





Yoho National Park of Canada

Management Plan

A UNESCO World Heritage Site

Yoho National Park of Canada

Management Plan

2022

© Her Majesty the Queen in Right of Canada, represented by the President & Chief Executive Officer of Parks Canada, 2022.

YOHO NATIONAL PARK OF CANADA MANAGEMENT PLAN, 2022.

Paper: R64-105/27-2022E 978-0-660-42612-9

PDF: R64-105/27-2022E-PDF 978-0-660-42611-2

Cette publication est aussi disponible en français.

Note to readers

The health and safety of visitors, employees and all Canadians are of the utmost importance. Parks Canada is following the advice and guidance of public health experts to limit the spread of COVID-19 while allowing Canadians to experience Canada's natural and cultural heritage.

Parks Canada acknowledges that the COVID-19 pandemic may have unforeseeable impacts on the Yoho National Park of Canada Management Plan. Parks Canada will inform Indigenous peoples, partners, stakeholders and the public of any such impacts through its annual update on the implementation of this plan.

For more information about the management plan or about **YOHO NATIONAL PARK OF CANADA**:

Yoho National Park of Canada P.O. Box 99 Field BC V0A 1G0

Tel: 250-343-6783 Email: <u>pc.yohoinfo-infoyoho.pc@canada.ca</u> Web: <u>www.parkscanada.gc.ca/en/pn-np/bc/yoho</u>

Front cover image credits top from left to right: Tourism BC / Dave Heath; Tourism Golden / Agathe Bernard; Parks Canada / Ryan Creary bottom: Parks Canada / Nick Fitzhardinge

Foreword



From coast to coast to coast, national historic sites, national parks and national marine conservation areas are a source of **shared pride for Canadians. They reflect Canada's natural** and cultural heritage and tell stories of who we are, including the historic and contemporary contributions of Indigenous peoples.

These cherished places are a priority for the Government of Canada. We are committed to protecting natural and cultural heritage, expanding the system of protected places, and contributing to the recovery of species at risk.

At the same time, we continue to offer new and innovative visitor and outreach programs and activities to ensure that more Canadians can experience these iconic destinations and learn about history, culture and the environment.

In collaboration with Indigenous communities and key partners, Parks Canada conserves and protects national historic sites and national parks; enables people to discover and connect with history and nature; and helps sustain the economic value of these places for local and regional communities.

This new management plan for Yoho National Park of Canada supports this vision.

Management plans are developed by a dedicated team at Parks Canada through extensive consultation and input from Indigenous partners, other partners and stakeholders, local communities, as well as visitors past and present. I would like to thank everyone who contributed to this plan for their commitment and spirit of cooperation.

As the Minister responsible for Parks Canada, I applaud this collaborative effort and I am pleased to approve the *Yoho National Park of Canada Management Plan.*

Inth

Steven Guilbeault Minister of Environment and Climate Change and Minister responsible for Parks Canada

Recommendations

Recommended by:

RHUmm.

Ron Hallman President & Chief Executive Officer Parks Canada

Andrew Campbell Senior Vice-President Operations Directorate

Rick Kubian Superintendent Lake Louise, Yoho and Kootenay Field Unit

Executive Summary

This management plan sets out the strategic direction for Yoho National Park for the next ten years. It replaces the 2010 management plan and provides updated direction for maintaining and restoring **ecological integrity, protecting the park's cultural resources, and providing memorable visitor experiences** and education. The plan presents a vision of the park at its best, and outlines a set of key strategies that will be implemented to help achieve that vision. The management plan was developed with input from Indigenous peoples, stakeholders, park staff and the public.

Yoho National Park was established in 1886. The park protects 1,313 square kilometres of the western slopes of the Main Ranges, representing a portion of the Rocky Mountains Natural Region within **Canada's** national park system. It is also a key component of the UNESCO Canadian Rocky Mountain Parks World Heritage Site.

Prior to European settlement and **the park's** establishment, Indigenous peoples lived on and cared for this land for thousands of years. This management plan recognizes the important role that Indigenous peoples can play in the stewardship of this special place. Parks Canada will work together with the Ktunaxa and Secwépemc peoples to reconnect them to this part of their traditionally used lands and waters, and to weave their perspectives and knowledge into park management.

There are seven key strategies contained in the management plan. These strategies collectively articulate the approach that Parks Canada will take to maintain and restore ecological integrity, integrate Indigenous perspectives, provide memorable visitor experiences that connect Canadians to their natural and cultural heritage, and address the pivotal challenge of climate change. Each strategy includes objectives that describe the desired outcomes to be achieved. Objectives are followed by a short list of targets that detail some tangible steps that will contribute to meeting the outcomes. All of these strategies work together in an integrated fashion, and are intended to be applied on a park-wide basis, so they need to be considered as a whole.

The seven key strategies are:

- Conserving Natural and Cultural Heritage for Future Generations;
- True-to-Place Experiences;
- Strengthening Indigenous Relations;
- Connecting With Canadians Within and Beyond the Park;
- Managing Development and Park Communities;
- Regional Connectivity and Landscapes; and
- Climate Change and Adaptation.

The key strategies represent Parks Canada's planned approach to park management for the next five to

ten years. However, Parks Canada will use an adaptive management methodology, where strategies may be refined over time to improve management effectiveness.

The plan also includes specific direction for the upper Yoho and Little Yoho Valley management area, which has important natural and cultural features combined with high visitation and significant public interest. Objectives and targets reflect the application of key strategies to this backcountry area.

A description and map of the park zoning system is included in the plan. Park zoning describes the relative level of protection versus development and use for different areas of the park, and ranges from Zone I – Special Preservation to Zone V – Park Services.

During the development of the plan it became evident that in some cases, more research, data gathering, and planning is required to provide robust management direction. In these cases, the management plan calls for the development of a subsidiary plan, strategy, or program. These include:

- Aquatic Ecosystem Stewardship Plan;
- Human–Wildlife Safety and Coexistence Guidelines and Operating Protocols;
- Species at Risk Action Plan (update);
- Cultural Resource Values Statement;
- Asset Management Plan;
- Visitor Experience Strategy;
- Visitor Use Management Plan for High-use Areas;
- Accessibility and Inclusivity Action Plan;
- External Relations Strategy;
- Strategic Plan for Interpretation;
- Field Community Plan (update);
- Wilderness Management Plan; and
- Climate Change Action Plan and Transition Strategy for Greening Operations.

Where not specified within this plan, the timing, milestones and process for completing each of the above will be identified by park managers subsequent to approval and tabling in Parliament of this park management plan.

The management plan concludes with a summary of a strategic environmental assessment. This assessment included a thorough examination of the potential environmental effects of the direction in the management plan, with a focus on potential cumulative effects. The assessment determined that the strategies, objectives and actions of the plan, taken together, will have positive effects over the life of the plan. No important negative environmental effects are anticipated.

Table of Contents

| Foreword | iii |
|---|-----|
| Recommendations | v |
| Executive Summary | vii |
| 1.0 Introduction | 1 |
| 2.0 Significance of Yoho National Park | 2 |
| 3.0 Planning Context | 4 |
| 4.0 Development of the Management Plan | 7 |
| 5.0 Vision | 7 |
| 6.0 Key Strategies | 8 |
| 7.0 Management Areas | 21 |
| 7.1 Upper Yoho and Little Yoho Valley | 21 |
| 8.0 Zoning and Declared Wilderness Area | 24 |
| 8.1 Zoning | 24 |
| 8.2 Wilderness Area Declaration | 27 |
| 9.0 Summary of Strategic Environmental Assessment | 29 |
| 10.0 References | 31 |
| | |

Maps

| Map 1: Regional Setting | 3 |
|---|----|
| Map 2: Yoho National Park | 5 |
| Map 3: Upper Yoho and Little Yoho Wilderness Area | 22 |
| Map 4: Park Zoning Map | 26 |
| Map 5: Emerald Lake Zoning | 28 |
| Map 6: Lake O'Hara Zoning | 28 |

Appendix

| Appendix A: Habitat Security Model, | Yoho National Park |
|-------------------------------------|--------------------|
|-------------------------------------|--------------------|

х

1.0 Introduction

Parks Canada administers one of the finest and most extensive systems of protected natural and historic places in the world. **The Agency's mandate is to protect and present** these places for the benefit and enjoyment of current and future generations. Future-oriented, strategic management of each national historic site, national park, national marine conservation area and heritage canal administered by Parks Canada supports **the Agency's** vision:

Canada's treasured natural and historic places will be a living legacy, connecting hearts and minds to a stronger, deeper understanding of the very essence of Canada.

The Canada National Parks Act and the Parks Canada Agency Act require Parks Canada to prepare a management plan for each national park. The Yoho National Park of Canada Management Plan, once approved by the Minister responsible for Parks Canada and tabled in Parliament, ensures Parks Canada's accountability to Canadians, outlining how park management will achieve measurable results in support of the Agency's mandate.

Indigenous peoples are important partners in the stewardship of heritage places, with connections to the lands and waters since time immemorial. Indigenous peoples, stakeholders, partners and the Canadian public were involved in the preparation of the management plan, helping to shape the future direction of the national park. The plan sets clear, strategic direction for the management and operation of Yoho National Park by articulating a vision, key strategies and objectives. Parks Canada will report annually on progress toward achieving the plan objectives and will review the plan every ten years or sooner if required.

This plan is not an end in and of itself. Parks Canada will maintain an open dialogue on the implementation of the management plan, to ensure that it remains relevant and meaningful. The plan will serve as the focus for ongoing engagement, and where appropriate, consultation on the management of Yoho National Park in years to come.

2.0 Significance of Yoho National Park

Yoho National Park is within the traditionally used lands and waters of the Ktunaxa and Secwépemc peoples. Prior to the arrival of Europeans, these Indigenous peoples used the area for hunting, fishing and gathering, and for travelling between other sectors of their territories.

Yoho National Park was created in 1886, one year after Canada's first national park was established at Banff. Like many of Canada's earliest national parks, Yoho was established in a time when, through government policy and law, Indigenous peoples were separated from their traditional lands and waters. Enforcement of hunting and gathering prohibitions, combined with other Government of Canada policies such as those restricting the ability of Indigenous people to leave reserves, resulted in their exclusion from the park.

