



PROPOSED ESKOM STEELPOORT PUMP STORAGE SCHEME

DRAFT TOURISM ENVIRONMENTAL IMPACT ASSESSMENT

BOHLWEKI ENVIRONMENTAL

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Proposed Pump Storage Scheme, Project Lima

prepared by: SiVEST

Environmental Division

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1 INTRODUCTION

A Tourism Scoping Study was completed at the end of 2006 which was based on a overview of the tourism industry in the area. The report formed part of a broader scoping process that assisted in the identification of a preferred site for the proposed pump storage scheme. Following the scoping study, it was important to gain a more detailed assessment of the impact of the proposed development on the tourism industry in the area.

2 METHODOLOGY

Information was gathered about the tourism industry in the area of the development area using the following methods:

- Detailed site visit
- Ad hoc interviews with various tourism facility operators in the area
- Personal knowledge and application
- Reference to other specialist reports as part of the EIA team.

2.1 Assumptions and Limitations

This report is not aimed at providing exhaustive tourism statistics for the Steelpoort area. Rather, this report is aimed at providing the EIA team with sufficient information to meaningfully inform the proposed development of a pump storage scheme and ancillary facilities through the minimisation of negative environmental impacts, and optimisation of positive environmental impacts on the tourism industry in the area.

The information in this report is limited to brief interviews with a handful of parties in the tourism industry in the area, and also on the limited research that has already been undertaken. We were not able to project quantifiable increases or decreases in the tourism industry as a result of the proposed development.

3 BACKGROUND

3.1 Acts and Policies

Please refer to the Tourism Scoping Study for relevant legislation.

3.2 The site in context

The site is located within the Steelpoort Valley and the western plateau of this area of the valley. The site is essentially surrounded by undisturbed vegetation in the valley and partially disturbed grasslands in the upland/plateau area.

3.3 Tourism in and around Steelpoort

The area of the Steelpoort Valley in which the development is proposed to occur is largely undiscovered as a tourism destination, but the potential is certainly there. The Mpumalanga Tourism Authority has two tourism areas that meet roughly in the Steelpoort Valley. These areas include the Cultural Heartland to the west and the Highlands Meander to the east. This places the proposed development site close to an existing important tourism area namely the Lydenburg trout fishing area which falls within the Highlands Meander area. Linkages to existing tourism areas are important to the future tourism growth in the area. The Kamoka Open Africa Route is also an important tourism route which links well with the Cultural Heartland area. Please refer to the Scoping Study for details of the tourism initiatives.

3.3.1 Tourism Trends and Land Use

The tourism industry in the Roosenekaal area is presently (and previously) dominated by the business tourism sector due to the mining activities in the area. The land use of the area of the Steelpoort Valley in the vicinity of the proposed development area is traditionally agriculture with limited cultivation in the fertile areas adjacent to the Steelpoort River, and cattle ranching in the other areas of the valley.

There are indications that these land uses are changing to tourism related activities including ecotourism, hunting and corporate team building.

3.3.2 Tourism Supply

The tourism facilities in the study area have been assessed in more detail than during the scoping phase. The bulk of the tourism accommodation supply/tourism facilities are located within the Roosenekal area. These guest lodges and bed and breakfasts are important to the tourism in the area. The mining industry alone is filling these facilities throughout the year with business tourists. The future of the tourism supply is likely to change with more emphasis on ecotourism, hunting and corporate functions. These facilities are beginning to, and are likely

to continue to take advantage of the scenic beauty and biodiversity found in this area. The table below indicates the details of some of the major tourism establishments in the area:

