







# Mount Revelstoke and Glacier National Parks of **Canada State of the Park Assessment** (2018)



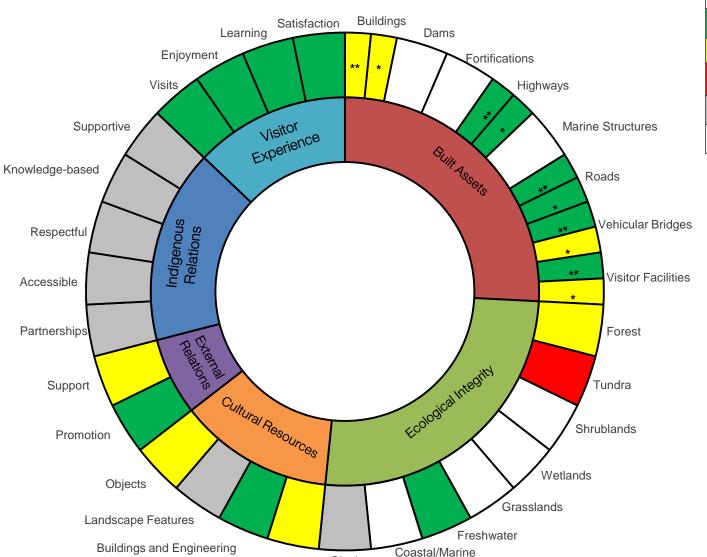
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Date

### Overview of Indicators- Mount Revelstoke and Glacier National Parks

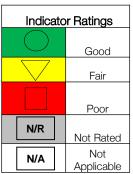


Glaciers

Archaeological

Sites

Works



"State of the Park" assessments are used to communicate the overall condition of key aspects of the park. The results reported in this assessment are based on monitoring data collected by Parks Canada for a suite of indicators used for consistent reporting across Canada's national parks. These assessments are undertaken every ten years to support identifying key management issues to address in the next park management plan.

- \*\* Mount Revelstoke National Park
- \* Glacier National Park

# **Ecological Integrity Indicators**

## **Mount Revelstoke National Park Indicators** Measures **Forest** Invasive Alien Plants Area Burned Condition Class Wildlife Mortality Terrestrial Birds N/R Landscape Change Stream Biotic Health **Freshwater Amphibian Occupancy** Air Quality Aquatic Connectivity Wetlands Surficial Extent N/R **Tundra** Caribou Census Decadal Glacier Inventory Subalpine Wildflower Meadows Whitebark Pine Alpine Terrestrial Birds N/R

#### Overview

Mount Revelstoke National Park (MRNP) presents 15 measures; 6 measures continue from 2007 plus 9 new measures, redistributed into 3 indicators compared to 5 indicators in 2007.

#### Forest Ecosystem

- The Invasive Plants measure is in good condition. With only one year of data, there
  is no reported trend. Native plant communities are intact in sensitive ecological
  areas with invasive alien plants generally limited to disturbed areas, such as
  highway corridors. Active control and monitoring is ongoing for priority species and
  locations as defined in the Invasive and Alien Plant Management Plan (2016).
- The Area Burned Condition Class measure is in fair condition and stable in MRNP.
- The Wildlife Mortality measure is in fair condition and declining. This measure assesses data for highway road kills, as well as other sources of mortality such as the railway. Highway data is the main source of information in this dataset.
- Terrestrial Birds are in poor condition in MRNP. There is limited data to calculate a long-term trend for this measure because this is the first time this analysis has been performed.

