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Banff National Park of Canada

State of the Park Assessment (2018)



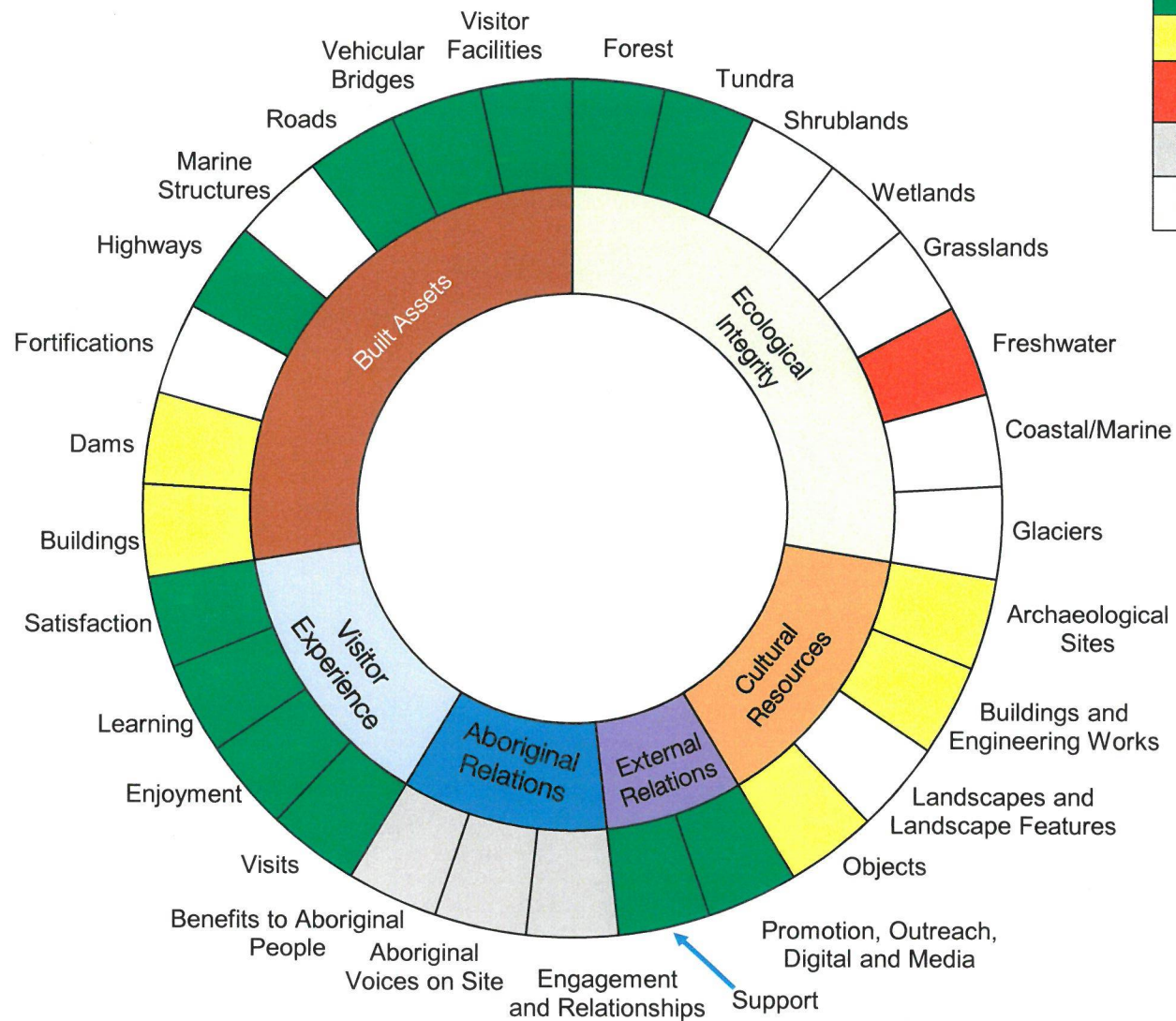
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Date

Overview of Indicators- Banff National Park



Indicator Ratings	
	Good
	Fair
	Poor
	Not Rated
	Not Applicable

Based on monitoring data for a national suite of indicators, "State of the Park" assessments are used to communicate the overall condition of key aspects of the park. These assessments are undertaken every ten years to support identifying key management issues the next park management plan.

