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Department :
Economic Development, Tourism and
Environmental Affairs

PROVINCE OF KWAZULU-NATAL



UMZINYATHI DISTRICT MUNICIPALITY ENVIRONMENTAL MANAGEMENT FRAMEWORK



STRATEGIC ENVIRONMENTAL MANAGEMENT PLAN

FINAL

October 2016






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AMENDMENTS PAGE

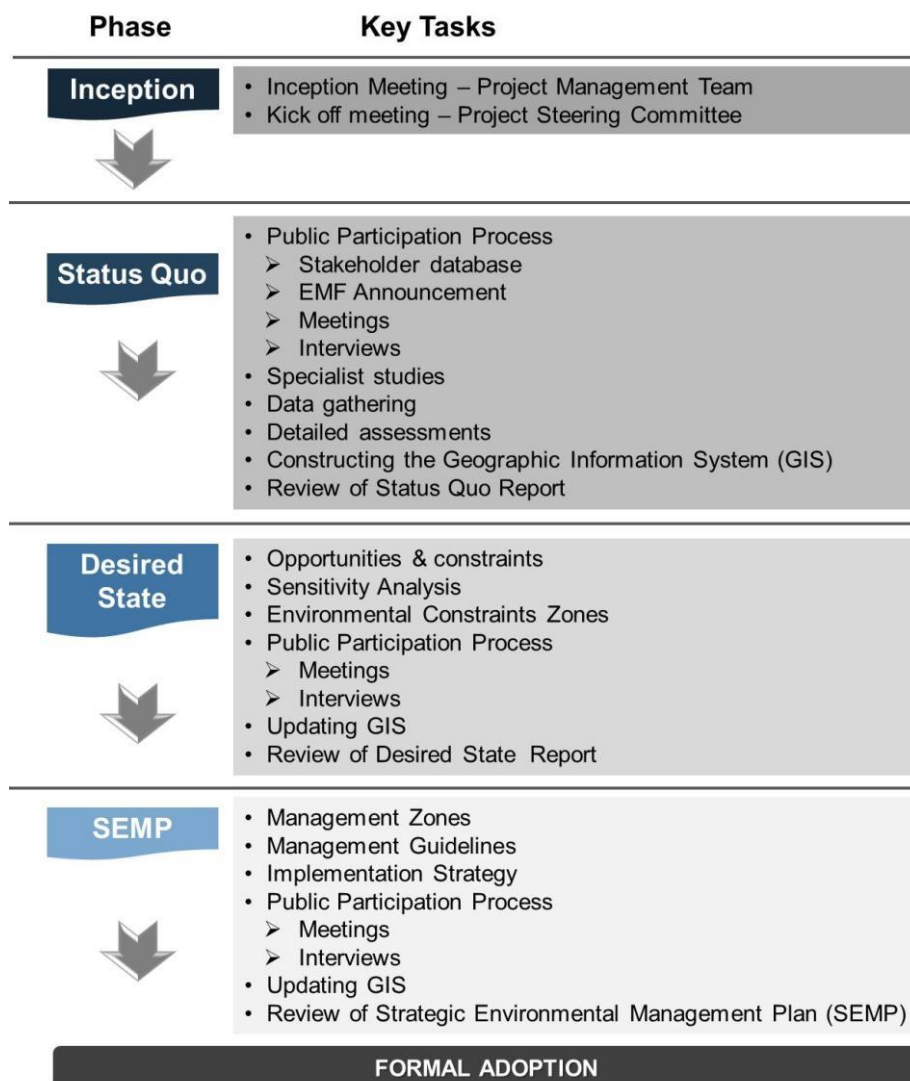
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EXECUTIVE SUMMARY

The uMzinyathi District Municipality (UDM), in partnership with the KwaZulu-Natal (KZN) Department of Economic Development, Tourism and Environmental Affairs (EDTEA), embarked on a process to develop an Environmental Management Framework (EMF) for the District. An EMF is a study of the biophysical and socio-cultural systems of a geographically defined area to reveal where specific activities may best be practiced and to offer performance standards for maintaining appropriate use of such land.

The EMF development approach, which is outlined in the figure to follow, is consistent with the requirements stipulated in the National Environmental Management Act (Act No. 107 of 1998) and the EMF Regulations (Government Notice No. R547 of 18 June 2010).



Outline of EMF Development Process



This report represents the Strategic Environmental Management Plan (SEMP) of the EMF process and serves to plot the way forward for attaining the desired state. The SEMP bridges the divide between the current state of the environment in UDM and the desired state. It aims to achieve this by managing the sustainable utilisation of land through Management Guidelines and by controlling the activities that may impact on environmental attributes in specific geographical areas.

The Desired State phase of the EMF was concluded with the delineation of Environmental Management Zones (EMZs). Each of these zones represents a specific demarcated area that requires active control to ensure that its potential is realised. The EMZs depict the assimilated sensitivity maps that were integrated with the development pressures and trends, opportunities, constraints and public aspirations.

To facilitate the attainment of the desired state for these EMZs, guidelines are required that stipulate compatible activities that support the vision for these zones and specific management requirements and objectives that need to be adhered to when development is proposed in a zone. The SEMP also attempts to manage activities in the EMZs linked to the listing notices (Government Notice No. R983, R984 and R985 of 4 December 2014) of the Environmental Impact Assessment (EIA) Regulations of 2014, in accordance with Section 24 of NEMA.

The SEMP culminates in a strategy for the implementation of the EMF, which consists of the following:

- ❖ A pragmatic approach to the implementation of the UDM EMF based on the commonly adopted management system of a Plan-Do-Check-Act cycle;
- ❖ Linkages with other Planning and Policy Instruments;
- ❖ Striving towards the Desired State;
- ❖ Giving Effect to the EMF –
 - EMF Enabling Institutional Arrangements;
 - EMF Implementation Duties;
 - EMF Functionality;
 - EMF Review;
- ❖ Management Framework for Strategic Issues & Priorities; and
- ❖ Monitoring, Evaluation & Review.



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LIST OF ABBREVIATIONS

CARA	Conservation of Agricultural Resources Act (Act 43 of 1983)
CBA	Critical Biodiversity Area
DAFF	Department of Agriculture, Forestry and Fisheries
DEA	Department of Environmental Affairs
DEAT	Department of Environmental Affairs and Tourism
DM	District Municipality
DMR	Department of Mineral Resources
DWA	Department of Water Affairs
DWS	Department of Water and Sanitation
EDTEA	Economic Development, Tourism and Environmental Affairs
EIA	Environmental Impact Assessment
EKZNW	Ezemvelo KZN Wildlife
EMF	Environmental Management Framework
EMZ	Environmental Management Zone
ESA	Ecological Support Area
FEPA	Freshwater Ecosystem Priority Areas
FSCA	Freshwater Systematic Conservation Assessment
GIS	Geographical Information System
GN	Government Notice
IDP	Integrated Development Plan
IEM	Integrated Environmental Management
IWMP	Integrated Waste Management Plan
KZN	KwaZulu-Natal
LM	Local Municipality
LUMS	Land Use Management System
NEMA	National Environmental Management Act (Act 107 of 1998)
NEM:BA	National Environmental Management: Biodiversity Act (Act 10 of 2004)
NFEPA	National Freshwater Ecosystem Priority Areas
NHRA	National Heritage Resources Act (Act 25 of 1999)
NWA	National Water Act (Act 36 of 1998)
SAHRA	South African Heritage Resources Agency
SANBI	South African National Biodiversity Institute
SDF	Spatial Development Framework
SEA	Strategic Environmental Assessment
SEMP	Strategic Environmental Management Plan
SPLUMA	Spatial Planning and Land Use Management Act (Act 16 of 2013)
UDM	uMzinyathi District Municipality
WWTW	Wastewater Treatment Works



DEFINITIONS / GLOSSARY OF TERMS

Attributes

The quality ascribed to an element in the environment that distinguishes it in character, form or nature from other elements in the environment.

Environment

The surroundings in which humans exist and which comprise:

- ❖ *The land, water and atmosphere of the earth;*
- ❖ *Micro-organisms, plant and animal life;*
- ❖ *Any part or combination of a) and b) and the interrelationships among and between them; and*
- ❖ *The physical, chemical, aesthetic and cultural properties and conditions of the foregoing that can influence human health and well-being.*

Environmental Feature

Elements and attributes of the biophysical, economic and social environment that comprise a data category.

Environmental Management Framework (EMF)

The study of the biophysical and socio-cultural systems of a geographically defined area to reveal where specific land-uses may best be practiced and to offer performance standards for maintaining appropriate use of such land.

Management Guidelines

Specific provisions applied in the management of each individual attribute or activity associated with the respective Environmental Management Zones.

Environmental Management Zones

Specific demarcated geographical area, represented spatially on a map illustrating a specific sensitive feature which needs to be managed in a pro-active and dedicated way.

Regulated Area of a Watercourse

1:100 year floodline or delineated riparian habitat, whichever is greatest (as per Government Notice 1199 of 18 December 2009).

INTRODUCTION



SECTION

1



1 INTRODUCTION

1.1 Background

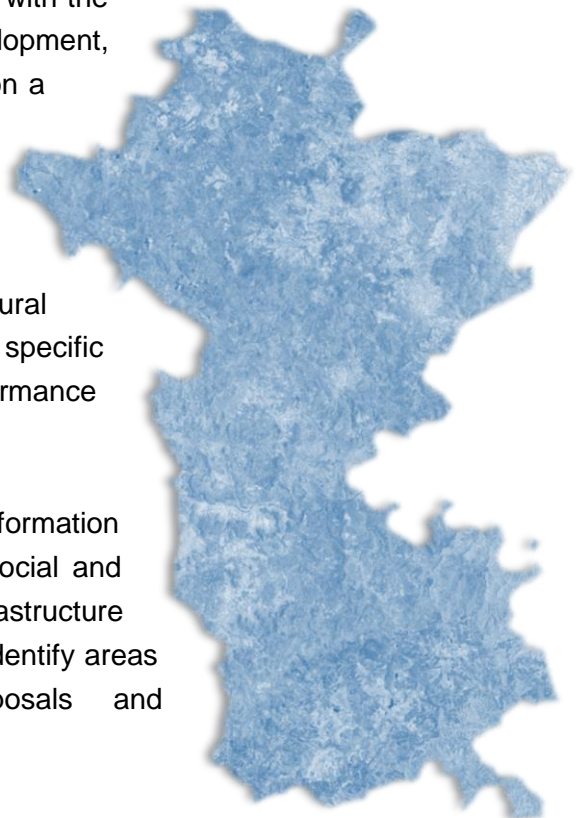
The uMzinyathi District Municipality (UDM), in partnership with the KwaZulu-Natal (KZN) Department of Economic Development, Tourism and Environmental Affairs (EDTEA), embarked on a process to develop an Environmental Management Framework (EMF) for the District. Nema Consulting was appointed to prepare the UDM EMF.

An EMF is a study of the biophysical and socio-cultural systems of a geographically defined area to reveal where specific activities may best be practiced and to offer performance standards for maintaining appropriate use of such land.

An EMF includes a framework of spatially represented information connected to significant environmental (i.e. ecological, social and economic) parameters, such as ecology, hydrology, infrastructure and services. A key function of an EMF is to proactively identify areas of potential conflict between development proposals and critical/sensitive environments.

Prior to commencement with the UDM EMF, the requisite administrative and institutional matters were set in place, which included the concurrence between the relevant spheres of government, namely the National Department of Environmental Affairs (DEA), KZN EDTEA and UDM.

As shown in **Figure 1**, the two major components of the UDM EMF entail Public Participation and Technical Development. Once the EMF is finalised, it will undergo promulgation and



gazetting in order to render it as a decision-support tool in the environmental and planning arenas.

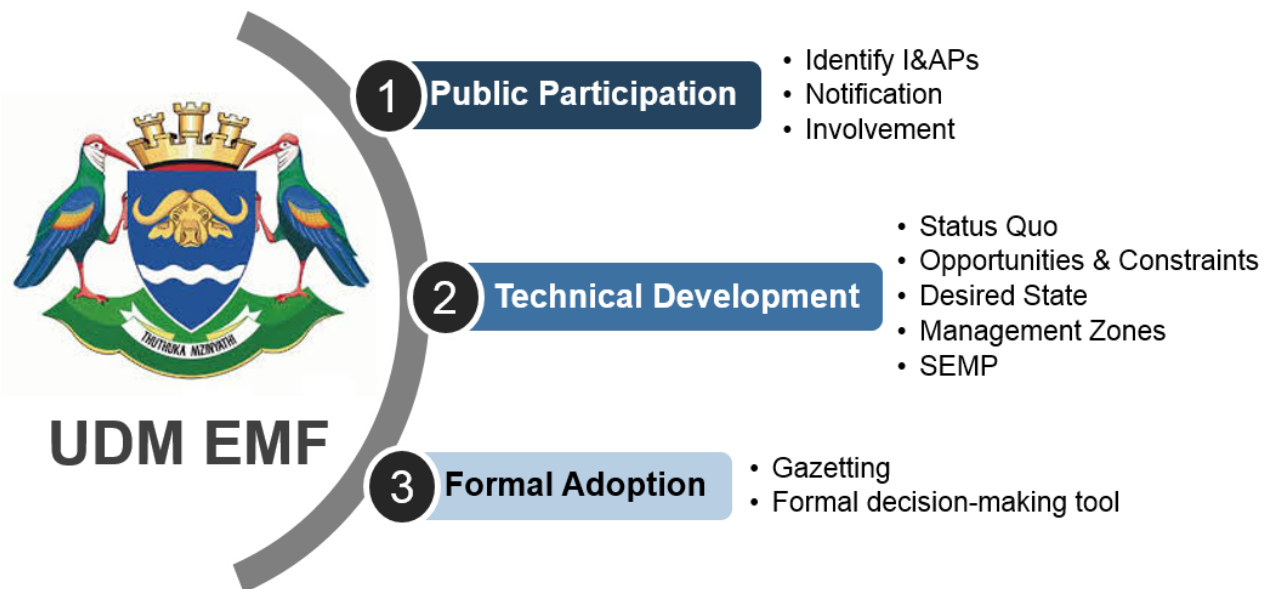


Figure 1: EMF Components

As part of the UDM EMF development process, the following deliverables were produced: Status Quo Report, Desired State Report and Strategic Environmental Management Plan (SEMP).

This report represents the SEMP (Volume 3) and serves to plot the way forward for attaining the desired state.

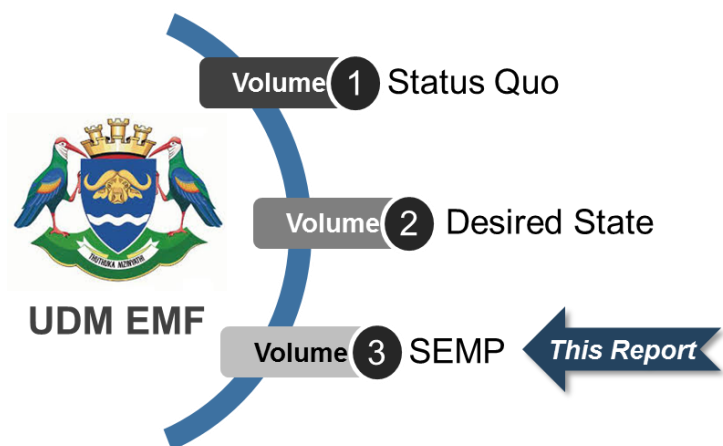


Figure 2: UDM EMF Building Blocks

1.2 EMF Study Area

The UDM is located in the north-central part of KZN (**Figure 3**). The municipality is bordered in the north by Amajuba District Municipality (DM), in the west by uThukela DM, in the south-west by uMgungundlovu DM in the south-east by iLembe DM, and in the east by uThungulu DM (**Figure 5**).

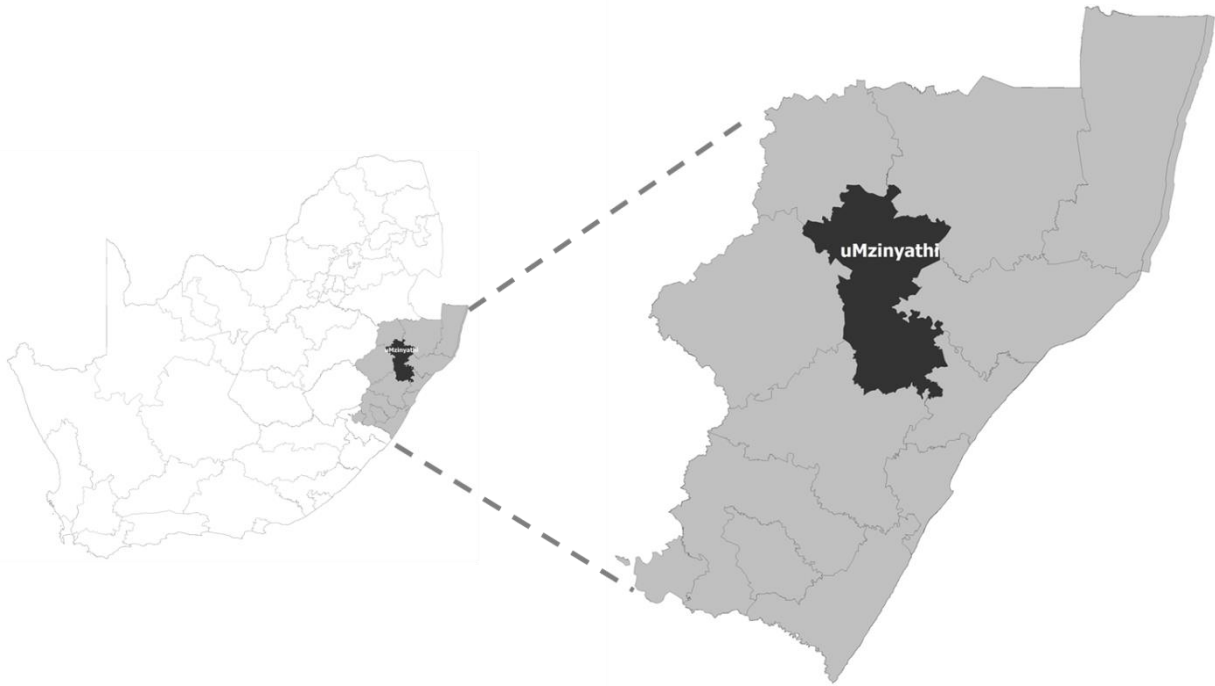


Figure 3: UDM National and Provincial Context

The District consists of four local municipalities, namely: Endumeni Local Municipality (LM), Nquthu LM, Msinga LM and Umvoti LM (**Figure 4**).

