Mammoth Cave National Park

1. World Heritage Property Data

1.1 - Name of World Heritage property
Mammoth Cave National Park

1.2 - World Heritage property details

1.3 - Geographic information table

Name	Coordinates	Property (ha)	Buffer zone (ha)	Total (ha)	Inscription year
Mammoth Cave National Park	37.187 / -86.103	21191	0	21191	1981
Total (ha)		**21191**	**0**	**21191**	

1.4 - Map(s)

Title	Date	Link to source
Mammoth Cave National Park	2006	

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

1. Mammoth Cave National Park (U.S. National Park Service)
2. World Heritage in the United States

Comment
Delete #2 and change to https://www.nps.gov/subjects/internationalcooperation/worldheritage.htm Add: Facebook: https://www.facebook.com/MammothCaveNPS Instagram: https://www.instagram.com/mammothcavenps/

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

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

		The World Heritage property (in whole or in part) is designated and/or protected under this convention/programme	The World Heritage property (in whole or in part) is not designated and/or protected under this convention/programme
2.1.1	**International Register of Cultural Property under Special Protection** (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?

No

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

No

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

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

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

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

Mammoth Cave is the most extensive cave system in the world, with over 285 miles (458 km) of surveyed cave passageways within the property (and at least another 80 miles [128 km] outside the property). The park illustrates a number of stages of the Earth's evolutionary history and contains ongoing geological processes and unique wildlife. It is renowned for its size and vast network of extremely large horizontal passages and vertical shafts. Nearly every type of cave formation is known within the site, the product of karst topography. The flora and fauna of Mammoth Cave is the richest cave-dwelling wildlife known, with more than 130 species within the cave system.

Criterion (vii): Mammoth Cave is the longest cave system in the world. The long passages with huge chambers, vertical shafts, stalagmites and stalactites, splendid forms of beautiful gypsum flowers, delicate gypsum needles, rare mirabilite flowers and other natural features of the cave system are all superlative examples of their type. No other known cave system in the world offers a greater variety of sulfate minerals.

Criterion (viii): Mammoth Cave exhibits 100 million years of cave-forming action and presents nearly every type of cave formation known. Geological processes involved in their formation continue. Today, this huge and complex network of cave passages provides a clear, complete and accessible record of the world's geomorphic and climatic changes. Outside the cave, the karst topography is superb, with fascinating landscapes and all of the classic features of a karst drainage system: vast recharge area, complex network of underground conduits, sink holes, cracks, fissures, and underground rivers and springs.

Criterion (x): The flora and fauna of the cave is the richest caverniculous wildlife known, numbering over 130 species, of which 14 species of troglobites and troglophiles are known only to exist here.

Integrity

With nearly 500 km of surveyed cave passageways within the property and over 21,000 hectares above ground, the property is large enough to offer a high level of protection to the outstanding universal value for which it was inscribed. A portion of the site has development (roads, visitor facilities, park operational and administrative infrastructure), but most of the area remains undeveloped in a natural zone. As a national park, protection of the property's integrity takes first priority in management decisions.

Mammoth Cave and its karst terrain face threats and challenges, most of which are from external sources. Because large portions of the Mammoth Cave watershed lie outside park boundaries, activities conducted in these privately-owned areas greatly influence water quality and quantity within the park. Water quality is influenced by sewage and waste disposal, farming and forestry practices, oil/gas wells, railroads and highways. Water quantity is influenced by flood-control dams on the Green and Nolin Rivers, and a small lock and dam immediately downstream of the park.

The integrity of Mammoth Cave has been strengthened as a result of five significant measures that have been taken since Mammoth Cave National Park was inscribed in 1981: an updated General Management Plan in 1983; the establishment of the Mammoth Cave Area International Biosphere Reserve in 1990 and subsequent expansion in 1996; a regional sewage system, installed in the early 1990s, which serves both the park and three adjacent communities; the establishment of the Mammoth Cave International Center for Science and Learning in 2004; and the discovery and mapping of 140 additional miles (225 km) of cave passageways over the past 31 years.

The regional sewer system has greatly increased protection of the park's sensitive cave system by servicing most of the areas that drain into the Mammoth Cave. The 1996 expansion of the Mammoth Cave Area Biosphere Reserve to 367,993 hectares has also played an important role in securing the property's integrity and maintaining water quality. The Biosphere Reserve now includes all or portions of six counties near Mammoth Cave National Park, encompassing the ecologically sensitive hydrological recharge area for Mammoth Cave National Park as well as a large interaction zone. This has helped address common concerns regarding water quality, has provided an impetus for protection and has reinforced the World Heritage property values inside the park in combination with the connected ecologically sensitive areas outside of the park.

In 2004, the Mammoth Cave International Center for Science and Learning was established through a partnership between Mammoth Cave National Park and Western Kentucky University. Part of a national network of learning centers located within national parks, it facilitates the use of parks for scientific inquiry, supports science-informed decision making, and promotes science literacy and resource stewardship. The learning center has contributed to "sister park" agreements with other World Heritage sites (China and Slovenia) that protect cave and karst resources.

Fine particles of air pollution often cause haze in the park, affecting how well and how far visitors can see vistas and landmarks. Air pollutants of concern can have serious effects on park air quality, human health, wildlife, vegetation, upland ponds, streams, soils, and visibility.

Protection and management requirements

Designated by the U.S. Congress in 1941 as a national park, Mammoth Cave 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. Day to day management is directed by the Park Superintendent.

Management goals and objectives for the property have been developed through a General Management Plan, which has been supplemented in recent years with more site-specific planning exercises as well as numerous plans for specific issues and resources. In addition, the National Park Service has established Management Policies which provide broader direction for all National Park Service units, including Mammoth Cave.