| Name of Establishment | Contact Details | Person Spoken to | Type of Facility | Number of Beds | Average Occupancy Rates (Percentage) | Main Guests |
|-----------------------|-----------------|--------------------|--|----------------|--------------------------------------|---|
| Impangele Ikhaya | (013) 273 7142 | Christa Struwig | Bush Camp with leisure activities i.e. horse riding & hiking. | 18 | 60% | Groups of people i.e. local families, companies (for conferences etc) |
| Pers Kombers | (013) 271 0174 | Rykie van Rensburg | Restaurant, B&B & camping facility | 12 | 60% | Local farmers & businessmen |
| La Ronel Guest House | 083 655 3295 | Irene du Preez | Guest House | 12 | 75% | Mine contractors-mainly from the platinum mine. |
| Koringhuis | (013) 273 7100 | Christine Jacobs | Full accommodation. Hall is present that can hold 85 - 100 people. | 19 | 70% (Never empty) | Businessmen |
| Mapoch Hotel | (013) 273 0066 | Anette | Hotel & Camp Site | 24 | 50 - 55% | Mine contractors. |
| Gwala Gwala | (013) 245 1008 | Tollie | Adventure Camp - used for teambuilding & outdoor training. | 120 | 60% | School children & teachers (i.e. on school field trips). |
| De Herbst Rust | 082 373 0318 | Braan Herbst | Private Hunting Lodge | 10 | Low | Local hunters |
| Bon Amanzi | 082 904 3793 | Wimpie Venter | Tourism, Teambuilding Camp/ecotourism | 64 | 75 - 80% | Corporate groups |
| Kwanja | 082 786 3737 | I.N Venter | New Conference and Hunting Facility | 60 | 80% | South African guests. |
| De Ou Skool Gastehuis | (013) 272 0042 | Marli | New Guest House | 8 | Low (at the moment) | Businessmen |

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| | | | | | | |
|--------------------|----------------|--------------|--|-------|---------------------------------------|---|
| Lapeng Guest House | 083 611 6362 | Fritz | Guest House | 24 | 65% | Businessmen |
| Kumula Game Lodge | | Charlene | Game Lodge | 36-38 | Weekdays - 100% Weekends - depends | Mining contractors & businessmen. |
| Megapa Game Lodge | | Elize Cronje | Game Lodge | 27 | 80% | Family groups, team building / conferences etc) |
| Vosrus | (013) 273 7230 | Gerde Jones | Guest House, B&B | 10 | 80% between Feb-Nov | Businessmen |
| Lena's Creek | 083 732 6332 | Karen Lemus | Guest House (Catered & Self Caterinh). | 10 | Varies. Busiest over school holidays. | SA Tourists mainly adults). |

3.4 Tourism Demand

These accommodation facilities have shown that their occupancies appear to reflect the high numbers of business tourists staying in these facilities. Thus the primary demand for tourism facilities in the area is from the mines themselves.

3.4.1 Business Tourism

This form of tourism is currently the most important driver of the tourism industry. The location of the mines in the area have provided impetus to the growth of guest lodges/B&B's in the area. These facilities have high (60-80%) occupancy rates which are generally constant throughout the year. Weekly occupancy rates are typically higher during the week than at weekends. There is a growth (specifically within the Steelpoort Valley) in the corporate team building sector with facilities such as Bon Amanzi providing corporate functions and ecotourism tourism.

3.4.2 Leisure Tourism

Leisure tourism is important to the future of the tourism market in the Steelpoort area. This form of tourism is currently not a major factor, but it is anticipated to be the major future growth area within the Steelpoort Valley/Roosenekal area. This sector of the tourism industry relies on outdoor attractions such as ecotourism, sports etc. In the case of the Roosenekal

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area, the ecotourism and hunting aspects are expected to be the main drivers. Facilities such as Bon Amanzi and Kwanye are the new facilities offering these activities.

3.4.3 Educational Tourism

The educational tourism in the area is expected to be a potential future growth area. This growth is likely to be related to the secondary and tertiary educational institutions which could include the area for future field trips.

The proponent has indicated their willingness to develop a visitors' centre as part of the development. This centre will utilise both the existing visitors to the area, but also has the potential to attract a new type of the visitor to the area i.e secondary and tertiary education tourists. These visitors could primarily visit the area as part of a school or university field trip to both the geological and biodiversity features of the area. The location of this visitors centre is critical to its success. Please refer to the recommendations for our opinion on a suitable location.