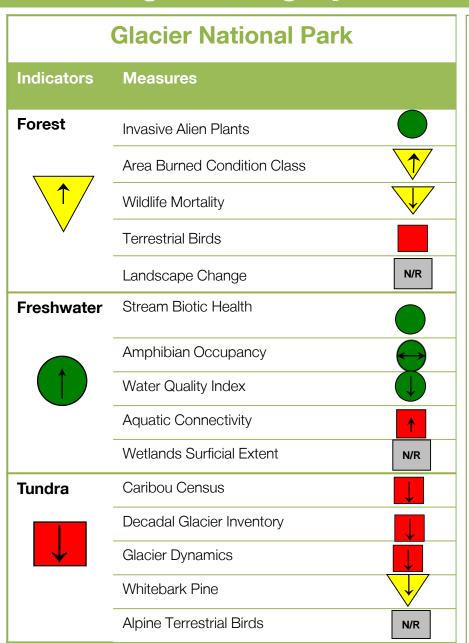
#### Freshwater Ecosystem

- The Stream Biotic Health measure is in good condition. With only one assessment period (multiple sites collected in different years), there is no reported trend. No departure from healthy, natural stream conditions has been detected.
- The Amphibian Occupancy measure is in good condition and stable. Occupancy rates of three pond breeding amphibians (western toad, long-toed salamander, and Columbia spotted frog) are not significantly different than 2009 baseline levels.
- Air quality is fair but declining.
- Aquatic Connectivity is in fair condition and improving. The proportion of culverts with unimpeded stream flow improved from 65% in 2007 to 70% in 2017.

#### Tundra Ecosystem

- Woodland Caribou continue to decline in MRNP due to threats beyond the park boundaries.
- Glaciers are decreasing in both extent and mass.
- The Subalpine Wildflower measure looks at changes in vegetation community composition between 1974 and 2011/12. There is insufficient data to determine a trend at this time.
- Whitebark pine is in fair condition and declining based on infection rates of blister rust and the extent of tree distribution.
- There is insufficient sample size to assess Alpine Terrestrial Birds, at this time. Under development.

# **Ecological Integrity Indicators**



**Note:** See Appendix 1 for Species at Risk Indicators **Sources:** *Information Centre on Ecosystems* 

#### Overview

Glacier National Park (GNP) presents 15 measures; 7 measures continue from 2007 plus 8 new measures, redistributed into 3 indicators compared to 5 indicators in 2007.

#### Forest Ecosystem

- The Invasive Alien Plants measure is in good condition. With only one year of data, there is no reported trend. Native plant communities are intact in sensitive ecological areas with invasive alien plants generally limited to disturbed areas, such as highway corridors. Active control and monitoring is ongoing for priority species and locations, as defined in the Invasive and Alien Plant Management Plan (2016).
- The Area Burned Condition Class measure is in fair condition and increasing in GNP.
- The Wildlife Mortality measure is in fair condition and declining. This measure assesses data for highway road kills, as well as other sources of mortality such as the railway. However, highway data is the main source of information in this dataset.
- Terrestrial Birds are in poor condition in MRNP. There is limited data to calculate a long-term trend for this measure because this is the first time this analysis has been performed

#### Freshwater Ecosystem

- The Stream Biotic Health measure is in good condition with no detected departure from healthy, natural stream conditions. With only one assessment period (multiple sites collected in different years), there is no reported trend.
- The Amphibian Occupancy measure is in good and stable condition. Occupancy rates of three pond breeding amphibians are not significantly different than the 2009 baseline levels.
- The Water Quality Index measure is good but declining. The status is based on assessment guidelines provided by Environment and Climate Change Canada.
   The declining trend is attributed to a 2015 spike in metals and nutrients, such as copper, lead and cadmium exceeding national guidelines, mainly due to hot weather and high snowmelt that year.
- Aquatic Connectivity is in poor condition and improving. The proportion of culverts with unimpeded stream flow and clear of fish barriers improved from 25% in 2007 to 45% in 2017.

#### Tundra Ecosystem

- Woodland Caribou continue to decline in GNP due to threats beyond the park boundaries.
- Glaciers are decreasing in both extent and mass.
- Whitebark Pine is in fair condition and declining based on infection rates of blister rust and the extent of tree distribution.
- There is insufficient sample size to assess Alpine Terrestrial Birds at this time. Under development.

### **Cultural Resource Indicators**

Indicators	Measures		
Archaeological Sites	Archaeological Sites		
Buildings and Engineering Works	Buildings and Engineering Works		
Landscapes and Landscape Features	Landscapes and Landscape Features		
Objects	Objects (Historical)		
	Objects (Archaeological)		

# Rogers Pass National Historic Site is included for reference as it is within Glacier NP but does not require a "State of" Assessment:

The Rogers Pass Commemorative Integrity Evaluation (2002-03) rated the resources of national significance in fair condition with a declining trend. The resources of other heritage value were rated in fair condition. At the time, high level threats having an impact on cultural resources included active wood rot in areas such as timbers in snowsheds and culverts, and severe climate resulting in avalanches and landslides.