Approximately 600,000 people visit the property each year, and 400,000 of those tour Mammoth Cave. Access to the cave is strictly controlled and visitation is confined to 10 miles of developed passageway. On the surface of the park, some trail use activities produce soil erosion and equine waste. Invasive species crowding out native plants is another area of great concern.

Protection of the site from current and potential threats will require continued monitoring of resource conditions, such as through the NPS Inventory and Monitoring program, which has developed nine "vital signs" for the park, including five cave vital signs (aquatic biota, bats, crickets, meteorology, woodrats), forest vegetation communities, invasive species early detection, ozone/foliar injury, and water quality. Continued collaboration at the landscape scale, such as through the Biosphere Reserve, is also essential to long term protection of the site.

Comment

The Mammoth Cave International Center for Science and Learning no longer exists. The paragraph that references it can be modified to be in the past tense. A sentence can be added to the end of the paragraph that states: "Though the Mammoth Cave International Center for Science and Learning closed in 2012, Mammoth Cave National Park continues to support a robust scientific research and environmental education program." Also, strike "and a small lock and dam immediately downstream of the park."

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	Karst Drainage System		✖		

3.2.2	Geological Formations	✖			
3.2.3	Caverniculous Wildlife	✖			
3.2.4	Water Quality		✖		
3.2.5	Air Quality		✖		
3.2.6					
3.2.7					
3.2.8					
3.2.9					
3.2.10					
3.2.11					
3.2.12					
3.2.13					
3.2.14					
3.2.15					

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

4. Factors Affecting the Property

4.1. Buildings and Development

4.1.1 - Housing

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

- Not relevant

Relevant	✖ Not relevant

4.1.2 - Commercial development

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

- Not relevant

Relevant	✖ Not relevant

4.1.3 - Industrial areas

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**
Positive							
Negative ✖		✖		✖			

4.1.4 - Major visitor accommodation and associated infrastructure

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

- Relevant, Positive, Current, Inside

✖ Relevant	Not relevant

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

4.1.5 - Interpretative and visitation facilities

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

- Relevant, Positive, Current, Inside

✖ Relevant	Not relevant

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

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

4.2. Transportation Infrastructure

4.2.1 - Ground transport infrastructure

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

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

✖ Relevant	Not relevant

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

4.2.2 - Underground transport infrastructure

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

- Not relevant

Relevant	✖ Not relevant

4.2.3 - Air transport infrastructure

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

- Not relevant

Relevant	✖ Not relevant

4.2.4 - Marine transport infrastructure

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

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

Relevant	✖ Not relevant

4.2.5 - Effects arising from use of transportation infrastructure

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

- Not relevant

✖ Relevant	Not relevant

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

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

There is a potential for an air tour operator to open a business outside of the national park. While tours over the park are not expected, nearby air traffic might impact the park's soundscape.

4.3. Services Infrastructures

4.3.1 - Water infrastructure

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

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

✖ Relevant	Not relevant

	Impact	Origin	Trend of impact

Impact	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive ✖	✖	✖	✖	✖			↗
Negative							

4.3.2 - Renewable energy facilities

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

- Relevant, Positive, Current, Inside

✖ Relevant	Not relevant

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

4.3.3 - Non-renewable energy facilities

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

- Relevant, Negative, Potential, Inside, Outside

✖ Relevant	Not relevant

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

4.3.4 - Localised utilities

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

- Relevant, Positive, Current, Inside, Outside

✖ Relevant	Not relevant

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

4.3.5 - Major linear utilities

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

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

✖ Relevant	Not relevant

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

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

4.4. Pollution

4.4.1 - Pollution of marine waters

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

- Not relevant

Relevant	✖ Not relevant

4.4.2 - Ground water pollution

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

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

✖ Relevant	Not relevant

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

4.4.3 - Surface water pollution

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

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

✖ Relevant	Not relevant

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

4.4.4 - Air pollution

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

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

✖ Relevant	Not relevant

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

4.4.5 - Solid waste

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

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

✖ Relevant	Not relevant

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

4.4.6 - Input of excess energy

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

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

✖ Relevant	Not relevant

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

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

Mammoth Cave National Park achieved International Dark Sky Park status in 2021 and is committed to reducing light pollution originating from inside the park and to working with partners on light pollution outside the park.

4.5. Biological resource use/modification

4.5.1 - Fishing/collecting aquatic resources

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

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

✖ Relevant	Not relevant

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

4.5.2 - Aquaculture

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

- Not relevant

Relevant	✖ Not relevant

4.5.3 - Land conversion

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

- Relevant, Negative, Current, Outside

✖ Relevant	Not relevant

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

4.5.4 - Livestock farming/Grazing of domesticated animals

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

- Relevant, Negative, Current, Outside

✖ Relevant	Not relevant

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

4.5.5 - Crop production

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

- Relevant, Negative, Current, Outside

✖ Relevant	Not relevant

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

4.5.6 - Commercial wild plant collection

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**
Positive							
Negative ✖	✖		✖				

4.5.7 - Subsistence wild plant collection

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**
Positive							
Negative ✖	✖	✖	✖				

4.5.8 - Commercial hunting

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

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

✖ Relevant	Not relevant

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

4.5.9 - Subsistence hunting

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

- Relevant, Positive, Current, Outside

✖ Relevant	Not relevant

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

4.5.10 - Forestry/Wood production

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

- Relevant, Negative, Current, Outside

✖ Relevant	Not relevant

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

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

✖ Relevant	Not relevant

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

4.6.2 - Quarrying

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

- Relevant, Negative, Current, Potential, Outside

✖ Relevant	Not relevant

	Impact	Origin	Trend of impact

Impact	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive							
Negative ✖	✖	✖		✖			

4.6.3 - Oil and gas

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

- Relevant, Negative, Current, Potential, Outside

✖ Relevant	Not relevant

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

4.6.4 - Water (extraction)

