Carlsbad Caverns National Park

1. World Heritage Property Data

1.1 - Name of World Heritage property

Carlsbad Caverns National Park

1.2 - World Heritage property details

1.3 - Geographic information table

Name	Coordinates	Property (ha)	Buffer zone (ha)	Total (ha)	Inscription year
Carlsbad Caverns National Park	32.167 / -104.383	18926	0	18926	1995
Total (ha)		18926	0	18926	

1.4 - Map(s)

Title	Date	Link to source
Carlsbad Caverns National Park	2006	

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

- 1. Carlsbad Caverns National Park (U.S. National Park Service)
- 2. World Heritage in the United States

Comment

#3 World Heritage in the United States Link broken; new url is https://www.nps.gov/subjects/internationalcooperation/worldheritage.htm Facebook: www.facebook.com/carlsbadcavernsnps Instagram: www.instagram.com/carlsbadcavernsnps Twitter: twitter.com/cavernsnps

- 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?

Not applicable

- 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?

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

No

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

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

- 2.8 Please add any further comments on cooperation with the other designation(s)/programme(s)
- 2.9 Are you aware of any elements associated with the World Heritage property that have been inscribed on the Representative List of the Intangible Cultural Heritage?

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

Statement of Outstanding Universal Value

Brief synthesis

The more than 120 limestone caves within Carlsbad Caverns National Park are outstanding and notable world-wide because of their size, mode of origin, and the abundance, diversity and beauty of the speleothems (decorative rock formations) within. On-going geologic processes continue to form rare and unique speleothems, particularly in Lechuguilla Cave. Carlsbad Caverns and Lechuguilla Cave are well known for their great natural beauty, exceptional geologic features, and unique reef and rock formations. The Permian-aged Capitan Reef complex (in which Carlsbad Caverns, Lechuguilla and other caves formed) is one of the best preserved and most accessible complexes available for scientific study in the world.

Criterion (vii): The park's primary caves, Carlsbad and Lechuguilla, are well known for the abundance, diversity, and beauty of their decorative rock formations. Lechuguilla Cave exhibits rare and unique speleothems, including the largest accumulation of gypsum "chandeliers," some of which extend more than six meters (18 feet) in length.

Criterion (viii): Carlsbad Caverns National Park is one of the few places in the world where on-going geologic processes are most apparent and rare speleothems continue to form, enabling scientists to study geological processes in a virtually undisturbed environment. These speleothems include helictites forming underwater, calcite and gypsum speleothems, and an astonishing collection of "biothems," cave formations assisted in their formation by bacteria. Researchers can study both the Capitan reef's inside through cave passages that penetrate in and through it as well as eroded canyon-exposed cross sections outside.

Integrity

Aside from a relatively small percentage of the park which sees significant visitation, access to the backcountry caves is strictly controlled and limited. In Carlsbad Cavern, infrastructure and heavy visitation have caused significant changes to the delicate ecosystem. Invertebrate transects throughout Carlsbad Cavern have shown that infrastructure has changed cave habitats, and that materials left by visitors, such as hair, trash, and lint, have altered population distributions as well as the ecosystem as a whole. Research on microbes in both Spider and Lechuguilla Caves has been vital in improving our understanding of the role they play in geologic processes.

Outside pressure from oil, gas, and water extraction have the potential to impact cave and karst resources, as well as biological and even cultural resources of the park. Oil and gas development, including their associated drilling and seismic activities have continued to expand around and towards the park. The city of Carlsbad and other local users have increased the amount of water extracted from the Capitan Aquifer, a karst aquifer that underlies the park. Because these activities have the potential to adversely impact cave and karst resources in the park, it is vital that the park continue to identify and monitor those resources.

Protection and management requirements

Designated by the U.S. Congress in 1930 as a national park, Carlsbad Caverns National Park is managed under the authority of the *Organic Act* of August 25, 1916 which established the United States National Park Service. In addition, the park has specific enabling legislation which provides broad congressional direction regarding the primary purposes of the park. Numerous other federal laws bring additional layers of protection to the park and its resources. Cave specific legislation includes the Federal Cave Resources Protection Act of 1988 and the Lechuguilla Cave Protection Act of 1993, the latter of which was created to protect that specific cave from extractive activities near the park. Day to day management is directed by the Park Superintendent.

The management of the property is guided through a General Management Plan, Cave and Karst Management Plan, Management Policies, and a Comprehensive Interpretive Plan.

Park management plans for the property have identified a number of resource protection measures, such as environmental assessment processes, zoning, ecological integrity, visitor monitoring, and education programs to address pressures arising from issues both inside and outside the park.

Long-term protection and effective management of the site from potential threats require continued monitoring of resource conditions, additional research, and assessment of potential threats. The NPS Inventory and Monitoring (I&M) program, and the Chihuahuan Desert I&M network, of which Carlsbad Caverns National Park is a part, have developed several "vital signs" to track a subset of physical, chemical and biological elements and processes selected to represent the overall health or condition of park resources. In Carlsbad Caverns National Park, these vital signs include air quality, climate, invasive plants, landbirds, landscape dynamics, spring ecosystems, uplands vegetation and soils. Air quality monitoring of volatile organic compounds is used to determine threats from sources outside of the park, especially from adjacent oil and gas fields.

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	Cave and Karst Resources	×			
3.2.2	Chihuahuan Desert and Other Ecosystems	×			
3.2.3	Capitan Reef	×			
3.2.4	Designated Wilderness	×			
3.2.5	Exploration and Research	×			
3.2.6	Opportunities for Connection to the Resource	×			
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					

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

Values in 3.2 are derived from the park's 2017 Foundation Document section on fundamental resources and values

4. Factors Affecting the Property

4.1. Buildings and Development

4.1.1 - Housing

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Inside, Outside

× Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	▶ Decreasing	⇒ Stable	Increasing
O Positive							
○ Negative X	×		×	×			7

4.1.2 - Commercial development

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Potential, Outside

× Relevant	Not relevant						
	Impact Origin			Trend of impact			
Impact	Current	Potential	• Inside	Outside	→ Decreasing	⇒ Stable	Increasing
O Positive							
○ Negative X		×		×		\rightarrow	

