



Mount Revelstoke

National Park of Canada

Glacier

National Park of Canada

Rogers Pass

National Historic Site of Canada

Management Plan



MOUNT REVELSTOKE
NATIONAL PARK OF CANADA

GLACIER
NATIONAL PARK OF CANADA

ROGERS PASS
NATIONAL HISTORIC SITE OF CANADA

MANAGEMENT PLAN

2010

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For more information about Mount Revelstoke and Glacier National Parks or Rogers Pass National Historic Site

Parks Canada
Box 350
Revelstoke, British Columbia
VoE 2S0
www.pc.gc/revelstoke
www.pc.gc/glacier
www.pc.gc/rogers

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FOREWORD



Canada's national historic sites, national parks and national marine conservation areas offer Canadians from coast-to-coast-to-coast unique opportunities to experience and understand our wonderful country. They are places of learning, recreation and inspiration where Canadians can connect with our past and appreciate the natural, cultural and social forces that shaped Canada.

From our smallest national park to our most visited national historic site to our largest national marine conservation area, each of these places offers Canadians and visitors several experiential opportunities to enjoy Canada's historic and natural heritage. These places of beauty, wonder and learning are valued by Canadians - they are part of our past, our present and our future.

Our Government's goal is to ensure that Canadians form a lasting connection to this heritage and that our protected places are enjoyed in ways that leave them unimpaired for present and future generations.

We see a future in which these special places will further Canadians' appreciation, understanding and enjoyment of Canada, the economic well-being of communities, and the vitality of our society.

Our Government's vision is to build a culture of heritage conservation in Canada by offering Canadians exceptional opportunities to experience our natural and cultural heritage.

These values form the foundation of the new management plan for Mount Revelstoke National Park of Canada, Glacier National Park of Canada and Rogers Pass National Historic Site of Canada. I offer my appreciation to the many thoughtful Canadians who helped to develop this plan, particularly to our dedicated team from Parks Canada, and to all those local organizations and individuals who have demonstrated their good will, hard work, spirit of co-operation and extraordinary sense of stewardship.


In this same spirit of partnership and responsibility, I am pleased to approve the Mount Revelstoke National Park of Canada, Glacier National Park of Canada and Rogers Pass National Historic Site of Canada Management Plan.

A handwritten signature in blue ink, consisting of several loops and a long horizontal stroke extending to the right.

Jim Prentice
Minister of the Environment

RECOMMENDATIONS

Recommended by:



Alan Latourelle
Chief Executive Officer
Parks Canada



Karen Tierney
Field Unit Superintendent
Mount Revelstoke and Glacier National Parks
Rogers Pass National Historic Site



EXECUTIVE SUMMARY

This updated management plan for Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site provides strategic direction for the delivery of Parks Canada's mandate for resource protection, visitor experience and public appreciation and understanding. It sets out a vision for the future that involves Canadians in safeguarding the unique natural and cultural heritage of the national parks and national historic site, and providing opportunities for memorable experiences that allow Canadians to make deep connections with their heritage.

The management plan includes six key strategies that describe the overarching management approach to the park, as well as four area concepts that provide more detailed direction for specific geographic areas. The plan contains a framework for measuring and reporting on progress in implementing the plan. It builds on the strengths of previous plans and sets the direction needed to improve the condition of the park as described in the 2008 *State of the Park Report*.

Participation programs provided a wide range of opportunities for Canadians to share their views and aspirations for this special place. The voices of Aboriginal people, stakeholders, community residents, park visitors and the general public all contributed to influencing the development of the plan.

The key strategies and highlights of management actions that will be implemented during the life of this plan are summarized below. The strategies, area concepts and actions are interrelated – together they will achieve the integrated delivery of Parks Canada's mandate.

Connecting and Reconnecting * Key Strategy

People have occupied, used and valued the Columbia Mountains for millennia. For over a century, Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site have offered opportunities to connect Canadians with this heritage and share their connections with others. At the same time, settlement, transportation corridors, industry and recreation have created disconnections on the land. Parks Canada will work in collaboration with others to restore connectivity, both ecosystem to ecosystem (eg: reconnecting habitats bisected by travel corridors such as roads and rail), and landscape to people (eg: reconnecting visitors to the beauty and diversity of the landscape). This strategy involves:

- building relationships with Aboriginal people to honour their cultural connections to the land and embrace traditional knowledge
- fostering cooperation with neighbouring land owners and land management agencies
- supporting reconnections across the national transportation corridor, as opportunities arise
- emphasizing Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site as gathering places for families, and developing visitor experience products that support nature, history and the outdoors being a part of the lives of children and families

The Columbia Mountains – *Up Close and Personal* * Key Strategy

Offering Canadians inspiring and authentic park experiences is integral to Parks Canada's mandate. The unique mountain heritage of Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site sets the stage for visitors to choose from a range of opportunities that match their interests and expectations. Actions by Parks Canada and partners will improve the quality of national park opportunities and maintain high levels of visitor satisfaction. Visitation will increase and more Canadians will establish the deep connections that arise from personal experience in inspiring places. Those connections are the basis for ensuring the enduring support for heritage conservation that is essential to sustain Canada's protected areas legacy into the future. This strategy involves:

- making visitors feel welcome at every stage of their trip
- using the Explorer Quotient and a market-oriented perspective to connect visitors to experiences that are inspiring, aligned with their interests, and grounded in Mount Revelstoke and Glacier national parks' and Rogers Pass National Historic Site's distinctive natural and cultural characteristics
- renewing and developing new visitor experience products that embrace a *Mountain Heritage Traditions* theme
- reviewing and improving visitor safety communications with a focus on preparedness and prevention
- creating memorable experiences in support of ecosystem management through citizen science and volunteer opportunities
- celebrating major anniversaries such as Glacier National Park's 125th in 2011 and the Mount Revelstoke National Park centennial in 2014
- using new technology and other means to improve trip planning and enhance opportunities for through-travellers

Ensuring Healthy Ecosystems * Key Strategy

Parks Canada works with others to improve the health of the greater North Columbia Mountains ecosystem, and maintain intact habitats, native species and natural processes within Mount Revelstoke and Glacier national parks. Protecting healthy ecosystems is also critical to ensuring that visitors continue to have outstanding opportunities to experience, enjoy, and learn about the unique natural heritage of the parks. Management actions will focus on those ecosystem components that are the most rare, vulnerable, significant or pivotal, including species of special management interest, vegetation health, wildlife movement, the long-term fire cycle, aquatic connectivity and returning disturbed sites to a natural state. This strategy involves:

- facilitating opportunities to enjoy and learn about healthy, intact ecosystems and helping people to reconnect with wild places
- developing and implementing a *Fire Management Plan* in collaboration with partner agencies

- preparing and implementing a southern mountain caribou conservation strategy for the parks, and contributing to Environment Canada's Species At Risk caribou recovery strategy
- completing trail realignments through grizzly bear habitat and developing educational materials

Touchstones to the Past – Celebrating our Roots * Key Strategy

The Columbia Mountains have long shaped, enriched and sustained human culture in this part of western Canada. The stories that define the Columbia Mountains combine millennia of Aboriginal peoples' use of the land, years of European exploration and the fur trade in the 1800s, a century of transportation, the emergence and continuing evolution of mountain recreation and hospitality traditions, and the communities of people who have come to visit and live here. The rich cultural heritage of Mount Revelstoke and Glacier national parks, Rogers Pass National Historic Site and the *Three Passes* cultural landscape stretching from Kicking Horse Pass to the Last Spike offers opportunities for visitors to experience a vivid sense of the past. This strategy involves:

- raising the profile of, and knitting the *Three Passes* cultural landscape together through partnerships which celebrate the connection of people to the land
- renewing and implementing the *Cultural Resource Management Plan*
- inviting the involvement of Aboriginal people and new Canadians in documenting and presenting their culture and relationships to the park landscapes
- intervening in natural processes (such as river erosion, avalanches or fire) where necessary to prevent the loss of or damage to significant cultural resources

Bringing the Mountains to People Where They Live * Key Strategy

Reaching a larger number of Canadians, many of whom live far from the national parks and are not aware of the significance of these special places, is critical to the future of the system of heritage places. Parks Canada will extend its reach through popular media and technology, and outreach programs, to bring current, lively and engaging content into the homes, schools and communities of Canadians across the country. This strategy involves

- bringing the national parks and national historic sites into the communities of Revelstoke, Golden, Field, Craigellachie, Sicamous and beyond, through the shared stories of the *Three Passes* (Kicking Horse Pass to the Last Spike) cultural landscape
- targetting youth, urban Canadians and new Canadians in British Columbia with outreach programs (such as Art in the Park) that connect them to park settings, stories and experiences
- collaborating with heritage-based agencies, schools and festival organizers to bring outreach education programming into small communities and larger urban centres in British Columbia
- working with provincial education authorities in the development of curricula and learning opportunities for teachers and students

Showcasing Science and Stewardship * Key Strategy

Throughout the past century, science and technology have come together many times in Mount Revelstoke and Glacier national parks in the service of stewardship and conservation. The parks are home to world-recognized snow, glacier, weather and avalanche science. Ground-breaking ecological science has been applied to restoration of damaged subalpine meadows, and the use of DNA fingerprinting to identify and track grizzly bears. One of Parks Canada's first studies on *connection to place* occurred here, and extensive archaeological research has been conducted in the parks and historic site. The application of innovative environmental technology has also been a hallmark of Mount Revelstoke and Glacier operations, including micro-water treatment plants, a micro-hydro plant and pioneering use of hybrid fuel vehicles. This strategy includes:

- sharing science and stewardship stories to create rich and rewarding opportunities for learning experiences within the parks and at home
- engaging a diverse community of interested Canadians in learning together, sharing information, and collaborating on solutions that create new success stories
- expanding environmental stewardship efforts within the national transportation corridor and beyond park boundaries

Area Concepts

In addition to the key strategies outlined above, detailed area concepts have been developed for four areas. Each area has a distinct identity defined by its landscape, ecological characteristics and history, and each offers unique opportunities for visitor experiences. The area concepts describe current strengths and challenges, and key actions to achieve a desired future condition for:

- *Mount Revelstoke and Glacier Backcountry Areas*
- *Major Rogers' Route – Trans-Canada Highway Corridor*
- *Rogers Pass National Historic Site*
- *Meadows in the Sky Area*

Monitoring and Reporting

Performance measurement tools include ecological integrity and cultural heritage indicators, many of which are shared with the other mountain national parks. Indicators were developed nationally for public appreciation and understanding and visitor experience. Data from these indicators will be used to prepare a *State of the Parks* report prior to the next five-year review of this plan.

Strategic Environmental Assessment (SEA)

A strategic environmental assessment of this management plan was conducted to evaluate potential environmental effects. The integrated implementation of the park management plan is expected to achieve the desired results for ecological integrity, commemorative integrity, visitor experience and public education in Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site.



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Parks Canada's Mandate

On behalf of the people of Canada, we protect and present nationally significant examples of Canada's natural and cultural heritage, and foster public understanding, appreciation and enjoyment in ways that ensure the ecological and commemorative integrity of these places for present and future generations.



A Vision for Mount Revelstoke and Glacier National Parks of Canada and Rogers Pass National Historic Site of Canada

The vision statement describes what Parks Canada is working towards - Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site at their future best.

Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site celebrate profound connections to Canadian history and national unity, a long tradition of Columbia Mountains hospitality and globally-significant ecological environments.

The scenery has changed little in the parks over the past century, yet much has changed in the way that people interact with these exceptional places. Dedicated staff, volunteers and the public are engaged in a spirit of conservation and stewardship - reconnecting fragmented landscapes and protecting extraordinary wetland fens, old growth rainforest, fragile alpine ecosystems and species at risk. Plants and animals thrive, and natural processes such as fire, flood and weather create natural habitat. Visitors have an opportunity for an “*up close and personal*” experience with these protected places, in ways that respect the needs of plants and animals. Mount Revelstoke and Glacier national parks are a valued contributor to the much larger regional landscape, and strong collaboration with neighbours supports park management activities.

Close connection with nature has always been a hallmark of the human experience in the Columbia Mountains. First Nations people have lived and travelled along the mighty Columbia River for millennia. Amidst soaring peaks, glaciers and ancient rainforest, the last mountain barrier of western Canada was unlocked when Major Albert Bowman Rogers discovered the pass that bears his name. The completion of the trans-continental railway in 1885 fulfilled a national promise made to British Columbia a decade and a half earlier. Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site, together with Yoho National Park and Kicking Horse Pass National Historic Site are focal points of the *Three Passes* cultural landscape stretching from Kicking Horse Pass to Eagle Pass (the Last Spike site at Craigellachie). The neighbouring communities of Revelstoke, Sicamous, Golden and Field are the gateways to the mountain pass tourism destinations knit together by the transportation routes.

Mount Revelstoke, Glacier and Rogers Pass inspire discovery on every scale – from sweeping mountain vistas to the seedling growing on a fallen nursery log, from a stonemason’s carved initial in quartzite to a century-old stone railway trestle pillar, from the curiosity in a child’s eyes at a campfire to a climber’s shout of exhilaration from the summit Mount Sir Donald. Even a drive through this Columbia Mountains wilderness is a memorable experience, passing through the lush green forests of summer or the towering piles of snow in winter. The deep connections that arise from personal experience in these inspiring places are the basis for enduring support for Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site.



1. A MANAGEMENT PLAN FOR MOUNT REVELSTOKE AND GLACIER NATIONAL PARKS OF CANADA AND ROGERS PASS NATIONAL HISTORIC SITE OF CANADA

1.1 Introduction

Parks Canada is responsible to the people and Parliament of Canada for administering the system of national parks, national historic sites and national marine conservation areas. A management plan is the key reference document that guides Parks Canada decisions and actions in protecting, managing and operating a national park or national historic site. Management plans are a legal requirement for all parks and sites. They are developed with the involvement of the Canadian public and are formally reviewed every five years to ensure that they remain relevant and effective.

The first management plan for Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site was completed in 1995. That management plan provided a framework for the protection of the historic site and parks' natural and cultural resources, management of visitor services and educational programs, integration with the surrounding region and operation of the national transportation corridor. In 2005, a revised plan brought adaptive management approaches to the restoration of ecological integrity, new tourism and visitor experience initiatives, and an area management approach to the parks and historic site.

This revised management plan builds on the successes of the previous plans and aims to fulfill the Parks Canada Agency strategic outcome:

that Canadians have a strong sense of connection to their national parks and national historic sites through meaningful experiences, and that these protected places are enjoyed in ways that leave them unimpaired for present and future generations.

Parks Canada's national mandate – protection of heritage resources and facilitation of visitor experiences and public education – charts a course for Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site. Natural and cultural resources are protected for their intrinsic value, as well as their value to people. Involving Canadians in conservation ensures the highest level of care for natural places and cultural sites. The provision of opportunities for visitor experiences and education in and about these natural and cultural settings allows personal connections and garners public support for the continued protection of cultural and ecological integrity.

While this management plan highlights new opportunities to experience and learn about the parks and historic site, maintenance of ecological and commemorative integrity remains Parks Canada's first priority. Resource protection is critical to ensuring that Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site remain relevant, meaningful and vital to Canadians. Visitation growth will be carefully monitored and managed to ensure both the protection of the park and historic site environment, and the quality of the visitor experience.

Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site are managed as part of a much larger mountain landscape. This broad regional perspective is integral to Parks Canada's success, and is reflected in the management plan's three main priorities:

- re-connecting people, as well as fragmented landscapes, habitat and corridors, protecting plants and animals, and engaging Canadians fully in these endeavours;
- facilitating opportunities for more Canadians and international visitors to make connections, through an “*up close and personal*” experience in the Columbia Mountains; and
- embracing the concept of the *Three Passes* - a broad cultural landscape extending from Kicking Horse Pass to the Last Spike site, including three national parks and three national historic sites and the communities of Revelstoke, Golden, Field, Craigellachie and Sicamous.

1.2 Three Significant Heritage Places – One Management Plan

Mount Revelstoke, Glacier and Rogers Pass are connected - naturally and historically. They lie at the heart of an ecological and cultural landscape extending from the British Columbia/Alberta border in the Rocky Mountains to the western edge of the Columbia Mountains near Shuswap Lake. Secwepemc, Ktunaxa and Syilx people have been stewards of this land for millenia.

It was in this landscape that Canada was linked from coast to coast as a new nation – twice. The Canadian Pacific Railway was forged through Kicking Horse Pass in 1884 and Rogers Pass and Eagle Pass in 1885, with the last spike being driven at Craigellachie in November 1885. Completion ceremonies for the Trans-Canada Highway were held 77 years later, in September 1962 at Rogers Pass.

The relationship between Mount Revelstoke and Glacier national parks, Rogers Pass National Historic Site and the broader landscape is central to this management plan. Joint and complementary management practices are threads which connect the three protected heritage areas together, recognizing their close relationship as well as the unique and individual character of each place. Together the parks and historic site protect and present the interwoven natural environment and human stories of this part of the Columbia Mountains.

Mount Revelstoke, Glacier and Rogers Pass share history and the cultural landscape with Yoho National Park, Kicking Horse Pass National Historic Site and Eagle Pass National Historic Site (the Last Spike). To ensure an integrated approach, this management plan was prepared in conjunction with the plan for Yoho National Park.

1.3 The Nature and Character of Mount Revelstoke and Glacier National Parks and Rogers Pass National Historic Site

Parks Canada’s goal is to represent each of Canada’s 39 terrestrial regions, nine marine regions and 24 historic themes. There are currently more than 40 national parks and national park reserves in Canada, located in every province and territory, and ranging in size from nine sq km to 45,000 sq km. Glacier National Park and Mount Revelstoke National Park represent the Columbia Mountains Natural Region.

The Columbia Mountains of south-eastern British Columbia are located between the Rocky Mountains to the east and the Interior Dry Plateau to the west. Four ranges make up the Columbia Mountains: the Purcells, Selkirks, Monashees, and Cariboos. Running north to south, the Columbia Mountains extend from central British Columbia to the border with Idaho and Washington states.

Spanning 1350 sq km, Glacier National Park protects parts of the Selkirk and Purcell mountain ranges. Glacier was originally established in 1886 as two small park reserves, encompassing the areas around the “Great Glacier” (Illecillewaet) and the summit of Rogers Pass. Canadian Pacific Railway officials and Members of Parliament were enthusiastic about the new park reserves. The reserves were linked and enlarged a few years later to include the “best scenery in the neighbourhood” (*Order in Council, October 10, 1886*).

Mount Revelstoke National Park protects 260 sq km of the Selkirk range. The City of Revelstoke and the local Progress Club appealed to Members of Parliament to establish a park on Mount Revelstoke in 1914, for its “glaciers, mountain peaks and waterfalls... and potential as a scenic park”.

The discovery and opening of Rogers Pass was a critical milestone in Canadian nation-building. The completion of the Canadian Pacific Railway line through Rogers Pass fulfilled a promise made by Prime Minister John A. Macdonald when British Columbia entered the Canadian Confederation in 1871. One hundred years later, the Historic Sites and Monuments Board of Canada designated Rogers Pass and several other mountain passes as national historic sites to commemorate the critical role of the passes in the building of Canada.

In Mount Revelstoke, Glacier and Rogers Pass, nature and culture have evolved together. These iconic places offer Canadians and international visitors a chance to connect with the wonder of the Columbia Mountains environment and to discover the evolving relationship of people with the land. The parks protect and preserve the globally-important wilderness and biodiversity that define the essential character of this natural environment. Wildlife, including grizzly bears, wolverines and mountain caribou co-exist with the people who visit and live in this area. A portion of the world’s only inland temperate cedar/hemlock rainforest is protected within the parks.

The Columbia Mountains and Mount Revelstoke, Glacier and Rogers Pass have many other unique characteristics and stories:

The Columbia Mountains

- The 180 million year-old Columbia Mountains are very different from the younger, sedimentary Rockies to the east and the Coast Mountains to the west. The metamorphic rock faces of the Selkirks and Purcells offer classic mountaineering routes – the first climbing in the mountains of western North America began here in the 1880s.
- The very narrow v-shaped valleys and towering cliffs that predominate in the Columbia Mountains contrast dramatically with the wide u-shaped valleys and distant peaks of the Rockies. Visitors have an “*up close and personal*” experience in the mountains, whether driving through the valley bottoms or switch-backing up the mountain-side trails.

The Columbia Mountains continued

- Tremendous precipitation creates dense cedar and hemlock forests, and the forested mountain-sides are slashed by uncountable avalanche paths. Rain, snow, steep terrain and avalanches give these parks their unique character. Canada's highest annual snowfall (25 m or 80 ft) was recorded just beyond the boundaries of Mount Revelstoke National Park.
- The native plants in this region of the Columbia Mountains are among the most diverse in Canada – tree species alone outnumber those of any other region in British Columbia. Giant Cedars and Hemlock Grove boardwalks are known around the world for their accessible rainforest experiences.

Mount Revelstoke National Park

- The Meadows in the Sky Parkway climbs through rainforest and “snowforest” lifezones to bring visitors to the subalpine meadows at the summit – the only mountain-top in the national parks system accessible by vehicle.
- A small southern mountain population of woodland caribou inhabits Mount Revelstoke. Cross-country skiers on the Meadows in the Sky Parkway may find their footprints in the snow.
- The Nels Nelsen ski jump in Mount Revelstoke was considered to be the best natural jumping hill in the world in the early part of the last century. Visitors today can only imagine the thrill of soaring above the hillside. World ski jumping records were established here – the only place in Canada. The country's oldest ski club had its home on these slopes.
- From 1916 to 1927, members of the British royal family regularly visited the park to celebrate new milestones in the completion of the road to the mountain summit. The story is presented along the Meadows in the Sky Parkway.

Glacier National Park

- More than 400 glaciers and icefields lie within the boundaries of Glacier. They are spectacular when seen from the Trans-Canada Highway or the hiking trails, and offer world-class mountaineering experiences.
- The national transportation corridor is kept open and safe through Glacier National Park by the world's largest mobile avalanche control program.
- The park's road-accessible deep powder backcountry skiing is considered some of the best in North America. Avalanche science conducted in the park provides daily information bulletins for backcountry skiers, and is shared with partners to support broader prevention communications.
- The first scientific study of glaciers in North America was undertaken by the Vaux family in Glacier in 1887. Researchers, volunteers and citizen scientists will continue this work.
- Nakimu, one of Canada's longest cave systems, is found in Glacier. A permit system allows safe access while protecting the fragile karst resources.



Rogers Pass National Historic Site

- Major A.B. Rogers received a gold watch and a cheque for \$5000, as well as a place in history for finding a way through the Selkirks. The stories of Major Rogers and “his” pass and the trials and triumphs of operating the railway through the pass are told at the Rogers Pass Discovery Centre and local museums.
- Rogers Pass is a living, evolving national historic site. The pioneering engineering techniques used in building and operating the railway line and highway continue to benefit today’s travellers. The 1916 Connaught Tunnel remains a major operating feat of the railway mainline, and the Macdonald Tunnel was completed in 1988. Snowsheds still defend both the highway and the railway, and avalanche control using howitzer fire has been conducted since 1960. The story is told through interpretation exhibits and programs throughout the site.
- The Selkirk Mountains were once considered to be an almost impenetrable barrier to travel. When Glacier House opened as the first lodging in the Selkirks, it was an outpost in the wilderness. Today, the Selkirks are a much more accessible place. Rogers Pass is one of the only national historic sites in Canada with vehicle-accessible campgrounds and deep powder ski-touring opportunities.
- Canada’s national highway – the Trans-Canada - was officially opened at Rogers Pass by Prime Minister John Diefenbaker in 1962. This transportation corridor today brings more than four million travellers through Rogers Pass, including much of western Canada’s commercial freight transportation traffic.

1.4 The Columbia Mountains - A Regional Ecosystem

National parks exist within regional ecosystems. Mount Revelstoke and Glacier national parks are located within the Montane Cordillera Ecozone, which stretches from the eastern side of British Columbia’s Coast Mountains to the Rocky Mountain Foothills in Alberta – an area of almost 500,000 sq km.

Within this ecozone, Mount Revelstoke and Glacier are part of a greater Columbia Mountains ecosystem, extending from Mica Creek in the north to Galena Bay in the south; and from Sicamous in the west to Golden in the east.

Ecological integrity is a term used to describe ecosystems that are self-sustaining and self-regulating.

A healthy ecosystem has a complete food web, a full complement of native species that can maintain their population and naturally-functioning processes (carbon and nutrient cycles). Together they provide the ecosystem with the ability to recover and adjust to disturbance or change.

In the North Columbia Mountains, many ecological processes are apparent at the regional ecosystem scale. Wildlife species such as mountain caribou, grizzly bear, wolverine and mountain goat have large home ranges, and depend on population processes at a regional landscape scale. Forest disturbances caused by insects or fire can also occur at the regional ecosystem level. Interagency collaboration is critical to management within park boundaries and on adjacent lands.

1.5 The *Three Passes* - Kicking Horse Pass to the Last Spike - A Cultural Landscape

Mount Revelstoke, Glacier and Yoho national parks, Rogers Pass, Eagle Pass and Kicking Horse Pass national historic sites and the neighbouring communities of Revelstoke, Golden, Sicamous and Field are focal points of the *Three Passes* cultural landscape, which stretches 300 km from Kicking Horse Pass to the Last Spike site at Craigellachie.

Stories abound here – of First Nations people, explorers, gold rush miners, railway surveyors, railway builders, mountain climbers, ski-jumpers, hoteliers, park staff, loggers, highway builders, mountain guides, historians, scientists, dam builders, pilots, artists and elected leaders.

Cultural landscapes capture the unique character of place and the evolving relationship between people and the natural environment. They illustrate how people have occupied, used, valued and connected with the land through time. Cultural landscapes flourish when those who value the landscape share their knowledge with others and act as stewards of the place.

(Adapted from UNESCO)

In addition to the parks and historic sites, there are many other cultural attractions and institutions in the region that present these stories. Collective cultural presentation approaches have been successful in the communities, and this concept will bring together the different stakeholders within this broad landscape for the first time.

Through collaboration, the *Three Passes* will knit together the economic, social and cultural values of the corridor, connecting visitors with *up close and personal* mountain experiences. Anniversaries and celebrations will serve to bring the Kicking Horse Pass to the Last Spike corridor to life as a cohesive cultural landscape.

A Short History of the Three Passes Cultural Landscape

Secwepemc, Ktunaxa and Syilx people have called these lands home for hundreds of centuries. First Nations people travelled the trails and waterways that span the Columbia Mountains, with the Columbia River one of the principle routes. Settlements and camps were made along the waterways. First Nations practiced a pattern of hunting and gathering which shifted land and resource use with the seasons. Berry grounds, root gathering grounds, fishing sites and hunting grounds throughout the Columbia Mountains were used seasonally. At several locations, regular trade gatherings were held and peace agreements were made. Rock paintings throughout the region are an important record of people, animals and spirit figures.