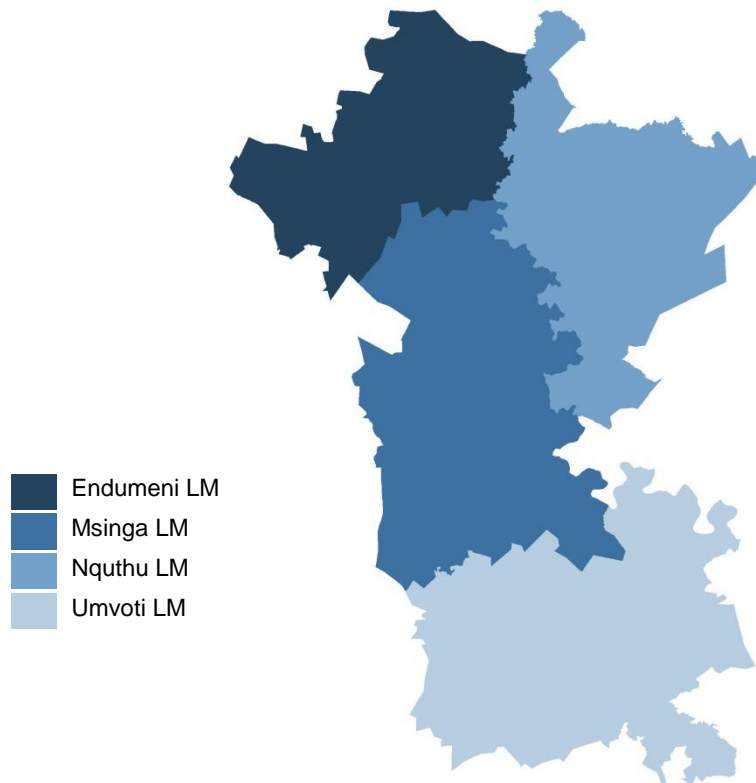
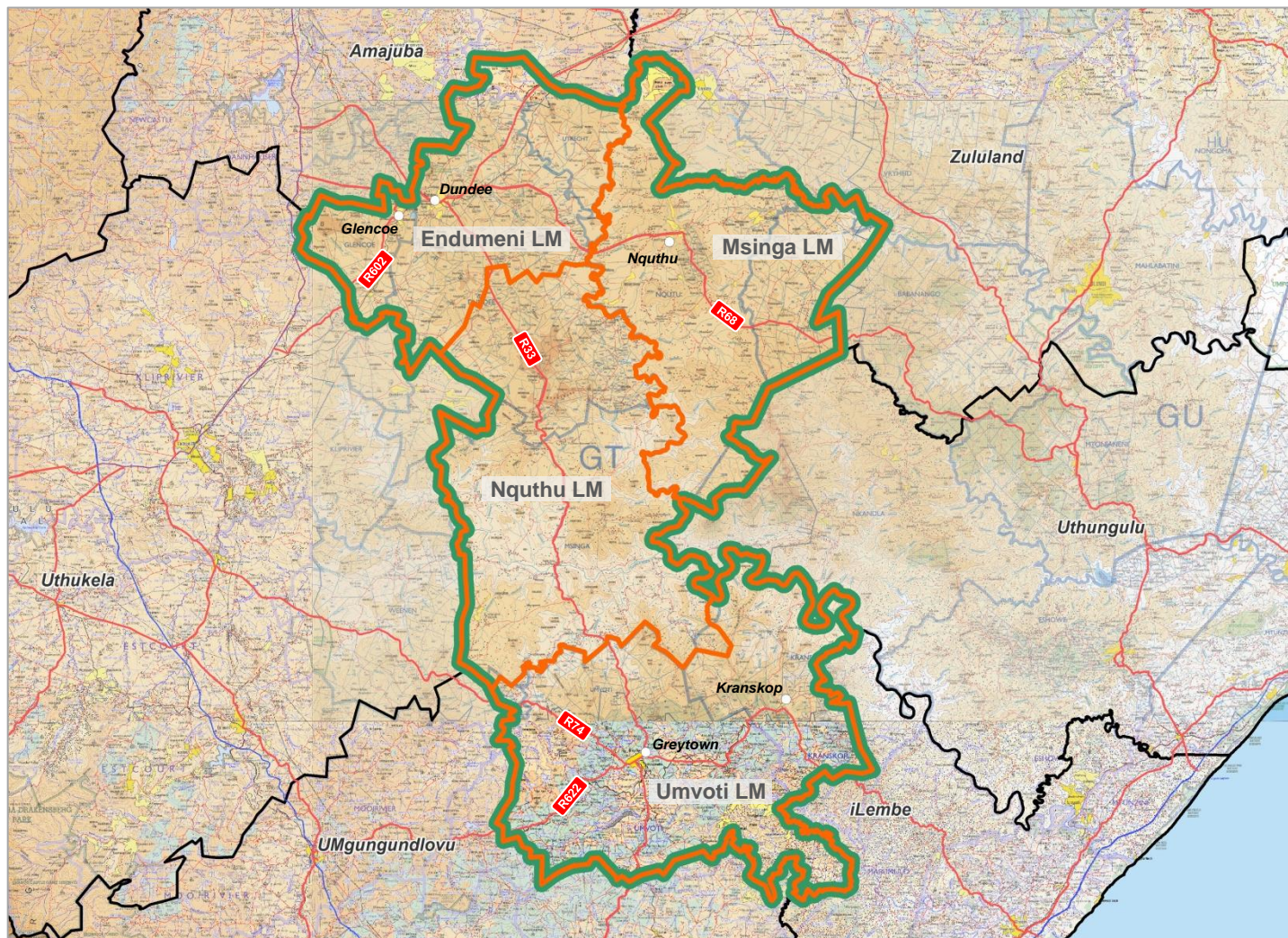


Figure 4: UDM Local Municipalities



UMZINYATHI DISTRICT MUNICIPALITY
ENVIRONMENTAL MANAGEMENT FRAMEWORK

Legend	
	UDM
	Local Municipalities
	Municipalities
Road class	
	National
	Arterial

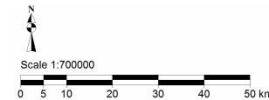


Figure 5: Locality Map



The District lies between the main N3 Corridor between Durban and Gauteng and the Coastal Corridor, running along the east coast. The seat of uMzinyathi is Dundee. The more developed urban areas include Dundee and Greytown, which can be viewed as a strong regional centre with substantial commercial and agricultural activity.

The total extent of the District Municipality is approximately 8079 km² and consists of extensive grasslands in the north supporting the primary agricultural sector based on cattle ranching for beef, sheep and mixed farming, and maize cultivation. Substantial forestry areas and some sugar cane cultivation occur in the southern parts.

An overview of each LM follows (UDM, 2014):

❖ **Endumeni LM -**

This municipality is unique, its population is predominantly urbanised or based on commercial farms and unlike the other local municipalities there is no tribal authority land. The main town is the commercial centre which is Dundee, it has most diversified economy, commercial cattle farming and dairy production and is the centre of the Battlefields tourist region.

❖ **Nquthu LM -**

This municipality is typically rural and largely under tribal authority where the population is largely previously disadvantaged and relatively dispersed and where services are scarce and often at rudimentary levels. The main town is Nquthu and subsistence agriculture is the main activity in the area.

❖ **Msinga LM -**

Owing to its rugged terrain Msinga's population is relatively dispersed and where services exist they are concentrated along road infrastructure and water sources such as the Tugela River. The main towns are Pomorey and Tugela Ferry. It's a rural region with subsistence farming as the primary land use.

❖ **Umvoti LM -**

This municipality comprises of urban areas, commercial agricultural areas and tribal authority areas all of which exhibit typical characteristics associated with these settlement types. Service levels in urban areas are high except for informal areas, in commercial agricultural areas they are relatively high as farmers provide their own services and in tribal authority areas they are low to moderate. The main town is the commercial centre Greytown.

1.3 EMF Objectives

In order to address the triggers for sustainable development in the UDM and the priority environmental opportunities and constraints, the specific objectives of the EMF will include the following:



1. To facilitate decision-making to ensure sustainable management of natural resources;
2. To provide strategic guidance on environmental, economic and social issues in the District;
3. To identify environmentally sensitive areas;
4. To identify the environmental and development opportunities and constraints;
5. To assess the economic and environmental potential of the area;
6. To provide a decision support system in respect of environmental issues and priorities in the EMF area;
7. To formulate a strategy that will incorporate issues such as land use, planning and sensitive environmental resources; and
8. To include existing policies as frameworks for establishing values, guidelines and standards for future developments.

In its formal context, the EMF that is adopted by the Minister or MEC will be taken into consideration when reviewing applications for environmental authorisation in or affecting the areas to which the EMF applies.

1.4 EMF Development Principles

In accordance with DEA (2010), the following principles have been applied in the development of the UDM EMF:

- ❖ The EMF is customised to the context of uMzinyathi;
- ❖ The EMF is undertaken with reference to environmental goals and priorities;
- ❖ The EMF strives to encourage sustainable development;
- ❖ The scope of the EMF is comprehensive enough to provide assistance to all levels and types of environmental and planning decision-making in UDM;
- ❖ The EMF places specific focus on the issues and information that matter in decision-making in UDM;
- ❖ Bio-physical, social, economic, and other aspects that are relevant in the District are reflected in the EMF;
- ❖ The EMF aims to be clear and easy to understand;
- ❖ The process of developing the EMF included an appropriate level of public participation;
- ❖ The process of developing the UDM EMF was conducted impartially; and
- ❖ The EMF takes into consideration the legal and policy requirements as well as guidelines that are applicable to uMzinyathi.

1.5 EMF Development Approach

The EMF development approach is consistent with the requirements stipulated in the following primary legislation that governs the process:

- ❖ The National Environmental Management Act (Act 107 of 1998) (NEMA), in particular Sections 2, 23 and 24; and
- ❖ The EMF Regulations (GN No. R. 547 of 18 June 2010), which make provision for the development, content and adoption of EMFs as a proactive environmental management decision support tool.

In addition, the UDM EMF will also conform to the Guideline on Environmental Management Frameworks in terms of the EMF Regulations of 2010, Integrated Environmental Management Guideline Series 6 (DEA, 2010).

An overview of the methodology to develop the EMF is broadly presented in **Figure 6**.

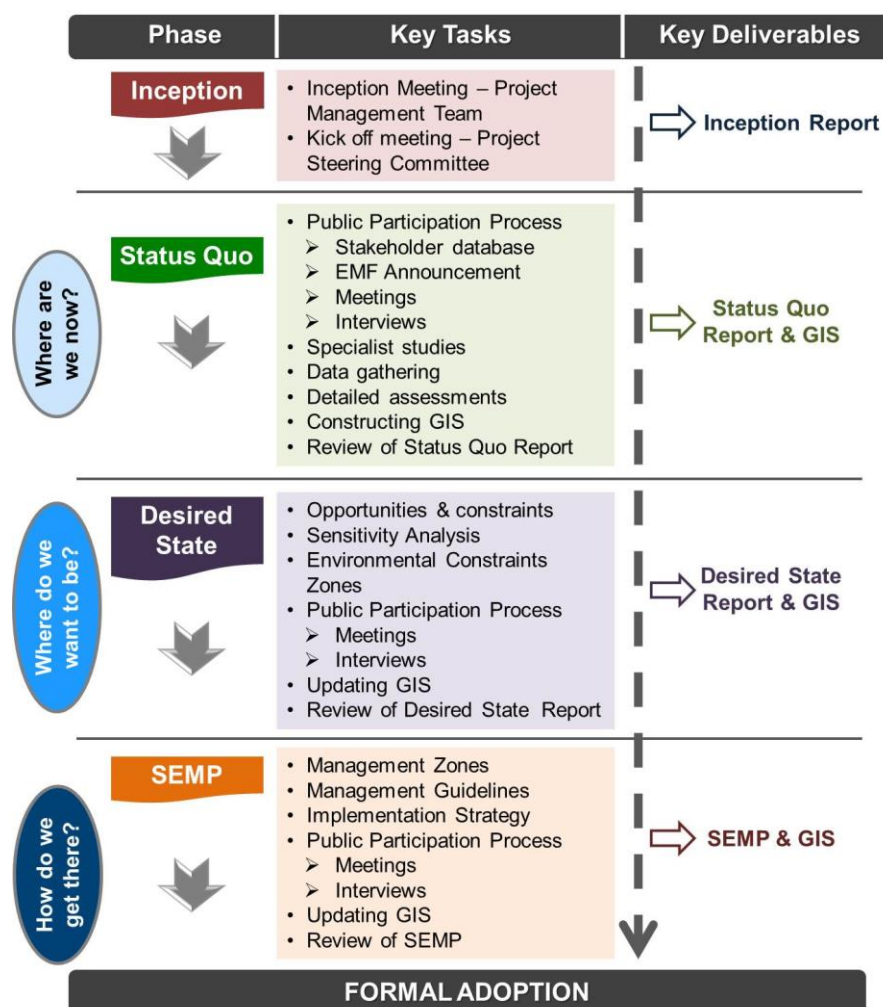


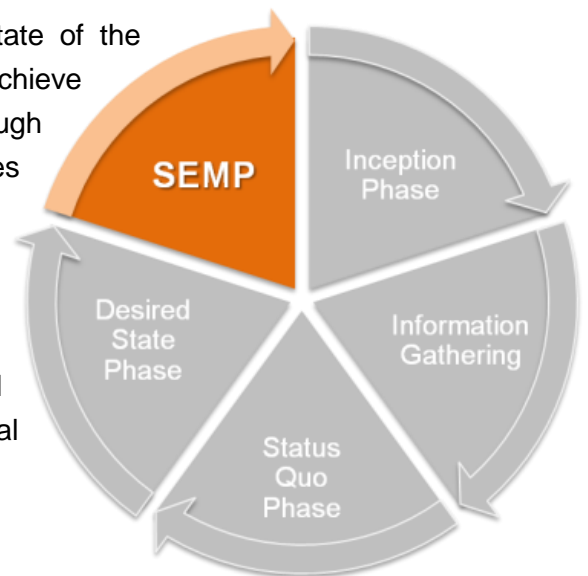
Figure 6: Broad overview of EMF Development Process

1.6 Culmination of the EMF Development Process

The SEMP bridges the divide between the current state of the environment in UDM and the desired state. It aims to achieve this by managing the sustainable utilisation of land through Management Guidelines and by controlling the activities that may impact on environmental attributes in specific geographical areas.

The Desired State phase of the EMF (refer to UDM EMF Volume 2: Desired State Report) was concluded with the delineation of the following Environmental Management Zones (EMZs):

- ❖ **Formally Protected Areas;**
- ❖ **Terrestrial Biodiversity;**
- ❖ **Aquatic Biodiversity;**
- ❖ **Agriculture;**
- ❖ **Heritage;** and
- ❖ **Urban Areas.**

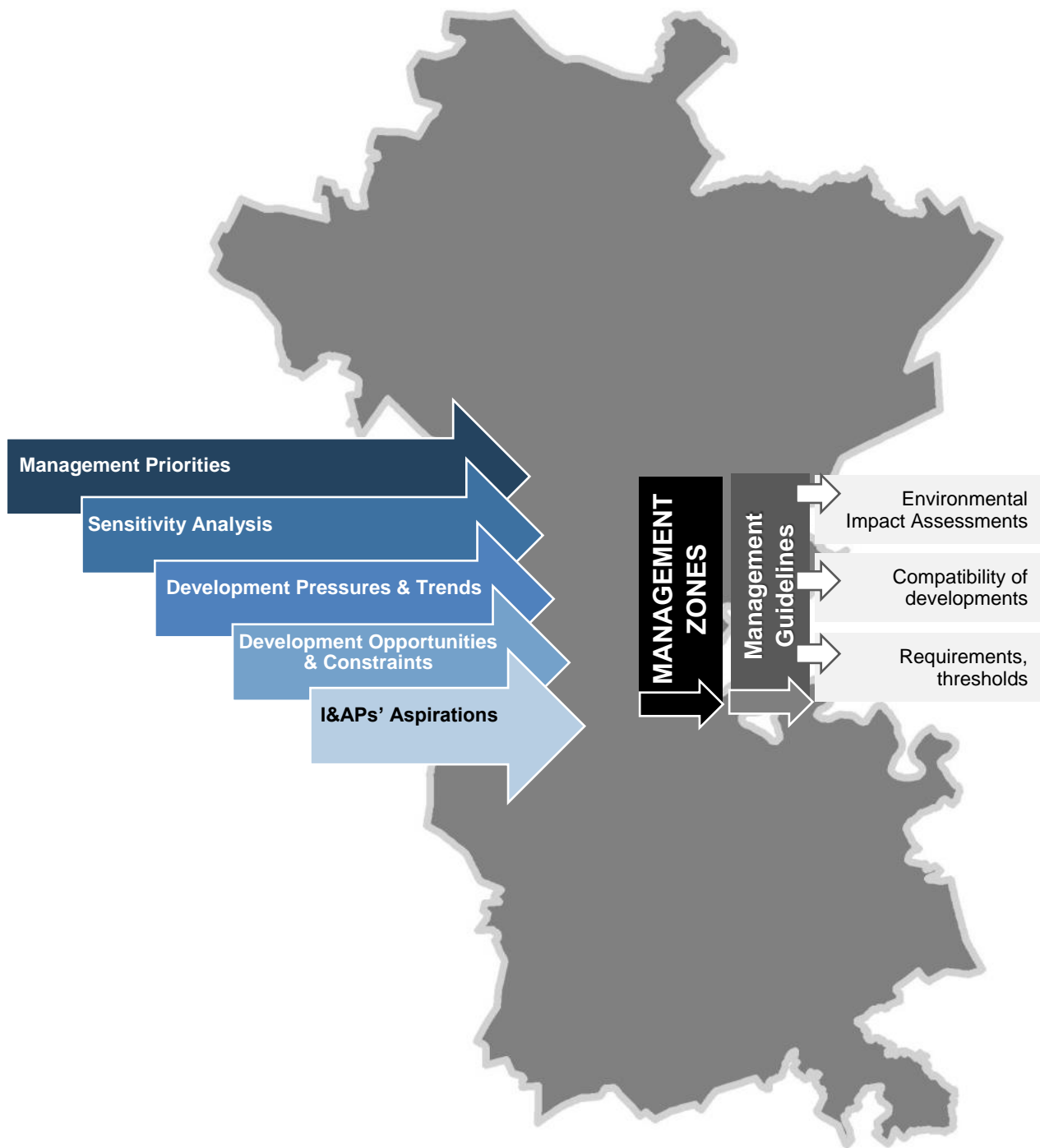


Each of the EMZs represents a specific demarcated area that requires active control to ensure that its potential is realised. The EMZs depict the assimilated sensitivity maps that were integrated with the development pressures and trends, opportunities, constraints and public aspirations.

To facilitate the attainment of the desired state for the Management Zones, guidelines are required that stipulate compatible activities that support the vision for these zones and specific management requirements and objectives that need to be adhered to when development is proposed in a zone. These Management Guidelines are contained in **Section 2**.

The SEMP also attempts to manage activities in the EMZs linked to the listing notices (GN No. R983, R984 and R985 of 4 December 2014) of the Environmental Impact Assessment (EIA) Regulations of 2014, in accordance with Section 24 of NEMA.

MANAGEMENT GUIDELINES





2 MANAGEMENT GUIDELINES

2.1 Introduction

Management Guidelines include statutory provisions as well as objectives, measures and best practices that need to be taken into consideration when contemplating development within the UDM's EMZs, in order to facilitate the realisation of the desired state. The Management Guidelines are primarily based on the following:

- ❖ Environmental management priorities in the District;
- ❖ Existing statutory and regulatory provisions;
- ❖ Existing policies, strategies, plans and programmes of various government departments;
- ❖ Outcomes of Status Quo phase, including findings of specialist studies and outcomes of public participation;
- ❖ Outcomes of Desired State phase, including Sensitivity Analysis and outcomes of public participation; and
- ❖ Best practices.

As stated in the EMF Guidelines (DEA, 2010), the Management Guidelines are not prescriptive regarding land use and do not indicate which land uses must occur in which areas. Rather, the guidelines indicate specific minimum environmental requirements and performance criteria, which need to be abided by and satisfied before approval of a development application should be considered. The Management Guidelines for each EMZ are displayed in the sub-sections to follow according to the format displayed in **Table 1**.

Table 1: Management Guidelines Outline

MANAGEMENT ZONE: _____					
Environmental Features	<i>Environmental features and attributes included and considered in the delineation of the specific Management Zone.</i>				
Governance Framework	<i>Relevant statutory framework pertaining to environmental features, as well as the types of activities and development commonly associated with the Management Zone in question. List of statutes may not be exhaustive.</i>				
Authorities	<i>Authorities with jurisdiction over environmental features and attributes in zone.</i>				
Implementation Mechanisms	<i>Protocols, procedures and other means of ensuring compliance with governance framework</i>				
Management Priorities	<i>Based on the environmental status, issues, constraints and opportunities. Linked to desirable state of the particular Management Zone.</i>				
Management Guidelines	<i>Specific management measures, objectives and requirements related to environmental attributes and the overall Management Zone.</i>				
	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; text-align: center;">Compatible Activities</td> <td style="width: 50%; text-align: center;">Incompatible Activities</td> </tr> <tr> <td style="text-align: center;"><i>Activities that promote and are supportive of the desired state and management objectives, and that need to be encouraged.</i></td> <td style="text-align: center;"><i>Activities that are in conflict with the desired state and management objectives of the management zone, that need to be discouraged.</i></td> </tr> </table>	Compatible Activities	Incompatible Activities	<i>Activities that promote and are supportive of the desired state and management objectives, and that need to be encouraged.</i>	<i>Activities that are in conflict with the desired state and management objectives of the management zone, that need to be discouraged.</i>
Compatible Activities	Incompatible Activities				
<i>Activities that promote and are supportive of the desired state and management objectives, and that need to be encouraged.</i>	<i>Activities that are in conflict with the desired state and management objectives of the management zone, that need to be discouraged.</i>				
Performance Management	<i>Measures indicating progress towards desired state. Means of measuring / checking achievement of targets (where relevant).</i>				

2.2 Formally Protected Areas EMZ

2.2.1 Mapped EMZ

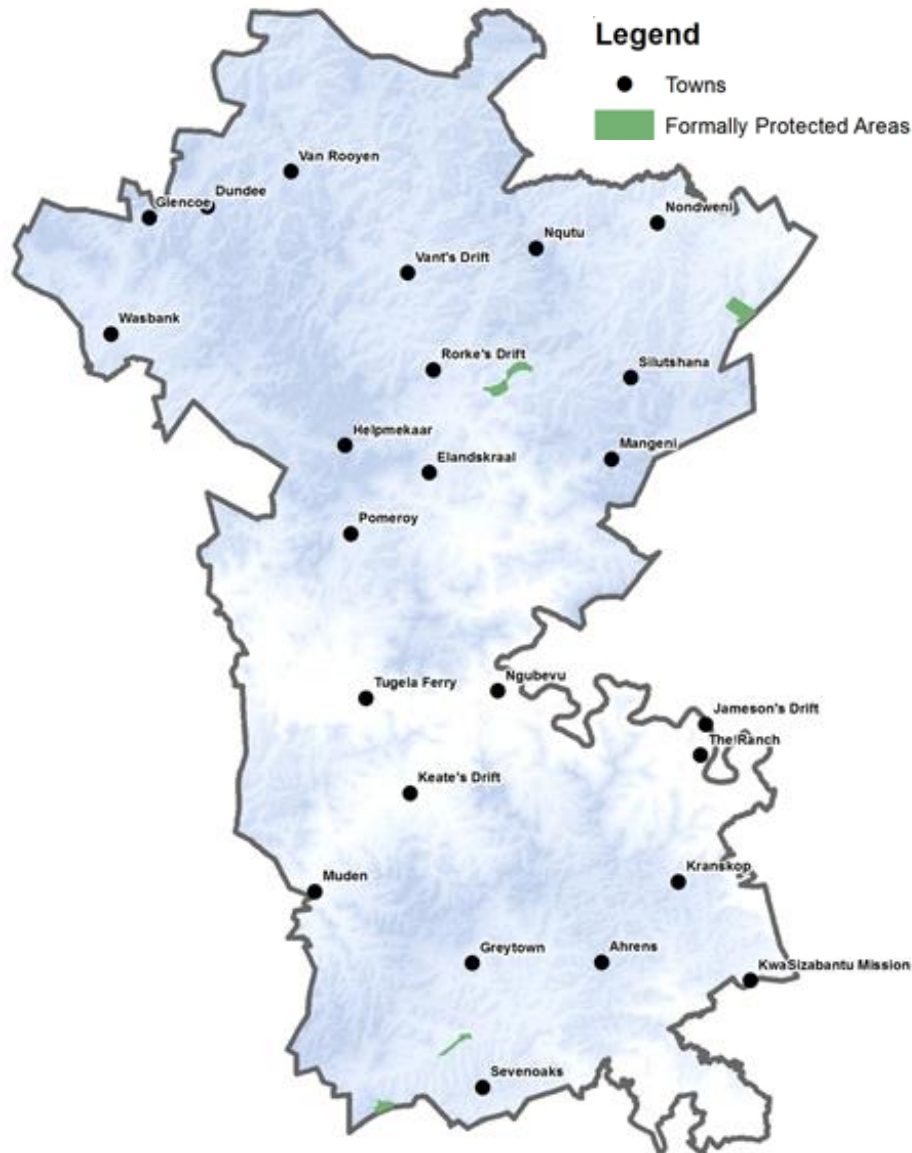


Figure 7: Formally Protected Areas EMZ

2.2.2 Environmental Features considered

- This zones includes all areas declared or formally proclaimed as protected in terms of governing legislation, including the KwaZulu-Natal Nature Conservation Management Act (No.9 of 1997) or the National Environmental Management: Protected Areas Act (Act No. 57 of 2003).
- Terrestrial areas that are formally protected by law and managed for the purpose of biodiversity conservation.
- Provincial Nature Reserves - Blinkwater Nature Reserve, Isandlwana, Ntinini Training Centre and Umvoti Vlei Nature Reserve.