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

- Relevant, Negative, Current, Potential, Outside

✖ Relevant	Not relevant

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

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

4.7. Local conditions affecting physical fabric

4.7.1 - Wind

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

- Relevant, Positive, Negative, Potential, Outside

✖ Relevant	Not relevant

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

4.7.2 - Relative humidity

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

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

✖ Relevant	Not relevant

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

4.7.3 - Temperature

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

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

✖ Relevant	Not relevant

	Impact		Origin		Trend of impact		
Impact	**Current**	**Potential**	**Inside**	**Outside**	**Decreasing**	**Stable**	**Increasing**
Positive ✖	✖	✖	✖	✖			

Negative ✖		✖	✖	✖			

4.7.4 - Radiation/Light

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

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

✖ Relevant	Not relevant

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

4.7.5 - Dust

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

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

✖ Relevant	Not relevant

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

4.7.6 - Water (rain/water table)

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

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

✖ Relevant	Not relevant

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

4.7.7 - Pests

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							
Negative ✖	✖	✖	✖	✖			

4.7.8 - Micro-organisms

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

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

✖ Relevant	Not relevant

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

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):

- Relevant, Positive, Current, Inside

✖ Relevant	Not relevant

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

4.8.2 - Society's valuing of heritage

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

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

✖ Relevant	Not relevant

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

4.8.3 - Indigenous hunting, gathering and collecting

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

- Relevant, Positive, Current, Inside, Outside

✖ Relevant	Not relevant

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

4.8.4 - Changes in traditional ways of life and knowledge system

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**
Positive							
Negative ✖		✖	✖	✖			

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

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

- Relevant, Positive, Current, Outside

✖ Relevant	Not relevant

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

4.8.6 - Impacts of tourism/Visitation/Recreation

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

- Relevant, Positive, Current, Inside, Outside

✖ Relevant	Not relevant

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

4.8.7 - 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, Inside

✖ Relevant	Not relevant

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

4.9.2 - Deliberate destruction of heritage

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

- Relevant, Negative, Current, Potential, Inside

✖ Relevant	Not relevant

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

4.9.3 - Military training

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

- Relevant, Positive, Current, Inside

✖ Relevant	Not relevant

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

4.9.4 - War

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

- Not relevant

Relevant	✖ Not relevant

4.9.5 - Terrorism

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

- Relevant, Negative, Potential, Inside, Outside

✖ Relevant	Not relevant

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

Positive							
Negative ✖		✖	✖	✖			

4.9.6 - Civil unrest

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

- Not relevant

Relevant	✖ Not relevant

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

4.10. Climate change and severe weather events

4.10.1 - Storms

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

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

✖ Relevant	Not relevant

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

4.10.2 - Flooding

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

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

✖ Relevant	Not relevant

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

4.10.3 - Drought

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

- Relevant, Negative, Current, Potential, Outside

✖ Relevant	Not relevant

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

4.10.4 - Desertification

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**
Positive							
Negative ✖		✖	✖	✖			

4.10.5 - Changes to oceanic waters

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
Positive							
Negative ✖		✖		✖			

4.10.6 - Temperature change

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
Positive							
Negative ✖	✖	✖	✖	✖			

4.10.7 - Other climate change impacts

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
Positive							
Negative ✖		✖	✖				

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

Climate change might impact cave airflow, temperature, and humidity dynamics which could, in turn, impact natural and cultural resources.

4.11. Sudden ecological or geological events

4.11.1 - Volcanic eruption

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
Positive							
Negative ✖		✖		✖			

4.11.2 - Earthquake

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

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

✖ Relevant	Not relevant

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

4.11.3 - Tsunami/Tidal wave

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

- Not relevant

Relevant	✖ Not relevant

4.11.4 - Avalanche/Landslide

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

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

Relevant	Not relevant
✖	

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

4.11.5 - Erosion and siltation/Deposition

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

- Relevant, Negative, Current, Potential, Outside

Relevant	Not relevant
✖	

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

4.11.6 - Fire (wildfire)

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

- Relevant, Negative, Potential, Inside, Outside

Relevant	Not relevant
✖	

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

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

Mammoth Cave National Park finalized a Fire Management Plan in 2019 that includes routine implementation of prescribed fire and allows for beneficial use of wildfire to help mitigate the potential impacts from changing fire regimes.

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

Relevant	Not relevant
✖	

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

4.12.2 - Invasive/Alien terrestrial species

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

- Relevant, Negative, Current, Potential, Outside

Relevant	Not relevant
✖	

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

4.12.3 - Invasive/Alien freshwater species

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

- Relevant, Negative, Current, Potential, Outside

✖ Relevant	Not relevant

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

4.12.4 - Invasive/Alien marine species

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

- Not relevant

Relevant	✖ Not relevant

4.12.5 - Hyper-abundant species

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							
Negative ✖	✖	✖	✖	✖			

4.12.6 - Modified genetic material

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**
Positive							
Negative ✖		✖		✖			

