

Fossil Hominid Sites of South Africa

1. World Heritage Property Data

1.1 - Name of World Heritage property




Fossil Hominid Sites of South Africa

1.2 - World Heritage property details

1.3 - Geographic information table

| Name | Coordinates | Property (ha) | Buffer zone (ha) | Total (ha) | Inscription year |
|---|------------------|------------------|------------------|-------------------|------------------|
| Sterkfontein, Swartkrans, Kromdraai, and Environs | -25.929 / 27.789 | 25000 | 28000 | 53000 | 1999 |
| Makapan Valley | -24.159 / 29.177 | 2220.05 | 55000 | 57220.05 | 2005 |
| Taung Skull Fossil Site | -27.619 / 24.633 | 158.743 | 3387 | 3545.743 | 2005 |
| Total (ha) | | 27378.793 | 86387 | 113765.793 | |

1.4 - Map(s)

| Title | Date | Link to source |
|---|------|---|
| Sterkfontein Valley Heritage Sites | 1998 |  |
| Makapan Valley Heritage Site Boundary | 2004 |  |
| Revised map showing the nominated area of the Taung Skull Fossil Site | 2004 |  |

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

- [Cradle of Humankind](#)

Comment

<http://www.maropeng.co.za> <http://www.thecradleofhumankind.net/> [cradleof_humankind](#) (Instagram) [@MaropengSA](#) (Twitter) [@cradleofhumankind](#) (Twitter)
Maropeng-Cradle of Humankind (Facebook) Makapan: no official website

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

- The Fossil Hominid Site of Sterkfontein, Swartkrans, Kromdraai and Environs forms the core zone of the Magaliesberg Biosphere Reserve (9 June 2015).

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

No

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

No

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

No

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

No

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

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

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

The Magaliesberg Biosphere reserve is represented on the Advisory Forum of the Fossil Hominid Sites of Sterkfontein, Swartkrans, Kromdraai and Environs(FHSSSKE) (popularly known as the Cradle of Humankind World Heritage Site). The Department of Environmental Affairs is the focal point of the World Heritage Convention and also the focal point of the RAMSAR Convention and MAB Programme.

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?

No

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 undulating landscape containing the fossil hominid sites of South Africa comprises dolomitic limestone ridges with rocky outcrops and valley grasslands, wooded along watercourses and in areas of natural springs. Most sites are in caves or are associated with rocky outcrops or water sources. The serial listing includes the Fossil Hominid Sites of Sterkfontein, Swartkrans, Kromdraai and Environs, and the Makapan Valley and Taung Skull Fossil Site. The Taung Skull, found in a limestone quarry at Dart Pinnacle amongst numerous archaeological and palaeontological sites south-west of the Sterkfontein Valley area, is a specimen of the species Australopithecus Africanus. Fossils found in the many archaeological caves of the Makapan Valley have enabled the identification of several specimens of early hominids, more particularly of Paranthropus, dating back between 4.5 million and 2.5 million years, as well as evidence of the domestication of fire 1.8 million to 1 million years ago. Collectively these sites have produced abundant scientific information on the evolution of modern humans over at least the past 3.5 million years. They constitute a vast reserve of scientific information, with enormous potential.

The sites contain within their deposits all of the key interrelated and interdependent elements in their palaeontological relationships. Alongside and predating the hominid period of occupation is a sequence of fossil mammals, micro-mammals and invertebrates which provide a window onto faunal evolution, palaeobiology and palaeoecology stretching back into the Pliocene. This record has come to play a crucial role in furthering our understanding of human evolution and the appearance of modern human behaviour.

The fossil evidence contained within these sites proves conclusively that the African continent is the undisputed Cradle of Humankind.

Criterion (iii): The nominated serial site bears exceptional testimony to some of the most important Australopithecine specimens dating back more than 3.5 million years. This therefore throws light on to the origins and then the evolution of humankind, through the hominisation process.

Criterion (vi): The serially nominated sites are situated in unique natural settings that have created a suitable environment for the capture and preservation of human and animal remains that have allowed scientists a window into the past. Thus, this site constitutes a vast reserve of scientific data of universal scope and considerable potential, linked to the history of the most ancient periods of humankind.

Integrity (2005)

The Fossil Hominid Sites of Sterkfontein, Swartkrans, Kromdraai and Environs together with Makapan Valley and Taung Skull Fossil Site comprise five separate components situated in different provinces and each has a buffer zone. Collectively these components contain the necessary evidence of sites where abundant scientific information on the evolution of modern humans over the past 3.5 million years was uncovered. Furthermore, the nominated serial site covers an area big enough to constitute a vast reserve of scientific information, with enormous potential.

Authenticity

As regards authenticity, the sites contain within their deposits all of the key interrelated and interdependent elements in their natural palaeontological relationships. Thus, the breccia representing the cave fillings contains the fossilised remains of hominids, their lithic cultural remains (from about 2.0 million years onwards), fossils of other animals, plants and pollen, as well as geochemical and sedimentological evidence of the conditions under which each member of the deposits was laid down. They represent a succession of palaeo ecosystems. The caves, breccias and strata from which quantities of fossils or tools have been extracted, together with the landscape are generally intact, but are vulnerable to development pressures, villagers' use of the environment and tourism.

Protection and management requirements

The components of the Fossil Hominid Sites of Sterkfontein, Swartkrans, Kromdraai and Environs together with Makapan Valley and Taung Skull Fossil Site are currently protected as National Heritage sites in terms of the National Heritage Resources Act, 1999 (Act No. 25 of 1999). In terms of this legislation, no person may destroy, damage, deface, excavate, alter, remove from its original position, subdivide or change the planning status of any heritage site without a permit issued by the heritage resources authority responsible for the protection of such site.

Management of each site is guided by the World Heritage Convention Act (Act No 49 of 1999); the National Environmental Protected Areas Act (Act No 57 of 2003), the National Environmental Management Act (Act No 107 of 1998), the National Environmental Management Biodiversity Act (Act No 10 of 2004) and the Physical Planning Act, 1967 (Act No. 88 of 1967).

In terms of these pieces of legislation, mining or prospecting is completely prohibited in a World Heritage Site and all developments are subjected to environmental impact assessments.

There are also site management plans for each of the sites as well as monitoring and evaluation programmes for each.

The five components of the property are situated in separate provinces in South Africa, each with a different combination of structures dealing with its management. Management issues at the five serial sites differ significantly. At the time of inscription of the first three sites it was envisaged that there would be a joint World Heritage Property Management Committee and that each Province and Site Management Authority would nominate members to the joint World Heritage Property Management Committee. It was envisaged that the function of the committee would be to streamline inter-site management, to discuss common management problems and to function as a communications forum for the sites. The equitable sharing of the benefits of increased tourism, joint funding proposals and the sharing of heritage-based skills were all issues to be considered.

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

| | Brief identification of attribute | Preserved | Compromised | Seriously compromised | Lost |
|-------|-----------------------------------|-----------|-------------|-----------------------|------|
| 3.2.1 | Cave systems | | × | | |
| 3.2.2 | Biophysical environment | × | | | |

| | | | | | |
|--------|-----------------------------|---|---|--|--|
| 3.2.3 | Faunal fossil assemblage | × | | | |
| 3.2.4 | Dolomitic limestone ridges | | × | | |
| 3.2.5 | Limestone quarries | | × | | |
| 3.2.6 | Archaeological sites | | × | | |
| 3.2.7 | Palaeontological sites | | × | | |
| 3.2.8 | Breccia and Strata | × | | | |
| 3.2.9 | Palaeoanthropological sites | | × | | |
| 3.2.10 | Historic and mining sites | × | | | |
| 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

The fossil deposits and the biophysical environment of the properties are intact. The potential threat to the world heritage property (FHSSSKE component) is posed by effluent from abandoned and active mines (i.e. Acid Mine Drainage) and this has been a concern of the World Heritage Centre since 2011. The Management Authority has since 2012, been commissioning the services of a Professional Service Provider for water resources monitoring.

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

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

4.1.2 - Commercial development

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

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

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

4.1.3 - Industrial areas

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

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

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

4.1.4 - Major visitor accommodation and associated infrastructure

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

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

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

4.1.5 - 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 | 🔴 Current | 🟡 Potential | 🟢 Inside | 🟢 Outside | 📉 Decreasing | ➡ Stable | 📈 Increasing |
| 🟢 Positive ✕ | ✕ | ✕ | ✕ | ✕ | | ➡ | |
| 🔴 Negative | | | | | | | |

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

These are predominantly for the Fossil Hominid Sites of Sterkfontein, Swartkrans, Kromdraai and Environs (Cradle of Humankind). While there is some development pressure throughout the site, it remains largely stable. For the other two sites these factors remains largely stable with little development pressure. The current development of the Taung Skull Fossil Site Interpretive Centre will positively enhance the interpretation of the property.

