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Strategic Environmental Assessment of the Tourism Sector for the Greater Waterberg Landscape



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Abbreviations and Acronyms

CBNRM	Community-based natural resources management
CBO	Community-based organisation
CCF	Cheetah Conservation Fund
CEO	Chief Executive Officer
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EQO	Environmental Quality Objective
ESIA	Environmental and Social Impact Assessment
FMD	Foot and mouth disease
GWC	Greater Waterberg Complex
GWL	Greater Waterberg Landscape
GWLC	The Greater Waterberg Landscape Committee
HAN	Hospitality Association of Namibia
IBA	Important Bird Area
LED	Local Economic Development
MET	Ministry of Environment and Tourism
MoA	Ministry of Agriculture
MoH	Ministry of Health
MoU	Memorandum of Understanding
NACSO	Namibian Association of CBNRM Support Organisations
Nam-Place	Namibia Protected Landscape Conservation Areas Initiative
Nampol	Namibian Police
NAPCOD	Namibian Programme to Combat Desertification
NDF	Namibian Defence Force
NDP	National Development Plan
NGO	Non-governmental organisation
NP	National Park
NWC	Northern Water Carrier
NWR	Namibia Wildlife Resorts
PET	Potential Evapo-transpiration
PLCA	Protected Landscape Conservation Area
R&E	Rare and endangered
RC	Regional Council
SEA	Strategic Environmental Assessment
TA	Tribal Authority
UN	United Nations
WAD	Women's Action for Development
WPNP	Waterberg Plateau National Park

EXECUTIVE SUMMARY: STRATEGIC ENVIRONMENTAL ASSESSMENT OF THE TOURISM SECTOR FOR THE GREATER WATERBERG LANDSCAPE

The assessment was commissioned by the Nam-Place Project as one of seven SEA assessments of the tourism sector within Namibian landscapes. The Landscapes concept establishes large scale networks of protected landscapes and in doing so address threats to habitat and species loss on a broader scale thus ensuring greater responsiveness to variability and seasonality issues around climate change.

The strategic environmental assessment of tourism undertook consultations, reviewed the existing literature and legal framework and visited the Greater Waterberg Landscape. These were undertaken between August and November 2013. Two separate consultative meetings were held with members of the Landscape Committee, one to establish issues and concerns and another as feedback and to rank and assign responsibilities to proposed actions.

The Landscape covers 19 200 km² of the semi-arid savanna in the eastern-central area of Namibia. The landscape falls within the Otjozondjupa Region. By far the greatest part (~85 %) of the landscape lies on communal land, comprising the four conservancy areas of Okamatapati, Otjituuu, Ozonahi and African Wild Dog. There are also two commercial conservancies. The Waterberg Plateau Park makes up only 2.1 % of the landscape. The remaining 13 % of the landscape is farmland, mostly freehold.

There are no perennial rivers in the study area. Two ephemeral rivers are the Omatako that runs along the north-west of the communal conservancies, and the Otjozondjou Omuramba, that forms the south-eastern border of the landscape. There is limited groundwater available to the east of the communal areas. While this has left the vegetation of the area less disturbed than in the east, it is a constraint to tourism development, as water would be necessary both to attract and retain wildlife in the area, and to service tourism infrastructure.

The GWC-PLCA comprises almost entirely a mosaic of tree and shrub savannah. Waterberg plateau has one of the highest levels of plant diversity in Namibia, with over 500 species recorded. Bush encroachment is evident throughout the Landscape. Wildlife numbers and species vary across the landscape with high diversity in the Waterberg Plateau Park. The park contains disease free herds of buffalo and rhino. The Waterberg plateau is also one of Namibia's 19 Important Bird Areas. The high biodiversity, especially of birds and mammals, of the park creates an important tourism 'pull-factor'

The population of the GWC-PLCA is around 24,000 people, of which some 1,500 are associated with the commercial farms surrounding the Waterberg plateau, and the rest living in the four communal conservancies. The economy is largely livestock based with the total cattle population estimated at over 92 000, total sheep population at around 30 000, and total goat population at about 43 000.

Although tourism is nationally important, the proportion of people in the PLCA that are involved in, or benefit from, tourism, is very low and limited to the Park and surrounding guest farms. Accommodation at the Park is managed by Namibian Wildlife Resorts (NWR) and offers chalets. Total capacity of the park is 168 overnight visitors. Visitor numbers have seen a slight decline since its peak in 2004/5 (±17,000). Some 13,000 visitors came to the resort in 2011. The resort has lost group travel to nearby private lodges due to quality complaints from clients.

There is a tarred road leading from Otjiwarango through to Okakarara, but all other roads in the PLCA are either well-maintained gravel roads, or sandy tracks. The road eastward from Okakarara is due to be tarred.

A number of policies support the development of the Landscape such as the National Policy on Tourism (2008), the CBNRM Policy of 2013, the Regional Planning and Development Policy 1997, Policy on Tourism and Wildlife Concessions on State Land of 2007, National Policy on Protected Areas' Neighbours and Resident Communities of 2013, Final Draft Rural Development Policy of 2011 and the National Land Policy of 1998. The last two policies relate to land use planning and land redistribution.

The Waterberg Plateau Park has a progressive Draft Plan which allows for co-management, outsourcing and privatisation and integration of the Park's wildlife system into a larger complex.

Resilience findings were that:

- There is potential for political/social instability due to a combination of historical abuse, economic disadvantages and increasing population
- Collapse or decline in the present tourism industry is possible
- There is ongoing loss of wildlife movement linkages within the landscape and between the landscape and adjacent systems.
- Reduction in grazer value of the GWL due to bush encroachment is ongoing.

Cumulative impacts arising out of the issues identified and the resilience analysis are:

- **Habitat fragmentation and loss of linkages:** The landscape has been and is continuing to be fragmented. Veterinary disease control fences (old and new) the Northern Water Carrier, fencing of the WPNP, surrounding private farms and expansion of legal and illegal fencing in the communal areas and settlement along road infrastructure.
- **Degradation of tourism appeal/decreasing comparative tourism attractiveness** compared to other areas in Namibia: Limited waste management, bush encroachment and unsightly developments are serving to reduce the wilderness value and overall appeal of the landscape.
- **Pressure on natural resources:** High and increasing population densities, high livestock numbers, reduced productivity of the range due to bush encroachment, uncontrolled harvesting of natural resources and few economic alternatives are leading to decline in the carrying capacity of the area.
- **Increasing social dissatisfaction:** Failure to establish linkages between WPNP and other private sector tourism developments and the conservancies of the landscape; absence of cultural tourism developments in the communal areas; declining natural resources and increasing population pressure; and historical political tensions.

Three tourism scenarios were outlined. The present situation or "Business as usual" is likely to see a continual decline in tourism and a reduction in its relative importance to the economy of the Landscape. A medium growth scenario outlines growth based on cultural tourism and development of a core wildlife area in the community conservancies. An optimal scenario includes the development of cultural tourism together with rehabilitation and expansion of the wildlife systems to create a world class tourism destination. The assessment of the three scenarios indicate that the optimal scenario has the greatest benefits with few negative impacts.

Based on the literature and the consultations with the Landscape Committee, the vision for the Greater Waterberg Landscape is suggested to be:

"To support biodiversity and wildlife conservation and enhance key ecosystems services across the landscape, through sound collaborative governance and the development of a sustainable ecotourism route centred on a wildlife core area to the east of the landscape

and on heritage tourism built on the historical and cultural attributes of the Waterberg area, with equitable participation and benefits across all stakeholder groups.”

Sustainability and growth in the tourism in the GWC-PLCA will be achieved by pursuing multiple objectives. These are to:

- Support biodiversity and wildlife conservation: There is a need to increase wildlife populations. This should be done by establishing a wildlife core area in Otjituuo and Okamatipati conservancies, and by developing wildlife corridors for sustainable consumptive and non-consumptive tourism. There should be increased access to and distribution of the biodiversity resource and high value species associated with the landscape. (Waterberg National Park will form the ecological core of the greater wildlife complex, and not just the tourism anchor).
- Enhance key ecosystems services: For long-term sustainability, environmental flows and functioning must be strengthened and maintained. Where ecosystem services are degraded, efforts must be made to rehabilitate and improve them, thus maintaining the value of the landscape.
- Promote sound and effective collaborative governance and management: Representative and effective coordinated management at the landscape level must be established in order to create an enabling environment for tourism. By 2014, an effective governance and management authority must be in place. It must have the mandate, authority and support of stakeholders. This will necessitate the alignment of landscape level and conservancy management plans. MET should only enter into MoUs involving multiple landscape members with approval of the Landscape Committee.
- Develop a sustainable ecotourism route: The landscape should be transformed from an isolated national park visit to a diverse heritage experience with multiple tourism activities and an alternative tourism route within Namibia. This should include:
 - Provision of a core wildlife area within the community conservancies;
 - Enhancement of the ecotourism value of the farms adjacent to the WPNP;
 - Identification and development of the tangible and intangible historic and cultural heritage of the area;
 - Improved and diversified use of the WPNP;
 - Establishment of a tourism hub to allow for information exchange and visitor information.
- Ensure equitable participation and benefits: Increased tourism in the area must lead to improved livelihood benefits at the landscape and local levels. These benefits should include employment, training, skills enhancement and capacity building.

Detailed environmentally quality objectives are presented in tables outlining actions, targets, responsibilities and timing.

The biggest challenge is that the Landscape is not, and has not been for decades, a cohesive ecological unit. The WPMP and surrounding guest farms to the west of the Landscape are isolated from the communal area conservancies to the east by fenced private farms, veterinary fencing, the Northern Water Carrier and the rapid increase in fenced areas within the adjacent communal areas. The communal conservancies are also isolated from the Tsumkwe wildlife system to the east by a functional veterinary disease control fence.

Effective management of the area requires a cohesive vision at landscape level which is currently missing. The current tourism operations are limited, heavily focussed on consumptive use and the WPNP is largely underutilised as a tourism product. Non consumptive tourism in the area relies almost entirely on the Waterberg Plateau National Park as its attraction. An industry providing guest accommodation and a mixture of consumptive and non-consumptive tourism has developed in the Park surroundings. The tourism industry in the Waterberg appears stagnant and, because it is not a

key component of the “Namibian visit”, has felt the effects of the world recession as it is readily cut from visitor itineraries.

An important attribute that is found across the Landscape, is the cultural heritage of the Herero. Although it unifies the Landscape, it has proven difficult to develop into a tourism product. Although current expectations of the communal conservancies regarding tourism potential and benefits are unrealistic, it is nevertheless possible for much more to be developed than is currently available.

At the strategic level, for the Landscape to provide biodiversity and ecosystem services and to become a valuable tourism destination, several major changes are needed. The GWL committee needs to have real authority to influence planning and other sector decisions. The WPNP/MET and veterinary services need to become active and supportive partners in the Landscape and the planners (Councils and Land Boards) have to be aware of, and share, the vision for the landscape.

1 INTRODUCTION AND BACKGROUND TO THE ASSIGNMENT

1.1 Introduction

This assignment falls under the Incentives and Market Transformation Component of the Namibia Protected Landscape Conservation Areas Project – NAM-PLACE. It specifically addresses the completion of Strategic environmental assessment for tourism development in 5 PCLAs and recommendations applied (Output 3.1).

This is aimed at supporting the development of new revenue streams and diversification of existing ones from the wildlife and tourism sector. Analysis, strategic and business planning approaches will be applicable to other parts of Namibia and elsewhere.

Tourism development and practices on community and private lands within five PLCAs need to be compatible with best practices in biodiversity management objectives while providing livelihoods to stakeholders, with the aim of long term sustainability and harmonization between landscape conservation and enhanced livelihoods. It is within this context that each landscape, with its own specific situation and setting receives a strategic environmental assessment to guide future tourism development, activities and current practices toward sustainability.

As an industry accounting for almost 10% of national gross domestic product, tourism presents a great opportunity to encourage the participation of more Namibians into the formal economy and the benefits accrued from it. The recently formulated fourth National Development Plan (NDP4) identifies tourism as a priority sector in the creation of employment and recognises the need for (amongst others) diversified product development.

The remarkable growth in tourism has not fully covered all areas of the country and specifically failed to optimize profitable forward and backward linkages with the local economy. In addition, as the industry relies heavily on the utilisation of the country's natural resource base, the environmental integrity needs to be safeguarded with priority.

Enhancing Heritage Resources cc (also referred to as EHR) and Ecosurv Environmental Consultants (Pty) Ltd welcome the opportunity to assist the NAM-PLACE project to conduct a strategic environmental assessment of the tourism sector in the Greater Waterberg Landscape (GWL) and formulate a practical, quality SEA report based on:

- Optimising a sustainable tourism industry measured in terms of improved human quality of life within the principles of environmental carrying capacity and biodiversity conservation;
- Providing guidance to the implementation of the co-management and development plan of the landscape and inform the future decision making processes affecting biodiversity conservation and sustainable tourism development in the landscape.

EHR and Ecosurv understand the need for the development of new revenue streams and diversification of existing ones from the wildlife and tourism sector. Tourism development and practices on community and private lands within PLCA need to be compatible with best practices in biodiversity management objectives while providing livelihoods to stakeholders, with the aim of long term sustainability and harmonization between landscape conservation and enhanced livelihoods with respect to wildlife stocking, infrastructure location, visitor controls among others.

Within this context the Waterberg landscape, with its own specific situation and setting, should receive a strategic environmental assessment to guide future tourism development, activities and current practices toward sustainability.

By focusing on the tourism sector and its (further) development within the landscape, the SEA will ensure that the long-term environmental and social sustainability of tourism development is thoroughly investigated and also evaluates possible (economic) inter-linkages thereby assessing the cumulative effects within the landscape. This combined impact also needs to be captured for the individual Environmental Impact Assessments (EIAs) that have been conducted for various tourism development projects since the combined impact of the latter is not known.

The team will further ensure that the SEA is designed in a way that planners, decision-makers, and stakeholders benefit from it whilst adhering to the regulatory framework of the Environmental Management Act (Act 7 of 2007).

1.2 The Namibian Protected Landscapes Conservation Areas (Nam-Place) Project

Nam-Place is a 5-year initiative housed in the Ministry of Environment and Tourism. Its aim is to expand the area under protected area management by establishing an extensive network of protected landscapes across the country. Through a landscape approach, Nam-Place seeks to ensure that Namibia's biodiversity and ecosystem values are conserved so as to provide sustainable benefit flows at local, national and global levels.

The Nam-Place initiative recognises that landscapes encompass different user groups with different needs and interests, while considering that the ecosystem goods and services across a landscape are interconnected. This means that changes in one part of the landscape can have consequences for the environment and livelihoods in other parts of the landscape.

The Nam-Place approach is based on collaborative management as a means to encourage stewardship and shared benefits, and to avoid the efforts of one individual counter-acting those of another. This management is formalised through a Landscape Management Committee comprised of representatives of stakeholders within the landscape. Activities are structured through the development of a collectively agreed-on Landscape Management Plan, which sets out roles and responsibilities, land use zones, infrastructure development and resources uses. Tourism is one of the potential resource uses that can promote both conservation and income generation to the landscape.

1.3 Status and Establishment of the Greater Waterberg landscape and associated Conservancies

1.3.1 The Landscape

As prescribed in the project document, each Protected Landscape comprises a current State PA at the core, and adjacent Communal Conservancies and Private Reserves/ land areas operating with shared biodiversity management objectives, frameworks and compatible land use. For the Greater Waterberg Protected Landscape, this includes the Waterberg National Park, Waterberg Conservancy, Cheetah Conservation Fund and the communal and commercial conservancies listed under 1.3.2 and 1.3.3. In addition, selected commercial farms are targeted that form a buffer zone around the park; the commitment of these farms to the landscape is currently unclear.

To date, the following achievements towards the creation of the Greater Waterberg Landscape have been met:

- Working collaborative management arrangements among the PA, the commercial Water Conservancy, Cheetah Conservation Fund (CCF) and conservancies established;
- Land use zoning in place for the conservancies;

- Approved constitutions and management plans in place for the conservancies;
- Draft constitution and co-management plan for the GWL formulated;
- Natural resource monitoring systems in place in conservancies.

1.3.2 Registered Conservancies

The Landscape contains four registered communal area conservancies, these are:

African Wild Dog Conservancy	
Registered	September 2005
Approximate population	5,500
Area	3,824 (square kilometres)

Okamatapati Conservancy	
Registered	September 2005
Approximate population	3,000
Area	3,096 (square kilometres)

Otjituuo Conservancy	
Registered	September 2005
Approximate population	9,000
Area	6,133 (square kilometres)

Ozonahi Conservancy	
Registered	September 2005
Approximate population	5,500
Area	3,204 (square kilometres)

1.3.3 Commercial Conservancies

Although not legally constitute, as the conservation legislation does not make provision for that, there are two private land membership organisations that fall within the landscape boundary. The **Waterberg Conservancy** is located south of the PA and the **Omatanga Conservancy** north of the park.

Both commercial conservancies have a constitution and defined membership on some 14 farms each.

2 SEA OBJECTIVES

This section presents the consultants' understanding of the objectives of the tourism SEA within the context of the Namibia Protected Landscape Conservation Areas Initiative (Nam-Place) Project, and highlights key principles of a Landscape Approach that frame and guide landscape-level management.

2.1 The SEA Process within the Context of the Nam-Place Approach

The SEA for the tourism sector is understood to be a section of the third component of the .Nam-Place Project:

- The first component is the establishing of new Protected Landscape Conservation Areas (PLCAs);

- The second component is on collaborative governance for PLCAs (establishment of the constitutions); and
- The third, and last, component is on incentives and market transformation. As a section under this component, the project is expected to undertake a Strategic Environmental Assessments (SEA) of the tourism sector for the landscape. The SEA will form a framework for the Incentives and Market Transformation management activities which could, for example, be contained in a tourism plan for the landscape.

2.2 Objectives of the Tourism SEA

The terms of reference make it clear that Component 3 is aimed at “supporting the development of new revenue streams and diversification of existing ones from the wildlife and tourism sector.” Within the context of the Nam-Place Project, tourism development and practices on community and private lands need to be: “compatible with best practices in biodiversity management objectives while providing livelihoods to stakeholders, with the aim of long term sustainability and harmonization between landscape conservation and enhanced livelihoods”.

Within the Nam-Place context the objective of the SEA is to ensure that the landscape receives a strategic environmental assessment to guide future tourism development, tourism activities and current practices toward sustainability. The main objective of the SEA, as stated in the terms of reference is:

“To conduct a strategic environmental assessment of the tourism sector in the Greater Waterberg Landscape (GWL) and develop a SEA report. The assessment should be based within the premise of achieving and optimizing a sustainable tourism industry measured in terms of improving human quality of life within the principles of environmental carrying capacity and biodiversity conservation. The outcome of the GWL SEA should support the Strategic Management Plan of the landscape and guide its implementation as well as inform the future decision making processes affecting biodiversity conservation and sustainable tourism development in the landscape”.

2.3 Understanding of the Key Principles of the Landscape Approach

Landscape approaches are emerging as important ways to respond to conservation needs in the face of increasing loss of land to what would otherwise be seen as competing land uses. By focusing on broader scales, both longer-term trends in environmental variability, and the vital ecosystem processes underpinning prime habitat and wildlife resources, can be taken into consideration. A recent review (Sayer et al 2013) summarises some of the key principles learned that can guide the process of decision-making for landscape level conservation. These principles have been adopted by the advisory body to the Convention on Biodiversity, and represent the combined opinion of key figures on how best to integrate agricultural and conservation at the landscape level. The principles are presented below, and from each, we derive a question that allows us to cross-check that these principles are included in our assessment.

Principle 1: Continual learning and adaptive management: Processes within landscapes are dynamic. Apart from seasonal variations, there are longer-term changes such as climate, range quality, and tourism demand that affect the biophysical and socio-economic functioning of the landscape. A feedback loop between changes in landscape attributes and management practices must be in place, so that this can inform decision-making. This adaptive management will allow the landscape to absorb non-linear shocks, unforeseen interactions and changes in thresholds.

Q. Have we identified the key landscape attributes and has the link between changes in attributes and management been established?

Principle 2: Common concern entry point: Solutions to problems identified within the landscape must be established through negotiation processes based on mutual trust. Trust emerges when objectives and values are shared. Although it may initially be difficult to have shared overarching goals, addressing simpler short-term objectives can begin the process of building trust.

Q. What are the shared objectives and are there simpler short term objectives that can be implemented to build trust?

Principle 3: Multiple scales: Outcomes at any scale are shaped by processes operating at other scales. Influences include feedback, synergies, flows, interactions, and time lags, as well as external drivers and demands. An awareness of these higher and lower level processes can improve local interventions, inform higher-level policy and governance.

Q. Have the scales and linkages between the various scales and domains been recognised?

Principle 4: Multifunctionality: Landscapes and their components have multiple uses and purposes, each of which is valued in different ways by different stakeholders. Trade-offs exist among the differing landscape uses, and need to be recognised and reconciled.

Q. Have the multiple uses and values of the landscape been identified and have trade-offs been recognised?

Principle 5: Multiple stakeholders: Multiple stakeholders frame and express objectives in different ways. This is over and above the fact that their specific interests may be different. Failure to engage stakeholders in an equitable manner in decision-making processes will lead to suboptimal, and sometimes unethical, outcomes. All stakeholders should be recognized, even though efficient pursuit of negotiated solutions may involve only a subset of stakeholders. Solutions should encompass a fair distribution of benefits and incentives.

Q. Have all stakeholders been identified and equitably involved in the decision making process?

Principle 6: Negotiated and transparent change logic: Trust among stakeholders is a basis for good management and is needed to avoid or resolve conflicts. Transparency is the basis of trust. Transparency is achieved through a mutually understood and negotiated process of change and is helped by good governance. All stakeholders need to understand and accept the general logic, legitimacy, and justification for a course of action, and to be aware of the risks and uncertainties.

Q. Is there transparency and is the logic for different actions legitimate and accepted?

Principle 7: Clarification of rights and responsibilities: Rules on resource access and land use shape social and conservation outcomes and need to be clear as a basis for good management. Clarifying rights and responsibilities is now replacing the command-and-control approach. Facilitation and negotiation are emerging as the core business of resource management agencies.

Q. Are the rights and responsibilities of the various stakeholders clearly defined, and are mechanisms for discussion and negotiation in place?

Principle 8: Participatory and user-friendly monitoring: Information can be derived from multiple sources. To facilitate shared learning, information needs to be widely understood and easily accessible. Systems that integrate different kinds of information need to be developed.

Q. What sources of data exist, and how can monitoring of different data be integrated into landscape level management and decision-making?

Principle 9: Resilience: Unplanned system changes are usually detrimental and undesirable. System-level resilience can be increased through an active recognition of threats and vulnerabilities. Actions need to be promoted that address threats and that allow recovery after perturbation through improving capacity to resist and respond.

Q. Are threats and vulnerabilities identified and understood?

Principle 10: Strengthened stakeholder capacity: People require the ability to participate effectively and to accept various roles and responsibilities. Such participation presupposes certain skills and abilities (social, cultural, financial).

Q. Has the participation of various stakeholders been outlined and agreed, and are mechanisms in place to facilitate skills development?

2.4 Constraints and Limitations

- Data sources and details limited to the literature and a brief consultation process.
- Although the SEA on tourism will align closely with the national requirements, it is not designed to enter the statutory process.