The first Europeans to cross the Rocky Mountains and see the lands of the Columbia were the Northwest Company explorer David Thompson and his party in 1807. Other fur traders, missionaries and settlers soon followed, crossing the Rockies and canoeing the Columbia. Gold rushes in the Big Bend of the Columbia River in the 1860s saw miners travelling up the river by steamboat and crossing the Monashee Mountains overland from the Shuswap Lake area. Surveyor Walter Moberly identified Eagle Pass as a wagon route to the gold fields and a potential route for a trans-continental railway.

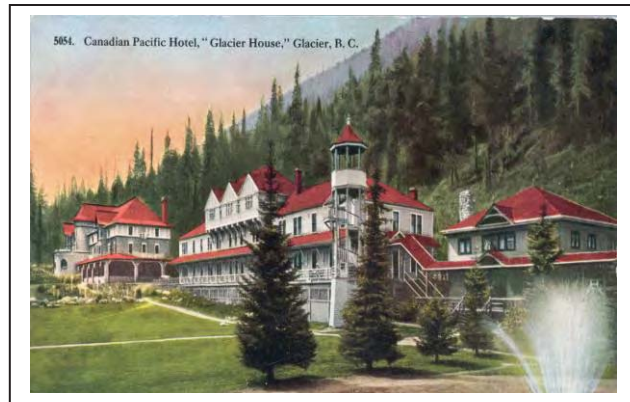
In the Rocky Mountains, Kicking Horse Pass had been recorded by Sir James Hector of the Palliser Expedition in 1858, but the pass had been virtually unused until the Canadian Pacific Railway company decided to adopt it as the rail route through the Rockies. Foregoing their preference for the more northerly Yellowhead Pass in 1881, they



used surveyor Walter Moberly's recommendation to cross the continental divide at Kicking Horse Pass. Ahead lay the uncharted Selkirk Mountains.

Major Rogers set out from present-day Sicamous on Shuswap Lake in 1881, seeking a passage through the formidable Selkirks. Led by Secwepemc guides, he followed Walter Moberly's well-established route over Eagle Pass to the Columbia River. Ascending along the unexplored Illecillewaet River, Rogers spotted a promising opening in the mountain range just as his supplies ran out. A year later, he approached the Selkirk Mountains from the east and confirmed the existence of "his" pass.

Within two years, railway construction crews had crossed Kicking Horse Pass and were pushing the line up the eastern slopes of Rogers Pass. The communities of Field and Golden sprang up at the railhead in 1884, and Revelstoke joined them a year later where the rail line crossed the Columbia River for a second time. The railway company established the first grand mountain hotels at the Great Glacier, near Rogers Pass as well as Field and Sicamous. Craigellachie came to fame in November 1885, when Major Rogers joined William Van Horne, general manager of the railway and board member Donald Smith for the driving of the last spike where east and westbound construction crews met.



The discovery of Rogers Pass unlocked the final mountain barrier of western Canada and catalyzed events such as the Last Spike that helped to form the Canadian identity. The *Three Passes* – Rogers, Kicking Horse and Eagle - were gateways to the Pacific and removed the last impediments to the completion of Canada's first transcontinental link. British Columbia was now connected by rail to the rest of Canada.

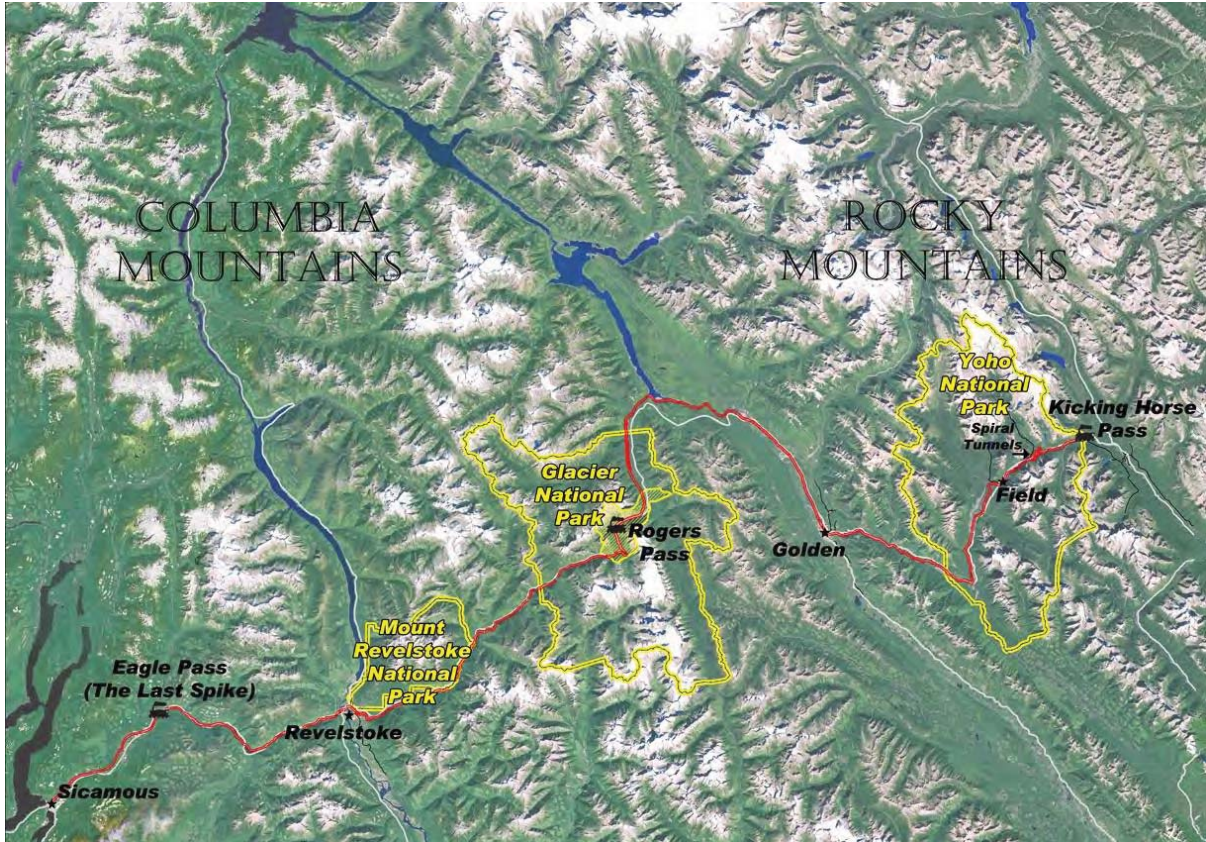
The railway corridor crossed spectacular mountain landscapes and spawned milestones of national and international significance along the rail line. Canada's second and third national parks - Glacier and Yoho - embraced some of western Canada's finest alpine scenery when they were established by a single act of Parliament a year after the completion of the railway and the creation of Banff National Park. Mount Revelstoke was established in 1914, celebrating and conserving the extraordinary sub-alpine flower meadows and lakes near the community of Revelstoke.

Mount Revelstoke, Glacier and Yoho national parks represent three of Canada's earliest efforts to preserve the country's most stunning landscapes. Rogers Pass, Kicking Horse Pass and Eagle Pass national historic sites each mark a significant turning point in Canadian history. In 2010, Prime Minister Harper called the pounding of the Last Spike at Eagle Pass the culmination of the "single most important nation-building project in the history of our country".

The communities of Revelstoke, Golden, Craigellachie, Sicamous and Field are not only the gateways to the parks and historic sites, they are also an intrinsic part of the cultural

landscape story. Parks Canada, the Secwepemc, Ktunaxa and Syilx people, and community partners are the caretakers and storytellers of an amazing mountain legacy.

Map 1 The Three Passes Cultural Landscape



National Historic Sites

- Eagle Pass
- Rogers Pass
- Kicking Horse Pass

Communities

- Sicamous
- Craigellachie
- Revelstoke
- Golden
- Field

National Parks

- Mount Revelstoke
- Glacier
- Yoho

First Nations

- Secwepemc
- Ktunaxa
- Syilx

2. CURRENT SITUATION

2.1 Protecting Natural Resources

Mount Revelstoke and Glacier are comprised of the three ecological zones typical of the Columbia Mountains: the lushly-vegetated valley bottoms and lower slopes of the Interior Cedar Hemlock, the steep, wet and cool upper mountainsides of the Engelmann Spruce-Subalpine Fir, and the cold, wind-swept alpine tundra and rock of the Interior Mountain Heather Alpine. Distinct habitats within the parks include wetlands, avalanche paths, and subalpine wildflower meadows.

Plant diversity is high here, with 880 species of plants occurring in the parks. In recent years, many rare plants, mosses, and lichens have been discovered in the parks - several of these lichen species are new to science.

Almost 250 species of animals have been recorded in the parks, including 56 mammals and 184 birds. The parks provide habitat for many species at risk including: the federally listed¹ threatened species - woodland caribou and olive-sided flycatcher; federally listed species of special concern - Coeur d'Alene salamander, western toad, rusty blackbird, Lewis' woodpecker and westslope cutthroat trout; and nationally assessed² (provincially but not federally listed) species of special concern - grizzly bear and wolverine. Whitebark pine, bull trout and slimy sculpin will undergo national assessments in the near future. In addition, two species of moonwort in the parks are listed as provincially uncommon in British Columbia.

Mount Revelstoke and Glacier contain over 400 glaciers, including the Illecillewaet, the first intensively-studied glacier in North America. Snow and glacial meltwater from Mount Revelstoke and Glacier contributes to the flow of the mighty Columbia River. The Columbia is a significant trans-boundary river, providing habitat and food for wildlife, and water for agriculture, recreational opportunities and hydro-electric power for British Columbia and the western United States.

The state of protected natural resources in Mount Revelstoke and Glacier national parks has been evaluated and detailed in the *State of the Parks Report* (2008). The ecological integrity monitoring program for Mount Revelstoke and Glacier includes indicators of the health of terrestrial and aquatic ecosystems, climate and atmosphere, regional landscapes and native biodiversity (see Appendix 1 for details).

Maintaining ecological integrity within Mount Revelstoke and Glacier is very challenging. The parks alone do not contain enough continuous unaltered habitat to

Known as the Interior Wet Belt, the forests within the Columbia Mountains contain the greatest diversity of coniferous tree species in Canada, and are considered to be the second most productive forest zone in Canada.

Although Mount Revelstoke and Glacier are smaller than Banff or Jasper national parks, they represent 70 percent of the typical species and habitat found within the greater Columbia Mountains region.

¹ federally listed" means "listed on Schedule 1 of the Species at Risk Act" (SARA)

² nationally assessed" means "assessed by the Committee on the Status of Endangered Wildlife in Canada and recommended for listing under SARA



sustain wide-ranging species such as mountain caribou and grizzly bears over the long-term. Wildlife habitat in the parks and the regional ecosystem extending beyond the parks have been fragmented by the past and current activities of people.



Transportation routes, dams and reservoirs, recreation infrastructure and industrial activities have been concentrated in valley bottoms, affecting interior cedar-hemlock forests, wetlands, rivers and lakes. The interruption of wildlife movement corridors, which also facilitate genetic exchange between populations has increased the isolation and vulnerability of both species. Mountain caribou populations have continued to decline, and the Columbia South herd in particular has plummeted to 13 individuals in 2009.

Transportation corridors have contributed to the introduction of invasive plants, site contamination, declines in water quality, and fragmentation of aquatic ecosystems and wildlife populations. Declining wildfire frequency contributes to habitat fragmentation for species that require younger forests and recently burned areas.

Some progress has been made in addressing regional ecosystem fragmentation issues with neighbouring land managers and other stakeholders. This includes collaboration on research projects, species recovery planning, fire management and land use planning.

Within each park, restoration of small fragmented habitats using native species is currently improving connectivity for small mammals, amphibians and insects. Aquatic connectivity is being improved through the repair or replacement of culverts that act as barriers to fish and the passage of other small species under the Trans-Canada Highway.

Parks Canada is working with others to implement the *Species at Risk Act* in monitoring, protection and recovery of species at risk. In recent years, population surveys of rare species have substantially bolstered understanding of species at risk.

The protection of ecosystem integrity and ecological connectivity is a priority within Mount Revelstoke and Glacier national parks. Parks Canada's national goal is to ensure that within five years, one major indicator of ecological integrity will be improved in every national park. The provision of opportunities for visitor experiences and education complements ecosystem management by creating personal connection, and garnering public support for the protection activities.

2.2 Protecting Cultural Resources

The state of the national historic site's cultural resources was assessed in the *Commemorative Integrity Evaluation for Rogers Pass National Historic Site* (2003), and was further reviewed during the preparation of the *State of the Parks Report*

(2008). The state of protected cultural resources within the two national parks was also evaluated for the *State of the Parks Report*.

Many nationally-significant cultural resources have benefited from recent stabilization efforts, including the Cascade Creek bridge, the 1885 rail grade and culverts, the Loop Brook stone trestle pillars and the Glacier House hotel site. Glacier Circle Cabin and Eva Lake Cabin, both nationally significant heritage buildings, have recently been stabilized and preserved in conjunction with the Friends of Mount Revelstoke and Glacier. Cultural resources associated with the historic Nels Nelsen Ski Jump have been protected and presented on-site to visitors. A World War One-era internment camp on Mount Revelstoke has been documented and presented at a visitor area on the Meadows in the Sky Parkway.

Given the very large size of Rogers Pass National Historic Site, there are some less significant artifacts (culverts, snowshed ruins) along the old rail line that are in poor condition. After the rail line was abandoned in 1916, decades of heavy snows, avalanches and wet summer climate caused these features to deteriorate beyond the point that they could be stabilized or repaired.

Cultural resource protection is complemented by opportunities for visitors to experience and learn about Columbia Mountains culture. New interpretive exhibits throughout the historic site and parks present the cultural legacy of the Columbia Mountains, including early explorers, surveyors and mountaineers, skiers and ski-jumpers, avalanche scientists, highway builders and the Canadian Forces, mountain guides and national parks staff. The stories of the Secwepemc, Ktunaxa and Syilx people are presented through First Nations public art pieces along a self-guiding trail atop Mount Revelstoke.



2.3 Connecting with Visitors

Four million travellers enter Mount Revelstoke and Glacier national parks on the Trans-Canada Highway every year. More than 610,000 people visit the parks every year, using facilities such as day-use areas, campgrounds, scenic parkway, interpretive viewpoints, discovery centre, self-guided interpretive trails, backcountry trails, alpine huts and ski terrain. Visitation has grown by 30% over the past 20 years, paralleling the growth in traffic volumes on the highway. Visitation to Mount Revelstoke and Glacier follows only Banff, Jasper and Pacific Rim national parks. Rogers Pass is also one of Canada's most visited national historic sites - more than 420,000 people a year stop to experience the self-guiding trails, interpretive viewpoints, day-use areas and discovery centre.

A major challenge is reaching a larger proportion of the drive-through market, and encouraging them to become new park and historic site visitors. As visitation grows, monitoring visitor use patterns will be essential in order to maintain contemporary visitor infrastructure and deliver the personal services that visitors value.



A primary consideration in the management of national parks and national historic sites is ensuring their continued relevance in a changing, more urban Canada. A key priority is the renewal and reinvention of the visitor experience in ways that respond to the motivations and interests of all Canadians. Meeting this challenge will promote increased visitation, and the deep and lasting personal connections that arise through personal experience in real and inspiring places. These connections are the basis for continual renewal of the constituency for heritage conservation that is essential to sustaining Canada's protected area legacy into the future.



The primary sources of information on visitor experience and learning opportunities for this management plan are the 2009 market analysis and focus group sessions, the 2009 *Meadows in the Sky Area Connection to Place Study*, the 2006 *Patterns of Visitor Use Study*, and annual *Campground Visitor Information Program* and *Trail Use* studies.

Visitors continue to express a very high level of satisfaction with their experience in Mount Revelstoke and Glacier. Significant investments in visitor opportunities and services in recent years have built on a solid foundation of research about visitor motivations, needs and expectations. In the 2006 *Patterns of Visitor Use* study, ninety-six percent of respondents indicated that they were satisfied with their visit to Mount Revelstoke and Glacier, and sixty-three percent were very satisfied (scoring their experience as five out of five). Seventy-six percent of visitors from British Columbia and Alberta say that they will definitely return to the parks and historic site again, and over one third of overseas visitors would like to return, even though most consider themselves to be on a once-in-a-lifetime trip.

The 2009 *Meadows in the Sky Area Connection to Place* study revealed new insights into the ways that visitors personally connect with and develop an attachment to protected landscapes. At least one third of respondents developed a very strong connection with the Meadows in the Sky Area, even on their first visit. Many people commented that this area had been one of the high points of their trip, a “captivating place” or a “peak experience”.

Study results indicate that 99% of respondents made some connection with the Meadows in the Sky Area. Visitors felt that the spectacular mountain-top views and peaceful, quiet setting made the greatest contributions to their sense of connection. Learning more about the area's nature and history was important to visitors in establishing a connection.

2.4 Connecting with Communities

Parks Canada collaborates with agencies and groups who share responsibility for managing the Columbia Mountains landscape. While direct management of Mount Revelstoke and Glacier National Parks and Rogers Pass National Historic Site of Canada is the responsibility of Parks Canada, the advice and support of many others is critical to success.



Park staff will work with Aboriginal people and with organizations such as the the Friends of Mount Revelstoke and Glacier, Canadian Wildlife Service, Natural Resources Canada, BC Hydro, Canadian Pacific, the Columbia Basin Fish and Wildlife Compensation Program, the Canadian Avalanche Centre, the Columbia Mountains Institute of Applied Ecology, the Geological Survey of Canada, the Association of Canadian Mountain Guides, the Alpine Club of Canada, the tourism industry and the academic community.

An annual forum will engage visitors, Aboriginal people, other organizations and community members in the leadership and challenge of perpetuating the mountain park heritage in a manner which enriches the experience and understanding of generations to come.

The traditional territories of the Secwepemc, Ktunaxa and Syilx people include the Columbia Mountains. Parks Canada will facilitate increased involvement of Aboriginal people in the parks and historic site. The Ktunaxa Treaty Council represents the Ktunaxa peoples in the B.C.Treaty Commission Process. While the Secwepemc and Syilx (Okanagan) First Nations are not currently involved in the treaty process, Parks Canada will reach out to work with all three First Nations and other recognized Aboriginal groups with connections to these lands.

Ecological, social, economic and historical ties bind the parks to the communities of Revelstoke and Golden as well as the greater ecosystem. Parks Canada places a very high priority on working with and strengthening relationships with neighboring Provincial Government land managers. Parks Canada collaborates with the City of Revelstoke, sitting on municipal commissions and participating in community programs and events.

Parks Canada also works with companies and organizations that use lands surrounding the parks, to mitigate impacts inside park boundaries. Forestry companies lease much of the timber that surrounds both parks. Mount Revelstoke National Park abuts a major hydro-electric dam and reservoir. Backcountry skiing, helicopter skiing, hiking and snowmobiling activities take place just beyond the boundaries of both parks.

2.5 Connecting with the Mountain National Parks

Mount Revelstoke, Glacier, Yoho, Kootenay, Jasper, Banff and Waterton Lakes national parks represent the Columbia Mountains and Rocky Mountains natural regions. Visitors travel among the parks, often during the same trip, and stakeholders have interests in several parks. Given the shared importance of these national parks as core protected areas in the Canadian Western Cordillera, it is important that management strategies of the mountain national parks are coordinated and complementary. For this reason, the management plans for the seven national parks have been reviewed and amended concurrently, through a common process. All seven mountain national parks share a common vision that aligns with and frames individual park visions (see next page).

The mountain parks also contain 15 national historic sites representing major themes in Canadian history. Five of the seven parks are also part of two World Heritage Sites, reflecting the global community's recognition of their outstanding universal value.



The Mountain National Parks * A Vision For the Future

Canada's mountain national parks are renowned living examples of all that is best in the conservation of mountain ecosystems and history, facilitation of authentic nature-based experience, shared initiative, meaningful learning, and mountain culture. Visitors to these places feel welcomed into experiences that exceed their expectations.

The silent peaks, forest mosaics, living waters, wildlife, people, clean air and endless capacity to inspire bring rejuvenation, hope and self-discovery to future generations, just as they have for the many generations that came before.

2.6 Emerging Issues

Since the completion of the 2005 management plan, a number of circumstances have changed in Mount Revelstoke and Glacier national parks and the region surrounding the parks. The following emerging issues have been assessed in the development of this management plan.

Significant changes in the nature and character of Revelstoke and Golden, the parks' gateway communities, pose both challenges and opportunities. The development of the four season Revelstoke Mountain Resort has set the neighbouring City of Revelstoke on a path of significant urban change.

Revelstoke's current year-round population of 8,000 will likely increase by at least 25%, and the resort itself has planned accommodation for 16,000 visitors at build-out in 20 years. The city's north boundary is shared with Mount Revelstoke National Park, and new suburban and mixed commercial development is planned for areas immediately adjacent to the national park. Parks Canada works with the City of Revelstoke to manage the impact of external growth pressures both inside the parks and on the boundaries, through the *Official Community Plan*.



At the same time, Kicking Horse Mountain Resort near the Town of Golden has experienced a decade of growth. The development of these mountain resorts has brought an influx of new visitors and new residents to the communities. The demographics of visitors to the parks and site have quickly begun to change, particularly during the winter months. Glacier National Park has witnessed an increase in novice backcountry skiers, and a willingness to ski previously untried terrain. The mountain resorts, local schools



and the communities have already begun to collaborate with Parks Canada on avalanche and skiing safety messages.

Opportunities for the development of complementary year-round tourism products, packages and promotion are also being explored by Parks Canada and partners within the *Three Passes* tourism destination concept. Cultural institutions such as museums and galleries are collaborating with Parks Canada on the *Three Passes* concept. The two new mountain resorts and other private attractions near the parks offer recreational services that complement the visitor experience available in the parks, including hot springs, cabin camping, mountain biking (downhill, cross-country and technical track), whitewater rafting, zip lines, guided parasailing and hang-gliding, snowmobiling, heli-skiing, heli-hiking, gondola rides and forest canopy tours.

The second major issue emerging since the 2005 management plan is the requirement to secure a supply of gravel to support highway operations and construction requirements. This necessitates an evaluation of the costs and benefits of extracting gravel from sources within national park boundaries, including effects on ecological integrity and the visitor experience, and the potential of successful quarry restoration after the completion of use.

2.7 Agency, Regulatory and Policy Context

National parks protect for all time, special places representative of Canada's natural regions, and connect Canadians with the enduring natural and cultural legacy of these places. The *Parks Canada Agency Act*, the *Canada National Parks Act* and *Parks Canada Guiding Principles and Operational Policies* set the context for this responsibility. National historic sites are established and commemorated under the *Historic Sites and Monuments Act* and are administered under the *Parks Canada Agency Act*.

In delivering on its mandate of heritage protection, visitor experience and education, Parks Canada is accountable for ensuring that management of each national park gives first priority to the maintenance or restoration of ecological integrity. Application of the *Canadian Environmental Assessment Act* and Parks Canada's *Policy on Strategic Environmental Assessment* ensures thorough, science-based consideration of potential environmental effects, and appropriate public review in advance of any development, licensing and policy decisions. Parks Canada also has specific obligations under the *Species at Risk Act*. For example, Parks Canada is working with the agency responsible (Environment Canada), and the Province of British Columbia in the preparation of a recovery plan for mountain caribou.

Parks Canada ensures the commemorative integrity of each national historic site that it administers through the *Historic Sites and Monuments Board Act*. Commemorative integrity is the realization of the commemorative intent for a national historic site. It defines the health or wholeness of the historic site, ensuring that the reasons for national designation are respected in all actions relating to the protection and presentation of such places.

Strategic direction in the Park Management Plan, and all operational and business planning decisions are subject to national policies and guidelines that frame Parks Canada's approach to management of national parks, national historic sites and national marine conservation areas. Some examples include:

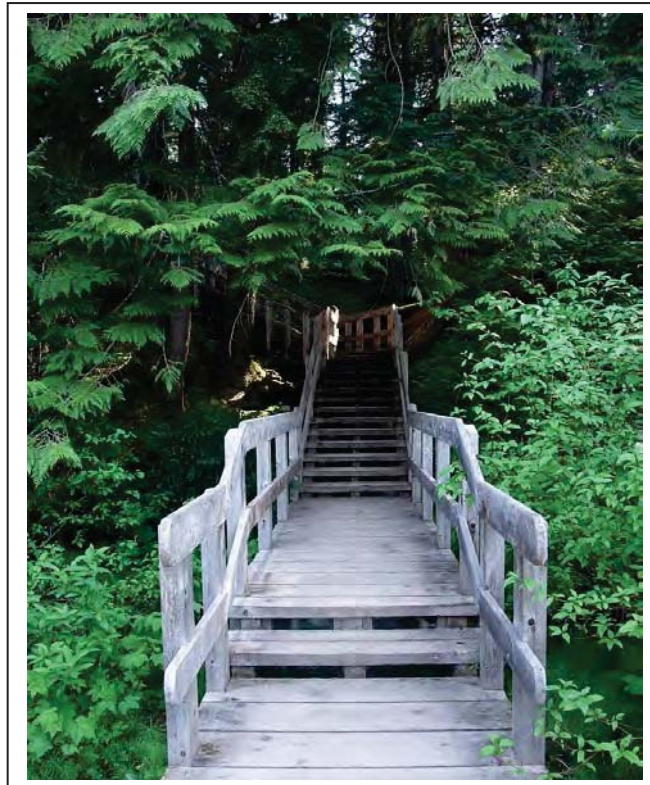


- Parks Canada's *Cultural Resource Management Policy*
- Management Bulletin - Recreational Activity/Special Event Assessments
- National Parks Wilderness Area Declaration Guidelines

Parks Canada publicly accounts for its performance by preparing every five years, a State of the Parks report that provides a synopsis of the current condition of the parks based on key indicators, and assesses performance in advancing the agency's mandate.

Parks Canada's corporate priorities influence this management plan:

- Parks Canada will continue to lead active management projects in national parks to improve key ecological integrity indicators. Investments will be made in a strategic manner to achieve results on the ground.
- A greater percentage of Canadians will report awareness and understanding of, and support for the heritage places managed by Parks Canada. More Canadians will also be aware of the opportunities available for public involvement in the stewardship of the parks and sites.
- A greater number of visitors will be attracted to national parks, national historic sites and national marine conservation areas through the creation of new visitor opportunities that position heritage places as experiential destinations.