4.2. Transportation Infrastructure

4.2.1 - Ground transport infrastructure

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

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

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

4.2.2 - Underground transport infrastructure

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

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

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

4.2.3 - Air transport infrastructure

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

- Not relevant

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

4.2.4 - Marine transport infrastructure

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

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

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

4.2.5 - Effects arising from use of transportation infrastructure

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

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

There are both positive and negative effects of transportation infrastructure particularly on the Fossil Hominid Sites of Sterkfontein, Swartkrans, Kromdraai and Environs but this does not have a material effect on the OUV. The Lanseria Airport is located to the east of the world heritage property.

4.3. Services Infrastructures

4.3.1 - Water infrastructure

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

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

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

4.3.2 - Renewable energy facilities

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

- Relevant, Positive, Potential, Inside

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

4.3.3 - Non-renewable energy facilities

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

- Relevant, Negative, Potential, Outside

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

4.3.4 - Localised utilities

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

- Relevant, Negative, Current, Outside

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

4.3.5 - Major linear utilities

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

- Relevant, Negative, Current, Inside, Outside

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

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

Services infrastructure in the world heritage property is crucial for local communities and for the functioning of the tourism sector in the region. There is no direct threat from services infrastructure on the OUV of the property. The TLC Potgieterus and Zebediela water farms are located in the buffer zone of the Makapan Valley.

4.4. Pollution

4.4.1 - Pollution of marine waters

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

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

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

4.4.2 - Ground water pollution

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

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

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

4.4.3 - Surface water pollution

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

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

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

4.4.4 - Air pollution

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

- Relevant, Negative, Current, Potential, Outside










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

4.4.5 - Solid waste

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

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






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

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

4.4.6 - Input of excess energy

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

- Relevant, Negative, Current, Potential, Outside

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

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

The threat from Acid Mine Drainage (AMD) on the FHSSSKE site has been reported in State of Conservation Reports to the World Heritage Centre in the last few years. A comprehensive water monitoring programme is in place since 2012 to monitor the impacts of AMD on the OUV (see attached Annexure 1).

4.5. Biological resource use/modification

4.5.1 - Fishing/collecting aquatic resources

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

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

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

4.5.2 - Aquaculture

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

- Relevant, Positive, Negative, Current, Inside

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

4.5.3 - Land conversion

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

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

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

4.5.4 - Livestock farming/Grazing of domesticated animals

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

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






















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

4.5.5 - Crop production

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

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

| ✕ Relevant | | | Not relevant | | | | |
|------------|--------|--|--------------|--|-----------------|--|--|
| | Impact | | Origin | | Trend of impact | | |

| Impact |  Current |  Potential |  Inside |  Outside |  Decreasing |  Stable |  Increasing |
|--|---|---|--|---|---|--|--|
|  Positive  |  |  |  |  | |  | |
|  Negative  |  |  |  |  | | |  |

4.5.6 - Commercial wild plant collection

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

- Not relevant






















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

4.5.7 - Subsistence wild plant collection

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

- Relevant, Positive, Negative, Current, Inside

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














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

4.5.8 - Commercial hunting

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

- Relevant, Negative, Current, Inside

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
















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

4.5.9 - Subsistence hunting

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

- Relevant, Negative, Current, Inside, Outside

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

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

4.5.10 - Forestry/Wood production

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

- Relevant, Negative, Current, Inside

| | |
|----------|--|
| 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

There is limited land conversion and increase in agricultural production in the core of the FHSSKE property. Livestock farming and some plant material collection is relevant for the Makapan Valley component but it is on a small scale and does not pose a threat to the OUV. Fire and grazing in the Makapan Valley also keep the grassy layer dominant (see attached Annexure 1).

4.6. Physical resource extraction
















4.6.1 - Mining

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

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

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

| | Impact | Origin | Trend of impact |
|--|--------|--------|-----------------|
|--|--------|--------|-----------------|

| Impact |  Current |  Potential |  Inside |  Outside |  Decreasing |  Stable |  Increasing |
|--|---|---|--|---|---|--|--|
|  Positive | | | | | | | |
|  Negative  |  |  |  |  | |  | |

4.6.2 - Quarrying

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

- Relevant, Negative, Current, Inside, Outside

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

4.6.3 - Oil and gas

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

- Not relevant

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

4.6.4 - Water (extraction)

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

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

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

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


There is legislation in place to prohibit mining activities in the core of world heritage properties. Mining activities in the buffer zone (e.g. Makapan Valley and Taung Skull Fossil Site) is controlled through the application of different legislative provisions. Water extraction is widespread through borehole extraction but is stable for all three component sites. Water extraction for agricultural purposes in the buffer zone in privately owned farms is managed through the National Water Act.

4.7. Local conditions affecting physical fabric

4.7.1 - Wind

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

- Not relevant

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

4.7.2 - Relative humidity

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

- Relevant, Negative, Current, Potential, Inside

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

4.7.3 - Temperature

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

- Relevant, Negative, Current, Inside

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

4.7.4 - Radiation/Light

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

- Not relevant

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

4.7.5 - Dust

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

- Relevant, Negative, Current, Potential, Inside

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

4.7.6 - Water (rain/water table)

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

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

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

4.7.7 - Pests

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

- Not relevant










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

4.7.8 - Micro-organisms

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

- Relevant, Positive, Current, Inside

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

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

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

Environmental Monitoring Systems were installed in the FHSSSKE (Sterkfontein Caves) to monitor amongst others Carbon Dioxide, algae growth. There are also plans to install eco-friendly lighting system for the cave, including a motion sensor system, sectioning of lights to allow the cave more time to recover from impacts of light. Bi-annual fossil site inspections and monitoring are conducted in collaboration with the South African Heritage Resources Agency.

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, Negative, Current, Inside

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

4.8.2 - Society's valuing of heritage

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

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

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

4.8.3 - Indigenous hunting, gathering and collecting

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

- Relevant, Positive, Negative, Current, Inside

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

4.8.4 - Changes in traditional ways of life and knowledge system

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

- Not relevant

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

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

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

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

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

4.8.6 - Impacts of tourism/Visitation/Recreation

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

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

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

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

There is an increase and awareness of the value of the property and steps taken by the Management Authorities to address education and awareness-creation is no doubt contributing to this.

4.9. Other human activities

4.9.1 - Illegal activities

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

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

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

4.9.2 - Deliberate destruction of heritage

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

- Relevant, Negative, Current, Potential, Inside

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

4.9.3 - Military training

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

- Not relevant

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

4.9.4 - War

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

- Not relevant

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

4.9.5 - Terrorism

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

- Not relevant

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

4.9.6 - Civil unrest

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

- Not relevant

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

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

There is some illegal construction within and outside the core but this is not widespread, is monitored by the Management Authorities and has no direct impact or threat to the OUV of the property which essentially are the fossil deposits that sit in the geology and cave systems of the sites. Graffiti is also observed on some of the caves in the world heritage property.

4.10. Climate change and severe weather events

4.10.1 - Storms

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

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

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

4.10.2 - Flooding

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

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

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

4.10.3 - Drought

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

- Not relevant

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

4.10.4 - Desertification

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

- Not relevant

| | |
|----------|----------------|
| 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, Outside
















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

4.10.7 - Other climate change impacts

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

- Relevant, Negative, Potential, Outside

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

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

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


The negative impacts do not have a direct and immediate impact on the OUV of the world heritage property. Drought in the world heritage property is largely from the perspective of crop production, veld fires and cattle grazing. The Climate Change outlook for the FHSSSKE component has not changed since the information provided regarding Climate Change by the State Party in its 2015 State of Conservation report.

4.11. Sudden ecological or geological events

4.11.1 - Volcanic eruption

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

- Not relevant

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

4.11.2 - Earthquake

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

- Not relevant

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

4.11.3 - Tsunami/Tidal wave

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

- Not relevant

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

4.11.4 - Avalanche/Landslide

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

- Not relevant

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

4.11.5 - Erosion and siltation/Deposition

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

- Relevant, Negative, Current, Potential, Inside

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

4.11.6 - Fire (wildfire)

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

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

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

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

Working on Fire programme is being implemented in the FHSSSKE to reduce the risk and likelihood of wildfires and alien vegetation fuel load build up. Paleontological and Paleo-anthropological sites are largely unaffected.

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

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

4.12.2 - Invasive/Alien terrestrial species

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

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

| ✕ Relevant | Not relevant | | | | | | |
|--------------|--------------|-------------|----------|-----------|-----------------|----------|--------------|
| | Impact | | Origin | | Trend of impact | | |
| Impact | 🔥 Current | 🔨 Potential | 📍 Inside | 🌿 Outside | 📉 Decreasing | ➡ Stable | 📈 Increasing |
| 🟢 Positive | | | | | | | |
| 🔴 Negative ✕ | ✕ | ✕ | ✕ | ✕ | | ➡ | |

4.12.3 - Invasive/Alien freshwater species

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

- Relevant, Negative, Current, Inside

| ✕ Relevant | Not relevant | | | | | | |
|--------------|--------------|-------------|----------|-----------|-----------------|----------|--------------|
| | Impact | | Origin | | Trend of impact | | |
| Impact | 🔥 Current | 🔨 Potential | 📍 Inside | 🌿 Outside | 📉 Decreasing | ➡ Stable | 📈 Increasing |
| 🟢 Positive | | | | | | | |
| 🔴 Negative ✕ | ✕ | ✕ | ✕ | ✕ | | ➡ | |

4.12.4 - Invasive/Alien marine species

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

- Not relevant

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

4.12.5 - Hyper-abundant species

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

- Not relevant

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

4.12.6 - Modified genetic material

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

- Not relevant

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

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

There are existing alien plants in the world heritage property. In the Makapan Valley, there are presently Invasive Alien species such as *Acacia mearnsii*, *Sesbaniapunicea*, *Populus* spp., *Eucalyptus* spp. and *Melia azedarachare* which should be controlled.