3 METHODOLOGY

3.1 Approach Adopted in the SEA

The strategic environmental assessment focuses on the tourism component of the Nam-Place Project. The content is shaped by the terms of reference and the national framework for SEA. This includes the Environmental Management Act of 2007 and the Procedures and Guidelines for Strategic Environmental Assessment (SEA) and Environmental Management Plan (EMP) of 2008.

3.2 Review of Background Literature

A review of relevant background documentation is conducted to ensure the policy, planning and regulatory environment for SEAs, Tourism, Protected Area Management and socio-economic development is understood. The following documents have been reviewed:

- NAM-PLACE Project document
- NAM-PLACE Project inception report
- Need Assessment Survey results
- Draft Co-management and Development Plan for the GWL
- Draft Briefing Paper: Co-management and development of the Greater Waterberg Complex
- Environmental, Social and Economic Profile for the proposed Greater Waterberg Protected Conservation Area
- Market analysis, review of existing and potential market within five Protected Landscape Conservation Areas
- Waterberg Plateau Park Management and Tourism Development Plan
- Policy and legal review as part of a feasibility assessment for the establishing Protected Landscape Conservation Areas in Namibia
- MET Strategic Plan
- National Tourism Policy of Namibia
- National Development Plan (4)
- Otjozondjupa Regional Local Economic Development Strategy

Chapter 5 discussed the relevant regulatory aspect of the Tourism SEA. A detailed reference list is provided in Chapter 10.

3.3 Planning Framework

The planning framework is determined by assessing existing policies, legislation and plans that together create the socio-political context for the Greater Waterberg Complex Landscape and its administration and management. The Policy and Legal Review (Watson and Odendaal 2009)

conducted as part of the feasibility study behind the establishment of the protected landscape conservation areas forms a starting point in this regard.

The applicable Namibian regulatory and development environment will determine the operational sphere for the consultancy. This includes, among other documents: NDP4, TIPEEG, Procedures and Guidelines for the Strategic Environmental Assessment and Environmental Management Plan and other environmental objectives within the mandate of the Ministry of Environment and Tourism.

3.4 Field Visit

A field mission was conducted in June 2013. The team visited the Greater Waterberg PLCA from 11 to 13 June and conducted a field inventory in the Otjituuo and Ozonahi Conservancy as well as Hamakari Guest Farm to obtain insight into the communal and commercial tourism scope. As part of the field visit to the landscape, the team participated in a landscape meeting in Okakarara (see 3.5).

3.5 Consultations

Consultation with landscape stakeholders took place during the Consultative Meeting in Okakarara on June 12, 2013. Some 17 representatives from the communal conservancies, commercial conservancies, local and regional government and project staff were present. The team had the opportunity to present the assignment and capture the challenges and opportunities raised by participants with respect to tourism in the landscape, subsequently incorporated into this document.

Additional consultation has been conducted with Nam-Place project staff in Windhoek as well as the owners of the Hamakari Guest Farm and the Waterberg Lodge.

A feedback workshop was held 14th October with the Landscape Committee to discuss the environmental quality objectives and to identify the appropriate parties involved.

A list of persons who participated in the stakeholder workshops is provided in Appendix 1.

3.6 Baseline

This study is part of an overall planning process and is not prepared in isolation. Baseline studies for the Landscapes have already been prepared and the description in this study is formulated on those reports.

Development of tourism (growth) scenarios takes cognizance of destination facilities in the greater landscape area, as well as traversing use by visitors that impacts on the area's environment. The existing baseline study is used to report the "business as usual scenario".

Together with the landscape committee, envisaged targets have been formulated for the scenarios described in this document. The scenarios incorporate socio-economic development based on the natural, cultural and man-made tourism potential of the landscape and comparisons with returns from other livelihood activities (e.g. farming). The assessment of the tourism system identifies where occupancy levels and associated profitability, as well as human skills and capacity needs, can be increased for both consumptive and non-consumptive tourism utilization within the landscape.

The inception phase allowed us to assess the existing information from the ToR, project publications and other relevant data as well as quantification of the tourism sector in the landscape based on:

- **Scope:** which deals mainly with size and number of attractions. Does the whole area offer (or hold potential for) tourism, or merely a few sites and what is the variety within the area

to offer different things. Scope is valued at primary, secondary and tertiary scope and linked to possible usage (consumptive & non-consumptive tourism).

- **Access:** looks at both the ability and effort to reach the destination area as well as the different sections and sites within the landscape. Seasonality is taken into account.
- **Location:** related to other attractions (neighbouring national parks, urban hub, etc.) as well as to generating markets but also in relation to potentially compromising structures (urban settlements, operational mines, etc.)
- **Drawing power:** this validates the resource and determines how far, and under what circumstances, people are willing to travel to visit the landscape. Valued as international, national or local with, for example, iconic wildlife species drawing visitors from across the world.

Existing visitor facilities were evaluated on quality and quantity and their role in shaping the area as a tourism destination. We used the state of the tourism system to determine the extent of the landscape and include areas impacted by the landscape and its tourism use/potential.

The team worked closely with partners and relevant key stakeholders in the landscape to address the key areas and considerations specifically identified in the GWL and any others to be presented in the inception report.

3.7 Scenarios

As required in the terms of reference three scenarios were prepared. These were based on literature, resources available and the tourism vision identified by the Landscape Management Committee. The vision was discussed at the consultative meetings. The three scenarios are:

- Business as usual (based on the current situation) and using the existing baseline survey;
- Envisaged (realistic) future scenario based on socio-economic development (using tourism potentials) within the thresholds of the landscape;
- Envisaged optimal future scenario where constraints are overcome to allow for maximum sustainable tourism development.

3.8 Assessment

The assessment was based on three separate sets of information:

- Impacts and concerns presently experienced at the Landscape level. These are drawn from the literature and from the consultation process. These issues and concerns are outlined in Section 7.2;
- Potential cumulative impacts arising from implementation of the preferred scenario at the landscape level (Section 7.3);
- Impacts and limitations that could arise from implementation of the preferred tourism development scenario based on the scenario outlines prepared under this SEA (Section 0).

3.9 Survey Instrument

In order to assess current tourism levels, its contribution to the local economy and key environmental aspects (e.g., energy and waste), a short survey instrument was sent via the Landscape Coordinator to the tour operators in the landscape. The instrument is appended to this report.

4 LANDSCAPE DESCRIPTION AND BASELINE

4.1 Landscape Description

The GWC-PLCA comprises an extensive area (19 200 km²) of the semi-arid savanna in the eastern-central area of Namibia. The landscape falls within the Otjozondjupa Region. By far the greatest part (~85 %) of the landscape lies on communal land, comprising the four conservancy areas of Okamatapati, Otjituuo, Ozonahi and African Wild Dog (Figure 1). The Waterberg Plateau Park makes up only 2.1 % of the landscape. The remaining 13 % of the landscape is farmland, mostly freehold.

Although the Waterberg Plateau Park serves as the main drawing feature for tourism in the area, issues of animal disease control and wildlife poaching are likely to see it maintain a separate management system to that of the rest of the landscape for the foreseeable future. The NamWater Canal that runs through the farms to the southeast of the plateau, as well as some farms with high game fences, create additional physical barriers to the movement of wildlife between the different components of the landscape. Veterinary disease control fences to the north-east and north-west of then present physical barriers limiting animal movement from the landscape to surrounding areas. These physical and politico-economic constraints, when combined with the large proportion of the landscape being comprised of the communal conservancies, suggest that the park will contribute less to the GWC-PLCA's viability, which will primarily be determined by the ecological and social processes in the communal areas.

Strategic Issues: One of the biggest challenges is that this PLCA is both ecologically and socio-economically divided into two separate sub-systems. The district C22/C42 road running north-eastward through Okakara, and the NamWater canal that runs through the freehold farms between the Waterberg plateau and the road, have created physical barriers that reinforce the socio-cultural constraints to wildlife movement across the landscape. To the east, the four large conservancies have had open access, unmanaged grazing across much of the landscape for some time. This has led to loss of wildlife habitat through bush encroachment and competition with livestock for grazing. The conservancies represent land uses that are both culturally and economically different to the freehold farms in the west. For the most part, those living in the conservancies are of Herero origin, whose primary livelihood is subsistence cattle farming. The freehold farms, while perhaps having a conservation interest more closely aligned with the national park, represent a fragmented part of the landscape due to fencing. At the same time, the opportunities for wildlife utilisation through hunting give these farmers an added incentive for wildlife conservation. These two sub-systems currently represent different ecosystem values for the landscape.

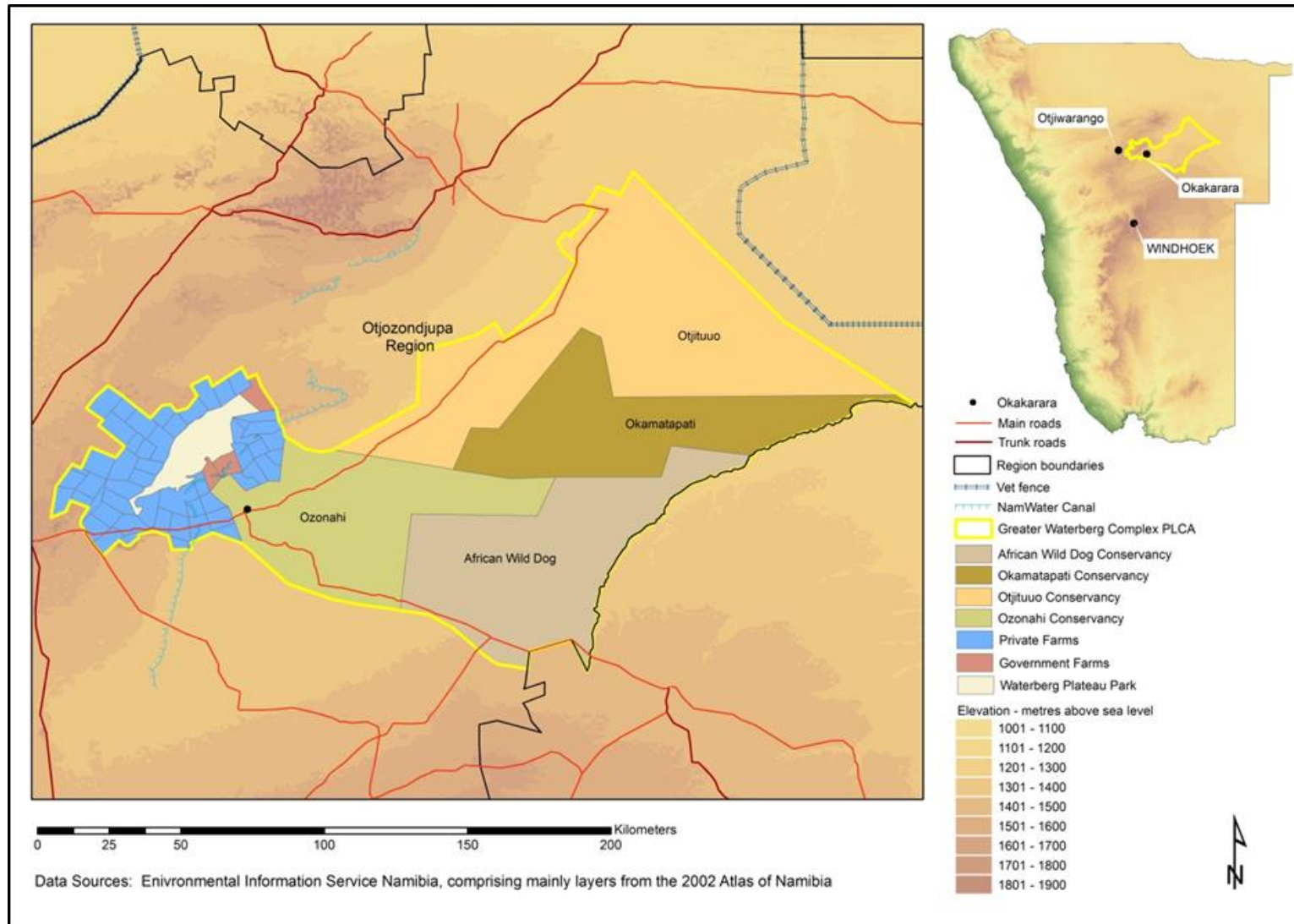


Figure 1: Map showing the location and tenure composition of the Greater Waterberg Complex Protected Landscape Conservation Area

4.2 Biophysical Baseline

Climate: The climate of the landscape can be described as semi-arid. Across Namibia, the gradient of average annual rainfall increases from south-west to north-east. In the GWC-PLCA, average annual rainfall is between 400 and 500 mm/year, with rain falling during the summer months between November and March. Potential evaporation (PET) is much higher, at about 1500-1600 mm/month. PET is driven in large part by the high maximum temperatures: in the hottest months temperatures reach on average 30 to 34 °C. Winters are mild, with some nights of frost, but generally minimum temperatures during the coldest month are around 4 to 6 °C.

Geology: The GWC-PLCA generally lies at about 1400 m about mean sea level. Most of the landscape is flat or gently undulating. To the west of the area, the Waterberg plateau rises abruptly some 150 to 200 m about the surrounding plain. The plateau is associated with fault-lines along the north-western side. The plateau has some cliff-faces to the south-east and south-west, and is generally bounded by a steep to very steep escarpment. The topographical relief provided by the plateau is a contributing factor to its richer biodiversity, with hillshade, and rapid elevation change providing more niches than the rest of the PLCA. In addition, the escarpment of the plateau for the most part creates a natural barrier to large mammal movement.



Figure 2: Looking west toward the southern part of the Waterberg plateau, surrounded by *Acacia*-dominated wood- and shrub-land savanna.

By far the most dominant geologic group in the landscape are the sands and calcrete that cover almost all the area of the communal conservancies, and much of the farms to the south-east of the Waterberg plateau. The Waterberg itself, along with other small outcrops to the east, comprises sandstones and conglomerates belonging to the Waterberg Basin group, uplifted by faulting. Farms to the west of the plateau lie on schists and dolomites of the Swakop Group, with some farms in the southwest on Damara granites.

Soils: The landscape is dominated by ferralitic arenosols – sandy soils with low water retention capabilities. Along the river channels that traverse the area, more fertile fluvisols can be found (Figure 3). The Waterberg plateau itself, although also mostly covered in arenosols, is fringed with rocky outcrops. Just east of the town of Okakarara, between the two main branches of the Omatako river, is an area of eutric cambisols.

Hydrology: There are no perennial rivers in the study area. Two ephemeral rivers are associated with the landscape – the Omatako that runs along the north-west of the communal conservancies, and the Otjozondjou Omuramba, that forms the south-eastern border of the landscape. Fossil river beds in the landscape occasionally hold pools of water during the summer months.

The groundwater potential of GWC-PLCA varies from very low in the eastern parts of the communal conservancies, to moderate in the west. The farms and Waterberg Plateau Park have isolated areas of moderate potential in an area that is otherwise generally low. Nevertheless, more than 650

groundwater boreholes are known to have been drilled in the area, the status of most of which has not been verified, but highest yielding boreholes tend to be associated with stretches of the Omatako river (Figure 3).

Vegetation: The GWC-PLCA comprises almost entirely a mosaic of tree and shrub savanna. This broad biome categorisation can be broken down into three main vegetation types. “Northern Kalahari”, whose tree species comprise mainly *Baikiaea plurijuga*, *Burkea africana*, and *Pterocarpus angolensis*, is found to the north-east. This vegetation association covers most of the Otjituuo and Okamatapati conservancies as well as the plateau and the farms to the north-east of the plateau. “Central Kalahari” is associated with slightly drier conditions, and its woody species are dominated by acacias, particularly *Acacia erioloba* and *A. mellifera*, as well as by *Tarchonanthus camporatus* and *Grewia flava*. This vegetation type is found over much of Ozonahi, and the western half of African Wild Dog, conservancies. The farms to the south-west, south and south-east of the plateau are covered by the third vegetation type, “Thornbush shrubland”. This type is also characterised by acacias, notably *Acacia mellifera*, *A. reficiens* and *A. fleckii*.

In terms of plant diversity, the Waterberg plateau has one of the highest levels of plant diversity in Namibia, with over 500 species recorded. The rest of the landscape is somewhat lower, but still characterised as having high-medium plant diversity with between 300 and 400 species.

Wildlife: Across much of the landscape large wildlife species have been displaced either through competition with livestock, or through habitat loss due to bush encroachment and fencing. The most common wildlife species of potential tourism interest found throughout the landscape are: kudu, jackal, and porcupine. However, numbers of nearly all wildlife species are currently very low in the communal conservancies. Healthy numbers of wild dog are found in the south-west of the landscape in the Wild Dog Conservancy. Mammal diversity for the Waterberg plateau and surrounding farms ranges from 75 to 90 species, while in the communal conservancies it is somewhat lower at between 60 and 75 species. The higher numbers of species in the commercial and government areas can in part be attributed to introductions for conservation and trophy hunting. Kirk’s dik-dik is a near-endemic antelope associated with the plateau (and therefore park), but elsewhere no other endemic mammals are known to occur. Within the park, a population of disease-free buffalo is maintained, and while this of localised conservation and tourism interest, current policy to limit disease transmission to livestock means that buffalo are unlikely to be allowed to be introduced anywhere else in the rest of the landscape, a fact that undermines the landscape conservation approach. White and black rhino populations are also maintained within the park, but the rise of poaching of these species is likely to limit its reintroduction to the surrounding farms or communal areas. To the north-west of the plateau is an important eland breeding area; this is however threatened by high private game fences on some farms outside the PLCA that have cut the eland migration northward to the broader Grootfontein area. Elephant, cheetah and wild dog also occur, with the latter having a healthy population in the Wild Dog Conservancy as well. Cheetah are also well represented in the PLCA, primarily on the commercial farms, due to the ongoing conservation efforts of CCF.

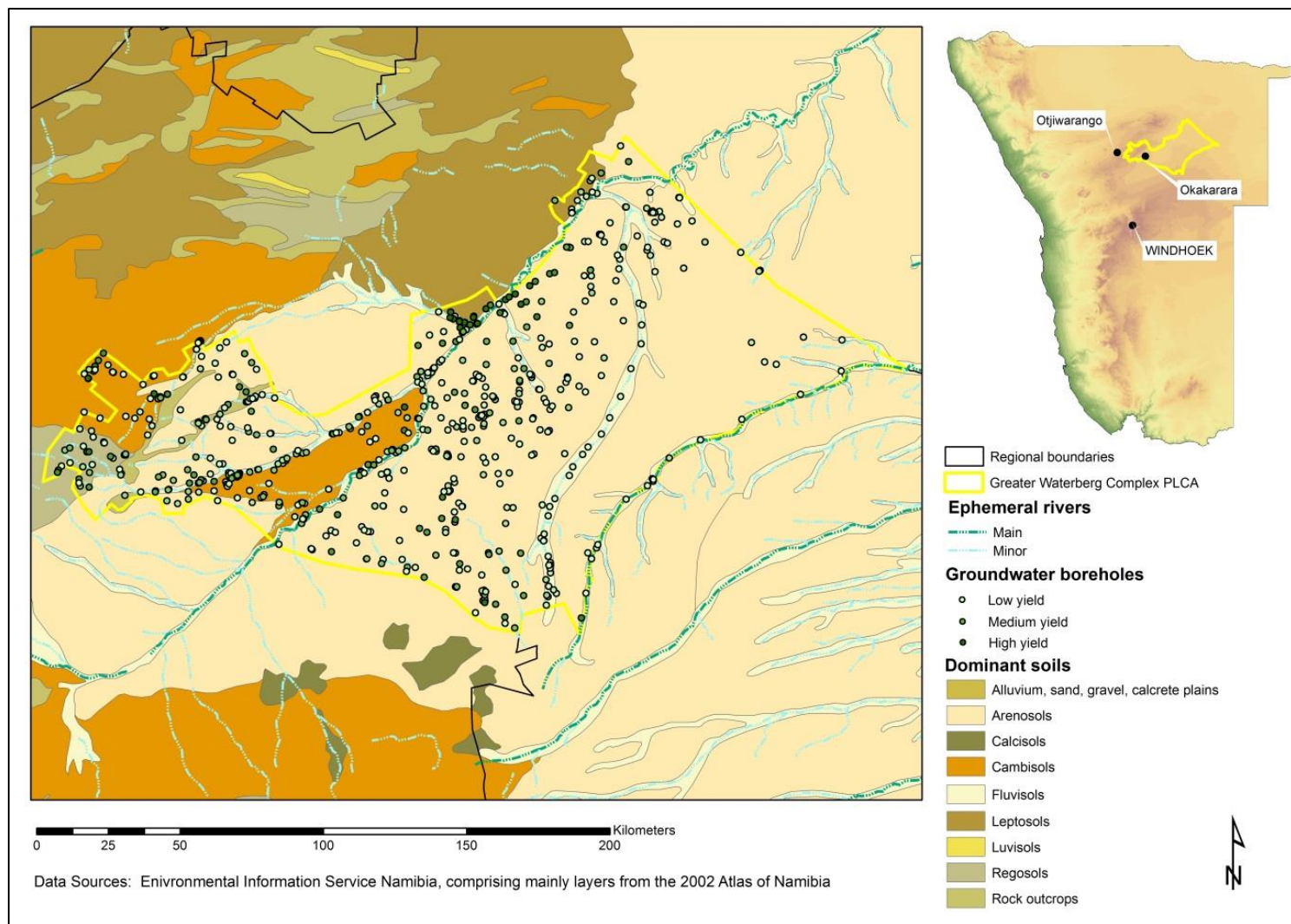


Figure 3: Map showing the dominant soils and hydrology of the GWC-PLCA

The Waterberg plateau is also one of Namibia's 19 Important Bird Areas, which overlaps with the park. The presence of a small (and shrinking) population of Cape vulture means that the Waterberg is host to a vulnerable species that is both globally threatened. In addition, there are several biome-restricted bird species that are well represented there, including Hartlaub's francolin, Burchell's Sandgrouse, Rüppell's parrot, Monteiro's and Bradfields' hornbills, barred wren-warbler, rockrunner, bare-cheeked babbler, Burchell's glossy starling, pale-winged starling, Kalahari scrub-robin and white-breasted sunbird. It must be noted, however, that this biome is extensive, and these species are therefore of 'least concern'. Parts of the plateau and the farms to the north-west have some of Namibia's highest diversity of bird species, at over 230 recorded. Numbers of species fall off steadily toward the east across the conservancies, presumably related to a combination of dryness and habitat homogeneity. However, even the most eastern part of the landscape has between 80 and 110 species.

Strategic Issues: The high biodiversity, especially of birds and mammals, of the park creates an important tourism 'pull-factor', but these attractions are spatially limited and not readily accessible to other stakeholders in the landscape.

The semi-arid environment and limited soil fertility dictate a low carrying capacity – whether for wildlife or livestock. This means that biophysical conditions, and rural subsistence livelihoods, are marginal. Drought exacerbates the limitations of the resource base.

There is limited groundwater available to the east of the communal areas. While this has left the vegetation of the area less disturbed than in the east, it is a constraint to tourism development, as water would be necessary both to attract and retain wildlife in the area, and to service tourism infrastructure.

Historically, however, there have been high livestock stocking rates both on the private farms and in the communal areas, leading to range degradation and even further reduction in the area's carrying capacity. While participation in tourism and other incentives have led to some reversal of this trend on the private farms, unregulated, open access to grazing and wildlife hunting have left the communal areas depleted in wildlife. Range degradation has knock-on effects into the socio-economic parts of the system, as will be discussed below.