4.1.3 - Industrial areas

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Outside

X Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	Current	Potential	• Inside	© Outside	→ Decreasing	→ Stable	Increasing
O Positive							
Negative X	×			×			,

4.1.4 - Major visitor accommodation and associated infrastructure

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

4.1.5 - Interpretative and visitation facilities

Previous answer Cycle 2 (19/08/2013):

• Relevant, Positive, Current, Inside, Outside

X Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	G Current	Potential	Inside	© Outside	▶ Decreasing	⇒ Stable	Increasing
Positive X	×		×	×		→	
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

4.2. Transportation Infrastructure

4.2.1 - Ground transport infrastructure

Previous answer Cycle 2 (19/08/2013):

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X Relevant			i	Not relevant			
	Impact Origin				Trend of impact		
Impact	Current	Potential	Inside	Outside	▶ Decreasing	⇒ Stable	Increasing
Positive							
Negative	×		×	×			-

4.2.2 - Underground transport infrastructure

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

4.2.3 - Air transport infrastructure

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

4.2.4 - Marine transport infrastructure

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Outside

Relevant X Not relevant

4.2.5 - Effects arising from use of transportation infrastructure

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X 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

The Scenic Loop Road was heavily damaged in a flash flood August 2022. The road has been closed pending major repairs.

4.3. Services Infrastructures

4.3.1 - Water infrastructure

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Outside

× Relevant	Not relevant						
	Impact Orig				Trend of impact		
Impact	Current	Potential	Inside	Outside	→ Decreasing	→ Stable	Increasing
O Positive							
Negative X	×			×			

4.3.2 - Renewable energy facilities

Previous answer Cycle 2 (19/08/2013):

• Relevant, Positive, Negative, Current, Potential, Outside

★ Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	→ Decreasing	→ Stable	Increasing
Positive X	×		×				
○ Negative X	×	×		×			

4.3.3 - Non-renewable energy facilities

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Outside

X Relevant	Not relevant

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	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	▶ Decreasing	→ Stable	Increasing
O Positive							
○ Negative X	×	×		×			

4.3.4 - Localised utilities

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Potential, Outside

× Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	• Inside	© Outside	▶ Decreasing	→ Stable	Increasing
Positive							
Negative	×	×		×			

4.3.5 - Major linear utilities

Previous answer Cycle 2 (19/08/2013):

Not 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

Relevant

4.4.1 - Pollution of marine waters

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant × Not relevant

4.4.2 - Ground water pollution

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Outside

× Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	→ Decreasing	→ Stable	Increasing
O Positive							
Negative X	×	×		×			

4.4.3 - Surface water pollution

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant × Not relevant

4.4.4 - Air pollution

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Outside

× Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	▶ Decreasing	→ Stable	Increasing
Positive							
	×	×		×			

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4.4.5 - Solid waste

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

4.4.6 - Input of excess energy

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Outside

× Relevant			ı	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	▶ Decreasing	→ Stable	Increasing
Positive							
Negative X	×	×		×			

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

4.5. Biological resource use/modification

4.5.1 - Fishing/collecting aquatic resources

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant	

4.5.2 - Aquaculture

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant
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4.5.3 - Land conversion

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

4.5.4 - Livestock farming/Grazing of domesticated animals

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

4.5.5 - Crop production

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	✗ Not relevant
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4.5.6 - Commercial wild plant collection

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

4.5.7 - Subsistence wild plant collection

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

4.5.8 - Commercial hunting

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant
1.0.0	THE TOTAL THE TO

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4.5.9 - Subsistence hunting

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

4.5.10 - Forestry/Wood production

Previous answer Cycle 2 (19/08/2013):

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 (19/08/2013):

• Relevant, Negative, Potential, Outside

X Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	▶ Decreasing	→ Stable	Increasing
Positive							
		×		×			

4.6.2 - Quarrying

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

4.6.3 - Oil and gas

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Outside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Gurrent	Potential	Inside	G Outside	→ Decreasing	→ Stable	Increasing
O Positive							
Negative X	×	×		×			

4.6.4 - Water (extraction)

Previous answer Cycle 2 (19/08/2013):

• Relevant, Positive, Negative, Current, Potential, Outside

X Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	▶ Decreasing	⇒ Stable	Increasing
O Positive X							
Negative X	×	×	×	×			

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

The park's water comes from a spring inside the park boundaries, however some of it is diverted to an adjacent landowner.

4.7. Local conditions affecting physical fabric

4.7.1 - Wind

Previous answer Cycle 2 (19/08/2013):

Not relevant

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Relevant × Not relevant 4.7.2 - Relative humidity Previous answer Cycle 2 (19/08/2013): Not relevant Relevant × Not relevant 4.7.3 - Temperature Previous answer Cycle 2 (19/08/2013): Not relevant Relevant × Not relevant 4.7.4 - Radiation/Light Previous answer Cycle 2 (19/08/2013): Not relevant Relevant × Not relevant 4.7.5 - Dust Previous answer Cycle 2 (19/08/2013): Not relevant Relevant X Not relevant 4.7.6 - Water (rain/water table) Previous answer Cycle 2 (19/08/2013): Not relevant Relevant × Not relevant 4.7.7 - Pests Previous answer Cycle 2 (19/08/2013): Not relevant Relevant × Not relevant 4.7.8 - Micro-organisms Previous answer Cycle 2 (19/08/2013): Not 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 4.8. Social/Cultural uses of heritage 4.8.1 - Ritual/Spiritual/Religious and associative uses Previous answer Cycle 2 (19/08/2013): Not relevant Relevant × Not relevant 4.8.2 - Society's valuing of heritage Previous answer Cycle 2 (19/08/2013): Not relevant Relevant × Not relevant 4.8.3 - Indigenous hunting, gathering and collecting

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

4.8.4 - Changes in traditional ways of life and knowledge system

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

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

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

4.8.6 - Impacts of tourism/Visitation/Recreation

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	✗ Not relevant

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

4.9. Other human activities

4.9.1 - Illegal activities

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Outside

× Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	→ Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×		×			

4.9.2 - Deliberate destruction of heritage

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Outside

× Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	▶ Decreasing	→ Stable	Increasing
O Positive							
Negative X	×	×		×			

