#### 1. World Heritage Property Data

#### 1.1 - Name of World Heritage Property

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

#### 1.2 - World Heritage Property Details

CanadaUnited States of AmericaEurope and North AmericanaturalMarine & coastal72ter1979, 1992, 1994

### 1.3 - Geographic Information Table

Name	Coordinates (latitude/longitude)	Property (ha)	Buffer zone (ha)	Total (ha)	Inscription year
Kluane / Wrangell-St. Elias / Glacier Bay / Tatshenshini- Alsek	61.198 / -140.992	9839121	0	9839121	1979
Total (ha)		9839121	0	9839121	

### 1.4 - Map(s)

Title		Link to source
Kluane / Wrangell-St Elias / Glacier Bay / Tatshenshini-Alsek - Map of the inscribed property	01/10/1993	œ

## 1.5 - Governmental Institution Responsible for the Property

- Jonathan Putnam
   US National Park Service Office of International Affairs
   World Heritage Program Officer
- Rebecca Kennedy International Programs, Parks Canada Program Specialist

#### Comment

Please replace Canadian contact information with: Vice President, Heritage Conservation and Commemoration Directorate Parks Canada Agency 25, rue Eddy, étage/floor 5 K1A 0M5 Gatineau Canada Telephone: +1(819) 994-1808 Fax: +1 (819) 934-1115

## 1.6 - Property Manager / Coordinator, Local Institution / Agency

Eric Veach

Chief of Cultural and Natural Resources

#### Comment

Rick Obernesser, Superintendent, Wrangell-St. Elias National Park & Preserve, rick\_obernesser@nps.gov Sean Sheardown, Superintendent, Kluane National Park Reserve, sean.sheardown@pc.gc.ca Susan Boudreau, Superintendent, Glacier Bay National Park & Preserve, susan\_boudreau@nps.gov Larry Boudreau, BC Northern Region Regional Director, larry.boudreau@gov.bc.ca

#### 1.7 - Web Address of the Property (if existing)

- <u>View photos from OUR PLACE the World Heritage</u> collection
- 2. Kluane Tatshenshini-Alsek (Parks Canada)
- Wrangell-St. Elias National Park and Preserve (U.S. National Park Service)

- 4. Glacier Bay National Park & Preserve (U.S. National Park Service)
- 5. World Heritage in Canada (Parks Canada)
- 6. Report on the State of Conservation (Parks Canada)
- 7. Natural site datasheet from WCMC
- 8. Natural site datasheet from WCMC
- 9. <u>Natural site datasheet from WCMC, Tatshenshini-Alsek Provincial Wilderness Park</u>
- 10. World Heritage in the United States

#### Comment

Please ADD: http://www.nps.gov/wrst http://www.nps.gov/glba Please note that Kluane National Park and Tatshenshini-Alsek Provincial Park are separate. Therefore, please ADD: http://www.env.gov.bc.ca/bcparks/explore/parkpgs/tatshens/http://www.pc.gc.ca/eng/pn-np/yt/kluane/index.aspx Please REMOVE: #2. Kluane Tatshenshini-Alsek (see above) #6. Report on State of Conservation (Canada) #9 - the link does not work

## 1.8 - Other designations / Conventions under which the property is protected (if applicable)

#### Comment

The Wilderness Act applies to areas within Wrangell-St. Elias and Glacier Bay National Parks/Preserves. Glacier Bay National Park is a UNESCO Biosphere Reserve The Protected Areas of British Columbia Act applies to Tatshenshini-Alsek The Alsek River portion of Kluane National Park and Reserve is designated under the Canadian Heritage Rivers System 1.4 On the map, Tatshenshini-Alsek Park is referred to as Tatshenshini-Alsek Wilderness Park. The word 'Wilderness' can be removed.

### 2. Statement of Outstanding Universal Value

### 2.1 - Statement of Outstanding Universal Value / Statement of Significance

### **Statement of Significance**

The Kluane/Wrangell-St. Elias/Glacier Bay/Tatshenshini-Alsek national parks and protected areas along the boundary of Canada and the United States of America are the largest nonpolar icefield in the world and contain examples of some of the world's longest and most spectacular glaciers. Characterized by high mountains, icefields and glaciers, the property transitions from northern interior to coastal biogeoclimatic zones, resulting in high biodiversity with plant and animal communities ranging from marine, coastal forest, montane, sub-alpine and alpine tundra, all in various successional stages. The Tatshenshini and Alsek river valleys are pivotal because they allow ice-free linkages from coast to interior for plant and animal migration. The parks demonstrate some of the best examples of glaciation and modification of landscape by glacial action in a region still tectonically active, spectacularly beautiful, and where natural processes prevail. Criteria

(vii) The joint properties encompass the breadth of active tectonic, volcanic, glacial and fluvial natural processes from the ocean to some of the highest peaks in North America. Coastal and marine environments, snow-capped mountains, calving glaciers, deep river canyons, fjord-like inlets and abundant wildlife abound. It is an area of exceptional natural beauty.

