# Waterton Glacier International Peace Park

## 1. World Heritage Property Data

### 1.1 - Name of World Heritage property
Waterton Glacier International Peace Park

### 1.2 - World Heritage property details

### 1.3 - Geographic information table

| Name | Coordinates | Property (ha) | Buffer zone (ha) | Total (ha) | Inscription year |
|---|---|---|---|---|---|
| Waterton Glacier International Peace Park | 48.996 / -113.904 | 457614 | 0 | 457614 | 1995 |
| **Total (ha)** | | **457614** | **0** | **457614** | |

### Comment
Minor modification based on an update from Glacier National Park. Combined size of Waterton-Glacier is 460,498.000 ha

### 1.4 - Map(s)

| Title | Date | Link to source |
|---|---|---|
| Waterton Glacier International Peace Park - Map of the inscribed property | 1993 | |

### 1.5 - Web and Social Media data of the property (if applicable)

1. Glacier National Park (U.S. National Park Service)
2. Natural site datasheet from WCMC
3. World Heritage in the United States
4. Waterton Lakes National Park, Parks Canada

### Comment
https://parks.canada.ca/pn-np/ab/waterton https://www.facebook.com/WatertonLakesNP https://www.twitter.com/WatertonLakesNP
https://www.youtube.com/@parkscanada https://www.nps.gov/glac/index.htm https://www.facebook.com/GlacierNPS https://twitter.com/glaciernps
https://www.instagram.com/glaciernps https://www.flickr.com/photos/glaciernps https://glaciernps.tumblr.com https://www.youtube.com/user/GlacierNPS

## 2. Other Conventions/Programmes under which the World Heritage property is protected (if applicable)

### 2.1 - Records indicate that your World Heritage property (in whole or in part) is designated and/or protected under the Conventions/programmes shown in the prefilled table below. Please check and amend as necessary.

| | | The World Heritage property (in whole or in part) is designated and/or protected under this convention/programme | The World Heritage property (in whole or in part) is not designated and/or protected under this convention/programme |
|---|---|---|---|
| 2.1.1 | **International Register of Cultural Property under Special Protection**<br>(1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict) | | ✖ |
| 2.1.2 | **List of Cultural Property under Enhanced Protection**<br>(Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict) | | ✖ |
| 2.1.3 | **The List of Wetlands of International Importance (The Ramsar List)**<br>(Convention on Wetlands of International Importance (Ramsar Convention)) | | ✖ |
| 2.1.4 | **World Network of Biosphere Reserves**<br>Man and the Biosphere (MAB) Programme | ✖ | |
| 2.1.5 | **Global Geoparks Network**<br>UNESCO Global Geoparks | | ✖ |

### 2.2 - Please provide comments on 2.1 if necessary

### 2.3 - Do your national authorities intend to request the granting of Enhanced Protection (if relevant) under the Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict for the World Heritage property in the next three years?
No

**2.4 - Do your national authorities intend to designate whole or part of the World Heritage property for inclusion in the List of Wetlands of International Importance (The Ramsar List), if relevant, in the next three years?**

No

**2.5 - Do your national authorities intend to designate whole or part of the World Heritage property as a Man and Biosphere Reserve (if relevant) in the next three years?**

Not applicable

**2.6 - Do your national authorities intend to apply for whole or part of World Heritage property to be designated as a UNESCO Global Geopark (if relevant) in the next three years?**

No

**2.7 - Please indicate the level of cooperation at property level between designations under different Conventions/Programmes**

| | | |
|---|---|---|
| **2.7.1** | **1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict** | |
| 2.7.1 | There is **no contact** with the Focal Point(s) of this designation/programme. | ✖ |
| 2.7.2 | The World Heritage Site Manager **occasionally** communicates with the Focal Point(s) of this designation/programme. | |
| 2.7.3 | The World Heritage Site Manager **regularly** communicates with the Focal Point(s) of this designation/programme. | |
| 2.7.4 | The World Heritage Site Manager **also manages** this designation/programme. | |
| **2.7.2** | **Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict** | |
| 2.7.1 | There is **no contact** with the Focal Point(s) of this designation/programme. | ✖ |
| 2.7.2 | The World Heritage Site Manager **occasionally** communicates with the Focal Point(s) of this designation/programme. | |
| 2.7.3 | The World Heritage Site Manager **regularly** communicates with the Focal Point(s) of this designation/programme. | |
| 2.7.4 | The World Heritage Site Manager **also manages** this designation/programme. | |
| **2.7.3** | **Convention on Wetlands of International Importance (Ramsar Convention)** | |
| 2.7.1 | There is **no contact** with the Focal Point(s) of this designation/programme. | ✖ |
| 2.7.2 | The World Heritage Site Manager **occasionally** communicates with the Focal Point(s) of this designation/programme. | |
| 2.7.3 | The World Heritage Site Manager **regularly** communicates with the Focal Point(s) of this designation/programme. | |
| 2.7.4 | The World Heritage Site Manager **also manages** this designation/programme. | |
| **2.7.4** | **Man and the Biosphere (MAB) Programme** | |
| 2.7.1 | There is **no contact** with the Focal Point(s) of this designation/programme. | ✖ |
| 2.7.2 | The World Heritage Site Manager **occasionally** communicates with the Focal Point(s) of this designation/programme. | |
| 2.7.3 | The World Heritage Site Manager **regularly** communicates with the Focal Point(s) of this designation/programme. | |
| 2.7.4 | The World Heritage Site Manager **also manages** this designation/programme. | |
| **2.7.5** | **UNESCO Global Geoparks** | |
| 2.7.1 | There is **no contact** with the Focal Point(s) of this designation/programme. | ✖ |
| 2.7.2 | The World Heritage Site Manager **occasionally** communicates with the Focal Point(s) of this designation/programme. | |
| 2.7.3 | The World Heritage Site Manager **regularly** communicates with the Focal Point(s) of this designation/programme. | |
| 2.7.4 | The World Heritage Site Manager **also manages** this designation/programme. | |

**2.8 - Please add any further comments on cooperation with the other designation(s)/programme(s)**

**2.9 - Are you aware of any elements associated with the World Heritage property that have been inscribed on the Representative List of the Intangible Cultural Heritage?**

No

**2.10 - Please list any elements associated with the World Heritage property inscribed under the Convention for the Safeguarding of the Intangible Cultural Heritage of which you are aware**

**2.11 - Are you aware of any documentary heritage listed under the Memory of the World Programme associated with the World Heritage property?**

Not aware

**2.12 - Please list any documentary heritage associated with the World Heritage property listed under the Memory of the World**

**Programme of which you aware.**

## 3. Statement of Outstanding Universal Value

### 3.1 - Statement of Outstanding Universal Value for the property as adopted by the World Heritage Committee

## Statement of Outstanding Universal Value

**Brief synthesis**

Waterton-Glacier International Peace Park has a distinctive climate, physiographic setting, mountain-prairie interface and tri-ocean hydrographical divide. It is an area of significant scenic values with abundant and diverse flora and fauna.

***Criterion (vii):*** Both national parks were originally designated by their respective nations because of their superlative mountain scenery, their high topographic relief, glacial landforms and abundant diversity of wildlife and wildflowers.

***Criterion (ix):*** The property occupies a pivotal position in the Western Cordillera of North America, resulting in the evolution of plant communities and ecological complexes that occur nowhere else in the world. Maritime weather systems unimpeded by mountain ranges to the north and south allow plants and animals characteristic of the Pacific Northwest to extend to and across the continental divide in the park. To the east, prairie communities nestle against the mountains with no intervening foothills, producing an interface of prairie, montane and alpine communities. The International Peace Park includes the headwaters of three major watersheds, which drain through significantly different biomes to different oceans. The biogeographical significance of this tri-ocean divide is increased by the many vegetated connections between the headwaters. The net effect is to create a unique assemblage and high diversity of flora and fauna concentrated in a small area.

**Integrity**

At 457,614 ha, the International Peace Park forms the centrepiece of the much larger transboundary “Crown of the Continent” ecosystem. The inscribed property alone is of sufficient size to maintain many of the scenic values and geomorphologic processes for which it was inscribed. Over 95% of the property is managed for wilderness values, but the property must be managed within the Crown of the Continent ecosystem context to ensure the genetic viability and long-term survival of many species, including top carnivores such as grizzly bear, cougar, gray wolf and wolverine, which may roam great distances outside the park boundaries. Likewise, the Flathead River system, which forms the western and southern boundaries of Glacier National Park and is home to important populations of fish species, originates outside the International Peace Park. Much of the property is bordered by other protected areas, adding important elements of connectivity for wildlife movement. While some barriers to connectivity within the larger ecosystem remain, there have been efforts by both countries to manage the Crown of the Continent to address these issues. These efforts will need to continue to ensure the long-term protection of the property’s Outstanding Universal Value.

**Protection and management requirements**

The two national parks are each managed and protected under their respective national legislative frameworks. Glacier National Park is managed under the authority of the *Organic Act* of August 25, 1916 which established the United States National Park Service. Glacier National Park also has enabling legislation which provides broad congressional direction regarding the primary purposes of the park. Waterton Lakes National Park is managed under the authority of the *Canada National Parks Act* and its associated regulations, which govern the protection and management of the natural and cultural resources of the park. Day-to-day management is directed by the Park Superintendent of each park according to the relevant legislative and regulatory mandates of the U.S. National Park Service and Parks Canada. The U.S. National Park Service and Parks Canada respectively maintain government to government relations with the Blackfeet Tribe as well as the Confederated Salish and Kootenai Tribes (Kootenai, Pend d’Oreille, and Salish Tribes) in the United States and the Blackfoot Confederacy (the Kainai, the Siksika, and the northern Piikani Nations) and the Ktunaxa Nation in Canada.

Management goals and objectives for the property have been developed through management plans for both parks, specifically: the Glacier National Park General Management Plan (1999) and the Waterton Lakes National Park of Canada Management Plan 2010. Although the management of each component of the property is directed by its own management plan, there are a number of guiding principles related to natural and cultural resource management, visitor use and interpretation, science and research and relations with Aboriginal peoples that are common to both parks, reflecting strong cooperation among the property managers. The management plans and their associated goals and objectives are periodically reviewed and updated with aboriginal, public, stakeholder and partner input, direction and advice.

A number of pressures arising from issues outside the Peace Park include residential, industrial and infrastructure development, and forestry practices in both countries. Park management plans for the property have identified a number of resource protection measures to address these pressures, such as environmental assessment processes, zoning, ecological integrity and visitor experience monitoring, as well as education programs.

In 2011, further to the *Memorandum of Understanding on Environmental Protection, Climate Action and Energy* signed by the Government of the Province of British Columbia and the Government of the State of Montana in 2010, British Columbia passed legislation to remove mining, oil and gas exploration and development as permissible land uses in the Flathead watershed in Canada thereby providing added environmental protection to the International Peace Park. The Crown Managers Partnership (a group of federal, state, provincial, tribal and first nations land managers) promotes transboundary collaborative strategies that focus on the long-term ecological health of the larger transboundary Crown of the Continent Ecosystem. In addition, the American Great Northern Landscape Conservation Cooperative provides additional opportunities for cooperation across jurisdictional and national boundaries.

Special attention will be given over the long term to monitoring and taking appropriate actions related to a number of factors in and near the property. Specifically, attention will focus on the effects of infrastructure development, the potential for water and air pollution, livestock grazing, impacts of biological resource use, impacts of climate change, and invasive or hyper-abundant species. Attention will also be given to current or potential logging and physical resource extraction activities near the property.

## Comment

Management goals and objectives for the property have been developed through management plans for both parks, specifically: the Glacier National Park General Management Plan (1999) and the Waterton Lakes National Park of Canada Management Plan 2010. UPDATE THIS: Waterton Lakes National Park of Canada Management Plan 2020 Also, under Integrity, edit to say "At over 460,000 ha..."

