

Barberton Makhonjwa Mountains

1. World Heritage Property Data


1.1 - Name of World Heritage property

Barberton Makhonjwa Mountains

1.2 - World Heritage property details

1.3 - Geographic information table

1.4 - Map(s)

Title	Date	Link to source
Barberton Makhonjwa Mountains - Map of the Inscribed Property	2018	

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

1. [Barberton Makhonjwa Geotrail](#)
2. [Barberton Makhonjwa Mountains World Heritage Site](#)

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

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

		The World Heritage property (in whole or in part) <u>is</u> designated and/or protected under this convention/programme	The World Heritage property (in whole or in part) <u>is not</u> designated and/or protected under this convention/programme
2.1.1	International Register of Cultural Property under Special Protection (1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict)		×
2.1.2	List of Cultural Property under Enhanced Protection (Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict)		×
2.1.3	The List of Wetlands of International Importance (The Ramsar List) (Convention on Wetlands of International Importance (Ramsar Convention))		×
2.1.4	World Network of Biosphere Reserves Man and the Biosphere (MAB) Programme		×
2.1.5	Global Geoparks Network UNESCO Global Geoparks		×

2.2 - Please provide comments on 2.1 if necessary

No comments

2.3 - Do your national authorities intend to request the granting of Enhanced Protection (if relevant) under the Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict for the World Heritage property in the next three years?

No

2.4 - Do your national authorities intend to designate whole or part of the World Heritage property for inclusion in the List of Wetlands of International Importance (The Ramsar List), if relevant, in the next three years?

No

2.5 - Do your national authorities intend to designate whole or part of the World Heritage property as a Man and Biosphere Reserve (if relevant) in the next three years?

No

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

No

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

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

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

In this site adherence is observed to both national legislations and international conventions that governs protected areas and world heritage sites under which this site falls.

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

No comments.

2.11 - Are you aware of any documentary heritage listed under the Memory of the World Programme associated with the World Heritage property?

Not aware

2.12 - Please list any documentary heritage associated with the World Heritage property listed under the Memory of the World Programme of which you are aware.

No comments.

3. Statement of Outstanding Universal Value

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

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
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3.2.1	340 million year sequence of Archaean lavas and sediments escaped subduction and erosion	✕			
3.2.2	best most diverse outstanding examples of rock outcrops from Archaean stage	✕			
3.2.3	earliest record of single celled life forms	✕			
3.2.4	best preserved sequence of volcanic & sedimentary rocks	✕			
3.2.5	earths earliest life forms: microfossils, stromatolites, biomats	✕			
3.2.6	detailed evidence in evolution of the originally oxygen free oceans and atmosphere	✕			
3.2.7	best sequence of volcanic and sedimentary rocks on earth	✕			
3.2.8	outstanding value of rocks lies in large numbers of sites and features that provide a unique scientific source	✕			
3.2.9	geology contribute to scientific knowledge and understanding of evolutionary earth	✕			
3.2.10	Earths earliest life forms: micro fossils, stramatolites, biomats	✕			
3.2.11	evidence of earliest large meteorite impact events - spherule beds	✕			
3.2.12	Oldest migmatites at the Greenstone belt margins	✕			
3.2.13					
3.2.14					
3.2.15					

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

No comments.

4. Factors Affecting the Property

4.1. Buildings and Development

4.1.1 - Housing

✕ Relevant			Not relevant				
	Impact		Origin		Trend of impact		
Impact	🔥 Current	🔥 Potential	📍 Inside	📍 Outside	↘ Decreasing	→ Stable	↗ Increasing
🟢 Positive							
🔴 Negative ✕	✕	✕	✕	✕		→	

4.1.2 - Commercial development

✕ Relevant			Not relevant				
	Impact		Origin		Trend of impact		
Impact	🔥 Current	🔥 Potential	📍 Inside	📍 Outside	↘ Decreasing	→ Stable	↗ Increasing
🟢 Positive							
🔴 Negative ✕		✕		✕		→	

4.1.3 - Industrial areas

✕ 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

✕ 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

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

Due to the area being mainly rural and mountainous there is very little chance of major development such as sky scrapers, factories impeding on the skyline. A geo-trail for visitors are existing and picnic site available at some of the sites, however it was part of the layout plan. There is also a operational Kromdraai Camp and Humala Lodge. These are well placed. A tourism Master plan exist as part of the IMP and it is developed to minimise impact etc. Visitor Info Center to be constructed

4.2. Transportation Infrastructure

4.2.1 - Ground transport infrastructure

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

4.2.2 - Underground transport infrastructure

Relevant	Not relevant
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4.2.3 - Air transport infrastructure

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

4.2.4 - Marine transport infrastructure

Relevant	Not relevant
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4.2.5 - Effects arising from use of transportation infrastructure

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

Impact exist from forestry logging trucks damaging tar roads at some sites. These roads provide access to tourists to the geo-sites. However these are repaired over time. Dirt roads do exist to villages within and outside the WHS. It also acts as management and security roads.

4.3. Services Infrastructures










4.3.1 - Water infrastructure

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










4.3.2 - Renewable energy facilities

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










4.3.3 - Non-renewable energy facilities

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










4.3.4 - Localised utilities

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

4.3.5 - Major linear utilities

✕ Relevant	Not relevant
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	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

Communication towers are present throughout the WHS specifically in villages. There are linear power lines cutting across Songimvelo Nature Reserve and Barberton Nature Reserve (BNR) but has been in place for some 30 years. With current legislation in terms of National Environmental Management Act and National Environmental Protected Areas Act such developments will be seriously restricted and monitoring existing ones.










4.4. Pollution

4.4.1 - Pollution of marine waters

Relevant	✕ Not relevant
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4.4.2 - Ground water pollution

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

4.4.3 - Surface water pollution

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔴 Current	🟡 Potential	🟢 Inside	🟢 Outside	📉 Decreasing	➡ Stable	📈 Increasing
🟢 Positive							
🔴 Negative ✕	✕		✕	✕		➡	

4.4.4 - Air pollution

Relevant	✕ Not relevant
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4.4.5 - Solid waste

✕ 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

Relevant	✕ Not relevant
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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

Agriculture is practised along Komati River which runs through the WHS. Water monitoring is done on a four years cycle by the Mpumalanga Tourism and Parks Agency and Department of Water Affairs. Refuse removal is conducted by Batobic at geo trail and within nature reserves and taken to approved local municipality refuse dumping sites.

