

Valhalla Park Management Plan

July 2012



BC Parks

Photo Credit: Paul Tovak

This document replaces the direction provided in the Valhalla Provincial Park Master Plan (1989).

Valhalla Park
Management Plan

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Plan Highlights

The vision for Valhalla Park is that the park will continue to be managed primarily for the conservation of its ecological systems and special features, while offering high-quality recreational opportunities that do not impair the park's ecological values and wilderness character. The management plan puts greater emphasis on sustaining the park's ecological values rather than on developing new recreational opportunities. Key elements of the management plan include:

- A vision that articulates the key role the park will play in protecting the important ecological values of the Central Columbia Mountains (CCM) Ecoregion while also providing wilderness-based recreational opportunities.
- A zoning plan that reflects the increased emphasis on the park's value as a key protected area which represents the CCM Ecoregion; preserves old-growth and undisturbed wildlife habitat; and offers wilderness recreational opportunities with minimal facilities and disturbances from mechanization. Strategies focus on maintaining use levels in each area of the park that are appropriate in terms of acceptable ecological impacts and quality of recreational experiences. This includes a prohibition of all forms of motorized access into the park except as provided for in this management plan (i.e., float plane access to Evans Lake and boat access to sites along Slocan Lake).
- Strategies that recognize the importance of managing the park in context of what is occurring within the surrounding landscape. This includes working with the appropriate government agencies to protect the visual integrity of the park from impacts of adjacent uses; coordinating with the appropriate government agencies on the management of roads, trails, and trailheads on Crown lands that provide access to the park; and developing a coordinated long-term approach to wildlife management with other appropriate government agencies and with First Nations, emphasizing species at risk.
- Strategies that maintain and/or restore natural disturbance regimes (insects, disease and fire) wherever possible.
- A strategy to develop a fire management plan for the park.
- Strategies to maintain the current number and configuration of backcountry trails, roofed accommodation and campsites but includes the investigation and possible formalization and designation of current random camping sites along the shore of Slocan Lake.
- Strategies to encourage low-impact recreation services in the park where facilities and public uses are compatible.

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1.0 Introduction

1.1 Management Plan Purpose

The purpose of this management plan is to guide the management of Valhalla Park.

This management plan:

- articulates the key features and values of the park;
- identifies the types and levels of management activities;
- determines the appropriate levels of use and development;
- clearly establishes the long-term vision and management objectives to be met; and,
- responds to current and predicted future threats and opportunities by defining a set of management strategies.

This management plan draws from the Valhalla Provincial Park Master Plan (1989) and the Valhalla Park background reports (1987 and 2004). Changes since the 1989 master plan include alterations to the park boundary, new protected areas nearby, improved information on ecological values, new mandates in the management of land and resources in adjacent areas and an increased emphasis on working with First Nations. Many of the initiatives provided for in the original master plan have not been realized and their continued relevance has been considered during the development of this new management plan.

Additional information was gathered from the West Kootenay-Boundary Land-Use Plan (1995) and implementation strategy (1997), and the Kootenay-Boundary Higher Level Plan Order (2002).

1.2 Planning Area

The park, located on the western shores of Slocan Lake (Figures 1 and 2), comprises approximately 50,060 hectares situated in the Valhalla Range of the Selkirk Ranges of the Columbia Mountains. It contains six major parallel drainages and represents the Central Columbia Mountains (CCM) Ecoregion through its full elevational range from Slocan Lake at 536 metres to peaks of 2,800 metres.

1.3 Legislative Framework

The park was established as a Class A park in 1983. In 1999, the 635 hectare Gimli Ridge was added to Valhalla Park and in 2010 District Lot 8223 was added to the park.

Class A parks are dedicated to the preservation of their natural environments for the inspiration, use and enjoyment of the public.

The 164 hectares Evans Lake Ecological Reserve, established in 1972, is situated within the park boundaries but is excluded from the park. Ecological reserves are managed under the *Ecological Reserve Act* and are dedicated to conservation and study purposes with very limited opportunities for recreation.

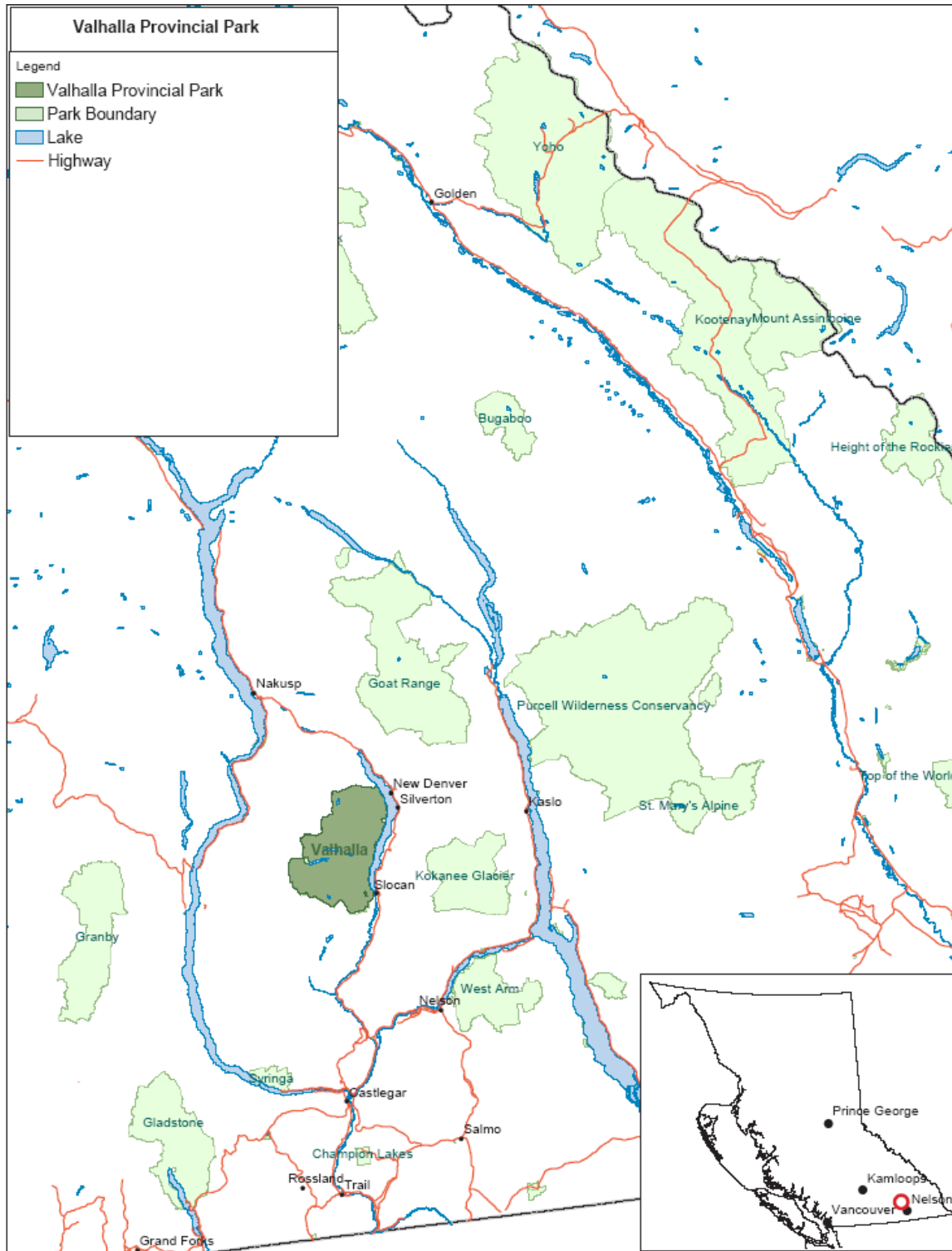


Figure 1: Regional Context Map

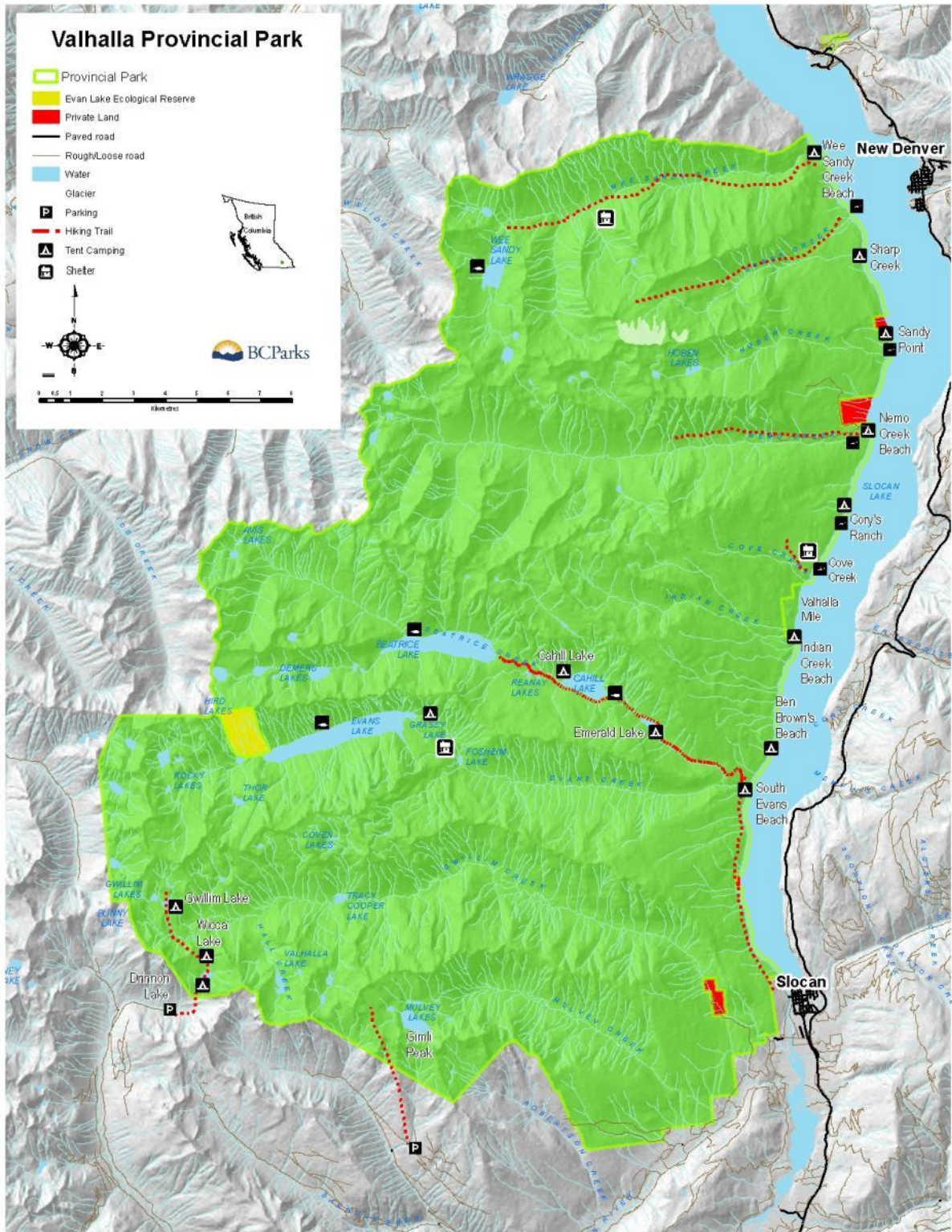


Figure 2: Valhalla Park Map

1.4 Management Commitments/Agreements

Kootenay-Boundary Land-Use Plan

Land use planning for land resources and conservation in the Kootenay-Boundary region of south-eastern British Columbia entered a new era with the provincial government initiative to prepare a strategic land-use plan. The West Kootenay-Boundary Land-Use Plan (WKBLUP) designated various land uses, including protected areas, over the entire region.

In addition to allocating land use, the WKBLUP established land use management guidelines through the Kootenay-Boundary Land-Use Plan Implementation Strategy. A number of Kootenay-Boundary Land-Use Plan Implementation Strategy objectives and strategies consider Valhalla Park and emphasize measures to protect and restore connectivity corridors and Grizzly Bear populations. Specific management direction relating to the park includes:

- Maintain wild fish stocks and the habitats of existing species in Slocan Lake.
- Maintain the Gwillim Creek water supply for the Village of Slocan.
- Maintain sufficient seasonal habitat to retain the existing Grizzly Bear populations.
- Maintain the regional connectivity corridor from Goat Range Park north into Revelstoke, and from Goat Range Park down Bremner Creek into the Valhalla's, to contribute to ecosystem representation, to serve as habitat linkage for seasonal migration of Caribou and Grizzly Bears, and to support Goat Range Park.
- Retain forest and grassland ecological elements and processes, including species richness, distribution and diversity ranging from a low to moderate risk.
- Maintain the regional connectivity corridor from Kokanee Glacier Park to Valhalla Park, through Lemon Creek, and Kokanee Glacier Park to Goat Range Park through Kane Creek, to contribute to ecosystem representation (ICHmw2), to serve as habitat linkage for the seasonal migration of Grizzly Bears, and to support Valhalla Park.

1.5 Relationship with First Nations

The Province and First Nations governments are working toward a relationship based on respect, recognition and accommodation of aboriginal title and rights. This management plan proposes to develop working relationships between BC Parks and First Nations in a number of areas to ensure that management of the park considers their traditional uses. The management plan will not limit subsequent treaty negotiations.

Valhalla Park lies within the asserted traditional territory of three First Nation tribal councils: the Ktunaxa Nation Council, the Okanagan Nation Alliance and the Shuswap Nation Tribal Council¹.

¹ Another group known as the Sinixt Nation has also asserted that the park is in their traditional territory but the governments of Canada and British Columbia do not afford the Sinixt status as a current First Nation and have not recognized their claim.

Ktunaxa Nation Council

The asserted traditional territory of the Ktunaxa people covers the Kootenay region and extends into the United States. In British Columbia, the Ktunaxa Nation Council includes four Indian Band members: St Mary's Band, Tobacco Plains Band, Columbia Lake Band and Lower Kootenay Band.