4.3 Social Baseline

Demographic characteristics: Based on NASCO 2009 estimates, the population of the GWC-PLCA is around 24,000 people, of which some 1,500 are associated with the commercial farms surrounding the Waterberg plateau, and the rest living in the four communal conservancies. Although on average population densities are very low at less than 2 people / km², it is important to note that people are not distributed evenly across the landscape. Outside of the town of Okakarara, most homesteads are associated with the main road from Okakarara northwards, and with the Omatako river system (Figure 4). The far eastern part of the PLCA is virtually uninhabited, and much of the landscape has less than one person / km².

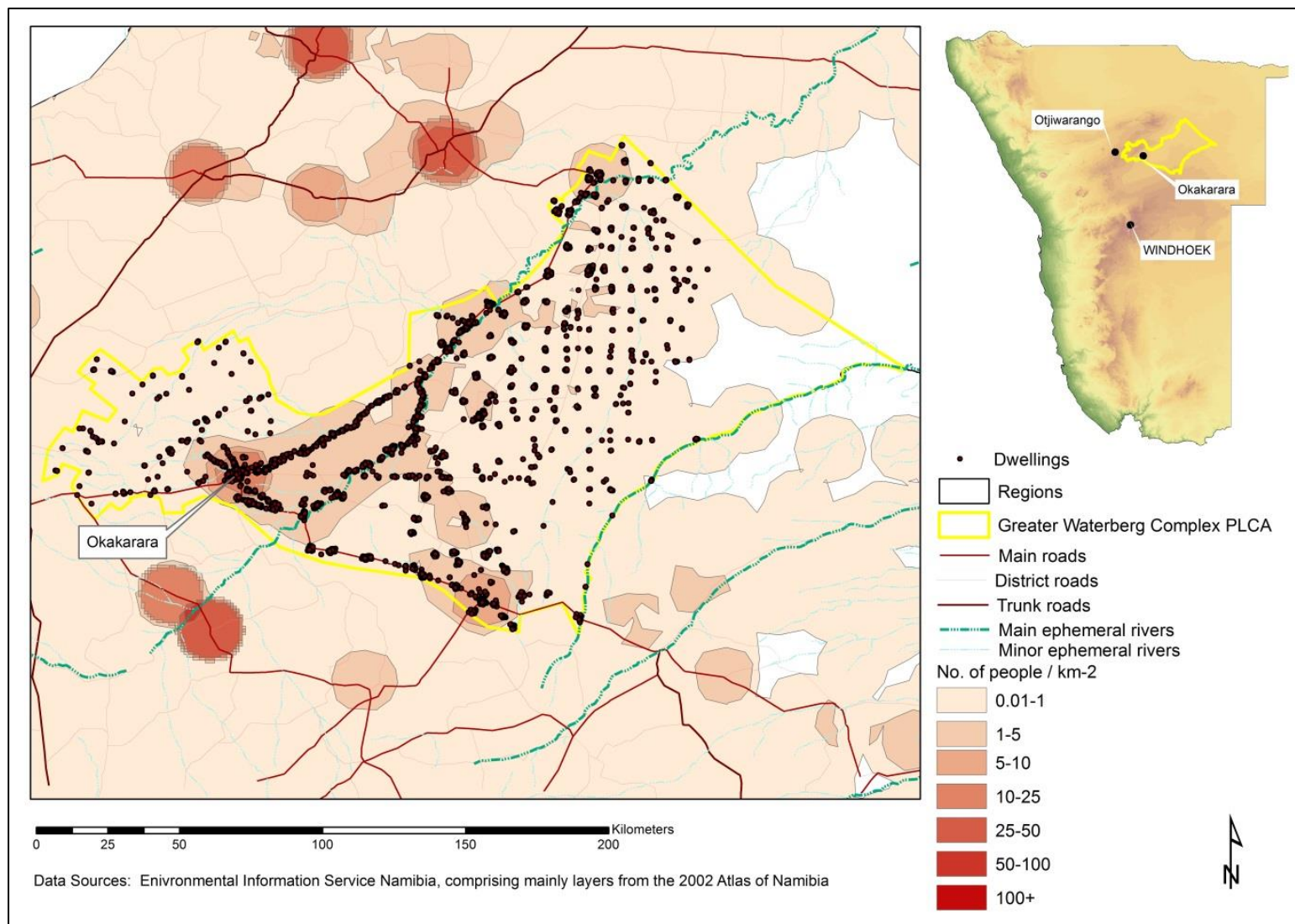


Figure 4: Distribution of people across the GWC-PLCA

In the conservancies, men are likely to outnumber women, following the Otjozondjupa regional composition of 52 % men and 48 % women (2011 census). The proportion of female-headed households at the regional level is 37 %, suggesting out-migration of men in search of work. Female-headed households tend to be worse off because they are able to access fewer resources, so the increase in this figure since 2001 is cause for concern. Literacy rates for the region are relatively high for a rural area, at 75 % for those aged 15 and above (2001 figures). However, completion rates for even primary school are low.

Most of the people living in the conservancies are of Herero ethnic origin, pursuing livestock farming as their major livelihood. The Herero have a very strong and rich cultural identity. However, the historical conflict in the area, that led to many being killed, and a mass exodus as refugees, has left the Herero feeling marginalised and dispossessed of some of their land.

Economy: The importance of livestock to the conservancy communities is evident in the fact that there are an estimated 4 head of cattle for every person in the area, with the total cattle population estimated at over 92 000, total sheep population at around 30 000, and total goat population at about 43 000. Around settlements, livestock carrying capacities are regularly exceeded. It is assumed that nearly all the rural population are engaged in livestock farming, as well as some natural resources harvesting, as no other income opportunities exist outside of the settlements; the combination of low rainfall, sandy soils and cultural preferences limiting the potential for crop production. However, due to poor range management and grazing practices, livestock quality is low, negatively impacting household incomes.

Reliance on natural resources appears to be high, and fuelwood in particular seems to be harvested indiscriminately with likely negative impacts on the environment.

Although tourism in the GWC may contribute strongly to national income from tourism, the proportion of people in the PLCA that are involved in, or benefit from, tourism, is very low. Currently only those working in the Waterberg Plateau Park, or on the few farms that have tourism activities, benefit directly. Some support industries (supplies and services) in the town of Okakarara will likely receive some indirect benefits as tour operators use their services. Currently there are 6 private guest-houses or lodges on farms surrounding the Waterberg Plateau Park. At the edge of the park there is also the Namibia Wildlife Resorts (NWR) parastatal-run camp. Currently the main tourism transit route runs to the west of the Waterberg, away from the PLCA, so passing traffic and its economic contributions is very limited. According to the 2012 regional LED strategy, potential attractions around Okakarara include two scenic pans and a dam; historical sites and monuments, and traditional ceremonies.

Other sources of income in the region are primarily related to employment in the government sector. At the consultation meeting with the GWC-PLCA management committee, reference was made to a proposed smelter that would possibly be built in Okakarara to process ore. While this might bring some income to the area, such developments must be weighed against the loss of potential income that would be related to a reduction in tourist potential caused by visual and olfactory pollution.

Infrastructure: There is a tarred road leading from Otjiwarango through to Okakarara,

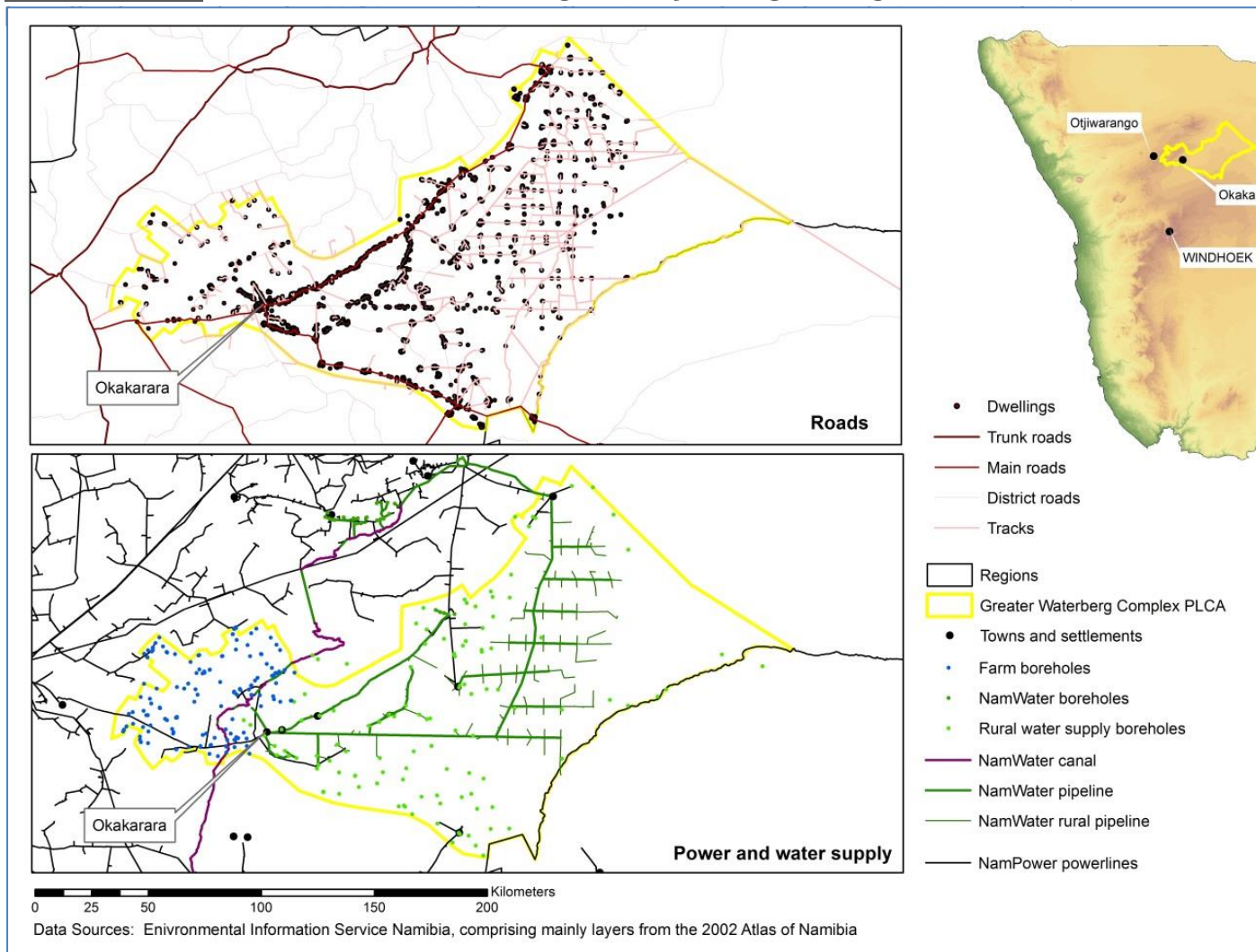


Figure 5), or sandy tracks. The road eastward from Okakarara is due to be tarred. The improved access to the east of the PLCA that this development will bring has strong implications – both positive and negative – for conservation and tourism development in the landscape. Although it will make the proposed wildlife core area easier for tourists to reach, it is also likely to expand settlement and livestock farming further into the less-utilised west, reducing habitat for wildlife.

Rural water supplies are provided along most of these tracks, and in the less populated areas, water is supplied by borehole. Most of the farms have private boreholes. Although most of the commercial farms have electricity, power supply in the conservancies is limited to those settlements in the north-west. There is one hospital in the GWC-PLCA, in Okakarara. Five clinics service the rest of the area. There are seven schools, two of which are in Okakarara.

Strategic Issues: The history of conflict in the area is still a strong influence on relationships between the different stakeholders in the area, and cultural tension must be addressed for the different parties to truly collaborate at the landscape level.

The area has high levels of poverty, and a small range of economic activities and opportunities. This means that the skills-base in the area is also narrow. The open, unmanaged access on the communal lands has led to range degradation primarily through bush encroachment, which feeds back to reduced returns to rural households. Related to the limited management of the communal

lands are cases of individuals fencing off areas without permission, which further reduces the resource base, creates additional barriers to animal movement, and leads to social conflict.

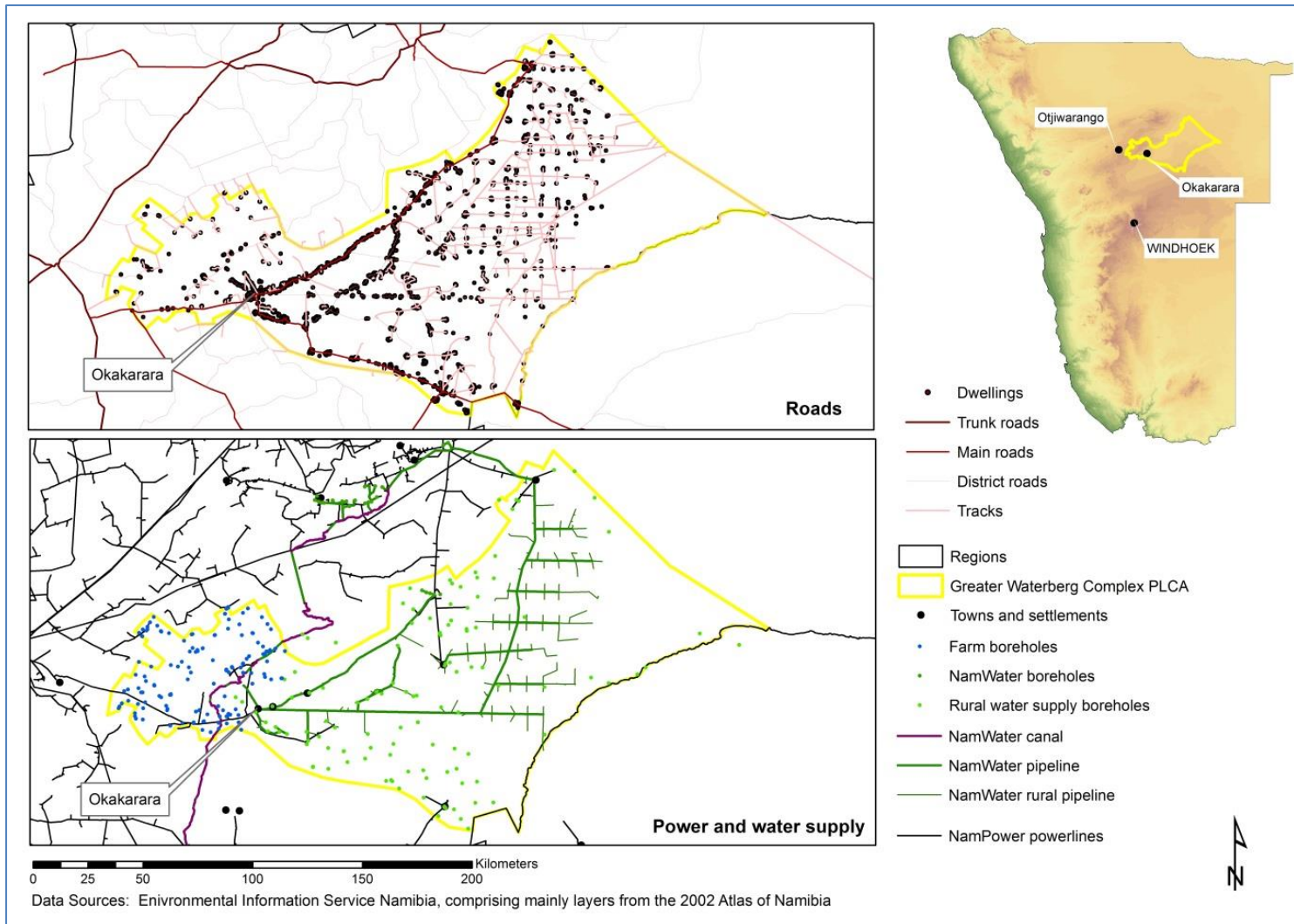


Figure 5: Maps showing road transport network (above) and water and power supply (below) in the GWC-PLCA.

4.4 Tourism Baseline

The current tourism system in the landscape is limited to the commercial conservancies and the Waterberg Plateau Park. The landscape is divided into 4 distinct tourism zones.

Zone 1. The Waterberg Plateau Park - Proclaimed in 1972 with a gazetted size of 405 km² with its most important features include the 50km long porous sandstone mountain massif with guided and unguided hiking trails as well as a breeding area for species such as Black rhino, Roan and Sable and the last known breeding colony of Cape Vultures in Namibia. Furthermore, it is an important historical site of fighting between German colonial troops and Herero.

Accommodation at Waterberg is managed by Namibian Wildlife Resorts (NWR) and offers chalets ranging in size from sleeping 2 – 4. The larger units offer self-catering facilities. All are located about half-way up the typical cliff-face. A camp site is located at the base of the plateau mountain near the reception, swimming-pool restaurants and shops. Total capacity is **168 overnight visitors**. A total of 9 unguided walking trails are located around the Waterberg Camp. The main activities on top of the plateau comprise of a game drive, a 42km unguided hiking trail, a 4-day/3-nights guided wilderness trail with shelter-type camp site including ablutions en-route. A vulture restaurant with a waterhole and hide is located on top of the plateau. Access is restricted during the hunting season to prevent possible conflict between consumptive tourism and non-consumptive tourism.

Visitor numbers have seen a slight decline since its peak in 2004/5 ($\pm 17,000$). Some 13,000 visitors came to the resort in 2011. The resort has lost group travel to nearby private lodges due to quality complaints from clients. Baboons form a concern and are perceived as a serious nuisance in their pursuit of food from guest units.

Scope: The park and its NWR resort cater for individual and group travel, catered and self-catered both overnight and day-visitors. A limited number of hiking trails is offered and only guided drives onto the plateau, where exotic wildlife occurs, are allowed. A hunting concession exists on top of the plateau. An environmental centre exists in the park and the old cemetery at the entrance is a proclaimed national monument on the early liberation struggle.

Access The park is open all year round; restaurant has fixed operating hours. Access with own vehicle is only allowed up to the accommodation units. Access to the plateau is allowed on foot during day-light hours. Overnight on the plateau is only permitted as part of a registered hiking trail. Game drives are offered twice a day with NWR vehicles (morning & afternoon).

Access road (D2512) can be difficult to negotiate after heavy rain.

Location: The park and its facilities are located off the D2512 district road.

Drawing Power: Rare & exotic species, scenic views, located between primary attractions in Namibia (detour), active tourism (hiking).

Zone 2. The Southern Commercial Zone comprises commercial guest accommodation as an alternative for the park facilities and hunting farms benefiting from having scenic views over the mountain. The Waterberg Wilderness Lodge provides the largest number of rooms (20) and captures group travel. The smaller Waterberg Guest farm (7 rooms), Hamakari Guest Farm (7 rooms) and WABI Lodge (5 rooms) are open to both photographic tourists and hunters. The area is directly associated with the park as the same access roads are shared. Occupancy figures (stated) are around 50% and a two nights stay is average. The vast majority of visitors do enter the park on a day-excursion. Activities offered are establishment based; excursion to the park are primarily conducted by guest themselves. A limited number (2 groups/month) visit Okakarara for a cultural experience. Hamakari Guest Farm was the site of one of the main historic battles and grave sites are found on the farm.

Scope: Area is primarily a hunting destination and is known for excellent (farm) hunts. The history of the battles between Herero and German colonial forces forms part of the 'area' appeal. Groups are limited in size due to capacity limitation at the establishments but both groups and self-drive frequent the area.

Access The C47 tar road provides access from the main B1 highway. Access road (D2512) can be difficult to negotiate after heavy rain which affects the Waterberg Wilderness and WABO lodge.

Location: The farms are located of the C47 and D2512 district road.

Drawing Power: Hunting trophies, located close the Waterberg Park, history rare & exotic species, farm life, scenic views, located between primary attractions in Namibia (detour).

Zone 3. The Northern Commercial Zone differs from the southern zone due to its restricted link to the park. The Waterberg Plateau Park has basically turned its back towards this area. No access exists and the typical cliff-front is less dramatic on the northern side which reduces the scenic appeal. Wildlife numbers are good and hunting forms the main activity. Access requires a longer detour (on gravel) roads from the main thoroughfare. The largest establishment is the Frans Indongo Lodge with 12 units providing a self-contained African wildlife experience. The Oase Guest Farm and Gross Warlencourt form the other existing establishments focussing primarily on hunting. Occupancy figures are not provided. The Cheetah Conservation Fund (CCF) has its operation in this area as well and attracts school groups, day-visitors and researchers, accessed from Otjiwarongo.

Scope: Area is primarily a hunting destination and is known for excellent (farm) hunts. Groups are limited in size due to capacity limitation at the establishments but both groups and self-drive frequent the area. Area has a limited scenic link to the park.

Access Access requires extensive farm road drives which lengthens travel time. No access to the park exists on the northern side.

Location: North of the Waterberg Park along various farm roads.

Drawing Power: Hunting trophies, farm life, scenic views, located between primary attractions in Namibia (long-detour).

4. The communal conservancies form a separate section as no tourism occurs in these areas expect for rare (occasional) transit traffic from Gobabis to Grootfontein. These numbers are limited and very seasonal, peaking around school holidays. No attractions have been developed although there is an interesting cultural/ historical resource base as its forms the heartland of the Herero nation.

Strategic Issues:

The main strategic issue from the current tourism usage of the area is its **limited number of products** in relation to the vast size of the landscape. These products are further not distributed equally over the landscape and cluster along (and close to) the Waterberg Plateau Park. As protected areas still have an excellent pull-factor, the area will remain linked to the appeal and usage of the park which is limited and *'of inappropriate quality'* (HAN CEO statement June 2013).

The current products are facilities offered are all very similar with hunting the common denominator on the private farms where even game species are fairly similar. The communal conservancies lack wildlife numbers as well as natural appeal as the landscape is monotonous, flat and highly encroached with bush obstructing views.

The overall landscape forms a secondary attraction and with the current economic down-turn, these types of attractions are first cut from an itinerary if savings need to be made.

POTENTIAL TOURISM ASSETS IN THE COMMUNAL CONSERVANCIES

[1] OKAKARARA TOWN

Old church at Hospital grounds
WAD – sales outlet for handicrafts and dresses
Okakarara Primary School
Middelbult Dam (seasonal) – sundowners and bird life
Cattle auction – Thursday and end of month
Kapana sales
Street life
Steps 4 Children Project

[2] ERAKORAMBI – historical site and graves on the Omaramba – Omatako. Events after “Hamakari” and water point

[3] OKAHITWA – nice houses, traditionally constructed and active holy fire practice. Set slightly back from road which adds to appeal

[4] OVITATU – Large cattle post with always cattle around in numbers. “Funny Tree” at bent in road (Shepard tree growing in Acacia tree) and remnants of EU funded chicken project. Nice store with friendly family

[5] OKONDJATU –old structures of the German colonial time as part of the Okamatangara farm. San community very visible in the village. Old water point used for boxing matches!!

5 POLICIES, PLANS AND PROGRAMMES

This section is guided by the comprehensive assessment carried out by Watson & Odendaal in 2009 as part of the preparatory work for the introduction of Protected Area Landscapes. It also includes other documents identified by stakeholders as relevant to the landscape. Here, each legal document is evaluated in terms of its relevance to the specific conditions of the GWC landscape.