4.13. Management and institutional factors

4.13.1 - Management system/Management plan

| ✕ Relevant | Not relevant | | | | | | |
|--------------|--------------|-------------|----------|-----------|-----------------|----------|--------------|
| | Impact | | Origin | | Trend of impact | | |
| Impact | 🔥 Current | 🔨 Potential | 📍 Inside | 🌿 Outside | 📉 Decreasing | ➡ Stable | 📈 Increasing |
| 🟢 Positive ✕ | ✕ | ✕ | ✕ | ✕ | | | 📈 |
| 🔴 Negative ✕ | ✕ | | ✕ | ✕ | 📉 | | |

4.13.2 - Legal framework

| ✕ Relevant | Not relevant | | | | | | |
|------------|--------------|--|--------|--|-----------------|--|--|
| | Impact | | Origin | | Trend of impact | | |

| Impact |  Current |  Potential |  Inside |  Outside |  Decreasing |  Stable |  Increasing |
|--|---|---|--|---|---|--|--|
|  Positive  |  |  |  |  | | |  |
|  Negative | | | | | | | |

4.13.3 - Governance

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


4.13.4 - Management activities

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

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

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

4.13.5 - Financial resources

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

4.13.6 - Human resources

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

4.13.7 - Low impact research/monitoring activities

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


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

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

4.13.8 - High impact research/monitoring activities

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

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

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

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

Staff shortages and unavailability of funded posts has a negatively impact on the world heritage property. The monitoring of the groundwater regime in the FHSSSKE has been ongoing since 2012. This has been reported in State of Conservation Reports. Low impact research/monitoring activities are also ongoing in the FHSSSKE paleontological and palaeo-anthropological sites. Management activities, legal framework issues and a lack of financial and human resources has a negative impact on the entire world heritage property.

4.14. Other factor(s)

4.14.1 - Other factor(s)

There is a lack of integrated development approach at a local government level.

4.15. Factors Summary Table




4.15.1 - Factors Summary Table

| Name | Impact | | | Origin | | Trend |
|---|--------|--|--|--------|--|-------|
| 4.1 Buildings and Development | | | | | | |
| 4.1.1 Housing | | | | | | |
| | | | | | | |
| 4.1.2 Commercial development | | | | | | |
| | | | | | | |
| 4.1.3 Industrial areas | | | | | | |
| | | | | | | |
| 4.1.4 Major visitor accommodation and associated infrastructure | | | | | | |
| | | | | | | |
| 4.1.5 Interpretative and visitation facilities | | | | | | |
| | | | | | | |
| 4.2 Transportation Infrastructure | | | | | | |
| 4.2.1 Ground transport infrastructure | | | | | | |
| | | | | | | |
| 4.2.3 Air transport infrastructure | | | | | | |
| | | | | | | |
| 4.2.5 Effects arising from use of transportation infrastructure | | | | | | |
| | | | | | | |
| 4.3 Services Infrastructures | | | | | | |
| 4.3.1 Water infrastructure | | | | | | |
| | | | | | | |
| 4.3.2 Renewable energy facilities | | | | | | |
| | | | | | | |
| 4.3.3 Non-renewable energy facilities | | | | | | |
| | | | | | | |
| 4.3.4 Localised utilities | | | | | | |
| | | | | | | |
| 4.3.5 Major linear utilities | | | | | | |
| | | | | | | |
| 4.4 Pollution | | | | | | |
| 4.4.2 Ground water pollution | | | | | | |
| | | | | | | |
| 4.4.3 Surface water pollution | | | | | | |
| | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 4.4.4 Air pollution | | | | | | |
| | ⊖ | ⚡ | ⚡ | ⊕ | 🔄 | ➡ |
| 4.4.5 Solid waste | | | | | | |
| | ⊖ | ⚡ | ⚡ | ⊕ | 🔄 | ➡ |
| 4.4.6 Input of excess energy | | | | | | |
| | ⊖ | ⚡ | | | 🔄 | ➡ |
| 4.5 Biological resource use/modification | | | | | | |
| 4.5.3 Land conversion | ⊕ | ⚡ | ⚡ | ⊕ | 🔄 | ➡ |
| | ⊖ | ⚡ | ⚡ | ⊕ | 🔄 | ➡ |
| 4.5.4 Livestock farming/Grazing of domesticated animals | ⊕ | ⚡ | ⚡ | ⊕ | 🔄 | ➡ |
| | ⊖ | ⚡ | ⚡ | ⊕ | 🔄 | ↗ |
| 4.5.5 Crop production | ⊕ | ⚡ | ⚡ | ⊕ | 🔄 | ➡ |
| | ⊖ | ⚡ | ⚡ | ⊕ | 🔄 | ↗ |
| 4.5.7 Subsistence wild plant collection | ⊕ | ⚡ | ⚡ | ⊕ | 🔄 | ➡ |
| | ⊖ | ⚡ | ⚡ | ⊕ | 🔄 | ↗ |
| 4.5.8 Commercial hunting | ⊕ | ⚡ | | | 🔄 | ➡ |
| | | | | | | |
| 4.5.9 Subsistence hunting | | | | | | |
| | ⊖ | ⚡ | ⚡ | ⊕ | 🔄 | ↗ |
| 4.6 Physical resource extraction | | | | | | |
| 4.6.1 Mining | | | | | | |
| | ⊖ | ⚡ | ⚡ | ⊕ | 🔄 | ➡ |
| 4.6.2 Quarrying | | | | | | |
| | ⊖ | ⚡ | ⚡ | ⊕ | 🔄 | ↗ |
| 4.6.4 Water (extraction) | ⊕ | ⚡ | | ⊕ | 🔄 | ➡ |
| | ⊖ | ⚡ | ⚡ | ⊕ | 🔄 | ➡ |
| 4.7 Local conditions affecting physical fabric | | | | | | |
| 4.7.1 Wind | ⊕ | ⚡ | | ⊕ | | ➡ |
| | ⊖ | ⚡ | ⚡ | ⊕ | 🔄 | ↗ |
| 4.7.2 Relative humidity | ⊕ | | | | | ➡ |
| | ⊖ | ⚡ | ⚡ | ⊕ | | ↗ |
| 4.7.3 Temperature | ⊕ | ⚡ | | ⊕ | | ➡ |
| | ⊖ | ⚡ | ⚡ | ⊕ | 🔄 | ↗ |
| 4.7.4 Radiation/Light | | | | | | |
| | ⊖ | ⚡ | ⚡ | ⊕ | 🔄 | ↗ |
| 4.7.5 Dust | | | | | | |
| | ⊖ | ⚡ | ⚡ | ⊕ | 🔄 | ➡ |
| 4.7.6 Water (rain/water table) | ⊕ | ⚡ | | ⊕ | 🔄 | ➡ |
| | ⊖ | ⚡ | ⚡ | ⊕ | 🔄 | ➡ |
| 4.7.7 Pests | | | | | | |
| | ⊖ | ⚡ | ⚡ | ⊕ | 🔄 | ➡ |
| 4.7.8 Micro-organisms | ⊕ | ⚡ | | ⊕ | | ➡ |
| | | | | | | |
| 4.8 Social/Cultural uses of heritage | | | | | | |
| 4.8.1 Ritual/Spiritual/Religious and associative uses | ⊕ | ⚡ | ⚡ | ⊕ | 🔄 | ➡ |
| | ⊖ | ⚡ | ⚡ | ⊕ | 🔄 | ➡ |











| | | | | | | |
|--|--|--|--|--|--|--|
| 4.8.2 Society's valuing of heritage | | | | | | |
| | | | | | | |
| 4.8.3 Indigenous hunting, gathering and collecting | | | | | | |
| | | | | | | |
| 4.8.5 Identity, social cohesion, changes in local population and community | | | | | | |
| | | | | | | |
| 4.8.6 Impacts of tourism/Visitation/Recreation | | | | | | |
| | | | | | | |
| 4.9 Other human activities | | | | | | |
| 4.9.1 Illegal activities | | | | | | |
| | | | | | | |
| 4.9.2 Deliberate destruction of heritage | | | | | | |
| | | | | | | |
| 4.10 Climate change and severe weather events | | | | | | |
| 4.10.2 Flooding | | | | | | |
| | | | | | | |
| 4.10.3 Drought | | | | | | |
| | | | | | | |
| 4.10.6 Temperature change | | | | | | |
| | | | | | | |
| 4.10.7 Other climate change impacts | | | | | | |
| | | | | | | |
| 4.11 Sudden ecological or geological events | | | | | | |
| 4.11.5 Erosion and siltation/Deposition | | | | | | |
| | | | | | | |
| 4.11.6 Fire (wildfire) | | | | | | |
| | | | | | | |
| 4.12 Invasive/alien species or hyper-abundant species | | | | | | |
| 4.12.2 Invasive/Alien terrestrial species | | | | | | |
| | | | | | | |
| 4.12.3 Invasive/Alien freshwater species | | | | | | |
| | | | | | | |
| 4.13 Management and institutional factors | | | | | | |
| 4.13.1 Management system/Management plan | | | | | | |
| | | | | | | |
| 4.13.2 Legal framework | | | | | | |
| | | | | | | |
| 4.13.3 Governance | | | | | | |
| | | | | | | |
| 4.13.4 Management activities | | | | | | |
| | | | | | | |
| 4.13.5 Financial resources | | | | | | |
| | | | | | | |
| 4.13.6 Human resources | | | | | | |
| | | | | | | |
| 4.13.7 Low impact research/monitoring activities | | | | | | |