(viii) These tectonically active joint properties feature continuous mountain building and contain 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.

(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. (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.

## 2.2 - The criteria (2005 revised version) under which the property was inscribed

(vii)(viii)(ix)(x)

## 2.3 - Attributes expressing the Outstanding Universal Value per criterion

see above

### 2.4 - If needed, please provide details of why the Statement of Outstanding Universal Value should be revised

See 2.5 below

### 2.5 - Comments, conclusions and / or recommendations related to Statement of Outstanding Universal Value

Canada and the United States are currently finalizing Retrospective Statements of Outstanding Universal Value for some of their World Heritage sites. Pending Committee approval, these will be used for the next Periodic Reporting cycle.

### 3. Factors Affecting the Property

#### 3.14. Other factor(s)

### 3.14.1 - Other factor(s)

Local road management by external agencies (AKDOT) has resulted in substantial impacts to streams within WRST.

### 3.15. Factors Summary Table

### 3.15.1 - Factors summary table

	Name	Impact			Orig	in
3.2	Transportation Infrastructure					
3.2.2	Air transport infrastructure		) 🗐		•	
3.2.3	Marine transport infrastructure	<b>(</b>	9		(0)	5
3.2.4	Effects arising from use of transportation infrastructure	6	) 🗐		•	F
3.3	Services Infrastructures					
3.3.1	Water infrastructure	<b>©</b>	) 🗐	A		F
3.3.2	Renewable energy facilities	(	)	9	•	
3.3.3	Non-renewable energy facilities	(	)	9	•	G
3.3.4	Localised utilities	<b>()</b>	) 🗐	9	•	F
3.3.5	Major linear utilities	<b>()</b>	) 🗐	A	•	F
3.4	Pollution					
3.4.1	Pollution of marine waters	(		9		F
3.4.2	Ground water pollution	(	)	9	•	F
3.4.3	Surface water pollution	(	)	9	•	S
3.4.4	Air pollution	(	) 🗐	A		F
3.4.5	Solid waste	6	9	A	•	F
3.5	Biological resource use/modification	' '				
3.5.1	Fishing/collecting aquatic resources	(	) 🗐	A	•	F
3.5.2	Aquaculture	(	)	A		F
3.5.3	Land conversion	<b>(</b>	) 🗐	A		G.
3.5.4	Livestock farming / grazing of domesticated animals		9		(0)	S
3.5.5	Crop production	(	) 🗐	A	•	F
3.5.7	Subsistence wild plant collection	<b>()</b>	) 🗐		•	F
3.5.8	Commercial hunting	<b>()</b>	) 🗐	A	•	F
3.5.9	Subsistence hunting	<b>()</b>	) 🗐		•	F
3.5.10	Forestry /wood production	<b>()</b>	) 🗐	A	•	F
3.6	Physical resource extraction					
3.6.1	Mining	(	9	4	•	F
3.6.2	Quarrying	<b>()</b>	9	A	•	
3.6.3	Oil and gas	(	)	A	•	F
3.6.4	Water (extraction)	6	9	A	•	
3.7	Local conditions affecting physical fabric	' '				
3.7.7	Pests	<b>(</b>	9	A	(0)	8
3.7.8	Micro-organisms			A		F
3.8	Social/cultural uses of heritage					
3.8.1	Ritual / spiritual / religious and associative uses	<b>(1)</b>			(0)	
3.8.2	Society's valuing of heritage	<b>(</b>	) 🗐	A	<b>(!</b> )	F
3.8.3	Indigenous hunting, gathering and collecting	<b>(</b>	) 🗐	A	•	F
3.8.4	Changes in traditional ways of life and knowledge system	<b>()</b>	9	9		F
3.8.5	Identity, social cohesion, changes in local population and community	<b>()</b>	) 🗐	A		F
3.8.6	Impacts of tourism / visitor / recreation	(	) 🗐	A	•	F
3.9	Other human activities			•		

	Name	Imp	act			Origin
3.9.1	Illegal activities				ø	C
3.9.3	Military training			Ŋ	A	C
3.10	Climate change and severe weather events	_	<u> </u>			
3.10.1	Storms	0		Ą	<b>A</b>	C
3.10.2	Flooding	0			A	<b>(</b> )
3.10.5	Changes to oceanic waters				A	C.
3.10.6	Temperature change			M	A	· ·
3.10.7	Other climate change impacts	0		M	A	<ul><li>@</li></ul>
3.11	Sudden ecological or geological events					
3.11.1	Volcanic eruption	0			A	<b>(</b>
3.11.2	Earthquake	0		M	A	<ul><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li><!--</td--></li></ul>
3.11.3	Tsunami/tidal wave	0		M	A	C.
3.11.4	Avalanche/ landslide	0		M	A	<b>(</b> )
3.11.5	Erosion and siltation/ deposition	0		M	A	<b>(</b>
3.11.6	Fire (widlfires)	0		A	À	<ul><li>@</li></ul>
3.12	Invasive/alien species or hyper-abundant species			_		
3.12.1	Translocated species					C
3.12.2	Invasive/alien terrestrial species					Œ
3.12.3	Invasive / alien freshwater species				A	C.
3.12.4	Invasive / alien marine species				À	C.
3.12.5	Hyper-abundant species	0			A	(a) (3
3.13	Management and institutional factors			-		
3.13.1	Low impact research / monitoring activities	0		A	A	• 《
3.13.2	High impact research / monitoring activities	0		M	A	<ul><li>@</li></ul>
3.13.3	Management activities	0		M	A	(a) (g
Legend	Current Potential Negative Positive Inside		C	Outs	ide	

