
- future complementary land management strategies are needed among the agencies and nongovernment organizations that have interests in the area.
- inadequate knowledge of how human activities impact conservation values
- need for increased public understanding of the conservation values and strategies
- inappropriate access and activities (e.g. type, intensity, location, and timing) that are incompatible with conservation objectives
- impacts to ecological integrity from non-native plants (weeds) and animals
- lack of adequate inventories, strategies, and resources to manage weeds
- ecosystems are not in a fire-maintained state
- lack of detailed information for appropriate fire response and management
- compatibility of activities on adjacent lands with Site objectives
- ability to monitor and enforce permitted uses
- compatibility issues may exist or arise among uses of the Site
- inadequate public facilities
- public desire for ongoing opportunities to participate in Site planning
- consistent, fair, and timely management strategies to resolve new and outstanding issues in the Site
- lack of knowledge of First Nation values and traditional uses to appropriately manage these interests

The following table lists specific issues, by theme, requiring management action:

Theme	Issue			
Protecting	need for public appreciation of the Site's conservation values			
ecological	• sensitive sites are not adequately identified, including inventory of rare fauna and flora			
values	management of public motorized vehicle access			
	• an undetermined effect of access and recreational activities on the Site's soils, vegetation, and wildlife			
	• impact of any future facilities on the aesthetic values of the Site			
	• possible impacts of tenured uses			
	<ul> <li>habitats degraded through past uses and management</li> </ul>			
	• weeds compromising the vegetative integrity of important habitats			
	<ul> <li>non-native animals and feral cats and dogs impacting conservation values</li> </ul>			
	• seral stage representation may not reflect natural disturbance regimes			
	fire response planning to protect ecological values			
	forest encroachment into grasslands, ingress, and fuel loading resulting from fire			
	suppression in ecosystems that are naturally maintained by fires			
	threat from human-caused fire			
Managing	• lack of access planning; safe, well-marked access routes that do not impact critical			
recreational	wildlife habitat, endangered species or livestock operations			
opportunities and impacts	<ul> <li>lack of appropriate facilities to accommodate the many recreational uses focused at the summit</li> </ul>			
and impuets	• increased fire hazards caused by increased public use			
	• need for self-guided interpretive kiosks explaining the values, sensitivities, and permitted uses of the Site			
	<ul> <li>continuation of annual star-gazing party held every August on top of Mount Kobau</li> </ul>			
	• concern that astronomical qualities would be affected if lighting is established on-site			

Theme	Issue
	wildlife-human interaction hazard areas along hiking trails
	safety hazards not adequately identified
Protecting cultural values	• cultural features not adequately identified (e.g. archaeological sites, First Nation ceremonial sites, pioneer ranch sites)
Recognized Tenures	<ul> <li>extent of motorized access for authorized tenured use</li> <li>concern about livestock-human conflicts and lack of awareness of tenure-holder rights and requirements (closing gates)</li> </ul>
	<ul> <li>lack of knowledge about appropriate grazing prescriptions that complement conservation objectives</li> </ul>
	<ul> <li>non-target, red-listed wildlife (i.e. badger) potentially being trapped</li> <li>utilities companies will require access to their facilities for maintenance and rehabilitation; impact of utility projects on Site values</li> </ul>
	<ul> <li>some uses may not be currently tenured</li> <li>water consumption may be impacting wildlife and salmonid habitat</li> </ul>
Aboriginal Involvement	lack of First Nations involvement
Scientific	• access for ongoing and future research and inventory that is compatible with conservation and recreation values
	maintenance of high quality conditions for astronomy

## **Management Direction**

#### **Management Objectives and Strategies**

The overall intent of this Site is conservation of the ecological and cultural values, while maintaining low-intensity recreation and nature-appreciation activities. The following over-riding management strategies are critical to the preservation of the primary values of this Site (red- and blue-listed plants and animals, and ecosystem representation). Furthermore these strategies are urgently required for delivery of the initial management direction and essential to future planning. Strategies are listed in order of priority.