2.2.3 Governance Framework

Laws & Policies	Plans & Programmes	Authorities
<ul style="list-style-type: none"> ▪ National Environmental Management Protected Areas Act (Act 57 of 2003) (NEM:PAA) ▪ NEM:PA: Norms and standards for the management of protected areas in South Africa (GN No. 528, 7 July 2014) ▪ KZN Nature Conservation Management Act (Act No. 09 of 1997) ▪ Natal Nature Conservation Ordinance (15 of 1974) 	<ul style="list-style-type: none"> ▪ Integrated Management Plans (IMPs) of Protected Areas (where relevant) 	<ul style="list-style-type: none"> ▪ Ezemvelo KZN Wildlife (EKZNW)
<ul style="list-style-type: none"> ▪ <i>Refer to the Governance Framework associated with Terrestrial and Aquatic Biodiversity EMZs (where relevant to statutory Protected Areas).</i> 		

Implementation Mechanisms	<ul style="list-style-type: none"> ▪ Refer to the Implementation Mechanisms associated with Terrestrial and Aquatic Biodiversity EMZs (where relevant to statutory Protected Areas). ▪ IMP programmes (where relevant). ▪ Environmental Management System for Protected Areas (where relevant). ▪ Development permits issued in terms of NEM:PAA. ▪ EKZNW may impose conditions in addition to (but consistent with) conditions set by other authorities and legislation. ▪ Rules for Protected Areas.
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2.2.4 Management Priorities

- Refer to the Management Priorities associated with Terrestrial and Aquatic Biodiversity (where relevant to statutory Protected Areas).
- Implement development in line with the IMPs of the Protected Areas (where relevant).
- Establish and protect buffer zones for Protected Areas in terms of the norms and standards for the management of protected areas in South Africa (GN No. 528, 7 July 2014).
- Advocate community conservation ventures and commensurate activities in buffer zones of Protected Areas.
- Maintain working relationships between the various spheres of government to ensure a collaborative effort to conserve UDM's Protected Areas and their adjoining buffer zones.
- Dedicated catchment management for watercourses that feed into the Protected Areas.

2.2.5 Management Guidelines

- IMPs of Protected Areas need to be adhered to.
- Strategic planning processes to be informed by EKZNW's Critical Biodiversity Areas (CBAs) and Biodiversity Sector Plan, including compliance with Land Use Management Objectives for the Terrestrial and Aquatic Conservation Categories, as well as Land Use Management Practices, Controls and Guidelines.
- Apart from the regulatory authority and other commentary authorities, specific requirements of EKZNW to be met when conducting EIAs within buffer zones of protected area. Buffer zones to be regarded as 5 km from the proclaimed boundary of a reserve (as per GN No. R. 985 of 4 December 2014), or unless a specific buffer has been identified.
- Ensure that edge effects of proposed activities do not compromise the integrity of the Protected Area or adversely impact on its ability to maintain a functioning system.
- Game farming within the carrying capacity of existing veld resources.



- Specialist disciplines required (where relevant) – Terrestrial Ecology (and associated sub-disciplines), Aquatic Ecology, Visual, Socio-economic, Social, Heritage, Geotechnical etc.

2.2.6 *Compatible & Incompatible Activities*

Compatible Activities	Incompatible Activities
<ul style="list-style-type: none">▪ Adhere to Zoning Plan of IMPs (where relevant).▪ Comply with EKZNW's Biodiversity Sector Plan.	<ul style="list-style-type: none">▪ Activities that compromise the integrity of the Protected Area.▪ No un-authorised development in Protected Areas..

2.2.7 *Performance Management*

- To be aligned with target and indicators in respective IMP's for Protected Areas (where relevant).
- Percentage of Biodiversity network under formal conservation.
- Occurrence of invasive alien animal populations.
- Loss of protected species.
- Measurable edge effects from developments in the buffer zones.

2.3 Terrestrial Biodiversity EMZ

2.3.1 Mapped EMZ

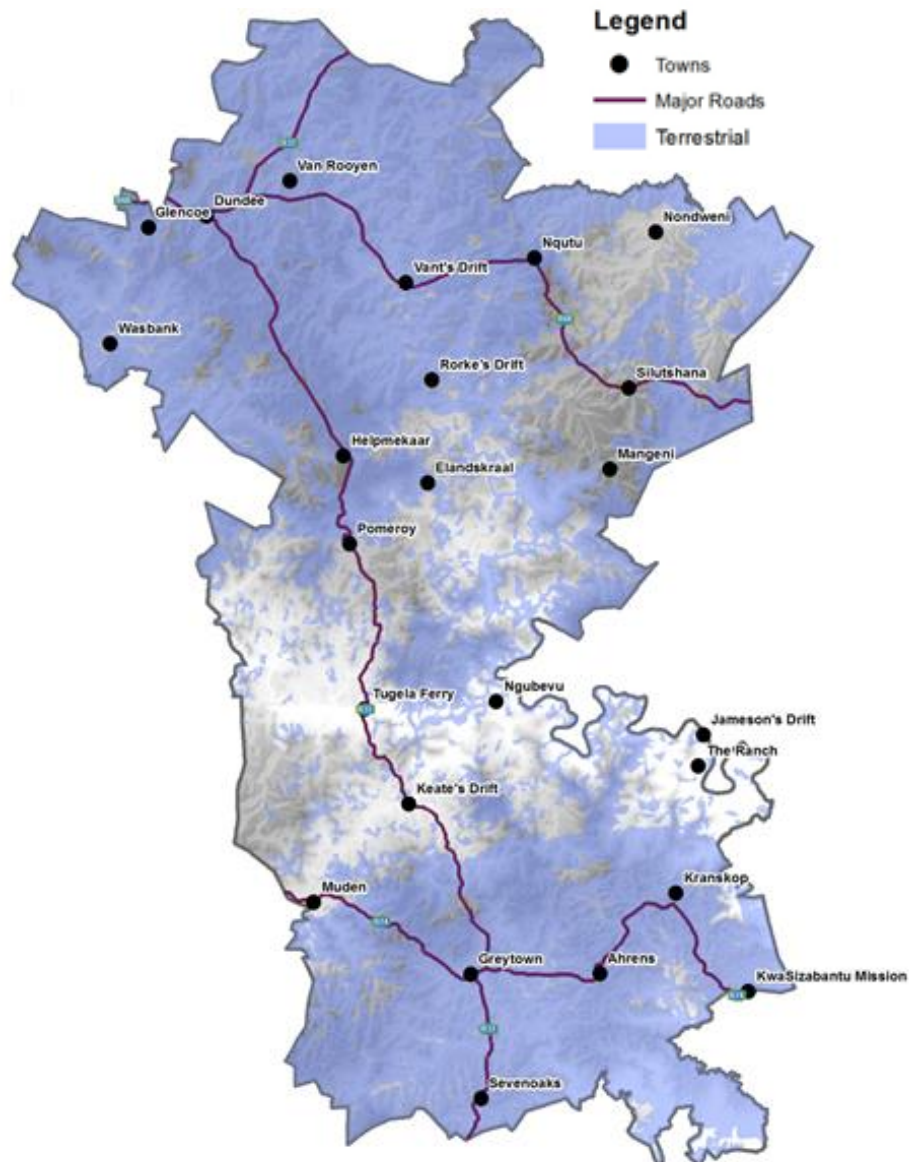


Figure 8: Terrestrial Biodiversity EMZ

2.3.2 Environmental Features considered

- The areas that fall under this zone are located outside of formally protected areas and exhibit high biodiversity or supportive functions, except for the landscape corridors that extend into formally protected area.
- Specific features include:
 - Community Conservation Areas;
 - Important Bird & Biodiversity Areas;
 - CBA Irreplaceable;
 - CBA Optimal;
 - Terrestrial Ecological Support Areas (ESAs);
 - Vegetation - Critically Endangered & Endangered;
 - Ridges with slopes > 5°.



2.3.3 Governance Framework

Laws & Policies	Strategies	Plans & Programmes	Authorities
<ul style="list-style-type: none"> ▪ International Conventions ▪ NEMA ▪ NEM:PAA ▪ National Environmental Management Biodiversity Act (Act 10 of 2004) ▪ National Water Act (Act 36 of 1998) (NWA) ▪ National Environmental Management: Air Quality Act (Act 39 of 2004) (NEM:AQA) ▪ National Environmental Management: Waste Act (Act 59 of 2008) (NEM:WA) ▪ Mineral and Petroleum Resource Development Act (Act 28 of 2002) (MPRDA) ▪ Conservation of Agricultural Resources Act (Act 43 of 1983) (CARA) and lists of declared alien invasive plants and weeds to be eradicated or controlled ▪ White Paper on Conservation and Sustainable Use of South Africa's Biological Diversity (July 1997) ▪ NEM:PA: Norms and standards for the management of protected areas in South Africa (GN No. 528, 7 July 2014) ▪ NEM:BA Alien and Invasive Species Regulations (GN No. 598, 1 August 2014) ▪ KZN Nature Conservation Management Act (Act No. 09 of 1997) ▪ Natal Nature Conservation Ordinance (15 of 1974) ▪ Climate Change Policy 	<ul style="list-style-type: none"> ▪ National Protected Area Expansion Strategy 2008 ▪ South Africa's National Biodiversity Framework (NBF) ▪ South Africa's National Biodiversity Strategy and Action Plan (NBSAP) 2005 ▪ National Biodiversity Assessment 2004 (updated 2011) ▪ National Grassland Biodiversity Programme 2011 ▪ National Strategy for Sustainable Development and Action Plan ▪ National Biodiversity Framework ▪ Mining and Biodiversity Guidelines. Mainstreaming biodiversity into the mining sector 2013 	<ul style="list-style-type: none"> ▪ EKZNW Systematic Terrestrial Conservation Plan ▪ UDM Biodiversity Sector Plan 2014 ▪ Stewardship programmes 	<ul style="list-style-type: none"> ▪ DEA ▪ EDTEA ▪ Department of Water and Sanitation (DWS) ▪ Department of Mineral Resources (DMR) ▪ Department of Agriculture, Forestry and Fisheries (DAFF) ▪ South African National Biodiversity Institute (SANBI) ▪ EKZNW ▪ District and Local Municipalities

<p>Implementation Mechanisms</p>	<ul style="list-style-type: none"> ▪ Species-based conservation (listed species). ▪ Area-based conservation (protected areas, protected eco-systems). ▪ Purpose-based conservation. ▪ State of Environment Reporting. ▪ Permitting of activities (threatened species, alien species and listed invasive species). ▪ Terrestrial protected areas. ▪ Control measures for alien and invasive plant species. ▪ Authorisations in terms of prevailing legal framework.
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2.3.4 Management Priorities

- Support and facilitate land planning and practices that safeguard and enhance the following:
 - Overall biodiversity values in the District;
 - Ecological corridors;
 - CBAs; and
 - Economic objectives based on wildlife industries that are compatible with the regions overall biodiversity values including ecotourism developments, stewardship programmes, Community Conservation Areas (CCAs) and Protected Area Expansion Strategy (NPAES).
- Conserve long-term viable and representatives of habitats of Critically Endangered species or any species of conservation importance (red data, specially protected species).
- Conserve long-term viable and representatives of sensitive habitats which afford threatened / Endangered species protection as well as controlling development pressure in these key sensitive areas.
- Support and facilitate land planning and practices that enhance the economic objectives based on wildlife industries that are compatible with the regions overall biodiversity values including ecotourism developments.
- Ecological linkages identified on the interface between the District and the bordering municipalities must be taken into account in conservation planning.
- Restore and conserve biodiversity and ecosystem patterns and processes.
- Any irreconcilable activities in close proximity to ecologically sensitive species' habitats or initiatives / wildlife industries compatible with regions overall biodiversity objectives (e.g. conservation areas) should be discouraged or strictly controlled.
- Prevent the illegal removal of protected terrestrial faunal and floral species.
- Remove and control terrestrial alien and invasive species.
- The use of residual biocides and insecticides to control nuisance animals must be reduced through education and extension.
- Implement effective veld fire management strategies.
- Advocate community conservation ventures and commensurate activities in buffers of formally protected areas.
- Annual monitoring of fixed points as well as spot checks in the broader area. Mark all occurrences of rare and endangered species (GPS) (especially vegetation) and follow up its existence in following years
- A programme to cultivate rare and endangered vegetation species should be initiated and the community should be included. Make use of indigenous knowledge
- An inventory of popular medicinal plants must be drawn up and efforts to commercially produce these species must be encouraged.
- Training and education on the implication of overexploitation of medicinal plants must be conducted with the local communities.
- Prepare and implement an Invasive Species Monitoring, Control and Eradication Plan.
- Include the local community in eradication programmes as an economic empowerment project.
- A greening programme in urban and rural areas to provide shade, erosion protection, and beautification.
- Identify and map Ecological Infrastructure in UDM. Investment in Ecological Infrastructure. See *interventions under Aquatic Biodiversity EMZ*.
- Undertake projects and programmes in a collaborative manner, to optimise the balance between conservation and development.



2.3.5 Management Guidelines

- Strategic planning processes to be informed by EKZNW’s CBAs and Biodiversity Sector Plan, including compliance with Land Use Management Objectives for the Terrestrial and Aquatic Conservation Categories, as well as Land Use Management Practices, Controls and Guidelines.
- Where land use conflict with areas earmarked for development, ensure adequate Ecological Assessments as well as overall feasibility assessments are done and identify appropriate feasibilities and /or mitigation measures, before any activities are approved or supported.
- Any irreconcilable activities in close proximity to ecologically sensitive species’ habitats or initiatives / wildlife industries compatible with regions overall biodiversity objectives should be discouraged or strictly controlled.
- Manage collision of birds with overhead power lines.
- Ensure that edge effects of proposed activities do not compromise the integrity of sensitive ecosystems.
- Establish and maintain functional ecological corridors.
- Safeguarding of protected fauna and flora species.
- Protection of threatened ecosystems.
- Manage alien invasive species (terrestrial and aquatic).
- Maintenance of open space systems in settlements.
- Linear-type development (e.g. pipelines, transmission lines) should be aligned along existing and proposed transport corridors rather than along point to point cross-country routes.
- Discourage any development activities on ridges with a slope of 5° or more.
- Grazing areas within agricultural areas to be maintained at or below grazing capacity.
- Rehabilitation plans to be developed for natural areas, where disturbance occurs outside development footprint.
- Development footprint should be restricted to already disturbed areas, as far as possible.
- Game farming to remain within the carrying capacity of existing veld resources.
- Specialist disciplines required (where relevant) – Ecological Assessments and associated sub-disciplines.

2.3.6 Compatible & Incompatible Activities

Compatible Activities	Incompatible Activities
<i>Comply with EKZNW’s CBAs and Biodiversity Sector Plan, including compliance with Land Use Management Objectives for the Terrestrial and Aquatic Conservation Categories, as well as Land Use Management Practices, Controls and Guidelines.</i>	

2.3.7 Performance Management

- Proportion of land invaded by invasive alien plants.
- Occurrence of invasive alien animal populations.
- Percentage of natural vegetation remaining, by type.
- Conservation status of natural vegetation, by type.
- Percentage of Biodiversity network under formal conservation.
- Threatened and extinct species.

2.4 Aquatic Biodiversity EMZ

2.4.1 Mapped EMZ

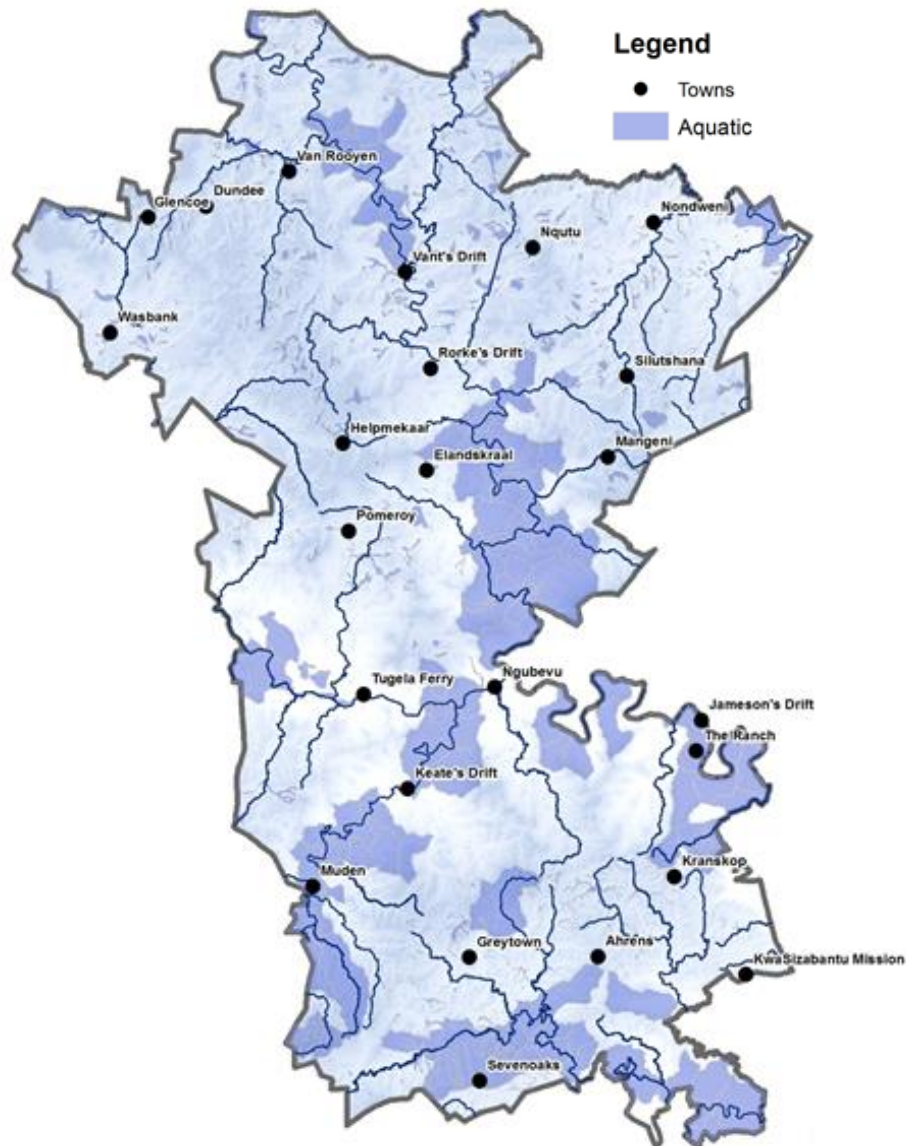


Figure 9: Aquatic Biodiversity EMZ

2.4.2 Environmental Features considered

- This zone includes surface freshwater resources that are significant in terms of aquatic biodiversity or from a water yield perspective.
- Specific features include:
 - Perennial & non-perennial rivers;
 - Freshwater Systematic Conservation Assessment (FSCA) (Optimal Biodiversity Areas);
 - Freshwater Ecosystem Priority Areas (FEPA) - Wetlands & Wetland Clusters;
 - FEPA - Flagship Rivers & Priority Rivers;
 - FEPA - Phase 2 Rivers;



- FEPA - Water Yield Areas;
- Perennial Rivers - 30m buffer zones;
- Perennial Rivers - 100m buffer zones;
- Non-perennial Rivers - 20m buffer zones.

