# Vredefort Dome

# 1. World Heritage Property Data

# **1.1 - Name of World Heritage property** Vredefort Dome

#### 1.2 - World Heritage property details

#### 1.3 - Geographic information table

Name	Coordinates	Property (ha)	Buffer zone (ha)	Total (ha)	Inscription year
Vredefort Dome core area	-26.867 / 27.267	30108	?	30108	2005
The stromatolite/basal fault plane site	-26.774 / 27.27	1	?	1	2005
The chocolate tablet breccia site	-26.92 / 27.133	1	?	1	2005
The pseudotachylite (quarry) site	-26.896 / 27.408	1	?	1	2005
Total (ha)		30111	0	30111	

#### 1.4 - Map(s)

Title	Date	Link to source
Proposed Vredefort Dome World Heritage Site with 5 km Buffer Area	2004	

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

# 1. Natural site datasheet from WCMC

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

None

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?

2.5 - Do your national authorities intend to designate whole or part of the World Heritage property as a Man and Biosphere Reserve (if

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 <b>no contact</b> 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 <b>no contact</b> 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 <b>no contact</b> 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 <b>no contact</b> 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 <b>no contact</b> 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) None

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?

No

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 None

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

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

None

#### 3. Statement of Outstanding Universal Value

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

# Statement of Outstanding Universal Value

#### Brief synthesis

The Vredefort Dome is 120 km south west from Johannesburg. The property represents a unique geological phenomenon formed about 2 023 million years ago and is the oldest and largest known meteorite impact structure on earth. Within the area, geological strata comprising the middle to upper zones of the earth's crust, developed over a period of more than 3 200 million years are exposed. All the classical related characteristics of a large astrobleme are found in the property. This multi-ring structure formed by the impact scar illustrates the effect of shock metamorphism of rocks, transformation of crystal structures and shatter cones of the immense force created by the impact.

Criterion (viii): Vredefort Dome is the oldest, largest, and most deeply eroded complex meteorite impact structure in the world. It is the site of the world's greatest single, known energy release event. It contains high quality and accessible geological (outcrop) sites which demonstrate a range of geological evidences of a complex meteorite impact structure. The rural and natural landscapes of the serial property help portray the magnitude of the ring structures resulting from the impact. The serial nomination is considered to be a representative sample of a complex meteorite impact structure. A comprehensive comparative analysis with other complex meteorite impact structures demonstrated that it is the only example on earth providing a full geological profile of an astrobleme below the crater floor, thereby enabling research into the genesis and development of an astrobleme immediately post impact.

#### Integrity

The serial World Heritage property which is about 30,111 ha, is made up of a main component area of 30,108 ha and 3 satellite components of 1 ha each. The property of the Vredefort Dome includes key geological (outcrop) sites which demonstrate classic complex meteorite impact structure phenomena. A comprehensive comparative analysis with other complex meteorite impact structures demonstrated that it is the only example on earth providing a full geological profile of an astrobleme below the crater floor, thereby enabling research into the genesis and development of an astrobleme immediately post impact. This serial property is surrounded by a 5 km buffer zone that is designed to ensure the property's long term protection against external development threats.

#### Protection and management requirements

Provision of legal protection and the establishment and maintenance of an effective management system involving all relevant stakeholders are essential requirements for this property.

The national World Heritage Convention Act of 1999 is to be applied to the World Heritage property following the completion of the national designation process. Various legal instruments are also applicable to ensure the protection of the property: These pieces of legislation include the Environmental Conservation Act(Act No. 73 of 1989), the National Environmental Management Act(Act No. 107 of 1998), the Physical Planning Act(Act No. 88 of 1967), the Subdivision of Agricultural Land Act(Act No 70 of 1970), the Free State Township Ordinance(Ord. No. 9 of 1969), National Environmental Management Biodiversity Act(Act No 10 of 2004) and the Free State Nature Conservation Ordinance(Ord. No. 8 of 1969). In terms of these laws, all development within or outside the property is subjected to an environmental Impact assessment. Once the World Heritage Convention Act also applies to this property, it will automatically be recognized as a protected area in terms of the National Environmental Management: Protected Areas (Act 57 of 2003). Protection in terms of the latter legislation also implies that mining or prospecting will be completely prohibited within the property or its buffer zone. The management of the property is to be guided by a multi-stakeholder Vredefort Dome Steering Committee and carried out on an interim basis by the Vredefort Dome Inter-Provincial Task Team. A framework defining roles and responsibilities is required. The future Management guidelines regarding the coordination of land-uses, development pressures, visual integrity, presentation and visitation of this World Heritage property.

An integrated management plan is required for the serial property so as to address the critical issues of the enforcement of the special land use planning requirements for the private property farmlands within the serial property, the preservation of the aesthetic rural/natural landscape and the protection, presentation of and public access to the clearly defined key satellite components. These conditions are essential to ensure that active conservation management is possible.

# Comment

The North West Nature Conservation Ordinance (Transvaal Ordinance on Nature Conservation, no. 12 of 1983) to be included. The World Heritage Convention Act is not applicable yet because the site is not proclaimed yet.

# 3.2 - Please list the key attributes of Outstanding Universal Value of your property and give an assessment of their condition. As a guideline, it is suggested to focus on approximately five key attributes (no more than 15 overall).

	Brief identification of attribute	Preserved	Compromised	Seriously compromised	Lost
3.2.1	Geological outcrops		×		
3.2.2	Multi-ring structure	×			
3.2.3	3 Satellite sites	×			
3.2.4	The Vaal River			×	
3.2.5	Rural + Natural Landscapes		×		
3.2.6					
3.2.7					
3.2.8					
3.2.9					
3.2.10					
3.2.11					
3.2.12					

3.2.13			
3.2.14			
3.2.15			

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

3.2.1 Some geological outcrops are compromised due to vandalism by visitors and scientists. 3.2.4 Pollution of the Vaal River has a serious compromise on the ecosystem as well as on the wildlife and humans depending on the river. The Blue Deal Project is to be implemented during 2020 to attend to this problem in and around the Vredefort Dome WHS. 3.2.5 Natural landscapes are compromised by alien and invasive species. Rural landscapes are compromised by developments.

## 4. Factors Affecting the Property

# 4.1. Buildings and Development

#### 4.1.1 - Housing

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Outside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×	×		<b>→</b>	

# 4.1.2 - Commercial development

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Potential, Inside, Outside

X Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X		×	×	×			1

# 4.1.3 - Industrial areas

Previous answer Cycle 2 (01/10/2010):

Not relevant

X Relevant				Not relevant				
	Impact		Origin		Trend of impact			
Impact	Current	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	Solution Decreasing	⇒ Stable	Increasing	
O Positive								
Negative X	×	×		×			1	

#### 4.1.4 - Major visitor accommodation and associated infrastructure

Previous answer Cycle 2 (01/10/2010):

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

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive X	×	×	×	×		<b>→</b>	
Negative X		×	×			<b>→</b>	

#### 4.1.5 - Interpretative and visitation facilities

#### Previous answer Cycle 2 (01/10/2010):

• Relevant, Positive, Current, Potential, Inside, Outside

× Relevant

Not relevant

	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	Inside	Cutside	Solution Decreasing	⇒ Stable	Increasing
O Positive X	×	×	×	×		<b>→</b>	
Negative							

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

4.1.1 Houses been build on the horizontal lines and on top of mountains have a negative scenic impact. 4.1.3 Upstream pollution of industries have a negative effect down stream where the Vredefort Dome is situated along side the Vaal River. Developments in the site. 4.1.4 Golf courses on islands in the Vaal River. 4.1.5 The Venterskroon Information Centre is open and available for tourists. The Vredefort Interpretation Centre was since its been build and completed never opened for tourists

#### 4.2. Transportation Infrastructure

#### 4.2.1 - Ground transport infrastructure

Previous answer Cycle 2 (01/10/2010):

• Relevant, Positive, Current, Potential, Inside, Outside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive X	×	×	×	×		<b>→</b>	
Negative							

# 4.2.2 - Underground transport infrastructure

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

Relevant	X Not relevant

#### 4.2.3 - Air transport infrastructure

Previous answer Cycle 2 (01/10/2010):

Not relevant

X Relevant				Not relevant				
	Impact		Origin		Trend of impact			
Impact	Current	9 Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing	
O Positive								
Negative X	×		×		S			

# 4.2.4 - Marine transport infrastructure

Previous answer Cycle 2 (01/10/2010):

• Relevant, Positive, Current, Potential, Inside, Outside

Relevant			× Not relevar	X Not relevant					
4.2.5 - Effects arising from use of transportation infrastructure									
X Relevant	X Relevant								
	Impact		Origin		Trend of impact				
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing		
O Positive									

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

4.2.1 There are only gravel roads in the site and these roads are not maintained as needed. Road conditions were of such a kind that some visitors refused to drive on them. These roads were upgraded in 2019 which had an positive impact on the site. Although the roads are upgraded , dust from the roads still has limited effect. 4.2.2 Not available in the site. 4.2.3 A very few landowners have landing strips. 4.2.5 Speeding on gravel roads and water erosion on the roads.

# 4.3. Services Infrastructures

Negative X

#### 4.3.1 - Water infrastructure

Previous answer Cycle 2 (01/10/2010):

• Relevant, Positive, Current, Potential, Inside, Outside

X Relevant				Not relevant				
	Impact Origin			Trend of impact				
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing	
O Positive X	×	×	×	×		<b>→</b>		
Negative								

#### 4.3.2 - Renewable energy facilities

Previous answer Cycle 2 (01/10/2010):

• Relevant, Positive, Current, Potential, Inside, Outside

X Relevant			l	Not relevant				
	Impact		Origin		Trend of impact			
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	Secreasing	⇒ Stable	Increasing	
O Positive X	×	×	×	×		<b>→</b>		
Negative								

× Not relevant

# 4.3.3 - Non-renewable energy facilities

Previous answer Cycle 2 (01/10/2010):

Not relevant

Relevant

# 4.3.4 - Localised utilities

Previous answer Cycle 2 (01/10/2010):

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

X Relevant				Not relevant					
	Impact Origin				Trend of impact				
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	C Outside	Solution Decreasing	⇒ Stable	Increasing		
O Positive X	×	×	×			<b>→</b>			
Negative X		×	×			$\rightarrow$			

#### 4.3.5 - Major linear utilities

Previous answer Cycle 2 (01/10/2010):

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

X Relevant	I	Not relevant					
	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing
Positive X	×	×		×		<b>→</b>	
Negative							

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

4.3.1 Water infrastructure like dams, water pumps and tanks are been used for the livelihoods of humans and animals and also for agricultural purposes. 4.3.2 Solar panels to generate electricity. A cell phone tower and radio tower increase effective communication. 4.3.4 Sewerage works are by means of septic tanks and French drains, they might have an impact on ground water. Cell and radio towers spoil the scenery. 4.3.5 Power lines.

4.4. Pollution

#### 4.4.1 - Pollution of marine waters

Previous answer Cycle 2 (01/10/2010):

Not relevant

Relevant

× Not relevant

#### 4.4.2 - Ground water pollution

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

X Relevant	I	Not relevant					
	Impact Origi		Origin	Trend of impact			
Impact	4 Current	9 Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×	×		$\rightarrow$	

# 4.4.3 - Surface water pollution

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

× Relevant	1	Not relevant					
	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	Inside	Cutside	Secreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×	×			1

# 4.4.4 - Air pollution

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

× Relevant	1	Not relevant					
	Impact		Origin		Trend of impact		
Impact	Current	9 Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×			<b>→</b>	

# 4.4.5 - Solid waste

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

X Relevant				Not relevant				
	Impact		Origin		Trend of impact			
Impact	Current	Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing	
O Positive								
Negative X	×	×	×	×		<b>→</b>		

# 4.4.6 - Input of excess energy

Previous answer Cycle 2 (01/10/2010):

Not relevant

X Relevant		Not relevant					
	Impact Or		Origin	Trend of impact			
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	C Outside	Solution Decreasing	⇒ Stable	Increasing
O Positive							
🤤 Negative 🗙	×	×	×			<b>→</b>	

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

4.4.2 Monitoring and investigations to be conducted into ground water pollution and the extend of the pollution. 4.4.3 Surface water pollution in the Vaal River is of great concern. 4.4.5 There is no municipal waste removal and household waste is to be removed by the landowner himself. In most cases they burn the waste , which contributes to a veld fire risk. 4.4.6 Light pollution due to the incorrect placement of lights have a minor effect in the site.