- 1. Implement priority access management improvements (e.g. gates, signage) intended to preserve conservation and cultural values, while allowing acceptable uses and activities.
- 2. Work with the agencies and non-government interests to develop complementary land management strategies
- 3. Develop interim pre-attack fire plan which reflects the conservation objectives.
- 4. Encourage awareness and support of the conservation objectives of the Site (e.g. workshops, interpretative signage and material and press releases).
- 5. Document existing ecological information and identify gaps. Where ecological risks are greatest, conduct ecological inventories and habitat assessments that will guide the development of management strategies.
- 6. Conduct inventory of noxious weeds as required. Develop and implement a weed management plan, in cooperation with South Okanagan Similkameen Weed Committee
- 7. Collate existing knowledge of cultural features and values, and identify information sources as well as any information gaps and inconsistencies. Consult with the Okanagan First Nations to identify cultural sites and traditional values and activities. Identify existing and potential risks to these resources. Prepare management objectives to protect these interests.
- 8. Pursue opportunities to collaborate with appropriate conservation projects and research being conducted in the Site.

- 9. Develop interim plans for the management of non-tenured protected area uses (e.g. recreational activities) to ensure, among other things, the protection of ecological and cultural values. These plans will include guidelines to address any potential conflicts with the various uses and between uses, and involve stakeholder consultation. Furthermore, the plans must recognize the need for adaptive management in the event of broad disturbance (e.g. wildfire). Priority should be given to the summit of Mount Kobau due to the concentration and diversity of uses in this area.
- 10. Conduct monitoring that can evaluate the effectiveness of management activities. Revise interim plans to reflect changes required to meet management objectives.

The following table lists specific strategies, by theme, to achieve management objectives:

Management Objectives	Strategies
Protect natural values	<ul> <li>Increase public awareness of the purpose of the Site through information and signage</li> <li>Monitor and enforce permitted and tenured uses of the Site; develop a volunteer warden program for the area</li> <li>Encourage stewardship of the Site (i.e. monitoring)</li> <li>As directed by the 2002 Conservation Risk Assessment, complete a rare fauna and flora species inventory</li> <li>Identify areas of particular ecological importance that require special management or protection</li> <li>Direct potentially harmful activity away from sensitive areas (e.g. fencing, trail management.)</li> <li>Minimize visitor impacts on the Site's red- and blue-listed plants and animals and sensitive areas; ensure recreation activities are generally maintained at low levels to minimize impacts on conservation values</li> <li>Complete impact assessments before improving or promoting recreational opportunities</li> <li>Identify and restore degraded habitats</li> <li>Aggressively control noxious weeds that impact the natural vegetation communities</li> <li>Control non-native animals and feral cats and dogs</li> <li>Assess seral stage distribution and integrate natural disturbance regimes to achieve seral stage representation that complements conservation objectives</li> <li>Assess forest encroachment, ingress and fuel loading; develop and implement a strategy to recover habitats to a fire-maintained condition</li> <li>Prepare a fire response and fire readiness plan</li> <li>Work with agencies and non-government interests to manage the conservation values in a cooperative manner</li> </ul>
Manage recreational values	<ul> <li>Prohibit public motorized vehicle access within the Site except on public roadways;         <ul> <li>public motorized vehicle use is only permitted on Mount Kobau road and the non-status road north of the former Ministry of Forests' recreation site as far as Testalinden Lake;</li> <li>public motorized vehicle use is prohibited on the non-status roads north of Testalinden Lake;</li> <li>close all spur roads off Mount Kobau road within the Site; gate the non-status road at Testalinden Lake and other non-status roads entering the northern portion of the Site</li> </ul> </li> <li>Provide day use recreation opportunities such as hiking, nature study and star-gazing and suitable basic facilities (e.g. toilets) in more accessible areas not containing high</li> </ul>