4.5. Biological resource use/modification

4.5.1 - Fishing/collecting aquatic resources

Relevant	✕ Not relevant
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4.5.2 - Aquaculture

Relevant	✕ Not relevant
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4.5.3 - Land conversion

✕ 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

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔴 Current	🟡 Potential	🟢 Inside	🟢 Outside	📉 Decreasing	➡ Stable	📈 Increasing
🟢 Positive							
🔴 Negative ✕	✕		✕	✕	📉		

4.5.5 - Crop production

✕ 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

✕ 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

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔴 Current	🟡 Potential	🟢 Inside	🟢 Outside	📉 Decreasing	➡ Stable	📈 Increasing
🟢 Positive							
🔴 Negative ✕	✕	✕	✕	✕			📈

4.5.8 - Commercial hunting

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔴 Current	🟡 Potential	🟢 Inside	🟢 Outside	📉 Decreasing	➡ Stable	📈 Increasing
🟢 Positive ✕	✕		✕			➡	
🔴 Negative							

4.5.9 - Subsistence hunting

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔴 Current	🟡 Potential	🟢 Inside	🟢 Outside	📉 Decreasing	➡ Stable	📈 Increasing
🟢 Positive							
🔴 Negative ✕	✕		✕	✕			📈

4.5.10 - Forestry/Wood production

✕ 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

Plantations are well established and have been in operation for at least 40 years. However forestry can only expand if permits are applied for. The area is saturated and no more expansion in the WHS is available. Trophy Hunting is done by the Conservation body: Mpumalanga Tourism and Parks Agency, on its Songimvelo Nature Reserve. Harvesting natural resources is permitted but controlled within Songimvelo NR. Outside the reserve but in the WHS harvesting is being conducted - Legislation apply

4.6. Physical resource extraction

4.6.1 - Mining

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔴 Current	🟡 Potential	🟢 Inside	🟢 Outside	📉 Decreasing	➡ Stable	📈 Increasing
🟢 Positive ✕	✕			✕		➡	
🔴 Negative ✕	✕	✕	✕	✕			📈

4.6.2 - Quarrying

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔴 Current	🟡 Potential	🟢 Inside	🟢 Outside	📉 Decreasing	➡ Stable	📈 Increasing
🟢 Positive							
🔴 Negative ✕	✕	✕	✕	✕			📈

4.6.3 - Oil and gas

Relevant	✕ Not relevant
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4.6.4 - Water (extraction)

✕ 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

Highlands dam within WHS provides water to Barberton Town. Sand is illegally mined in rivers outside the WHS. All mining is outside the WHS. Mainly visual impact of tailing dams but also positive in providing much needed jobs.

4.7. Local conditions affecting physical fabric

4.7.1 - Wind

Relevant	✕ Not relevant
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4.7.2 - Relative humidity

Relevant	✕ Not relevant
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4.7.3 - Temperature

Relevant	✕ Not relevant
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4.7.4 - Radiation/Light

Relevant	✕ Not relevant
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4.7.5 - Dust

Relevant	✕ Not relevant
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4.7.6 - Water (rain/water table)

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔴 Current	🟡 Potential	🟢 Inside	🟢 Outside	📉 Decreasing	➡ Stable	📈 Increasing
🟢 Positive							
🔴 Negative ✕	✕		✕			➡	

4.7.7 - Pests

Relevant	✕ Not relevant
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4.7.8 - Micro-organisms

Relevant	✕ Not relevant
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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

Alien plants are a problem within the WHS. Beside plantation infestation into natural areas new alien invasive plant species such as *Campuloclinium macrocephalum* are now present within the WHS. Sand mining along Komati and Mondozi rivers on increase. Illegal informal mining within WHS is a challenge but mining security and MTPA work together on illuminating the threat. A Taskgroup exist between mine, Police and MTPA to curb illegal mining. Meetings are held once every two months.

4.8. Social/Cultural uses of heritage

4.8.1 - Ritual/Spiritual/Religious and associative uses

Relevant	✕ Not relevant
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4.8.2 - Society's valuing of heritage

✕ Relevant	Not relevant
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	Impact		Origin		Trend of impact		
Impact	🔴 Current	🟡 Potential	🟢 Inside	🟢 Outside	📉 Decreasing	➡ Stable	📈 Increasing
🟢 Positive ✕	✕		✕				📈
🔴 Negative							

4.8.3 - Indigenous hunting, gathering and collecting

✕ Relevant	Not relevant
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	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

✕ Relevant	Not relevant
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	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

✕ Relevant	Not relevant
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	Impact		Origin		Trend of impact		
Impact	🔴 Current	🟡 Potential	🟢 Inside	🟢 Outside	📉 Decreasing	➡ Stable	📈 Increasing
🟢 Positive ✕		✕	✕				📈
🔴 Negative							

4.8.6 - Impacts of tourism/Visitation/Recreation

✕ Relevant	Not relevant
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	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

Rhino poaching is problematic on Songimvelo Nature Reserve. Due to poaching rhinos had to be relocated from the reserve. Where the reserve carried some 46, only four is left. Poaching is sporadic. Illegal harvesting of certain plants with medicinal and other purposes does happen within the WHS. As an example, *Athrixia* is one such plant extensively harvested for the making of brooms. Refer to annexure 1.