4 POTENTIAL IMPACT OF THE PUMP STORAGE SCHEME ON TOURISM

4.1 Impact assessment relating to the Tourism Industry

During the scoping phase, SiVEST identified 3 major impacts that are likely to result from the development of the proposed pump storage scheme and ancillary facilities:

- Sense of place
- Land Use change
- Tourism growth and sustainability

These impacts have been discussed in the Scoping Report, and will not be repeated here. For the purposes of the EIA, the impacts described above have been amalgamated into a holistic impact analysis of the proposed development on the tourism industry. The impact assessment has been analysed according to a variety of aspects. These are discussed below in terms of how they relate to the tourism industry.

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4.2 Sense of Place Impact Relative to Tourism

4.2.1 Construction Phase

| Rating Matrix for Sense of Place | |
|---|------------------|
| Criteria | Rating |
| Extent | 2 |
| Duration | 1 |
| Intensity | <u>3</u> |
| Probability of occurrence | <u>3</u> |
| Total | <u>11</u> |
| This is rated as a high negative Impact before the implementation of mitigation and management measures | |
| Mitigation and Management measures | |
| <ul style="list-style-type: none"> - Location of construction camp away from tourism areas - Containment of construction camps to predetermined areas away from tourism areas | |
| Criteria | Rating |
| Extent | 2 |
| Duration | 1 |
| Intensity | <u>3</u> |
| Probability of occurrence | <u>3</u> |
| Total | <u>9</u> |
| This is rated as a Medium Negative Impact after the implementation of mitigation and management measures | |

Operation Phase

| Rating Matrix for Sense of Place | |
|----------------------------------|--------|
| Criteria | Rating |
| Extent | 2 |
| Duration | 3 |
| Intensity | 1 |

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| | |
|---|---------------|
| Probability of occurrence | 2 |
| Total | 7 |
| This is rated as a Low to medium negative Impact before the implementation of mitigation and management measures | |
| Mitigation and Management measures | |
| <ul style="list-style-type: none"> - Location of construction camp away from tourism areas - Containment of construction camps to predetermined areas away from tourism areas | |
| Criteria | Rating |
| Extent | 1 |
| Duration | 3 |
| Intensity | 1 |
| Probability of occurrence | 1 |
| Total | 6 |
| This is rated as a Low Negative Impact after the implementation of mitigation and management measures | |

4.2.2 Land Use Relative to Tourism

Construction Phase

| Rating Matrix for Land Use | |
|---|-----------------|
| Criteria | Rating |
| Extent | 2 |
| Duration | 1 |
| Intensity | <u>3</u> |
| Probability of occurrence | 3 |
| Total | <u>9</u> |
| This is rated as a medium negative Impact before the implementation of mitigation and management measures | |
| Mitigation and Management measures | |
| <ul style="list-style-type: none"> - Location of construction camp away from tourism areas - Containment of construction camps to predetermined areas away from tourism areas | |

| Criteria | Rating |
|--|-----------------|
| Extent | 1 |
| Duration | 1 |
| Intensity | <u>3</u> |
| Probability of occurrence | 2 |
| Total | <u>7</u> |
| This is rated as a Low Negative Impact after the implementation of mitigation and management measures | |

Operation Phase

| Rating Matrix for Land Use | |
|--|-----------|
| Criteria | Rating |
| Extent | 1 |
| Duration | 3 |
| Intensity | 2 |
| Probability of occurrence | 2 |
| Total | 8 |
| This is rated as a medium negative Impact before the implementation of mitigation and management measures | |
| Mitigation and Management measures | |
| <ul style="list-style-type: none"> - Location of development so as to limit negative impacts on existing tourism operations - Establishment of a tourism visitor centre and a nature reserve around the proposed development | |
| Criteria | Rating |
| Extent | 3 |
| Duration | 3 |
| Intensity | 4 |
| Probability of occurrence | 3 |
| Total | 13 |
| This is rated as a High to Very High Positive Impact after the implementation of mitigation and management measures | |

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4.2.3 Tourism growth and sustainability