#### Archaeological Sites

Documented archaeological sites in the two parks include resources affiliated with railway construction, mountaineering, logging, and mining. There are a total of 185 known sites in Glacier National Park (GNP) and 17 in Mount Revelstoke National Park (MRNP). Archaeological sites are generally stable or slowly declining in condition due to unmitigated environmental factors (e.g. avalanches, rockfalls, vegetation encroachment, and water erosion). Potential impacts to archaeological sites related to new projects are assessed and mitigated. Overall rating for archaeological sites is fair and declining. In GNP, vegetation clearing has been conducted on the 1885 railgrade from the Summit Monument to Loop Brook, including the former site of Glacier House, as well as the access route to Cascade Creek Bridge.

#### **Buildings and Engineering Works**

There are four buildings in the two parks designated as "recognized" by the Federal Heritage Building Review Office: Summit Fire Lookout, Glacier Circle Alpine Hut, Eva Lake cabin, and Arthur O. Wheeler Hut. These are in good condition. Ownership of Glacier Park Lodge and the gas station was transferred to Parks Canada in 2016. In 2017, they were designated "recognized" federal heritage buildings. The buildings were highly contaminated and in poor condition, however, and for public safety and to address historic contamination issues, Parks Canada completed abatement and demolition of the buildings, and site remediation.

In GNP, the surface drainage of the Stone Arch Culvert was upgraded prior to resurfacing. Engineering assessments were conducted for the culvert and Loop Brook Pillars to plan future restoration work. In MRNP, vegetation clearing and site restoration was conducted at the Nels Nelson Ski Jump.

#### Landscapes and Landscape Features

Complementing the "Three Passes" cultural landscape concept, a *Glacier National Park and Rogers Pass National Historic Site Heritage Viewscape Recording and Analysis (2016-17)* was recently completed for viewscapes along the Trans-Canada Highway corridor in GNP. Cultural landscape and landscape features outside of the transportation corridor in GNP have not been formally identified and therefore are not rated at this time.

#### Objects (Historical)

Historical objects (e.g. documents, plaques, equipment) have accumulated and been acquired through donation or purchase over many years. Based on data from the Artifact Information System, the historical objects are in fair condition overall (67% good, 19% fair, 14% poor).

#### Objects (Archaeological)

There are 18,741 objects associated with GNP and 5 associated with MRNP that have been collected through archaeological work in the parks. As these are in the Parks Canada collection, they are in a controlled environment and considered to be fair (stable).

### **External Relations Indicators**

Indicators	Measures		
Promotion	Events		1
Support	Volunteers		<b>**</b>
Promotion (events where contacts were recorded)	2014-15	2015-16	2016-17
Field Unit Outreach Total Contacts	2214	2827	4967 +124%
Vancouver Outreach Team Total Contacts	90,000	99,044	96,310 +7%
TOTAL CONTACTS	92,241	101,871	101,277 +9.7%
Web & Social Media	2015-16	2016-17	2017-18
Facebook Followers (English)		8,297	9,022 <b>+8.7</b> %
Facebook Followers (French)		237	304 +28.3%
Website Page views	936,213	1,073,919	1,223,222 +30.6%
Website Visits	764,485	877,296	712,436 <b>-6.8%</b> *

<sup>\*</sup> Web Trend Note: Website data has only been tracked since 2015-16. Website load balancing was introduced in 2017, negatively affecting reported visit count.

Sources: MRG Outreach, Volunteer, and Partnering data to 2016-17. Facebook InSights 2017 & 2018. Web statistics from National Office Web Team.

#### Overview

Mount Revelstoke and Glacier (MRG) Field Unit takes a proactive approach to External Relations through public outreach, partnering, stakeholder engagement, media relations, and web and social media presence. A good working relationship exists with local communities, Revelstoke and Golden, as well as other local and regional stakeholders. MRG will continue to strengthen regional partnerships and networks to generate and enhance promotional and support opportunities.

Outreach, volunteer, and other programs were significantly different during the Canada 150 celebrations. As a result, data from 2017 has not been included in the indicators.