Management Objectives	Strategies
	<ul> <li>ecological values</li> <li>Provide backcountry day use recreation opportunities in the less accessible areas provided there is no threat to high ecological values</li> <li>Monitor use and impacts of recreational activities; management of use may require seasonal or other measures to minimize disturbance to conservation values, erosion on trails, public safety or fire hazards</li> <li>Reduce the potential for human/wildlife interactions</li> <li>Ensure that private lands are adequately posted</li> </ul>
Protect cultural heritage values	<ul> <li>Investigate and collate existing information on cultural heritage values; prepare Cultural Features Information Summary</li> <li>Conduct further assessments of heritage values</li> </ul>
Manage tenures	<ul> <li>Determine access requirements for tenure holders</li> <li>Maintain access for communications sites within and just north of the Site</li> <li>Ensure tenured users of the Site use best management practices to minimize impacts on red- and blue-listed plants and animals</li> <li>Encourage trappers to use selective techniques to avoid trapping red- or blue-listed wildlife (e.g. badger, white-tailed jackrabbit)</li> <li>Encourage tenured users and visitors to work cooperatively to promote harmonious coexistence; signage for public awareness of tenure rights and requirements</li> <li>Ensure existing utility inspection, maintenance and rehabilitation is compatible with Site objectives</li> <li>Ministry of Forests to maintain the fire lookout cabin and access road as long as required for fire lookout purposes; no public motorized vehicle access will be allowed; cabin to be removed by Ministry of Forests when no longer needed for fire lookout purposes</li> <li>Encourage the relinquishment of unused water licences</li> </ul>
Aboriginal values	Consult with the appropriate Okanagan First Nations
Scientific	<ul> <li>Encourage scientific research that benefits Site management objectives</li> <li>Ensure that Site management supports long-standing scientific opportunities, including the preservation of the rare quality of the Site for astronomical study (e.g. no on-site lighting)</li> </ul>

#### **Integration with Other Land Use Planning Processes**

This management direction statement, future management direction statements, and all resulting management actions will follow the intent and criteria set out by the Okanagan-Shuswap LRMP for the Mount Kobau Site. Management of the Site should be coordinated with land management of other levels of government, including First Nations and other compatible stakeholders in the area. This will be done within the confines of the *Park Act* and BC Parks' Conservation Program Policies. Increased awareness and cooperation is vital to ecosystem management.

#### **Consultation and Future Planning**

Local groups will continue to be consulted to determine promotion, information and volunteer strategies. In addition, the Environmental Stewardship Division will work with the appropriate Okanagan First Nations to further determine heritage and cultural values and strategies for these activities. Future planning will not compromise the ecological integrity of natural or cultural values within the Site, especially where there are species or communities that are considered at risk in the province. Integrated planning with other agencies, adjoining landowners and interest groups will ensure ecosystem integrity and promote long-term stewardship of the area.

#### **Zoning Plan**

The Mount Kobau Site is temporarily zoned as Natural Environment and Wilderness Recreation with the intent that Special Feature zones will be designated as soon as the necessary information is available.

**Natural Environment:** relatively low use but higher levels in association with nodes of activity or access. This zone includes a recreation corridor with motorized access along Mount Kobau road, and an area of higher-level recreational use at the summit in the area of the former Forest Service Recreation Site and on designated trails. Other recreation corridors may be designated pending further assessment of habitat values and sensitivity. The extent of this zone is to be determined, pending an inventory of rare and sensitive species, communities, and features.

**Wilderness Recreation:** most of the Site will be managed for low visitor use levels to provide protection for important ecosystems and red- and blue-listed plants and animals. Recreation will be directed through designated areas. Portions of this zone likely will be designated as Special Feature zone when adequate information becomes available to recognize these areas.

**Special Features:** areas considered to be of particularly high ecological or heritage value, where public access is to be restricted. The intent is that Special Features will be established in the Site, based primarily on red-listed plant communities and critical wildlife habitat, and cultural sites. The map in Appendix IV shows areas of particular ecological importance, based on Terrestrial Ecosystem Mapping, which highlights potential Special Features zones. Further information on species and habitats, including red-listed plant communities, has to be gathered before this zoning can be applied to areas currently zoned as Wilderness Recreation.

See Appendix I for a list of acceptable uses and a map of zoning and recreation corridors.

