

Joggins Fossil Cliffs

1. World Heritage Property Data

1.1 - Name of World Heritage property


Joggins Fossil Cliffs

1.2 - World Heritage property details

1.3 - Geographic information table

Name	Coordinates	Property (ha)	Buffer zone (ha)	Total (ha)	Inscription year
Joggins Fossil Cliffs	45.71 / -64.436	689	29.4	718.4	2008
Total (ha)		689	29.4	718.4	

1.4 - Map(s)

Title	Date	Link to source
Joggins, Nominated Property and Buffer zone	2007	

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

1. [The Joggins Fossil Cliffs](#)

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) <u>is</u> designated and/or protected under this convention/programme	The World Heritage property (in whole or in part) <u>is not</u> designated and/or protected under this convention/programme
2.1.1	International Register of Cultural Property under Special Protection (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 (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) (Convention on Wetlands of International Importance (Ramsar Convention))		✗
2.1.4	World Network of Biosphere Reserves Man and the Biosphere (MAB) Programme		✗
2.1.5	Global Geoparks Network 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?

No

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)

It may, at some point in the future, come up for discussion of the Joggins Fossil Cliffs becoming part of the Cliffs of Fundy Geopark. Again, no conversations are being had around the topic, but if it comes up the discussion will be had.

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?

Not aware

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 are 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

The Joggins Fossil Cliffs have been termed the “coal age Galápagos” and are the world reference site for the “Coal Age”. Their complete and accessible fossil-bearing rock exposures provide the best evidence known of the iconic features of the Pennsylvanian (or Carboniferous) period of Earth History.

Criterion (viii): Earth's history, geological and geomorphic features and processes: The "grand exposure" of rocks at Joggins Fossil Cliffs contains the best and most complete known fossil record of terrestrial life in the iconic "Coal Age": the Pennsylvanian (or Carboniferous) period in Earth's history. The site bears witness to the first reptiles in Earth history, which are the earliest representatives of the amniotes, a group of animals that includes reptiles, dinosaurs, birds, and mammals. Upright fossil trees are preserved at a series of levels in the cliffs together with animal, plant and trace fossils that provide environmental context and enable a complete reconstruction to be made of the extensive fossil forests that dominated land at this time, and are now the source of most of the world's coal deposits. The property has played a vital role in the development of seminal geological and evolutionary principles, including through the work of Sir Charles Lyell and Charles Darwin, for which the site has been referred to as the "coal age Galápagos".

Integrity

The boundaries of the property are clearly defined in relation to logical stratigraphic criteria and include all of the areas necessary to fully display the fossil record of Joggins including the cliff face and foreshore rock exposures, and include both the most fossiliferous strata and younger and older rocks that provide geological context. The inland extent of the property is defined based on the eroding top of the cliffs and this is a fully justifiable and logical basis to cope with the dynamic nature of this coastal property. A relatively narrow buffer zone is defined, which is not part of the inscribed property, but is sufficient to control coastal development which could otherwise threaten the values of the property.

Protection and management requirements

The property has effective legal protection and has the strong support of all levels of government, including in relation to the provision of funding. Some aspects of the legislation, such as for the licensing of fossil collection are cumbersome and would benefit from review, although can be better implemented if site managers are empowered to do so. The site is well resourced, including through the provision of a new visitor centre, and is managed in a way that can be considered to set international standards. The effective process of community involvement and partnerships between scientists, museums and economic interests are also noted, and the biggest challenge of the property will be to maintain the level of performance and resources required in the future.

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	Grand Exposure: 15KM of coastal cliff face	✗			
3.2.2	Fossil Record: the best and most complete known fossil record of terrestrial life in the iconic "Coal Age	✗			
3.2.3	History of Science: The property has played a vital role in the development of seminal geological and evolutionary principles, including through the work of Sir Charles Lyell and Charles Darwin	✗			
3.2.4	Complete and accessible fossil-bearing rock exposures	✗			
3.2.5	Upright fossil trees are preserved at a series of levels in the cliffs together with animal, plant and trace fossils	✗			
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):

- Not relevant

Relevant	✗ Not relevant
----------	----------------

4.1.2 - Commercial development

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

- Not relevant

Relevant	✗ Not relevant
----------	----------------

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):

- Not relevant

Relevant

✕ Not relevant










4.1.5 - Interpretative and visitation facilities

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

- Relevant, Positive, Current, Inside, Outside

✕ 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

4.1.5 We are working to incorporate the history of the indigenous peoples from this area, the Mi'kmaq. Going forward new signage will be fabricated to include the Mi'kmaq language. We are also developing interpretation that will explain the site through the Mi'kmaq world creation story.