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

| Name | Impact | | | Origin | | Trend |
|------------------------|---|---|---|--------|---|---|
| 4.1.3 Industrial areas | | | | | | |
| |  |  |  | |  |  |

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

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

| Name | Impact | Origin | Trend |
|---|---|---|---|
| 4.1.4 Major visitor accommodation and associated infrastructure |    |   |  |
| |    |  |  |

Spatial scale - Area affected by the factor

| | |
|---|------------|
| | Restricted |
| ✕ | Localised |
| | Extensive |
| | Widespread |

Temporal scale - Occurrence of the impact

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

Impact - Impact on the attributes







| | |
|---|---------------|
| ✕ | Insignificant |
| | Minor |
| | Significant |
| | Major |

Management response - Capacity of management to respond

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

Trend - Development over the last 6 years

| | |
|---|------------|
| | Decreasing |
| ✕ | Static |
| | Increasing |










| Name | Impact | Origin | Trend |
|--|---|---|---|
| 4.1.5 Interpretative and visitation facilities |    |   |  |
| | | | |

Spatial scale - Area affected by the factor

| | |
|---|------------|
| ✕ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |






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

4.2 Transportation Infrastructure

| Name | Impact | Origin | Trend |
|---------------------------------------|---|---|---|
| 4.2.1 Ground transport infrastructure | <input checked="" type="checkbox"/>   | <input checked="" type="checkbox"/>   | <input checked="" type="checkbox"/>  |
| | <input checked="" type="checkbox"/>   | <input checked="" type="checkbox"/>   | <input checked="" type="checkbox"/>  |

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

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

| Name | Impact | Origin | Trend |
|------------------------------------|---|---|---|
| 4.2.3 Air transport infrastructure |   |  |  |
| |   |  | |

Spatial scale - Area affected by the factor

| | |
|---|------------|
| ✕ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |

Temporal scale - Occurrence of the impact

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

Impact - Impact on the attributes








| | |
|---|---------------|
| ✕ | Insignificant |
| | Minor |
| | Significant |
| | Major |

Management response - Capacity of management to respond

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

Trend - Development over the last 6 years

| | |
|---|------------|
| | Decreasing |
| ✕ | Static |
| | Increasing |












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

Spatial scale - Area affected by the factor

| | |
|---|------------|
| | Restricted |
| ✕ | Localised |
| | Extensive |













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

4.3 Services Infrastructures

| Name | Impact | Origin | Trend |
|----------------------------|---|---|---|
| 4.3.1 Water infrastructure |    |   |  |
| |    |   |  |

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

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

| Name | Impact | Origin | Trend |
|-----------------------------------|---|---|---|
| 4.3.2 Renewable energy facilities |    |   |  |
| |    |   |  |

Spatial scale - Area affected by the factor

| | |
|---|------------|
| ✕ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |

Temporal scale - Occurrence of the impact

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

Impact - Impact on the attributes











| | |
|---|---------------|
| ✕ | Insignificant |
| | Minor |
| | Significant |
| | Major |

Management response - Capacity of management to respond

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

Trend - Development over the last 6 years




| | |
|---|------------|
| | Decreasing |
| ✕ | Static |
| | Increasing |

| Name | Impact | Origin | Trend |
|---------------------------------------|---|---|---|
| 4.3.3 Non-renewable energy facilities |    |   |  |
| |    |   |  |

Spatial scale - Area affected by the factor











| | |
|---|------------|
| ✕ | Restricted |
| | Localised |

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

| Name | Impact | | | Origin | | Trend |
|---------------------------|---|---|---|---|---|---|
| 4.3.4 Localised utilities | | | | | | |
| |  |  |  |  |  |  |

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

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

| Name | Impact | Origin | Trend |
|------------------------------|---|---|---|
| 4.3.5 Major linear utilities |    |   |  |
| |    |   |  |

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










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

| | |
|--|---------------|
| Impact - Impact on the attributes | |
| | Insignificant |
| ✕ | Minor |
| | Significant |
| | Major |

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





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

4.4 Pollution

| Name | Impact | Origin | Trend |
|------------------------------|---|---|---|
| 4.4.2 Ground water pollution |    |   |  |
| |    |   |  |




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

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

| Name | Impact | | | Origin | | Trend |
|-------------------------------|---|---|---|---|---|---|
| 4.4.3 Surface water pollution | | | | | | |
| |  |  |  |  |  |  |

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













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

| Name | Impact | | | Origin | | Trend |
|------------------------------|---|---|--|--------|---|---|
| 4.4.6 Input of excess energy | | | | | | |
| |  |  | | |  |  |










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

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

4.5 Biological resource use/modification













| Name | Impact | Origin | Trend |
|-----------------------|---|---|---|
| 4.5.3 Land conversion |    |   |  |
| |    |   |  |

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

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











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

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

| Name | Impact | Origin | Trend |
|-----------------------|---|---|---|
| 4.5.5 Crop production |    |   |  |
| |    |   |  |

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

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

| Name | Impact | Origin | Trend |
|---|---|---|---|
| 4.5.7 Subsistence wild plant collection |    |   |  |
| |    |   |  |












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

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

| | |
|--|---------------|
| Impact - Impact on the attributes | |
| | Insignificant |
| ✕ | Minor |
| | Significant |
| | Major |





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

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

| Name | Impact | Origin | Trend |
|--------------------------|---|---|---|
| 4.5.8 Commercial hunting |    |   |  |
| |    |   |  |

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



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

| Name | Impact | | | Origin | | Trend |
|---------------------------|---|---|---|---|---|---|
| 4.5.9 Subsistence hunting | | | | | | |
| |  |  |  |  |  |  |

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

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

4.6 Physical resource extraction

| Name | Impact | Origin | Trend |
|--------------|---|---|---|
| 4.6.1 Mining | | | |
| |  |  |  |

Spatial scale - Area affected by the factor

| | |
|---|------------|
| ✕ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |

Temporal scale - Occurrence of the impact

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

Impact - Impact on the attributes




| | |
|---|---------------|
| | Insignificant |
| ✕ | Minor |
| | Significant |
| | Major |

Management response - Capacity of management to respond

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

Trend - Development over the last 6 years

| | |
|---|------------|
| ✕ | Decreasing |
| | Static |
| | Increasing |

| Name | Impact | Origin | Trend |
|-----------------|---|---|---|
| 4.6.2 Quarrying | | | |
| |  |  |  |

Spatial scale - Area affected by the factor

| | |
|---|------------|
| ✕ | Restricted |
| | Localised |
| | Extensive |









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

| Name | Impact | | | Origin | | Trend |
|--------------------------|--------|--|--|--------|--|-------|
| 4.6.4 Water (extraction) | | | | | | |
| | | | | | | |






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

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

4.7 Local conditions affecting physical fabric






| Name | Impact | Origin | Trend |
|------------|---|---|---|
| 4.7.1 Wind |   |  |  |
| |    |   |  |

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

| Name | Impact | Origin | Trend |
|-------------------------|---|---|---|
| 4.7.2 Relative humidity |  | |  |
| |    |  |  |




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

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

| Name | Impact | Origin | Trend |
|-------------------|---|---|---|
| 4.7.3 Temperature |   |  |  |
| |    |   |  |

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

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

| Name | Impact | Origin | Trend |
|-----------------------|---|---|---|
| 4.7.4 Radiation/Light | | | |
| |  |  |  |
| |  |  |  |

Spatial scale - Area affected by the factor

| | |
|---|------------|
| | Restricted |
| ✕ | Localised |
| | Extensive |
| | Widespread |

Temporal scale - Occurrence of the impact

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

Impact - Impact on the attributes







| | |
|---|---------------|
| | Insignificant |
| ✕ | Minor |
| | Significant |
| | Major |

Management response - Capacity of management to respond

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

Trend - Development over the last 6 years








| | |
|---|------------|
| | Decreasing |
| ✕ | Static |
| | Increasing |

| Name | Impact | Origin | Trend |
|------------|---|---|---|
| 4.7.5 Dust | | | |
| |  |  |  |
| |  |  |  |