3. OVERVIEW OF THE MANAGEMENT PLAN

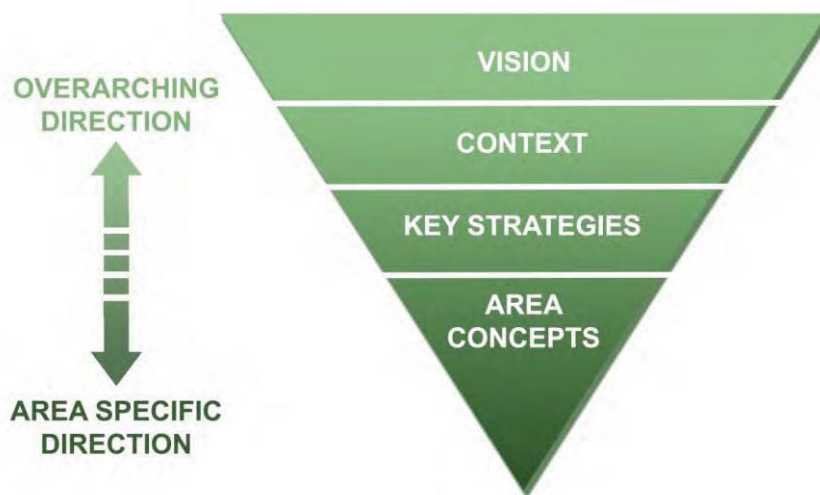
Six **Key Strategies** form the basis of this management plan, addressing the main areas of focus in achieving the vision:

- Connecting and Reconnecting
- The Columbia Mountains – *Up Close and Personal*
- Ensuring Healthy Ecosystems
- Touchstones to Our Past – Celebrating our Roots
- Bringing the Mountains to People Where They Live
- Showcasing Science and Stewardship

The management plan also contains four **Area Concepts** with detailed direction for discrete geographic areas of the parks and historic site. The Key Strategies and Area Concepts are presented in an integrated way to ensure that the three elements of the Parks Canada mandate – protection, education and visitor experiences – are addressed in each part of the park:

- Mount Revelstoke and Glacier National Park Backcountry Areas
- Major Rogers' Route – Trans-Canada Highway Corridor
- Rogers Pass National Historic Site
- Meadows in the Sky Area

To avoid repetition, direction statements that are common to more than one Area Concept are identified in the appropriate Key Strategy.



4. KEY STRATEGIES

4.1 Connecting and Reconnecting

This strategy focuses on:

- illustrating and celebrating how people have occupied, used, valued and connected with Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site through time
- working in collaboration with others to reconnect fragmented landscapes, habitats and corridors
- connecting and reconnecting Canadians with their heritage and sharing their stories of connection
- exploring ways to reconnect ecosystems across the transportation corridor, while recognizing that safe travel is the principle objective of the corridor

Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site are places of connection. The nation's most important economic lifelines were connected through Rogers Pass and Glacier twice - the trans-continental railway in 1885 and the Trans-Canada Highway in 1962. Canadian mountain tourism and mountaineering were born here in 1886, connecting people from around the world with the Selkirk Mountains. The parks and site offer Canadians and international visitors an opportunity to experience places that they might not otherwise have a chance to see - an avalanche path, a mountain-top, a railway tunnel, a cave system or a ski-jump.

Visitors can personally experience the rich cultural heritage of the Columbia Mountains – the stories of those who came before and created the character of these places: Aboriginal people, explorers like David Thompson and Major Rogers, the gold rush miners of the 1860s, adventurers like members of the Alpine Club of Canada or the ski-jumpers of Revelstoke, railway and highway builders, early visitors, avalanche scientists and national park staff who have helped to give the Columbia Mountains their character.



These human connections have also created disconnections on the land however. The relatively undisturbed wilderness areas of Glacier National Park contain some of the most productive grizzly bear habitat in the mountain parks, yet key habitat and movement corridors are severely fragmented by the highway and the railway. While mountain caribou are protected within Mount Revelstoke National Park, this species lives on large landscapes that extend beyond the protection of park boundaries, where habitat is fragmented by logging, reservoirs and recreation. Wetlands in both parks



provide rare and fragile habitat, yet much of this habitat is disconnected by the road and rail corridor.

This management plan presents two new approaches to resolving fragmentation challenges and reconnecting people to the landscape:

- Parks Canada will seek to facilitate “zones of cooperation”, a systematic approach to working with neighbouring land owners and land management agencies to address ecological integrity and visitor experience challenges.



- The *Three Passes* (Kicking Horse Pass to the Last Spike) cultural landscape concept will be an integrating narrative for resource protection, visitor experiences and educational opportunities in the parks and historic site.

If Mount Revelstoke and Glacier’s first century was marked by fragmentation that shrank the landscape of possibilities for the Columbia Mountains, the second century will be about connecting and reconnecting, inspiring new hope, meaning and possibilities for the future. *Connecting and Reconnecting* is a global theme that has guided the development of the key strategies and area concepts presented in this management plan.

Direction

1. Collaborate with neighbouring land management agencies to restore fragmented landscapes, habitats and corridors, and maintain natural processes, particularly those along the transportation corridor and boundary areas.
2. Increase public connection and personal stewardship for these protected places through volunteer and citizen science programs.
3. Work with Aboriginal people to honour their cultural connections to the land and embrace traditional knowledge in Parks Canada decision-making.
4. Highlight the parks and sites as gathering places for families. Develop visitor experience products that support nature, history and the outdoors as a big part of the lives of children and families. Invite visitors to return to Mount Revelstoke, Glacier and Rogers Pass again and again.
5. Connect Canadians at home to their mountain heritage through the use of new media technologies.



4.2 The Columbia Mountains – *Up Close and Personal*

This strategy focuses on:

- presenting a warm welcome to Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site and the parks and sites of the Canadian Rockies
- offering opportunities for real and inspiring experiences that allow Canadians and international visitors to make a personal connection with these special places - connections that will linger long after they get home
- setting the stage for visitors to have the most enjoyable experience in every service, program facility and activity, recognizing their differing needs, motivations, expectations, travel styles and time available
- increasing visitation to Mount Revelstoke, Glacier and Rogers Pass by two percent annually, through opportunities for new and traditional visitor experiences in collaboration with partners throughout the cultural landscape
- engendering a sense of stewardship and a culture of conservation through visitor experience and learning opportunities that are designed to showcase healthy ecosystems and historic settings, and to protect these heritage values

Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site bring the Columbia Mountains *up close and personal* for visitors. The steep, narrow valleys and towering mountains create a sense of enclosure - it can strain the neck just to see their summits. Unlike the Rocky Mountains, the landscape in the Columbias does not open up wider until one climbs high into the sub-alpine, where views of peaks and glaciers stretch to every horizon.

Subalpine meadows explode into colour every August, as the short wildflower season reaches its apex. In the rainforest, visitors try to wrap their arms around the ancient cedars and quickly realize they need help to reach all the way around. Skunk cabbage plants can be as tall as a twelve year-old child. Beautiful but prickly devil's club plants do an effective job of encouraging most visitors to stay on the trail.



In winter, the parks change dramatically, with deep snowpacks allowing visitors to enter mountain landscapes that are almost impenetrable in the summer. The Meadows in the Sky Parkway in Mount Revelstoke, left unploughed in winter, offers the only cross-country skiing in the two parks. Elsewhere, skiers tour through valleys of snow-covered spruce, fir, cedar and hemlock before skinning up to the deep powder bowls, cirques, glaciers and glades of the high country.

Roadside strolls, backcountry trails and the Meadows in the Sky Parkway all provide quick access to a peak experience - those “highlight of the vacation” experiences that create life-long memories. In many places, it is easy for a visitor to be alone and have a deeply personal park experience. The thick forests and rolling subalpine meadows create a sense of seclusion, even when others are not far away. The parks and historic site are gathering places for those who wish to share the experience with family and friends.

Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site, and the *Three Passes* cultural landscape offer almost limitless opportunities for an *up close and personal* experience. From remote wilderness adventure, to volunteer programs, from roadside interpretive trails to arts festivals in neighbouring gateway communities, everyone can connect with a special place that meets their needs.

Mount Revelstoke, Glacier and Rogers Pass offer opportunities for experiences that are not widely available elsewhere – like deep-powder backcountry skiing in a national historic site or summiting a mountain by vehicle within 30 minutes of leaving the highway.



For vacationers heading east through the mountains, the national park experience begins here. Mount Revelstoke or Glacier are the first national park stop for more than 60%

of overseas visitors and 40% of American visitors. More than half of all current overseas visitors have never visited a Canadian national park before coming to Mount Revelstoke and Glacier. Visitors from British Columbia and Alberta often stop only in Mount Revelstoke and Glacier during a given trip, while visitors from other provinces, overseas and the United States are more likely to include Mount Revelstoke and Glacier on a mountain parks tour.

The parks and historic site have tremendous name recognition in Europe and Australia, and are principle stops on the itinerary of tour groups from Taiwan and Korea. Ski-touring in Rogers Pass is known around the world, and enthusiasts from Norway to Singapore take up temporary residence in the winter to ski the pass every day.

This management plan builds on the social science research conducted in these parks to develop a better understanding of the different experiences that visitors expect. People often have very different motivations for visiting the parks. Their expectations and needs can change from one visit to the next. Even within a group of people visiting the parks together, individuals may be seeking very different experiences. The “*Columbia Mountains - Up Close and Personal*” key strategy is a market-oriented approach that assures that visitor needs and expectations can be met at every stage of their visit, from planning their park trip to their departure and return home.

Mount Revelstoke, Glacier and Rogers Pass are best positioned to offer opportunities to visitors who want to enjoy the freedom and adventure of outdoor pursuits, to people who value travel in safe and scenic settings, to individuals exploring family history and connections, to those who yearn to learn more about these places and to travellers who seek rejuvenation and renewal in the mountains.



Research has indicated that many people develop strong personal connections to special park places during a visit to Mount Revelstoke. The research identified visitor expectations and the settings, facilities, services, activities and personal benefits that help visitors to connect with the parks and site. Establishing these personal connections and relevance with visitors is at the core of the *Up Close and Personal* visitor experience concept. (More detail on the *visitor experience concept* is available in Appendix 2)

Columbia Mountains – Up Close and Personal * Visitor Experience Concept

This visitor experience strategy is based on five levels of engagement and interaction with the parks and historic site. The strategy is designed to offer opportunities for enjoyment and learning that meets the needs and expectation of visitors, while protecting heritage resources and respecting the special character of place:

- Virtual travellers** can experience the parks and historic site anywhere in the world that technology or media can reach. Parks Canada has an opportunity to introduce or reinforce a connection to these places through a virtual experience. For reluctant travellers, these experiences may be the entire park experience, but for others, virtual travel can inspire a personal visit to the parks and historic site.
- The **“pass-through experience”** is a tremendous opportunity to connect through-travellers with the scenery and the history of the Columbias, making the route more than just another picturesque view through the windshield or the windows of the dome railcar. Parks Canada will reach out to visitors in their vehicles and on-board the rail tour trains, using new media technologies and other innovative communications. Through-travellers will recognize that they are passing through national parks, and will be encouraged to stop or come back when they have more time. Drivers can also be stewards of the parks by not littering and by reducing their speed and watching for wildlife.
- Visitors who stop at least once in the parks or historic site experience the **“view from the edge”** along the national transportation corridor. Roadside rest stops offer visitors an opportunity for a deeper experience of the mountain environment that may involve stopping to snap a picture, stretching their legs, having a picnic, going for a short stroll, driving the scenic parkway or stopping at the discovery centre. Visitors can connect with the parks and historic site through safe, comfortable frontcountry experiences that include opportunities to learn more. The **“view from the edge”** also encourages visitors to spend more time in the parks and step into the wild. Places like the Rogers Pass Discovery Centre, Giant Cedars, Skunk Cabbage, Hemlock Grove and the Summit of Rogers Pass will be particularly appealing for those seeking hassle-free travel, rejuvenation and relaxation, or freedom and excitement in outdoor settings.
- A visitor with more time available may chose to **“step into the wild”** although they may not venture too far from the transportation corridor. Here, visitors have the time for in-depth experiences that encourage learning and strengthen personal connections to the parks and historic site, whether in the frontcountry campgrounds, on the Meadows in the Sky Parkway or hiking out to view the Meeting of the Waters. Visitors who have **“stepped into the wild”** often feel a strong sense of personal stewardship for these protected places.
- Visitors who go **“beyond the edge and into the wilderness”** often have an inherent affinity for nature. Their carefully planned, intensely personal experiences often include long days of hiking or ski-touring, lengthy backpacking trips, mountain climbing and ski-mountaineering on the peaks and glaciers. Places like Jade Lakes, Beaver Valley and Hermit Meadows define this type of experience. A sense of connection and stewardship may come from a single backcountry trip or be the result of a lifetime of visits and an ever-deepening love of these places.



Increased visitation and a heightened sense of personal connection among visitors also result in an increase in support for ecological and commemorative integrity. Raised boardwalks, staff presentations, an interpretive shuttle bus service, a wealth of interpretive media and trail relocations in sensitive habitats are examples of the approaches used to facilitate improved visitor opportunities and increased stewardship awareness and to protect sensitive environments.

Direction

1. Create diverse visitor opportunities, facilities and services aligned with the five *Up Close and Personal* experience types. Develop opportunities which invite visitors to move from one level of experience to another while deepening their connection to these special places, and increasing their understanding of and appreciation for the protected ecological and cultural resources which form the settings for their visit. Position these unique national park and national historic site experiences within the spectrum of complementary opportunities offered along the *Three Passes* tourism route.
 - continue to learn more about the needs, motivations and expectations of visitors, their satisfaction with the park experience and how they develop connections with special places, and use the information to constantly improve upon the *Up Close and Personal* experience types
 - review and adjust visitor activities, facilities and services on a regular basis to ensure that visitor needs and expectations are being met
 - create new visitor experience products that reinforce the special protected nature of the parks and historic site, inspire in visitors a sense of shared stewardship and complement the regional tourism offer, such as:
 - encouraging *Virtual Travellers* to connect with the parks' and historic site's rugged mountain landscape, creating a desire to spend time in the parks and historic site on future trips, or to appreciate them from a distance
 - using new technologies and media to reach *Pass Through Travellers* with interpretive stories and park information, encouraging them to stop, spend some time and see the *View from the Edge* of the highway corridor
 - creating additional roadside recreational and learning opportunities to encourage travellers to stop and linger *On the Edge*; and creating opportunities for new visitors to *Step into the Wild*, where they can spend time experiencing the unique heritage of the backcountry



- developing new media and social networking tools to create collective support for visitors' post trip memories
- develop and support new special events and visitor activities that:
 - promote public understanding and appreciation of the ecosystems and history of the Columbia Mountains and Parks Canada's mandate
 - involve a diverse range of stakeholders and partners in their development and delivery
 - facilitate opportunities for outstanding visitor experiences
 - align with the nature and character of the parks and historic site (Section 1.3) and area concepts (Section 5)
 - support ecological (Section 4.1 and 4.3) and cultural resource protection (Section 4.4) goals
 - attract new markets in seasons and locations that have available capacity and sufficient ecological resilience (Direction Statement 2, below)

Evaluate proposals periodically through a structured public review process that emphasizes inclusiveness and timely decision-making.

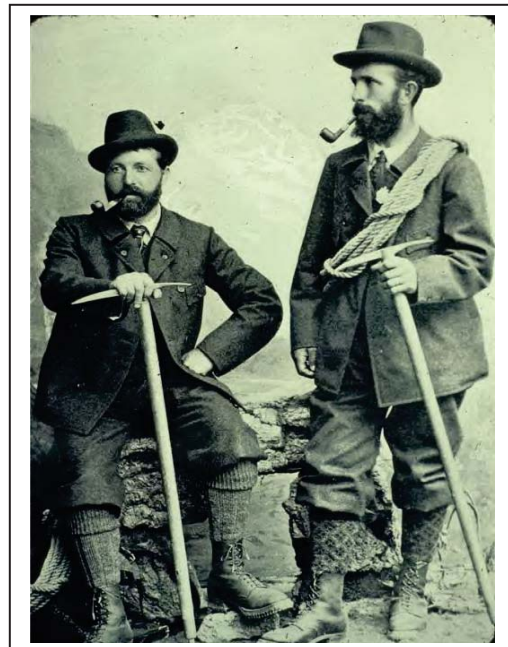
2. Encourage 2% annual visitation growth and longer stays, attract new markets, and manage patterns of visitor use.
 - work with neighbouring communities, regional visitor centres, arts/culture/ museum groups and the tourism industry to promote the *Three Passes* cultural landscape (Kicking Horse Pass to the Last Spike), and to welcome visitors to this "Great Canadian Drive" tourist destination



- collaborate with the tourism sector and travel media to improve trip-planning services, to influence market perceptions and use of the parks and historic site, to help visitors develop accurate expectations of their experience and to create promotions and experience packages, including special events

- encourage increased visitation in areas of the parks and historic site that have the capacity to accept more visitors without environmental impact or a negative effect on the quality of the visitor experience, such as:
 - lower-use locations (eg: Beaver Valley Day-Use Area)
 - shoulder seasons (eg: October on the Meadows in the Sky Parkway)
 - times of day when crowds are smaller (eg: evenings at Giant Cedars)
 - winter (eg: cross-country skiing on the Meadows in the Sky Parkway)
 - barrier-free facilities (eg: Hemlock Grove Day-Use Area)
- monitor the effectiveness of communication efforts, the effects of visitation growth on both ecological integrity and visitor experience quality; and adapt park management practices to prevent or mitigate any negative effects on protected resources or the experience of visitors

3. Embrace “*Mountain Heritage Traditions*” as a key theme of both the *Up Close and Personal* approach and the parks’ and site’s role in the *Three Passes* cultural landscape. The *Mountain Heritage Traditions* theme honours the Aboriginal people who lived and travelled lightly on the land in the Columbia Mountains. The theme also celebrates more than a century of mountain guides, hoteliers, adventurers, mountaineers and scientists who created a legacy of mountain ethics, self-reliance, care and stewardship in these mountains.



- adopt the *Mountain Heritage Traditions* theme in the redevelopment of welcome, orientation, information and interpretation services
- design any new visitor experience facilities, and complete any renovations in an architectural motif that reinforces the natural environment of the Columbia Mountains (stone and big timber) and the *Mountain Heritage Traditions* theme (heritage post and beam)
- engender a sense of the tradition of stewardship, care for the mountain environment and connection with these special places in all visitor communications
- continuously review and improve visitor safety communications with a focus on preparedness and prevention, self-reliance and low impact; and reducing the need for reactive response
- utilize the *Mountain Heritage Traditions* theme to resolve resource management issues in ways that reflect a century of offering opportunities for visitors to safely



experience the natural environment (eg: where possible adopting trail re-routing practices and minimum group sizes in bear country, rather than area closures)

4. Create learning opportunities that match the parks' and historic site's stories with the range of visitor interests and their available time.

- use a mix of both non-personal presentation media and personal interpretation programs
- integrate the results of ecological science research, conservation and stewardship into programs and media
- provide learning opportunities at different scales to reflect learning styles and market interests
- support the story-telling efforts of others
- design new special events and learning opportunities to reinforce the setting and heritage values and character of the parks and historic site and the broader cultural landscape



5. Explore opportunities for additional collaboration with the Alpine Club of Canada, licensed mountain guides and the park's commercial accommodation services to enhance and promote the ski-touring experience in Glacier National Park, during development of the Backcountry Area Plan.

6. Strengthen volunteer and citizen science programs in ecosystem monitoring, park management activities, stewardship programs and social science research.



4.3 Ensuring Healthy Ecosystems

This strategy focuses on:

- improving the health of the greater North Columbia Mountains ecosystem, particularly by working with others to re-establish connectivity
- maintaining intact habitats and natural processes that support biological communities within Mount Revelstoke and Glacier national parks
- undertaking priority management actions focused on those ecosystem components that are the most rare, vulnerable, significant or pivotal
- facilitating opportunities to continue enjoying and learning about healthy, intact ecosystems and helping people to reconnect with wild places

Ecological integrity is evident in places where all the expected plants and animals still thrive, where people use the place in ways that respect the needs of those plants and animals and are engaged in their stewardship, and where natural processes such as fire, flood and weather create natural habitat for wildlife.

Ecological resources are protected for their own intrinsic value, as well as their value to people. The ecological integrity of Mount Revelstoke and Glacier national parks is managed in a manner that also supports opportunities for people to experience protected landscapes and learn about the natural world.

Parks Canada approaches the maintenance of ecological integrity through the integration of science, adaptive management, the precautionary principle and ecosystem-based management, while providing opportunities for learning experiences.

The integration of science ensures credibility. Adaptive management provides flexibility, allowing the re-evaluation of management decisions. Following the precautionary principle means making reversible, limited-impact decisions. Ecosystem management involves working with others to maintain broader regional ecosystems.

The vegetation and wildlife of the Columbia Mountains define these parks as much as the glaciers, peaks and rivers. Vegetation patterns in Mount Revelstoke and Glacier national parks are broadly determined by elevation. Less than 20% of the parks' area is lower elevation, ecologically-important western red cedar and western hemlock forest. Riparian areas in the valley bottoms occupy less than 0.6% of the total park area. The valley bottoms, which contain some of the oldest forest stands and rare sensitive species, are critical to long-term ecological integrity. Forest harvesting and reservoir development outside of the parks have dramatically reduced this ecozone within the North Columbia Mountains ecosystem.

Engelmann spruce, sub-alpine fir, and mountain hemlock on mid-mountain and upper slopes open into parkland meadows and then alpine tundra at the highest elevations. More than half of Glacier National Park is alpine tundra, rock and glaciers. Areas at or above the treeline provide year-round or seasonal habitat for wildlife including grizzly bear, mountain goat and mountain caribou. While all species are protected in national parks, some species receive additional attention due to their listing in the federal *Species At Risk Act*.



Avalanches, forest fires and insects such as the hemlock looper are major disturbances that shape the landscape. Avalanche paths are very important to wildlife such as grizzly bear, Columbia ground squirrel and Wilson’s warbler. Forest fires provide a diversity of habitat for cavity-nesting birds and grizzly bears. Limited wetlands of cat-tail, sedge, water hemlock and skunk cabbage are found in the Illecillewaet River valley, while unique calcarious fens support biodiversity in the Beaver River Valley. These wetlands are as valuable as they are rare. The Beaver Valley fen supports 22 dragonfly species, one quarter of the total species found in British Columbia.

Maintaining the ecological integrity of Glacier and Mount Revelstoke national parks is challenging because of their small size relative to the scale of ecosystem interactions. The national transportation corridor, introduction of exotic vegetation, habitat fragmentation in the broader ecosystem and the 20 km separation between the two parks complicate management at an ecosystem level. The impacts of climate change, which may be very significant, are not yet fully understood. These issues require intensive collaboration with neighbours, partners and stakeholders to find novel methods of maintaining ecosystem health.

Parks Canada will work with neighbouring land managers to identify shared values and create “zones of cooperation” - an approach to the restoration of connectivity beyond park boundaries, based on mutual values and benefits.

Multi-lateral agreements will foster cooperation on habitat and visitor monitoring, habitat protection, wildfire management, backcountry recreation, visitor safety and learning.

Restoration of connectivity will be a priority within Mount Revelstoke and Glacier national parks – between ecosystems (eg: northern and southern Columbia Mountains), between habitats (eg: wetlands bisected by the highway), between wildlife populations (eg: southern mountain population of the woodland caribou) and between people and the landscape (eg: visitors learning about the fragility, beauty and diversity of wetlands). This work will build upon the foundation of ecosystem protection and restoration success achieved in Mount Revelstoke and Glacier over the past 15 years. This challenge is best met through collaboration with Aboriginal people, partners, stakeholders and visitors, identifying shared values and promoting a sense of collective stewardship.



The provision of opportunities for visitor experiences and education in and about these natural and cultural settings allows personal connections, and garners public support for the continued protection of cultural and ecological integrity.

All park decisions and actions will be analyzed for their potential to restore, maintain or enhance ecological integrity, including connectivity.



Direction

1. Ensure that Mount Revelstoke and Glacier national parks have the full complement of native species and communities that are characteristic of the Columbia Mountains Natural Region.
 - manage to ensure that Columbia Mountains ecological community types (eg: white bark pine and subalpine meadows) continue to persist in the parks
 - manage invasive non-native species and diseases likely to negatively affect native plant or fish populations, wildlife habitat or aquatic community diversity
 - plan for and implement recovery measures for species at risk, or other rare or sensitive species, by working cooperatively with federal and provincial agencies
 - monitor keystone species and communities which indicate the condition of park ecosystems so that actions may be taken to mitigate environmental degradation or illustrate improvement
 - protect known sensitive areas, communities and populations
2. Sustain ecological connectivity to ensure the persistence of natural levels and patterns of species and communities.
 - maintain large areas of the parks in a wilderness state and reconnect areas that have become isolated
 - facilitate the movement of wildlife species between key habitats, particularly by improving connectivity across roadways, the railway and trails as opportunities arise
 - reduce wildlife mortality caused by people
 - monitor the effectiveness of management actions on ecosystems and visitor use
3. Allow natural processes to occur on the landscape, at rates similar to recent history.
 - implement the *Fire Management Plan*, including fuel management strategies (eg: Firesmart, prescribed burning) in collaboration with partner agencies; continue to restore fire so that natural vegetation characteristics persist in park ecosystems while ensuring public safety, and protecting property and adjacent lands
 - maintain, and where necessary, mitigate rates of natural forest insect and disease disturbance
 - continue the persistence of predator-prey dynamics



- monitor natural processes as an indicator of the condition of parks, so that actions may be taken to mitigate environmental degradation
4. Provide opportunities for visitors to experience healthy, protected ecosystems first-hand, increasing their understanding and support for conservation goals.
 - present public programs that bring together communication specialists, park biologists and external specialists to share information and raise awareness and understanding of park ecosystems
 - engage visitors and residents in hands-on learning experiences in ecosystem management and monitoring through volunteer and citizen science programs
 - tell the story of caribou population decline as a poignant example of stresses upon wide-ranging species
 5. Work with others to develop innovative ways to restore or reconnect ecosystems.
 - collaborate with Aboriginal communities to enhance understanding of traditional ecological knowledge to assist in management decisions
 - work cooperatively with regional land managers, partner agencies and industry to ensure the persistence of wide-ranging, sensitive or at-risk species in park and regional ecosystems
 - foster specific zones of co-operation along park boundaries to develop and support mutual goals
 - improve our understanding of the impacts of climate change on park ecosystems, develop management strategies to adapt to climate change and strengthen educational opportunities on climate change



4.4 Touchstones to Our Past – Celebrating our Roots

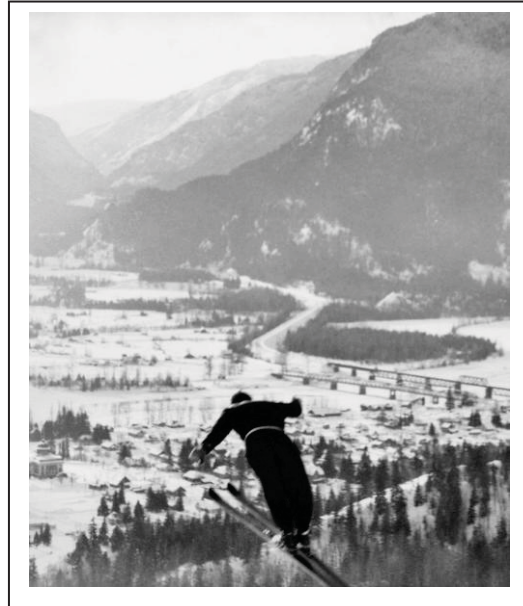
This strategy focuses on:

- presenting the rich cultural heritage of Mount Revelstoke and Glacier national parks, Rogers Pass National Historic Site, the *Three Passes* cultural landscape and the Columbia Mountains



- offering opportunities for visitors to experience a vivid sense of the past and personally connect with and contribute to this enduring legacy, in a manner that makes history and culture an integral part of the contemporary visitor experience
- recognizing the contribution of people from around the world to the completion of the transcontinental railway and the development of western Canada; and engaging those cultures in telling the story

The Columbia Mountains have long shaped, enriched and sustained human culture in this part of western Canada. The stories that define the Columbia Mountains combine millennia of Aboriginal peoples' use of the land, years of European exploration and the fur trade in the 1800s, a century of transportation, the emergence and continuing evolution of mountain recreation and hospitality traditions, and the communities of people who have come to visit and live here.



Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site protect and present important cultural resources in large part by continually redefining people's relationship with them, while protecting their authenticity and character.

The roots of Columbia Mountain and Rocky Mountain culture are commemorated at many other national historic sites within the broad cultural landscape, including Boat Encampment, Howse Pass, Athabasca Pass and Kootenae House (all associated with fur trade explorer David Thompson), Eagle Pass (the Last Spike) and Kicking Horse Pass, the S.S. Moyie (an inland lakes sternwheeler vessel), Kaslo Town Hall (the oldest on the BC mainland) and Nikkei Internment Memorial Centre (internment of Japanese-Canadians). While Canadian Pacific's Glacier Heritage Railway Station is not open to the public (it is located in the operations yard at the entrance to the Connaught Tunnel), it is also an important part of the historic site and the cultural landscape.

These touchstones to our past spotlight the culture and heritage of the Columbia and Rocky Mountains in ways that enrich people's experiences and strengthen their sense of connection to these places.

Direction

1. Renew the *Cultural Resource Management Plan* for the parks and historic site.
2. Enhance the protection of cultural resources and the natural environment in ways that respect the past, present and future relationship between people and the land and the intrinsic value of the resources themselves.



3. Intervene in natural processes (such as river erosion, avalanches or fire) where necessary to prevent the loss of or damage to significant cultural resources, without creating sustained negative impact to the environment.
4. Invite the involvement of Aboriginal people in documenting and presenting their culture and relationship to park landscapes.
5. Keep history alive by presenting and celebrating the shared stories of the *Three Passes* cultural landscape, the national parks and national historic sites, the people and the communities between Field and Sicamous.
6. Animate the places where visitors gather in the cultural landscape with interpretation, including live performances and other programming that weave together the story of our relationship with the natural landscape as part of every learning experience.
7. Raise the profile and knit the cultural landscape together through special events and anniversaries that connect people with the stories of those who came before.
8. Strengthen relationships with communities of new Canadians to document and present their relationships with the Columbia Mountains.



4.5 Bringing the Mountains to People Where They Live

This strategy focuses on:

- promoting an ongoing dialogue and personal connection with Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site beyond our boundaries
- extending the reach of the parks and site, with an emphasis on the use of modern technology and outreach programming to bring current, lively and engaging content into homes, schools and communities

Parks Canada will bring the ongoing stories of mountain culture, science, recreation and park management to people who may not otherwise have an opportunity to learn about, visit or become involved in our national parks and national historic sites.

Almost 80% of Canadians live in urban centres and more than one-fifth were not born in Canada. Parks Canada will work with others to reach out to these audiences through initiatives such as environmental education programs at schools, extension events for special groups, “real-time” content on park and partner websites, park and partner publications, mass media contacts, national advertising and community events.





Wherever they live, work or gather, new Canadians and young people will have the opportunity to be introduced to Canada’s remarkable mountain heritage. Canadians will understand and value the mountain national parks and be able to connect with wild places, culture and history.

Direction

1. Bring the national parks and national historic sites into the communities of Revelstoke, Golden, Field, Craigellachie, Sicamous and beyond, through the shared stories of the *Three Passes* (Kicking Horse Pass to the Last Spike) cultural landscape.
2. Target youth, urban Canadians and new Canadians especially in British Columbia with outreach programs (such as Art in the Park) that connect them to park settings, stories and experiences, the dynamic natural environment of the mountains and the cultural landscape of the *Three Passes* corridor.

3. Collaborate with heritage-based agencies, schools and festival organizers to bring outreach education programming (eg: Mountain World Heritage Interpretive Theatre) into small communities and larger urban centres in British Columbia on a regular basis with priority on the BC interior and Vancouver areas.



4. Collaborate with provincial education authorities in British Columbia and Alberta in the development of curricula and learning opportunities for teachers and students to bring national park and national historic site themes, cultural landscape stories and mountain safety messages into the classroom.
5. Continually refresh and renew content for an enhanced park and historic site web presence that provides learning, sharing and experiential opportunities for Canadians and others so that they can experience the excitement of being “virtually there”.



4.6 Showcasing Science and Stewardship

This strategy focuses on:

- focusing natural, social and cultural science, technological innovation, traditional knowledge and stewardship efforts on resolving long-term and day-to-day conservation challenges
- engaging interested stakeholders, park visitors and communities in monitoring programs, research data collection, and applying and sharing scientific findings in park and site decision-making
- inviting volunteers and park visitors to participate in stewardship activities that enrich visitors' experiences and support the protection and management of the parks and historic site

Mount Revelstoke and Glacier national parks are home to world-recognized snow and avalanche science, conducted along with research associates in the global academic community, the Province of British Columbia and the Canadian Avalanche Association. Railway engineers began the first systematic observation of avalanches in 1885, and their information was put to immediate use in the design and location of snowsheds. When Rogers Pass was chosen as the location for the Trans-Canada Highway in the mid-1950s, snow and avalanche studies were undertaken again. The tradition of excellence in snow research and avalanche control continues to this day.



Canadian Pacific engineers broke new ground with mountain railway construction techniques, building what were at the time, the world's highest bridge (Stoney Creek) and the world's longest tunnel (Connaught Tunnel). Highway builders in the early 1960s designed and constructed Canada's first highway snowsheds. In the 1980s, railway engineers replicated the feat of the Victorian era, constructing the western hemisphere's longest rail tunnel. As the transportation corridor evolves, there will be a need to seek innovative engineering solutions to reconnect wildlife movement corridors.

Throughout the past century, science and technology have come together many times in Mount Revelstoke and Glacier in the service of conservation. The first scientific study of glaciers in North America was undertaken here in 1887. Researchers and volunteers continue that work today, including leading edge research into lichen growth as a means of studying glacial retreat. Famed surveyor Arthur O. Wheeler pioneered the technique



of photogrammetry to produce a portfolio of detailed maps of the Rogers Pass area in 1905. In the 1960s, researchers from McMaster University undertook some of Canada's most thorough ever subterranean mapping in Nakimu Caves. The 1980s saw ground-breaking ecological science applied to the restoration of damaged subalpine meadows at the summit of Mount Revelstoke. In a landmark 1999 study, Parks Canada and Province of British Columbia scientists forged new ground in the use of DNA fingerprinting to identify and track grizzly bears.

The social sciences also flourish in Mount Revelstoke, Glacier and Rogers Pass. The *Patterns of Visitor Use Study* (2007) provided the first comprehensive report on how visitors move about and experience the parks, as well as providing data on demographics, expectations and satisfaction. The *Meadows in the Sky Area Connection to Place Study* (2009) provides Parks Canada with some of the first ever information on the places, characteristics and experiences that initiate a sense of place attachment in a national park. There has been extensive archaeological research and cataloguing undertaken in the parks and Rogers Pass National Historic Site, including cultural resources related to the railway, the World War I era internment camp, the Nels Nelsen historic area and high altitude archaeology conducted with Aboriginal researchers.

The application of innovative environmental technology has been a hallmark of Mount Revelstoke and Glacier operations, including the first use of hybrid fuel vehicles in a Canadian national park fleet in 2001. A micro-hydro plant was constructed at Illecillewaet Campground in 2008. Recycling outlets, waste stream reduction programs and removal of invasive weeds have all been introduced during the past decade. Parks Canada has also supported environmental stewardship efforts beyond park boundaries, as a founding member of British Columbia's first community *Bear Aware* Program in 1996, and a founding membership in *Idle-Free Revelstoke* in 2007.

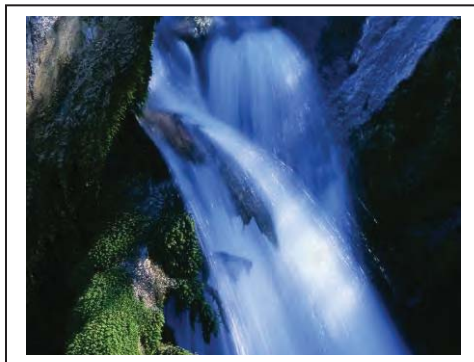
Parks Canada's understanding of mountain ecosystems and species and these dynamic landscapes continues to evolve. Monitoring and study approaches will continue to be designed to maintain a high degree of scientific rigour and statistical validity, while being delivered collaboratively with interested Canadians.

Direction

1. Work with Aboriginal people to incorporate traditional knowledge into the park research program and decision-making.
2. Make science, technology and stewardship successes a signature characteristic of conservation and the visitor experience in Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site.
 - share science, conservation and technology stories in ways that create rich and rewarding opportunities for learning within the parks and at home
 - create opportunities for scientists, volunteers and visitors to share their knowledge



- engage people in citizen science or volunteer programs around core ecological monitoring programs and other ecosystem studies, and engender a commitment to stewardship of the parks and historic site in every visitor
- 3. Offer scientists (social, natural and cultural) opportunities to conduct applied science studies in the parks and site.
- 4. Work with the Province of British Columbia and other knowledge sources.
- 5. Expand the use of environmental technologies in park operations, such as photovoltaic power, waste stream reduction, water and energy conservation and wastewater treatment improvements.
- 6. Expand environmental stewardship programs within the national transportation corridor in partnership with Canadian Pacific, including herbicide application, toxic spill clean-up, run-off containment and grain spill clean-up.
- 7. Continue to support environmental stewardship efforts beyond park boundaries, such as the *Revelstoke Bear Aware* program and transit service from the community to the park.



5. AREA CONCEPTS

5.1 Introduction

Four areas have been identified in Mount Revelstoke and Glacier national parks for planning purposes– the backcountry areas of both parks, the Trans-Canada Highway Corridor (Major Rogers’ Route) that crosses both parks, Rogers Pass National Historic Site in Glacier National Park and the Meadows in the Sky area in Mount Revelstoke National Park. The four areas are distinguished by their unique heritage resources, settings and experiences. Other than the Meadows in the Sky Area, the boundaries are not discrete - Rogers Pass National Historic Site overlays both the Major Rogers’ Route and portions of the backcountry for example.

Before the coming of the trans-continental railway in 1885, the Selkirk and Purcell ranges of the Columbia Mountains were primordial wilderness – the original “backcountry.” Today’s park **backcountry** areas protect a portion of this ancient wilderness. They are of tremendous ecological importance to the parks. Remote, largely untouched areas of old-growth forest and the subalpine zone in the backcountry are important habitat for threatened mountain caribou and olive-sided flycatchers, as well as large carnivores like grizzly and black bears, cougars, wolves, coyotes and wolverines. Visitors to these places step back in time, into the boots of the early mountaineers, feeling the same sense of awe and accomplishment more than a century later.

Major A.B. Rogers and his survey party found a way through the mysterious wilderness barrier of the Selkirks in 1881. Glacier National Park was established near the railway line that followed **Major Rogers’ route** five years after his explorations. Seven decades passed before the Trans-Canada Highway was pushed through the pass, bringing the first automobiles to the wilderness, and a new type of explorer to the Columbia Mountains – the motorist. The Major’s original route offers passage through the “impenetrable mountains”, and an opportunity for visitors to experience the same timeless peaks, waterfalls, cliffs and valleys in all seasons. Major Rogers’ Route through Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site represents about one-third of the 300 km long *Three Passes* (Kicking Horse Pass to the Last Spike) cultural corridor.

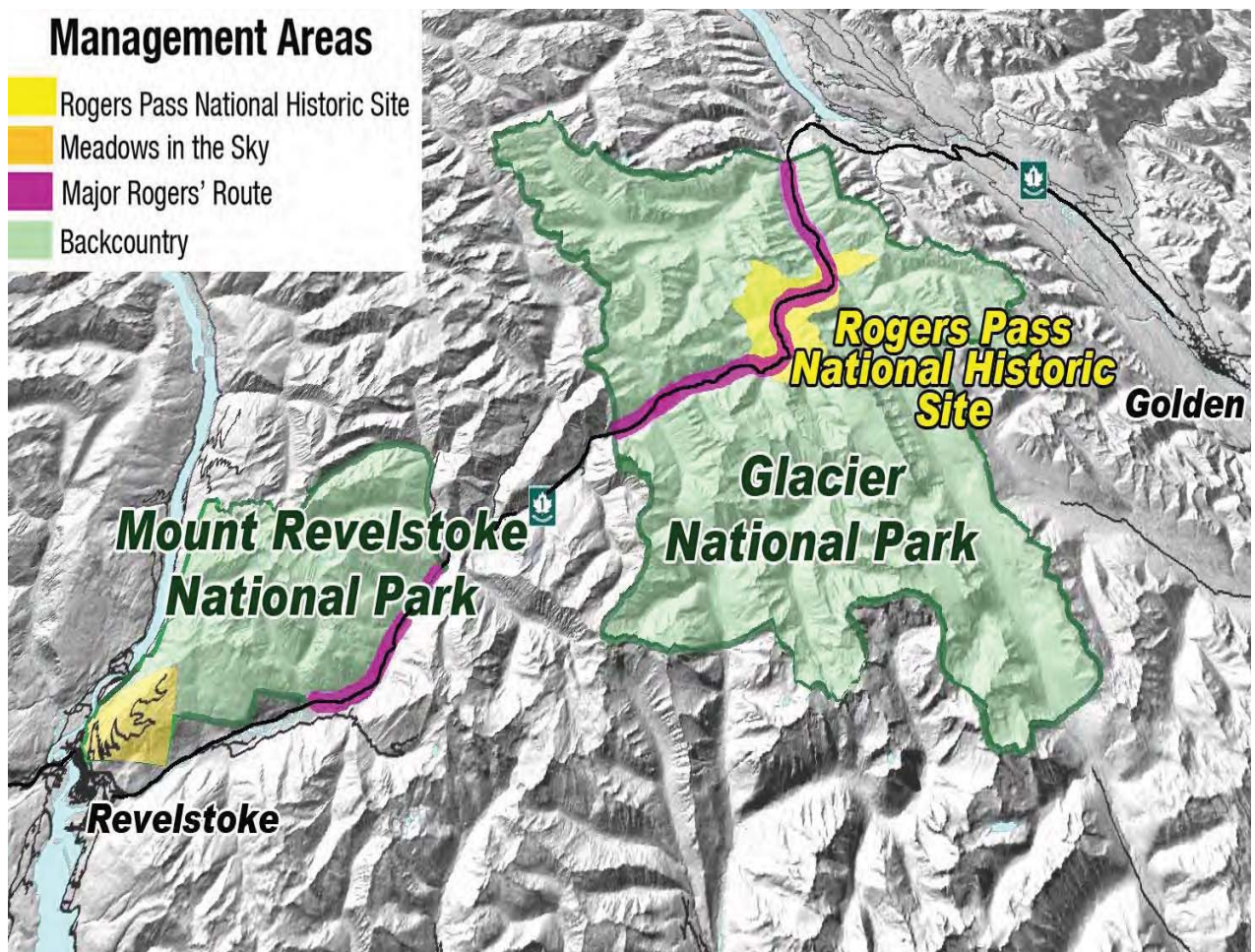
The opening of **Rogers Pass** was a turning point in Canadian history. With the completion of the Canadian Pacific Railway, the rest of Canada was now connected to British Columbia, fulfilling the promise made by Prime Minister John A. Macdonald when the province joined confederation. Although the original rail line over the pass is long abandoned, Rogers Pass National Historic Site today is a living, evolving cultural landscape. While the unforgiving environment and weather of the pass has taken a toll on the original railway structures, visitors can still experience the incredible challenges overcome by the railway engineers and the human drama of operating in Canada’s snowiest and most avalanche-prone place.

Almost 30 years after the establishment of Glacier National Park, the citizens of Revelstoke were successful in having the mountains in their backyard recognized by Parliament as a national park. Construction of the road to the summit of Mount Revelstoke had begun in 1911, to encourage provincial and federal government attention. Locally, the road was referred to as the *Royal Road* because of the many visits by



members of the British royal family. Today, that mountain road is known as the Meadows in the Sky Parkway. The parkway climbs 1600 metres up from the community, through rainforest and subalpine snowforest to the wildflower meadows at the top of the mountain – perhaps the easiest access to a mountain-top in the Canadian national park system. At the same time, the **Meadows in the Sky Area** also provides habitat to the mountain caribou, grizzly bear, Coeur d'Alene salamander, western toad and olive-sided flycatcher.

Map 2 Mount Revelstoke and Glacier National Parks – Management Areas



5.2 Mount Revelstoke and Glacier National Park Backcountry Areas

The backcountry areas of Mount Revelstoke and Glacier national parks can be characterized by the nature of the environment and the experience available there. There are places in the backcountry with trails and rustic huts and shelters that lie within the distance that most hikers would travel in one day. Most parts of the backcountry are very remote places with virtually no facilities for hikers, skiers or mountaineers, where the visitor experience is defined by self-reliance.

5.2.1 The Backcountry - At Its Future Best

Standing at the toe of the Illecillewaet Glacier, hiking to the Eva Lake Cabin or gazing at a vista of peaks from Glacier Circle, visitors can be humbled by the sheer scale and grandeur of the backcountry. Backcountry experiences here take place in many different settings, from relatively easy valley bottom trails to steep mountain-climbing routes, from complex icefield crossings to wild lands with no sign of human occupation.

Backcountry visitors on a day trip experience a sense of space and serenity, although they are likely to encounter others while hiking or skiing. Grizzly bears can be seen in the distance – trail routes lead hikers away from important habitat, protecting people and reducing stress on the bears.

In the tradition and spirit of mountaineering, Mount Revelstoke and Glacier offer opportunities for new hikers and backcountry visitors. The trail systems serve the day-hiker and provide access to the deeper backcountry. Mountain guides and a system of rustic alpine huts and backcountry cabins provide an extra margin of safety and offer a world class backcountry experience for new visitors.

Connect ...

with the century-old tradition of peak experiences in the Columbia Mountains wilderness.

Retrace the footsteps of explorers, scientists, engineers and mountaineers who have travelled through this rugged, often inhospitable area.

Classic climbing routes, looming mountains, immense glaciers, a sense of solitude and accomplishment allow you to become part of the legacy of mountain characters to visit the “*The Canadian Alps.*”

Most areas beyond a day’s travel from the trailhead are primeval wilderness, that draw more experienced backcountry visitors. Old-growth forests, rushing rivers, wetlands and fragile alpine meadows deep in the wilderness remain largely unchanged from the time before European people discovered these valleys. Natural processes such as predation, fire and forest insect disturbance occur unaltered. Experienced backcountry travellers challenge themselves in these wild places, where nature sets the rules.

Adventure tourism has a rich and enduring heritage in the Mount Revelstoke and Glacier backcountry. The first recreational climbing in western Canada occurred in the peaks above Rogers Pass in 1885, and local citizens were climbing to the top of Mount Revelstoke and beyond by the 1890s. Visitors today discover the sense of awe and anticipation that must have been felt by tourists disembarking at Glacier House or arriving at Jade Lakes.

Winter transforms the backcountry landscape. Skiers seeking deep powder experiences benefit from the avalanche science break-throughs that accompanied the development



of the transportation corridor. Daily avalanche bulletins and safety information provide winter visitors with the information they need to make safe choices.

Many backcountry visitors become part of a century of on-going volunteerism in mountain ecology, avalanche and glaciology science, as stewards of these places of extraordinary beauty and serenity. Visitors are mindful of their footprint and the need to leave these areas intact for future generations. They are well-prepared for their outing and understand their delicate yet powerful connection with the environment.

5.2.2 Current Situation

Strengths

Mount Revelstoke and Glacier national parks are largely defined by the backcountry – which encompasses most of the parks and contains all of the elements that characterize the Columbia Mountains.

Originating from the Trans-Canada Highway in Glacier National Park are the hiking and ski-touring routes of the Illecillewaet and Asulkan drainages, the Beaver-Copperstain-Bald Mountain areas, and the Hermit, Bostock and Balu Pass areas.

In Mount Revelstoke National Park, Eva, Miller and Jade lakes are accessible from a trailhead in the Meadows in the Sky summit area. Backcountry trails in both parks provide access to the climbing, mountaineering and wilderness expedition opportunities that lie beyond trail's end.

Backcountry trails are designed to support the type of experience visitors are seeking while minimizing the potential for conflict with wildlife. Most areas that provide a day-hiking experience during the summer offer more technically-challenging backcountry skiing opportunities during the rest of the year, requiring avalanche knowledge, route-finding skills and self-rescue capability.



In winter, the trails may get as much as 20 metres of snowfall annually, and skiing opportunities follow lines that often differ from the hiking trails

Summer and winter, the backcountry experience is supported by campsites at Eva and Jade lakes, the Beaver-Copperstain-Bald Mountain backpacking loop, Mount Sir Donald and Hermit Meadows. Random camping is allowed beyond five km from trailheads. Overnight accommodation is also available at the Sapphire Col Hut, historic Glacier Circle Cabin and the Asulkan Cabin in Glacier, all operated by the Alpine Club of Canada. Historic Caribou Cabin in Mount Revelstoke is open to overnight skiers and snowshoers in winter.



Day-hikers use Illecillewaet or Loop Brook campgrounds or the Alpine Club's Wheeler Hut as a base camp, while backcountry skiers stay at the Glacier Park Lodge at Rogers Pass, the Wheeler Hut or camp at the Asulkan winter trailhead.

Deeper into the wilderness of the parks, visitors must bring a higher skill level to the experience. The "trail-less" wilderness of the Mountain Creek, Incommapleux River, Flat Creek and Clachnacudainn Icefield watersheds lie beyond a day's hike or ski for the majority of visitors. Visitors challenge nature on its own terms, bushwhacking, bivouacking and breaking trail without the support of cabins, bridges or maintained hiking routes.

Visitation

About 60,000 people visit the backcountry annually with 2,000 staying overnight. The most rapidly increasing backcountry user group is the winter visitor, with about 15,000 people skiing or snowboarding every year.

The backcountry primarily attracts the *Authentic Experience* visitor segment. (See segmentation details in Appendix 2). Safety and self-reliance is a keystone of the backcountry experience.

Challenges to Address in This Plan

Natural disturbances such as fire, floods and avalanches are a natural part of the backcountry landscape in the parks. The suppression of fire in the Mount Revelstoke backcountry has interrupted the natural fire cycle, impacting the age and historical distribution of vegetation. Whitebark pine, an uncommon species, requires fire to regenerate.

Just beyond park boundaries, lodges and motorized recreational activities have changed the traditional backcountry experience dramatically. Backcountry lodges transport helicopter-supported hikers and skiers to boundary areas, making alpine and subalpine areas in the parks more easily accessible. Road access to the Quartz Creek area just outside Glacier and the Sale Mountain area near Mount Revelstoke allows snowmobilers and all-terrain vehicle users to reach and sometimes illegally enter park boundaries. In addition, mountain caribou may be impacted by the presence of people and the noise of snowmobiling in adjacent boundary areas that have been traditionally undisturbed wilderness.

The major ski resorts on both sides of the parks, Revelstoke Mountain Resort and Kicking Horse Mountain Resort, have drawn new skiers to the Columbia Mountains. Many new residents and visitors also pursue ski-touring opportunities in the parks, increasing the demand for access to pristine powder snow. It is critical that backcountry users understand the complexity of mountain terrain in the parks, and are properly equipped and prepared.

Parks Canada staff also access some backcountry areas via helicopter and snowmobile, for the purposes of visitor safety, monitoring, facility operations, fire management, law enforcement and avalanche control. Operational snowmobile use is very restricted to minimize disturbance to mountain caribou, but there is no system in place to track and monitor the impact of operational helicopter and airplane overflights.



Numerous sensitive areas and unique species in the backcountry require special protection, including:

- the wetlands and ancient forests of the Beaver Valley,
- prime grizzly bear habitat in the Cougar Valley,
- the old and ancient forests of the Incomappleux Valley,
- alpine tarns and subalpine lakes,
- the Nakimu Cave system and other caves,
- the old-growth forests and wetlands of the Woolsey Creek area,
- newly-discovered lichen species on the Bald Hills, and
- important mountain caribou, wolverine and olive-sided flycatcher habitat.

Visitors can experience many of these special areas, but there are some limitations on access. The Cougar Valley is a prohibited area for most of the year to protect both visitors and the grizzly bear population. Catch and release fishing is permitted in Eva, Miller and Jade lakes, which were stocked with non-native species in the 1930s. In order to protect the bull trout, fishing is not allowed on park rivers or streams.

Although large mammals such as grizzly bear, wolverine and mountain caribou exist relatively undisturbed within the backcountry, they require more space than the parks can provide. They depend on other areas within the parks and beyond, making collaboration with neighbouring land agencies and the backcountry recreation industry essential for their long-term survival. The challenge is to reduce impacts on the species and increase connectivity between habitats and populations, while facilitating opportunities to visit the park backcountry.

5.2.3 Objectives

To enhance ecological integrity and to protect the natural environment of the backcountry in ways which respect the past, present and future relationship between people and the land and the intrinsic value of the resources themselves.

To invite people to explore, learn about and connect with the wilderness environment and heritage buildings of the backcountry, by facilitating year-round *Beyond the Edge and Into the Wilderness* experiences.