2.4.3 Governance Framework

Legislation & Policies	Strategies	Plans & Programmes	Authorities
<ul style="list-style-type: none"> ▪ Water Services Act (Act 108 of 1997) ▪ Same as for Terrestrial Biodiversity EMZ 	<ul style="list-style-type: none"> ▪ National Water Resource Strategy 2013 ▪ Internal Strategic Perspective ▪ Catchment Management Strategy ▪ Water for Growth and Development Strategy (where relevant) ▪ Groundwater Strategy (where relevant) ▪ Same as for Terrestrial Biodiversity EMZ 	<ul style="list-style-type: none"> ▪ Catchment Management Plan ▪ National Aquatic Ecosystem Health Monitoring Programme ▪ National Freshwater Ecosystems Priority Atlas 2011 ▪ Waste Discharge Charge System ▪ Working for Water and Wetlands Programmes ▪ Blue and Green Drop Classification ▪ South African Water Quality Guidelines ▪ Same as for Terrestrial Biodiversity EMZ 	<p>Same as for Terrestrial Biodiversity EMZ</p>

Implementation Mechanisms	<ul style="list-style-type: none"> ▪ Resource Directed Measures - clear objectives for the desired level of protection of the resource – Reserve, Classification System, and Resource Quality Objectives. ▪ Source Directed Controls – measures to control water use, e.g. water quality standards for waste water, waste water discharges, pollution prevention, and waste minimisation technologies. ▪ National monitoring and information systems – address the monitoring, recording, assessing and dissemination of information on water resources. ▪ Catchment Management Forum. ▪ Authorisations in terms of prevailing legal framework.
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2.4.4 Management Priorities

- Refer to Management Priorities for Terrestrial Biodiversity EMZ (where relevant).
- Promote the restoration of the National Freshwater Ecosystem Priority Areas (NFEPAs) to deliver basic ecosystem functions to surrounding environments.
- Prevent the illegal removal of protected aquatic species.
- Remove and control aquatic alien and invasive species.
- Compile an inventory and guidelines for the protection of all wetland areas in the District.
- Encourage UDM's participation in relevant water use fora.
- Wetland areas, streams and rivers to be protected, rehabilitated and managed to maintain ecological functioning.
- Transboundary management of water resources (e.g. upstream impacts, institutional relationships).
- Catchment and river management policies and guidelines to be integrated into land use and development planning.
- Rehabilitation of old mining areas.
- National Aquatic Ecosystem Health Monitoring Programme to be extended to cover all major rivers in District. Database to be developed of chemical, physical and bacteriological water quality data for DWS



monitoring points in the municipality.

- UDM to ensure that provision is made in the LUMS to enforce the identification, establishment of required set-backs, protection and maintenance of wetlands and riparian zones.
- Provision of adequate sanitation and waste management services.
- Provision of basic services to informal settlements.
- Promote water conservation and demand management through regulation where appropriate. Rainwater harvesting, grey water recycling, re-use of treated effluent from wastewater treatment works (WWTW) and similar technical enhancements should be encouraged.
- Flood prone areas to be managed to minimise flood risks and impacts.
- People removed from flood risk areas (especially Msinga).
- Develop drought management plan.
- Critical wetlands need to be delineated according to DWS guidelines.
- Consider the potential impacts of Climate Change on long term spatial structure.
- Identify and map areas of Ecological Infrastructure associated with aquatic ecosystems. Identify areas for interventions such as:
 - Clear invasive alien plants, especially in mountain catchments and riparian areas;
 - Rehabilitate wetlands;
 - Rehabilitate eroded areas and reinstate suitable ground cover;
 - Maintain buffers of natural vegetation along streams and rivers;
 - Reinstall buffers of natural vegetation between agricultural crops and rivers or wetlands;
 - Improve rangeland management practices (e.g. grazing regime, fire management); and
 - Monitor compliance with effluent standards for agriculture and industry.

2.4.5 Management Guidelines

- Refer to Management Guidelines for Terrestrial Biodiversity EMZ (where relevant).
- Water abstraction rights need to be formalised in order to quantify the demand and to ensure that the overall Ecological Reserve can be maintained within the system.
- Maintaining the Ecological Reserve (Ecological Water Requirements) and watercourse classification.
- To ensure that water is fit for use as imposed by the water quality standards.
- Dedicated catchment management for important water yield areas (notably the NFEPA and priority sub-catchments).
- Provision of adequate sanitation and waste management services.
- Rehabilitation of riparian areas affected by anthropogenic activities.
- Comply with NFEPA Management Guidelines.
- For any proposed water use or development in proximity to a watercourse, a delineation of the wetland / riparian habitat needs to be undertaken in accordance with the prevailing DWS Guidelines.
- Development should be located outside 1:100 year flood line and should not interfere with stormwater drainage. No urban, mining or agricultural development within regulated area of the watercourse (i.e. 1:100 year floodline or delineated riparian / wetland habitat, whichever is greatest).
- Comply with the UDM Biodiversity Sector Plan's land-use planning and decision-making guidelines for Aquatic CBAs.
- Adopt a 30 metres buffer area from the boundary of the regulated areas of watercourses. Strict regulation of encroachment and incompatible activities.
- Adopt a 500 metres buffer area from the edge of wetlands, based on risks posed to the wetland by the development (refer to Risk-Based Water Use Authorisation Guidelines for Section 21(C) and (I) Water Uses, DWA 2009). Strict regulation of encroachment and incompatible activities.
- Regulated areas and buffer zones for watercourses (based on DWS requirements) should be determined on a strategic priority basis as and when pressure for industry, mining, intensive agriculture



or rural development occurs.

- All watercourses (including delineated boundary and additional 30m buffer zone) should be regarded as sensitive until proven otherwise by a suitably qualified specialist.
- Promote water conservation and demand management through regulation, where appropriate.
- Source directed controls (including compliance with licence conditions) for WWTW, mining, landfills and other sources of impacts to resource quality (i.e. flow, water quality, habitat and aquatic biota).
- Mining and prospecting within the alluvial flood plains (outside of the regulated area) should not be permitted without relevant approvals and detailed after-use and rehabilitation plans.
- Develop invasive species control plan in accordance with the NEM:BA Alien and Invasive Species Regulations (GN No. R. 598, 1 August 2014), with particular focus on stressed catchments.
- Dedicated catchment management for watercourses that feed into Protected Areas.
- Implement a water quality monitoring programme and consider relevant water quality variables that pose a threat to the functionality of wetlands.
- Strict regulation of development with structural elements.
- Strict protection of sensitive alluvial vegetation with significant ecosystem status.
- Stormwater management plans to accompany large developments, where onsite attenuation should be promoted.
- Watercourse crossings need to undergo an authorisation process and need to adopt best practices (e.g. perpendicular crossings, avoid sensitive habitat, accommodate floods).
- Comply with the Resource Management Plans of the dams in the district (where relevant).
- Specialist fields required (where relevant) – Aquatic Ecological Assessments (and associated sub-disciplines), Hydrology, Geomorphology.

2.4.6 Compatible & Incompatible Activities

Compatible Activities	Incompatible Activities
<i>Comply with EKZNW's CBAs and Biodiversity Sector Plan, including compliance with Land Use Management Objectives for the Terrestrial and Aquatic Conservation Categories, as well as Land Use Management Practices, Controls and Guidelines.</i>	

2.4.7 Performance Management

- Zero loss of wetlands.
- No encroachment into regulated area of a watercourse.
- Percentage compliance with DWS Public Health Guidelines.
- Health of rivers as determined by the National Aquatic Ecosystem Health Monitoring Programme.
- Mean annual precipitation and evaporation.
- Improvement in the Blue and Green Drop Status of all municipalities within the District.
- Creation of awareness in terms of the water shortage predictions for the district.
- Reducing the total water loss occurring in the District to less than 10%.

2.5 Agriculture EMZ

2.5.1 Mapped EMZ

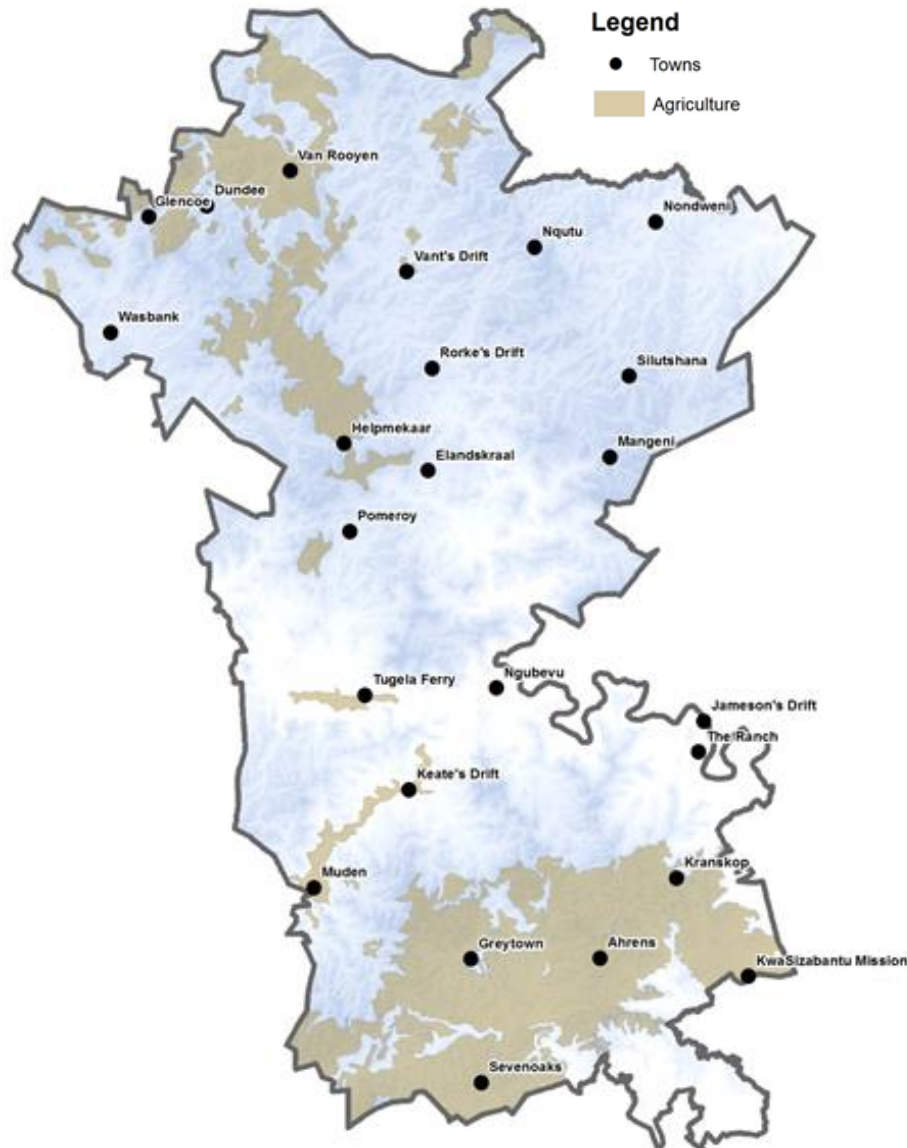


Figure 10: Agriculture EMZ

2.5.2 Environmental Features considered

- The zone includes areas that are associated with high agricultural potential as well as those land parcels where Primary Agricultural Land Use is encountered.
- Specific features include:
 - KZN Agricultural Land Categories –
 - Category A: Irreplaceable;
 - Category B: Threatened.



2.5.3 Governance Framework

Laws & Policies	Strategies	Plans & Programmes	Authorities
<ul style="list-style-type: none"> ▪ NEMA ▪ CARA and lists of declared alien invasive plants and weeds to be eradicated or controlled ▪ NWA ▪ Spatial Planning and Land Use Management Act (Act 16 of 2013) (SPLUMA) ▪ The Agricultural Resource Conservation Regulations (R1048 of 1948) ▪ The Subdivision of Agricultural Land Act (Act 70 of 1970) ▪ White Paper on Agriculture ▪ Land Redistribution Policy for Agricultural Development ▪ National Climate Change Response White Paper 2011 ▪ National Spatial Development Perspective (NSDP) ▪ National Strategy for Sustainable Development and Action Plan (NSSD1) 	<ul style="list-style-type: none"> ▪ Strategic Plan for South African Agriculture 2013 ▪ Comprehensive Rural Development Strategy, 2009 ▪ Integrated Food Security Strategy, 2002 ▪ KZN Strategy for Agrarian Transformation 	<ul style="list-style-type: none"> ▪ Land Care Programme 1999 ▪ Integrated and Sustainable Rural Development Programme ▪ Agricultural Policy Action Plan 2014-2019 ▪ KZN Agricultural Land Categories Spatial Decision Support Tool ▪ Working for Water 	<ul style="list-style-type: none"> ▪ KZN Department of Agriculture and Rural Development (DARD) ▪ DAFF ▪ EDTEA ▪ DWS ▪ District and Local Municipalities ▪ Department of Local Government and Human Settlements (DLGHS) ▪ Department of Rural Development and Land Reform (DRDLR)

Implementation Mechanisms	<ul style="list-style-type: none"> ▪ Soil conservation measures. ▪ Land capability and suitability assessment. ▪ Pollution prevention and remediation measures. ▪ Authorisations in terms of prevailing legal framework.
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2.5.4 Management Priorities & Guidelines

- Adhere to KZN Agricultural Land Categories Spatial Decision Support tool.
- Harness agricultural potential in the district.
- High potential, unique agricultural land and land under irrigation with approved water rights should be protected.
- Invest in agricultural education and land care programmes.
- Build capacity surrounding farming methods to local subsistence farming.
- Diversification of agricultural practices to prevent monoculture crop production and establish good farming practices.
- High potential agricultural land set aside for agricultural purposes.
- Sustainable and environmental friendly irrigation practices.
- Sustainable grazing practises.
- Conserve agricultural genetic resources.
- Responsible management of diseases and pests.
- Support small producers.
- Climate change adaptation and mitigation.
- Priority areas (e.g. regulated areas of watercourses, wetlands) affected by historical farming activities



and that are no longer under cultivation need to be rehabilitated.

- Enforcement of livestock carrying capacity.
- Providing the necessary support to emerging farmers.
- Integrated livestock and wildlife management.
- Manage impacts from polluted (e.g. saline) return flows from agricultural activities.
- Control bush encroachment.
- Eradication of alien invasive species should be controlled under the Conservation of Agricultural Resources Act (Act 48 of 1983). Involve rural and affected communities.
- Comply with legal requirements for change of land use from agriculture to any other land use.
- Manage impacts from polluted (e.g. saline) return flows from agricultural activities.
- Best practices to be employed, including contour farming, organic farming, use of fertilizer and pesticides, management of return flows, water conservation, soil preservation, stocking densities.
- Action plan required to control desertification.
- Where potential competition exists between areas of high agricultural potential and other favourable land use, the relevant specialist studies will need to be conducted to allow for informed and balanced decision-making.
- Apply water management measures in irrigation agriculture.
- The relevant specialist studies will need to be conducted to allow for informed and balanced decision-making. Specialist fields required (where relevant) – Agriculture and associated sub-disciplines.

2.5.5 Compatible & Incompatible Activities

Compatible Activities	Incompatible Activities
<ul style="list-style-type: none"> ▪ Activities that support primary agricultural production (including associated infrastructure). ▪ Agricultural supplies and services, including agri-industrial facilities. ▪ Private residential use associated with farming activities. ▪ Farm worker villages. ▪ Tourism (regulated and agriculture-focused). 	<ul style="list-style-type: none"> ▪ Any activity which poses a threat to land with high agricultural potential. ▪ Poor farming practices, especially related to water conservation, soil degradation and water pollution. ▪ Mining. ▪ Heavy industries. ▪ Dense settlements.

2.5.6 Performance Management

- Zero loss of high potential agricultural land.
- Sustainable farming units maintained.
- Historical and unused agricultural areas in environmentally sensitive areas rehabilitated.

2.6 Heritage EMZ

2.6.1 Mapped EMZ

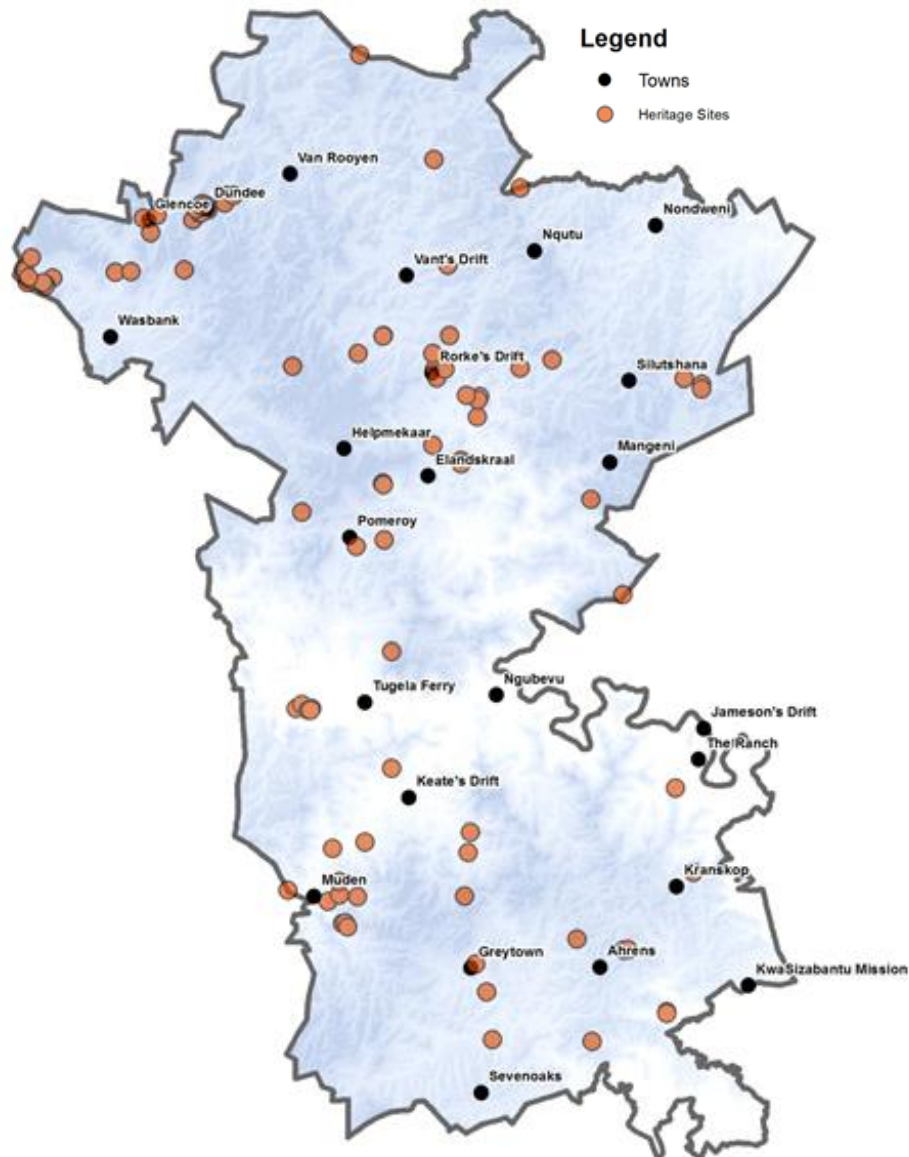


Figure 11: Heritage EMZ

2.6.2 Environmental Features considered

- All sites of significance from a heritage perspective are included in this zone. Note that no buffer area has been allocated to the heritage sites.
- Specific features include:
 - Archaeological Resources;
 - Historical Resources and Monuments;
 - Cemeteries;
 - Living Heritage Resources.



2.6.3 Governance Framework

Laws & Policies	Plans & Programmes	Authorities
<ul style="list-style-type: none"> ▪ National Heritage Resources Act (Act 25 of 1999) (NHRA) ▪ KZN Heritage Act (Act No. 04 of 2008) ▪ National Heritage Council Act (Act No. 11 of 1999) ▪ National Monuments Act (Act No. 28 of 1969) ▪ Amafa Policy Guidelines for the access of rock art 	<ul style="list-style-type: none"> ▪ Management Plans (generic and site-specific) 	<ul style="list-style-type: none"> ▪ South African Heritage Resources Agency (SAHRA) ▪ Amafa aKwaZulu-Natali ▪ Department of Arts and Culture
<p>Implementation Mechanisms</p>	<ul style="list-style-type: none"> ▪ Conservation, protection and administration of both the physical and the living or tangible heritage resources. ▪ Issuing of permits for protection of heritage resources, graves, archaeological and paleontological sites. ▪ Issuing of permits in terms of national heritage site status before any changes or development is contemplated. ▪ Conduct Heritage Impact Assessments in terms of Section 38 of the National Heritage Resources Act (Act No. 25 of 1999). 	