4.2. Transportation Infrastructure

4.2.1 - Ground transport infrastructure

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

- Not relevant

Relevant

✕ Not relevant

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

4.2.4 - Marine transport infrastructure

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

- Not relevant

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

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

4.3. Services Infrastructures

4.3.1 - Water infrastructure

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

- Not relevant

☐ Relevant

☒ Not relevant

4.3.2 - Renewable energy facilities

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

- Not relevant

☐ Relevant

☒ Not relevant

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):

- Not relevant

☐ Relevant

☒ Not relevant

4.3.5 - Major linear utilities

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

- Not relevant

☐ Relevant

☒ Not relevant

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

4.4. Pollution

4.4.1 - Pollution of marine waters

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 <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			

4.4.2 - Ground water pollution

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

- Not relevant

☐ Relevant

☒ Not relevant

4.4.3 - Surface water pollution

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 <input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			

4.4.4 - Air pollution

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							

4.4.5 - Solid waste

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

- Not relevant

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

4.4.6 - Input of excess energy

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

- Not relevant

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

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

4.4.1 Pollution. We continue to see a rise in coastal pollution, and garbage washing up on our shoreline.

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):

- Not relevant

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

4.5.4 - Livestock farming/Grazing of domesticated animals

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

- Not relevant

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

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):

- Not relevant

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

4.5.7 - Subsistence wild plant collection

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

- Not relevant

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

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

4.5.10 - Forestry/Wood production

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

- Not relevant

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

4.6. Physical resource extraction

4.6.1 - Mining

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

- Not relevant

Relevant

✕ Not relevant

4.6.2 - Quarrying

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

- Not relevant

Relevant

✕ Not relevant

4.6.3 - Oil and gas

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

- Not relevant

Relevant

✕ Not relevant

4.6.4 - Water (extraction)

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

- Not relevant

Relevant

✕ Not relevant

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

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

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):

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

✕ Relevant

Not relevant

	Impact		Origin		Trend of impact		
Impact	 Current	 Potential	 Inside	 Outside	 Decreasing	 Stable	 Increasing
 Positive ✕	✕			✕		→	
 Negative ✕	✕			✕		→	

4.7.7 - Pests

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

- Not relevant

Relevant

✕ Not relevant

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

Rain causes erosion to the Joggins Fossil Cliffs. This is a positive because it uncovers new fossils. It is a negative because the rain/weather can damage fossils.

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

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

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):

- Not relevant



Relevant

✕ Not relevant

4.8.6 - Impacts of tourism/Visitation/Recreation

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

- Relevant, Positive, Current, 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

Tourism numbers dropped during the covid-19 pandemic. Visitation numbers are trending towards pre-pandemic levels.

4.9. Other human activities

4.9.1 - Illegal activities

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

- Not relevant

Relevant	✕ Not relevant
----------	----------------

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):

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

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	 Current	 Potential	 Inside	 Outside	 Decreasing	 Stable	 Increasing
 Positive ✕	✕	✕		✕			
 Negative ✕	✕	✕					

4.10.2 - Flooding

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

- Not relevant

Relevant

✕ Not relevant

4.10.3 - Drought

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

- Not relevant

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):

- Not relevant

Relevant

✕ Not relevant

4.10.7 - Other climate change impacts

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

- Not relevant

Relevant

✕ Not relevant

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

4.10.1 Hurricanes can be very destructive to the Joggins Fossil Cliffs. Storm surges from the Bay of Fundy have caused large sections of the cliff face to fall down. This is positive because it exposes new fossils. Negative because it can destroy fossils exposed.

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

4.11.5 - Erosion and siltation/Deposition

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

- Relevant, Positive, Current, Potential, Inside

✕ 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):

- Not relevant

Relevant	✕ Not relevant
----------	----------------

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

Erosion exposes new fossils.