# 4.5. Biological resource use/modification

# 4.5.1 - Fishing/collecting aquatic resources

Previous answer Cycle 2 (01/10/2010):

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

X Relevant				Not relevant						
	Impact C		Origin		Trend of impact					
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	C Outside	> Decreasing	⇒ Stable	Increasing			
O Positive										
Negative X	×	×	×	×			1			
<ul> <li>4.5.2 - Aquaculture</li> <li>Previous answer Cycle 2 (01/10/2010): <ul> <li>Relevant, Positive, Potential, Inside, Outside</li> </ul> </li> </ul>										
Relevant			× Not relevan	relevant						
<ul> <li>4.5.3 - Land conversion</li> <li>Previous answer Cycle 2 (01/10/</li> <li>Relevant, Positive, Negati</li> </ul>	,	tial, Inside, Outside								
X Relevant				Not relevant						
	Impact		Origin		Trend of impact					
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Coutside	Solution Decreasing	⇒ Stable	Increasing			
O Positive										
Negative X	×	×	×				1			
-	4.5.4 - Livestock farming/Grazing of domesticated animals Previous answer Cycle 2 (01/10/2010):									

• Relevant, Positive, Current, Potential, Inside, Outside

X Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Cutside	Solution Decreasing	⇒ Stable	Increasing
O Positive X	×	×	×	×		<b>→</b>	
Negative X		×	×	×		<b>→</b>	

# 4.5.5 - Crop production

Previous answer Cycle 2 (01/10/2010):

• Relevant, Positive, Current, Potential, Inside, Outside

X Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	C Outside	> Decreasing	⇒ Stable	Increasing
O Positive X	×	×	×			$\rightarrow$	
Negative							

# 4.5.6 - Commercial wild plant collection

Previous answer Cycle 2 (01/10/2010):

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

X Relevant				Not relevant					
	Impact		Origin		Trend of impact				
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	C Outside	Secreasing	⇒ Stable	Increasing		
O Positive X	×	×	×			<b>→</b>			
Negative									

#### 4.5.7 - Subsistence wild plant collection

Previous answer Cycle 2 (01/10/2010):

• Relevant, Positive, Current, Potential, Inside, Outside

X Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×		<b>N</b>		

# 4.5.8 - Commercial hunting

Previous answer Cycle 2 (01/10/2010):

• Relevant, Positive, Current, Potential, Inside, Outside

X Relevant			I	Not relevant					
	Impact		Origin		Trend of impact				
Impact	4 Current	9 Potential	Inside	Cutside	Secreasing	⇒ Stable	Increasing		
O Positive X	×	×	×	×		<b>→</b>			
Negative									

# 4.5.9 - Subsistence hunting

Previous answer Cycle 2 (01/10/2010):

Not relevant

× Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	Current	9 Potential	<ul> <li>Inside</li> </ul>	C Outside	> Decreasing	⇒ Stable	Increasing
O Positive X	×	×	×			$\rightarrow$	
Negative							

# 4.5.10 - Forestry/Wood production

Previous answer Cycle 2 (01/10/2010):

Not relevant

Relevant

× Not relevant

# 4.5.11 - Please comment as necessary on how the factors selected as relevant in 4.5 are affecting the property either negatively or positively

4.5.1 Illegal netting. 4.5.3 There's an increase in the planting of peacanut trees, and the impact on the environment is still to be established. 4.5.4 Overgrazing can be a problem. 4.5.5 A few vegetable gardens are maintained, but the site is not suitable for crop farming. 4.5.7 Collecting wood from indigenous trees is a low potential problem. 4.5.8 Illegal hunting has a huge negative effect on the environment, especially rhino poaching. 4.5.9 Example is hunting for house hold purpose

# 4.6. Physical resource extraction

# 4.6.1 - Mining

Previous answer Cycle 2 (01/10/2010):

Relevant, Negative, Current, Potential, Inside, Outside

X Relevant				Not relevant				
	Impact		Origin		Trend of impact			
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing	
O Positive								
Negative X		×	×	×		$\rightarrow$		

# 4.6.2 - Quarrying

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

× Relevant

Not relevant

	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	Inside	C Outside	Secreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×			<b>→</b>	

# 4.6.3 - Oil and gas

Previous answer Cycle 2 (01/10/2010):

Not relevant

Relevant	X Not relevant

# 4.6.4 - Water (extraction)

Previous answer Cycle 2 (01/10/2010):

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

X Relevant			١	Not relevant					
	Impact		Origin		Trend of impact				
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	C Outside	> Decreasing	⇒ Stable	Increasing		
O Positive									
Negative X	×	×	×	×					

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

4.6.1 Possible approved mining applications will have a negative impact on the environment. 4.6.2 Usage of quarries for upgrading of roads. 4.6.4 Water extraction from the Vaal River for irrigation purposes. Monitoring on non-compliance to be implemented to determine how many water users are permitted to do so.

# 4.7. Local conditions affecting physical fabric

# 4.7.1 - Wind

- Previous answer Cycle 2 (01/10/2010):
  - Relevant, Negative, Current, Potential, Inside, Outside

× Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	Inside	C Outside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×			$\rightarrow$	

# 4.7.2 - Relative humidity

Previous answer Cycle 2 (01/10/2010):

• Relevant, Positive, Current, Potential, Inside, Outside

X Relevant			I	Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive X	×	×	×	×			
Negative							

# 4.7.3 - Temperature

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

× Relevant	1	Not relevant					
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	Inside	Cutside	Secreasing	⇒ Stable	Increasing
O Positive							
🤤 Negative 🗶	×	×	×			$\rightarrow$	

## 4.7.4 - Radiation/Light

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Potential, Inside, Outside

× Relevant			1	Not relevant			
	Impact C		Origin		Trend of impact		
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×	×			1

# 4.7.5 - Dust

- Previous answer Cycle 2 (01/10/2010):
  - Relevant, Negative, Current, Potential, Inside, Outside

× Relevant			I	Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×			<b>→</b>	

# 4.7.6 - Water (rain/water table)

- Previous answer Cycle 2 (01/10/2010):
  - Relevant, Positive, Current, Potential, Inside, Outside

X Relevant				Not relevant				
	Impact Origin				Trend of impact			
Impact	Gurrent	Potential	<ul> <li>Inside</li> </ul>	C Outside	> Decreasing	⇒ Stable	Increasing	
O Positive X	×	×	×	×		$\rightarrow$		
C Negative								

# 4.7.7 - Pests

- Previous answer Cycle 2 (01/10/2010):
  - Relevant, Negative, Current, Potential, Inside, Outside

X Relevant			I	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	9 Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×			$\rightarrow$	

# 4.7.8 - Micro-organisms

Previous answer Cycle 2 (01/10/2010):

Not relevant

Relevant

× Not relevant

# 4.7.9 - Please comment as necessary on how the factors selected as relevant in 4.7 are affecting the property either negatively or positively

4.7.4 In the past 6 years the night light has significantly increased. 4.7.7 Wild life diseases might occur with an negative effect in the area if they do occur in.

## 4.8. Social/Cultural uses of heritage

# 4.8.1 - Ritual/Spiritual/Religious and associative uses

- Previous answer Cycle 2 (01/10/2010):
  - Relevant, Positive, Current, Potential, Inside, Outside

X Relevant			Not relevant	
	Impact	Origin		Trend of impact

Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	Secreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×		<b>N</b>		

# 4.8.2 - Society's valuing of heritage

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

X Relevant				Not relevant				
	Impact		Origin		Trend of impact			
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	C Outside	> Decreasing	⇒ Stable	Increasing	
O Positive X	×	×	×	×			/	
Negative								

# 4.8.3 - Indigenous hunting, gathering and collecting

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Gurrent	9 Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×	×		<b>→</b>	

# 4.8.4 - Changes in traditional ways of life and knowledge system

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

X Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	Inside	Cutside	Solution Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×			$\rightarrow$	

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

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	9 Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×				1

# 4.8.6 - Impacts of tourism/Visitation/Recreation

Previous answer Cycle 2 (01/10/2010):

• Relevant, Positive, Current, Potential, Inside, Outside

X Relevant				Not relevant			
	Impact Origi		Origin	Trend of impact			
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	C Outside	> Decreasing	⇒ Stable	Increasing
O Positive X	×	×	×			$\rightarrow$	
Negative							

# 4.8.7 - Please comment as necessary on how the factors selected as relevant in 4.8 are affecting the property either negatively or positively

4.8.1 A mine tunnel filled with water is used for baptizing purposes. Wood collection, littering and a fire hazard accompanies these weekend functions. 4.8.2 Society education is needed. 4.8.3 Fishing and hunting are been done in the site. 4.8.5 Members of the local community are moving to nearby cities and towns in search for job opportunities. 4.8.6 Responsible tourism is needed.

#### 4.9. Other human activities

# 4.9.1 - Illegal activities

## Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	C Outside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×				1

# 4.9.2 - Deliberate destruction of heritage

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

X Relevant				Not relevant	relevant				
	Impact O		Origin	rigin Trend of impact					
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing		
O Positive									
Negative X	×	×	×			<b>→</b>			
4.9.3 - Military training									

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside

Relevant	X Not relevant
<ul><li><b>4.9.4 - War</b></li><li>Previous answer Cycle 2 (01/10/2010):</li><li>Not relevant</li></ul>	
Relevant	X Not relevant
<ul><li>4.9.5 - Terrorism</li><li>Previous answer Cycle 2 (01/10/2010):</li><li>Not relevant</li></ul>	
Relevant	X Not relevant
<ul><li>4.9.6 - Civil unrest</li><li>Previous answer Cycle 2 (01/10/2010):</li><li>Not relevant</li></ul>	
Relevant	× Not relevant

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

None

# 4.10. Climate change and severe weather events

# 4.10.1 - Storms

- Previous answer Cycle 2 (01/10/2010):
  - Relevant, Negative, Current, Potential, Inside, Outside

X Relevant			Not relevant	
	Impact	Origin		Trend of impact

Impact	4 Current	Potential	Inside	C Outside	Secreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×	×		<b>→</b>	

# 4.10.2 - Flooding

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

X Relevant				Not relevant				
	Impact C		Origin Trend o		Trend of impact	nd of impact		
Impact	4 Current	9 Potential	Inside	Cutside	Secreasing	⇒ Stable	Increasing	
O Positive								
Negative X	×	×	×	×		<b>→</b>		

#### 4.10.3 - Drought

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Potential, Inside, Outside

X Relevant				Not relevant	levant				
	Impact C		Origin		Trend of impact				
Impact	Gurrent	Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing		
O Positive									
Negative X	×	×	×	×		<b>→</b>			
4.10.4 - Desertification Previous answer Cycle 2 (01/10/ • Not relevant	2010):								

# Relevant × Not relevant 4.10.5 - Changes to oceanic waters

Previous answer Cycle 2 (01/10/2010):

Not relevant

Relevant

× Not relevant

# 4.10.6 - Temperature change

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Potential, Inside, Outside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×	×		$\rightarrow$	

# 4.10.7 - Other climate change impacts

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Potential, Inside, Outside

X Relevant				Not relevant			
	Impact Orig		Origin		Trend of impact		
Impact	4 Current	Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X		×	×	×			

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

# positively

4.10.2 Erosion control is needed.

# 4.11. Sudden ecological or geological events

# 4.11.1 - Volcanic eruption

Previous answer Cycle 2 (01/10/2010):

Not relevant

Relevant	X Not relevant
4.11.2 - Earthquake	
Previous answer Cycle 2 (01/10/2010): Not relevant	
Relevant	X Not relevant
<ul> <li>4.11.3 - Tsunami/Tidal wave</li> <li>Previous answer Cycle 2 (01/10/2010):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul> <li>4.11.4 - Avalanche/Landslide</li> <li>Previous answer Cycle 2 (01/10/2010):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant

# 4.11.5 - Erosion and siltation/Deposition

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

× Relevant				Not relevant				
	Impact		Origin		Trend of impact	act		
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing	
O Positive								
Negative X	×	×	×	×			1	

# 4.11.6 - Fire (wildfire)

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

X Relevant	1	Not relevant					
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	Inside	Cutside	Secreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×	×		$\rightarrow$	

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

4.11.5 There are places where there is a degree of erosion. 4.11.6 Veld fires are identified as one of the threats to the site and has an impact on the natural landscapes attributes of the site.