4.9.3 - Military training

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant	Relevant	X Not relevant
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4.9.4 - War

Previous answer Cycle 2 (19/08/2013):

Not relevant

Delevent	M
Relevant	X Not relevant

4.9.5 - Terrorism

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

4.9.6 - Civil unrest

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

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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 (19/08/2013):

Not relevant

× Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	▶ Decreasing	→ Stable	Increasing
O Positive							
○ Negative X	×	×		×			

4.10.2 - Flooding

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

4.10.3 - Drought

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

4.10.4 - Desertification

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

4.10.5 - Changes to oceanic waters

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

4.10.6 - Temperature change

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

4.10.7 - Other climate change impacts

Previous answer Cycle 2 (19/08/2013):

• Not relevant

Relevant	X 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

4.11. Sudden ecological or geological events

4.11.1 - Volcanic eruption

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant	

4.11.2 - Earthquake

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

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4.11.3 - Tsunami/Tidal wave

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

4.11.4 - Avalanche/Landslide

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

4.11.5 - Erosion and siltation/Deposition

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

4.11.6 - Fire (wildfire)

Previous answer Cycle 2 (19/08/2013):

• Relevant, Positive, Current, Potential, Outside

× Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	→ Decreasing	→ Stable	Increasing
Positive X	×	×		×			
Negative							

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

4.12. Invasive/alien species or hyper-abundant species

4.12.1 - Translocated species

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Outside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	▶ Decreasing	→ Stable	Increasing
O Positive							
○ Negative X	×	×		×			

4.12.2 - Invasive/Alien terrestrial species

Previous answer Cycle 2 (19/08/2013):

• Relevant, Negative, Current, Potential, Outside

✗ Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	• Inside	Outside	▶ Decreasing	→ Stable	Increasing
Positive							
○ Negative X	×	×		×			

4.12.3 - Invasive/Alien freshwater species

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

4.12.4 - Invasive/Alien marine species

Previous answer Cycle 2 (19/08/2013):

Not relevant

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Relevant X Not relevant

4.12.5 - Hyper-abundant species

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X Not relevant

4.12.6 - Modified genetic material

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant X 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



4.13.2 - Legal framework

× Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	▶ Decreasing	→ Stable	Increasing
Positive X	×	×	×				
Negative							

4.13.3 - Governance

★ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	▶ Decreasing	→ Stable	Increasing
O Positive 🗶	×	×	×				
Negative							

4.13.4 - Management activities

Previous answer Cycle 2 (19/08/2013):

• Not relevant

× Relevant				Not relevant				
	Impact		Origin	Origin		Trend of impact		
Impact	Gurrent	Potential	Inside	© Outside	→ Decreasing	⇒ Stable	Increasing	
O Positive X	×	×	×					
Negative								

4.13.5 - Financial resources

× Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	→ Decreasing	→ Stable	Increasing
O Positive X	ж	×	ж				

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	Negative							
--	----------	--	--	--	--	--	--	--

4.13.6 - Human resources

X Relevant			1	Not relevant			
	Impact Origin Trend of impact						
Impact	Current	Potential	• Inside	Outside	→ Decreasing	→ Stable	Increasing
O Positive X	×	×	×				
Negative							

4.13.7 - Low impact research/monitoring activities

Previous answer Cycle 2 (19/08/2013):

Not relevant

✗ Relevant				Not relevant						
	Impact Origin			Trend of impact						
Impact	Current	Potential	Inside	C Outside	▶ Decreasing	→ Stable	Increasing			
○ Positive ★	×	×	×							
Negative										

4.13.8 - High impact research/monitoring activities

Previous answer Cycle 2 (19/08/2013):

Not relevant

Relevant	X Not relevant

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

4.14. Other factor(s)

4.14.1 - Other factor(s)

4.15. Factors Summary Table

4.15.1 - Factors Summary Table

, ,, ,						
Name	Impact			Origin		Trend
4.1 Buildings and Development						
4.1.1 Housing						
		9		•	Œ	7
4.1.2 Commercial development						
			9		F	\rightarrow
4.1.3 Industrial areas						
		9			Œ	1
4.1.5 Interpretative and visitation facilities	O	9		•	Œ	→
4.2 Transportation Infrastructure						
4.2.1 Ground transport infrastructure						
		9		•	Œ	7
4.3 Services Infrastructures						
4.3.1 Water infrastructure						
		9			F	
4.3.2 Renewable energy facilities	•	9		•		
		9	9		Œ	

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4.3.3 Non-renewable energy facilities						
		A	q		Œ	
4.3.4 Localised utilities						
		A	a		Œ	
4.4 Pollution		·	·			
4.4.2 Ground water pollution						
4.4.2 Ground water pointion		A			(CF	
A A A All and Buston		4	9		Ġ.	
4.4.4 Air pollution						
		9	F		Œ	
4.4.6 Input of excess energy						
		P	9		Œ	
4.6 Physical resource extraction						
4.6.1 Mining						
			9		Œ	
4.6.3 Oil and gas						
		A	q		Œ	
4.6.4 Water (extraction)	•					
		q	q	()	F	
4.9 Other human activities						
4.9.1 Illegal activities						
		A			CET	
4.9.2 Deliberate destruction of heritage		-,	-,		9	
4.5.2 Deliberate destruction of heritage		-31	a		<i>(</i> 6	
		Ą	9		Ġ.	
4.10 Climate change and severe weather events						
4.10.1 Storms						
		4	9		G	
4.11 Sudden ecological or geological events						
4.11.6 Fire (wildfire)	•	9	P		©	
4.12 Invasive/alien species or hyper-abundant species						
4.12.1 Translocated species						
		q	9		Œ	
4.12.2 Invasive/Alien terrestrial species						
		q	9		Œ	
4.13 Management and institutional factors						
4.13.1 Management system/Management plan	•	P	9	@		
4.13.2 Legal framework	•	a	q	@		
		A		<u>@</u>		
4.13.3 Governance				V 2		
4.13.3 Governance	O	7	-,	4		
4.13.3 Governance 4.13.4 Management activities	O	9	a	•		

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4.13.5 Financial re	4.13.5 Financial resources					q	9	•		
4.13.6 Human reso	13.6 Human resources					9	9	•		
4.13.7 Low impact	research/monitoring acti	vities			O	9	9	•		
Legend						de		G Outsi	de	