4.12. Invasive/alien species or hyper-abundant species

4.12.1 - Translocated species

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

- Not relevant

Relevant	✕ Not relevant
----------	----------------

4.12.2 - Invasive/Alien terrestrial species

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

- Not relevant

Relevant	✕ Not relevant
----------	----------------

4.12.3 - Invasive/Alien freshwater species

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

- Not relevant

Relevant	✕ Not relevant
----------	----------------

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):

- Not relevant

Relevant	✕ Not relevant
----------	----------------

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

4.13. Management and institutional factors

4.13.1 - Management system/Management plan

Relevant	✕ Not relevant
----------	----------------

4.13.2 - Legal framework

Relevant	✕ Not relevant
----------	----------------

4.13.3 - Governance

Relevant	✕ Not relevant
----------	----------------

4.13.4 - Management activities

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

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

✕ 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
----------	----------------

4.13.7 - Low impact research/monitoring activities

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

- Relevant, Positive, Current, Potential, 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):

- Relevant, Positive, Current, Potential, Inside

✕ 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

4.13.9 Ongoing funding is always a concern. We are approaching the end of a 10 year agreement with our government partner. Without this funding we would not be able to carry out operations at the site.

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						
4.1.5 Interpretative and visitation facilities	➕	🔴		🟢	🟢	

4.4 Pollution						
4.4.1 Pollution of marine waters						
						
4.4.3 Surface water pollution						
						
4.4.4 Air pollution						
						
4.7 Local conditions affecting physical fabric						
4.7.6 Water (rain/water table)						
						
4.8 Social/Cultural uses of heritage						
4.8.6 Impacts of tourism/Visitation/Recreation						
4.10 Climate change and severe weather events						
4.10.1 Storms						
						
4.11 Sudden ecological or geological events						
4.11.5 Erosion and siltation/Deposition						
4.13 Management and institutional factors						
4.13.4 Management activities						
4.13.5 Financial 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
4.1.5 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 - Development over the last 6 years	
	Decreasing
	Static
✕	Increasing

4.4 Pollution

Name	Impact			Origin		Trend
4.4.1 Pollution of marine waters						
						

Spatial scale - Area affected by the factor	
	Restricted
	Localised
	Extensive
✕	Widespread
Temporal scale - Occurrence 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 - Development over the last 6 years	
	Decreasing
	Static
✕	Increasing

Name	Impact	Origin	Trend
4.4.3 Surface water pollution			
			


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

Temporal scale - Occurrence 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 - Development 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 - Occurrence of the impact	
<input checked="" type="checkbox"/>	One off or rare
<input type="checkbox"/>	Intermittent or sporadic
<input type="checkbox"/>	Frequent
<input type="checkbox"/>	On-going
Impact - Impact on the attributes	
<input type="checkbox"/>	Insignificant
<input checked="" type="checkbox"/>	Minor
<input type="checkbox"/>	Significant
<input type="checkbox"/>	Major
Management response - Capacity of management to respond	
<input type="checkbox"/>	High capacity
<input type="checkbox"/>	Medium capacity
<input type="checkbox"/>	Low capacity
<input checked="" type="checkbox"/>	No capacity and / or resources
Trend - Development over the last 6 years	
<input type="checkbox"/>	Decreasing
<input checked="" type="checkbox"/>	Static
<input type="checkbox"/>	Increasing






4.7 Local conditions affecting physical fabric

Name	Impact			Origin	Trend
4.7.6 Water (rain/water table)					

Spatial scale - Area affected by the factor	
<input type="checkbox"/>	Restricted
<input type="checkbox"/>	Localised
<input type="checkbox"/>	Extensive
<input checked="" type="checkbox"/>	Widespread
Temporal scale - Occurrence of the impact	
<input type="checkbox"/>	One off or rare
<input checked="" type="checkbox"/>	Intermittent or sporadic
<input type="checkbox"/>	Frequent
<input type="checkbox"/>	On-going
Impact - Impact on the attributes	
<input type="checkbox"/>	Insignificant
<input type="checkbox"/>	Minor
<input checked="" type="checkbox"/>	Significant
<input type="checkbox"/>	Major
Management response - Capacity of management to respond	
<input type="checkbox"/>	High capacity
<input type="checkbox"/>	Medium capacity







	Low capacity
✕	No capacity and / or resources
Trend - Development over the last 6 years	
	Decreasing
✕	Static
	Increasing

4.8 Social/Cultural uses of heritage

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 - Occurrence 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 - Development over the last 6 years	
	Decreasing
	Static
✕	Increasing



4.10 Climate change and severe weather events

Name	Impact	Origin	Trend
4.10.1 Storms	  		
	  		

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 - Development over the last 6 years	
	Decreasing
✕	Static
	Increasing






4.11 Sudden ecological or geological events

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 - Development over the last 6 years	
	Decreasing
✕	Static
	Increasing