4.9. Other human activities

4.9.1 - Illegal activities

✕ 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

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔴 Current	🟡 Potential	🟢 Inside	🟢 Outside	📉 Decreasing	➡ Stable	📈 Increasing
🟢 Positive							
🔴 Negative ✕	✕		✕			➡	

4.9.3 - Military training

Relevant	✕ Not relevant
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4.9.4 - War

Relevant	✕ Not relevant
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4.9.5 - Terrorism

Relevant	✕ Not relevant
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4.9.6 - Civil unrest

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔴 Current	🟡 Potential	🟢 Inside	🟢 Outside	📉 Decreasing	➡ Stable	📈 Increasing
🟢 Positive							
🔴 Negative ✕	✕		✕	✕		➡	

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

Periodic political marches on service delivery within villages: blocking of roads/gate entrances. Vandalism to display plaques on geo-trail does happen but at low incidence. Arson fires frequently occur during winter months within and outside WHS. There has been illegal occupation of land within the WHS, however when noticed these are taken up with relevant departments. Incidence of illegal extraction of natural resources exist but law enforcement patrols are conducted and legislation in place

4.10. Climate change and severe weather events

4.10.1 - Storms

Relevant	✕ Not relevant
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4.10.2 - Flooding

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔴 Current	🟡 Potential	🟢 Inside	🟢 Outside	📉 Decreasing	➡ Stable	📈 Increasing
🟢 Positive							
🔴 Negative ✕		✕	✕	✕		➡	

4.10.3 - Drought

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔴 Current	🟡 Potential	🟢 Inside	🟢 Outside	📉 Decreasing	➡ Stable	📈 Increasing

Positive							
Negative							

4.10.4 - Desertification

Relevant	Not relevant
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4.10.5 - Changes to oceanic waters

Relevant	Not relevant
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4.10.6 - Temperature change

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

4.10.7 - Other climate change impacts

Relevant	Not relevant
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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

Periodic floods and droughts are possible. Over the past four years rainfall has dropped but difficult to state if it is due to climate change.

4.11. Sudden ecological or geological events

4.11.1 - Volcanic eruption

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

4.11.2 - Earthquake

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

4.11.3 - Tsunami/Tidal wave

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

4.11.4 - Avalanche/Landslide

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

4.11.5 - Erosion and siltation/Deposition

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

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

4.11.6 - Fire (wildfire)

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

Deliberate acts of setting uncontrolled fires (arson) by pastoralists remain a challenge especially during winter periods. MTPA is a member of the Lowveld and Escarpment Fire Association (LEFPA) and fires are suppressed in case of arson. Working on Fire (WOF) also assist in burning fire breaks at a fee. A fire management plan is in place and annual fire breaks are made prior to the burning season.

4.12. Invasive/alien species or hyper-abundant species

4.12.1 - Translocated species

✕ 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

✕ 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

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

4.12.4 - Invasive/Alien marine species

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

4.12.5 - Hyper-abundant species

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔥 Current	🔊 Potential	📍 Inside	🌐 Outside	↘ Decreasing	→ Stable	↗ Increasing
➕ Positive							
➖ Negative ✕		✕	✕	✕			↗

4.12.6 - Modified genetic material

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

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

Bush intensification does happen but within the nature reserves veld is continuously monitored, and appropriate bush thinning and rotational burning methods are applied.










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

✕ 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

✕ 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

✕ 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

Mpumalanga Tourism & Parks Agency provide oversight through the Project Management Committee on managing the WHS matters. The MTPA have a approved staff organogram in place with appointed staff at managerial and operational levels. Where staff shortages occur contract staff are appointed for specific tasks. Research ongoing by international/national scientist through the institution of high learning. The initial Budget of R 5.4 million has been allocated to roll out identified deliverable.

4.14. Other factor(s)

4.14.1 - Other factor(s)






































































































The process is underway to source additional funding. Research permit applications and evaluation systems is in place and upgraded. Permit approval process done in collaboration with South African Heritage Resources Agency.

4.15. Factors Summary Table

4.15.1 - Factors Summary Table

Name	Impact			Origin		Trend
4.1 Buildings and Development						
4.1.1 Housing						
4.1.2 Commercial 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						
4.2.3 Air 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						

4.4.5 Solid waste						
4.5 Biological resource use/modification						
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						
4.6.4 Water (extraction)						
4.7 Local conditions affecting physical fabric						
4.7.6 Water (rain/water table)						
4.8 Social/Cultural uses of heritage						
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						
						
4.9.6 Civil unrest						
						
4.10 Climate change and severe weather events						
4.10.2 Flooding						
						
4.10.3 Drought						
						
4.10.6 Temperature change						
						
4.11 Sudden ecological or geological events						
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						
						
4.12.5 Hyper-abundant species						
						
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
4.1.1 Housing							
Spatial scale - Area affected by the factor							
	Restricted						
	Localised						
	Extensive						
	Widespread						
Temporal scale - Occurence of the impact							
	One off or rare						
	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Impact on the attributes							
	Insignificant						
	Minor						
	Significant						
	Major						
Management response - Capacity of management to respond							
	High capacity						
	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - Development over the last 6 years							
	Decreasing						
	Static						
	Increasing						

Name		Impact			Origin		Trend
4.1.2 Commercial development							
Spatial scale - Area affected by the factor							
	Restricted						
	Localised						
	Extensive						
	Widespread						
Temporal scale - Occurence of the impact							

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

Name	Impact			Origin		Trend
4.1.3 Industrial areas						
						

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

Trend - 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 - Development 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 - Occurrence of the impact	
	One off or rare
✕	Intermittent or sporadic
	Frequent
	On-going
Impact - Impact on the attributes	
✕	Insignificant
	Minor
	Significant
	Major
Management response - Capacity of management to respond	
	High capacity
✕	Medium capacity
	Low capacity

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

Name	Impact	Origin	Trend
4.2.3 Air transport infrastructure	 	 	
	 	 	













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

Temporal scale - Occurrence of the impact	
✕	One off or rare
	Intermittent or sporadic
	Frequent
	On-going

Impact - Impact on the attributes	
	Insignificant
✕	Minor
	Significant
	Major

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

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

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

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

Temporal scale - Occurrence of the impact	
--	--










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

4.3 Services Infrastructures

Name	Impact	Origin	Trend
4.3.1 Water infrastructure	<div>+</div> <div>-</div>	<div>?</div> <div>?</div>	<div>?</div> <div>?</div>
	<div>+</div> <div>-</div>	<div>?</div> <div>?</div>	<div>?</div> <div>?</div>

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

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

Name	Impact	Origin	Trend
4.3.2 Renewable energy facilities	 	 	
	 		









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

Temporal scale - Occurrence of the impact	
✕	One off or rare
	Intermittent or sporadic
	Frequent
	On-going