The Ktunaxa/Kinbasket Treaty Council is currently negotiating a treaty with the Government of Canada and the Province of British Columbia, and has signed a government-to-government memorandum of understanding with the Province for the management of provincial parks in their traditional territory. The memorandum of understanding makes provisions for the parties to cooperate in a variety of park management activities including planning, boundary reviews, economic development and capacity building.

Okanagan Nation Alliance

The Okanagan Nation Alliance asserted traditional territory extends from the Okanagan Valley to the West Kootenay and includes the Upper and Lower Arrow lakes. The alliance is composed of seven Indian Band members including: Lower Similkameen, Upper Similkameen, Osoyoos, Penticton, Westbank, Okanagan and Upper Nicola Indian bands.

Shuswap Nation Tribal Council

The Shuswap Nation Tribal Council asserted traditional territory extends from Kamloops to an area that roughly encompasses the Columbia River drainage, including the Upper and Lower Arrow lakes. It is an association of 10 of the 17 Secwepemc (Shuswap) bands of interior British Columbia: Adams Lake, Bonaparte, Tk'emlups, Little Shuswap Lake, Neskonlith, Shuswap, Simpcw (North Thompson), Skeechestn, Splat's'in (Spallumcheen) and Whispering Pines/Clinton.

1.6 Ecosystem-Based Management Approach

BC Parks supports a science-based ecosystem management approach for protected areas. This requires:

- integration of available science-based information with management activities;
- understanding the interrelationships between the ecosystem's biological and non-biological components;
- a focus on long-term and large-scale issues;
- a holistic view of the environmental system and environmental problems; and,
- inter-agency co-operation as ecosystems extend beyond jurisdictional boundaries.

The Kootenay-Boundary Land-Use Plan Implementation Strategy emphasized the importance of an ecosystem-based approach to land and resource planning and management to maintain healthy functioning ecosystems and, in protected areas, to maintain ecosystem representation.

The 2002 Kootenay-Boundary Higher Level Plan Order revised an earlier higher level plan order (January 2001). The establishment of new resource management zones and changes to the enhanced resource development zones form the basis of the new order. The order affects land use immediately adjacent to Valhalla Park, and influences ecosystem values and function (e.g., wildlife connectivity and foraging, road access). Responsibility for the order on a day-to-day basis rests with the provincial agency responsible for approving forest development plans.

Natural processes such as wildfire, disease and insect infestation must be incorporated into management for the park. Allowing the progression of natural processes within the park must be weighed against potential impacts on ecological components and conditions outside it.

Since the home range of wildlife species is often larger than the protected area, effective management of ecosystems is a challenge. The efforts to conserve and maintain species diversity within the park can be negatively influenced by land management practices outside of the park. It is therefore essential to define an “area of cooperation” around the park of sufficient size to allow some practical degree of greater park ecosystem management.

Much of this understanding, knowledge and the practices to implement an ecosystem management approach for protected areas are still in the formative stages and will be developed over time



Hird Lake

1.7 The Planning Process

The management planning process for Valhalla Park has included a number of steps. The first step involved the updating and production of a background report which was completed in November 2004. The second step involved a series of consultations with individuals and organizations that had expressed an interest in the park. A series of interviews were conducted with a wide array of stakeholders and two management planning workshops were held in September and October of 2004.

A draft management plan was then developed based on the results of the workshop; discussions with knowledgeable persons (both inside and outside of government); and consideration of broad land use policies, BC Parks' policies, zoning criteria and existing facility developments within the park. Review of the draft management plan with the public and stakeholders took place the following year through open houses and meetings. After revisions were made to the draft management plan to incorporate this input, consultation began with the First Nations.

There was a significant delay in the management planning process when the opportunity became available to acquire one of the high priority parcels of private land along the lakeshore of Slocan Lake.

2.0 Values and Roles of the Park

2.1 Significance and Roles

Provincial and Regional Context

Valhalla Park fulfills important ecological, recreation and cultural roles. Valhalla Park is provincially significant as an area which conserves key natural and cultural values of the Central Columbia Mountains Ecosection, as well as providing a varied land base for a diversity of recreational opportunities. Other protected areas in relatively close proximity include Kokanee Glacier, Goat Range, Purcell Wilderness Conservancy, Syringa, and Granby parks. These areas contribute to the protection of biodiversity in the region, and in association with the managed forest are integral to conservation of wildlife populations, plant communities and biodiversity. Collectively, the protected areas cover just over 11% of the total land base in the West Kootenay/Boundary area.

Beyond supporting the objective of the WKBLUP of conserving regional biodiversity, the park has been identified in the Kootenay-Boundary Higher Level Plan Order as an integral component of Grizzly Bear connectivity in the West Kootenay although its location beside Slocan Lake can be a limiting factor. Valhalla Park occupies an important north-south link in the West Kootenay connectivity network, interconnecting with an east-west corridor running through Caribou Creek and Shannon-Wragge creeks to the north, and Bannock Burn Creek and the Little Slocan River to the south. Less direct links extend well beyond the immediate park boundaries. Hydrologic processes link the creeks within the park that flow into Slocan Lake to the whole Columbia basin.

The park plays a major role in the regional tourism economy, particularly in the Slocan Valley. Its very name evokes a wilderness image which has wide appeal provincially, nationally and internationally to those seeking nature-based recreation or simply unimpaired natural scenery. Because the park provides a highly visible, dramatic and untouched backdrop to views over Slocan Lake from the east side, it contributes significantly to the attraction of the Highway 6 corridor and to the appeal of the east side communities as bases for the wide range of recreational activities available in the area.

Significance in the Provincial Protected Areas System

Valhalla Park contributes to the protected areas system by encompassing a full elevational range from the extensive low-elevation lakeshore, to large mid-elevation lakes and largely undisturbed low to mid-elevation forests, to mountain peaks (all within the Central Columbia Mountains Ecosection). Although conservation is the primary role of Valhalla Park, the park also provides a wide range of high-quality frontcountry and backcountry recreational opportunities in sustainable natural and wilderness settings ranging from water-based activities along the shores of Slocan Lake to rigorous hikes and mountaineering ascents of the many peaks within the park.

2.2 Biodiversity and Natural Heritage Values

Large Relatively Intact Ecosystem Representation

The park includes a full range of ecosystem types and habitat from riparian corridors and old-growth forest, to alpine tundra.

The park is one of 21 protected areas contributing to representation of the Central Columbia Mountains (CCM) Ecosection which is well represented (18.8%) in the province's protected areas system. The park is the third greatest contributor to the representation of this ecosection, following Purcell Wilderness Conservancy and Goat Range parks.

The CCM Ecosection is one of six located within the Northern Columbia Mountains Ecoregion, a rugged, often ice-capped mountain area that rises abruptly from the Southern Rocky Mountain Trench to the east. This block of mountains intercepts eastward flowing precipitation, making these the wettest mountains in the BC interior.

The park is unique in the ecosection for the following reasons:

- Among the CCM protected areas, Valhalla Park has by far the largest frontage on a main valley lake, as well as the greatest area of lakes (848 hectares).
- Representation of the ICHdw variant is the second largest among the CCM protected areas, after the Purcell Wilderness Conservancy Park.
- The park is representative of one of the four distinct elevational sequences of biogeoclimatic zones in the CCM and is particularly unique and significant for its full elevational range from low-level lakeshore to mountain crest.
- It is also significant within the ecosection for the amount of late seral forest cover it contains, given the degree of disturbance and road development that has occurred outside protected areas.

The park contains six of the seven landscape elements typical of the Central Columbia Mountains (i.e., main valley bottoms adjacent to major lakes, main valley bottoms adjacent to major rivers, main valley face units, secondary valley bottoms, side valley walls, and high elevation ridgelines and mountain passes).

It encompasses the following six biogeoclimatic variants – ATun, ESSFwc1, ESSFwc4, ESSFwcp4, ICHmw2 and ICHdw. Valhalla Park is second only to Goat Range Park in contributing to the representation of the ESSFwc1 biogeoclimatic variant in the province's protected areas system. The ICHmw2 includes four out of six possible landscape elements, while the ESSFwc1 and ESSFwc4 have three out of four, and the ESSFwcp and AT occur in all potential landscape elements.

Table 1: Biogeoclimatic Zone Variant Representation

Biogeoclimatic Zone	Biogeoclimatic Zone Variant	Area in Valhalla Park (ha)	Percent of Variant in Valhalla Park
Alpine Tundra	AT un	4,691	1.3
Engelmann Spruce Sub-alpine Fir	ESSF wc1	4,150	2.5
	ESSF wc4	15,900	2.6
	ESSFwcp4	9,404	6.0
Interior Cedar Hemlock	ICH dw	250	0.1
	ICH mw2	15,386	1.8

Vegetation

Valhalla Park is situated within the wet interior forest belt. The park is, for the most part, a forested landscape made up of a mosaic of successional timber stands within the framework of three general biogeoclimatic zones. The lower elevations (400 – 1,600 metres) are in the Interior Cedar Hemlock Zone. The mid elevations (1,600 – 2,000 metres) fall within the Engelmann Spruce-Subalpine Fir Zone. The highest elevations (2,000 – 2,400 metres) are a combination of Engelmann Spruce- Subalpine Fir Parkland Zone and Alpine Tundra Zone.

The Evans Lake yellow cedar stand is considered the best example of a yellow cedar stand in the interior of the province and the occurrences of salal/ponderosa pine in Cove Creek and the Engelmann spruce/coastal fern association in upper Nemo Creek are recognized as rare (normally not found in interior plant communities).

Wildlife

Valhalla Park supports a wide range of species, including large and small mammals, some of which are provincially listed as rare or endangered. The park provides essential habitat for Fisher (blue-listed species), Grizzly Bear (blue-listed species), Mountain Caribou (red-listed population), Mountain Goat and Wolverine (blue-listed species), and the presence of other species at risk is strongly suspected. Deer and Elk are also present within the park; however, because of limited foraging habitat and severe winters there are no substantial populations in the park.

Fish and Aquatic Values

The blue-listed Shorthead Sculpin and Bull Trout are native to at least some of the park's waters. Other fish species likely occurring within streams in the park are Mountain Whitefish, Rainbow Trout, Slimy Sculpin, Torrent Sculpin and Brook Trout (introduced species). Currently, stream and lake surveys identifying fish abundance and species diversity within the park are lacking.

Since the park contains six major and four minor creek drainages which feed into Slocan Lake, the park contributes significantly to the lake's water quality. When Evans, Beatrice, Cahill and Wee Sandy lakes are included, the park contains larger bodies of

freshwater than any other protected area in the Central Columbia Mountains. Although creek flows are primarily fed by annual rain and snow, it is likely that late summer stream levels are steadily reducing as permanent snowfields and glaciers in the park, such as the New Denver Glacier, continue to recede at noticeable rates owing to climate change.

2.3 Cultural Heritage Values

Traditional First Nation use for sustenance, spiritual and cultural purposes within Valhalla Park is evident from a number of pictographs and other archaeological sites along the west shore of Slocan Lake. These features are regionally important cultural heritage sites. The park is known to contain nine pictograph sites and six prehistoric sites. One site found high in an alpine basin may indicate that vision quests or hunting activity also extended further into the mountains. These sites are thought to be associated primarily with the Sinixt or Lakes People, who were resident in the Slocan Valley from 1000 - 500 BC until the time of European contact.

The logging history of the area before 1920 is also represented in timber extraction artefacts and other signs of hand, horse and flume logging in the lower Beatrice, Evans, and Nemo and Wee Sandy valleys. Many areas in the park, particularly some of the lower creek valleys and Slocan Lake shoreline, retain evidence of early 20th century activity by loggers, trappers and other pioneers. These early 20th century logging relics are regionally important cultural heritage sites.

2.4 Recreation Values

The lakeshore of Slocan Lake provides relatively easy boating, canoeing and kayaking opportunities, as well as access to beaches for hiking and overnight camping. There are hiking trails into a number of drainages in the park with some accessed via roads that are either in close proximity to or reach park boundaries. A relatively short hike to Mulvey Basin is rewarded by dramatic scenery and world class mountaineering peaks and walls. Established backcountry campsites are situated on lakes in both relatively low elevation valley bottoms and in sub-alpine areas. The park's six separate drainages and extensive remote areas offer a wide variety of challenging opportunities for wilderness travel and mountaineering.

Recreational Use

The park is recreationally significant for the range of summer wilderness opportunities it provides including: easy boat access to a 27 kilometre natural shoreline; easy, valley bottom hiking with river and upland lake fishing; floatplane access to a large mountain lake; sub-alpine hiking and backpacking; and strenuous alpine hiking, climbing and mountaineering.

The heaviest recreational use in the summer months occurs at various boat-accessed beach sites along Slocan Lake (Figure 3). While multi-day canoe and kayak trips along



Sharp Creek Beach

the park shoreline are increasing, camping and day use accessed by power boat predominates on these sites.

Hiking occurs mostly in the southern half of the park, with day use occurring on Gimli Ridge and Drinnon Pass, along the Slocan/Evans Creek trail, and up the Evans/Beatrice creeks trail to Cahill Lake. Backpacking is popular in the Gwillim/Drinnon lakes area, though more extensive off-trail alpine routes are also used to Mulvey Basin and through the upper basins along the park spine.

Though winter use remains light, the ski touring traverse of the spine of the park is considered a regional classic. Winter use of the park for extended ski touring and mountaineering trips is steadily increasing each year.

Although Valhalla Park contains several large, mid-elevation lakes and many smaller alpine lakes and tarns, natural productivity for fish is low owing to short growing seasons and generally rocky shorelines. Slocan Lake also has relatively low fishery values owing to low nutrient levels. The larger upland lakes have been stocked with rainbow trout and other species and offer moderate sport fishing values. Beatrice, Evans and Cahill lakes were stocked from 1930 - 1938 and Wee Sandy, Wragge and Shannon lakes were stocked in the 1970s. Falls and velocity barriers in their lower reaches limit fishery capability on most of the creeks, but Evans and Beatrice creeks support Cutthroat Trout.

Viewscape

Valhalla Park provides provincially significant pristine lake and mountain panoramas, based on views of the Valhalla Range from various elevations on the east side of Slocan Lake. Evans, Beatrice and Wee Sandy lakes are regionally significant in terms of their relatively large size and high mountain settings. Mulvey Basin, the Devil's Range and the Nemo Walls are provincially significant mountain scenic features.