Spatial scale - Area affected by the factor







| | |
|---|------------|
| | Restricted |
| ✕ | Localised |
| | Extensive |
| | Widespread |

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

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

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

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

| Name | Impact | Origin | Trend |
|-------------|---|--------|-------|
| 4.7.7 Pests | | | |
| |       | | |

Spatial scale - Area affected by the factor

| | |
|---|------------|
| | Restricted |
| ✕ | Localised |
| | Extensive |
| | Widespread |

Temporal scale - Occurrence of the impact

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

Impact - Impact on the attributes





| | |
|---|---------------|
| ✕ | Insignificant |
| | Minor |
| | Significant |
| | Major |

Management response - Capacity of management to respond

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

Trend - Development over the last 6 years

| | |
|---|------------|
| | Decreasing |
| ✕ | Static |
| | Increasing |

| Name | Impact | Origin | Trend |
|-----------------------|---|--------|-------|
| 4.7.8 Micro-organisms |       | | |
| | | | |

Spatial scale - Area affected by the factor

| | |
|---|------------|
| ✕ | Restricted |
| | Localised |
| | Extensive |
| | Widespread |









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

4.8 Social/Cultural uses of heritage

| Name | Impact | Origin | Trend |
|---|---|--|---------------------------|
| 4.8.1 Ritual/Spiritual/Religious and associative uses | <div> <div>+</div> <div>+</div> <div>+</div> </div> | <div> <div>+</div> <div>+</div> </div> | <div> <div>→</div> </div> |
| | <div> <div>-</div> <div>+</div> <div>+</div> </div> | <div> <div>+</div> <div>+</div> </div> | <div> <div>→</div> </div> |

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

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

| Name | Impact | Origin | Trend |
|-------------------------------------|---|---|---|
| 4.8.2 Society's valuing of heritage |    |   |  |
| |   |   |  |









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

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

| | |
|--|---------------|
| Impact - Impact on the attributes | |
| | Insignificant |
| ✕ | Minor |
| | Significant |
| | Major |










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

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

| Name | Impact | Origin | Trend |
|--|---|---|---|
| 4.8.3 Indigenous hunting, gathering and collecting |    |  | |
| |    |   |  |






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

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

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

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

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

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

Spatial scale - Area affected by the factor

| | |
|---|------------|
| | Restricted |
| | Localised |
| ✕ | Extensive |
| | Widespread |

Temporal scale - Occurrence of the impact

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

Impact - Impact on the attributes

| | |
|---|---------------|
| | Insignificant |
| ✕ | Minor |
| | Significant |
| | Major |





Management response - Capacity of management to respond

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

Trend - Development over the last 6 years

| | |
|---|------------|
| | Decreasing |
| | Static |
| ✕ | Increasing |






4.9 Other human activities

| Name | Impact | Origin | Trend |
|--------------------------|---|---|---|
| 4.9.1 Illegal activities |    |   |  |

Spatial scale - Area affected by the factor

| | |
|---|------------|
| | Restricted |
| ✕ | Localised |
| | Extensive |



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

| Name | Impact | | | Origin | | Trend |
|--|---|---|---|---|---|---|
| 4.9.2 Deliberate destruction of heritage | | | | | | |
| |  |  |  |  |  |  |




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

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

4.10 Climate change and severe weather events






| Name | Impact | Origin | Trend |
|-----------------|---|---|---|
| 4.10.2 Flooding | | | |
| |  |  |  |

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

| Name | Impact | Origin | Trend |
|----------------|---|---|---|
| 4.10.3 Drought | | | |
| |  |  |  |





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

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

| Name | Impact | | | Origin | | Trend |
|---------------------------|---|---|---|---|---|---|
| 4.10.6 Temperature change | | | | | | |
| |  |  |  |  |  |  |






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

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

| Name | Impact | | | Origin | | Trend |
|-------------------------------------|---|---|---|---|---|---|
| 4.10.7 Other climate change impacts | | | | | | |
| |  |  |  |  |  |  |

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

4.11 Sudden ecological or geological events

| Name | Impact | | | Origin | | Trend |
|---|---|---|---|---|---|---|
| 4.11.5 Erosion and siltation/Deposition | | | | | | |
| |  |  |  |  |  |  |

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





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

| Name | Impact | Origin | Trend |
|------------------------|--------------|--------------|--------------|
| 4.11.6 Fire (wildfire) | <div> </div> | <div> </div> | <div> </div> |
| | <div> </div> | <div> </div> | <div> </div> |





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

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

4.12 Invasive/alien species or hyper-abundant species

| Name | Impact | Origin | Trend |
|---|---|---|---|
| 4.12.2 Invasive/Alien terrestrial species | | | |
| |  |  |  |
| |  |  |  |

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

| Name | Impact | Origin | Trend |
|--|---|---|---|
| 4.12.3 Invasive/Alien freshwater species | | | |
| |  |  |  |
| |  |  |  |

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






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

4.13 Management and institutional factors











| Name | Impact | Origin | Trend |
|--|---|--|---------------------------|
| 4.13.1 Management system/Management plan | <div> <div>+</div> <div>⚠</div> <div>⚠</div> </div> | <div> <div>+</div> <div>↻</div> </div> | <div> <div>↗</div> </div> |
| | <div> <div>-</div> <div>⚠</div> <div></div> </div> | <div> <div>+</div> <div>↻</div> </div> | <div> <div>↘</div> </div> |

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

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

| Name | Impact | Origin | Trend |
|------------------------|---|---|---|
| 4.13.2 Legal framework |    |   |  |
| | | | |

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

| Name | Impact | Origin | Trend |
|-------------------|---|---|---|
| 4.13.3 Governance |    |   |  |
| |   |   |  |










| | |
|--|------------|
| Spatial scale - Area affected by the factor | |
| | Restricted |
| | Localised |

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









| Name | Impact | | | Origin | | Trend |
|------------------------------|--------|--|--|--------|--|-------|
| 4.13.4 Management activities | | | | | | |
| | | | | | | |

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

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



| Name | Impact | Origin | Trend |
|----------------------------|---|---|---|
| 4.13.5 Financial resources |    |  |  |
| |    |   |  |

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

| Name | Impact | Origin | Trend |
|------------------------|---|---|---|
| 4.13.6 Human resources |    |  |  |
| |    |   |  |

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

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

| Name | Impact | Origin | Trend |
|--|---|---|---|
| 4.13.7 Low impact research/monitoring activities |    |   |  |
| | | | |

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

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

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

1. Fossil Hominid Sites of Sterkfontein, Swartkrans, Kromdraai and Environs also known as Cradle of Humankind 2. Taung Skull Fossil Site 3. Makapan Valley

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

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

| | Attribute | Preserved | Compromised | Seriously compromised | Lost |
|----------|--|-----------|-------------|-----------------------|------|
| 4.18.1.1 | Cave systems | ✕ | | | |
| 4.18.1.2 | Biophysical environment | ✕ | | | |
| 4.18.1.3 | Limestone quarries and Dolomitic limestone ridges | | ✕ | | |
| 4.18.1.4 | Historic and mining sites | ✕ | | | |
| 4.18.1.5 | Archaeological, Paleo-anthropological and Palaeontological sites sites | ✕ | | | |

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

Boundaries for both the core and buffer zone are known by the Management Authorities but are not known by the local communities. There is also some uncertainty regarding the buffer zone boundaries and its recognition by local communities.

5.2. Protective Measures

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

The following Acts are now applicable to all properties:

- South African World Heritage Convention Act (Act 49 of 1999);
- National Heritage Resources Act (Act 25 of 1999); National Environmental Management:
- Protected (Areas Act 57 of 2003)

All South African World Heritage Sites are also declared as National Heritage Sites and therefore subject to protection by both national and international legislations.

Swartkrans, Sterkfontein, and Kromdraai

The legal status is not uniform throughout the site. A number of legislative mechanisms control land use, land development, and environment impacts on the area. The present legislation aims at protecting the site and not managing or developing it. However, the present National Monuments Act (No 28, 1969) is shortly to be replaced by a new National Heritage Act, the objective of which is "to present an integrated holistic heritage structure which will coordinate the expressions of the living heritage of all who belong to South Africa"; this statute will take account of management and presentation as well as protection.

The site also comes within the provisions of the National Environmental Management Act (No 107, 1999), which requires the formulation of management plans and their approval by the governmental Committee of Environmental Coordination.

Swartkrans, Sterkfontein, and Kromdraai and the palaeoanthropological material associated with them are protected by the National Monuments Act. Any interventions to be undertaken in the area, particularly mining activities, are subject to the Minerals Act (No 50, 1991) and the Environment Conservation Act (No 73, 1989), which stipulate that environmental impact assessments must be carried out before any major construction work is started. The local provincial authorities are strengthening their control on local planning and development strategies, through Land Development Objectives, as provided for in the Development Facilitation Act (No 67, 1995) which would supplement the already existing national acts on development. These objectives encourage agricultural, recreational, and

tourism-related activities. They also preserve and protect the site from any urban spread and harmful land use. The Draft Gauteng Development Planning Bill incorporates Land Development Objectives in the form of "local development plans" (see below).