Impact - Impact on the attributes	
✕	Insignificant
	Minor
	Significant
	Major











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

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

Name	Impact	Origin	Trend
4.3.3 Non-renewable energy facilities	 		
	 		











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

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

Name	Impact	Origin	Trend
4.3.4 Localised utilities	 	 	
	  	 	

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

Trend - Development over the last 6 years	
	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 - Occurrence of the impact	
✕	One off or rare
	Intermittent or sporadic
	Frequent
	On-going

Impact - Impact on the attributes	
	Insignificant
✕	Minor
	Significant
	Major

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






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

4.4 Pollution

Name	Impact	Origin	Trend
4.4.2 Ground water pollution			
	 	 	



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

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

Name	Impact			Origin		Trend
4.4.3 Surface water pollution						
						

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

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

Name	Impact	Origin	Trend
4.4.5 Solid waste			
	 	 	

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



Temporal scale - Occurrence of the impact	
✕	One off or rare
	Intermittent or sporadic
	Frequent
	On-going

Impact - Impact on the attributes	
✕	Insignificant
	Minor
	Significant
	Major

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




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

4.5 Biological resource use/modification

Name	Impact	Origin	Trend
4.5.3 Land conversion			
	 	 	






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

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

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

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

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

Name	Impact	Origin	Trend
4.5.5 Crop production	 	 	




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

Temporal scale - Occurrence of the impact	
	One off or rare
	Intermittent or sporadic
	Frequent
✕	On-going

Impact - Impact on the attributes	
✕	Insignificant
	Minor
	Significant
	Major




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

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

Name	Impact	Origin	Trend
4.5.6 Commercial wild plant collection	 	 	




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

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

Name	Impact			Origin		Trend
4.5.7 Subsistence wild plant collection						
						

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

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

Name	Impact	Origin	Trend
4.5.8 Commercial hunting	 		






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

Temporal scale - Occurrence of the impact	
	One off or rare
	Intermittent or sporadic
	Frequent
✕	On-going

Impact - Impact on the attributes	
	Insignificant
✕	Minor
	Significant
	Major






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

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

Name	Impact	Origin	Trend
4.5.9 Subsistence hunting	 	  	

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




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

Name	Impact			Origin		Trend
4.5.10 Forestry/Wood production						






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

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

Name	Impact			Origin		Trend
4.6.4 Water (extraction)						

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




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

4.7 Local conditions affecting physical fabric





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

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

4.8 Social/Cultural uses of heritage






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

Name	Impact			Origin		Trend
4.8.3 Indigenous hunting, gathering and collecting						
						

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

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





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

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

Temporal scale - Occurrence of the impact	
	One off or rare
	Intermittent or sporadic
	Frequent
✕	On-going






Impact - Impact on the attributes	
✕	Insignificant
	Minor
	Significant
	Major

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

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

Spatial scale - Area affected by the factor	
---	--

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

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

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

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

4.9 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 - Occurrence of the impact	
	One off or rare
	Intermittent or sporadic
	Frequent
✕	On-going

Impact - Impact on the attributes	
	Insignificant
✕	Minor
	Significant
	Major

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

Name	Impact			Origin		Trend
4.9.2 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 - Development over the last 6 years							
	Decreasing						
✕	Static						
	Increasing						

Name	Impact			Origin		Trend
4.9.6 Civil unrest						

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

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

4.10 Climate change and severe weather events

Name	Impact			Origin		Trend
4.10.2 Flooding						
						

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

Name	Impact	Origin	Trend
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4.10.3 Drought							

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

Name		Impact			Origin		Trend
4.10.6 Temperature change							

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

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

4.11 Sudden ecological or geological events

Name	Impact			Origin		Trend
4.11.5 Erosion and siltation/Deposition						





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

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

4.12 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 - Occurrence of the impact							
	One off or rare						
	Intermittent or sporadic						
✕	Frequent						
	On-going						

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

Name	Impact			Origin		Trend
4.12.2 Invasive/Alien terrestrial species						
						





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

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

4.13 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 - Occurrence of the impact							
	One off or rare						
	Intermittent or sporadic						

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

Name	Impact			Origin		Trend
4.13.2 Legal framework						

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

✕	Static
	Increasing

Name	Impact	Origin	Trend
4.13.3 Governance	 		

Spatial scale - Area affected by the factor

	Restricted
	Localised
✕	Extensive
	Widespread

Temporal scale - Occurrence of the impact

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

Impact - Impact on the attributes



	Insignificant
	Minor
✕	Significant
	Major

Management response - Capacity of management to respond

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

Trend - Development over the last 6 years

	Decreasing
✕	Static
	Increasing

Name	Impact	Origin	Trend
4.13.4 Management activities	 		

Spatial scale - Area affected by the factor

	Restricted
	Localised
✕	Extensive
	Widespread

Temporal scale - Occurrence of the impact








	One off or rare
	Intermittent or sporadic

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

Name	Impact			Origin	Trend
4.13.5 Financial resources	+	🔴	🟡	🕒	➡️

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

✕	Static
	Increasing

Name	Impact	Origin	Trend
4.13.6 Human resources	  		
	 		

Spatial scale - Area affected by the factor

	Restricted
	Localised
✕	Extensive
	Widespread

Temporal scale - Occurrence of the impact

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

Impact - Impact on the attributes






	Insignificant
	Minor
✕	Significant
	Major

Management response - Capacity of management to respond

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

Trend - Development over the last 6 years

	Decreasing
✕	Static
	Increasing

Name	Impact	Origin	Trend
4.13.7 Low impact research/monitoring activities	  	 	

Spatial scale - Area affected by the factor

	Restricted
	Localised
✕	Extensive
	Widespread

Temporal scale - Occurrence of the impact

	One off or rare
	Intermittent or sporadic

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

Name	Impact			Origin	Trend
4.13.8 High impact research/monitoring activities	+	🔴	🟡	👁️	➡️

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

×	Static
	Increasing

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

Not applicable-one contiguous area

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	340 million year sequence of archaean laval	×			
4.18.1.2	best most diverse outstanding examples of rock outcrops from Archaean stage	×			
4.18.1.3	earliest record of single celled life forms	×			
4.18.1.4	best preserved sequence of volcanic & sedimentary rocks	×			
4.18.1.5	earths earliest life forms: microfossils, stromatolites, biomats	×			

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

BMM WHS focuses on "buffer mechanisms" and not buffer zones. The buffer mechanisms are adequate to manage the WHS. A buffer mechanism guiding manual will be developed to clearly indicate legislation, processes to follow into newly proposed development within these buffer mechanism zones/areas. Refer to annexure 1. A map indicating the buffer mechanism area is in place. A buffer guiding manual to assist developers are to be developed as funding was approved by the African World Heritage Fund.