Interpretation

The park's regionally and provincially significant archaeological and heritage sites, notably the pictographs and early 20th century logging remains, have considerable but largely unrealized interpretive value.

Access

Paved public road access exists to the Slocan/Evans Creek trailhead and to public boat launch ramps at Slocan, Silverton and New Denver. Paddle boating access is also available from the Wragge Beach near the northern boundary of the park.

Access to backcountry areas, such as Gimli Ridge and the Drinnon/Gwillim lakes area, is by forest service roads. Dependant on industrial activity adjacent to park boundaries, these roads are subject to variable maintenance standards.

Floatplane access to Evans Lake can offer an isolated wilderness experience to those who would otherwise be physically unable to reach such a site.

2.5 Other Park Attributes

Inholdings

There are two privately owned inholding lots in the lower Gwillim Creek area that contain several buildings. Four District Lot inholdings on Slocan Lake together comprise several kilometres of valuable shoreline. Of these properties, District Lot 7686, the large lot north of Hoben Creek opposite Silverton, is subdivided into twelve smaller lots, at least five of which have buildings. District Lot 6521, the large lot north of Nemo Creek, contains one old homestead and one relatively new residence. District Lot 1253, Block A, is a small lot on the south side of Nemo Creek which contains one cabin and adjoins the Nemo Creek Beach campsite. District Lot 10396, the small lot at Pebble Beach along the Slocan-Evans Creek trail, contains one building and results in the park trail taking a wide detour up the hillside.

Community Watershed

Gwillim Creek is a major domestic water source for the Village of Slocan (population of 340) and has five licences for irrigation and domestic uses.

Nemo Creek has two water licences which pre-date park establishment, one for domestic power generation and the other for domestic use while Mulvey Creek water is licenced to three users for irrigation and domestic purposes. .

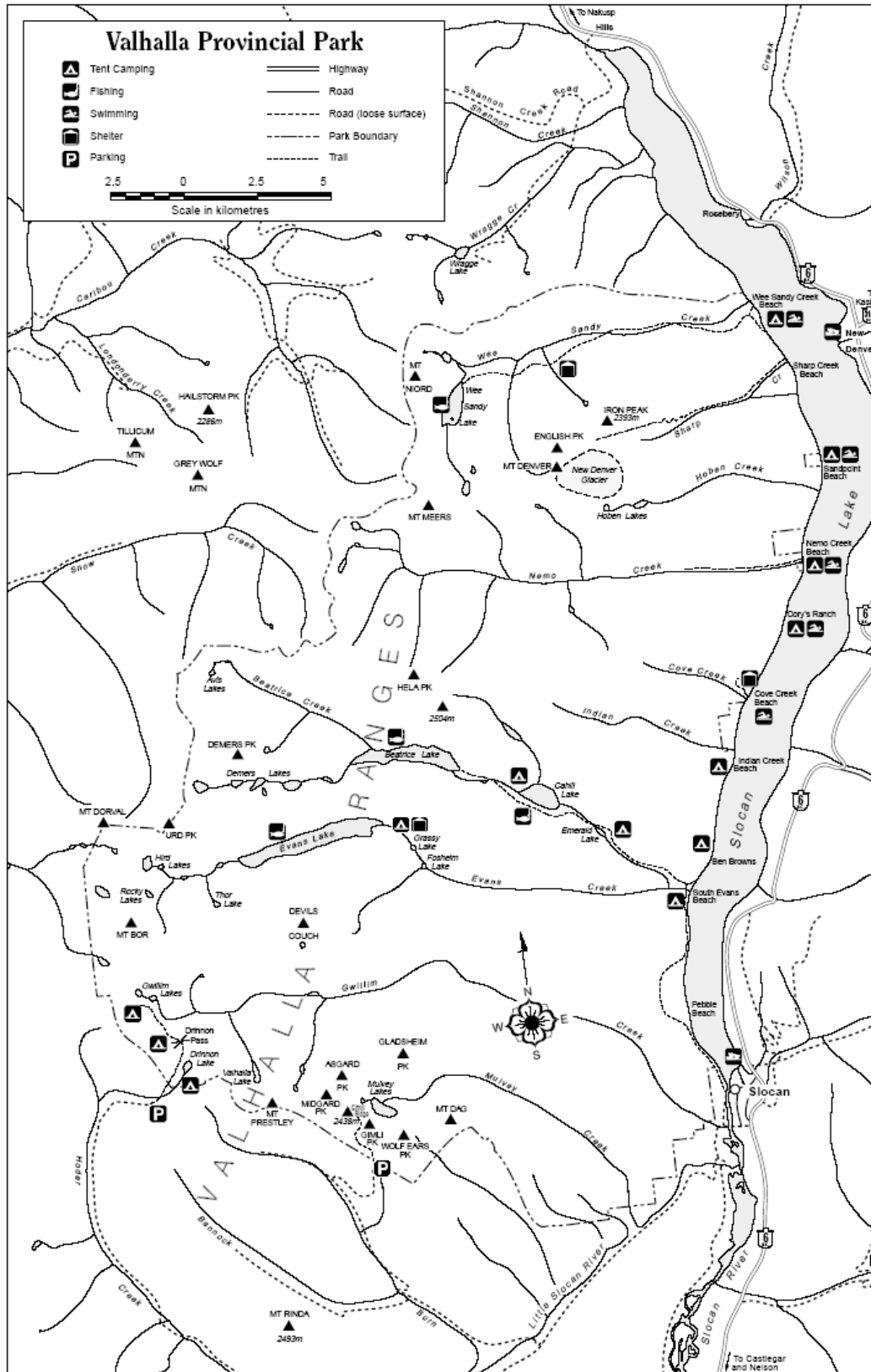


Figure 3: Valhalla Park and Recreational Attributes

3.0 Management Direction

3.1 Vision

The vision statement is forward looking and describes the desired future for Valhalla Park. This vision statement projects into the future to describe what a visitor to Valhalla Park would expect to find at that time and sets the tone for how the park may differ from what it is today. The vision provides a conceptual context for defining the conservation, recreation and cultural roles of the park.

Valhalla Park continues to be managed primarily for the conservation of its ecological systems and special features, while offering high-quality recreational opportunities that emphasize, and do not impair, the park's ecosystem values and wilderness character.

The priority assigned to ecosystem-based management both within, and adjacent to, the park has supported well-researched intervention to conserve and restore natural habitats and connectivity corridors. As a result, the populations of Grizzly Bear and other species at risk have increased and representative fish, wildlife and vegetation species diversity and health have been maintained. Management emphasis on the conservation of wilderness values has both reduced recreational impacts in sensitive areas and maintained visitor experiences which exemplify wilderness qualities. New or upgraded park facilities have not negatively impacted ecological and wilderness values.

Management activities have restored damage from visitor impacts, maintained trails and campsites to suitable standards, enabled compliance of park regulations in summer and winter, and supported planning and management for biodiversity. A combination of public education and effective compliance activities have ensured that recreational visitors and residents of adjacent communities appreciate, respect and protect the park's natural and cultural values. Careful planning and cooperative management of access with other agencies, industry and the public have reinforced the park's wilderness character and increased the viability of its core habitats for species at risk. Modes of access to the park are in keeping with wilderness preservation and experiences.

Greater understanding of First Nations' interests and greater sensitivity to their cultural and spiritual ties to the landscape have formed a holistic vision for management of the park.

3.2 Management Issues, Objectives, and Strategies

This management plan addresses a number of issues identified through previous land use planning processes and through consultation with other government agencies, First Nations, user groups, and the public. More detailed summaries and of key issues can be found in Appendices 3, 4 and 5.

Ecosystem-Based Management

There are large gaps in the information and understanding of the ecosystems in the park. Over the last several decades much of the management effort has been directed to recreational values and enhancement. An increased focus in ecosystem-based managed is needed in order to develop a strategy for ecosystem management. Information and knowledge gaps need to be filled and concise management practices developed.

Objectives	Management Strategies
To conserve unimpaired representative ecosystems, ecological values and natural ecological processes within the park.	<ul style="list-style-type: none">• Develop and apply an ecosystem management strategy that includes the major ecosystem components of vegetation, fish and wildlife and natural processes such as fire, insects, diseases, pollination and evolution.• Limit habitat fragmentation when considering facilities or uses to avoid cumulative impacts in the park.
To support wildlife connectivity within and outside the park to maintain the integrity of sensitive ecological values in support of the park.	<ul style="list-style-type: none">• Ensure habitat for grizzly bear, mountain goat and wolverine in the park is managed to support connectivity over the working landscape and between the region's protected areas and wildlife management areas and work co-operatively with other government agencies and land managers to support connectivity outside the park.• Work with the appropriate government agencies to support the Kootenay-Boundary Land Use Plan Implementation Strategy Conservation Objectives and Strategies and the resource management zone objectives of the higher level plan order.• Provide input through provincial review processes for proposed major developments outside the park that may impact the park's ecosystem values.• Monitor and provide input into forest development and mineral exploration projects, and commercial recreation proposals.
To increase knowledge of ecological values and processes within the park by encouraging and conducting research to support future management decisions.	<ul style="list-style-type: none">• Increase information and understanding of ecosystem values and processes in partnership with other agencies, jurisdictions and academia through the sharing of inventory and research.• Conduct habitat inventory and develop a species list for the park, preferably in coordination with similar efforts for the surrounding area. Place priority on those areas with present or projected recreational uses and on those areas such as the bedrock meadows above Slocan Lake which have species at risk or unusual species diversity.• Field check existing predictive ecosystem mapping, specific to priority areas and projects, preferably in cooperation with similar efforts for the surrounding "area of cooperation".

Objectives	Management Strategies
To conserve representative and sensitive shoreline habitats.	<ul style="list-style-type: none"> Complete an overview assessment of shoreline ecosystems, species, habitats, and features to identify priority areas for conservation. Modify zoning/recreational use patterns to restore and/or maintain the representative and sensitive shoreline areas (See <i>Overnight Use and Boating</i>).
To build and maintain the necessary public support for ecological conservation within the park.	<ul style="list-style-type: none"> Co-ordinate the development of outreach and educational resources with other agencies and private groups to enhance the overall effectiveness of activities that support ecosystem function.

Vegetation

Management of vegetation is an integral part of the overall ecosystem management strategy for Valhalla Park. Vegetation communities are often the key defining characteristic of the component parts of an ecosystem. How these communities are managed can have a profound effect on the overall success of adopting an ecosystem approach to park management. Some of the fundamental issues that must be addressed in the management of the park's vegetation communities are: forest health (insects and diseases), the role and management of fire, interagency planning and cooperation, and the lack of detailed information on the park's plant communities.

An underlying issue is the impact of climate change which is difficult to predict for specific areas, particularly those with complex topography. General trends can be identified: mountain biogeoclimatic zones will shift upward; insects and diseases will expand when not limited by cold; hardwoods and "southerly" conifers will expand their ranges while more cold-adapted conifers will lose habitat; and species along elevation bands in mountainous terrain will tend to lose habitat and decrease in numbers. The timing of these changes, their specific application to Valhalla Park, and their implications for management, require research and modeling.

Objectives	Management Strategies
To manage the park's vegetation communities to ensure that the area's natural biodiversity is maintained and/or restored.	<ul style="list-style-type: none"> As part of the ecosystem management strategy, develop vegetation management strategies that will maintain or restore natural disturbance regimes (insects, disease and fire) wherever possible, while considering: <ul style="list-style-type: none"> the ecological role of the park in the greater ecosystem in which it is embedded (e.g., if older age class vegetation is under-represented in lands outside parks in the ecosection, the vegetation management objectives of the park should be to protect a higher percentage of old-age vegetation); conservation of vegetation communities and rare species (e.g., yellow cedar and coastal salal); the habitat needs of wildlife; the recreational and visual values of the park; public health and safety; and adjacent forest resources.

Objectives	Management Strategies
	<ul style="list-style-type: none"> • Ensure public review and the completion of a BC Parks' impact assessment for: <ul style="list-style-type: none"> - proposals for significant tree removal or other measures to address fire, insect or disease disturbances (in keeping with the BC Parks tree removal policy); and - activities that might damage park values or ecosystems.
<p>To complete the planning and coordination necessary to allow the natural progression of lightning-initiated fires in prescribed conditions and locations in the park.</p>	<ul style="list-style-type: none"> • Develop a fire management plan for the park which takes a proactive approach to fire management. This management plan should prescribe where and under what conditions lightning-initiated fires can be used in the maintenance of natural ecosystem diversity. • Identify the most important recreational and scenic areas in the park and protect them from fire. • Work cooperatively with communities and private property owners adjacent to the park to ensure that fire safe practices are followed in the immediate vicinity of structures and community infrastructure within or near the park's boundaries. • Encourage permitting agencies to require that any proposed developments adjacent to the park assess fire hazards and risks in light of the park's objective of restoring fire to ecosystems. • Work with appropriate agencies to set thresholds for the atmospheric conditions, the cumulative smoke level in the Slocan Valley from all sources, and the duration of smoke emissions from fires, and suppress fires in the park if these thresholds are exceeded.
<p>Use ecologically friendly methods of vegetation management and firefighting.</p>	<ul style="list-style-type: none"> • Keep up-to-date wildfire response directions on the Ministry of Environment's Wildfire Response intranet page and share management plan with wildfire responders to assist in protecting park values. • Allow burned areas to recover naturally to reduce erosion and protect the soil. To protect biological diversity, leave burned wood on the ground to decompose wherever possible.
<p>To improve knowledge of the park's vegetation communities, with emphasis on protection of rare, endangered and vulnerable native plant communities and species.</p>	<ul style="list-style-type: none"> • Encourage low-impact scientific studies of vegetation. • Complete a comprehensive vegetation inventory to locate, identify, and map plant communities, rare species and threatened plant communities in areas that could potentially be impacted by recreation, particularly Slocan Lake shoreline sites and those areas accessed from Hoder and Bannockburn creeks. • Use backcountry recreation impact monitoring (BRIM) on sensitive vegetation communities. Develop appropriate visitor management strategies to ensure these sensitive vegetation communities are protected. • Intervene where necessary if natural processes threaten rare, endangered or vulnerable native plant communities and species. • In support of the prohibition on plant gathering for commercial purposes in parks, educate the public about the values of maintaining the integrity of all components of the park's vegetation communities.