In addition to these legislative controls, many landowners in the area implement their own management and conservation plans. The commitment of local landowners to conservation is also demonstrated by the many Natural Heritage Sites registered in the area. In this situation, private landowners apply to the Department of Environment and Tourism for their land to be registered. This status is conditional upon the owner agreeing that no destruction or degrading will be done by him and that he will report any infractions to the relevant authorities.

The Gauteng Draft Development Bill, in the process of being drawn up, aims at providing the Province with a single system of development planning. The nominated area would be specifically dealt with as a World Heritage Site, giving it a defined management strategy, a unique overall protection, and an administrative body responsible for its promotion, protection, and management.

Taung Skull Fossil Site:

In May 2004, i.e. three months after submission of the nomination dossier, the status of "National Heritage Site" was conferred on this ensemble. This means that it is now protected by the provisions of the National Heritage Resources Act (NHRA), and benefits from the constant attention of the South Africa Heritage Resource Agency (SAHRA).

As a result, the buffer zone can immediately be declared as a "protected space" and retain this status for a period of 2 years, leaving time to find sustainable solutions for the preservation of the zone.

Makapan Valley :

This ensemble was proclaimed a National Heritage Site in 2002, and thus benefits from the protections mentioned above for the Taung Skull site.

Important note:

In addition to the protection conferred by the National Heritage Resources Act, there are other legal safeguards relating to land use, development and environmental impact in the zone:

- mining exploitation is governed by the Quarries and Mining Act (no. 50, of 1991);
- the provisions of the Environmental Conservation Act (no. 73, of 1989) stipulate that impact studies are compulsory prior to all construction work;
- the provisions of the National Environment Management Act (no. 107, of 1999) state that management plans must be drawn up and approved by the governmental committee for environmental coordination;
- lastly, the Development Encouragement Act (no. 67, of 1995) provides for the devising, by the provincial and local authorities, of land development objectives (agriculture, tourism, leisure). This enables the local control and protection of sites against all damaging land use and risks relating to urban sprawl.

Source: ICOMOS Evaluation; Periodic Reporting Cycle 2

Comment

The revised Statement is attached in Annexure 1.

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

| |
|---|
| 2013 / Spatial Planning and Land Use Management Act 16 of 2013 / Yes / Yes / No / Yes / No / 1983 / |
| Culture Promotion Act 35 of 1983 / yes / yes / No / Yes / No / 2003 / National Environmental Management: Protected Areas Act 57 of 2003 / |
| Yes / Yes / No / Yes / No / 2004 / National Environmental Management: Biodiversity Act 10 of 2004 / Yes / |
| Yes / No / Yes / No / 1998 / National Water Act, Act 36 of 1998 / Yes / Yes / |
| No / Yes / No / 2008 / National Environmental Management: Waste Act, Act 59 of 2008 / Yes / Yes / No / |
| Yes / No / 2000 / Promotion of Access to Information Act 2 of 2000 / Yes / Yes / No / Yes / |
| No / 1996 / National Archives and Record Service of South Africa Act 43 of 1996 / Yes / Yes / No / Yes / No / |
| 2003 / Limpopo Environmental Management Act 7 of 2003 / Yes / Yes / No / Yes / Yes / 1983 / |

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

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

In general, the Constitution of the Republic of South Africa makes provision for a three-tier system of government (National, Provincial and Local Government) which are distinctive, interdependent and interrelated. All three (3) spheres of Government operates within a framework of co-operative governance in undertaking

defined mandates. South African legislation related to WHSs is very comprehensive and strong. However, there remain challenges around capacity for compliance and enforcement.

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

In the Fossil Hominid Sites of Sterkfontein, Swartkrans, Kromdraai and Environs conflicting requirements from separate spheres of government sometimes makes it difficult for property owners, developers as well as the wider public to fully understand and comprehend the outcomes of the various application processes.

5.3. Management System/Management Plan

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

Public management system at provincial/regional level

If 'Other', please specify




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

| |
|--|
| A statutory Management Plan or zoning plan for the property. |
| Other forms of statutory or non-statutory plans (e.g. strategic plans) |
| Agreed 'Memorandums of Understanding' between different managing institutions, groups or others, including documents agreed with local communities for management |
| Mechanisms to promote equal participation among and within groups, including different levels of authority, local communities, indigenous people, women and men, and other specific groups |
| A framework for inclusive economic development, including equal access and distribution of resources and opportunities arising from the protection of the property |
| An integrated management plan combining World Heritage and any other designations |
| A management plan |
| An annual work plan or business plan |
| An environmental management framework |
| An assessment of biological and cultural diversity and ecosystem services provided by the property |
| A joint approach to management of cultural and natural heritage |

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

A Master Plan for the FHSSSKE was developed for the property when it was inscribed in 1999. This master plan has been systematically implemented since then. A new Draft Integrated Management Plan (IMP), based on the original master plan and updated has been developed and its is envisaged that this will be approved for implementation in 2020 and for the next five years. Draft IMPs exist for the Makapan Valley and Taung Skull Fossil Site as well.

5.3.4 - Management Documents

| Title | Status | Available | Date | Link to source |
|---|----------|-----------|------|---|
| Proposed international environment and conservation management plan for the nominated World Heritage site known as The Fossil Hominid Sites of Sterkfontein, Swartkrans, Kromdraai and Environs | In Force | Available | 1998 |  |
| Makapansgat Valley Cultural Landscape Master Plan | In Force | Available | 2004 |  |
| Conservation Management Plan for the Taung Skull National Heritage Site | In Force | Available | 2004 |  |

Comment

Draft Integrated Management Plans (IMP) exist for all of the serially-listed properties. 2. Cradle of Humankind Environmental Management Framework

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.

The Historic Urban Landscape Recommendation has not been used by both the State Party and Management Authorities.

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:

The FHSSSKE provided the World Heritage Centre with an overview of climate change predictions for the component property in its 2016 State of Conservation report in response to Decision 39 COM 7B.44.

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

Some use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties

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

The Strategy for Reducing Risks from Disasters at World Heritage Properties has not been considered in the draft Integrated Management Plans. The Vulnerable Fossil Site Risk Prevention Strategy for the Fossil Hominid Sites of South Africa (Fossil Hominid Sites of Sterkfontein, Swartkrans, Kromdraai and Environs component was submitted to the World Heritage Centre in 2018 in response to Decision 41 COM 7B.72.

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 and many of its activities are being implemented**

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

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

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 | Researchers | | | | |

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

The site established Advisory Forums/ Park Forum consisting of landowners, local authorities and other stakeholders

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

Draft Integrated Management Plans exist for all three properties.

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) | 1 % | 0 % |
| 6.1.1.7 | Governmental (regional/provincial/state) | 98 % | 98 % |
| 6.1.1.8 | Governmental (local/municipal) | 0 % | 0 % |
| 6.1.1.9 | In-country donations (NGOs, foundations, etc.) | 0 % | 0 % |
| 6.1.1.10 | Individual visitor charges (e.g. entry, toilets, parking, camping fees, etc.) | 0 % | 1 % |
| 6.1.1.11 | Commercial activities (e.g. merchandising and catering, filming permit, concessions, etc.) | 1 % | 1 % |
| 6.1.1.12 | Other | 0 % | 0 % |
| | | Total 100 % | Total 100 % |

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

The Makapan Valley has during the funding cycle of 2017/18 -2019/20 financial years benefited from the Environmental Protection & Infrastructure Programmes (EPIP) which is one of the funding programmes within the Department of Environmental Affairs (DEA), for the implementation of projects using Expanded Public Works Programme (EPWP) methods.

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

The available **budget is inadequate** for basic management needs and presents a serious constraint to the capacity to manage

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

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

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

The Fire Management Programme at the FHSSSKE is implemented through EPIP funding under the Working on Fire (WoF) programme.

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 | 80 % | 90 % |
| 6.1.6.2 | Women | 20 % | 10 % |

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

Human resources are **inadequate** for management needs

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

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

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

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.

The World Heritage Strategy for Capacity Building has not been used. Capacity Building is done on an Ad-hoc basis. The Capacity Building Strategy for the world heritage property will be developed once the National Capacity Building Strategy has been developed.

6.1.12 - Are there site-specific capacity building plans or programmes that develop local expertise and that contribute to the transfer of skills for the conservation and management of the World Heritage property?

A site-based capacity building plan or programme is in place and partially implemented; some technical skills are being transferred to those managing the property locally, **but most technical work is carried out by external staff**

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

In a government context there is always a challenge around having sufficient capacity to complete the work needed. Although there are heritage courses available at tertiary institutions, there isn't a coordinated national training programme for heritage professionals. A Site Managers Forum has been established by the State Party to enhance knowledge sharing and management effectiveness.