#### 4.12. Invasive/alien species or hyper-abundant species

#### 4.12.1 - Translocated species

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

X Relevant			Not relevant	
	Impact	Origin		Trend of impact

Impact	4 Current	Potential	Inside	C Outside	S Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×			<b>→</b>	

# 4.12.2 - Invasive/Alien terrestrial species

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

X Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	Inside	Outside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×			$\Rightarrow$	

## 4.12.3 - Invasive/Alien freshwater species

Previous answer Cycle 2 (01/10/2010):

• Relevant, Negative, Current, Potential, Inside, Outside

X Relevant			I	Not relevant					
	Impact		Origin		Trend of impact				
Impact	4 Current	Potential	Inside	Cutside	Secreasing	⇒ Stable	Increasing		
O Positive									
Negative X	×	×	×	×		$\rightarrow$			
4.12.4 - Invasive/Alien mar Previous answer Cycle 2 (01/10/ • Not relevant	-								
Relevant			× Not relevant						

#### 4.12.5 - Hyper-abundant species

Previous answer Cycle 2 (01/10/2010):

Not relevant

× Not relevant

# 4.12.6 - Modified genetic material

Previous answer Cycle 2 (01/10/2010):

Not relevant

Relevant

Relevant

X Not relevant

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

4.12 Alien and invasive plants are through out the site and have an high negative impact on the natural landscapes attributes of the sites OUV.

# 4.13. Management and institutional factors

#### 4.13.1 - Management system/Management plan

X Relevant				Not relevant				
	Impact		Origin		Trend of impact			
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	C Outside	Solution Decreasing	⇒ Stable	Increasing	
O Positive								
Negative X	×	×	×		<b>N</b>			
4.13.2 - Legal framework								
X Relevant				Not relevant				
	Impact		Origin		Trend of impact			
Impact	4 Current	Potential	Inside	C Outside	Subscreasing	⇒ Stable	Increasing	

Positive					
G Negative ★	×	×	×		1

# 4.13.3 - Governance

× Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Coutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×			$\rightarrow$	

# 4.13.4 - Management activities

Previous answer Cycle 2 (01/10/2010):

• Relevant, Positive, Current, Potential, Inside, Outside

X Relevant		Not relevant					
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	C Outside	> Decreasing	⇒ Stable	Increasing
O Positive X	×	×	×		<b>S</b>		
Negative X	×	×	×			$\rightarrow$	

## 4.13.5 - Financial resources

X Relevant			٦	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×		<b>S</b>		

# 4.13.6 - Human resources

X Relevant				Not relevant					
	Impact		Origin		Trend of impact				
Impact	Gurrent	Potential	<ul> <li>Inside</li> </ul>	C Outside	> Decreasing	⇒ Stable	Increasing		
O Positive X	×	×	×		8				
Negative									

# 4.13.7 - Low impact research/monitoring activities

Previous answer Cycle 2 (01/10/2010):

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

X Relevant				Not relevant					
	Impact Origin			Trend of impact					
Impact	4 Current	Potential	Inside	Cutside	Secreasing	⇒ Stable	Increasing		
Positive X	×	×	×			<b>→</b>			
Negative									

## 4.13.8 - High impact research/monitoring activities

- Previous answer Cycle 2 (01/10/2010):
  - Relevant, Negative, Potential, Inside, Outside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	Inside	Coutside	> Decreasing	⇒ Stable	Increasing
O Positive							

😑 Negative 🗙	×	×	×	×		$\rightarrow$	
--------------	---	---	---	---	--	---------------	--

# 4.13.9 - Please comment as necessary on how the factors selected as relevant in 4.13 are affecting the property either negatively or positively

4.13.1 The Draft I.M.P. needs to be reviewed, approved and implemented. An Action Plan is to be implemented in the mean time. 4.13.2 The site is not proclaimed yet according to national legislation. Proclamation is very important. 4.13.3 A Management Authority needs to be approved and appointed. A Stakeholder Steering Committee is in place 4.13.4 Activities are decreasing due to resources constrains this damages the rocks. 4.13.8 Vandalism on a view geological outcrops due to research.

## 4.14. Other factor(s)

# 4.14.1 - Other factor(s)

None

# 4.15. Factors Summary Table

## 4.15.1 - Factors Summary Table

Name	Impact	Impact		Origin		Trend
4.1 Buildings and Development						
4.1.1 Housing						
	0	9	9	٢	٢	<b>→</b>
4.1.2 Commercial development						
	0		9	۲	Ċ	/
4.1.3 Industrial areas						
	0	9	9		Ċ	
4.1.4 Major visitor accommodation and associated infrastructure	٢	9	9	۹	Ċ	<b>→</b>
	0		9	٢		<b>→</b>
4.1.5 Interpretative and visitation facilities	٢	9	9	۲	Ċ	$\rightarrow$
4.2 Transportation Infrastructure						
4.2.1 Ground transport infrastructure	٩	9	9	۲	Ċ	<b>→</b>
4.2.3 Air transport infrastructure						
	0	9		۲		\$
4.2.5 Effects arising from use of transportation infrastructure						
	0	9	9	٢		
4.3 Services Infrastructures						
4.3.1 Water infrastructure	٢	9	9	٢	Ċ	<b>→</b>
4.3.2 Renewable energy facilities	٢	9	9	٢	Ċ	$\rightarrow$
4.3.4 Localised utilities	٢	9	9	۹		<b>→</b>
	0		9	۲		<b>→</b>
4.3.5 Major linear utilities	٢	9	9		Ċ	<b>→</b>
4.4 Pollution						
4.4.2 Ground water pollution						
	٢	4	9	۲	æ	<b>→</b>
4.4.3 Surface water pollution	•				9	
	0	4	9	٩	Ċ	1
4.4.4 Air pollution						

Image: state in the state in		6					
Add part of a constraint of a		9	4	4	٢		<b>→</b>
Aligned production of a set of	4.4.5 Solid waste						
All biological resource unsembalation and any set of the set		0	4	4	٢	٢	<b>→</b>
Abbaiged resource assembification         I	4.4.6 Input of excess energy						
Althing conversionII <t< td=""><td></td><td>0</td><td>4</td><td>9</td><td>٢</td><td></td><td><b>→</b></td></t<>		0	4	9	٢		<b>→</b>
A3 Land conversion••• <td< td=""><td>4.5 Biological resource use/modification</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	4.5 Biological resource use/modification						
As Land convenionImage: section of the se	4.5.1 Fishing/collecting aquatic resources						
nnnnnnnnn10 <td></td> <td>9</td> <td>4</td> <td>9</td> <td>۲</td> <td>Ċ</td> <td></td>		9	4	9	۲	Ċ	
AltAvesock tarming/Grazing of domesicated animalsII<	4.5.3 Land conversion						
ASC Grop notaction $  $		0	4	9	٢		1
AS Core production999 </td <td>4.5.4 Livestock farming/Grazing of domesticated animals</td> <td>٢</td> <td>9</td> <td>9</td> <td>٢</td> <td>Ċ</td> <td><math>\rightarrow</math></td>	4.5.4 Livestock farming/Grazing of domesticated animals	٢	9	9	٢	Ċ	$\rightarrow$
Ase one of the sector of th		0		9	۲	Ċ	<b>→</b>
Image: A set of the set of	4.5.5 Crop production	٢	9	9	۲		<b>→</b>
Image: A set of the set of							
NoteNo	4.5.6 Commercial wild plant collection	٢	9	9	٢		<b>→</b>
NoteNo							
NoteNo	4.5.7 Subsistence wild plant collection						
A.S. Commercial huntingiii<iiiiiiiiiiiiiiiiiiiiiii<		0	4	9	۲		~
A.5. Subsistence huntingIII <tdi< td="">IIII<t< td=""><td>4.5.8 Commercial hunting</td><td>-</td><td>- </td><td>-</td><td></td><td>18</td><td></td></t<></tdi<>	4.5.8 Commercial hunting	-	- 	-		18	
Image: A part of the section of the		•	-1	-1		G	~
Image: A part of the section of the	4.5.9 Subsistance hunting	0	n an				
A.1 MiningiiiiiiiaiiiiiiiiA.2 QuaryingiiiiiiiiiiaiiiiiiiiiiiiiA.4 Water (extraction)iii </td <td>* oubsistence nunning</td> <td><b>v</b></td> <td>-1</td> <td>-1</td> <td></td> <td></td> <td>~</td>	* oubsistence nunning	<b>v</b>	-1	-1			~
A.1 MiningiiiiiiiaiiiiiiiiA.2 QuaryingiiiiiiiiiiaiiiiiiiiiiiiiA.4 Water (extraction)iii </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
nnnnnnnaiiiiiiia.2 Quaryingiiiiiiiiaiiiiiiiiiia.4 Water (extraction)iii<							
A.2 QuarryingIntersection<	4.6.1 Mining						
image: state in the state		0		9	٢	Ċ	<b>→</b>
A.A Water (extraction)     ind     ind     ind     ind     ind       1     ind     ind     ind     ind     ind       A.A Local conditions affecting physical fabric     ind     ind     ind     ind     ind       A.T. Local conditions affecting physical fabric     ind     ind     ind     ind     ind       A.T. A transmittion     ind     ind     ind     ind     ind     ind       A.T. A transmittion     ind     ind     ind     ind     ind     ind       A.T. A traditation/Light     ind     ind     ind     ind     ind       A.T. A traditation/Light     ind     ind     ind     ind     ind       A.T. A traditation/Light     ind     ind     ind     ind     ind	4.6.2 Quarrying						
Image: birth or constraints of the second straints trank straints of the se		0	9	9	۲		<b>→</b>
4.7 Local conditions affecting physical fabric       9 <t< td=""><td>4.6.4 Water (extraction)</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	4.6.4 Water (extraction)						
4.71 Wind       I		0	4	9	٢	۴	
A.2. Relative humidity       Image: Relative h	4.7 Local conditions affecting physical fabric						
4.2 Relative humidity       I	4.7.1 Wind						
A.7.3 Temperature       initial       initia       initial       initi		0	9	9	٢		<b>→</b>
n         n	4.7.2 Relative humidity	٩	9	9	٢	Ċ	
n         n							
n         n	4.7.3 Temperature						
4.7.4 Radiation/Light       in       in <t< td=""><td></td><td></td><td>Ø</td><td>a</td><td>٦</td><td></td><td></td></t<>			Ø	a	٦		
4.7.5 Dust       ••	4.7.4 Padiation/Light	-	-1	-1	Q.		•
4.7.5 Dust	4.7.4 Raulauvi/Elynt						
<b>⊖ ₽ ₽ • • •</b>	4.7.5 Dut	0	4	4	٩	¢	
	4.7.3 DUSL						
4.7.6 Water (rain/water table)			9	9	٢		<b>→</b>
	4.7.6 Water (rain/water table)	٢	9	9	٢	Ċ	<b>→</b>
4.7.7 Pests	4.7.7 Pests						

	0	9	9	۲		<b>→</b>
4.8 Social/Cultural uses of heritage						
4.8.1 Ritual/Spiritual/Religious and associative uses						
	0	9	9	۹		\$
4.8.2 Society's valuing of heritage	٢	9	9	٢	Ċ	1
4.8.3 Indigenous hunting, gathering and collecting						
4.8.4 Changes in traditional ways of life and knowledge system	9	9	4	٩	Ċ	<b>→</b>
	٢	Ø	a	۲		
4.8.5 Identity, social cohesion, changes in local population and community						
	0	Ø	a	۲		
4.8.6 Impacts of tourism/Visitation/Recreation	•	-1	1	•		× →
	•	-1	-1			-
4.9 Other human activities						
4.9.1 Illegal activities						
	٢	Ø	a	٢		
4.9.2 Deliberate destruction of heritage	•					
	6	Ø	a	۲		<b>→</b>
4.10 Climate change and severe weather events	•		•			
4.10.1 Storms						
	٢	4	a		( <b>F</b>	<b>→</b>
4.10.2 Flooding	•			9	3	
	0	9	9	٢	Ċ	<b>→</b>
4.10.3 Drought						
	0	9	9	٩	Ċ	$\rightarrow$
4.10.6 Temperature change						
	9	9	9	٢	Ċ	<b>→</b>
4.10.7 Other climate change impacts						
	9		9	٢	Ċ	
4.11 Sudden ecological or geological events						
4.11.5 Erosion and siltation/Deposition						
4.11.6 Fire (wildfire)	0	4	9	٢	Ċ	
	0		a		18	
4.12 Invasive/alien species or hyper-abundant species	-	-1	-1	Q.	<b>C</b>	
4.12.1 Translocated species						
	9	9	9	۲		<b>→</b>
4.12.2 Invasive/Alien terrestrial species						
	9	9	9	٢		<b>→</b>
4.12.3 Invasive/Alien freshwater species						
	9	9	9	٢	Ċ	<b>→</b>
4.13 Management and institutional factors						
4.13.1 Management system/Management plan						