Objectives	Management Strategies
To prevent the establishment of non-native plant species.	<ul style="list-style-type: none"> In cooperation with adjoining land management assess, monitor and control noxious and other invasive weed and non-native plant species using the most effective low-impact biological or mechanical method available.

Fish and Wildlife

One of the greatest challenges in the future management of Valhalla Park will be to sustain essential wildlife habitat and maintain biodiversity in the midst of a rapidly changing climate in conjunction with continuing industrial activity and increasing commercial and public recreational use on surrounding lands. The park, along with other large wilderness protected areas such as Kokanee Glacier, Goat Range and Purcell Wilderness Conservancy parks, provide important habitat and create critical linkages for wildlife movement in the West Kootenay.

There is a lack of research in the park with respect to the cumulative effects of recreation use and facility development on rare and endangered species, and also a shortage of inventories and baseline data on wildlife. The dynamics of wildlife movement in and out of the park complicates an already limited knowledge of the species diversity in Valhalla Park. These knowledge gaps dictate the need for enhanced sharing and co-ordination of management among a number of agencies and interests. Some agreements already in place between government agencies are helping co-ordinate the management of wildlife, including sharing information and assisting with inventory collection.

Objectives	Management Strategies
To maintain the natural diversity of wildlife species and habitats within and adjacent to the park, with priority given to rare, endangered or threatened species.	<ul style="list-style-type: none"> Identify high priority habitats necessary for the continuing health of wildlife populations and manage accordingly. Develop a coordinated long-term approach to wildlife management with other government agencies and with First Nations, emphasizing species at risk, including: <ul style="list-style-type: none"> - maintaining habitat; - conservation and use; - management of biodiversity; - access; and, - connectivity and range management.
To present opportunities for wildlife viewing and study, as well as, other appropriate recreational uses.	<ul style="list-style-type: none"> In accordance with the BC Parks Bear-People Conflict Prevention Plan, develop and implement operations procedures to minimize potential bear/human conflicts in areas of known bear concentration through public information, outreach, location of trails, campsites and facilities, garbage management, area closures, and removal of problem bears if appropriate. Wildlife values management will have a priority over recreational activities. Where appropriate, provide opportunities for wildlife viewing, studying and appreciation.

Objectives	Management Strategies
To maintain healthy populations of the present range of species in numbers consistent with natural population cycles.	<ul style="list-style-type: none"> Acquire traplines in the park as funds are available, and/or by mutual agreement between the trapper and government. <p>See also <i>Hunting</i> section</p>
To enhance the knowledge and understanding of the park's wildlife species and their habitats.	<ul style="list-style-type: none"> Develop a wildlife inventory with priority on red and blue-listed species. Update the existing Grizzly Bear inventory and habitat assessment. Encourage research aimed at better understanding the cumulative effects of recreational use (e.g., hiker traffic) on species such as Mountain Goats, Wolverine and Grizzly Bears. Encourage the assistance of volunteers and others to collect wildlife data (e.g., bird watching clubs, anglers, pilots and tour operators, etc.).
To establish or maintain fisheries at levels offering quality recreation, subject to the capability of the lakes and creeks and the protection of original species.	<ul style="list-style-type: none"> Maintain/restore natural fish habitat and conserve all natural fish populations. Develop and implement a fish inventory and management strategy to address needs inside the park and along the Slocan Lake shoreline. Identify and recommend measures to manage the quality of fishing in stocked lakes (Drinnon, Evans, Beatrice, Cahill, Little Cahill (Emerald), Wee Sandy). Implement a creel census of Evans, Beatrice and Cahill lakes to ascertain the current character and health of the fishery.

Water

Given that the greatest concentration of backcountry recreational use occurs in the headwaters of this drainage, protection of Gwillim Creek water quality is of primary importance. Owing to campsite locations and to the use of fly-out effluent barrels in outhouses, recreational impacts appear to have minimal effect on water quality issues although to date, no water quality or monitoring studies have been undertaken in the park.

Objectives	Management Strategies
To maintain the natural qualities of water resources in Valhalla Park for their habitat values, their benefits to park users and use for domestic water supplies outside the park.	<ul style="list-style-type: none"> Ensure that recreational activities have minimal impact on erosion of surface materials and do not compromise water quality. Ensure that sanitary facilities and recreational development and use in all park watersheds meet public health standards, particularly in Mulvey, Nemo and Gwillim creeks. Investigate all private waterworks in the park and issue park use permits for those that have tenures predating park establishment. Establish long-term monitoring of water quality in the upper reaches of Gwillim Creek to detect any adverse effects from recreational use in the headwaters areas. Undertake remedial work if required.

Cultural Heritage

Although all of the pictographs within the park have legal protection under the *Heritage Conservation Act*, some have been vandalized with graffiti and wanton destruction. The park also has many archaeological sites where First Nations activity occurred. The archaeological features of the park are significant for the information they provide about First Nations' culture in the Slokan Valley, but the more accessible sites such as shoreline pictographs are at risk. Strategies are required to ensure that these important cultural heritage values are protected and managed.

There are locally significant traces of early 20th century logging and homesteading but these are fading away, with little attention being paid to their interpretive appeal. Better documentation and presentation of these heritage values could both increase public appreciation of the park and enhance visitation.

Objectives	Management Strategies
To identify and protect significant cultural values within Valhalla Park.	<ul style="list-style-type: none">• Conduct archaeological impact assessments and apply management measures (i.e., buffering, avoidance, access controls, signs, mitigation, and restoration) where appropriate.• Protect <i>in situ</i> important heritage features and traditional First Nations use sites located within the park. Such sites will not be identified on any public park literature in order to protect them from damage, but the fact that they are protected by penalties under the <i>Heritage Conservation Act</i> under should be publicized to deter vandalism.• Adhering to research standards, protocols and permit conditions, protect the park's cultural heritage values from human interference or unacceptable natural decay by applying the appropriate level of management intervention.
To work with First Nations and other government agencies in the management and protection of First Nation archaeological sites.	<ul style="list-style-type: none">• Conduct research with First Nations to increase the knowledge and understanding of pre and post-contact history of the area.• In consultation with First Nations, develop educational and outreach material on the park's pre-contact and current cultural values.
To interpret the remnants of logging and other early 20 th century activity within the park.	<ul style="list-style-type: none">• Encourage detailed research and interviews to document resource extraction and homesteading activities that occurred prior to park establishment.• Encourage cooperative development of signage, brochures or other information to interpret the history of resource extraction and homesteading to park visitors.

Viewscapes

The visual values of Valhalla Park are provincially significant. Slocan Lake itself is a major visual feature which creates a sense of distance or isolation between the relatively close east and west shores. The forested slopes above the western shoreline of Slocan Lake have low to moderate recreational capability. However, these slopes lie in front of a very scenic background of rugged mountain peaks and have a high aesthetic value because they are immediately visible from the eastern side of Slocan Lake by travelers on Highway 6, as well as from the various villages and communities on the east side of Slocan Lake. These apparently undisturbed front slopes are the basis of the Slocan Valley's image as an area of outstanding natural beauty. They constitute the park's most significant visual resource. Known as the Silvery Slocan Circle Route, there are no comparable viewscapes from a major highway anywhere in the southern part of the province.

The park has developed a high profile as a symbol of the natural beauty and wilderness character of the Slocan Lake area². Because of its high visibility from the Slocan Lake communities and east side viewpoints, it provides an inspirational backdrop to other recreational activities taking place on the east side of the lake and is vicariously appreciated by many tourists who may never actually set foot in it. Though difficult to calculate, the economic and tourism benefits of this vicarious appreciation are undoubtedly significant and are achieved without any impact on the park itself.

Developed trails partway up key drainages offer opportunities for day hikers and backpackers to see the turbulent streams, to reach the scenic alpine areas, and to glimpse Mountain Goats and other wildlife. At higher elevations, glaciers have created a rugged alpine area of cirque basins, horn-like peaks and expansive cliff faces. Numerous lakes and tarns, alpine vegetation and stark granitic rock contribute to spectacular foreground views, while the Valhalla Range and the flanking Monashee and Purcell ranges offer long-range vistas of a sea of mountains.

Objectives	Management Strategies
To protect and maintain visual resources that are key to Valhalla Park's appeal.	<ul style="list-style-type: none">• Continue to input into other resource agency plans for activities outside of but visible from the park, particularly for the west side of Slocan Lake north of Wee Sandy Creek.• Encourage the relevant government agency and forest licensees to help ensure, through the forest development plan review process, that areas outside the park boundary are managed to protect viewscapes.• Work with the appropriate government agencies to protect the visual integrity of the park from impacts of adjacent uses.• Through fire management planning, identify the most important recreational and scenic areas in the park and protect them from fire. (See also <i>Vegetation</i> section)• Establish a relationship with private landowners on the west side

² For example, the outdoor clothing line "Valhalla Pure" both trades upon and enhances this image.

Objectives	Management Strategies
	<p>of Slocan Lake which will encourage them to support park visual objectives by avoiding any development activities such as clear-cut logging or obtrusive building which would impact the appealing natural quality of the west side.</p> <ul style="list-style-type: none"> • Work with the appropriate government agency and local communities to support the development of Highway 6 as a scenic route with information on the park provided at rest stops, viewpoints and boat access sites.
To design and situate park facilities in a manner that preserves the visual integrity of the park.	<ul style="list-style-type: none"> • Identify areas of the park visible from points outside the park and ensure that provisions are made for maintaining their visual appeal when considering such matters as shoreline developments, trails, wildlife habitat management and fire management. • Ensure that trails, bridges, signs and other structures in the park are visually harmonious with their settings.

Access

The opportunity for a wilderness experience largely depends on how access is managed. Access management helps define the type, impact, distribution, and amount of use. It can affect the spread of invasive species and the movement of organisms. It is also important to maintaining the wilderness qualities of the park. Detailed discussion on access issues can be found in Appendix 4.

Objectives	Management Strategies
To work with appropriate agencies to ensure road accesses to key trailheads remain open.	<ul style="list-style-type: none"> • Coordinate with the relevant government agencies with respect to the management of roads, trails, and trailheads on Crown lands that provide access to the park. • Place emphasis on maintaining the Bannock Burn Road and Hoder Creek Road to a high standard to allow easy and safe access for park visitors to Gimli Ridge and Drinnon Pass.
To ensure public access to key areas of Valhalla Park, emphasizing hiking as the prevailing access mode in order to maintain the natural and wilderness qualities of the park.	<ul style="list-style-type: none"> • Maintain all existing trailheads that are currently accessible by road and boat. • Investigate the possible development of one access point on the park's western boundary that could expand hiking and backcountry opportunities in this area. Primary areas for study: Gwillim Basin via Woden Creek, and Wee Sandy via Niord Col from Snowslide Creek. Suggested criteria include: <ul style="list-style-type: none"> - maintain wildlife and wilderness values; - maintain a minimum 2 - 3 hours hiking time to the destination area within the park. (Note that this could require blocking abandoned logging spur roads or constructing a trail parallel to a road. Also note that park funds are not available to fund trails outside park boundaries.); - ensure that any new trail could not be used for mechanized access (mountain bike, motorcycle, ATV, snowmobile); and - avoid opening remote areas such as Avis Lakes, Upper Demers Lakes and upper Nemo Valley. • Prohibit all forms of motorized access into the park except for management purposes and as provided for in this management plan.

Objectives	Management Strategies
	<ul style="list-style-type: none"> • Work with the appropriate government agency with respect to Wragge Beach Recreation Site in recognition that the site is a staging area for canoeists/kayakers entering the park from the north end of Slocan Lake. • Continue to use air access for management and emergency operations in a way that will minimize impacts on wildlife and wilderness recreation values.
To minimize use of aircraft as a means of accessing park recreational opportunities.	<ul style="list-style-type: none"> • See also <i>Mechanized Uses</i> section
To provide important visitor information at all access and departure points into the park.	<ul style="list-style-type: none"> • Install, maintain and keep current trailhead and access point signage and kiosks to ensure park visitors are provided with important park messages prior to their departure and entry into the park.

Boating

Much of the park's Slocan Lake shoreline is accessible only by boat, and boaters probably constitute the largest single category of park users. To reinforce the park's image and role as a natural refuge and wilderness, non-motorized and low noise boating uses will be encouraged and users of personal watercraft will be urged to operate well away from the shoreline. Though the park includes a 100 metre wide foreshore strip along Slocan Lake, the federal government has jurisdiction over boating use and will only regulate the use of watercraft for reasons of public safety or environmental impact. However, provincial park managers do have the authority to limit inconsiderate noise in, and around, public use areas within park boundaries.

Objectives	Management Strategies
To encourage a range of boating activities emphasizing appreciation of the natural settings of the different environments of the park.	<ul style="list-style-type: none"> • Encourage boat access across Slocan Lake to the park by providing facilities and information programs appropriate to different types of watercraft as identified through use patterns, user surveys and through any cooperative planning for boating on Slocan Lake, • Establish and maintain facilities and information programs to supply "recreational opportunity packages" for water-based touring activities along Slocan Lake, including camping, picnicking, day hiking, fishing, swimming and cultural and natural feature appreciation. • Encourage private sector initiatives to provide water transportation, boat rental, and boat storage and marina facilities from locations on Slocan Lake outside the park to make west shore park sites more publicly accessible. • Work toward designation of certain beach sites for non-motorized users and closure of some sites to use of amplified audio devices (i.e., radios and tape and CD players using loudspeakers rather than headphones). • Work with local communities and outside agencies (governmental and non-governmental) on options for encouraging non-motorized boat access to designated sites along the west shore of Slocan Lake.

Objectives	Management Strategies
	<ul style="list-style-type: none"> In consideration of the natural and wilderness qualities of the park, work with the federal government to put an electric motors only restriction on the upland lakes in the park.

Hunting

Hunting activity in Valhalla Park remains very limited owing to access difficulties. The management plan permits hunting in the accessible areas of the park under Nature Recreation and Wilderness Recreation zoning.

Objectives	Management Strategies
To provide sustainable wilderness hunting opportunities.	<ul style="list-style-type: none"> Continue to allow hunting in the Nature Recreation and Wilderness Recreation zones of the park (100% of the park). Assess, monitor, and regulate hunting consistent with the hunting regulations under the <i>Wildlife Act</i> (e.g., continue the existing closure on hunting of Mountain Caribou and Grizzly Bear in the area).

