IUCN Conservation Outlook Assessment 2014 **(archived)**
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Please note: this is an archived Conservation Outlook Assessment for Kluane / Wrangell-St Elias / Glacier Bay / Tatshenshini-Alsek. To access the most up-to-date Conservation Outlook Assessment for this site, please visit https://www.worldheritageoutlook.iucn.org.

Kluane / Wrangell-St Elias / Glacier Bay / Tatshenshini-Alsek

SITE INFORMATION

Country:
Canada, United States of America (USA)
Inscribed in: 1979
Criteria:
(vii) (viii) (ix) (x)

Site description:
These parks comprise an impressive complex of glaciers and high peaks on both sides of the border between Canada (Yukon Territory and British Columbia) and the United States (Alaska). The spectacular natural landscapes are home to many grizzly bears, caribou and Dall's sheep. The site contains the largest non-polar icefield in the world. © UNESCO

SUMMARY

2014 Conservation Outlook

Good with some concerns

The exceptional aesthetic values of the site and its outstanding geological features remain well-preserved. However, the site's glaciers and associated processes are becoming increasingly affected by climate change. Current threats to the site are limited and their impact is low. The most significant potential threat to the site's values is climate change.

Current state and trend of VALUES

Low Concern
Trend: Deteriorating

The exceptional aesthetic values of the site remain largely intact and its outstanding geological features remain well-preserved. However, the site's glaciers and associated processes are becoming increasingly affected by climate change.

Overall THREATS

Low Threat

Impacts of past mineral development on the area of Tatshenshini-Alsek Park, direct and indirect effects of commercial fishing in Glacier Bay, as well as increasing visitation in most of the parks and associated impacts have been identified as existing threats to the site's values, however, their impact is low. Climate change represents the most significant potential threat to the site's values.

Overall PROTECTION and MANAGEMENT

Mostly Effective

Protection and management of individual component protected areas that make

up this serial transboundary site are highly effective. However, the absence of a management body for the entire World Heritage site is of some concern.

FULL ASSESSMENT

Description of values

Values

World Heritage values

- **Area of exceptional natural beauty**
  Criterion:(vii)

  This area of exceptional natural beauty encompasses coastal and marine environments, snow-capped mountains, calving glaciers, deep river canyons, fjord-like inlets and abundant wildlife abound (Statement of Significance, 2006).

- **Outstanding examples of major ongoing geologic and glacial processes**
  Criterion:(viii)

  The site features continuous mountain building and contains outstanding examples of major ongoing geologic and glacial processes. Over 200 glaciers in the ice-covered central plateau combine to form some of the world's largest and longest glaciers, several of which stretch to the sea. The site displays a broad range of glacial processes, including world-class depositional features and classic examples of moraines, hanging valleys, and other geomorphological features (Statement of Significance, 2006).

- **Rich variety of terrestrial and coastal/marine environments with complex and intricate mosaics of life at various successional stages**
  Criterion:(ix)

  The influence of glaciation at a landscape level has led to a similarly broad range of stages in ecological succession related to the dynamic movements

of glaciers. Subtly different glacial environments and landforms have been concentrated within the property by the sharp temperature and precipitation variation between the coast and interior basins. There is a rich variety of terrestrial and coastal/marine environments with complex and intricate mosaics of life at various successional stages from 500 m below sea level to 5000 m above (Statement of Significance, 2006).

▶ **Great variety of fauna**
Criterion:(x)

Wildlife species common to Alaska and Northwestern Canada are well represented, some in numbers exceeded nowhere else. The marine components support a great variety of fauna including marine mammals and anadromous fish, the spawning of which is a key ecological component linking the sea to the land through the large river systems. Populations of bears, wolves, caribou, Dall sheep and mountain goats that are endangered elsewhere are self-regulating here. This is one of the few places remaining in the world where ecological processes are governed by natural stresses and the evolutionary changes in a glacial and ecological continuum (Statement of Significance, 2006).