### 3.2 - Please list the key attributes of Outstanding Universal Value of your property and give an assessment of their condition. As a guideline, it is suggested to focus on approximately five key attributes (no more than 15 overall).

| | Brief identification of attribute | Preserved | Compromised | Seriously compromised | Lost |
|---|---|---|---|---|---|
| 3.2.1 | Abundant diveristy of wildlife and wildflowers | ✖ | | | |
| 3.2.2 | Headwaters of three major watersheds | ✖ | | | |
| 3.2.3 | Convergence of mountain and prairie ecosystems | ✖ | | | |

| | | | | | |
|---|---|---|---|---|---|
| 3.2.4 | Regional connectivity (landscapes and protected areas) | ✖ | | | |
| 3.2.5 | Landscapes (95%) protected as wilderness areas | ✖ | | | |
| 3.2.6 | | | | | |
| 3.2.7 | | | | | |
| 3.2.8 | | | | | |
| 3.2.9 | | | | | |
| 3.2.10 | | | | | |
| 3.2.11 | | | | | |
| 3.2.12 | | | | | |
| 3.2.13 | | | | | |
| 3.2.14 | | | | | |
| 3.2.15 | | | | | |

**3.3 - Comments, conclusions and/or recommendations related to Statement of Outstanding Universal Value**

## 4. Factors Affecting the Property

## 4.1. Buildings and Development

### 4.1.1 - Housing

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Potential, Inside, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | ✖ | ✖ | ✖ | ✖ | | | ↗ |

### 4.1.2 - Commercial development

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Potential, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | | ✖ | ✖ | ✖ | | | ↗ |

### 4.1.3 - Industrial areas

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.1.4 - Major visitor accommodation and associated infrastructure

Previous answer Cycle 2 (19/09/2013):

- Relevant, Positive, Negative, Potential, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | ✖ | | ✖ | | | → | |
| Negative ✖ | ✖ | ✖ | ✖ | ✖ | | | ↗ |

### 4.1.5 - Interpretative and visitation facilities

Previous answer Cycle 2 (19/09/2013):

- Relevant, Positive, Negative, Current, Inside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | ✖ | ✖ | ✖ | | | | ↗ |
| Negative | | | | | | | |

### 4.1.6 - Please comment as necessary on how the factors selected as relevant in 4.1 are affecting the property either negatively or positively

Inholder businesses within park, commercial development outside of Glacier, such as RV park/campground impact wildlife connectivity and traffic congestion. New housing developments can have similar impact, but can be beneficial to those who live and work in the region Waterton Lakes National Park underwent significant improvements to park infrastructure between 2015 and 2023 through Government of Canada's Federal Infrastructure Investment Program and rebuilding following Kenow Wildfire (2017)

## 4.2. Transportation Infrastructure

### 4.2.1 - Ground transport infrastructure

Previous answer Cycle 2 (19/09/2013):

- Relevant, Positive, Negative, Potential, Inside, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | ✖ | ✖ | ✖ | ✖ | | → | |
| Negative ✖ | ✖ | ✖ | ✖ | ✖ | | | ↗ |

### 4.2.2 - Underground transport infrastructure

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.2.3 - Air transport infrastructure

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | | ✖ | | ✖ | ↘ | | |
| Negative ✖ | ✖ | | ✖ | | | → | |

### 4.2.4 - Marine transport infrastructure

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Current, Outside

| Relevant | ✖ Not relevant |
|---|---|

### 4.2.5 - Effects arising from use of transportation infrastructure

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | ✖ | | ✖ | ✖ | | | ↗ |

### 4.2.6 - Please comment as necessary on how the factors selected as relevant in 4.2 are affecting the property either negatively or positively

Glacier: Road construction, widening, adding lanes, and increasing visitation traffic are impacting wildlife connectivity. Due to Air Tour Management Plan, Air tours are decreasing and projected to stabilize after 2030. Waterton: Increasing visitor traffic is increasing wear and tear of roadways and environmental impacts of vehicle traffic.

## 4.3. Services Infrastructures

### 4.3.1 - Water infrastructure

Previous answer Cycle 2 (19/09/2013):

- Relevant, Positive, Current, Inside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | ✖ | ✖ | ✖ | | | → | |
| Negative | | | | | | | |

### 4.3.2 - Renewable energy facilities

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | ✖ | ✖ | ✖ | ✖ | | | ↗ |
| Negative ✖ | ✖ | | | ✖ | | | ↗ |

### 4.3.3 - Non-renewable energy facilities

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.3.4 - Localised utilities

Previous answer Cycle 2 (19/09/2013):

- Relevant, Positive, Negative, Current, Potential, Inside, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | ✖ | ✖ | ✖ | ✖ | | → | |
| Negative ✖ | | ✖ | ✖ | ✖ | | | ↗ |

### 4.3.5 - Major linear utilities

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Potential, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | ✖ | ✖ | | ✖ | | | ↗ |

### 4.3.6 - Please comment as necessary on how the factors selected as relevant in 4.3 are affecting the property either negatively or positively

Glacier: Park is updating aging water infrastructure. Inholders are upgrading septic systems to reduce environmental leaching. Waterton: Outside power grid and transmission limitations could negatively affect expansion of Electric Vehicle infrastructure in Waterton Lakes.

## 4.4. Pollution

### 4.4.1 - Pollution of marine waters

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.4.2 - Ground water pollution

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Potential, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | ✖ | ✖ | ✖ | ✖ | | | ↗ |

### 4.4.3 - Surface water pollution

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.4.4 - Air pollution

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Current, Inside, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | ✖ | ✖ | ✖ | ✖ | | | ↗ |

### 4.4.5 - Solid waste

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | | ✖ | ✖ | | | → | |

### 4.4.6 - Input of excess energy

Previous answer Cycle 2 (19/09/2013):

- Relevant, Positive, Negative, Current, Potential, Inside, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | ✖ | | ✖ | | | → | |
| Negative ✖ | | ✖ | | ✖ | | | ↗ |

### 4.4.7 - Please comment as necessary on how the factors selected as relevant in 4.4 are affecting the property either negatively or positively

Agricultural aerial deposition and microplastics are on the increase. Septic leakage is decreasing. Dark sky friendly lighting improvements have reduced light pollution inside, but it continues to increase outside. Waterton Lakes National Park (Alberta, Canada) and Glacier National Park (Montana, USA) have received full certification as an International Dark Sky Park, after meeting the International Dark Sky Association (IDA) outdoor lighting requirements in 2021.

## 4.5. Biological resource use/modification

### 4.5.1 - Fishing/collecting aquatic resources

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.5.2 - Aquaculture

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.5.3 - Land conversion

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Potential, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | | ✖ | | ✖ | | | ↗ |

### 4.5.4 - Livestock farming/Grazing of domesticated animals

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Current, Inside, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | ✖ | | ✖ | ✖ | | → | |

### 4.5.5 - Crop production

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.5.6 - Commercial wild plant collection

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Potential, Inside

| Relevant | ✖ Not relevant |
|---|---|

### 4.5.7 - Subsistence wild plant collection

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | ✖ | | ✖ | | | → | |
| Negative | | | | | | | |

### 4.5.8 - Commercial hunting

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.5.9 - Subsistence hunting

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | | ✖ | ✖ | | | | ↗ |
| Negative ✖ | | ✖ | ✖ | | | | ↗ |

### 4.5.10 - Forestry/Wood production

Previous answer Cycle 2 (19/09/2013):

- Relevant, Positive, Negative, Current, Outside

| Relevant | ✖ Not relevant |
|---|---|

### 4.5.11 - Please comment as necessary on how the factors selected as relevant in 4.5 are affecting the property either negatively or positively

Glacier: Development is expanding outside Site boundaries. Logging continues negative impact outside boundaries as well, but it is on the decline Waterton: Requests for Indigenous harvesting, including subsistence hunting increasing. Some positives in this as far as reconciliation goes, some challenges with balancing land use and visitor access.

## 4.6. Physical resource extraction

### 4.6.1 - Mining

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Potential, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | | ✖ | | ✖ | | → | |

### 4.6.2 - Quarrying

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | ✖ | | | ✖ | | → | |

### 4.6.3 - Oil and gas

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Current, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | | ✖ | | ✖ | | → | |

### 4.6.4 - Water (extraction)

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Potential, Outside

| Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| Impact | Current | Potential | Inside | Outside | Decreasing | Stable | Increasing |
| Positive | | | | | | | |
| Negative ✖ | | ✖ | | ✖ | | → | |

### 4.6.5 - Please comment as necessary on how the factors selected as relevant in 4.6 are affecting the property either negatively or positively

Glacier: On-going mining, water-bottling, and oil/gas extraction continue to have impacts, but are not expanding at this time.

## 4.7. Local conditions affecting physical fabric

### 4.7.1 - Wind

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.7.2 - Relative humidity

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.7.3 - Temperature

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| Impact | Current | Potential | Inside | Outside | Decreasing | Stable | Increasing |
| Positive | | | | | | | |
| Negative ✖ | | ✖ | ✖ | ✖ | | | ↗ |

### 4.7.4 - Radiation/Light

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.7.5 - Dust

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.7.6 - Water (rain/water table)

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.7.7 - Pests

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| Impact | Current | Potential | Inside | Outside | Decreasing | Stable | Increasing |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Positive | | | | | | | |
| Negative ✖ | ✖ | ✖ | | ✖ | | | ↗ |

### 4.7.8 - Micro-organisms

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| | |
|---|---|
| Relevant | ✖ Not relevant |

### 4.7.9 - Please comment as necessary on how the factors selected as relevant in 4.7 are affecting the property either negatively or positively

Waterton: Wildfire disturbance has seen increase in terrestrial invasive plants. Threat of aquatic invasive species (whirling disease, invasive mussels, Eurasian milfoil) is present and being actively monitored and managed.

## 4.8. Social/Cultural uses of heritage

### 4.8.1 - Ritual/Spiritual/Religious and associative uses

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| | |
|---|---|
| ✖ Relevant | Not relevant |

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | ✖ | | ✖ | | | | ↗ |
| Negative | | | | | | | |

### 4.8.2 - Society's valuing of heritage

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| | |
|---|---|
| Relevant | ✖ Not relevant |

### 4.8.3 - Indigenous hunting, gathering and collecting

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| | |
|---|---|
| ✖ Relevant | Not relevant |

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | | ✖ | ✖ | | | | ↗ |
| Negative ✖ | | ✖ | ✖ | | | | ↗ |

### 4.8.4 - Changes in traditional ways of life and knowledge system

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| | |
|---|---|
| Relevant | ✖ Not relevant |

### 4.8.5 - Identity, social cohesion, changes in local population and community

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Potential, Outside

| | |
|---|---|
| ✖ Relevant | Not relevant |

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | | ✖ | ✖ | ✖ | | → | |

### 4.8.6 - Impacts of tourism/Visitation/Recreation

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Potential, Inside, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | ✖ | ✖ | ✖ | ✖ | | | ↗ |

**4.8.7 - Please comment as necessary on how the factors selected as relevant in 4.8 are affecting the property either negatively or positively**

There has been a substantial increase in visitation over the past decade, generating traffic gridlock in some areas, and temporary closures until traffic clears. Overcrowding impacts safety response time, visitor experience, and results in damage to some resources. Over the past three years, management tools are being implemented to limit the number of vehicles in specific regions during peak hours.