Activity/Use/Facility	Wilderness Recreation Zone	Natural Environment Zone	Special Features Zone
Aboriginal Traditional Uses	Y	Y	Y
Hunting	Y	Y	Y
Fishing	n/a	n/a	n/a
Trapping	N2	N2	N
Grazing (domestic livestock)	N2	N2	N2
Recreational gold panning/rock hounding	N	N	N
Native Plant Seed Harvest	М	М	М
Utility corridors	N2	N2	N2
Communication sites	N	N2	N
Horseback trail riding (casual)	Y	Y	Y
Horseback trail riding (competitive)	N	N	N
Guided hunting	Y until tenure holder ceases guiding in the PA	Y until tenure holder ceases guiding in the PA	Y until tenure holder ceases guiding in the PA
Guided fishing	n/a	n/a	n/a
Guided nature tours	M	M	M
Commercial recreation (facility-based)	N	N	N
Commercial recreation (non-facility-based)	M	M	M
Backcountry huts	N	N	N
Water control structures (including wells, reservoirs and diversions)	N2	N2	N2
Fish stocking and enhancement	Ν	Ν	Ν
Road access	N1	Y	N1
Recreational hiking (on designated trails only)	Y	Y	Ν
Recreational mountain bikes (on designated trails only)	Y	Y	Ν
Rock Climbing	Ν	n/a	Ν
Hang Gliding	Ν	N	N
Pets (under control and on designated trails only)	М	Y	Ν
Camping (e.g. star parties)	N	М	Ν
Campfires	Ν	М	Ν
On-designated-road access (motorized)	Ν	Y	Ν
Off-road access (motorized)	Ν	Ν	Ν
Aircraft access (helicopter)	N1	N1	N1
Fire suppression (as per Fire Management Plan)	Y	Y	Y
Prescribed fire (as per Fire Management Plan)	Y	Y	Y
Fire prevention (as per Fire Management Plan)	Y	Y	Y
Noxious weed control	Y	Y	Y
Forest Health (e.g. insect/disease control)	Y	Y	Y
Scientific research	М	М	М
Astronomical study and photography	М	Y	М

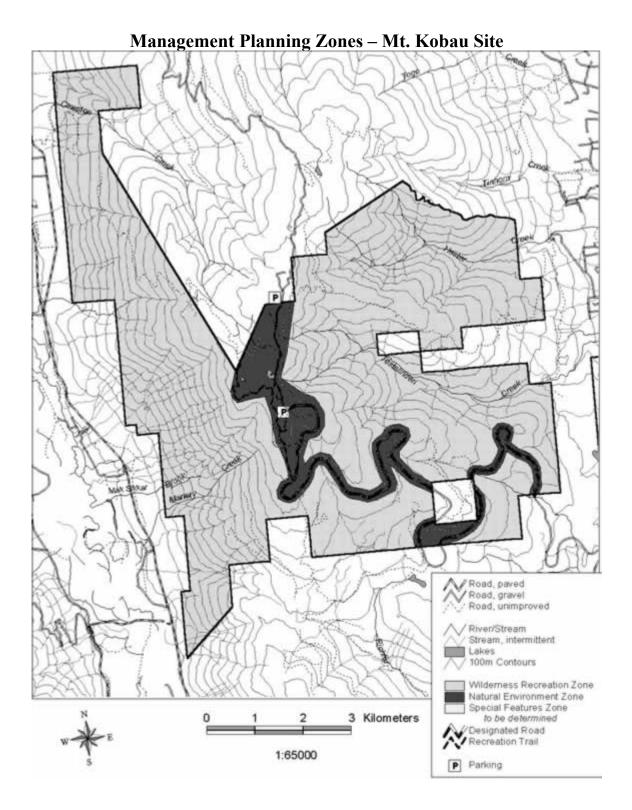
### Appendix I Acceptable Activities, Uses and Facilities in Mount Kobau Site

Y = allowed subject to conditions identified in the MDS and future management strategies

M = authorization required; may be permitted if compatible with Site objectives; may be subject to limitations N = not allowed

N1 = allowed for authorized purposes only (e.g. Environmental Stewardship Division, tenured uses)

