FINAL REPORT

Barrier of Spears - Sani Pass

MKHOMAZI WILDERNESS AREA (KZDMA 43)
SISONKE DISTRICT MANAGEMENT AREA

LAND USE MANAGEMENT SYSTEM
(LUMS)

SCHEME POLICY

PREPARED FOR SISONKE DISTRICT MUNICIPALITY

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GENERAL PROVISIONS

CHAPTER 1

BASIC PROVISIONS

1.1 TITLE

This planning system shall be known as the "Sisonke DMA Land Use Management System (LUMS): Phase 2: Rural Scheme Policy", hereinafter referred to as the Policy.

1.2 PURPOSE

The purpose of this Policy is to identify suitable zones for the management of rural land in the municipal area based upon the principles of the LUMS guidelines manual and to put forward a management system that can be applied by the District Council to areas which were formerly outside of the urban areas currently covered by the Planning Schemes. The purpose of this Policy is to promote co-ordinated and harmonious development of the District Management Ares area in such a way as will most effectively tend to promote conservation, health, safety, order, amenity, convenience and general welfare, as well as efficiency and economy in the process of development, and the improvement of communications. The purpose generally is to ensure that the principles of sustainability, efficiency and integration are achieved. In furtherance of this purpose the Sisonke District Municipality desires to achieve a pattern and distribution of land uses which would generally provide for the following:

- Protect natural resources and biodiversity.
- Protect cultural resources giving due consideration to the diversity of communities.
- Protect and enhance unique areas or features of environmental significance and biodiversity.
- Accommodate desirable land uses.
- Provide a framework to resolve land use conflict.
- Promote certainty of land use.
- Promote the efficient use of land.
- Promote the efficient movement of persons and goods.
- Promote economic activity.
- Promote the amenity of adjacent land uses.
- Manage land generally, including change of land use and sub-division.

1.3 POLICY AREA

The Drakensberg Park alternatively known as oKhahlamba Park is an inland mountain range. The extreme western edge of the Park lies at 29° 45' E and extends to 28° 52' E, the northern border of the northern component area is located at 28° 38' S and extends to 28° 46' S, and the southern component area lies between 28° 55' S and 29° 55' S. The policy area however consists only of the Southern portion of the park referred to as the Sisonke DMA or KZDMA43.

1.4 DATE OF ADOPTION

The date of adoption will be the date upon which it is resolved to be implemented by the Municipality as a policy.

1.5 RESPONSIBLE AUTHORITY

The Council of the Sisonke District Municipality, hereinafter referred to as the Local Authority, and Ezemvelo KZN Wildlife in joint management shall be the authority, responsible for carrying into effect the provisions of the Policy.

1.6 LAND-USE POLICY MAP

The Land-Use Policy Map comprises of the following MAPS

Map No.	**Drawing No.**	**Date**
Map 4	KZDMA43ENV2	NOV 2004

1.7 THE GENERAL PURPOSE, CONTENT AND LEGAL STATUS OF POLICY

Any proposal or application to develop or use land and /or buildings within a Local Authority area must have regard for the provisions of the Policy and for the provisions of the Integrated Development Plan, including the Spatial Development Framework (SDF), the District Municipality is in the process of sourcing funding to compile these documents. The latter Plan is a broad principal strategic planning document accompanied by a map or plan which sets out broad goals for a municipal area, based on its role, character and its expected or planned growth, and provides policy and strategy for achieving those goals. A proposed development or change of land-use must be in accordance with the IDP.

Over and above the IDP an Environmental Management Plan (EMP) is in the process of being drafted by EKZNW. This plan identifies areas of sensitivity in the DMA and provides management recommendations for these areas. Any proposed development or change in land use must also be in accordance with the EMP guidelines. This document will be particularly important in land management until the IDP and SDF have been drafted and accepted.

The general purpose of this section is to provide a context within which land and/or buildings may be used or developed in terms of the provisions of a Policy, and then to examine in some detail the content of the Policy.

It should be noted that this is a policy to be applied for land use management in rural areas of the Municipality and is not as yet entrenched in law. It has however been prepared with a view to it becoming legally binding.

1.8 MAIN COMPONENTS OF A SCHEME POLICY

The provisions of the Policy comprise two main components which operate in tandem, namely:

(i) a Policy Map depicting "zoning", and

(ii) the Scheme Policy or text containing guidelines for development and control.

The Policy Map is prepared on a rural cadastral base that depicts all registered sub-divisions of land and existing roads on which is overlaid the nature and extent of each use zone.

In this form the Policy map forms a dual purpose, i.e. firstly, it enables identification of any lot or subdivision of land in terms of its physical relationship with its surroundings, including matters that might have a direct effect on the lot or subdivision such as the position of existing roads and adjacent zonings.

In order to cater for future development potential within a zone, this LUMS Scheme Policy permits a degree of flexibility via 2 categories of provisions. These provisions specify the usage and development of land and buildings, within each zone, according to those that are:

- Preferred uses (Uses that could be considered through the relevant application procedures)
- Non-preferred uses (Uses that, if proposed, would require a change of zoning)

1.9 CONTEXT OF RURAL LAND-USE ZONING

An important goal of this document is that it should state its purpose and procedures in a clear, readily comprehensible manner. To this end this LUMS Scheme Policy sets out to explain the underlying purpose for and basis of the terminology used to describe land use zones.

A Land Use Zone is a portion of land located within the Local Authority area in terms of which certain uses of land, buildings and structures are imposed and regulations pertaining to their use and development are specified.

Often people confuse a land use zone with the land use, that may or may not be permitted therein. This confusion is compounded when either the same, or similar sounding names are used to describe both a zone and the land use permitted therein.

Bearing in mind that this is a policy at this stage, the nature, extent and location of land use zones are as set out in the Land Use Map and the purposes for which such zoned land may be used shall be as set out in Part 2 of this Scheme policy in the form of preferred and non-preferred uses.

In respect of areas shown as Environmental Management Zone on the Policy Map, the prime consideration is the protection of flora and fauna in these indigenous botanical communities and the protection of watercourses. No land use or development of any nature or extent should be undertaken, nor developed on any portion of these reservations or zones be permitted, until the proposed land use or development has been subject to proper assessment. Proposals with respect to new developments undertaken

by Ezemvelo KZN Wildlife within protected areas in its custody is initially made by the staff of the reserve, represented by the reserve management team. Planning for development in protected areas involves the consideration of a number of key issues related to the immediate footprint of the proposed development. Included are biophysical, biodiversity, and, social, aesthetical, design and cultural considerations, in order to ensure that possible negative impacts are identified and appropriate mitigation measures defined, and that inappropriate development does not take place. Comments from interested and affected parties are thus strongly encouraged.

Consideration is also given to impacts at destinations to be visited from the development, whether within the protected area or beyond. Included in the area's analysis are both resource- and cultural-related issues at the destination point, and possible limitations, which may need to be imposed, in order to minimize negative impacts. Community equity and involvement is now considered an essential aspect of the development and operation of the proposed facility. Community involvement is employed to ensure that negative impacts on immediate neighbors is either minimized or successfully mitigated. A key consideration in proposed new development proposals is a business plan and financial viability, in order to ensure financial as well as environmental sustainability.

Any development or change in land use within this zone is subject to Environmental Impact Assessment in terms of the Integrated Environmental Management process required for a change in land use from conservation to any other use under section 21 of the Environment Conservation Act (No.73 of 1989) as amended. As part of this process both the District Municipality and Ezemvelo KZN Wildlife would need to be extensively consulted as the joint management authorities.

1.10 CONSIDERATION OF DEVELOPMENT APPLICATIONS

When the KwaZulu-Natal Development Bill 2003 comes into effect (enacted), all land development applications in KwaZulu-Natal will be considered in terms of this Bill. Until such time, the following procedures are used for considering the development of land.

All the land comprising the Park is state-owned, being registered in the name of the President of the Republic of South Africa. Control and management of the Park has been delegated by the KwaZulu-Natal Provincial Administration to the KwaZulu-Natal Nature Conservation Service. No private persons occupy the Park. Staff in the employ of the Nature Conservation Service are housed in the Park.

1.10.1 Town Planning Ordinance

Development applications may be submitted in terms of the Town Planning Ordinance No.27 of 1949, to the Department of Traditional and Local Government Affairs in Pietermaritzburg.

i. Applications for the development of land for a layout or subdivision of ten or less units/sites, is made in terms of the section 11.2 of the Ordinance;
ii. Applications for the development of land for a layout or subdivision of ten or more units/sites is made in terms of section 11*bis* of the ordinance;
iii. Subdivision and town establishment applications are submitted in terms of section 12 and 33 of the Ordinance.

1.10.2 Development Facilitation Act

The Development Facilitation Act No.67 of 1995 may be used throughout KwaZulu-Natal and can be used for any land development application requiring development approvals. The DFA is a fast track mechanism for authorisation development. Applications are lodged with the Designated Officers as appointed by the DFA Tribunal Registrar. In the case of Kwa Sani Municipal area the Designated Officer is based at the Department of Traditional and Local Government Affairs in Pietermaritzburg.

1.10.3 Less Formal Townships Establishment Act

This Act is used for the establishment of less formal townships and residential development. Applications are lodged with the Department of Traditional and Local Government Affairs in Pietermaritzburg.

- (See Annexure 3)

Development concessions are subject to development approval.

1.11 ENVIRONMENTAL INVENTORY (NON-NEGOTIABLES)

The aim of the park is the preservation of the World Heritatge site and it's associated biodiversity and species. Therefore it is essential that while accommodating tourism development, environmental assets associated with the area are not undermined. An integral part of ensuring this is the development of a local Land Use Management System, based on a the draft local Environmental Management Plan.
The following non-negotiables were however identified at this stage and taken into consideration when developing a Land Use Management System.

1.11.1 Indigenous Bush or Savanna areas

These areas are mapped on the land use map, Map 2. All these areas and all other all areas under indigenous forest and properties with indigenous trees should be subject to the following guidelines:

- No indigenous trees should be removed without authorization from DWAF who are responsible for protection of protected tree species.
- No undergrowth should be removed or the natural forest structure interfered with in any way as; when the forest undergrowth is removed, the large trees left standing often slowly die due to drought. Authorization must be obtained from DWAF prior to any clearing of both trees and under story of indigenous forested areas.
- All forest along streams and rivers must be conserved to prevent bank erosion.
- Wherever possible, patches of forest must be linked to form a continuous network and thus a path of migration for flora and fauna present (bushbuck, duiker, birds and so on) this would be easiest along existing corridors like streams and rivers.
- Forest trees should be left to screen development to improve stormwater drainage and aesthetics.

- Developers should be encouraged where possible to maintain any trees on site as part of the layout of the development.

1.11.2 Areas of High Biodiversity Value

These controls will relate to the entire park as the entire area is of high biodiversity value.

- Should there be a change in land use or development density (as listed in Schedule 1, Section 1, or 2 of the Environmental Conservation Act (ECA) of 1989), or the upgrading or construction of structures and facilities as listed in the ECA, the vegetation in high biodiversity areas should not be cleared until a "botanical assessment" has been undertaken and approval granted by the Department of Agriculture and Environmental Affairs and Ezemvelo KZN Wildlife approved.
- Earthmoving equipment must be prohibited from the site until the environmental assessment has been approved and the vegetation to be conserved has been demarcated.
- The District Council and Ezemvelo KZN Wildlife should actively attempt to remove exotic trees or shrubs in areas of this category.
- The fencing used in development should be appropriate and should allow for the movement of small animals that may be found in this area, for eg Duiker, weasel.

1.11.5 Wetlands, dams, and corridors.

Designated on the land use map, Map 1. It must be stressed however that wetlands identified over and above these maps should be subject to the same guidelines.