Today the park protects 1,313 square kilometres representing the western slopes of the Main Ranges of the Rocky Mountains Natural Region. The park is bounded by the Continental Divide and Banff National Park to the east, Kootenay National Park to the south, and British Columbia provincial lands to the north and west (Map 1). The park is one of seven parks comprising the Canadian Rocky Mountain Parks World Heritage Site, which encompasses 23,069 square kilometres. Within the park, the Kicking Horse River—including its main headwater tributary, the Yoho River—is designated as a Canadian Heritage River. This is one of the main tributaries of the upper Columbia River watershed, so the park contributes significantly to the conservation of this important international river system.

Yoho National Park attracts visitors from around the world who come to experience its steep mountain peaks, cliffs, glaciers, turquoise lakes, waterfalls and rare fossils. There are more than 400 kilometres of trails that provide outstanding hiking and skiing opportunities. The Trans-Canada Highway and other park roads provide exceptional scenic mountain drives.

The park landscape includes alpine, subalpine and montane ecoregions. The climate is continental, with warm summers and cold winters. Precipitation is gradational, increasing from west to east due to the orographic uplift associated with the Continental Divide. This precipitation pattern produces a deep snowpack in the eastern part of the park. This results in significant avalanche activity, which is an important ecosystem disturbance process that contributes to the diversity of ecological communities.

Park ecosystems support populations of iconic wildlife, including mountain goat, grizzly bear, black bear, lynx, wolverine, wolf, bull trout, westslope cutthroat trout, moose, elk, and mule deer. Approximately 200 species of birds have been observed in the park. The park also includes important subalpine habitat for the endangered whitebark pine.

The Burgess Shale fossil sites are among the most important natural features of the park. They were inscribed as a UNESCO World Heritage Site in 1980. The site was expanded in 1984 and 1990 to include seven parks comprising the Canadian Rocky Mountain Parks World Heritage Site. Important Burgess Shale fossil sites also occur in Kootenay National Park. Burgess Shale fossils preserve in exquisite detail an abundant variety of soft-bodied marine organisms from the Middle Cambrian Period, 508 million years ago. This is one of the world's premier fossil localities. Ongoing scientific research continues to provide crucial information about the nature of these fossil deposits and the early evolution of complex animal life.

In 1881, the Canadian Pacific Railway chose Kicking Horse Pass as their route through the Rockies. Construction commenced that year and was completed in 1886. Subsequent work to reduce the steep grades on the route was completed in 1909 with the opening of the Spiral Tunnels. The village of Field was established as a staging area for the construction of the railway through the pass. In 1886, Canadian Pacific built Mount Stephen House in Field, the first railway hotel in the Canadian Rockies, which helped to initiate the era of tourism and alpine recreation in the area. Kicking Horse Pass National Historic Site was designated in 1971 to commemorate the significance of this location in Canadian transportation history.

Map 1: Regional Setting



In 1908, the Canadian Pacific Railway constructed a log tea house at the foot of Twin Falls in the Yoho Valley as an overnight backcountry accommodation for railway tourists exploring the area. The Twin Falls Tea House was designated a National Historic Site in 1992 for its representation of the rustic design tradition and for its association with early outdoor recreation in the mountain national parks.

In 1922, Swiss guides working for the Canadian Pacific Railway constructed a stone hut on the Continental Divide at Abbot Pass to serve as a base for ascents of nearby peaks including Mount Victoria and Mount Lefroy. The Abbot Pass Refuge Cabin, situated on the border of Yoho and Banff national parks, was also designated a national historic site in 1992 for its representation of the rustic design tradition, and for its association with early outdoor recreation in the mountain national parks. This national historic site has been negatively impacted by the effects of climate change. Slope erosion and glacial recession have caused structural damage to the hut despite extensive stabilization efforts and interventions made to preserve the structure. Consequently, Parks Canada has made the difficult decision to dismantle and substantially remove the Abbot Pass Refuge Cabin from its current location.

The construction of the railway also led to the discovery of lead, zinc, and silver deposits in the area in 1884. Two underground mines were developed east of Field: the Kicking Horse Mine on Mount Field and the Monarch Mine on Mount Stephen. Production from these mines commenced in 1888 and continued until 1952. The mines were abandoned in 1954, and all salvageable material was removed by 1957. Vestiges of this mining history remain visible to park visitors today.

The park contains significant cultural resources. There are 177 known archaeological sites in the park, including 11 pre-contact Indigenous sites. More than 5,600 artefacts from these sites have been collected and catalogued. Eleven buildings have been recognized by the Federal Heritage Buildings Review Office for their cultural significance. The Canadian Pacific Railway station in Field is designated a federal Heritage Railway Station. Two national historic persons are commemorated in the park: Édouard-Gaston Deville, Surveyor General of Canada from 1885 to 1924 who developed the mapping technique known as photogrammetry, and Elizabeth Parker, who was instrumental in the creation of the Alpine Club of Canada.

3.0 Planning Context

Modern-day Yoho National Park lies within part of the traditionally used lands and waters of the Ktunaxa and Secwépemc peoples. The importance of strengthening relationships with Indigenous communities is one of the key issues identified in the *State of the Park Assessment* (Parks Canada 2018). This requirement is being addressed through collaborative efforts aimed at establishing working relationships between Parks Canada, the Ktunaxa Nation and five communities of the Secwépemc Nation, namely the Shuswap Band, Splatsin, Neskonlith Indian Band, Adams Lake Indian Band, and Little Shuswap Lake Band. The intent is to increase the inclusion of Indigenous perspectives in park management, and to work together on initiatives of mutual interest to support the Government of Canada's commitment to reconciliation.

Yoho National Park is bisected by the Trans-Canada Highway and the Canadian Pacific Railway, both of which follow the Kicking Horse River Valley for most of their route (Map 2). The highway provides easy access for visitors to the otherwise rugged topography of the park and is the main road link between British Columbia and the rest of Canada. Annual traffic volume is more than 2.7 million vehicles (59 percent passenger vehicles, 41 percent trucks/buses)¹, with average summer traffic volume of over 14,000 vehicles per day. The park provides opportunities for visitors to connect with the unique natural and cultural heritage of the Rocky Mountains on the west side of the Continental Divide. Visitation to Yoho increased by an average of 3.1 percent per year between 2011 and 2020, reaching a total of 700,900 in 2019–20. The majority of these visitors stop at one or more of the scenic destinations in the park such as Takakkaw Falls, Emerald Lake, and Wapta Falls. These features are all located at the terminus of

¹ Data from Parks Canada traffic counters; analysis by McElhanney Engineering.

Map 2: Yoho National Park



secondary roads. Consequently, the potential for traffic congestion and visitor crowding is a concern. Managing increasing demand is one of the key issues identified in the *State of the Park Assessment*.

The village of Field is located along the Trans-Canada Highway in the centre of the park. The Yoho Visitor Reception Centre provides park orientation and trip planning information, and interpretive exhibits on the Burgess Shale and Kicking Horse Pass National Historic Site (Spiral Tunnels). It is a busy place during the summer months, and includes a small pond and playground adjacent to the highway.

Between 2016 and 2020, the Government of Canada invested \$141.5 million to support infrastructure work in Yoho National Park as part of the largest federal infrastructure plan in the history of Parks Canada. This investment was used to upgrade Kicking Horse Campground, improve critical highway infrastructure and the Field vehicle bridge, and to develop new staff housing in Field.

The Trans-Canada Highway in the park is an undivided two-lane road, except for a six-kilometre four-lane section at the eastern boundary. The Trans-Canada Highway east and west of the park consists of a four-lane divided highway. A design plan and environmental impact assessment for the twinning of the remaining section of this highway through the park has been completed (Wood 2021). This proposed expansion presents both challenges and opportunities that may influence park management over the life of this management plan.

The Canadian Pacific Railway also bisects the park, with the route closely following the Kicking Horse River for much of its length. The majority of trains travelling through the park are transporting freight to and from the Port of Vancouver. Commodities regularly carried include hazardous goods and potential wildlife attractants such as grains and legumes. Specialized passenger sightseeing rail service is offered by the Rocky Mountaineer during snow-free months, although there is no opportunity for visitors to disembark in the park.

The presence of these two national transportation corridors through the principal river valley of the park presents challenges for park management. Wildlife mortality due to vehicle strikes on both the highway and railway is an important issue. The transportation of hazardous materials through this mountainous corridor heightens the risk of toxic spills and environmental contamination. Both corridors also act as vectors for the introduction of non-native vegetation.

Important conservation challenges identified in the *State of the Park Assessment* (Parks Canada 2018, 2019a) include the need to improve the ecological integrity of both forest and aquatic ecosystems. Fire suppression throughout most of the 20th century has created a forest that is less diverse than expected in both age and species composition. This older, more uniform forest is more vulnerable to catastrophic wildfire, insects and disease. Forest ecosystems may also be affected by climate change in various ways, including alteration of the fire regime, changes in species composition and distribution, and a shift toward more open forest types over time. Returning fire to the landscape is important to initiating the process of forest ecosystem restoration and adapting to climate change.

Aquatic ecosystems have also been affected negatively over a period of decades by the stocking of nonnative fish, and the loss of aquatic connectivity due to historic road and rail construction practices that created barriers to fish passage on many streams. Restoring the ecological integrity of aquatic ecosystems will require improvements to aquatic ecosystem connectivity and the restoration of native fish species in key habitats.

Climate change will present a significant challenge to the park over the next decade. Surface air temperatures in the region have risen by 1°C over the past 100 years (Walker and Pellatt 2008). Climate change models predict an increase in annual mean temperature for the park of 4°C to 8°C and an annual increase in precipitation of 200 to 300 millimetres by 2100². Changes of this magnitude will require adaptive responses to address potential impacts on the natural and cultural resources of the park.

² Using RCP 8.5 and a composite projection of four Global Circulation Models: CanESM2, CESM1CAM5, HADGEM2ES and MIROCESM (1980–2010 baseline); Parks Canada, 2017.

Regional landscape connectivity and ecosystem function is potentially affected by land use pressures both within and beyond park boundaries. The Town of Golden, located 20 kilometres west of the park, is dependent on resource industries and tourism. Forest harvesting, accompanied by extensive road development, is an important economic activity occurring near the western and northern park boundaries. Adventure tourism operations are expanding in the region, and include lodge-based and day trip heli-skiing, heli-hiking, heli-biking, snowmobiling, off-road vehicle tours, mountain biking, ski touring, and hiking. Two open-pit silica mines have been developed in the Columbia Valley west of the park boundary. Collaborative efforts will be required to protect biodiversity and maintain regional landscape connectivity.