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		
4.1.1 Housi	ng							
			9		•	G	7	
Spatial sca	le - Area affected by the factor							
	Restricted							
×	Localised							
	Extensive							
	Widespread							
Temporal s	cale - Occurence of the impact							
	One off or rare							
	Intermittent or sporadic							
	Frequent							
×	On-going							
Impact - Im	pact on the attributes							
	Insignificant							
×	Minor							
	Significant							
	Major							
Manageme	nt response - Capacity of management to respond							
	High capacity							
×	Medium capacity							
	Low capacity							
	No capacity and / or resources							
Trend - Dev	relopement over the last 6 years							
×	Decreasing							
	Static							
	Increasing							

Name	Impact	Origin	Origin		
4.1.2 Commercial development					

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				9		Œ	→
				•		4	
Spatial sca	le - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
×	Minor						
	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
	Medium capacity						
×	Low capacity						
	No capacity and / or resources						
Trend - Dev	relopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
Name		Impact			Origin		Trend
4.1.3 Indus	trial areas						_
			9			F	7
Spatial sca	le - Area affected by the factor						
	Restricted						
	Localised						
×	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						

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Impact - Impact on the attributes

Insignificant

Minor

×

	Significant					
	Major					
Managemer	nt response - Capacity of management to respond					
	High capacity					
	Medium capacity					
×	Low capacity					
	No capacity and / or resources					
Trend - Dev	elopement over the last 6 years					
	Decreasing					
	Static					
×	Increasing					
Name		Impact		Origin		Trend
4.1.5 Interp	etative and visitation facilities	O	4	•	G	→
Spatial scal	e - Area affected by the factor					
	Restricted					
×	Localised					
	Extensive					
	Widespread					
Temporal se	cale - Occurence of the impact					
	One off or rare					
	Intermittent or sporadic					
	Frequent					
×	On-going Control of the Control of t					
Impact - Imp	pact on the attributes					
	Insignificant					
	Minor					
×	Significant					
	Major					
Managemer	nt response - Capacity of management to respond					
	High capacity					
×	Medium capacity					
	Low capacity					
	No capacity and / or resources					
Trend - Dev	elopement over the last 6 years					
	Decreasing					
	Static					
×	Increasing					

4.2 Transportation Infrastructure

Name	Impact	Origin	Trend	

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4.2.1 Groun	d transport infrastructure				
		9	•	F	7
Spatial sca	le - Area affected by the factor				
	Restricted				
×	Localised				
	Extensive				
	Widespread				
Temporal s	cale - Occurence of the impact				
	One off or rare				
	Intermittent or sporadic				
	Frequent				
×	On-going				
Impact - Im	pact on the attributes				
	Insignificant				
×	Minor				
	Significant				
	Major				
Manageme	nt response - Capacity of management to respond				
	High capacity				
×	Medium capacity				
	Low capacity				
	No capacity and / or resources				
Trend - Dev	relopement over the last 6 years				
	Decreasing				
×	Static				
	Increasing				

4.3 Services Infrastructures

Name		Impact			Origin		Trend	
4.3.1 Water	infrastructure							
			9			G		
Spatial sca	Spatial scale - Area affected by the factor							
	Restricted							
×	Localised							
	Extensive							
	Widespread							
Temporal s	scale - Occurence of the impact							
	One off or rare							
	Intermittent or sporadic							
	Frequent							
×	On-going On-going							

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Impact - I	mpact on the attributes						
	Insignificant						
~	Minor						
×							
	Significant						
	Major						
Managem	ent response - Capacity of management to respond						
	High capacity						
	Medium capacity						
×	Low capacity						
	No capacity and / or resources						
Trend - D	evelopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						
Name		Impac			Origin		Trend
4.3.2 Ren	ewable energy facilities	O	9		•		
			9	9		C	
Spatial so	ale - 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 - I	mpact on the attributes						
impact - i							
	Insignificant						
×	Minor						
	Significant						
	Major						
Managem	ent response - Capacity of management to respond						
	High capacity						
	Medium capacity						
×	Low capacity						
	No capacity and / or resources						
Trend - D	evelopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						

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Name	Name		Impact			Origin		
4.3.3 Non-r	enewable energy facilities		q	q		Œ		
Spatial sca	le - Area affected by the factor							
	Restricted							
	Localised							
×	Extensive							
	Widespread							
Temporal s	cale - Occurence of the impact							
	One off or rare							
	Intermittent or sporadic							
	Frequent							
×	On-going							
Impact - Im	pact on the attributes							
	Insignificant							
	Minor							
×	Significant							
	Major							
Manageme	nt response - Capacity of management to respond							
	High capacity							
	Medium capacity							
×	Low capacity							
	No capacity and / or resources							
Trend - Dev	relopement over the last 6 years							
	Decreasing							
	Static							
×	Increasing							
Name	sed utilities	Impact			Origin		Trend	
4.3.4 LOCAI	sed utilities		en e	q		E		
			q	7		G		
Spatial sca	le - Area affected by the factor							
	Restricted							
×	Localised							
	Extensive							
	Widespread							
Temporal s	cale - Occurence of the impact							
	One off or rare							
	Intermittent or sporadic							
	Frequent							
	On making							

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Impact - Im	pact on the attributes
	Insignificant
×	Minor
	Significant
	Major
Manageme	nt response - Capacity of management to respond
	High capacity
	Medium capacity
×	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
	Static
×	Increasing

4.4 Pollution

Name		Impact			Origin		Trend
4.4.2 Groun	nd water pollution						
			9	9		F	
Spatial sca	le - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal s	scale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going On-going						
Impact - Im	pact on the attributes						
	Insignificant						
×	Minor						
	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
	Medium capacity						
×	Low capacity						
	No capacity and / or resources						
Trend - De	velopement over the last 6 years						
	Decreasing						
	Static						

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Name	Impact	Impact		Origin		Trend
4.4.4 Air pollution						
		9	9		(