#### Promotion

- Field unit outreach events, reached an increasing number of Canadians, primarily targeting urban areas, including Vancouver, Kelowna, and Calgary.
- The Vancouver Outreach Team delivers programs about MRG, in addition to several other parks and sites, to urban Canadians in Metro Vancouver.
- MRG works with local destination marketing organizations and Destination BC to reach Canadian, North American and European travellers, and to identify opportunities for collaboration on social media, web, and travel media visits.
- Media coverage of MRG is most frequent in Revelstoke and Golden, but each year several stories are picked up by regional or national media. These stories relate to visitor safety incidents, park management issues, conservation initiatives, as well as travel-related promotions.

#### Support

- Formal partnering agreements (of various types) held by MRG have doubled in number between 2013 and 2017. These include relationships with local and regional partners in program delivery, tourism, infrastructure operations, and conservation priorities.
- Volunteer numbers have remained small (between 12 and 44 volunteers per year) and relatively stable each year. Volunteer hours range between under 100 hours and over 800 hours in any given year, depending on the projects that primarily include supporting special events and research.

# **Indigenous Relations Indicators**

Indicators	Measures	
Indigenous Partnerships	Indigenous Collaboration in Heritage Place Planning and Management	N/R
	Indigenous Collaboration in Heritage Place Operations	N/R
Indigenous Accessibility	Indigenous Partner Access to Heritage Place Traditional Lands & Activities	N/R
Mutual Respect	Team Member Commitment to Building Mutual Respect, Trust and Understanding with Indigenous Partners	N/R
	Extent of Reconciliation with Local Indigenous Communities	N/R
Incorporation of Traditional	Incorporation of Traditional Knowledge	N/R
Knowledge	Use of Indigenous Languages	N/R
Support for Indigenous	Economic Opportunities for Indigenous Peoples	N/R
Communities	Capacity Building for Indigenous Peoples	N/R

#### Geographic Context

Mount Revelstoke and Glacier (MRG) engages 12 Indigenous communities with traditional ties to the parks, all of which are located two hours or more away by car. Geographic distance presents challenges for broad community awareness and participation in day to day operations of the parks.

#### **Partnerships**

Collaborative agreements are currently being negotiated between the Ktunaxa Nation Council and Parks Canada (MRG, Yoho, and Kootenay national parks), and between five Secwepemc bands and Parks Canada, respectively. Once established, each agreement will provide a means to improve communication, understanding and the depth of relationships.

Recent partnership projects include:

- First Footsteps Trail at the summit of Mount Revelstoke: Elders and artists from three nations contributed to an interpretive trail featuring traditional knowledge and art.
- Revelstoke Caribou Rearing in the Wild, a five year pilot project to establish maternity penning for endangered mountain caribou. MRG and Splatsin Band are two of five regional project partners.

Parks Canada is in the early stages of building its relationship with these groups and in understanding their perspectives on these places. The indicators and measures of the relationship between Parks Canada and Indigenous peoples should be collaboratively determined based on shared understanding and evaluation of what is meaningful to both parties. The indicators and measures listed on the left-hand side of this page have not yet been discussed with the groups concerned, so rating at this stage would be premature.

Progress is being made, however, and in recent years Parks Canada and various Indigenous groups have engaged in activities, as noted above, and relationship building has begun.

#### Accessibility and Mutual Respect

MRG has been the location of several Secwepemc events (2015-2017), including elder's tours, cultural days, and large gatherings. MRG staff have received cultural awareness training and waive park fees for anyone who identifies as Indigenous.

#### Support

Parks Canada communicates regularly with local Indigenous groups to share information and explore opportunities to work together. Consultation on Species at Risk Recovery Plans, infrastructure and other projects, led to procurement training sessions, cultural review and the inclusion of Indigenous observers for key infrastructure improvement sites, and harvest of traditional plants.

# Visitor Experience Indicators

Indicators	Measures
Visits	2016/17 Attendance Mount Revelstoke and Glacier National Parks
Enjoyment	Enjoyed Visit
	Satisfaction with Availability of Services
	Satisfaction with Availability of Activities
	Satisfaction with Staff Demonstrating Passion
	Satisfaction with Condition of Facilities
Learning	Learned Something
Satisfaction	Overall Visit Satisfaction
	Satisfaction with Information Prior to Arrival
	Satisfaction with Value for Entry Fee

Source: 2016/17 Visitor Information Program +/- 5.3% margin of error

#### Overview

Results of the 2016/17 Visitor Information Program research indicate that the vast majority of visitors enjoyed their visit to Mount Revelstoke and Glacier national parks, citing the recreational activities available in the parks as being very enjoyable experiences. The top reasons visitors indicated that they were inspired to visit were the natural elements of the parks, the parks' location on a main travel corridor and the range of things to do in the parks.