2.6.4 Management Priorities

- Preservation of UDM's heritage resources.
- Audit all existing facilities, in terms of status, management and potential. Detailed inventories of Heritage Resources should be compiled and mapped.
- Heritage Impact Assessments to accompany relevant developments.
- Clear institutional responsibilities at a municipal level for heritage preservation.
- Relevant officials at DM and LMs to hold regular meetings with Amafa to discuss challenges and get support in managing heritage sites.
- Development of a Heritage Management Plan for the UDM to guide and assist officials with dealing with heritage sites to ensure the protection and conservation of these sites.
- Establish a District Heritage Forum.
- Municipalities should initiate a ward based community interaction program whereby further sites of cultural and heritage importance which could be classified as category 3 heritage resource within the municipality area can be identified.
- Explore opportunities in both cultural and ecological tourism in the region.
- Optimise opportunities associated with tourism and job creation linked to the conservation of cultural and heritage resources.

2.6.5 Management Guidelines

- Execution and approval of Heritage Impact Assessments for activities listed in section 38 of the NHRA.
- Incorporate heritage considerations into development proposals.
- Sense of place to be maintained.
- Strict regulation of inappropriate development within footprint / buffer zone of National, Provincial and Local Heritage Sites. Buffer = 50 m in rural areas and 10 – 20 m in urban areas, or as established by an appropriate specialist and agreed to by Amafa aKwaZulu-Natali.
- Strict regulation of any alterations, additions or new structures that are contradictory to protected buildings or the general character of area.
- Specialist fields required (where relevant) – Heritage and associated sub-disciplines.



2.6.6 Compatible & Incompatible Activities

Compatible Activities	Incompatible Activities
<ul style="list-style-type: none">Conservation.Tourism (regulated; low impact).Ecological Corridors.Open space (regulated; low impact; excluding any permanent structures).	<ul style="list-style-type: none">Any activity that poses a threat to cultural and heritage resources.Illegal activities (i.e. not authorised).
<p>Note that certain heritage assets (e.g. graves) have a small footprint whereas other sites (e.g. battlefields) may encompass a larger area. The appropriateness of activities thus need to be established by a suitable specialist and based on the particular nature of the heritage asset in question, the risks posed by the proposed activity, and following consultation with Amafa aKwaZulu-Natali.</p>	

2.6.7 Performance Management

- No illegal changes to or loss of heritage assets.
- Inventory of heritage resource.

2.7 Urban Areas EMZ

2.7.1 Mapped EMZ

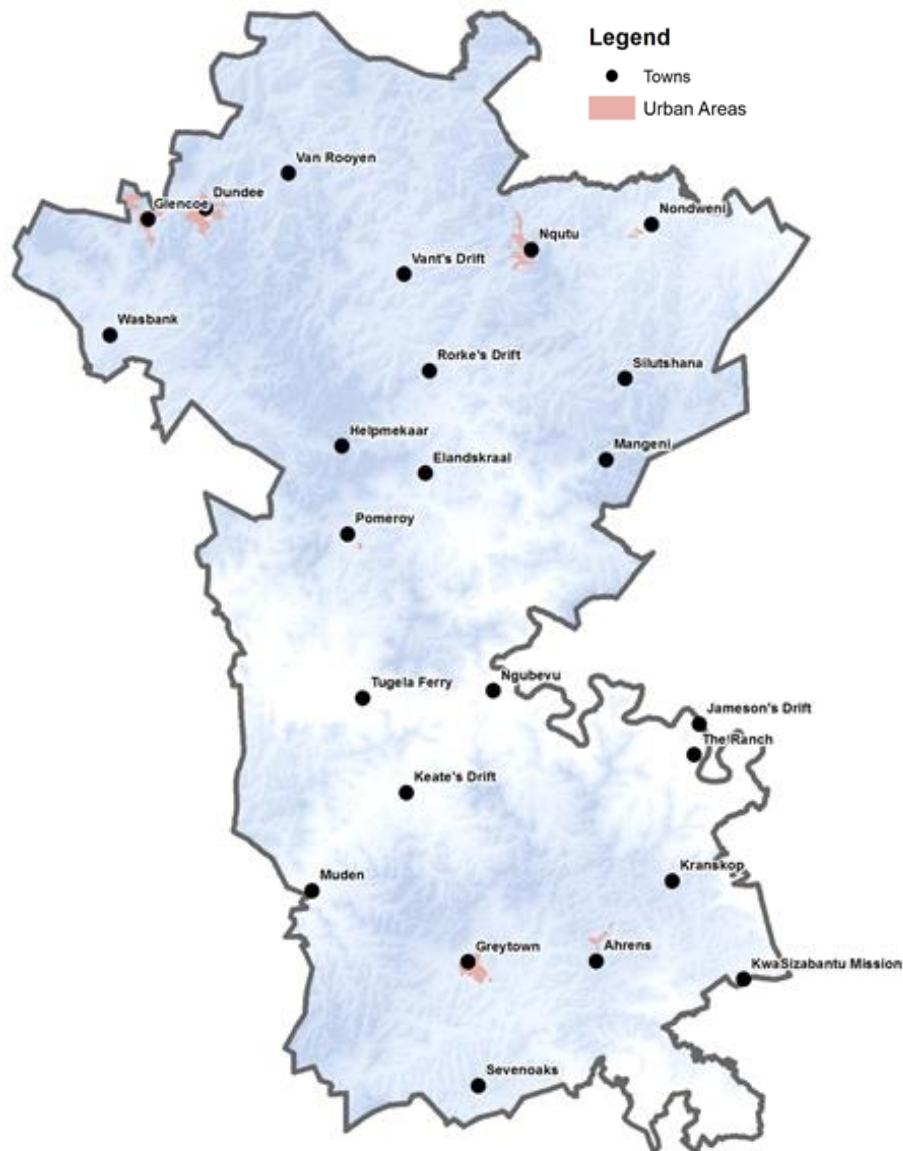


Figure 12: Urban Areas EMZ

2.7.2 Environmental Features considered

- This zone includes areas situated within the urban edge, as defined or adopted by UDM.
- The management measures to follow distinguish between Urban – General and Mining & Industry.
- Towns include:

○ Ahrens;	○ Helpmekaar;	○ Muden;	○ Pomeroy;
○ Dundee;	○ Hermansburg;	○ Nondweni;	○ Seven Oaks;
○ Glencoe;	○ Keate;	○ Nqutu;	○ Tugela Ferry;
○ Greytown;	○ Kranskop;	○ Nte Village;	○ Wasbank.



2.7.3 Governance Framework

Urban - General			
Laws & Policies	Strategies	Plans & Programmes	Authorities
<ul style="list-style-type: none"> ▪ NEMA ▪ SPLUMA ▪ Municipal Systems Act (Act 32 of 2000) ▪ NWA ▪ NEM:WA ▪ National Housing Act (Act 107 of 1997) ▪ National Waste Classification and Management Regulations 2013 ▪ National Norms and Standards for the Assessment of Waste for Landfill Disposal ▪ National Norms and Standards for Disposal of Waste to Landfill 2013 ▪ NEM:AQA ▪ National Framework for Air Quality Management 2007 ▪ National Ambient Air Quality Standards ▪ Listed Activities and Associated Minimum Emission Standards 2013 ▪ National Climate Change Response White Paper 2011 ▪ Climate Change Policy 	<ul style="list-style-type: none"> ▪ National Framework for Sustainable Development 2008 ▪ National Waste Management Strategy 2011 ▪ Air Emission Inventory for KZN ▪ Growth, Economic and Redistribution Strategy ▪ Urban and Rural Development Framework ▪ Breaking New Ground - A comprehensive plan for the development of sustainable human settlements 2005 ▪ Air Quality Framework 	<ul style="list-style-type: none"> ▪ Integrated Development Plans ▪ Spatial Development Frameworks ▪ Urban Regeneration Programmes ▪ Provincial Integrated Waste Management Plan ▪ UDM Integrated Waste Management Plan ▪ Air Quality Management Plans ▪ Housing Sector Plans ▪ Municipal by-laws 	<ul style="list-style-type: none"> ▪ UDM ▪ Local Municipalities and relevant units ▪ EDTEA ▪ DWS ▪ KZN Department of Human Settlements
Mining & Industry			
Laws & Policies	Strategies	Plans & Programmes	Authorities
<ul style="list-style-type: none"> ▪ Kyoto Protocol 2002 ▪ MPRDA ▪ <i>Same as for Urban - General</i> 	<ul style="list-style-type: none"> ▪ Mining and Biodiversity Guidelines. Mainstreaming biodiversity into the mining sector 2013 ▪ <i>Same as for Urban - General</i> 	<ul style="list-style-type: none"> ▪ <i>Same as for Urban - General</i> 	<ul style="list-style-type: none"> ▪ DMR ▪ DEA ▪ EDTEA ▪ DWS ▪ UDM ▪ Local Municipalities and relevant units
Implementation Mechanisms	<ul style="list-style-type: none"> ▪ Pollution prevention and remediation measures. ▪ Spatial Development Framework (SDF). ▪ Land Use Management Schemes (LUMS). ▪ Authorisations in terms of prevailing legal framework. ▪ Municipal Open Space Systems. 		

2.7.4 Management Priorities

Urban - General	<ul style="list-style-type: none"> ▪ The core objective of this zone is urbanisation and densification. ▪ Focus future settlement and economic development opportunities. ▪ Encourage infill development (i.e. development of land within built-up areas). ▪ Air Quality Management Plan required for the District. ▪ Detailed emissions inventory to be developed for the District.
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	<ul style="list-style-type: none">▪ Permitting of all waste disposal sites.▪ Waste disposal sites and WWTWs to be operated in accordance with legal requirements.▪ Action plan for promoting renewable energy.▪ Promotion of energy efficient heating and lighting.▪ Awareness campaigns to be conducted regarding the dangers of local communities burning waste, as a means of disposal.▪ Provision of adequate waste management services.▪ Establishment of municipal by-laws governing the burning of waste.▪ Promote restructuring of urban settlements to more efficiently accommodate future and present populations.▪ Development must be aligned to the SDF and must conform to the LUMS.▪ Improve connectivity and mobility through an efficient movement network.▪ A clearly defined District wide Open Space System is required, with connectivity to CBAs and ESAs (where possible).▪ Invest in places with high tourism value.▪ Establish buffer zones for air (e.g. WWTWs, landfills) and noise pollution, for restriction of undesirable activities and land uses.▪ Promote urban regeneration.▪ Address service backlogs and provide adequate level of services - waste, water, electricity, sanitation and stormwater.▪ Promote “green cities”.▪ Manage urban sprawl.▪ Eradicate informal settlements.▪ Promote and safeguard urban open space system (including parks and recreational facilities).▪ Climate change management.▪ Promote water conservation measures.▪ Control illegal dumping and eradicate dumping hotspots.
Mining & Industry	<ul style="list-style-type: none">▪ Refer to Management Priorities under Urban – General (where relevant).▪ Coordinated compliance monitoring and enforcement of mining and industrial activities.▪ Institute air quality monitoring programme. Duly consider pollution sources, sensitive receptors and climatic conditions.▪ Rehabilitation of abandoned mining areas.▪ Decrease levels of pollution in the immediate proximity of main pollution sources.

2.7.5 Management Guidelines

Urban - General	<ul style="list-style-type: none">▪ Development must be aligned to the SDF and must conform to the LUMS.▪ Avoid disparate or undesirable development outside Urban Edge, which does not adhere to land use planning frameworks (SDF, LUMS, etc.).▪ Ensure suitable stormwater management measures are implemented, based on the nature of the development.▪ Avoid encroachment into buffer zones of watercourses.▪ Employ green building measures.▪ Climate change management.▪ Promote water conservation measures.
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Mining & Industry

- Refer to Management Guidelines under Urban – General (where relevant).
- Manage mining and industrial related impacts, which may include (amongst others) –
 - Surface and ground- water pollution;
 - Soil pollution;
 - Air pollution;
 - Noise pollution;
 - Loss of habitat;
 - Visual impacts;
 - Loss of arable land.
- Consider off-site impacts and edge effects to sensitive features in other Management Zones.
- Manage wastewater and solid waste.
- Comply with the relevant air pollution guidelines.
- Conduct geotechnical investigations and obtain recommendations from Council for Geosciences prior to development in areas with unstable geological conditions (including undermining).
- Establish buffer zones for air and noise pollution, for restriction of undesirable activities and land uses.
- Mining should only be permitted if relevant authorisations are in place.
- Rehabilitation plans to be aligned with desired state.
- Mining companies must commit sufficient financial resources to rehabilitation, prior to approval.
- Authorisation conditions to be strictly enforced by DMR and other authorities.
- Compliance with water conservation and demand management strategy.
- Regulate and prohibit land-based activities which may affect the quantity and quality of groundwater. High groundwater pollution risk activities should not be allowed in areas where the aquifer is characterized by primary permeability and secondary permeability (fractures), as pollution plume may migrate rapidly.
- Establish an understanding of the groundwater resources' vulnerability to pollution. Prevention of groundwater pollution in areas of seasonal shallow water table.
- Prevent intrusion of polluted surface water in groundwater resources.
- Implement groundwater monitoring programme.
- Institute adequate source-directed controls to manage potential impacts to water resources, which could include:
 - Authorisations, licences and permits;
 - Standards to regulate quality of waste discharges;
 - Requirements for on-site management practices (e.g. to minimise waste at source and to control diffuse pollution);
 - Requirements for clean-up and remediation of water resources that have already been polluted.
- The relevant specialist studies will need to be conducted to allow for informed and balanced decision-making. Specialist fields required (where relevant) – Terrestrial Ecology, Surface and –Groundwater, Visual, Noise, Health, Socio-economic, Traffic, etc.



2.7.6 Compatible & Incompatible Activities

Urban - General	
Compatible Activities	Incompatible Activities
<ul style="list-style-type: none"> ▪ Development complementary to the LUMS. ▪ Infill development. ▪ Commensurate infrastructure and utility services. 	<ul style="list-style-type: none"> ▪ Development that clashes with the LUMS. ▪ Mining. ▪ Heavy industry. ▪ Agriculture (including agri-industry). ▪ Activities that threaten cultural and historical resources. ▪ Activities that encroach upon open space corridors.
Mining & Industry	
Compatible Activities	Incompatible Activities
<ul style="list-style-type: none"> ▪ Development complementary to the LUMS. ▪ Permissible activities include the authorised mining activities that adhere to conditions of authorisation, Environmental Management Plan / Programme and mining best practices. ▪ Infrastructure and activities associated with mining and industry. ▪ Engineering and utility services and infrastructure. ▪ Solid waste disposal facilities. ▪ Sub-stations and electrical infrastructure. ▪ Sewage treatment facilities. ▪ Tourism (regulated and mining-focused). 	<ul style="list-style-type: none"> ▪ Development that clashes with the LUMS. ▪ Development that compromises mineral resources. ▪ Illegal mining activities (i.e. not authorised). ▪ Activities that are in conflict with desired state and after use plans. ▪ Urban and infrastructure development prior to mineral extraction. ▪ Intensive agriculture.

2.7.7 Performance Management

Urban - General	<ul style="list-style-type: none"> ▪ Avoidance of disparate development. ▪ Upgrading of un-serviced and informal areas. ▪ Prevent exceedance of pollution standards. ▪ Prevent loss of municipal open space. ▪ Control rate of urban regeneration.
Mining & Industry	<ul style="list-style-type: none"> ▪ Legal and permitted mining. ▪ Rehabilitation of derelict industrial and mining areas. ▪ Exceedance of pollution standards. ▪ Compliance with authorisation conditions and pre-determined management measures and requirements. ▪ Monitoring and reporting on compliance. ▪ Pollution incidents.

EIA LISTINGS



SECTION

3



3 EIA LISTINGS

3.1 Introduction

Section 24 of NEMA gives the Minister and the provincial counter-part, the MEC, the power to regulate which activities need permission to proceed and to accept spatial plans to assist in the authorisation of new activities.

One of the primary purposes of the EMF is to function as a support mechanism in the EIA process in the evaluation and review of development applications. This is achieved in the following manner:

- ❖ Supporting the undertaking of an EIA in an area by indicating the scope of potential impacts and information requirements for executing the assessment (refer to Management Guidelines in **Section 2**);
- ❖ Delineating geographical areas within which additional specified activities are to be identified in terms of NEMA;
- ❖ Delineating geographical areas within which activities listed in terms of NEMA may be excluded by identifying areas that are not sensitive to the potential impacts of such activities; and
- ❖ Delineating geographical areas within which activities listed in terms of the EIA Regulations are either escalated from Listing Notice 1 to 2 or *vice versa* (see **Box 1**).

BOX 1

WHAT IS THE DIFFERENCE BETWEEN A BASIC ASSESSMENT & SCOPING AND EIA PROCESS?

A **Basic Assessment** is the environmental assessment applied to activities listed in Listing 1 and 3 (GN No. R983 and R985 of 4 December 2014, respectively). These are smaller scale activities, the impacts of which are generally known and can be easily managed. Typically, these activities are of lower risk and are considered less likely to have significant impacts to the receiving environment.

Scoping and EIA requires a thorough and rigorous environmental assessment for activities contained in Listing 2 (GN No. R984 of 4 December 2014). Due to their nature and/or extent, these activities are of higher risk and are likely to have significant impacts that cannot be easily predicted.



3.2 Relationship between EMZs and EIA Listing Notices

The EMF informs EIAs through the environmental sensitivity depicted through the EMZs, linked to their Management Guidelines that need to be considered for undertaking developments within these zones. In this way, the Desired State is promoted by allowing compatible developments to proceed without undergoing protracted decision-making processes whilst subjecting potentially disparate development to an environmental assessment.

The relationship between the EMZs and the EIA Listing Notices were explored based on the following:

❖ **Activities - significant impact –**

Activities where the related impact(s) may have a high significance rating in terms of the environmental attributes in an EMZ. Only permissible through strict regulation, and impacts need to be adequately mitigated.

❖ **Activities – no significant impact –**

Activities that are more amenable to environmental attributes in an EMZ, and where a low significance rating applies. Although permissible, regulation is still a requirement.

The compatibility of the activities contained in the EIA Listing Notices (GN No. R983, R984 and R985 of 4 December 2014) with regards to the EMZs are presented in **Appendix A**. The following conditions apply to the interpretation and application of the EMF's influence to the EIA activities:

1. As the Geographical Information System (GIS) was compiled based largely of desktop spatial information, a certain level of ground-truthing that is appropriate to the type of activity and status of the receiving environment, will be required. Depending on the outcome, the requirements can be challenged.
2. While preferred activities within the EMZs are proposed, it does not preclude a developer/ planner from having to consider the underlying sensitive features or having to comply with relevant environmental legislation.
3. Transformed or degraded areas need to be considered with caution, as they might still be sensitive from a socio-economic perspective. Suitable consideration will need to be given to the proposed activity's impacts to these features.
4. Exclusion must be considered following consultation with the competent environmental authority in terms of NEMA.
5. Where an exclusion is permitted, it is advocated that an Environmental Management Programme (EMPr) needs to be prepared in accordance with section 24N of NEMA and



Appendix 4 of GN No. R982 (4 December 2014) for approval by the competent environmental authority.

6. From the EMF's perspective, the following need to be considered during the application stage of the EIA:
 - a. The competent authority must make the EMF available to the applicant / Environmental Assessment Practitioner (EAP);
 - b. The EAP must, in accordance with Regulation 15 of GN No. R982 (4 December 2014), determine whether a Basic Assessment or Scoping should be applied to the application, taking into account the EMF's requirements;
 - c. If the EAP managing the application, following the review of the EMF, is for any reason of the view that the environmental assessment process recommended by the EMF is inappropriate (based on a sufficient understanding of the project and receiving environment), the applicant / EAP may provide sufficient motivation to the competent authority to deviate from the EMF.
7. Exclusions do not apply to other environmental legislation, where the relevant approvals will still need to be sought for various legal triggers. Examples of such key pieces of legislation include:
 - ❖ National Water Act (Act No. 36 of 1998);
 - ❖ National Environmental Management Air Quality Act (Act No. 39 of 2004);
 - ❖ National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004);
 - ❖ National Environmental Management: Protected Areas Act (Act No. 57 of 2003);
 - ❖ National Environmental Management: Waste Act (Act No. 59 of 2008);
 - ❖ National Forests Act (No. 84 of 1998);
 - ❖ Minerals and Petroleum Resources Development Act (Act No. 28 of 2002);
 - ❖ National Heritage Resources Act (Act No. 25 of 1999);
 - ❖ KZN Heritage Act (Act No. 04 of 2008);
 - ❖ Conservation of Agricultural Resources Act (Act No. 43 of 1983); and
 - ❖ KwaZulu-Natal Nature Conservation Management Act (Act No. 09 of 1997).