Spatial scal	e - Area affected by the factor					
	Restricted					
	Localised					
×	Extensive					
	Widespread					
Temporal s	Temporal scale - Occurence of the impact					
	One off or rare					
	Intermittent or sporadic					
×	Frequent					
	On-going					
Impact - Im	pact on the attributes					
	Insignificant					
×	Minor					
	Significant					
	Major					
Managemei	nt response - Capacity of management to respond					
	High capacity					
	Medium capacity					
×	Low capacity					
	No capacity and / or resources					
Trend - Dev	elopement over the last 6 years					
	Decreasing					
	Static					
×	Increasing					

Name	Impact		Origin		Trend	
4.4.6 Input of excess energy						
		A	9		C	

Spatial sca	lle - Area affected by the factor
	Restricted
×	Localised
	Extensive
	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
×	Intermittent or sporadic
	Frequent

	On-going
Impact - Im	pact on the attributes
×	Insignificant
	Minor
	Significant
	Major
Manageme	ont response - Capacity of management to respond
	High capacity
	Medium capacity
×	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
	Static
×	Increasing

4.6 Physical resource extraction

Name		Impact		Origin		Trend	
4.6.1 Minin	g						
				9		G	
Spatial sca	ale - 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 - Im	pact on the attributes						
×	Insignificant						
	Minor						
	Significant						
	Major						
Manageme	ent response - Capacity of management to respond						
	High capacity						
	Medium capacity						
×	Low capacity						
	No capacity and / or resources						
Trend - De	velopement over the last 6 years						
	Decreasing						

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×	Static
	Increasing

Name	Impact			Origin		Trend
4.6.3 Oil and gas						
		9	9	Œ		
Spatial scale - Area affected by the factor						

		4	4	G	
Spatial sca	le - Area affected by the factor				
	Restricted				
×	Localised				
	Extensive				
	Widespread				
Temporal s	cale - Occurence of the impact				
	One off or rare				
	Intermittent or sporadic				
	Frequent				
×	On-going				
Impact - Im	pact on the attributes				
	Insignificant				
×	Minor				
	Significant				
	Major				
Manageme	nt response - Capacity of management to respond				
	High capacity				
	Medium capacity				
×	Low capacity				
	No capacity and / or resources				
Trend - Dev	relopement over the last 6 years				
	Decreasing				
	Static				
×	Increasing				

Name	Impact	Impact				Trend
4.6.4 Water (extraction)	O					
		9	9	•	G	

Spatial scal	e - Area affected by the factor			
	D. C. C.			
	Restricted			
×	Localised			
	Extensive			
	we i			
	Widespread			
Temporal s	cale - Occurence of the impact			
	One off or rare			
	Internettant as a second			
×	Intermittent or sporadic			

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	Frequent
	On-going On-going
Impact - Im	pact on the attributes
	Insignificant
×	Minor
	Significant
	Major
Manageme	nt response - Capacity of management to respond
	High capacity
	Medium capacity
×	Low capacity
	No capacity and / or resources
Trend - Dev	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

4.9 Other human activities

Name		Impact		Origin		Trend	
4.9.1 Illegal	activities						
			9	9		F	
Spatial sca	e - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going On-going						
Impact - Im	pact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
×	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - Dev	elopement over the last 6 years						

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	Decreasing						
	Static						
×	Increasing						
Name		Impact			Origin		Trend
4.9.2 Delibe	4.9.2 Deliberate destruction of heritage						
			q	9		©	
Spatial sca	le - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
×	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - Dev	relopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
X	increasing						

4.10 Climate change and severe weather events

Name	Impact Impact		Origin		Trend		
4.10.1 Storms							
			9	9		G	
Spatial scale - A	Area affected by the factor						
Re	estricted						
× Lo	calised						
Ex	tensive						
Wi	idespread						
Temporal scale	Temporal scale - Occurence of the impact						

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×	One off or rare
	Intermittent or sporadic
	Frequent
	On-going
Impact - Im	pact on the attributes
×	Insignificant
	Minor
	Significant
	Major
Manageme	nt response - Capacity of management to respond
	High capacity
×	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
	Static
×	Increasing

4.11 Sudden ecological or geological events

Name		Impact			Origin		Trend
4.11.6 Fire	(wildfire)	O	A	9		F	
Snatial sea	le - Area affected by the factor						
Spatial Sca							
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going On-going						
Impact - Im	pact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
×	Medium capacity						
	Low capacity						

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	No capacity and / or resources
Trend - Dev	relopement over the last 6 years
	Decreasing
×	Static
	Increasing

4.12 Invasive/alien species or hyper-abundant species

Restricted Localised

Name		Impact		Origin		Origin	
4.12.1 Tran	slocated species						
			q	9		G	
Snatial sca	le - Area affected by the factor						
Opatiai Soa	Restricted						
	Localised						
×	Extensive						
•	Widespread						
Temporal s	scale - Occurence of the impact						
remporars	One off or rare						
	Intermittent or sporadic						
×	Frequent						
^	On-going On-going						
Impact - Im	pact on the attributes						
impact - im	Insignificant						
×	Minor						
^							
	Significant						
Managama	Major						
wanageme	nt response - Capacity of management to respond						
**	High capacity						
×	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - Dev	velopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						
Name		Impact			Origin		Trend
	sive/Alien terrestrial species	iiipact			Origin		Hend
			q	q		Œ	
Spatial sca	le - Area affected by the factor						

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×	Extensive
	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
×	Frequent
	On-going On-going
Impact - Im	pact on the attributes
	Insignificant
×	Minor
	Significant
	Major
Manageme	nt response - Capacity of management to respond
	High capacity
×	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	velopement over the last 6 years
	Decreasing
	Static
×	Increasing

4.13 Management and institutional factors

Name		Impact			Origin	Trend
4.13.1 Management system/Management plan		•	9	9	•	
Spatial sca	le - Area affected by the factor					
	Restricted					
	Localised					
	Extensive					
×	Widespread					
Temporal s	cale - Occurence of the impact					
	One off or rare					
	Intermittent or sporadic					
	Frequent					
×	On-going					
Impact - Im	pact on the attributes					
	Insignificant					
	Minor					
	Significant					
×	Major					
Manageme	nt response - Capacity of management to respond					