- Infilling, drainage and hardened surfaces (including buildings and asphalt) should not be located in any of the wetland zones (i.e. permanent, seasonal and temporary) such activities generally result in significant impacts on a wetland's hydrology, hydraulics and biota and on the goods and services wetlands provide
- Hardened surfaces and erven should be located at least 15 m outside of the outer boundary of the seasonal/permanent zone (Note: if the width of the outer temporary zone is greater than 15 m and Item 1 above is met then this requirement would automatically be met). The seasonal and permanent zones generally have surface water for extended periods. In the case of seasonal, it may be for most of the wet season and in the case of permanent, it may be throughout the year. A buffer is required between areas potentially generating non-point source pollution and such areas characterized by surface water.
- Extension to the buffer in localized areas should also be included to minimize the impact of concentrated stormwater run-off into the wetland. Stormwater outflows should not enter directly into the wetland. A predominantly vegetated buffer area at least 20 m wide should be included between the stormwater outflow and the outer boundary of the wetland, with mechanisms for dissipating water energy and spreading and slowing water flow and preventing erosion. This buffer is particularly important when the catchment feeding the stormwater drain comprises predominantly hardened surfaces. Extensive hardened surfaces in the catchment and stormwater drains significantly increase the intensity of stormwater runoff, which increases the risks of erosion in a wetland. In addition, urban stormwater runoff is often polluted. A buffer is therefore required to reduce the energy and erosive power of the stormwater and to decrease the level of pollutants in the runoff before it enters the wetland.
- Where the wetland has a particularly high biodiversity value, further buffering may be required, the width of which would depend on the specific requirements of the biota. This should be determined in comsultatin with Ezemvelo KZN Wildlife. The value of a wetland for biodiversity derives not only from features of the wetland but also from the quality of

natural, non-wetland areas adjacent to the wetland, as many wetland dependent species such as the giant bullfrog (Pyxicephalus adspersus) require both wetland and non-wetland habitat.

- If a road crossing is planned in a wetland, first seek an alternative route. If this is not available then ensure that the road has minimal affect on the flow of water through the wetland (e.g. by using box culverts rather than pipes). Do not lower the base level of the wetland or any stream passing through the wetland. Ensure an adequate buffer is present to deal with run-off from the road (see Item 3 above). During construction, minimize disturbance of the wetland at and adjacent to the road crossing site. Road crossings may potentially greatly modify local water flow patterns in a wetland. In addition to having a damming or draining effect on the flow upstream of the road, roads which do not allow for the adequate passage of water may concentrate flow downstream, increasing the erosion hazard and drying out this portion of the wetland. A lowering of the base level increases the gradient in the wetland, thereby increasing the speed of water flow and its erosive potential and the extent to which it contributes to lowering the water table.
- Where a road runs alongside a wetland and it intercepts natural hillslope runoff into the wetland, the road should be set back from the boundary of the wetland by at least 20 m and feed-off points should be included at frequent intervals along the road (at least every 100 m) and the outflows of these should conform to the requirements of the stormwater outflows (given in Item 2 above). A road running alongside a wetland can strongly affect the natural hillslope runoff into the wetland by intercepting this runoff and concentrating it in localized entry points. The fewer the feed-off points into the wetland and the less protected they are, the more severe this effect will be.
- Where development (e.g. hardened surfaces, infilling and drainage) in a wetland is unavoidable then the resulting impacts must be mitigated. In many cases, off-site mitigation may be the only means of achieving satisfactory mitigation. The cumulative loss of wetlands in South Africa is already very high (see Section 1.1) and the continued net loss of wetlands needs to be prevented. Invasion of a wetland by alien plants may considerably reduce the integrity of a wetland.
- Where any disturbance of the soil takes place in a wetland, clear alien plants which establish and follow up for at least 2 years thereafter. Disturbance of a wetland favours the establishment of alien plants, which require long-term control.
- Where the infiltration rate of a wetland's catchment is naturally high and the wetland is maintained predominantly by groundwater input, at least 60% of the wetland's catchment should remain as permeable surfaces in a residential area and preferably at least 30% in an industrial/commercial area. Where the level of development is very high, reduced surface runoff can be promoted through mechanisms such as porous pavements (The inclusion of these mechanisms in areas dominated by hardened surfaces is generally sound catchment management practice and should be encouraged widely). Failure to maintain groundwater input to a predominantly groundwater-fed wetland will considerably alter the hydrological regime of the wetland, thereby compromising its integrity.
- The onus is on the developer to identify and delineate all wetlands in the project area at a finer scale depending on the proposed development. Mapping at a minimum scale of 1: 10 000 is generally require .in order to account for the impact of a development adjacent to a wetland, it is essential that the boundary of the wetland be mapped.Any wetlands identified on the ground should be delineated and mapped by the municipality on an ongoing basis.
- Any development must comply with the requirements of the National Water Act. Through the concept of the "ecological reserve", this act makes provision for ensuring water of

acceptable quantity and quality for maintaining the ecological functioning of wetlands and river systems. While wetlands assist in enhancing water quality, they should not be relied upon as an easy substitute for addressing pollution at source, as this may lead to serious impacts to the wetland systems.

- Access to wetlands by off-road vehicles, man and livestock, should be as far as possible prevented.
- All vegetation on the banks of streams and rivers must be protected.

CHAPTER 2

GENERAL DEFINITIONS AND TYPES OF LAND USE

GENERAL DEFINTIONS:

2.1.1 AESTHETIC

Means the perception of artistic elements or elements in the natural or created environment that are pleasing to the eye.

2.1.2 AMBIANCE

Means the character or tones of an area, as determined by building scale and design, amount and type of activity, intensity of use, location and design of open space, and related factors that influence the perceived quality of the environment.

2.1.3 AMENITY

Means a natural or created feature or aspect that enhances a particular property, place or area from the perspective of its aesthetic quality, visual appeal, or makes it more attractive or satisfying.

2.1.4 ANCILLARY USE

Means a use incidental to or customarily associated with a specific use.

2.1.5 APPEAL TRIBUNAL

Means the Appeal Tribunal established in terms of the Town Planning Ordinance as well as in terms of the Development and Facilitation Act (67 of 1995).

2.1.6 APPROVAL

Means the written approval of the Responsible Authority.

2.1.7 AREA OF POLICY

Means the area, which lies within the inner edge of the boundary line on the resolution map.

2.1.8 BIO-DIVERSITY

Means the rich variety of plants and animals that live in their own environment.

2.1.9 BIOSPHERE

Means an internationally designated area created to integrate the natural environment and surrounding communities, by the conservation and protection of the bio-diversity and integrity of biotic communities, plants and animals within their natural ecosystems and to demonstrate the value for conservation.

2.1.10 BUILT ENVIRONMENT

Means the physical surroundings created by human activity.

2.1.11 BYLAW

Means the bylaws or regulations the Responsible Authority in force in the area of a Planning Scheme.

2.1.12 CATCHMENT

Means the area from which any rainfall will drain into the watercourse or part thereof through surface flow to a common point or common point or common points.

2.1.13 CATCHMENT MANAGEMENT

Means the controlling and protection of catchment areas.

2.1.14 CONDITIONAL USE PERMIT REQUIRED

This means a special consent use that includes ancillary uses that might have a more intrusive impact and require special conditions to protect the amenity, or mitigate the impact of the proposed use. The procedure usually requires public advertising and a municipality may impose conditions of approval. This also includes those land use types which require more detailed consideration by means of a comprehensive development application.

The requirements listed above may be met through other legislated processed however the municipality will require an application to include the above mentioned documentation prior to offering support to the development. All other legislative authorizations from relevant government departments must be obtained prior to development.

2.1.15 CONSERVANCY

Means a group of individual farms or similar contiguous land parcels which through their owners' initiative are combined together for the protection and preservation of the natural bio-diversity of ecosystems in that area.

2.1.16 CONSERVATION

Means protecting, saving and using resources wisely, especially the bio-diversity found in the area.

2.1.17 COMMISSION

Means Planning and Development Commission established under the Town Planning Ordinance No 27 of 1949.

2.1.18 CRITICAL AREA

Means an area with one or more of the following environmental characteristics:

- steep slopes;
- flood plain;
- soils classified as having high water tables;
- soils classified as highly erodible, subject top erosion, or highly acidic;
- land incapable of meeting percolation requirements;
- land formerly used for landfill operations or hazardous industrial use;
- fault areas;
- stream corridors;
- estuaries;
- mature stands of indigenous vegetation;
- aquifer recharge and discharge areas;
- wetlands transition areas; and
- habitats of endangered species.

2.1.19 DATE OF ADOPTION

Means the date upon which this scheme was first adopted by the Responsible Authority in terms of the relevant planning legislation; provided that, where any provision of this scheme is subsequently varied by way of amendment or revision the 'date of adoption' of any such varied provision shall be the date upon which it is adopted.

2.1.20 DEVELOP LAND/DEVELOPMENT

Means to erect a building or structure on any land or to alter or extend any buildings or structure or to create a lay out for, or adapt such land for any use or purpose.

2.1.21 DEVELOPMENT PERMIT REQUIRED

This means a special consent use that will require clear motivation for the development prior to municipal support. It includes compatible ancillary uses that are considered to be low impact uses and require limited procedural mechanisms for consideration. The procedure usually involves the obtaining of written consent of the neighbors, or community consent. All other legislative authorizations from relevant government departments must be obtained prior to development.

2.1.22 DEVELOPMENT TRIBUNAL

Means the Development Tribunal for the Province established under section 15 of the Development Facilitation Act, 1995 (Act No.67 of 1995).

2.1.23 DWELLING UNIT

Means a building constructed, used or adapted to be used as a dwelling unit to accommodate one household and which includes not more than one kitchen, habitable rooms for the accommodation of bona fide domestic servants, outbuildings and accessories as are ordinarily used therewith, but shall not include a building which in the opinion of the Responsible Authority is designed in such a way to enable it to be utilised by two or more separate households.

2.1.24 ECOSYSTEM

Means the surroundings within which humans exist and includes: -

- the land, water and atmosphere of the earth;
- micro organism, plant and animal life;
- any part or combination of (1) and (2) and the interrelations amongst and between them; and,
- the physical, chemical, aesthetic and cultural properties and conditions of the afore going that influences human health and well being.

2.1.25 ENVIRONMENTAL IMPACT

Means a positive or negative environmental change caused by a human act.

2.1.26 ENVIRONMENTAL MANAGEMENT

Means the use of land for the conservation of natural resources and the wilderness qualities associated with these areas; for low intensity eco-tourism; for maintaining bio-diversity and sustainable catchment management.

2.1.27 ENVIRONMENTAL MANAGEMENT PLAN

Means a plan referred to in section 11 (xx) of the National Environmental Management Act (Act No, 107 of 1998).

2.1.28 ENVIRONMENTAL IMPLEMENTATION PLAN

Means a plan referred to in section 11 (xxii) of the National Environmental Management Act (Act No, 107 of 1998).

2.1.29 EXISTING USE

Means in relation to any building or land a continuous use of that building or land on or at the date of adoption for the purposes for which it was designed and lawfully authorised by the Responsible Authority at that date.

2.1.30 KWAZULU LAND AFFAIRS ACT

The Act was promulgated for the former KwaZulu areas and is still applicable.

2.1.31 IN-STREAM HABITAT

Means the physical structure of a watercourse and the associated vegetation in relation to the bed of the watercourse.

2.1.32 LANDSCAPING

Means the planting of groundcover, plants, shrubs and trees on a site to enhance the visual outlook and includes the shaping of land forms, introduction of water and rock features, and the placement of garden furniture, such as benches, bridges, walkways, ornaments, lighting etc. Landscaping includes “vegetation” of a lot, which refers to a limited form of landscaping, restricted to the introduction of plant material.

2.1.33 LAND USE ZONE

Means an area shown on Rural LUMS Land Use Policy Map by distinctive colouring or edging or in some other distinctive manner, for the purpose of indicating the restrictions imposed by a scheme on the erection and use of buildings or structures, or the use of land. A land use zone conveys certain development preferences applicable to that zone.

2.1.34 NATIONAL BUILDING REGULATIONS

Means the national building regulations made in terms of section 17 of the National Building Regulations and Building Standards Act. (Act No. 103 of 1977), as amended.

2.1.35 NATURAL ENVIRONMENT

Means our physical surroundings, including plants and animals when they are unspoiled by human activities.

2.1.36 NATURAL FEATURES

Includes topographical, drainage, vegetation, and faunal features, such as different landforms, rivers and streams, waterfalls and pools, rarer plants, and unusual fauna.

2.1.37 ORDINANCE

Means the Natal Town Planning Ordinance, 1949 (Ordinance No.27 of 1949) as amended.

2.1.38 OWNER

Means the person registered in the Deeds Registry as the owner of the land or the person who, for the time being, receives the rent in respect of the land or any building thereon, whether on his/her own account or as the agent or trustee, and includes the liquidator or legal representative, provided that such a liquidator or legal representative is acting within the authority conferred upon him by law.