N2 = present and allowed to continue, but not normally allowed



Contact	Affiliation
Resource Agencies	
Bob Lincoln	ESD, WLAP
Al Hare	EPD, WLAP
Steve Roe	EPD, WLAP
Mike Watkins	EPD, WLAP
Jim Mottishaw	Fire, MoF
Alex McLean	Range, MoF
John Pethybridge	Weed Committee, MoF
Daryl Hunt	Roads, MoF
Roger Venables	Recreation, MoF
Margot Hollinger	Forest Health, MoF
John Parsons	Range, MoAF
Ken McAra	Region, MoAF
Tom Freeman	Roads, Reg MoT
Bill Bedford	Roads, MoT
Elsie Lemke	Town of Osoyoos
Glen Mandziuk	Osoyoos Business & Community Development Centre
Joan Bush	RDOS – Electoral Area B
Roger Mayer	RDOS Chair
John Piazza	RDOS – Electoral Area A
Consultative Gov. Members	
Tea Lea	WLAP
Hans Roemer	WLAP
Dennis Lloyd	Research, MoF
Orville Dyer	ESD, WLAP
Ernie Maynard	MSRM
Alex McLean	MoF
Grant Furness	ESD, WLAP
Mike Hanry	ESD, WLAP
Dave Tudhope	MSRM
In-Park Tenures	
Bob Gibbard	LRMP Rep., Trapping
Albin Hochsteiner	guide-outfitter
Mark Quaedvleig	LRMP rep., ranching; range licence
Ace and Rose Elkink	range licence
Clarence Schneider	range licence
D.B. McCurdy	range licence
Carol Allison	range licence
George Thompson	Haynes Estate Ranch
Sherry Linn	Bluebird Trail Society

## Appendix II Stakeholders Contacted for South Okanagan Grasslands Park

First Nations	· · · · · · · · · · · · · · · · · · ·
Chief Moses Louie	Lower Similkameen Band
Chief Clarence Louie	Osoyoos Band
Richard Holmes	Upper Similkameen Band
Stewart Phillip	Penticton Band
•	
Significant Adjacent Landowners Bureau of Land Management	United States
•	TNT, adj. landowner
Jim Hope Marlin Clancon	•
Marlin Clapson Jim Pendergraft	Osoyoos Desert Society adj. landowner; grazing tenure
5	
Wayne and Hazel Pendergraft Geral Pendergraft	adj. landowner; grazing tenure
-	adj. landowner; grazing tenure
Mrs. A. Dolynuk	adj. landowner
Daryl Gibb Bob Ellis	adj. tenant
	adj. landowner
Lee McFadyen Carol Allison	adj. landowner
	adj. landowner; grazing tenure
George & Richard Thompson	adj. landowner; grazing tenure adj. landowner
Peter Fodey Clarence Schneider	,
Nichola Walkden	adj. landowner; grazing tenure
	The Land Conservancy of BC
Audrey Harper Steve Venables	adj. landowner
Research / Science	adj. landowner
Pam Krannitz	vegetation and endangered spp CWS
Geoff Scudder	invertebrates - UBC
Rob Cannings	invertebrates - UBC
Walt Klenner	small mammals - MoF
Nancy Mahony	song birds - UBC
Mike Miller	vegetation research
T.G. Northcote	limnology
David Dodge	HR MacMillan Space Centre
Conservation	The macininal space centre
Robert Hawes	South Okanagan-Similkameen Conservation Program
Bruno Delesalle	Grassland Conservation Council
Brad Arner	Ducks Unlimited
Marlin Clapson	Osoyoos Desert Society
Clive Johnson	Okanagan-Simlkameen Parks Society
Laure Neish	South Okanagan Naturalists Club
Dick Cannings	South Okanagan Naturalists Club
Harry Nielsen	Oliver-Osoyoos Naturalists Club
Harold King	Oliver-Osoyoos Naturalists Club
Don Sloan	Okanagan-Simlkameen Parks Society
Lee McFadyen	Similkameen Naturalist Club