	0	9	9	٢		<b>N</b>
4.13.2 Legal framework						
	0	4	9	٢		1
4.13.3 Governance						
	٢	9	9	٢		<b>→</b>
4.13.4 Management activities	٢	4	9	٢		<b>N</b>
	0	9	9	٢		<b>→</b>
4.13.5 Financial resources						
	0	9	9	٢		$\mathbf{N}_{i,j}$
4.13.6 Human resources	٢	9	9	٢		$\mathbf{N}_{i,j}$
4.13.7 Low impact research/monitoring activities	٢	9	9	٢		<b>→</b>
4.13.8 High impact research/monitoring activities						
	0	9	9	٢	Ċ	<b>→</b>
Legend         Image: Current         Image: Potential         Image: Negative         Image: Negative <td><ol> <li>Insi</li> </ol></td> <td>de</td> <td></td> <td>Coutsi 🖉</td> <td>de</td> <td></td>	<ol> <li>Insi</li> </ol>	de		Coutsi 🖉	de	

4.16. Assessment of current and potential positive and negative factors

# 4.16.1 - Assessment of current and potential negative and positive factors

4.1 Buildings and Development

Name		Impact			Origin		Trend
4.1.1 Hous	ing						
		0	9	9	٢	Ċ	<b>→</b>
Spatial sca	le - Area affected by the factor						
×	Restricted						
	Localised						
	Extensive						
	Widespread						
Temporal	scale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
×	Minor						
	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
	Medium capacity						
×	Low capacity						

No capacity and / or resources

#### Trend - D elopement over the last 6 years

	Decreasing
	Static
×	Increasing

Name	Impact	Impact		Origin		Trend
4.1.2 Commercial development						
	9		9	٢	Ċ	
Spatial scale - Area affected by the factor						

Spatial	scale -	Area	affected	hv	the	factor

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

Name	Impact		Origin		Trend	
4.1.3 Industrial areas						
	0	4	9		Ċ	
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 - In	npact on the attributes
	Insignificant
	Minor
	Significant
×	Major
Manageme	ent response - Capacity of management to respond
	High capacity
	Medium capacity
×	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
	Static
×	Increasing

ne de la constante de la const		Impact			Origin	
4.1.4 Major visitor accommodation and associated infrastructure	٢	9	9	۲	Ċ	$\rightarrow$
	0		9	۲		$\rightarrow$

# Spatial scale - Area affected by the factor

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

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

Name		Impact		Origin		Trend	
4.1.5 Interpretative and visitation facilities		0	9	9	٢	Ċ	<b>→</b>
Spatial sca	le - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Im	pact on the attributes						
×	Insignificant						
	Minor						
	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
	Medium capacity						
×	Low capacity						
	No capacity and / or resources						
Trend - Dev	velopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						

# 4.2 Transportation Infrastructure

Name		Impact			Origin		Trend
4.2.1 Ground transport infrastructure		•	9	9	٢	Ċ	$\rightarrow$
Spatial cos	Spatial scale - Area affected by the factor						
Spatial Sca							
	Restricted						
	Localised						
	Extensive						
×	Widespread						

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

Name	Impact	Origin	Trend
4.2.3 Air transport infrastructure			

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

o 1

×	No capacity and / or resources			
Trend - De	velopement over the last 6 years			
	Decreasing			
×	Static			
	Increasing			
Name		Impact	Origin	Trend
4.2.5 Effect	ts arising from use of transportation infrastructure			

impact			ongin	men	
0	4	9	۲		

## Spatial scale - Area affected by the factor

opanai 302	
	Restricted
	Localised
	Extensive
×	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going
Impact - Im	npact on the attributes
	Insignificant
×	Minor
	Significant
	Major
Manageme	ent response - Capacity of management to respond
	High capacity
	Medium capacity
×	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

# 4.3 Services Infrastructures

Name	Impac	t		Origin		Trend
4.3.1 Water infrastructure		9	9		Ċ	<b>→</b>
Spatial scale - Area affected by the factor						
Restricted						
Localised						
Extensive						

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

ne		÷		Origin		Trend
4.3.2 Renewable energy facilities	٢	9	9	۲	Ċ	<b>→</b>

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

	Restricted
×	Localised
	Extensive
	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
×	Intermittent or sporadic
	Frequent
	On-going
Impact - Im	spact on the attributes
	Insignificant
×	Minor
	Significant
	Major
Manageme	Int response - Capacity of management to respond
	High capacity
	Medium capacity
×	Low capacity

No capacity and / or resources

# Trend - Developement over the last 6 years

	Decreasing
×	Static
	Increasing

Name	Impact			Origin		Trend
4.3.4 Localised utilities	٢	9	9	٢		<b>→</b>
	0		9	۲		<b>→</b>

# Spatial scale - Area affected by the factor

Restricted       Restricted       Kensive       Widespread       Famore       Famore       Immittent or sporade       intermittent or sporade       Prequent       Immittent or sporade       intermittent or sporade       Immittent or sporade <td< th=""><th>•</th><th>•</th></td<>	•	•
image:		Restricted
Veloa           Veloa           Import	×	Localised
Temporal-Cocurance of the impact         X       One off or rare         Intermittent or sporadic       Intermittent or sporadic         Y       Frequent         On-poing       On-poing         Impact - Impac		Extensive
Image: A constraint of a sporadic       Intermittent of sporadic       Frequent       On-going       Image:		Widespread
Intermittent or sporadic       Intermittent or sporadic       Frequent       Or-going       Impact - textributes       Insignificant       X       Significant       Significant       Minor       Impact - textributes       Minor       Minor       Minor       Magor       Magor       Impact - textributes       Significant       Minor       Magor       Impact - textributes       Minor       Impact - textributes       Impact - textring <th>Temporal s</th> <th>cale - Occurence of the impact</th>	Temporal s	cale - Occurence of the impact
Frequent       Frequent       On-going       Impact-to the attributes       Insignificant       X       Minor       Significant       Major       Management to respont       Medium capacity of management to respont       X       Medium capacity       Y       Medium capacity of management to respont       X       Decapacity of management to respont       X       Decapacity of management to respont       X       Decapacity of management to respont	×	One off or rare
impact - impa		Intermittent or sporadic
Imaged -		Frequent
k     isignificant       X     Minor       isignificant     isignificant       Major     itia capacity of management to respond       Maine capacity     Medium capacity       X     Medium capacity       X     Low capacity and / or resources       X     Decreasing       X     Decreasing       X     Static		On-going
image: Minor       image: Significant       Manage: Tesponse - Capacity of management to respond       Manage: Tesponse - Capacity of management to respond       Medium capacity       Medium capacity       Medium capacity       No capacity and / or resources       Tend - Decreasing       Decreasing       Static	Impact - Im	pact on the attributes
Significant       Marger       Manager       Manager <th></th> <th>Insignificant</th>		Insignificant
Major         Managemet - Capacity of management to respond         Major - Capacity of management to respond         Mijor - Capacity of management to respond         Medium capacity         Medium capacity         Modium capacity         Modium capacity         No capacity and / or resources         Tend - Decreasing         Decreasing         X       Static	×	Minor
Management to respond         Migh capacity         High capacity         Medium capacity         X         Low capacity         No capacity and / or resources         Trend - Decreasing         Decreasing         X       Static		Significant
High capacity       Medium capacity       Low capacity       tow capacity and / or resources         Trend - Decreasing       Static		Major
Medium capacity       Medium capacity       Low capacity       No capacity and / or resources       Trend - Decreasing       X       Static	Manageme	nt response - Capacity of management to respond
x     Low capacity       No capacity and / or resources       Trend - Decreasing       x     Static		High capacity
No capacity and / or resources       Trend - Decreasing       & Static		Medium capacity
Trend - Developement over the last 6 years       Decreasing       X     Static	×	Low capacity
Decreasing       X       Static		No capacity and / or resources
X Static	Trend - Dev	velopement over the last 6 years
		Decreasing
Increasing	×	Static
		Increasing

Name		Impact			Origin		Trend
4.3.5 Major	linear utilities	٢	9	9		Ċ	<b>→</b>
Spatial sca	le - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						

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

# 4.4 Pollution

Name		Impact			Origin		Trend
4.4.2 Grour	4.4.2 Ground water pollution						
		0	9	9	٢	Ċ	$\rightarrow$
Spatial sca	le - Area affected by the factor						
×	Restricted						
	Localised						
	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
×	One off or rare						
	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Im	pact on the attributes						
×	Insignificant						
	Minor						
	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
	Medium capacity						

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

Name		Impact			Origin		Trend
4.4.3 Surfac	4.4.3 Surface water pollution						
		0	9	9	٢	Ċ	
Snatial sca	le - Area affected by the factor						
Spatial Sca							
	Restricted						
	Localised						
	Extensive						
×	Widespread						

# Temporal scale - Occurence of the impact

	One off or rare		
	Intermittent or sporadic		
	Frequent		
×	On-going		
Impact - Im	Impact - Impact on the attributes		
	Insignificant		
	Minor		
	Significant		
×	Major		
Manageme	Management response - Capacity of management to respond		

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

	Decreasing
	Static
×	Increasing

Name		Impact			Origin	
4.4.4 Air pollution						
	0	9	9	۹		<b>→</b>

# Spatial scale - Area affected by the factor

	Restricted
×	Localised
	Extensive

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

Name	Impact		Origin		Trend	
4.4.5 Solid waste						
	0	4	9	٢	Ċ	<b>→</b>

# Spatial scale - Area affected by the factor

opunai oou				
	Restricted			
	Localised			
	Extensive			
×	Widespread			
Temporal s	cale - Occurence of the impact			
	One off or rare			
	Intermittent or sporadic			
	Frequent			
×	On-going			
Impact - Im	Impact - Impact on the attributes			
	Insignificant			
×	Minor			
	Significant			
	Major			
Manageme	nt response - Capacity of management to respond			
	High capacity			
	Medium capacity			
×	Low capacity			

No capacity and / or resources

# Trend - Developement over the last 6 years

	Decreasing
×	Static
	Increasing

Name	Impact		Origin		Trend	
4.4.6 Input of excess energy						
	0	9	9	۹		<b>→</b>
Spatial scale - Area affected by the factor						

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

# 4.5 Biological resource use/modification

Name		Impact		Origin		Trend	
4.5.1 Fishi	ng/collecting aquatic resources						
		0	9	9	٢	Ċ	
Spatial sca	le - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						

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

# Name

Name	Impact	npact		Origin	Trend
4.5.3 Land conversion					
	0	4	9	۲	

# Spatial scale - Area affected by the factor

opullar oou	ie - Area affected by the factor
	Restricted
	Localised
	Extensive
×	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going
Impact - Im	pact on the attributes
	Insignificant
×	Minor
	Significant
	Major
Manageme	nt response - Capacity of management to respond
	High capacity
	Medium capacity

# kw capacity No capacity and / or resources Trend - Decreasing bcreasing Static km

Name	Impact			Origin		Trend
4.5.4 Livestock farming/Grazing of domesticated animals	٢	9	9	۲	Ċ	<b>→</b>
	0		9	۲	۴	<b>→</b>
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 - In	npact on the attributes
	Insignificant
×	Minor
	Significant
	Major
Manageme	ent response - Capacity of management to respond
	High capacity
	Medium capacity
×	Low capacity
	No capacity and / or resources
Trend - De	evelopement over the last 6 years
	Decreasing

× s	Static
Ir	Increasing

Name		Impact			Origin		Trend
4.5.5 Crop	4.5.5 Crop production		9	9	۲		<b>→</b>
Spatial sca	le - Area affected by the factor						
	Restricted						
×	Localised						