5.1 National Policies

5.1.1 National Land Policy of 1998

Key Principles: The National Land Policy is founded on several fundamental principles. Of particular importance to landscape management are those relating to: a mixed economy, sustainable use of land and natural resources, and 'land' as a renewable natural resource. The policy is divided into two sections addressing urban land and rural land.

Relevance to GWC-PLCA: The section on rural land is relevant to the GWC-PLCA. In particular, this policy outlines the structure for administration of land in communal areas as being vested in Regional Land Boards and in Traditional Authorities. Because the Regional Land Boards are responsible for zoning, they will play a key role in determining land use zones in the extensive communal areas that form part of the GWC-PLCA. The policy also addresses the issue of land redistribution. In the GWC-PLCA, some of the freehold farms have already been acquired for redistribution, as may others. The challenge for landscape management in this regard is that new land owners buy in to and support the landscape conservation process. However, the stipulation that "priority will be given to those who will use the land for the purpose of production" includes a focus on game ranching and tourism. These two production purposes should be given higher weighting in any land redistribution exercise in the GWC-PLCA area. This is further supported through clause 3.17 that calls for the promotion of environmentally sustainable land use to be demonstrated. With the GWC-PLCA focus on wildlife tourism, the issue of land enclosure is also relevant, where fencing and other enclosures should be subject to spatial planning and consultation with neighbouring land users.

5.1.2 Draft National Land Tenure Policy of 2005

Key Principles: The purpose of the land tenure policy is to ensure efficient use of land for the economic and social benefit of the nation. It pulls together aspects of land management and rights from existing policy documents.

Relevance to GWC-PLCA: The GWC-PLCA encompasses a range of land tenure types, including freehold and communal areas. The different tenure systems must be understood in terms of the varying rights in order for the landscape to be managed effectively as a whole.

5.1.3 Final Draft Rural Development Policy of 2011

Key Principles: This policy aims to develop "stable rural communities with viable institutions, sustainable economics and universal access to social amenities" through integrating and amplifying existing sectoral policies. While the focus is primarily on physical infrastructure, there are also sections on rural products and environmental protection that are relevant to landscape management. With regard to the development of physical infrastructure, the policy notes the need for integrated planning, and this would be critical to ensuring that service provision does not clash with the broader management processes that the landscape plans.

Relevance to GWC-PLCA: Since rural development initiatives are intended to be driven from the grass root level up, the opportunities for ensuring that infrastructural development enhances the

wildlife potential of GWC-PLCA are in place. The concept of rural products (clause 4.3.7) should be taken in its broadest sense to include the full range of tourism products, and marketing efforts in this regard must also be targeted. The section on environmental protection and sustainable use of natural resources is highly relevant in that the communal areas included in the GWC-PLCA are marginal. The landscape concept speaks directly to this section, which calls for:

- Management and conservation of biodiversity
- Integrated land use management
- Land tenure, ownership and user rights
- Equitable use of available resources (note, the tourism resources are not spread evenly across the landscape)
- Benefit sharing
- Combating environmental degradation and pollution.

5.1.4 National Resettlement Policy of 2001

Key Principles: The intention behind this policy is to move disadvantaged people from marginal areas to those with sufficient resources. In this regard there are some overlaps with the redistribution aspects of the 1998 National Land Policy.

Relevance to GWC-PLCA: It is unlikely that this policy will impact the landscape beyond the issue addressed above under the Land Policy discussion relating to resettlement of farmers on any purchased freehold farms.

5.1.5 Affirmative Action Loan Scheme of 1992

Key Principles: This scheme as established to remove the pressure of larger, well-established farmers from communal lands and so increase the available grazing for smaller farmers. This is achieved by offering loans to the larger farmers to resettle outside of the communal areas.

Relevance to GWC-PLCA: No direct relevance to management of the GWC-PLCA is envisaged.

5.1.6 National Forestry Policy of 2001

Key Principles: The first aim of this policy is to 'reconcile rural development with biodiversity conservation', and while this is intended through a focus on forest resources, the principle is in keeping with that of landscape conservation. The fourth aim even more explicitly addresses this shared conservation aim, by calling for 'multiple use conservation areas'.

Relevance to GWC-PLCA: Much of the challenge to proper forestry management in the GWC-PLCA comes from poor range management leading to bush encroachment. The potential for this policy to support, and be supported by, the area's tourism development is strong, since functioning wildlife systems are premised on a return to healthy habitat.

5.1.7 National Policy on Protected Areas' Neighbours and Resident Communities of 2013

Key Principles: This critical policy is based on the premise that successful park management and the welfare of neighbouring communities is interrelated, and sets out to establish guidelines for the involvement of neighbours and/or resident communities in the management of protected areas, and for them benefit from such involvement. Specifically, one of the objectives is to promote natural resources management across landscapes, thus providing for the necessary legal framework to support the PLCA committees. The policy also looks at concepts such as benefit-sharing, which could help avoid the development of non-viable ventures in conservancy areas, since benefits would be shared across the neighbours, and not each entity competing for its own stake.

Relevance to GWC-PLCA: The policy is highly relevant to GWC-PLCA (as it is to all of the PLCAs) through its focus on the broader landscape and areas surrounding parks. Of key importance to the GWC is the objective of establishing corridors to sustainable wildlife population viability.

5.1.8 Policy on Wildlife Management, Utilisation and Tourism in Communal Areas of 1995

Key Principles: It is through this policy that the concept of conservancies on communal land (as well as on commercial land) is introduced. The observed benefit of devolving conditional rights over wildlife to commercial farmers is seen as providing the opportunity to bring both social and ecological advantages to communal areas. Critically, the policy refers to managing the land as a unit, a principle that underpins the landscape approach as well. The policy is important because it explicitly acknowledges the link between rural development and conservation.

Relevance to GWC-PLCA: This policy is highly relevant to the GWC-PLCA because it establishes the principles and structures for communities to participate in wildlife management, and in tourism, which are the activities on which this landscape plans to focus.

5.1.9 Policy on Tourism and Wildlife Concessions on State Land of 2007

Key Principles: This policy builds on a strong history of concession-granting, and focuses in particular on protected areas and natural resources on other State land. Of key importance to the landscape conservation approach is the acknowledgement of the role of park neighbours. Specifically, the policy addresses tourism and trophy hunting – the latter often being associated with tourism as well.

Relevance to GWC-PLCA: With the Waterberg Plateau Park seen as the tourism anchor of this landscape, the issue of concessions is currently contentious. Many feel the park is under-utilised, and that greater benefits to landscape residents would be felt through additional concessions. This policy is therefore highly relevant, since its precepts would guide any decisions regarding any changes in the current concession arrangements.

5.1.10 National Policy on Human-Wildlife Conflict Management of 2009

Key Principles: This document highlights the need to accept that wildlife is part of the natural environment, and that in order to ensure the needs of future generations are met, the needs of current generations must be balanced with biodiversity conservation. This policy is relevant to landscape conservation primarily because landscapes include areas where people are settled, and any increase in wildlife would lead to increased human-wildlife conflict. At the same time, the policy is in line with the landscape approach, in that it calls for the maintenance of viable wildlife populations throughout the country.

Relevance to GWC-PLCA: In the GWC-PLCA, issues of conflict are more likely to occur on the communal areas, where any increase in wildlife will be done in the presence of livestock farming activities. The potential for conflict lies in both competition for grazing and browsing resources, and in predation of livestock. In effect, the creation of the landscape as a management unit responds directly to the policy's call for local level participation, as does the proposed use of economic benefits through wildlife-based tourism to off-set the costs of conflict.

5.1.11 Promotion of Community-based Tourism of 1995

Key Principles: Through this document, the Ministry sets out to actively open up opportunities for rural communities to increase their participation in tourism. The focus is primarily on development, and on meeting community needs and interests, although it does also note that benefits from tourism on communal land should provide incentives for conservation.

Relevance to GWC-PLCA: In the GWC-PLCA the initial discussions are centring around expanding tourism into communal areas, more than on increase community participation on existing features such as the Waterberg Plateau Park. This means drawing on the skills and heritage of the communities, as well as creating new opportunities for income generation. The landscape conservation approaches are therefore in line with this policy.

5.1.12 CBNRM Policy of 2013

Key Principles: This latest policy builds on the earlier work of the Community-based Tourism and Wildlife Management, Utilisation and Tourism in Communal Areas policies of 1995. The CBNRM initiatives are intended to encompass sound environmental management and sustainable natural resources use, while also strengthening the socio-economic conditions of rural communities. At the same time, the policy recognises that the focus of CBNRM has widened considerably. Its specific aims are to synergize rural development and biodiversity conservation, to empower rural communities to engage in and benefit from natural resources management, to increase the yields of benefits derived from natural resources, to enable investment in conservation related businesses, to strengthen community institutions, and to enable community to engage collectively in monitoring and management of natural resources and mitigation against climate change.

Relevance to GWC-PLCA: One of the key policy principles is that of participatory management, and the representation of the conservancies on the landscape management committee directly addresses this. The principles of balancing development needs with biodiversity conservation are shared with the landscape approach, and consideration to this is already being given in terms of the focus on zoning separate areas for conservation and farming.

5.1.13 National Water Policy White Paper

Key Principles: This policy sets up the framework to replace the Water Act 54 of 1956 with the Water Resource Management Act 24 of 2004. Its intention is to bring in more efficient management of water resources, while improving equity in access to safe water. To do this, the policy is based on shifting ownership to be vested in the state for the whole society.

Relevance to GWC-PLCA: No aspect is relevant to this landscape specifically; however, for all landscapes the pertinent principle is the development of water resources in a way that promotes equitable and sustainable socio-economic development.

5.1.14 Regional Planning and Development Policy of 1997

Key Principles: This policy responds to issues arising from limited environmental and resource management. The focus is primarily on agricultural practices, but calls for sound management of soil water and forest resources as tools for development.

Relevance to GWC-PLCA: The issue of range degradation is a key one for the GWC-PLCA, and this policy is relevant in its focus on the need to bring in sound rangeland management.

5.1.15 National Drought Policy and Strategy of 1997

Key Principles: The drought policy has many objectives; the one most pertinent to the landscape approach is minimising degradation of the natural resources base during droughts. This policy is currently relevant to all landscapes as the country is experiencing drought conditions this year.

Relevance to GWC-PLCA: The shift of responsibility from government to farmers is relevant here, because the landscape approach provides an opportunity for commercial and communal farmers to find collective responses to resource management in drought conditions.

5.1.16 Policy for the Conservation of Biotic Diversity and Habitat Protection of 1994

Key Principles: This earlier policy is highly pertinent to landscapes particularly from the perspective of biodiversity conservation through the protection of habitats – a landscape approach is best suited to accommodating broader habitat types and functioning.

Relevance to GWC-PLCA: Waterberg Plateau Park is of particular biodiversity interest in Namibia. The area has one of the highest number of bird species in Namibia, and is host to several rare and endangered species, with the park acting as a source for repopulation of other areas. One of the critical challenges already envisaged relates to ways of expanding shared habitat outwards from the park.

5.1.17 National Policy on Tourism of 2008

Key Principles: The policy envisages the sustainable utilisation of the resource base of Namibia through a tourism system that is private sector led and includes a meaningful participation by previously disadvantaged Namibians as employees and entrepreneurs. The principles of community-based tourism have priority support.

Relevance to GWC-PLCA: The benefits from tourism should be spread (more) equally over the area which requires the introduction and development of tourism in the communal conservancy section of the landscape. If this is achieved through the introduction of a cultural/historical visitor product, the landscape would benefit from an improved & diversified overall appeal.

5.2 Legislation

5.2.1 Namibian Constitution

Key Principles: Of interest to landscape management are those aspects of the constitution that address development and conservation, and that outline the structures for governance, particularly those at regional and local government levels. The constitution calls for policies that promote human welfare, including (among other aspects), the maintenance of ecosystems and biodiversity for the benefit of present and future generations of Namibians.

Relevance to GWC-PLCA: Although not specific to GWC-PLCA, of relevance is the establishment of regional councils and the recognition of traditional authorities, whose land and resource management responsibilities have them playing an important role in the landscape.

5.2.2 Regional Councils Act 22 of 1992

Key Principles: The act sets out the functioning of the elected regional councils, including their duties and responsibilities. The councils are tasked with carrying out development planning for the region, basing their decisions on the socio-economic and bio-physical characteristics of the region. With regard to the landscape programme, of particular interest is the focus on “natural and other resources and the economic development potential” of the region, the “general land utilisation pattern”, and on “the sensitivity of the natural environment”.

Relevance to GWC-PLCA: As with all the other PLCAs, the mandate of the regional council places them as key members of the landscape committee and with a critical role to play in ensuring cohesive broad-scale planning.

5.2.3 *Traditional Authorities Act 25 of 2000*

Key Principles: This act establishes the structures and functioning of traditional authorities, including the powers and duties of the different members, including chiefs and heads of communities. Not only is the chief of any traditional community the custodian and implementer of customary law for that community, but he is also responsible for carrying out any other powers or duties that statutory law may confer on him. This act is important to those landscapes which include conservancies on communal lands, as the traditional authorities are central to the management of those conservancies, and carry a lot of influence in this regard.

Relevance to GWC-PLCA: In GWC-PLCA, there are four conservancies, and hence four different traditional authorities that are members of the landscape committee. They serve as representatives of the communities and will play a key role in decision-making and ensuring implementation of the management activities that take place, or include, their communities.

5.2.4 *Decentralisation Enabling Act 33 of 2000*

Key Principles: The Decentralisation Enabling Act allows for the functions of line Ministries to be handed down to regional councils and local authority councils. This act builds on the Regional Council Act and Local Authorities Act, and has played a key role in strengthening the ability of the local level to be engaged in decision-making surrounding tourism and environmental management.

Relevance to GWC-PLCA: Other than having the regional councils and local authorities as key players in landscape management, this legislation does not have any relevance unique to the GWC-PLCA.

5.2.5 *Town and Regional Planning Bill (to replace Town Planning Ordinance of 1954)*

Key Principles: Of main relevance to the landscape programme are the regional structure plans and zoning activities that will need to be prepared. It will be important to ensure that such plans take into consideration the objectives and plans of each of the landscapes. Since the Regional Councils are responsible for the regional structure plans, this should be a straightforward process.

Relevance to GWC-PLCA: As with all the other landscapes, the zoning exercises will need to be synergised so that the regional structure plans incorporate the different landscape management zones.

5.2.6 *Agricultural (Commercial) Land Reform Act 6 of 1995*

Key Principles: With this act, the Minister has power to acquire agricultural land for land reform purposes. This includes giving the state preferent right to purchase any agricultural land put up for sale, and imposes restrictions of certain transfers of agricultural land. The focus is on increasing the land available to Namibian citizens, particularly those previously disadvantaged, for their participation in agriculture.

Relevance to GWC-PLCA: This law is particularly relevant to GWC-PLCA because some of the freehold farms surrounding the Waterberg Park are listed as those that the State would purchase for redistribution should they be put up for sale. There is a possible conflict here, where any recipient of such land adheres strictly to the purpose of the land being for agriculture, and does not participate in the broader conservation approaches (such as game-friendly fencing) of the landscape. This could work counter to the broader landscape management objectives.

5.2.7 *Soil Conservation Act 76 of 1969*

Key Principles: This earlier piece of legislation is still highly relevant of its attention to on overgrazing, stock carrying-capacities, and the prevention of erosion and fires.

Relevance to GWC-PLCA: It is relevant in this landscape because of the negative impacts that current over-stocking, particularly on the communal lands areas has had. This law could support the landscape management committee where it might want to introduce more sustainable land management practices.

5.2.8 *Communal Land Reform Act 5 of 2002*

Key Principles: The purpose of this act is the establishment of Communal Lands Boards to oversee customary land grants by chiefs and traditional authorities. Because the land board members comprise community members and representatives of the Regional Council, these bodies provide an opportunity for those landscapes that include communal areas to coordinate their zoning and management activities.

Relevance to GWC-PLCA: In GWC-PLCA there are some reported incidences where individuals have fenced off areas of communal land for their own use without permission. The Land Board can facilitate landscape management by addressing such issues, and by working with the community to ensure that land allocations are in keeping with the broader landscape objectives.

5.2.9 *Environmental Management Act 7 of 2007*

Key Principles: This act sets out the principles for decision-making regarding issues affecting the environment, in order to support sustainable natural resources use and environmental management. The principles include: ensuring the sustainable use of renewable resources; community involvement in natural resources management and in the sharing of benefits; the participation of interested and affected parties; equitable access to resources; assessments undertaken for activities that may have significant impacts; promotion of unsustainable development; protection of cultural and natural heritage including biodiversity; reduction, re-use and recycling of waste; a precautionary approach where scientific uncertainty exists; and limitation of damage to the environment.

Relevance to GWC-PLCA: This act is relevant to all the landscapes, in that any significant planning activity or infrastructural development that may change the ecological functioning of the area will need to be assessed to ensure it complies with the principles of this act.

5.2.10 *Parks and Wildlife Management Bill of 2009*

Key Principles: This bill, which is still in preparation, is intended to replace the existing Nature Conservation Ordinance of 1975 and the Nature Conservation Amendment Act 5 of 1996. The bill concerns the declaration of a range of different types of protected area – including protected landscapes. As such, it is highly relevant to the Nam-Place project. The bill also sets out the institutional arrangements for management of protected areas, such as the formation of committees, development of constitutions, etc.

Relevance to GWC-PLCA: This bill will be relevant to all PLCAs, not just GWC-PLCA, because of its focus on protected landscapes, and how wildlife in such areas may be used.

5.2.11 *Nature Conservation Ordinance (1975), amended by Conservation Amendment Act 5 of 1996*

Key Principles: This act governs the conservation of nature, establishes game parks and nature reserves, and the institutions for their management. This act is itself to be replaced by the forthcoming Parks and Wildlife Management Act (discussed above). The 1996 amendment inserts a section (amongst other amendments) on conservancies for communal areas and their functioning.

Relevance to GWC-PLCA: The act is relevant to GWC-PLCA because it is still the legal document governing the four conservancies whose areas comprise the bulk of this landscape.

5.2.12 Pollution Control and Waste Management Bill

Key Principles: This bill is still being prepared. Its focus is on all forms of pollution, affecting land, water and air. Although the landscape conservation activities are unlikely to be major sources of pollution, the issues of groundwater pollution, and proper solid waste management are relevant with regard to any tourism-related developments that take place in the landscapes.

Relevance to GWC-PLCA: This bill will be relevant to all landscapes, not only in terms of governing pollution and waste management, but also as supporting legislation to aid the landscape committees in managing the impact of other potential sources of pollution and waste, including litter control.

5.2.13 Namibia Tourism Board Act 21 of 2000

Key Principles: This act establishes the Tourism Board and sets out its functions. These include: promotion of environmentally sustainable tourism; ensuring services and facilities meet with prescribed standards; process applications for registration as a tourism facility and grade such facilities; maintain a register of facilities; and inspect such facilities.

Relevance to GWC-PLCA: Relevant to all PLCAs, not just GWC-PLCA through the focus on tourism activities as the main economic activity within the protected landscapes.

5.2.14 Forest Act 12 of 2001

Key Principles: This act follows the Forestry Development Policy. It outlines the objective of forestry management in Namibia, pulling together and updating several earlier acts into one, and providing for the protection of the environment, classification of forests, and use of forests and their products.

Relevance to GWC-PLCA: Although there are no forest reserves or community forests in the GWC-PLCA, the section on Protection of the Environment is still relevant here. The Act gives the Minister the power to create any area as a protected area (on reasonable grounds and in proper consultation), and protects vegetation in the riparian zones of any water courses. This act supports landscape conservation, and its principles do not appear to conflict with those of the PLCAs.

5.2.15 Water Resource Management Act 24 of 2004

Key Principles: This act replaces the Water Act 54 of 1956. It governs all levels of water management, from national water master plan to hand-dug wells for domestic use. It also addresses the issue of rural water supply.

Relevance to GWC-PLCA: The act provides for the formation of water point user associations, and this could provide the legal arrangement for the landscape management committee to set up water supply to the proposed wildlife core area to the east of the GWC-PLCA.

5.2.16 National Heritage Act 27 of 2004

Key Principles: Through this act, both places and objects can be declared of heritage significance, according them protection and conservation. Given the broad definition of heritage, and the large geographical scope of landscapes, it is clear that this act will be of importance. As a registered heritage item, both places and objects need to be protected. This provides the opportunity for synergies with the protected landscape concept, since heritage status will support conservation initiatives and enhance the tourism value of an area.

Relevance to GWC-PLCA: The GWC-PLCA currently has no registered heritage items, however, there are several aspects of the landscape which have heritage value and for which national heritage status may at some point be claimed. These include the cultural aspects of Herero lifestyles, as well as the history of the Herero-German battles that took place in the area.

5.3 International Agreements

In the GWC-PLCA, there are no World Heritage Sites or Ramsar Wetlands of International Importance. Therefore these two international agreements, to which Namibia is a signatory, are not included here. Those that are relevant are discussed below.

5.3.1 Millennium Development Goals

Key Principles: Namibia is a member of the UN, and in 2000 signed the Millennium Declaration. Of the 8 Millennium Development Goals, number 7 is most relevant to landscape conservation: “to ensure environmental sustainability”.

Relevance to GWC-PLCA: Not unique to GWC-PLCA, the need to integrate principles of sustainable development, and to reduce biodiversity loss, is a goal shared with all landscapes in this project.

5.3.2 Convention on Biological Diversity

Key Principles: Namibia is also a party to the Convention on Biological Diversity, which it signed in 1992. This international agreement obliges Namibia to conserve its biodiversity. The main influence of this convention is through the formal policy and legal documents implemented at national level.

Relevance to GWC-PLCA: No special significance to GWC-PLCA above the biodiversity conservation aspects already discussed under the different policies and laws above.

5.3.3 United Nations Framework Convention on Climate Change, and Kyoto Protocol on the Framework Convention on Climate Change

Key Principles: Namibia signed this convention in 1992, and ratified it in 1995. The focus is on greenhouse emissions and sequestration.

Relevance to GWC-PLCA: The interplay between woodland cover, fire and fire suppression is important for this landscape. Most of the wildland fires in the GWC-PLCA complex are of human origin, and if left to burn uncontrolled, can undermine both management of the landscape’s habitats, and the area’s ability to sequester carbon.

5.3.4 United Nations Convention to Combat Desertification

Key Principles: Namibia ratified this convention in 1997. It is particularly relevant to semi-arid and arid countries such as Namibia, which are prone to desiccation and drought. The signing of this convention led to the development of NAPCOD – Namibia’s Programme to Combat Desertification, which aimed to empower rural communities to better manage their resources.

Relevance to GWC-PLCA: This convention lends weight to those practices that may be introduced to the landscape to reduce overgrazing and range degradation, particularly in the communal areas.

5.3.5 Birdlife International Important Bird Areas Programme

Key Principles: By definition, an IBA is an internationally agreed priority site for conservation action recognized by Birdlife International. A site qualifies as an IBA only if it meets one or more of the following criteria:

1. Supports significant populations of globally threatened birds
2. Supports range- or biome-restricted species
3. Supports large numbers of congregatory birds (exceeding 0.5 % of the regional or global population).