IMPLEMENTATION STRATEGY



SECTION

4

4 IMPLEMENTATION STRATEGY

4.1 Cyclical Implementation Approach

A pragmatic approach to the implementation of the UDM EMF is recommended, which is based on the commonly adopted management system of a Plan-Do-Check-Act cycle. This method acknowledges that it requires dedicated commitment to continual improvement to eventually achieve the desired management outcomes. The main steps in the cycle are presented in the table to follow.

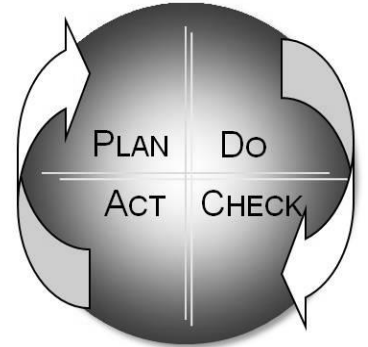


Table 2: UDM EMF Implementation Cycle

1.	<u>Plan</u>	<ul style="list-style-type: none"> ❖ Identify the EMF triggers. ❖ Define the scope of the EMF. ❖ Determine information requirements and key environmental features and attributes to be investigated. ❖ Develop and implement a public participation strategy. ❖ Determine context for environmental management, based on status quo, opportunities, constraints, issues, and desired state. ❖ Delineate management zones and assign management objectives and requirements. ❖ Develop implementation strategy. ❖ Seek formal adoption. ❖ Establish institutional arrangements.
2.	<u>Do</u>	<ul style="list-style-type: none"> ❖ EMF training of stakeholders. Depending on the audience, training mechanisms can include manuals, tutored sessions, brochures, etc. ❖ Recruitment of EMF in appraisal of proposals / applications for activities or developments. ❖ Implementation of EMF management measures, including provisions and arrangements for accomplishing management objectives and desired state.
3.	<u>Check</u>	<ul style="list-style-type: none"> ❖ Monitoring of EMF performance and overall implementation. ❖ Monitoring to include appropriate environmental performance indicators
4.	<u>Act</u>	<p>Taking stock of the lessons learnt during the implementation of the EMF and the outcome of the review stage, management actions need to be taken to ensure that the EMF is revised as needed. New information must also be incorporated into the EMF, and the GIS must also be updated.</p>



4.2 Linkages with other Planning and Policy Instruments

The EMF attempts to be aligned with existing planning tools, in particular the municipal SDF and IDP. Likewise, the EMF will feed environmental information into these planning tools. The environmental priorities emphasised in the EMF should serve as a thrust in formulating new plans and guide the decisions on existing planning arrangements.

On a spatial scale, the EMZs should form the environmental layer of the SDF for the UDM. Any conflicts that exist between the EMF and SDF would need to be identified and ironed-out in a balanced manner with due consideration of sustainability principles.

The Biodiversity Sector Plan is intended to contribute to a range of multi-sectoral planning and assessment processes, such as EMFs, SDFs, Strategic Environmental Assessments (SEAs), Environmental Impact Assessments (EIAs) and water use authorisations; and to support land use decision-making that impacts on biodiversity e.g. rezoning, agricultural and mining authorisations. Where relevant, provisions of this plan were included in the SEMP, which included the CBA Map and management requirements for these sensitive areas.

4.3 Striving towards the Desired State

Environmental Management Priorities contained in the SEMP emanate from the issues, opportunities and constraints identified during the EMF status quo assessment, and through feedback received during Public Participation.

In terms of the EMF development process, Management Priorities were not necessarily all taken forward in the mapping component of the EMF, where some of the objectives could not be presented spatially. However, the Management Priorities promote attaining the desired state of the EMF study area by playing an important role in setting Management Guidelines for the respective EMZs.

Outside of the functions of the EMF, the Management Priorities need to be captured in future environmental management strategies for the DM, which need to be championed by the responsible government bodies.

Mapping the path from the environmental vision to the realisation of the desired state relies on the disaggregation of the vision into management objectives. These objectives are best presented in a hierarchy, which begins at its coarsest level with the vision and ends in a series of management objectives of increasing focus, rigour and practical achievability (see example presented in **Figure 13**).

The higher level vision and accompanying objectives (SEMP Management Priorities) relate primarily to upper management and societal values with statements of strategic intent, while the lower level objectives provide more specified and operational-type objectives that can be linked to specific targets. The lower level objectives, which represent the most detailed and most technical level of objectives, are not necessarily contained in the EMF and need to be developed as part of the roll-out of the tool through appropriate strategies, plans and programmes by the relevant stakeholders.

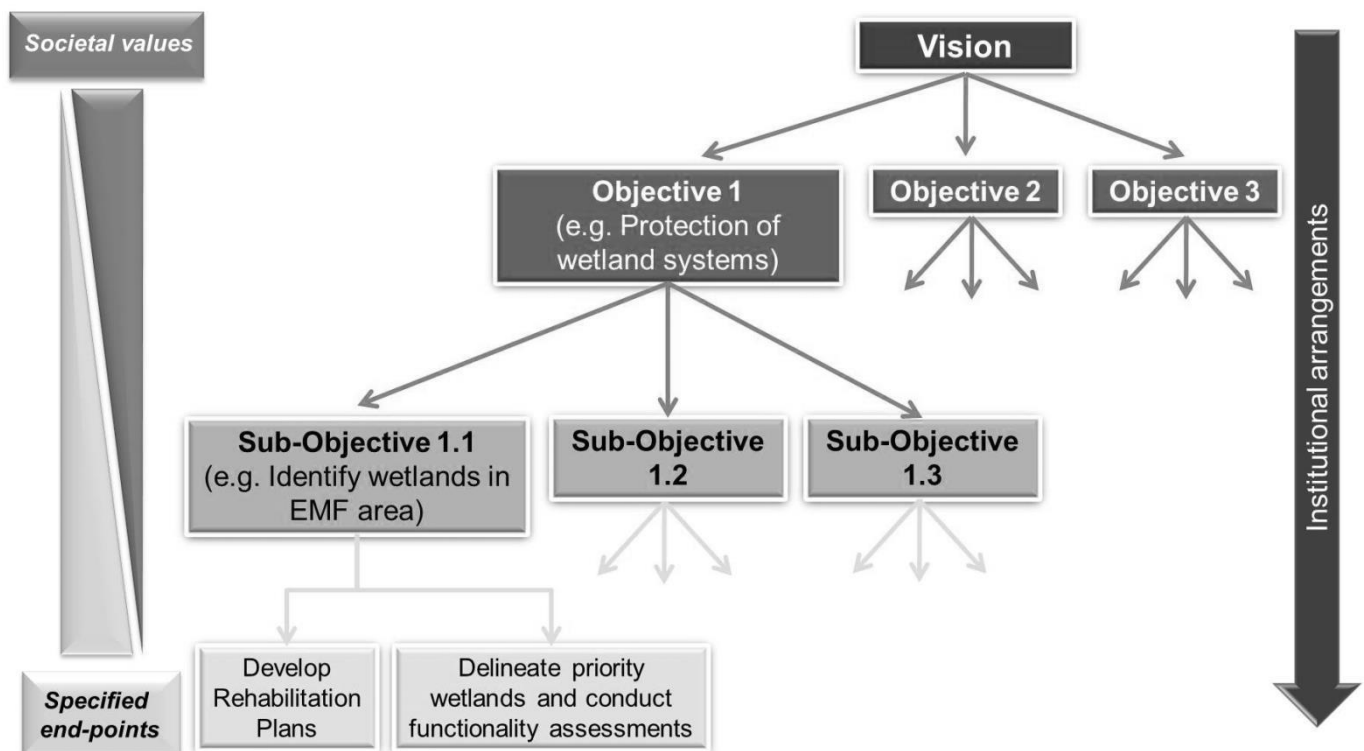


Figure 13: Objectives Hierarchy with example

The role of the EMF in striving towards the desired state includes the following:

- ❖ Provide context and guidance to policies, strategies and plans, where the environmental management requirements need to be taken into consideration;
- ❖ Planning initiatives need to support the management objectives for each EMZ;
- ❖ Developers and professionals need to screen proposals against the EMF and the appropriate EMZs to identify potential incompatibility. Should the activity not conform to the desired state established for the management zone, the proponent may revise the proposal or undertake detailed investigations to verify the EMF findings; and
- ❖ National (i.e. DEA), provincial (EDTEA) and local (UDM and LMs) authorities should use the EMF to facilitate environmental decision-making.



4.4 Giving Effect to the EMF

Institutional arrangements are regarded as the overall framework for sustainable development planning and decision-making, including political, legal, regulatory, policy and organisational frameworks and processes.

The sub-sections to follow discuss some of the high-level provisions that need to be in place to successfully implement the UDM EMF.

4.4.1 EMF Enabling Institutional Arrangements

Provision needs to be made in terms of the capacity and ability of the UDM and LMs to ensure effective Integrated Environmental Management (IEM). In addition, the various environmental planning and management tools that are associated with various pieces of environmental legislation need to be in place.

The DM needs to ensure that the requisite enabling environment is created to facilitate the successful application of the EMF. **Table 3** lists the organisational arrangements required to give effect to EMF and IEM in general. The associated timeframes range from short-term (immediately to 1 year), medium-term (1 – 3 years) and long-term (3 – 5 years).

Table 3: Organisational arrangements for UDM EMF implementation & IEM

Organisational Requirement	Timeframe
1. Conduct a training needs assessment and provide environmental training to municipal officials.	short-term
2. Establish dedicated Environmental Management Units for DM and LMs to oversee the following – <ol style="list-style-type: none"> a. Planning, coordinating, implementing and monitoring all aspects related to IEM; b. Coordinating environmental compliance (where the municipality acts as the developer or project proponent, fulfils functions or conducts activities) and governance (where the municipality acts as the commenting or regulatory authority); c. Creating environmental awareness within the municipality and ensuring task-specific environmental training is provided to municipal officials; d. Designing and managing pollution prevention, abatement, and control programmes; e. Applying legal and regulatory tools to achieve environmental sustainability; f. Mainstreaming environmental sustainability within the municipal structure and functions. 	short to medium-term
3. Develop an internal system to screen all projects, functions and activities against environmental legislation and to initiate the relevant authorisation protocols.	short to medium-term
4. Conduct environmental compliance monitoring of municipal projects.	short to medium-term
5. Integrate EMF into the IDP, SDF and LUMS of the DM and LMs	medium-term
6. Establish a co-operative environmental governance forum to engage with key environmental authorities from the various spheres of government.	short-term



Organisational Requirement	Timeframe
7. Dedicated environmental officers in the DM and LMs to support the Environmental Managers by undertaking executing the following functions: <ol style="list-style-type: none"> a. Environmental compliance monitoring; b. Responding to environmental complaints; c. Roll-out of environmental education; d. Review of Environmental Impact Assessments, Environmental Management Programmes, planning applications, etc.; e. Implementing environmental projects; f. Assist in compiling environmental management tools. 	long-term
8. Establish community environmental forums.	medium-term

4.4.2 EMF Implementation Duties

In accordance with the EMF Regulations (GN No. R547 of 18 June 2010), various role-players are involved with the conclusion of the EMF development process, its formal adoption and the ensuing implementation of the framework. The key duties that need to be performed for the implementation of the EMF are listed in **Table 4**.

Table 4: EMF Implementation Duties

EMF Implementation Duty	Roles & Responsibilities
Finalise EMF	<ul style="list-style-type: none"> ▪ UDM ▪ EDTEA ▪ DEA
Endorse EMF	<ul style="list-style-type: none"> ▪ Project Steering Committee (PSC)
Seek EMF approval	<ul style="list-style-type: none"> ▪ UDM – Council resolution ▪ EDTEA
Gazetting of EMF	<ul style="list-style-type: none"> ▪ DEA ▪ MEC (EDTEA)
Broadcast the EMF (e.g. roadshow)	<ul style="list-style-type: none"> ▪ UDM ▪ EDTEA
Consideration of EMF during the review of activities / project proposals in terms of NEMA section 24(4)(b)(vi)	<ul style="list-style-type: none"> ▪ DEA ▪ EDTEA ▪ DMR ▪ DWS ▪ Municipalities
Set operational objectives and implementation plans for desired state	<ul style="list-style-type: none"> ▪ UDM ▪ EDTEA
Monitor the implementation of the EMF	<ul style="list-style-type: none"> ▪ UDM ▪ EDTEA
Review the EMF	<ul style="list-style-type: none"> ▪ UDM ▪ EDTEA
Update the EMF	<ul style="list-style-type: none"> ▪ UDM ▪ EDTEA



4.4.3 EMF Functionality

According to the EMF Regulations (GN No. R547 of 18 June 2010), once an EMF is adopted by the Minister or MEC it must be taken into account in the consideration of applications for environmental authorisation in or affecting the geographical area to which the framework applies. The primary purpose of an EMF is thus to function as a support mechanism in the EIA process in the evaluation and review of development applications, as well as making strategic informed decisions regarding land use planning applications.

The UDM and LMs, as well as key government departments (e.g. EDTEA, DWS, DMR) will use the EMF as a tool for planning, environmental screening, regulatory functions and overall decision-making.

The EMF provides a compilation of information and maps illustrating attributes of the environment in the District. This provides valuable guidance in terms of planning processes in UDM.

The EMF will provide applicants with an early indication of the areas in which it would be potentially appropriate to undertake an activity. If an area has been earmarked for a certain type of development where it will be incompatible with the desired state of the associated EMZ, the applicant will need to undergo a rigorous environmental assessment to determine the state of the receiving environment and the potential impacts to the features that contribute towards the sensitivity of the zone in question. As the GIS was compiled based largely of desktop spatial information, a certain level of ground-truthing that is suitable for the type of activity and status of the receiving environment, will be required.

It is important to note that, while the SEMP outlines preferred activities within the EMZs, it does not preclude a developer/ planner from having to consider the underlying sensitive features or having to comply with relevant environmental legislation.

4.4.4 EMF Review

An EMF must be implemented and monitored on a regular basis to ensure that it achieves its purpose and goal. The UDM EMF's intended use should be checked against the following performance indicators:

- ❖ Officials trained on the interpretation and application of the EMF;
- ❖ Appointment of dedicated Environmental Managers in the DM and LMs to oversee the implementation of the EMF;
- ❖ Outcomes of projects screened against EMF GIS;
- ❖ Manner in which projects were influenced by the EMZ requirements;



- ❖ Adherence to Management Guidelines; and
- ❖ Application of EMF guidance to EIA Listing Notices.

According to the EMF Regulations (GN No. R547 of 18 June 2010), an EMF may from time to time, on the initiative of the Minister or an MEC in concurrence with the Minister, or as specified in the revision schedule of the EMF, be revised, on condition that such revision is subject to a public participation process similar to that envisaged in the Regulations. It is proposed that the review and revision cycle of the EMF be coupled to that of the other planning tools (i.e. SDF and IDP). Accordingly, an overall update cycle of 5 years is recommended.

With the review of the EMF it is recommended that the following elements be investigated in greater detail for the next generation EMF for Umzinyathi:

1. Urban Areas –
 - Further refinement of the Urban Area EMZ is required to delineate a separate management zone for mining and industry.
2. Terrestrial Biodiversity –
 - Require detailed ground-truthing for CBAs, in particular those in areas of potential Protected Area Expansion and those in areas of high development pressure;
3. Surface Water –
 - The KZN Aquatic CBAs need to be taken down to river level, as opposed to catchment based;
4. Geohydrology –
 - Extent of groundwater resources and possible exploitation;
 - Identification of vulnerable groundwater resources;
 - Management requirements;
5. Climate Change –
 - Climate change risks in the district;
 - Mapping of possible alternative energy sources;
6. Socio-economic Development –
 - The first generation EMF focuses heavily on sensitive environmental resources in UDM, as reflected in the EMZs. Future versions of the EMF need to investigate the socio-economic development opportunities in the district in greater detail and dedicated management zones need to be considered that focus explicitly on these aspects.
7. A dedicated EMZ needs to be considered for tourism, especially considering the tourism-related opportunities in the district and the role that this industry plays in the local economy.



8. Further consideration needs to be given regarding inclusion of terrain and geotechnical conditions as an EMZ in the EMF.
9. Consideration of inclusions or exclusions in terms of the listed waste management activities under the National Environmental Management: Waste Act (NEM:WA) (Act No. 59 of 2008).
10. Investigate community conservation strategies for areas that are located alongside formally protected areas. Consider initiatives that will support the desired state of the protected areas and not jeopardise their ecosystem goods and services, while promoting socio-economic benefits to the local communities.

4.5 Management Framework for Strategic Issues & Priorities

Table 5 contains the environmental objectives, strategies and interventions to address certain of the Environmental Management Priorities in the district. Note that detailed strategies are not included in the EMF, and will need to be developed in consultation with the relevant stakeholders. Only certain Environmental Management Priorities have been selected from the list contained in the EMF Desired State Report (Volume 2). This is to prevent an unrealistic and over-ambitious attempt at dealing with all the management priorities and issues in the district. In addition, those management priorities that fall solely within the ambit of other government bodies and where the UDM has no role to play have not been considered further.

The interventions set the high-level scope for conceptualising the projects deemed necessary to achieve the objectives. However, they do not define the details required for the implementation of actual projects. Once the interventions have been endorsed by the relevant stakeholders, project plans will need to be developed to include information pertaining to the following:

1. Project description;
2. Budget and sources of finance;
3. Implementation timeframes;
4. Activities and outputs; and
5. Performance indicators (aligned with sustainability criteria).

It is accepted that the interventions will go through a degree of refinement in the formulation of project plans or that alternatives may be identified, with contributions from the environmental authorities, multi-stakeholder workshops and through more in-depth public participation. Such modifications are supported, as long as the original motivations for the interventions are borne in mind and the alterations are orchestrated by the ultimate goals of

attending to the environmental issues. The sustainability criteria (refer to the EMF Desired State Report, Volume 2) must also always guide the evolution of the projects towards realising the District's vision.

The purpose of the **objectives** is to address the prioritised environmental issues and to manage the natural resources and environmental assets in UDM, whilst ensuring alignment with the municipal vision. The objectives aim to be pragmatic in their scope to prevent unrealistic aspirations.

The **strategies** strive to attain the objectives set for addressing the environmental issues. They are intrinsically linked to UDM's environmental context and the realisation of the desired state. The **interventions**, which emanate from the strategies, present the measures and ventures at the coalface to practically bridge the gap between the current and desired state. Note that the timeframes are as follows: short- (immediately to 1 year), medium- (1 – 3 years) and long-term (3 – 5 years).