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	High capacity					
×	Medium capacity					
	Low capacity					
	No capacity and / or resources					
Trend - Dev	velopement over the last 6 years					
	Decreasing					
×	Static					
	Increasing					
Name		Impact	Impact			Trend
4.13.2 Lega	ll framework	O	9	9	•	
Spatial sca	le - Area affected by the factor					
	Restricted					
	Localised					
	Extensive					
×	Widespread					
Temporal s	cale - Occurence of the impact					
	One off or rare					
	Intermittent or sporadic					
	Frequent					
×	On-going					
Impact - Im	pact on the attributes					
	Insignificant					
	Minor					
	Significant					
×	Major					
Manageme	nt response - Capacity of management to respond					
	High capacity					
×	Medium capacity					
	Low capacity					
	No capacity and / or resources					
Trend - Dev	velopement over the last 6 years					
	Decreasing					
×	Static					
	Increasing					
Name		Impact			Origin	Trend
4.13.3 Gov	ernance	•	9	9	•	
Spatial sca	le - Area affected by the factor					
	Restricted					

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	Localised						
	Extensive						
×	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
×	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - De	elopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						
Name	igement activities	Impact	q	q	Origin		Trend
4.13.4 Mail	gement activities		-1	-1			
Spatial sca	e - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - Im							
	pact on the attributes						
	Insignificant						
×	Insignificant						
×	Insignificant Minor						

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	High capacity						
×	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - Dev	relopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						
Name		Impact	Impact		Origin		Trend
4.13.5 Fina	ncial resources	•	9	9	•		
Spatial sca	le - Area affected by the factor						
	Restricted						
	Localised						
	Extensive						
×	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
×	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - Dev	relopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						
Name	an resources	Impact	·	9	Origin		Trend
4. 13.0 Hum	สม เธองนะ เธอ		-1	-1			
Spatial sca	le - Area affected by the factor						
	Restricted						

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×	Localised					
	Extensive					
	Widespread					
Temporal s	scale - Occurence of the impact					
	One off or rare					
	Intermittent or sporadic					
	Frequent					
×	On-going					
Impact - Im	ppact on the attributes					
	Insignificant					
	Minor					
×	Significant					
	Major					
Manageme	ent response - Capacity of management to respond					
	High capacity					
×	Medium capacity					
	Low capacity					
	No capacity and / or resources					
Trend - De	velopement over the last 6 years					
×	Decreasing					
	Static					
	Increasing					
	Increasing					
Name		Impact		m)	Origin	Trend
	Increasing Impact research/monitoring activities	Impact	4	9	Origin	Trend
		•	9			
4.13.7 Low		•	9		•	
4.13.7 Low	impact research/monitoring activities	•	9		•	
4.13.7 Low	impact research/monitoring activities ale - Area affected by the factor	•	9		•	
4.13.7 Low	impact research/monitoring activities ale - Area affected by the factor Restricted	•	9		•	
4.13.7 Low	impact research/monitoring activities ale - Area affected by the factor Restricted Localised	•	9		•	
4.13.7 Low Spatial sca	impact research/monitoring activities ale - Area affected by the factor Restricted Localised Extensive	•	9		•	
4.13.7 Low Spatial sca	impact research/monitoring activities ale - Area affected by the factor Restricted Localised Extensive Widespread	•	9		•	
4.13.7 Low Spatial sca	rimpact research/monitoring activities ale - Area affected by the factor Restricted Localised Extensive Widespread scale - Occurence of the impact	•	9		•	
4.13.7 Low Spatial sca	Impact research/monitoring activities Idle - Area affected by the factor Restricted Localised Extensive Widespread Scale - Occurence of the impact One off or rare	•	9		•	
4.13.7 Low Spatial sca	Impact research/monitoring activities Idle - Area affected by the factor Restricted Localised Extensive Widespread Scale - Occurence of the impact Intermittent or sporadic	•	9		•	
4.13.7 Low Spatial sca	Impact research/monitoring activities Intermittent or sporadic Impact research/monitoring activities Impact research/monitoring activities Impact research/monitoring activities Restricted Localised Localised Extensive Widespread Scale - Occurence of the impact Intermittent or sporadic Frequent	•	9		•	
4.13.7 Low Spatial sca	Impact research/monitoring activities alle - Area affected by the factor Restricted Localised Extensive Widespread scale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going	•	9		•	
4.13.7 Low Spatial sca	Impact research/monitoring activities Idle - Area affected by the factor Restricted Localised Extensive Widespread Scale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going	•	9		•	
4.13.7 Low Spatial sca	Impact research/monitoring activities Ide - Area affected by the factor Restricted Localised Extensive Widespread scale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going spact on the attributes Insignificant	•	9		•	
4.13.7 Low Spatial sca	Impact research/monitoring activities Intermittent or sporadic Frequent On-going Insignificant Minor	•	9		•	

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	High capacity
×	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
Trend - De	Decreasing
Trend - De	

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	Cave and Karst Resources	×			
4.18.1.2	Chihuahuan Desert and other ecosystems	×			
4.18.1.3	Capitan Reef	×			
4.18.1.4	Designated Wilderness	×			
4.18.1.5	Exploration and Research	×			

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 property has no buffer zone and does not need one

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

The property has **no known and recognised** buffer zone

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

5.2. Protective Measures

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

Carlsbad Caverns was first designated as a national monument in 1923 and redesignated a national park in 1930. Approximately two thirds of the area were also gazetted as wilderness in 1978.

The US Department of the Interior, National Park Service is the sole owner. The Federal Government has full jurisdiction over all lands within the park boundary through the US Department of te Interior and National Park Service.

A Land Protection Plan approved in 1984 is in place covering the private tract. If adverse development or use of the private tract should be threatened which could endanger it or other park values, condemnation proceedings could be initiated to acquire the tract.

Public Law 103-169, which was passed by Congress and signed into law in 1993 als provides protection to park caves.

The Secretary of the Interior is empowered to make rules and regulations for proper management and protection of the park and its resources and these rules are already in place.