The IBA criteria are internationally agreed, standardised, quantitative and scientifically defensible. Ideally, each IBA should be large enough to support self-sustaining populations of as many as possible of the key bird species for which it was identified or, in the case of migrants, fulfil their requirements for the duration of their presence. Each IBA provides a different set of conditions that suit certain groups or suites of species. The presence or absence of certain species at an IBA can indicate the conservation status of that IBA. BirdLife International calls these ‘trigger’ species and they can be used as indicators to monitor the health of an IBA.

Relevance to GWC-PLCA: The Waterberg Plateau is a listed IBA in Namibia. An IBA must be amenable to conservation action and management. In the case of the Waterberg Plateau, bird conservation is operationalized through the protected area status of the Waterberg Plateau Park.

5.4 Plans

5.4.1 Vision 2030

Key Principles: Vision 2030 provides the policy framework for Namibia’s long-term development. Section 5 addresses the Sustainable Resource Base, with the sub-visions most important to the landscapes approach being: maintenance of natural habitats and wildlife populations that also support sustainable tourism; the appropriate and equitable use of land’ and participatory and sustainable management of woodlands and savannahs. Other sub-visions of relevance elsewhere in the vision document include: “open, dynamic, competitive and diversified economy”; an “economic environment [...] suitable for all citizens”; “with a viable natural resources export sector”;

Relevance to GWC-PLCA: As with all the other PLCAs, the direct application of these visions will come through more applied documents such as the policies and laws addressed above, as well as national, regional and local plans.

5.4.2 National Development Plan 4

Key Principles: NDP 4 covers the period 2012/13 to 2016/17, and like its predecessor, is based on sound environmental management and sustainable development. Tourism and agriculture are two of the economic priorities, and in some of the PLCAs, the challenge is in balancing the two. Section 11 clearly demonstrates the need for Namibia as a tourism destination to remain regionally competitive, while still ensuring that tourism development remain economically, socially, and environmentally sustainable.

Relevance to GWC-PLCA: The review of NDP3 shows that the tourism sector is not growing as strongly as had been hoped for during the previous planning phrase, and this shows the need for realism when considering tourism development initiatives in GWC-PLCA, as the market may be much smaller, and returns lower, than peoples’ expectations.

5.4.3 Ministry of Environment and Tourism Strategic Plan (2007/8 – 2011/12) of 2007

Key Principles: MET’s mission is “to promote biodiversity conservation in the Namibian environment through the sustainable utilisation of natural resources and tourism development...” The first 5 themes of this strategic plan are not only MET’s mandate, but also are all relevant to the landscape conservation approach of the Nam-Place project, addressing environmental management;

protected areas, habitats and species, developing tourism; CBNRM; and supporting rural development, particularly around parks.

Relevance to GWC-PLCA: There are no aspects of this strategic plan that speak solely to GWC-PLCA; instead it is clear that the Nam-Place project was developed in keeping with the principles of this document.

5.4.4 *Namibian Forestry Strategic Plan of 1996*

Key Principles: The aims of this plan are: conservation of natural ecosystems for their biodiversity and other values; contribution to agricultural productivity through soil and water conservation; supporting poverty alleviation and equitable development; and protection of biodiversity and prevention of climate change. The plan targets forest resources both within and outside forest reserves, including farm forestry by individual households.

Relevance to GWC-PLCA: The plan is relevant to all PLCAs, through its focus on biodiversity conservation, as well as the processing for forest products, which in GWC-PLCA would refer less to timber, and more to crafts and curios as part of diversification of tourism activities in the region. Forestry management as part of wildlife habitat protection also supports the landscape conservation goals.

5.4.5 *Recommendations, Strategic Options and Action Plan on Land Reform in Namibia of 2004*

Key Principles: This plan is imbedded in the context of the land policies and acts already described above. It sets out recommended actions for carrying out land reform.

Relevance to GWC-PLCA: The plan recommends a continuation of the procedure whereby sale of farms or interest in farms must first be offered to MLRR. It also recommends a move away from subdivision, to resettlement of a homogeneous group that manages the farm as a whole. This is important as subdivisions usually involve greater infrastructure, especially fencing, that hinder wildlife movement and undermine a landscape management approach. The plans also recommends that lease agreements become more flexible so that other forms of land use (such as wildlife-based tourism) can be considered on resettlement farms. This too, would promote landscape conservation.

5.4.6 *Draft Otjozondjupa Regional LED Strategy*

Key Principles: The vision of the Otjozondjupa Regional Council is for the region to be “highly developed” and with excellent services for its inhabitants. This local economic development strategy considers 7 different sectors, the most important of which are agriculture and tourism. The strategic objectives are employment creation, improved service provision, infrastructure development, improvement of key economic sectors’ contribution to regional growth, and skills development.

Relevance to GWC-PLCA: The two critical sectors of relevance to the GWC-PLCA mandate are agriculture and tourism. The LED tourism objective is in keeping and would be supportive of the landscape management objectives: that is, ensuring that the region “Offers a viable tourism route with resultant increase in length of stay and spending of visitors to the region through active product & attraction development and structured promotion of the regions attractions”. A key proposal is the establishment of a formal marketing agency, which would be an important player in the landscape’s tourism development.

Also important is the proposal to introduce revolving livestock schemes for communal farmers, a move which would reduce range degradation. Linked to this is the identification of areas to be

targeted for de-bushing, and the GWC-PLCA Management Committee could work with the council to identify areas of greatest urgency in this regard.

5.4.7 Draft Waterberg Plateau Park Management Plan

Key Principles: The Management and Development Plan for the Waterberg Plateau Park has been designed and structured to be priority focused and action orientated, to facilitate implementation and the achievement of outputs and outcomes. The Plan is linked to an annual cycle of management and oversight, involving the preparation of annual work plans and budgets.

The Plan is “principles” based. These principles serve essentially as mini policy statements. Not all eventualities can be planned for, but if the basic principles are established, decisions can be readily made against these principles and thus be in line with Park policy.

Relevance to GWC-PLCA: The plan holds a chapter on tourism development. This chapter identifies the possibility to establish a 6 room (12 bed) **tented safari lodge** operation offering accommodation; exclusive game drives and guided hiking expeditions on the plateau as a new product with international drawing power able to enhance the value of the landscape.

It further foresees expansion of potential **activities** which could be offered including guided walks and game drives on the plateau (under rules set by the MET and subject to an EIA). For this, it recommends that MET:

- Awards a 5-year activity concession to the neighbouring private tourism operators;
- Shares 50% of the concession revenue with the neighbouring communal conservancies according to a percentage agreed between MET and the community for the specific support of community-based tourism infrastructure development;
- Adheres to the key principles and guidelines for the awarding of concessions to multiple neighbouring communities adjacent to a protected area, as laid out in **the Policy on Tourism and Wildlife Concessions on State Land (2007:12)**. This policy states that “concessions need not be exclusive or limited to accommodation provision but could also be made available for different activities such as guided tours, walking trails, etc”

The recommendation to award activity concession rights to neighbouring community conservancies running compatible community-based tourism projects will benefit the larger landscape area.

5.4.8 Strategic Environmental Assessment of Replication of The CBEND Project - Combating Bush Encroachment for Namibia's Development

A strategic Environmental Assessment was carried out on the CBEND Project. The Project aims to:

- Restore of productive rangelands that are currently bush encroached,
- Supply of electricity into the national grid, using local, indigenous, renewable fuel,
- Employment creation and opportunities for small bush harvesting enterprises,
- The establishment of commercially operated small Independent Power Producers

The SEA assessed the proposed Project and a number of alternative uses including the production of charcoal, firewood, poles and extruded wood logs. Alternative bush clearing methods were assessed such as: manual cutting, mechanical clearing, use of arboricides, burning and biological control.

The baseline indicated that the GWL is affected by both *Acacia mellifera* and *Dichrostachys cineria* encroachment.

The findings are that only encroacher species should be targeted and valuable browse species retained for both forage and soil protection. Protected species are not to be cleared. *A. mellifera* should be easier to control than *D. cineria*. Slopes greater than 12 % are not to be thinned and from

5-12% only partially thinned. Aftercare is important to limit regrowth. In general biodiversity benefits from bush thinning rather than clearing.

6 INSTITUTIONAL FRAMEWORK

6.1 Description of Existing Arrangements

The GWC-PLCA is not a formal management system yet. The current institutional arrangements in place within the area are as follows:

Regional Governance: The landscape falls within the Otjozondjupa region, encompassing the Okakarara and Otjiwarongo (rural) constituencies.

Conservancy: Four, formal communal conservancies are located in the landscape. The Ozonahi Conservancy borders the commercial farm land and forms the link with the larger communal area. Its management committee consists of 11 men and six women; the Executive Committee of nine members; one female staff; and wildlife monitoring using the Event Book monitoring system is in place.

African Wild Dog Conservancy has a management committee of 11 men and six women; an Executive Committee of nine members; one female staff; and wildlife monitoring is conducted using the Event Book monitoring system.

Otjituuo Conservancy is managed by a committee of seven men and five women, with staff of one Office Coordinator. It works in close collaboration with the local farmers association, and wildlife monitoring using Event Book monitoring system is in place.

Okamatapati Conservancy is managed by a committee of 13 men and five women. There is an Executive Committee of nine members, and one female staff. There is close cooperation between the conservancy and the local farmers association. The conservancy has a representative on the local development committee. It carries out wildlife monitoring using the Event Book monitoring system.

The commercial conservancies are not established on formal legislation but form important institutions in the area. Not all farms are a member of the **Waterberg Conservancy or Omatanga Conservancy**; the majority does however subscribe to its membership, although local stakeholders state the conservancy is not very active.

More regular interaction occurs on the level of the **farmer associations**. The Waterberg Plateau Park splits the farmer associations in the landscape with the Waterberg Association in the south and the Rietfontein Farm Association north of the mountain.

6.2 Challenges to Effective Tourism Management at the Landscape Level

There are two main challenges in effective tourism management at landscape level. The first is the interaction and communication amongst landscape stakeholders. Such interaction is ad-hoc, irregular and relies on very few individuals driving relevant development issues for landscape management. The institutional arrangements are weak (see 6.1) on both the communal and

commercial side. The communal conservancies lack income generating opportunities, limiting their effective management in absence of support from development organisations. The interaction on the commercial farm side is limited as well. The mountain splits the area in half and no formal communication exists. The Waterberg Conservancy is highly ineffective. Communication between the commercial and communal farming areas does not exist in any formal way.

The second challenge rests in the high level of competition amongst the current tourism ventures. They (almost) all offer hunting as their main tourism product, with similar packages both in facilities and trophies. The non-hunting tourism product is dominated by a few operators and these products are also highly similar (game drives and park visit; rooms and camping). The lack of diversity means that all entrepreneurs are fishing for the same client base; the individual enterprise performance is given priority over the landscape development.

7 TOURISM STRATEGIC ENVIRONMENTAL ASSESSMENT

The assessment describes the findings from the literature review and stakeholder meetings. The issues identified have been grouped into 5 categories relating to different aspects of landscape / environmental management:

- Biodiversity and wildlife conservation
- Ecosystem services
- Governance and management
- Tourism
- Participation and benefits

For each environmental management category, the assessment first outlines the shocks and thresholds, and then describes the cumulative impacts and highlights the primary mitigations for addressing them.

On the basis of the impacts and risks, the three tourism development scenarios are then presented and assessed to identify the optimal developments.

7.1 Identified Issues, Impacts and Drivers

Critical issues, impacts and drivers are presented below for each of the five landscape objectives.

7.1.1 Biodiversity and Wildlife Conservation

Present situation:

- The WPNP and surroundings play an important role in rare and endangered (R&E) species conservation e.g. cheetah, Cape vultures, wild dog, rhino, FMD disease free buffalo
- Poor distribution of wildlife within the landscape
- Low numbers of wildlife in communal areas due to persistent high pressure from poaching
- Low diversity of species outside WPNP
- Viability of the proposed Eastern Core area as an effective wildlife area is limited due to the absence of water resources
- Controlled access to WPNP due to perceived threat to rhino population limits tourism
- Pressure on vegetation species (unregulated use of wood resources such as firewood, charcoal, poles and other veld product harvesting)
- Bush encroachment

Likely future developments:

- Increased livestock numbers
- Increased human population numbers
- Continued threat of rhino poaching and animal disease transmission (principally FMD) will keep wildlife diversity confined to WPNP

Cumulative impacts, risks and conflicts with other development objectives:

- Farming activities and range land increase
- Fencing (legal and illegal)
- Illegal harvesting of fire wood
- Climate change is expected to increase pressure on water and grazing resources

Synergies, opportunities and suggestions for the objective:

- Wildlife re-introduction
- Landscape access improved / Reducing barriers to movement

7.1.2 *Ecosystem Services*

Present situation:

- Bush encroachment due to high levels of livestock reduces long term livestock carrying capacity.
- High levels of uncontrolled fire entering the landscape from the east.
- Significant barriers to wildlife movement and dispersal from: (1) fencing around WPNP; (2) fencing of private farms surrounding WPNP; rapid increase in legal and illegal fencing within conservancies; (4) veterinary control fences (old fence within the landscape and the present fence isolating the Tsumkwe/Kaudum wildlife system from the landscape); (5) Namwater Northern Water Carrier passes across the landscape on the eastern side of WPNP.
- Closure of wildlife (eland) movement corridors (between Rietfontein and the area just north west of the WPNP).
- Limited management of solid waste

Likely future developments:

- Manganese smelter to be developed
- Increased rate of fencing in the conservancies
- Livestock densities to remain high
- Increase pressure on natural resources
- Loss of eland movement corridor and closure of wild dog range in conservancies

Cumulative impacts, risks and conflicts with other development objectives:

- Scenic tourism appeal reduced through visual impact of smelter and unmanaged solid waste
- Ecotourism value of the landscape outside of WPNP to remain low.

7.1.3 *Governance and Management*

Present situation:

- Coordinated management at the landscape level limited to the GWL Committee
- Landscape committee has no legal mandate or authority
- Poor communication and interaction between the various stakeholders in the landscape. Three key stakeholder groups exist, these are the community conservancies, the freehold farms and the WPNP (MET). These stakeholders have different mandates and resources.
- There is limited participation of the freehold farms in landscape development this reduces the capacity of the Landscape and its sustainability.
- The Landscape members do not share a vision and have no clear strategic plan to enhance the environmental and tourism value of the landscape.

Likely future developments:

- Collapse of the Landscape Management Committee as the Nam-Place project winds down.

Cumulative impacts, risks and conflicts with other development objectives:

- Different agendas and objectives of the various stakeholders
- Planning and developments within the Landscape from other planning authorities undermine the effectiveness and authority of the Landscape Committee

7.1.4 Tourism

Present situation:

- No landscape level tourism product
- Low ecotourism value of much of the eastern landscape
- No destination area brand and promotion
- Secondary destination status
- Limited park utilisation
- Stagnation of wildlife tourism product development in the private farms (consumptive and non-consumptive)
- Poor quality reviews of park facilities (NWR)
- Absence of tourism in communal areas of the landscape
- Overall limited road access network (to core area) and limited cellular coverage

Likely future developments:

- Decline in visitor numbers
- Increased competition and price reductions
- Absence of tourism in communal areas remains
- Increase in barriers to tourism sector entry due to high cost of compliance to the Environmental Act.
- An increase in transit traffic through communal conservancies (Otjinene – Grootfontein)
- Reduced aesthetic value of landscape from uncontrolled waste management and establishment of a smelter
- Potential for increase criminal activity negatively impacting self-drive tourism

Cumulative impacts, risks and conflicts with other development objectives:

- Animal disease control restrictions reduces distribution of WPNP wildlife diversity onto surrounding farms
- National level concern about rhino poaching limits access to WPNP

7.1.5 Participation and Benefits

Present situation:

- Little trickle down and few linkages between existing tourism (in the WPNP and guest farms) and the communal areas of the landscape
- Limited development of cultural tourism product
- Conservancies not fully supported by community members
- Herero crafts are presently limited in diversity and of variable quality
- High community expectations for tangible benefits

Likely future developments:

- Possible decrease in benefits for commercial entities (decline)
- Increase in hunting

- Collapse of conservancy model in absence of benefits

Cumulative impacts, risks and conflicts with other development objectives:

- The failure to develop a tourism economy together with high community expectations will undermine the conservancies and the overall landscape concept.

7.2 Shocks, Thresholds and Resilience

Within the context of the economic and ecological isolation of the eastern conservancies from the Waterberg Plateau National Park area and the discussions in Appendix 2, the key thresholds that have or may be crossed are:

- Political/social instability due to a combination of historical abuse, economic disadvantages and increasing population, this could be crossed during drought, livestock disease outbreaks or economic downturn. One could move away from the threshold through land re-distribution (short term), change in regional economy (e.g. growth of tourism sector) outmigration of employable youth (improved national economy).
- Collapse of the tourism industry: the Waterberg is on the national tourism circuit but is not one of the core tourism sites. Should there be any downturn in global economy or a reduction in tourism within Namibia, the Waterberg will be one of the first places cut from visitor's itineraries. Tourism as a land use could collapse within the Waterberg Landscape. The move away from this threshold there is need to greatly expand the tourism value of the area, diversify its products and increase its attraction.
- Loss of wildlife movement linkages within the landscape and between the landscape and adjacent systems. These include 1) the loss of eland movement between the WPNP and farms to the NE due to fences. 2) Reduction of open systems threatening wild dog in the Wild Dog Conservancy due to people fencing in their range. 3) Veterinary fence along the eastern boundary of the landscape separating the conservancies from the wildlife systems of Nyae Nyae and Kaudum NP. 4) internal barriers cutting the WPNP from the conservancies such as farm fences, the ENWC and past veterinary control fences (not functioning but still maintained) and the NEWC which cuts across the landscape from southwest to northeast just of the east of the WPNP. These barriers have effectively separated the wildlife systems of the conservancies from that of the commercial farms (and WPNP). It is unlikely that these barriers will be removed and the GWL needs to be considered as a landscape of two distinct wildlife systems, one based around the WPNP and the other based around the less settled areas of the conservancies.
- Reduction in grazer value of the GWL due to bush encroachment. This has happened across most of the landscape where permanent cattle populations exist. It can be combatted by change in livestock composition, diversification into wildlife production and use, long term changes in livestock husbandry approaches.
- Current (and future) drought impacting livestock numbers as well as game numbers and appeal of the area leading to increased pressure on water resources, rangeland movements and further bush encroachment.
- Global tourism trends and Namibia's continuing price increasing limiting arrival numbers to the country.

External Pressures:

- Climate change
- Wildlife movement corridors that extend outside of the Landscape
- National land redistribution
- National concerns about rhino poaching
- Drought
- Changes to agricultural disease control approaches

7.3 Cumulative Impacts

The cumulative impacts are based on a matrix of time and developments at different scales (Table 2.).

TABLE 2: Cumulative Impacts as a result of developments identified during the survey. These are all ranked high, medium, low either positive or negative or no impact

	Impact short term	Impact medium term	Impact long term
Landscape developments			
• Ore smelter		Medium negative visual and aesthetic	
• New road			Medium positive (tourism access)
• Resettlement of farms	Medium negative (reduced investor confidence)	Low positive (reduced social tension)	Low negative (reduced long term tourism development)
• Population increase	Medium negative (increased pressure on land resources)	Medium negative (increased pressure on land resources)	High negative (increased pressure on land resources)
• Fencing and land allocation in conservancies	Medium negative (Reduced ecosystem connectivity)	Medium negative (Reduced ecosystem connectivity)	Medium negative (Loss of ecosystem connectivity)
•			
Surrounding the Landscape			
• Settlement patterns to east , south		High negative (change from open extensive to closed ranches)	
• Increased comparable tourism attractiveness of other tourism areas over GWL	Low negative (reduction in tourism)	Medium negative (reduction in tourism)	High negative (reduction in tourism)
• Disease outbreaks	Medium negative (economic loss)		
• National water carrier			Medium negative (cuts wildlife linkages between WPNP and conservancies)
National			
• (re) Settlement policies	Medium positive (political support)	Low positive (redistribution of wealth)	
• Tourism policies			
• Veterinary disease control policy		Medium negative (reduced biodiversity, reduced tourism potential)	Medium negative (reduced biodiversity, reduced tourism potential)
•			
International			
• World economy	Medium negative (reduced visitor numbers)		
• Climate change			Low negative (reduced agricultural potential, increased conflict over land)

Cumulative impacts from other activities and developments affecting the tourism potential of the landscape. These can be summarised into the following key cumulative impacts

- **Habitat fragmentation and loss of linkages:** The landscape has been and is continuing to be fragmented. Veterinary disease control fences (old and new) the Northern Water Carrier, fencing of the WPNP, surrounding private farms and expansion of legal and illegal fencing in the communal areas.
- **Degradation of tourism appeal/decreasing comparative tourism attractiveness** compared to other areas in Namibia: Limited waste management, bush encroachment and unsightly developments are serving to reduce the wilderness value and overall appeal of the landscape.
- **Pressure on natural resources:** High and increasing population densities, high livestock numbers, reduced productivity of the range due to bush encroachment, uncontrolled harvesting of natural resources and few economic alternatives are leading to decline in the carrying capacity of the area.
- **Increasing social dissatisfaction:** Failure to establish linkages between WPNP and other private sector tourism developments and the conservancies of the landscape; absence of cultural tourism developments in the communal areas; declining natural resources and increasing population pressure; historical political tensions.

7.4 Tourism Scenarios

Descriptions of the three scenarios are provided in detail below.

7.4.1 Business as Usual

In this scenario, the existing low growth scenario where the tourism product remains unaltered and located primarily within the Waterberg National Park and the adjacent commercial farms, community benefits are limited and historic tourism opportunities are not used. The Greater Waterberg Landscape remains a marginal destination.

The current products will remain isolated enterprises that compete for visitors with highly similar products and services and the Park will maintain its limited tourism utilisation). No tourism development occurs in the communal conservancies.

- Current management systems

The cooperation between the different stakeholders within the landscape will remain ad-hoc, erratic and continues to lack trust. The individual commercial and communal conservancies will remain weak in their internal management and their effectiveness limited. The communal conservancies will not receive continued support and their existence remains fragile in its effective management of natural resources. There will not be an affective landscape level management development at the individual commercial farms, the Waterberg Park and the communal conservancies will continue to adhere to individual objectives over joint targets.

- Current facilities and numbers of visitors

The facilities and visitor numbers will not change and remain available in the freehold and park sections of the landscape only. No landscape product will be introduced and the individual land, and facility, owners will compete for visitors from a stagnating market. The size and scope of facilities will not change and the NWR resort at the GWP will remain the largest accommodation unit. No accommodation facilities will be available in the communal area of the landscape.

- Current tourism products

The Waterberg Plateau Park will remain the core wildlife product offering activities on foot and by vehicle. This is complemented by a well-developed, consumptive tourism product across registered hunting farms within the commercial conservancies and as a trophy hunting concession in the park.

- Impacts on biodiversity and conservation

Across the broader landscape, impacts on biodiversity and conservation are high, primarily through fencing and the truncation of wildlife movement, and through range degradation due to poor grazing management.

- Levels of support from communities

Community involvement remains limited and passive at the level of the four communal area conservancies only. These will continue to lack effective community involvement. The traditional authority structures across the Okakarara constituency will remain the influential community representation for the landscape. Participation at conservancy AGMs remains limited.

- Infrastructure in place

The tarring of the road east from Okakarara is imminent. While this could greatly improve access for tourism into the communal conservancies, in the absence of tourism products, it will be more likely to open up the area for further livestock expansion, thus posing a threat to wildlife and associated tourism development.