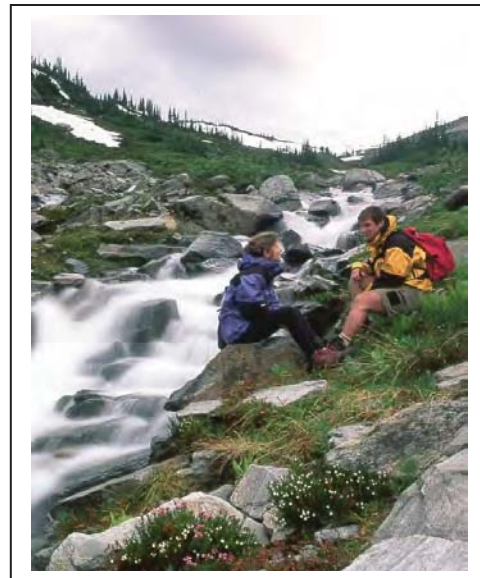
5.2.4 Actions

1. Engage the public in preparation of a *Backcountry Area Plan*, addressing issues related to both the winter and the snow-free season. Engage the public in the process to create *Declared Wilderness Areas*.
2. Offer opportunities to go *Beyond the Edge and Into the Wilderness* (into remote areas of the backcountry that lie beyond a day's travel for most visitors), targeting backpackers, mountaineers and ski-mountaineers who have a respect for the backcountry, are self-reliant and who understand their role in ensuring their own personal safety.
 - explore the potential for collaborative partnership opportunities to expand the system of rustic backcountry huts or shelters in ways that support the park's mountaineering heritage and protect the ecological values of the area.



3. Enhance day-use *Beyond the Edge and Into the Wilderness* opportunities, such as hiking, backpacking, climbing, caving, mountaineering, ski-touring, snowshoeing and ski-mountaineering, targeting visitors who place a high value on the outdoors, with an interest in learning and challenging themselves.

- provide minimal facilities such as trails, trail signs and rustic bridges in key areas (note that while the Illecillewaet, Asulkan and Hermit areas in Glacier are primarily day-use areas, they also include designated campgrounds and huts used by climbers and skiers)
- identify those areas of the backcountry that can offer new and “intermediate” hikers an introductory backcountry experience (recognizing that most of the backcountry in Mount Revelstoke and Glacier is very complex terrain)



- collaborate with backcountry lodge and helicopter-serviced recreation companies operating near park boundaries to ensure that the “park edge” product offer outside of the parks respects and protects the natural park environment

4. Design and locate backcountry facilities to optimize visitor opportunities in ways that support and secure wildlife habitat, and monitor the effectiveness of those designs.

- facilitate low-impact visitor experiences in the backcountry through trail re-alignments which avoid high quality habitat for grizzly bears, mountain caribou and olive-sided flycatchers, or damage to soil and vegetation

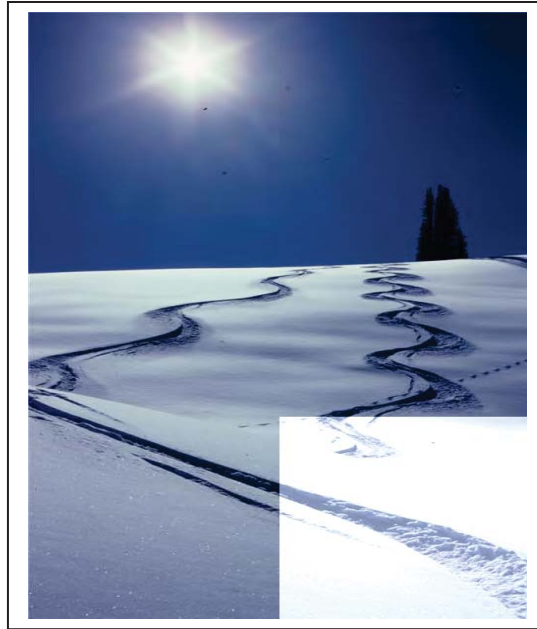


- create educational materials to promote visitor decisions that minimize the disturbance of wildlife, including mountain caribou and grizzly bears
- minimize the risk to female grizzlies and to visitors through seasonal closures (eg: lower Cougar Valley) or controlled use of important bear areas (eg: Balu Pass hiker group size) – permanent facility closures would be considered as a last resort



5. Collaborate on the development and implementation of a backcountry fire management program to maintain and restore ecological integrity, ensure visitor safety, protect adjacent lands and create learning opportunities.
6. Enhance “*Mountain Heritage Traditions*” learning opportunities through on-site exhibits in high use locations (eg: former Avalanche Crest Teahouse site, Vaux family glacier photo location) and through programs at lodges beyond park boundaries. (See details in Key Strategy 4.2 - *The Columbia Mountains - Up Close and Personal*, direction statement 4.)
7. Continue to review and improve the visitor safety and self-reliance program.

- focus on preparedness and the prevention of public safety incidents, reducing the need for reactive response
- advise visitors in pre-trip planning information about the mountain guide services available for complex backcountry travel situations
- work with partners to share information and develop new avalanche safety communication tools



8. Build and strengthen relationships with backcountry partners, stakeholders and neighbours.
 - work with neighbouring land managers and users on habitat protection, ecological monitoring, wildfire monitoring, and visitor experience and education
 - work with backcountry lodges, snowmobilers and all-terrain vehicle users to increase awareness of park boundaries, backcountry safety, park regulations and the impact of motorized recreation on the park backcountry experience
 - evaluate the impact of helicopter and fixed wing aircraft overflights of the backcountry (both for park operations and commercial backcountry recreation) on mountain caribou, and develop an approach to formalize and coordinate overflights



5.3 Major Rogers' Route - The Trans-Canada Highway Corridor

Major Rogers' Route crosses the southern edge of Mount Revelstoke National Park and slices through the middle of Glacier National Park. While Rogers Pass National Historic Site is located at the heart of the corridor, it is addressed as a separate area concept, in Section 5.4.

5.3.1 Major Rogers Route - At Its Future Best

Travellers on the Trans-Canada Highway corridor know that they are re-tracing Major A.B. Rogers' 1881/1882 route of exploration through the "impassable mountain barrier." They understand the Canadian significance of Rogers Pass and its importance in the completion of the country's first east-west railway link.

Mount Revelstoke National Park offers eastbound visitors a strong sense of arrival at a special place, welcoming them to the mountain national parks and setting the stage for the great experiences available in the Three Passes – the Kicking Horse Pass to the Last Spike tourism corridor.

New media reaches out to touch travellers in their vehicles and tell the spellbinding tales of the Columbia Mountains and the technological innovations that keep the corridor open and safe. The Trans-Canada Highway Corridor allows year-round passage through these mountains, protected by the world's largest mobile avalanche control program. Parks Canada and its partners collaborate on traveller information, highway maintenance, snow research and emergencies.

Connect ...

with Major Rogers' Route - the steep mountains, roaring rivers, ancient forests laced with spiky devil's club, swamps and wetlands, and the range of jagged peaks that he finally climbed to spot a passageway through the mountains.

Find yourself in unique places – picnicking in an avalanche path in summer, and standing where Prime Minister Diefenbaker tamped down the "last patch" of asphalt for the Trans-Canada Highway. Even visitors travelling through the parks without stopping recognize that these are special places, more than just another scenic view through the windshield.

Travellers connect on a personal level with the scenic vistas of glaciers and mountains, the sense of enclosure of the valleys and the lush greens of the cedar-hemlock rainforest and subalpine forest. The "View from the Edge" of the Major Rogers' Route provides opportunities for rest and relaxation, family time, spiritual growth, discovery, recreation and learning about the unique ecosystem and cultural landscape. Even travellers who were not originally planning to stop here are happy they decided to take a break from the drive.

Learning opportunities help visitors to understand and support efforts to improve the health of ecosystems, including improved connectivity for wildlife and aquatic ecosystems, reduced impacts of invasive species and improved forest health.



5.3.2 Current Situation

Strengths

With the exception of the rail tunnels beneath Rogers Pass and Kicking Horse Pass, the Trans-Canada Highway and Canadian Pacific line still follow the original 1880s railway route. It takes about an hour to drive the portion of Major Rogers' Route within Mount Revelstoke, Glacier and Rogers Pass.

Major Rogers' Route is a living and evolving transportation corridor at the centre of the *Three Passes* (Kicking Horse Pass to the Last Spike) cultural landscape. It has been a place of innovation and science for more than a century. Many of the pioneering engineering techniques used in construction and operation of the railway continue in use today, including some original snowshed locations and the 1916 Connaught Tunnel.



The 1988 Macdonald Tunnel is the longest rail tunnel in the western hemisphere. The avalanche control innovations put in place for the Trans-Canada Highway in the 1960s are still used today, including mobile artillery control and high elevation static defences.

The highway traverses old-growth forests which are important habitat for species such as mountain caribou, wolverine and grizzly and black bear; and passes historic landmarks like the railway trestle pillars at Loop Brook and the Cascade Creek stone bridge.

Major Rogers' Route offers many opportunities to experience the "*View from the Edge*" of the corridor. A series of seven major roadside day-use areas encourages travellers to stop and linger for a while during the drive. Day-use areas like Giant Cedars, Skunk Cabbage, Hemlock Grove, Beaver Valley and the Summit of Rogers Pass bring visitors *up close and personal* with the inland cedar-hemlock rainforest, skunk cabbage wetlands, glacial and avalanche landscape and riverside lands of the parks and the historic settings of Rogers Pass. Learning opportunities are combined with picnic areas and boardwalks and trails for strolling at all of these locations.

Three road-accessible campgrounds offer rustic camping experiences and direct connections to the trails and learning opportunities in the historic site during the summer. The trail system near Illecillewaet Campground and several other backcountry trailheads invites visitors to "*Step into the Wild.*"

The Major Rogers' Route experience changes dramatically with the seasons. During the winter months, day-use areas and campgrounds lie under three to five metres of snow. Roadside trailheads are staging areas for the challenge, adventure, thrill and solitude of deep snow ski-touring in the backcountry.

The Rogers Pass Discovery Centre is a year-round education centre and the springboard for exploration of the parks and national historic site. The centre switches gears in the winter and becomes a gathering place for skiers seeking information in the morning and sharing stories at the end of the day.

Substantial stewardship gains have been made in ecosystem health along the highway and railway corridor over the years. Several contaminated sites have been remediated, and a toxic spill response protocol is in place. Major projects to mitigate the impacts of highway operations have included drainage improvements at the Rogers Pass Operations Compound, and fish habitat protection at the Beaver River highway bridge.

Visitation

More than 4,000,000 travellers drive Major Rogers' Route every year. On average, more than half a million travellers stop to experience Mount Revelstoke and Glacier during the snow-free months, with a smaller number visiting during winter. The number of through-travellers stopping to visit areas along the corridor has increased steadily over the past 15 years with the addition of new welcome stations at park boundaries, new orientation media and entrance exhibits at all major roadside facilities.

The Major Rogers' Route experience appeals to several visitor segments, including Authentic Experiencers, Cultural History Buffs, Rejuvenators, Gentle Explorers and No-Hassle Travellers (see details in Appendix 2).

Challenges to Address in This Plan

Snow is a dominant feature of Major Rogers' Route, from late October until early June. The Trans-Canada Highway runs a gauntlet of 134 avalanche paths through the park. The corridor is kept open through the efforts of Parks Canada avalanche control and highway maintenance crews, Canadian Pacific crews and Department of National Defence artillery and personnel.

Both the railway and highway cut through prime valley bottom habitat, fragmenting the landscape and affecting the movement of wildlife, fish and amphibians. The sheer volume of rail and highway traffic produces a range of impacts – from collisions with wildlife and spills of contaminants to the spread of noxious weeds.



Grain spills on the rail line attract wildlife and are a cause of wildlife mortality. Natural disturbances like forest fire have been altered along the corridor, affecting the health of forests and vegetation. There is currently little data on the impacts of the avalanche control program on wildlife.

Abrasives and salt used in winter highway operations can affect the health of riparian areas, ponds and streams. This is of particular concern in the unique Beaver Valley fen, an environmentally-sensitive site located between the highway and rail line. Future highway expansion, including additional passing lanes or lane twinning would require a large amount of aggregate material. Currently, there are no active gravel sources in



Mount Revelstoke or Glacier national parks.

There are a number of contaminated sites in the Rogers Pass area and several other locations along the corridor, reflecting the evolving use of these areas over the past century.

Visitation continues to grow, particularly during the summer and autumn. Day-use areas such as Giant Cedars and the Summit of Rogers Pass are very busy during the peak summer season. Other facilities are less crowded, but the global reputation of places like Giant Cedars and Rogers Pass puts them on the “must see” list for many visitors. Significant highway and railway noise is an issue at many facilities along Major Rogers’ Route, as many visitors indicate that they are looking for peace and quiet during a park visit. Parks Canada will need to continue to find innovative ways to maintain the benefits sought by current visitors, while accommodating new visitors and protecting natural and cultural resources.



5.3.3 Objectives

To manage the transportation corridor in a manner that facilitates safe year-round travel and driving with care, embraces environmentally sensitive operations, provides meaningful visitor experiences and allows for the reconnection of fragmented habitats.

To enhance ecological integrity and to protect the natural environment and cultural resources in ways which respect the past, present and future relationship between people and the land and the intrinsic value of the resources themselves.

To invite people to stop, explore, learn about and connect with the valley bottom and lower subalpine environments and historic setting of the Major Rogers’ Route Area, by facilitating year-round *Virtual, Pass Through, View From the Edge* and *Step Into the Wild* experiences.

5.3.4 Actions

1. Enhance opportunities for *Pass Through* travellers to connect with the parks and historic site.
 - work with partners along the *Three Passes* route (Kicking Horse Pass to the Last Spike) to increase awareness of the opportunities to stop and experience



these special places

- employ technological innovations such as on-demand information services and audio story-telling to augment the national park driving experience for those who choose not to stop, or for travellers stopped for avalanche control
2. Enhance opportunities for *View from the Edge* experiences, by supporting visitor activities such as camping, walking, photography, scenic driving, road cycling and picnicking, respecting the key values that visitors have identified (such as peace and quiet, uncrowded places, scenic vistas) in any facility design or re-design.
- provide opportunities for individuals and groups to explore Major Rogers' Route and learn about its unique landscape and history in all seasons, while seeking ways to improve space and security for wildlife
 - promote the Rogers Pass Discovery Centre as an essential stop on the Major Rogers' Route, for safety information, park and historic site orientation and learning opportunities
 - renew personal and non-personal interpretive services along the corridor to create new learning opportunities for visitors
 - renew the network of easily-accessible trails that allow visitors to get *up close and personal* with Major Rogers' Route



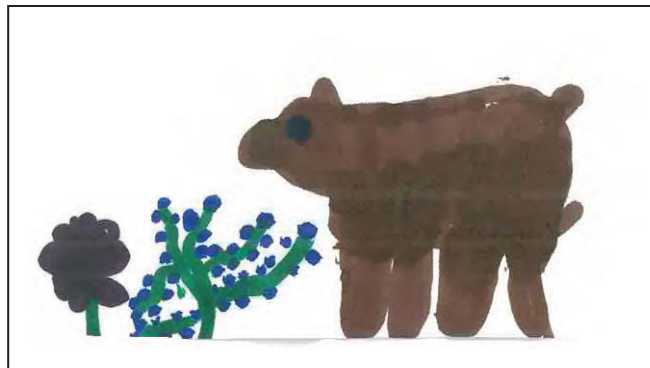
3. Enhance opportunities for *Step into the Wild* experiences by providing improved staging areas for hiking and ski-touring, including integrating the *Mountain Heritage Traditions* theme into backcountry trailheads and the Rogers Pass Discovery Centre.
4. Support the upgrading of commercial facilities at Rogers Pass to advance Parks Canada's protection, visitor experience and learning goals, in a manner that is consistent with the rustic character and "*Mountain Heritage Traditions*" context of Glacier National Park. Use the development review process to examine key aspects of any redevelopment proposals for the commercial facilities at Rogers Pass, such as design character, footprint, density and structure size.
5. Tell the story of Major Rogers' Route and the *Three Passes* heritage corridor, in collaboration with Yoho National Park, the communities of Revelstoke, Golden, Field, Craigellachie and Sicamous and partners such as the Revelstoke Museum and Archives, Revelstoke Railway Museum, Friends of Mount Revelstoke and Glacier, Canadian Pacific, the Province of British Columbia, park businesses, the Department of National Defence and organizations representing Japanese Canadians and other cultures. Special events and celebrations include:
- o the 100th anniversary of Canada's worst avalanche disaster in 2010,



- the 125th anniversary of the Last Spike in 2010,
 - the 125th anniversary of the establishment of Glacier and Yoho national parks in 2011,
 - the 50th anniversary of the opening of the Trans-Canada Highway in 2012,
 - the 100th anniversary of Mount Revelstoke National Park in 2014
6. Continue to fill gaps in information about the aspects of history and culture on Major Rogers' Route that are not directly related to the national historic site, such as traditional use of the area by Aboriginal people, mining, highway development and avalanche control.
 7. Collaborate with the motorcoach tour industry and other interested parties to explore the potential for new learning opportunities and gathering places for tour groups and families at day-use areas, based on the Giant Cedars concept of a picnic area, short stroll and interpretation package.
 8. Continue to manage the highway in a safe, reliable manner that minimizes both closures and the impacts of operations and construction. Support Canadian Pacific in their operations in Glacier National Park.
 - consider designs during long-term planning for the highway that would strengthen wildlife connections and minimize environmental impacts
 - continue collaborations with others (such as traffic management during closures, highway condition reports, snow research, etc.)
 - develop *Drive with Care* messages and media to promote stewardship of the parks and historic site, minimize wildlife mortality and increase the safety of motorists
 - monitor the effectiveness of mitigations to the Beaver Valley mudflow, and make adjustments as required
 - remediate contaminated sites within the corridor
 - continue ongoing work with Canadian Pacific on changes to operational practices that would improve ecological integrity in Glacier National Park
 9. Allow changes to the existing system of telecommunications services in the corridor, when those changes will benefit Parks Canada, improve communications efficiency, yield environmental benefits, increase public safety and benefit the visitor experience while avoiding negative impacts on ecological integrity, aesthetics or the visitor experience.



10. Review long-term plans for obtaining aggregate material required for highway construction and maintenance purposes to ensure compliance with the Parks Canada Management Directive 2.4.7 *Sand, Gravel and Other Materials, Excavation and Site Rehabilitation*. The preference will be to obtain materials from outside the parks. Options will be explored and public input will be sought as part of an environmental assessment including addressing rare plant communities and habitat and archaeological resources of importance. Full pit rehabilitation and related costs will be a component of highway construction and recapitalization budgets. Consideration will also be given to restoration of other damaged areas in the park to offset the direct impact of aggregate extraction in the short term.
11. Continue to improve ecosystem health by restoring ecological connectivity.
 - improve aquatic connectivity by retrofitting culverts to permit passage of stream dwelling species, such as fish and amphibians
 - protect rare wetlands and old-growth forests along the corridor
 - restore wildlife movement corridors under or across the highway and railway as opportunities arise during expansion or reconstruction
 - protect grizzly bears and reduce the potential for conflict between bears and people by implementing temporary closures and enhanced communications programming when grizzly bears are present at visitor facilities, by supporting Canadian Pacific in eliminating food attractants such as grain spills and by redesigning trails that have the potential to create wildlife conflict



- develop and implement a fire management program for the corridor, to maintain and restore ecological integrity, ensure the safety of visitors and protect park facilities and adjacent lands
 - restore and reclaim areas disturbed by past development, including the former Mountain Creek Campground and Beaver Pit aggregate quarry
 - minimize adverse effects of invasive plants on ecosystems and the visitor experience, and minimize the spread of invasive plants into park ecosystems or beyond the parks to neighbouring lands
12. Continue to monitor and manage natural processes (avalanches, mudslides, fire) to ensure the safety of the public and park infrastructure.



5.4 Rogers Pass National Historic Site

At the heart of Glacier National Park and Major Roger's Route, Rogers Pass National Historic Site tells the extraordinary story of the opening of the Columbia Mountains frontier and completion of Canada's first national railway line in 1885 - one of the key nation-building events in Canadian history.

5.4.1 Rogers Pass National Historic Site - At Its Future Best

Passing through avalanche paths on the steep ascent to Rogers Pass, visitors gain a new appreciation for the obstacles that railway builders overcame and the science and engineering feats that have allowed transportation to continue through the pass for well over a century. Upon arrival at the pass, visitors are struck by the peaks towering directly above. The encircling wall of mountains is a testament to Major Rogers' tenacity – at first, there does not appear to be a pass here at all.

Staff at the Rogers Pass Discovery Centre spark visitors' curiosity by sharing the legends of the pass. The protected landscape of Rogers Pass National Historic Site creates very diverse experiences. Visitors find themselves stepping over old railway ties and crossing stone arch bridges on the abandoned railway line. Only a short stroll from Illecillewaet

Campground, hikers explore the ruins of Glacier House Hotel, imagining Victorian era adventurers sipping beverages and watching climbers on Mount Sir Donald. The railway line and snowshed ruins are clearly visible, and the stone arch bridges and the trestle pillars at Loop Brook are in remarkably good shape for features that were last operational in 1916.

In winter, skiers glide through waist deep snow - an unusual activity in a national historic site. In a unique twist, the discovery centre functions as something of a ski lodge during the long winter months, serving skiers and boarders seeking a deep powder experience.

Rustic camping facilities celebrate the century-old railway and mountain hospitality heritage. Picnic areas and scenic viewpoints provide a respite from highway travel and tell tales of the historic site. Learning about Canadian history, watching the trains, taking a break from driving, or resting and relaxing with family are more satisfying and rewarding amid the stunning landscape of Rogers Pass.

Connect ...

with passionate staff and volunteers to learn about Rogers Pass National Historic Site. Canadians and international visitors retrace their cultural roots to a human story of achievement that spans a century.

Vestiges of the original Canadian Pacific Railway line lie within panoramic views of snow-covered mountains, glaciers and waterfalls.

Unique interpretive and educational experiences bring the hardships of railway pathfinders, builders and engineers to life. The stories leave you with a strong sense of connection and an understanding of the role of the pass in confirming British Columbia's place in the Canadian confederation.



5.4.2 Current Situation

Strengths

Situated in Glacier National Park, Rogers Pass has a long and storied past. Established as Canada's second national park in 1886, one year after the completion of the railway through the pass, Glacier was also the home of one of the earliest mountain resorts in western Canada - Glacier House. The first two tourists reached the Rogers Pass area in 1884, as the railway was still under construction, and almost two years before the completion of Glacier House. Skilled mountaineers and sightseers from around the globe were quickly attracted to the trails and climbing routes established at Glacier House and Rogers Pass by the CPR and the legendary Swiss guides.

Rogers Pass was a place of "firsts" and superlatives. For forty years at the turn of the last century, it was the most renowned mountain climbing region in North America. Rogers Pass hosted the first mountain guiding operation in Canada, the first North American glacier studies and the first botanical studies conducted in the Columbia Mountains. Canadian Pacific's operation included the first avalanche studies and the first snowsheds in Canada, and the tallest bridge structure in the world at that time. But the railway's presence in Rogers Pass came at a great cost in lives, and by 1916 the railway had retreated underground to the Connaught Tunnel. Within ten years, Glacier House was also gone.

The legend of Rogers Pass lived on and the original route over the pass was declared a national historic site in 1971. The Rogers Pass Discovery Centre was built in 1982 as a result of an Historic Sites and Monuments Board of Canada decision to commemorate the major mountain passes of western Canada. Interpretive media at the Discovery Centre, four self-guiding trails and on-site exhibits at five day-use areas present a comprehensive account of Rogers Pass. These facilities offer visitors a *View from the Edge*, and in some cases, encourage visitors to *Step into the Wild* on backcountry trails. The story continues outside the historic site, at the Revelstoke Railway Museum, the Revelstoke Museum and Archives, the Golden Museum, Kicking Horse Pass National Historic Site and Eagle Pass National Historic Site (the Last Spike) at Craigellachie. Rogers Pass is one of the centrepieces of the Three Passes (Kicking Horse Pass to the Last Spike) cultural landscape.

Winter snow accumulations averaging more than nine metres change the Rogers Pass experience considerably. Rogers Pass offers perhaps the best deep powder ski touring of any Canadian national historic site. The Discovery Centre provides information for backcountry users and serves as a gathering place for winter recreationists at the beginning and end of a deep powder day.



Visitation

More than 420,000 visitors stop to enjoy Rogers Pass National Historic Site. The historic site appeals to several visitor segments, including Authentic Experiencers, Cultural History Buffs, Rejuvenators, Gentle Explorers and No-Hassle Travellers (see segmentation details in Appendix 2).

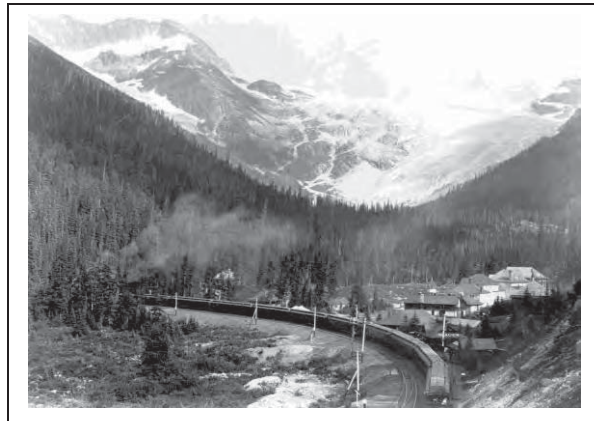
The majority of visitors (approx 75%) to Glacier National Park also visit the national historic site's two main attractions – the discovery centre and the Trans-Canada Highway monument at the summit of the pass. Ninety-three percent of visitors from outside BC and Alberta stop to experience the national historic site. The historic site is also very popular in summer and autumn with European visitors. Knowledge of Rogers Pass and the historic railway story is growing among new Canadians and visitors from Asia, many of whom had family members involved in the early railway operation.

Escorted rail tours travel through Glacier National Park on the Canadian Pacific main line. While the trains do not stop in the park or historic site, on-board tour guides do present the story of the pass.

Challenges to Address in This Plan

Rogers Pass is a dynamic natural environment of tremendous snowfall and avalanches, heavy rainfall, floods and landslides and rapid vegetation growth. These factors were major obstacles during construction and operation of the original rail line and eventually caused the railway company to abandon the route and build the Connaught Tunnel. These same conditions remain the greatest challenge in protecting the cultural resources of the national historic site.

Vegetation removal programs are regularly conducted on the original railbed and the ruins of Glacier House and other stone features. Water erosion problems are addressed through culvert installation and maintenance. Major stone masonry resources such as Cascade Creek bridge, the Loop Brook pillars and the Illecillewaet stone arch culvert have undergone extensive stabilization.



From 1885 to 1916, the Canadian Pacific Railway had a townsite, roundhouse and railyard in Rogers Pass. Parks Canada's operations compound at the pass has been in use since the construction of the Trans-Canada Highway in the early 1960s. Hydrocarbon contamination at the pass has largely resulted from leaks, spills and historic storage and disposal practices.

5.4.3 Objectives

To enhance commemorative integrity and to protect the natural environment in ways which respect the past, present and future relationship between people and the land and the intrinsic value of the resources themselves.