Construction Phase

| Rating Matrix for Tourism growth | |
|--|-----------|
| Criteria | Rating |
| Extent | 3 |
| Duration | 1 |
| Intensity | 2 |
| Probability of occurrence | 2 |
| Total | 8 |
| This is rated as a medium positive Impact before the implementation of mitigation and management measures | |
| Mitigation and Management measures | |
| <ul style="list-style-type: none"> - Containment of construction camp and construction vehicles to as small as area as possible - Use of existing tourism facilities by construction management staff - Marketing of tourism facilities identified near the development during the construction phase | |
| Criteria | Rating |
| Extent | 3 |
| Duration | 3 |
| Intensity | 4 |
| Probability of occurrence | 4 |
| Total | 14 |
| This is rated as a very high positive Impact after the implementation of mitigation and management measures | |

Operation Phase

| Rating Matrix for Tourism growth | |
|----------------------------------|--------|
| Criteria | Rating |
| Extent | 3 |
| Duration | 3 |

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| | |
|--|---------------|
| Intensity | 2 |
| Probability of occurrence | 2 |
| Total | 10 |
| This is rated as a low to medium positive Impact before the implementation of mitigation and management measures | |
| Mitigation and Management measures | |
| <ul style="list-style-type: none"> - Marketing of tourism facilities identified near the development during the construction phase - Use of existing tourism establishments for maintenance management staff - Location of development so as to limit negative impacts on existing tourism operations - Establishment of a tourism visitor centre and a nature reserve around the proposed development | |
| Criteria | Rating |
| Extent | 3 |
| Duration | 3 |
| Intensity | 3 |
| Probability of occurrence | 3 |
| Total | 12 |
| This is rated as a very high positive Impact after the implementation of mitigation and management measures | |

5 CONCLUSIONS

The tourism industry in the Steelpoort area is still in its infancy, but is growing. The industry has in the past been dependant on the mining industry for its sustainability. There is little to no tourism in the Mathula/Sehlakwane area, but it does form part of the Cultural Heritage Route. The majority of the tourism facilities are located in the Roosenekal area, and the Steelpoort Valley itself. Despite the beauty and scenic value of the area, this has not been a major driver of tourism growth. However, there is a recent trend towards the establishment of nature based tourism facilities. These facilities include ecotourism, hunting and corporate team building operations.

The proposed development of the Steelpoort Pump Storage Scheme, is expected to have negative impacts relating to loss of sense of place during the construction phase, and to a lesser extent during the operational phase. The construction phase is likely to exert the greatest negative impact on the existing game reserves in the area through the construction camp and the construction traffic. This is mainly due to the large size of the construction camp which will house 2500 workers. However, the overall impact will be a positive one both during construction and operation as a result of the increased business tourism that is expected to generated by the proposed development.

6 RECOMMENDATIONS

The construction camp, the workforce, and the construction traffic will need to be carefully managed throughout the life of the construction phase. This will minimise the impact on these existing, and indeed any new facilities that may be currently planned or developed. Limited access to the Steelpoort Valley is vital, and it is suggested that the shortest possible access route off the R555 is only used. The construction camp should not be a catalyst for social degeneration in the area and all mitigation measures as recommended by the Social Specialist should be strictly enforced.

The establishment of a nature reserve in the vicinity of the proposed development, and associated visitors centre, will be key to the sustainable development of the tourism industry, and will complement the existing and new nature based tourism facilities in the valley. The visitors centre is likely to be more successful if it is located in the Steelpoort Valley, at the lower dam. The visitors centre should have the following key objectives:

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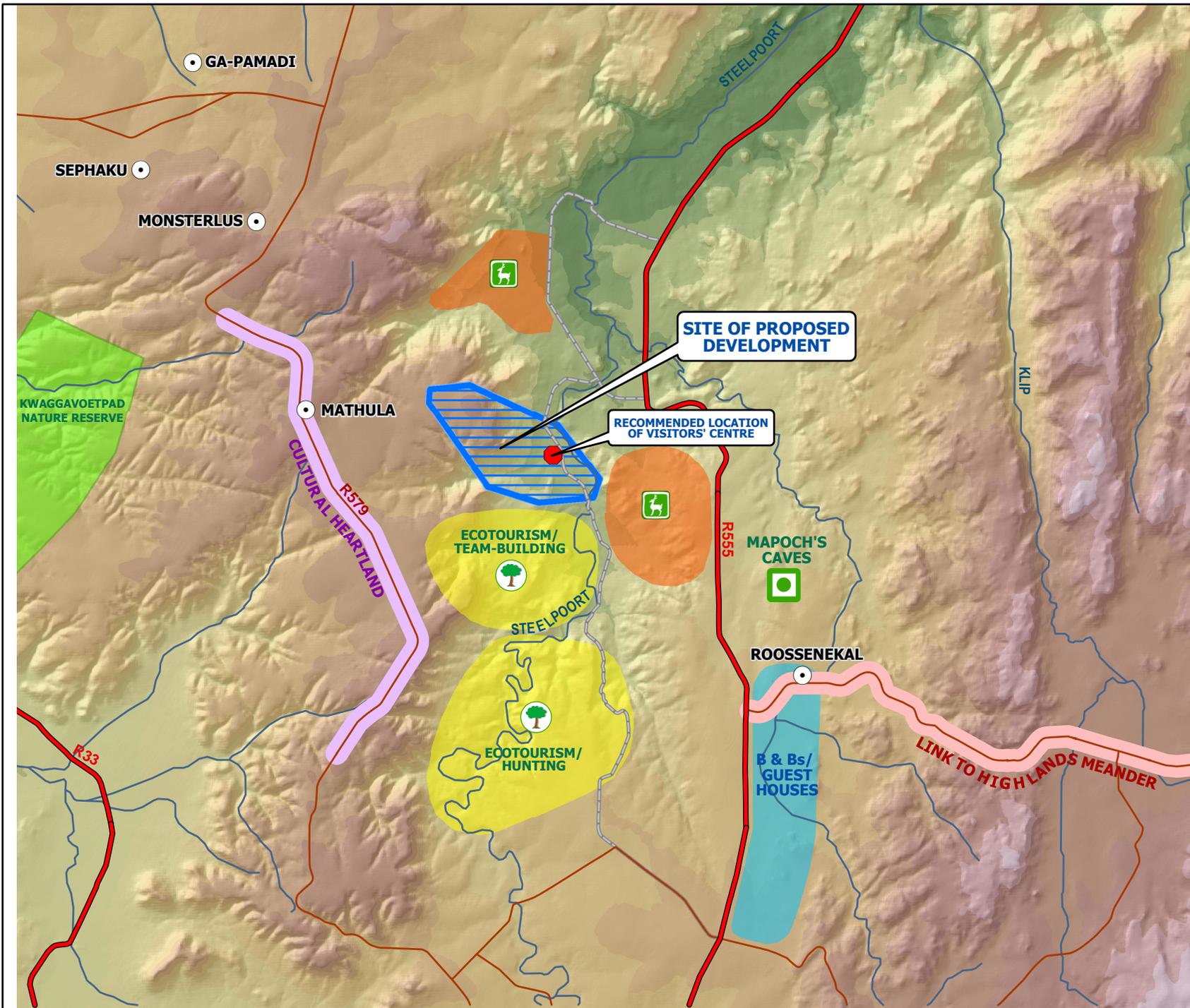
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- To showcase the engineering technology and methodologies of the development
- To showcase the environmental advantages of this type of power generation
- To showcase the biodiversity, geography, and geology of the area
- To showcase the other industries in the area
- To showcase the social and cultural heritage of the area

The visitors centre should be carefully designed and laid out by a professional company. It is advisable that the Mpumalanga Tourism Authority is involved in the development of the concept for the visitor's centre. It is also recommended that the Mpumalanga Parks Board is involved with the development of the nature reserve.



PROPOSED ESKOM STEELPOORT PUMP STORAGE SCHEME

TOURIST ATTRACTIONS/FACILITIES

Legend

-  Site of Proposed Development
-  Protected Areas
-  Main Towns
-  Main Roads
-  Secondary Roads
-  Gravel Road
-  Major Rivers

Tourism Attractions / Facilities

-  Ecotourism
-  Hunting
-  Mapoch's Caves
-  B&Bs/Guest Houses (Mining Clients)
-  Cultural Heartland
-  Link to Highlands Meander

SOURCE:
ENVIRONMENTAL AND TOURISM POTENTIAL
ATLAS (DEAT), 2005