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

4.13. Management and institutional factors

4.13.1 - Management system/Management plan

✖ Relevant	Not relevant

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

4.13.2 - Legal framework

✖ Relevant	Not relevant

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

4.13.3 - Governance

Relevant	Not relevant
✖	

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

4.13.4 - Management activities

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

- Relevant, Positive, Current, Potential, Inside

Relevant	Not relevant
✖	

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

4.13.5 - Financial resources

Relevant	Not relevant
✖	

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

4.13.6 - Human resources

Relevant	Not relevant
✖	

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

4.13.7 - Low impact research/monitoring activities

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

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

Relevant	Not relevant
✖	

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

4.13.8 - High impact research/monitoring activities

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

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

Relevant	Not relevant
✖	

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

4.13.9 - 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						
4.1.3 Industrial areas						
	⊖		👎		👍	
4.1.4 Major visitor accommodation and associated infrastructure	⊕	👎	👎	◎		↗
4.1.5 Interpretative and visitation facilities	⊕	👎	👎	◎		↗
4.2 Transportation Infrastructure						
4.2.1 Ground transport infrastructure	⊕	👎		◎	👍	
	⊖	👎				→
4.2.5 Effects arising from use of transportation infrastructure						
	⊖		👎		👍	
4.3 Services Infrastructures						
4.3.1 Water infrastructure	⊕	👎	👎	◎	👍	↗
4.3.2 Renewable energy facilities	⊕	👎	👎	◎	👍	↗
4.3.3 Non-renewable energy facilities						
	⊖	👎			👍	
4.3.4 Localised utilities	⊕	👎	👎	◎	👍	
	⊖	👎	👎		👍	
4.3.5 Major linear utilities	⊕	👎	👎	◎		
	⊖		👎	◎	👍	
4.4 Pollution						
4.4.2 Ground water pollution						
	⊖	👎	👎	◎	👍	
4.4.3 Surface water pollution						
	⊖	👎	👎	◎	👍	
4.4.4 Air pollution						
	⊖	👎	👎	◎	👍	
4.4.5 Solid waste						
	⊖	👎	👎	◎	👍	
4.4.6 Input of excess energy	⊕	👎		◎	👍	
	⊖	👎	👎	◎	👍	
4.5 Biological resource use/modification						

4.5.1 Fishing/collecting aquatic resources						
4.5.3 Land conversion						
4.5.4 Livestock farming/Grazing of domesticated animals						
4.5.5 Crop production						
4.5.6 Commercial wild plant collection						
4.5.7 Subsistence wild plant collection						
4.5.8 Commercial hunting						
4.5.9 Subsistence hunting						
4.5.10 Forestry/Wood production						
4.6 Physical resource extraction						
4.6.1 Mining						
4.6.2 Quarrying						
4.6.3 Oil and gas						
4.6.4 Water (extraction)						
4.7 Local conditions affecting physical fabric						
4.7.1 Wind						
4.7.2 Relative humidity						
4.7.3 Temperature						
4.7.4 Radiation/Light						
4.7.5 Dust						
4.7.6 Water (rain/water table)						
4.7.7 Pests						

4.7.8 Micro-organisms						
	⊖	↓	↓	○		
4.8 Social/Cultural uses of heritage						
4.8.1 Ritual/Spiritual/Religious and associative uses	⊕	↓		○		
4.8.2 Society's valuing of heritage	⊕	↓	↓	○	↑	
4.8.3 Indigenous hunting, gathering and collecting	⊕		↓	○	↑	
4.8.4 Changes in traditional ways of life and knowledge system						
	⊖		↓	○	↑	
4.8.5 Identity, social cohesion, changes in local population and community	⊕	↓			↑	
4.8.6 Impacts of tourism/Visitation/Recreation	⊕	↓		○	↑	
4.9 Other human activities						
4.9.1 Illegal activities						
	⊖	↓	↓	○		
4.9.2 Deliberate destruction of heritage						
	⊖	↓	↓	○		
4.9.3 Military training	⊕		↓	○		
4.9.5 Terrorism						
	⊖		↓	○	↑	
4.10 Climate change and severe weather events						
4.10.1 Storms						
	⊖	↓	↓	○	↑	
4.10.2 Flooding						
	⊖	↓	↓	○	↑	
4.10.3 Drought						
	⊖	↓	↓	○	↑	
4.10.4 Desertification						
	⊖		↓	○	↑	
4.10.5 Changes to oceanic waters						
	⊖		↓		↑	
4.10.6 Temperature change						
	⊖	↓	↓	○	↑	
4.10.7 Other climate change impacts						
	⊖		↓	○		
4.11 Sudden ecological or geological events						
4.11.1 Volcanic eruption						
	⊖		↓		↑	

4.11.2 Earthquake						
	⊖			○		
4.11.4 Avalanche/Landslide						
	⊖			○		
4.11.5 Erosion and siltation/Deposition						
	⊖			○		
4.11.6 Fire (wildfire)						
	⊖			○		
4.12 Invasive/alien species or hyper-abundant species						
4.12.1 Translocated species						
	⊖			○		
4.12.2 Invasive/Alien terrestrial species						
	⊖			○		
4.12.3 Invasive/Alien freshwater species						
	⊖			○		
4.12.5 Hyper-abundant species						
	⊖			○		
4.12.6 Modified genetic material						
	⊖					
4.13 Management and institutional factors						
4.13.1 Management system/Management plan	⊕			○		
4.13.2 Legal framework	⊕			○		
4.13.3 Governance	⊕			○		
4.13.4 Management activities	⊕			○		
4.13.5 Financial resources	⊕			○		
	⊖			○		
4.13.6 Human resources	⊕			○		
	⊖			○		
4.13.7 Low impact research/monitoring activities	⊕			○		
4.13.8 High impact research/monitoring activities	⊕			○		

Legend	Current	Potential	Negative	Positive	Inside	Outside

4.16. Assessment of current and potential positive and negative factors

4.16.1 - Assessment of current and potential negative and positive factors

4.1 Buildings and Development

Name	Impact	Origin	Trend

Name	Impact			Origin		Trend
4.1.3 Industrial areas						

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

Name	Impact			Origin		Trend
4.1.4 Major visitor accommodation and associated infrastructure						