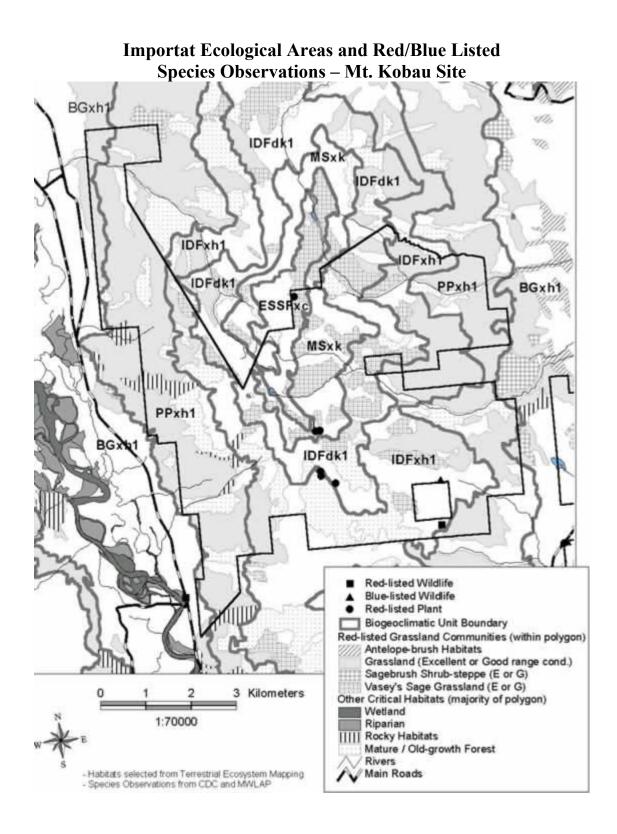
Sportsmen Assoc.	
John Nett	Osoyoos Wildlife Federation
Joan McKay	South Okanagan-Similkameen Sportsmen's Association / BC Wildlife Federation
Ron Taylor	LRMP rep, BC Wildlife Federation
Ernie Marven	Kermeos-Cawston Sportsmen's Association
Recreation	
Juergen Hansen	LRMP rep., recreation
Brad Houston	Penticton Outdoors Club
Eva Durance	Penticton Outdoors Club
Roberta Carleton	Equestrian
Terry Burke	off-road motorized
Chris Prowse	The Bike Barn
Peter Matthews	mountain biker
Bill Archibald	Trails BC VP & route chair
Jim Shaver	local astronomical group
Jim Failes	Mt. Kobau Astronomical Society
Utilities and Commercial	
Kevin Jones	West Kootenay Power
Barry Radies	West Kootenay Power
Jan Rustad	Canadian Helicopters

### Appendix III Red- and Blue-listed Wildlife Species Recorded In or Near Mount Kobau Site

Common Name	Scientific name	Prov. Status	COSEWIC Status	Source *
REPTILES	5 species			
Rubber Boa	Charina bottae	Blue		WLAP
BIRDS	15 species			
Brewer's Sparrow	Spizella breweri breweri	Red		CDC,WLAP
Flammulated Owl	Otus flammeolus	Blue	Special Concern	WLAP
Lewis's Woodpecker	Melanerpes lewis	Blue	Special Concern	WLAP
Williamson's Sapsucker	Sphyrapicus thyroideus thyroideus	Blue		WLAP
PLANTS				
Columbia Goldenweed	Pyrrocoma carthamoides var carthamoides	Red		CDC
Dry-Land Sedge	Carex xerantica	Blue		CDC
Dwarf Groundsmoke	Gayophytum humile	Blue		CDC
Nettle-Leaved Giant-Hyssop	Agastache urticifolia	Red		CDC
Tweedy's Willow	Salix tweedyi	Blue		CDC
Two-Spiked Moonwort	Botrychium paradoxum	Red		CDC
PLANT COMMUNITY				
Big Sage / Bluebunch Wheatgrass - Balsamroot	Artemisia tridentata / elymus spicatus - balsamorhiza sagittata	Interim red		CDC

\* WLAP = Ministry of Water Land and Air Protection wildlife sightings database (Penticton); CDC = Conservation Data Centre element occurrence report

Note: Some additional species have been documented in these sites, but are not yet recorded by CDC or WLAP