Table 5: Addressing Municipal Prioritised Environmental Issues

(S = short term; M = medium term; L = long term)

Issues	Objectives	Strategies	Interventions	Time-frames	Locations	Roles & Responsibilities
CLIMATE						
Risks posed by climate change	Ensure UTDM's preparedness for climate change risks	Develop Climate Change Strategy	Climate Change Strategy to include Implementation Plan.	M	Municipal-wide	<ul style="list-style-type: none"> • DEA • EDTEA • DWS • Department of Energy • Relevant municipal units
SURFACE WATER						
Lack of protection of watercourses and encroachment of development along rivers.	Protection of regulated areas for watercourses (i.e. 1:100 year floodline or delineated riparian / wetland habitat, whichever is greatest)	Control development alongside watercourses.	<ul style="list-style-type: none"> • Adopt 30 metres buffer area from boundary of regulated area of major watercourses for strict regulation of development. Implementation through adequate provisions in the municipal LUMS. • Alien clearing programme. • Rehabilitation of riparian areas. 	S	Major watercourses	<ul style="list-style-type: none"> • EDTEA • DWS • Relevant municipal units
SOIL						
High levels of erosion.	Management of erodible areas.	Establish an understanding of the areas susceptible to erosion.	<ul style="list-style-type: none"> • Mapping of areas where the soil has a high erodibility factor. • Rehabilitation programme for priority areas. • Education on best land use practices. 	M	Municipal-wide	<ul style="list-style-type: none"> • EDTEA • DAFF • DWS • EKZNW • Relevant municipal units
	Management and protection of the grasslands in the primary catchment of the Tugela River.	Maintain the vegetation cover that ensures the protection of the soil during precipitation events, effective absorption of water into the soil, and the slow release of the water into				



Issues	Objectives	Strategies	Interventions	Time-frames	Locations	Roles & Responsibilities
		the system thereafter.				
HERITAGE RESOURCES						
Threats to heritage resources	Protection of UDM's heritage assets.	Identify and preserve heritage assets located in the District.	<ul style="list-style-type: none"> • Prepare detailed inventory of heritage resources in UDM. Classify in terms of national (Grade 1), provincial (Grade 2) and local (Grade 3) significance. • Strict regulation of inappropriate development within footprint / buffer zone of National and Provincial Heritage Sites. • In heritage areas strict regulation is required for any alterations, additions or new structures that are contradictory to the protected buildings or the general character of area. • Optimise opportunities associated with tourism and job creation linked to the conservation of cultural and heritage resources. • Clear institutional responsibilities at a municipal level for heritage preservation. • Either a heritage officer/s is appointed to the UDM or relevant official/s are trained in the management of heritage sites so that the UDM and LMs benefit from these sites in terms of increased visitor numbers and tourism revenue. 	S	Municipal-wide	<ul style="list-style-type: none"> • Amafa • KZN Tourism Authority • Relevant municipal units



Issues	Objectives	Strategies	Interventions	Time-frames	Locations	Roles & Responsibilities
			<ul style="list-style-type: none"> Establish a District Heritage Forum. 			
AGRICULTURE						
Risk of loss of high potential agricultural land	Optimal protection and utilisation of land with high agricultural potential	Identify and protect high agricultural potential land.	<ul style="list-style-type: none"> Mapping and inventory of land with high agricultural potential. IDP, SDF and LUMS to consider the KZN Agricultural Land Categories Spatial Decision Support tool. Establish sustainable land use practices for areas of high agricultural importance (grazing and cultivation) 	S - M	Municipal-wide	<ul style="list-style-type: none"> DARD DAFF EDTEA DWS Agricultural Sector Relevant municipal units
Overgrazing.	Decline in land degradation from overgrazing.	Establish programme to manage overgrazing.	<ul style="list-style-type: none"> Education programme for emerging farmers on best practices. Support to farmers on land acquired through land claim. 	S	Areas exposed to overgrazing	<ul style="list-style-type: none"> DARD DAFF EDTEA Relevant municipal units
INFRASTRUCTURE & MUNICIPAL SERVICES						
Permitting of waste disposal sites	Landfills to be operated according to legal requirements.	Integrated Waste Management Plan (IWMP) for UDM.	<ul style="list-style-type: none"> Implement IWMP. Compliance and enforcement monitoring. 	M	UDM Landfills	<ul style="list-style-type: none"> DEA EDTEA DWS Relevant municipal units
INSTITUTIONAL ENVIRONMENT						
Non-compliance of municipal activities with environmental	100% compliance with enviro-legal obligations	Establish system to ensure compliance of municipal activities with enviro-legal requirements.	Screening of municipal activities and functions against enviro-legal requirements	S - M	Municipal-wide	<ul style="list-style-type: none"> Relevant municipal units EDTEA
			Implementation of UDM EMF, including			



Issues	Objectives	Strategies	Interventions	Time-frames	Locations	Roles & Responsibilities
legislation			<p>the use of the GIS to screen municipal projects</p> <p>Environmental compliance monitoring of municipal projects, functions and activities</p> <p>Appoint dedicated Environmental Managers for DM and LMs</p>			
Institutional problems associated with environmental management within the municipality	Alignment of municipal functions with requirements for IEM.	Provide enabling environment to municipal officials to adopt and implement IEM.	<ul style="list-style-type: none"> • Develop IEM Implementation Plan, with provisions for institutional arrangements and implementation of environmental management tools. • Conduct environmental training. Create environmental awareness among municipal officials. • EMF to be incorporated in the review of the municipal IDP and SDF. • Evaluate municipal project and programmes against the EMF, environmental vision and sustainability criteria. • Establish a co-operative environmental governance forum to engage with key environmental authorities. • Establish communication channels with civil society for environmental matters. 	S		<ul style="list-style-type: none"> • Relevant municipal units



4.6 Monitoring, Evaluation & Review

The municipal SDFs and IDPs needs to be monitored and reviewed in order to:

- ❖ Measure the performance of the IDPs success against sustainability principles;
- ❖ Measure the performance of the municipality against the goals set in the IDP;
- ❖ Provide an evaluation process to review and improve the IDP/SDF;
- ❖ Build on the lessons of good practice;
- ❖ Address identified shortcomings in previous IDPs; and
- ❖ Create an opportunity to continuously improve the quality and accuracy of the IDP/SDF.

Some common tools used to monitor, evaluate and review IDPs from an environmental perspective include:

1. Key Performance Indicators (KPIs);
2. Sustainability Indicators;
3. Environmental audits;
4. Environmental monitoring;
5. Community-based monitoring;
6. Interviews and workshops with stakeholder reference groups; and
7. State of Environment Reporting (SoER).

Key Performance Indicators (KPIs) were established for the UDM and they are contained in **Table 6**. These KPIs serve to gauge the municipality's performance in addressing the environmental issues and in satisfying the related objectives and strategies listed in **Table 5**.

Over and above these issue- and project-specific KPIs, DEA's core set of environmental performance indicators for local level reporting (DEAT, 2004) also need to be adopted by UDM for future reporting (as relevant).

Table 6: KPIs for Municipal Prioritised Environmental Issues

Objectives	Strategies	KPIs
CLIMATE		
Ensure UDM's preparedness for climate change risks	Develop Climate Change Strategy	<input checked="" type="checkbox"/> % implementation of Climate Change Strategy
SURFACE WATER		
Protection of regulated areas for watercourses (i.e. 1:100 year floodline or delineated riparian /	Control development alongside watercourses.	<input checked="" type="checkbox"/> Number of encroachments <input checked="" type="checkbox"/> Specific provision in LUMS



Objectives	Strategies	KPIs
wetland habitat, whichever is greatest)		
SOIL		
Management of erodible areas.	Establish an understanding of the areas susceptible to erosion.	<input checked="" type="checkbox"/> Identification of priority areas with high erodibility factor
HERITAGE RESOURCES		
Protection of UTDM's heritage resources	Identify and preserve heritage resources located in the district.	<input checked="" type="checkbox"/> Inventory developed <input checked="" type="checkbox"/> % of classification completed <input checked="" type="checkbox"/> Specific provision in LUMS <input checked="" type="checkbox"/> Number of tourism opportunities identified <input checked="" type="checkbox"/> Designation of responsibilities at a municipal level for heritage management <input checked="" type="checkbox"/> Convening of District Heritage Forum
AGRICULTURE		
Optimal protection and utilisation of land with high agricultural potential	Identify and protect high agricultural potential land.	<input checked="" type="checkbox"/> Inventory developed <input checked="" type="checkbox"/> Sustainable land use practices developed <input checked="" type="checkbox"/> Specific provision in LUMS
Decline in land degradation from overgrazing.	Establish programme to manage overgrazing.	<input checked="" type="checkbox"/> Education programme developed <input checked="" type="checkbox"/> % implementation of education programme <input checked="" type="checkbox"/> Number of farmers assisted <input checked="" type="checkbox"/> Level of support provided
INFRASTRUCTURE & MUNICIPAL SERVICES		
Landfills to be operated according to legal requirements.	IWMP for UDM.	<input checked="" type="checkbox"/> % implementation of IWMP <input checked="" type="checkbox"/> Number of monitoring events <input checked="" type="checkbox"/> % compliance achieved
INSTITUTIONAL ENVIRONMENT		
100% compliance with enviro-legal obligations	Establish system to ensure compliance of municipal activities with enviro-legal requirements.	<input checked="" type="checkbox"/> Number of municipal projects for which legal screening has been undertaken <input checked="" type="checkbox"/> Number of municipal projects that have been screened against the EMF <input checked="" type="checkbox"/> Number of municipal officials trained on the EMF <input checked="" type="checkbox"/> Environmental Managers for DM and LMs appointed
Alignment of municipal functions with requirements for IEM	Provide enabling environment to municipal officials to adopt and implement IEM.	<input checked="" type="checkbox"/> IEM Implementation Plan developed <input checked="" type="checkbox"/> Training needs assessment conducted <input checked="" type="checkbox"/> Number of municipal officials that have undergone environmental training <input checked="" type="checkbox"/> Environmental Awareness Programme developed <input checked="" type="checkbox"/> % implementation of Environmental Awareness Training <input checked="" type="checkbox"/> EMF incorporated into IDP and SDF <input checked="" type="checkbox"/> Number of municipal projects that have been screened against the sustainability criteria <input checked="" type="checkbox"/> Co-operative environmental governance forum established <input checked="" type="checkbox"/> Public communication channels established



4.7 Cross-boundary Environmental Management

The UDM is bordered by the following District Municipalities:

- ❖ Amajuba District Municipality (DM) - north-west;
- ❖ Zululand DM - north-east;
- ❖ King Cetshwayo DM - east;
- ❖ iLembe DM - south-east;
- ❖ uMgungundlovu DM - south-west; and
- ❖ uThukela DM - west.

EMFs for the neighbouring DMs will need to take cognisance of the UDM's EMZs and their associated Management Guidelines. This is particularly important for collaborative management of environmental features that traverse multiple administrative boundaries (e.g. major rivers).

4.8 Environmental Governance

4.8.1 Current Environmental Institutional Structures

A high-level overview of the environmental roles and responsibilities of key environmental authorities, which influence and guide environmental policies, strategies and plans in uMzinyathi, is provided in **Table 7**.




Table 7: Environmental Roles and Responsibilities

Environmental Authorities	Key Objectives / Obligations / Services / Functions
 <p>DEA environmental affairs Department Environmental Affairs REPUBLIC OF SOUTH AFRICA</p>	<ul style="list-style-type: none"> ▪ Promote the enhancement of natural resources for sustainable equitable use and protect and enhance the quality and safety of the environment ▪ Promoting the conservation and sustainable utilisation of our natural resources to enhance economic growth ▪ Protecting and improving the quality and safety of the environment ▪ Promoting a global sustainable development agenda ▪ Transformation ▪ Regulation and management of all biodiversity, heritage and conservation matters ▪ Promote and conserve our biological diversity and cultural and local natural resources and ensure the sustainable utilisation of resources ▪ Protect the environment in the interest of the health and well-being of the people ▪ Provide environmental information in support of effective environmental management and public participation in environmental governance ▪ Manage conservation the Transfrontier Conservation Areas and Protected Areas ▪ Promote and conserve our biological diversity and cultural and local natural resources and ensure the sustainable utilisation of resources for the benefit of the people of South Africa ▪ Provide programme management support service to Line Managers in managing Poverty Relief project



Environmental Authorities	Key Objectives / Obligations / Services / Functions
 <p>KZN EDTEA edtea Department : Economic Development, Tourism and Environmental Affairs PROVINCE OF KWAZULU-NATAL</p>	<p>Environmental services Include –</p> <ul style="list-style-type: none"> ▪ Environmental Planning, Governance & Information Management ▪ Environmental Impact Assessment ▪ Environmental Empowerment & Sustainable livelihoods ▪ Coastal & Biodiversity Management ▪ Pollution & Waste Management ▪ Compliance, Monitoring and Enforcement ▪ Air Quality & Climate Change ▪ Alien Invasive Species Management
 <p>DMR mineral resources Department: Mineral Resources REPUBLIC OF SOUTH AFRICA</p>	<ul style="list-style-type: none"> ▪ Actively contribute to sustainable development - promote sustainable resource management and contribute to skills development and the creation of meaningful and sustainable jobs ▪ Promote and transform the minerals sector <ul style="list-style-type: none"> ○ Promote and facilitate value addition to mineral resources extracted in the Republic ○ Redress past imbalances through promoting investment, broader participation in the minerals sector, direct intervention in communities, and increased BEE and SMME participation inclusive of women, youth and the disabled. ▪ Regulate the minerals sector - developing new policies, reviewing of existing policies and amending legislation to make them current to evolving an environment and achieving transformation in the minerals and mining industry ▪ Promote health and safety in the minerals sector - provide clear policy and regulatory framework to manage health and safety risks and promote best practice in the mining sector ▪ Protect the environment – promote the reduction of the impact of mining activities on the environment and public health through management of rehabilitation of ownerless and derelict mines, research and development in mine environmental management and development of mine environmental policies. ▪ Efficient and effective service delivery - develop and review internal processes, understand stakeholder needs and improve turn-around times ▪ Enhance DMR culture, systems and people - attract, develop and retain appropriate skills, promote good organisational culture and make the Department an employer of choice. ▪ Ensure long term financial stewardship – ensure optimal utilisation of resources, manage budgets effectively, implement risk management strategies and promote corporate governance
 <p>DWS water & sanitation Department: Water and Sanitation REPUBLIC OF SOUTH AFRICA</p>	<ul style="list-style-type: none"> ▪ Forecasting and balancing of water demand and supply ▪ Ensure adequate information and knowledge to sustainably manage water resources ▪ Improve water allocation ▪ Improve water use efficiency ▪ Improved water resource quality ▪ Ensure protection of water resource quality and quantity ▪ Ensure water service delivery through policy and regulation ▪ Regulate Water Services Authorities ▪ Develop and construct new infrastructure ▪ Asset management ▪ Percentage maintenance of infrastructure as per maintenance plan ▪ Ensure the provision of regional bulk water ▪ Rehabilitation and refurbishment of water resources infrastructure ▪ Ensure implementation of cooperation agreements ▪ Shape the global agenda on water ▪ Strengthen regional institutions of water ▪ Organisational growth and development ▪ To provide gender equality and woman empowerment solutions ▪ Contribute towards poverty alleviation through job creation initiatives



Environmental Authorities	Key Objectives / Obligations / Services / Functions
<p>EKZNW</p> 	<ul style="list-style-type: none"> ▪ To improve the state of biodiversity in KwaZulu-Natal for the benefit of people ▪ To provide quality conservation and ecotourism service delivery by being a well resourced organisation whilst striving for sustainability. ▪ To be an efficient, transparent, honest and accountable public entity with good governance. ▪ To be the employer of choice through creating decent work and sustainable livelihoods.
<p>Amafa aKwaZulu-Natali</p> 	<ul style="list-style-type: none"> ▪ Amafa / Heritage KwaZulu Natali is the provincial heritage conservation agency for KZN. Amafa was established as a statutory body in terms of the KZN Heritage Act of 1997, replaced by the KZN Heritage Act of 2008. ▪ Protection and preservation of cultural and heritage resources through approvals for development permits.
<p>UDM</p> 	<p>The powers and functions of UDM include the following:</p> <ul style="list-style-type: none"> ▪ Water supply and sanitation services ▪ Municipal Health services ▪ Integrated development planning ▪ Solid waste disposal sites ▪ Municipal airports serving the area of the DM as a whole ▪ Municipal environmental health serving the area of the DM as a whole ▪ Municipal roads ▪ Fire fighting services for district municipality including planning and co-ordination ▪ Establishment, conduct and control of cemeteries ▪ Promotion of local tourism for the area of the district municipality ▪ Municipal public works relating to any of the above functions or any other functions assigned to the DM <p>Shared functions include:</p> <ul style="list-style-type: none"> ▪ Integrated Development Planning ▪ Tourism ▪ Municipal roads ▪ Fire fighting services ▪ Fresh produce markets and (abattoirs)

4.8.2 Desirable Governance System

In an attempt to overcome the complications associated with applying IEM in the District, within the context of multiple governance regimes and host of environmental authorities with statutory mandates, it is recommended that the future environmental governance system for UDM follows a similar approach to the Triologue Model. The hypothesis is that this model (**Figure 14**) consists of six essential elements, and that the degree of successful governance (i.e. good governance) depends on the balance between these elements. First, governance requires the existence of effective science, government and society processes. Secondly, governance also requires effective interfaces between each of the three processes, namely (i) society and science, (ii) government and society, and (iii) society and science (Turton et al., 2007).

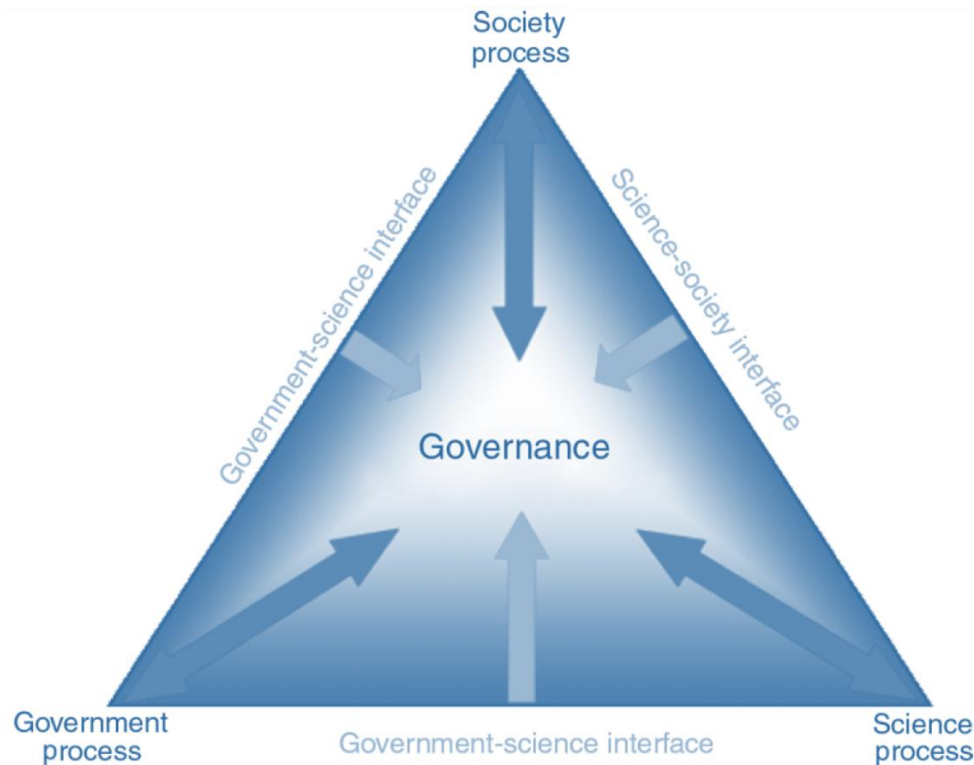


Figure 14: Schematic representation of the Triologue Model, showing its three elements and their interfaces (Hattingh et al., 2007).

The interface between these structures would require careful consideration to ensure the following:

- ❖ To adequately understand governance issues in UDM;
- ❖ To allow for collaborative environmental management by promoting social engagement and reducing reliance on command-and-control management methods;
- ❖ To elicit buy-in from key stakeholders as well as major landowners (including the Ingonyama Trust Board and Traditional Councils) in the District;
- ❖ To manage stressed resources (e.g. water) in a balanced manner;
- ❖ To prevent environmental degradation (e.g. overgrazing); and
- ❖ To identify governance opportunities and constraints.

The intention is to ultimately establish a desirable governance system to facilitate effective decision-making and policy-formulation in UDM. This will require the compilation of management guidelines and an action plan for implementation.



5 REFERENCES

DEA, (2010), Environmental Management Frameworks in terms of the EMF Regulations of 2010, Integrated Environmental Management Guideline Series 6, Department of Environmental Affairs (DEA), Pretoria.

DWA, (2009). Section 21(c) and (i) Risk-Based Assessment and Authorisation: Edition 02, Version 07.1. Department of Water Affairs (DWA), Pretoria.

EKZNW. (2014). uMzinyathi Biodiversity Sector Plan. V1.0. Unpublished Report of Ezemvelo KZN Wildlife, Biodiversity Conservation Planning Division. Ezemvelo KZN Wildlife, Pietermaritzburg.

Hattingh, J., Maree, G. A., Ashton, P. J., Leaner, J. J. & Turton, A. R. (2007). A trialogue model for ecosystem governance. *Water Policy* 9 Supplement 2 (2007) 11–18.

Turton, A. R., Hattingh, J., Roux, D., Claassen, M., Maree, G. A. & Strydom, W. F. (eds) (2007). *Governance as a Trialogue: Government-Society-Science in Transition*. Springer-Verlag, Berlin.

UDM. (2014). Spatial Development Framework. KZN: Unpublished. uMzinyathi District Municipality, Dundee.