4.13 Management and institutional factors

Name	Impact	Origin	Trend
4.13.4 Management activities	  	 	

Spatial scale - Area affected by the factor	
✕	Restricted
	Localised
	Extensive
	Widespread
Temporal scale - Occurrence 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 - Development over the last 6 years	
	Decreasing
✕	Static
	Increasing

Name	Impact	Origin	Trend
4.13.5 Financial resources			

Spatial scale - Area affected by the factor							
<input checked="" type="checkbox"/>	Restricted						
<input type="checkbox"/>	Localised						
<input type="checkbox"/>	Extensive						
<input type="checkbox"/>	Widespread						
Temporal scale - Occurrence of the impact							
<input checked="" type="checkbox"/>	One off or rare						
<input type="checkbox"/>	Intermittent or sporadic						
<input type="checkbox"/>	Frequent						
<input type="checkbox"/>	On-going						
Impact - Impact on the attributes							
<input type="checkbox"/>	Insignificant						
<input type="checkbox"/>	Minor						
<input checked="" type="checkbox"/>	Significant						
<input type="checkbox"/>	Major						
Management response - Capacity of management to respond							
<input checked="" type="checkbox"/>	High capacity						
<input type="checkbox"/>	Medium capacity						
<input type="checkbox"/>	Low capacity						
<input type="checkbox"/>	No capacity and / or resources						
Trend - Development over the last 6 years							
<input type="checkbox"/>	Decreasing						
<input checked="" type="checkbox"/>	Static						
<input type="checkbox"/>	Increasing						

Name	Impact	Origin	Trend
4.13.7 Low impact research/monitoring activities			

Spatial scale - Area affected by the factor	
<input type="checkbox"/>	Restricted
<input checked="" type="checkbox"/>	Localised
<input type="checkbox"/>	Extensive
<input type="checkbox"/>	Widespread
Temporal scale - Occurrence of the impact	
<input type="checkbox"/>	One off or rare
<input checked="" type="checkbox"/>	Intermittent or sporadic
<input type="checkbox"/>	Frequent
<input type="checkbox"/>	On-going
Impact - Impact on the attributes	
<input type="checkbox"/>	Insignificant
<input checked="" type="checkbox"/>	Minor

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

Name	Impact	Origin	Trend
4.13.8 High impact research/monitoring activities	<div>+</div> <div>👎</div> <div>👍</div>	<div>🌱</div> <div></div>	

Spatial scale - Area affected by the factor	
✕	Restricted
	Localised
	Extensive
	Widespread
Temporal scale - Occurrence 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 - Development 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	Grand Exposure	×			
4.18.1.2	History of Science	×			
4.18.1.3	Fossil Record	×			
4.18.1.4					
4.18.1.5					

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 are **adequate to maintain** the property's Outstanding Universal Value

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 buffer zones are **adequate** to maintain the property's Outstanding Universal Value

5.1.4 - Are the boundaries of the buffer zones known and recognised?

The buffer zones of the World Heritage property **are known and recognised by both** the management authority and local communities/landowners

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

5.2. Protective Measures

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

The property has protected status under a range of overlapping provincial and municipal laws.

It is protected through convergent legislation that includes protective designations, mineral exploration closures, land-use planning and zoning. These include the Provincial Special Places Protection Act, Beaches Act, Minerals Act and the land-use planning and zoning by laws of the Municipality of Cumberland.

Source: IUCN Evaluation

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?

The **legal framework** in the buffer zone for the maintenance 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**

5.2.5 - 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?

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

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

There is adequate legislations in place to protect the world heritage site. We provide education to the public regarding laws and regulations in place to protect the site. Policing and enforcement of legislation is outside of our mandate.

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
Charitable management (e.g. by NGO)

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.
Governance mechanisms that foster and respect traditional practices, knowledge and uses of the property
Agreed 'Memorandums of Understanding' between different managing institutions, groups or others, including documents agreed with local communities for management
Mechanisms to promote equal participation among and within groups, including different levels of authority, local communities, indigenous people, women and men, and other specific groups
A management plan
A disaster, climate or conflict risk management plan
A visitor/visitation management plan

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

The property is managed by the Joggins Fossil Institute Association. A public non-profit organization with a volunteer Board of Directors. The Board is made up of both local residents and government appointments. The day to day oversight of the Joggins Fossil Cliffs is carried out by the Institute's management team, which reports to the Board of Directors.