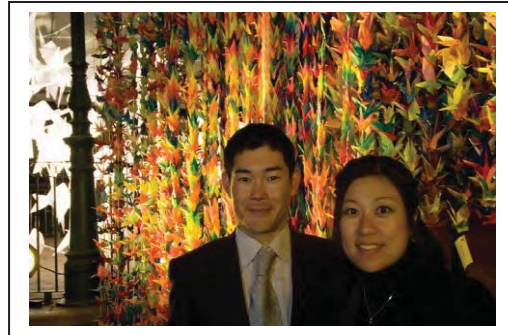


To reduce the degree of impairment of cultural resources caused by natural processes.

To invite people to explore, learn about, connect with and celebrate the rich cultural heritage of Rogers Pass, by facilitating year-round *Virtual, Pass Through, View From the Edge* and *Step into the Wild* experiences.

5.4.4 Actions

1. Enhance opportunities for *View from the Edge* and *Pass Through* experiences, by supporting visitor activities such as walking, camping, photography, scenic driving, picnicking, geocaching and learning, respecting the key values that visitors have identified (such as peace and quiet and uncrowded places) in any facility design or re-design.
 - continue to renew interpretive services throughout the historic site; and continue to renew the network of easily-accessible trails that allow visitors to *get up close and personal* with the historic site
 - facilitate opportunities for new Canadians to make meaningful personal and virtual connections with the stories of Rogers Pass and the *Three Passes* cultural landscape – a place where Canadian, Japanese, European, Chinese and American people all contributed to the national dream
 - renew camping opportunities, celebrating the historic site story, the *Mountain Heritage Traditions* themes and connections to the historic trail network
 - explore opportunities for collaboration with partners to enhance camping opportunities in a manner that facilitates personal connections with the historic site and national park
2. Support opportunities for *Step into the Wild* experiences, by providing staging grounds within the national historic site for activities such as hiking and skiing, making the historic site real and meaningful for backcountry hikers and skiers and connecting them with the *Mountain Traditions*.
3. Continue to stabilize nationally-significant Level 1 and Level 2 cultural resources, including removal of encroaching vegetation and non-native plants from significant resources (such as the foundation walls of Glacier House), prevention of erosion, repair of stone masonry works and control of waterflow around important historic railway structures
4. Work with partners and stakeholders to position Rogers Pass National Historic Site within the *Three Passes* cultural landscape.
5. Complete the description of *Designated Place* for Rogers Pass National Historic Site to confirm the boundaries of the site (see *Designated Place* definition in Section 6.2).



5.5 Meadows in the Sky Area

Located in the south-west corner of Mount Revelstoke National Park, the Meadows in the Sky Area is a premier day-use area anchored by the Meadows in the Sky Parkway. This 26 km scenic drive leads visitors to the subalpine wildflower meadows at the summit of Mount Revelstoke - the main staging area for the park backcountry.

5.5.1 The Meadows in the Sky Area - At Its Future Best

The Meadows in the Sky Area is known world-wide for its easily-accessible subalpine wildflower meadows and broad views of snow-capped mountains on every horizon. In this area, visitors have an opportunity to get up close and personal with places that most people never experience – the actual summit of a mountain or the top of a world championship ski jump.

Viewpoints along the parkway offer a view from the edge - unparalleled panoramas of the Columbia River, the Selkirk and Monashee Mountains and the city below.

The Meadows in the Sky Parkway and the Summit and Lindmark trails symbolize the early connections with the community. Local residents are proud ambassadors, sharing the national park in their backyard with visiting friends and family, and serving as stewards of the resources. They tell the tales of a bygone era, when world records were set at the historic Nels Nelsen ski jump. Young and old alike relive the thrill experienced by those pioneering ski-jumpers.

Many visitors return through the seasons, by car, bike, ski, snowshoe or on foot, following the changing snowline as it moves up and down the mountain. Mountain caribou and grizzly bears also move up and down the slopes of Mount Revelstoke with the seasons, unconstrained by the nearby activities of visitors. Varied birdsong can be heard at different elevations. Visitors understand their special relationship with nature and connections to history here.

Visitors achieve the benefits they sought from this protected landscape. Many are moved by the peace and quiet and lack of crowds. Others feel wonder and amazement at the top of the mountain and along the way up. Some come to learn more, and others come to have fun outdoors.

Connect ...

with nature on a personal level. Experience the drive upward through three distinct ecological zones. Take shelter under the canopy of the cedar-hemlock rainforest, stroll through the spires of the subalpine spruce and fir snowforest, and surround yourself in mountain-top wildflower meadows. From the parkway, you will be captivated by views of vast mountain vistas and lush valleys. This unforgettable place includes important habitat for the mountain caribou, olive-sided flycatcher, wolverine, Coeur d'Alene salamander and grizzly bear.

5.5.2 Current Situation

Strengths

The Meadows in the Sky Area has offered grand mountain experiences to visitors since the early 1900s. The parkway follows the original 1911-1927 road for the most part, and is



still the only place in a Canadian national park where visitors can reach a mountain summit by vehicle. The Summit and Lindmark trails are also almost a century old. Visionary Revelstoke citizens initiated these projects in an active effort to promote the establishment of a national park here. The Nels Nelsen ski jump dates to 1916, and is the only place in Canada where world records in ski-jumping have been set. Historic buildings like the picnic shelters at Monashee and Balsam Lake, the summit fire tower and Caribou Cabin, and the site of a World War I internment camp help tell the story of the Meadows in the Sky area.

The Meadows in the Sky experience changes dramatically with the seasons. The place is a busy visitor destination during the short subalpine summer. It is popular with visitors looking for a day of easy strolling and picnicking in a mountain-top environment, a longer uphill hike from town, or a day of hiking in the subalpine backcountry. The area offers a frontcountry experience complete with picnic areas and viewpoints and a shuttle bus service. Visitors experience the three major life zones of the Columbia Mountains – “rainforest – snowforest – no forest” – as they drive or hike up the mountain.

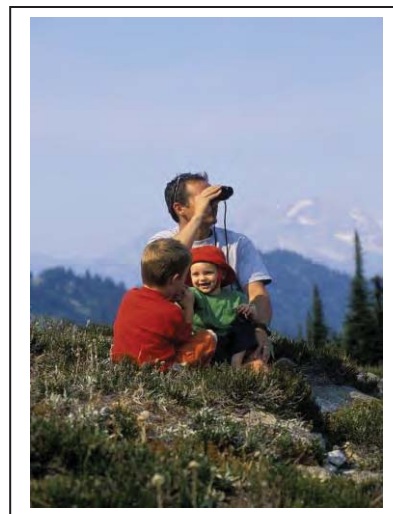
During the winter months, the area offers tobogganing and snowshoeing at the base of the mountain and nordic skiing opportunities on the unploughed parkway. Beyond the first eight km of trackset trail, the parkway offers a backcountry skiing type of experience. During the spring and autumn, the parkway opens and closes with the snow level on the mountain, with lower elevations open from mid-May to the end of October.

The Meadows in the Sky environment is more than a setting for visitor experiences. The area is home to mountain caribou, black and grizzly bears, wolverines, deer, migratory and resident birds, and several species of amphibians and reptiles including the Coeur d’Alene salamander and northern alligator lizard.

Significant achievements have been made in stewardship in the Meadows in the Sky Area. Ecological remediation projects have improved the visitor experience while restoring native soils and vegetation to disturbed sites. Beginning in 1996, important gains were made in grizzly bear conservation when the *Revelstoke Bear Aware* program was initiated to promote bear stewardship in the city. Parks Canada worked with the Province of British Columbia to study mountain caribou in and around Mount Revelstoke National Park. This research has been used to inform management decision-making on snowmobile use, cross-country track-setting and overnight winter use of the Meadows in the Sky Area.

Visitation

About 100,000 people visit one or more locations in the Meadows in the Sky Area annually, with about 35,000 visitors making their way to the top of the mountain during the snow-free season. Local residents are often repeat visitors to the Meadows in the Sky Area. The Meadows in the Sky Area draws several visitor segments, including Personal History Explorers, Authentic Experiencers, Rejuvenators and No-Hassle Travellers.



Research indicates that the international reputation of both Mount Revelstoke National Park and the community of Revelstoke draws many European visitors to the Meadows in the Sky Area. The areas is seen by many visitors as a model of sustainable tourism.

Parks Canada conducted a pilot study in 2009 to gather information about the ways that visitors make personal connections with protected landscapes in a national park. Virtually every one of the 3500 respondents indicated that they had made some form of personal connection with the Meadows in the Sky Area during their visit. Further research will investigate how an initial sense of connection can turn into a longer-term attachment to this special place and feelings of ownership and stewardship.

Challenges to Address in This Plan

Management of increasing visitation will continue to be a challenge. While the day-use areas and trails along the Meadows in the Sky Parkway are uncrowded, most visitors at the height of summer want to make it to the top of the mountain. The summit area is located in a fragile subalpine environment and parking is limited. While most visitors stay on the marked trails, some trampling of the wildflower meadows continues to occur. Chronic vandalism problems have led to the need for gated-entry on the parkway.



Parks Canada must continue to explore innovative ways of maintaining the benefits sought by current visitors while increasing access to new visitors, particularly those leaving the highway corridor or parkway to *step into the wild*. Creative access and design solutions are needed to address crowding, parking, trampling and other localized environmental impacts.

Ecological connectivity is a challenge in the Meadows in the Sky Area. Evening traffic on the parkway can cause toad, salamander and chorus frog mortality. Above Monashee Viewpoint, continued vigilance is needed in the winter to ensure that mountain caribou continue to exist on the landscape. Invasive plants have, for the most part been removed from the summit area, but continued efforts are needed to control further invasions by new species.

Studies have shown that there is a substantial risk of wildfire at upper elevations in the Meadows in the Sky Area, with only a single roadway providing access to the summit area. Wildfire could also threaten park facilities on the mountain and in the nearby City of Revelstoke.

5.5.3 Objectives

To protect and celebrate the natural and cultural heritage of the Meadows in the Sky Area as an international model of stewardship.



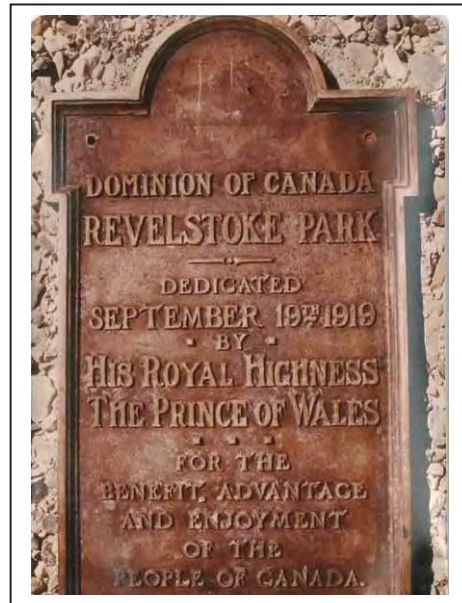
To inspire personal connection with the rainforest, snowforest and subalpine environments and cultural heritage of the Meadows in the Sky Area, by facilitating year-round *Virtual*, *View From the Edge* and *Step Into the Wild* experiences.

5.5.4 Actions

1. Engage the public in the preparation of the *Meadows in the Sky Area Plan* which will reach new markets and increase visitation to the area in ways that protect the resources and respect the values that visitors have identified as integral to personally connecting with this place.
2. Enhance opportunities for *View from the Edge* experiences by supporting visitor activities such as walking, photography, scenic driving, stargazing, picnicking, trail running, geocaching, road cycling, mountain biking, skiing, snowshoeing and tobogganing, respecting the key values that visitors have identified (such as peace and quiet, uncrowded places, scenic vistas) in any facility design or re-design.
 - provide opportunities for individuals and small groups to explore the Meadows in the Sky Area and learn about its unique landscape and history in all seasons, while improving space and security for wildlife
 - encourage year-round use, emphasizing the entire Meadows in the Sky Area during the snow-free months and promoting the opportunities on the lower mountain during the winter and shoulder seasons
 - augment and enhance the Nels Nelsen historic area as a gathering place for families and groups through additional hiking and learning opportunities
 - explore with the Royal Astronomical Society of Canada, the potential of designating Mount Revelstoke National Park as a Dark Sky Preserve
3. Enhance opportunities for *Step into the Wild* experiences, by supporting visitor activities such as walking, hiking, trail running, skiing and snowshoeing.
 - enhance the trailheads at Balsam and Heather lakes as staging areas for *Step into the Wild* opportunities in the backcountry
 - promote the hiking opportunities available on the Summit and Lindmark trails as an alternative to driving the parkway



4. Continue to integrate Mount Revelstoke National Park into the fabric of the community of Revelstoke by strengthening the ties with local stakeholders, partners and residents.
 - engage and collaborate with the community in fostering support for mountain caribou recovery and grizzly bear protection in the Meadows in the Sky Area
 - enhance fire management preparedness in collaboration with the community, to ensure the safety of visitors and reduce risk to property and adjacent lands
 - collaborate with the City of Revelstoke on implementation of the direction in the Official Community Plan that relate to the shared national park/city boundary (eg: trail connections, protection of wildlife corridors, viewscapes and natural areas, fire management)
 - engage the community in telling the story of Mount Revelstoke National Park such as the city's visionary role in the park's establishment, the royal visits, and the skiing and ski-jumping history of the park
 - use special events to strengthen ties with Revelstoke and to invite new visitation during the shoulder seasons (eg: the 100th anniversary of Mount Revelstoke National Park and its shared history with the community)
 - work with the neighbouring mountain resort to develop complementary visitor experiences within the park, and to support safe winter travel



5. Protect cultural resources that connect visitors to the Meadows in the Sky story and the people who came before.

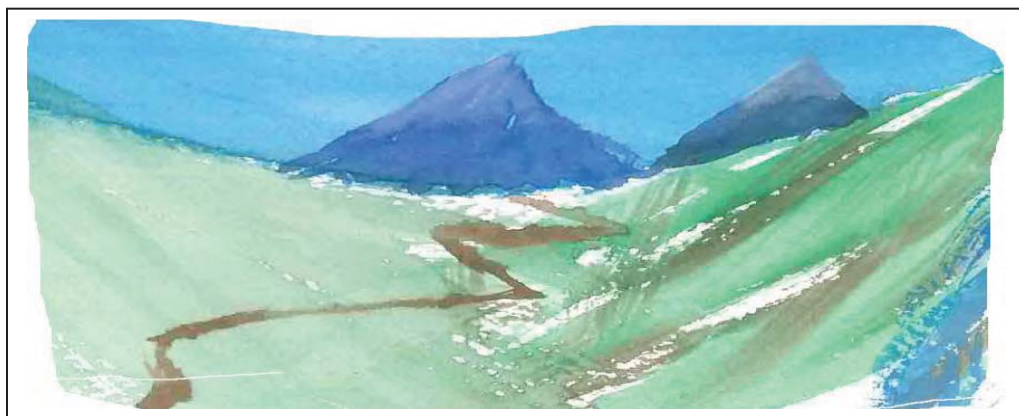
- stabilize cultural resources at the Nels Nelsen historic ski jump
- explore opportunities for non-profit organizations to enhance the visitor experience at historic buildings such as the Nels Nelsen historic ski- jump and chalet, the Mount Revelstoke firetower and the Balsam Lake washroom building



- continue to fill gaps in information about cultural heritage (such as the World War I era internment camp site)



- 6.
 - work with Aboriginal people in sharing stories of traditional use of the area
 - Continue to model good stewardship practices.
 - explore green public transportation methods (such as additional shuttle service offered through third parties)
 - engender additional personal care and stewardship of the Meadows in the Sky Area among residents and visitors alike
 - close operational support infrastructure that is no longer required and rehabilitate the area
- 7. Continue to maintain and increase ecological connectivity while improving visitor experience opportunities.
 - maintain western toad and Coeur d'Alene salamander and other amphibian populations, through innovative approaches to mortality reduction on roads and re-establishment of connectivity; and create opportunities to engage the public in learning and stewardship experiences
 - limit the establishment and spread of invasive non-native plants into undisturbed sites, and restore areas that have been invaded where possible
 - expand opportunities for increased conservation awareness and education, through a volunteer or citizen science program and through additional interpretive media
 - maintain caribou by allowing them undisturbed overnight use of their winter habitats at elevations above Caribou Cabin



6. NATIONAL PARK ZONING, NATIONAL HISTORIC SITE DESIGNATED PLACE AND NATIONAL PARK DECLARED WILDERNESS

6.1 National Park Zoning

Parks Canada's zoning system classifies areas in national parks according to their need for protection. The suitability of these areas for visitor activities is a consideration in zoning decisions. The zoning system has five categories: special preservation, wilderness, natural environment, outdoor recreation and park services. In addition, certain areas that require special attention can be designated as *Environmentally Sensitive Sites*. Their identification complements the zoning system and is important to the protection of a full range of valued resources.

Map 3 outlines the zones and *Environmentally Sensitive Sites* for Mount Revelstoke and Glacier national parks.

6.2 Designated Place

The Designated Place exercise is completed through the Historic Sites and Monuments Board, Status of Designation Committee, to confirm the limits of the historic place. Parks Canada will initiate this exercise for Rogers Pass National Historic Site on approval of the management plan.

6.3 Declared Wilderness

The *Canada National Parks Act* provides for areas of a national park to be declared, by regulation, as wilderness areas. The intent of this legislation is to enhance protection and maintain a high level of ecological integrity. In these declared wilderness areas, the legislation only permits development and activities required for essential services and resource protection. Wilderness designation is one of a range of tools to ensure the preservation of wilderness values and will not change current visitor use of the area. Zoning and landscape management unit objectives will determine levels of use in declared wilderness areas.

Declared wilderness areas will generally be consistent with land now classified as Zone II. Exceptions will include utility and service corridors that cut through Zone II areas, and small Zone II areas between transportation corridors. On approval of the park management plan, Parks Canada will initiate work on wilderness declaration. Public involvement will be encouraged in the development of the wilderness areas map.

6.4 Mount Revelstoke and Glacier National Park Zoning

Zone I - Special Preservation

Zone I lands deserve special preservation because they contain or support unique, threatened or endangered natural or cultural features, or are among the best examples of the features that represent a natural region. Preservation is the key consideration. Motorized access and circulation are not permitted. In Glacier National Park the Nakimu Caves and the lower Cougar Valley are Zone I due to their significant karst features and important grizzly bear habitat. The caves include over five kilometres of passages and are one of the most extensive cave systems known in British Columbia. The cave system



consists of three small upstream caves and a main cave. Sinkholes, springs, an unroofed cavern and a dry valley are visible at the surface. Features inside the caves include waterfalls, plunge pools, stalactite grottoes, moonmilk and seasonal and permanent ice deposits. Surface vegetation near the caves is also of special interest due to the presence of calcicole (calcium-dependent) plant species. Calcicoles are rare in the Selkirk Mountains due to the limited amount of limestone and calcareous soils.

Access to the Nakimu Caves in the upper Cougar Valley is facilitated by guided hiking/caving tours. A number of permits are available each year for guided groups to enter the caves via the Balu Pass Trail.

Zone II - Wilderness

These extensive areas represent and conserve a portion of the Columbia Mountains Natural Region in a wilderness state. Protecting ecosystems where there is minimal human interference is the key consideration. Zone II areas offer opportunities for visitors to experience the parks' ecological characteristics firsthand with few, if any, rudimentary services and facilities. Facilities are restricted to trails, backcountry campsites, alpine huts, trail shelters, descent assists on Mt. Sir Donald and warden patrol facilities. Public motorized access is not permitted. Approximately ninety percent of the parks will be managed as Zone II.

Zone III - Natural Environment

In Zone III areas, visitors discover the parks' natural and cultural heritage through recreational activities that require only limited and rustic services and facilities. No motorized access is permitted. Zone III applies to areas where visitor use and facilities exceed the acceptable standards for Zone II. The Zone III area in Mount Revelstoke National Park includes the Eva Lake-Miller Lake trail corridor. This is the most heavily-used alpine area in the park. The Natural Environment zone also includes the hiking trails along the Meadows-in-the-Sky Parkway. Zone III trails are used primarily by day-hikers, although overnight use does occur in this zone. Zone III areas in Glacier National Park include the series of hiking trails in the Illecillewaet and Asulkan areas.

Zone IV - Outdoor Recreation

Outdoor recreation zones are limited areas capable of accommodating a range of opportunities for understanding, appreciating and respecting the parks' heritage value. Appropriate opportunities and related essential services and facilities are provided in ways that impact the ecological integrity of the park to the smallest extent possible. Direct access by motorized vehicles is permitted. In Mount Revelstoke National Park, the Meadows-in-the-Sky-Parkway is a Zone IV area. The transportation corridor through Mount Revelstoke National Park and Glacier National Park, including the many visitor facilities such as trailheads, day-use areas and viewpoints, avalanche control facilities such as the Mount Fidelity station and Canadian Pacific's tunnel portal access roads and the Mount Macdonald Tunnel fan building are all included within Zone IV.

Zone V - Park Services

Park operations and administration, visitor services, and support facilities are concentrated in park service zones. In Glacier National Park the Zone V area



includes the Rogers Pass compound, the Rogers Pass Discovery Centre, and the Glacier Park Lodge and service station and associated facilities. In Mount Revelstoke National Park the Zone V area includes the One Mile compound, residential area and associated facilities, which will be reduced in size over the life of this plan. Commercial facility development in the parks and historic site is limited to the existing leasehold area in Rogers Pass.

6.5 Environmentally Sensitive Sites

This designation applies to naturally or culturally significant or sensitive features or areas that require special protection and visitor access management to protect resources.

The following areas have been designated as *Environmentally Sensitive Sites*:

The Cascade Caves and Bridge

- sensitive cave formations
- frequently used grizzly bear habitat
- culturally significant bridge

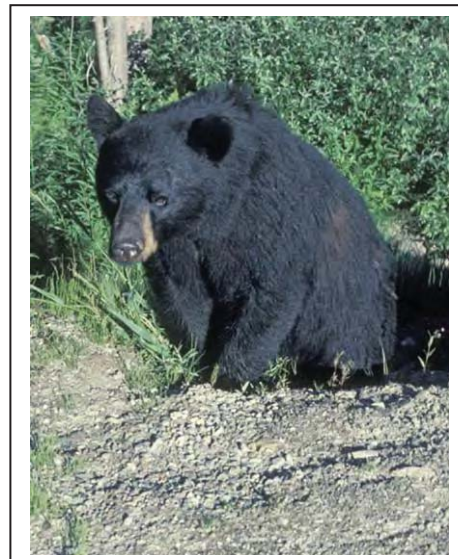
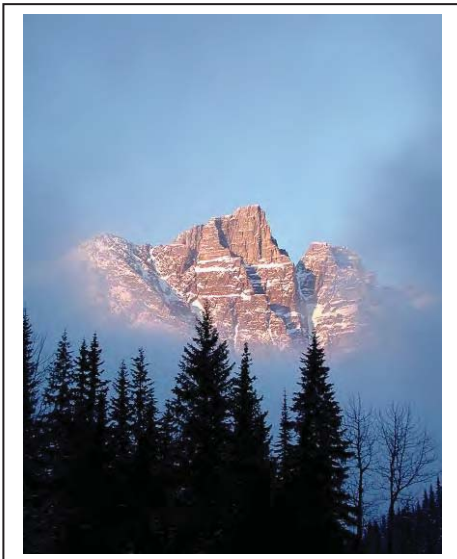
Access to Cascade Caves requires a superintendent permission. Public access to the bridge is not allowed.

Beaver Valley Fen

- significant spring-fed wetland
- only calcareous fen known in the park
- extremely high invertebrate biodiversity (eg: hosts 25% of all British Columbia's dragonfly species)

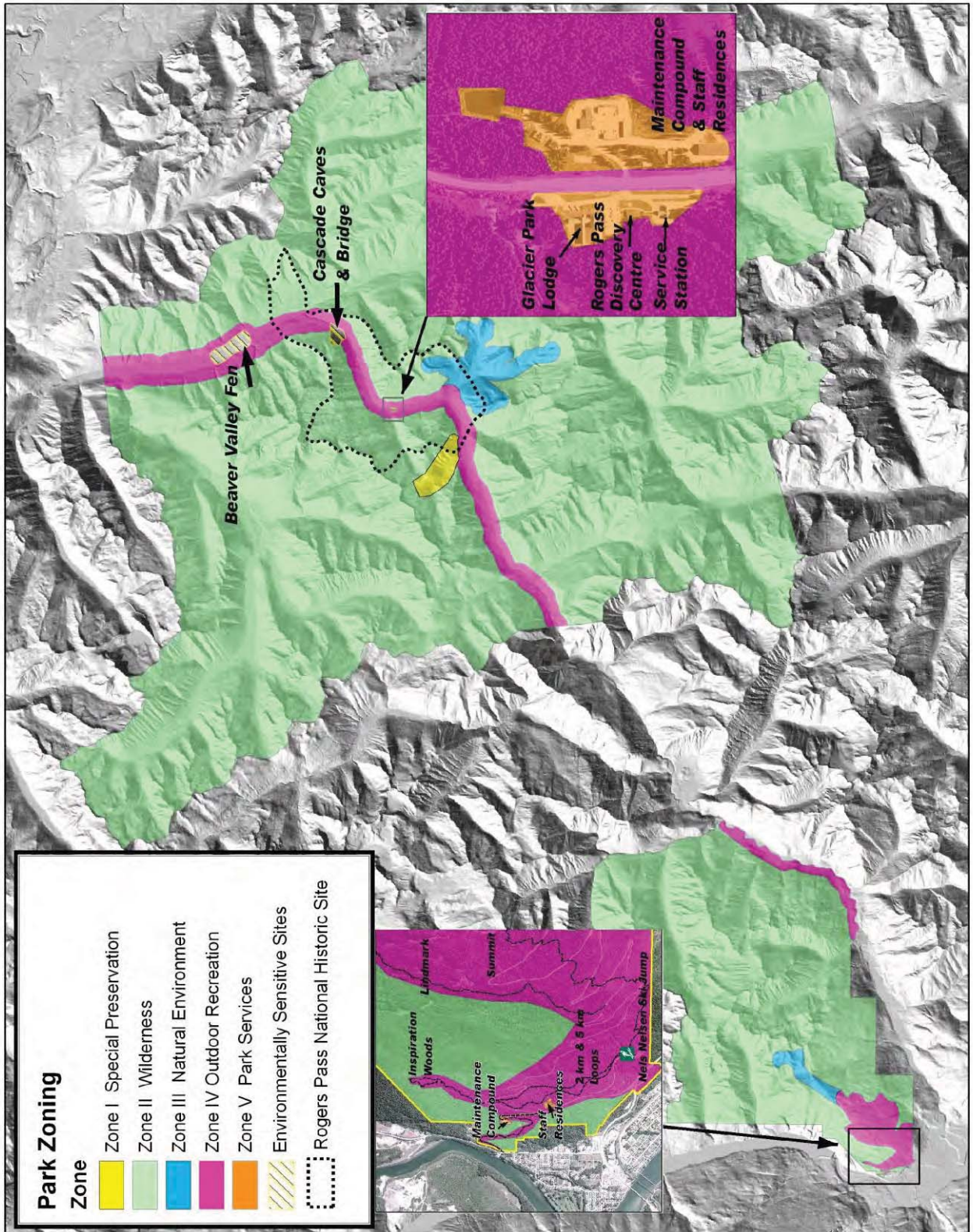
Public access to the fen is not facilitated, as there are no trails or visitor facilities in the wetland. The wetlands are interpreted off-site at Beaver Valley Day-Use Area.