#### Visits

2017/18 attendance at Mount Revelstoke and Glacier (MRG) National Parks was 789,975 visitors. This represents a 24% increase since 2011/12.

#### **Enjoyment**

98% of park visitors reported enjoying MRG in 2016, up from 92% in the previous Visitor Information Program (VIP) Survey in 2011.

In 2016, 85% of visitors were satisfied or very satisfied with the availability of visitor activities; and 84% were satisfied or very satisfied with the availability of visitor services. Similar satisfaction data was not available in the 2011 VIP report, so ongoing trends cannot be assessed. To address visitor satisfaction and expand the range of activities and services available in the parks, the new Beaver Lodge Children's Bike Park, Nels Nelsen Ski Jump viewpoint/exhibits and two new trailhead washroom buildings were built in 2017.

95% of 2016 visitors were satisfied with staff members' passion for the parks, and 95% were also satisfied with the condition of park facilities. Similar satisfaction data was not available in the 2011 VIP report, so ongoing trends cannot be assessed

#### Learning

78% of visitors reported learning something during their park visit in 2016. This is an increase from the 67% score in the 2011 VIP survey. Four new learning opportunities were added to the parks in 2017.

#### Satisfaction

98% of visitors reported being satisfied with their overall visit in 2016, up from 92% in the previous VIP Survey.

78% of 2016 visitors reported being satisfied with the information available prior to arrival. Detailed data on this satisfaction measure was not available in 2011, so ongoing trends cannot be assessed.

91% of 2016 visitors reported being satisfied with the value for entrance fee. Detailed 2011 data on this measure was not available, so ongoing trends cannot be assessed.

### **Built Assets Indicators**

Indicators	Measures	Mount Revelstoke	Glacier
Buildings	All types		
Dams	none	N/A	N/A
Fortifications	none	N/A	N/A
Highways	Trans Canada Highway		
Marine Structures	none	N/A	N/A
Roads	Special attraction roads and access roads to visitor facilities		
Vehicular Bridges	This includes bridges on the Trans Canada Highway		
Visitor Facilities	Campgrounds, Day-use Areas, Trails, Parking Lots, Pedestrian & Trail Bridges		

#### Overview

Since the last reporting period, an unprecedented program of asset recapitalization has been undertaken, leading to key improvements in asset condition/ratings.

#### **Buildings**

Most buildings in the parks are rated in fair to good condition and recent investments have contributed to the upward trend. In Rogers Pass most buildings are rated fair as they were built in the 1960s and much of their plumbing and electrical infrastructure needs upgrading or replacement. Most of the sewage and storm water management infrastructure in Rogers Pass has been replaced through recent investments. In several situations, buildings were in poor condition and no longer operationally relevant. These buildings, including former staff housing and a carpentry shop in MRNP, underwent abatement and demolition.

#### Highways

Highways in Mount Revelstoke National Park are seeing a steady improvement in pavement condition ratings as a result of rehabilitation, with sections in 'poor' condition now less than 10%. Since 2012, Trans-Canada Highway pavement condition indices have improved from an overall surface rating of poor throughout Glacier National Park to ratings of good to very good in 2017.

#### Roads

Roads in Mount Revelstoke National Park are in good condition and are showing an improving trend. This assessment is primarily due to the significant investment in the Meadows in the Sky Parkway. Roads in Glacier National Park have not seen any significant investment in recent years and as such are showing signs of excessive wear. This is most evident in the road to the Beaver Valley Trailhead.

#### Vehicular Bridges

Bridges and avalanche snow shed structures receive maintenance and rehabilitation work to maintain a fair to good level of service.

#### Visitor Facilities

Visitor facilities in Glacier National Park are rated in fair condition but improving. All of the day use areas along the Trans-Canada Highway, and trails in both the Mount Revelstoke Summit and Illecillewaet areas, have seen significant improvements (2015-18) through Federal Infrastructure Investment funded projects.