4.0 Development of the Management Plan

This plan was developed concurrently with the management plans for Kootenay, Banff, Jasper, Waterton Lakes, Mount Revelstoke and Glacier national parks, as these places share many of the same challenges, opportunities, stakeholders and visitors. This synchronized approach allowed for landscape-level **coordination for protecting resources, managing visitor use and other key aspects of Parks Canada's work**. The plan was developed with input gathered during two phases of engagement from the Ktunaxa Nation, Secwépemc Nation (Shuswap Band, Splatsin, Neskonlith Indian Band, Adams Lake Indian Band, and Little Shuswap Lake Band), stakeholders and the general public. During the first phase of engagement in 2019, the **Let's Talk Mountain Parks** online platform provided background information on the 2018 *State of the Park Assessment* and the management plan review process, and sought input on the park vision, issues and opportunities. Additional engagement activities specific to Yoho National Park included discussions with Indigenous groups, stakeholder workshops in Golden and Field, outreach events at Kicking Horse Mountain Resort and the Golden Farmers' Market, and a webinar with Campus Club members at Vancouver Island University.

During the three-month engagement period, more than 400 people were actively engaged on the Yoho National Park pages of **Let's Talk Mountain Parks**. Canadians shared a wide variety of ideas and perspectives on issues and opportunities, both in person and online, ranging from broad landscape-level conservation to specific operational input. All feedback was considered in the development of the draft management plan.

In the second phase of the engagement program, the draft management plan was offered to Indigenous communities, stakeholders and the general public for further review and comment. Valuable input was received from representatives of the Secwépemc Nation and the Ktunaxa Nation. This second phase public and stakeholder engagement program ran for a three-month period from April to July 2021 on the **Let's Talk Mountain Parks** website and included a survey and other engagement tools. Parks Canada also hosted numerous online video conference sessions to present the draft plan and gather input. More than 500 comments and suggestions were received during this engagement. All input received from Indigenous communities, stakeholders and the public was analyzed and considered in the preparation of this final management plan.

5.0 Vision

In the desired future of Yoho National Park, Ktunaxa and Secwépemc peoples—who have been connected to this place for thousands of years—continue to be part of the land, guided by their traditional laws and stewardship, and have a meaningful role in the management of this special area.

Forest ecosystems influenced by wildfire and other natural processes and cultural practices are of varied composition and age, making them more resilient to the effects of climate change. A diverse array of native wildlife has secure habitat and movement pathways connected to regional landscapes. Native fish

and other organisms move freely through aquatic ecosystems that are not affected by pollution, unnatural barriers or non-native competitors.

Visitors to Yoho National Park discover a treasured mountain heritage area where they are able to engage **in activities rooted in the park's** distinct wilderness landscapes, history and cultures. **Yoho's human** history includes ancient Indigenous stewardship, intertwined with European exploration of the continent, settlement and the building of the railway. Visitors are able to learn of the enduring connections of Indigenous peoples to these ancestral lands, and recall the thunder of the railway locomotives as they follow in the footsteps of visitors before them. Visitors to the Spiral Tunnels, Twin Falls Tea House National Historic Site, Kicking Horse Pass National Historic Site, and the village of Field are able to experience tangible cultural resources that preserve a unique sense of place related to this important period in Canada's history.

The Burgess Shale, one of the world's most important palaeontological resources, is recognized as a model of stewardship that supports scientific research, visitor experience and educational outreach. Rigorous protection, controlled access, engaging exhibits and a virtual museum are used together to protect and present these exquisite treasures.

As a key link in the regional ecosystem, Yoho provides critical movement corridors for wildlife, connecting habitat in British Columbia and Alberta. Fire continues to shape the landscape, and visitors have opportunities to witness the process of forest regeneration and learn about the importance of fire in forest ecosystems and its role as an adaptive response to climate change. Collaboration with neighbouring parks and other land managers broadens the impact of individual efforts. The park is recognized for its evidence-based decisions grounded in scientific understanding and Indigenous knowledge, and is an active participant in the conservation and management of the regional ecosystem.

The community of Field thrives in its role as an eclectic and unique mountain town that respects the ecological and cultural importance of its national park setting. The community supports the well-being of residents, and provides accommodation facilities and services that support memorable experiences throughout the park.

Visitors come to experience outstanding nature and culture-based activities, including some of the best alpine hiking, climbing, and ski touring opportunities in North America. Intrepid visitors find opportunities for wilderness adventures requiring skill, experience and self-reliance, while new or more casual visitors are able to experience a taste of adventure supported by safe, accessible and inclusive park facilities. Increasing visitation to the most popular locations in the park is actively managed to provide high-quality experiences based on the park's unique history and landscape, while protecting park ecosystems and maintaining secure habitat for wildlife.

6.0 Key Strategies

The following key strategies outline the broad approaches that will be used to manage Yoho National Park consistent with the mandate of Parks Canada and its inscription as part of the UNESCO Canadian Rocky Mountain Parks World Heritage Site. They describe how the main challenges and opportunities identified for the park will be addressed over the next five to ten years. To implement these key strategies, Parks Canada is committed to working collaboratively with Indigenous Nations who have traditionally used the lands and waters in the area of the park. This work is dependent on the capacity, interests and protocols of those Nations, and Parks Canada will work with them to identify how they want to participate in park management.

Each key strategy includes objectives that describe the desired outcomes. Targets identify tangible steps that demonstrate measurable progress toward achieving each objective. Targets have been prioritized with specific dates where feasible. Where no dates have been referenced, the target will be achievable over the period of the plan based on opportunities, and the priorities and capacity of the Agency. Parks Canada

will report to Indigenous partners, stakeholders and Canadians annually on plan implementation. Barring the unexpected, the commitments in the plan are feasible within the park's funding and human resources capacities. Implementation of these strategies in an integrated manner will move the park closer to achieving the vision for Yoho National Park.

The key strategies represent Parks Canada's planned approach to park management for the next five to ten years. The park, however, is part of a dynamic landscape with natural variability and uncertainties. Consequently, Parks Canada will use an adaptive management approach, where new knowledge, monitoring results, and new technologies may contribute to refining or re-thinking strategies over time to improve management effectiveness.

Key Strategy 1: Conserving Natural and Cultural Heritage for Future Generations

The protection of natural and cultural resources, park landscapes and ecological integrity is core to the **reason for the park's** existence. **Parks Canada's approach to** conserving these important aspects will be guided by an understanding of and respect for significance of place, ecological integrity and cultural values. Knowing that uncertainties exist, Parks Canada's **ecosystem management**, conservation and restoration initiatives will be built on the best available science and Indigenous knowledge, in support of a precautionary, adaptive approach that provides for evolution of management policies and practices based on the monitoring of outcomes.

The maintenance or restoration of ecological integrity is the legislated first priority of park management. This priority has been at the forefront of many innovative initiatives to conserve and restore park ecosystems, from managing fire on the landscape to reconnecting terrestrial and aquatic habitats. This strategy builds on these conservation successes and establishes priorities for components of park ecosystems that require management attention.

In Yoho, restoring the role of fire as a key process in forest ecosystems will be a priority over the next ten years. Through intentional actions such as prescribed fire and managed wildfire, park managers will strive to increase the natural diversity of forests and grassland areas, with a long-term goal of restoring 50 percent of the historic fire cycle. Forests affected by frequent fire will be more diverse in age and composition, which will provide a greater range of wildlife habitat and increase ecosystem resilience to stresses such as insects, disease, and climate change.

Management attention will also focus on improving the ecological integrity of aquatic and terrestrial ecosystems, managing species at risk and non-native invasive species, and maintaining landscape connectivity, especially across the Trans-Canada Highway. Parks Canada will use active management techniques to restore ecosystems where they are degraded. Grizzly bear habitat security models will continue to be used as a tool for maintaining good quality wildlife habitat (see Appendix A). Where the long-term needs of grizzly bear populations are met, it is assumed that the needs of many other wildlife species will also be met.

The mountain parks are rich in human history and cultures. Indigenous stewardship and connection with this place has existed since time immemorial. An era of European exploration began in the 19th century, followed by nation-building, tourism development and the birth of a national conservation ethic in the 20th century. Cultural resources associated with this past and present human use may include built structures, landscapes, objects, stories, songs, art, practices, and other elements of intangible value. Their protection is important as they represent our collective experience and values, and they shape who we are today. Parks Canada will focus on identifying the park's cultural resources and understanding their significance from both a western and an Indigenous perspective. These resources will be cared for responsibly, and presented in a culturally appropriate, accessible manner that gives them meaning in the contemporary world while respecting their historic character.

Objective 1.1: The ecological integrity of forest ecosystems is improved through the restoration of fire disturbance (prescribed fire, managed wildfire), carefully designed forest thinning, native species planting, and control of high-priority non-native vegetation.

Targets

- As the capacity, protocols and interest of Indigenous partners allows, Indigenous knowledge and practices are integrated with western science and climate change studies into forest management and prescribed fire plans. Knowledge integration will begin with the initiation of collaborative round table discussions with Ktunaxa and Secwépemc peoples.
- By 2030, through prescribed fire and wildfire, 50 percent of the annual expected burned area (587 hectares/year based on long-term fire cycles) is achieved, in accordance with objectives and strategies outlined in the Fire Management Plan (Parks Canada 2019b).
- The trend of the ecological integrity condition measure for fire is stable or improving by 2025.
- Park visitors have opportunities to witness and learn about Indigenous burning practices and the role of fire in the ecosystem during prescribed fire events and in park interpretive programs.
- The ecological integrity condition measure for non-native invasive plants shows an improving trend in the next *State of the Park Assessment*.

Objective 1.2: The ecological integrity of aquatic ecosystems is improved through restoration of connectivity and recovery of native fish species.

Targets

- An aquatic ecosystem stewardship plan is prepared by 2022 that outlines conservation priorities and management strategies to improve the ecological integrity of aquatic ecosystems.
- Barriers to fish passage are eliminated on streams where this will not increase access for nonnative fish, as opportunities arise related to future upgrades on the Trans-Canada Highway.
- Two water bodies (lakes or stream segments) are restored to their natural condition through applied research and restoration techniques.
- Programs are implemented to monitor and detect aquatic invasive species on recreational boats and gear to prevent their introduction to park waterways.
- Targeted visitor education and public awareness strategies are developed together with adjacent mountain parks to reduce the risk of spreading aquatic invasive species.
- Over the life of this plan, aquatic ecosystem indicators are stable or increasing.
- Parks Canada's leadership targets for wastewater effluent are achieved, and biological monitoring results remain within reference conditions, indicating that human waste throughout the park is effectively managed to maintain the ecological integrity of aquatic ecosystems.