## 4.9. Other human activities

### 4.9.1 - Illegal activities

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | ✖ | | ✖ | | | → | |

### 4.9.2 - Deliberate destruction of heritage

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.9.3 - Military training

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.9.4 - War

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.9.5 - Terrorism

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.9.6 - Civil unrest

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

**4.9.7 - Please comment as necessary on how the factors selected as relevant in 4.9 are affecting the property either negatively or positively**

## 4.10. Climate change and severe weather events

### 4.10.1 - Storms

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.10.2 - Flooding

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Current, Potential, Inside

| Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| Impact | Current | Potential | Inside | Outside | Decreasing | Stable | Increasing |
| Positive | | | | | | | |
| Negative ✖ | | ✖ | ✖ | ✖ | | | ↗ |

### 4.10.3 - Drought

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Current, Inside

| Relevant | ✖ Not relevant |
|---|---|

### 4.10.4 - Desertification

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.10.5 - Changes to oceanic waters

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.10.6 - Temperature change

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Current, Inside, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| Impact | Current | Potential | Inside | Outside | Decreasing | Stable | Increasing |
| Positive | | | | | | | |
| Negative ✖ | | ✖ | ✖ | ✖ | | | ↗ |

### 4.10.7 - Other climate change impacts

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| Impact | Current | Potential | Inside | Outside | Decreasing | Stable | Increasing |
| Positive | | | | | | | |
| Negative ✖ | | ✖ | ✖ | ✖ | | | ↗ |

### 4.10.8 - Please comment as necessary on how the factors selected as relevant in 4.10 are affecting the property either negatively or positively

Average temperatures are increasing more rapidly at higher elevations. Variability in quantity and seasonality of snowfall and off-season storms has occurred. Reduced glacial ice will impact summer stream volume and temperatures.

## 4.11. Sudden ecological or geological events

### 4.11.1 - Volcanic eruption

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.11.2 - Earthquake

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.11.3 - Tsunami/Tidal wave

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.11.4 - Avalanche/Landslide

Previous answer Cycle 2 (19/09/2013):

- Relevant, Positive, Negative, Current, Potential, Inside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | ✖ | ✖ | ✖ | | | | ↗ |

### 4.11.5 - Erosion and siltation/Deposition

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | ✖ | ✖ | ✖ | | | | ↗ |

### 4.11.6 - Fire (wildfire)

Previous answer Cycle 2 (19/09/2013):

- Relevant, Positive, Negative, Current, Inside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | | ✖ | ✖ | ✖ | | | ↗ |

### 4.11.7 - Please comment as necessary on how the factors selected as relevant in 4.11 are affecting the property either negatively or positively

Our region has seen an increase in wildfires and associated smoke impacting air quality (usually in late summer/fall, but spring events have had impact as well.) Waterton Lakes: Increased erosion, and potential for landslides and avalanches, has increased following the 2017 Kenow Wildifire in areas where built infrastructure exists.

## 4.12. Invasive/alien species or hyper-abundant species

### 4.12.1 - Translocated species

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Current, Inside, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | | | | | | | |
| Negative ✖ | ✖ | ✖ | ✖ | ✖ | ↘ | | |

### 4.12.2 - Invasive/Alien terrestrial species

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Current, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| Impact | Current | Potential | Inside | Outside | Decreasing | Stable | Increasing |
| Positive | | | | | | | |
| Negative ✖ | ✖ | ✖ | ✖ | ✖ | | | ↗ |

### 4.12.3 - Invasive/Alien freshwater species

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Potential, Outside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| Impact | Current | Potential | Inside | Outside | Decreasing | Stable | Increasing |
| Positive | | | | | | | |
| Negative ✖ | | ✖ | ✖ | ✖ | | → | |

### 4.12.4 - Invasive/Alien marine species

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.12.5 - Hyper-abundant species

Previous answer Cycle 2 (19/09/2013):

- Relevant, Negative, Current, Inside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| Impact | Current | Potential | Inside | Outside | Decreasing | Stable | Increasing |
| Positive | | | | | | | |
| Negative ✖ | ✖ | ✖ | ✖ | | | → | |

### 4.12.6 - Modified genetic material

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| Relevant | ✖ Not relevant |
|---|---|

### 4.12.7 - Please comment as necessary on how the factors selected as relevant in 4.12 are affecting the property either negatively or positively

Invasive plants, fish, and pathogens (e.g. white pine blister rust) have impacted health and abundance of native species. We are concerned that mussels, other aquatic invasive species, white-nose syndrome in bats, chronic wasting disease in ungulates may reach our area soon. Glacier: Spread of feral swine and rabbit hemorrhagic disease are of concern.

## 4.13. Management and institutional factors

### 4.13.1 - Management system/Management plan

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| Impact | Current | Potential | Inside | Outside | Decreasing | Stable | Increasing |
| Positive ✖ | ✖ | ✖ | ✖ | | | → | |
| Negative | | | | | | | |

### 4.13.2 - Legal framework

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | | ✖ | ✖ | | | → | |
| Negative | | | | | | | |

### 4.13.3 - Governance

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | | ✖ | ✖ | | | → | |
| Negative | | | | | | | |

### 4.13.4 - Management activities

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | | ✖ | ✖ | | | → | |
| Negative | | | | | | | |

### 4.13.5 - Financial resources

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | | ✖ | ✖ | | | → | |
| Negative | | | | | | | |

### 4.13.6 - Human resources

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | | ✖ | ✖ | | ↘ | | |
| Negative | | | | | | | |

### 4.13.7 - Low impact research/monitoring activities

Previous answer Cycle 2 (19/09/2013):

- Relevant, Positive, Current, Inside

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive ✖ | ✖ | ✖ | ✖ | ✖ | | | ↗ |
| Negative | | | | | | | |

### 4.13.8 - High impact research/monitoring activities

Previous answer Cycle 2 (19/09/2013):

- Not relevant

| ✖ Relevant | Not relevant |
|---|---|

| | Impact | | Origin | | Trend of impact | | |
|---|---|---|---|---|---|---|---|
| **Impact** | **Current** | **Potential** | **Inside** | **Outside** | **Decreasing** | **Stable** | **Increasing** |
| Positive | ✖ | | ✖ | | | → | |
| Negative | | | | | | | |

### 4.13.9 - Please comment as necessary on how the factors selected as relevant in 4.13 are affecting the property either negatively or positively

Glacier: We are making forward progress in management planning, available funding is not keeping up with inflation and management needs. Recruiting sufficient human resources has become more challenging in part to limited affordable housing and non-competitive wages, Waterton: A new Management Plan came into effect in 2022. Water sampling activities continue to monitor for aquatic invasive species. Some removal of non-native fish species (previously introduced as game species) is planned.

## 4.14. Other factor(s)

### 4.14.1 - Other factor(s)

## 4.15. Factors Summary Table

### 4.15.1 - Factors Summary Table

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.1 Buildings and Development** | | | | | | |
| **4.1.1 Housing** | | | | | | |
| | ⊖ | ↙ | ↙ | ○ | ↗ | ↗ |
| **4.1.2 Commercial development** | | | | | | |
| | ⊖ | | ↙ | ○ | ↗ | ↗ |
| **4.1.4 Major visitor accommodation and associated infrastructure** | ⊕ | ↙ | | ○ | | → |
| | ⊖ | ↙ | ↙ | ○ | ↗ | ↗ |
| **4.1.5 Interpretative and visitation facilities** | ⊕ | ↙ | ↙ | ○ | | ↗ |
| | | | | | | |
| **4.2 Transportation Infrastructure** | | | | | | |
| **4.2.1 Ground transport infrastructure** | ⊕ | ↙ | ↙ | ○ | ↗ | → |
| | ⊖ | ↙ | ↙ | ○ | ↗ | ↗ |
| **4.2.3 Air transport infrastructure** | ⊕ | | ↙ | | ↗ | ↘ |
| | ⊖ | ↙ | | ○ | | → |
| **4.2.5 Effects arising from use of transportation infrastructure** | | | | | | |
| | ⊖ | ↙ | | ○ | ↗ | ↗ |
| **4.3 Services Infrastructures** | | | | | | |
| **4.3.1 Water infrastructure** | ⊕ | ↙ | ↙ | ○ | | → |
| | | | | | | |
| **4.3.2 Renewable energy facilities** | ⊕ | ↙ | ↙ | ○ | ↗ | ↗ |
| | ⊖ | ↙ | | | ↗ | ↗ |
| **4.3.4 Localised utilities** | ⊕ | ↙ | ↙ | ○ | ↗ | → |
| | ⊖ | | ↙ | ○ | ↗ | ↗ |
| **4.3.5 Major linear utilities** | | | | | | |
| | ⊖ | ↙ | ↙ | | ↗ | ↗ |
| **4.4 Pollution** | | | | | | |
| **4.4.2 Ground water pollution** | | | | | | |
| | ⊖ | ↙ | ↙ | ○ | ↗ | ↗ |
| **4.4.4 Air pollution** | | | | | | |
| | ⊖ | ↙ | ↙ | ○ | ↗ | ↗ |
| **4.4.5 Solid waste** | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |
| **4.4.6 Input of excess energy** | | | | | | |
| | | | | | | |
| **4.5 Biological resource use/modification** | | | | | | |
| **4.5.3 Land conversion** | | | | | | |
| | | | | | | |
| **4.5.4 Livestock farming/Grazing of domesticated animals** | | | | | | |
| | | | | | | |
| **4.5.7 Subsistence wild plant collection** | | | | | | |
| | | | | | | |
| **4.5.9 Subsistence hunting** | | | | | | |
| | | | | | | |
| **4.6 Physical resource extraction** | | | | | | |
| **4.6.1 Mining** | | | | | | |
| | | | | | | |
| **4.6.2 Quarrying** | | | | | | |
| | | | | | | |
| **4.6.3 Oil and gas** | | | | | | |
| | | | | | | |
| **4.6.4 Water (extraction)** | | | | | | |
| | | | | | | |
| **4.7 Local conditions affecting physical fabric** | | | | | | |
| **4.7.3 Temperature** | | | | | | |
| | | | | | | |
| **4.7.7 Pests** | | | | | | |
| | | | | | | |
| **4.8 Social/Cultural uses of heritage** | | | | | | |
| **4.8.1 Ritual/Spiritual/Religious and associative uses** | | | | | | |
| | | | | | | |
| **4.8.3 Indigenous hunting, gathering and collecting** | | | | | | |
| | | | | | | |
| **4.8.5 Identity, social cohesion, changes in local population and community** | | | | | | |
| | | | | | | |
| **4.8.6 Impacts of tourism/Visitation/Recreation** | | | | | | |
| | | | | | | |
| **4.9 Other human activities** | | | | | | |
| **4.9.1 Illegal activities** | | | | | | |
| | | | | | | |
| **4.10 Climate change and severe weather events** | | | | | | |
| **4.10.2 Flooding** | | | | | | |
| | | | | | | |
| **4.10.6 Temperature change** | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | ⊖ | | 👎 | ◎ | ↗ | ↗ |
| **4.10.7 Other climate change impacts** | | | | | | |
| | ⊖ | | 👎 | ◎ | ↗ | ↗ |
| **4.11 Sudden ecological or geological events** | | | | | | |
| **4.11.4 Avalanche/Landslide** | | | | | | |
| | ⊖ | 👎 | 👎 | ◎ | | ↗ |
| **4.11.5 Erosion and siltation/Deposition** | | | | | | |
| | ⊖ | 👎 | 👎 | ◎ | | ↗ |
| **4.11.6 Fire (wildfire)** | | | | | | |
| | ⊖ | | 👎 | ◎ | ↗ | ↗ |
| **4.12 Invasive/alien species or hyper-abundant species** | | | | | | |
| **4.12.1 Translocated species** | | | | | | |
| | ⊖ | 👎 | 👎 | ◎ | ↗ | ↘ |
| **4.12.2 Invasive/Alien terrestrial species** | | | | | | |
| | ⊖ | 👎 | 👎 | ◎ | ↗ | ↗ |
| **4.12.3 Invasive/Alien freshwater species** | | | | | | |
| | ⊖ | | 👎 | ◎ | ↗ | → |
| **4.12.5 Hyper-abundant species** | | | | | | |
| | ⊖ | 👎 | 👎 | ◎ | | → |
| **4.13 Management and institutional factors** | | | | | | |
| **4.13.1 Management system/Management plan** | ⊕ | 👎 | 👎 | ◎ | | → |
| | | | | | | |
| **4.13.2 Legal framework** | ⊕ | | 👎 | ◎ | | → |
| | | | | | | |
| **4.13.3 Governance** | ⊕ | | 👎 | ◎ | | → |
| | | | | | | |
| **4.13.4 Management activities** | ⊕ | | 👎 | ◎ | | → |
| | | | | | | |
| **4.13.5 Financial resources** | ⊕ | | 👎 | ◎ | | → |
| | | | | | | |
| **4.13.6 Human resources** | ⊕ | | 👎 | ◎ | | ↘ |
| | | | | | | |
| **4.13.7 Low impact research/monitoring activities** | ⊕ | 👎 | 👎 | ◎ | ↗ | ↗ |
| | | | | | | |
| **4.13.8 High impact research/monitoring activities** | ⊕ | 👎 | | ◎ | | → |
| | | | | | | |

| **Legend** | 👎 Current | 👎 Potential | ⊖ Negative | ⊕ Positive | ◎ Inside | ↗ Outside |
|---|---|---|---|---|---|---|