Additional research is underway on low elevation wetland and old-growth forests as potential *Environmentally Sensitive Sites*. Some of these forest areas are habitat corridors with rare or endangered species that contribute to and require special protection.



Map 3

Mount Revelstoke and Glacier National Park Zoning



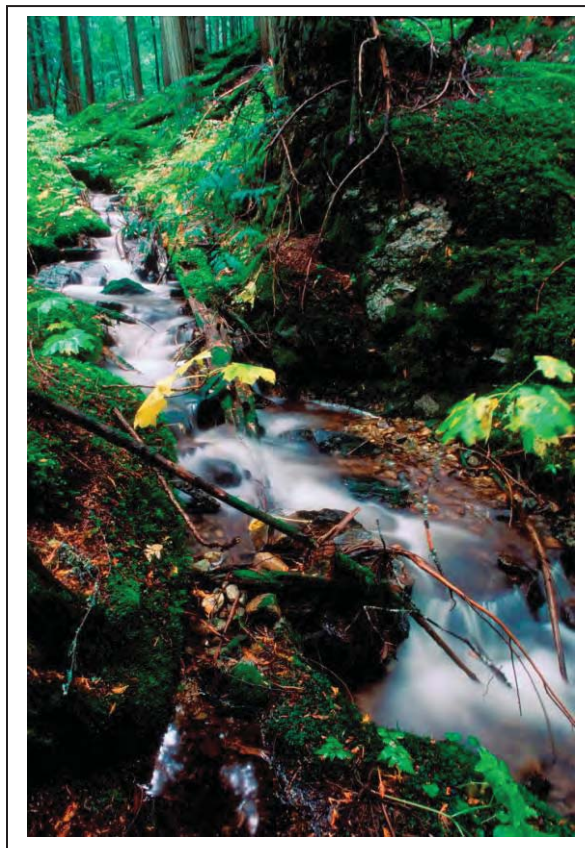
7. MONITORING AND REPORTING

7.1 Condition Monitoring

Parks Canada will monitor the effectiveness of this management plan by tracking key performance indicators related to the park ecosystem, cultural resources, visitor experience and public appreciation. A set of quantitative measurements underlies each indicator. Management performance is evaluated against either a prescribed trend or target for each measure.

The process for *State of the Parks Reporting* is relatively new and still evolving, with the goal of having monitoring programs in place for each key area of the mandate. The monitoring program for ecological integrity is more advanced than the others. Monitoring of cultural resources, visitor experience and public appreciation are under development and will be guided by national performance expectations and protocols.

The indicators of management performance that will be evaluated in the next *State of the Parks Report* (scheduled for completion in 2013/14) are shown in Appendix 1.



8. SUMMARY OF THE STRATEGIC ENVIRONMENTAL ASSESSMENT

8.1 Introduction

The following is a summary of the Parks Canada strategic environmental assessment (SEA) of the *Management Plan for Mount Revelstoke National Park of Canada, Glacier National Park of Canada, and Rogers Pass National Historic Site of Canada*, conducted in accordance with *The Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals (2004)*. The purpose of the SEA is to ensure that the strategies and actions presented in the plan are reviewed for their potential environmental results, both positive and negative, and that the means for avoiding or reducing adverse impacts and enhancing positive environmental effects are identified.

The SEA considers potential cumulative effects of the plan on critical ecological attributes such as wildlife, aquatic and terrestrial ecosystems and processes, by focusing on the key elements of the management plan strategies and performance measures. The SEA also considers potential cumulative impacts to cultural and palaeontological resources and visitor experiences as a result of changes in the environment. The scope of the SEA considers the effects of the management plan in combination with external sources of stress within the greater region.

The management plan is the document that outlines policy direction related to protection of the natural environment. This policy direction takes the form of objectives and key actions to address the three elements of Parks Canada's mandate – protection, education and experience.

8.2 Public Engagement

The management plan review process offered opportunity for public input, including regional Aboriginal groups. Public and expert review of the draft plan contributed meaningfully to assessing its strengths and weaknesses and resulted in a final management plan with stronger direction for protection, experience and education.

8.3 Key Strategies - Assessment and Findings

The management plan is based on six key strategies and four area concepts developed for select regions of the park. This summary focuses on the assessment of the six key strategies; details on the assessment of area concepts can be found in the full SEA. The key strategies were assessed using “key valued components and processes” as per the *2008 State of the Parks Report*. Key valued components and processes include: native biodiversity, aquatic and terrestrial ecosystems, regional landscapes, climate and atmosphere, cultural resources, visitor experience and public education.

A number of key strategies and area concepts address the key valued components including enhancing visitor experience and visitor satisfaction, facilitating learning and stewardship/citizen science opportunities, and personal connections to nature and history. The key strategy of *Ensuring Healthy Ecosystems* focuses on key valued ecological components and processes linked to ecological integrity. SEA highlights for each key strategy are identified below.



Columbia Mountains – Up Close and Personal provides the framework for visitor experience in the park. Key directions provide the basis for: creating new or removing park facilities, improving existing infrastructure, and/or inviting more visitors on the landscape. Growth in visitation to the park needs to be carefully managed to avoid adverse environmental effects. Measures that are important to managing increases to visitation include:

- Integrated delivery of the management plan strategies as intended in the plan.
- Continued consideration and incorporation of key valued components, processes and desired outcomes during management deliberations and decision implementation.
- Growth in commercial activities will be managed through the *Lease and Licensing Regulations* of the *National Parks Act of Canada*.
- New visitor activities will be determined through engaging the public in assessing new visitor activities and determining the conditions under which they would be considered.
- Parks Canada will also achieve minimal environmental impact through visitor use monitoring, concentrating use where possible; amalgamating or clustering facilities; avoiding incremental expansion; and relocating facilities where appropriate to achieve environmental gains.

Connecting and Reconnecting provides a framework for restoring fragmented landscapes, habitats and corridors along the transportation corridor. In addition, this strategy addresses the cultural landscape concept which acts to integrate resource protection, traditional knowledge, visitor experiences and educational opportunities in the parks and region. No direct impacts or interactions on assessment factors are expected as a result of implementing this strategy.

Ensuring Healthy Ecosystems contains five themes which can be viewed as strategic desired outcomes³ for Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site that will:

- ❖ *Ensure that there is full complement of native species characteristic of the Columbia Mountains Natural Region,*
- ❖ *Sustain ecological connectivity,*
- ❖ *Allow ecological processes to play their traditional role in shaping park ecosystems,*
- ❖ *Ensure that ecosystem management activities take into account opportunities to engage visitors in experiences and learning opportunities,*
- ❖ *Work together with others to innovate ways to restore and reconnect ecosystems (eg: through zones of cooperation).*

³ Desired outcomes are defined as the future ecological and cultural conditions required to achieve ecosystem health



It is anticipated that successful implementation of the plan will be accomplished through collaboration between Parks Canada and stakeholders. Completion of the *Zoning and Wilderness Area Declaration* under the *Canada National Parks Act* will result in large designated natural areas throughout the park, contributing to protection of a wide range of species. Opportunities for public input will be provided.

Ensuring Healthy Ecosystems – Key Valued Components and Processes

Through the management plan, Parks Canada will maintain or restore natural ecosystems that contribute to long-term ecological health at the park level and benefit the greater region. Key valued components and processes of this strategy include:

Native Biodiversity

- A diverse community of habitats, native wildlife and vegetation are indicative of healthy mountain ecosystems and influence visitation in the park. Maintaining wildlife populations and ensuring that habitats remain free of invasive species will protect and restore native biodiversity. Parks Canada will continue to control the spread of non-native plants to minimize the negative impacts on vegetation biodiversity.
- Caribou have been identified as threatened under the *Species at Risk Act* with concern for declining populations throughout the mountain parks. Currently the Columbia South mountain caribou population uses Mount Revelstoke National Park as well as surrounding provincial lands. Habitat fragmentation due to old-growth forest harvesting and recreational use adjacent to national park boundaries has impacted the population. Interagency collaboration is key.
- Grizzly bears are a species of special concern under the *Species at Risk Act* and an important indicator species for the mountain parks. The total mountain national parks area is insufficient to support a grizzly bear population. Consequently, careful interagency collaboration is required to ensure the bear population survives in a regional and park environment that will have increasing levels of development and recreation.
- Parks Canada continues to work with adjacent land managers on the concept of “zones of cooperation” to address management actions for shared caribou and grizzly bear populations. Area concepts outline key actions for improving habitat for grizzly bears as well as reducing direct mortality. Many cumulative impacts affecting these priority species and other wildlife in Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site are addressed through species-specific plans, strategies, research permits, environmental assessments or collaboration with neighbouring land management agencies.

Aquatic Ecosystems

- Transportation infrastructure and development have created habitat fragmentation in aquatic ecosystems. Parks Canada continues to look at opportunities to restore connectivity along roadways in the park where crossings have created barriers to fish, amphibians and hydraulic connectivity.
- There are currently 11 contaminated sites within Mount Revelstoke and Glacier national parks that are registered on the Federal Contaminated Sites Inventory; two of these sites are currently undergoing monitoring and/or remediation.



Contaminated material can impact ground and surface water leading to impacts on water quality and vegetation.

Terrestrial Ecosystems and Regional Landscapes

- Glacier and Mount Revelstoke national parks contain old-growth forest which are threatened outside the protected area of national parks, as well as within the parks by fire. Higher elevation landscapes offer protection of alpine meadows and priority species such as white bark pine. Parks Canada continues to participate in regional management initiatives to protect these important vegetation types.
- Parks Canada will consider a long-term gravel extraction plan for highway operation and future construction requirements. The gravel extraction plan will require an environmental assessment. As identified in the *State of the Parks Report* and highlighted in the Ensuring Healthy Ecosystems key strategy, park practices and decision-making should not lead to reduction or impacts in old-growth forest, sensitive sites such as the Beaver Valley Fen, or irreplaceable geological features.
- Implementing the Fire Management Plan and using fire as a restoration tool will help restore the natural range of variability. This can also be linked to restoring natural predator/prey dynamics and restoring forest health while ensuring public safety and protecting property and adjacent lands. Key directions include implementing prescribed fires and managing natural fires to attain natural vegetation mosaics.

Climate and Atmosphere

- Snow and glacial meltwater from Mount Revelstoke and Glacier contributes to the flow of the Columbia River. The Columbia is a significant trans-boundary river, providing habitat and food for wildlife, and water for agriculture, recreational opportunities and hydro-electric power for British Columbia and the western United States. Glacier monitoring improves knowledge about the impacts of climate change on park ecosystems, and assists in developing management strategies to help communities in adapting to a changing climate.

Touchstones of Our Past – Celebrating our Roots

Past development, future activities and natural degradation of sites may further impact the key valued component of cultural resources - either through on-the-ground change or loss of knowledge. By collaborating with communities and cultural organizations to present cultural landscape stories beyond the boundaries, the protection of cultural resources will be strengthened and the means in which Canadians can connect with them will be enhanced. The protection of physical sites and cultural resources, and prevention of the loss of oral history will result in positive environmental effects.

Key actions such as completing a *Cultural Resource Management Plan* and inventories of heritage buildings, investing in cultural resources, and conducting research and monitoring activities of archaeological resources are expected to improve the condition of cultural and archaeological resources while increasing visitor awareness and education of cultural heritage.

Bringing the Mountains to People Where They Live delivers knowledge and connections to communities and schools outside the national parks, addressing the key valued component of public education. It focuses on media and outreach programming in communities and schools to expand awareness of national parks and historic sites among



priority audiences. No direct impacts or interactions on assessment factors are expected as a result of implementing this strategy. Fostering understanding and desire to protect wild places will help communicate environmental stewardship messages and increase the importance of maintaining protected places.

Showcasing Science and Stewardship

addresses several key valued components and processes that are expected to result in positive environmental and cultural resource effects. Such results include a greater knowledge of ecosystems, ecosystem and cultural resource restoration, monitoring, citizen science and greater connections between Canadians and the park to encourage public support for park management, including:

- Conducting and facilitating ecological and social science research and monitoring programs to better understand park ecosystems, levels of acceptable change, human dimensions, and relationships with visitor use.

8.4 Desired Future Outcomes

A number of desired outcomes have been outlined in the SEA that are indicative of the conditions required to maintain a healthy ecosystem. These objectives are based on long-term monitoring programs and key issues identified in the 2008 State of the Parks Report.

In order to ensure that impacts from management directions such as increased visitation and facilities do not cause cumulative effects to key valued components and processes, the desired outcomes for ensuring healthy ecosystems were considered during the development of the management plan. These desired outcomes should be used to guide the future decision-making processes, be applied to the implementation of key strategies and area concepts, and focus where additional monitoring is required. They are:

Desired outcomes for biodiversity

- Maintain and where feasible, restore native vegetation that reflect long-term ecosystem functions.
- Prevent further introduction of non-native plant species and reduce current infestations.
- Maintain viable wildlife and fish populations and the habitat that sustains them.
- Human-caused mortality of priority species is reduced and reproductive success is not diminished.
- Maintain natural range of variability in riparian areas regarding composition, structure, quantity and function of native communities.
- In wetland areas, maintain natural levels and patterns of surface and subsurface hydrological flow.
- As outlined in the *State of the Parks Report*: no reduction in old-growth forest due to park practices and decision-making except if restoring natural processes.

Desired outcomes for connectivity

- Terrestrial habitat connectivity is maintained and where feasible restored.
- Natural flow regimes, water quality and aquatic connectivity are maintained and where feasible restored.



- Long-term patterns of wildlife, including caribou, wolverine and grizzly bear behaviour, distribution and abundance are restored.

Desired outcomes for natural processes

- Monitor ecological processes with regard to fire and forest health and maintain natural function where possible.
- Maintain and where feasible restore native vegetation that reflects long-term ecosystem function and natural range of variability.
- Ensure predator-prey dynamics reflect natural levels.
- Alluvial process, such as meandering rivers, are allowed to occur naturally, or with as few impediments as possible, including those processes adjacent to highway infrastructure.

Desired outcomes for visitor experience activities

- Align with natural and cultural resource protection goals.
- Facilitate opportunities for enjoyable and meaningful national park or national historic site experiences.
- Promote lasting personal connections with and appreciation of the Columbia Mountains.
- Value and involve local communities.
- Respect the character of the place and align with area concepts.
- Monitor growth in visitation to ensure that there is no negative impact on ecological integrity or the experience of visitors.
- Monitor the impacts of activities on ecological and cultural integrity.

Desired outcomes for cultural resources

- Maintain with minimal disturbance the distinguishing features of cultural and archaeological resources and ensure that there is no loss of information and knowledge and records.

8.5 Residual Impacts, Cumulative Impacts and Regional Stressors

Residual impacts are environmental effects that are not acknowledged by the management plan and therefore remain as impacts in the park. Parks Canada employs a mobile avalanche control program based in Rogers Pass - a program embodying the agency's prioritization of public safety for those travelling the Trans-Canada Highway route through the pass. Numerous avalanche paths are controlled by Howitzer artillery as part of this public safety program. It is recognized that the impacts of avalanche control activity likely have displaced caribou, and the impacts upon mountain goats are unknown at this time.

There are a number of ***cumulative impacts*** throughout Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site that contribute to the challenges in maintaining ecological and cultural integrity. The following is a list of key stressors that at times may influence desired outcomes:

- The main valley bottoms in the parks have intense human activity.



- A transportation corridor bisects the major valleys through Glacier and skirts inside the southern boundary of Mount Revelstoke.
- Regional land management practices have altered the natural range of ecosystem variability.

Although Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site cover a diverse landscape and support a number of different wildlife species, the parks are subjected to **regional stressors** which affect transboundary natural resources. Even though the management plan realm of control is confined to the national park boundaries, Parks Canada continues to liaise with external stakeholders and provincial agencies as a way to integrate common goals. The following stressors, which may be impacting features within the parks, are beyond Parks Canada's control:

- Community, industrial, recreational and hunting activities on regional landscapes adjacent to park boundaries that directly or indirectly impact shared wildlife populations, aquatic resources, and vegetation communities.
- Changes in climate that impact wildlife and vegetation distributions, fresh water flow and natural disturbance processes.

8.6 Park Management Plan Implementation and Follow Up

The park management plan describes strategic directions that will be implemented over the next 15 years. Some of the initiatives described in the plan are conceptual in nature and individual project planning will be subject to further assessment under the *Canadian Environmental Assessment Act* or other applicable assessment processes. It is anticipated that these projects will be developed in such a manner as to accomplish the desired outcomes.

Parks Canada will use established monitoring programs and the *State of the Parks Report* to assess the outcomes of the management plan with respect to ecological, cultural and social science indicators established in the performance management framework of the plan. Should impacts be detected, adequate management tools are available to implement mitigations that will avoid, reduce or counter negative effects.

8.7 Strategic Environmental Assessment Conclusion

Projects that are conducted according to the management plan and address the information requirements identified in the SEA will ensure that ecological integrity and cultural resources within the parks and national historic site are maintained and/or restored. It is anticipated that Parks Canada will continue to strive to meet the strategic desired outcomes outlined in *Ensuring Healthy Ecosystems* when assessing specific developments, human use projects, initiatives, and ongoing activities.

In conclusion, the integrated implementation of the park management plan is expected to achieve the desired results for ecological integrity, commemorative integrity, visitor experience and public education in Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site. Appropriate strategies are identified to avoid or reduce negative effects that could arise through individual park management initiatives or as a result of cumulative effects. Individual projects will be subject to the application of the *Canadian Environmental Assessment Act* to ensure that potential impacts can be mitigated. As a result, the park management plan is not likely to result in any significant adverse cumulative effects.



9. SUMMARY OF PRIORITY ACTIONS FOR 2010 - 2014

This management plan contains directions and actions to achieve long-term management objectives and the desired future for the parks and historic site as a whole, as well as for each area concept.

This summary identifies priority actions for the next five years, with the understanding that adjustments will be made in response to changing circumstances. Progress will be reported each year. Cumulative progress will be reviewed in the 2013 *State of the Parks Report* and the five year review of this management plan. Two over-arching priorities will guide the work:

The *Three Passes* Cultural Landscape

The *Three Passes* cultural landscape will be developed as one of Canada's great driving tours and a destination in its own right. The *Three Passes* concept is a new tourism experience that will encourage additional visitation in an area stretching from Kicking Horse Pass to the Last Spike. Working with others, Parks Canada will capitalize on a number of upcoming anniversaries to knit the cultural landscape together through protection and education activities and the creation of memorable experiences.

Moving the Terrestrial Indicator

Parks Canada will collaborate with others to ensure healthy ecosystems through the restoration of terrestrial connectivity – both ecosystem to ecosystem (eg: reconnecting habitats bisected by travel corridors such as roads and rail), and landscape to people (eg: reconnecting visitors to the beauty and diversity of the landscape). Opportunities will be provided for the public to explore and learn about the unique landscape and history of the Columbia Mountains, in a manner which improves space and security for wildlife and engages everyone in stewardship activities.



Key Strategy	Five Year Priorities
The Columbia Mountains - <i>Up Close and Personal</i>	<ul style="list-style-type: none"> • Renew and develop new visitor experience products that embrace a <i>Mountain Heritage Traditions</i> theme • Review and improve visitor safety communications with a focus on preparedness and prevention • Enhance the visitor experience through citizen science and volunteer opportunities • Celebrate major anniversaries, such as Glacier 125 and Mount Revelstoke centennial
Connecting and Reconnecting	<ul style="list-style-type: none"> • Collaborate with others to reconnect fragmented landscapes, habitats and corridors; and other areas of mutual interest along park boundaries • Build relationships with Aboriginal people to honour their cultural connections to the land and embrace traditional knowledge
Ensuring Healthy Ecosystems	<ul style="list-style-type: none"> • Complete and begin implementation of the <i>Fire Management Plan</i> in collaboration with partner agencies • Create learning opportunities that tell the stories of the ecosystem • Prepare and implement a park caribou conservation strategy with public participation and coordinated with Banff, Yoho and Jasper; contribute to Environment Canada's Species at Risk recovery strategy for southern mountain caribou. • Complete trail realignments through grizzly bear habitat and develop educational materials
Touchstones to Our Past - Celebrating our Roots	<ul style="list-style-type: none"> • Raise the profile of and knit the <i>Three Passes</i> cultural landscape together through partnerships to celebrate the connection of people to the land • Renew and implement the <i>Cultural Resource Management Plan</i> for the national parks and the national historic site • Strengthen relationships with communities of new Canadians to document and present their relationships with the Columbia Mountains
Bringing the Mountains to People Where They Live	<ul style="list-style-type: none"> • Work with provincial education authorities in the development of curricula and learning opportunities for teachers and students
Showcasing Science and Stewardship	<ul style="list-style-type: none"> • Share science and stewardship stories to create rich and rewarding opportunities for learning experiences within the parks and at home • Expand environmental stewardship efforts within the national transportation corridor and beyond park boundaries



Area Concept	Five Year Priority
Mount Revelstoke and Glacier National Parks Backcountry Areas	<ul style="list-style-type: none"> • Engage the public in the development and implementation of a <i>Backcountry Plan</i> • Promote areas of the backcountry that offer new hikers safe introductory experiences • Complete the <i>Wilderness Declaration</i>
Major Rogers' Route - The Trans-Canada Highway Corridor	<ul style="list-style-type: none"> • Enhance opportunities for drive-through travellers to connect with the parks and historic site • Continue contaminated site work with a focus on Rogers Pass • Develop a long term plan for obtaining aggregate materials required for highway construction and maintenance
Rogers Pass National Historic Site	<ul style="list-style-type: none"> • Continue to stabilize nationally significant Level 1 and 2 cultural resources • Complete the description of <i>Designated Place</i> for Rogers Pass National Historic Site • Celebrate the 50th anniversary of the Trans-Canada Highway and the 125th anniversary of the Last Spike
Meadows in the Sky Area	<ul style="list-style-type: none"> • Engage the public in the development and implementation of a <i>Meadows in the Sky Area Plan</i> • Strengthen ties between Mount Revelstoke National Park and the community of Revelstoke • Develop and promote year-round experiences



APPENDIX 1 Performance Measurements

Category: Heritage Resource Conservation

Expected Results:

- Management actions result in improvement of condition or trend for the terrestrial ecological indicator by 2014
- Ecosystem conservation is improved through active management.
- The condition of cultural resources in the national parks is maintained and the state of cultural resources in the national historic site is improved.