2.1.39 PLANNING SCHEME

Means the Kwa Sani Scheme in the course of preparation, as amended from time to time.

2.1.40 POLLUTION

Means to erect a building or structure on any land or to alter or extend any buildings or structure or to create a lay out for, or adapt such land for any use or purpose.

2.1.41 PREFFERED USES

This means uses, which are considered to be compatible with the environment and surrounding land uses. The municipality will support development within the preferred uses.

No additional authorizations will be required from the municipality however any legislative authorizations such as environmental or development authorizations from relevant government departments must still be obtained prior to development.

2.1.42 PREMIER

Means to erect a building or structure on any land or to alter or extend any buildings or structure or to create a lay out for, or adapt such land for any use or purpose.

2.1.43 PROHIBITED USES

This means land uses which are considered to be incompatible with the surrounding land uses, and which the municipality is will all likelihood not consider.

Any development application for a prohibited use will be subject to a comprehensive development application to the municipality and other legislative authorizations from relevant government departments that details how all potential impacts of the development will be mitigated to a point where the development is acceptable to the municipality and relevant government departments.

2.1.44 RESPONSIBILE AUTHORITY

Means the relevant body or person required, in terms of the relevant legislation, such as the Town Planning Ordinance Act (No.27 of 1949) as amended, the KwaZulu Land Affairs Act (No.11 of 992) or the Development Facilitation Act (No.67 of 1995) etc. to control, administer or approve development applications and plans (See Rural LUMS: Procedures and Processes for considering Development Applications).

2.1.45 RIPERIAN HABITAT

Means the physical structure and associated vegetation of the areas associated with a watercourse which are commonly characterised by alluvial soils, and which are inundated or flooded to an extent and with a frequency sufficient to support

vegetation of species with a composition and physical structure distinct from those of adjacent land areas.

2.1.46 SOIL EROSION

Means the loss of soil as the result of the action of the natural elements, e.g. water, wind, drought, and attrition, or from other inappropriate activities, e.g. agricultural or other use or development of the land that results in the washing away or loss of the soil.

2.1.47 STATE LAND

Means to erect a building or structure on any land or to alter or extend any buildings or structure or to create a lay out for, or adapt such land for any use or purpose.

2.1.48 TEMPORARY USE

A use established for a specified period of time, which is to be determined and placed in writing by the Responsible Authority, and is not to exceed the period of time specified by the responsible authority.

2.1.49 TRIBAL AUTHORITY

A tribal authority or a community authority established in terms of the Amakhosi and isiPhakanyiswe Act, 1990 (Act No. 67 of 1995).

2.1.50 TRIBUNAL REGISTRAR

The Development Tribunal registrar referred to in section 15(9) of the Development Facilitation Act, 1995 (Act No. 67 of 1995).

2.1.51 WASTE

Means any by-product or residue, be it gaseous, liquid or solid, which is emitted in the course of loading, unloading, storage, manufacture and distribution of raw materials or products. Liquid waste includes domestic sewage, industrial effluent, and storm water run-off containing impurities.

2.1.52 WETLANDS

Means land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports, or would support, vegetation, birdlife, etc. typically adapted to life in saturated soil.

DEFINTIONS OF LAND USE/ACTIVITY

2.2.1 ADMINISTRATIVE/COMMUNITY

Means the use of land for administrative, community or other institutional Purposes.

2.2.2 AGRI-INDUSTRY

Means a commercial activity supporting or complementing agricultural activities including concentrated plant or animal production units, or related to processing or beneficiation of agricultural products.

Included are operations that supply agricultural tools and machinery and agricultural requirements such as fertiliser and stock feeds; commercial mechanical or engineering workshops; plant nurseries and production tunnels or other such structures, processing of dairy products or saw milling of timber, abattoirs, cattle feedlots, chicken batteries and piggeries and the wastes or by-products from such activities. Excluded from the definition are any of the above activities which are carried for purely "own use" or non-commercial purposes. Also excluded are facilities for handling livestock for purposes of dipping, spraying, counting or shearing, or for basic cleaning and packaging of crops such as potatoes.

2.2.3 AMENITY AREA

Means land reserved for the protection of places of scenic beauty, natural vegetation, rivers and other topographical features, fauna and flora, places of historical interest and the like, but which may with the permission of the owner be used by the public for passive recreation.

2.2.4 AMENITY PLANTING

Means uses of plants, especially trees, for windbreaks or other shelter, ornamental purposes, or for view frames (but not for commercial timber production).

A range of plants are regularly used for amenity purposes but some have become invasive and are now classified as problem species. Attention is drawn to such plants in order to prevent the inadvertent spreading of problem species and the use of the following species is particularly inadvisable:

American bramble	*Rubus cuneifoleus*
Black wattle	*Acacia meatnsii*
Silver wattle	*A. dealbata*
Green wattle	*A. decurrens*
Fire thorn	*Pyracanthya sp*
Silver (Grey) poplar	*Populus canescens*
Pine trees	*Pinus spp,* especially *P. patula*
Gum trees	*Eucalyptus spp.*

2.2.5 BED AND BREAKFAST ESTABLISHMENT

Means a dwelling unit in which not more than 50% of the bedrooms are provided for overnight guests for compensation, on a daily or weekly basis, with or without meals.

In terms of approval of any land use, the Responsible Authority may stipulate any condition it considers necessary to protect the amenity of the area, including those such as: maximum size; who shall operate any activity; circumstances for the operation of and activity; maximum number of vehicles permitted on any premises; number of formal parking bays required; maximum number of employees; hours of operation, maximum number of rooms to be let; maximum number of guests; whether the owner is required to be resident on the property; control of signage, etc.

2.2.6 BIRD SANCTUARY

Means a place dedicated to the care, rehabilitation, protection and conservation of wild and exotic bird species, which includes breeding and research programs, and may be open to the public for educational and recreational purposes.

2.2.7 BUSINESS

Means the use of land for the conduct of a business or commercial undertaking, or the use of land for an outlet through which goods or services are sold.

2.2.8 COMMERCIAL AFFORESTATION

Production of timber in plantations, greater than 10ha in extent, for commercial purposes.

2.2.9 CROPPING

Means the use of land for producing edible or saleable plants.

2.2.10 CUSTOMARY HARVESTING

Means the harvesting and collecting of natural grasses and medicinal plants on a sustainable basis in environmentally sensitive or protected areas or parks for traditional practices, and which may require permits from the relevant authority.

2.2.11 EDUCATION

Means the use of land for educational, or directly related purposes.

2.2.12 ENVIRONMENTAL EDUCATION

Means the use of land for teaching environmental understanding and awareness.

2.2.13 EXTENSIVE AGRICULTURE

Means agriculture involving the use of the natural vegetation without any attempt to increase its yield above that of the original condition, and/or the cultivation of up to 20ha of land for crops or pastures.

This refers primarily to the grazing of livestock on natural veld but does allow for a limited amount of crop or pasture production. Included is the use of facilities such as dips, spray races, and holding kraals.

2.2.14 FARM STALL

Means a building used for retailing of fresh farm produce produced on site, including home made items. The Responsible authority may stipulate the maximum size of the farm stall.

2.2.15 FISH FARMING

Means an area devoted to the cultivation of fish and other organisms for commercial sale.

2.2.16 FORESTRY

Means the use of land for exotic or indigenous timber production.

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2.2.17 HORTICULTURE

Means the use of land for the production of flowers, fruit or vegetables.

2.2.18 INDUSTRIAL DEVELOPMENT

Means developments or industries, as identified in Section 21 of the Environmental Conservation Act (Act 73 of 1989), which are not allied with local tourism or agricultural activities.

Such developments will usually be based on some manufacturing or product processing activity, but are not linked to any tourism product or activity and neither use nor produce any agricultural product.

2.2.19 INTENSIVE AGRICULTURE

Means a farming system involving high yields of crops or livestock products by means of replacing or enhancing the natural agricultural resource base.

Such activity is likely to impact significantly upon the local bio-diversity and scenic resources and consists primarily of production of monospecific crops such as maize or vegetables on areas which exceed 20ha in extent, or the grazing of livestock on improved pastures. Included are operations involving irrigation of crops or pasture and use may be of large machines such as combine harvesters and centre-pivot irrigation systems.

2.2.20 INTENSIVE OR SEMI-INTENSIVE HUMAN SETTLEMENT

Means settlements which are either greater than that needed for the agricultural or other activity on the property, or which are conventional residential developments.

Such settlements may or may not be formally defined and recognised but which are at a level requiring development of some communal infrastructure and which are almost totally dependent on food brought in from other areas. At greater densities they are tending toward urban development.

2.2.21 LARGE SCALE TOURISM DEVELOPMENT

Means the development of large-scale tourism infrastructure such as large hotels, theme parks, cultural and heritage centres, camping and caravan facilities, timeshare or other such developments, and casinos.

2.2.22 LARGE-SCALE INFRASTRUCTURAL PROJECTS

Means large-scale infrastructure which has the potential to impinge on the integrity of the natural environment or on the aesthetic quality of the landscape.

Included are items such as regional powerlines, major dams and water canals, reservoirs or other infratructure associated with water reticulation schemes, highways, railways, cellular telephone masts, cableways and the like.

2.2.23 MINES AND QUARRIES

Means sites established for the (commercial) extraction of materials such as minerals, rock, gravel, sand or shale, or soil borrow pits, or peat extraction. Also included are any associated facilities, such as crusher or screening plants, or other works which are used to process the product of any mine or quarry.

The sites referred to may be either on dry land or may be associated with a river channel or a wetland.

2.2.24 NATURE AND RESOURCE CONSERVATION

Means the long term management, including the associated environmental education opportunities, of natural resources such as bio-diversity resources and sites of social, cultural, spiritual, archeological, palaeontological, geological or scenic value, in order to ensure their continued existence in an acceptable condition, whether or not utilisation, active or passive, is taking place.

2.2.25 NATURE AND CULTURE BASED TOURISM

Means outdoor recreation and participatory travel experience, to both natural as well as to cultural environments, that contribute to the sustainable use of these environments, respect the integrity of the host communities, and which produce

economic opportunities that contribute to the long term conservation of the resource base and reinforce the concept that conservation can bring meaningful benefits.

This form of ecotourism is implemented at a low key and does not necessarily require the provision of accommodation or other built infrastructure.

2.2.26 SCATTERED RESIDENTIAL AND SMALL SETTLEMENTS

Residential use of tribal, private or communally-owned land which includes limited cropping and ad hoc grazing; or settled countryside.

2.2.27 SMALL-SCALE AGRICULTURE

Means agricultural uses on areas of land less than (20ha in extent) or production of crops, usually for human or livestock consumption purposes, in small lands on a larger property. Excluded are numbers of adjacent small fields (lands) which are operated by individuals or families on communal land.

2.2.28 SMALL-SCALE TOURISM DEVELOPMENT

Means development of tourism facilities such as bed-and-breakfasts, small-scale chalet complexes and small hotels, camping and caravan facilities, and cottage industries and art and craft outlets. Overnight visitor numbers on any one property shall not exceed one person per two hectares and shall not exceed 60 such visitors per property.

2.2.29 SPECIAL LANDSCAPES

Means landscapes that are important for their natural beauty or vistas or cultural, historical or geological features.

2.2.30 SPECIAL NATURE RESERVES

Means an area declared as a Special Nature Reserve under section 18 of the Environment Conservation Act (Act No. 73 of 1989).

2.2.31 SUBSISTENCE AGRICULTURE

The use of land for agricultural purposes mainly for own use.

2.2.32 SUB-DIVISION

Means the formal subdivision of an existing cadastrally defined unit into two or more subdivisions through the office of the Surveyor General with the intention of transferring such subdivisions to other parties.

PART 2: LAND USE ZONE

CHAPTER 3

ENVIRONMENTAL MANAGEMENT ZONE

3.1 INTRODUCTION

The entire park as per the LUMS guide must be an environmental management zone. This is the norm for all protected areas. To aid in land use management however four subzones within this zone have been identified.

3.1.1 SPECIFIC PURPOSE

STATEMENT OF INTENT

The protection of ecologically sensitive, culturally valuable and historically meaningful sites and precincts and the natural habitats of animals, birds, or reptiles species within Agricultural Areas, in accordance with national laws and policies and provincial and local guidelines, strategies and programmes.