Assessment information

Threats

Current Threats
Low Threat

Impacts of past mineral development on the area of Tatshenshini-Alsek Park, direct and indirect effects of commercial fishing in Glacier Bay, as well as increasing visitation in most of the parks and associated impacts have been identified as existing threats to the site's values, however, their impact is low.

► Tourism/ visitors/ recreation

Low Threat
Inside site

Use of ATVs and snowmachines for access within Wrangell-St. Elias National Park and Preserve for traditional and recreational activities has the potential to negatively impact park resources and affect visitor experience. As technology advances such vehicles venture into areas of the park that haven't previously seen such use, with the potential to impact wildlife and other park resources (Periodic Report, 2006).
During the past decades the Tatshenshini-Alsek Provincial Park has experienced an intensive growth in tourist use with the growing interest in rafting. Use levels on the rivers are controlled by requiring users to hold a Park Use Permit (WCMC, 2011).

► Mining/ Quarrying

Low Threat
Inside site

Previous mineral development in the area of Tatshenshini-Alsek Park and a pipeline adjacent to the Haines Road have left environmental liabilities which are being monitored (Periodic Report, 2006).

► Fishing / Harvesting Aquatic Resources

Low Threat
Inside site
Outside site

In Glacier Bay, direct and indirect effects of commercial and sport fishing are likely occurring. Commercial fishing, principally for salmon, Tanner crab and halibut, removes as much as half a million pounds of biomass from Glacier Bay proper's marine waters annually. This removal of biomass has poorly known but likely important effects on marine ecosystems, including associated nearshore and riparian habitats. Regulations affecting commercial fisheries in Glacier Bay limit the types of allowed fisheries and the number of participants. As a result of recently legislated phaseout, commercial fishing within the bay is anticipated to cease within the next four decades (Periodic

Report, 2006).

Potential Threats

High Threat

Climate change represents the most significant potential threat to the site's values. Effects of climate change include retreat of glaciers and melting of permafrost soils.

▶ Temperature changes

High Threat
Inside site
Outside site

Effects of climate change include retreat of glaciers and melting of permafrost soils (Periodic report, 2006).

▶ Housing/ Urban Areas

Low Threat
Outside site

As human populations increase in the area surrounding the World Heritage Site, the development pressures will tend to increase. The four units comprising the site all work extensively with the local communities on various planning projects to minimize these impacts (Periodic Report, 2006).

Protection and management

Assessing Protection and Management

▶ Integration into regional and national planning systems

Data Deficient

Data deficient

▶ Legal framework and enforcement

Mostly Effective

Kluane National Park and Reserve is managed under the authority of the Canada National Parks Act and its associated regulations, and the Parks Canada Agency Act. Tatshenshini-Alsek Park was established in 1993 by the Province of British Columbia as a Class A Park under the Park Act by an enactment of the provincial legislature. Glacier Bay National Monument was established in 1926 and redesignated as National Park in 1980. Wrangell-St.Elias National Park and Preserve was established under the Alaska Natural Interest Lands Conservation Act (ANILCA). Both US parks' designated wilderness lands and waters are also managed under the Wilderness Act. Other laws that apply to Canadian national parks include: The Fisheries Act (1985); The Canadian Environmental Assessment Act (1992); The Migratory Birds Convention Act (1994); The Species at Risk Act (2002) (Periodic Report, 2006).

► Management effectiveness

Mostly Effective

Management of the individual component protected areas appears effective; however, the absence of an overarching management body for the entire World Heritage site is of some concern.

► Boundaries

Highly Effective

The site has been significantly enlarged through a number of extensions which added new components to it (1992 and 1994 extensions, Decision CONF 002 X.C; Decision CONF 003 XI).

► Staff training and development

Data Deficient

Data deficient

► Education and interpretation programs

Highly Effective

A number of education and interpretation prorgammes exist in all component

protected areas.