Ecological Integrity Indicators

Indicators	Measures	
Forest 	Area Burned Condition Class	
	Non-native Vegetation	
	Terrestrial Birds	
	Multi-species Mammal Occupancy	
	Winter Wildlife Corridors	
Tundra 	Non-native Vegetation	
	Alpine Birds	
	Alpine Extent	
	Sensitive Alpine Species – Goat	
	Alpine Obligate - Pika	
Freshwater 	Connectivity	
	Amphibian Occupancy	
	Lake Fish Index	
	Water Quality	
	Stream Fish Occupancy	

Overview

The long-term ecological integrity condition monitoring program in Banff National Park has changed considerably since the last State of Park assessment in 2008, for greater consistency with national indicators, and to provide a more comprehensive assessment. These changes include a new indicator (Tundra). Because of the relative recency of these changes, 2 measures (Alpine extent and Amphibian Occupancy) are unrated for this report, and there is no direction of change (trend arrow) for some other indicators. However, the indicators and measures are now confirmed and will provide a solid basis for comparative analysis in future reporting. It should be noted that in some cases, improvement to ecological conditions requires action over decades and may not be evident within the 10 year period of the report.

The Forest and Tundra indicators and measures were largely rated as “good”. Only the Area Burned by Condition Class measure is rated as poor, and this rating reflects decades of fire suppression; the effects of which cannot be restored over a 10 year period. Two measures - winter wildlife corridors and goats - rated as fair. Restoration of wildlife movement corridors has progressed steadily over the last decade however, it has not met the ecological thresholds to be rated in “good” condition which compare corridor use to other high functioning corridors (control sites) in the park. For goats as the Sensitive Large Mammal Species, the measure condition reflects a relatively small study area and may not be representative of the park as a whole.

Since the last State of the Park Report, the indicator for the aquatic ecosystem aspects (now Freshwater) and most of the measures that support it have changed. These changes have resulted in more robust data on the total state of the park’s freshwater systems. The overall water quality in the park is rated as good and stable throughout most of the park. Because these changes occurred partway through the 10 year period, there is insufficient data to determine an overall trend.

The poor connectivity rating stems from historically poor culvert design and placement, while the ratings for Lake Fish Index and Stream Fish Occupancy (two measures of native biodiversity) resulted from historical stocking of non-native fish species. Future improvements to the condition of these measures is possible with continued restoration of native species, removal of non-native species, and culvert improvements or replacements. Recent actions such as removal of the 40 Mile Dam, culvert upgrades on the Trans-Canada Highway, and successful removal of non-native fish from Rainbow Lake and Cascade Creek, demonstrate progress on aquatic connectivity, with more work to be done. The unintended introduction of Whirling Disease into Alberta's watersheds presents a new threat to native biodiversity (lake and stream indices) as well as species at risk such as the Westslope Cutthroat Trout.

Note: See Appendix 1 for Species at Risk Indicators Sources: summaries of the objectives, methods, analyses and results for each measure is presented within the Banff National Park 2018 State of Park Report – Technical Summary.

Cultural Resource Indicators

Indicators	Measures	
Archaeological Sites		
Buildings and Engineering Works	Rating is based on a weighted average of Overall Asset Condition (by Current Replacement Value). No trend data is available because this is a revised rating system not applied previously	
Cultural Landscapes and Landscape Features	None identified	N/A
Objects	310 Objects of other heritage value	
	274,342 Objects of other heritage value (Archaeological)	

Overview

There are 14 national historic designations within Banff National Park. These include:

- 2 operational national historic sites
- 4 non-operational national historic site
- 1 non-Parks Canada national historic site
- 2 national historic events
- 2 heritage railway stations
- 1 heritage river
- 2 people of national historic significance

Archaeological Sites

There are 808 archaeological sites in Banff National Park. Most of these are in the main river valleys, but traces of prehistoric occupation have been found throughout the park, including the high alpine areas. By virtue of their location, many of these sites are subject to (and threatened by) natural processes; and some suffer from cumulative effects of development and area use. *No trend data is available because this is a revised rating system not applied previously.* It is anticipated that some natural deterioration over time is occurring.