### 3.16. Assessment of current negative factors

### 3.16.1 - Assessment of current negative factors

		Spatial scale	Temporal scale	Impact	Management response	Trend
3.2	Transportation Infrastructure		•			•
3.2.2	Air transport infrastructure	restricted	frequent	insignificant	medium capacity	static
3.2.3	Marine transport infrastructure	restricted	intermittent or sporadic	insignificant	high capacity	static
3.2.4	Effects arising from use of transportation infrastructure	localised	frequent	minor	medium capacity	increasing
3.3	Services Infrastructures					
3.3.1	Water infrastructure	restricted	intermittent or sporadic	insignificant	high capacity	static
3.3.4	Localised utilities	restricted	on-going	minor	low capacity	increasing
3.3.5	Major linear utilities	restricted	on-going	minor	low capacity	increasing
3.4	Pollution					
3.4.4	Air pollution	localised	intermittent or sporadic	minor	low capacity	static
3.4.5	Solid waste	restricted	one off or rare	insignificant	medium capacity	static
3.5	Biological resource use/modification		•		•	•
3.5.1	Fishing/collecting aquatic resources	extensive	frequent	minor	medium capacity	static
3.5.3	Land conversion	restricted	one off or rare	insignificant	no capacity and / or resources	static
3.5.4	Livestock farming / grazing of domesticated animals	localised	frequent	minor	high capacity	static
3.5.5	Crop production	restricted	one off or rare	insignificant	low capacity	static

### Section II-Kluane / Wrangell-St. Elias / Glacier Bay / Tatshenshini-

		Spatial scale	Temporal scale	Impact	Management response	Trend
3.5.7	Subsistence wild plant collection	localised	intermittent or sporadic	insignificant	high capacity	static
3.5.8	Commercial hunting	extensive	on-going	minor	high capacity	static
3.5.9	Subsistence hunting	extensive	on-going	minor	high capacity	static
3.5.10	Forestry /wood production	localised	intermittent or sporadic	minor	medium capacity	increasing
3.6	Physical resource extraction					
3.6.1	Mining	restricted	one off or rare	insignificant	high capacity	decreasing
3.6.2	Quarrying	restricted	intermittent or sporadic	minor	low capacity	static
3.6.4	Water (extraction)	restricted	one off or rare	insignificant	medium capacity	static
3.7	Local conditions affecting physical fa	bric				
3.7.7	Pests	extensive	on-going	minor	no capacity and / or resources	decreasing
3.8	Social/cultural uses of heritage					
3.8.2	Society's valuing of heritage	localised	intermittent or sporadic	insignificant	low capacity	static
3.8.3	Indigenous hunting, gathering and collecting	extensive	on-going	minor	high capacity	static
3.8.4	Changes in traditional ways of life and knowledge system	localised	intermittent or sporadic	minor	medium capacity	static
3.8.5	Identity, social cohesion, changes in local population and community	localised	intermittent or sporadic	minor	no capacity and / or resources	increasing
3.8.6	Impacts of tourism / visitor / recreation	localised	intermittent or sporadic	insignificant	high capacity	increasing
3.9	Other human activities					
3.9.3	Military training	localised	intermittent or sporadic	significant	no capacity and / or resources	increasing
3.10	Climate change and severe weather e	vents				
3.10.6	Temperature change	extensive	frequent	significant	no capacity and / or resources	increasing
3.10.7	Other climate change impacts	extensive	frequent	significant	no capacity and / or resources	increasing
3.11	Sudden ecological or geological even	ts				
3.11.2	Earthquake	localised	one off or rare	insignificant	no capacity and / or resources	static
3.11.3	Tsunami/tidal wave	restricted	one off or rare	minor	low capacity	static
3.11.6	Fire (widlfires)	localised	intermittent or sporadic	minor	high capacity	static
3.12	Invasive/alien species or hyper-abund	ant species				
3.12.1	Translocated species	localised	on-going	insignificant	medium capacity	static
3.12.2	Invasive/alien terrestrial species	localised	frequent	minor	medium capacity	increasing
3.12.5	Hyper-abundant species	localised	on-going	minor	no capacity and / or resources	increasing
3.13	Management and institutional factors					
3.13.1	Low impact research / monitoring activities	restricted	frequent	insignificant	high capacity	increasing
3.13.2	High impact research / monitoring activities	restricted	intermittent or sporadic	insignificant	high capacity	static
3.13.3	Management activities	localised	frequent	insignificant	high capacity	static

## 3.17. Comments, conclusions and / or recommendations related to factors affecting the property

### 3.17.1 - Comments

Wrangell-St. Elias National Park/Preserve contains approximately 1 million acres of private inholdings within its boundary. Activities associated with these private lands include mining, potential oil &/or gas development, grazing, motorized vehicle access, limited agriculture, water withdrawals, and timber harvest.