Extensive

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

Name	Impact		Origin	Trend	
4.5.6 Commercial wild plant collection	o 9 9		۲	<b>→</b>	
Spatial scale - Area affected by the factor					

	Restricted
×	Localised
	Extensive
	Widespread
Temporal s	cale - Occurence of the impact
×	One off or rare
	Intermittent or sporadic
	Frequent
	On-going
Impact - Im	pact on the attributes
×	Insignificant
	Minor
	Significant
	Major
Manageme	nt response - Capacity of management to respond
	High capacity
	Medium capacity

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

Name	Impact		Origin		Trend	
4.5.7 Subsistence wild plant collection						
	0	9	9	٢		<b>N</b>

# Spatial scale - Area affected by the factor

Spatial Sca	ie - Area anected 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					
Manageme	Management response - Capacity of management to respond					
	High capacity					
	Medium capacity					
×	Low capacity					
	No capacity and / or resources					
Trend - Dev	velopement over the last 6 years					
	Decreasing					
×	Static					
	Increasing					

Name		Impact		Origin		Trend					
4.5.8 Commercial hunting		٢	4	9	۲	Ċ	$\rightarrow$				
Spatial scale - Area affected by the factor											
×	Restricted										

Localised Extensive

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

Name	Impact		Origin		Trend	
4.5.9 Subsistence hunting	٢	9	9	۹		<b>→</b>

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

×	Restricted
	Localised
	Extensive
	Widespread
Temporal s	scale - Occurence of the impact
×	One off or rare
	Intermittent or sporadic
	Frequent
	On-going
Impact - Im	pact on the attributes
×	Insignificant
	Minor
	Significant
	Major
Manageme	nt response - Capacity of management to respond
	High capacity
	Medium capacity

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

## 4.6 Physical resource extraction

Name		Impact			Origin		Trend
4.6.1 Mining							
		0		9	٢	Ċ	<b>→</b>
Spatial sca	le - Area affected by the factor						
×	Restricted						
	Localised						
	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
×	One off or rare						
	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
×	Minor						
	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
	Medium capacity						
×	Low capacity						
	No capacity and / or resources						
Trend - Dev	elopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						
Name		Impact			Origin		Trend
Name 4.6.2 Quarry	ying	impact			Ungin		Trend
		0	9	9	٩		<b>→</b>
	e - 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 - In	upact on the attributes						
inipact - in	Insignificant						
~	Minor						
×							
	Significant						
	Major						
Manageme	ent response - Capacity of management to respond						
	High capacity						
	Medium capacity						
×	Low capacity						
	No capacity and / or resources						
Trend - De	velopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						
Name		Impact			Origin		Trend
4.6.4 Wate	r (extraction)		_				
		0	4	4	0	F	
Spatial sca	ale - Area affected by the factor						
	Restricted						
×	Localised						

Temporal scale - Occurence of the impact

Extensive Widespread

i emperare	
	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going
Impact - Im	pact on the attributes
	Insignificant
×	Minor
	Significant
	Major
Manageme	nt response - Capacity of management to respond
	High capacity

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

## 4.7 Local conditions affecting physical fabric

Name		Impact			Origin		Trend
4.7.1 Wind	4.7.1 Wind						
		0	9	9	٢		<b>→</b>
Spatial sca	e - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
×	Minor						
	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
	Medium capacity						
×	Low capacity						
	No capacity and / or resources						
Trend - Dev	elopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						
Name		Income			Orteste		Territ
Name 4.7.2 Relativ	/e humidity		9	9	Origin	Ċ	Trend
Spatial sca	e - Area affected by the factor						
	Restricted						

×	Localised			
	Extensive			
	Widespread			
Temporal	scale - Occurence of the impact			
×	One off or rare			
	Intermittent or sporadic			
	Frequent			
	On-going			
Impact - I	npact on the attributes			
	Insignificant			
×	Minor			
	Significant			
	Major			
Managem	ent response - Capacity of management to respond			
	High capacity			
	Medium capacity			
×	Low capacity			
	No capacity and / or resources			
Trend - De	evelopement over the last 6 years			
	Decreasing			
×	Static			
	Increasing			
Name		Impact	Origin	Trend

Name	Impact		Origin	Trend
4.7.3 Temperature				
	0	9 9	٢	$\rightarrow$

Spatial sca	le - Area affected by the factor
	Restricted
×	Localised
	Extensive
	Widespread
Temporal s	cale - Occurence of the impact
×	One off or rare
	Intermittent or sporadic
	Frequent
	On-going
Impact - Im	pact on the attributes
	Insignificant
	Minor
×	Significant
	Major

Management response - Capacity of management to respond

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

Name	Impact	:		Origin		Trend
4.7.4 Radiation/Light						
	0		<i>i</i>		100	1

Spatial sca	le - Area affected by the factor					
×	Restricted					
	Localised					
	Extensive					
	Widespread					
Temporal s	cale - Occurence of the impact					
×	One off or rare					
	Intermittent or sporadic					
	Frequent					
	On-going					
Impact - Im	pact on the attributes					
	Insignificant					
×	Minor					
	Significant					
	Major					
Manageme	nt response - Capacity of management to respond					
	High capacity					
	Medium capacity					
	Low capacity					
×	No capacity and / or resources					
Trend - Dev	velopement over the last 6 years					
×	Decreasing					
	Static					
	Increasing					
		_				
Name		Impact	t		Origin	Trend
4.7.5 Dust			-	~7		
		9	9	4	٢	<b>→</b>

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

Restricted

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

Name	Impact			Origin		Trend
4.7.6 Water (rain/water table)	٢	9	9	٢	Ċ	$\rightarrow$

Spatial sca	le - 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 - In	pact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	nt response - Capacity of management to respond
	High capacity

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

Name	Impact			Origin	Trend
4.7.7 Pests					
	0	9	9	٢	<b>→</b>

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

## 4.8 Social/Cultural uses of heritage

Name	Impact			Impact		Impact		Impact		Impact		Impact			Impact		act Origin			Trend
4.8.1 Ritual/Spiritual/Religious and associative uses																				
	0	9	9	۲		<b>N</b>														
Spatial scale - Area affected by the factor																				

×	Restricted			
	Localised			
	Extensive			
	Widespread			
Temporal s	scale - Occurence of the impact			
×	One off or rare			
	Intermittent or sporadic			
	Frequent			
	On-going			
Impact - Im	apact on the attributes			
	Insignificant			
×	Minor			
	Significant			
	Major			
Manageme	nt response - Capacity of management to respond			
	High capacity			
	Medium capacity			
×	Low capacity			
	No capacity and / or resources			
Trend - Dev	velopement over the last 6 years			
	Decreasing			
×	Static			
	Increasing			
Name		Impact	Origin	Trend
1000				

4.8.2 Society's valuing of heritage	٢	9	9	٢	Ċ	1

Spatial scal	le - Area affected by the factor
	Restricted
×	Localised
	Extensive
	Widespread
Temporal s	cale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going
Impact - Im	pact on the attributes
	Insignificant
×	Minor
	Significant
	Major

Management response - Capacity of management to respond

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

Name	Impact		Origin		Trend	
4.8.3 Indigenous hunting, gathering and collecting						
	0	9	9	۲	C	<b>→</b>

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

Increasing

Name	Impact		Impact		Impact		Origin		Trend
4.8.4 Changes in traditional ways of life and knowledge system									
	0	9	9	٢	<b>→</b>				
Spatial scale - Area affected by the factor									

Restricted

×	Localised					
	Extensive					
	Widespread					
Temporal s	scale - Occurence of the impact					
	One off or rare					
×	Intermittent or sporadic					
	Frequent					
	On-going					
Impact - Im	pact on the attributes					
	Insignificant					
×	Minor					
	Significant					
	Major					
Manageme	ent response - Capacity of management to respond					
	High capacity					
	Medium capacity					
	Low capacity					
×	No capacity and / or resources					
Trend - De	velopement over the last 6 years					
	Decreasing					
	Decreasing Static					
×						
	Static					
Name	Static Increasing	Impact			Origin	Trend
Name	Static	Impact	9	9	Origin	Trend

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

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

Name	Impact		Origin		Trend	
4.8.6 Impacts of tourism/Visitation/Recreation	ism/Visitation/Recreation		۲		<b>→</b>	

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

× Increasing

## 4.9 Other human activities

Name	Impact			Origin	Trend
4.9.1 Illegal activities					
	• • •		۲		
Spatial scale - Area affected by the factor					

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

Name	Impact		oct Origin		Trend
4.9.2 Deliberate destruction of heritage					
	9	9	9	۲	<b>a</b>

	Restricted			
×	Localised			
	Extensive			
	Widespread			
Temporal s	cale - Occurence of the impact			
	One off or rare			
×	Intermittent or sporadic			
	Frequent			
	On-going			
Impact - Im	pact on the attributes			
	Insignificant			
	Minor			
×	Significant			
	Major			

## Management response - Capacity of management to respond

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

## 4.10 Climate change and severe weather events

Name	Name				Origin	Trend	
4.10.1 St	orms	Impact					
		0	9	9	٢	Ċ	
		•	4	-1	Q	G	~
Spatial s	cale - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Tempora	I scale - Occurence of the impact						
×	One off or rare						
	Intermittent or sporadic						
	Frequent						
	On-going						
Impact -	Impact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Manager	nent response - Capacity of management to respond						
	High capacity						
	Medium capacity						
	Low capacity						
×	No capacity and / or resources						
Trend - I	Developement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						
Name	Name				Origin		Trend
4.10.2 FI	poding						
		0	9	9	۲	Ċ	$\rightarrow$

Spatial sca	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 - Im	npact on the attributes				
	Insignificant				
	Minor				
×	Significant				
	Major				
Manageme	ent response - Capacity of management to respond				
	High capacity				
	Medium capacity				
	Low capacity				
×	No capacity and / or resources				

### Trend - Developement over the last 6 years

	Decreasing
	Static
×	Increasing

Name	Impact			Origin	Trend	
4.10.3 Drought						
	0	9	9	٢	Ċ	$\rightarrow$

## Spatial scale - Area affected by the factor

	······································
	Restricted
	Localised
×	Extensive
	Widespread
Temporal s	cale - Occurence of the impact
	One off or rare
×	Intermittent or sporadic
	Frequent
	On-going
Impact - Im	pact on the attributes
	Insignificant
	Minor
×	Significant
	Major

### Management response - Capacity of management to respond

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

Name		Impact			Origin	
4.10.6 Temperature change						
	0	4	9	۹	Ċ	$\rightarrow$

### Spatial scale - Area affected by the factor

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

e		Impact			Origin	
4.10.7 Other climate change impacts						
	0		9	٢	Ċ	

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

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

# 4.11 Sudden ecological or geological events

Name		Impact			Origin		Trend
4.11.5 Eros	4.11.5 Erosion and siltation/Deposition						
		9	9	9	٢	G	
Spatial sca	le - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal s	icale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
×	Minor						
	Significant						

Management response - Capacity of m	nanagement to respond
-------------------------------------	-----------------------

wanageme	in response - capacity of management to respond
	High capacity
	Medium capacity
×	Low capacity
	No capacity and / or resources
Trend - Dev	velopement over the last 6 years
	Decreasing
	Static

× Increasing

Name	Impact		Origin		Trend	
4.11.6 Fire (wildfire)						
	0	9	9	٢	Ċ	<b>→</b>

### Spatial scale - Area affected by the factor

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

# 4.12 Invasive/alien species or hyper-abundant species

Name	Impact	Origin	Trend
4.12.1 Translocated species			

		0	9	9	۲	<b>→</b>
Spatial s	cale - Area affected by the factor					
×	Restricted					
	Localised					
	Extensive					
	Widespread					
Tempora	I scale - Occurence of the impact					
×	One off or rare					
	Intermittent or sporadic					
	Frequent					
	On-going					
Impact -	mpact on the attributes					
	Insignificant					
×	Minor					
	Significant					
	Major					
Managen	nent response - Capacity of management to respond					
	High capacity					
	Medium capacity					
×	Low capacity					
	No capacity and / or resources					
Trend - D	evelopement over the last 6 years					
	Decreasing					
×	Static					
	Increasing					

Name	Impact		Origin		Trend		
4.12.2 Invasive/Alien terrestrial species							
		0	4	9	۲		<b>→</b>
Spatial sca	le - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal s	scale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
×	Frequent						
	On-going						
Impact - Im	pact 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 - Dev	velopement over the last 6 years
	Decreasing