The reservation of land as part of a sustainable living environment by virtue of its importance in terms of natural bio-diversity and the biodiversity goods and services the ecosystems, in which these exist, produce.

The identification and preservation of sites that have historical significance or cultural value.

The reservation of land which has special status and economic value due to its function and the provision of services contributing to the balance of nature or the prevention of natural disasters eg. The retention of water in wetlands, grasslands and other natural habitats.

OBJECTIVES

- To protect and conserve the natural environment and natural processes for their historic, scientific, landscape, bio-diversity, habitat, or cultural values.
- To provide facilities which assist in public education and the integration of built and natural environments with minimal degradation of the natural environment or natural processes.
- To create a holistic framework where culturally significant and historical sites accorded equal status and value along with new developments.
- To ensure the sustainable provision of ecosystem services to the community.

DEFINITION

The use of land for the maintenance of bio-diversity and the wilderness qualities associated with these areas: low intensity eco-tourism and sustainable catchment functioning.

It includes areas requiring preservation and conservation because they provide ecosystem services or are unique landscapes or viewpoints or areas of ecological, historical or cultural importance, bio-diversity and have unique habitats or species.

It also includes areas that by virtue of their ecological or biological functions provide services that contribute to the natural disaster management systems.

ANCILLARY USES (Preferred Use)

- ❖ Amenity Area
- ❖ Special landscape
- ❖ Natural Resources
- ❖ Eco-tourism
- ❖ Conservancies
- ❖ Biosphere reserve
- ❖ Extensive Agriculture
- ❖ Customary Harvesting
- ❖ Bird Sanctuary
- ❖ Amenity Planting

3.2 WILDERNESS SUBZONE

STATEMENT OF INTENT

The protection of the pristine areas of the park to ensure no unnatural disturbance of the ecologically sensitive, culturally valuable and historically meaningful sites and precincts and the natural habitats of animals, birds, or reptiles species within the Park, in accordance with mapping undertaken by EKZNW during the formulation of their Environmental Management Plan for the Park.

The reservation of land, currently undisturbed by human interference, for conservation purposes only.

OBJECTIVES

- To protect and conserve the natural environment and natural processes for their historic, scientific, landscape, bio-diversity, habitat, or cultural values.
- To prevent unnatural disturbance of an extremely important site.
- To reserve land for the express purpose of conservation.

DEFINITION

The use of land for the maintenance of bio-diversity, heritage and the wilderness qualities associated with the area.

It includes areas requiring preservation and conservation because they provide extremely high World Heritage Value

ANCILLARY USES (Preferred Use)

- ❖ Amenity Area

- ❖ Special landscape
- ❖ Natural Resources
- ❖ Bird Sanctuary
- ❖ Nature and Resource Conservation

3.3 NATURE AND CULTURE BASED ACTIVITY SUBZONE

STATEMENT OF INTENT

The protection of ecologically sensitive, culturally valuable and historically meaningful sites and precincts and the natural habitats of animals, birds, or reptiles species within areas used for nature and culture based activities.

Increased awareness of biodiversity value through the use of land for nature and culture based activities.

The reservation of land as part of a sustainable living environment by virtue of its importance in terms of natural bio-diversity and the biodiversity goods and services the ecosystems, in which these exist, produce.

The reservation of land for which has special status and economic value due to its function and the provision of services contributing to the balance of nature or the prevention of natural disasters eg. The retention of water in wetlands, grasslands and other natural habitats.

OBJECTIVES

- To protect and conserve the natural environment and natural processes for their historic, scientific, landscape, bio-diversity, habitat, or cultural values.
- To provide land for activities which assist in public education and recreation with minimal degradation of the natural environment or natural processes.
- To create a holistic framework for the utilization of culturally significant and historical sites in a sustainable manner.
- To ensure the sustainable provision of ecosystem services to the community.

DEFINITION

The use of land for the maintenance of bio-diversity, educational and recreational resources through low intensity nature and culture based activities and sustainable recreational and educational use.

It includes areas requiring preservation and conservation because they provide ecosystem services or are unique landscapes or viewpoints or areas of ecological, historical or cultural importance, bio-diversity and that have unique habitats or species that can be utilised for recreation and education through sustainable ecotourism activities.
It also includes areas that by virtue of their ecological or biological functions provide services that contribute to the natural disaster management systems.

ANCILLARY USES (Preferred Use)

- ❖ Nature and resource conservation
- ❖ Amenity Area
- ❖ Special landscape
- ❖ Natural Resources
- ❖ Eco-tourism Activities
- ❖ Customary Harvesting (with strict controls)
- ❖ Environmental Education

3.4 HIGH POTENTIAL ECOTOURISM NODES

STATEMENT OF INTENT

The sustainable development of the nodes through ecotourism; to realise the biodiversity, cultural and economic value of the park.

The identification and preservation of sites with economic value in terms of their nature and culture based tourism attraction.

The promotion of appropriate forms of sustainable tourism development to generate economic revenue for the maintenance of the Park

To serve as an interface to areas of environmental significance.

The reservation of land which has special status and economic value due to its function, the provision of services contributing to the balance of nature or the prevention of natural disasters and sustainable development potential.

OBJECTIVES

- To provide facilities which assist in public education and the integration of built and natural environments with minimal degradation of the natural environment or natural processes.
- To create a holistic framework where culturally significant and historical sites accorded equal status and value along with new developments.
- Maintain the aesthetic and environmental quality of the region through promotion of sustainable and appropriate tourism development.

DEFINITION

The use of land for the accommodation, tourism and economic development Not all land in this zone will be used for this purpose but to maintain the attraction of this area the remaining land will be used for conservation of ecosystem services, unique landscapes or viewpoints or areas of ecological, historical or cultural importance, bio-diversity or have unique habitats or species.

ANCILLARY USES (Preferred Use)

- ❖ Amenity Area

- ❖ Special landscape
- ❖ Small scale tourism
- ❖ Natural Resources
- ❖ Eco-tourism
- ❖ Customary Harvesting
- ❖ Environmental education
- ❖ Recreation
- ❖ Farm Stall
- ❖ Customary Harvesting
- ❖ Amenity Planting
- ❖ Bird Sanctuary

3.5 ROADED NATURAL SUBZONE

STATEMENT OF INTENT

To provide necessary land areas for the provision of essential services, at this stage mainly roads for access in accordance with national, provincial and local laws and policies and in a manner, which will not detract from the character of the surrounding environment.

OBJECTIVES

- To ensure that the environmentally appropriate land required for the necessary services infrastructure is set aside for development.
- To ensure that land used for service provision is located appropriately, away from residential or other land uses where they will detract from amenity or safety.
- To protect sensitive areas from any potential negative impacts related to the installation of services is minimised by adhering to environmental management principles.
- To promote conservation of resources by recycling and careful use.

DEFINITION

A zone for the identification of existing and future infrastructural service corridors and areas required for the installation, maintenance and proper functioning of those services.

The main use at this stage relates to the transport into and out of the park but may also include services such as:

- Water pipelines, reservoirs, rainwater tanks
- Sanitation (on-site)
- Electricity lines
- Telecommunications lines
- Roads and pathways
- Electricity sub-stations
- Water purification plants
- Telecommunication towers
- Electricity pylons

CHAPTER 4

ENVIRONMENTAL INTERFACE /BUFFER ZONE

4.1 SPECIFIC PURPOSE

STATEMENT OF INTENT

The Buffer Zone Falls within the Kwa Sani Municipality and is therefore administered by them as opposed to the District Municipality. The Kwa Sani municipality has however adopted the Drakensberg Special Case Area Plan (SCAP) and as such this chapter adheres to the controls and recommendations included therein.

The intention therefore of this zone is the support and protection of the important environmental areas by creating an interface with a limited range of land uses that support systems within the Environmental Management Zone.
There is a need to promote environmentally sustainable farming practices to ensure the maintenance of the study area.

OBJECTIVES

- Provide a graduation of development opportunities and land uses surrounding environmentally significant areas.
- To utilise agricultural land on an environmentally sustainable basis to lessen its potential impact on adjacent environmentally sensitive areas.
- To provide land where agricultural practices are consistent with environmental considerations and pollution controls such that they do not impact on the systems which support both the adjacent significant area but also the associated ecosystem goods and services.

DEFINITION

A zone for the use of land for sustainable agriculture as the main economic activity, which will continue to provide a range of valued environmental services to the adjacent environmental management zone.

- This area will be managed in such a way so as to provide adequate protection from potential negative impacts from more intensive land uses.

ANCILLARY USES (Preferred Use)

- ❖ Amenity planning with non-invasive species
- ❖ Extensive agriculture
- ❖ Intensive agriculture
- ❖ Nature and resource conservation
- ❖ Nature and culture-based tourism
- ❖ Small-scale tourism
- ❖ Small-scale agriculture

- Subsistence agriculture
- Trails

ANNEXURE 1
MAPS

ANNEXURE 2

Table 1 : Mkhomazi Wilderness Area - LAND USE CATEGORIES BY ZONE

LAND USE CATEGORIES **P** = Preferred Use **D** = Development Permit Required **C** = Conditional Permit Required **X** = Prohibited Use	**LAND USE ZONES**	**LAND USE SUB ZONES**			
	Env Man	**Cons**	**Eco Activity**	**High Eco tourism**	**Transport**
1.Conservation					
1.1 Special landscapes	**P**	**P**	**P**	**P**	**P**
1.2 Nature and Resource Conservation	**P**	**P**	**P**	**P**	**P**
1.3 Major game reserve	**NA**	**NA**	**NA**	**NA**	**NA**
1.4 Amenity Planting	**P**	**X**	**P**	**P**	**P**
1.5 General game reserves	**NA**	**NA**	**NA**	**NA**	**NA**
1.6 Amenity Area	**P**	**P**	**P**	**P**	**P**
1.7 Conservancies	**NA**	**NA**	**NA**	**NA**	**NA**
1.8 Bird Sanctuary	**P**	**P**	**P**	**P**	**P**
1.9 Biospheres	**NA**	**NA**	**NA**	**NA**	**NA**
1.10 Special Nature Reserves	**NA**	**NA**	**NA**	**NA**	**NA**
2. Agriculture					
2.1 Intensive livestock	**X**	**X**	**X**	**X**	**X**
2.2 Extensive Agriculture	**X**	**X**	**X**	**X**	**X**
2.3 Cropping	**X**	**X**	**X**	**X**	**X**
2.4 Irrigated cropping	**X**	**X**	**X**	**X**	**X**
2.5 Agricultural Industry	**X**	**X**	**X**	**X**	**X**
2.6 Commercial Afforestation	**X**	**X**	**X**	**X**	**X**
2.7 Customary Harvesting	**D**	**X**	**D**	**D**	**D**
2.8 Farm Stall	**P**	**X**	**X**	**P**	**P**
2.9 Horticulture	**X**	**X**	**X**	**X**	**X**
2.10 Forestry	**X**	**X**	**X**	**X**	**X**
2.11 Agro-forestry	**X**	**X**	**X**	**X**	**X**
2.12 Fishing	**D**	**X**	**D**	**D**	**D**
2.13 Traditional Agriculture/scattered residential	**D**	**X**	**X**	**D**	**D**
3. Tourism and recreation					
3.1 Eco-tourism (nature and culture based Tourism development	**P**	**X**	**X**	**P**	**P**
3.2 Ecotourism (nature and culture based) Tourism activities	**P**	**X**	**P**	**P**	**P**
3.3 Bed and breakfast establishment	**C**	**X**	**X**	**C**	**C**
3.4 Intensive or semi-	**C**	**X**	**X**	**C**	**C**