Regulation:

The Antiquities Act of 1906

The National Park Service Organic Act of 1916

Presidential Proclamation No. 1679 (1923) - Created Carlsbad Cave National Monument

Public Law 216 (46 Stat. 279) (16 U.S.C. Sec. 207c) (1930) - Created Carlsbad Caverns National Park

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The Wilderness Act of 1964

The National Environmental Policy Act of 1969

The NPS General Authorities Act of 1970

The Endangered Species Act of 1973

Public Law 95-625 (1978) - Designated wilderness inside park

The Archeological Resources Protection Act of 1979

The National Parks Omnibus Management Act of 1988

The Federal Cave Resources Protection Act of 1988

The Redwood National Park Act of 1988

The Lechuguilla Cave Protection Act of 1993

Code of Federal Regulations - Parks, Forests, and Public Property (CFR 36)

Compendium of Regulations - Carlsbad Caverns National Park - 2003

The National Park Service Management Policies 2001

Source: Advisory Body Evaluation 1995, Nomination File 1995 and Periodic Reporting, Cycle 1, 2004

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 property has no buffer zone

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?

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

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

There is adequate capacity/resources to enforce legislation and/or regulation in the World Heritage property

- 5.2.7 Please provide a short summary of how the legislation, including spatial planning and other regulation, works in practice
- 5.2.8 Comments, conclusions and/or recommendations about the information related to the measures taken to protect the World Heritage property
- 5.3. Management System/Management Plan
- 5.3.1 Please check the box which most closely match the character of the governance and management system of the property Public management system at national level

If 'Other', please specify

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

A statutory Management Plan or zoning plan for the property.

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

A Final General Management Plan/Environmental Impact Statement (EIS) was completed and released to the public in 1996. The plan sets forth a basic management philosophy and provides strategies for addressing issues and achieving management objectives. The plan provides the framework for management decisions over the next 10 to 15 years to meet the following: (1) Preserve and protect cave resources, the Chihuahuan Desert ecosystem, and the Capitan Reef in Carlsbad Caverns National Park, as well as associated natural and cultural resources; (2) provide a range of opportunities for public use, enjoyment, and understanding, while minimizing impacts on park resources and natural processes; and (3) facilitate research to provide a continuum of information in support of park interpretation, management decisions, and the general body of scientific knowledge. The Plan/EIS lists three separate, and extensive, alternatives: Alternative 1 - This is the No-Action Alternative that continues the existing management direction as described in current plans. Under this alternative, the park would "provide for visitor use and respond to resource management issues and concerns as funding allowed, but there would be no major change in management direction." Alternative 2 - This is the proposed alternative and "would base resource management decisions on scientific research, inventory, and monitoring. Human activities and facilities would be studied to determine effects of resources, particularly cavern resources. Once these studies are done, a development concept plan would be completed to determine subsurface threats and ways to eliminate or mitigate these threats. Opportunities for visitors would be increased, special off-trail tours would continue, and additional surface trails would be continued. The present visitor center would also be remodeled. Alternative 3 - This alternative "proposes the removal of many surface functions and facilities above the cavern within five years to ensure the protection of subsurface resources. To replace these functions, a new visitor orientation/transit center and operations center would be developed at the base of the escarpment." The present visitor center would be modified to focus on interpretation and essential services. A shuttle system would be provided to get visitors from the new visitor center to Carlsbad Cavern and back. Visitor use of Carlsbad Cavern would be monitored and restricted to minimize further impacts to cave resources. The proposed alternative (Alternative 2) was selected based on

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environmental considerations as well as a cost versus benefits analysis.

5.3.4 - Management Documents

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					×

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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)	77 %	95 %
6.1.1.7	Governmental (regional/provincial/state)	0 %	0 %
6.1.1.8	Governmental (local/municipal)	0 %	0 %
6.1.1.9	In-country donations (NGOs, foundations, etc.)	0 %	0 %
6.1.1.10	Individual visitor charges (e.g. entry, toilets, parking, camping fees, etc.)	18 %	5 %
6.1.1.11	Commercial activities (e.g. merchandising and catering, filming permit, concessions, etc.)	5 %	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 adequate** for effective management of the World Heritage property

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

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

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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	45 %	55 %
6.1.6.2	Women	55 %	45 %
		Total 100 %	Total 100 %

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

Human resources are adequate for management needs

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

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

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

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

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

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

- 6.1.11 If the World Heritage Strategy for Capacity Building has been used, please briefly describe what has been done.
- 6.1.12 Are there site-specific capacity building plans or programmes that develop local expertise and that contribute to the transfer of skills for the conservation and management of the World Heritage property?

A site-based capacity building plan or programme is in place and 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

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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	Poor
Local/municipal authorities	Fair
Indigenous peoples	Poor
Landowners	Poor
Women	Poor
Youth/children	Poor
Researchers	Poor
Local visitors	Poor
National/international tourists	Fair
Tourism industry	Fair
Local businesses and industries	Poor
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 and effective education and awareness programme for children and youth that contributes to the protection of the World Heritage property

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

Local communities	
Youth/children	
Local Visitors	
National/international tourists	

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	Good
Guided tours	Good
Trails/routes	Fair
Printed information materials	Good
Online (website, social media, etc.)	Good

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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

305,521 / 152,724 / 379,909 / 460,743 / 493,975 /

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

Ranger observation

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

\$0 / \$16 / \$0 / \$15 / \$0 / \$32 /

9.6 - Please provide the source of information

Park fee, cooperating association, and concession operator records.

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 planned and effective strategy to manage visitors, tourism activity and its derived impacts on the World Heritage property

- 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?

Yes, using a different system

If a different system, please specify

Physical monotoring, resource ipacts

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

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

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

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

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

In one location and easily visible to visitors

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

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

9.15 - Are there locally driven sustainable tourism initiatives?

Not applicable

If 'Yes', please specify

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

Vρς

If 'Yes', please specify

High affinity with the park unit and the local community. The park is well supported by the local community.

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

High affinity with the park unit and the local community. The park is well supported by the local community.