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

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

Name	Impact			Origin		Trend
4.1.5 Interpretative and visitation facilities						

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

4.2 Transportation Infrastructure

Name	Impact			Origin		Trend
4.2.1 Ground transport infrastructure						

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

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

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

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

4.3 Services Infrastructures

Name	Impact			Origin		Trend
4.3.1 Water infrastructure						

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

Name	Impact			Origin		Trend
4.3.2 Renewable energy facilities						

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

Name	Impact			Origin		Trend
4.3.3 Non-renewable energy facilities						

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

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

Name	Impact			Origin		Trend
4.3.4 Localised utilities						

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

Name	Impact			Origin		Trend
4.3.5 Major linear utilities						

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

4.4 Pollution

Name	Impact			Origin		Trend
4.4.2 Ground water pollution						

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

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

Name	Impact			Origin		Trend
4.4.3 Surface water pollution						

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

	Static
✖	Increasing

Name	Impact			Origin		Trend
4.4.4 Air pollution						

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

Name	Impact			Origin		Trend
4.4.5 Solid waste						

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

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

Name	Impact			Origin		Trend
4.4.6 Input of excess energy						

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

	Static
✖	Increasing

4.5 Biological resource use/modification

Name	Impact			Origin		Trend
4.5.1 Fishing/collecting aquatic resources						

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

Name	Impact			Origin		Trend
4.5.3 Land conversion						

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

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

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

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

	Decreasing
✖	Static
	Increasing

Name	Impact			Origin		Trend
4.5.5 Crop production						

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

Name	Impact			Origin		Trend
4.5.6 Commercial wild plant collection						

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

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

Name	Impact			Origin		Trend
4.5.7 Subsistence wild plant collection						
						

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

	Decreasing
✖	Static
	Increasing

Name	Impact			Origin		Trend
4.5.8 Commercial hunting						

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

Name	Impact			Origin		Trend
4.5.9 Subsistence hunting						

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

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

Name	Impact			Origin		Trend
4.5.10 Forestry/Wood production						
	⛔	👎			↻	

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

	Decreasing
✖	Static
	Increasing

4.6 Physical resource extraction

Name	Impact			Origin		Trend
4.6.1 Mining						

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

Name	Impact			Origin		Trend
4.6.2 Quarrying						

Spatial scale - Area affected by the factor	
✖	Restricted
	Localised
	Extensive
	Widespread
Temporal scale - Occurence of the impact	

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

Name	Impact			Origin		Trend
4.6.3 Oil and gas						

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

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

Name	Impact			Origin		Trend
4.6.4 Water (extraction)						

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

4.7 Local conditions affecting physical fabric

Name	Impact			Origin		Trend
4.7.1 Wind						

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

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

Impact - Impact on the attributes	
	Insignificant
✖	Minor
	Significant
	Major

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

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

Name	Impact			Origin		Trend
4.7.2 Relative humidity						

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

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

Impact - Impact on the attributes	
	Insignificant
✖	Minor
	Significant
	Major

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

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

Name	Impact			Origin		Trend
4.7.3 Temperature						

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

Name	Impact			Origin		Trend
4.7.4 Radiation/Light						

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

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

Impact - Impact on the attributes	
	Insignificant
✖	Minor
	Significant
	Major

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

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

Name	Impact			Origin		Trend
4.7.5 Dust						

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

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

Impact - Impact on the attributes	
	Insignificant
✖	Minor
	Significant
	Major

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

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

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

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

Name	Impact			Origin		Trend
4.7.7 Pests						

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

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

Impact - Impact on the attributes	
	Insignificant
	Minor
✖	Significant
	Major

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

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

Name	Impact			Origin		Trend
4.7.8 Micro-organisms						

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

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

Impact - Impact on the attributes	
	Insignificant
	Minor
✖	Significant
	Major

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

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

4.8 Social/Cultural uses of heritage

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

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

Name	Impact			Origin		Trend
4.8.2 Society's valuing of heritage						

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

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

Name	Impact			Origin		Trend
4.8.3 Indigenous hunting, gathering and collecting						

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

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

Name	Impact			Origin		Trend
4.8.4 Changes in traditional ways of life and knowledge system						

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

Name	Impact			Origin		Trend
4.8.5 Identity, social cohesion, changes in local population and community						

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

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

Name	Impact			Origin		Trend
4.8.6 Impacts of tourism/Visitation/Recreation						

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

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

4.9 Other human activities

Name	Impact			Origin		Trend
4.9.1 Illegal activities						

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

Name	Impact			Origin		Trend
4.9.2 Deliberate destruction of heritage						

Spatial scale - Area affected by the factor	
✖	Restricted
	Localised

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

Name	Impact			Origin		Trend
4.9.3 Military training						

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

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

Name	Impact			Origin		Trend
4.9.5 Terrorism						

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

4.10 Climate change and severe weather events

Name	Impact			Origin		Trend
4.10.1 Storms						

Spatial scale - Area affected by the factor	
	Restricted

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

Name	Impact			Origin		Trend
4.10.2 Flooding						

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

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

Name	Impact			Origin		Trend
4.10.3 Drought						

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

Name	Impact			Origin		Trend
4.10.4 Desertification						

Spatial scale - Area affected by the factor	
✖	Restricted

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

Name	Impact			Origin		Trend
4.10.5 Changes to oceanic waters						
	⛔					

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

	High capacity
	Medium capacity
	Low capacity
✖	No capacity and / or resources

Trend - Developement over the last 6 years

	Decreasing
	Static
✖	Increasing

Name	Impact			Origin		Trend
4.10.6 Temperature change						

Spatial scale - Area affected by the factor

	Restricted
	Localised
	Extensive
✖	Widespread

Temporal scale - Occurence of the impact

	One off or rare
✖	Intermittent or sporadic
	Frequent
	On-going

Impact - Impact on the attributes

	Insignificant
	Minor
✖	Significant
	Major

Management response - Capacity of management to respond

	High capacity
	Medium capacity
✖	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years

	Decreasing
	Static
✖	Increasing

Name	Impact			Origin		Trend
4.10.7 Other climate change impacts						

Spatial scale - Area affected by the factor

	Restricted

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

4.11 Sudden ecological or geological events

Name	Impact			Origin		Trend
4.11.1 Volcanic eruption						
	⛔		👎		🌱	

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

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

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

Name	Impact			Origin		Trend
4.11.2 Earthquake						

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

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

Impact - Impact on the attributes	
	Insignificant
	Minor
	Significant
✖	Major

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

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

Name	Impact			Origin		Trend
4.11.4 Avalanche/Landslide						

Spatial scale - Area affected by the factor

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

Name	Impact			Origin		Trend
4.11.5 Erosion and siltation/Deposition						

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

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

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

Name	Impact			Origin		Trend
4.11.6 Fire (wildfire)						