LAND USE CATEGORIES **P** = Preferred Use **D** = Development Permit Required **C** = Conditional Permit Required **X** = Prohibited Use	**LAND USE ZONES**	**LAND USE SUB ZONES**			
	Env Man	**Cons**	**Eco Activity**	**High Eco tourism**	**Transport**
intensive human settlement					
3.5 Environmental education	**P**	**X**	**P**	**P**	**P**
3.6 Large Scale tourism	**C**	**X**	**X**	**C**	**C**
3.7 Recreation	**P**	**X**	**P**	**P**	**P**
4. Mining and quarrying					
4.1 Mining quarrying	**X**	**X**	**X**	**X**	**X**
5. Residential					
5.1 Scattered residential settlement	**D**	**X**	**X**	**D**	**D**
5.2 Small, emerging rural settlement	**D**	**X**	**X**	**D**	**D**
5.3 Towns	**X**	**X**	**X**	**X**	**X**
6. Industry					
6.1 Agro-industry	**X**	**X**	**X**	**X**	**X**
6.2 Light industry	**X**	**X**	**X**	**X**	**X**
6.3 Noxious industry	**X**	**X**	**X**	**X**	**X**
6.4 Heavy industry	**X**	**X**	**X**	**X**	**X**
7. Business/commercial					
7.1 Business/commercial	**D**	**X**	**X**	**D**	**D**
8. Institutional					
8.1 Administration	**D**	**X**	**X**	**D**	**D**
8.2 Education	**D**	**X**	**X**	**D**	**D**
8.3 Heath	**D**	**X**	**X**	**D**	**D**
8.4 Physical infrastructure	**P**	**X**	**X**	**C**	**P**

ANNEXURE 3

RURAL LUMS: PROCEDURES AND PROCESSES FOR CONSIDERING DEVELOPMENT APPLICATIONS

1. POTENTIAL DEVELOPMENT APPLICATIONS

SECTION OF ACT/ORDINANCE	TYPE OF APPLICATION	*APPLICATION PROCEDURES AND PROCESS
TOWN PLANNING ORDINANCE, NO.27 OF 1949 (AS AMENDED): APPLICABLE TO FORMER NATAL AREAS		
SECTION 11(2)	DEVELOPMENT OF LAND	SEE LUMS MANUAL
SECTION 11 bis	NEED AND DESIRABILITY	SEE LUMS MANUAL
FULL/SECTION 33 PROVISIONS OF III	SUBDIVISION (INCLUDING FULL TOWNSHIP ESTABLISHMENT)	SEE LUMS MANUAL
SECTION 47 bis	ADOPTION, EXTENSION, RESCINDMENT OR AMENDMENT OF PLANNING SCHEME	SEE LUMS MANUAL
SECTION 47 bis	REZONING OF LAND	SEE LUMS MANUAL
SECTION 67 (1) (a)(b) or (c)	*****BUILDING PLANS; DEVELOP OR USE LAND (IN AN AREA IN WHICH A RESOLUTION TO PREPARE A SCHEME HAS TAKEN EFFECT)	SEE LUMS MANUAL
SECTION 67 (1)(d)	SUBDIVIDE LAND (IN AN AREA IN WHICH A RESOLUTION TO PREPARE A SCHEME HAS TAKEN EFFECT)	SEE LUMS MANUAL
SECTION 67 bis	SPECIAL CONSENT (IN AN AREA IN WHICH A RESOLUTION TO PREPARE A SCHEME HAS TAKEN EFFECT)	SEE LUMS MANUAL
KWAZULU LAND AFFAIRS ACT, NO. 11 OF 1992: APPLICABLE TO FORMER KWAZULU AREAS/INGONYAMA TRUST AREAS		
*(Deals with occupancy)	*PERMISSION TO OCCUPY	SEE LUMS MANUAL
*(Deals with tenancy)	*LEASE AGREEMENT	SEE LUMS MANUAL
SECTION 14(11)	DEVELOPMENT OF LAND	SEE LUMS MANUAL

DEVELOPMENT FACILITATION ACT, NO.67 OF 1995: APPLICABLE TO WHOLE OF KWAZULU-NATAL		
SECTION 31 OF 49	LAND DEVELOPMENT AREA	SEE DFA MANUAL

SECTION 31 OR 49(JOINT APPLICATION	LAND DEVELOPMENT AREA AND REGISTRATION ARRANGEMENT	SEE DFA MANUAL
SECTION 61	LAND REGISTRATION ARRANGEMENT	SEE DFA MANUAL
SECCTION 30 OR 48	EXEMPTION	SEE DFA MANUAL
SECTION 42	INVESTIGATION OF A NON-STATUTORY LAND DEVELOPMENT	SEE DFA MANUAL
REGULATION 28	COMPEL AN AUTHORITY ON PROCEED WITH THE APPLICATION	SEE DFA MANUAL

* ENVIRONMENTAL APPLICATIONS

2. DATA SOURCES

- KWAZULU-NATAL LAND USE AND DEVELOPMENT BILL, 2003 (AUGUST 2003)
- LUMS GUIDELINE MANUAL
- ECOTOURISM REPORT
- DEVELOPMENT APPLICATIONS

ANNEXURE 4

REVIEW OF RELEVANT INTERNATIONAL CONVENTIONS AND LOCAL LEGISLATION

INTERNATIONAL CONVENTIONS

There are three international conventions directed at conserving natural resources, and to which South Africa is a signatory:

- The Convention to Combat Desertification
- The Convention on Biological Diversity
- The Convention on Wetlands of International Importance, Especially as Waterfowl Habitat.

Convention on Biological Diversity, 1992

Sugarcane farming involves the removal of natural vegetation and the loss of natural habitat, which result in a general reduction in biodiversity. As South Africa is a signatory to the Biodiversity Convention, sugarcane growers should aim to reduce and mitigate the impact they have on biodiversity.

The MSAR Convention

The general responsibility to promote the wise use of wetlands should be noted, as in many cases wetlands have been drained and planted over by sugarcane, throughout the history of the industry.

NATIONAL LEGISLATION

The Constitution Act, No. 108 of 1996

Every person has the right to an environment that is not harmful to his/her health or well-being, and to have the environment protected for the benefit of present and future generations. This will be achieved by reasonable legislation and other measures that prevent pollution and ecological degradation, promote conservation, and secure ecologically sustainable development and use of natural resources, while promoting justifiable economic and social development.

Conservation of Agricultural Resources Act, No. 43 of 1983

This Act provides for the prescription of control measures that must be complied with by land users. (The Act is under review at present.) These measures can be related to a variety of issues, and some key control measures that have been prescribed through regulations relating to farming are:

- Permission is required for the cultivation of virgin soil.
- Permission is required for the cultivation of land with more than 20% slope and, in certain cases, land with more than 12% slope. (This does not apply to land cultivated prior to the prescription of this control measure.)

- Every land user shall protect irrigated land from water and wind erosion through measures prescribed in the regulations.
- Every land user shall protect irrigated land from salination and waterlogging through measures prescribed in the regulations.
- No land user shall utilise the vegetation in a vlei, marsh or water sponge, or within the flood area of the watercourse, or within 10 m horizontally outside such flood area, in a manner that causes the deterioration of or damage to the natural agricultural resources.
- Every land user shall remove the vegetation in a watercourse to such an extent that it will not constitute an obstruction during a flood that could cause excessive soil loss.
- Permission is required to drain or cultivate any vlei, marsh or water sponge or to cultivate any land within the flood area of a watercourse or within 10 m horizontally outside the flood area of a watercourse. (This does not apply to land cultivated prior to the prescription of this control measure.)
- In 2001, the Act was amended and a schedule was published. This schedule listed three categories of plants, namely weeds, commercially propagated invaders and ornamental invaders. Full details of these lists, photographs of the plants concerned and control/eradication methods are available on the website: www. aqis. aqric.za/aqisweb/wip.

Soil Conservation Committees

Conservation Committees are appointed by the Minister, in every Magisterial District, to monitor compliance with the clauses of the Act.

Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, No. 38 of 1947

Fertilisers and agricultural remedies may not be sold unless they have been registered in terms of the Act, and the Minister may prohibit the acquisition, disposal, sale or use of certain fertilisers and agricultural remedies.

The National Environmental Management Act (NEMA), No. 107 of 1998

This Act is one of the most recent, and deals with farming and other activities that could have a long term detrimental effect on the environment.

- To promote integrated environmental management activities, the Act provides for the identification of activities that require authorisation before they may be undertaken. Prior to the authorisation of an activity, the potential impact of the activity on the environment, socio-economic conditions and cultural heritage must be assessed.
- The Act places a general obligation on persons responsible for significant pollution and environmental degradation to take all the necessary measures to prevent, minimise and rectify such pollution or degradation.
- The Act broadens the category of people or organisations who can take court action with regards to a breach of any section of the Act, including principles of the Act.
- The Act provides for any person to undertake private prosecutions in the public interest or in the interest of the protection of the environment in respect of a breach of any duty (other than public duties resting on the state) in any

legislation (and Association's regulations) where the duty is concerned with the protection of the environment, and the breach of that duty is an offence.

Environment Conservation Act (ECA), No. 73 of 1989

The Act provides for the control of activities which may have a detrimental effect on the environment. In the past few years, two categories of the regulations that are relevant to sugarcane farming have been promulgated:

Environmental Impact Assessment (EIA) Regulations, Nos. R1182, R1183 and R1184, 5 September 1997

Some of the activities'identified as having a potentially detrimental effect on the environment are directly relevant to sugarcane farming:

- The construction or upgrading of:
  - Roads, outside the borders of town planning schemes
  - Canals and channels, including diversions of the normal flow of water in a river bed and the transfer schemes between water catchments and impoundments
  - Dams, levees or weirs affecting the flow of a river
- The change of land use from:
  - Agricultural or undetermined use to any other use
  - Use for grazing to any other form of agricultural use
- The concentration of livestock in a confined structure for the purpose of mass commercial production.
- The intensive husbandry of, or importation of, any plant or animal that has been declared a weed or an invasive alien species.
- The release of any organism outside its natural area of distribution that is used for biological control.
- The genetic modification of any organism with the purpose of fundamentally changing the inherent characteristics of that organism.
- The reclamation of land below the high water mark of the sea and inland water, including wetlands.

The National Water Act, No. 36 of 1998

The Act provides for the classification of water resources, the setting of resource quality objectives and the determination of a reserve for all significant water resources. The reserve is

defined by the Act as the quality of water required to meet basic human needs and to protect aquatic ecosystems.

The Act places a general obligation on those in control of land to take reasonable measures to prevent, minimise and rectify any pollution of water resources that has occurred as a result of activities performed on the land in question.
T he Act provides for new controls on -the use of water generally, and allows for the promulgation of regulations relating to a number of aspects of water use, including:

- Regulating or prohibiting any activity in order to protect a water resource, or instream or riparian habitat.
- Limiting or restricting the purpose, manner or extent of water use.
- Prescribing methods for making a volumetric determination of water to ascribe an agricultural practice as a stream flow reduction activity for the purpose of water use allocation and the imposition of charges.
- The Act provides for the control of `stream flow reduction activities'. This refers to activities which in some way reduce the availability of water in a watercourse to an unacceptable extent. The Act presently defines afforestation as a stream flow reduction activity and allows for further stream flow reduction activities, which could include sugarcane, to be declared at a later stage.

Atmospheric Pollution Prevention Act; No. 45 of 1965

There are at present no regulations in place for the control of cane burning. However, the practice of cane burning could be regulated by Part Ill of this Act by declaring it a scheduled activity for which a permit would then be required.

White Paper on integrated Pollution and Waste Management for South Africa

The White Paper emphasises the importance of preventing pollution and waste, and avoiding environmental degradation. The current fragmentation, duplication and lack of co-ordination will be eliminated by reviewing all existing legislation and preparing one piece of legislation that will deal with all waste and pollution matters.

National Forest and Fire Laws Amendment Act, 2001

In terms of this Act the Minister may `declare a tree, groups of trees, woodlands or a species of trees protected.' No species protected in terms of regulations under this act should be removed or damaged during the establishment or management of sugarcane farms.

Occupational Health and Safety Act, No. 85 of 1993

Every employer shall provide and maintain a working environment that is safe and without risk to the health of his employees. Should an employer have 20 or more employees, he is required to appoint health and safety representatives. Where more than 10 people are employed at a work place, the employer shall ensure that at least one person is readily available, during normal work hours, who is in possession of a valid certificate of competency in first aid. There

are also requirements under this Act regarding the provision of drinking water and sanitation facilities.

National Heritage Resources Act No. 25 of 1999 and KwaZulu-Natal Heritage Act No. 10 of 1997

This Act is administered by the National Heritage Resource Agency, to protect heritage resources that are considered of national importance.