5.2. Protective Measures

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

The five reserves that collectively constitute 67% of the nominated property are effectively protected by the National Environmental Management: Protected Areas Act, No. 57 of 2003 (NEMPAA) and the Mpumalanga Tourism and Parks Agency Act, No.5 of 2005 (MTPAA). Issuing of any new mining and mineral exploration rights in these areas is specifically prohibited under the Mineral and Petroleum Resources Development Act, No. 28 of 2002 (MPRDA). Inscription of the nominated property would provide additional protection under the World Heritage Convention Act, No. 49 of 1999 (WHCA).

Approximately one-third of the nominated property lie outside formal Protected Areas. These areas were chosen to include key geosites with essential attributes that are not well represented inside any of the five formal Protected Areas. Geosites inside the nominated property but outside the protected areas currently have limited or no legal protection. This is being actively addressed by the South African Heritage Resources Agency (SAHRA), who have completed an inventory all of these geosites and are in the process of applying for protection for them under the National Heritage Resources Act, No. 25 of 1999 (NHRA).

Inscription of the nominated property on the World Heritage List would provide immediate additional protection under the World Heritage Convention Act, No. 49 of 1999 (WHCA). The State Party supplementary information conveyed that notification of intention to declare geosites outside the boundaries of the reserves as protected heritage sites was issued on 26 September 2017 and that these geosites will be formally published in a government gazette in March 2018. At the statutory date of finalization of the IUCN evaluation, the formal protection of the geosites was not able to be confirmed.

Source: Advisory Body Evaluation (IUCN), 2018

5.2.2 - Please list any legislation and other measures (regulatory -including spatial planning- contractual, institutional or traditional) not included in 5.2.1 and indicate the category

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

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

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

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

5.2.5 - Is the legal framework (i.e. legislation and/or regulation) in the broader setting of the World Heritage property adequate for maintaining the Outstanding Universal Value including conditions of Integrity and/or Authenticity of the property?

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

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

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

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

The umbrella legislation is the National Environmental management Act, no 107 of 1998, and its listing notices for environmental assement NEMPAA, No. 57 of 2003 and its regulations affords protection to Protected Areas, NEMBA No. 10 of 2004 affords protection to indigenous species and control of alien species. SPLUMA no 16 of 2013 regulates land use and systems in place for municipalities to regulate such application. Beside the Spacial development plan municipalities also have IDP.

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

South Africa has adequate environmental legislation, starting at the Constitution of South Africa, Section 24: "everyone has the right to a healthy and safe environment....". The Mpumalanga Nature Conservation Act, no 10 of 1998 and its regulations also affords protection to protected Areas and indigenous species.

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 joint national/ local

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
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 disaster, climate or conflict risk management plan
An assessment of biological and cultural diversity and ecosystem services provided by the property
Other (please specify below)
Land Claims Settlement Agreements S 42 D, and Co management Agreements

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

Integrated Management Plans for protected Areas are in place for Songimvelo and Barberton Nature Reserves. BMM WHS - Integrated Management plan completed. Draft - Integrated Disaster Risk Management Plan in place. Fire Management Plan in place. Refer to annexure 1.

5.3.4 - Management Documents

Title	Status	Available	Date	Link to source
Management Plans	N/A	Available	2018	

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?

No use has been made of the 2011 Recommendation on the Historic Urban Landscape

5.3.6 - If the Historic Urban Landscape Recommendation has been used at this property, please describe briefly what has been done.

Not applicable

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?

Some 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:

Climate change risks have been incorporated into the draft Integrated Disaster Risk Management Plan; flooding, drought and potential fires. Attended the African World Heritage Fund workshop on Integrated Disaster Risk Management Plan. Climate Change formed part of presentations.

5.3.9 - Has any use been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property ?

Some 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

Within the draft Integrated Disaster Risk Management Plan a matrix is developed to identify risks from attributes/risks, hazards/impacts/likelihood/risk ranking score/mitigation circumstances/custodian. As per the African World Heritage Fund workshop in July 2018

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 **only partially implemented**

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

An annual work/action plan **exists and all of its activities are being implemented and monitored**

5.3.15 - Does the management system include formal mechanisms and procedures that ensure participation and contribution of the following groups, living within or near the World Heritage property and/or buffer zone in management decisions that maintain the Outstanding Universal Value of the property?

		Not applicable	No mechanisms for participation	Some participation	Direct participation	Transformative participation in all relevant decision processes
5.3.15.1	Local communities					×
5.3.15.2	Local authorities					×
5.3.15.3	Landowners in the property and the buffer zone					×
5.3.15.4	Indigenous peoples					×
5.3.15.5	Women					×
5.3.15.6	Other specific groups					
	If you selected, 'Other specific groups' please specify					

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

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

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

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

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

All landowners within BMM WHS are kept up to speed with developments All land owners have signed agreements to have their land included into the WHS Barberton tourism and biodiversity corridor as a project manager who closely interacts with communities on on all world heritage site work within Government it has become policy to appoint woman/youth on a 55% and 60% youth ratio within all Social Responsibility projects Land Claim appointment policy 60% land claimants,40% affected community member

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

Adequate management systems are implemented: 5 year Strategic plans, Annual performance plans, Action plans, monitoring and evaluation and proof of evidence.