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

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

Impact - Impact on the attributes	
	Insignificant
	Minor
✖	Significant
	Major

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

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

4.12 Invasive/alien species or hyper-abundant species

Name	Impact			Origin		Trend
4.12.1 Translocated species						

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

Name	Impact			Origin		Trend
4.12.2 Invasive/Alien terrestrial species						

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

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

Name	Impact			Origin		Trend
4.12.3 Invasive/Alien freshwater species						

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

Name	Impact			Origin		Trend
4.12.5 Hyper-abundant species						

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

Name	Impact			Origin		Trend
4.12.6 Modified genetic material						

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

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

4.13 Management and institutional factors

Name	Impact			Origin		Trend
4.13.1 Management system/Management plan						

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

Name	Impact	Origin	Trend

4.13.2 Legal framework						

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

Name	Impact			Origin		Trend
4.13.3 Governance						

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

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

Name	Impact			Origin		Trend
4.13.4 Management activities						

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

Name	Impact			Origin		Trend
4.13.5 Financial resources						

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

Name	Impact			Origin		Trend
4.13.6 Human resources						

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

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

Name	Impact			Origin		Trend
4.13.7 Low impact research/monitoring activities						

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

Name	Impact			Origin		Trend
4.13.8 High impact research/monitoring activities						

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

4.17. Serial inscriptions (national or transnational)

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

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

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

	Attribute	Preserved	Compromised	Seriously compromised	Lost
4.18.1.1	Karst Drainage System		✖		
4.18.1.2	Geological Formations	✖			
4.18.1.3	Caverniculous Wildlife		✖		
4.18.1.4	Water Quality		✖		
4.18.1.5	Air Quality		✖		

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).

The United States Government on behalf of the American public owns Mammoth Cave National Park. It is managed by the National Park Service, a federal agency. As a unit of the National Park System, Mammoth Cave National Park receives the highest level of conservation protection afforded by federal law in the United States.

As an entity of the government of the United States of America, the National Park Service is an agency within the Department of the Interior. Mammoth Cave National Park is operated and managed under the authority of national government, which has "exclusive federal jurisdiction" over all lands within the park.

Regulations:

- The Wilderness Act of 1964
- The National Environmental Policy Act of 1969, as amended
- The Endangered Species Act of 1973, as amended
- The Archeological Resources Protection Act of 1979, as amended
- The National Parks Omnibus Management Act of 1998
- The Federal Cave Resources Protection Act of 1988
- The Redwood National Park Act of 1988
- Code of Federal Regulations - Parks, Forests, and Public Property (CFR 36)
- Compendium of Regulations - Mammoth Cave National Park - 2012
- The National Park Service Management Policies 2006
- The National Historic Preservation Act of 1966, as amended
- The Native American Graves Protection and Repatriation Act of 1990
- The Clean Air Act Amendments of 1970, as amended
- The Clean Water Act of 1972, as amended

Source: Periodic Reporting Cycle 1, Periodic Reporting Cycle 2

Comment
Update "Compendium of Regulations - Mammoth Cave National Park - 2012" to "Compendium of Regulations - Mammoth Cave National Park - 2023."

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

5.2.6 - Can the legal framework (i.e. legislation and/or regulation) be enforced?
There is **acceptable capacity/resources** to enforce legislation and/or regulation in the World Heritage property but some deficiencies of enforcement remain

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

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

5.3. Management System/Management Plan

5.3.1 - Please check the box which most closely match the character of the governance and management system of the property
Public management system at national level

If 'Other', please specify

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

A statutory Management Plan or zoning plan for the property.
Other forms of statutory or non-statutory plans (e.g. strategic plans)
Governance mechanisms that foster and respect traditional practices, knowledge and uses of the property
Mechanisms to promote equal participation among and within groups, including different levels of authority, local communities, indigenous people, women and men, and other specific groups
A framework for inclusive economic development, including equal access and distribution of resources and opportunities arising from the protection of the property
An integrated management plan combining World Heritage and any other designations
A management plan
An annual work plan or business plan
A visitor/visitation management plan
An environmental management framework
An assessment of biological and cultural diversity and ecosystem services provided by the property

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

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	The public at large.

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

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

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

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

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

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

6. Financial and Human Resources

6.1. Funding

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

		Project costs	Running costs
6.1.1.1	Multilateral funding (GEF, World Bank, etc.)	0 %	0 %
6.1.1.2	Bilateral international funding	0 %	0 %
6.1.1.3	World Heritage Fund (International Assistance)	0 %	0 %
6.1.1.4	Contribution from other conventions and programmes	0 %	0 %
6.1.1.5	International donations (NGOs, foundations, etc.)	0 %	0 %

6.1.1.6	Governmental (national/federal)	70 %	70 %
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.)	2 %	2 %
6.1.1.10	Individual visitor charges (e.g. entry, toilets, parking, camping fees, etc.)	27 %	27 %
6.1.1.11	Commercial activities (e.g. merchandising and catering, filming permit, concessions, etc.)	1 %	1 %
6.1.1.12	Other	0 %	0 %
		Total 100 %	Total 100 %

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

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

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

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

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

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

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

		From local communities %	From elsewhere %
6.1.6.1	Men	65 %	65 %
6.1.6.2	Women	35 %	35 %
		Total 100 %	Total 100 %

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

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

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

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

Awareness raising and public information/communication	Fair
Marketing and promotion	Fair
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

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?

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?