## 4.16. Assessment of current and potential positive and negative factors

### 4.16.1 - Assessment of current and potential negative and positive factors

4.1 Buildings and Development

| Name | Impact | Origin | Trend |
|---|---|---|---|

| 4.1.1 Housing | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |

| | Spatial scale - Area affected by the factor |
|---|---|
| | Restricted |
| | Localised |
| ✖ | Extensive |
| | Widespread |
| | **Temporal scale - Occurence of the impact** |
| | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| ✖ | On-going |
| | **Impact - Impact on the attributes** |
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| | **Management response - Capacity of management to respond** |
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |
| | No capacity and / or resources |
| | **Trend - Developement over the last 6 years** |
| ✖ | Decreasing |
| | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| 4.1.2 Commercial development | | | | | | |
| | | | | | | |

| | Spatial scale - Area affected by the factor |
|---|---|
| ✖ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |
| | **Temporal scale - Occurence of the impact** |
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| | **Impact - Impact on the attributes** |
| | Insignificant |

| | |
|---|---|
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| | Static |
| ✖ | Increasing |

| Name | Impact | Origin | Trend |
|---|---|---|---|
| **4.1.4 Major visitor accommodation and associated infrastructure** | | | → |
| | | | ↗ |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| ✖ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | Origin | Trend |
|---|---|---|---|
| **4.1.5 Interpretative and visitation facilities** | | | ↗ |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| ✖ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| ✖ | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| | Static |
| ✖ | Increasing |

## 4.2 Transportation Infrastructure

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.2.1 Ground transport infrastructure** | | | | | | → |
| | | | | | | ↗ |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| ✖ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |

| | |
|---|---|
| | Minor |
| ✖ | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| | Static |
| ✖ | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.2.3 Air transport infrastructure** | | | | | | |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| ✖ | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| ✖ | Decreasing |
| | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.2.5 Effects arising from use of transportation infrastructure** | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| ✖ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| | Static |
| ✖ | Increasing |

## 4.3 Services Infrastructures

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.3.1 Water infrastructure** | | | | | | → |
| | | | | | | |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| ✖ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| ✖ | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |

| | |
|---|---|
| ✖ | Insignificant |
| | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.3.2 Renewable energy facilities** | | | | | | |
| | | | | | | |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| ✖ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| ✖ | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| | Minor |
| ✖ | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| | Static |
| ✖ | Increasing |

| Name | Impact | Origin | Trend |
|---|---|---|---|

| 4.3.4 Localised utilities | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |

| Spatial scale - Area affected by the factor | |
|---|---|
| ✖ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| 4.3.5 Major linear utilities | | | | | | |
| | | | | | | |

| Spatial scale - Area affected by the factor | |
|---|---|
| ✖ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |

| | |
|---|---|
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| | Static |
| ✖ | Increasing |

## 4.4 Pollution

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.4.2 Ground water pollution** | | | | | | |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| ✖ | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| 4.4.4 Air pollution | | | | | | |

| Spatial scale - Area affected by the factor | |
|---|---|
| | Restricted |
| ✖ | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| | Static |
| ✖ | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| 4.4.5 Solid waste | | | | | | |

| Spatial scale - Area affected by the factor | |
|---|---|
| | Restricted |
| ✖ | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| | Intermittent or sporadic |
| ✖ | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |

| | |
|---|---|
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.4.6 Input of excess energy** | | | | | | |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| ✖ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| ✖ | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| ✖ | Insignificant |
| | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

## 4.5 Biological resource use/modification

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.5.3 Land conversion** | | | | | | |
| |  | |  | |  |  |

| | **Spatial scale - Area affected by the factor** |
|---|---|
| | Restricted |
| ✖ | Localised |
| | Extensive |
| | Widespread |
| | **Temporal scale - Occurence of the impact** |
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| | **Impact - Impact on the attributes** |
| ✖ | Insignificant |
| | Minor |
| | Significant |
| | Major |
| | **Management response - Capacity of management to respond** |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| | **Trend - Developement over the last 6 years** |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.5.4 Livestock farming/Grazing of domesticated animals** | | | | | | |
| |  |  | |  |  |  |

| | **Spatial scale - Area affected by the factor** |
|---|---|
| | Restricted |
| ✖ | Localised |
| | Extensive |
| | Widespread |
| | **Temporal scale - Occurence of the impact** |
| | One off or rare |
| ✖ | Intermittent or sporadic |

| | |
|---|---|
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| ✖ | Insignificant |
| | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.5.7 Subsistence wild plant collection** | | | | | | |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| ✖ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| ✖ | Insignificant |
| | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |

| | |
|---|---|
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.5.9 Subsistence hunting** | | | | | | |
| | | | | | | |

| Spatial scale - Area affected by the factor | |
|---|---|
| | Restricted |
| ✖ | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| ✖ | Insignificant |
| | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| | Static |
| ✖ | Increasing |

## 4.6 Physical resource extraction

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.6.1 Mining** | | | | | | |
| | | | | | | |

| Spatial scale - Area affected by the factor | |
|---|---|
| | Restricted |
| ✖ | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| ✖ | One off or rare |

| | |
|---|---|
| | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| ✖ | Insignificant |
| | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| ✖ | Decreasing |
| | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.6.2 Quarrying** | | | | | | |
| | ⛔ | | | | | ➡ |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| ✖ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| ✖ | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| ✖ | Insignificant |
| | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |

| | |
|---|---|
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.6.3 Oil and gas** | | | | | | |
| | ⛔ | | 👎 | | 🔄 | ➡ |

| **Spatial scale - Area affected by the factor** | |
|---|---|
| | Restricted |
| ✖ | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| ✖ | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| ✖ | Insignificant |
| | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.6.4 Water (extraction)** | | | | | | |
| | ⛔ | | 👎 | | 🔄 | ➡ |

| **Spatial scale - Area affected by the factor** | |
|---|---|
| | Restricted |
| ✖ | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |

| | |
|---|---|
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

## 4.7 Local conditions affecting physical fabric

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.7.3 Temperature** | | | | | | |
| |  | |  |  |  |  |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| | Localised |
| | Extensive |
| ✖ | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| ✖ | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| | Minor |
| ✖ | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |

| Trend - Developement over the last 6 years | |
|---|---|
| | Decreasing |
| | Static |
| ✖ | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| 4.7.7 Pests | | | | | | |
| | | | | | | |

| Spatial scale - Area affected by the factor | |
|---|---|
| | Restricted |
| | Localised |
| ✖ | Extensive |
| | Widespread |

| Temporal scale - Occurence of the impact | |
|---|---|
| | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| ✖ | On-going |

| Impact - Impact on the attributes | |
|---|---|
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |

| Management response - Capacity of management to respond | |
|---|---|
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |

| Trend - Developement over the last 6 years | |
|---|---|
| | Decreasing |
| | Static |
| ✖ | Increasing |

## 4.8 Social/Cultural uses of heritage

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| 4.8.1 Ritual/Spiritual/Religious and associative uses | | | | | | |
| | | | | | | |

| Spatial scale - Area affected by the factor | |
|---|---|
| ✖ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |

| Temporal scale - Occurence of the impact | |
|---|---|
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |

| Impact - Impact on the attributes | |
|---|---|
| ✖ | Insignificant |
| | Minor |
| | Significant |
| | Major |

| Management response - Capacity of management to respond | |
|---|---|
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |

| Trend - Developement over the last 6 years | |
|---|---|
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.8.3 Indigenous hunting, gathering and collecting** | | | | | | |
| | | | | | | |

| Spatial scale - Area affected by the factor | |
|---|---|
| | Restricted |
| ✖ | Localised |
| | Extensive |
| | Widespread |

| Temporal scale - Occurence of the impact | |
|---|---|
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |

| Impact - Impact on the attributes | |
|---|---|
| ✖ | Insignificant |
| | Minor |
| | Significant |
| | Major |

| Management response - Capacity of management to respond | |
|---|---|
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |

| | |
|---|---|
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| | Static |
| ✖ | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.8.5 Identity, social cohesion, changes in local population and community** | | | | | | |
| | ⛔ | | 👎 | ⊙ | ↩ | ➡ |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| ✖ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| ✖ | On-going |
| **Impact - Impact on the attributes** | |
| ✖ | Insignificant |
| | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.8.6 Impacts of tourism/Visitation/Recreation** | | | | | | |
| | ⛔ | 👎 | 👎 | ⊙ | ↩ | ↗ |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| | Localised |
| ✖ | Extensive |
| | Widespread |

| Temporal scale - Occurence of the impact | |
|---|---|
| | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| ✖ | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| | Static |
| ✖ | Increasing |

## 4.9 Other human activities

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.9.1 Illegal activities** | | | | | | |
| |  |  | |  | |  |

| Spatial scale - Area affected by the factor | |
|---|---|
| | Restricted |
| ✖ | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| ✖ | Insignificant |
| | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| | Medium capacity |

| | |
|---|---|
| ✖ | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

## 4.10 Climate change and severe weather events

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.10.2 Flooding** | | | | | | |
| | ⛔ | | ↰ | ⊙ | ↱ | ↗ |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| | Localised |
| ✖ | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.10.6 Temperature change** | | | | | | |
| | ⛔ | | ↰ | ⊙ | ↱ | ↗ |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| | Localised |

| | |
|---|---|
| | Extensive |
| ✖ | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| ✖ | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| | Minor |
| ✖ | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| | Static |
| ✖ | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.10.7 Other climate change impacts** | | | | | | |
| | ⛔ | | | | | ↗ |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| ✖ | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| ✖ | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |

| | |
|---|---|
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| | Static |
| ✖ | Increasing |

## 4.11 Sudden ecological or geological events

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.11.4 Avalanche/Landslide** | | | | | | |
| | ⛔ | 👎 | 👎 | ⊙ | | ↗ |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| ✖ | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.11.5 Erosion and siltation/Deposition** | | | | | | |
| | ⛔ | 👎 | 👎 | ⊙ | | ↗ |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |

| | |
|---|---|
| | Localised |
| ✖ | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| ✖ | On-going |
| **Impact - Impact on the attributes** | |
| ✖ | Insignificant |
| | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.11.6 Fire (wildfire)** | | | | | | |
| |  | |  |  |  |  |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| | Localised |
| | Extensive |
| ✖ | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| | Minor |
| ✖ | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |

| | |
|---|---|
| ✖ | High capacity |
| | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| | Static |
| ✖ | Increasing |