## 4. Protection, Management and Monitoring of the Property

#### 4.1. Boundaries and Buffer Zones

#### 4.1.1 - Buffer zone status

There is no buffer zone, and it is not needed

## 4.1.2 - Are the boundaries of the World Heritage property adequate to maintain the property's Outstanding Universal Value?

The boundaries of the World Heritage property are **adequate** to maintain the property's Outstanding Universal Value

## 4.1.3 - Are the buffer zone(s) of the World Heritage property adequate to maintain the property's Outstanding Universal Value?

The property had no buffer zone at the time of its inscription on the World Heritage List

### 4.1.4 - Are the boundaries of the World Heritage property known?

The boundaries of the World Heritage property are known by the management authority but are not known by local residents / communities / landowners.

### 4.1.5 - Are the buffer zones of the World Heritage property known?

The property had **no buffer zone** at the time of its inscription on the World Heritage List

## 4.1.6 - Comments, conclusions and / or recommendations related to boundaries and buffer zones of the World Heritage property

Local communities surrounding Wrangell-St. Elias National Park express concern regarding any involvement with the United Nations and are opposed to the WHS designation.

### 4.2. Protective Measures

## 4.2.1 - Protective designation (legal, regulatory, contractual, planning, institutional and / or traditional)

The Canada National Parks Act (2000) and its associated regulations govern the protection and management of the cultural and natural resources of Kluane National Park and Reserve. Land Claim Final Agreements with the Champagne and Aishihik and Kluane First Nations provide additional

direction for the protection and management of the park and park reserve's cultural and natural resources.

National park regulations include but are not necessarily limited to:

- · aircraft access
- business
- · camping
- fire protection
- fishing
- · general
- · wildlife regulations

The Canada National Parks Act requires that "maintenance or restoration of ecological integrity, through the protection of natural resources and natural processes, shall be the first priority of the Minister when considering all aspects of the management of parks." The Parks Canada Agency Act (1998) established an Agency "for the purpose of ensuring that Canada's national parks, national historic sites and related heritage areas are protected and represented for this and future generations and in order to further the achievement of the national interest as it is related to those parks, sites and heritage areas and related programs."

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)

Consolidated versions of the Canada National Parks Act and associated regulations can be found at:

http://laws.justice.gc.ca/en/N-14.01/index.html and http://lois.justice.gc.ca/fr/N-14.01/index.html

Canadian national parks are also managed according to Parks Canada's Guiding Principles and Operational Policies.

Wrangell-St. Elias and Glacier Bay National Park and Preserves are administered under the authority of the Organic Act of August 25, 1916 (39 Stat. 535), which established the United States NPS and which states that the fundamental purpose of national parks is "...to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such a manner as by such means as will leave them unimpaired for the enjoyment of future generations." The Organic Act and its associated regulations govern the protection and management of the cultural and natural resources of the unit.

Wrangell-St. Elias National Park and Preserve was established under ANILCA at 5.34 hectares (13.2 million acres), with some sections designated as national preserve and the bulk of the area designated as national park. 3.6 million hectares (8.9 million acres) of federally designated wilderness was overlaid on these sections

Glacier Bay National Monument was established on February 26, 1925 by proclamation of Calvin Coolidge (43 Stat 1988) under the Antiquities Act. In 1980, ANILCA redesignated the monument as Glacier Bay National Park and Preserve and extended the boundaries to include the northern end of the Fairweather Range and adjacent coastal areas. ANILCA also designated most of the park lands and a portion of the park waters as Wilderness.

Management of the properties' resources is mandated under several additional federal statutes enacted over the past 80 years:

- Wilderness Act
- · National Historic Preservation Act
- Redwood Act
- National Environmental Policy Act
- Endangered Species Act
- The National Parks and Recreation Act of 1978

### Section II-Kluane / Wrangell-St. Elias / Glacier Bay / Tatshenshini-

- Marine Mammal Protection Act
- National Parks Omnibus Management Act of 1998
  Tatshenshini-Alsek Park was established in 1993 by the
  Province of British Columbia as a Class A Park by an
  enactment of the provincial legislature. Parks are managed for
  important conservation values and are dedicated for the
  preservation of their natural environments for the inspiration,
  use and enjoyment of the public. It is managed under the
  following statutes:
- Park Act and regulations
- Protected Areas of BC Act
- · Wildlife Act

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

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

4.2.3 - 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?