The KwaZulu-Natal Heritage Act provides for the establishment of Amafa aKwaZulu-Natali as the statutory body to administer heritage conservation on behalf of the KZN provincial government.

These Acts are responsible for the protection of landscapes and natural features, geological sites of scientific or cultural importance, buildings, graves and burial sites, battlefields, historically and archaeologically important sites and artifacts, including meteorites. The requirements of the Act are integrated into the EIA process and Amafa aKwaZulu-Natali must be consulted at the outset for any development project requiring an EIA.

ANNEXURE 5

Ukhahlamba Drakensberg Park World Heritage Site Draft IDP (March 2003 (updated November 2003)

uKHAHLAMBA-DRAKENSBERG PARK
WORLD HERITAGE SITE

DRAFT
INTEGRATED DEVELOPMENT PLAN
PART B: ***ZONATION***
March 2003 (updated 07 Nov 2003)

For internal review only

BJ Corcoran, R Porter & AC Blackmore (Planning Division)
in conjunction with the
Conservation Management Team of the UDP WHS

uKHAHLAMBA-DRAKENSBERG PARK
WORLD HERITAGE SITE

DRAFT INTEGRATED DEVELOPMENT PLAN

PART B: ***ZONATION***

March 2003 (updated 07 Nov 2003)

Prepared by: **Brent Corcoran (***PA Planner***), Roger Porter (***HP***) and Andy Blackmore (***Co-ord: IEM***)**

In conjunction with the Conservation Management Team of the uKhahlamba-Drakensberg Park World Heritage Site (UDP WHS)

SOUTHERN UDP WHS	CENTRAL UDP WHS	NORTHERN UDP WHS
John Crowson (CMSU)	**Oscar Mthimkhulu (CMCU)**	**Rob Faure (CMNU)**
Henry Hibbert (Garden Castle)	Gavin Shaw (Highmoor)	Alan Howell (Monks Cowl)
Chris Wex (Cobham)	Raymond Zikhali (Witteberg, ex-Injisuthi)	Dennis Nhleko (Culfargie)
Elasta Hadebe (Vergelegen)	Alfred Sigubudu (ex-Witteberg)	Makhiseni Myeza (OiC – Cath Peak)
Stephen Richert (ex – Vergelegen)	Mthethu Khumalo (Hillside)	Lance van der Bank (2iC – Cath Peak)
Eduard Goosen (Lotheni)		Alfred Sigubudu (Royal Natal)
Alverton Phungula (OiC-Mkhomazi)		Stephen Richert (Rugged Glen)
Emmanuel Nkosi (2iC - Mkhomazi)		
Charl Brummer (Kamberg)		

Authors' NOte

This Draft Integrated Development Plan has been prepared as an integral part of the Management Planning process for the uKhahlamba-Drakensberg Park World Heritage Site (UDP WHS). It is noted that the Final Draft of the IDP, as a supporting document to the Integrated Management Plan for the UDP WHS, will be ready for a formal public consultation phase by the end of March 2004.

The original draft has been split up into four (4) major components, namely:

- **Part A: Overall Development and Use Strategy, serving as a summary document. The following three components give more detailed information:**
- Part B: Zonation Plan for the UDP WHS (including the buffer zone as defined during the SCAP process)
  - **This draft zonation will need to be updated, based on the decisions to be taken regarding the future development and use strategy of the UDP WHS. Hence, at present, it strongly reflects the patterns of existing development and use in the UDP WHS, whilst providing an initial insight into the future desired state of the UDP WHS.**
- **Part C: Tourism Strategy for the UDP WHS**
- **Part D: Management and Bulk Infrastructure Strategy for the UDP WHS.**

It must be noted that these documents are not stand alone, but are integrated as follows:

- **Bulk infrastructure considerations have taken into account the predicted needs of both the conservation management and the tourism functions of the UDP WHS**
- **The zonation plan provides the first-level of decision-making for both tourism and conservation management, in a sense of what you can do where, and at what scale.**
- **Tourism and management functions have been assessed to determine their potential impacts on one another, as well as on the relevant values of the UDP WHS.**
- **The general information document has provided the key reference points for decisions made in drafting the respective supporting documents**
- **The zonation plan is focused on zoning for the most appropriate development and use patterns and scales for the UDP WHS, relative to the various biodiversity and cultural values associated with the UDP WHS.**

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Control Sheet

Process to Date

DATE	Process Summary
November 2001	- Regional Operations Committee (ROC) Meeting - Agreement on need for IDP & on prioritising staff's time where possible - Project briefs were sent out to Conservation Management, Ecological Advice, Ecotourism & Marketing and Conservation Partnerships sections (detailed actions for information requirements for the IDP document) - Wilderness Management Plan (WiMP) Meeting - Some guest activities addressed in this process
December 2001	- Field visit to UDP WHS, met with sub-regional teams to explain process & IDPs as a planning approach - Visited each station to become familiarised with conservation & sense of place issues.
January 2002	- Information received from Conserv Mgmt staff. (on general station issues pertaining to resource sensitivities, development & use issues, etc) - IDP Workshop (18 Jan)
February 2002	- IDP Workshop (11 Feb)
March 2002	
April 2002	- WiMP Workshop (10 April) - IDP Workshop (19 April)
May 2002	- WiMP Workshop (09 May)
June 2002	- UDP WHS IDP Workshop (10 June)
July 2002	- WiMP Workshop - Zonation Workshop #1 – Southern Berg (introduction & review of 1st draft, South of Sani Pass) - Zonation Workshop #1 – Northern Berg (introduction)
August 2002	- IDP workshop replaced by Mtg regarding Injasuthi Jeep Track & Mont-aux-sources area - Research Symposium preparation & presentation - Zonation Workshop #2 – Sthern Berg (review 2nd draft, South of Sani Pass & prep 1st draft North of Sani Pass) - Zonation Workshop #1 – Central Berg (introduction)
September 2002	- Zonation Workshop #2 – Northern Berg (prep of 1st draft, delegation of zonation tables) - Zonation Workshop #3 – Southern Berg (review of 2nd draft, delegation of tables) - Meeting with Ecotourism & Marketing Staff Team - Meeting with Conservation Partnerships
October 2002	- Zonation Workshop #2 – Central Berg (prep of 1st draft, delegation of zonation tables) - Meeting with Ecological Advice Staff - WiMP Meeting - UDP WHS IDP Meeting - Sehlabathebe NP visit (including review of draft zonation tables for SBerg)
November 2002	- Zonation Workshop #3 – Central Berg (review of tables & 1st drafts) - Zonation Workshop #3 – Northern Berg (review of tables & 1st drafts)
December 2002	- Zonation workshop #4 – Southern Berg (review of tables & 2nd drafts)
January 2003	- Zonation workshop #4 – Central Berg (review of tables & 2nd drafts) - Zonation workshop #4 – Northern Berg (review of tables & 2nd drafts) - WiMP Meeting – Limits of Acceptable Change
February 2003	- Zonation Workshop #5 – Southern Berg (review of tables & 3rd draft)
March 2003	- ROC Meeting – review of year to date & discussions on project plan for 2003/4 - Nthn, Central & Sthn Annual Mgmt Mtgs – discussion on project plan for 2003/4 - Site visit to Amphitheatre
April 2003	- ROC Meeting – presentation & discussion on draft project plan for 2003/4 - Meeting with Ecotourism & Marketing Staff (HEMs monthly meeting)
May	-
June	- 03 June, Tourism Strategy workshop
July	-
August	- Field Visit to Southern Berg with DF, JK, AvE, WB, John Crowson

Way Forward

A project management plan has been drafted for the completion of the Final Draft of the UDP WHS IDP. This project plan is made up of a number of sub-component project plans that should ensure the timeous and co-ordinated completion of the various parts of the IDP. This will ensure that the Final Draft IDP is completed by the end of March 2004, with recommendations for the development and use of the Park from 2004-2008. Please refer to Appendix ??? for the revised draft project management framework for the completion of the Integrated Development Plan for the UDP WHS. (note: delay in process has resulted in this deadline being shifted accordingly)

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List of Acronyms

CURE	Cultural Resource Management Plan
DoT	Department of Transport
DTLGA	Department of Traditional and Local Government Affairs
DWAF	Department of Water Affairs and Forestry
EIA	Environmental Impact Assessment
EKZNW	Ezemvelo KwaZulu-Natal Wildlife
EXCO	Executive Committee
FUM	Features-Use Matrix
GIS	Geographic Information System
I& AP	Interested and Affected Parties
IDP	Integrated Development Plan
IEM	Integrated Environmental Management
KDNC	KwaZulu Department of Nature Conservation
KZN	KwaZulu-Natal
KZNNCB	KwaZulu-Natal Nature Conservation Board
KZNNCS	KwaZulu-Natal Nature Conservation Service

MDTP	Maloti-Drakensberg Transfrontier Conservation and Development Programme
NDP	Natal Drakensberg Park
NEMA	National Environmental Management Act
NPB	Natal Parks Board
OiC	Officer in Charge
PA	Protected Area
RNNP	Royal Natal National Park
ROS	Recreation Opportunity Spectrum
SCA	Special Case Area
SCAP	Special Case Area Plan
SWOT	Strengths, Weaknesses, Opportunities and Threats
UDP	uKhahlamba-Drakensberg Park
USFS	United States Forest Service
VEO	Visitor Experience Opportunity
WH	World Heritage
WHCA	World Heritage Convention Act
WHS	World Heritage Site

A. INTRODUCTION

The focus of this document (Part B) is the Draft Zonation Plan for the uKhahlamba-Drakensberg Park World Heritage Site (UDP WHS). This is a key component of the Integrated Development Plan (IDP) that is in the process of being prepared for the UDP WHS, and which will be completed within the framework of the Maloti-Drakensberg Transfrontier Conservation and Development Programme (MDTP).

Reference should be made to Parts A, C and D for further information on the Integrated Development Plan for the UDP WHS. Part A, more specifically, contains the legal and policy framework for the WHS in general and for development planning pertaining to it. In addition, it contains the SWOT analysis for the WHS, with reference to the development and use of the WHS and its buffer zone.

Anything else?

B. ZonAtion Theory and MEthodology

This section presents the general methodology and approach in defining the zonation plan for the future development and use of uKhahlamba-Drakensberg Park World Heritage Site (UDP WHS).

Introduction

The purpose of categorising zones is to ensure that development is consistent with the biophysical constraints and recreational opportunities of the protected area. Zonation allows for co-ordination and phasing of the development of land, such that it will promote order, amenity, convenience and general welfare, and reduce conflict between recreation users. In addition, it will reduce conflict between efficiency, protection of sensitive natural features and economy in the process of development. The desired zonation should indicate the direction in which the protected area is to be developed and managed. Hence, zonation is prescriptive about areas that are "go" or "no-go" for development, as well as the type of development that is considered appropriate. This thinking can be summarised as follows:

- what visitor experience opportunities are appropriate, and should therefore be provided;
- what are the essential elements of these experiences;
- how much land should be allocated to the various opportunities; and
- where in the park should such opportunities be provided.

It is noted that zonation is just one of a suite of management options for effective management of visitors in protected areas. Others include, *inter alia,* carrying capacity, education and interpretation, and general behaviour guidelines. These will be addressed during the remaining stages of the IDP drafting process.

Zonation Systems

EKZNW has defined a zonation system that enables protected areas to be zoned, in context, according to seven categories. These categories are spread along a continuum, from wilderness to rural recreational development nodes. A special zone has also been included, so as to be able to reflect those areas of the PAs that are of a high conservation priority, and thus require strict protection measures (Appendix 6). This zonation system is being universally applied to EKZNW's protected areas, with the exception of the UDP WHS, where the recreational opportunity spectrum (ROS), a zonation system developed for the US Forest Service, and applied in national parks managed by Parks-Canada, is being used (Table 1).

This zonation system, and the resulting zonation plan for the UDP WHS will recognise and reflect:

- the sensitive features[1] associated with the reserve (i.e. biophysical, cultural and sense of place)[2],
- the range of visitor experiences[3], and
- the influence of existing development and use on these features and experiences.

As a result, the final management zonation will be a composite of ecological zonation (based on natural and cultural resource sensitivity), sense of place, cultural features, patterns of environmental settings, and existing development and use patterns. The final zonation map will be represented as a desired state, i.e. directing management towards a vision for each zone, that reflects and respects the broader conservation and ecotourism objectives for the reserve. A zonation table detailing the boundaries and rationale for each zone, as well as the zone's natural and cultural features will support the zonation map. Biophysical features that are readily located on the ground have been used to demarcate and delineate the zone boundary.