## 4.12 Invasive/alien species or hyper-abundant species

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.12.1 Translocated species** | | | | | | |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| | Localised |
| ✖ | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| ✖ | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| | Minor |
| ✖ | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| | Static |
| ✖ | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.12.2 Invasive/Alien terrestrial species** | | | | | | |

| |
|---|
| **Spatial scale - Area affected by the factor** |

| | |
|---|---|
| | Restricted |
| | Localised |
| ✖ | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| ✖ | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| | Minor |
| ✖ | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| | Static |
| ✖ | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.12.3 Invasive/Alien freshwater species** | | | | | | |
| | ⛔ | | | | | ➡ |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| | Localised |
| | Extensive |
| ✖ | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| ✖ | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| | Minor |
| | Significant |
| ✖ | Major |

| Management response - Capacity of management to respond | |
|---|---|
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |

| Trend - Developement over the last 6 years | |
|---|---|
| | Decreasing |
| | Static |
| ✖ | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| 4.12.5 Hyper-abundant species | | | | | | |
| | ⛔ | 👎 | 👎 | ⊙ | | ➡ |

| Spatial scale - Area affected by the factor | |
|---|---|
| | Restricted |
| ✖ | Localised |
| | Extensive |
| | Widespread |

| Temporal scale - Occurence of the impact | |
|---|---|
| | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| ✖ | On-going |

| Impact - Impact on the attributes | |
|---|---|
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |

| Management response - Capacity of management to respond | |
|---|---|
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |

| Trend - Developement over the last 6 years | |
|---|---|
| | Decreasing |
| ✖ | Static |
| | Increasing |

## 4.13 Management and institutional factors

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| 4.13.1 Management system/Management plan | ⊕ | 👎 | 👎 | ⊙ | | ➡ |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| | Localised |
| | Extensive |
| ✖ | Widespread |
| **Temporal scale - Occurence of the impact** | |
| ✖ | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.13.2 Legal framework** | | | | | | |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| | Localised |
| | Extensive |
| ✖ | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| ✖ | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |

| | |
|---|---|
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.13.3 Governance** | | | | | | → |
| | | | | | | |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| | Localised |
| | Extensive |
| ✖ | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| ✖ | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.13.4 Management activities** | | | | | | → |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| | Localised |
| | Extensive |
| ✖ | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| ✖ | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.13.5 Financial resources** | | | | | | → |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| | Localised |
| | Extensive |
| ✖ | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| ✖ | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| | Minor |

| | |
|---|---|
| ✖ | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.13.6 Human resources** | | | | | | |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| | Localised |
| ✖ | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| | Intermittent or sporadic |
| | Frequent |
| ✖ | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| | Medium capacity |
| ✖ | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| ✖ | Decreasing |
| | Static |
| | Increasing |

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| **4.13.7 Low impact research/monitoring activities** | | | | | | |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| ✖ | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| | Intermittent or sporadic |
| ✖ | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| ✖ | Insignificant |
| | Minor |
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

| Name | Impact | Origin | Trend |
|---|---|---|---|
| **4.13.8 High impact research/monitoring activities** | | | |

| | |
|---|---|
| **Spatial scale - Area affected by the factor** | |
| | Restricted |
| ✖ | Localised |
| | Extensive |
| | Widespread |
| **Temporal scale - Occurence of the impact** | |
| | One off or rare |
| ✖ | Intermittent or sporadic |
| | Frequent |
| | On-going |
| **Impact - Impact on the attributes** | |
| | Insignificant |
| ✖ | Minor |

| | |
|---|---|
| | Significant |
| | Major |
| **Management response - Capacity of management to respond** | |
| | High capacity |
| ✖ | Medium capacity |
| | Low capacity |
| | No capacity and / or resources |
| **Trend - Developement over the last 6 years** | |
| | Decreasing |
| ✖ | Static |
| | Increasing |

## 4.17. Serial inscriptions (national or transnational)

**4.17.1 - If your property is a serial inscription (national or transnational) please identify which components of the property are impacted by each factor**

## 4.18. Prediction of the state of conservation at next cycle of Periodic Reporting.

**4.18.1 - Please predict what the state of conservation of each attribute will be approximately 6 years from now (at the time of the next cycle of Periodic Reporting)**

| | Attribute | Preserved | Compromised | Seriously compromised | Lost |
|---|---|---|---|---|---|
| 4.18.1.1 | Abundant diveristy of wildlife and wildflowers | ✖ | | | |
| 4.18.1.2 | Headwaters of three major watersheds | ✖ | | | |
| 4.18.1.3 | Convergence of mountain and prairie ecosystems | ✖ | | | |
| 4.18.1.4 | Regional connectivity (landscapes and protected areas) | ✖ | | | |
| 4.18.1.5 | Landscapes (95%) protected as wilderness areas | ✖ | | | |

# 5. Protection and Management of the Property

## 5.1. Boundaries and Buffer Zones

**5.1.1 - Are the boundaries of the World Heritage property adequate to maintain the property's Outstanding Universal Value?**
The boundaries **do not limit the ability to maintain** the property's Outstanding Universal Value but they **could be improved**

**5.1.2 - Are the boundaries of the World Heritage property known and recognised?**
The boundaries **are known by both** the management authority and local communities/landowners

**5.1.3 - Are the buffer zone(s) of the World Heritage property adequate to maintain the property's Outstanding Universal Value?**
The property has **no buffer zone** and **does not need one**

**5.1.4 - Are the boundaries of the buffer zones known and recognised?**
The property has **no known and recognised** buffer zone

**5.1.5 - Comments, conclusions and/or recommendations related to boundaries and buffer zones of the World Heritage property**
Boundaries are adequate for protection in USA side of the Site. Opportunities for boundary expansion are being explored in Canada. The Waterton Biosphere Reserve Association plays a valuable role in working with the Biosphere Reserve (BR) buffer zone community. Cooperative work in the BR buffer zone is carried out by the Crown Managers Partnership.

## 5.2. Protective Measures

**5.2.1 - Protective designation (legal, regulatory, contractual, planning, institutional and/or traditional).**

The Waterton-Glacier International Peace Park comprises Waterton Lakes National Park, Alberta, Canada and Glacier National Park, Montana, USA, both of which are ranked as IUCN Category II Protected Areas. Waterton Lakes National Park was set aside as a Forest Reserve in 1895 and reclassified as a Dominion Park in 1911 and a National Park under the National Parks Act in 1930. It is Crown Land administered by Parks Canada, Gatineau, Quebec and managed from a parks headquarters in Waterton, Alberta. Glacier National Park was originally established as a National Park under its own legislation in 1911. It is Federal Land administered by the US Department of the Interior National Park Service, Washington, D.C., and managed from a parks headquarters in West Glacier, Montana. Parts of both parks have additional protection status under national legislation, a matter discussed in more detail in the body of the report.

On 30 June 1932 the citizens and governing bodies of Canada and USA, by act of Royal Assent and Presidential Proclamation, respectively, commemorated the friendship and goodwill of Canada and the USA through the joint establishment of the Waterton-Glacier International Peace Park – the first such park in the world. At the time it was recorded that the mutual co-ordination and consultation between the two national parks was essential for continued protection of the rich diversity

of their natural and cultural resources. Further it was noted that the unique balance of natural resources constitutes an international ecological unit which is vital to the integrity of the two parks as a whole. In the 1970s Waterton and Glacier National Parks were designated as Biosphere Reserves under the UNESCO Man and the Biosphere Program. The Waterton-Glacier International Peace Park was inscribed on the World Heritage List in 1995.

Source: Joint UNESCO/IUCN Mission Report (2009)

**5.2.2 - Please list any legislation and other measures (regulatory -including spatial planning- contractual, institutional or traditional) not included in 5.2.1 and indicate the category**

**5.2.3 - Is the legal framework (i.e. legislation and/or regulation including spatial planning) adequate for maintaining the Outstanding Universal Value including conditions of Integrity and/or Authenticity of the property?**

The **legal framework** for maintaining of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property provides an **adequate basis for effective management and protection**

**5.2.4 - Is the legal framework (i.e. legislation and/or regulation) adequate in the buffer zone for maintaining the Outstanding Universal Value including conditions of Integrity and/or Authenticity of the property?**

There is **no legal framework** in the buffer zone for maintaining the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property

**5.2.5 - Is the legal framework (i.e. legislation and/or regulation) in the broader setting of the World Heritage property adequate for maintaining the Outstanding Universal Value including conditions of Integrity and/or Authenticity of the property?**

There is **no legal framework** for controlling use and activities in the broader setting of the World Heritage property

**5.2.6 - Can the legal framework (i.e. legislation and/or regulation) be enforced?**

There is **acceptable capacity/resources** to enforce legislation and/or regulation in the World Heritage property but some deficiencies of enforcement remain

**5.2.7 - Please provide a short summary of how the legislation, including spatial planning and other regulation, works in practice**

**5.2.8 - Comments, conclusions and/or recommendations about the information related to the measures taken to protect the World Heritage property**

## 5.3. Management System/Management Plan

**5.3.1 - Please check the box which most closely match the character of the governance and management system of the property**

Public management system at national level

### If 'Other', please specify

**5.3.2 - Management System: Please indicate which of the various management tools listed below are used to help protect the property.**

| |
|---|
| A statutory Management Plan or zoning plan for the property. |
| Other forms of statutory or non-statutory plans (e.g. strategic plans) |
| Governance mechanisms that foster and respect traditional practices, knowledge and uses of the property |
| A management plan |
| An annual work plan or business plan |
| A disaster, climate or conflict risk management plan |
| A visitor/visitation management plan |
| An environmental management framework |
| An assessment of biological and cultural diversity and ecosystem services provided by the property |
| A joint approach to management of cultural and natural heritage |

**5.3.3 - Please give a brief description of the management system currently in place at your property**

Waterton Lakes: administered as part of Canada’s national parks, by Parks Canada Agency.

**5.3.4 - Management Documents**

### Comment

Waterton Lakes’ 2022 Management Plan can be found online here: https://parks.canada.ca/pn-np/ab/waterton/info/index/directeur-management/plan-2022

**5.3.5 - Has any use been made of the 2011 Recommendation on the Historic Urban Landscape in developing policies and best practices for the protection of this property?**

**No use** has been made of the 2011 Recommendation on the Historic Urban Landscape

**5.3.6 - If the Historic Urban Landscape Recommendation has been used at this property, please describe briefly what has been done.**

**5.3.7 - Has any use been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property?**

**Some use** has been made of the World Heritage Policy for Climate Change

**5.3.8 - If the Climate Change policy has been used, please briefly describe what has been done along with any research on the impacts**

**of Climate Change on the property:**

**5.3.9 - Has any use been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property ?**

**No use** has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties

**5.3.10 - If the Strategy for Reducing Risks from Disasters at World Heritage Properties has been used, please briefly describe what has been done**

**5.3.11 - Rate the coordination between the various levels of administration (i.e. national/federal; regional/provincial/state; local/municipal etc.) involved in the management of the World Heritage property**

There is **adequate coordination** between all bodies/levels involved in the management of the property

**5.3.12 - Is the management system/plan adequate to maintain the property's Outstanding Universal Value?**

The management system/plan is **fully adequate** to maintain the property's Outstanding Universal Value

**5.3.13 - Is the management system being implemented?**

The management system is being **fully implemented and monitored**

**5.3.14 - Is there an annual work/action plan and is it being implemented?**

An annual work/action plan **exists and many of its activities are being implemented**

**5.3.15 - Does the management system include formal mechanisms and procedures that ensure participation and contribution of the following groups, living within or near the World Heritage property and/or buffer zone in management decisions that maintain the Outstanding Universal Value of the property?**

| | | Not applicable | No mechanisms for participation | Some participation | Direct participation | Transformative participation in all relevant decision processes |
|---|---|---|---|---|---|---|
| 5.3.15.1 | Local communities | | | × | | |
| 5.3.15.2 | Local authorities | | | × | | |
| 5.3.15.3 | Landowners in the property and the buffer zone | | | × | | |
| 5.3.15.4 | Indigenous peoples | | | × | | |
| 5.3.15.5 | Women | | | | × | |
| 5.3.15.6 | Other specific groups | × | | | | |
| | If you selected, 'Other specific groups' please specify | | | | | |