The property had **no buffer zone at the time of inscription** on the World Heritage List

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

An adequate legal framework exists for the area surrounding the World Heritage property and the buffer zone, but there are some deficiencies in its implementation which undermine the maintenance of the Outstanding Universal Value including conditions of Authenticity and / or Integrity of the property

## 4.2.5 - Can the legislative 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 remain

## 4.2.6 - Comments, conclusions and / or recommendations related to protective measures

The tremendously vast nature of the WHS limits the ability of managers to prevent many site specific impacts to the World Heritage property.

### 4.3. Management System / Management Plan

### 4.3.1 - Management System

Kluane National Park and Reserve is managed and owned by the Canadian Federal Government as a National Park. Wrangell-St. Elias and Glacier Bay National Park and Preserves are managed by the US National Park Service (NPS) under the US Department of Interior, a cabinet level agency within the executive branch reporting directly to the President. Tatshenshini-Alsek Park is managed under the authority of the Minister of Water, Land and Air Protection (WLAP) of the Province of British Columbia, Canada.

The park is co-managed by the Ministry of WLAP and the Champagne and Aishihik First Nations.

There is a management plan in place for the site. Summary of management plan

Kluane

A park management plan is required under the Parks Canada Agency Act and Canada National Parks Act.

Over the last several years and following a series of public consultation meetings, workshops with local students and the CAFN, stakeholder meetings, and with input from a volunteer working group established to provide recommendations on the park recreational opportunities, the 1990 management plan was updated.

Approved by Canada's Minister of the Environment in early 2004, the updated management plan provides long-term strategic direction for the management and operation of Kluane National Park and Reserve. The Park Superintendent, working cooperatively with the Kluane National Park Management Board and the Champagne and Aishihik and Kluane First Nations, is responsible for the implementation of the management plan.

The management plan identifies a number of key actions related to heritage resource protection and presentation, visitor services, and management of Parks Canada. These actions fall within eight general themes related to:

- Identifying and protecting critical wildlife habitat and movement corridors
- · Strengthening co-operative management
- Working with partners in the region to maintain a healthy ecosystem
- Increasing ecological integrity monitoring
- Assisting local First Nations to become reacquainted with the park
- Offering a variety of high quality wilderness experiences without impairing ecological integrity
- · Expanding interpretation and outreach services; and
- Establishing wilderness area declaration for Zone I and II areas of the park

Wrangell-St. Elias

The General Management Plan for Wrangell-St. Elias National Park and Preserve was completed in 1986.

The plan and subsequent action plans fulfill the requirements of ANILCA of 1980, which established the park and preserve. Major topics covered include:

- Land Protection planning
- · Natural and Cultural Resources planning
- · Backcountry and Wilderness management
- · Management zoning
- Visitor services
- Commercial services
- Access

There have been two amendments to the General Management Plan: one to cover the issue of existing mining claims within the park and one to incorporate Kennecott National Historic Landmark into the park.

The plan is available at: <a href="http://www.nps.gov/wrst">http://www.nps.gov/wrst</a>. Glacier Bay

The General Management Plan for Glacier Bay National Park and Preserve sets the overall direction for management of natural and cultural resources, visitor use, land protection, and facility development. The plan and subsequent action plans fulfill the requirements of ANILCA of 1980, which established the park and preserve. This plan was developed in accordance with the National Environmental Policy Act, which requires public participation and review. The main elements of the plan are:

Natural Resource Management

### Section II-Kluane / Wrangell-St. Elias / Glacier Bay / Tatshenshini-

- Cultural Resource Management
- Land Protection
- Park/Preserve Boundary Changes
- · Wilderness Management/Zoning
- Private Lands Use and Development
- · Commercial Visitor Services
- · Backcountry Use
- · Use of Glacier Bay National Preserve
- Vessel Use
- · Bartlett Cove Development Concept

The plan is available at:

http://www.nps.gov/glba/pphtml/facts.html.

Tatshenshini-Alsek Park

Tatshenshini-Alsek Park is currently managed under an approved Management Direction Statement pending preparation of a full management plan. The priority for management of the park is to ensure that its internationally significant natural, cultural heritage and recreational values are protected and that ecosystems within the park maintain their natural function. The direction statement includes principles for management and priority management objectives and strategies for:

- protecting biophysical values
- protecting cultural heritage values
- protecting recreation values and managing for appropriate levels of recreational use
- ensuring environmental protection
- resolving non-conforming uses
- encouraging public understanding, appreciation and enjoyment
- •cooperating in identifying and optimizing commercial, economic, training and employment opportunities for CAFN and
- •ensuring coordinated approaches for management with adjacent jurisdictions in recognition of the World Heritage status.