Mountaineering

The dramatic peaks of the Mulvey Group and the Devil's Range continue to attract mountaineers to Valhalla Park. Removal of the deteriorated Mulvey Basin Hut has required climbers to establish base camps for multi-day climbing trips in that area, but improved access to Gimli Ridge has increased the feasibility of day-use climbs. The southern part of the North/South Wilderness Recreation Zone is likely to see increased mountaineering/backpacking activity and may require improved route and campsite definition.

Objectives	Management Strategies
To provide a range of mountaineering opportunities ranging from day trips to extended expeditions.	<ul style="list-style-type: none"> Maintain day-use trail access via Gimli Ridge to the park's most outstanding climbing area, the Mulvey Group. Maintain trail access to the western end of the Devil's Range climbing area via Gwillim Lakes. Identify and retain some important climbing areas in the park in the Core Wilderness Recreation Zone in order to protect options for wilderness mountaineering expeditions.

Fishing

Fishing contributes to the destination attraction of the lakes in the Evans and Beatrice watersheds, and these superbly remote natural settings contribute to the park's reputation for offering outstanding wilderness experiences. However, much of the sport fishery in Valhalla Park is based on introduced fish stocks, which may be impacting native species. A balance must be struck between the conservation objective of maintaining representative native fish stocks, particularly any species at risk, and continuing to offer well-established and popular sport fishing opportunities. Considerably more information on the park fisheries is required to assist in appropriate management.

Objectives	Management Strategies
To establish or maintain fisheries at levels offering quality recreation, subject to the capability of the lakes and creeks and the protection of original species.	<ul style="list-style-type: none"> See strategies listed for <i>Fish and Wildlife</i> section
To facilitate fishing opportunities compatible with particular zones by providing a variety of appropriate accesses.	<ul style="list-style-type: none"> Maintain trails and shoreline facilities on Slocan Lake to serve angling activities offshore (Slocan to Evans Creek, Sharp Creek to Wee Sandy Creek). Maintain trails for relatively accessible hike-in lake fishing opportunities at Drinnon Lake and Little Cahill (Emerald) Lake. Maintain trails for relatively accessible hike-in river fishing opportunities along Beatrice Creek, Lower Nemo Creek and Wee Sandy Creek. Maintain trails for access to backcountry lake and river fishing opportunities in Wee Sandy, Lower Nemo, Beatrice and Cahill drainages. Where habitat capability permits, offer remote, wilderness lake and river fishing opportunities in trailless areas such as Upper Nemo, Evans Creek, Hird Lakes and west end of Beatrice Lake. Offer floatplane accessed fly-in backcountry lake fishing opportunities at Evans Lake. Authorize horse use in lower Gwillim Creek as an alternate means of accessing river fishing opportunities (see also <i>Horse Use</i> section)

Hiking

Since 1989, most of the trails in the longer drainages of the park (Mulvey, Gwillim, Evans, Nemo, Wee Sandy) have been allowed to deteriorate, as they all transect important Grizzly Bear habitat and it was never intended that use would be promoted into those areas. Most use occurs on the Slocan-Evans Creek shoreline trail, the connecting trail to Beatrice Lake, the Hoder Creek to Gwillim Lakes trail, and the Gimli Ridge trail, built following the 1999 addition of the ridge to the park. By comparison with Kokanee Glacier Park, which currently sees around 18,000 visitors annually, Valhalla may have averaged only 4,400 annually since 1997. Much of the boat accessed use involves only day hikes into the lower sections of the drainages, and only the Drinnon/Gwillim trails see relatively heavy backpacking use in addition to day hiking. Dogs must remain leashed and are restricted to the lakeshore sites and the Slocan-Evans Creek trail within the park because of the greater potential for undesirable impacts on wildlife in other areas³.

Objectives	Management Strategies
To offer and maintain a range of hiking opportunities appropriate to the different environments of the park.	<ul style="list-style-type: none"> • Provide relatively easy day hiking opportunities originating from trailheads immediately outside the park (i.e., Slocan-Evans, Hoder-Drinnon) and from boat access only sites (i.e., Lower Nemo, Sharp and Wee Sandy creeks). • Provide extended backcountry trail hiking opportunities through the various environments of the park: low elevation (Slocan-Evans); mid-range (Wee Sandy, Sharp, Evans-Beatrice); and high elevation (Gwillim Lakes, Gimli Ridge). • With consideration for safety and minimal effects on vegetation and wildlife, research and identify recommended routes for backpacking and mountaineering access to key staging areas in the Wilderness Recreation Zone (e.g., Valhalla Lake, Coven Lakes, Hird Lakes, Demers Lake, Avis Lake). • Retain the Core Wilderness Recreation Zone (e.g., mid & upper Nemo Creek, portions of Evans and Beatrice creeks) without developed trails or facilities to offer wilderness travel and to ensure minimal human interference with sensitive resources. • In alpine areas, where appropriate, use cairn-marked routes instead of built trails. In fragile vegetation or soil areas, layout, construct and maintain trails adequately to prevent environmental deterioration. • Continue to allow dogs within the park only when leashed and at the Slocan lakeshore sites or along the shoreline trail between Slocan and Evans Creek.
To assess and monitor the impact of backcountry visitors on natural and cultural values.	<ul style="list-style-type: none"> • Close, relocate or improve trails as required if bear and visitor safety problems arise. • Monitor trail use through a system of trail counters and use BRIM to assess problem areas.

³ In addition to chasing wildlife, dogs can provoke bear confrontation and lead pursuing bears directly back to their masters. Dog fecal matter carries bacteria that are potentially fatal to wildlife and can cause illness in humans if they contaminate the water supply.

Horse Use

Light but regular horse use has occurred on the old roadbed in the Gwillim Creek drainage without apparent impacts since the park was established. The Slocan City water supply is now treated and closely monitored, and is therefore highly unlikely to be affected by continued light and responsible horse use.

Objectives	Management Strategies
To provide for horse use in consideration of terrain, trail conditions, water quality, general environmental quality and other recreationists.	<ul style="list-style-type: none">• Subject to monitoring to confirm that Grizzly Bears and water quality are not being adversely affected, continue to allow horse use on established trails in the lower half of the Gwillim Creek drainage.• Provide no new permanent facilities for horse use activities in the park beyond any trail upgrading necessary to protect the environment.

Winter Recreation

Overall, winter use of the park remains light. The north/south ski touring traverse is one of the preferred activities. Observers report that snowmobiles have frequently operated illegally in some parts of the park, notably the Drinnon/Gwillim lakes area. As snowmobile and helicopter activity increases on surrounding lands, the wilderness appeal of the park is likely to draw more ski touring use, particularly for multi-day trips. For reasons of accessibility and standards, few of the park's trails lend themselves to snowshoeing or cross-country skiing, but some potential may exist for encouraging these activities on historic wagon routes in the southern drainages of the park.

Objectives	Management Strategies
To offer a range of non-mechanized winter recreation opportunities in the different environments of the park.	<ul style="list-style-type: none">• Continue the prohibition on the use of snowmobiles in Valhalla Park; encourage compliance by snowmobilers.• Prohibit helicopter skiing drop-off and pick-up in the park.• Encourage alpine ski touring only in safe and appropriate backcountry terrain.• Continue liaison with the Canadian Avalanche Association with respect to providing up to date avalanche bulletins and education.• Investigate opportunities for cross-country skiing, snowshoeing and winter camping, particularly in the southern drainages of the park.

Overnight Use

The objectives and strategies for overnight use in a large park determine the range of facilities required to reflect the needs of a diverse public. The self-sufficient mountaineer may need nothing, whereas individuals and multi-generational families may have a diversity of needs from primitive campsites to roofed accommodation. It is not necessary to accommodate all of these needs within any individual park, as long as they are being met across the landscape and appropriately in the park system as a whole.

The 1989 Valhalla Park Master Plan provided the opportunity for a very wide range of both camping and roofed accommodations facilities including commercial opportunities (see Appendix 2). In the absence of any demand or use pressures, a number of the planned basic lakeshore and backcountry individual and group campgrounds were not developed and the envisaged diversity of roofed accommodation was also never realized. Although one lakeshore and one backcountry public shelter were built, no new public cabins were built, no commercial camps or lodges were developed and some existing cabins deteriorated. Floatplane access continued to Evans Lake, though the condition of the basic cabin there deteriorated so as to offer only marginal accommodation.

There has been a significant increase in commercial overnight facilities outside the park, including four commercial lodges built relatively near the park with one in Ice Creek bordering the park. Overnight accommodations are also available from numerous hotels, lodges and bed and breakfast establishments in the nearby communities. The close proximity to the park is often referenced by these establishments to attract visitors. Visitors can use water taxi and other conveyances to access the park from community-based accommodation.

While the diversity of accommodation originally envisioned for the park has not materialized, accommodations serving the park are being provided through a variety of means supporting the economy of local communities. This economic support through tourism was one of the original purposes for creating Valhalla Park and it appears to be occurring. Under these circumstances additional roofed accommodation in the park is not necessary. The high demand for camping and the increased congestion along the shoreline of Slocan Lake, however, requires consideration of improvements.

Objectives	Management Strategies
To provide a diversity of ecologically sustainable overnight facilities supporting a variety of boat and hiking accessed backcountry opportunities.	<ul style="list-style-type: none">• Maintain existing designated formal campsites complete with hardened sites, toilet facilities, bear poles, and designated cooking areas at the following locations:<ul style="list-style-type: none">- on the lakeshore of Slocan Lake at South Evans Creek Beach, Ben Browns (Spring) Beach, Indian Creek Beach, Cove Creek Beach, Cory's Ranch (Homestead Beach), Nemo Creek Beach, Sandy Point Beach, Sharp Creek Beach and Wee Sandy Beach; and,

Objectives	Management Strategies
	<ul style="list-style-type: none"> - in the backcountry at Drinnon Lake, Wicca Lake, Gwillim Lakes, Emerald Lake, Cahill Lake West and Evans Lake. • Investigate and, as necessary, formalize and designate campsites at the currently random camping sites on the Slocan lakeshore at North Wee Sandy Creek, North Cory's Ranch, South Cory's Ranch, South Cove Creek, South Ben Browns, South Ben Browns (non-power boats), Evans Point North and Evans Creek North (group site). • Monitor the need for primitive backcountry campsites at Mulvey Basin, Coven Lakes, Upper Demers Lakes, Avis Lakes, Wee Sandy Lake West and South and New Denver Glacier and, if necessary for environmental protection or public safety, define or develop facilities within zone guidelines. • Review the need for a backcountry group use site at Gwillim Lakes and develop if appropriate. • Consider water-accessed group use in campground design at Wee Sandy Beach, Homestead Beach (Cory's Ranch) and South Evans Beach. • Assess the need, feasibility and impact for higher capacity campsite facilities on the Slocan lakeshore or in the backcountry as appropriate within zone guidelines. • Maintain, repair or replace (like for like) the existing basic public cabins at Cove Creek and Evans Lake and the shelters at Iron Creek and Evans Creek. • Limit roofed accommodations to what is specified in these strategies with no additional roofed accommodations⁴ constructed during the term of this management plan. • Encourage visitors to use accommodations (e.g., hotels, motels, resorts, lodges, bed and breakfasts, campgrounds) in adjacent communities and provide park outreach material to these facilities.
To assess and monitor the impact of backcountry visitors on the park's natural and cultural values.	<ul style="list-style-type: none"> • Educate visitors about minimum impact camping (backcountry wilderness ethics) at all sites in the park to avoid site degradation and minimize human-bear conflicts. • Continue education and compliance of regulations pertaining to "no dogs" and "no campfires". • Use appropriate assessment tools such as BRIM to ensure that existing backcountry campsites and overnight roofed accommodations are not adversely impacting the park's natural and cultural values. • If negative impacts are detected, mitigate them by visitor management techniques such as quotas, camping at designated sites only, site expansion and hardening, closures, seasonal and area restrictions, etc.

⁴ Note, roof accommodation is prohibited in DL 8283 in perpetuity as a condition of purchase

Mechanized Uses

Although some mechanized activities, such as helicopters, ATV's, snowmobiles and mountain bikes, are accommodated in some provincial parks in British Columbia, these activities are generally not compatible with the wilderness nature and land use intent of many protected areas including Valhalla Park.

Mountain biking does not occur in the park. Considering that access to most of the park is by boat, the potential for mountain biking is low. While there are a few trails in the alpine, they are much too short for mountain biking (less than 2 km) and could create a conflict with climbers and hikers if used.

Though aircraft access is permitted to Avis Lake, Demers Lake and Evans Lake, floatplane access is practical only to Evans Lake⁵. Floatplane access to Evans Lake has been a longstanding use and its continuation was approved in the 1989 master plan because it was recognized that its spectacular mountain setting provides a unique opportunity in the southern interior of the province. However, it appears that at least some of the parties accessing the lake by air have not been respecting the wilderness character of the area and have constructed rustic campsites, damaged the cabin and left considerable litter. Management actions to address these issues are required.

Although the 1989 master plan provided for commercial helicopter access to specific areas (Evans Lake, Upper Demers Lake, Avis Lakes and Devil's Couch year round; Wee Sandy Lake, New Denver Glacier and Mulvey Basin in winter only), the use of helicopters for accessing the park has been far less than anticipated.

The supply of heli-hiking, heli-skiing and helicopter-accessed commercial lodge opportunities within the Central Columbia Mountains has increased significantly since 1989. The fact that winter heli-access opportunities are offered in nearby Kokanee Glacier Park, and extensive heli-skiing occurs in Goat Range Park increases the value of Valhalla Park as a protected wilderness area with minimal aircraft activity.

Lowering previously authorized levels of aircraft activity is fully consistent with the park's emphasis on the conservation of natural values and systems and recreational uses which focus on appreciation of the park's natural and wilderness qualities.

⁵ Under Schedule A subject to Section 27 (2) of the *Park, Conservancy and Recreation Area Regulation* (BC Reg 242/2004, s. 2.), aircraft are permitted to land on "Avis Lake, Demers Lake and Evans Lake". This regulation has some technical and practical problems. There are two Avis Lakes, not one, and both are very small alpine tarns in a rocky cirque in which any floatplane landing or takeoff would be impossible. There are four lakes in the Demers Lakes chain, though the regulation refers only to "Demers Lake". None of these lakes is much longer than 400 m, making floatplane access similarly problematic. In practice, the only known floatplane use occurs at Evans Lake, where it is supported by the plan.