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)	0.2 %	1 %
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)	64 %	70 %
6.1.1.7	Governmental (regional/provincial/state)	36 %	28 %
6.1.1.8	Governmental (local/municipal)	0.2 %	1 %
6.1.1.9	In-country donations (NGOs, foundations, etc.)	0 %	0 %
6.1.1.10	Individual visitor charges (e.g. entry, toilets, parking, camping fees, etc.)	0 %	0 %
6.1.1.11	Commercial activities (e.g. merchandising and catering, filming permit, concessions, etc.)	0 %	0 %
6.1.1.12	Other	0 %	0 %
		Total 100.4 %	Total 100 %

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

Mpumalanga Tourism and Parks Agency Income generated through tourism activities: Income generated-outsourced commercial: R 246 868 Income generated: own facilities & gate takings: R 643 677

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

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

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

The existing sources of funding are **secure over the medium-term** and **planning is underway to secure funding over the long-term**

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

The BMM-WHS is very recent so much development needs to happen. In the pipeline is a visitor information center at Barberton to be planned and constructed. The VIC estimate is in the region of R 110 million rands over three years. The existing geotrail has 13 developed geo sites. Additional 4 x geo sites will be identified and

constructed in this 2020-2021 financial year. One senior geologist position will be filled following the approval of the new organogram.

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

		From local communities %	From elsewhere %
6.1.6.1	Men	45 %	75 %
6.1.6.2	Women	55 %	25 %
		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	Good
Environmental sustainability	Good
Community participation and inclusion	Good
Risk preparedness	Good
Capacity development and education	Good
Administration	Good
Research and monitoring	Good
Awareness raising and public information/communication	Good
Marketing and promotion	Good
Interpretation	Good
Visitor management/tourism	Good
Enforcement (custodians, police)	Good

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

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

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

Some 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.

An Integrated Disaster and Risk Management Plan course was presented by African World Heritage Fund. African World Heritage Fund workshop: Third cycle of the periodic reporting for the Africa Region. At end of October a training session will be attended on the South African Heritage Resources Integrated System electronic research application system.

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 partially implemented; some technical skills are being transferred to those managing the property locally, **but most technical work is carried out by external staff**

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

With regard to 6.1.12 above: 70% of the Barberton Makhonjwa Mountains World Heritage Site consist of nature reserve for which there are well trained staff. It is only scientific based knowledge in terms of geology which is sourced from geologist, both international and national.

7. Scientific Studies and Research Projects

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

Knowledge about the values and attributes of the World Heritage property is **adequate**

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

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

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

Research results **are shared widely with active outreach** to local communities and national and international audiences

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

Extensive geological research is conducted and in line with the Outstanding Universal Value both international and national. Publications are made available as data published (always a condition on the permit/approval letter). The Geological Society of South Africa had a 3 day field trip to celebrate the 50th year anniversary of the discovery of Komatiites.

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	Good
Indigenous peoples	Fair
Landowners	Good
Women	Fair
Youth/children	Fair
Researchers	Good
Local visitors	Good
National/international tourists	Good
Tourism industry	Good
Local businesses and industries	Good
NGOs	Good
Other specific groups	Not applicable
If you selected 'Other specific groups', please describe	

8.2 - Does the property have a heritage education programme(s) for children and/or youth, that can contribute to a better understanding of heritage, promote diversity and foster intercultural dialogue?

There is a planned education and awareness programme for children and/or youth **but it only partly meets the needs**

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

Local communities
Local/municipal authorities
Indigenous peoples
Landowners
Women
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	Not provided but needed
Site museum	Poor
Information booths	Not provided but needed
Guided tours	Fair
Trails/routes	Good
Printed information materials	Good
Online (website, social media, etc.)	Good
Transportation facilities	Fair
Other	Good
If 'Other' is selected, please specify	The BMM WHS is the only geo trail developed in South Africa, free of charge, easy accessible, fully interpretative displays, guides available through booking. A printed booklet is available at the Tourism/Batobic offices.

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

The Barberton Makhonjwa Mountains World Heritage Site is the only geo trail developed in South Africa, free of charge, easy accessible, fully interpretative displays, guides available through booking. A printed booklet is available at the Tourism/Barberton Tourism and Biodiversity Corridor offices.

9. Visitor Management

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

120 (Humala Lodge) / 0 / 0 / 0 / 0 /
2768 (Kromdraai Camp) / 0 / 0 / 0 / 0 /

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

Entry tickets and registries
Accommodation establishments
Tourism industry
Visitor surveys
Other
reserve management summaries

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

Two overnight stays

9.4 - Please provide the source of information

At Songimvelo the Humala Lodge runs at an occupancy of 33%. It has a total of 30 beds. This lodge only became operational in 2018. Intake was 571034 \$. Info from Lodge Manager. Fee include two meals and 2 game drives per person. That is 156\$ daily spend At Kromdraai Camp the annual occupancy is 26%. There are 107 number of beds. Intake was 36775 \$ over one year. Info from Camp manager. This is a self catering facility. That is 3.63\$ daily spend.

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

159.63 / 0 / 0 / 0 / 0 / 10 /
3.63 / 0 / 8 / 0 / 0 / 0 /

9.6 - Please provide the source of information

Kromdraai Camp (self catering) at Songimvelo Nature Reserve. Info provided by Camp manager. Humala Lodge (overnight fee include 2 meals per day and 2 game drives) at Songimvelo Nature Reserve. Info provided by lodge manager.

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

Comprehensive tourism master plans is in place for both Songimvelo and Barberton Nature Reserves. Those link to the Integrated Management Plan's biophysical

analysis and zonation of the reserves. The annual Management Effectiveness Tracking Tool is a computer program in South Africa to assess the effective management of the protected area. Visitor/tourism impacts etc is part of the questionnaire.

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

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

9.10 - Is the effectiveness of tourism management regularly monitored?

Yes, using a different system

If a different system, please specify

The Management Effective Tracking Tool(METT) is used to assess nature reserves on an annual basis.

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?

Not displayed at all

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

Fees are collected, but make **no contribution** to the management of the World Heritage property

9.15 - Are there locally driven sustainable tourism initiatives?

Yes

If 'Yes', please specify

The geo trail provide opportunities to geological knowledgeable individuals to interpret for visitors and receive a fee.

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

Yes

If 'Yes', please specify

It provide jobs in maintaining the geo trail

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

The Mpumalanga Tourism & Parks Agency works closely with local tourism establishments and Barberton Tourism and Biodiversity Corridor on the Barberton Makhonjwa Mountains World Heritage Site initiative.