7.4.2 *Realistic Tourism Development*

This is a medium growth scenario, where the effective wildlife boundaries of the WPNP remain unaltered although there is an increase in tourism activities in the farms and the main tourism routes through the conservancies. The cultural and historic tourism opportunities are greatly increased resulting in a longer visitor stay. The eastern core area in the conservancies is established and open to adventure and 4x4 tourism along the Otjinene – Grootfontein road. Thematic route developments occur and cultural/historical events offer quality tourism products.

- Management systems

Increased coordination is obtained to support thematic product coordination in the area but this remains limited to jointly supporting marketing efforts. The management interventions remain focused on the separate stakeholders of the landscape although more frequent interaction happens around specific tourism development themes. Outside support and guidance for the establishment of thematic trails and a 4x4 route (and possible cultural/historical events) is obtained but not continued at operational level.

- Proposed facilities and numbers of visitors

Initial evidence of increasing visitor numbers to the communal area conservancies of the landscape through utilisation of the new products by domestic and regional visitors (self-drive itineraries). Increase initially limited to Namibian and South African school holidays with numbers peaking during Easter and Independence holidays. Actual accommodation facilities will not increase although the length of stay at established lodges and resorts in/around the Waterberg Park will slowly increase with a single night.

- Tourism products

The tourism product of the landscape will include a clearly defined cultural/historical trail, linking the WPP with selected sites in the communal areas and on private farm land. Informative signage will be erected at identified sites and appropriate publications will be available under the banner of the landscape.

The core conservation area will be stocked with wildlife and include a designated (half-day) 4x4 trail for which a GPS map (App) will be available branded under the landscape banner.

- Impacts on biodiversity and conservation

The re-introduction of wildlife to the eastern core, and the development of wildlife- and adventure-based tourism in this area, would work positively to distribute conservation efforts more widely across the landscape.

- Levels of support from communities

Interest and commitment of community members in the communal conservancies will increase due to the evidence of tourism development in the area, both as physical products as well as visitor numbers. Interest and participation around conservancy and landscape issues will increase and active membership of the conservancy will increase. The initial momentum emphasises benefit sharing over conservation and effective management issues. Awareness and understanding of conservancy and landscape management will increase.

- Infrastructure in place

In this scenario, the creation of a wildlife tourism area and the tarring of the road east have the potential to work together to be strongly beneficial. Tarring access all the way from Otjiwarongo will greatly increase the attraction of this landscape, and expand the range of tourist types wanting to visit the area.

7.4.3 *Optimal Tourism Development*

A high growth scenario based on a transformation of the WPNP to include partners in conservation and tourism in the landscape to extend the effective wildlife management boundary to the perimeter of the participating stakeholder farms. Where there are greater benefits in being conservancy members contributing to the biodiversity vision of the area. The cultural and historic tourism products are greatly developed and an increasing number of visitors are directed towards these products.

The core area in the conservancies develops into a valuable ecotourism destination with high wildlife numbers and the opportunity to view elephant. The increase in overall tourism value of the area spreads economic opportunities throughout the landscape. The area develops an image as a green destination with quality ecotourism products and a strong Herero cultural feel where the historic attributes of the landscape are viewed from all perspectives.

- Management systems

The individual management systems of the landscape stakeholders are transferring responsibilities to the higher landscape level and the GWL is accepted as authority for biodiversity management and tourism development. The WPNP management (and Ministry) support the development and enables an improved utilisation of the park resources for tourism purposes for which operational modalities are formulated at landscape level adhering to constitutional requirements. Participation by commercial farms around the mountain increases and regular (quarterly) meetings take place.

- Proposed facilities and numbers of visitors

An increased and diversified tourism product initiates an increase in visitor numbers and the establishment of new accommodation in the communal conservancies as well as an increase in facilities around the mountain. Visitor numbers continue to increase (subject to overall trends in arrivals to Namibia) and the length of stay increases. The spread of visitor numbers and flows is more equal across the landscape and entry (exit) to the area is diversified with the eastern boundaries forming an important gateway. Facilities in the communal areas are quality camp grounds with individual serviced sites able to house 8 groups (16 vehicles).

- Tourism products

A broad scope of products is developed across the landscape. This should include:

- Thematic signposted trails based on historical/ cultural themes (3 trails)
- 4x4 trail with 2 shaded viewing decks in the core wildlife area
- Access to the plateau of the WPNP for registered lodge owners of the landscape with their own vehicles and guides
- Information Centre and guide association (pick-up point) at the Okakarara Community Cultural & Tourism centre for information on tourism in the landscape
- Night drives in the WPNP
- Paragliding and ultralight game flights in the area
- Branded artefacts and cultural gifts
- Annual Herero cultural event

- Impacts on biodiversity and conservation

It is under this scenario that the impacts on biodiversity and conservation are predominantly positive, and strongest. With greater area available to the wildlife of WPNP through their use of the neighbouring farms, healthier populations with stronger gene pools can be developed. At the same time, the eastern core will provide additional habitat for some key species, strengthening wildlife populations throughout the landscape.

- Levels of support from communities

The communities see the benefit of tourism and support the landscape management actively and effectively as members of their respective conservancies. These structures lead the management with traditional authorities now serving more of a facilitation and mediation role. Understanding of landscape management is widespread across residents in the area. Benefits from tourism are understood and individual community entrepreneurial activities in support of tourism development encouraged if conforming to landscape objectives.

- Infrastructure

With tar access all the way from Otjiwarongo through to the east of the conservancy, together with the provision of water supply for wildlife and wildlife-based tourism in the east, the greater range of products and the quality of the wildlife experience could change the landscape into a major destination. With landscape-level objectives informing and guiding development, new infrastructure can be aligned to limit its negative impacts on the scenery, and to ensure that facilities are distributed appropriately.

7.4.4 Assessment of the Environmental (Social) Impacts Associated with Each Tourism Scenario

Table 1: Assessment of scenario impacts for Performance Areas (partially after IFC 2012 Guidelines). These are all ranked high, medium, low either positive or negative or, no impact from +++ to ---. Business-as-usual acts as a baseline

Component Based on the IFC Standards	Business-as-Usual	Medium Growth Scenario	High Growth Scenario
Assessment and Management of Environmental and Social Risks and Impacts			
Environmental risks reduced	--	-	
Key systems processes protected	+ (WPNP)	++	+++
Key thresholds not exceeded	---	-	+
Social risks addressed	--	+	++
Community grievances addressed	---		++
Community participation	---	+	+++
Resource Efficiency and Pollution Prevention			
High GHG emissions			+
Adaptability to CC		+	++
Trans boundary impacts			
Air pollution			
Solid Waste production and Pollution	-	-	-
Veld Products depletion	-		+
Overgrazing	---	---	-
High energy use			
High water use		- (wildlife watering)	- (wildlife watering)
Community Health, Safety, and Security			
Health & disease exposure		-	--
Exposure to hazardous equipment/materials			
Loss of ecosystems services	-		
Land Acquisition and Involuntary Resettlement			
Involuntary displacement of people from their land		-	-
Voluntary displacement		--	--
Economic displacement		--	--
Biodiversity Conservation and Sustainable Management of Living Natural Resources			
Loss of natural habitat		+	++
Loss of critical habitat			+
Habitats degradation			
Alien invasive species			
Loss of biodiversity	- (wild dog)		
Loss or reduction of PAs		+	++
Reduced function of ecosystems services			
Indigenous Peoples			
Loss of traditional land ownership			
Loss of traditional natural resources			
Loss of traditional rights		+	++
Cultural Heritage			
Loss of cultural heritage sites			++
Loss of cultural resources		+	+++
Loss of indigenous knowledge		+	+++

Table 2: Assessment of the three tourism development scenarios in relation to the cumulative impacts identified in the landscape assessment

Cumulative Impacts	Business-as-Usual	Medium Growth Scenario	High Growth Scenario
<i>Habitat fragmentation and loss of linkages</i>			
Veterinary disease control fences	Unaltered	Unaltered	Some controls reduced/removed
Northern Water Carrier	Unaltered	Unaltered	Unaltered
Fencing of the WPNP, surrounding private farms	Unaltered	Unaltered	Reduced
Expansion of legal and illegal fencing in the communal areas	Increasing	Increasing	Reduced in areas linked to Core
<i>Degradation of tourism appeal</i>			
Poor waste management	Unaltered	Improved	Improved
Bush encroachment	Increasing	Attempted reduction	Attempted reduction
Unightly developments from other sectors	Increasing	Improved planning	Tourism planning guides development options
<i>Pressure on natural resources</i>			
Population densities	Increasing	Increasing	Increasing
High livestock numbers	Increasing	Increasing	Stabilised
Bush encroachment	Increasing	Potentially stabilised	Stabilised
Uncontrolled harvesting of natural resources	Increasing	Increasing	Controlled
Few economic alternatives			
<i>Increasing social dissatisfaction</i>			
Failure to establish linkages between WPNP and other private sector tourism developments and the conservancies	Few linkages	Increasing linkages	Linkages established
Absence of cultural tourism developments in the communal areas	Unaltered	Some cultural tourism	Cultural tourism underpins tourism growth
Declining livelihoods due to depletion of natural resources	Declining	Slow decline	Halted
Historical political tension	Increasing	Unaltered	Declining

The assessment of scenario impacts for Performance Areas indicates that the high tourism growth scenario is best social and environmental option. It will significantly contribute to a positive impact on cultural heritage, social stability and all environmental sectors apart from resettlement as there may be some economic displacement in the conservancy core area of communities.

The cumulative impacts all get worse under the business as usual situation. They are, in some cases, addressed under the medium growth scenario and are, in most cases, addressed under the optimum tourism growth scenario.

It is important to note that the present, “business as usual”, situation is not only stagnant; it is also slightly negative from the environmental and social perspective.

8 STRATEGIC ENVIRONMENTAL MANAGEMENT RECOMMENDATIONS FOR TOURISM IN THE LANDSCAPE

Using the categories of management under which the issues and impacts were grouped, a vision and set of landscape-level objectives is proposed. These are then used to guide the development of specific environmental quality objectives (EQOs) and corresponding management activities.

8.1 Vision and Objectives

8.1.1 Vision for the Landscape

Based on the literature and the consultations with the Landscape Committee, the vision for the Greater Waterberg Landscape is suggested to be:

“To support biodiversity and wildlife conservation and enhance key ecosystems services across the landscape, through sound collaborative governance and the development of a sustainable ecotourism route centred on a wildlife core area to the east of the landscape and on heritage tourism built on the historical and cultural attributes of the Waterberg area, with equitable participation and benefits across all stakeholder groups.”

8.1.2 Landscape Objectives

Sustainability and growth in the tourism in the GWC-PLCA will be achieved by pursuing multiple objectives. These are to:

- Support biodiversity and wildlife conservation: There is a need to increase wildlife populations. This should be done by establishing a wildlife core area in Otjituuo and Okamatipati conservancies, and by developing wildlife corridors for sustainable consumptive and non-consumptive tourism. There should be increased access to and distribution of the biodiversity resource and high value species associated with the landscape. (Waterberg National Park will form the ecological core of the greater wildlife complex, and not just the tourism anchor).
- Enhance key ecosystems services: For long-term sustainability, environmental flows and functioning must be strengthened and maintained. Where ecosystem services are degraded, efforts must be made to rehabilitate and improve them, thus maintaining the value of the landscape.
- Promote sound and effective collaborative governance and management: Representative and effective coordinated management at the landscape level must be established in order to create an enabling environment for tourism. By 2014, an effective governance and management authority must be in place. It must have the mandate, authority and support of stakeholders. This will necessitate the alignment of landscape level and conservancy management plans. MET should only enter into MoUs involving multiple landscape members with approval of the Landscape Committee.
- Develop a sustainable ecotourism route: The landscape should be transformed from an isolated national park visit to a diverse heritage experience with multiple tourism activities and an alternative tourism route within Namibia. This should include:
 - Provision of a core wildlife area within the community conservancies;
 - Enhancement of the ecotourism value of the farms adjacent to the WPNP;
 - Identification and development of the tangible and intangible historic and cultural heritage of the area;
 - Improved and diversified use of the WPNP;
 - Establishment of a tourism hub to allow for information exchange and visitor information.

- Ensure equitable participation and benefits: These benefits should include employment, training, skills enhancement and capacity building.

8.2 Institutional Responsibilities and SEA Enforcement

Within the Landscape, the existing roles and responsibilities and the proposed roles are outlined in Table below.

Table 4: Institutional Roles and Responsibilities

Institution	Role	Required Role for the Landscape
Government of Namibia		
Ministries	Responsible for a sector of government public administration. Formulate policy and strategies	Allow for selective implementation of policy on a site specific basis where objectives at the appropriate scale are different to that of the ministry
Departments (Central Government)	Implement policy objectives through plans and programmes	Judicial implementation of plans and programmes so that they support the objectives of the Landscape and do not undermine ecosystem integrity or lead to the collapse of ecosystem services. Support MET in identifying how and where the integrity of the ecosystem can be improved and impacts on biodiversity reduced.
Line ministry departments at the district level	Implement departmental plans and programmes at the district level	Selectively implement programmes that support the Landscape objectives and halt plans and programmes that are undermining the system integrity. Increase flexibility in responding to impacts identified and providing feedback to policy makers.
MET	Environmental protection Biodiversity Conservation Tourism Development	Environmental authority auditing to ensure that the requirements of the SEMP are being implemented by the various responsible parties Facilitate & approve tourism joint-ventures Formulate and implement PA management plans
Council	Community representation	Represent communities and provide informed feedback so that the Landscape becomes a reality on the ground.
Civil Society		
NGOs (at the regional level)		To support the implementation of the landscape SEA within their specific mandates.
Representative bodies for user groups	Promote the interests of members and maintain standards	Inform and educate members as to the Landscape objectives, identify areas of impact created by interest group activities and means to reduce or remove impacts, actively participate in the management and monitoring of the Landscape
Landscape Committee	To facilitate the management of the Landscape to meet its principal objective	Unchanged, but focus on the big issues, be aware of thresholds being crossed and bring resilience thinking into management approaches. Coordination, awareness of institutional responsibilities and the authority to reject inappropriate development strategies
Conservancies	Manage common property resources within demarcated	Implement management decisions by the landscape at conservancy level

Institution	Role	Required Role for the Landscape
	boundaries through a constituted membership structure	Contribute to affective landscape management through their membership structures
Village authorities	Tribal administration supports development initiatives and implements customary law.	Implement CBNRM at the appropriate scale and locations.
CBOs	Represent specific interest groups and CBNRM	

8.3 Implementation Framework

The SEA preparation is the first stage in the process and probably the simplest. It needs to follow a path in which the SEA urgency and requirements are transmitted to the people, users, sectors and administrators of the Landscape.

Once the SEA is approved, management actions have to be monitored and evaluated and the actions updated and improved while at the same time research into the thresholds needs to be on going so that the targets can be refined or changed.

A feedback loop allowing for adaptive management is crucial. The loop seeks to improve management and refine the targets by responding to research, monitoring and evaluation on an annual basis. The link to the public (both in terms of information distribution and consultations) is crucial to maintaining support. Where issues arise and focused stakeholder meetings can address the issues, these should be held by the appropriate authority and supported by MET.

8.4 Environmental Quality Objectives

Environmental quality objectives (EQOs) are identified based on national obligations and in response to pressures. They form an attempt to provide a strategic level standard or target or LAC (limits of acceptable change) for each of the main issues. For example, if the concern is the proliferation of lodges along the river system, EQO is to state the acceptable number of beds per unit of river system. The EQO is not fixed; should adaptive management monitoring by the landscape indicate that at such a level there is no impact on environment or loss of tourism value, then numbers can be experimentally increased and a new limit set. These limits are normally set on international and national standards or experiences.

To incorporate the adaptive management approach, the targets linked to EQO specific actions are to be reviewed annually and, based on improved understanding of the thresholds, revised, made available for public consultation and then approved by the Landscape Committee and authorised by MET. It is critical that revisions are made based on improved information only and not in response to pressure from user groups.

The table below was developed after discussion and inputs from the PLCA committee during the June and October 2013 meetings.

TABLE 5: Environmental Quality Objectives to Support Biodiversity and Wildlife Conservation

EQO	Management Actions and Mitigations	Target / Goal	Importance to the Landscape	Responsible Party	Time frame
a. Enhance the ecological viability of the WPNP	Include additional habitats in the surrounding area in a co-management approach of wildlife resources	MET implements the plans for a Greater Waterberg Complex	High	MET, Conservancies, GWLC	Between year 3 to 5
	Improve wildlife linkages through identification and conservation of key movement corridors	Key corridors identified, conserved and where critical, enhanced	High	MET, Conservancies, GWLC	Ongoing, identified within 1 year and conserved within 3
b. Increase the distribution of wildlife and wildlife diversity within the landscape	Identify, conserve and enhance key animal movement corridors	Key corridors identified, conserved and where critical, enhanced	High	MET, Conservancies, GWLC	Ongoing, identified within 1 year and conserved within 3
	Reintroduce wildlife to the conservancies' conservation areas	Core area restocked with historic wildlife assemblage	High for the core area	Conservancies, MET, GWLC	Ongoing, to be reintroduced into Core area after water secured and area established
	Increase linkages between WPNP and adjacent farms (Note that the WPNP Management Plan includes "The Greater Waterberg Complex represents a "smart public-private partnership" of custodians, managers and owners who share a common vision for the long-term management and development of the area. This development would be to the mutual socio-economic advantage of all participants, to the fragile semi-arid environment and to biodiversity conservation.")	Protocols agreed and participating farms included into the Greater Waterberg Complex	High	MET, conservancies, GWLC	Ongoing, with implementation within 3-5 years
c. Reduce persistent levels of poaching in the conservancies	Increase public support for the conservancies	To a level where game populations in the conservancy areas begin to recover	Moderate to high depending on the areas	Conservancies, MET, link to Conservancy Event Notebook Monitoring System	5 years

EQO	Management Actions and Mitigations	Target / Goal	Importance to the Landscape	Responsible Party	Time frame
d. Ensure water availability to support wildlife populations in conservancy core conservation areas	Provide permanent watering points for wildlife in the proposed core area of the conservancies.	At least five watering points established prior to wildlife re-introductions in the core area	High	GWC-PLCA	1 year
e. Co-manage tourism access and use of WPNP so as to increase tourism	Through co-management of the WPNP, establish an increased tourist access framework which does not increase the threat of rhino poaching (Note that the WPNP Mgt Plan includes “The Ministry of Environment and Tourism (MET), in its Strategic Planning (2007b), has embraced this notion of co-management approaches to landscapes and biodiversity across different land tenure systems in which different land owners, custodians and managers work towards a common vision, common objectives and outcomes and via agreed actions.” MET has identified concession sites and opportunities for operators with facilities outside the park to obtain or operate concessions within it	Co management established and independent guiding by both private and public sector in WPNP leading to a doubling of visitor numbers within 5 years (adhering to WPP Management Plan acceptable growth scenario).	High (MET has plans for this, needs to be implemented)	WPNP/MET. Tourism operators, GWLC	1 year
f. Control the unregulated commercial use of veld products and wood resources such as firewood, charcoal and poles in the conservancies	Link commercial use of resources to formal bush thinning programmes such as CBEND. CBEND SEA guidelines must be followed (SAEIA & C. Christian, 2009)	5 % of the most seriously bush encroached grasslands thinned.	Very high (overdue)	Conservancies, MoA (forestry), RC, National Planning Commission Secretariat	An ongoing program starting end of year 1

EQO	Management Actions and Mitigations	Target / Goal	Importance to the Landscape	Responsible Party	Time frame
g. Reduce veterinary controls that prevent distribution of buffalo and other species from the WPNP to the surrounding farms thus creating an integrated wildlife system	Veterinary services, private sector conservancy farmers, Cheetah Conservation and MET to prepare protocols to allow disease free buffalo (and other wildlife species) to be distributed into a greater Waterberg wildlife system	Participating private sector farms effectively integrated into a greater Waterberg wildlife system resulting in enhanced ecotourism potential of the area	Medium – long term plan	Veterinary Services, WPNP/MET, GWLC	Protocols established within 5 years
h. Biodiversity conservation	Ensure that the important role that the WPNP plays in endangered species conservation e.g. cheetah, Cape vultures, wild dog, rhino, FMD disease free buffalo is maintained and enhanced	Conservation status of known endangered species in the landscape improved or at a minimum maintained	High	WPNP/MET, GWLC	Within 3 years, ongoing

TABLE 6: Environmental Quality Objectives to Enhance Key Ecosystem Services

EQO	Management Actions and Mitigations	Target / Goal	Importance to the Landscape	Responsible Party	Time frame
a. Maintain existing animal movement corridors and enhance linkages between conservation areas within the landscape	Identify, conserve and prevent closure of key wildlife movement corridors through illegal fencing in the communal areas	Key corridors identified and conserved.	High	Min of Lands, Land Board, TA, Conservancies, MET, police	ongoing
	Identify means to reduce the impact of the Northern Water Carrier which cuts across the south eastern side of the WPNP creating a wildlife movement barrier	Establish where the known crossing points are located and institute a mitigation plan e. g. "sponsor a slab" initiative for NWC	Medium	Water Affairs, 'canal committee'	Within 2 years
	Remove or reduce fences/barriers to eland annual movements between Rietfontein and the area just north west of the WPNP affecting survival of the migratory population	Annual movement pattern understood, mapped and conservation measures put in place.	High	Ongarangombe Conservancy, MET	Being addressed. Move from understanding and mapping to implementation within 2 years
	Address animal disease control fence which limits wildlife linkages between the GWL and Tsumkwe area. This includes elephant population linkages between the Kaudum NP and the conservancy core area.	Assess the options of shifting the veterinary control fence to the south western side of the core area with that of retaining it on the eastern side of the core area	Medium	Veterinary Services, Conservancies GWLC	Long term plan within 5 years
b. Enhance range quality across the landscape	Implement a bush thinning programme and research with Polytechnic of Namibia. Ensure that the recommendations of the SEA of the CBEND Project are adhered to.	At least two, labour intensive bush thinning projects underway by 2016 in collaboration with the National Planning Commission Secretariat	High	National Planning Commission Secretariat, GWLC/CCF employee, farmers associations, Polytechnic of Namibia	Being addressed through holistic management (CCF)
c. Establish fire control and management systems	Fire management to be established to prevent wild fires from entering the landscape from the east (Tsumkwe)	The frequency of fires entering the Landscape to be reduced. Fire, though, to be retained in the landscape as a bush encroachment reduction tool (Trollope & Dondofema, 2003)	High	GWLC, CCF Directorate of Forestry	In place, ongoing

EQO	Management Actions and Mitigations	Target / Goal	Importance to the Landscape	Responsible Party	Time frame
d. Maintain aesthetic landscape quality, improve the sense of place and minimize visual pollution	Ensure that aesthetic impacts of developments such as mines, smelters, power lines, cell phone towers are considered during planning for developments within the landscape	Aesthetic considerations incorporated into proposed developments within the landscape	Medium	MET, Conservancies, land owners, town council	Ongoing program after vision and objectives adopted
e. Establish effective and sustainable solid waste management	Institutional and infrastructural preparation for solid waste management developed	Landfills and council landfill services established for major settlement centres	High	Town councils	1 year

TABLE 7: Environmental Quality Objectives to Promote Sound and Effective Collaborative Governance and Management