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

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	Fair
Local/municipal authorities	Fair
Indigenous peoples	Fair
Landowners	Fair
Women	Fair
Youth/children	Fair
Researchers	Fair
Local visitors	Fair
National/international tourists	Fair
Tourism industry	Fair
Local businesses and industries	Fair
NGOs	Fair
Other specific groups	Fair
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
Local/municipal authorities
Landowners
Youth/children

Researchers
Local Visitors
National/international tourists
Tourism industry
Local businesses and industries
NGOs

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

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

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

9. Visitor Management

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

530,000 / 515,744 / 290,392 *global pandemic / 551,590 / 533,206 /

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

Entry tickets and registries
Accommodation establishments
Transportation services
Tourism industry
Visitor surveys

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

One day (no overnight stay)

9.4 - Please provide the source of information

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

$2,904 / $2,444 / $2,366 / $0 / $25,961 / $9,924 /

9.6 - Please provide the source of information

Lodging, food and beverage, transportation, and souvenirs daily expenditures calculated by dividing 2022 annual sales receipts by 364 (number of days that the site is open annually). Recreation fees calculated by dividing 2022 annual cave tour ticket sales by 364. The total visitor spending in the local economy in 2021 (most recent year data is available) was $47,874,000.

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

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

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

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

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

9.10 - Is the effectiveness of tourism management regularly monitored?

Yes, using a different system

If a different system, please specify

A variety of indicators and thresholds are used to monitor the visitor experience and resource impacts.

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

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

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

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

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

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

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

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

9.15 - Are there locally driven sustainable tourism initiatives?

Yes

If 'Yes', please specify

Bioshpere Region, Trail Town designated communities, local and regional tourism councils

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

Yes

If 'Yes', please specify

Tourism at the World Heritage site has a significant economic impact on surrounding communities.

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

10. Monitoring

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

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

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

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

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

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

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

World Heritage managers/coordinators and staff	Good
Local/municipal authorities	Non-existent
Local communities	Non-existent
Indigenous peoples	Non-existent
Landowners	Non-existent
Women	Good
Researchers	Good
Tourism industry	Non-existent
Local businesses and industry	Non-existent

NGOs	Poor
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?

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**	✖
5.2.6	There is **acceptable capacity/resources** to enforce legislation and/or regulation in the World Heritage property but some deficiencies of enforcement remain	
5.3	**Management System/Management Plan**	
5.3.7	**No use** has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property	✖
5.3.9	**No use** has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	✖
6.1	**Funding**	
6.1.3	The available **budget is acceptable** but **could be further improved** to fully meet the management needs of the World Heritage property	
6.1.7	Human resources **partly meet** the management needs of the World Heritage property	✖
6.1.10	**No use** has been made of the World Heritage Strategy for Capacity Development at the World Heritage property	✖
9	**Visitor Management**	
9.7	There **is a strategy** to manage visitors, tourism activity and its derived impacts on the World Heritage property but there are **some deficiencies in implementation**	✖
9.9	Visitor use of the World Heritage property is managed but **improvements could be made**	

Please select 3 more issues.

Please save this question to reflect changes

12. Summary and Conclusions

12.1. Summary - Factors affecting the Property

12.1.1 - Summary - Factors affecting the Property

4.3	**Services Infrastructures**						
4.3.3	Non-renewable energy facilities	Air pollution impairment to park natural and cultural resources: visibility; sensitive vegetation species; soil and water resources; cultural resources (Criteria x)	Organic act of 1916; Clean Air Act, as amended in 1977 and 1990, assist the park through various rules and regulations reducing impairment to park natural and cultural resources.	Measure ozone, sulfur dioxide, carbon monoxide, nitric oxide, total oxides of nitrogen, visibility, fine particles, dry deposition, wet deposition, toxic deposition, particle scattering.	on-going	US National Park Service; Kentucky Division for Air Quality; US Environmentla Protection Agency	Non-renewable energy facilities result in air quality impacts at the World Heritage site.
4.4	**Pollution**						

4.4.4	Air pollution	Air pollution impairment to park natural and cultural resources: visibility; sensitive vegetation species; soil and water resources; cultural resources (Criteria x)	Organic act of 1916; Clean Air Act, as amended in 1977 and 1990, assist the park through various rules and regulations reducing impairment to park natural and cultural resources.	Measure ozone, sulfur dioxide, carbon monoxide, nitric oxide, total oxides of nitrogen, visibility, fine particles, dry deposition, wet deposition, toxic deposition, particle scattering.	on-going	US National Park Service; Kentucky Division for Air Quality; US Environmentla Protection Agency	The park also utilizes air pollution effects monitoring to determine impacts to sensitive vegetation; collaborate on air pollution permit reviews with regulatory agencies.
4.7	**Local conditions affecting physical fabric**						
4.7.3	Temperature	Loss of biodiversity; Increase wildfire; loss of wetlands; reduced groundwater levels; wildlife migration; increased stress on endanger species; spread of invasive species (Criteria x)	Collaborate with climate change experts and weather agencies to develop resource indicator indices for the early detection of climate change. Utilize the US National Park Service's Resist-Accept-Direct framework for responding to climate change.	Continue to monitor temperature and other weather attributes	on-going	US National Park Service; US National Oceanic and Atmospheric Administration; US Geological Survey; US National Weather Service	Park continues to explore research opportunities on temperature impacts to the park.
4.7.6	Water (rain/water table)	Loss of biodiversity; Increase wildfire; loss of wetlands; reduced groundwater levels; wildlife migration; increased stress on endanger species; spread of invasive species (Criteria x)	Collaborate with climate change experts and weather agencies to develop resource indicator indices for the early detection of climate change. Utilize the US National Park Service's Resist-Accept-Direct framework for responding to climate change.	Continue to monitor rainfall and other weather attributes	ongoing	US National Park Service; US National Oceanic and Atmospheric Administration; US Geological Survey; US National Weather Service	Park continues to explore research opportunities on rain/water table impacts to the park.
4.7.7	Pests						
4.10	**Climate change and severe weather events**						
4.10.3	Drought						
4.10.6	Temperature change	Loss of biodiversity; Increase wildfire; loss of wetlands; reduced groundwater levels; wildlife migration; increased stress on endanger species; spread of invasive species (Criteria x)	Collaborate with climate change experts and weather agencies to develop resource indicator indices for the early detection of climate change. Utilize the US National Park Service's Resist-Accept-Direct framework for responding to climate change.	Continue to monitor temperature and other weather attributes	on-going	US National Park Service; US National Oceanic and Atmospheric Administration; US Geological Survey; US National Weather Service	Park continues to explore research opportunities on temperature impacts to the park and to consider ways to improve resiliency of systems that may be subject to the impacts of temperature changes.
4.10.7	Other climate change impacts						
4.11	**Sudden ecological or geological events**						
4.11.2	Earthquake	Earthquake impact to natural and cultural resources. (Criteria vii, x)	Monitor and report earthquake activity to lead Federal agency: US Geological Survey. Survey resources for damage assessments.	Observe and report earthquake activity. Permanent seismograph was recently installed inside the cave.	on-going	National Park Service; Kentucky Geological Survey; US Geological Survey	Earthquakes are relatively infrequent in the park however the park is very close to major active earthquake prone areas.
4.12	**Invasive/alien species or hyper-abundant species**						
4.12.2	Invasive/Alien terrestrial species						