5.3.4 - Management Documents

Title	Status	Available	Date	Link to source
Joggins Fossil Cliffs Management Plan January 2007	In Force	Available	2007	

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?

The 2011 Recommendation on the Historic Urban Landscape is **not relevant** to this property

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?

No 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					

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

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)	0 %	0 %
6.1.1.7	Governmental (regional/provincial/state)	50 %	50 %
6.1.1.8	Governmental (local/municipal)	0 %	0 %
6.1.1.9	In-country donations (NGOs, foundations, etc.)	0 %	0 %
6.1.1.10	Individual visitor charges (e.g. entry, toilets, parking, camping fees, etc.)	50 %	50 %
6.1.1.11	Commercial activities (e.g. merchandising and catering, filming permit, concessions, etc.)	0 %	0 %
6.1.1.12	Other	0 %	0 %
		Total 100 %	Total 100 %

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

6.1.3 - 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

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

The existing sources of funding are **secure over the medium-term** and **planning is underway to secure funding over the 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	38 %	0 %
6.1.6.2	Women	62 %	0 %
		Total 100 %	Total 0 %

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	Fair
Environmental sustainability	Fair
Community participation and inclusion	Fair
Risk preparedness	Fair
Capacity development and education	Fair
Administration	Good
Research and monitoring	Good
Awareness raising and public information/communication	Fair
Marketing and promotion	Fair
Interpretation	Good
Visitor management/tourism	Good
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)	Fair

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 fully implemented; all technical skills are being transferred to those managing the property locally

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

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

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	Good
Local/municipal authorities	Fair
Indigenous peoples	Non-existent
Landowners	Fair
Women	Good
Youth/children	Good
Researchers	Good
Local visitors	Good
National/international tourists	Good
Tourism industry	Good
Local businesses and industries	Good
NGOs	Fair
Other specific groups	Not applicable

If you selected 'Other specific groups', please describe

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 education and awareness programme for children and/or youth but it only partly meets the needs

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

Local communities

Women

Youth/children

Researchers

Local Visitors

National/international tourists

Tourism industry

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	Good
Information booths	Fair
Guided tours	Good
Trails/routes	Fair
Printed information materials	Fair
Online (website, social media, etc.)	Good
Transportation facilities	Poor
Other	Not needed
If 'Other' is selected, please specify	

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

9. Visitor Management

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

12200 / 5300 / 4700 / 13300 / 14400 /

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

Entry tickets and registries

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

One to three hours

9.4 - Please provide the source of information

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

0 / 0 / 0 / 35 / 0 / 0 /

9.6 - Please provide the source of information

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

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

Visitor use of the World Heritage property is effectively managed and does not impact its Outstanding Universal Value

9.10 - Is the effectiveness of tourism management regularly monitored?

No

If a different system, please specify

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 limited 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 **many locations** 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?

No

If 'Yes', please specify

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

Yes

If 'Yes', please specify

Supports multiple local businesses

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

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** but **monitoring of the status of indicators could be improved**

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	Non-existent
Local/municipal authorities	Fair
Local communities	Fair
Indigenous peoples	Non-existent
Landowners	Good
Women	Good
Researchers	Good
Tourism industry	Good
Local businesses and industry	Fair

NGOs	Fair
Other specific groups	Not applicable
If you selected 'Other specific groups', please specify	

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.

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

11. Identification of Priority Management Needs

11.1 - Identification of Priority Management Needs

5.2	Protective Measures	
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	
5.3.7	No 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 acceptable but could be further improved to fully meet the management needs of 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	✕
8	Education, Information and Awareness Building	
8.2	There is a planned education and awareness programme for children and/or youth but it only partly meets the needs	✕
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	✕
9.11	There is limited cooperation between those responsible for the World Heritage property and the tourism industry to present the Outstanding Universal Value and increase appreciation	✕
10	Monitoring	
10.2	Information on the values of the World Heritage property is adequate and key indicators have been defined but monitoring of the status of indicators could be improved	✕

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

4.4	Pollution						
4.4.1	Pollution of marine waters	The 'grand exposure' of 14.7 km of coastal fossil cliffs.	Yearly beach clean ups. Volunteers walk a length of the beach and collect trash.	Staff observe the area.	Yearly.	Joggins Fossil Institute	n/a
4.4.3	Surface water pollution	The 'grand exposure' of 14.7 km of coastal fossil cliffs.	Yearly beach clean ups. Volunteers walk a length of the beach and collect trash.	Staff observe the area.	Yearly.	Joggins Fossil Institute	n/a
4.4.4	Air pollution	The 'grand exposure' of 14.7 km of coastal fossil cliffs.	n/a	n/a	n/a	n/a	n/a
4.7	Local conditions affecting physical fabric						