**5.3.16 - Please rate the cooperation/relationship between the World Heritage property managers/coordinators/staff and the following groups**

| | | Not applicable | Non-existent | Poor | Fair | Good |
|---|---|---|---|---|---|---|
| 5.3.16.1 | Local communities | | | | | × |
| 5.3.16.2 | Local/Municipal authorities | | | | | × |
| 5.3.16.3 | Indigenous peoples | | | | | × |
| 5.3.16.4 | Landowners | | | | | × |
| 5.3.16.5 | Women | | | | | × |
| 5.3.16.6 | Youth/Children | | | | | × |
| 5.3.16.7 | Researchers | | | | | × |
| 5.3.16.8 | Local Visitors/Tourists | | | | | × |
| 5.3.16.9 | National/International tourists | | | | | × |
| 5.3.16.10 | Tourism Industry | | | | | × |
| 5.3.16.11 | Local businesses and industries | | | | × | |
| 5.3.16.12 | NGOs | | | | × | |
| 5.3.16.13 | Other specific groups | | | | | × |
| | If you selected 'Other specific groups', please specify | Crown Managers Partnership | | | | |

**5.3.17 - Please rate the extent to which the management system of your property contributes towards achieving the objectives of the World Heritage Committee's Policy for the Integration of a Sustainable Development Perspective into the Processes of the *World Heritage Convention***

| | | Not applicable | No contribution | Limited | Significant | Full achievement |
|---|---|---|---|---|---|---|
| 5.3.17.1 | The management system of the property contributes to gender equality | | | | | ✖ |
| 5.3.17.2 | The management system of the property provides ecosystem services/benefits to the local community (e.g. fresh air, water, food, medicinal plants) | | | | ✖ | |
| 5.3.17.3 | The management system of the property contributes to social inclusion and equity, improving opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion or economic or other status | | | | ✖ | |
| 5.3.17.4 | The management system of the property integrates a human rights-based approach | | | | | ✖ |
| 5.3.17.5 | The management system of the property contributes to fostering inclusive local economic development, and to enhancing livelihood | | | | ✖ | |
| 5.3.17.6 | The management system of the property contributes to conflict prevention, including respect for cultural diversity within and around the World Heritage property | | | | ✖ | |

**5.3.18 - Please provide further details on the ratings of the management system given in the table above**

Glacier: The two parks of the World Heritage Site operate under separate management documents. The Glacier portion operates under US Department of Interior and National Park Services policies and guidelines. At the park level, the 1999 General Management Plan was updated through a Foundation Document in 2016. Waterton Lakes: New management plan in 2022. Revisions to our community plan to manage local development are planned in the next year.

**5.3.19 - Comments, conclusions and/or recommendations related to the management system/plan**

## 6. Financial and Human Resources

### 6.1. Funding

**6.1.1 - If your funding sources do not exactly fit those shown, put the relevant amounts against the funding type that most closely represents your situation, and use the comment box below to provide more details.**

| | | Project costs | Running costs |
|---|---|---|---|
| 6.1.1.1 | Multilateral funding (GEF, World Bank, etc.) | 0 % | 0 % |
| 6.1.1.2 | Bilateral international funding | 0 % | 0 % |
| 6.1.1.3 | World Heritage Fund (International Assistance) | 0 % | 0 % |
| 6.1.1.4 | Contribution from other conventions and programmes | 0 % | 0 % |
| 6.1.1.5 | International donations (NGOs, foundations, etc.) | 0 % | 0 % |
| 6.1.1.6 | Governmental (national/federal) | 95 % | 62 % |
| 6.1.1.7 | Governmental (regional/provincial/state) | 0 % | 0 % |
| 6.1.1.8 | Governmental (local/municipal) | 0 % | 0 % |
| 6.1.1.9 | In-country donations (NGOs, foundations, etc.) | 5 % | 0 % |
| 6.1.1.10 | Individual visitor charges (e.g. entry, toilets, parking, camping fees, etc.) | 0 % | 30 % |
| 6.1.1.11 | Commercial activities (e.g. merchandising and catering, filming permit, concessions, etc.) | 0 % | 3 % |
| 6.1.1.12 | Other | 0 % | 5 % |
| | | Total 100 % | Total 100 % |

**6.1.2 - Please comment here on any other aspects of funding sources not covered in the table above**

Glacier: Base operational funds are provided federally though small annual increases and do not keep up with required wage increases and operational costs. We are dependent on income from entrance and service fees. We have aging infrastructure in many areas. Upgrades are addressed annually as funds become available, but a large backlog remains. Waterton: Infrastructure investment (2015-2020) and rebuilding following the 2017 Kenow Wildfire have resulted in vast improvements to park faciliti

**6.1.3 - Is the current budget sufficient to manage the World Heritage property effectively?**

The available **budget is inadequate** for basic management needs and presents a serious constraint to the capacity to manage

**6.1.4 - Are the existing sources of funding secure and likely to remain so?**

The existing sources of funding are **secure over both the medium- and long-term**

**6.1.5 - Comments, conclusion, and/or recommendations related to finance and infrastructure**

**6.1.6 - Estimate the distribution of men and women involved in the management, conservation, interpretation of the World Heritage properties and the extent to which they are drawn from local communities.**

| | | From local communities % | From elsewhere % |
|---|---|---|---|
| 6.1.6.1 | Men | 57 % | 48 % |
| 6.1.6.2 | Women | 43 % | 52 % |
| | | Total 100 % | Total 100 % |

### 6.1.7 - Are available human resources adequate to manage the World Heritage property?

Human resources **partly meet** the management needs of the World Heritage property

### 6.1.8 - Considering the management needs of the World Heritage property, please rate the availability of professionals in the following disciplines

| | |
|---|---|
| **Conservation** | Good |
| **Environmental sustainability** | Fair |
| **Community participation and inclusion** | Fair |
| **Risk preparedness** | Good |
| **Capacity development and education** | Fair |
| **Administration** | Good |
| **Research and monitoring** | Fair |
| **Awareness raising and public information/communication** | Good |
| **Marketing and promotion** | Good |
| **Interpretation** | Good |
| **Visitor management/tourism** | Fair |
| **Enforcement (custodians, police)** | Fair |

### 6.1.9 - Please rate the availability of training opportunities for the management of the World Heritage property in the following disciplines

| | |
|---|---|
| **Conservation** | Fair |
| **Environmental sustainability** | Fair |
| **Community participation and inclusion** | Fair |
| **Risk preparedness** | Fair |
| **Capacity development and education** | Fair |
| **Administration** | Fair |
| **Research and monitoring** | Fair |
| **Awareness raising and public information/communication** | Fair |
| **Marketing and promotion** | Fair |
| **Interpretation** | Fair |
| **Visitor management/tourism** | Fair |
| **Enforcement (custodians, police)** | Good |

### 6.1.10 - Has any use been made of the World Heritage Strategy for Capacity Building at the property?

**No use** has been made of the World Heritage Strategy for Capacity Building

### 6.1.11 - If the World Heritage Strategy for Capacity Building has been used, please briefly describe what has been done.

### 6.1.12 - Are there site-specific capacity building plans or programmes that develop local expertise and that contribute to the transfer of skills for the conservation and management of the World Heritage property?

**A site-based** capacity building plan or programme is in place and partially implemented; some technical skills are being transferred to those managing the property locally, **but most technical work is carried out by external staff**

### 6.1.13 - Comments, conclusions and/or recommendations related to human resources, expertise and training

In most cases, we are able to recruit necessary expertise to meet management and operational needs, though this has become more challenging in the past few years. Availability of training programs is good, but funds to send staff to training has been greatly reduced over the past couple of decades. Waterton Lakes: Efforts to hire from local Indigenous communities have increased in recent years, resulting in a larger population of local Indigenous people in our workforce.

## 7. Scientific Studies and Research Projects

### 7.1 - Is there adequate knowledge (scientific or traditional) about the values and attributes of the World Heritage property to support planning, management and decision-making to ensure that Outstanding Universal Value is maintained?

Knowledge about the values and attributes of the World Heritage property is **adequate**

### 7.2 - Is there a planned programme of research at the property which is directed towards management needs and/or improving understanding of Outstanding Universal Value?

There is a **comprehensive, integrated programme** of research, which is relevant to management needs and/or improving understanding of Outstanding Universal Value

### 7.3 - Are results from research programmes publicly available and disseminated?

Research results **are shared** widely **with active outreach** to local communities and national and international audiences

### 7.4 - Comments, conclusions and/or recommendations related to scientific studies and research projects

We benefit from research and monitoring conducted by National Park Service, U.S. Geological Survey, state and provincial departments, and numerous universities and other educational institutions. Many additional desired research topics remain unfunded. A portion of our research needs are supported by private donations to our “friends groups”.

## 8. Education, Information and Awareness Building

### 8.1 - Please rate the awareness and understanding of the existence and justification for inscription of the World Heritage property amongst the following groups

| | |
|---|---|
| **Local communities** | Fair |
| **Local/municipal authorities** | Fair |
| **Indigenous peoples** | Poor |
| **Landowners** | Poor |
| **Women** | Poor |
| **Youth/children** | Poor |
| **Researchers** | Fair |
| **Local visitors** | Poor |
| **National/international tourists** | Fair |
| **Tourism industry** | Poor |
| **Local businesses and industries** | Fair |
| **NGOs** | Fair |
| **Other specific groups** | Fair |
| **If you selected ‘Other specific groups’, please describe** | Website visitors |

### 8.2 - Does the property have a heritage education programme(s) for children and/or youth, that can contribute to a better understanding of heritage, promote diversity and foster intercultural dialogue?

There is **a planned and effective education and awareness programme** for children and youth that contributes to the protection of the World Heritage property

### 8.3 - Who are the target audiences for education and awareness programmes at your property?

| |
|---|
| Local communities |
| Local/municipal authorities |
| Indigenous peoples |
| Landowners |
| Women |
| Youth/children |
| Researchers |
| Local Visitors |
| National/international tourists |
| Tourism industry |
| Local businesses and industries |
| NGOs |
| Other specific groups |

**8.4 - Please rate the adequacy of the following visitor facilities and services at the World Heritage property for education, information, interpretation and awareness building**

| | |
|---|---|
| **Visitor centre** | Good |
| **Site museum** | Not needed |
| **Information booths** | Good |
| **Guided tours** | Good |
| **Trails/routes** | Good |
| **Printed information materials** | Good |
| **Online (website, social media, etc.)** | Good |
| **Transportation facilities** | Good |
| **Other** | Not needed |
| **If 'Other' is selected, please specify** | |

**8.5 - Comments, conclusions and/or recommendations related to education, information and awareness building**

Excellent interpretive and education programs are in place. Because status as national parks often overshadows status as a World Heritage Site, we could do a better job of highlighting this. Waterton: These ratings more accurately reflect GNP. Our new visitor centre opened in 2022. Parks Canada Agency has adopted a digital-first approach to sharing information, which has led to a stronger online offering. However this is at the expense of our printed materials (I'd rate us 3).

## 9. Visitor Management

**9.1 - Please provide estimated annual visitor numbers (including national and international visitors) since the last Periodic Report**

3,384,300 / 3,607,405 / 2,152,329 / 3,501,559 / 3,374,984 /

**9.2 - What information sources are used to collect visitor statistics?**

Entry tickets and registries

Visitor surveys

Other

vehicle counters

**9.3 - What is the average length stay of a visitor to the World Heritage property?**

Two overnight stays

**9.4 - Please provide the source of information**

Visitor surveys

**9.5 - What is the approximate average daily visitor expenditure? (Please provide an estimated monetary figure in USD)**

39 / 28 / 26 / 5 / 14 / 15 /

**9.6 - Please provide the source of information**

Budgetyourtrip.com Grau, Kara. 2023. Montana Travel Regions & Counties – Economic Contribution of 2019/2021 Averaged Nonresident Travel Spending. Institute for Tourism and Recreation Research Publications. ScholarWorks at University of Montana. Waterton Lakes data: Commercial lodging, food/beverage, transportation souvenirs: Data deficient Lodging (camping): 26.11 Admission fees: 7.95 Recreation fees: 18.16 (source: Parks Canada fees)

**9.7 - Does the management system/plan for the World Heritage property include a strategy with an action plan to manage visitors, tourism activity and its derived economic, socio-cultural and environmental impacts?**

There **is a strategy** to manage visitors, tourism activity and its derived impacts on the World Heritage property but there are **some deficiencies in implementation**

**9.8 - Please provide any comments relating to the answer provided above in question 9.7**

A visitor use strategy is under development. We are currently pilot testing methods to prevent over-crowding during peak visitor hours. Waterton Lakes: Undergoing a similar visitor use management scoping exercise.