10. Monitoring

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

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

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

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

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

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

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

A State of Conservation report has not been done in the past as the BMM WHS received its inscription in 2018. Note this is also the first Periodic Report. To assess the management effectiveness of the WHS an annual Management Effectiveness Tracking Tool assessment is conducted. This is a national policy. Refer to annexure 1.

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

World Heritage managers/coordinators and staff	Fair
Local/municipal authorities	Good
Local communities	Fair
Indigenous peoples	Fair
Landowners	Good
Women	Fair
Researchers	Good
Tourism industry	Good
Local businesses and industry	Good
NGOs	Good
Other specific groups	Fair
If you selected 'Other specific groups', please specify	Depart of education: incorporated BMM-WHS into school syllabus.

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

Implementation is underway

10.7 - Please provide comments relevant to the implementation of recommendations from the World Heritage Committee.

WHC 1 Request - SA continue collaboration with Eswatini in expanding WHS into Swaziland. ongoing 2 Request SA to make available a viable budget to manage the WHS. done 3 Request SA to continue to strengthen the buffer zone to protect the WHS. ongoing Refer to annexure 1.

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

Mpumalanga Tourism and Park Agency Board approved the WHS organogram for implementation. Budget in place but additional funds are required. Submitted addition funding request to provincial government. Received 10 000 \$ from African World Heritage Fund to develop a buffer guiding manual. Awaiting transfer of funds. Through the Songimvelo-Malolotja Transfrontier Conservation Area Task Group the expansion of the WHS into eSwatini is an agenda item. Refer to annexure 1.

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	
5.3	Management System/Management Plan	
5.3.5	No use has been made of the Historic Urban Landscape Recommendation to develop policies and best practices for the protection of the property	
5.3.7	Some use has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property	✗
5.3.9	Some use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	✗
5.3.13	The management system at the property is only being partially implemented	
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	Some use has been made of the World Heritage Strategy for Capacity Development at the World Heritage property	✗
6.1.12	A site-based capacity building plan or programme is in place and partially implemented; some technical skills are being transferred to those managing the property locally, but most technical work is carried out by external staff	✗
8	Education, Information and Awareness Building	
8.2	There is a planned education and awareness programme for children and/or youth but it only partly meets the needs	✗
9	Visitor Management	

9.7	There is a strategy to manage visitors, tourism activity and its derived impacts on the World Heritage property but there are some deficiencies in implementation	X
10	Monitoring	
10.2	Information on the values of the World Heritage property is adequate and key indicators have been defined but monitoring of the status of indicators could be improved	

Please select 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

4.5	Biological resource use/modification						
4.5.4		Livestock farming/Grazing of domesticated animals					
4.5.6	Commercial wild plant collection	This site applies good practice.	The site applies strict permitting systems in line with natural resource use policy.	This site has law enforcement unit.	This site adheres to the annual performance plan and operational plan.	MTPA and PMC	This site also applies timous reviewal of the site management.
4.5.7	Subsistence wild plant collection	This site applies good practice.	The site applies strict permitting systems in line with natural resource use policy.	This site has law enforcement unit.	This site adheres to the annual performance plan and operational plan.	MTPA and PMC	This site also applies timeous reviewal of the site management.
4.5.9		Subsistence hunting					
4.6	Physical resource extraction						
4.6.1	Mining	No mining is allowed in the site.	No mining allow on this site	No mining allow on this site.	No mining allow on this site	No mining allow on this site	No mining allow on this site
4.8	Social/Cultural uses of heritage						
4.8.4		Changes in traditional ways of life and knowledge system					
4.9	Other human activities						
4.9.1	Illegal activities	No illegal activities.	No illegal activities.	No illegal activities.	No illegal activities.	No illegal activities.	No illegal activities.
4.10	Climate change and severe weather events						
4.10.6		Temperature change					
4.12	Invasive/alien species or hyper-abundant species						
4.12.2	Invasive/Alien terrestrial species	The site is guided and adheres to governing national legislations on dealing with invasive/alien plant species i.e. National Environmental Management Act and National Environmental Management: Biodiversity Act.	Through natural resource management programs this site applies periodic programmes that are aimed at eradication and control of invasive/alien vegetation.	This site has an ongoing programme of monitoring occurrence of invasive/alien vegetation. Every three months after a particular control method is applied a follow up process is ensued.	Annually.	MTPA and PMC.	Joint programmes are run by stakeholders related to this site.

4.13	Management and institutional factors						
4.13.6	Human resources	This site has existing agreements of cooperation between parties involved in this site which guides how they relate on matters affecting each other's interest on the site.	Ongoing processes of enhancing human resource where needed.	Guided by the need human resource will be enhanced.	This is an ongoing process guided by need.	MTPA and the PMC soon to be the Management Authority.	The management authority will eventually be responsible for the day to day management of the site.

Question not completed

12.2. Summary - Management Needs

12.2.1 - Summary - Management Needs

5.3	Management System/Management Plan				
		Actions	Timeframe	Lead agency (and others involved)	More info / comment
5.3.7	Some use has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property	A Climate Change response report completed by a service provider in November 2011 is in place. This report may require updating to ensure the Impacts of WHS properties are adequately addressed.	to be updated by 2021.	MTPA, BATOBIC, DEFF.	Incorporate latest CCR data into report. To source funding.
5.3.9	Some use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	A draft Integrated Disaster and Risk Management Plan is in place. It should be presented and signed off by the Office of the Minister.	March 2020.	MTPA & BATOBIC.	IDRMP approximately 90% complete.
6.1	Funding				
6.1.7	Human resources partly meet the management needs of the World Heritage property	The organogram for BMM-WHS has been approved by the Board of MTPA and key position will be filled in 2020/21 financial year as budgeted for.	2021-2022 financial year: fill and complete the 8 vacant posts.	DEDT, MTPA - BATOBIC.	A total of 9 posts appear on the organogram. These should be filled over a 3 year period.
6.1.10	Some use has been made of the World Heritage Strategy for Capacity Development at the World Heritage property	The BMM-WHS did nominate a Site Manager and Youth to attend the WHC in Azerbaijan but were unsuccessful. During 2018 a AWHF workshop on Disaster and Risk Management was attended. Early 2019 the 3rd Periodic Reporting Workshop was attended.	2021-2022.	MTPA-BATOBIC: all South Africa Site management forums and South Africa World Heritage Convention Committees are attended. It is here where any WHC/UNESCO decisions are discussed and implemented.	SA have structures in place to address requirements of the WHC/UNESCO.
6.1.12	A site-based capacity building plan or programme is in place and partially implemented; some technical skills are being transferred to those managing the property locally, but most technical work is carried out by external staff	Currently the BMM-WHS relies on local and international Geologists with regard to research and publications. BMM-WHS to appoint one Senior Geologist in the 2019-2020 financial year.	2020-2021 financial year.	MTPA-BATOBIC.	An appointed Geologist will be able to network with international and national geologists to steer the research direction.