4.7.6	Water (rain/water table)	The 'grand exposure' of 14.7 km of coastal fossil cliffs.	Monitor site.	Review world heritage site after severe rain to see what new fossils are exposed or eroded.	Sporadically throughout the year as needed.	Joggins Fossil Institute	n/a
4.10	Climate change and severe weather events						
4.10.1	Storms	The 'grand exposure' of 14.7 km of coastal fossil cliffs.	Observe and assess damage. Collect fossils as needed.	Observe and assess damage.	Sporadically throughout the year as needed.	Joggins Fossil Institute	n/a
4.13	Management and institutional factors						
4.13.5	Financial resources	Affects ability to preserve and promote the site.	More funding is needed from government partners.	Yearly audited financials.	Yearly	Joggins Fossil Institute. Nova Scotia Dept. of Communities, Culture, Heritage, and Tourism	n/a

Summary - Factors affecting the Property **completed**

12.2. Summary - Management Needs

12.2.1 - Summary - Management Needs

5.2	Protective Measures					
		Actions	Timeframe	Lead agency (and others involved)	More info / comment	
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	No actions being taken. We are working with what we have.	Daily.	Joggins Fossil Institute		
5.3	Management System/Management Plan					
5.3.7	No use has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property	Review the Policy Document on the Impacts of Climate Change on World Heritage Properties	12 months	Joggins Fossil Institute	n/a	
5.3.9	No use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	Review the Strategy for Reducing Risks from Disasters at World Heritage Properties	12 months	Joggins Fossil Institute	n/a	
6.1	Funding					
6.1.3	The available budget is acceptable but could be further improved to fully meet the management needs of the World Heritage property	Continue to lobby government partners for additional funds.	ongoing	Joggins Fossil Institute		

6.1.7	Human resources partly meet the management needs of the World Heritage property	Recruit additional staff.	6 months	Joggins Fossil Institute	n/a
6.1.10	No use has been made of the World Heritage Strategy for Capacity Development at the World Heritage property	Review the World Heritage Strategy for Capacity Development	12 months	Joggins Fossil Institute	n/a
8	Education, Information and Awareness Building				
8.2	There is a planned education and awareness programme for children and/or youth but it only partly meets the needs	Trying to recruit an education and outreach coordinator	6 months	Joggins Fossil Institute	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	Review and update the strategy to manage visitors, tourism activity and its derived impacts on the World Heritage property	12 months	Joggins Fossil Institute	n/a
9.11	There is limited cooperation between those responsible for the World Heritage property and the tourism industry to present the Outstanding Universal Value and increase appreciation	Continue to look for opportunities to partner with the tourism the tourism industry to present the Outstanding Universal Value and increase appreciation	ongoing	Joggins Fossil Institute, NS Dept of Communities, Culture, Heritage, and Tourism	
10	Monitoring				
10.2	Information on the values of the World Heritage property is adequate and key indicators have been defined but monitoring of the status of indicators could be improved	Additional assessments of the World Heritage property	ongoing	Joggins Fossil Institute	n/a

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.

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	Positive
Management effectiveness	Positive
Quality of life for local communities and indigenous peoples	Positive
Recognition	Positive
Education	Positive
Infrastructure development	No impact
Funding for the property	Positive
International cooperation	Positive
Political support for conservation	Positive
Legal/Policy framework	No impact
Advocacy	No impact
Institutional coordination	Very positive
Security	Very positive
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

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

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

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

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	Fair
Site Managers	Fair
UNESCO World Heritage Centre	Fair
Advisory Bodies (ICOMOS, IUCN, ICCROM)	Fair

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

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

3 / 0 / 6 /

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

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	Fair
UNESCO (other sectors/field offices)	Fair
UNESCO National Commission	Fair
ICOMOS International	Fair
IUCN International	Fair
ICCROM international/regional	Fair

ICOMOS national/regional	Fair
IUCN national/regional	Fair

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)	Good
UNESCO other sectors (e.g. field office)	Fair
National Commission for UNESCO	Fair
ICOMOS International	Fair
ICCROM International/regional	Fair
ICOMOS national/regional	Fair
IUCN national/regional	Fair
IUCN International	Fair

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

No item were proposed for update

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.