Buildings and Engineering Works

Banff National Park has 22 Historic Buildings of other heritage value. Concerted investment in protecting these resources in recent years has resulted in 14 of these in good condition and 7 in fair condition. Additionally, 6 historic building conservation maintenance plan completed to ensure long-term protection of these buildings.

Landscapes and Landscape Features

To date, cultural landscape sites have not been identified in Banff National Park, therefore no evaluation has taken place. Identification of key landscapes in future could support Indigenous connections with the land and strengthen historic associations.

Objects

Objects not on display in locations such as the Banff Park Museum, are stored at the Banff CRM Collection and Archives, Parks Canada Winnipeg and Calgary Offices. Trend information is not available for this report, as a complete re-assessment of all objects was not possible. It is anticipated that some deterioration over time is occurring due to lack of specialised storage facilities.

External Relations Indicators

Indicators	Measures	
Outreach	Contacts - "Contact" is defined as a meaningful interaction of at least 30 seconds with Parks Canada staff.	
Digital Communications	Followers, Reach, Engagement, Page views, Impressions (the number of times an ad is displayed through a web, newspaper, mobile medium)	
Media Relations	Requests and responses; coverage in local, regional, national and international media outlets	
Support	Number of volunteers Volunteer hours	

Overview

A key goal of Parks Canada's external relations program is to inform, influence and involve Canadians in opportunities that deepen their understanding of and appreciation for national parks. Since the last State of the Park Report, External Relations activities and efforts have evolved with changing societal expectations and technologies. Accordingly, Banff National Park has shared the results of its programs and achievements in conservation through in-person outreach, media relations, promotional campaigns and a strong web and social media presence that includes 8 social media channels. As a result, the External Relations program in Banff reaches hundreds of thousands of people outside the park, each year. All indicators are rated as "good", with an improving trend.

Outreach

National park content is shared with audiences in Toronto/ Vancouver/Calgary through national social and electronic media stories, in-person activities, and partnered programs with organisations such as the Calgary Zoo, Telus Science World, and the Royal Ontario Museum. The number of contacts varies annually depending on the type of programs / activities implemented, but the overall trend is upward. Outreach efforts are augmented by strong promotional activities and collaboration with the tourism industry given that the regional markets comprise 50% of the park's visitation. Banff National Park invests in promotional campaigns as a means to influence trip planning and visitor behaviour while they are in the park. For instance, in 2016/17 Parks Canada implemented a campaign to increase transit ridership and raise awareness of transit offers and generated 29,000,000 impressions; and in 2017/2018 a winter campaign to increase awareness of planning ahead, resulted in over 1.6 million internet impressions.

Digital Communications

Over the past 10 years, communication approaches have evolved substantially and Parks Canada's approach now includes strategic use of tools such as YouTube, Twitter and Facebook., with significant success. For example, Banff National Park Facebook reach grew to over 8 million people (a 280% increase) while website views reached over 5.8 million (a 20% increase).

Media Relations

Media interest in Banff has increased steadily over the last decade, with Banff featuring prominently in stories across Canada and around the world. This activity is important for Canadians and others to understand the value or national parks and their contribution to the environment and national identity.

Support

Volunteers continue to support the park through on the ground effort.

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 Knowledge	Incorporation of Traditional Knowledge	N/R
	Use of Indigenous Languages	N/R
Support for Indigenous Communities	Economic Opportunities for Indigenous Peoples	N/R
	Capacity Building for Indigenous Peoples	N/R

Overview

Historically the lands that comprise modern day Banff National Park were used by many Indigenous peoples for travel, sustenance, ceremony and trade. Today, the main portion of Banff National Park lies in Treaty 7 Territory, with the far northern parts of the park falling within the areas held under Treaties 6 and 8. The park is also part of the Homeland for the Metis People.