Objective 1.3: The status of local populations of species at risk is improved through park conservation measures that promote species recovery and address known threats, including climate change considerations.

Targets

- Recovery measures for species at risk (whitebark pine, little brown myotis, olive-sided flycatcher) outlined in the *Multi-Species Action Plan for Yoho National Park of Canada* (2017) are implemented.
- The action plan is updated regularly to reflect the current status of species in the park and to identify emerging issues, needs and priorities. Recently listed species (bank swallow, barn swallow, black swift) are incorporated into the plan.
- Park information on species at risk is available for visitors, stakeholders and the public to enhance awareness and understanding, and promote human–wildlife coexistence and compliance with the *Species at Risk Act*.

Objective 1.4: The ecological impacts of human use are addressed by reducing disturbance in key wildlife corridors and other important habitat areas, promoting stewardship among park users, and by active management that mitigates potential impacts and enhances wildlife habitat in selected areas.

Targets

- Human–wildlife safety and coexistence guidelines and operating protocols that describe proactive measures to reduce risk, criteria for intervention, scope of possible response actions, and approach to visitor education are prepared by 2025.
- The potential to implement off-track mitigations to reduce the risk of rail-related wildlife mortality in Yoho National Park is assessed. Methods will be consistent with the recommendations of the Parks Canada–Canadian Pacific Joint Initiative for Grizzly Bear Conservation and may include alternate travel routes or habitat enhancements via prescribed burning or forest thinning.
- Installation of wildlife fencing to reduce highway-related wildlife mortality is completed as part of proposed twinning of the Trans-Canada Highway.
- Wildlife crossing structures designed to maintain terrestrial habitat connectivity based on research and understanding of wildlife movement patterns are built in conjunction with highway fencing.
- Wildlife camera monitoring confirms that crossing structures function as effective movement pathways for medium and large mammals across the Trans-Canada Highway in the park.
- Disturbed sites created during highway construction, such as the Mount Vaux rock storage area, are restored to functional habitat following project completion.
- Current levels of grizzly bear habitat security are maintained or improved in each of the park's Landscape Management Units (LMUs), as reported in the next *State of the Park Assessment*.
- Within the life of this plan, and in collaboration with external researchers, Parks Canada will refine the grizzly bear habitat security model to better consider habitat suitability/importance for a range of sensitive or wary species, with consideration for season, types/levels of disturbance, and connectivity between habitat patches.
- Grizzly bear population trends and female grizzly bear occupancy are stable, as assessed in Yoho, Kootenay and Banff national parks in 2024.
- Mountain goat populations remain stable.
- The Amiskwi and Ice River–Leanchoil trails are reclassified as wilderness routes, and trail maintenance is discontinued to reduce human disturbance in these key connectivity corridors.
- Targeted ecosystem modifications, such as forest thinning or prescribed fires, are used to create habitat designed to attract wildlife away from high human-use areas such as the Field townsite and Emerald Lake Lodge and day-use area.

Objective 1.5: Cultural resources are identified, documented, and protected in ways that respect their diverse origins, and their past and present significance.

- As the capacity, protocols and interest of Indigenous partners allows, the inventory of cultural sites and objects in the park that are important to Indigenous communities with ancestral ties to the area is updated, and the protocols and practices for their management are improved.
- By 2030, the inventory of known cultural resources in the park is reviewed, validated and integrated into the park geographic information system.
- A schedule for condition monitoring of cultural resources is established, and a consistent reporting program is created to assess and measure change or degradation of cultural resources over time.
- Collaborative research projects are developed that contribute to the understanding of the variety of cultural resources in the park, including tangible and intangible resources and cultural practices.
- By 2028, built heritage condition assessments and building conservation maintenance plans are completed for all federal heritage buildings in the park.
- The condition of the built heritage indicator is improved from poor to fair in the next State of the Park Assessment.
- By 2026, in collaboration with Indigenous groups and others, a Cultural Resource Values Statement that identifies historic themes and cultural resources is completed for the park.

• The practice of cultural resource management is enhanced through collaboration with others in the contiguous mountain parks to improve knowledge sharing and understanding of broader landscape relationships.

Key Strategy 2: True-to-Place Experiences

National parks provide exceptional opportunities for Canadians to develop a sense of connection to their natural and cultural heritage. The opportunity to be immersed in nature, history and diverse cultures while surrounded by wilderness and mountain landscapes is truly distinctive. Maintaining the authenticity and quality of this experience while ensuring that visitors understand its uniqueness is central to Parks Canada's mandate. Visitor opportunities will be characterized by ecological sustainability and recognition of diverse visitor motivations and expectations. Activities and communications will be designed to advance understanding and stewardship of natural and cultural resources, encouraging all to share the responsibility of conserving these special places.

In Yoho National Park, visitor satisfaction remains high. However, steadily increasing visitation means that Parks Canada must actively attend to the challenges that come with demand for finite spaces to ensure that visitation levels are sustainable. This strategy focuses on maintaining the outstanding mountain experiences for which the park is known, supported by essential facilities and services that **respect the park's unique sense of place. Successful implementation of this strategy will require the** collaboration and support of stakeholders and partners.

Parks Canada will adapt to changing demand and respond to the needs of visitors in ways that provide equitable access to the nature- and culture-based experiences in the park. Visitor use management approaches will be evidence-based and will contribute to achieving ecological integrity objectives and ensure that visitors have predictable access to safe and enjoyable experiences in a way that advances sound environmental stewardship of this special place. Communication throughout the trip cycle will allow visitors to plan their experiences, be prepared, and arrive with the right expectations.

Visitation will continue to be concentrated in several high-demand areas of the park such as Takakkaw Falls, Emerald Lake, and Field. Carefully controlled visitor access will continue to be managed in the Lake **O'Hara area and at Burgess Shale sites to s**upport protection of unique and sensitive resources. Other popular day-use hiking and sightseeing options will be maintained at Sherbrooke Lake, Wapta Falls, Natural Bridge, Mount Hunter and Hoodoos trails. Park maintenance and trail crew resources will be focused on supporting these experiences. The vast majority of the remainder of the park landscape will be protected in wilderness areas with low levels of human use. Visitation in high-use areas will be managed to reduce traffic congestion, prioritize public safety and provide quality experiences. Infrastructure investments will focus on improving accessibility and creating an inclusive environment for staff and visitors. Whether in busy roadside locations or in remote wilderness areas, visitor facilities will be planned, designed, located and maintained to facilitate quality experiences, support ecological integrity, and provide long-term asset sustainability.

Objective 2.1: Sustainable, well-designed infrastructure and services accommodate appropriate levels of use while protecting park ecosystems.

- Infrastructure design guidelines are adopted for campgrounds, popular day-use areas and trailheads that ensure appropriate facilities are in place—including parking, washrooms, and trailhead signage—to support visitor experience and protect local ecosystems from the impacts of visitor use.
- An asset management plan is developed to identify strategies, resources and actions to optimize asset performance and sustainability, to minimize risks, and to ensure assets effectively contribute to the objectives in this management plan while respecting existing limits to growth as defined by the boundaries of the declared wilderness area.

- Demand for frontcountry camping is addressed by improving efficiency at Monarch and Kicking Horse campgrounds, and by investigating the potential of restoring a portion of the historic camping offer in the western sector of the park.
- The sense of arrival is improved at park entry points to welcome and inform visitors, and help guide them to appropriate locations based on their interests.
- The Lake O'Hara Campground is upgraded to address the deteriorating condition of tenting sites and improve ancillary facilities.
- The effects of light pollution on ecological integrity and visitor experience are reduced by adopting lighting standards established by the International Dark-Sky Association for all new lighting, and retrofitting existing lighting to meet these standards.
- A new day-use facility is created near the western boundary of the park in conjunction with highway upgrades to serve as a welcome and orientation station for eastbound travellers.

Objective 2.2: Visitor use management strategies are developed and implemented where needed to protect park ecosystems and maintain quality visitor experiences.

Targets

- A visitor experience strategy is prepared to identify key visitor markets and desired experience opportunities in the park.
- A visitor use management plan is prepared for areas of high visitation that outlines strategies, tools and appropriate improvements to infrastructure and services to ensure the visitor offer is sustainable.
- The feasibility of developing alternative transportation options to provide access to Takakkaw Falls and Emerald Lake is evaluated prior to 2025.
- The existing suite of visitor use management tools at Lake O'Hara is maintained, including busaccess quotas, area closures, and voluntary trail restrictions used to protect sensitive alpine ecosystems and reduce disturbance in key wildlife movement corridors.
- A random draw reservation system for Lake O'Hara is in place and is monitored to assess its effectiveness and potential for use at other locations.
- Access to Burgess Shale sites is restricted to visitors accompanied by guides working for or licensed by Parks Canada.

Objective 2.3: Accessibility and inclusivity are improved in accordance with the purpose and principles of the *Accessible Canada Act*.

Targets

- An accessibility and inclusivity assessment and action plan is completed over the first five years of this plan to identify and **mitigate barriers within the park's built environment (offices, operational** buildings, frontcountry camping and day-use areas), information and communication technologies, transportation systems, and other park programs and services.
- Adaptive design principles are incorporated into new or refurbished park facilities to ensure they are accessible, in accordance with best practices and standards and in collaboration with persons with disabilities.

Objective 2.4: Sustainable trails, programs, services and backcountry campgrounds provide visitors with a range of high quality opportunities to experience the diversity of the park with options of various duration and difficulty.

- Improvements are made to existing trails, trailhead kiosks, backcountry campgrounds and trail signage where deficiencies have been identified, to support high quality nature- and culture-based experiences and appropriate wayfinding.
- The condition of the Mount Stephen Trail is improved to address ongoing slope failure and trail degradation, and support the Burgess Shale guided hike program to the Mount Stephen Trilobite Beds.

- The Mount Hunter trailhead is relocated to improve visitor safety in conjunction with proposed twinning of the Trans-Canada Highway.
- Park visitor experience opportunities are enhanced with programs developed in collaboration with Indigenous partners that recount the history, culture and practices of Indigenous peoples and provide opportunities to learn about Indigenous culture and practices from Indigenous peoples themselves.
- By 2030, as the interests and capacity of Indigenous partners allows, Indigenous languages are woven into a portion of park trail signs.