10. Monitoring

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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 considerable monitoring but it is not directed towards management needs and/or improving the understanding of 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	Non-existent
Local communities	Non-existent
Indigenous peoples	Non-existent
Landowners	Non-existent
Women	Non-existent
Researchers	Good
Tourism industry	Non-existent
Local businesses and industry	Non-existent
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

5.1	Boundaries and Buffer Zones	
5.1.3	The property has no buffer zone	×
5.1.4	The property has no known and recognised buffer zone	×
5.2	Protective Measures	
5.2.4	The property has no buffer zone	×
5.2.5	An adequate legal framework exists for the broader setting of the World Heritage property and the buffer zone, but there are some deficiencies in implementation which undermine the maintenance of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the property	×
5.3	Management System/Management Plan	

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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	
6.1.10	No use has been made of the World Heritage Strategy for Capacity Development at the World Heritage property	×
10	Monitoring	
10.1	There is considerable monitoring at the World Heritage property but it is not directed towards management needs and/or improving understanding of Outstanding Universal Value	×
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	×
Pleas	e select 0 more issues.	
☑ Ple	ase save this question to reflect changes	

12. Summary and Conclusions

12.1. Summary - Factors affecting the Property

12.1.1 - Summary - Factors affecting the Property

4.1	Buildings and I	Development											
1.1.3	Industrial area	as Visual intrusion	N/A		Night sky being mo	and light po	llution ar	e N/A	A	N/A		N/A	
1.2	Transportation	Infrastructure											
4.2.1		Ground transport infrastructure											
1.3	Services Infras	tructures											
1.3.1	Water infrastructure	Potential reduction in availability	water	N/A		N/A		N/A		N/A		N/A	
4.3.3	Non-renewable energy facilities		l environmental	other fe	ark is working ederal agen as and mitig as leasing in cource	acies to	N/A		N/A		N/A	N/	A
1.3.4	Localised u	tilities Visual intrusion	N	I/A		N/A		N/A		N/A		N/A	
4.4	Pollution												
1.4.4	Air pollution	Number of days with ozo exceedance of recomme		N/A		Ozone is mo	nitored		N/A		N/A	N	/A
1.6	Physical resour	rce extraction											
1.6.3	3	Potential environmental effects	Oil and gas exp drilling and extr			d by Bureau nagement	of	on-going		Mana	au of Land gement and nal Park service	þ	N/A
1.9	Other human ac	ctivities											
1.9.1		Illegal activities											
4.9.2		Deliberate destruction of heritage											
4.12	Invasive/alien s	species or hyper-abundant s	pecies										
4.12.2		Invasive/Alien terrestrial species											

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12.2. Summary - Management Needs

12.2.1 - Summary - Management Needs

5.1	Boundaries and	d Buffer Zones									
		Actions		Timeframe			Lead age involved)		nd others	More info	o / comment
5.1.3	The property has no buffer zone			N/A		N/A		N/A	N/A		
5.1.4	The property has no known and recognised buffer zone	N/A	N/A			N/A			N/A		
5.2	Protec	ctive Measures									
5.2.4		roperty has N/A	'A			N/A		1	N/A	N	/A
5.2.5	legal frame exists broads of the Herita proper buffer there defici imple which the ma of the Outsta Universical including condition Auther and/or	work for the er setting World ge tty and the zone, but are some encies in mentation undermine aintenance anding real Value ing ions of	o the extent possib	ole work with other fe impacts	ederal	N/A			N/A	N.	/A
5.3	Management	System/Manage	ement Plan								
5.3.7	No use has been made of the Policy Document on the Impacts of Climate Chang on World Heritage Properties at the property	Change Str		as its own Climate	on-go	ing			National Park Serv	rice	N/A
5.3.9	No use has been made of the Strategy fo Reducing Risk from Disasters at World Heritage Properties at the property	manageme or ks		as its own suite of	on-go	ing			National Park Serv	rice	N/A
6.1		Funding									
6.1.10		No use has been made o the World Heritage Strategy for Capacity Development the World Heritage			N/A			N/A		N/A	

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		property			
10	Monitoring				
10.1	There is considerable monitoring at the World Heritage property but it is not directed towards management needs and/or improving understanding of Outstanding Universal Value	Monitoring occurs for environmental vital signs and resource condition	on-going	National Park Service	Monitoring is not based on Outstanding Universal Value
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	Monitoring occurs for environmental vital signs and resource condition, but frequency could be increase	on-going	National Park Service	N/A

Summary - Management Needs completed

- 12.3. Conclusions on the State of Conservation of the Property
- 12.3.1 Following the analysis undertaken for this report, what is the current state of Authenticity of the World Heritage property?

 The Authenticity of the World Heritage property has been preserved
- 12.3.2 Following the analysis undertaken for this report, what is the current state of Integrity of the World Heritage property? The Integrity of the World Heritage property is intact
- 12.3.3 Following the analysis undertaken for this report, what is the current state of the World Heritage property's Outstanding Universal Value?

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

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

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

- 12.3.5 Comments. conclusions and/or recommendations related to the state of conservation of the property.
- 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	No impact
Research and monitoring	No impact
Management effectiveness	No impact
Quality of life for local communities and indigenous peoples	No impact
Recognition	Positive
Education	No impact
Infrastructure development	No impact
Funding for the property	No impact
International cooperation	No impact
Political support for conservation	No impact
Legal/Policy framework	No impact
Advocacy	No impact

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Institutional coordination	No impact
Security	No impact
Gender equality	No impact
Provision of ecosystem services/ benefits to local communities	No impact
Social inclusion and equity, and improvement of opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion, or economic or other status	No impact
Fostering inclusive local economic development and enhancing livelihood	No impact
Contributing to conflict prevention, including respect for cultural diversity within and around heritage properties	No impact
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

State of Conservation

Management

Governance

- 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 concept of Outstanding Universal Value

The property's Outstanding Universal Value

The concept of Integrity and/or Authenticity

The property's Integrity and/or Authenticity

Management effectiveness to maintain the Outstanding Universal Value

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

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

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

Awareness raising

- 15.2.2 Comments on use of data from the Cycle of Periodic Reporting
- 15.3. Timing and resources
- 15.3.1 Entities involved in the filling out of this online questionnaire (tick as many boxes as applicable)

Governmental institutions responsible for cultural and natural heritage

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 has **not been explicitly** considered or 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

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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?

All 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)	Not applicable
UNESCO National Commission	Good
ICOMOS International	Not applicable
IUCN International	Not applicable
ICCROM international/regional	Not applicable
ICOMOS national/regional	Not applicable
IUCN national/regional	Not applicable

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

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

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

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

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

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

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

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

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

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