Source: Overall Asset Condition from Maximo data, 2018

### **Key Issues** Climate change

decreasing glacial extent and mass will influence volume and timing of glacial fed streams. Wildlife protection Increasing road and railway traffic continue to have negative impacts on wildlife in the parks. Research carried out in Glacier National Park has identified key mitigations to help reduce highway mortality such as wildlife overpasses and/or underpasses, and and conservation wildlife detection signs.

population recovery actions, Parks Canada collaborates with partners and neighbouring land managers.

Shrinking glaciers are a key indicator to help understand the long-term effects of climate change Mount Revelstoke and Glacier

national parks' ecosystems, including changes to the rate of flow of fresh water into lakes, rivers and wetlands. In partnership with UNBC, Parks Canada continues to apply leading edge scientific techniques to study and monitor glaciers. It is expected that

Woodland caribou populations continue to decline due to cumulative landscape changes within and beyond park boundaries, such as habitat loss, degradation, sensory disturbance and fragmentation. Similarly, suspected causes of terrestrial bird condition are due to habitat change within other areas of the migratory range, exacerbated by climate change. To contribute to broader

Invasive species and non-native plants are currently threatening native species and ecosystems in Mount Revelstoke and Glacier

national parks. Other potential threats include white-nose syndrome in bats and whirling disease in fish. Climate change is further

Mount Revelstoke and Glacier National Parks have traditionally been used by the Syilx, Ktunaxa, and Secwepemc peoples. Parks

Canada recognises the rich history of local Indigenous peoples on the landscape and is committed to strengthening relationships

Visitation increased by 24% from 2011/12 to 2017/18. While visitor satisfaction has remained high, increased visitation at peak

times of the summer visitor season are putting pressure on select park facilities and sensitive environments. For many years, our

innovation and efforts, have allowed us to successfully mitigate most impacts through education, enforcement, active management of visitors and wildlife, and various infrastructure upgrades. To address increasing demand, additional management actions will be

and deepening Indigenous involvement in the management of Mount Revelstoke and Glacier national parks. Collaborative

agreements with all three nation groups are pending and will help move forward in the spirit of reconciliation.

exacerbating the spread of invasive species, insects and disease and the impacts are expected to worsen in coming years.

Wildfire is crucial to a well-functioning ecosystem, and improves habitat quality for many species including species at risk like whitebark pine and olive-sided flycatcher. Fire can, however, place visitors, communities, and assets at risk. Through effective fire management, natural fire cycles can be restored while reducing wildfire risk to people, neighbouring communities and assets.

Invasive species, insects and disease

Wildfire

Indigenous Relations

Increasing Visitation

Asset Investment

required.

It is essential to balance the need to maintain and upgrade existing infrastructure with investments in new assets. Safety remains a top priority but visitor satisfaction is also of utmost importance.

• Trans-Canada Highway improvements remain a priority focus for many regional stakeholders. Significant investments have been made to improve reliability and safety through both parks, and twinning may be an opportunity in the future. As visitation increases so does the pressure on and demand for facilities and services. Priorities are to ensure current assets meet visitor needs, and identify opportunities to improve the offer in popular/congested areas.

# **Appendix 1: Species at Risk Indicators**

Species	Conservation target	Outcome
Whitebark Pine	Plant 2,600 blister rust resistant seedlings by 2019	Reached: 1,545 seedlings planted in 2017, 1,100 seedlings planted in 2018.
Endangered Medium level of influence	Ensure more than 60 % of seedling survival after 2 years	Reached: 95% survival after 2 years
	Restore 20 hectares of habitat by 2019 through thinning and prescribed fire	Reached: 0.5 hectares restored in 2017, >20 hectares complete in 2018)
Woodland Caribou (Southern Mountain Population)	Support development of techniques to augment caribou calf survival in the wild.	Reached: Through Revelstoke Caribou Rearing in the Wild partnership annual penned calf survival rate for 2015-17 doubled the survival rate of calves born in the wild.
Threatened Low level of influence	Support status assessment of caribou herds.	Partial: Census flights within the NPs complete. Assessment of regional herd numbers in cooperation with the province of British Columbia ongoing.
	Develop fine scale mapping of caribou habitat.	Partial: Development of fine scale caribou habitat mapping is launched in 2017. Work ongoing.
	Limit human caused disturbance in caribou habitat.	Reached: Annual closure on Mount Klotz, winter overnight camping restriction in MRNP.
	Reduce impact on caribou habitat through fire management planning with the goal to prevent catastrophic fires in caribou habitat.	Partial: Fire management and prescribed fire planning complete. Site preparation for prescribed fires in MRNP and GNP significantly advanced in 2018. Further work to be completed in future years.