### Comment

In 2010 a new management plan for Kluane was approved and is in effect for ten years. A joint planning team was organized to lead the planning process, and was comprised of representatives of Champagne and Aishihik First Nations, Kluane First Nation, Kluane Park Management Board and Parks Canada Agency. Other agencies, special interests, businesses, NGOs, communities, users and the public were also consulted in the plan development.

http://www.pc.gc.ca/eng/pn-np/yt/kluane/plan.aspx.

### 4.3.2 - Management Documents

Title	Status	Available	Date	Link to source
General Management Plan	N/A	Available	01/01/1991	

# 4.3.3 - How well do the various levels of administration (i.e. national / federal; regional / provincial / state; local / municipal etc.) coordinate in the management of the World Heritage Property?

There is coordination between the range of administrative bodies / levels involved in the management of the property **but it could be improved** 

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

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

### 4.3.5 - Is the management system being implemented?

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

## 4.3.6 - Is there an annual work / action plan and is it being implemented?

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

## 4.3.7 - Please rate the cooperation / relationship with World Heritage property managers / coordinators / staff of the following

Local communities / residents	Poor
Local / Municipal authorities	Non-existent
Indigenous peoples	Fair
Landowners	Poor
Visitors	Fair
Researchers	Good
Tourism industry	Good
Industry	Not applicable

#### 4.3.8 - If present, do local communities resident in or near the World Heritage property and / or buffer zone have input in management decisions that maintain the Outstanding Universal Value?

Local communities **directly contribute** to some decisions relating to management

# 4.3.9 - If present, do indigenous peoples resident in or regularly using the World Heritage property and / or buffer zone have input in management decisions that maintain the Outstanding Universal Value?

Indigenous peoples directly contribute to **some decisions** relating to management but their involvement could be improved

# 4.3.10 - Is there cooperation with industry (i.e. forestry, mining, agriculture, etc.) regarding the management of the World Heritage property, buffer zone and / or area surrounding the World Heritage property and buffer zone?

There is contact but **little or no cooperation** with industry regarding the management of the World Heritage property, buffer zone and / or area surrounding the World Heritage property and buffer zone

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

The 4 units that make up the WHS have some coordination. Specifically management of river trips on the Tatshenshini-Alsek & Glacier Bay units are well coordinated. International coordination of hunting patrols and fire management occurs between Wrangell-St. Elias and Kluane. The vast, remote, rugged nature of the units makes coordination challenging. Regarding 4.3.1 - Tatshenshini-Alsek Park is managed under authority of the Minister of Environment, not WLAP, Province of British Columbia.

## 4.3.12 - Please report any significant changes in the legal status and / or contractual / traditional protective measures and management arrangements for the World

Heritage property since inscription or the last Periodic report

none

#### 4.4. Financial and Human Resources

## 4.4.1 - Costs related to conservation, based on the average of last five years (relative percentage of the funding sources)

Multilateral funding (GEF, World Bank, etc)	0%
International donations (NGO's, foundations, etc)	0%
Governmental (National / Federal)	95%
Governmental (Regional / Provincial / State)	0%
Governmental (Local / Municipal)	0%
In country donations (NGO's, foundations, etc)	1%
Individual visitor charges (e.g. entry, parking, camping fees, etc.)	2%
Commercial operator payments (e.g. filming permit, concessions, etc.)	1%
Other grants	1%

### 4.4.2 - International Assistance received from the World Heritage Fund (USD)

#### Comment

none

## 4.4.3 - Is the current budget sufficient to manage the World Heritage property effectively?

The available budget is **acceptable** but could be further improved to fully meet the management needs

## 4.4.4 - Are the existing sources of funding secure and likely to remain so?

The existing sources of funding **are secure** in the mediumterm and planning is underway to secure funding in the longterm

## 4.4.5 - Does the World Heritage property provide economic benefits to local communities (e.g. income, employment)?

There is **some flow** of economic benefits to local communities

## 4.4.6 - Are available resources such as equipment, facilities and infrastructure sufficient to meet management needs?

There are adequate equipment and facilities

## 4.4.7 - Are resources such as equipment, facilities and infrastructure adequately maintained?

There is basic maintenance of equipment and facilities

## 4.4.8 - Comments, conclusion, and / or recommendations related to finance and infrastructure

none

## 4.4.9 - Distribution of employees involved in managing the World Heritage property (% of total)

Full-time	50%
Part-time	50%

## 4.4.10 - Distribution of employees involved in managing the World Heritage property (% of total)

Permanent	25%
Seasonal	75%

### 4.4.11 - Distribution of employees involved in managing the World Heritage property (% of total)

Paid	85%
Volunteer	15%

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

A range of human resources exist, but these are **below optimum** to manage the World Heritage Property.