Increasing	

Name	Impact		Origin		Trend	
4.12.3 Invasive/Alien freshwater species						
	0	9	9	٢	Ċ	$\rightarrow$

### Spatial scale - Area affected by the factor

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

## 4.13 Management and institutional factors

Name	Impact	Origin	Trend



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

Name	Impact	ct		:				Origin		Trend
4.13.2 Legal framework										
	0	9	9	٢						

## Spatial scale - Area affected by the factor

	•
	Restricted
	Localised
	Extensive
×	Widespread
Temporal s	cale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going
Impact - Im	pact on the attributes
	Insignificant

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

Name	Impact	Impact		:t		act		oact		Origin		Trend
4.13.3 Governance												
	0	9	9	۲		<b>→</b>						

	Restricted						
	Localised						
	Extensive						
×	Widespread						
Temporal s	scale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
×	Minor						
	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
×	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - De	velopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						
		_				_	_
Name		Impact		-	Origin		Trend
4.13.4 Man	agement activities	٢	9	4	٢		3

		0	9	9	٢	<b>→</b>
Snatial so	ale - Area affected by the factor					
Spatial St	Restricted					
	Localised					
	Extensive					
×	Widespread					
Temporal	scale - Occurence of the impact					
	One off or rare					
	Intermittent or sporadic					
	Frequent					
×	On-going					
Impact - I	mpact on the attributes					
	Insignificant					
×	Minor					
	Significant					
	Major					
Managem	ent response - Capacity of management to respond					
	High capacity					
	Medium capacity					
×	Low capacity					
	No capacity and / or resources					
Trend - De	evelopement over the last 6 years					
×	Decreasing					
	Static					
	Increasing					

Name	Name		Impact			Trend
4.13.5 Fina	ncial resources					
		0	9	9	٢	\$
						_
Spatial sca	le - Area affected by the factor					
	Restricted					
	Localised					
	Extensive					
×	Widespread					
Temporal s	scale - Occurence of the impact					
	One off or rare					
	Intermittent or sporadic					
	Frequent					
×	On-going					

## Impact - Impact on the attributes

Insignificant Minor

×	Significant
	Major
Manageme	Int response - Capacity of management to respond
	High capacity
	Medium capacity
×	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
×	Decreasing
	Static

Increasing

Name	Impact			Origin		Trend
4.13.6 Human resources	٢	9	9	۲		\$

## Spatial scale - Area affected by the factor

opullal oou						
	Restricted					
	Localised					
	Extensive					
×	Widespread					
Temporal s	cale - Occurence of the impact					
	One off or rare					
	Intermittent or sporadic					
	Frequent					
×	On-going					
Impact - Im	pact on the attributes					
	Insignificant					
	Minor					
×	Significant					
	Major					
Manageme	nt response - Capacity of management to respond					
	High capacity					
	Medium capacity					
×	Low capacity					
	No capacity and / or resources					
Trend - Dev	velopement over the last 6 years					
	Decreasing					
×	Static					
	Increasing					
Name		Impact		~7	Origin	Trend
4.13.7 Low	impact research/monitoring activities	٢	9	9	٢	<b>→</b>

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

Increasing

Name		Impact			Origin		Trend
4.13.8 Higi	4.13.8 High impact research/monitoring activities						
		0	9	9	٢	Ċ	<b>→</b>
Spatial sca	ale - Area affected by the factor						
×	Restricted						
	Localised						
	Extensive						
	Widespread						
Temporal	scale - Occurence of the impact						
×	One off or rare						
	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - In	npact on the attributes						
	Insignificant						
×	Minor						

	Significant
	Major
Manageme	ent response - Capacity of management to respond
	High capacity
	Medium capacity
×	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

#### 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

None

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	Excellent geological outcrops		×		
4.18.1.2	Multi-ring structure	×			
4.18.1.3	3 Satellite Sites	×			
4.18.1.4	The Vaal River		×		
4.18.1.5	Rural and Natural Landscapes		×		

### 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 the management authority but are not known by local communities/landowners

#### 5.1.3 - Are the buffer zone(s) of the World Heritage property adequate to maintain the property's Outstanding Universal Value? The buffer zones are **adequate** to maintain the property's Outstanding Universal Value

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

The buffer zones of the World Heritage property are known and recognised by the management authority but are not known by local communities/landowners

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

The buffer zone is not a fixed boundary as the boundary of the core area is , and only by GPS co-ordinates will enable a landowner to know what part of his property is in the buffer zone. The buffer zone is a 5 km boundary around the core area, and has been investigated if it should be aligned along the cad-astral borders of the properties.

#### 5.2. Protective Measures

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

The land within the nominated property is predominantly agricultural, has freehold status, and is subject to national, provincial and district statutory regulations. The following national legislation is applicable: The World Heritage Convention Act 49 of 1999; the National Heritage Resources Act 25 of 1999; the National Environmental Managements Act 107 of 1998 and the Physical Planning Act 88 of 1967. At the Provincial level, the Northwest and Free State Provinces have applicable nature conservation ordinances regulating environmental aspects of the area. At the local level, the nominated property falls within the District Municipalities of Northern Free State and Southern District North West, and the Local Municipal areas of Potschefstroom (Northwest Province) and Parys (Free State Province), and their environmental regulations.

In December 2002, the South African National Heritage Resources Agency decided, in principle, to declare the nominated property a National Heritage Site under the provisions of the National Heritage Resources Act 25 of 1999 subject to a Cultural Heritage Survey and Management Plan being completed. This document has been completed (February 2005) although no advice of the formal declaration of the National Heritage Site had been received as of March 2005.

Source: IUCN Evaluation

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

1983 / Nature Conservation Ordinance , No. 12 (Transvaal) / Natural / Provincial / 2013 /

Spatial Planning and Land use Management Act , No. 16 / National / 2014 / Vredefort Dome Environmental Management Framework /

Gazetted Notice 1150 of 19 December 2014 / Provincial /

# 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?

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

# 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?

An adequate legal framework in the buffer zone for maintaining the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property exists but there are some deficiencies in implementation

## 5.2.5 - Is the legal framework (i.e. legislation and/or regulation) in the broader setting of the World Heritage property adequate for

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

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

There are major deficiencies in 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 Regulations regarding the conservation of the site and the management of the Management Authority needs to be approved and Gazetted for implementation. Presently only draft documents and has been disputed by the landowners.

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

National legislation is still applicable and enforced in the site although its not proclaimed yet.

#### 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 Other

### If 'Other', please specify

Government and Private

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

Agreed 'Memorandums of Understanding' between different managing institutions, groups or others, including documents agreed with local communities for management

An integrated management plan combining World Heritage and any other designations

An annual work plan or business plan

An environmental management framework

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

5.3.1.The site is managed by a Steering Committee with representation of all relevant stakeholders, with Department of Environment, Forestry and F as the chair of the Committee. 5.3.2.13 A Disaster Risk Management Plan to be developed in the nearby future.

#### 5.3.4 - Management Documents

Title	Status	Available	Date	Link to source
Strategic Development and Management Plan	N/A	Available	2002	

# 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. None

# 5.3.7 - Has any use been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property?

No use has been made of the World Heritage Policy for Climate Change

5.3.8 - If the Climate Change policy has been used, please briefly describe what has been done along with any research on the impacts of Climate Change on the property:

None

5.3.9 - Has any use been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property ? No use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties

5.3.10 - If the Strategy for Reducing Risks from Disasters at World Heritage Properties has been used, please briefly describe what has been done

None

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 coordination between the range of administrative bodies involved in the management of the property, but it could be improved

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

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

#### 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 but few of its activities are being implemented

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

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

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	Vredefort Dome Tourism Association				

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

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

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

5.3.17.1 Significant contribution to gender equality due to Expanded Public Works Programme (EPWP) projects ensuring representation of men, woman youth and also people living with disabilities.

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

A Draft Action Plan , 2019 - 2023 , to be approved and implemented until the I.M. P. can be put into place. According to the O.F.S. Landowners Association there is no management currently been done at the site.

#### 6. Financial and Human Resources

### 6.1. Funding

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

		Project costs	Running costs
6.1.1.1	Multilateral funding (GEF, World Bank, etc.)	0 %	0 %
6.1.1.2	Bilateral international funding	0 %	0 %
6.1.1.3	World Heritage Fund (International Assistance)	0 %	0 %
6.1.1.4	Contribution from other conventions and programmes	0 %	0 %
6.1.1.5	International donations (NGOs, foundations, etc.)	0 %	0 %
6.1.1.6	Governmental (national/federal)	0 %	0 %
6.1.1.7	Governmental (regional/provincial/state)	30 %	70 %
6.1.1.8	Governmental (local/municipal)	70 %	30 %
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 %	Total 100 %

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

The budget is been managed from Head Office and not at the Vredefort Dome Project Management Office. Local Government sometimes provide funding for projects. According to the O.F.S. Landowners Association there has been no funding forthcoming from Government.

#### 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 not secure

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

An application for international funding was submitted to develop a Disaster Risk Management Plan during 2020 / 2021.

# 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	50 %	50 %
6.1.6.2	Women	50 %	50 %
		Total 100 %	Total 100 %

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

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

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

Conservation	Fair
Environmental sustainability	Not available
Community participation and inclusion	Not available
Risk preparedness	Poor
Capacity development and education	Poor
Administration	Not available
Research and monitoring	Fair
Awareness raising and public information/communication	Poor
Marketing and promotion	Poor
Interpretation	Not available
Visitor management/tourism	Fair
Enforcement (custodians, police)	Fair

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

Conservation	Poor
Environmental sustainability	Not available
Community participation and inclusion	Not available
Risk preparedness	Fair
Capacity development and education	Fair
Administration	Poor
Research and monitoring	Poor
Awareness raising and public information/communication	Fair
Marketing and promotion	Not available
Interpretation	Not available
Visitor management/tourism	Poor
Enforcement (custodians, police)	Fair

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

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

6.1.11 - If the World Heritage Strategy for Capacity Building has been used, please briefly describe what has been done. None

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?

There is no site-based capacity building plan or programme in place; management is implemented by external staff and skills are not transferred

6.1.13 - Comments, conclusions and/or recommendations related to human resources, expertise and training None

#### 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 **acceptable** for most key areas but there are gaps

# 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 small amount of research, but it is not planned

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

Research results are not shared at any level

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

Research in the site is mostly been done by the North West University on a annual basis. This research is mostly been done by the Geology Department as part of student training. Research results need to be requested from the University.

#### 8. Education, Information and Awareness Building

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

Local communities	Poor
Local/municipal authorities	Poor
Indigenous peoples	Not applicable
Landowners	Fair
Women	Not applicable
Youth/children	Poor
Researchers	Fair
Local visitors	Poor
National/international tourists	Fair
Tourism industry	Fair
Local businesses and industries	Fair
NGOs	Poor
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 limited and ad hoc education and awareness programme for children and/or youth

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

local communities
andowners
/outh/children
ocal Visitors
Jational/international tourists

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

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

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

Education and awareness is mostly done at the Venterskroon Information Centre. The Vredefort Interpretation Centre is not operational since it was built and completed ; structural problems need to be attended to. There are a few registered tourist guides that are doing guided tours.

#### 9. Visitor Management

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

National: 995 / month = 11 940; International: 250 / month = 3000 / National: 389 / month = 3 891; International: 44 / month = 438 / No information / No inform

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

Accommodation establishments
Tourism industry
Other
Visitors book at the Information Centre.

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

One day (no overnight stay)

#### 9.4 - Please provide the source of information

The visitors book at the Venterskroon Information Centre is the prime source of visitors statistics, and secondary sources are visitors statistics from product owners around the Venterskroon area.

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

Great variety of different private lodges charging their own fees / Great variety of private product owners providing food and beverages at their own fees. / Most visitors are coming with their own transportation / No admission fees are requested into the site. / Great variety of different private recreational activities charging their own fees / Private product owners provide these services at their own fees. /

#### 9.6 - Please provide the source of information

It is difficult to provide a figure for daily visitors expenditure because there are a lot of product owners and activity facilities that offer the visitors a great variety of choices to be made regarding tourist activities, all with different prices.

## 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 it is not implemented

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

The Integrated Management Plan has a Tourism Management Plan incorporated into it, but it needs to be approved and implemented.