EQO	Management Actions and Mitigations	Target / Goal	Importance to the Landscape	Responsible Party	Time frame
a. Establish a shared landscape vision and objectives, with clear strategic plans for reaching the objectives	Review, modify and adopt the proposed landscape vision and objectives	Landscape vision and objectives finalised and adopted by the landscape committee	High	GWLC	Within one year
b. Establish an effective and sustainable authority at the landscape level	Roles, responsibilities and authority of the Landscape members and institution established	Effective authority established at the landscape level, with management plans, and active constituted bodies in place	High	MET, Conservancies, Park, individual farms	Before the end of the Nam-Place project
c. Obtain full support and buy-in from other planning authorities influencing the landscape	Outline vision and objectives of the GWL and highlight potential synergies and conflicts and areas where support is necessary from planning authorities within and affecting the landscape	Planning authorities informed and supportive of landscape vision and objectives	High	MLC, MET	Within 1 year and reinforced annually
d. Establish realistic and full participation of key stakeholder groups	Active and full participation to be established by creating three separate sub-committees; one for the eastern conservancies and core area and another for the western WPNP and adjacent farms and one for cultural tourism.	Sub committees established with active participation of stakeholder groups from each area	High	MET, Conservancies, NGOs	Within 1 year
e. Ensure greater and more effective NGO involvement	Identify and develop partnerships with NGOS that can assist in developing cultural and heritage aspects for tourism development	NGOS to support the various components of cultural tourism development identified and at least two partnerships established.	High	CCF, Polytechnic of Namibia, University, Federation (housing, RD), Nam-Place to secure donors	Ongoing
f. Implementation framework and funding identified	GWL development framework prepared for each of the subcommittees	Framework in place and being implemented	High	GWLC, conservancies	In place, ongoing

TABLE 8: Environmental Quality Objectives to Develop a Sustainable Ecotourism Route

EQO	Management Actions and Mitigations	Target / Goal	Importance to the Landscape	Responsible Party	Time frame
a. Build a brand for the Landscape which establishes it as a tourism destination	Develop an independent brand for the Landscape which establishes it as a unique destination that is an addition to the existing key destinations of the Namibian tourism route	A culturally unique ecotourism destination brand established	High	GWLC, Nam-Place, NGOs	2 years (Needs to be linked to ecotourism and cultural tourism developments in the Landscape)
b. Address the inherent low ecotourism value of much of the eastern landscape	Establish diverse and high density wildlife populations in the conservancy core area. Linked to objectives 1 & 2	Finalise boundary of core area; assess options of linkages to the Tsumkwe wildlife system; establish water supply; restock through support from MET; establish tourism access; develop brand	High	NACSO, GWLC, MET/WPNP, Veterinary Services	2 years to beginning of restocking program
c. Assist the conservancy venture to address the costly EIA requirements of the Environmental Act so as to reduce the barrier to entry into tourism	Identify and secure alternative sources of funding or partners for EIAs for tourism venture developments	Alternative sources of funds identified or alternative partners to undertake EIAs	Medium	MET (use Polytechnic, UNAM); NGOs	Support for at least 2 EIAs of tourism developments in the conservancies provided by year two.
d. Identify and document cultural and historic tourism attributes of the area	Although much is documented, a compilation and mapping of the attributes is required.	Cultural attributes compiled and mapped	High	Conservancies, assisted by NGOs	1 year
e. Diversify the tourism product through the development of historic and cultural tourism products	The cultural documentation to be followed by the development of tourism products around the cultural attributes.	Cultural tourism products developed	High	Conservancies, assisted by NGOs, support of a tourism planner	2 nd year

EQO	Management Actions and Mitigations	Target / Goal	Importance to the Landscape	Responsible Party	Time frame
f. Address concerns about rhino poaching whilst increasing access to the WPNP to a wider range of tourism products	Substantially improved tourist and private sector guide access to WPNP while ensuring that the risk of rhino poaching is not significantly increased	Access and use of WPNP by private sector tourism doubled with no significant increase in rhino poaching within the park	High	WPNP/MET, GWLC	2 nd year
g. Improve and extend NWR facilities and services	Develop innovative arrangements such as joint ventures and subleases to private sector.	Innovative arrangements in place	Medium	WPNP/MET, GWLC	3 rd year
h. Revitalise guest farms	Identify veterinary acceptable approaches to allow distribution of buffalo from the WPNP to the surrounding farms for both consumptive and non-consumptive tourism	Protocols established and buffalo and other species spread throughout the Greater Waterberg Complex (as defined by MET) in participating farms	High	WPNP/MET, GWLC and participating farms	3 rd year
i. Reduce the extent of litter and uncontrolled waste dumping in villages to a level that does not conflict with tourism or pose a threat to the ecological integrity of the Landscape	Council to establish formal waste landfills and provide supporting services to settlements. Public to be educated on the need for waste management and their responsibilities	Landfills established and services available.	Medium	Conservancies , GWLC RC, MoH	4 years
j. Keep crime below the level that creates a threat to tourism	Create strong public support for visitors and ensure all tourist related crime incidents are reported and addressed	Crime on visitors not to exceed present levels	Medium	Community policing, Nampol, NDF	Ongoing: Collaboration, tourist education

TABLE 9: Environmental Quality Objectives to Ensure Equitable Participation and Benefits

EQO	Management Actions and Mitigations	Target / Goal	Importance to the Landscape	Responsible Party	Time frame
a. Increase the involvement of communities in tourism	Strengthening of the conservancies	Increased participation and support of conservancy objectives by people residing in conservancies	Medium	Conservancies, GWLC	Ongoing
	Development of quality cultural tourism		High	Conservancies (NGOs?), community experts, communities, development officers	Ongoing, by 2 years
b. Reduce community expectations for short term tangible benefits	Create and spread a realistic long term vision for tourism within the Landscape.	Community aspirations are linked to the long term tourism vision	High	Conservancies	Within 1 year of having a long term plan. Awareness, meetings, updating, getting right people in conservancy mgt
c. Develop tourism skills in the community conservancies	Develop tourism skills in line with the branding of the Landscape and the cultural tourism opportunities within the conservancies	Skill requirements identified and training opportunities established	High	JV partner, NGOs	Ongoing
d. Establish effective and mutually beneficial linkages between existing tourism establishments and cultural tourism in community areas	After the branding has been developed and cultural tourism opportunities identified, establish appropriate linkages between existing WPNP based tourism and cultural tourism in the landscape	Linkages established	High	NACSO, then GWC once products are there	After quality cultural tourism products developed. Year 3
e. Increase the diversity, quality of Herero crafts available within the Landscape	Assess existing Herero crafts and, within the cultural tourism framework, improve the diversity and quality of Herero crafts	Diversity and quality of Herero crafts improved	Medium	Conservancy chairs, conservancy managers, NGOs, NACSO	Ongoing, by year 3

9 CONCLUSIONS AND KEY RECOMMENDATIONS

The biggest challenge is that the Landscape is not, and has not been for decades, a cohesive ecological unit. The WPMP and surrounding guest farms to the west of the Landscape are isolated from the communal area conservancies to the east by fenced private farms, veterinary fencing, the Northern Water Carrier and the rapid increase in fenced areas within the adjacent communal areas. The communal conservancies are also isolated from the Tsumkwe wildlife system to the east by a functional veterinary disease control fence.

Effective management of the area requires a cohesive vision at landscape level which is currently missing. The current tourism operations are limited, heavily focussed on consumptive use and the WPNP is largely underutilised as a tourism product. Non consumptive tourism in the area relies almost entirely on the Waterberg Plateau National Park as its attraction. An industry providing guest accommodation and a mixture of consumptive and non-consumptive tourism has developed in the Park surroundings. The tourism industry in the Waterberg appears stagnant and, because it is not a key component of the “Namibian visit”, has felt the effects of the world recession as it is readily cut from visitor itineraries.

An important attribute that is found across the Landscape, is the cultural heritage of the Herero. Although it unifies the Landscape, it has proven difficult to develop into a tourism product. Although current expectations of the communal conservancies regarding tourism potential and benefits are unrealistic, it is nevertheless possible for much more to be developed than is currently available.

At the strategic level, for the Landscape to provide biodiversity and ecosystem services and to become a valuable tourism destination, several major changes are needed. The GWL committee needs to have real authority to influence planning and other sector decisions. The WPNP/MET and veterinary services need to become active and supportive partners in the Landscape and the planners (Councils and Land Boards) have to be aware of, and share, the vision for the landscape.

This SEA outlines a vision and key objectives together with specific management actions to assist in providing direction to the Landscape. For the Landscape to be able to meet its tourism objectives the following strategically important actions are required:

- Adoption of a shared vision and strategic objectives. Ensure that the vision is shared by key stakeholders affecting the Landscape.
- Recognition that the Landscape has two separate ecological units that will have different development directions and tourism appeal. This will necessitate the WLC to have two separate planning sub-committees that support by and represent the stakeholders of each ecological unit.
- MET and the WPNP: The attitude and support of MET will make or break the Landscape as a management unit. At present the WPNP’s initial objective is to “breed and sustain healthy populations of rare species of large mammals such as white and black rhino, disease free buffalo, sable and roan antelope, and eland” (Strategic objective of the WPNP Management Plan), and tourism plays a secondary role. MET needs to address the concerns of the GWL Committee about access to and quality of non-consumptive tourism within the Park. Two major shifts in approach are required:
 1. The WPNP also needs to change its position from an isolated plateau park to that of being the core to a greater wildlife system that includes participating surrounding farms (this is supported in the WPNP Management Plan: “The Park, although small, could benefit from land increase, especially since some of the large game species that are confined to the current area might do well in adjacent areas. However, since the Park is free of Foot and Mouth disease, any extensions of the Parks area have to be conducted carefully.”)

2. MET-centric management must be exchanged for co-management (Note that this is included in the WPNP Management Plan “The Greater Waterberg Complex represents a “smart public-private partnership” of custodians, managers and owners who share a common vision for the long-term management and development of the area. This development would be to the mutual socio-economic advantage of all participants, to the fragile semi-arid environment and to biodiversity conservation.”)
 - Veterinary Services have an important role in identifying how disease free buffalo can be safely introduced into the farms surrounding the WPNP. It also needs to consider options for assisting the Conservancy Core area develop linkages with the Tsumkwe wildlife system.
 - The GWL Committee and MET need to work together to establish the conservancy core area in the east and the greater Waterberg wildlife system (Complex as described in the WPNP Management Plan page 66 Figure 6) in the west as dual attractions into a Landscape that offers tourism based on ecotourism and the cultural attributes of the Herero people.
 - There is a lot to be done to support tourism development. These include branding, development of the cultural tourism component and the establishment of mutually beneficial linkages between established tourism enterprises and cultural tourism opportunities.

It is clear from the assessment that the GWL is a fragile system; fragile from a social perspective with large differences in wealth and opportunity and politically insecure due to its historical events. The ecosystem is under pressure with few wildlife linkages remaining between the key components of the landscape most notably the communal, commercial farm areas and the national park.

If the Landscape is develop into a dynamic tourist destination which can contribute to the diversification of livelihoods, much is to be done. The recommendations of the SEMP contain the key actions which are emphasised below.

- Support biodiversity and wildlife conservation: There is a need to increase wildlife populations and mitigating the cumulative impacts of habitat fragmentation and loss of linkages within the Landscape and depletion of natural resources. This should be done by:
 - Establishing a wildlife core area in Otjituuo and Okamatipati conservancies,
 - Developing and conserving wildlife corridors and the strategic removal of fences in key areas. There should be increased access to and distribution of the biodiversity resource and high value species associated with the landscape. (Waterberg National Park will form the ecological core of the greater wildlife complex, and not just the tourism anchor).
 - As a landscape, address natural resource depletion through conservancy regulation of natural resource use and a holistic approach to reducing bush encroachment.
- Enhance key ecosystems services: For long-term sustainability, environmental flows and functioning must be strengthened and maintained and mitigate the cumulative impact of degrading the tourism appeal.
 - Where ecosystem services are degraded, efforts must be made to rehabilitate and improve them, thus maintaining the value of the landscape. This includes waste management and prevention of conflicting land uses and high visual impact developments
- Promote sound and effective collaborative governance and management: Representative and effective coordinated management at the landscape level must be established in order to create an enabling environment for tourism.
 - By 2014, an effective governance and management authority must be in place. It must have the mandate, authority and support of stakeholders. This will necessitate the alignment of landscape level and conservancy management plans.
 - MET should only enter into MoUs involving multiple landscape members with approval of the Landscape Committee.

- Develop a sustainable ecotourism route: The landscape should be transformed from an isolated national park visit to a diverse heritage experience with multiple tourism activities and an alternative tourism route within Namibia. The cumulative impact of increasing social dissatisfaction will be partially mitigated through the following:
 - Provision of a core wildlife area within the community conservancies;
 - Enhancement of the ecotourism value of the farms adjacent to the WPNP;
 - Identification and development of the tangible and intangible historic and cultural heritage of the area;
 - Improved and diversified use of the WPNP;
 - Establishment of a tourism hub to allow for information exchange and visitor information.

- Ensure equitable participation and benefits: By ensuring that increased tourism in the area leads to improved livelihood benefits at the landscape and local levels, the cumulative impact of increasing social dissatisfaction will be mitigated. These benefits should include:
 - employment,
 - training,
 - skills enhancement,
 - capacity building, and
 - alternative livelihoods and incomes.

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APPENDIX 1: ATTENDANCE LIST FOR THE GWC-PLCA SEA CONSULTATIVE MEETING, OKAKARARA

JUNE 12TH, 2013

M. Mweutota	UNDP
L. Halueendo	NAM-PLACE
K. Kandjii	MET-WPNP Warden
Laurie Marker	CCF
Chris Friedel	CCF
Sonja Schneider-Waterberg	Waterberg Conservancy
Harry Schneider-Waterberg	Waterberg Conservancy
K. Komonungombe	Okakarara Constituency
M. Tjikurame	Elandsweide
M. Ngatikembro	CCF
K. Katjiveri	Otjituuo Conservancy
M. Kavetuua	
E. Karita	Okamatapati Conservancy
J. Hindjou	Ndjoura Investments
Uri Matundu	NAM-PLACE
G. Kaapii	Cultural Project
M. Sibalatani	NAM-PLACE
D. Parry	EcoSurv
L. Cassidy	EcoSurv
W.Schalken	EHRafrica

OCTOBER 15TH 2013

Name	Organisation
David Masen	MET – Waterberg PP
Sonja Schneider-Waterberg	Waterberg Conservancy
Harry Schneider-Waterberg	Waterberg Conservancy
Michael Sibalatani	NAMPLACE
Leonard Mokanya	NAMPLACE
G. Kamdingwe	MET (Okakarara)
Mbinge Kavetuna	African Wild Dog Conservancy
A. Mundjindjii	Ozonahi Conservancy
R.N. Kashiakumwa	MET (Okakarara)
K. Katjiveri	Otjituuo Conservancy
A. Vindina	AA (OFA)
K. Kandjii	MET – Waterberg PP
Ebenhard Karita	Okamatapati Conservancy
Manfrit Tjikurame	Elandsweide (OWFA)
Lin Cassidy	Ecosurv

APPENDIX 2: SUMMARY OF THE STAKEHOLDER CONSULTATIVE MEETING (OKAKARARA, 12TH JUNE 2013)

Categories of members, what is your vision for tourism? Where do you see tourism in this greater area going?

Harry: start dreaming! Start with the core area proposed to the east of the two communal conservancies – where do you see it? If water is there and it is fenced, a lot of development will be there. There will be lots of lodges, employment will be there, a lot of management activities will be there, it will be a tourism attraction centre.

Outside the core area there will be cultural tourism. (NB. Management plans are not in place). What is vision for wildlife tourism? A lot will happen there. What game is there now? Not much. What about linking this core area to the Tsumkwe area to the north that is already established, making a 4x4 route for adventure travellers. Although there is a disease fence, and vet department will need to be involved, it can work as a route. Right now tourists drive to Grootfontein and then across to Tsumkwe, whereas they could go through here.

(A discussion on the new tar road and its alignment and linkages followed.)

The road will play a key role in developing that core area, we have an opportunity of being the centre of the country for a multiple day stay on the way to Etosha. We can direct people passing through the western part of the landscape to the eastern area. We need to come up with what our routes will look like, where the facilities will be, and all of those potential business opportunities. We need to look at a big land use plan. There are issues around electricity and water, how do those fit into tourism development? If the core area is the core, how to service it? What type of tourist will be coming in there? The development that can happen in 5 years can be high when guided by a development plan. We need to know what is happening out there so we can plan around that. Communities need to know where the villages are going to be so we can do a landscape approach.

We do not need to focus on one type of tourist, whether destination and transit, we need to attract both. And we need to also think about working travellers and not just tourists.

We are also thinking that during the construction process, we want to use borrow pits for watering wildlife.

Jackson: I see the vision in a more holistic way – there are other aspects beyond the core area that could support the growth of the core area. That is the cultural aspect, there are people who are organised who can be involved in attracting tourists to the core area, and in the constituency there are also historical sites that tourists can be taken to, as well as the old war sites around Waterberg.

Looking at us being farmers, and wildlife being a new thing, we need capacity building to live in harmony, because wildlife can have a better impact than livestock on the grazing – this should all be part of the bigger vision.

The important thing is to identify those resources that we have, and those that we know we don't have. For example, that huge area to the east of the landscape – there are wild places out there, there is a lot of birdlife out there.

Marty (CCF): We are talking about cultural tourism and core areas, but the most important thing to do is to look at some of the limitations. It might not be ideal, so it would be good to have a list of identified attractions or potential sites that could drive tourism growth in this area.

We have already done an assessment of the historical sites in the area, also all the traditional dances are in place. Even our people know how to present cooking, meals – we are waiting, but we are still working with paper, not getting it on the ground. Holy places are there, some historical places might bring back bad memories, but also we can focus on day-to-day life in the area. And we have some roads that go through to the east, we need these to be declared as access roads, we are already working on this. Nam-Place is coming in to start again, they didn't try and work with this existing associations.

Roads will bring people in, this will benefit the majority of people on the ground. Businesswise we are going to benefit. Our focus will be the smaller groups. Not 5 star hotels or the big organised tours, but home-stays, not people coming in and going out, but staying put. What about attachment of students from all over the world – we could attract them too. The traditional dancing of the Herero is a big hit, but it is unknown.

Our expectation is not just to talk without end results, where is the outcome? We are good at talking and coming up with documents, but action is a problem. Unlocking economic potential of the area trying to be unlocked was set up through Regional Economic Strategy. The Ministry of Information has been trying to make a DVD of OK constituency. In fact one was already made through GIZ: "In the centre of the mountain", a small programme / video (11 mins) for marketing.

Does the boundary of KAZA touch this landscape?

We don't want to change too much what we are. In terms of Greater Waterberg, it is to make it possible for people to come in here and go to other sites that are worth visiting – that is what it's about. With regard to the core area, we need to understand the type of tourist that would do it, it should be marketed as something for the adventure tourist, and linked to Drotsky's Caves and Aha in Botswana. The reason it hasn't happened is yet, is that the infrastructure is not there yet – we need to establish it. I wouldn't be too concerned about roads; that will come. Look at Damaraland 20 years ago, there was nothing, now it is a key destination.

15 years ago, we asked the same questions (as the Waterberg conservancy) - what can we do to get tourists into our area? We need to establish the infrastructure to get tourists into this area. A Needs Assessment was done in this regard [need to get].

We need to look at getting those conservancies outside the landscape involved. The biggest obstacle is the vet fence.

Until now, the focus has been on looking for what land is available, for tourism development – that is how we came to focus on the core area – it is what is there, and it has potential, it something once can use in order to develop. The western part already has a certain amount of infrastructure, lodges, roads, water, it is on the circuit and it is relatively established. That is why we are looking at the conservancies – what is in there that one can develop? Is that the basis of the vision – spreading tourism equally throughout the area? Absolutely: how do we make people benefit from the development of this area? That is the purpose of bringing all these sectors together to make a difference to a large amount of people.

Yes, Waterberg plateau does still play a big role: through the complex, linkages should be created from the park through the lodges on the farms, to provide access to important sites for the conservancies. They already have visitors coming here, the link can be established, with a route then taking it out to the conservancies. If we think like this, then we can start tomorrow, by working on these smaller activities while we build on the bigger activity of the core area. For example, the wild dogs are a world attraction. It is about networking, starting small and creating linkages, linking all the attractions together. One of the key features of establishing a network of small projects is to give people basic knowledge, to have small projects and facilities everywhere, where people can first work and get the know-how to establish their own projects. For example where people ask to be paid for photos – that is not the right attitude. Through the network, we can all benefit from one tourist going to Diekman’s farm if that tourist then comes to see us.

The enhancement of our environment through wildlife and tourism is going to change the economics of the area as well. If we look at the tourists that are out there, we need to look at where they might stay. We need to compare 1000 vs. 6000 tourists and determine what we need, and what look at what changes – both good and bad – they will bring. That is why looking at an integrated approach of wildlife and livestock is a good idea. If that happens, then even in the core area we can see wildlife expanding outwards if folk there see the value and benefits of coexistence here in the farms around the Waterberg. Yes, there will be increased benefits, but we will also need to address human-wildlife conflicts.

In terms of enhancing the environment for wildlife, Nam-Place was also supposed to look at opening up the fences, but that is now very difficult with the security issue related to increased rhino poaching in the broader southern African region. It is therefore unlikely that MET will open Waterberg in the near future, because of the rhino situation.

We need more trained game guards, as well as more trained tourism people. Capacity with regard to all aspects of environmental management needs to be developed. They are starting with school kids, talking about things like waste, but such issues must be addressed at all levels.

With regard to the issue of unsustainable or illegal tourism activities - I don’t really know? There is the problem with overharvesting devil’s claw, we need to look at that, but that’s not really tourism. Unregulated tourism could be a challenge, it needs a plan. But currently it is not clear that there are problems there. Yes, it would be unsustainable if it is not trickling down to the routes [or did he mean roots?]. Perhaps around trophy hunting? Or where people organised cultural tours, but when tourists wanted to take photos, they tried to charge.

Waste: we are trying to put in a green scheme around Otjiwarango, using the concept of a Green Region as a vision –and setting the standard for waste management, making it look better and starting recycling. These aesthetic aspects of tourism need to be addressed.

The town of Okakarara falls under the landscape, and there are no disposal sites. Under the Environmental Management Act there needs to be a better regulated site. Currently there is just an unregistered dump site. Also, there are two unfenced sewerage oxidation pond sites. The main road to CCF goes past the Otjiwarango dump – it’s a high point for CCF, 6000 visitors a year have to look at that. [NB: This is not part of the landscape, and on the CCF private road.]

Inappropriate Infrastructure: Roads are not properly maintained. Some areas do not have cellphone coverage. Perhaps it should be Inadequate Infrastructure, not Inappropriate. Electricity – and a huge percent of the population lacking access to water – these are big challenges. [Note: maybe the issue of inappropriate infrastructure was introduced by Nam-Place staff with regard to proposed smelter???)

Sustainable Resource Use: We do have a problem of overgrazing. There is a really high livestock density resulting in bush encroachment. Wildlife is non-existent in some of the conservancies – creating a challenge for tourism. A lot of poaching is going on – especially for meat. Across the landscape, animals have been translocated into the conservancies, and they have somehow vanished. The management was not appropriate, and there was no water. Poaching levels are constant, not increasing. There is also stock theft, and of course, the big threat of rhino poaching.