## Appendix IV Ecosystem Representation in Mount Kobau Site

BEC / Habitat Type	% of PA		Habitats Present
BGxh1	3.3		
Grassland	2.5	WB	Bluebunch wheatgrass - Sandberg's bluegrass deep soil
		WS	Bluebunch wheatgrass - selaginella shallow soil
Sagebrush Shrub-Steppe	0.4	SN	Big sagebrush - needle-and-thread grass coarse-textured soil
		SS	Big sagebrush - selaginella very shallow soil
		SW	Big sagebrush - bluebunch wheatgrass mesic
Rocky Habitats	0.2	RO	Rock outcrop
		SO	Saskatoon - mock-orange talus
Moist Forest	0.1	SP	Common snowberry - pinegrass moist
Other	0.0	CV	Cultivated vineyard
PPxh1	37.9		
Grassland	15.3	WA	Bluebunch wheatgrass - arrow-leaved balsamroot deep soil
		WF	Bluebunch wheatgrass - Idaho fescue coarse-textured soil
		WJ	Bluebunch wheatgrass - junegrass mesic
		WS	Bluebunch wheatgrass - selaginella shallow soil
Sagebrush Shrub-Steppe	0.1	SS	Big sagebrush - selaginella very shallow soil
Rocky Habitats	7.5	RO	Rock outcrop
,		TA	Talus
		SO	Saskatoon - mock-orange talus
Riparian	0.2	AS	Trembling aspen - common snowberry moist
Dry Forest	13.6	PF	Ponderosa pine - Idaho fescue warm aspect, deep soil
		PS	Ponderosa pine - selaginella shallow soil
		PW	Ponderosa pine - bluebunch wheatgrass mesic
Moist Forest	1.2	SP	Common snowberry - pinegrass moist
Other	0.0	BA	Barren
DFxh1	30.8		·
Grassland	5.2	FW	Idaho fescue - bluebunch wheatgrass steep, warm aspect
	-	WA	Bluebunch wheatgrass - arrow-leaved balsamroot deep soil
		WS	Bluebunch wheatgrass - selaginella shallow soil
Vasey's Sage Grassland	2.4	VK	Vasey's big sagebrush - Kentucky bluegrass grassland
Rocky Habitats	1.8	RO	Rock outcrop
	-	TA	Talus
		SO	Saskatoon - mock-orange talus
Wetland	0.0	SB	Silverweed - bulrush meadow
Riparian	0.8	AS	Trembling aspen - common snowberry moist
Forest	20.4	DP	Douglas-fir - pinegrass mesic
		DW	Douglas-fir - bluebunch wheatgrass warm aspect, deep soil
		SP	Common snowberry - pinegrass moist
		PS	Ponderosa pine - selaginella shallow soil
Other	0.2	BA	Barren
DFdk1	16.3		
Grassland	0.6	WS	Bluebunch wheatgrass - selaginella shallow soil
Vasey's Sage Grassland	3.9	VK	Vasey's big sagebrush - Kentucky bluegrass grassland
Rocky Habitats	0.7	RO	Rock outcrop
	0.1		

BEC / Habitat Type	% of PA		Habitats Present
Wetland	0.0	OW	Shallow open water
		SE	Sedge wetland
Riparian	0.6	AS	Trembling aspen - common snowberry moist
Forest	10.4	DY	Douglas-fir - yarrow warm aspect
		LP	Lodgepole pine - pinegrass mesic
		PS?	Ponderosa pine - selaginella shallow soil
		SP	Common snowberry - pinegrass moist
Other	0.0	BE	Beach
MSxk	8.9		
Vasey's Sage Grassland	1.7	VK	Vasey's big sagebrush - Kentucky bluegrass grassland
Rocky Habitats	0.6	RO	Rock outcrop
		ΤA	Talus
Riparian	0.3	AS	Trembling aspen - common snowberry moist
Forest	6.2	DA	Douglas-fir - heart-leaved arnica warm aspect
		LL	Lodgepole pine - arctic lupine mesic
		SG	Spruce - black gooseberry moist
ESSFxc	2.7		
Vasey's Sage Grassland	0.9	VK	Vasey's big sagebrush - Kentucky bluegrass grassland
Rocky Habitats	0.2	RO	Rock outcrop
Wetland	0.1	OW	Shallow open water
		PO	Pond
Forest	1.6	FG	Subalpine fir - grouseberry mesic