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

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

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

There is **considerable research** but it is **not directed towards management needs and/or improving understanding of Outstanding Universal Value**

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

Research **results are shared** with local communities and partners **but there is no active outreach** to national or international agencies

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

There is a need to develop the Fossil Hominid Sites of South Africa's reputation as a premier research area. The Management Authority of these properties are not directly responsible for management of the scientific research of the sites. The process of scientific research is managed by tertiary Institutions. Limited research has been undertaken on the Precambrian microfossils in the FHSSSKE.

8. Education, Information and Awareness Building

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

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

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

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

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

| |
|---------------------------------|
| Local communities |
| Local/municipal authorities |
| Women |
| Youth/children |
| Local Visitors |
| National/international tourists |
| Tourism industry |

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

| | |
|-------------------------------|------|
| Visitor centre | Poor |
| Site museum | Poor |
| Information booths | Poor |
| Guided tours | Fair |
| Trails/routes | Fair |
| Printed information materials | Poor |

| | |
|--|-------------------------|
| Online (website, social media, etc.) | Fair |
| Transportation facilities | Not provided but needed |
| Other | Not needed |
| If 'Other' is selected, please specify | |

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

An Interpretation Centre Complex has been established at the FHSSSKE that offers comprehensive interpretation value for the world heritage property. There is also a comprehensive schools education and sponsorship process in place in the last 10 years. Planning is underway for the development of Interpretation Centres at Taung Skull Fossil Site and Makapan Valley. Taung currently has an established Education Centre. However, more education and awareness-creation is needed.

9. Visitor Management

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

300 000 (Fossil Hominid Sites of Sterkfontein, Swartkrans, Kromdraai and Environs) / 250 000 / 200 000 / 200 000 / 150 000 /

4502 (Taung Skull Fossil Site) / 3181 / 6041 / 2348 / 0 /

500 National visitors and 70 International visitors (Makapan Valley) / 1000 National visitors and 20 International visitors / 1150 National visitors and 50 International visitors / 1000 National visitors and 700 International visitors / 2500 National visitors and 500 International visitors /

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

Entry tickets and registries

Accommodation establishments

Tourism industry

Visitor surveys

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

One day (no overnight stay)

9.4 - Please provide the source of information

The above figures refer to the official visitor centres of Maropeng and Sterkfontein Caves in the FHSSSKE. It does not take into account visitor figures for the broader FHSSSKE component and the private sector in particular. Makapan Valley statistics are monitored by the tourism section at the Limpopo Department of Economic Development; Environment and Tourism (LEDET).

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

100 (Fossil Hominid Sites of Sterkfontein, Swartkrans, Kromdraai and Environs) / 30 / 50 / 30 / 50 / 20 /

0 (Taung Skull Fossil Site) / 0 / 0 / 0 / 0 / 0 /

0 (Makapan Valley) / 0 / 0 / 0 / 0 / 0 /

9.6 - Please provide the source of information

Tickets for the Maropeng and Sterkfontein Caves (the official visitor centers for the FHSSSKE) are sold onsite, online via Webtickets (<https://www.webtickets.co.za/v2/EventCategories.aspx?itemid=1463428154>) and at Pick n Pay Stores. The Taung Fossil Site has a visitor book that keeps a record of visitors to the site.

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

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

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

The draft Integrated Management Plans are the overall guiding strategy documents for the management of the world heritage property. There are no Admission or Recreation fees for visitors to the Taung Skull Fossil Site.

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

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

9.10 - Is the effectiveness of tourism management regularly monitored?

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

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

The 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?

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

9.15 - Are there locally driven sustainable tourism initiatives?

Yes

If 'Yes', please specify

In the private and public sectors

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

Yes

If 'Yes', please specify

Through public meetings

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

The FHSSSKE property is largely in private landownership and requires close cooperation between a myriad of stakeholders in terms of tourism, visitation and public use. The sites are vastly different in terms of the provision and management of visitor facilities. Tourism facilities are being developed on all sites. The FHSSSKE however has well established visitor facilities that are managed through Public Private Partnership with revenue accruing towards the management of the site.

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 **considerable monitoring** but it is not directed towards management needs and/or improving the understanding of Outstanding Universal Value

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

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

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

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

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

A Management Effectiveness Tracking Tool (METT) is used by the world heritage property as provided by the State Party. Reports from the monitoring conducted by the South African Heritage Resources Agency (SAHRA) and the Council for Scientific and Industrial Research (CSIR) are used to improve management of the sites in the FHSSSKE.

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

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

| | |
|---|----------------|
| Other specific groups | Not applicable |
| If you selected 'Other specific groups', please specify | |

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

Implementation is underway

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

The issue of water monitoring and the potential impacts of Acid Mine Drainage (AMD) on the FHSSSKE has received comprehensive attention since 2012 and has been reported in State of Conservation Reports.

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

Bi-annual monitoring is conducted on the fossil sites of FHSSSKE but this can be improved. Annual water monitoring is conducted by the Council for Scientific and Industrial Research (CSIR) and the Department of Water Affairs (DWA). The shortage of staff mentioned in 4.13.6 in the Taung Skull Fossil Site and the site's location within a rural communal area has a serious impact on effective monitoring.

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 | ✗ |
| 5.3 | 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 | Some 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 | |
| 5.3.17 | <ul style="list-style-type: none"> In a limited manner, the management system of the World Heritage property does provide ecosystem services/benefits to the local community (e.g. fresh air, water, food, medicinal plants) 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 | |
| 6.1 | Funding | |
| 6.1.3 | The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage the World Heritage property | |
| 6.1.7 | Human resources are inadequate for 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 | A site-based capacity building plan or programme is in place and partially implemented; some technical skills are being transferred to those managing the property locally, but most technical work is carried out by external staff | |
| 7 | Scientific Studies and Research Projects | |
| 7.2 | There is considerable research in the World Heritage property but it is not directed towards management needs and/or improving understanding of Outstanding Universal Value | |
| 7.3 | Research results are shared with local communities and partners but there is no active outreach to national or international agencies | |
| 8 | Education, Information and Awareness Building | |
| 8.2 | There is a planned education and awareness programme for children and/or youth but it only partly meets the needs | ✗ |
| 9 | Visitor Management | |
| 9.7 | There is a strategy to manage visitors, tourism activity and its derived impacts on the World Heritage property but there are some deficiencies in implementation | ✗ |

| | | |
|-----------|--|---|
| 9.9 | Visitor use of the World Heritage property is managed but improvements could be made | |
| 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 considerable monitoring at the World Heritage property but it is not directed towards management needs and/or improving understanding of Outstanding Universal Value | ✕ |
| 10.2 | Information on the values of the World Heritage property is adequate and key indicators have been defined but monitoring of the status of indicators could be improved | |

Please select 1 more issues.

☒ Please save this question to reflect changes

12. Summary and Conclusions

12.1. Summary - Factors affecting the Property

12.1.1 - Summary - Factors affecting the Property

| | | | | | | | |
|-------------|--|--------------------------|---|---|-------------|---|---|
| 4.7 | Local conditions affecting physical fabric | | | | | | |
| 4.7.5 | Dust | | | | | | |
| 4.8 | Social/Cultural uses of heritage | | | | | | |
| 4.8.5 | Identity, social cohesion, changes in local population and community | Criteria iii and vi | An Integrated Management Plan has been developed that takes into account all of the above matters. A socio-economic inclusive economy study has been finalised and the recommendations being implemented. | This is being done through the broader Management Effectiveness Tracking Tool (METT) process. | Ongoing | Management Authorities, Local Communities | The first phase of the Inclusive Economy Study is being implemented in the FHSSSKE. |
| 4.8.6 | Impacts of tourism/Visitation/Recreation | Criterion (iii) and (iv) | Conduct Tourism Impact Assessment | Monitoring will be done through management of visitor numbers | 2022 - 2025 | Management Authority; Provincial Government Authorities; Local Government Authorities; Provincial Tourism Associations; Tour Operators | No comment |
| 4.10 | Climate change and severe weather events | | | | | | |
| 4.10.3 | Drought | | | | | | |
| 4.10.6 | Temperature change | | | | | | |
| 4.11 | Sudden ecological or geological events | | | | | | |
| 4.11.6 | Fire (wildfire) | Criteria iii and iv | Develop a Fire Management Plan | Monitored through the implementation of the Fire Management Programme | 2021 | Management Authorities; Working on Fire; Local Municipalities; Local communities; Landowners; Department of Environmental Affairs | Fire Management Programme is in place at the FHSSSKE. |
| 4.13 | Management and institutional factors | | | | | | |
| 4.13.1 | Management system/Management plan | Criteria iii and iv | Finalise the development of the Integrated Management Plan | Section 42 of the World Heritage Convention Act, 49 of 1999 provides for annual reporting on the implementation of the Integrated Management Plan | 2020 | Management Authorities; State Party; South African Heritage Resources Agency; Council for Scientific and Industrial Research; Local municipalities; Research Institutions; National Department of Tourism; Provincial Government Departments. | The Integrated Management Plans for the serial sites will be finalised in 2020. |

| | | | | | | | |
|--------|---------------------|---------------------|---|---|-------------|---|---|
| 4.13.3 | Governance | Criteria iii and vi | Ensure co-operative governance and administrative relationships and structures are in place to effectively manage the world heritage property by entering into Memorandum of Understanding with institutions, provincial and local authorities. | Implementation of the Memorandum of Understanding | 2021 - 2026 | Management Authorities; Gauteng Department of Agriculture and Rural Development; South African Heritage Resources Agency; Council for Scientific and Industrial Research; Local municipalities; Research Institutions; National Department of Tourism | Entering into a MOU will improve co-operative governance and management of fossil sites. |
| 4.13.5 | Financial resources | Criteria iii and vi | Identify external funding sources | Funding applications | 2020 - 2026 | Management Authorities; Department of Environmental Affairs; Multilateral Funding Institutions and World Heritage Fund | Funding is critical for the effective management of the world heritage property. |
| 4.13.6 | Human resources | Criteria iii and vi | A Management Authority team exists for the management of the COHWHs component of the serial site. | Ongoing | Ongoing | COHWHs Management Authority | There currently exists a team but additional capacity is required in terms of the overall management of the property. |