Objectives	Management Strategies
To de-emphasize mechanized uses in the park in favour of non-mechanized uses more compatible with natural and wilderness experiences.	<ul style="list-style-type: none"> • Prohibit mechanized conveyances, including ATVs, ORVs, motorcycles and snowmobiles from Valhalla Park. • Prohibit mountain bicycle riding in the park to avoid potential conflict with other users. • Work with the general public and the BC Snowmobile Association to improve compliance in directing snowmobile use out of the park and into acceptable areas. • Prohibit heli-skiing and heli-hiking anywhere in the park. • Continue air access for management, research and emergency operations in a way that will minimize impacts on wildlife and wilderness recreation values • See <i>Boating</i> section
To continue float plane access to Evans Lake, subject to improvements in user accountability and cabin repairs.	<ul style="list-style-type: none"> • Limit fixed wing aircraft access to existing public floatplane use of Evans Lake⁶. Have pilots file appropriate flight plans and obtain any other required authorizations or permits. • Work with the BC Floatplane Association and apply appropriate enforcement in order to foster a “leave no trace” style of use.

Community and Economic Opportunities

Currently there are four guided recreation companies operating in the park and the Association of Canadian Mountain Guides is also authorized by permit to provide guided recreational opportunities. Low-impact recreation services are encouraged, but operations requiring air-access, fly-in camps and lodges are not appropriate in Valhalla Park.

Objectives	Management Strategies
To encourage the provision of ecologically sustainable recreation services	<ul style="list-style-type: none"> • Encourage low-impact recreation services in the park under permit where no new infrastructure is required and where park facilities and general public uses are compatible. • Establish a verifiable monitoring program of recreation services use impacts using Backcountry Recreation Impact Monitoring or similar processes. When monitoring shows the environmental and/or wilderness carrying capacities are close to being exceeded, management intervention such as quotas should be set for commercial operators and limits set on public visitation. • Monitor and assess, with associated agencies, the impact of scenic overflights on wildlife and develop improved operational procedures, practices, or other management options to minimize impacts on wildlife.
To encourage stewardship of park values and support of nearby communities by all commercial operators and users.	<ul style="list-style-type: none"> • Work with recreation services operators to collect data, and develop stewardship programs and a code of conduct for their businesses while operating within the park. • Encourage any proposed recreation services business accessing the park to be based in nearby communities if possible..

⁶ See reference to the discrepancy between the aircraft regulation and the park geography (p. 31).

Visitor Information

Providing current information about provincial parks is an important aspect of visitor service management. Information about Valhalla Park will serve a number of functions. It will assist visitors in planning their visit so they will know what to expect. Secondly, this information will promote outdoor etiquette, risks associated with winter use and potential wildlife/human interactions, respect for the natural environment and careful appreciation of the variety of values found within the park. Thirdly, it will foster an awareness of the cultural and conservation values and features of this area.

In an assessment which remains valid today, BC Parks' Slocan Valley Sub-Regional System Plan (1983) identified Valhalla Park as a key attraction in an area of considerable recreation potential. The need continues for co-ordination of marketing and information services among all potential providers of recreational and tourism opportunities in the sub-region in order to obtain optimum economic benefits. Regional and local governments as well as the private sector can do much to complement and supplement the BC Parks basic information services. Conversely, park information can cross-refer to tourism and recreational activities outside the park and information on park opportunities can draw attention to private or community suppliers of recreational services in the area.

People visit particular parks in the expectation that they will be able to enjoy certain types of experiences. Information about a park will therefore obviously affect the level of use and the type of visitors it attracts. Consequently, information strategies must be consistent with the management intent of the park. The conservation and recreation significance of the park must be incorporated into strategies for marketing. There are concerns that promoting backcountry recreation can lead to significant increases in use, which in turn can affect park values and wilderness qualities; therefore care must be taken in the type of promotion and marketing programs undertaken. Marketing programs promoting sustainability and environmental consciousness will ensure the park resources are appreciated, understood, and respected. Valhalla Park lends itself in particular to vicarious appreciation, owing to its visual profile for a distance of some 30 kilometres along a main provincial highway and from popular viewpoints such as Idaho Lookout.

In addition to BC Parks, other agencies and groups promote parks. Co-ordination is needed to ensure that promotional information is consistent, accurate and in keeping with the park management plan.

Objectives	Management Strategies
To promote optimum use of the park's range of backcountry recreational opportunities in regional, provincial and other markets, packaging the park's products among the variety of attractions to be found in the Slocan Valley/Arrow Lakes area.	<ul style="list-style-type: none"> • Portray the park's role in conserving important species, habitats and biodiversity and in representing the Central Columbia Mountains Ecoregion. • Work with nearby communities, commercial operators, tourism associations and the media to develop a marketing plan which will portray the park in an accurate manner and create expectations appropriate to a wilderness park. • Create an information strategy that will focus on maintaining use levels in each area of the park that are appropriate in terms of acceptable ecological impacts and quality of recreational experience.
To ensure that accurate information about park values and recreational opportunities is available to park visitors.	<ul style="list-style-type: none"> • Continue to use park information signs and shelters at designated access points including boat launch sites to provide important safety information and wilderness ethics to visitors. • Communicate the latest information on low-impact use practices to visitors.

Interpretive Themes

Valhalla Park offers significant recreational opportunities, while protecting important cultural and natural values, all in a wilderness setting. The park provides a pristine venue to explore natural processes and features along with cultural history that is unique to this area.

The park represents several themes that could be explored in an education or research program. These include:

- Natural Heritage: regional landscapes, geology, hydrology, role of the park in the Central Columbia Mountains Ecosystem; role in the protected areas network for connectivity and its importance during an era of climate change;
- Cultural Heritage: cultural heritage significance of specific sites in the park, particularly focusing on pre-contact First Nations culture (particular emphasis should be put on First Nations use of and respect for the Central Columbia Mountains resource base) and remnants of the horse and flume logging of the 1900-1920s;
- Wilderness Recreation: opportunities available in the park, wildlife viewing and appreciation, outdoor safety, bear and avalanche awareness and conservation/wilderness ethics.

Objectives	Management Strategies
To encourage public awareness, understanding and appreciation of the elements comprising the Central Columbia Mountains Ecoregion, and the special natural and cultural features of Valhalla Park.	<ul style="list-style-type: none"> • Encourage private sector preparation of promotional or informational products relating to the Valhalla Park themes described above. Involve the cultural heritage knowledge and expertise of individual volunteers and cooperating organizations in management initiatives that are focused on preserving and interpreting the historic features of the park (e.g., Friends of West Kootenay Parks). • Produce education and information on the themes described above and make it available on the BC Parks website.

Objectives	Management Strategies
	<ul style="list-style-type: none"> Emphasize the high visual quality of the park as viewed from the east side of Slocan Lake by cooperating with appropriate authorities, associations and commercial tour operators to provide information and interpretation of Valhalla Park at key sightseeing viewpoints outside the park (e.g., Slocan lookout, Silverton Lookout, Silverton, New Denver, Rosebery).



One of many cultural heritage sites in the park

Management Messages

Awareness and pre-trip planning information can help to set expectations, enhance the recreational experience, and influence attitudes and behaviours. Valhalla Park is primarily a wilderness area. Despite some facility development along the Slocan Lake shoreline and in the backcountry, the park contains many natural hazards. Year round, Slocan Lake is prone to sudden storms, which pose particular hazards for small and non-motorized craft. In summer, visitors must be prepared for chance encounters with wildlife. Interactions between park visitors and Grizzly Bears can result in harm to both the visitor and the bear. Backpackers should be aware of appropriate bear avoidance behaviour and identification of bear habitat to reduce potential encounters. In winter, backcountry skiers must be independent, self-sufficient and proficient in avalanche safety.

Specific information on pre-trip planning and expectations can be found at BC Park's Regional Office in Cranbrook, the sub-regional office in Nelson, on the BC Parks website, and in the summer at several outlets in New Denver. Because of the variable climate, rugged nature, and wilderness qualities of this park, visitors are urged to be especially vigilant in their pre-trip preparations. They are encouraged to seek out weather reports, avalanche bulletins and maps and to provide their trip itinerary to relatives or friends with departure/return times. Communications from within the park are limited to satellite phones and rescue services are not readily available.

Objectives	Management Strategies
To clearly indicate to visitors that, although the park is relatively accessible and offers day use opportunities, it remains a wilderness area that requires basic pre-trip planning.	<ul style="list-style-type: none"> • Work with local communities and tourism associations in providing appropriate pre-trip planning information. • Provide specific information to enhance backcountry visitors' awareness of the natural features, boating hazards, wilderness etiquette, cultural setting and techniques for respecting bear habitat and avoiding bear encounters. The focus will be on pre-trip planning. • Ensure any other agency's information on Valhalla Park is current and accurate. • Maintain the natural character of the park by placing signs only where they are necessary for visitor safety or the protection of sensitive sites. • Develop an avalanche awareness and avoidance strategy for backcountry skiers.

Scientific Research and Education

To date, a minimal amount of scientific research and education has been conducted within the park. Environmental stressors on the park (e.g., climate change, wildfire, some high recreation use) create a greater need to establish a solid foundation of baseline scientific knowledge.

Objectives	Strategies
To encourage research on the natural and cultural history of the park.	<ul style="list-style-type: none"> • Ensure that research relating to First Nations values involves First Nations people and the appropriate government agencies. • Establish partnerships with local colleges and universities to promote research on geology, biology, botany, hydrology, archaeology and other areas in Valhalla Park. • Limit scientific research that involves collecting specimens.
To encourage multi-agency cooperation in the field of protected areas scientific research and education.	<ul style="list-style-type: none"> • Encourage colleges, universities, other agencies, and corporate sponsors to establish funding for and to undertake appropriate and timely research studies including inventory and monitoring of values at risk. • Promote education and conservation through increasing understanding of the natural and cultural values of the park. • Promote and support educational field trips to the park by institutions such as Selkirk College and the W.E. Graham School Valhalla Wilderness Program.

Inholdings

The park contains a number of inholdings, at least some of which have strategic value in terms of access and shoreline representation. There are impacts associated with private developments. The two inholding lots in lower Gwillim Creek effectively block public access up the drainage. As the public have no legal right of way access through the park, mutually beneficial access arrangements might be negotiated.

Objectives	Strategies
To acquire key inholdings to enhance the conservation of natural systems, expand recreational opportunities or resolve existing or potential park management problems.	<ul style="list-style-type: none">Any park acquisitions are dependent upon available funding, a willing seller and negotiations based on market value. Acquire in order of priority the following properties adjacent to the park:<ul style="list-style-type: none">District Lot 1253, Block A (south Nemo Creek); and,District Lot 10396 (Pebble Beach).
To encourage owners of inholdings to minimize the impacts of their activities on the park's natural and cultural values, and recreational opportunities.	<ul style="list-style-type: none">Work cooperatively with those who own inholdings to minimize the impact of their activities on park values, and conversely the impact of park management and visitor activities on their inholdings.Attempt to obtain a public trail easement through District Lot 8939 and District Lot 12795 (Gwillim Creek).

Tenures

There is a cabin under tenure that pre-dated park establishment and a commitment was made by BC Parks to continue the permit during the lifetime of the original permittee. Transferring the permit to others such as family members is not allowed. The permit conditions indicate that the permit is subject to cancellation without renewal upon the death of the permittee.

In addition, there are five tenures for recreational guiding and one for maintenance and operations. Three traplines that existed before park establishment also continue under permits.

Objectives	Strategies
To phase out existing tenures which do not provide a public service or meet park policies or objectives.	<ul style="list-style-type: none">Continue park use permit for summer cabin site on DL10030, renewable during the lifetime of the current permittee.Continue to authorize the traplines within the park until such time as they can be phased out. Do not allow new traplines.Monitor use levels associated with private guiding companies.Assess impacts to natural, experiential and/or visual values from over-flights.

3.3 Zoning

Zones divide a park into logical units for management. Zoning applies consistent management objectives based on provincial policy standards on natural, cultural and recreational values, and existing and projected patterns of access and recreational use in relation to specific conservation goals. The individual zones reflect the intended land use, the degree of human use, level of management and development permitted. Valhalla Park has been divided into three zones: two wilderness recreation zones, and one nature recreation zone (Figure 4).

Wilderness Recreation Zones

There are two wilderness recreation zones: the Core Wilderness Recreation Zone and the North/South Wilderness Recreation Zone. While both zones are open to hunting and fishing, the core zone is managed differently than the north/south zone by having a stronger emphasis on the conservation of wilderness values and a wilderness recreational experience.