Parks Canada is in the early days of building its relationship with these groups and in understanding their history, interests and perspectives on this lands. 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 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 (in particular with the Treaty 7 Nations and the Metis Nation) have engaged in numerous activities together and relationship building has begun. Some activities include:

- Regular harvesting of medicines, ochre and teepee poles for traditional use
- Settling and implementing Castle Mountain Land Tiber Claim and developing implementation protocols with the Siksika First Nation
- Holding story telling, cultural activities, and ceremonies at various park locations
- Establishing Indigenous youth summer employment opportunities, and awareness training for staff
- Establishing an Indigenous Advisory Circle for the park

Visitor Experience Indicators

Indicators	Measures	
Visits 	Attendance (person-visit) 2011/12: 3,226,979 2017/18: 4,181,856	
Enjoyment  <i>* See below</i>	Enjoyed Visit – 98%	
	Satisfaction with Availability of Services – 96%	
	Satisfaction with Availability of Activities – 94%	
	Satisfaction with Staff Demonstrating Passion – 88%	
	Satisfaction with Condition of Facilities – 95%	
Learning 	Learned Something – 69% (about natural heritage of the place)*	
Satisfaction 	Overall Visit Satisfaction – 97%	
	Satisfaction with Information Prior to Arrival – 92%	
	Satisfaction with Value for Entry Fee – 81%	

Measures with a score of 90% or higher are rated 'green', with the exception of the learning score which, consistent with Parks Canada national direction, is rated 'green' if the score is 60% or higher for national parks.

Sources: Parks Canada Attendance 2011/12 – 2017/18
Visitor Information Program 2011

Overview

The Visitor Experience (VE) indicator ratings are based on results of the 2011 Banff National Park Visitor Information Program (VIP) survey. Scores are in the higher ranges with the exception of the learning measure. This is consistent with other national parks. The park is conducting a VIP survey in 2018, and these results will be used to identify trends, and to verify this assessment and the pertinent issues the Park Management Planning review.

While the current State of the Park results are based on the 2011 VIP survey, recent research conducted partners confirms high visitor satisfaction.

Although the park experiences high visitation and many frontcountry facilities are at or near capacity, visitors are being offered a wide range of opportunities and the quality of the experience is still high. Since 2012, numerous actions have been undertaken to ensure continued quality visitor experiences. As a result, measures with lower scores are expected show improvement in the 2018 VIP survey. Examples of actions implemented include:

- Significant improvements to a wide variety of infrastructure (i.e. campground utilities, washroom facilities)
- Increased staff on the ground to serve visitors at visitor centres, campgrounds and day use areas
- Introduced transit options to and within the park, and other traffic management initiatives
- Improved roadway and parking infrastructure along the Trans-Canada Highway and secondary roads
- Improved campground utility infrastructure, including 31 new o'TENTik units
- Enhanced signage throughout the park

Visits

Visitation increased by 29.6% between 2011/12 and 2017/18. This represents an increase of 954,877 visitors over this period. In 2017/18, Parks Canada's 150th anniversary, park entry was free, and this resulted in visitation greater than at any other location in the Parks Canada system. Visitation continues to increase and be focused on key destinations such as the town of Banff, Lake Louise, Lake Minnewanka and Johnston Canyon.

Enjoyment

98% of visitors enjoyed their visit, surpassing the goal of 90% set in the 2010 Park Management Plan. Satisfaction levels with availability of services (96%), activities (94%) and condition of facilities (95%) and staff demonstration of passion (88%) were high.

Learning

Learning scores were generally lower, consistent with other national parks on this measure. In Banff NP, 69% of visitors learned something about the natural heritage of the place.

Satisfaction

Surveys indicate visitors were satisfied with their overall visit (97%) and with information prior to arrival (92%). Visitors were slightly less satisfied with the value received for their entry fee (81%).