Key Strategy 3: Strengthening Indigenous Relations

The Government of Canada has committed to deepen and strengthen relationships with Indigenous peoples. Accordingly, many places administered by Parks Canada are managed through cooperative management bodies or advisory relationships with local Indigenous communities. These structures recognize the important and ongoing roles and responsibilities of Indigenous peoples as stewards of heritage places. With approaches founded on renewed relationships, respect and cooperation, the mountain national parks will continue to recognize Indigenous connections and work with Indigenous peoples to advance priorities of mutual interest.

Yoho was among the first national parks established in Canada, during a time when Indigenous peoples were often separated from their traditional lands and waters. Today, Parks Canada is working to reverse that legacy by recognizing Indigenous connections and building working relationships.

Reconciliation will be given meaning through collaborative approaches that address the interests and priorities of diverse Indigenous groups and cultures. This work will promote the reconnection of Indigenous peoples to their traditionally used lands and waters within the park, support Indigenous voices in sharing Indigenous cultures and histories, support initiatives to protect and care for park lands, and facilitate participation in the economic opportunities associated with this special place. Parks Canada's work with Indigenous communities in Yoho National Park also supports broader Government of Canada initiatives, such as implementation of recommendations by the Truth and Reconciliation Commission, and efforts toward the implementation of the United Nations Declaration on the Rights of Indigenous Peoples.

The delivery of Parks Canada's mandate will be enhanced by bringing Indigenous perspectives into park management and operations, and by working with Indigenous communities to identify and present Indigenous culture, history and stories. The objectives and targets below are intended for implementation throughout the life of this plan, as the capacity, priorities and interests of Indigenous partners allow.

Objective 3.1: Indigenous peoples with traditional connections to the lands and waters within Yoho National Park are engaged in the park through strong collaborative relationships with Parks Canada.

Targets

- Agreements are established with the Ktunaxa Nation and Secwépemc Nation communities (Shuswap Band, Splatsin, Neskonlith Indian Band, Adams Lake Indian Band, and Little Shuswap Lake Band) to help build strong, collaborative working relationships and deepen involvement in park management and operations.
- The Ktunaxa Nation and Secwépemc Nation are engaged in the development of the aquatic ecosystem stewardship plan and future fire management plans.
- Indigenous partners and Parks Canada work together to develop targets to measure the success of this strategy, and to identify projects of mutual interest.

Objective 3.2: Park management is strengthened through the participation of Indigenous communities and the braiding of Indigenous knowledge into park programs and management decisions.

Targets

- Parks Canada works with the Ktunaxa Nation and Secwépemc Nation to understand their interests, values and management objectives for Yoho National Park.
- Based on priorities identified through this work, Indigenous knowledge shared with Parks Canada is woven into ecological and cultural resource management programs.
- Training led by Indigenous peoples to increase awareness and understanding of Indigenous cultures, histories, perspectives and priorities is available for Parks Canada staff and businesses operating in the park.

Objective 3.3: Indigenous partners benefit from economic opportunities associated with the park.

Targets

- Employment, contracting and procurement opportunities consistent with Parks Canada and Treasury Board policies and guidelines are explored with Indigenous partners with traditional ties to the park.
- The potential for Indigenous Guardian programs to contribute to park monitoring and visitor education is explored with Indigenous partners.
- Indigenous partners use the park in meaningful and culturally relevant ways according to their traditional and modern practices.

Key Strategy 4: Connecting With Canadians Within and Beyond the Park

Yoho National Park is part of the heritage of all Canadians. Parks Canada strives to make this natural and cultural heritage better known through engaging programs and educational content that helps to build a sense of connection. As people come to understand this heritage, they will come to value and support national parks in the future, and be inspired to engage in conservation and stewardship activities wherever they may live. This strategy focuses on providing learning programs and services to park visitors while reaching out to Canadians where they live to connect them with this special place. Parks Canada will work to adapt to the changing ways Canadians interact with national parks by providing natural and cultural heritage interpretation in various formats to park visitors, and connecting with other Canadians through the technologies they use wherever they are.

Visitors to the park will have a range of opportunities to observe, learn and participate in interpretation programs that deepen their understanding and connection to this place. Canadians unable to visit will have increasing opportunities to learn about Yoho's protected heritage and Parks Canada's conservation programs. Efforts to reach beyond park boundaries will focus on using technology to reach Canadians in urban centres. By connecting with Canadians who may never visit Yoho National Park, Parks Canada will increase support for the protection of the natural and cultural heritage of these places.

Connecting with park visitors and Canadians who are not in the park will also help to develop ecological and cultural literacy, build support for management actions aimed at preserving natural and cultural heritage, and raise awareness of the need to promote stewardship, strengthen Indigenous relations and adapt to the effects of climate change.

Objective 4.1: Yoho National Park will understand and adapt to the information needs and expectations of Canadians.

Targets

- A strategic assessment of external communications activities is conducted for the park and considers the needs of Canada's evolving population.
- A comprehensive external relations strategy is prepared to provide direction to all external communications efforts in Yoho National Park.

Objective 4.2: Current and engaging educational content and learning programs allow Canadians to develop a sense of shared stewardship and connection to Yoho National Park, its dynamic ecosystems and human stories.

Targets

- A strategic plan to guide personal and non-**personal interpretation of the park's natural and** cultural heritage is developed by 2023.
- Opportunities to increase Indigenous content in park interpretation programs are developed together with Indigenous partners.
- In collaboration with partners, promotional efforts focused on park stewardship, respectful enjoyment of the park, and authentic national park experiences influence visitor behaviour in a positive manner.
- Burgess Shale interpretive displays at the Yoho Visitor Centre are upgraded by 2025 to incorporate the findings of recent and ongoing scientific research.
- New or revised interpretive programs and products are developed to offer diverse and inclusive opportunities for all visitors.

Objective 4.3: Canadians are engaged in learning about Yoho National Park, allowing them to experience and form meaningful connections to the park without visiting in person.

Targets

- Quality outreach programs supported by online platforms and key partnerships reach traditional and new target audiences in the urban centres of Calgary, Toronto and Vancouver.
- Targets are established to measure success of social media, traditional media such as print, radio and television, promotions and outreach.
- Innovative digital media and virtual experiences are developed in response to the needs and expectations of Canadians.

Key Strategy 5: Managing Development and Park Communities

Ecological integrity will be the first priority in park management, including managing development or redevelopment. **Parks Canada's approach will be transparent and consistent, and will continue to respect** limits, zoning and declared wilderness designations. Any development considered must demonstrably support the vision and objectives of each park as described in its park management plan. Development will facilitate greater awareness and connection to natural and cultural spaces and aim to protect for future generations the qualities that make these places distinctive.

Parks Canada has a well-established framework of limits to growth in the mountain national parks, consisting of legislation, regulations and policy dating back to the 2001 amendments to the *Canada National Parks Act*. This framework is a central element of Parks Canada's approach to maintaining or restoring ecological integrity and providing exceptional visitor experiences. The framework includes growth limits for the overall footprint and maximum allowable commercial floor space within townsites (Field); development limits for outlying commercial accommodations (OCA) which prescribe the opportunities, constraints and maximum build-out for each hotel and hostel in the park (OCA Guidelines); the *National Parks of Canada Wilderness Area Declaration Regulations* that apply to 97 percent of Yoho National Park and prohibit commercial development or activities that would impair the wilderness and special preservation zones (see section 8.1). In this regard, Parks Canada is developing new regulations and guidelines to implement a modernized planning permit process to ensure transparent and consistent decision-making when reviewing proposed projects.

As centres for visitor services, townsites in the mountain national parks play an essential role in delivering **Parks Canada's mandate**. There will be continued respect for established spatial and development limits, and national park communities will provide services and facilities that directly support broader park objectives and are characterized by environmentally sustainable practices.

Developed infrastructure in Yoho National Park includes the village of Field, several outlying commercial accommodations, four huts operated by the Alpine Club of Canada, a hostel, the Trans-Canada Highway, the Canadian Pacific Railway, utility corridors, gravel pits, park campgrounds, day-use areas, trails and

backcountry patrol cabins. Many of these facilities provide important staging areas for visitors exploring the park. The majority of these facilities are also located within montane and valley bottom habitat, which is also the most biologically productive. Respect for established growth limits and careful management of activities within these areas are essential to ensuring that these habitats remain ecologically functional.

Wilderness areas will be managed to maintain wilderness character. Wilderness experiences will range from places supported by well-maintained, rudimentary infrastructure such as trails and backcountry campsites, to more remote opportunities requiring a high degree of self-reliance and wilderness travel skills, where there is little or no built infrastructure. Asset investment will focus on supporting key backcountry opportunities in popular areas. Maintaining ecological integrity, wildlife habitat security and movement corridors will be paramount considerations in wilderness areas with little or no infrastructure.

The goal of this strategy is to **ensure that the park's distinctive landscape and wilderness areas are** protected intact for future generations, while allowing for appropriate development that considers the needs of visitors. Yoho National Park will rigorously apply land use and development regulations and policies to ensure the protection of natural and cultural heritage. Parks Canada will also manage existing and proposed commercial guiding services to ensure permitted activities and patterns of use are consistent with ecological and visitor experience objectives.

Objective 5.1: Development and land use is managed using existing tools and other techniques as necessary to ensure the human-use footprint remains within established growth limits.

Targets

- No additional area of park land outside of the Field community boundary is made available under licence or lease for commercial accommodations and ancillary infrastructure.
- New national land use planning regulations are applied to the review of proposed development projects.
- Aggregate resources required for park facility construction and maintenance are acquired in accordance with the *Mountain Parks Aggregate Management Strategy* (2019). External sources are used where feasible, and rehabilitation plans are implemented for in-park sources.
- Infrastructure associated with the Great Divide Lodge (formerly West Louise Lodge) is removed and the site rehabilitated following the termination of the lease in December 2025, or sooner.

Objective 5.2: Wilderness areas are managed to maintain wilderness character and ecological integrity.

Targets

- A wilderness management plan supported by site-specific data is prepared, and defines desired ecological and visitor experience objectives, trail and facility maintenance priorities, and appropriate recreational activities and group use sizes for specific wilderness areas of the park.
- Outdoor recreation activities with minimal impact on park ecosystems and which require few, if any, rudimentary services and facilities are supported.
- Commercial and private horse use occurs in designated areas only, and is managed in such a way as to prevent or minimize environmental impacts and to allow existing impacts to recover.
- The intensity and patterns of wilderness use are monitored to evaluate effects on habitat security and wilderness character.

Objective 5.3: Commercial activities support visitors' connection to the park, enhance appreciation for park ecosystems and human history, and avoid negative ecological impacts and visitor conflicts.