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

There is some management of the visitor use of the World Heritage property

#### 9.10 - Is the effectiveness of tourism management regularly monitored?

No

## If a different system, please specify

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

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

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

The presentation and interpretation of the Outstanding Universal Value of the property is acceptable but improvements could be made

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

In many locations and easily visible to visitors

9.14 - How does visitor/tourism revenue (e.g. entry charges, permits) contribute to the management of the World Heritage property? No fees are collected

9.15 - Are there locally driven sustainable tourism initiatives?

Yes

### If 'Yes', please specify

Landowners, Product owners, Vredefort Dome Tourism Association.

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

Yes

### If 'Yes', please specify

Local communities are working at the facilities that provide tourism attractions and activities.

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

The Vredefort Dome Tourism Association are assisting in the promotion of tourism in the site. The OUV is well presented to visitors by tourist guides taking visitors through the site. Question 9.5. The site is 99 % privately owned and services and activities for tourists are presented by different product owners at their own fees. Services that the Department is providing is not paid for.

#### 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 small amount of monitoring, but it is not planned

# 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 sufficient to define key indicators, but this has not been done

#### 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

The State of Conservation Report has 10 reporting points to UNESCO regarding the state of conservation. The METT Assessments are also used to monitor the management effectiveness and 5 interventions have been identified to be approved on an annual base.

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

World Heritage managers/coordinators and staff	Good
Local/municipal authorities	Non-existent
Local communities	Fair
Indigenous peoples	Not applicable
Landowners	Fair
Women	Fair
Researchers	Poor
Tourism industry	Fair
Local businesses and industry	Poor

If you selected 'Other specific groups', please specify

**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.

The State Party is working toward proclamation and the implementation of the Regulations for the site , as well as the establishment of the Management Authority.

Fair

Not applicable

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

Monitoring activities need to be improved and applicable stakeholders can assist in doing so.

#### 11. Identification of Priority Management Needs

### 11.1 - Identification of Priority Management Needs

5.1	Boundaries and Buffer Zones	
5.1.2	The boundaries of the World Heritage property are known by the management authority but are not known by local communities/landowners	×
5.1.4	The buffer zones of the World Heritage property are known and recognised by the management authority but are not known and recognized by local communities/landowners	×
5.2	Protective Measures	
5.2.3	An adequate legal framework for maintaining of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property exists but there are some deficiencies in implementation	×
5.2.4	An adequate legal framework in the buffer zone for maintaining the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property exists but there are some deficiencies in implementation	×
5.2.5	An adequate legal framework exists for the broader setting of the World Heritage property and the buffer zone, but there are some deficiencies in implementation which undermine the maintenance of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the property	×
5.2.6	There are major deficiencies in capacity/resources to enforce legislation and/or regulation in the World Heritage property	×
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	No use has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property	×
5.3.9	No use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	×
5.3.11	There is coordination between the range of administrative bodies involved in the management of the property, but it could be improved	×
5.3.12	The management system/plan is only partially adequate to maintain the property's Outstanding Universal Value	×
5.3.13	The management system at the property is only being partially implemented	×
5.3.14	An annual work/action plan exists for the property but few of the activities are being implemented	×
5.3.17	<ul> <li>The management system of the World Heritage property does not provide ecosystem services/benefits to the local community (e.g. fresh air, water, food, medicinal plants)</li> <li>In a limited manner, the management system of the World Heritage property does contribute to social inclusion and equity, improving opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion or economic or other status</li> <li>The management system of the World Heritage property does not contribute to fostering inclusive local economic development, and to enhancing livelihood</li> <li>The management system of the World Heritage property does not contribute to conflict prevention, including respect for cultural diversity within and around the World Heritage property</li> </ul>	×
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	×
6.1.4	Existing sources of funding are not secure	×
6.1.7	Human resources partly meet the management needs of the World Heritage property	×
6.1.10	No use has been made of the World Heritage Strategy for Capacity Development at the World Heritage property	×
6.1.12	There is no site-based capacity building plan or programme in place; management is implemented by external staff and skills are not transferred	×
7	Scientific Studies and Research Projects	
7.2	There is a small amount of research in the World Heritage property but it is not planned	×
7.3	Research results are not shared at any level	×

8	Education, Information and Awareness Building	
8.2	There is a limited and ad hoc education and awareness programme for children and/or youth	×
9	Visitor Management	
9.7	There is a strategy to manage visitors, tourism activity and its derived impacts on the World Heritage property but it is not implemented	×
9.9	There is some management of the visitor use of the World Heritage property	×
9.11	There is limited cooperation between those responsible for the World Heritage property and the tourism industry to present the Outstanding Universal Value and increase appreciation	×
9.12	The presentation and interpretation of the Outstanding Universal Value of the property is acceptable but improvements could be made	×
10	Monitoring	
10.1	There is a small amount of monitoring at the World Heritage property, but it is not planned	×
10.2	Information on the values of the World Heritage property is sufficient to define key indicators, but this has not been done	×
Pleas	se select -18 more issues.	
D Ple	ease save this question to reflect changes	

# 12. Summary and Conclusions

## 12.1. Summary - Factors affecting the Property

## 12.1.1 - Summary - Factors affecting the Property

4.1	Buildings an	d Development						
4.1.3	Industrial areas	Although there are no industries in the site , the site is been effected by pollution from industries upstream in the Vaal River.	The implementation of a Blue Deal Project that will attend to the upgrading of the water quality in the Vredefort Dome.	Monthly surface water monitoring and river health monitoring with additional monitoring points will be implemented with the Blue Deal Project.	2019 - 2030	The National Department of Water and Sanitation and the Dutch Water Authority.	The project will be implemented in 2020.	
4.2	Transportati	on Infrastructure						
4.2.5		Effects arisin from use of transportatio infrastructure	n					
4.4	Pollution	Pollution						
4.4.3	Surface water pollution	The surface water in the Vaal River is mostly polluted by severage from upstream and the Ngwathe LM waste water treatment plant , and most probably also from other factors like agricultural runoff and littering.	The implementation of the Blue Deal Project that will attend to the upgrading of the water quality in the Vaal River in the Vredefort Dome area.	Monitoring will be done by the National Department of Water and Sanitation , and will also include the North West Provincial Department.	2019 - 2030	National Department of Water and Sanitation and the Dutch Water Authority.	The project will be implemented in 2020.	
4.5	Biological re	esource use/modification	n					
4.5.3		Land conver	sion					
4.5.4		Livestock farming/Graz of domestica animals	•					
4.7	Local condit	ions affecting physical	fabric					

change       and droughts are experienced. These changes have an negative influence on the natural landscapes as attributes.       measures are not in place, but many information is been done in the site, but its been done by professional agencies, it is been done in the site, but its been done by professional agencies.       iiike universities.       Plan to that will the man climate	4.7.5	Dust	Dust pollution is a ongoing impact mostly from the gravel roads in the site , but it is not a major impact. It has a very limited impact on the natural landscapes.	taken. During the recent upgrading of the roads , the	Daily monitoring by the staff members and landowners staying and working in the site.	Ongoing.	Landowners , product owners and the Provincial Department.	There are not dust control measures to be implemented on a daily basis.
change       and droughts are experienced. These changes have an negative influence on the natural landscapes as attributes.       measures are not in place, but managing the effects are been done by professional agencies outside of the site, which will inform the site.       institutional agencies, institutional agencies, ister. This agencies outside of the site, which will inform the site.         4.13       Management and institutional factors         4.13.1       Management system/Management plan negative influence on implemented, an Action Plan will be put into Plan. Will be put into Plan. Will implemented, approved and implemented, approved and implemented, an Action Plan will be put into Plance.       Provincial Department of Environment Fisheries and Forestry. (Focal Part). (Focal Plan during Porvincial implemented from Plan. Action Plan will be put into Plance.       Provincial Annual budgeting and budgeting and budgeting and budgeting store to cover.       Provincial Annual Provincial Department.       Provincial Department.         4.13.5       Financial resources       Departmental financial resources are provided budgeting and budgeting store to cover.       Provincial Annual budgeting and budgeting and budgeting and budgeting store to cover.       Provincial Annual provincial Annual budgeting and budgeting an	4.10	Climate chan	ge and severe weather eve	ents				
4.13.1       Management system/Management plan       The available Draft Integrated Management Plan needs to be reviewed , approved and implemented. Until the I.M.P. is been approved and implemented, an Action Plan will be put into place.       Reviewing and implementing of the Draft Integrated Management Plan. Approving and implementing of the Draft Action Plan. Approving and implemented, an Action Plan will be put into place.       Provincial Department of Environment Fisheries and Forestry. (Focal Point).       Approval and implementation of the Action Plan during 2020.       Vredefort Dome Steering Committee.       Revi I.M.F. Steering Committee.         4.13.2       Legal framework       Legal framework       Eagl framework       The head office of the Provincial       Annually       Provincial popartment.       Provincial porvide       Provincial porvide       Provincial porvide       Annual budgeting and budget requests to cover       The head office of the Provincial       Annually       Provincial Department.       The lea provide	4.10.6		and droughts are experienced. These changes have an negative influence on the natural landscapes	measures are not in place , but managing the effects are been done as far as	is been done in the site , but its been done by professional agencies outside of the site , which will		institutional agencies,	A Disaster Management Plan to be developed that will also attend to the management of climate change in the site. This management plan to be developed in 2020 / 2021 financial year.
<ul> <li>system/Management plan</li> <li>Integrated Management Plan needs to be reviewed , approved and implemented. Until the I.M.P. is been approved and implemented, an Action Plan uill be put into place.</li> <li>Legal framework</li> <li>Legal framework</li> <li>Financial resources are provided</li> <li>Annual budgeting and budgeting and provincial resources are provided</li> <li>Annual budgeting and budgeting and budget requests to cover</li> <li>The head office of the Provincial</li> <li>Annually</li> <li>Provincial Department.</li> </ul>	4.13	Management	and institutional factors					
4.13.5       Financial resources       Departmental financial resources are provided       Annual budgeting and budget requests to cover       The head office of the Provincial       Annually       Provincial Department.       The la provide	4.13.1	system/Manageme	ent Integrated Management Plan needs to be reviewed , approved and implemented. Until the I.M.P. is been approved and implemented , an Action Plan will be put	implementing of the Draft Integrated Management Plan. Approving and implementing of the Draft Action Plan.	Departments and the National Department of Environment Fisheries and Forestry. (Focal	implementation of Action Plan during	of the Steering	Reviewing of the I.M.P. will be done through the National Dept. of Environment , Fisheries and Forestry.
resources are provided budget requests to cover the Provincial Department. provide	4.13.2		Legal fram	nework				
are been managed from head office and not the management office in the site. The amount of budgetto be submitted for approval and implementation.manage site for mainte been of thems	4.13.5	resources resources are provided on an annual base and are been managed from head office and not the management office in the site. The amount of budget available differs from year to year and is not		budget requests to cove all the necessary activit to be submitted for approval and	er the Provincial	of Annually		The landowners also provide financial resource for the management of the site for example maintenance on roads been done by themselves where urgently needed.