Crime is rising here, we constantly have poaching on our farm, and crime is a threat to tourism.

There is also a lot of wood that is being cut and sold, and the selling of charcoal, and selling poles to the building industry.

Is mining a problem in this area? Not that we know of.

Compatible resource use: for example having the core area inside a livestock use area? [No response from participants on this issue.]

Fire is definitely be a challenge.

Illegal fencing, we have individuals fencing off areas of communal land as if it is theirs, while actually it is not. This affects animal migration.

The Okakarara town council is planning to set up a big [manganese?] smelter here in town. This might be bad for tourism. Maybe a coal mine is to be started near here – that is a rumour, we don't know much about that.

Concessions into park: the park is a no-go zone for any tour operators but MET and NWR. That is a ministerial decision, and it is still like that. The hunting concession is still open to the public – the current one expires in 2013, and we are still waiting to see the next one advertised.

Conflict between consumptive and non-consumptive tourism: no, the park is well zoned and there is no conflict. Within the Waterberg Conservancy, both forms are being tapped into, but there is also no obvious conflict. It should be compatible, it is about managing, and you need to have both.

Heritage resources: It is possible that the Waterberg is a National Heritage Site – need to confirm, could be an important marketing point. Could be in a vision, give a higher profile. Dinosaur footprints, and fossil trees and bone fossils.

Fire management: fire seems to be increasing, we need to be managing it. Fire always comes from Tshumkwe; the San are hunting with fire, and we are down-wind.

Lack of wildlife: In the GWC, we could focus on wild dog, cape vulture, and cheetah as animals found more here than in other regions. However, Waterberg as a vulture breeding station does not have much hope as there are only 3 or 4 pairs left. There used to be many, now only a few remain. This is due to poisoning, and to bush encroachment, as the birds can't land to get to the carcass. The Rare and Endangered Species Trust (REST) has a centre outside Otjiwarongo.

We need more lodges in the east. In the west, we are not even close to running at capacity, so we don't need more facilities here. We do relatively well, we could develop if we have more activities to offer – growth will be driven by marketing of the region.

Human capacity is a key factor. How many people are there out there that can participate? We need to provide skills. Crafts: diversity and quality could be a problem – it needs training. When we say there is no infrastructure for tourism, that is it even in terms of ‘human’ infrastructure – we have to start from scratch. The capacity-building needs for this project is massive.

It is important to focus on what is unique about the landscape, and where its linkages to other areas in Namibia are.

Environmental quality: the smelter could possibly have a negative effect. Also there are a lot of villages, 22,500 people. Especially around villages you see trash lying around. In terms of industry, and big sources of pollution, that is not an issue around here.

Any known critical biodiversity hotspots we should be aware of: The Waterberg Park – Roan, sable, disease-free buffalo. But the problem is that it is so difficult to access the park, that it is hard to consider it as part of the landscape. If you marketed it differently you could attract more people, but access it is so limited. Activities are so limited. Tourists are rushed to 3 water points and out. The history, the dinosaur footprints, the vistas, shorter access to the wildlife area, all of the access is not tapped into. It is such a pity to see such huge potential untapped. The accommodation available at the park is not of a sufficient standard for a certain type of clientele. NWR is known to be of limited quality and service – it is challenged. You could have quite a linkage to the community too, the cultural link to Waterberg is huge. There could be guided cultural walks on the mountain to show its heritage importance.

The park is a big anchor, but can we do anything with it?

[MET representative:] With regard to access to Waterberg, we don’t have self-drives. We don’t need farmers to drive their own tourists, it is too small. No, the MET activities do not run at full capacity. We don’t have the activities if there are no tourists, so only run on-demand.

Waterberg is one of two wilderness areas in the country. It is not functioning as a drawing card for the area, so we have to create a new one. The communities do not benefit from the Waterberg through wildlife, but they could benefit if there was a tourism route linking the park to their areas. We could have two major wildlife arms: the protected park providing a window into Hereroland, and the Hereroland itself having the wildlife that can be accessed by tourism – but that needs huge development, in a structured planned way.

One potential is the shift we have seen since concessions in parks introduced. Some parks left alone, and others where concessions given to communities. Maybe we can see if communities could have a concession of access to do Herero-guided tours.

Any key movement corridors: Eland are blocked off from Rietfontein along the north-western Waterberg – blocked by some of the game fences. In September in response to flowering of the Yellow-wood Terminalia, they calve here. There’s also a fence on a commercial farm near Okakarara, the resettlement farm has a very high fence. The old vet fence, they don’t allow it to be taken down. There is some movement of wild dog east to west within the conservancies. Elephants come from far. Also, some buffalo come down from the plateau, but they are usually shot.

**APPENDIX 3: SURVEY INSTRUMENT TO ASSESS THE EXISTING GREATER
WATERBERG TOURISM SECTOR**

Tourism Baseline Survey Instrument Greater Waterberg Complex Landscape



Please provide the following information to your landscape coordinator.

Description of Facility	
Name of facility	
Type of tourism facility: (e.g. lodge, hunting camp, B&B, campsite, etc.)	
Location (coordinates)	
Southing/latitude	
Northing/longitude	
Location (access road)	
Contact person (Name)	
Contacts (Email or telephone)	

Visitors	
Type of visitor units (tents, bungalows/chalet, rooms)	
No. of accommodation units (excluding camping)	
Total no. of beds:	
Estimated total no. of bed nights for 2012	
Period (months of the year) of highest visitor numbers:	
Camping facilities (do you allow for or provide camp sites)?	
No. of camp sites:	
Estimated total no. of campers for 2012:	

Rates and Charges	
Rack rates per visitor per day (bed night rates 2012)	
Please indicate if rate is bed only, B&B, DB&B or full board	
Rates per person camping per day (please indicate whether rate is per camper or camp site)	

Activities provided	
List all activities provided	
Most popular activities	
Additional activities you would like to provide on your property as well as in the larger landscape (including the Waterberg Park)	

Hunting (if listed as an activity above, please complete this section)	
Estimated no. of trophies taken in 2012	
Estimated no. of bednights by hunters in 2012	
List in order of importance the 3 most important hunting species at your establishment	

Staff	
Total no. of staff in your employment (permanent)	
No of designated tourism employees	
Division of tourism employee levels:	
• Cleaners and support	
• Management and supervisors	
• Specialist staff (hunting guides etc.)	
No. of staff resident on site	

Utilities	
List all sources of power used (e.g. mains grid, generator, solar, wind)	
What is the main source of power?	
If firewood is used, where is it obtained from?	
Is firewood readily available?	
How is solid waste (rubbish) disposed of?	
What rubbish items are recycled?	
How is sewage treated? (pit latrines, septic tanks, conservancy tanks)	

Do you have any issues or concerns about the landscapes concept that you would like to raise, particularly with regards to tourism?

A large, empty rectangular box with a thin black border, intended for the user to provide their response to the question above.

Thank you for your support

APPENDIX 4: GWL RESILIENCE ASSESSMENT AND THE IDENTIFICATION OF KEY ISSUES

A: INTRODUCTION TO RESILIENCE THEORY AND PRACTICE

Resilience Terminology

Several key ideas and concepts of resilience thinking are briefly outlined in the following paragraphs.

1. Ecosystems, social systems and social-ecological systems (SES) are **self-organizing systems** and in SES the ecological and social domains are strongly interlinked. Changes in ecosystems, social systems and SESs are driven by two kinds of change: (i) external (environmental) and (ii) internal where systems go through internally generated cycles of change – known as adaptive cycles (Fig. 1).

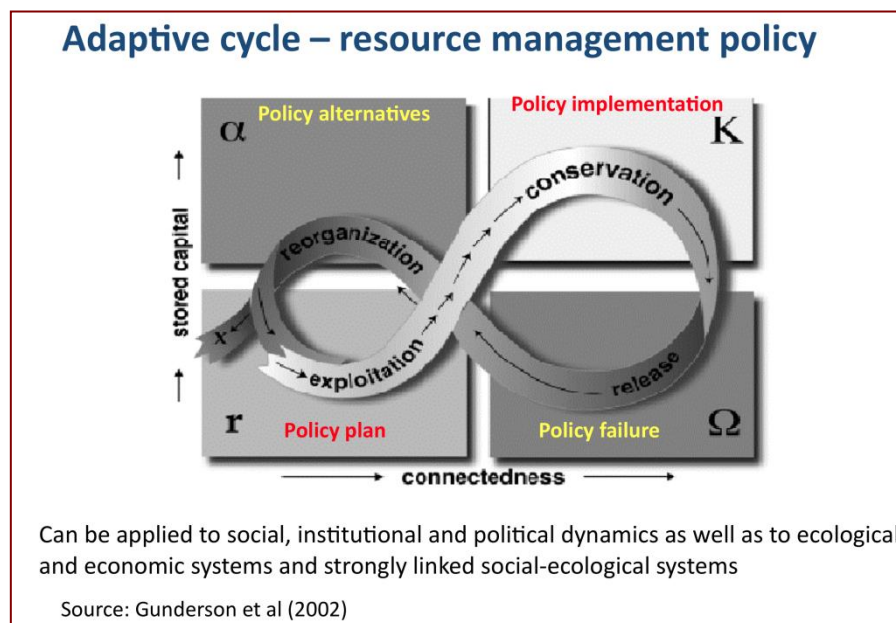


Figure 6: Diagrammatic representation of an adaptive cycle. The arrows within the loops indicate the rates of change with exploitation and conservation phases being slow and release and reorganisation being rapid.

2. Resilience is the “amount of change a system can undergo (its capacity to absorb disturbance) and remain within the same regime - essentially retaining the same function, structure and feedbacks.” (Walker and Salt 2006). The system is able to retain the same identity although reorganisation following a disturbance may not take it back to precisely the same state - change and adaptation are constantly present. Resilience is a conceptual framework for understanding how **persistence** and **transformation** coexist in SES and it involves three, intertwined concepts, namely, **Thresholds**, **Adaptability**, and **Transformation**.
3. There are **limits** to how much a system can be changed and still recover. Beyond those limits, or **thresholds**, it functions differently and changes to some other state, i.e. a transition between states occurs that may or may not be reversible. Thresholds occur in both ecological systems and social systems and when there is a change in feedbacks, when they occur across scales and result in cascading effects, and across scales and domains (ecological, economic, social) and can have cascading effects.
4. Adaptability (general resilience) is the capacity of the system to cope with shocks and surprises and the following attributes tend to confer adaptability and maintain system resilience:
 - a. High diversity and redundancy, and especially response diversity.
 - b. Being modular in structure and not over-connected

- c. Detecting and responding quickly to change (having tight feedback loops)
 - d. Being 'open' (e.g. immigration and emigration, dispersal)
 - e. Reserves, both biophysical (e.g. seed banks) and social (e.g. memory and experience)
 - f. Trust, leadership and social networks (social capital)
 - g. Overlapping institutions and polycentric governance.
5. There are four important points about resilience and adaptation:
- a. You cannot understand or effectively manage a system by focusing on one scale. Attention needs to be given to at least three scales the focal scale, the scale above and the scale below the focal scale. Increasing resilience at one scale, or pursuing efficiency (e.g. maximum sustained yield) at one scale can reduce resilience at other scales.
 - b. Making a system very resilient in one way, at one scale, can cause it to lose resilience in other ways, at other scales. There are trade-offs in applying resilience in practice
 - c. Resilience is NOT about not changing or trying to keep a system constant by preventing disturbance, these actions reduce resilience. For example a forest or woodland from which fire is always excluded loses its resilience to fire. Most losses of resilience are unintended consequences of resource management narrowly focused on optimisation - single resource decisions with multiple resource consequences.
 - d. Resilience per se is neither 'good' nor 'bad'. Undesirable states of systems can be highly resilient (e.g. dictatorships, saline landscapes, bush encroached rangelands).
6. **Transformability.** If a shift into a "bad" state has happened or is inevitable, or if the current state is no longer a desirable one, the only option is **transformation**. Transformability is the capacity to become a fundamentally different system when ecological, social and/or economic conditions make the existing system untenable.

Approach to Resilience Analysis

The main steps for a resilience analysis are as follows:

1. The main steps are:
 - a. **Define the system** - focal and related scales, and resilience of what to and to what?
 - System boundaries, scales; what is the region? the "focal" scale? scales above and below?
 - Stakeholders, governance (formal, informal)
 - Key assets, values, ecosystem services
 - Disturbances, shocks, trends and drivers. What are the "characteristic" disturbances, and their disturbance regimes (rainfall variation – floods, droughts, frosts)? What rare shocks have occurred in the past and may occur in the future (e.g. climatic, particular pests, civil unrest)? Or completely novel shocks such as new markets, emerging diseases? What have been the major trends and drivers and drivers in the system (e.g. climate change, demography, energy prices)? For trends, develop a timeline /historical profile (how did it get to be like it is now)?
 - b. **Examine system dynamics** and assess resilience (i.e. resilience of specific components of the system or specified resilience and thresholds, general resilience [see paragraph 4 above], and transformation and transformability). This entails examining known thresholds, thresholds of potential concern, state and transition models, which transitions may be characterised by thresholds, what feedbacks are involved in the process, and short and long term spatial and temporal changes in the system.

For each of the identified valued system Goods and Services, what are the underlying **controlling variables** that determine them, and do any of them have threshold levels? This set of controlling variables determines the state of the system at any time, and its resilience (e.g. for crop production -- soil fertility / condition, rainfall, labour; or for biodiversity the proportion of native habitat, levels of fragmentation and connectivity).

For each S&T 'model' the following questions need to be explored: Could any of the transitions have threshold effects? What are the controlling (slow) variables, that may have thresholds on them? What feedbacks are involved?

Interacting thresholds across scales (i.e. focal scale and upper and lower scales) and domains (ecological economic, social) also need to be explored. From what is known and from the State & Transition exercise can potential thresholds for each scale/domain be identified?

Determinants of transformability also need to be examined and include such factors as the preparedness to change, what the options are for change, and the capacity to change - with governance issues often being the major determinants. Achieving transformational change depends on the kind and strength of governance and those responsible for correcting inappropriate governance are often the root of the problem.

- c. **Examining options for interventions** involves considering the kinds and scales of interventions that may be possible (e.g. policy and governance, financial assistance, information and education), the sequencing of interventions, developing a adaptive management program and examining where transformational change may be called for. What form interventions may take will depend on where in the adaptive cycle the system is.
- d. **In summary.** How do you *do* a resilience assessment, and how do you apply it to planning and management? There is no 'recipe', no set procedure or sequence of actions.

B: A ROUGH HISTORY OF THE GREATER WATERBERG LANDSCAPE AREA

A short understanding of the history of events within the Landscape gives an idea to what shaped the present land uses and communities.

- The area was used initially by Nama and then more recently (150 years ago circa 1750) by Herero cattle farmers who moved from the Kaokoland area near the Kunene. In the 1884-90 German farmers settled the area around the Waterberg Plateau and to the west and north.
- A rebellion broke out over land in 1904 – 1907 which led to the near genocide of the Herero people in the Otjozondjupa Region.
- Approximately 50-60,000 of the ca 70,000 Herero died mainly of starvation. Approximately 16,000 survived.
- 8,889 were taken prisoner and 1175 took up exile in Bechuanaland.
- After Namibian independence in 21 March 1990, Herero living in Botswana were allowed to return to Namibia with their livestock. Approximately 20,000 Herero were living in Botswana at the time of Namibian independence.
- There has been some (4) commercial farms in the Okakarara area that have been resettled by Herero farmers since 1990.

The Main Issues Identified

Social

- Grazing and grazing land. The increase in people and livestock at the same time as bush thickening has resulted in overstocking.
- The Herero feel politically isolated, short of land and culturally unappreciated. Their history is a major social problem and recognition of it is critical to cultural healing. Cultural tension between the different land holding groups

Economic

- The existing tourism market is limited and GWL is not a core tourism area.
- Poverty and lack of economic development opportunities.
- Lack of groundwater in most of the eastern Otjozondjupa Region limits both wildlife and livestock

Ecosystem Function

- Wildlife and consumptive and non-consumptive tourism is important for many of the commercial farms. Growth is limited by limited species diversity and lack of ecological linkages to the WPNP
- High stocking rates, guns and traditional use of wildlife has depleted the communal areas of wildlife.
- Major physical barriers to wildlife movement are
 - Veterinary fencing (old and new)
 - Farm fences (The commercial farms are fenced and form a barrier around the WPNP, which, together with the natural barrier of the plateau separates wildlife in the park from the surrounding areas)
 - Eastern National Water Carrier (ENWC)
 - Closure of land through increased fencing in communal areas

The key issues are therefore:

- Lack of and declining grazing exacerbated by drought
- Historic disadvantages still not addressed, exacerbated by drought or economic decline
- Barriers throughout the landscape to internal and cross landscape movements of wildlife exacerbated by population density
- Limited tourism value, not enhanced by limited park access exacerbated by crime and social instability

C: WHAT IS SPECIFIC RESILIENCE REQUIRED FOR IN THE GWL?

- Droughts
- Bush thickening/range degradation
- Increase of barriers to wildlife movement
- Veterinary disease controls/ disease outbreaks
- Political instability
- Downturn in the global tourism market

Driver	Controlling Variable	Threshold
Known Thresholds		
Drought	Pressure on land resources, social conflict	Livestock dying in significant numbers
Bush thickening	Continuous grazing, loss of fire regime	Woody grass ratio
Increase in population	Availability of land and grazing, leads to fencing	Population density in the communal areas reaches a point after which households trying to control their resources
Barriers to wildlife movement	Fences and Eastern National Water Carrier	Decline in eland and wild dog populations
Veterinary disease controls	Animal disease legislation	Removal of veterinary control fences, buffalo allowed onto farms
Animal disease outbreaks	Stress; Smuggling of animals into disease free areas	Significant decline in cattle numbers/decline in livestock value
Thresholds of Potential Concern		
Political and cultural instability	Downturn in tourism or national economy; drought or change in Herero leadership; animal disease outbreak; loss of tourism within the GWL	Economic wellbeing
Downturn in the global tourism market	World economy	Decline in GWL share of the local market

D: SYSTEM MATRIX OF THE GWL ACROSS DOMAIN AND SCALE

The SEA is at the landscape level (our focal scale) but is affected by issues at the national scale and at the smaller specific land ownership scale. The three domains are the biophysical, the economic and the social. The matrix contains variable that could affect thresholds or regime shifts. The arrows indicate impacts or change effects should a threshold be crossed.

Domain	Scale		
	Land Ownership	Landscape	National
Biophysical	Limited grazing	Bush encroachment	
	Physical barriers around individual lands	Limited wildlife linkages	Eastern National Water Carrier creates barrier
		No groundwater in eastern Otjozondjupa	
		Wildlife diversity in WPNP only	
		Threat of Rhino Poaching	National Wildlife Policies
Economic		Linkages to east and north cut due to vet fence	
	Non-consumptive tourism	Otjozondjupa Regional Local Economic Development Strategy	Veterinary control policy creates barriers, prevents distribution of buffalo & elephant
	Consumptive tourism	New road from north to south	Tourism circuit (last choice)
	Access to WPNP controlled	Political instability or crime leading to collapse of tourism in GWL	
	Large economic and resource differences between commercial and communal		
Social	Proposed smelter at		
	Livestock ownership (communal)	Resentment by Herero community (due to history)	Land distribution policy
	Livestock ownership (commercial)		Political decisions and policies
	Political dissatisfaction		

Implications of the matrix are:

- The national scale impacts on the landscape and the landscape impacts on the individual
- Non-consumptive tourism is affected by many variables
- Herero resentment fuelled by declining condition of grazing, increase in population and the large economic differences between commercial and communal farmers. This will impact on the stability of the area as a tourism destination
- Veterinary control policies affect many other sectors particularly wildlife linkages, consumptive tourism and wildlife biodiversity

E: POTENTIAL FUTURE SHOCKS THAT WILL IMPACT ON THE GWL

- Drought
- Disease outbreak
- Spontaneous resettlement of farms
- Tourism market decline

F: GENERAL RESILIENCE

Viewed from the perspective of land use (WPNP, commercial farms (livestock; wildlife; mixed), resettled farms, communal lands, CBNRM wildlife areas) the area is very modular with few economic and biodiversity linkages between the different land use groups.

Based on where we are in the adaptive cycle it appears that the communal areas are at the limit of the cycle and about to collapse and reorganise. This may be temporarily averted by land redistribution or significant positive changes to the local economy e.g. high growth in tourism within the communal areas. The commercial farms appear to have climaxed earlier in terms of production systems and have diversified into consumptive and non-consumptive tourism (to increase their resilience). This has stagnated near the climax due to local political instability (limiting investment) limited tourism resource development and marginal value of the GWL as a tourism destination.

In conclusion the general resilience of the communal areas can only be improved through increased access to land, improved local grazing or significant changes in the communal area economy. The communal area core wildlife development is an attempt to do so.

The commercial farms have also reached a limit and can only revitalise should veterinary controls be changed and biodiversity on the farms and linkages to the WPNP improved. There does not appear to be the political will to support the change.

The lack of social trust between the land users will reduce the resilience of the system to absorb shocks.

G: TRANSFORMABILITY

The economic plight of the communal areas cannot be addressed by land. There will never be enough land as livestock numbers will always increase to the resources available and bush thickening will continue to occur due to the type of livestock management. Solutions here would be:

- Agricultural services to keep livestock owners informed that there are limits to cattle carrying capacity and livestock diversification to browsers is required. There may be need to switch back to a wet-dry season movement of cattle herds. Try innovative experiments to improve the quality of grazing.
- Development of an ecotourism source in the communal areas to draw tourists into the conservancies. This could be developed by linking the core area to the east (Nxainxai and Kaudum National Park), by fencing the core **out** of the veterinary restrictions. There are a number of other innovations needed, of most importance is access to water for wildlife.
- Establishment of a valuable cultural tourism experience across the landscape from the historic Waterberg Battle areas in the commercial farms to the cultural heart of the Herero. This will require open cultural exchange and explicit linkages between the commercial farm tourism and the communal areas. Much exists and the history tends to separate the visitor from the quality cultural experience. It needs to be developed for different markets i.e. for the German visitor it needs to emphasise the battle, nuances on both sides of the conflict and the cultural attributes that allowed the Herero to be so successful. For the general tourist the focus should be on the cultural attributes, indigenous knowledge and customs. And for the local market (Herero), the need to bring out the importance and solemn event, remembering the past and heroes.
- The commercial farms have also reached a plateau in tourism and agricultural development. The area will not improve as a tourism destination or a biodiversity hot spot until the linkages between the WPNP and the farms are established and that the two land uses become one ecological unit. This will require substantial shifts in veterinary controls.
 - Establishing veterinary approved fences along boundaries of participating commercial farms.
 - Changing rights of access to the area for participating farmers who contribute significant areas of habitat.
 - Look at and implement different conservancy models of how the farms can cooperate with each other and with the WPNP.

The above approaches involve very different communities, locations and management requirements. Each will have different objectives and details in the approach. They are, though, linked through the cultural tourism element of one people and one history. The management changes needed in the communal areas will require substantial investment from government while the changes in the commercial farms need policy and strategy changes in the veterinary sector.

The different approaches clearly argue for an overall GWL committee with two strong sub committees made up of very different stakeholder groups. The objectives of each sub-committee will be different from the other and the strategies different. But the overall success of either or both will result in the GWL becoming a core tourism area within the Namibian tourism industry.