Targets

• In collaboration with other national park field units, the commercial guiding licencing process is reviewed and refined to maintain or improve the quality of guiding services, confirm consistent standards for all guides, ensure fair and equitable opportunities to obtain business licences, and provide a fair return to Canadians.

- Backcountry use by commercial guides is monitored through mandatory annual reporting to determine intensity and patterns of use in order to evaluate effects on habitat security and wilderness character.
- Intensive use of wilderness settings by guided tour groups involving base camps for extended periods is not permitted.

Objective 5.4: The village of Field is a sustainable visitor centre for welcoming and orienting visitors to the park while providing comfortable living environments for eligible residents.

Targets

- Within five years of approval of this plan, an updated community plan for the village of Field is completed. The community plan is consistent with this management plan and the principles of no-net-negative environmental impact, environmental stewardship and heritage conservation.
- Forest fuel management work is implemented in and around the village to reduce wildfire risk.
- The wayfinding and trail network connecting the community with the broader park is improved to enhance ease of exploration.
- The cultural resources related to Field's railway history that contribute to a unique sense of place are protected and presented to help visitors understand and appreciate the village's origins.
- Remaining residential lots are made available for development by eligible residents.
- Remaining commercial space within the legislated limits is made available for potential development to provide services for visitors and residents.
- Wildlife movement corridors around the community are maintained or improved.
- Community spaces are enhanced with landscaping that facilitates public enjoyment, respects the unique sense of place, and reduces invasive plants.
- The feasibility of establishing public transportation links between the community of Field and park facilities such as Kicking Horse Campground, Natural Bridge day-use area, and Emerald Lake is investigated.

Key Strategy 6: Regional Connectivity and Landscapes

The mountain national parks will strive to contribute to landscape-scale conservation in Canada by being ecologically and socially connected across boundaries. Many aspects of park management such as ecological restoration, emergency preparedness, climate change mitigation and adaptation, wildlife corridors, and tourism function over a broad region within and beyond park borders. Parks Canada will aim to maintain and expand regional collaboration to better monitor, understand and address these and other landscape-level issues.

The Government of Canada has established biodiversity goals that include doubling the amount of nature **protected in Canada's lands and oceans, and a commitment to work with others to** restore habitats for **species at risk and to improve Canada's natural envi**ronment. To support these goals, the Government of Canada invested an historic \$1.35 billion in 2018 to support work with governments, Indigenous groups, non-profit organizations and others.

Parks Canada will support this effort by working collaboratively with others in the region to promote landscape-scale conservation, and to help ensure protection and presentation of the Canadian Rocky Mountain Parks World Heritage Site. This work will focus on preserving ecological integrity in the Rocky Mountain region through initiatives such as the restoration of fire as an ecosystem driver, protection of regional habitat and wildlife corridors for wide-ranging species like grizzly bear and wolverine, recovery of species at risk such as whitebark pine and little brown myotis, restoration of native fish, and control of aquatic invasive species. Working with others beyond park boundaries will foster the next generation of park stewards so they can continue to advance landscape-scale conservation in the region.

Objective 6.1: Collaboration with regional partners including government, non-government organizations, Indigenous communities, and local residents supports environmental stewardship, landscape-scale management, coordinated responses to climate change, and biodiversity conservation.

Targets

- Relationships with regional ecosystem partners and land managers are strengthened, and research, data and planning information is shared to support landscape-level conservation planning, connectivity, climate change mitigation and adaptation, cultural resource management, fire and vegetation management, and to address other cross-boundary conservation issues.
- If requested by Indigenous partners, the park provides support for the development of Indigenous Protected and Conserved Areas.
- Programs to prevent the introduction of aquatic invasive species, including rapid response plans, are developed and implemented by Parks Canada and provincial governments.
- Species at risk conservation and recovery measures are implemented together with Indigenous communities with ancestral ties to the park, and other regional partners.
- Regional tourism product development and marketing promotes appropriate park use.

Objective 6.2: Wildlife corridors continue to function as movement pathways for animals travelling between the mountain parks and lands managed by others.

Targets

- Priority wildlife corridors are identified and conserved by working with neighbouring jurisdictions and the forest industry to develop access management strategies that minimize human disturbance within them.
- Winter monitoring of wildlife corridors in the Kicking Horse River Valley is conducted annually, and analysis is completed and reported in the next *State of the Park Assessment*.
- Climate variables are incorporated into corridor function monitoring to assess potential related changes to species composition over time.
- Cooperation on prescribed fire planning, fuel management and implementation supports the maintenance of cross-boundary habitat connectivity.

Key Strategy 7: Climate Change and Adaptation

The mountain national parks were established to protect and represent specific features of Canada's natural heritage. They include some of Canada's most significant landscapes and natural and cultural resources, which are already affected by climate change. As such, these parks offer excellent opportunities to contribute to an understanding of climate change and its impacts over time. Parks Canada is committed to protecting park ecosystems for future generations by demonstrating leadership in sustainable operations and adaptive management in response to climate change impacts. The mountain national parks will continue to collaborate with others on climate change research, monitoring and education.

Climate change is evident in the dramatic recession of glaciers in the mountain parks, but may also be observed in other changes to the landscape and park ecosystems, and degradation of cultural resources. As the climate warms, changes in hydrological flow patterns may occur that can affect various aspects of aquatic ecosystems. Changes in the amount and patterns of winter snow accumulation may alter patterns of avalanche activity, leading to changes in local vegetation patterns. A warmer climate may result in hotter, drier summers with a corresponding increase in the frequency and severity of wildfires and the length of the wildfire season. The area of montane, subalpine and alpine ecosystems may fluctuate. The duration of the summer season may increase, resulting in changes to wildlife movement, habitat use and visitor use patterns. Intense weather events may affect patterns of erosion and deposition, putting park infrastructure and cultural resources at risk, and **straining the park's capacity to maintain safe and** enjoyable opportunities for visitors.

The four contiguous mountain parks protect a vast mountain landscape with considerable variation in both latitude and elevation³. The resulting landscape diversity may provide important refugia for biodiversity as the climate warms and habitats shift.

³ Approximately 3° of latitude separate the northern edge of Jasper National Park and the southern edge of Kootenay National Park. Elevation ranges from approximately 900 metres at the southern edge of Kootenay National Park to over 3,700 metres at the summit of Mount Columbia in Jasper National Park.

The park will continue to monitor key ecological parameters, seek and support Indigenous knowledge and scientific research to identify and understand the scope of local climate changes, and identify potential challenges and opportunities for park management. This will provide the basis for developing and **implementing adaptation strategies that will increase the park's** resilience to the effects of climate change. The park will also demonstrate leadership in combatting climate change by working with others to reduce carbon emissions generated within the park, and by investing in energy efficiency and renewable energy systems.

Objective 7.1: Research and monitoring to enhance understanding of the effects of climate change on key ecosystem parameters is supported within the park and the results are shared with park visitors and Canadians.

Targets

- Indigenous knowledge shared by Ktunaxa and Secwépemc partners regarding changes in local climatic conditions is woven into park planning and operations.
- Monitoring of the areal extent of alpine ecosystems is completed and reported in the next *State of the Park Assessment*.
- Monitoring protocols for mountain goats based on sub-population units and goat survey units are formalized and surveyed every two to three years.
- Monitoring of small mammals (pika), alpine birds, amphibians, and presence of non-native plants is repeated at regular intervals to detect changes in the alpine ecosystem.
- Collaboration with scientists investigating the effects of climate change is increased.
- Results of climate change research are shared with colleagues and are communicated to park visitors through interpretation programs, and to external audiences through social media.

Objective 7.2: The threats posed by climate change to park ecological and cultural resources, infrastructure and operations are mitigated through active management and adaptation based on available scientific research, monitoring, and predictive modelling.

Targets

- Key managers and staff have a basic understanding of climate change adaptation and mitigation, **Parks Canada's** climate change adaptation framework, and green procurement principles, and receive training on the Parks Canada Asset Sustainability and Resiliency Standard by 2023.
- Wildfire risk reduction using FireSmart principles is implemented around all high-value infrastructure to mitigate the predicted increase in wildfire activity due to climate change.
- Risk assessments are completed for other park assets that may be vulnerable to damage or loss from extreme weather events such as floods, windstorms, and debris flows or slope failures, appropriate mitigations are implemented, and emergency preparedness plans are in place.
- The effects of climate change on the park's cultural resources are monitored, threats are identified, and adaptation plans are developed.
- Forest restoration and fire management plans are informed by climate change research and the Parks Canada Carbon Atlas.

Objective 7.3: Carbon emissions from Parks Canada sources within the park are reduced in accordance with the Departmental Sustainable Development Strategy through development of energy efficient infrastructure, use of renewable energy, and programs to encourage reduction of fossil fuel use.

- Climate change and sustainability considerations are integrated into park decision-making, programs and operations through a climate change action plan for Yoho National Park that includes a transition strategy for greening operations.
- By 2023, the carbon sequestration capacity of the park is identified.
- By the end of 2023, a baseline inventory of greenhouse gas emissions for Parks Canada's vehicle fleet and facilities in the park is completed.

- Between 2021 and 2023, 75 percent of the **park's** light-duty vehicle fleet purchases are zeroemission or hybrid.
- A light-duty vehicle fleet replacement plan is prepared by 2023 to facilitate a shift to zeroemission vehicles.
- Additional charging stations for electric vehicles are installed at park facilities that have access to the power grid (Field, Boulder Compound, West gate).
- New or upgraded park infrastructure, including housing, operational spaces and visitor facilities incorporates energy efficient design and technologies, and all new buildings are constructed to meet low carbon standards.
- Carbon emissions associated with park operations are decreased by reducing the use of diesel generators, consolidating office spaces, reducing motor vehicle use by staff and partners, and other innovative approaches.
- The potential for regional transit systems to link local communities with the park and reduce private vehicle use is investigated with partners.

7.0 Management Areas

7.1 Upper Yoho and Little Yoho Valley

The upper Yoho and Little Yoho Valley area consists of the Takakkaw Falls day-use area and campground, and the upstream wilderness area encompassing the watersheds of the upper Yoho and Little Yoho rivers. The Takakkaw Falls day-use area is one of the most popular destinations in the park. It includes picnic sites, washroom facilities, and a trail accessible for all abilities leading to the base of the falls. Roofed accommodation is available at the nearby Whiskey Jack Hostel. The Takakkaw Falls Campground is a walk-in campsite 400 metres from the parking area, providing easy access to overnight accommodation on the edge of a wilderness valley.