[1] Sensitivity is defined according to conservation status (including that of cultural features), specific sensitivity of each feature to specific types and scales of development & use, and the feature's perceived value to society.

[2] Zonation should be primarily based on an analysis of the sensitivities associated with these features.

[3] i.e. these reflect the diversity of environmental settings or visitor experience opportunities associated with the UDP.

However, initial critiques of the previous and present zonation approaches have highlighted a concern regarding the objectivity, defensibility and transparency of zoning for protected areas. For example, ROS does not adequately describe or define land-units of biodiversity significance or integrity, as ROS only considers land units on the basis of their use and experience attributes on a scale from wilderness to high intensity. In this regard, further refinement of this draft zonation will seek to establish a base zonation highlighting biodiversity and cultural values of the protected area. The potential use categories will then be overlaid, and then any conflicts will be resolved into a final zonation with appropriate management objectives and guidelines for each zone.

As such, EKZNW is investigating an alternative means to establishing this base zonation, with the aim of protecting these values, such that the primary purposes of each protected area are reflected in the zonation. This process will involve drafting a resource sensitivity analysis.

TABLE 1: RECREATIONAL OPPORTUNITY SPECTRUM (ROS)- CRITERIA FOR APPLICATION AS A ZONATION SYSTEM[4, 5 6]

Category	*Description of Criteria to be used to Zone the PA*	*Setting descriptions (as from the ROS Handbook)*
Pristine Wilderness	Unmodified, no development, not impacted by any sights or sounds of people (e.g. formalised trails, etc) ***Not above the 2400m contour (used as a guideline, until a visual impact assessment can be undertaken)*** No closer than 100m to either side of existing trails No formalised paths, no signage e.g. valley between Eastman's Ridge & the High Berg escarpment	Setting: Area is characterised by essentially unmodified natural environment of fairly large size. Interaction between users is very low, and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Motorised use not permitted
Primitive Wilderness	Unmodified environment, except for formalised trails being used at a low intensity (no signage) Visual & audio impact from outside, but at a distance (>10km) Everything above the 2400m contour will be Primitive Wilderness 100m buffer of formalised trails passing through Pristine Wilderness zones will be Primitive Wilderness Rock-packing (with concrete re-enforcement) (Minimum tool or not) of trails allowed where necessary (i.e. areas of medium intensity of use) – only through the necessary protocol as to be determined by Wilderness Management Committee e.g. Ndedema Gorge	
Semi-Primitive Wilderness	Unmodified environment, near-wilderness experience, formalised trails used at a medium intensity (change zonation for UDP WHS accordingly, especially Monks Cowl valley) Visual & audio impact from outside, but at a medium distance (5-10km) Natural environment intact Rock-packing (with concrete re-enforcement) (Minimum tool or not) of trails allowed where necessary (i.e. areas of medium intensity of use) – only through the necessary protocol as to be determined by Wilderness Management Committee E.g. Dooleys Falls area, Amphitheatre beyond hut & trail area	
Semi-Primitive Non-motorised	Closely related to SPW, but usage of formalised trails at a high intensity – concreting / rock-packing of trails Natural environment experience, non-motorised use, usually a buffer between wilderness & SPW / RN areas Visual & audio impact from outside, at a short distance (<5km) May be hiking huts or other types of low-scale accommodation, possible field ranger outposts e.g. immediate trail zone around Thendele, upper end of Rainbow Gorge & surrounds, outpost on Lions Ridge	Setting: Area is characterised by a predominantly natural or natural-appearing environment of moderate to large size, interaction between users is low, but there is often evidence of other users. The area is managed such that minimum on-site controls and restrictions may be present, but are subtle. Motorised use is not permitted
Semi-Primitive Motorised	4x4 trails & their area of impact (audio & visual) Visitor & management tracks & their zone of visual & audio impact (GIS to be used to determine exact range of impact, hence an initial distance of 100m other side has been set) Rustic accommodation, or low-level, low intensity tourism nodes (no bigger than 10-20 beds) e.g. Mikes Pass, Culfargie Valley	Setting: Area is characterised by predominantly natural or natural-appearing environment of moderate-to-large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorised use is allowed.
Roaded Natural	Small to Medium sized Camp nodes (20-100 beds), access control points, 2x4 roads (tar & gravel), small to medium management nodes e.g. Monks Cowl Office & development node, Giants Castle Camp & access road	Setting: Area is characterised by predominantly natural-appearing environments with moderate evidences of the sights and sounds of humankind. Such evidences usually harmonize with the natural environment. Interaction between users may be low to moderate, but with evidence of other users prevalent. Resource modifications and utilisation practices are evident, but harmonise with the natural environment. Conventional motorised use is provided for in construction standards and design of facilities

[4] Source: ROS User Guide, USFS, as in Advanced Wilderness Workshop
[5] Activity + Setting = Experience or Recreational Opportunity
[6] Recreational Opportunities can be defined along a continuum, and have been divided into 6 classes, with each class being defined in terms of activity, setting and experience opportunities

Category	*Description of Criteria to be used to Zone the PA*	*Setting descriptions (as from the ROS Handbook)*
Rural	A rural recreational node / area, rather than as a nature-based experience. Resort type development rather than a nature-based tourism facility e.g. Cathedral Peak Hotel & Didima, RNNP Visitor Centre & Mahai Camp Site	Setting: Area is characterised by substantially modified natural environment. Resource modifications and utilisation practices are to enhance specific recreation activities & to maintain vegetative cover and soil. Sights & sounds of humans are readily evident & the interaction between users is often moderate-high. A number of facilities are designed for use by a large number of people. Facilities are often provided for special activities. Moderate densities are provided far away from developed sites. Facilities for intensified motorised use and parking are available.
Buffer (as per SCAP process)	Zoned as per the Special Case Area Plan for the Drakensberg. Note the additional project that was undertaken to refine the outer (eastern boundary) of the buffer zone. In referring the ROS system, it is noted that there are opportunities for roaded natural, rural or urban experiences within the buffer zone. In the SCAP document, these are referred to as the buffer settlements, tourism development nodes (Babangibone – Bushmans Nek), and so on. Reference should be made to Appendix ? or below for a list of permitted and non-permitted activities, as defined in the SCAP document. It is proposed that, for the purpose of the Zonation Plan, that the Buffer Zone for the UDP WHS includes the Tourism Development Nodes and View Corridors and Access Corridors, as these zones form a continuum with the SCAP buffer zone. Buffer zone is designated as an area of co-operation between Park authorities and nieghbouring landowners and other authorities. Those with rights to land will be provided opportunities for co-operative initiatives which will be of value to both the Park authorities as well as land title and right holders (see options for preferential access in a swop for restriction of development to appropriate scales and locations, and architectural styles) View corridors provide am NB sense of anticipation and for appreciation of sense of place Development control schemes should preferably be formulated for buffer settlement nodes as well as for the tourism development nodes and access corridors.	Lies immediately east of the UDP WHS, and its function would be primarily to protect the integrity of the UDP WHS (See WHCA as well), as well as of the natural communities within the buffer View Corridors are along the main access roads to and parallel to the UDP WHS, and thus provide scenic vistas for the traveller. Access corridors refer to the two authorised access links between SA and Lesotho, namely Sani Pass and Bushmans Nek Pass. Will play an important role in transfrontier tourism in the future. Tourism development nodes are a mixture of tourism facilities, agriculture, afforestation and some more limited informal settlement. Most of land is privately owned, with nodes enjoying ready access through official access points. These nodes still have some development potential. Nodes are "located in areas which are attractive, provide good views, a feeling of "being in the mountains" and have potential for resource-orientated activities. Nodes should also have ready access to wilderness / natural areas through controlled points" (DAP).

Resource Sensitivity Analysis – Relevance for defining the zonation

SEA???

Previous and present systems of zoning involve using a 1:50 000 map (note: the scale of the map used for zoning will depend on the size of the PA) to delineate the different development and use zones for the UDP WHS. EKZNW conservation management staff have used their collective expertise in an attempt to consider all values simultaneously and in an integrated manner, so as to ensure the conservation of the UDP WHS's values in the face of development and use pressures. However, it is proposed that such an approach is not able to effectively integrate and consider all values simultaneously, and thus new techniques and approaches are in the process of being identified and assessed for application to planning processes for protected areas. The focus of the preferred technique is a resource sensitivity analysis.

Resource sensitivity is based on the relevant feature's conservation status (rare and endangered, endemicity, viable or sub-viable populations, context of species conservation status in province, etc), sensitivity to disturbance, and perceived value to society. It is noted that consideration should be given to modeling the distribution of key species, features, etc, where data is not available or is of poor resolution.

The preferred method of a resource sensitivity analysis is the Features-Use Matrix (FUM). Each feature of UDP WHS (i.e. biophysical, sense of place, or cultural feature) has the potential to be related to each type and scale of development and use being considered for UDP WHS. The FUM will be used:

- either as a decision-support tool for the zonation plan, and/or
- for Environmental Impact Assessments (EIA) of proposed developments or uses of UDP WHS, and / or
- as a technique for developing or fine-tuning the zonation plan for the UDP WHS.

A process is presently underway to define the FUM Matrix for the UDP WHS, with the first results expected at the end of March 2004. These will be integrated into the final draft IDP for approval by the KZNNC Board. The process will define:

(i) which sensitive features can be used as benchmark indicators for monitoring the impacts of development and use on the UDP WHS;
(ii) which types and scales of development and use may possibly be considered for the UDP WHS;
(iii) the spatial or conceptual relationship between each feature and each type / scale of development and use;
(iv) the gaps in the data for effective use of this tool for guiding development and use of the UDP WHS.

C. Previous Zonation Plans for the UDP WHS

A number of attempts have been made to zone the UDP WHS, with the aim of guiding the development and use of the Park. These include the NPB-Smaille Plan (1993) and the WHS Nomination Plan (1998).

NPB-Smaille Plan (1993)

This recreation plan (Figure 3) was initiated by some of the conservation managers in the then-Natal Drakensberg Park (NDP), who saw the need for more systematic decision-making with regard development and recreation resource management in the NDP. Glenda Smaille was requested to facilitate the process, and as such developed a plan to guide recreation resource managers and policy makers concerning the allocation and management of opportunities for recreation.

The Plan was based on an adaptation of the Recreational Opportunity Spectrum (ROS) zonation system, and was strongly influenced by the existing wilderness proclamations, in that the resultant zonation plan for the then NDP was weighted towards the unmodified, wilderness end of the ROS spectrum.

In 1996, Mike Haynes, the NPB Ecotourism Planner, initiated but didn't complete an exercise to zone the Park. However, the work that was done by Haynes has been used to zone other protected areas in the province, e.g. HiP, Tembe-Ndumo, UDP WHS, etc.

Zonation Plan for the World Heritage Nomination

Ezemvelo KZN Wildlife, in conjunction with Amafa aKwaZulu Natali (Heritage KZN), submitted a nomination to the World Heritage Committee in 1999, with the aim of designating the uKhahlamba-Drakensberg Park as a mixed World Heritage Site, i.e. natural and cultural properties. As a result, the UDP WHS was inscribed on the World Heritage Site list in 2000. The nomination documentation included two zonation maps, namely (a) an overall conservation zonation plan (Figure 4), and (b) a tourism land-use zonation plan.

(a) The overall conservation zonation plan detailed the existing core and buffer conservation areas of the UDP WHS. The purpose was to clearly define a core area that would be managed as "strict conservation" and a buffer area where development could occur and recreational activities would be of relatively greater intensity. This was based on:

(i) the need to respect the integrity of the existing wilderness proclamations. This included the designation of part of the wilderness proclamations as part of the buffer conservation areas[7].

(ii) the need to respect the integrity of areas of the reserve that had inherent wilderness or near-wilderness qualities, but were not proclaimed as such, e.g. Giants Castle Game Reserve, area of Cathedral Peak State Forest between the Mlambonja and Mdedelelo Wilderness Areas, etc.

[7] These "wilderness buffers" can be related to one of the categories of the present zonation system [namely the Wilderness Opportunity Spectrum (WOS)] being used, namely the Semi-Primitive Wilderness zone. This WOS is a sub-section of the Recreation Opportunity Spectrum (ROS).