Built Assets Indicators

Indicator	Measure		Overview
Buildings	<i>See note*</i>		Banff National Park (BNP) has 1,279 assets listed in the Parks Canada asset database worth approximately \$2.3 billion. The portfolio is comprised of a wide range of assets as noted in the list below as well as various operational assets such as utilities, grounds, communications, etc.
Dams			Buildings There are 522 buildings within BNP; this includes all operations buildings, museums/exhibits/attraction buildings, staff housing owned by Parks Canada and buildings supporting visitor experience operations. These are rated as in fair condition.
Fortifications	<i>Not applicable – no fortifications in BNP.</i>	NA	Dams Parks Canada operates two dams within the Park, both located on Johnson Lake. A third dam at Lake Minnewanka, is operated by a third party. After post-flood repairs/upgrades in 2013, the dams are in fair condition. The west dam is showing some signs of seepage but remains a low risk
Highways	<i>Good condition. Significant rehabilitation</i>		Highways and Roads Highways within Banff National Park consist of 82 kilometers of four-lane divided Trans-Canada Highway, as well as the northern 10.5 kilometres of Highway 93 South and 122 kilometers of Highway 93 North (the Icefields Parkway). This makes up the single largest component of the asset portfolio and is in good condition. All other secondary, operational and campground roads are grouped in the 'Roads' category, includes roads such as the Sunshine Access Road, the Moraine Lake Road and the Bow Valley Parkway. This category is also rated as 'good'.
Marine Structures	<i>Not Applicable- no locks or marine structures in BNP.</i>	NA	
Roads	<i>Good condition. Considerable rehabilitation underway</i>		
Vehicular Bridges	<i>Good condition. Considerable rehabilitation.</i>		Vehicular Bridges BNP contains 147 vehicular bridges which are mostly comprised of structures on the TCH but not included in the highways component noted above. Significant maintenance has improved the overall condition rating. Individual bridge condition ratings tend to be either good or poor, with very few rated as fair.
Visitor Facilities	<i>Good condition. Significant rehabilitation underway</i>		Visitor Facilities Visitor Facilities includes all campgrounds, trails, parking lots, pedestrian bridges, picnic areas etc. with Banff National Park that directly contribute to visitor experiences (excluding all buildings). Recent actions have improved the overall condition of the park's visitor facilities.

**Note: Asset ratings are based on a weighted average of Overall Asset Condition (by Current Replacement Value). No trend data is available because this is a revised rating system not applied previously*

Key Issues

Aquatic Biodiversity	There are a number of current and anticipated challenges that must be addressed to move Banff's aquatic ecosystems into a better condition. These include: non-native fish impacts on biodiversity in lakes and streams throughout the Park; the likely impacts of whirling disease on native species including West Slope Cutthroat Trout – a Species at Risk; declining populations of native Lake Trout in Lake Minnewanka, the threat of aquatic invasive species, such as quagga muscle and mud snail; and lack of aquatic connectivity impacting native biodiversity by preventing aquatic organisms from accessing key habitats and by disrupting alluvial processes that promote biodiversity.
Climate Change	Climate change can have broad reaching impacts on native biodiversity, habitats, species at risk, prevalence of parasites/disease, distribution and persistence of non-native or invasive species, fire cycles and wildfire risks, hydrology (flood frequency and severity, water quantity), which in turn may affect water quality, nutrient levels, and wastewater management. It may also result in changes to visitation levels and patterns of human use within the park. Current infrastructure, management strategies and operations, and park capacity have not been evaluated in this context. The results may necessitate different approaches to management and monitoring to adapt positively.
Managing Increasing Visitation	While park visitation has continued to rise steadily. This visitation has largely been concentrated at key destinations. For many years, Parks Canada's innovative programs (e.g. transit systems, education and promotion, active management of visitors and wildlife, etc.) have ensured that these increases have not been to the detriment of the park's natural or cultural resources, or to the visitor experience. Some park infrastructure and facilities in key destinations are at or near capacity, so managing further visitation increases will be challenging. Understanding the impacts of increasing visitation for park character, resources, and experience is critical to effective management in the future. Additional or new approaches to addressing demand may be required.
Improving Indigenous Relations and Connections with the Park	After a long history of exclusion of Indigenous Peoples from the park, Parks Canada recognises that Indigenous presence and meaningful participation in the park is key to a successful future, and to offering an authentic experience to the world. There is a long road ahead to build respectful, trusting relationships and for Parks Canada to fully understand Indigenous past, current perspectives, and priorities. Re-establishing this connection of Indigenous groups with their traditional lands is a priority for Parks Canada.