The wilderness area upstream of Takakkaw Falls extends eastward to the Banff National Park boundary. The area includes the entire Yoho portion of the Wapta and Waputik Icefields and is bounded on the west by the height of land between the Yoho River and Amiskwi River watersheds. Its boundary to the southwest extends to Yoho Pass and includes the Iceline Trail and the Yoho Lake/Yoho Pass trail (Map 3).

This wilderness area encompasses approximately 17,300 hectares, or roughly 13 percent of Yoho National Park. There are currently more than 6,000 hectares of year-round snow and ice within the area. These icefields, which provide significant input to the Yoho and Kicking Horse River watershed, are receding (Marshall et al. 2011, Demuth et al. 2008).

There are approximately 46 kilometres of designated hiking trails, including popular routes in the forested valleys of the Yoho and Little Yoho rivers, and the Iceline, Kiwetinok Pass and Yoho Glacier trails that climb above the treeline into glaciated alpine terrain. This wilderness area includes four backcountry campgrounds: Laughing Falls, Twin Falls, Little Yoho Valley, and Yoho Lake. The Little Yoho Campground is located within a riparian zone subject to occasional flooding and erosion. Camping facilities at Twin Falls and Laughing Falls are deteriorating and require maintenance.

Roofed accommodation is available at four huts operated by the Alpine Club of Canada (ACC). Year-round accommodation is available at the Stanley Mitchell Hut in the Little Yoho Valley. During the summer months, Twin Falls Teahouse National Historic Site has traditionally offered limited overnight accommodations. A new licence of occupation for this facility has been issued to the ACC for operation as an overnight mountain hut with limited food service. The Louise and Richard Guy Hut and the Scott Duncan Hut both provide accommodation in winter only. Together with the Bow Hut and Balfour Hut in Banff National Park, these huts support two of the most popular backcountry ski traverses in western Canada—the Wapta Traverse, and the Yoho Traverse. All of these facilities are serviced by helicopters that fly in fuel and fly out human waste. There is also a Parks Canada backcountry cabin near the Stanley Mitchell Hut. Wildfire risk reduction work has been carried out around several of these facilities in recent years.



Map 3: Upper Yoho and Little Yoho Wilderness Area

The area is accessed via the Yoho Valley Road which is open from approximately late June to early October depending on snow conditions. This 13-kilometre narrow, winding mountain road provides a dramatic scenic drive, but the popularity of the area means that traffic congestion can be a problem during the short summer season. The road is closed in the winter and becomes a ski route for visitors touring into or out of the valley.

The upper Yoho Valley is within the Yoho/Emerald Landscape Management Unit which currently has an estimated habitat security value of 55 percent, below the management target of 68 percent. Without significant changes to human use this target will not be attained. This is the most popular area in the park for day-use visitation and backcountry camping. Parks Canada will strive to maintain current habitat security by restricting further trail development and maintaining existing low to moderate levels of overnight visitation.

Wilderness Character

Wilderness character is defined by ecological, experiential, and wilderness management objectives, and the associated types of facilities, services and recreational uses that are permitted within a given area. The Yoho and Little Yoho valleys provide easily accessible opportunities for visitors to experience the natural landscape of Yoho National Park. **It includes the park's most popular backcountry camping areas and is** also one of the busiest locations for day hiking. The area protects a natural landscape without roads, where ecological processes function with minimal human management, but within a matrix of moderate to high human use during the summer. Links with neighbouring landscapes preserve ecological connectivity. Parks Canada will manage this area to maintain natural characteristics where the sights, sounds, and smells of wild nature predominate.

The Yoho–Little Yoho Wilderness Area will be managed to maintain the following characteristics:

- a large wilderness landscape maintained in a natural state with minimal intrusion of infrastructure or technology;
- a moderate degree of self-reliance required of visitors during the summer;
- a high degree of self-reliance required of visitors during the winter;
- a well-maintained trail network with designated, hardened campsites and human food and waste management facilities;
- bridges over all major watercourses;
- high human use around Takakkaw Falls, and moderate human presence in the core area in summer, where visitors can expect to encounter other people frequently most days;
- light human presence in the summer on the fringes such as the Yoho Glacier and Kiwetinok Pass trails, where visitors can expect to encounter other people infrequently and opportunities for solitude and feelings of remoteness are possible; and
- light human use during the winter, where solitude is the norm except in the vicinity of the overnight huts, meaning a high degree of self-reliance is required.

Objective 1: Visitor facilities in poor condition are upgraded to improve visitor experience and meet the intent of Key Strategy 2, while ensuring that wildlife corridors and habitat security are maintained or improved consistent with Key Strategy 1.

Targets

- The Little Yoho Valley Campground is relocated from its existing location to a new site in the vicinity of the footbridge over the Little Yoho River.
- Backcountry camping facilities at Twin Falls and Laughing Falls are upgraded to address deficiencies and improve experience for overnight visitors while maintaining current overnight capacity.
- New and innovative solutions to human waste management at backcountry facilities are explored to ensure that sustainable facilities meet demand and prevent or mitigate negative ecological effects.
- The feasibility of relocating the Whiskey Jack Hostel to achieve greater separation from the nearby avalanche path, consolidate the infrastructure footprint and improve overnight accommodation is investigated with partners (including Hostelling International and the Alpine Club of Canada). If implemented, the footprint of a new facility will be within the existing Zones III and IV areas at Takakkaw Falls, or within the village of Field in accordance with Key Strategy 5.
- Facilities at Takakkaw Falls day-use area that are accessible to people with physical challenges are enhanced and promoted.

Objective 2: Robust visitor use data permits a better understanding of visitor use patterns, and a more accurate determination of habitat security values, in support of Key Strategies 1 and 2.

Targets

- Visitor volumes and patterns of use within the area are monitored regularly.
- Traffic volume data is collected on Yoho Valley Road.
- Wildlife and human-use data are assessed to identify potential opportunities to improve grizzly bear habitat security.

Objective 3: Visitors have opportunities to learn about local history, culture, and heritage buildings, in support of Key Strategies 1 and 4.

Targets

• A formal check list for annual monitoring of the Twin Falls Tea House is developed as part of the new licence of occupation as a means to ensure that built heritage and cultural values are maintained.

- By 2025, the interpretation of the historical significance of Twin Falls Tea House National Historic Site is enhanced to improve visitor experience and understanding of this cultural resource.
- Opportunities to reflect local Indigenous heritage using interpretive products and place names are explored with Indigenous partners.
- Information on the heritage value of the Takakkaw Falls patrol cabin is communicated through interpretive materials.

Objective 4: Visitor use management strategies as outlined in Key Strategy 2 are explored and implemented as needed to maintain quality visitor experiences, reduce traffic congestion, and meet ecological objectives.

Targets

- Visitors express a high degree of satisfaction (90 percent or higher) and low perception of negative experiences due to crowding when surveyed.
- A visitor use management plan is developed to document opportunities and challenges and identify strategies and actions, including the potential need for a random draw or other access allocation system for backcountry camping and day-use opportunities.
- A feasibility study of the potential for alternative transportation on Yoho Valley Road is completed.

8.0 Zoning and Declared Wilderness Area

8.1 Zoning

Parks Canada's national park zoning system is an integrated approach to the classification of land and water areas in national parks and designates where particular activities can occur on land or water, based on the ability to support those uses. The zoning system has five categories:

- Zone I Special Preservation;
- Zone II Wilderness;
- Zone III Natural Environment;
- Zone IV Outdoor Recreation; and
- Zone V Park Services.

The zoning plan for Yoho National Park is described below and is illustrated in Map 4. The current zoning plan is unchanged from the version presented in the 2010 park management plan, with the exception of the following housekeeping amendments:

- The Zone III area at the north end of Emerald Lake was refined to correct a mapping inaccuracy.
- The Zone III corridor along the Great Divide Trail (old 1-A Highway) was adjusted to correct an inaccuracy in the buffer width and make it consistent with the adjacent zoning in Banff National Park.

Zone I – Special Preservation

The Zone I designation applies to those areas of the park that are among the very best examples of the features that characterize the natural region, or that support outstanding or rare ecological or cultural features. This zone may also be used to protect areas that are too sensitive to accommodate facility development or large numbers of visitors. Preservation is the primary objective. Public motorized access is not permitted.

Zone I areas in Yoho National Park include the Ice River Igneous Complex, the Burgess Shale fossil sites, and the Ottertail Flats and Leanchoil Marsh wetlands.

The Ice River Igneous Complex is the largest igneous intrusion in the Canadian Rocky Mountains. This igneous rock unit contrasts sharply with the sedimentary rocks that comprise the vast majority of the Canadian Rockies. Even compared to other igneous rocks, the Ice River complex is of unusual composition, consisting of uncommon alkaline rocks such as nepheline syenite, pyroxenite and carbonatite. Blue sodalite, an uncommon mineral often sought by collectors, has been quarried from the complex just outside of park boundaries. The existing upper Ice River trail that bisects this zone is maintained infrequently and provides wilderness recreation opportunities in the upper Ice River valley and Mount Goodsir area. Human-use levels are low, and no additional infrastructure or upgrades will be provided.

The Burgess Shale fossil sites are designated as Zone I areas. These include all known Burgess Shale fossil sites within the Stephen Formation in Yoho National Park. The Burgess Shale preserves in exquisite detail the fossilized remains of a 508-million-year-old marine ecosystem, from a time shortly after the rapid diversification of complex life known as the Cambrian Explosion. The Burgess Shale is recognized as one of the most significant palaeontological localities in the world, and it was inscribed on the UNESCO World Heritage List in 1980. The rarity and scientific importance of these fossils means that they must be strictly protected from theft and vandalism. Visitors may only enter the main fossil sites with a guide from Parks Canada or the Burgess Shale Geoscience Foundation. Parks Canada will continue to support scientific research at these sites for projects approved through the Research and Collection Permit System.

The Ottertail Flats wetlands and Leanchoil Marsh are relatively low elevation, montane wetland features. This is an uncommon ecosystem type in the central Canadian Rockies, and these are the two best and largest examples in the park. The boundary for the Ottertail Flats Zone I area includes the entire wetland portion along the Kicking Horse River south of the Amiskwi River confluence to Finn Creek, excluding the Canadian Pacific Railway corridor and a 100-metre buffer on either side.

Zone II – Wilderness

Zone II includes large areas of natural landscape preserved in wilderness conditions. These areas give visitors an opportunity to experience nature with minimal human intrusion or built facilities. Public motorized access is not permitted.