#### Changes in species conservation status or trends

There are 13 species in Mount Revelstoke and Glacier National Parks (MRG) listed on Schedule 1 of the *Species at Risk Act*. Three are endangered, four are threatened (including two newly listed species), and six are species of special concern. Five species are currently addressed within MRG's multi-species action plan and two newly listed species will be addressed in 2019.

#### Key information and threats

- Whitebark Pine blister rust, mountain pine beetle, fire suppression and climate change are the major threats facing whitebark pine.
- Caribou Woodland Caribou continue to decline in MRG due to threats beyond the park boundaries. Habitat loss, degradation and fragmentation from both human-caused and natural sources, and increased predation, has resulted in declining numbers of caribou throughout their range. Small populations limit recovery potential.
- Bats The most significant threat to little brown myotis and northern myotis is white-nose syndrome.
- Olive-sided Flycatcher Probable significant threats include reduced availability of insect prey, as well as habitat loss beyond the park boundaries including degradation and fragmentation from both human-caused and natural sources.

#### Results of management actions

- Whitebark Pine Cone caging and collection of seed from potentially rust resistant parent trees within MRG, propagation in a nursery, and planting work is ongoing. These actions will contribute to the recovery of the species.
- Parent trees are also undergoing blister rust resistance trials to confirm resistant status. Habitat restoration through thinning and prescribed fire is planned for 2018.

# **Appendix 1: Species at Risk Indicators (continued)**

Species	Conservation target	Outcome
Maintain access restrictions for the public to protect bats and their residences. Implement decontamination protocols and best management practices to protect against spread of white-nose syndrome for monitoring and research activities.		Ongoing: Access is currently restricted and decontamination protocols are being implemented by all researchers.
	Compile existing data and survey to identify and prioritize sites that have high potential to be hibernacula or maternity colonies.	Reached: Hibernacula, maternity colony caves, and roosts have been identified. Monitoring is ongoing.
Olive-sided Flycatcher  Threatened Low level of influence	Implement prescribed fire to improve and create habitat. Implement at least two fires every five years and maintaining fire disturbance at 20% of natural cycle.	Partial: Site preparation for three prescribed fires is underway with implementation to begin in 2018. GNP is currently at 57% and MRNP is at 11% of their natural fire cycles.

Sources: Information extracted from Biotics and ICE

#### Results of management actions (continued)

Caribou - Parks Canada is a partner in the Revelstoke Caribou Rearing in the Wild initiative which aims to pen approximately 20 female caribou through the calving season on an annual basis. Calf survival rates for the last three years have doubled what is expected in the wild. Fine scale caribou habitat mapping is underway. MRG supports the census of local herds and manages human caused disturbance through area closures and permit conditions. Prescribed fire is used to reduce the potential of catastrophic fires in caribou critical habitat.

Bats - Maintaining access restrictions to bat habitats for the public, maintaining decontamination protocols to protect against the spread of white-nose syndrome for monitoring and research activities, and monitoring bat activity to determine presence of maternity colonies or hibernacula.

Olive-sided Flycatcher - Prescribed fire planning and preparation are underway. Implementation of fires to begin in 2018. GNP currently at 57% and MRNP at 11% of its natural fire cycle.

Completion of recovery documents or other legal requirements

A multi-species action plan has been published for MRG for whitebark pine, woodland caribou (southern mountain population), olive-sided flycatcher, little brown myotis, and northern myotis. Recovery strategies have been produced for olive-sided flycatcher and woodland caribou (southern mountain population), and strategies for the other three species are in draft form. A description of critical habitat has been posted to the *Canada Gazette* for woodland caribou (southern mountain population).

### Legend

Trend\State	Good	Fair	Poor	Not Rated
Improving	1	<b>*</b>	<b>↑</b>	<b>↑</b>
Stable		<b>**</b>	$\longleftrightarrow$	$\leftrightarrow$
Declining	•	<del></del>		<b>+</b>
Not Rated				N/R
Not Applicable				N/A

The 3 categories for Species at Risk reporting:

**Reached**: All actions are completed and conservation target is reached **Partial**: Some actions are completed but conservation target is not yet

reached

Not initiated: No actions have been implemented