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

<u>.                                      </u>	
Research and monitoring	Poor
Promotion	Poor
Community outreach	Fair
Interpretation	Poor
Education	Poor
Visitor management	Fair
Conservation	Fair
Administration	Poor
Risk preparedness	Fair
Tourism	Poor
Enforcement (custodians, police)	Poor

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

Not available
Low
Not available
Low
Medium
Not available
Medium

## 4.4.15 - Do the management and conservation programmes at the World Heritage property help develop local expertise?

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

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

Units are utilizing some local expertise, however, many staff are transient without long term ties to local communities. Staff numbers across most units are currently in decline.

#### 4.5. Scientific Studies and Research Projects

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

Knowledge about the values of the World Heritage property is **sufficient** for most key areas **but there are gaps** 

# 4.5.2 - 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 **considerable** research but it is **not directed** towards management needs and / or improving understanding of Outstanding Universal Value

### 4.5.3 - Are results from research programmes disseminated?

Research results are shared with local participants and some national agencies

## 4.5.4 - Please provide details (i.e. authors, title, and web link) of papers published about the World Heritage property since the last Periodic Report

Within US NPS units details are available at http://www.irma.nps.gov

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

The Inventory and Monitoring Program in the US NPS provides some funding formonitoring of natural resources identified as vital signs.

## 4.6. Education, Information and Awareness Building

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

In many locations, but not easily visible to visitors

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

Local communities / residents	Non-existent
Local / Municipal authorities within or adjacent to the property	Poor
Local Indigenous peoples	Non-existent
Local landowners	Non-existent
Visitors	Average
Tourism industry	Average
Local businesses and industries	Poor

## 4.6.3 - Is there a planned education and awareness programme linked to the values and management of the World Heritage property?

There is a **limited and** *ad hoc* education and awareness programme

## 4.6.4 - What role, if any, has designation as a World Heritage property played with respect to education, information and awareness building activities?

World Heritage status has influenced education, information and awareness building activities, **but it could be improved** 

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

The Outstanding Universal Value of the property is adequately presented and interpreted **but improvements could be made** 

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

Visitor centre	Excellent
Site museum	Adequate
Information booths	Adequate
Guided tours	Poor
Trails / routes	Adequate
Information materials	Adequate
Transportation facilities	Adequate
Other	Adequate

### 4.6.7 - Comments, conclusions and / or recommendations related to education, information and awareness building

The Outstanding Universal Values of the site are presented in interpretive programs but there is not a specific interpretive program aimed at the WHS.

#### 4.7. Visitor Management

### 4.7.1 - Please provide the trend in annual visitation for the last five years

Last year	Minor Increase
Two years ago	Minor Increase
Three years ago	Minor Increase
Four years ago	Minor Increase
Five years ago	Minor Increase

### 4.7.2 - What information sources are used to collect trend data on visitor statistics?

Entry tickets and registries
Transportation services
Visitor surveys
Other

### 4.7.3 - Visitor management documents

# 4.7.4 - Is there an appropriate visitor use management plan (e.g. specific plan) for the World Heritage property which ensures that its Outstanding Universal Value is maintained?

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

### Section II-Kluane / Wrangell-St. Elias / Glacier Bay / Tatshenshini-

## 4.7.5 - Does the tourism industry contribute to improving visitor experiences and maintaining the values of the World Heritage property?

There is **limited co-operation** between those responsible for the World Heritage property and the tourism industry to present the Outstanding Universal Value and increase appreciation

## 4.7.6 - If fees (i.e. entry charges, permits) are collected, do they contribute to the management of the World Heritage property?

The fee is collected, and makes **some contribution** to the management of the World Heritage property

## 4.7.7 - Comments, conclusions and / or recommendations related to visitor use of the World Heritage property

Fee collection varies between units.

#### 4.8. Monitoring

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

There is considerable monitoring but it is **not directed towards management needs** and / or improving understanding of Outstanding Universal Value

## 4.8.2 - Are key indicators for measuring the state of conservation used to monitor how the Outstanding Universal Value of the property is maintained?

Information on the values of the World Heritage property is sufficient and key indicators have been defined but monitoring the status of indicators could be improved

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

or the remaining groupe	
World Heritage managers / coordinators and staff	Average
Local / Municipal authorities	Not applicable
Local communities	Non-existent
Researchers	Poor
NGOs	Poor
Industry	Non-existent
Local indigenous peoples	Poor

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

No relevant Committee recommendations to implement

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

none

## 4.8.6 - Comments, conclusions and / or recommendations related to monitoring

US NPS monitors natural resources through the Inventory and Monitoring program. Monitoring in Kluane National Park is undertaken by Parks Canada under its environmental assessment guidelines.