Core Wilderness Recreation Zone

Description

At approximately 20,918 hectares, this zone covers the drainages of Hoben Creek, Nemo Creek, Cove Creek, Indian Creek, Evans Creek and Beatrice Creek, with the exception of:

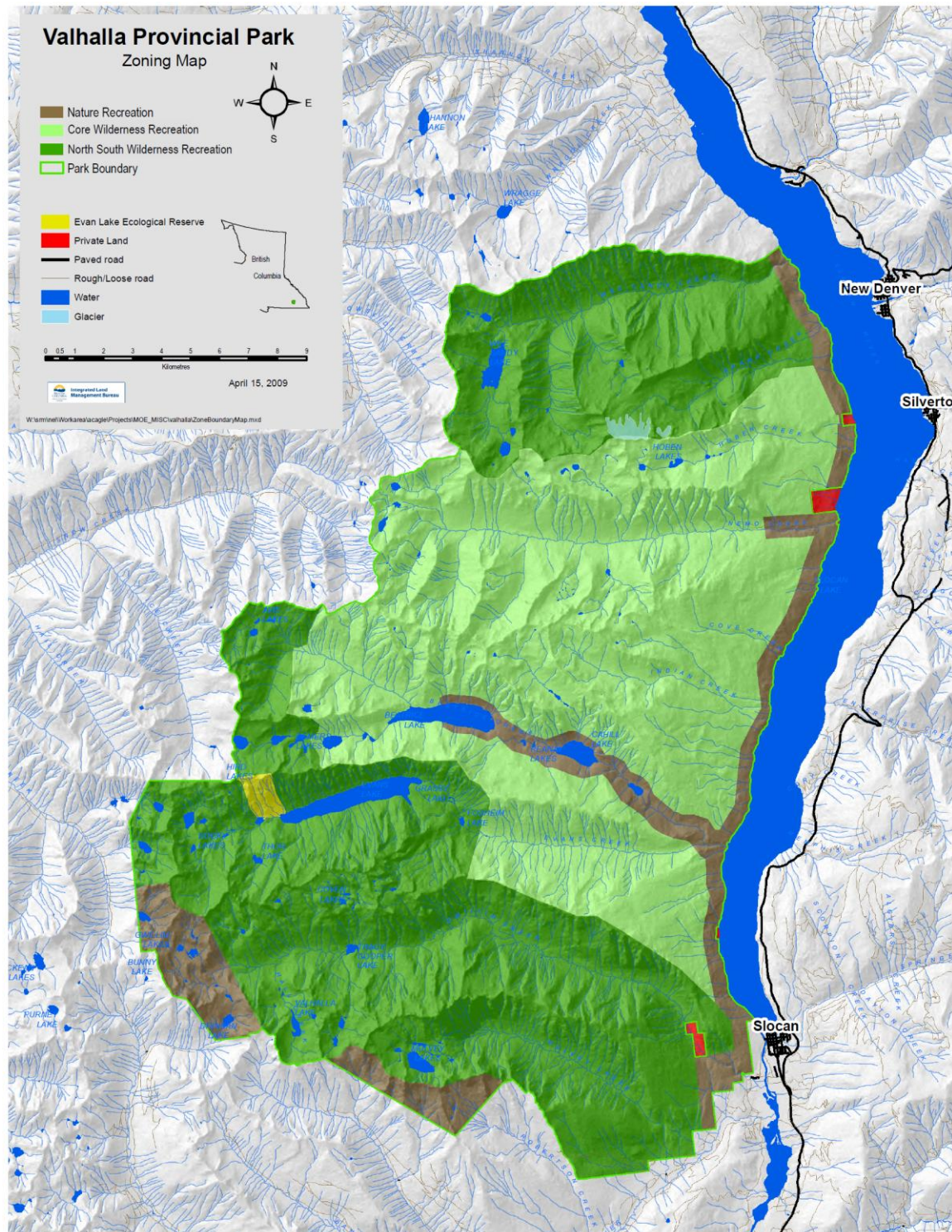
- A 1 kilometre wide strip along the Slocan Lake shoreline zoned Nature Recreation;
- A 1.5 kilometre wide Nature Recreation Zone corridor 5 kilometres up Nemo Creek from Slocan Lake;
- A 1 kilometre wide Nature Recreation Zone strip centred on the trail from Slocan Lake up Evans Creek and Beatrice Creek to the eastern half of Beatrice Lake, combined with 500 metre strips around Emerald Lake, Cahill Lake and the eastern half of Beatrice Lake; and
- North South Wilderness Recreation zoning over the Avis Lakes basin and the upper three Demers Lakes at the head of the Beatrice drainage, and the Evans Lake drainage above a point on Evans Creek 1 kilometre downstream from the outlet of Fosheim Lake.

Objective and Management Intent

To protect a remote, undisturbed natural landscape and to provide unassisted backcountry recreation opportunities dependent on a pristine environment where no motorized activities or facilities will be allowed.

Zone Rationale

To emphasize the park's conservation values, the intent is to manage remote portions of the park under the more conservative zoning. The headwaters of Nemo Creek are included in this zone to afford priority to the prime Grizzly Bear habitat which extends throughout the entire upper half of this valley.



North and South Wilderness Recreation Zone

Description

This Wilderness Recreation Zone covers areas with the same management objectives. This zone covers approximately 24,284 hectares and includes the following areas:

- North: The watersheds of Wee Sandy Creek and Sharp Creek (including the New Denver Glacier), except for the lakeshore portions zoned Nature Recreation; and
- South: The watersheds of Gwillim Creek (except for portions zoned as Nature Recreation), Mulvey Creek; the upper reaches of Evans Creek west of Fosheim Lake (except the Evans Lake Ecological Reserve and the portion zoned as Nature Recreation at the eastern end of Evans Lake); Upper Beatrice Creek (Avis Lakes) and the upper three Demers Lakes.

Objective and Management Intent

To protect a remote, undisturbed natural landscape and to provide backcountry recreation opportunities dependent on a pristine environment, while permitting air access to designated sites.

Zone Rationale

The Wilderness Recreation Zone is intended to delineate parts of Valhalla Park which are focal areas for wilderness-based backcountry recreation and which involve minimal facilities. These areas will remain open to hunting.

The southern portion of the park that was predominately zoned as Wilderness in the 1989 master plan, will now be zoned Wilderness Recreation and will include the previous Nature Recreation zones on the Avis and Demers lakes, most of Evans Lake, the Mulvey Basin area and the lower half of Gwillim Creek. At the same time, this new management plan acknowledges that wilderness zoning would not be appropriate from a practical perspective along the power boat accessible Slocan Lake shoreline, at the camping and cabin sites at the east end of Evans Lake and in the lower valleys and the Drinnon/Gwillim lakes area where established trails are relatively well-used.



Upper Demers Lakes in the Wilderness Recreation Zone from Urd Col

Nature Recreation Zone

There is one Nature Recreation Zone that encompasses several areas with the same management objectives.

Description

Collectively, the Nature Recreation Zone covers approximately 4,834 hectares of the park. The zone applies to the following areas:

- Slocan Lake Shoreline – A 1 kilometre wide strip along the entire Slocan Lake shoreline of the park, excluding the shoreline inholdings;
- Lower Nemo Creek - A 1.5 kilometre wide corridor centred on the Nemo Creek Trail for a distance of 5 kilometres from Slocan Lake;
- Evans and Beatrice creeks - A 1 kilometre wide strip centred on the trail from Slocan Lake up Evans Creek and Beatrice Creek to the eastern half of Beatrice Lake, combined with 500 metre strips around Emerald Lake, Cahill Lake and the eastern half of Beatrice Lake;
- Evans Lake – a 1 kilometre buffer around the backcountry sites and cabin at the east end of Evans Lake; and,
- Drinnon and Gwillim lakes – Within the boundaries of the park, the watersheds of Drinnon Creek and the uppermost lake at the headwaters of Woden Creek, and that portion of the Gwillim Creek watershed lying west of a line connecting Lucifer Peak and Drinnon Peak.

Objective and Management Intent

To protect scenic values; to provide for backcountry recreation opportunities; and to provide appropriate facility nodes in a largely undisturbed natural environment.

Zone Rationale

The intent of this zone is to provide for backcountry-type facilities which are compatible with appreciation and conservation of the park's natural environment while accommodating use levels higher than what is normally associated with a wilderness experience. Motorized (i.e., power boat) access is permitted to Slocan Lake shoreline sites, and floatplane access is permitted to the Evans Lake East area, but no mechanized access is permitted to other Nature Recreation zones in the park.



Nature Recreation Zone at Drinnon Pass

4.0 Plan Implementation

The management plan implementation section provides information about the types and priority strategies that BC Parks will implement as funding and resources permit.

4.1 High Priority Strategies

- Develop a fire management plan for the park which takes a proactive approach to fire management.
- Assess the need, feasibility and impact for higher capacity campsite facilities on the Slocan lakeshore or in the backcountry as appropriate within zone guidelines.
- Install, maintain and keep current trailhead and access point signage and kiosks to ensure park visitors are provided with important park messages prior to their departure and entry into the park.
- Investigate all private waterworks in the park and issue park use permits for those that have tenures predating park establishment.

Short Term (3 - 5 years)

- Acquire in order of priority the following properties adjacent to the park:
 - District Lot 1253 (south Nemo Creek); and
 - District Lot 10396 (Pebble Beach).
- Attempt to obtain a public trail easement through District Lots 8939 and 12795 (Gwillim Creek).
- Field check the existing predictive ecosystem mapping, specific to priority areas and projects, preferably in cooperation with similar efforts for the surrounding area of cooperation.
- Complete an overview assessment of shoreline ecosystems, species, habitats, and features to identify priority areas for conservation.
- Conduct habitat inventory and develop a species list for the park, preferably in coordination with similar efforts for the surrounding area. Place priority on those areas with present or projected recreational uses and on those areas such as the bedrock meadows above Slocan Lake which have species at risk or unusual species diversity.
- Complete a comprehensive vegetation inventory to locate, identify, and map plant communities, rare species and threatened plant communities in areas that could potentially be impacted by recreation, particularly Slocan Lake shoreline sites and those areas accessed from Hoder and Bannockburn creeks.
- Develop a wildlife inventory with priority on red and blue-listed species. Update the existing grizzly bear inventory and habitat assessment.
- Encourage boat access across Slocan Lake to the park by providing facilities and information programs appropriate to different types of watercraft as identified through use patterns, user surveys and through any cooperative planning for boating on Slocan Lake

- Work toward designation of certain beach sites for non-motorized users and for closing certain sites to use of amplified audio devices (i.e., radios and tape and CD players using loudspeakers rather than headphones).
- Investigate and, as necessary, formalize and designate campsites at the currently random camping sites on the Slocan lakeshore at North Wee Sandy Creek, North Cory's Ranch, South Cory's Ranch, South Cove Creek, South Ben Browns, South Ben Browns (non-power boats), Evans Point North, Evans Creek North (group site).
- Consider water-accessed group use in campground design at Wee Sandy Beach, Homestead Beach (Cory's Ranch) and South Evans Beach.
- Co-ordinate the development of outreach and educational resources with other agencies and private groups to enhance the overall effectiveness of activities that support ecosystem function.

Long Term (6 - 10 Years)

- Develop and apply an ecosystem management strategy that includes the major ecosystem components of vegetation, fish and wildlife and natural processes such as fire, insects, diseases, pollination and evolution.
- Subject to monitoring to confirm that Grizzly Bears and water quality are not being adversely affected, continue to allow horse use on established trails in the lower half of the Gwillim Creek drainage.
- Conduct research with First Nations to increase the knowledge and understanding of pre and post-contact history of the area.
- Develop a coordinated long-term approach to wildlife management with other government agencies, and with First Nations, emphasizing species at risk.

4.2 Monitoring

- Assess impacts to natural, experiential and/or visual values from over-flights.
- Establish long-term monitoring of water quality in the upper reaches of Gwillim Creek to detect any adverse effects from recreational use in the headwaters areas. Undertake remedial work if required.
- Use backcountry recreation impact monitoring (BRIM) on sensitive vegetation communities. Develop appropriate visitor management strategies to ensure these sensitive vegetation communities are protected.
- Monitor the need for primitive backcountry campsites at Mulvey Basin, Coven Lakes, Upper Demers Lake, Avis Lakes, Wee Sandy Lake West and South and New Denver Glacier and, if necessary for environmental protection or public safety, define or develop facilities within zone guidelines.
- Monitor and assess, with associated agencies, the impact of scenic overflights on wildlife and develop improved operational procedures, practices, or other management options to minimize impacts on wildlife.

Appendix 1: Appropriate Uses Table

The following table lists existing and potential future uses in Valhalla Park. This is not an exhaustive list of uses that may be considered in this park.

The table is provided to summarize the uses which the management planning process has confirmed are not appropriate in Valhalla Park. The table also gives a general indication of the management direction for other uses. The table must be reviewed in conjunction with the other sections of the management plan, including the role descriptions, vision, objectives and strategies.

Activity/Facility	Core Wilderness Recreation	North/South Wilderness Recreation	Nature Recreation
Activity			
Beach activities (swimming, sunbathing, etc.)	Y	Y	Y
Boating (power)	N	N	Y
Boating (non-power)	Y	Y	Y
Camping - no trace (backpacking)	Y	Y	Y
Camping - other (at designated sites)	N	Y	Y
Commercial recreation (facility-based)	N	N	N
Commercial recreation (non-facility based)	Y	Y	Y
Fishing	Y	Y	Y
Hiking and walking	Y	Y	Y
Hunting	Y	Y	Y
Natural and cultural values appreciation (birding, photography, wildlife viewing)	Y	Y	Y
Recreational gold panning/rock hounding	N	N	N
Skiing (downhill and cross-country track based)	N	N	N
Skiing (helicopter or cat-assisted)	N	N	N
Skiing (other)	Y	Y	Y
Trapping	Y	Y	Y
Use			
Aircraft access	N	Y	N
Exotic insect/disease control	N	Y	Y
Filming (commercial)	N	N	Y
Fire management (prescribed fire management)	Y	Y	Y
Fire management (prevention)	Y	Y	Y
Fire management (suppression)	Y	Y	Y
Fish stocking and enhancement	Y	Y	Y
Forest insect/disease control	Y	Y	Y
Grazing (domestic livestock)	N	N	N
Guide outfitting (fishing)	Y	Y	Y
Guide outfitting (hunting)	N	N	N
Guide outfitting (nature tours)	Y	Y	Y
Horse use/pack animals (not exotic)	N	Y	Y
Motorised Water access	N	N	Y
Non-motorised water access	Y	Y	Y
Noxious weed control	N	Y	Y

Activity/Facility	Core Wilderness Recreation	North/South Wilderness Recreation	Nature Recreation
Off-road access (mechanical activities)	N	N	N
Off-road access (motorised - not snowmobiles)	N	N	N
Off-road access (snowmobiles)	N	N	N
Pack animals (exotic)	N	N	N
Facility			
Administrative buildings and compounds	N	N	N
Backcountry huts and emergency shelters	N	Y	Y
Boat launches	N	N	N
Campgrounds and picnic areas (vehicle access and serviced)	N	N	N
Campgrounds (other)	N	Y	Y
Communication sites	N	N	Y
Interpretation and information buildings	N	N	N
Roads and parking lots	N	N	N
Lodges and other serviced accommodation	N	N	N
Trails (hiking, cycling, cross-country skiing)	N	Y	Y
Utility corridors	N	N	N
Water control structures	N	N	N

Legend		
N	Not an appropriate use in this zone	<ul style="list-style-type: none"> It has been confirmed during the management planning process that this use is not appropriate in this zone. This may be an existing use which the management planning process has determined is no longer an appropriate use in this zone. The management plan details strategies for addressing this inappropriate use (e.g., phasing out, closing).
Y	May be an appropriate use in this zone	<ul style="list-style-type: none"> This indicates that some degree or scale of this use may be appropriate. For existing uses, the management plan will provide guidance on the appropriate level or scale of this use (e.g., direction to reduce, restrict or increase the current level of this activity) and may address specific restrictions or enhancements (e.g., capacity, appropriate sites, designated trails, purposes, party size, time of year, etc.). For new or expanded uses, this does not constitute approval. This indicates that the use <u>may be considered</u> for further evaluation and possible approval (e.g., park use permit adjudication, completion of a review as part of the BC Parks' Impact Assessment Process). In some cases the appropriateness may not be confirmed until further assessments are completed.
N/A	Not an applicable use in this zone	<ul style="list-style-type: none"> This is applied where it is not feasible for the use to take place in this zone (e.g., mooring buoys in a terrestrial zone).