**9.9 - Is visitor use effectively managed to maintain the Outstanding Universal Value of the property?**

Visitor use of the World Heritage property is managed but **improvements could be made**

**9.10 - Is the effectiveness of tourism management regularly monitored?**

Yes, using a different system

### If a different system, please specify

Local Visitor Use Management Monitoring Program, Wilderness permits etc.

**9.11 - How does the tourism industry cooperate with the site management to improve visitor experiences and maintain the Outstanding Universal Value of the World Heritage property?**

There is **good cooperation** between those responsible for the World Heritage property and the tourism industry **to present the Outstanding Universal Value and increase appreciation**

### 9.12 - How well is the information on the Outstanding Universal Value of the property presented and interpreted?

The Outstanding Universal Value of the property **is adequately presented and interpreted**

### 9.13 - At how many locations is the World Heritage emblem displayed at the property?

In **one location** and **easily visible** to visitors

### 9.14 - How does visitor/tourism revenue (e.g. entry charges, permits) contribute to the management of the World Heritage property?

**Fees are collected** and make a **substantial contribution** to the management of the World Heritage property

### 9.15 - Are there locally driven sustainable tourism initiatives?

Yes

## If 'Yes', please specify

Crown Roundtable etc. Waterton Lakes: Paahtomahksikimi Cultural Centre providing Indigenous experiences in the park.

### 9.16 - Are the benefits of tourism shared with local communities?

Yes

## If 'Yes', please specify

Many small businesses and community groups benefit from visitors spending time and money in the parks.

### 9.17 - Comments, conclusions and/or recommendations related to visitation/tourism/public use of the World Heritage property

We continue to seek ways to provide for enjoyment of the resource by visitors while protecting natural and cultural resources and maintaining a safe environment. Waterton Lakes: Local businesses are actively engaged in tourism, providing a range of experiences. Indigenous tourism opportunities are being developed through collaboration with Parks Canada and neighbouring communities.

## 10. Monitoring

### 10.1 - Is there a monitoring programme at the property directed towards management needs and/or towards improving the understanding of the Outstanding Universal Value?

There is a **comprehensive, integrated programme of monitoring**, which is relevant to management needs and/or improving understanding of the Outstanding Universal Value

### 10.2 - Is necessary information available in order to define key indicators for measuring the state of conservation and are they used in monitoring how the Outstanding Universal Value of the property is being maintained?

Information on the values of the World Heritage property is **adequate and key indicators have been defined** for measuring the state of conservation and **are being used in monitoring** of how the Outstanding Universal value of the property is being maintained

### 10.3 - Are key indicators defined and in place for the following principal aspects of the property?

| | Extend of indicators | Not applicable | No indicators | Indicators have been defined but are not yet in use | Indicators are in place and in use since the last Periodic Reporting cycle |
|---|---|---|---|---|---|
| 10.3.1 | State of conservation | | | | ✖ |
| 10.3.2 | Effectiveness of the management system | | | | ✖ |
| 10.3.3 | Character of governance | | | | ✖ |
| 10.3.4 | Appropriate synergy with other conservation designations | | | | ✖ |
| 10.3.5 | Contribution to sustainable development | | | | ✖ |
| 10.3.6 | Capacity development | | | | ✖ |

### 10.4 - Please provide information on relevant key indicators adopted at the property

### 10.5 - Please rate the level of involvement in monitoring of the following groups:

| | |
|---|---|
| **World Heritage managers/coordinators and staff** | Good |
| **Local/municipal authorities** | Fair |
| **Local communities** | Fair |
| **Indigenous peoples** | Fair |
| **Landowners** | Fair |
| **Women** | Good |
| **Researchers** | Good |
| **Tourism industry** | Fair |

| | |
|---|---|
| **Local businesses and industry** | Fair |
| **NGOs** | Fair |
| **Other specific groups** | Good |
| **If you selected 'Other specific groups', please specify** | Private fund-raising group |

### 10.6 - Has the State Party implemented relevant recommendations arising from the World Heritage Committee?

No relevant Committee recommendations to implement

### 10.7 - Please provide comments relevant to the implementation of recommendations from the World Heritage Committee.

US National Park Service implements a vital signs monitoring program to track key indicators for ecosystem health. Waterton Lakes: A State of the Park Assessment was completed in advance of developing the 2022 Management Plan. It is available here:
https://parks.canada.ca/pn-np/ab/waterton/info/index/directeur-management/edp-sop

### 10.8 - Comments, conclusions and/or recommendations related to Monitoring

## 11. Identification of Priority Management Needs

### 11.1 - Identification of Priority Management Needs

| | | |
|---|---|---|
| **5.1** | **Boundaries and Buffer Zones** | |
| 5.1.3 | The property has **no buffer zone** | |
| 5.1.4 | The property has **no known and recognised buffer zone** | ✖ |
| **5.2** | **Protective Measures** | |
| 5.2.4 | There is **no legal framework** in the buffer zone for maintaining the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property | |
| 5.2.5 | There is **no legal framework** for controlling use and activities in the broader setting of the World Heritage property and the buffer zone | ✖ |
| 5.2.6 | There is **acceptable capacity/resources** to enforce legislation and/or regulation in the World Heritage property but some deficiencies of enforcement remain | ✖ |
| **5.3** | **Management System/Management Plan** | |
| 5.3.5 | **No use** has been made of the Historic Urban Landscape Recommendation to develop policies and best practices for the protection of the property | ✖ |
| 5.3.7 | **Some use** has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property | ✖ |
| 5.3.9 | **No use** has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property | ✖ |
| **6.1** | **Funding** | |
| 6.1.3 | The available **budget is inadequate** for basic management needs and presents a serious constraint to the capacity to manage the World Heritage property | |
| 6.1.7 | Human resources **partly meet** the management needs of the World Heritage property | ✖ |
| 6.1.10 | **No use** has been made of the World Heritage Strategy for Capacity Development at the World Heritage property | ✖ |
| 6.1.12 | **A site-based** capacity building plan or programme is in place and partially implemented; some technical skills are being transferred to those managing the property locally, **but most technical work is carried out by external staff** | |
| **9** | **Visitor Management** | |
| 9.7 | There **is a strategy** to manage visitors, tourism activity and its derived impacts on the World Heritage property but there are **some deficiencies in implementation** | ✖ |
| 9.9 | Visitor use of the World Heritage property is managed but **improvements could be made** | ✖ |

**Please select 0 more issues.**

**Please save this question to reflect changes**

## 12. Summary and Conclusions

## 12.1. Summary - Factors affecting the Property

### 12.1.1 - Summary - Factors affecting the Property

| | |
|---|---|
| **4.1** | **Buildings and Development** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **4.1.1** | Housing | Management of properties as a whole is affected by shortage of regional housing and affordable housing. Some staff housing exists but is not adequate to support all staff, nor a feasible solution to have all staff in site-owned housing. | Seek funding for in park-funding where development is appropriate. Housing challenges outside the park and outside of our mandate and jurisdiction. Largely outside our control. | Ongoing | Ongoing | Parks Canada Agency, National Park Service | n/a |
| **4.7** | **Local conditions affecting physical fabric** | | | | | | |
| **4.7.3** | Temperature | Sites are vulunerable to temperature related effects of climate change. | Continued efforts to reduce carbon footprint of park operations. ie- Waterton: development of solar energy and procurement of green vehicles has taken place. | Ongoing species at risk monitoring to assess adaptations to climate change | Ongoing | Parks Canada Agency, National Park Service | n/a |
| **4.7.7** | Pests | "and abundant diversity of wildlife and wildflowers" potentially at risk due to invasive plant proliferation, such as spotted knapweed | Waterton: ongoing vegetation restoration program to remove terrestrial invasive plant species (pulling, spraying where freasible, etc.). | Monitoring is a part of actions being taken to prevent the spread of terrestrial invasives. | Ongoing | Parks Canada Agency, National Park Service | n/a |
| **4.8** | **Social/Cultural uses of heritage** | | | | | | |
| **4.8.6** | Impacts of tourism/Visitation/Recreation | Managing areas largely designated as wilderness areas to mantain ecological integrity in the face of mounting tourism pressures | Visitor use management strategies are in development. Some strategies such as limiting/timing entry have already been implemented in Glacier National Park. Active traffic management in busy areas of Waterton Lakes. | Weekend traffic monitoring in place on high visitation weekends will help inform next steps. | Present, ongoing | Parks Canada Agency, National Park Service | n/a |
| **4.10** | **Climate change and severe weather events** | | | | | | |
| **4.10.6** | Temperature change | Sites are vulunerable to temperature related effects of climate change. | Continued efforts to reduce carbon footprint of park operations. ie- Waterton and Glacier: development of alternative energy, procurement of green vehicles and charging stations. | Active environmental monitoring. | Ongoing | Parks Canada Agency, National Park Service | n/a |
| **4.10.7** | Other climate change impacts | "a distinctive climate, physiographic setting, mountain/prairie interface and tri-ocean hydrographical divide as well as its scenic values" | Research on climate impacts on vulnerable populations, managing fisheries to promote resilience for native species. | Monitoring of mountain goats, pikas, grizzly bears, harlequin ducks, common loons, bats and other species as funding allows. | on-going | Parks Canada Agency, National Park Service | n/a |
| **4.11** | **Sudden ecological or geological events** | | | | | | |
| **4.11.6** | Fire (wildfire) | "Area of significant scenic values" | While wildfire is a natural process, actions such as prescribed fires to create fire guards have taken place to prevent future wildfires from affecting build infrastructure, where possible. | Ongoing fire condition monitoring in place, helicopter patrols following periods of lightning, fire bans put in place during times of extreme fire danger. | Ongoing | Parks Canada Agency, National Park Service | Note: Significant wildfires have affected each park in the last six years. |
| **4.12** | **Invasive/alien species or hyper-abundant species** | | | | | | |
| **4.12.1** | Translocated species | "there are two endemic fish species" | Lake Trout suppression efforts on west sidce of Glacier, and efforts to reduce other non-native historically stocked fish. | Fisheries crews monitor numerous lakes for presence of native & nonnative fish. | ongoing | National Park Service | n/a |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **4.12.2** | Invasive/Alien terrestrial species | "and abundant diversity of wildlife and wildflowers" potentially at risk due to invasive plant proliferation, such as spotted knapweed | Waterton: ongoing vegetation restoration program to remove terrestrial invasive plant species (pulling, spraying where freasible, etc.). | Monitoring is a part of actions being taken to prevent the spread of terrestrial invasives. | Ongoing | Parks Canada Agency, National Park Service | n/a |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **4.12.3** | Invasive/Alien freshwater species | "Area of significant scenic values" | Ongoing watercraft inspection and quarantine programs. Large public education component. | Monitoring programs in place for AIS detection, overall health of aquatic ecosystems | Ongoing | Parks Canada Agency, National Park Service | Invasive of concern include quagga and zebra mussels, whirling disease and eurasian milfoil. |