► Management system

Mostly Effective

Kluane / Wrangell-St. Elias / Glacier Bay / Tatshenshini-Alsek is a transboundary serial property comprised of:
- Kluane National Park and Reserve of Canada
- Wrangell-St. Elias National Park and Reserve (USA)
- Glacier Bay National Park and Reserve (USA)
- Tatshenshini-Alsek Provincial Park (Canada)

In the United States, Glacier Bay National Park and Preserve and Wrangell-St. Elias National Park and Preserve are administered by the National Park Service. Kluane National Park Reserve is administered by Parks Canada. Tatshenshini-Alsek Provincial Park is administered by the Ministry of Water, Land and Air Protection in the British Columbia provincial government (WCMC, 2011). All component protected areas have their own management systems. However, there is currently no management agreement in place that would guide management of the entire transboundary World Heritage site (http://www.tbpa.net/page.php?ndx=63).

► Implementation of Committee decisions and recommendations

Highly Effective

No recent Committee Decisions

► Sustainable finance

Data Deficient

In 2006 the annual operating budgets of the component protected areas were: Kluane - $3 million; Wrangell-St. Elias - $3 million; Glacier Bay - $3.5 million; Tatshenshini-Alsek - $50 000 (Periodic Report, 2006). More recent figures are unavailable.

► Sustainable use

Mostly Effective

Traditional use of resources continues in some of the components of the site. Subsistence use in the Kluane National Park includes the right to hunt, fish,

gather edible plants and trap furbearing animals using traditional and current methods and equipment. Currently, subsistence activities in the park are low (Kluane Management Plan, 2010).

▶ Tourism and interpretation

Data Deficient

Data deficient

▶ Monitoring

Mostly Effective

Long-term ecological monitoring programmes are in place, e.g. Kluane Ecological Monitoring Project. However, there are no general environmental programmes in place or contemplated for Tatshenshini-Alsek Park. Specific environmental monitoring occurs for trails, wilderness campsites, mining sites and pipeline sites (Periodic Report, 2006).

▶ Research

Data Deficient

Data deficient

▶ Relationships with local people

Highly Effective

All component protected areas which comprise this site work effectively with local communities and First Nations to ensure their involvement in the management processes.

Overall assessment of protection and management

Mostly Effective

Protection and management of individual component protected areas that make up this serial transboundary site are highly effective. However, the absence of a management body for the entire World Heritage site is of some concern.

▶ **Assessment of the effectiveness of protection and management in addressing threats outside the site**
Data Deficient

Data deficient

State and trend of values

Assessing the current state and trend of values

World Heritage values

▶ **Area of exceptional natural beauty**
Good
Trend:Stable

The exceptional aesthetic values of the site have been well-preserved and remain largely intact.

▶ **Outstanding examples of major ongoing geologic and glacial processes**
Low Concern
Trend:Deteriorating

The outstanding geological features of the site remain well preserved. However, its glaciers and associated processes are becoming increasingly affected by climate change. A number of glaciers have already shown significant retreat, including for example Muir Glacier in Glacier Bay NP (http://www.usgs.gov/climate_landuse/glaciers/repeat_photography.asp).

▶ **Rich variety of terrestrial and coastal/marine environments with complex and intricate mosaics of life at various successional stages**
Data Deficient
Trend:Data Deficient

Data deficient

▶ Great variety of fauna

Data Deficient
Trend:Data Deficient

Data deficient

Summary of the Values

▶ Assessment of the current state and trend of World Heritage values

Low Concern

Trend: Deteriorating

The exceptional aesthetic values of the site remain largely intact and its outstanding geological features remain well-preserved. However, the site's glaciers and associated processes are becoming increasingly affected by climate change.

Additional information

Key conservation issues

▶ Climate change

Global

Effects of climate change include retreat of glaciers and melting of permafrost soils (Periodic report, 2006).

Projects

Compilation of active conservation projects

№	Organization/ individuals	Project duration	Brief description of Active Projects
1	Data deficient		Data deficient

REFERENCES

№	References
1	Decision : 38 COM 8D
2	Decision : CONF 002 X.C
3	Kluane National Park of Canada. Management Plan. 2010
4	Periodic Report, 2006.
5	Statement of Significance, 2006.
6	UNEP-WCMC, 2011.
7	http://www.usgs.gov/climate_landuse/glaciers/repeat_photogr…