8	Education, Information and Awareness Building				
8.2	There is a planned education and awareness programme for children and/or youth but it only partly meets the needs	Develop educational and awareness wall banners & posters according to school syllabus, and utilise MTPA Social ecologists to develop BMM WHS programs for schools, community interaction.	2019-2020.	MTPA.	These posters and wall banners are in draft currently.
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	There is an action to develop gate ways, nodal points and signage at the entrance/exits of the WHS. Nodal points will be maps to indicate directions and signage will be the UNESCO required signs, within the WHS. Some R 2,4 million is available.	2019-2020.	MTPA-BATOBIC.	Currently await the appointment of the Management Authority and declaration of the BMM-WHS.

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?

Not applicable (sites inscribed exclusively under criteria vii to x (natural World Heritage properties))

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

The Integrity of the World Heritage property is **intact**

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

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

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

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

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

The Barberton Makhonjwa Mountains World Heritage Site's Outstanding Universal Value is well maintained for the report period.

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	Positive
Quality of life for local communities and indigenous peoples	Positive
Recognition	Positive
Education	Positive
Infrastructure development	Positive
Funding for the property	Positive
International cooperation	Very positive
Political support for conservation	Positive
Legal/Policy framework	Very positive
Advocacy	Positive
Institutional coordination	Very positive
Security	Positive
Gender equality	Positive

Provision of ecosystem services/ benefits to local communities	Positive
Social inclusion and equity, and improvement of opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion, or economic or other status	Positive
Fostering inclusive local economic development and enhancing livelihood	Positive
Contributing to conflict prevention, including respect for cultural diversity within and around heritage properties	Positive
Other	Not applicable
If 'Other', please specify	

13.2 - Comments, conclusions and/or recommendations related to World Heritage status and its impacts

A very comprehensive social study was done during the development of the nomination dossier. All affected parties from local communities, tribal authorities, ward councillors, district and local municipalities, local government and national government and eSwatini formed part of the negotiations and study. It was only the mines that opposed the establishment of the WHS. However through continuous consultation an attempt is now being made to develop a Memorandum of Agreement to minimise conflict

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

Since 2009 an annual Management Effectiveness Tracking Tool assessment was conducted. The Management Effectiveness Tracking Tool application measures the effective management of the protected areas and includes now the World Heritage Site. A new electronic version will be implemented in 2019 and will be conducted in March 2020. It is a National policy to implement this assessment tool. All Site Managers are also part of the South African World Heritage Convention Committee and the Site Managers Forum which run back to back on a two quarterly basis. World Heritage Site matters and progress are discussed in these forums.

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

Sustainable Development
Synergies
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 <i>World Heritage Convention</i>
The concept of Outstanding Universal Value
The property's Outstanding Universal Value
The concept of Integrity and/or Authenticity
The property's Integrity and/or Authenticity
Management effectiveness to maintain the Outstanding Universal Value
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	No follow-up
Site Managers	No follow-up
UNESCO World Heritage Centre	No follow-up
Advisory Bodies (ICOMOS, IUCN, ICCROM)	No follow-up

15.2. Use of Data

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

Revision of priorities/strategies/policies for the protection, management and conservation of heritage
Update of management plans
Fundraising
Awareness raising
Advocacy

Other
medium term strategic and annual performance plan

15.2.2 - Comments on use of data from the Cycle of Periodic Reporting

It would be important to prioritise the shortcomings in the management/administration of the World Heritage Site and focus on those aspects. Also important is to do a costing on such shortcomings so that the future budget can accommodate the activities that requires to be improved on. NB: This is the first periodic report completed by the Barberton Makhonjwa Mountains World Heritage Site management.

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
Other specific groups
BATOBIC which is the implementing agent for the MTPA on the BMM WHS and also represents the landowners within the BMM WHS. Currently MTPA and BATOBIC drives the WHS through the Project Management Committee.
Non-Governmental Organizations

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?

No

15.3.4 - Please estimate the time (working hours) needed to complete this questionnaire

48 / 16 / 30 /

15.3.5 - Did you mobilise any additional resources to fill out this questionnaire?

	Additional resources	No	Yes
15.3.5.1	Human resources		×
15.3.5.2	Financial resources for organizing consultation meetings/ training		×

15.4. Format and content of the Periodic Report

15.4.1 - How accessible was the information required to complete this questionnaire?

Most required information was accessible.

15.4.2 - Was the questionnaire easy to use and clear to understand?

		Very Difficult	Difficult	Easy	Very easy
15.4.2.1	Ease of use of questionnaire			×	
15.4.2.2	Clarity of questions			×	

15.4.3 - Please provide suggestions for improvement of the Periodic Reporting questionnaire

The question of whether there is one UNESCO sign at the World Heritage Site could be improved. Rather post a question whether the signage appear on all entrances/exits of the World Heritage Site, along roads and at specific sites of the Outstanding Universal Value and are they in line with UNESCO guidelines. Site managers require user name and passwords to connect to electronic questionnaires at least 3 months in advance.

15.5. Training and Guidance

15.5.1 - Please rate the level of support in terms of training and guidance from the following entities in completing this questionnaire

UNESCO World Heritage Centre	Fair
UNESCO (other sectors/field offices)	Fair
UNESCO National Commission	Fair
ICOMOS International	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	Fair
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State Party Representative (national Focal Point)	Fair
UNESCO other sectors (e.g. field office)	Fair
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?

Yes

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

Online training resources were adequate.

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

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

No item were proposed for update

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

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

No comment.

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