Appendix 1: Species at Risk Indicators

Species	Conservation target	Outcome
Banff Springs Snail Endangered <i>Ability to Influence: High</i>	Maintain self-sustaining populations and habitats Implement Recovery Strategy	Reached - Recovery strategy and designation of Critical Habitat completed. - Reintroduced into two unoccupied habitats. - Ongoing protection, research and monitoring.
Westslope Cutthroat Trout (AB Population) Threatened <i>Ability to Influence: Medium</i>	Protect and maintain pure popn's at self-sustaining levels and re-establish additional pure popn's within historical home range	Partial - Recovery strategy in place. - Research to identify additional critical habitat. - Efforts to reduce impacts of whirling disease. - Aquatic restoration – removal of non-natives. - Education and outreach.
Common Nighthawk Threatened <i>Ability to Influence: Low</i>	Maintain occupancy at confirmed sites in appropriate habitat	Partial - Identified sites protected from potential human use impacts.
Little Brown Myotis Endangered <i>Ability to Influence: Low</i>	Maintain current distribution. Protect known hibernacula and maternity roosts	Partial - Acoustic, visual and net surveys ongoing. - One hibernacula detected and protected. - Known maternity roosts managed. - Limiting human-caused spread of WNS. - Enhanced communications.
Olive-sided Flycatcher Threatened <i>Ability to Influence: Low</i>	Protect individuals and maintain habitat	Partial - Protection of nest sites through application of NPA, SARA and construction BMPs. - Habitat maintenance and enhancement through active management (fire).
Whitebark Pine Endangered <i>Ability to Influence: Medium</i>	Establish self-sustaining, rust-resistant population throughout species range	Partial - Seeds collected and planting begun - Use of prescribed/wildfire to create habitat - Ongoing mapping/protection - Outreach communications
Woodland Caribou (South. Mtn. Population) Threatened <i>Ability to Influence: Medium</i>	Establish stable to increasing numbers for the Jasper/Banff NP Local Population Unit	Partial - Draft critical habitat identified - Supporting caribou conservation initiatives.

Overview

Changes in species conservation status or trends

Banff National Park contains seven SARA Schedule 1 listed species, with five species being listed within the last 10 years.

Key information and threats

Key threats that could negatively influence SAR in BNP include:

- *habitat change due to historic fire suppression, introduction of non-native species and climate change.*
- *lack of basic information on distribution and population status inside the park for bird and bat species*
- *spread of white-nose syndrome within bat species and whirling disease within westslope cutthroat trout*
- *management of park infrastructure containing bat maternity roosts or hibernacula*

Results of management actions

BNP has received extra funding (CoRe) to undertake the following SAR activities:

- *conservation and restoration of WBP, application of prescribed fire to renew habitats, and monitoring of wolves in former caribou habitat.*

Completion of recovery documents or other legal requirements

- *Critical habitat defined for the Banff Springs Snail.*
- *Critical habitat for Whitebark Pine, Caribou and Westslope Cutthroat trout, all in draft form.*
- *Federal recovery strategies completed for flycatcher, BS snail, trout, nighthawk and caribou.*
- *Federal recovery strategies for Little Brown Myotis and Whitebark Pine, in draft form.*
- *Approved SARA Multi-species Action Plan for BNP completed for all 7 species.*

Sources: Information extracted from Biotics and SARA Multi-species Action Plan for Banff National Park of Canada

Legend

Trend\State	Good	Fair	Poor	Not Rated
Improving				↑
Stable				↔
Declining				↓
Not Rated				
Not Applicable				

The three 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