## 12.2. Summary - Management Needs

## 12.2.1 - Summary - Management Needs

5.1	Boundaries and Buffer Zones				
		Actions	Timeframe	Lead agency (and others involved)	More info / comment
5.1.2	The boundaries of the World Heritage property are known by the management authority but are not known by local communities/landowners	The boundaries of the core area are along existing roads but area not known to all the landowners in the site. Landowners to be informed about these boundaries.	Ongoing	Provincial Departments	Informal information shedding as working together between the parties.
5.1.4	The buffer zones of the World Heritage property are known and recognised by the management authority but are not known and recognized by local communities/landowners	The buffer zone is not a fixed boundary and only by GPS co-ordinates will a landowner know what part of his property is in the buffer zone. Its been investigated if the buffer zone shouldn't be indicated along the cadastrial borders of properties.	2020	State Party and the Provincial Department.	A preliminary investigation will be done first to determine further actions.
5.2	Protective Measures				

5.2.3	An adequate legal framework for maintaining of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property exists but there are some deficiencies in implementation	appointmen Authority w implementa and manag still draft do	roclamation of the site and ppointment of the Management uthority will ensure more effective nplementation of legal frameworks nd management plans , which are till draft documents presently. More uman resources can also assist.		d till proclamation is	National Department , Provincial Departments , Landowners Associations and the Conservancy.	Proclamation of the site and the appointment of the Management Authority is very important and needs to be done as soon as possible.
5.2.4	An adequate legal framework in the buffer zone for maintaining the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property exists but there are some deficiencies in implementation	appointmen Authority w implementa and manag still draft do	Proclamation of the site and appointment of the Management Authority will ensure more effective implementation of legal frameworks and management plans , which are still draft documents presently. More human resources can also assist.		d till proclamation is	National Department , Provincial Departments , Landowners Associations and the Conservancy.	Proclamation of the site and the appointment of the Management Authority is very important and needs to be done as soon as possible.
5.2.5	An adequate legal framework exists for the broader setting of the World Heritage property and the buffer zone, but there are some deficiencies in implementation which undermine the maintenance of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the property	as a World	sn"t been proclaimed yet Heritage Site according legislation. Proclamation	Unsure		The Sate Party - National Department of Environmental Affairs.	Proclamation of the site is still to be done.
5.2.6	There are <b>major</b> deficiencies in capacity/resources to enforce legislation and/or regulation in the World Heritage property	to be appoint Regulation	pement Authority needs nted , and the s been approved and or implementation.	Unsure		The State Party - the National Department of Environmental Affairs.	The landowners declared a dispute regarding some of the regulations and also the signed Memorandum of Agreement and awaiting meeting with the Minister regarding this dispute.
5.3	Management System	n/Manageme	ent Plan				
5.3.5	No use has been ma Historic Urban Lands Recommendation to o policies and best prac the protection of the p	cape develop ctices for	The Historic Urban Lands Recommendation to be incorporated into policies practices for the protectio site.	and best	Unknown	National and Provincial Departments	The Historic Urban Landscape Recommendation need to be obtained.
5.3.7	No use has been ma Policy Document on t Impacts of Climate Cl World Heritage Proper property	h the Impacts of Climate Chang Change on World Heritage Properties		age on Financial year es to be aster Risk		National and Provincial Departments	An application has been submitted for international assistance for the development and implementation of a Disaster Risk Management Plan in the site.
5.3.9	No use has been ma Strategy for Reducing from Disasters at Wo Heritage Properties a property	ng Risks Risk Disaster Managemen orld for the site.		-	2020 / 2021 Financial Year	Provincial Department	A service provider to be appointed by the Provincial Department to compile such an document. Application for international funding was done to compile and implement such a document.
5.3.11	There is <b>coordinatio</b> the range of administ bodies involved in the management of the p <b>but it could be impr</b>	rative e roperty,	National and Provincial Departments are presentl as administrative bodies i with a reasonable cooper assistance between each but it can be improved on	in the site ation and other ,	Ongoing	National and Provincial Departments.	Communication channels between the different Departments can be strengthened.

5.3.12	The management system/plan is <b>only partially adequate</b> to maintain the property's Outstanding Universal Value	The Draft Integrated Management Plan needs to be reviewed , approved and implemented. An Draft Action Plan , 2019 - 2023 , is compiled , needs to be approved and implemented as management document until the I.M.P. can be put into place.	2020 / 2021 Finical Year	The Vredefort Dome Steering Committee	The Draft Action Plan has been compiled by the National and Provincial Departments relevant in the site.
5.3.13	The management system at the property is <b>only being partially implemented</b>	The permanent staff component in the site is very limited and not effective to implement management systems in both provinces sides of the site. A permanent Management Authority is needed.	Unknown	National Department and the Provincial Departments.	Appointment of the Management Authority will ensure permanent and sufficient staff members to effectively implement management systems.
5.3.14	An annual work/action plan exists for the property but few of the activities are being implemented	The Draft Action Plan , 2019 - 2023 , needs to be approved and implemented.	2020 / 2021 Financial year	The Vredefort Dome Steering Committee	The Draft Action Plan was compiled by the applicable National and Provincial Departments.
5.3.17	<ul> <li>The management system of the World Heritage property does not provide ecosystem services/benefits to the local community (e.g. fresh air, water, food, medicinal plants)</li> <li>In a limited manner, the management system of the World Heritage property does contribute to social inclusion and equity, improving opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion or economic or other status</li> <li>The management system of the World Heritage property does not contribute to fostering inclusive local economic development, and to enhancing livelihood</li> <li>The management system of the World Heritage property does not contribute to conflict prevention, including respect for cultural diversity within and around the World Heritage property</li> </ul>	Local community members are involved in EPWP projects concentrating in alien and invasive species control in the site. Conflict prevention was attended to through meetings with the relevant stakeholders.	Contract periods from four to nine months.	Service providers that are willing to fund such a EPWP project for exp. the North West Parks and Tourism Board.	This office only assist in the management or monitoring of the projects , and not in the funding. The working relationship between relevant stakeholders has since recently been improved.
6.1	Funding				

6.1.3	The available budget is acceptable bu could be further improved to fully meet the management needs of the World Heritag property	enough for effective management. The site is already Gazetted as a Private Entity which can generate its own income and funding. A MA is needed.	Unsure when Management Authority will be appointed.	The National Department of Environmental Affairs - The S Agent.	Requesting International Funding for management activities is also been done.	
6.1.4	Existing sources of funding are <b>no</b> secure	Annual available Departmental Budgets change annually and are not secure. Budget requests to be secured as far as possible. Application for international funding to assist in budget needs.	Annually	The Provincial Department assisting in the management the site.	An application for international of funding was submitted for the 2020 / 2021 financial year.	
6.1.7	Human resources <b>partly meet</b> th management needs of the World Heritag property		Ongoing	Provincial Department	Posts will be filled as funding is available and according to priority needs.	
6.1.10	No use has been made of the World Heritage Strategy for Capacity Development the World Heritage property		Unknown	Provincial Department	It is uncertain when this Strategy can be implemented.	
6.1.12	There is no site-based capacity building plan of programme in place; management implemented external staff and skills are not transferred	and on an ad hock base by external staff , for example first aid and alien is plant control. by	Ongoing	Provincial Departments	Site based capacity building plans and programmes can only be internally done with an appointed Management Authority in place.	
7	Scientific Studies	and Research Projects				
7.2	There is a small	Research been done in the site is	Annually	North West University	Study needs to be provided to the	
	amount of research in the World Heritage property but it is not planned	mostly be university for student training purposes and not for the improving of the understanding of the OUV. Such needs can be communicated with the university to focus there research on.			university to be included in there annual research programme.	
7.3	Research results are not shared at any level	Research mostly been done by local universities which keep their results and reports to themselves unless been requested for by the Department. The management office is present with field work where possible.	iversities which keep their results and Provincial Departments ports to themselves unless been quested for by the Department. The anagement office is present with field		Strengthening the relationships between researchers and the management office is one of the METT interventions attended to for upgrading.	
8	Education, Inform	ation and Awareness Building				
8.2	There is aThe Departmental Section oflimited and adEnvironmental Empowerment are doinghoc educationeducational programmes in the site onand awarenessan ad hock basis. Local Tourist guidesprogramme forare taking groups through the site. Thechildren and/orVenterskroon Information Centre isyouthavailable.			Provincial Department and Local Fourist guides.	Departmental programmes include camps and site visits with schools and Environmental Clubs from around the area. Tourist guides are doing vehicle and guided walks in the site. The Information Centre provides exhibitions , posters and video clips.	
9	Visitor Manager	nent				

9.7	There is a strategy to manage visitors, tourism activity and its derived impacts on the World Heritage property but it is not implemented	Implement the Tourism Management Plan that is part of the Integrated Management Plan.	Ongoing	Provincial Department	The I.M.P. needs to be reviewed , approved and implemented. A Draft Action Plan will be implemented until the I.M.P. can be implemented.
9.9	There is <b>some</b> management of the visitor use of the World Heritage property	Visitors can only visit sensitive sites in the Vredefort Dome through the assistance of a registered field guide who has permission from the landowner to visit these sites. Daily visitors can only drive through on the scenic route through the site.	Ongoing	Provincial Departments , Landowners , Registered tourist guides.	Vandalism on and collections of geological outcrops are indirectly prevented in this way.
9.11	There is limited cooperation between those responsible for the World Heritage property and the tourism industry to present the Outstanding Universal Value and increase appreciation	Representatives of the Vredefort Dome Tourism Association are attending meetings related to the site , but increased involvement and cooperation can be attended to.	Ongoing	Provincial Department	Upgrading in communication and involvement is essential.
9.12	The presentation and interpretation of the Outstanding Universal Value of the property is acceptable but improvements could be made	The Vredefort Interpretation Centre needs to be renovated , equipped and opened for visitors. This centre is the gateway into the Vredefort Dome.	2020 / 2021 Financial year	The National Department of Tourism and the Districts Municipality.	Since the Centre was build and completed , it had structural deficiencies and was not approved for public use.
10	Monitoring				
10.1	There is a <b>small</b> amount of monitoring at the World Heritage property, but it is not planned	Monitoring is been done on a ad hock basis by staff members from the management office but can be made more effective by involving other stakeholders in the site.	Ongoing	Provincial Department	Monitoring for management purposes can be concentrated on.
10.2	Information on the values of the World Heritage property is sufficient to define key indicators, but this has not been done	Monitoring is been done but on a ad hock basis.	Ongoing	Provincial Department	More effective monitoring can be done with additional staff members appointed , and also effective time management and planning with the present staff members.

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 are being partially degraded but the state of conservation of the World Heritage property has not been significantly impacted

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

Cultural values like old buildings, ox wagons, tabaco stores, ect. have been partially degraded, but it doesn't effect the OUV of the site. The pollution of the Vaal River has a negative effect on the value of the drinking water for communities that are dependent on this water.

#### 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	Positive
Research and monitoring	Positive
Management effectiveness	No impact
Quality of life for local communities and indigenous peoples	No impact
Recognition	Positive
Education	Positive
Infrastructure development	Positive
Funding for the property	No impact
International cooperation	No impact
Political support for conservation	No impact
Legal/Policy framework	No impact
Advocacy	No impact
Institutional coordination	Not applicable
Security	Positive
Gender equality	Not applicable
Provision of ecosystem services/ benefits to local communities	Not applicable
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	Not applicable
Contributing to conflict prevention, including respect for cultural diversity within and around heritage properties	Not applicable
Other	Not applicable
If 'Other', please specify	

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

The site is listed but not proclaimed yet according to South African legislation. The value of property in the site has increased since the listing of the site.

#### 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

Fire management, veld fires are combated by a great variety of stakeholders involved like landowners, and if needed the local fire brigade and teams of Working on Fire. The landowners also belong to the Fire Protection Association. The Provincial Department assisted in providing radios and fire fighting equipment.

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

Synergies	
State of Conservation	
Management	
Governance	

### 15. Assessment of the Periodic Reporting Exercise

#### 15.1. Relevance of Periodic Reporting

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

The concept of Outstanding Universal Value

The property's Outstanding Universal Value

The property's Integrity and/or Authenticity

Management effectiveness to maintain the Outstanding Universal Value

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

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

#### 15.2. Use of Data

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

Revision of priorities/strategies/policies for the protection, management and conservation of heritage

Awareness raising

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

As mentioned above.

#### 15.3. Timing and resources

#### 15.3.1 - Entities involved in the filling out of this online questionnaire (tick as many boxes as applicable)

Governmental institutions responsible for cultural and natural heritage

Site Manager/Coordinator World Heritage property staff

UNESCO National Commission

Local communities

# **15.3.2** - Has a gender balanced contribution and participation been considered in the filling out of this questionnaire? Gender balance has been given limited consideration and implementation is in 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

8 / 6 / 504 (3 weeks) /

#### 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

None

### 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	Good
UNESCO (other sectors/field offices)	Fair

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

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

UNESCO World Heritage Centre	Fair
State Party Representative (national Focal Point)	Good
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? None

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

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

• Statement of Outstanding Universal Value for the property as adopted by the World Heritage Committee Reason for update: The North West Nature Conservation Ordinance (Transvaal Ordinance on Nature Conservation, no. 12 of 1983) to be included. The World Heritage Convention Act is not applicable yet because the site is not proclaimed yet.

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

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

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

The workshops that were presented by the Focal Point and the Heritage Centre were of great value in understanding and completing of the questionnaire. I would have liked to save the completed questionnaire on my computer to be used as guidance document for future planning.

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