Appendix 2: Conservation Issues Summary

The overall challenge for the management of Valhalla Park will be to conserve and protect important natural values, while maintaining high quality backcountry recreational experiences. Since completion of the Valhalla Provincial Park Master Plan (1989), the expansion of both industrial access and public and commercial recreation activities in areas surrounding the park has increased its value as a potential ecological benchmark for the West Kootenay which can offer a setting for low intensity recreational activities oriented toward appreciation of natural and wilderness settings.

Climate Change – With increasing scientific and public concern about climate change and its implications, it may be appropriate to link ecological inventory and monitoring work at the park level with studies of climate change. In Valhalla Park, such linkages could help to project risks to vegetation and wildlife based on warming and drying trends, as well as providing models of what “natural ecological progressions” might mean for this specific park.

Species at Risk - The role of the park in conservation of species at risk (Mountain Goat and Grizzly Bear) must be defined in coordination with the management approach for these species on surrounding lands.

Shorelines - Undeveloped shoreline features are severely under-represented in the protected area network for the CCM Ecoregion, and since the Slocan Lake shoreline is used extensively for recreation, shoreline conservation values in Valhalla Park are particularly important and need to be clearly understood to ensure appropriate management.

Information - Lack of baseline ecological information limits strategic conservation planning, precludes defining operational-level management direction and may result in further impacts due to uninformed decisions.

Connectivity - Valhalla Park is increasingly becoming an island of a protected landscape surrounded by resource extraction activities. The implications of this on the park’s biodiversity, on wildlife migration and on population viabilities must be investigated and addressed.

Natural Disturbance Regimes - Direction on the management of park vegetation must balance the progression or replication of Natural Disturbance Regimes against the retention of original elements of CCM biodiversity which may have become rare or non-existent outside the park, as well as considering visual quality, and risks to facilities in

the park, to public health and to adjacent managed forestlands. The Valhalla Provincial Park Master Plan (1989) called for development of a long-term vegetation/forest management strategy and a fire management plan, but these initiatives have not been developed. Associated with managing the park for natural disturbances is the mountain pine beetle infestation that has occurred throughout the province's pine forests and in the southern areas of Valhalla Park.

Non-native Species and Noxious Weeds - Invasive weeds could pose a threat to the park by their spread from vehicles using logging roads leading to the park boundary. To date, no inventories have been conducted within the park, but various non-indigenous plant species are known to occur immediately outside the park.

Fisheries - Fisheries management in the park must consider the existing sport fisheries in the rivers and upland lakes as well as protecting the Shorthead Sculpin and other blue-listed species. Information on which to base management of fish values is lacking, suggesting that research is required and that conservative interim strategies should be adopted to ensure viable populations.

Human Impacts – Vegetation in some heavily used shoreline sites and in the Drinnon/Gwillim lakes backcountry is suffering from visitor impacts and both non-native species and noxious weeds are being unintentionally introduced. In addition, though commercial wildcrafting⁷ is not permitted under the *Park Act*, a considerable amount of mushroom harvesting has occurred in Valhalla Park. Over the long term this collecting can ultimately impact the natural progression of the park ecosystems.

Public Support - Public education is one of the most cost-effective means of supporting the ecological conservation roles of the park, and management of the park needs to build this support.

⁷ Wildcrafting may be defined as the gathering of native plant material from its native "wild" environment for food, medicine, fibre or art.

Appendix 3: Access Issues Summary

A basic principle of the 1989 management plan was that virtually all elements of the public should be able to experience examples of the wide range of scenery and features offered by Valhalla Park. Implicit in this principle, however, was the qualification that all features of the park could not be equally accessible if a range of recreational experiences was also to be available. In practice, therefore, some lake, creek valley and alpine features were to be easily accessible on a day-use basis, while other comparable lakes, valleys and alpine areas could only be reached by longer hikes, some of which would offer cabin accommodation while others required tenting. Still other specific park alpine and lake features were to be accessible primarily by mechanized means, but general mechanized access to the park was to be controlled owing to its potential to disrupt other visitors' enjoyment of the park. Horse access was considered appropriate in the longest drainage of the park (Gwillim Creek), where fragile alpine areas are not present and hiking access to focal points is available by another route. Motor road access inside the park was considered unnecessary and inappropriate. Mechanized conveyances such as motorcycles and ATV's are excluded from the park under the *Park, Conservancy and Recreation Area Regulation*. Mountain bicycles were also considered incompatible with the park's natural and wilderness emphasis and the relatively low standard of its trails and were not permitted unless in specifically posted areas.

The current management plan adheres to many aspects of the 1989 strategy, but owing to the growth of commercial roofed accommodations in areas outside the park and to increased emphasis on maintaining the ecosystem and natural quality of protected areas, it is proposed that air access be further curtailed and that expansion of roofed accommodation, which would have depended on air access, is carefully reviewed.

The roads accessing the Hoder Creek and Gimli Ridge trailheads both have industrial road use permits on them. These roads are the responsibility of a designated forest licensee operating in the area. Should forestry operations cease, the licensee has no legal obligation to provide maintenance on the road. Often, if the industrial road use permit is lifted the access is downgraded to a Wilderness Forest Service Road. Access with this designation is not guaranteed and maintenance is focused on mitigating environmental problems, not on keeping the road open for vehicles. The closure or reduced maintenance of forest roads may channel a greater number of park visitors to maintained roads. Other potential access to the park boundary is provided by routes originating from Forest Service Roads on the west side of the park which end several kilometres from park boundaries. Any future use of these routes will be affected by use and maintenance of resource roads leading to trailheads.

Vehicle Access - Valhalla Park is a rugged wilderness park. Vehicular access is limited to gravel forestry roads to the park boundaries. Some of these roads are no longer being used by the government forest ministry for forest harvesting activities and have become

wilderness recreation roads. This denotes a lower level of maintenance which can make travel difficult for two wheel drive vehicles and could result in less access as roads deteriorate over time.

General Hiking Access - The 1983 - 1989 concept of maintaining the core wilderness values of Valhalla Park in the headwater basins of most of its main creek valleys has been altered since 1989 by two factors. Extensive logging road networks west and north of the park have brought motorized summer and winter access much closer to these boundaries. At the same time, original trail accesses up a number of the long creek valleys have deteriorated, resulting in a greater potential for solitude in mid-drainage than in the high basins. Most of the public cabins existing at the time of park establishment have also deteriorated, reducing their utility to support extensive hiking and backpacking.

Hiking Access from the North – Consideration needs to be given to the feasibility and merits of the 1989 master plan proposal to develop shoreline trail access from Wragge Beach to Wee Sandy Creek as a means of increasing and diversifying hiking opportunities and potentially increasing visitation to the northern area of the park.

Hiking Access from the West - With timber harvesting nearing the western boundary of the park, it has been suggested that trail access be considered to some of the features just east of the height-of-land which have hitherto been accessible by ground only via multi-day hikes. Access from the west could offer possible benefits to businesses in the Arrow Lakes communities, particularly Burton, and could support or encourage commercial recreation opportunities based outside the park on the west side. Improved access from the west could also diversify and increase backcountry opportunities. At the same time, opening up some of the high basins to access improvements from the west could tend to reduce the range of more remote backcountry opportunities conceived in the original management plan. However, as the designation of Goat Range Park and western additions to Purcell Wilderness Conservancy Park offer new protected area backcountry opportunities in the CCM Ecosection which were not available when Valhalla Park was established, reconsideration may be appropriate.

Floatplane Access - Valhalla Park has beautiful remote backcountry lakes, some of which have historically been accessed by floatplanes. There appears to be an increased interest and demand for continued floatplane access, however, at least some of the authorized floatplane use on Evans Lake has been problematic and has resulted in impacts, including significant littering and vegetation damage.

Helicopter Access – To date, provision has been made for helicopter access to specific sites which were sufficiently remote as to see very little use from ground access. Helicopter-accessed public and commercial recreational opportunities were included in the wide variety of experiences available in the park with the expectation that they would help to deliver the tourism economic benefits which had been anticipated at the

time the park was established. In fact, since 1989, helicopter-supported recreational activities have expanded all around the Valhalla Park, but the anticipated levels of public and commercial interest in such activities within the park have not materialized. As a result of increased helicopter activity elsewhere in the Central Columbia Mountains, the value of backcountry areas free of such activity has increased. Accordingly, it may be appropriate to reduce and/or phase out the previous provisions for helicopter access within the park.

Appendix 4: Recreation Issues Summary

Although in recent history large parks were established primarily for their conservation values, it may be difficult to strike an optimum balance between protecting conservation values and accommodating recreation and tourism activities. In seeking this balance, it is important to recognize that even though parks may attempt to capture the best available cross section of the province's natural diversity and many prime features, they occupy only a relatively small proportion of the total land base. They should not be regarded as the focal points for all outdoor recreational activity, and any particular unit should not be expected to accommodate the full spectrum of possible recreational opportunities. At the same time if widespread support for protected areas is to remain strong, all segments of the public must feel that, where legitimate and compatible with protected area principles, their particular recreational interests and needs are recognized somewhere within the protected areas system as a whole.

The Valhalla Provincial Park Master Plan (1989) proposed to take advantage of the segmentation provided by the park's six major drainages to provide for a wide diversity of backcountry recreational experiences, a number of which would be supported by roofed accommodation facilities and air access. This approach was expected to contribute to the regional economy by attracting a broad range of visitors and serving as a focal point for other tourism opportunities in the area. Although a marketing plan was called for in order to realize the economic potential of the park for tourism, such a plan was never undertaken.

It is important to coordinate planning for recreational uses both inside and outside the park in order to maintain a wide range of recreational opportunities in the region. The growth of commercial recreation and mechanized public recreation surrounding the park since 1989 has increased the value of Valhalla Park as an area which could offer non-mechanized recreation opportunities. Equally important is the coordination of park management with land use planning outside the park. Currently, proposed logging and approved cutblocks in close proximity to the park boundary have implications both to recreational access and to connectivity for wildlife species.

Accommodation Facilities and Other Developments – At the time Valhalla Park was established, a number of cabins of various origins existed within the park. The 1989 Master Plan provided for the continuation and expansion of roofed accommodations, largely as a means of encouraging or supporting recreational activities in suitable areas and seasons where overnight use might not otherwise occur. Since 1989, most of the 1983 vintage cabins have deteriorated or have been removed. With one exception (Iron Creek Shelter on Wee Sandy Creek), no new public roofed accommodations have been

provided within the park and an opportunity exists to re-examine the issue of roofed accommodation in the current park context.⁸

In practice, development and use levels have generally fallen short of ceilings suggested in the 1989 Master Plan (target 1996 figures for use compare with 1999 actual figures as follows: boaters - 6,000 target, 4,717 actual; day use – 2,000 target, 1,862 actual; overnight – 7,000 target, 4,675 actual).

Since 1989, the air-accessed commercial facilities at Avis, Demers and Evans lakes which were provided for in the master plan have not materialized. Over the same period, however, a number of commercial recreation operations, including several small lodges, have developed on the lands surrounding Valhalla Park. Hut accommodation has been improved in nearby Kokanee Glacier Park, where winter helicopter access has also become well-established.

With air-accessed and facility-based recreational experiences comparable to those originally considered for Valhalla Park now being offered in adjacent areas, the value of the park as a relatively undeveloped and non-mechanized alternative to surrounding public lands and to Kokanee Glacier Park has increased. At the same time, Valhalla Park's high conservation values can be better sustained over time by conservative facility development than by developing recreational infrastructure which would tend to reduce the region's recreational diversity. Under these circumstances, it is desirable to consider whether this range of recreational opportunities is still appropriate to provide within the park, at what locations should opportunities be provided or encouraged, and what level of facility development and management presence is appropriate for each.

When Valhalla was established as a provincial park, it was identified as having high potential for commercial recreational use. Currently, however, only four commercial operators and the Association of Canadian Mountain Guides are authorized by permit to provide guided recreational opportunities in the park. There may be room for expanding the range and location of commercial recreational uses in the park, but the impacts of such activities on plant and animal communities and on other recreational activities must be within acceptable limits.

⁸ This is a complex issue, not least because the term "roofed accommodation" can cover a range from open Adirondack-type shelters, through basic public huts (Naiset Cabins in Mount Assiniboine Park) and staffed public huts (Kokanee Glacier Cabin in Kokanee Glacier Park) to private, full-service lodges. Cautionary considerations include capital cost, management/maintenance expenses and the possible need for helicopter access, environmental impacts and influence on the park's conservation emphasis and potential wilderness character, possible commercial involvement and potential conflicts between business viability and park or public interests, potential competition with commercial lodges and accommodations around the park and in neighbouring communities, and increased user costs favouring wealthier users. Positive considerations include diversifying recreational appeal and backcountry use, attracting "baby boomers" and others seeking less rigorous backcountry experiences, focusing impacts resulting from dispersed camping, creating new economic opportunities for the private sector and generating funds directly for the park.

Managing Use Levels - Due to the topography of the park, the recreational use of Valhalla Park is primarily limited to a number of recreational corridors either along the shore of Slocan Lake, or along backcountry trails. Consequently, recreational use at certain periods of the summer can become intense, especially along some of the waterfront sites on Slocan Lake. Strategies must be developed to maintain the quality of the environment and experience at heavily used sites.