Question not completed

12.2. Summary - Management Needs

12.2.1 - Summary - Management Needs

| | | | | | |
|-------|---|--|-------------|---|--|
| 5.1 | Boundaries and Buffer Zones | | | | |
| | | Actions | Timeframe | Lead agency (and others involved) | More info / comment |
| 5.1.4 | The 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 | Finalise the boundary modification process for the FHSSSKE. The Makapan Valley is in the early stages of revising the boundary. | 2020-2021 | Management Authorities; Local communities; Landowners; Local municipalities; State Party | Public meetings are held annually in the FHSSKE to communicate the matter of boundaries, amongst others. There is a consultative process underway that involves all stakeholders through the establishment of a COHWHS Advisory Forum. |
| 5.2 | Protective Measures | | | | |
| 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 | 1. Development of an Integrated Management Plan for the period 2020-2025. 2. Annual reporting to the State Party on the implementation of the Integrated Management Plan | 2020-2025 | Management Authority State Party Provincial Government Authorities Local Government Authorities | The strengthening of cooperative governance relationships between the three tiers of government will contribute positively to the better management of the World Heritage property. |
| 5.3 | Management System/Management Plan | | | | |
| 5.3.7 | No use has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at | Development of a Disaster Risk Management Plan which includes Climate Change. | 2020 - 2022 | Gauteng Department of Economic Development; North-West Department of Economic Development,Environment, Conservation and Tourism; Limpopo Economic Development of Environment and Tourism; Council for Scientific and Industrial Research; SAHRA | There are plans to development an Integrated Disaster Management Strategy for the Fossil Hominid Sites of South Africa and this will take into account the Policy Document on the Impacts of Climate Change. |

| | | | | | |
|--------|--|--|-------------|---|---|
| | the property | | | | |
| 5.3.9 | Some use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property | Development of an Integrated Disaster Risk Prevention Strategy for the Fossil Hominid Sites of South Africa | 2020 -2021 | Gauteng Department of Economic Development; North-West Department of Economic Development,Environment, Conservation and Tourism; Limpopo Economic Development of Environment and Tourism; Council for Scientific and Industrial Research; SAHRA; NDMC | There are plans to development an Integrated Disaster Management Strategy for the Fossil Hominid Sites of South Africa and this will take into account the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property. |
| 6.1 | Funding | | | | |
| 6.1.10 | No use has been made of the World Heritage Strategy for Capacity Development at the World Heritage property | Implement the World Heritage Strategy for Capacity Development to be developed by the State Party. | 2021 - 2026 | State Party; Gauteng Department of Economic Development; North-West Department of Economic Development,Environment, Conservation and Tourism; Limpopo Economic Development of Environment and Tourism | The State Party has committed on developing a strategy for Capacity Development. |
| 8 | Education, Information and Awareness Building | | | | |
| 8.2 | There is a planned education and awareness programme for children and/or youth but it only partly meets the needs | Sponsorship of school visits for disadvantaged schools in the world heritage property area. Development of education programmes linked to the school curriculum. | 2020-2025 | Management Authority Department of Education | It is important that the education and outreach programmes is extended to a national level and not simply provincial. |
| 9 | Visitor Management | | | | |
| 9.7 | There is a strategy to manage visitors, tourism activity and its derived impacts on the World Heritage property but there are some deficiencies in implementation | Implement the Visitor Management Strategy | 2020 -2025 | Gauteng Department of Economic Development; North-West Department of Economic Development,Environment, Conservation and Tourism; Limpopo Economic Development of Environment and Tourism; | It is important that the Visitor Management Strategy is fully implemented. |
| 9.12 | The presentation and interpretation of the Outstanding Universal Value of the property is acceptable but improvements could be made | 1. Develop interpretation material 2. Training of tour guides to diversify the presentation of the world heritage property | 2020 - 2025 | Gauteng Department of Economic Development; North-West Department of Economic Development,Environment, Conservation and Tourism; Limpopo Economic Development of Environment and Tourism; National Department of Tourism; Tourism Associations | Improve the presentation and interpretation material and ensure that it reaches all stakeholders. |
| 10 | Monitoring | | | | |
| 10.1 | There is considerable monitoring at the World Heritage property but it is not directed towards management needs and/or improving understanding of Outstanding Universal Value | 1.Implementation of the Management Effectiveness Tracking Tool (METT); 2.Water Monitoring programme 3. Fossil Sites Monitoring | 2020-2025 | Management Authority; State Party; SAHRA; CSIR | There is considerable monitoring at the FHSSKE through the METT system as well as additional monitoring through a comprehensive water monitoring programme (CSIR) and fossil site monitoring (SAHRA). |

12.3. Conclusions on the State of Conservation of the Property

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

The Authenticity of the World Heritage property **has been preserved**

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

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

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

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

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

Other important cultural and/or natural values 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.

The State of Conservation of the property remains stable. There are challenges but these do not compromise the OUV of the property.

13. Impact of World Heritage Status

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

| | |
|---|----------------|
| Conservation | Positive |
| Research and monitoring | Positive |
| Management effectiveness | Positive |
| Quality of life for local communities and indigenous peoples | No impact |
| Recognition | Positive |
| Education | Positive |
| Infrastructure development | Positive |
| Funding for the property | Positive |
| International cooperation | No impact |
| Political support for conservation | Positive |
| Legal/Policy framework | Positive |
| Advocacy | Positive |
| Institutional coordination | Positive |
| Security | Positive |
| Gender equality | No impact |
| Provision of ecosystem services/ benefits to local communities | No impact |
| Social inclusion and equity, and improvement of opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion, or economic or other status | Positive |
| Fostering inclusive local economic development and enhancing livelihood | Positive |
| Contributing to conflict prevention, including respect for cultural diversity within and around heritage properties | Positive |
| Other | Not applicable |
| If 'Other', please specify | |

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

The inscription of the world heritage property has created a greater awareness about heritage and has made a significant contribution to local economic development.

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

South Africa has developed legislation to implement the Convention. A range of projects are being implemented and measures undertaken to protect the OUV and beneficiation for local communities. There is a need to explore other funding opportunities.

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

Sustainable Development

Synergies

State of Conservation

Management

Governance

15. Assessment of the Periodic Reporting Exercise

15.1. Relevance of Periodic Reporting

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

The *World Heritage Convention*

The concept of Outstanding Universal Value

The property's Outstanding Universal Value

The concept of Integrity and/or Authenticity

The property's Integrity and/or Authenticity

Management effectiveness to maintain the Outstanding Universal Value

Monitoring and reporting

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

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

15.2. Use of Data

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

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

Update of management plans

Fundraising

Awareness raising

Advocacy

Other

An increase in projects for community beneficiation implemented

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

Data from the Cycle of Periodic Reporting is an important barometer for Site Managers and informs how management plans are implemented and reviewed.

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

Staff from other World Heritage properties

15.3.2 - Has a gender balanced contribution and participation been considered in the filling out of this questionnaire?

Gender balance has **not been explicitly** considered or implemented in the process.

15.3.3 - Were you given adequate time (i.e. roughly ten months) to gather necessary information and to fill in this questionnaire?

No

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

10 / 3 / 40 /

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

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

15.4. Format and content of the Periodic Report

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

All required information was accessible.

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

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

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

There may be World Heritage property Site Managers who may not always have connectivity to be able to access the questionnaire online. This may have to be looked at.

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) | Not applicable |
| UNESCO National Commission | No support |
| ICOMOS International | Not applicable |
| IUCN International | Not applicable |
| ICCROM international/regional | Not applicable |
| ICOMOS national/regional | Good |
| 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 | Good |
| State Party Representative (national Focal Point) | Good |
| UNESCO other sectors (e.g. field office) | Not applicable |
| National Commission for UNESCO | No support |
| ICOMOS International | No support |
| ICCROM International/regional | Not applicable |
| ICOMOS national/regional | Good |
| IUCN national/regional | No support |
| IUCN International | No support |

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

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

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

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

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

No item were proposed for update

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

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

none

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