#### 4.9. Identification of Priority Management Needs

### 4.9.1 - Please select the top 6 managements needs for the property (if more than 6 are listed below)

Please refer to question 5.2

### 5. Summary and Conclusions

### 5.1. Summary - Factors affecting the Property

### 5.1.1 - Summary - Factors affecting the Property

		World Heritage criteria and attributes affected	Actions	Monitoring	Timeframe	Lead agency (and others involved)	More info / comment
3.3	Services Infras	tructures	•	·	•	<u>'</u>	-
3.3.4	Localised utilities	Power lines interfere with scenic quality in Wrangell-St. Elias.	N/A	N/A	N/A	WRSTUS NPS	Attempted to work on this issue with local utility prior to line installation. It's unlikely there will be any change in the near future.
3.7	Local condition	ns affecting physical fab	ric				
3.7.7	Pests	Spruce Bark beetle infestations have substantially changed forest conditions in Wrangell-St. Elias and Kluane.	N/A	Monitoring will be performed cooperatively with other agencies when funding is available.	20 years.	WRSTUSNPS	Spruce bark beetles are a native species that may exhibit invasive behavior in response to climate change.
3.9	Other human a	ctivities		•	•	•	
3.9.3	Military training	Scenic quality and natural soundscape may be affected by military overflights in Wrangell- St. Elias.	Comment on planning efforts of the Department of Defense	n/A	20 years	WRST-USNPS	Expansion of military training overflights are currently proposed in areas adjacent to WRST
3.10	Climate change	and severe weather eve	ents		,	<del>'</del>	
3.10.6	Temperature change	Climate change is rapidly reducing glaciers and affecting wildlife species in all units.	Promote understanding of human caused increases in GHG and carbon emissions	Monitoring of ecosystems susceptible to climate change will occur in individual units	Long term	All	Northern ecosystems appear to be particularly vulnerable to the effects of climate change.
3.10.7	Other climate change impacts	River flows are more dynamic.	N/A	Same as 3.10.6	Long term	ALL	n/a
3.12	Invasive/alien species or hyper-abundant species						
3.12.5	Hyper- abundant species	A number of insect species that defoliate trees are hyperabundant in Wrangell-St. Elias.	Monitor	Monitoring will occur when funding is available	long term	n/a	n/a

### 5.2. Summary - Management Needs

### 5.2.2 - Summary - Management Needs

4.1 Bou	4.1 Boundaries and Buffer Zones					
		Actions		Lead agency (and others involved)	More info / comment	
	the World Heritage	Local residents are familiar with local boundaries but are not familiar with the overall WHS boundaries. This is primarily an education effort.	Ongoing		Some resistance to participation in anything related to the U.N. in WRST's local communities.	
4.3 Man	agement Syster	n / Management Plan				
	There is little or no cooperation with industry regarding management	This issue doesn't require attention.	n/a	n/a	n/a	
4.4 Fina	4.4 Financial and Human Resources					
4.4.13		Agencies will continue to pursue budget increases.	Ongoing	All	n/a	
4.6 Edu	4.6 Education, Information and Awareness Building					

### Section II-Kluane / Wrangell-St. Elias / Glacier Bay / Tatshenshini-

		Interpretive programs can provide additional attention to WHS status.	Ongoing		Could pursue more interest/opportunities for branding
--	--	---	---------	--	---

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

#### 5.3.1 - Current state of Authenticity

**Not applicable** (for sites inscribed exclusively under criteria vii to x)

#### 5.3.2 - Current state of Integrity

The integrity of the World Heritage property is intact

### 5.3.3 - Current state of the World Heritage property's Outstanding Universal Value

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

### 5.3.4 - 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 **predominantly intact** 

## 5.4. Additional comments on the State of Conservation of the Property

#### 5.4.1 - Comments

none

## 6. World Heritage Status and Conclusions on Periodic Reporting Exercise

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

No impact
No impact
No impact
No impact
Positive
No impact
No impact
No impact
Positive
No impact

### 6.2 - Comments, conclusions and / or recommendations related to World Heritage status

World Heritage status provides a unique opportunity for attracting and educating visitors about the value of all of the individual units that make up this WHS. This opportunity could be further enhanced by additional coordination throughout the 4 units that make up this site.

### 6.3 - Entities involved in the preparation of this Section of the Periodic Report

Governmental institution responsible for the property

### 6.4 - Was the Periodic Reporting questionnaire easy to use and clearly understandable?

nο

## 6.5 - Please provide suggestions for improvement of the Periodic Reporting questionnaire

The number of questions should be reduced

## 6.6 - Please rate the level of support for completing the Periodic Report questionnaire from the following entities

UNESCO	Good
State Party Representative	Good
Advisory Body	Very poor

## 6.7 - How accessible was the information required to complete the Periodic Report?

Not all of the required information was accessible

## 6.8 - The Periodic Reporting process has improved the understanding of the following

The concept of Outstanding Universal Value

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

UNESCO	Not Applicable
State Party	Not Applicable
Site Managers	Not Applicable
Advisory Bodies	Not Applicable

## 6.10 - Summary of actions that will require formal consideration by the World Heritage Committee

Automatically generated in online version

## 6.11 - Comments, conclusions and / or recommendations related to the Assessment of the Periodic Reporting exercise

There is tremendous variability across 4 large units managed by 3 different government entities, it wasn't always easy to respond to questions.