Indicator: Regional Landscapes

Measure	Target
Long-term fire cycle	<ul style="list-style-type: none"> ✓ Increase in disturbance by fire measure trend from fair condition to fair and improving trend by 2014 ✓ To achieve natural age class distribution, by 2013, area burned is at least 25% of what has burned over 1/3 of the historic fire cycle
Fragmentation measures	<ul style="list-style-type: none"> ✓ By 2014, wildlife habitat connectivity is improved and wildlife mortality is decreased along the Parkway ✓ Increase in number of mitigations to enhance connectivity across the transportation corridor, roads and trails, as opportunities arise ✓ The percentage of landscapes, habitats and natural corridors in the parks that are currently fragmented decreases
Effectiveness of management actions	<ul style="list-style-type: none"> ✓ Under development; priority on trail re-alignments
Glacier-Mass Balance ; landscape scale	<ul style="list-style-type: none"> ✓ Monitoring only – no target
Extent of Glacier change	<ul style="list-style-type: none"> ✓ Monitoring only – no target



Indicator: Terrestrial Ecosystems	
Measure	Target
Invasive non-native plants	<ul style="list-style-type: none"> ✓ By 2012, the number and areal extent of invasive plant species is declining ✓ Increase in non-native vegetation measure from fair to good condition by 2014 ✓ Invasive species are effectively controlled and, where feasible, eliminated
Forest insect and disease	<ul style="list-style-type: none"> ✓ By 2012, whitebark pine infection and mortality rates are stable compared to 2007 levels ✓ Rates of natural processes continue within historic patterns
Vegetation patterns, structure and health	<ul style="list-style-type: none"> ✓ Old-growth forest does not decline (excluding natural disturbances)

Indicator: Aquatic Ecosystems	
Measure	Target
Connectivity of aquatic ecosystems	<ul style="list-style-type: none"> ✓ Increase in aquatic connectivity measure trend from fair to fair and increasing by 2014
Benthic invertebrates	<ul style="list-style-type: none"> ✓ No decrease in benthic community diversity
Water quality	<ul style="list-style-type: none"> ✓ No decrease in current water quality conditions in river systems

Indicator: Native Biodiversity	
Measure	Target
Mount Revelstoke and Glacier Wildlife Targets in general	<ul style="list-style-type: none"> ✓ Increase in wildlife mortality measure from not rated to improving trend by 2014 ✓ By 2014, wildlife habitat connectivity is



	improved and wildlife mortality is decreased on the transportation corridor
Caribou	✓ By 2014, ≥1 documented caribou presence during the winter and no observed human use (ski track) in caribou habitat closures on Mt Klotz
Avian species	✓ No decrease in species diversity as a result of actions in the parks
Fish inventories	✓ Monitoring only – no target
Amphibians	✓ No decrease in amphibian populations
Bears	<ul style="list-style-type: none"> ✓ Grizzly bear habitat security is maintained or improved ✓ In restricted grizzly bear habitat areas, by 2011 there are, < 3 negative bear encounters/year (a), despite levels of human use and (b), and there is 75% compliance to group size restrictions
Species at Risk	<ul style="list-style-type: none"> ✓ By 2014, important habitat has been identified, habitat targets are determined, and mitigations are in place for threatened species (example: caribou, olive-sided flycatcher) ✓ By 2014, work is in progress on identification of important habitat and mitigations for species of management concern (example: grizzly bears, western toad)
Indicator: Climate and Atmosphere	
Measure	Target
Precipitation	✓ Monitoring only – no target
Snowpack	✓ Monitoring only – no target
Air temperature	✓ Monitoring only – no target



Indicator: Cultural Resources	
Measure	Target
Commemorative Integrity	<ul style="list-style-type: none"> ✓ No decrease in commemorative integrity for Rogers Pass National Historic Site ✓ The state of cultural resources in the national parks are maintained
<p>Category: Public Appreciation and Understanding</p> <p>Expected Results:</p> <ul style="list-style-type: none"> • Canadians appreciate the significance of Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site and support their protection and presentation. • Canadians learn about the heritage of Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site and understand that they are protected and presented on their behalf. • Stakeholders and partners are engaged in the protection and presentation of Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site. 	
Indicator: Learning	
Measure	Target
Outreach Education / Learning	<ul style="list-style-type: none"> ✓ An increased percentage of Canadians consider that they learned about the heritage of the parks and/or site
Indicator: Appreciation and Understanding	
Measure	Target
Appreciation and Understanding	<ul style="list-style-type: none"> ✓ An increased percentage of Canadians understand that the parks and site are protected and presented on their behalf ✓ At least 60% of local residents consider Mount Revelstoke and Glacier national Parks and Rogers Pass National Historic Site to be meaningful to them
Awareness	<ul style="list-style-type: none"> ✓ At least 60% of potential visitors and residents are aware of Canada's system of protected areas



Indicator: Engagement	
Measure	Target
Engagement	<ul style="list-style-type: none"> ✓ An increased percentage of interested stakeholders and partners support the protection and presentation of the parks and site ✓ An increased percentage of stakeholders and partners feel that they have opportunities to influence and contribute to management of the parks and site ✓ The number of volunteers increases ✓ The number of relationship agreements with Aboriginal communities increases
<p>Category: Visitor Experience</p> <p>Expected Results:</p> <ul style="list-style-type: none"> • Visitors feel a sense of connection to Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site. • Canadians visit Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site. • Visitors learn from experience and active participation. • Visitors enjoy their visit. • Visitors understand the significance of Rogers Pass National Historic Site. 	
Indicator: Attendance	
Measure	Target
Attendance	<ul style="list-style-type: none"> ✓ The number of visitors to the parks and site increases by 2% per year for the first five years of the plan



Indicator: Connection to place	
Measure	Target
Connection to Place	<ul style="list-style-type: none"> ✓ 85% or more of visitors feel a positive personal connection with these protected places and that these places are meaningful to them, and 30% or more of visitors feel that they have made a very strong personal connection

Indicator: Enjoyment/Satisfaction	
Measure	Target
Enjoyment/Satisfaction	<ul style="list-style-type: none"> ✓ 90% or more of visitors to the parks and site enjoy and are satisfied with their experience and 50% or more of visitors find their experience to be extremely enjoyable and are very satisfied

Indicator: Learning (Interpretation)	
Measure	Target
Learning (interpretation)	<ul style="list-style-type: none"> ✓ 50% or more of visitors take part in a learning opportunity ✓ 60% or more of visitors to the national parks who take part in a learning activity are satisfied with the experience ✓ 60% or more of visitors who take part in a national park learning activity feel that they learned something during their visit ✓ 85% of visitors to the NHS consider that they learned about the cultural heritage of the place ✓ Availability of, and participation in, volunteer opportunities increases



Indicator: Asset Condition	
Measure	Target
Asset condition	✓ The number of contemporary visitor assets in good condition increases
Indicator: Visitor Safety	
Measure	Target
Visitor safety	<ul style="list-style-type: none"> ✓ A reduced frequency and severity of injury to visitors ✓ Decreased use of park backcountry areas during periods of high risk ✓ Increased reach of enhanced risk prevention and education activities
Indicator: Through Highways	
Measure	Target
Condition of through highways	✓ Zero days of closure of through highways due to asset condition
Category: Environmental Stewardship	
Indicator: Environmental Stewardship	
Measure	Target
Contaminated Sites	<ul style="list-style-type: none"> ✓ 80% of the contaminated and 25% of disturbed sites known in 2010 will have progress towards restoration ✓ Area and number of contaminated sites restored increases
Spills and Contaminants	✓ Contaminants and spills are removed and cleaned
Greenhouse gases	✓ Decreased greenhouse gas emissions from park operations
Energy Efficiency	✓ Energy efficiency at Parks Canada facilities is improved
Waste Stream Diversion	✓ Maintained and enhanced (where possible) recycling opportunities



APPENDIX 2

MOUNT REVELSTOKE, GLACIER AND ROGERS PASS * VISITOR EXPERIENCE CONCEPT

National Park and National Historic Site Visitor Experience Segments

Adapted from the Canadian Tourism Commission Explorer Quotient Program

Authentic Experienter

Your traveller type is something of an improv artist, exploring nature, history and culture, all on your path to personal development.

Cultural Explorer

You are a very active traveller who enjoys frequent weekend escapes. Always on the move, you immerse yourself in nature, local culture and history.

Cultural History Buff

You strive to go beyond your own roots to understand the history and culture of others. You are most likely to own a passport and you enjoy solitary travel.

Free Spirit

Something of a thrill-seeker, travel satisfies your need for the exciting and exotic.

Gentle Explorer

You like to return to past destinations and enjoy the security of familiar surroundings. You appreciate convenience, relaxation and typically look for all the comforts of home.

No Hassle Traveller

A bit of an escapist, you search for worry-free and secure travel. You look for relaxation, simplicity and a chance to experience the outdoors with family and friends.

Personal History Traveller

You travel to gain a deeper understanding of your ancestry and heritage. Your travel tends to be a shared experience, both during and after your trip.

Rejuvenator

When you travel, you want to stay in top accommodations where you're most comfortable. Travel is a chance to totally disconnect and get away from it all.

Virtual Traveller

Tending not to travel very often, you prefer the comforts of home to the uncertainties of new places or cultures.



The Columbia Mountains – Up Close and Personal ***Visitor Experience Themes***

The visitor experience themes for Mount Revelstoke and Glacier national parks and Rogers Pass National Historic Site reflect travellers's desire to visit authentic places and make personal connections with these natural and cultural environments. Each of the four themes has elements that will appeal to members of every Explorer Quotient segment. On the following pages, the EQ market appeal of each area of the parks and site is identified in conjunction with the level of experience (eg: View from the Edge, etc.).

Regional Theme * *The Three Passes*

The settings, stories and experiences available in Mount Revelstoke, Glacier and Rogers Pass will be positioned within the broader context of the *Three Passes* cultural landscape and tourism destination. As noted on page 7 of the management plan, there is an incredible wealth of stories available to be presented within the heritage settings of the *Three Passes*, which stretches from the Continental Divide in the Rocky Mountains to the western edge of the Columbia Mountains near Shuswap Lake. Within the cultural landscape, there is something for travellers from every Explorer Quotient type – from farmer's market shopping and slow food restaurants, to campgrounds with hot springs and camper cabins, to the world's most renowned heli-skiing. The national parks and national historic site occupy a specific niche in the *Three Passes*, as presented in the next visitor experience themes.

National Parks and National Historic Site Overarching Theme * *Up Close and Personal*

Visitors to Mount Revelstoke, Glacier and Rogers Pass have opportunities to experience the Columbia Mountains wilderness in a manner that is truly unrivalled. Nowhere else does a major travel corridor cross the three southern ranges of the Columbias – the Monashees, Selkirks and Purcells. Although a busy highway, the Trans-Canada route lets visitors experience firsthand the towering peaks, narrow valleys, glaciers and icefields, lush inland rainforest and whitewater rivers of the Columbia Mountains wilderness. Every experience opportunity in the parks and historic site is designed to let visitors make their own personal connections with the Columbias.

National Parks and National Historic Site Theme * *Mountain Heritage Traditions*

The *Mountain Heritage Traditions* theme will honour the Aboriginal people who have lived and travelled lightly on the lands of the Columbia Mountains for millenia. The theme also celebrates more than a century of guides, hoteliers, adventurers, mountaineers, hikers, cavers, skiers and scientists who created a legacy of mountain ethics, self-reliance, care and stewardship in these mountains. The *Mountain Heritage Traditions* theme will underlie all welcome, orientation, information, interpretation, learning and recreational services in the parks and historic site.

National Parks Theme * *Moving An Indicator*

Throughout the past century, science and stewardship have come together many times in Mount Revelstoke and Glacier in the service of conservation. For example, the first scientific study of glaciers in North America was undertaken here in 1887, by private citizens. This theme will provide opportunities for hands-on learning experiences in ecosystem monitoring and management activities through volunteer and citizen science programs. This theme also involves the presentation of public programs that bring together scientists and interpreters to raise awareness and understanding of Parks Canada's efforts to improve the state of terrestrial ecosystems in the parks.



Area Concepts – Detailed Visitor Experience Strategies

1.0 Backcountry Areas

1.1 Backcountry Areas * Protected Setting

Before the coming of the trans-continental railway in 1885, the Selkirk and Purcell ranges of the Columbia Mountains were primordial wilderness – the original “backcountry.” Today’s park backcountry areas protect a portion of this ancient wilderness. They are of tremendous ecological importance to the parks. Remote, largely untouched areas of old-growth forest, valley bottom wetlands, and subalpine meadows and forests are important habitat for threatened mountain caribou and olive-sided flycatchers, as well as grizzly and black bears, cougars, wolves, coyotes and wolverines.

In many ways, Mount Revelstoke and Glacier national parks are defined by the backcountry. Only a small portion of the two parks is road-accessible “frontcountry”. The backcountry’s narrow valleys, steep mountain-sides and tall trees create a sense of enclosure for visitors venturing out on the trails.

The protected setting of the backcountry is also shaped by the special history of these places. Visitors step back in time, following the footsteps of the early mountaineers, feeling the same sense of awe and accomplishment more than a century later.

Virtually all of the recreational opportunities offered in the Rogers Pass area of Glacier National Park are supported by trails built in the 1880s and 1890s by the Swiss guides and staff of Glacier House. The complex of trails in the Illecillewaet and Asulkan valleys and the Hermit and Balu trails are more than a century old, as are the hiking trails that lead into the Eva, Miller and Jade lakes area in the Mount Revelstoke backcountry. Backcountry cabins and huts are another legacy of that early recreation era, including Glacier Circle Hut and Eva Lake Shelter.

Beyond trails-end lies the deep wilderness of the Mountain Creek, Incommapleux River, Flat Creek and Clachnacudainn Icefield watersheds.

1.2 Backcountry Areas * Opportunities for Personal Benefits

Backcountry visitors can achieve personal benefits such as rejuvenation, excitement, freedom, awe, adventure, recreation, challenge, spiritual growth, discovery and learning

1.3 Backcountry Areas * Visitor Experience Levels

The protected places of the backcountry are the settings for two levels of visitor experience – the *Step Into The Wild* experience and the *Into the Wilderness* experience

- **The “Step Into The Wild” Experience**
where: on the trails that are accessible within a day’s hike or ski
what: walking, mountain biking*, hiking, ski-touring and snowshoeing

“Step Into The Wild” Market Appeal

who: Authentic Experiencers, Rejuvenators



- **The “Beyond The Edge and Into The Wilderness” Experience**
where: beyond trails-end and in trail-less wilderness areas
what: mountaineering, backpacking, caving, ski-touring and ski-mountaineering

“Beyond The Edge and Into The Wilderness” Market Appeal

who: Authentic Experiencers

1.4 Backcountry Areas * Area Management

Those parts of the backcountry that are within a day’s activity for most visitors have a level of development that is best described as rustic and primitive. Visitor experiences are supported by trails, trail bridges, backcountry campsites and roofed shelter (Asulkan Cabin, Caribou Cabin, Eva Lake Shelter). Visitors are likely to occasionally see park staff at trailheads or on the trail. Trailhead orientation and information exhibits help visitors to prepare for their day in the backcountry.

While most of the backcountry is considered to be complex terrain, there are areas that novice hikers can easily access in a day (including the Illecillewaet and Asulkan trail networks and the Eva and Miller lakes trails).



Although day-hiking opportunities in Mount Revelstoke and Glacier are not unique among the mountain parks, the two parks do represent the only Columbia Mountains backcountry areas in the national parks system. Glacier National Park in particular is known as a hiking park. Any re-design of existing facilities or design of new backcountry facilities will respect the key values that visitors have identified (such as uncrowded places and immediate access to the distinctive elements of the Columbias – tall, thick old-growth forests, lush greenery, waterfalls, glacier and icefield views and steep mountain-sides).

Very large areas of the parks will remain trail-less wilderness, where visitors are able to challenge nature on its own terms. The Mountain Creek, Incommapleux River, Flat Creek and Clachnacudainn Icefield watersheds lie beyond a day’s hike or ski for the majority of visitors. Experience, knowledge, equipment, self-reliance and self-rescue are the most important elements of these experiences. Visitors cross icefields, bushwhack, bivouac, cross rivers, break trail and climb without the support of maintained hiking routes or bridges. Glacier Circle Hut and Sapphire Col Hut provide shelter for climbers and ski-mountaineers.



2.0 Major Rogers Route Area

2.1 Major Rogers Route * Protected Setting

The Major Rogers' Route setting is a natural and cultural landscape, weaving together the nature of the Columbia Mountains and the heritage of the people who live here

The narrow valleys, steep mountain-sides and tall trees create a sense of enclosure for visitors. The corridor is located for the most part in the dense interior cedar-hemlock lifezone, although it does enter the subalpine lifezone as it crosses Rogers Pass.

Mountain peaks, glaciers, icefields and avalanche paths are visible throughout the corridor. Snow is a major factor almost year-round with a deep snowpack in the corridor in winter. Snow is only absent from the peaks from mid-July to late-August most years.

Major Rogers' Route traverses ancient and old-growth forests and valley bottom wetlands which are important habitat for mountain caribou, wolverine, grizzly and black bear, mountain goat and many species of amphibians, reptiles and fish.

The cultural resources of the Major Rogers' Route are very prominent in a few locations. Historic landmarks like the railway trestle pillars at Loop Brook and the Cascade Creek stone bridge are visible from the highway. The abandoned rail line and the site of Glacier House are all easily accessible on foot from the highway corridor. Major Rogers Route is still very important to transportation in Canada and features like the Macdonald railway tunnel and avalanche snowsheds are all features of the route.

The Major Rogers' Route is part of the Kicking Horse Pass to the Last Spike cultural landscape corridor. It takes about an hour to drive the portion of the corridor that is protected within Mount Revelstoke, Glacier and Rogers Pass. Other elements of the cultural landscape setting are visible beyond the parks, at Craigellachie, Revelstoke, Golden and in Yoho National Park and Kicking Horse Pass National Historic Site.

2.2 Major Rogers Route * Opportunities for Personal Benefits

Visitors to the Major Rogers' Route can achieve the following benefits, among others: time with family and friends or time alone, recreation exercise and leisure, learning and discovery, wonder and amazement, spiritual growth and rejuvenation, and sometimes, just a break from driving.

2.3 Major Rogers Route * Visitor Experience Levels

The protected places of the Major Rogers' Route area are the settings for two levels of visitor experience – the *Pass Through* and *View from the Edge* experiences.

- **The “Pass Through” Experience**

where: on the Trans-Canada Highway or scenic train tour

what: photography, nature and heritage appreciation and learning

“Pass Through” Market Appeal

who: members of all Explorer Quotient segments pass through the area on the highway



- **The “View From The Edge” Experience**
where: at day-use areas, campgrounds, trails and the discovery centre
what: camping, walking, hiking, photography, nature and heritage appreciation
dog sledding*, scenic driving, picnicking, road cycling and snowshoeing

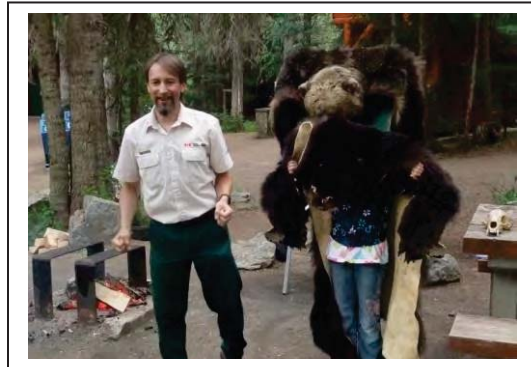
“View From The Edge” Market Appeal

who: Authentic Experiencers, Cultural History Buffs, Rejuvenators, Gentle Explorers and No-Hassle Travellers

2.4 Major Rogers Route * Area Management

As a key *Pass Through* and *View From The Edge* visitor experience area, there is a high level of facility development and a high level of visitor services in the Major Rogers’ Route area. The Major Rogers Route (and Rogers Pass area) are the only places in the parks or historic site that offer the *Pass Through* visitor experience.

The signature characteristic of the Major Rogers’ Route is the ease of access to *View From The Edge* experiences. These experiences are all available with no more than a 20 minute walk away from the parking lot. There is a high level of interpretive presentation on-site, through exhibits, signs and personal programs. The Rogers Pass Discovery Centre is the springboard for exploration of the rest of the parks and the historic site. Visitors are offered a personal welcome here, and at the campgrounds and Giant Cedars Day-Use Area, and have a high likelihood of meeting a staff member during their park experience.



Most visitor experiences in the Major Rogers’ Route area are relatively easy, requiring little previous experience. Unique visitor experiences include picnicking in an avalanche path (in summer), walking across an old stone railway bridge and standing at the place where the Trans-Canada Highway was completed.

Visitor experiences are supported by facilities such as campgrounds, the discovery centre, picnic areas and viewpoints, the Alpine Club’s Wheeler Hut, a variety of walking trails, and welcome stations at the park boundaries, Illecillewaet Campground and Giant Cedars.

Trailheads along the corridor in Glacier National Park are the staging ground for day and overnight experiences in the backcountry.

View From The Edge facilities are designed to attract through-travellers to stop and enjoy the parks and historic site. The *Pass Through* experience is also enhanced by the availability of GPS-based driving tours.

Any re-design of existing facilities or design of new facilities will respect the key values that visitors have identified (such a break from driving, uncrowded places, recreational experiences mixed with learning opportunities, and easy access from the highway).

3.0 Rogers Pass National Historic Site

3.1 Rogers Pass * Protected Setting

Rogers Pass is an evolving cultural landscape, set within the protected natural environment of Glacier National Park. Together, the protected in-situ cultural resources and natural setting present the long and storied past of Rogers Pass – stories such as:

- the discovery, exploration and surveying of the pass - the last barrier to completion of the trans-continental railway,
- Glacier - Canada's second national park,
- Glacier House - one of the earliest mountain resorts in western Canada,
- the first Victorian era tourists and mountaineers and the role of the legendary Swiss guides,
- the first North American glacier and avalanche studies,
- the first snowsheds in Canada, the tallest bridge structure in the world at the turn of the last century and the Connaught Tunnel, North America's longest tunnel at the time
- the triumphs and the tragedies of railway operations,
- the completion of the world's longest national highway

All of these stories of human achievement are presented within a setting of tall cedars, hemlocks, fir and spruce, next to rushing glacier-fed rivers, in the shadow of towering peaks, under a coat of heavy snow seven months of the year.

3.2 Rogers Pass * Opportunities for Personal Benefits

Visitors to Rogers Pass National Historic Site can achieve the following benefits, among others: learning about Canadian history, watching the trains, taking a break from driving, resting and relaxing with family

3.3 Rogers Pass * Visitor Experience Levels

The protected places of Rogers Pass National Historic Site are the settings for three levels of visitor experience – the *Pass Through* experience, the *View from the Edge* experience and the *Step into the Wild* experience.

- **The “Pass Through” Experience**

where: on the Trans-Canada Highway or scenic train tour

what: photography, nature and heritage appreciation and learning

“Pass Through” Market Appeal

who: members of all Explorer Quotient segments pass through Rogers Pass on the highway



- **The “View From The Edge” Experience**
where: at day-use areas, campgrounds, trails and the discovery centre
what: camping, walking, hiking, photography, nature and heritage appreciation and learning, scenic driving and picnicking

“View From The Edge” Market Appeal

who: Authentic Experiencers, Cultural History Buffs, Rejuvenators, Personal History Travellers, Gentle Explorers, Cultural Explorers and No-Hassle Travellers

- **The “Step Into The Wild” Experience**
where: on the trails that lead from the historic site into the backcountry
what: walking, photography, hiking, ski-touring and snowshoeing

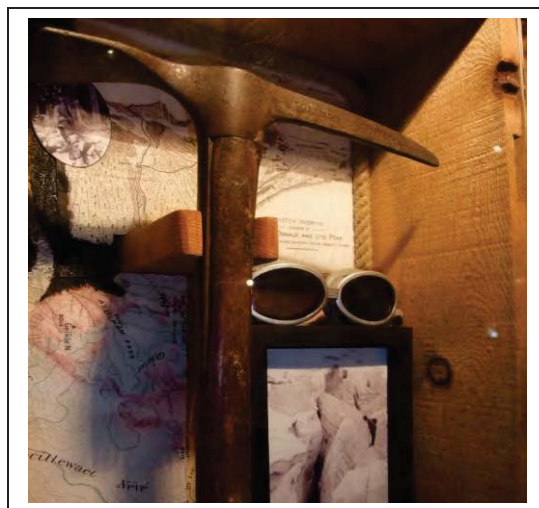
“Step Into The Wild” Market Appeal

who: Authentic Experiencers, Rejuvenators

3.4 Rogers Pass * Area Management

As a key *Pass Through* and *View From The Edge* visitor experience area, there is a high level of facility development and a high level of visitor services in Rogers Pass. The historic site and the rest of Major Rogers Route are the only places in the parks or historic site that offer the *Pass Through* visitor experience.

The visitor experience in Rogers Pass is designed around easily accessible learning opportunities. *View From The Edge* experiences are available on the 1885 Trail, Abandoned Rails Trail, Glacier House Trail and Loop Brook Trail – all short self-guiding interpretive trails. The Rogers Pass Discovery Centre is the springboard for exploration of the historic site. Visitors are offered a personal welcome here and at the campgrounds, and have a high likelihood of meeting a staff member during their park experience. Personal interpretive programs are offered all summer long within the historic site, with many offered right at the campgrounds.



Most visitor experiences in the historic site are relatively easy, requiring little previous experience. In addition to the discovery centre, campgrounds and trails, four day-use areas offer opportunities to get up close and personal with the historic and contemporary

railway lines. The historic site is also the staging ground for *Step Into The Wild* hiking, climbing and ski-touring opportunities in the backcountry, many of which follow the century-old access routes built by the Swiss guides of Glacier House.

Any re-design of existing facilities or design of new facilities will respect the key values that visitors have identified (such as peace and quiet away from the highway corridor, uncrowded places, historic learning opportunities crossed with recreational experiences, and easy access from the highway). The appearance of the Parks Canada operational compound at the summit of Rogers Pass detracts from the quality of the visitor experience and will be addressed.

4.0 Meadows in the Sky Area

4.1 *Meadows in the Sky * Protected Setting*

The Meadows in the Sky setting is a natural and cultural landscape, weaving together the nature of the Columbia Mountains and the heritage of the people who live here

The Meadows in the Sky area protects three ecological regions: “rainforest” – “snowforest” – “no forest” - the area includes the interior cedar-hemlock lifezone, the subalpine lifezone and the alpine lifezone

The area is home to mountain caribou, black and grizzly bears, wolverines, deer, migratory and resident birds, and many species of amphibians and reptiles including the Coeur d’Alene salamander

Snow is a major element of the setting, with deep snow from the bottom to top of the mountain during winter, and snow at the higher elevations until July

The recreational resources of the Meadows in the Sky area are cultural resources in themselves - the parkway follows the original 1911 road alignment, and is the only place in a Canadian national park where visitors can reach a mountain summit by car - the Summit and Lindmark trails are also a century old.

Other cultural resources also define the setting - the Nels Nelsen ski jump dates to the 1916, and is the only place in Canada where world records in ski jumping have been set - historic buildings like the picnic shelters at Monashee and Balsam Lake, the summit firetower and Caribou Cabin, and the site of a World War I internment camp help tell the story of the Meadows in the Sky area

4.2 *Meadows in the Sky * Opportunities for Personal Benefits*

Visitors to the Meadows in the Sky can achieve the following benefits, among others: time with family and friends or time alone, peace and quiet, recreation exercise and leisure, learning and discovery, wonder and amazement, rejuvenation escape and rest

4.3 *Meadows in the Sky * Visitor Experience Levels*

The protected places of the Meadows in the Sky area are the settings for two levels of



visitor experience – the *View from the Edge* experience and the *Step into the Wild* experience.

- **The “View From The Edge” Experience**

where: along the parkway and at day-use areas

what: walking, photography, nature and heritage appreciation and learning, scenic driving, horseback riding*, star gazing, picnicking, road cycling, skiing, snowshoeing and tobogganing

“View From The Edge” Market Appeal

who: Personal History Explorers, Rejuvenators, No-Hassle Travellers and Authentic Experiencers

- **The “Step Into The Wild” Experience**

where: on the frontcountry trails

what: walking, photography, hiking, nature appreciation, mountain biking, trail running, skiing and snowshoeing

“Step Into The Wild” Market Appeal

who: Authentic Experiencers, Rejuvenators

4.4 Meadows in the Sky * Area Management

As a key *View From The Edge* visitor experience area, there is a high level of visitor facility development and visitor services in the Meadows in the Sky area.

The Meadows in the Sky area is easily accessible by vehicle from the Trans-Canada Highway, and on foot or by bicycle from the City of Revelstoke. Visitors are offered a personal welcome during the snow-free season, and have a high likelihood of meeting a staff member during their park experience. There is a high level of interpretive presentation, and special events throughout the year.



Most visitor experiences in the Meadows in the Sky area are relatively easy, requiring little previous experience. Unique visitor experiences include summiting a mountain from a vehicle, standing on a ski-jump, photographing sub-alpine wildflower meadows and learning about First Nations heritage.



Visitor experiences are supported by facilities such as the parkway, the gateway welcome station, picnic areas and picnic shelters, viewpoints, the Nels Nelsen Chalet and a variety of walking, hiking and mountain biking trails.

In addition to the facilities above, interpretive exhibits, a shuttle bus, on-site staff and ski-trail grooming are services which support the visitor experience.

The trailhead at the Heather Lake Summit day-use area is the staging ground for day and overnight experiences in the backcountry.

Any re-design of existing facilities or design of new facilities will respect the key values that visitors have identified (such as peace and quiet, uncrowded places, and scenic vistas).

***NOTES**

Backcountry Areas:

reintroduction of mountain biking in the Beaver Valley area will be reviewed through an activity assessment, as part of the Backcountry Plan

Major Rogers Route:

dog sledding in the lower Beaver Valley area will be reviewed through a new activity assessment

Meadows in the Sky Area:

reintroduction of horseback riding on the Meadows in the Sky Parkway will be reviewed through an activity assessment, as part of the Meadows in the Sky Area Plan





PHOTO CREDITS

**Parks Canada
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and

**Verena Blasy
Rob Buchanan
Zuzana Driediger
Roger Eddy
Les Gyug
Guillaume Lansac
Lisa Larson
Mas Matsushita
Rick Reynolds
Alice Weber
Tina Whitman
John G Woods**