Summary - Factors affecting the Property **completed**

## 12.2. Summary - Management Needs

### 12.2.1 - Summary - Management Needs

| **5.1** | **Boundaries and Buffer Zones** | | | | |
|---|---|---|---|---|---|
| | | **Actions** | **Timeframe** | **Lead agency (and others involved)** | **More info / comment** |
| **5.1.4** | The property has **no known and recognised buffer zone** | Work with local biosphere reserves (Waterton and Crown of the Continent) to raise profile of buffer zones. | TBD | Parks Canada, US National Park Service, Waterton Biosphere Region Association and Crown of the Continent Biosphere Reserve | Not a priority. |

| **5.2** | **Protective Measures** | | | | |
|---|---|---|---|---|---|
| **5.2.5** | There is **no legal framework** for controlling use and activities in the broader setting of the World Heritage property and the buffer zone | None. | N/A | N/A | Multijurisdictional buffer zones mean no single entity is overseeing a legal framework outside of the national parks. Individual municipalities exist with their own legal frameworks for development, etc. |
| **5.2.6** | There is **acceptable capacity/resources** to enforce legislation and/or regulation in the World Heritage property but some deficiencies of enforcement remain | Waterton: Park Warden numbers are low for the number for violations. An additional warden has recently been hired. Glacier: Working on increasing Park Ranger capacity to meet needs with some difficulty filling all available positions. | Evaluate again after new hire. | Parks Canada, US National Park Service | This is a separate service from Waterton Lakes Field Unit. We can, and continue to advocate for human resources. |

| **5.3** | **Management System/Management Plan** | | | | |
|---|---|---|---|---|---|
| **5.3.5** | **No use** has been made of the Historic Urban Landscape Recommendation to develop policies and best practices for the protection of the property | None planned. | N/A | N/A | There are no historic urban landscapes present in Waterton-Glacier. |
| **5.3.7** | **Some use** has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property | Waterton: Management Plan of 2022 manages with climate change in mind. Ongoing research, monitoring and sustainable infrastructure development is taking place. Glacier: Utilizing USNPS Climate Action Plan to plan and implement climate response. | Ongoing | Parks Canada, US National Park Service | none |

| | | | | | |
|---|---|---|---|---|---|
| **5.3.9** | **No use** has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property | If this was actioned, and it may have been, it would be at a scope and scale larger than an individual national park. No action to take. | n/a | Parks Canada, US National Park Service | n/a |

| | | | | | |
|---|---|---|---|---|---|
| **6.1** | **Funding** | | | | |
| **6.1.7** | Human resources **partly meet** the management needs of the World Heritage property | Continued advocacy regarding local funding from national sources. Glacier works with private donor organization to supplement project funding. | Ongoing | Parks Canada, US National Park Service | n/a |
| **6.1.10** | **No use** has been made of the World Heritage Strategy for Capacity Development at the World Heritage property | If this was actioned, and it may have been, it would be at a scope and scale larger than an individual national park. No action to take. | n/a | Parks Canada, US National Park Service | n/a |

| | | | | | |
|---|---|---|---|---|---|
| **9** | **Visitor Management** | | | | |
| **9.7** | There **is a strategy** to manage visitors, tourism activity and its derived impacts on the World Heritage property but there are **some deficiencies in implementation** | Continuing with social science research collection and implementing visitor use management strategies as needed | Ongoing | Parks Canada, US National Park Service | n/a |
| **9.9** | Visitor use of the World Heritage property is managed but **improvements could be made** | Continuing with social science research collection and implementing visitor use management strategies as needed. These are rolling out in both properties and being refined as needed. | Ongoing | Parks Canada, US National Park Service | n/a |

**Summary - Management Needs** completed

## 12.3. Conclusions on the State of Conservation of the Property

### 12.3.1 - Following the analysis undertaken for this report, what is the current state of Authenticity of the World Heritage property?

The Authenticity of the World Heritage property **has been preserved**

### 12.3.2 - Following the analysis undertaken for this report, what is the current state of Integrity of the World Heritage property?

The Integrity of the World Heritage property is **intact**

### 12.3.3 - Following the analysis undertaken for this report, what is the current state of the World Heritage property's Outstanding Universal Value?

The World Heritage property's Outstanding Universal Value has been **maintained**.

### 12.3.4 - What is the current state of the property's other values?

Other important cultural and/or natural values and the state of conservation of the World Heritage property are **intact**

### 12.3.5 - Comments. conclusions and/or recommendations related to the state of conservation of the property.

Overall, the attributes of Outstanding Universal Value remain intact. Management strategies have been implemented to reduce and mitigate threats from invasive species, a changing climate, and increasing visitation. Waterton Lakes: Same as above, generally. However the Kenow Wildfire of 2017 left the park more vulnerable to climate change impacts due to changes to tree cover, therefore slope stability and rainwater/snow management. Large avalanches have occurred more frequently in some areas.

## 13. Impact of World Heritage Status

### 13.1 - Please rate the impacts of World Heritage status of the property in relation to the following areas

| | |
|---|---|
| **Conservation** | Very positive |

| | |
|---|---|
| **Research and monitoring** | Very positive |
| **Management effectiveness** | Positive |
| **Quality of life for local communities and indigenous peoples** | No impact |
| **Recognition** | Very positive |
| **Education** | Positive |
| **Infrastructure development** | No impact |
| **Funding for the property** | Positive |
| **International cooperation** | Very positive |
| **Political support for conservation** | Positive |
| **Legal/Policy framework** | Positive |
| **Advocacy** | Positive |
| **Institutional coordination** | No impact |
| **Security** | No impact |
| **Gender equality** | Positive |
| **Provision of ecosystem services/ benefits to local communities** | Positive |
| **Social inclusion and equity, and improvement of opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion, or economic or other status** | Positive |
| **Fostering inclusive local economic development and enhancing livelihood** | Positive |
| **Contributing to conflict prevention, including respect for cultural diversity within and around heritage properties** | Positive |
| **Other** | Not applicable |
| **If 'Other', please specify** | |

### 13.2 - Comments, conclusions and/or recommendations related to World Heritage status and its impacts

World Heritage Site status highlights the importance of protecting the outstanding universal values of the site. It provides leverage for protecting against external threats, such as mining operations that would impact water quality etc., and it is a positive factor to list when seeking additional funding for site protection. The designation can be used to educate visitors about the global significance of the site.

## 14. Good Practice in the Implementation of the World Heritage Convention

### 14.1 - Example of good practice in World Heritage protection, identification, conservation or management at the property level

An effective practice we are proud of is the ongoing collaboration between Waterton-Glacier World Heritage Site/International Peace Park/ and Biosphere Regions and neighboring land management agencies in the surrounding Crown of the Continent Ecosystem. Representatives meet frequently to discuss common issues and seek collaborative solutions to management challenges. Our most recent annual forum in March 2023 focusing on Indigenous Leadership in Honoring and Caring for the Crown of the Continent Ecosystem was a tremendous success.

### 14.2 - Define which topics are covered by this example of best practice at the property level

| |
|---|
| Sustainable Development |
| Synergies |
| State of Conservation |
| Management |
| Capacity Building |

## 15. Assessment of the Periodic Reporting Exercise

## 15.1. Relevance of Periodic Reporting

### 15.1.1 - Has the Periodic Reporting process improved the understanding of the following?

| |
|---|
| The *World Heritage Convention* |
| The concept of Outstanding Universal Value |
| The concept of Integrity and/or Authenticity |
| Management effectiveness to maintain the Outstanding Universal Value |
| Monitoring and reporting |

**15.1.2 - Please rate the follow-up to conclusions and recommendations from previous Periodic Reporting exercise by the following entities**

| | |
|---|---|
| **State Party** | Not needed |
| **Site Managers** | Not needed |
| **UNESCO World Heritage Centre** | Not needed |
| **Advisory Bodies (ICOMOS, IUCN, ICCROM)** | Not needed |

## 15.2. Use of Data

**15.2.1 - How do the authorities in charge of the property plan to use the data recorded from this cycle of Periodic Reporting?**

| |
|---|
| Revision of priorities/strategies/policies for the protection, management and conservation of heritage |
| Update of management plans |
| Fundraising |
| Awareness raising |

**15.2.2 - Comments on use of data from the Cycle of Periodic Reporting**

## 15.3. Timing and resources

**15.3.1 - Entities involved in the filling out of this online questionnaire (tick as many boxes as applicable)**

| |
|---|
| Site Manager/Coordinator World Heritage property staff |

**15.3.2 - Has a gender balanced contribution and participation been considered in the filling out of this questionnaire?**
Gender balance **is explicitly considered and effectively implemented** in the process.

**15.3.3 - Were you given adequate time (i.e. roughly ten months) to gather necessary information and to fill in this questionnaire?**
Yes

**15.3.4 - Please estimate the time (working hours) needed to complete this questionnaire**

| |
|---|
| 6 / 4 / 11 / |

**15.3.5 - Did you mobilise any additional resources to fill out this questionnaire?**

| | Additional resources | No | Yes |
|---|---|---|---|
| 15.3.5.1 | Human resources | | ✖ |
| 15.3.5.2 | Financial resources for organizing consultation meetings/ training | ✖ | |

## 15.4. Format and content of the Periodic Report

**15.4.1 - How accessible was the information required to complete this questionnaire?**
**Most** required information was accessible.

**15.4.2 - Was the questionnaire easy to use and clear to understand?**

| | | Very Difficult | Difficult | Easy | Very easy |
|---|---|---|---|---|---|
| 15.4.2.1 | Ease of use of questionnaire | | ✖ | | |
| 15.4.2.2 | Clarity of questions | | | ✖ | |

**15.4.3 - Please provide suggestions for improvement of the Periodic Reporting questionnaire**
Offline document is cumbersome, but much more reliable to use. I would expect a form of this length online to auto-save as progress is completed in 2023.

## 15.5. Training and Guidance

**15.5.1 - Please rate the level of support in terms of training and guidance from the following entities in completing this questionnaire**

| | |
|---|---|
| **UNESCO World Heritage Centre** | Not applicable |
| **UNESCO (other sectors/field offices)** | Not applicable |
| **UNESCO National Commission** | Not applicable |
| **ICOMOS International** | Not applicable |
| **IUCN International** | Not applicable |
| **ICCROM international/regional** | Not applicable |

| | |
|---|---|
| **ICOMOS national/regional** | Fair |
| **IUCN national/regional** | Not applicable |

**15.5.2 - Please rate the level of support for completing the Periodic Reporting questionnaire from the following entities**

| | |
|---|---|
| **UNESCO World Heritage Centre** | Fair |
| **State Party Representative (national Focal Point)** | Not applicable |
| **UNESCO other sectors (e.g. field office)** | Not applicable |
| **National Commission for UNESCO** | Not applicable |
| **ICOMOS International** | Not applicable |
| **ICCROM International/regional** | Not applicable |
| **ICOMOS national/regional** | Fair |
| **IUCN national/regional** | Not applicable |
| **IUCN International** | Not applicable |

**15.5.3 - Were the online training resources prepared by the World Heritage Centre regarding Periodic Reporting adequate for you to complete this questionnaire?**

Not applicable (i.e. I did not use these resources)

**15.5.4 - If you found that the online training resources were not adequate, what changes would you like to see implemented?**

## 15.6. Actions that will require formal consideration by the World Heritage Committee

**15.6.1 - Summary of actions that will require formal consideration by the World Heritage Committee**

- **Geographic information table**
  Reason for update: Minor modification based on an update from Glacier National Park. Combined size of Waterton-Glacier is 460,498.000 ha
- **Statement of Outstanding Universal Value for the property as adopted by the World Heritage Committee**
  Reason for update: Management goals and objectives for the property have been developed through management plans for both parks, specifically: the Glacier National Park General Management Plan (1999) and the Waterton Lakes National Park of Canada Management Plan 2010. UPDATE THIS: Waterton Lakes National Park of Canada Management Plan 2020 Also, under Integrity, edit to say "At over 460,000 ha..."

Changes to these items will need to go through the proper processes.

## 15.7. Comments, conclusions and/or recommendations related to the Assessment of the Periodic Reporting Exercise

**15.7.1 - Comments, conclusions and/or recommendations related to the Assessment of the Periodic Reporting Exercise**

**15.7.2 - Thank you for having filled in all the questions. Please contact your National Focal Point for validation.**