(iii) the need to protect various biophysical features of significant conservation status, e.g. drainage lines, sub-alpine vegetation, boulder scree slopes, etc.

(b) The tourism land-use zonation plan for the UDP WHS detailed the then existing patterns of development and use. These development and use patterns were presented in the form of Maps 1 and 2 of the Hiking Map series, and Maps 3-6 of the old Slingsby Maps. In no way were these maps used to convey a future desired state for the development and use of the UDP WHS. Hence, these maps have been used to reflect the then-known baseline patterns of use and development.

Conclusion

The present zonation process has recognised that:

(a) staff have been involved to some degree in these previous planning processes;
(b) previous plans may be out of date, both in terms of protected area development planning techniques, resource sensitivity analysis techniques, the use of GIS, as well as in terms of changing contexts, etc;
(c) previous plans have not been approved by the former NPB or by EKZNW;
(d) the zonation systems applied during the previous planning processes are not compatible with the preferred zonation system that has been applied during this present zonation process. Hence, the information from the old plans, in order to be used to assist in defining the present zonation plan, had to be related to the present zonation system;
(e) these previous plans may not be transparent, objective, or may not have been drafted with appropriate zonation techniques, and hence may not be defendable;
(f) the WHS zonation plans were approved by the WH Committee, as part of the inscription of the UDP WHS on the WH list of approved sites, and that this will mean that any changes in these zonation plans will need to be approved by and/or communicated to the WH Committee, together with the appropriate defendable motivations.

As a result, the present zonation planning approach is in the process of developing transparent, objective and defendable zonation plans, based on improved development planning techniques and on the due consideration of present and possible planning contexts.

D. The Draft Zonation Plan for UDP WHS

The zonation plan for the whole uKhahlamba-Drakensberg Park is in Figure 5, whilst Figs 6a – 8b (pgs 19-24) contain the maps of the sub-regions of the UDP WHS. The tables that follow (pgs 25 – 63) support the zonation map, in that they describe the proposed zones, in terms of their boundaries, rationale, and key natural and cultural features.

As noted above, biophysical, social and managerial criteria, including *inter alia*, sensitivity of the geology and hydrology, slope gradient, wilderness experiences, and existing infrastructure and activities were taken into account in drafting this zonation plan.

In addition, there are a number of actions that need to be completed before the zonation plan for the UDP WHS can be finalised as part of the overall IDP by the end of March 2004. These include, *inter alia*:

- Complete the **Digital Elevation Model for the UDP WHS**, in order that it may be used to run a **visual impact assessment** to (1) test the assumptions made in defining the boundaries of the pristine (e.g. if the 2400 - 2600m contours is the correct contour to define the upper limit of any pristine area in the UDP WHS – each will be tested in context), primitive and semi-primitive wilderness zones, (2) test the assumptions made in defining the zone of influence of jeep tracks and main access roads in the UDP WHS.

- Revisit the **concept of the No-Camping Zones** around each of the main access points or station nodes in the UDP WHS. This will include revisiting the logic and rationale, the criteria for delineating these zones, the actual delineation in context, and whether there should be refinement of these development control overlays.

- Decide on the future of **designated campsites in the wilderness zones** and proclamations of the UDP WHS – i.e. whether this strategy impacts on the wilderness values of the UDP WHS, or if the potential intensity of use of these wilderness areas means that such a strategy is necessary to manage access into, and impacts on these wilderness areas.

- Investigate the **carrying capacity / limits of acceptable change** for the UDP WHS, and consider the possible mechanisms to limit people in certain areas

- Investigate what realistic mechanisms are available to **manage the impact of the dagga-smuggling and cattle-rustling trade** on the UDP WHS, including the role of the MDTP in facilitating co-operative and integrated planning for the area;

- Develop a policy and strategy for the **management of airspace** in the UDP WHS

- Consider the **sub-division of some of the larger zones**, where necessary, in order to manage for the complexity of development and use issues in key areas of the UDP WHS. In addition, to consider the possible **amalgamation or integration of zones** with one another, where the initial subdivision is unnecessary or significantly adds to the complexity of management in a certain area of the UDP WHS, rather than simplifying it.

- Use the **MDTP programme** to ensure that the Local and District Municipalities integrate the **SCAP** into their IDPs. This will assist in finalising what development controls should be in place to direct development and use patterns on private and communal lands in the **buffer zone of the UDP WHS**, otherwise the future sense of place and ecological integrity of the Park will be compromised. For example, during the process of zoning the Lotheni section of the Southern UDP WHS, one Pristine Wilderness Zone had to be downgraded to a Primitive Wilderness Zone due to the construction of a homestead in the immediate buffer zone of the Park.

- Complete the **assessment of the 1700km of trails** in the UDP WHS,

- this process is assessing whether existing trails should be kept open, and with what maintenance objective.
- In addition, it will evaluate whether additional trails should be considered around existing or proposed access points or trail heads in the UDP WHS.

In addition, the more detailed planning process to take place in 2003/2004 should assist in refining the zonation at the station level. This will apply to all the existing access points, as well as to the visitor facility nodes and associated activities. This will include, *inter alia*, issues such as:

- the use of Mikes Pass, and of the area beyond Arendsig;
- the future of the Injisuthi Jeep Track and to the existing management and visitor activities associated with the Track;
- the use of the area on top of the Amphitheatre from the top of the chain ladder to Tugela Falls (includes the Sentinel Gully);
- the management of visitors in Cathedral Peak and Royal Natal, in being zoned as two of the most intensely used areas in the UDP WHS.

Insert MAPS

Insert TABLES

Table 4a: Zonation Table : Bushmans Nek and Garden Castle

Table 4b: Zonation Table : Cobham

Table 4c: Zonation Table : Vergelegen

Table 4d: Zonation Table : Lotheni

Table 4e: Zonation Table : Mkhomazi and Kamberg

Table 5: Zonation Table : Central UDP (Highmoor, Witteberg, Hillside, Injisuthi)

Table 6a: Zonation Table : Monks Cowl and Culfargie

Table 6b: Zonation Table : Cathedral Peak

Table 6c: Zonation Table : Royal Natal

Table 6d: Zonation Table : Rugged Glen, Robinsons Bush, Poccolan

Please note that reference should be made to Parts C (Tourism Strategy) and D (Management & Bulk Infrastructure Strategy) of the IDP, where the development and use objectives are set for each of the land-use management zones identified in the zonation plan.

References

(update page numbering)

Please refer to Part A of the IDP for a complete list of references used in drafting this document.

Appendices

Appendix 1: EKZNW Zonation System, as adapted from ROS

(i) Unmodified natural environment (Wilderness zone)

(This may be equivalent to a proclaimed **WILDERNESS ZONE or WILDERNESS AREA**, but must include areas which are not designated as such but which provide the highest quality natural setting)

Description:

A landscape which is natural in all respects, and where the focus is on the protection of biodiversity and ecosystem processes. Human presence is temporary and associated impacts are transient. Recreational use is limited to the lowest intensity and restrictions are placed on the range of activities and on visitor numbers. It is in this environment that a Wilderness quality experience is possible.

Key characteristics:

Natural landscape, strict protection, no structures, use of *in situ* natural materials, stone cairns, no alien vegetation, access on foot or horseback, low intensity and transient use, wilderness experience.

(ii) Largely unmodified (Limited use zone)

Description of setting:

A landscape which is natural in most respects, with the exception of certain minor structures, which enhance access or mitigate environmental impacts. The focus is on the protection of biodiversity and ecosystem processes. Recreational usage is low in density and frequency and impacts are transient.

Key characteristics:

Natural landscape, mitigation of impacts, natural materials, low recreational use, no public vehicle access, near-wilderness experience.

(iii) Partly modified (Low density use zone)

Description of setting:

A natural landscape which is predominantly unmodified, with the exception of some recreational and management structures including roads.

Key characteristics:

Natural landscape, isolated alien vegetation clumps, controlled use is of a low intensity, e.g. backpacking and camping; active mitigation of impacts, natural resource use, low key structures, 4x4 vehicle access, low intensity of use, nature experience.

(iv) Modified (Moderate density use zone)

Description of setting:

The landscape is partially transformed, but with management, a largely unmodified natural setting could be restored; management efforts would be directed towards restoration. Roads may be provided for 2x4 vehicle access. There may be evidence of alien plant encroachment.

Key characteristics:

Partially modified landscape, containing natural areas, alien plants, evidence of past non-conservation uses, some facility-based recreation e.g. bush camps, hides, picnic sites, self-guided walks, usually about 1 ha in extent; moderate use intensity, management infrastructure, nature experience.

(v) Park development node

Description of setting:

Natural landscape that would include concentrated nature-based activities in a landscaped setting of less than 10 ha. Views should be of less modified settings. Frequent human or mechanical sounds could characterise such a setting.

Key characteristics:

Landscaped recreation area, which may contain facilities such as restaurants, swimming pools and children's playgrounds, management infrastructure, lawns, substrate modification, extensive management of impacts, comfortable and safe experience of nature. Includes campsites, rest camps, restaurants, interpretation centre, game capture facility.

(vi) Rural

Description of setting:

Rural settings usually fall outside of statutorily protected areas, but may be components of community conservation areas and biosphere reserves. For the HUP Concept Plan, this zonation falls outside the protected area and is characterised by extensive non-conservation, mixed land uses comprising agriculture, including pastoralism, cultivation and settlement, and appropriately zoned pockets of low-key, facility-based recreational development. In most instances, the biophysical resource base would be extensively modified with only remnant patches of indigenous vegetation remaining.

Key characteristics:

Non-conservation use, agriculture, settlement, facility-based recreation, extensive modification, countryside experience.

(vii) Rural recreational development node

Description of setting:

Located within a rural setting, Rural Recreational Development Nodes are an amplification of the Park recreation Node, and are characterised by a variety of non-conservation land uses, but with emphasis on recreational and leisure

development. Non-recreational land uses would include a residential component, service zone, and agriculture.

Appendix 2: Preferred & non-preferred land uses & activities for the Buffer Zone of WHS[8]

Areas	Zone	Preferred Land-uses and activities	Non-preferred land-uses a
	Buffer **(excluding Drakensberg Approaches Policy Development Nodes)**	**Amenity planting with non-invasive species** **Extensive agriculture** **Nature & culture-based tourism** **Nature & resource conservation** **Small-scale tourism development** **Small-scale agriculture** **Subsistence agriculture** **Trails** **Intensive agriculture**	**Agri-industry** **Commercial afforestation** **Industrial development** **Intensive or semi-intensive hu** **Large-scale infrastructure proj** **Large-scale tourism developm** **Mines and quarries** **New roads** **Subdivision of land**
	Buffer Settlement	**Amenity planting with non-invasive species** **Extensive agriculture** **Intensive agriculture** **Nature & culture-based tourism** **Nature & resource conservation** **Small-scale tourism development** **Small-scale agriculture** **Subsistence agriculture** **Trails**	**Industrial development** **Large-scale infrastructure proj** **Mines and quarries** **New roads** **Agri-industry** **Commercial afforestation** **Large-scale tourism developm** **Subdivision of land**
	View Corridors **(Also applies to flexible transition area)**	**Amenity planting with non-invasive species** **Extensive agriculture** **Intensive agriculture** **Nature & culture-based tourism** **Nature & resource conservation** **Small-scale tourism development** **Small-scale agriculture** **Subsistence agriculture** **Trails**	**Agri-industry** **Commercial afforestation** **Industrial development** **Intensive or semi-intensive hu** **Large-scale infrastructure proj** **Large-scale tourism developm** **Mines and quarries** **New roads** **Subdivision of land**
on Area	***Tourism Development Nodes***	**Amenity planting with non-invasive species** **Extensive agriculture** **Intensive agriculture** **Large-scale tourism development** **Nature & culture-based tourism** **Nature & resource conservation** **Small-scale tourism development** **Small-scale agriculture** **Subdivision of land** **Subsistence agriculture** **Trails**	**Agri-industry** **Commercial afforestation** **Industrial development** **Intensive or semi-intensive hu** **Large-scale infrastructure proj** **Mines and quarries** **New roads**

[8] The definitions for these terms, as well as for the activities themselves, can be found in sections 11.5 and 11.4 respectively.