Question not completed

12.2. Summary - Management Needs

12.2.1 - Summary - Management Needs

5.1	**Boundaries and Buffer Zones**

		Actions	Timeframe	Lead agency (and others involved)	More info / comment
5.1.4	The property has **no known and recognised buffer zone**	No actions are recommended as the property does not have a buffer zone, and one is not needed.	not applicable	not applicable	No actions are recommended as the property does not have a buffer zone, and one is not needed.
5.2	**Protective Measures**				
5.2.4	The property has **no buffer zone**	No actions are recommended as the property does not have a buffer zone, and one is not needed.	not applicable	not applicable	No actions are recommended as the property does not have a buffer zone, and one is not needed.
5.3	**Management System/Management Plan**				
5.3.7	**No use** has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property	The US National Park Service has internal guidance documents available related to climate change impacts to national parks.	ongoing	US National Park Service	The US National Park Service has internal guidance documents available related to climate change impacts to national parks.
5.3.9	**No use** has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	The US National Park Service utilizes internal guidance documents and planning processes to reduce and respond to risks from disasters.	ongoing	US National Park Service	The US National Park Service utilizes internal guidance documents and planning processes to reduce and respond to risks from disasters.
5.3.17		not applicable	not applicable	not applicable	not applicable
6.1	**Funding**				
6.1.7	Human resources **partly meet** the management needs of the World Heritage property	The site has made attempts to optimize human resources capacity given the current budget. The site routinely explores means of further optimizing human resources capacity.	ongoing	US National Park Service	The site has made attempts to optimize human resources capacity given the current budget. The site routinely explores means of further optimizing human resources capacity.
6.1.10	**No use** has been made of the World Heritage Strategy for Capacity Development at the World Heritage property	The site will continue its efforts to build capacity for effectively managing, communicating, and collaborating on issues associated with heritage.	ongoing	US National Park Service	While there has been no direct use of the World Heritage Strategy for Capacity Development, many of the management approaches that the site implements are consistent with those identified in the strategy.
9	**Visitor Management**				
9.7	There **is a strategy** to manage visitors, tourism activity and its derived impacts on the World Heritage property but there are **some deficiencies in implementation**	Continue to enhance visitor use infrastructure in a manner that improves the visitor experience and protects heritage resources.	ongoing	US National Park Service	Multiple, large-scale visitor use projects are underway and planned for the near future (lodging improvements, cave trail rehabilitation, comprehensive surface trail management plan).

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?

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

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

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

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

13. Impact of World Heritage Status

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

Conservation	Very positive
Research and monitoring	Very positive
Management effectiveness	Not applicable
Quality of life for local communities and indigenous peoples	Positive
Recognition	Positive
Education	Positive
Infrastructure development	Positive
Funding for the property	Not applicable
International cooperation	Very positive
Political support for conservation	Positive
Legal/Policy framework	Positive
Advocacy	Positive
Institutional coordination	Positive
Security	Not applicable
Gender equality	Positive
Provision of ecosystem services/ benefits to local communities	Positive
Social inclusion and equity, and improvement of opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion, or economic or other status	Positive
Fostering inclusive local economic development and enhancing livelihood	Positive
Contributing to conflict prevention, including respect for cultural diversity within and around heritage properties	Not applicable
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

The site completed a Cave and Karst Management Plan and Fire Management Plan during this reporting period. These documents were a result of interdisciplinary collaboration and public outreach. They will guide the management of the site's Outstanding Univeral Values for years to come.

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

Sustainable Development
State of Conservation
Management
Governance
Capacity Building

15. Assessment of the Periodic Reporting Exercise

15.1. Relevance of Periodic Reporting

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

The property's Outstanding Universal Value
Monitoring and reporting

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

State Party	Not needed
Site Managers	Good
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)

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

1 / 0 / 8 /

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	Not applicable
UNESCO (other sectors/field offices)	Not applicable
UNESCO National Commission	Not applicable
ICOMOS International	Not applicable
IUCN International	Not applicable
ICCROM international/regional	Not applicable
ICOMOS national/regional	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	Not applicable
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

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

  Reason for update: The Mammoth Cave International Center for Science and Learning no longer exists. The paragraph that references it can be modified to be in the past tense. A sentence can be added to the end of the paragraph that states: "Though the Mammoth Cave International Center for Science and Learning closed in 2012, Mammoth Cave National Park continues to support a robust scientific research and environmental education program." Also, strike "and a small lock and dam immediately downstream of the park."

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

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

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

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