Most of Yoho National Park is designated Zone II to ensure that large representative landscapes are maintained. Park facilities may include trails, bridges, backcountry campgrounds, alpine huts and Parks Canada backcountry cabins.

Two Remote Avalanche Control Systems installed on Mount Bosworth and Mount Stephen are nonconforming uses within the Zone II area. These systems assist Parks Canada in protecting the Trans-Canada Highway from the impact of destructive avalanches.

Map 4: Park Zoning Map



Zone III – Natural Environment

Zone III areas are managed as natural environments that provide a range of visitor opportunities, often supported by facilities of a basic and rustic nature. Public motorized access is not permitted; however, snowmobiles may be used to set Nordic ski trails, and both helicopters and snowmobiles may be used to service backcountry facilities where permitted by lease or licence agreements.

Facilities within Zone III areas in Yoho National Park include the Takakkaw Falls Campground and dayuse area, Whiskey Jack Hostel, Emerald Lake Nordic Trail area (Map 5), Lake O'Hara Lodge and the Elizabeth Parker Hut (Map 6).

Zone IV – Outdoor Recreation

The Zone IV designation is applied to areas that provide a wide range of visitor activities, supported by frontcountry facilities and park roads. Public motorized access is a primary characteristic of this zone. Zone IV areas in the park include the Trans-Canada Highway and Canadian Pacific Railway corridors, park roads, frontcountry campgrounds and day-use areas.

Zone V – Park Services

Zone V includes those areas of the park where there is a concentration of services and built facilities. The village of Field is the only Zone V area in the park. The Zone V boundary incorporates the community boundary established in Schedule 4 of the *Canada National Parks Act*, along with the cemetery, water reservoir, and associated access road.

Environmentally Sensitive Sites

This designation applies to small areas that are sensitive to development and use that may require special protection. Two areas within Yoho are designated as environmentally sensitive sites:

Wapta Marsh – a relatively high elevation montane wetland located in Kicking Horse Pass. Montane wetlands are rare features on the west slope of the Canadian Rockies.

Emerald Lake vegetation – The moist microclimate around the shaded east side of Emerald Lake supports vegetation communities unique to the mountain parks. Western hemlock, western red cedar, western yew, and grand fir are found in this habitat and are at the eastern limit of their range. Several understory plants that occur here are found nowhere else in the park.

8.2 Wilderness Area Declaration

The intent of legally designating a portion of a national park as wilderness is to maintain its wilderness character in perpetuity. Only activities that are unlikely to impair the wilderness character of the area may be authorized within the declared wilderness area of Yoho National Park. Public motorized access is not permitted. Infrastructure within declared wilderness is restricted to rudimentary facilities such as trails and campsites intended to support wilderness experiences.

In Yoho National Park, the majority of Zone I and Zone II areas have been legally declared as wilderness areas by the *National Parks of Canada Wilderness Area Declaration Regulations* (SOR/2000 – 387). This area encompasses 1,256 square kilometres, or 97 percent of Yoho National Park.

Map 5: Emerald Lake Zoning



Map 6: Lake O'Hara Zoning



9.0 Summary of Strategic Environmental Assessment

All national park management plans are subject to a strategic environmental assessment to understand the potential for cumulative effects. This understanding contributes to evidence-based decision-making that supports the maintenance and restoration of ecological integrity over the life of the plan. The strategic environmental assessment of the management plan for Yoho National Park considered the potential impacts of climate change, local and regional activities around the park, expected increases in visitation and proposals within the management plan. The strategic environmental assessment assessed the potential impacts on different aspects of the ecosystem, including hydrology, aquatic communities, forest vegetation, alpine habitat, whitebark pine, carnivores, and mountain goats.

The management plan will result in many positive impacts on the environment, including the maintenance and improvement of ecological integrity within the park, collaborative initiatives to preserve habitat security and connectivity across the regional landscape, and strategies to lessen the impacts of visitors on the ecology of the park.

Ongoing monitoring, active management and restoration programs within the park will be used to mitigate potential cumulative effects on aquatic communities, whitebark pine ecosystems, hydrological function, and others. For example, the presence of a major transportation corridor through the park has had negative impacts on hydrological function and increases the risk of aquatic invasive species establishment. Future restoration activities planned to increase connectivity concurrent to highway upgrades, and communication strategies to reduce the likelihood of aquatic invasive species establishment will be effective in restoring this ecological parameter, while reducing the impacts of future cumulative effects.

Forest vegetation, carnivores and mountain goats are particularly vulnerable to cumulative effects. Years of fire suppression have had an impact on forest communities, effects which may be further exacerbated by climate change. Yoho will prioritize restoring fire as a key process in forests through wildfire management and implementing prescribed burns. Monitoring has shown large mammal presence on the landscape is at desired levels, and grizzly bear habitat is generally secure in Yoho. Cumulative effects of a major transportation corridor, a townsite, and increased visitation will pose challenges to carnivores over the next ten years. The management plan identifies several objectives under Key Strategies 1 (Conserving Natural and Cultural Heritage for Future Generations), 2 (True-to-Place Experiences) and 5 (Managing Development and Park Communities) to maintain and improve habitat security and connectivity, such as working with partners to reduce mortalities and improve regional connectivity, and managing the intensity of human use in priority areas. There is uncertainty on the status of mountain goats in Yoho, and both visitation and climate change have the potential to impact this species. Continued monitoring and establishment of regional partnerships to support landscape-level conservation will increase their resiliency to climate change stressors.

Yoho National Park is part of the Canadian Rocky Mountain Parks World Heritage Site. The world heritage values for which it was designated were evaluated to ensure the management plan adequately protects them.

Indigenous partners, stakeholders and the public were consulted on the draft management plan and a summary of the draft strategic environmental assessment. Feedback was considered and incorporated into the strategic environmental assessment and management plan as appropriate.

The strategic environmental assessment was conducted in accordance with the *Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals* (2010) and facilitated an evaluation of how the management plan contributed to the Federal Sustainable Development Strategy. Individual projects undertaken to implement management plan objectives at the site will be evaluated to determine if

an impact assessment is required under the *Impact Assessment Act* (2019), or successor legislation. The management plan supports a number of Federal Sustainable Development Strategy goals, namely:

- Greening government;
- Sustainably managed lands and forests;
- Healthy wildlife populations;
- Connecting Canadians with nature; and
- Safe and healthy communities.

Many positive environmental effects are expected, and there are no important negative environmental effects anticipated from implementation of the Yoho National Park management plan.

10.0 References

Demuth, M., Pinard, V., Pietroniro, A., Luckman, B., Hopkinson, C., Dornes, P., and Comeau, L., 2008. Recent and past-century variations in the glacier resources of the Canadian Rocky Mountains: Nelson River system. Terra Glacialis. Special Issue. 27-52.

Marshall, S.J., White, E.C., Demuth, M.N., Bolch, T., Wheate, R., Menounos, B., Beedle, M.J., and Shea, J.M., 2011. Glacier water resources on the eastern slopes of the Canadian Rocky Mountains. Canadian Water Resources Journal, 36:2, 109-134, DOI: 10.4296/cwrj3602823

Parks Canada, 2017. Climate Change Trends & Projections: Mountain Region. Parks Canada Office of the Chief Ecosystem Scientist. 41p.

Parks Canada, 2018. Yoho National Park of Canada State of the Park Assessment. 12p.

Parks Canada, 2019a. Yoho National Park State of the Park Report Technical Compendium. Resource Conservation, Lake Louise, Yoho and Kootenay Field Unit. 197p.

Parks Canada, 2019b. Fire Management Plan 2019: Banff, Yoho and Kootenay National Parks. 75p.

Walker, I.R. and Pellatt, M.G., 2008. Climate change and ecosystem response in the northern Columbia River basin – a paleoenvironmental perspective. Environmental Reviews 16, 113-140.

Wood Environment and Infrastructure Solutions, 2021. Detailed Impact Analysis – Phase IVB, Trans-Canada Highway Twinning, Yoho National Park. 677p.

Appendix A – Habitat Security Model, Yoho National Park

Grizzly bears are widely accepted as an indicator of ecological integrity in mountain ecosystems. Parks **Canada's goal is to maintain a stable to increasing population of grizzly bears and to provide bears with** safe access to available habitat. Grizzly bear habitat is secure when bears have a low probability of encountering humans and can forage with little human-caused disturbance, maintaining their wary behaviour, a trait considered desirable.

Secure habitat areas are defined as areas that are below 2,500-metre elevation, vegetated, greater than 500 metres from high human activity, and have continuous (non-fragmented) habitat equal to or greater than the 9-square-kilometre average daily feeding area for a female grizzly bear.

Habitat security is reported by the Landscape Management Unit (LMU) in Yoho National Park (Figure 1). Each LMU approximates the size of an adult female grizzly bear's home range and is delineated on the basis of current knowledge of grizzly bear distribution and typically encompass watersheds. These landscape units primarily identify contiguous habitat that meets the yearly foraging needs of grizzly bears and helps prioritize areas for management attention.



Figure 1: Landscape Management Units in Yoho National Park

The habitat security model was updated in 2018 using the most recent available data. Table 1 illustrates the results by LMU, and Figure 2 illustrates the results for the whole park. Approximately 13 percent of the land base is considered unsuitable habitat for grizzly bears primarily because it is rock and ice (above 2,500-metre elevation). The 2018 results identify an average of 80 percent of available land across six LMUs as secure habitat. Five LMUs exceeded the minimum management target of 68 percent secure area. The lowest percentage of secure habitat occurred in the Yoho/Emerald management unit (55 percent). The Amiskwi unit had the largest proportion of secure habitat (100 percent).

An average of 19 percent of the land base across all LMUs was not secure because of high human activity. The largest percentage of land base in the zone of human influence occurred in the Yoho/Emerald (39 percent) and Kicking Horse (29 percent) management units. The percentage of land base not secure due to small patch size averaged 2 percent across all LMUs.

| | NON-SECURE* (%) | | SECURE* (%) |
|----------------------|-------------------------------|-------------------------------------|------------------------------|
| Land Management Unit | Human Use (>100 visits/mo) | Patch size too small (< 9km²) | < 100 visits/mo and >9km² |
| Amiskwi | 0 | 0 | 100 |
| Ice River | 5 | 0 | 94 |
| Kicking Horse | 29 | 2 | 70 |
| Ottertail | 24 | 2 | 74 |
| Porcupine | 13 | 0 | 87 |
| Yoho/Emerald | 39 | 6 | 55 |

* Areas > 2500m elevation were excluded