APPENDIX A

COMPATIBILITY OF EIA ACTIVITIES WITH GEOGRAPHIC AREAS



UMZINYATHI DISTRICT MUNICIPALITY EMF

COMPATIBILITY OF EIA ACTIVITIES WITH GEOGRAPHIC AREAS

Notes:

- *Appropriate discretion needs to be applied when interpreting the tables to follow, within the context of the Environmental Management Framework (EMF) for the uMzinyathi District Municipality. The conditions associated with the use of these tables, as contained in the EMF's SEMP, need to be taken into consideration at the onset of the legal screening process.*
- *Take into consideration the exclusions that apply to urban areas when interpreting activities within the context of the Urban Areas EMZ.*
- *Refer to Section 24C of NEMA for the procedure for identifying the competent authority.*

Legend:

	High risk activity in the context of the EMZ - based on associated impacts, sensitivity of receiving environment and desired state. Activity potentially not supported.
BA	Activity can only be undertaken if authorised following the undertaking of at least a Basic Assessment and the requisite specialist studies that are relevant to the EMZ. Compliance with EMZs' Management Guidelines.
S&EIA	Activity can only be undertaken if authorised following the undertaking of a Scoping and EIA process as well as the requisite specialist studies that are relevant to the EMZ. Compliance with EMZs' Management Guidelines.
	Consider for exclusion from authorisation, with suitable motivation and site-specific appraisal of receiving environment. Subject to a separate legal process.
Acronyms:	<ul style="list-style-type: none"> • FPA – Formally Protected Areas • TB – Terrestrial Biodiversity • AB – Aquatic Biodiversity • A – Agriculture • H – Heritage • UA – Urban Areas



LISTING NOTICE 1 (GN NO. R983)

Activity no.	Activity description	Environmental Management Zones					
		FPA	TB	AB	A	H	UA
1.	The development of facilities or infrastructure for the generation of electricity from a renewable resource where- (i) the electricity output is more than 10 megawatts but less than 20 megawatts; or (ii) the output is 10 megawatts or less but the total extent of the facility covers an area in excess of 1 hectare; excluding where such development of facilities or infrastructure is for photovoltaic installations and occurs within an urban area.		BA		BA		<i>As per activity</i>
2.	The development and related operation of facilities or infrastructure for the generation of electricity from a non-renewable resource where- (i) the electricity output is more than 10 megawatts but less than 20 megawatts; or (ii) the output is 10 megawatts or less but the total extent of the facility covers an area in excess of 1 hectare.		BA		BA		BA
3.	The development and related operation of facilities or infrastructure for the slaughter of animals with a product throughput of- (i) poultry exceeding 50 poultry per day; (ii) reptiles, game and red meat exceeding 6 units per day; or (iii) fish, crustaceans and amphibians with a wet weight product throughput of 20 000 kg per annum.		BA		BA		BA
4.	The development and related operation of facilities or infrastructure for the concentration of animals for the purpose of commercial production in densities that exceed- (i) 20 square metres per large stock unit and more than 500 units per facility; (ii) 8 square meters per small stock unit and; a. more than 1 000 units per facility excluding pigs where (b) applies; or b. more than 250 pigs per facility excluding piglets that are not yet weaned; (iii) 30 square metres per crocodile at any level of production, excluding crocodiles younger than 6 months; (iv) 3 square metre per rabbit and more than 500 rabbits per facility; (v) 250 square metres per ostrich or emu and more than 50 ostriches or emus per facility.		S&EIA		BA		BA
5.	The development and related operation of facilities or infrastructure for the concentration of- (i) more than 1 000 poultry per facility situated within an urban area, excluding chicks younger than 20 days; (ii) more than 5 000 poultry per facility situated outside an urban area, excluding chicks younger than 20 days; (iii) more than 5000 chicks younger than 20 days per facility situated within an urban area; or (iv) more than 25000 chicks younger than 20 days per facility situated outside an urban area.		S&EIA		BA		<i>As per activity</i>
6.	The development and related operation of facilities, infrastructure or structures for aquaculture of- (i) finfish, crustaceans, reptiles or amphibians, where such facility, infrastructure or structures will have a production output exceeding 20 000 kg per annum (wet weight); (ii) molluscs and echinoderms, where such facility, infrastructure or structures will have a production output exceeding 30 000 kg per annum (wet weight); or		BA		BA		BA



Activity no.	Activity description	Environmental Management Zones					
		FPA	TB	AB	A	H	UA
	(iii) aquatic plants, where such facility, infrastructure or structures will have a production output exceeding 60 000 kg per annum (wet weight); excluding where the development of such facilities, infrastructure or structures is for purposes of sea-based cage culture in which case activity 7 in this Notice applies.						
7.	The development and related operation of facilities, infrastructure or structures for aquaculture of sea-based cage culture of finfish, crustaceans, reptiles, amphibians, molluscs, echinoderms and aquatic plants, where the facility, infrastructure or structures will have a production output exceeding 50 000 kg per annum (wet weight).						
8.	The development and related operation of hatcheries or agri-industrial facilities outside industrial complexes where the development footprint covers an area of 2 000 square metres or more.	👎	BA	👎	BA	👎	BA
9.	The development of infrastructure exceeding 1000 metres in length for the bulk transportation of water or storm water- (i) with an internal diameter of 0,36 metres or more; or (ii) with a peak throughput of 120 litres per second or more; excluding where- (a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve; or (b) where such development will occur within an urban area.	S&EIA	BA	BA	BA	BA	As per activity
10.	The development and related operation of infrastructure exceeding 1000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes – (i) with an internal diameter of 0,36 metres or more; or (ii) with a peak throughput of 120 litres per second or more; excluding where- (a) such infrastructure is for bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes inside a road reserve; or (b) where such development will occur within an urban area.	S&EIA	BA	BA	BA	BA	As per activity
11.	The development of facilities or infrastructure for the transmission and distribution of electricity- (i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts; or (ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more.	S&EIA	BA	BA	BA	BA	As per activity



Activity no.	Activity description	Environmental Management Zones					
		FPA	TB	AB	A	H	UA
12.	The development of- (i) canals exceeding 100 square metres in size; (ii) channels exceeding 100 square metres in size; (iii) bridges exceeding 100 square metres in size; (iv) dams, where the dam, including infrastructure and water surface area, exceeds 100 square metres in size; (v) weirs, where the weir, including infrastructure and water surface area, exceeds 100 square metres in size; (vi) bulk storm water outlet structures exceeding 100 square metres in size; (vii) marinas exceeding 100 square metres in size; (viii) jetties exceeding 100 square metres in size; (ix) slipways exceeding 100 square metres in size; (x) buildings exceeding 100 square metres in size; (xi) boardwalks exceeding 100 square metres in size; or (xii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs- (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; - excluding- (aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour; (bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies; (dd) where such development occurs within an urban area; or (ee) where such development occurs within existing roads or road reserves.	BA	BA	BA	BA	BA	<i>As per activity</i>
13.	The development of facilities or infrastructure for the off-stream storage of water, including dams and reservoirs, with a combined capacity of 50000 cubic metres or more, unless such storage falls within the ambit of activity 16 in Listing Notice 2 of 2014.	S&EIA	BA	BA	BA	BA	BA
14.	The development of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.	S&EIA	BA		BA	BA	BA
15.	The development of structures in the coastal public property where the development footprint is bigger than 50 square metres, excluding - (i) the development of structures within existing ports or harbours that will not increase the development footprint of the port or harbour; (ii) the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (iii) the development of temporary structures within the beach zone where such structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will						



Activity no.	Activity description	Environmental Management Zones					
		FPA	TB	AB	A	H	UA
	not be cleared; or (iv) activities listed in activity 14 in Listing Notice 2 of 2014, in which case that activity applies.						
16.	The development and related operation of facilities for the desalination of water with a design capacity to produce more than 100 cubic metres of treated water per day.						
17.	Development- (i) in the sea; (ii) in an estuary; (iii) within the littoral active zone; (iv) in front of a development setback; or (v) if no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater; in respect of- (a) fixed or floating jetties and slipways; (b) tidal pools; (c) embankments; (d) rock revetments or stabilising structures including stabilising walls; (e) buildings of 50 square metres or more; or (f) infrastructure with a development footprint of 50 square metres or more - but excluding- (aa) the development of infrastructure and structures within existing ports or harbours that will not increase the development footprint of the port or harbour; (bb) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (cc) the development of temporary infrastructure or structures where such structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared; or (dd) where such development occurs within an urban area.						
18.	The planting of vegetation or placing of any material on dunes or exposed sand surfaces of more than 10 square metres, within the littoral active zone, for the purpose of preventing the free movement of sand, erosion or accretion, excluding where - (i) the planting of vegetation or placement of material relates to restoration and maintenance of indigenous coastal vegetation undertaken in accordance with a maintenance management plan; or (ii) such planting of vegetation or placing of material will occur behind a development setback.						
19.	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from- (i) a watercourse; (ii) the seashore; or (iii) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater but excluding where such infilling, depositing, dredging, excavation, removal or moving- (a) will occur behind a development setback; (b) is for maintenance purposes undertaken in accordance with a maintenance management plan; or	BA	BA	BA	BA	BA	BA



Activity no.	Activity description	Environmental Management Zones					
		FPA	TB	AB	A	H	UA
	(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies.						
20.	Any activity including the operation of that activity which requires a prospecting right in terms of section 16 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource, including activities for which an exemption has been issued in terms of section 106 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002).	👎	BA	BA	BA	BA	BA
21.	Any activity including the operation of that activity which requires a mining permit in terms of section 27 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including associated infrastructure, structures and earthworks directly related to the extraction of a mineral resource, including activities for which an exemption has been issued in terms of section 106 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002).	👎	BA	BA	BA	BA	BA
22.	The decommissioning of any activity requiring - (i) a closure certificate in terms of section 43 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002); or (ii) a prospecting right, mining right, mining permit, production right or exploration right, where the throughput of the activity has reduced by 90% or more over a period of 5 years excluding where the competent authority has in writing agreed that such reduction in throughput does not constitute closure.	BA	BA	BA	BA	BA	BA
23.	The development of cemeteries of 2500 square metres or more in size.	👎	BA	👎	👎	BA	BA
24.	The development of- (i) a road for which an environmental authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010; or (ii) a road with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres; but excluding- (a) roads which are identified and included in activity 27 in Listing Notice 2 of 2014; or (b) roads where the entire road falls within an urban area.	BA	BA	BA	BA	BA	BA
25.	The development and related operation of facilities or infrastructure for the treatment of effluent, wastewater or sewage with a daily throughput capacity of more than 2000 cubic metres but less than 15000 cubic metres.	S&EIA	BA	👎	BA	BA	BA
26.	Residential, retail, recreational, tourism, commercial or institutional developments of 1000 square metres or more, on land previously used for mining or heavy industrial purposes; - excluding - (i) where such land has been remediated in terms of part 8 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; or (ii) where an environmental authorisation has been obtained for the decommissioning of such a mine or industry in terms of this Notice or any previous NEMA notice; or (iii) where a closure certificate has been issued in terms of section 43 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) for such land.	BA	BA	BA	BA	BA	BA



Activity no.	Activity description	Environmental Management Zones					
		FPA	TB	AB	A	H	UA
27.	The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for- (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.	S&EIA	BA		BA	BA	BA
28.	Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture or afforestation on or after 01 April 1998 and where such development: (i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.	BA	BA	BA	BA	BA	<i>As per activity</i>
29.	The release of genetically modified organisms into the environment, where assessment for such release is required by the Genetically Modified Organisms Act, 1997 (Act No. 15 of 1997) or the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004).	BA	BA	BA	BA	BA	BA
30.	Any process or activity identified in terms of section 53(1) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004).	BA	BA	BA	BA	BA	BA
31.	The decommissioning of existing facilities, structures or infrastructure for- (i) any development and related operation activity or activities listed in this Notice, Listing Notice 2 of 2014 or Listing Notice 3 of 2014; (ii) any expansion and related operation activity or activities listed in this Notice, Listing Notice 2 of 2014 or Listing Notice 3 of 2014; (iii) any development and related operation activity or activities and expansion and related operation activity or activities listed in this Notice, Listing Notice 2 of 2014 or Listing Notice 3 of 2014; (iv) any phased activity or activities for development and related operation activity or expansion or related operation activities listed in this Notice or Listing Notice 3 of 2014; or (v) any activity regardless the time the activity was commenced with, where such activity: (a) is similarly listed to an activity in (i), (ii), (iii), or (iv) above; and (b) is still in operation or development is still in progress; excluding where- (aa) activity 22 of this notice applies; or (bb) the decommissioning is covered by part 8 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies.	BA	BA	BA	BA	BA	BA
32.	The continuation of any development where the environmental authorisation has lapsed and where the continuation of the development, after the date the environmental authorisation has lapsed will meet the threshold of any activity or activities listed in this Notice, Listing Notice 2 of 2014, or Listing Notice 3 or Listing Notice 4 of 2014.	BA	BA	BA	BA	BA	BA
33.	The underground gasification of 300 kilograms or more coal per day, including any associated operation.	S&EIA	BA		BA	BA	BA



Activity no.	Activity description	Environmental Management Zones					
		FPA	TB	AB	A	H	UA
34.	The expansion or changes to existing facilities for any process or activity where such expansion or changes will result in the need for a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the release of emissions or pollution, excluding- (i) where the facility, process or activity is included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; or (ii) the expansion of or changes to existing facilities for the treatment of effluent, wastewater or sewage where the capacity will be increased by less than 15 000 cubic metres per day.	S&EIA	BA	BA	BA	BA	BA
35.	The expansion of residential, retail, recreational, tourism, commercial or institutional developments on land previously used for mining or heavy industrial purposes, where the increased development footprint will exceed 1000 square meters; excluding - (i) where such land has been remediated in terms of part 8 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; or (ii) where an environmental authorisation has been obtained for the decommissioning of such a mine or industry in terms of this Notice or any previous NEMA notice; or (iii) where a closure certificate has been issued in terms of section 43 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) for such land.	BA	BA	BA	BA	BA	BA
36.	The expansion of facilities or structures for the generation of electricity from a renewable resource where- (i) the electricity output will be increased by 10 megawatts or more, excluding where such expansion takes place on the original development footprint; or (ii) regardless the increased output of the facility, the development footprint will be expanded by 1 hectare or more; excluding where such expansion of facilities or structures is for photovoltaic installations and occurs within an urban area.	S&EIA	BA	BA	BA	BA	BA
37.	The expansion and related operation of facilities for the generation of electricity from a non-renewable resource where- (i) the electricity output will be increased by 10 megawatts or more, excluding where such expansion takes place on the original development footprint; or (ii) regardless the increased output of the facility, the development footprint will be expanded by 1 hectare or more.	S&EIA	BA	👎	BA	BA	BA
38.	The expansion and related operation of facilities for the slaughter of animals where the daily product throughput will be increased by more than- (i) 50 poultry; (ii) 6 units of reptiles, red meat and game; or (iii) 20 000 kg wet weight per annum of fish, crustaceans and amphibians	BA	BA	👎	BA	BA	BA
39.	The expansion and related operation of facilities for the concentration of animals for the purpose of commercial production in densities that will exceed- (i) 20 square metres per large stock unit, where the expansion will constitute more than 500 additional units;	S&EIA	BA	👎	BA	BA	BA



Activity no.	Activity description	Environmental Management Zones					
		FPA	TB	AB	A	H	UA
	(ii) 8 square meters per small stock unit, where the expansion will constitute more than; (a) 1 000 additional units per facility or more excluding pigs where (b) applies; or (b) 250 additional pigs, excluding piglets that are not yet weaned; (iii) 30 square metres per crocodile at any level of production where the expansion will constitute an increase in the level of production, excluding crocodiles younger than 6 months; (iv) 3 square metre per rabbit where the expansion will constitute more than 500 additional rabbits; or (v) 250 square metres per ostrich or emu where the expansion will constitute more than 50 additional ostriches or emus.						
40.	The expansion and related operation of facilities for the concentration of poultry, excluding chicks younger than 20 days, where the capacity of the facility will be increased by- (i) more than 1 000 poultry where the facility is situated within an urban area; or (ii) more than 5 000 poultry per facility situated outside an urban area.	S&EIA	BA	👎	BA	BA	BA
41.	The expansion and related operation of facilities, infrastructure or structures for aquaculture of- (i) finfish, crustaceans, reptiles or amphibians, where the annual production output of such facility, infrastructure or structures will be increased by 20 000 kg (wet weight) or more; (ii) molluscs and echinoderms where the annual production output of such facility, infrastructure or structures will be increased by 30 000 kg (wet weight) or more; or (iii) aquatic plants where the annual production output of such facility, infrastructure or structures will be increased by 60 000 kg (wet weight) or more; excluding where the expansion of facilities, infrastructure or structures is for purposes of sea-based cage culture in which case activity 42 in this Notice will apply.	BA	BA	BA	BA	BA	BA
42.	The expansion and related operation of facilities, infrastructure or structures for aquaculture of sea-based cage culture of finfish, crustaceans, reptiles, amphibians, molluscs, echinoderms and aquatic plants where the annual production output of such facility, infrastructure or structures will be increased by 50 000 kg (wet weight) or more.						
43.	The expansion and related operation of hatcheries or agri-industrial facilities outside industrial complexes, where the development footprint of the hatcheries or agri-industrial facilities will be increased by 2 000 square metres or more.	S&EIA	BA	👎	BA	BA	BA
44.	The expansion of cemeteries by 2500 square metres or more.	S&EIA	BA	👎	BA	BA	BA
45.	The expansion of infrastructure for the bulk transportation of water or storm water where the existing infrastructure- (i) has an internal diameter of 0,36 metres or more; or (ii) has a peak throughput of 120 litres per second or more; and (a) where the facility or infrastructure is expanded by more than 1000 metres in length; or (b) where the throughput capacity of the facility or infrastructure will be increased by 10% or more; excluding where such expansion- (aa) relates to transportation of water or storm water within a road reserve; or (bb) will occur within an urban area.	BA	BA	BA	BA	BA	<i>As per activity</i>



Activity no.	Activity description	Environmental Management Zones					
		FPA	TB	AB	A	H	UA
46.	The expansion and related operation of infrastructure for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes where the existing infrastructure- (i) has an internal diameter of 0,36 metres or more; or (ii) has a peak throughput of 120 litres per second or more; and (a) where the facility or infrastructure is expanded by more than 1000 metres in length; or (b) where the throughput capacity of the facility or infrastructure will be increased by 10% or more; excluding where such expansion- (aa) relates to transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes within a road reserve; or (bb) will occur within an urban area.	BA	BA	BA	BA	BA	As per activity
47.	The expansion of facilities or infrastructure for the transmission and distribution of electricity where the expanded capacity will exceed 275 kilovolts and the development footprint will increase.	S&EIA	BA	BA	BA	BA	BA
48.	The expansion of - (i) canals where the canal is expanded by 100 square metres or more in size ; (ii) channels where the channel is expanded by 100 square metres or more in size ; (iii) bridges where the bridge is expanded by 100 square metres or more in size; (iv) dams, where the dam, including infrastructure and water surface area, is expanded by 100 square metres or more in size; (v) weirs, where the weir, including infrastructure and water surface area, is expanded by 100 square metres or more in size; (vi) bulk storm water outlet structures where the bulk storm water outlet structure is expanded by 100 square metres or more in size; or (vii) marinas where the marina is expanded by 100 square metres or more in size; where such expansion or expansion and related operation occurs- (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; excluding- (aa) the expansion of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour; (bb) where such expansion activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies; (dd) where such expansion occurs within an urban area; or (ee) where such expansion occurs within existing roads or road reserves.	BA	BA	BA	BA	BA	As per activity
49.	The expansion of - (i) jetties by more than 100 square metres; (ii) slipways by more than 100 square metres;	BA	BA	BA	BA	BA	As per activity



Activity no.	Activity description	Environmental Management Zones					
		FPA	TB	AB	A	H	UA
	(iii) buildings by more than 100 square metres; (iv) boardwalks by more than 100 square metres; or (v) infrastructure or structures where the physical footprint is expanded by 100 square metres or more; where such expansion or expansion and related operation occurs- (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; excluding- (aa) the expansion of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour; (bb) where such expansion activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies; (dd) where such expansion occurs within an urban area; or (ee) where such expansion occurs within existing roads or road reserves.						
50.	The expansion of facilities or infrastructure for the off-stream storage of water, including dams and reservoirs, where the combined capacity will be increased by 50000 cubic metres or more.	S&EIA	BA	BA	BA	BA	BA
51.	The expansion of facilities for the storage, or storage and handling, of a dangerous good, where the capacity of such storage facility will be expanded by more than 80 cubic metres.	S&EIA	BA		BA	BA	BA
52.	The expansion of structures in the coastal public property where the development footprint will be increased by more than 50 square metres, excluding such expansions within existing ports or harbours where there will be no increase in the development footprint of the port or harbour and excluding activities listed in activity 23 in Listing Notice 3 of 2014, in which case that activity applies.						
53.	The expansion and related operation of facilities for the desalination of water where the design capacity will be expanded to produce an additional 100 cubic metres or more of treated water per day.						
54.	The expansion of facilities - (i) in the sea; (ii) in an estuary; (iii) within the littoral active zone; (iv) in front of a development setback; or (v) if no development setback exists, within a distance of 100 metres inland of the highwater mark of the sea or an estuary, whichever is the greater; in respect of- (a) fixed or floating jetties and slipways; (b) tidal pools; (c) embankments; (d) rock revetments or stabilising structures including stabilising walls; (e) buildings where the building is expanded by 50 square metres or more; or						



Activity no.	Activity description	Environmental Management Zones					
		FPA	TB	AB	A	H	UA
	(f) infrastructure where the development footprint is expanded by 50 square metres or more, but excluding- (aa) the expansion of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour; or (bb) where such expansion occurs within an urban area.						
55.	Expansion- (i) in the sea; (ii) in an estuary; (iii) within the littoral active zone; (iv) in front of a development setback; or (v) if no development setback exists, within a distance of 100 metres inland of the highwater mark of the sea or an estuary, whichever is the greater; in respect of- (a) facilities associated with the arrival and departure of vessels and the handling of cargo; (b) piers; (c) inter- and sub-tidal structures for entrapment of sand; (d) breakwater structures; (e) coastal marinas; (f) coastal harbours or ports; (g) tunnels; or (h) underwater channels; but excluding the expansion of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour.						
56.	The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre- (i) where the existing reserve is wider than 13,5 meters; or (ii) where no reserve exists, where the existing road is wider than 8 metres; excluding where widening or lengthening occur inside urban areas.	BA	BA	BA	BA	BA	<i>As per activity</i>
57.	The expansion and related operation of facilities or infrastructure for the treatment of effluent, wastewater or sewage where the capacity will be increased by 15000 cubic metres or more per day and the development footprint will increase by 1000 square meters or more.	S&EIA	BA	👎	BA	BA	BA
58.	The increase of the amount of coal gasified underground, where any such increase exceeds 300 kg per day, including any associated operation.	👎	BA	👎	BA	BA	BA
59.	The expansion and related operation of facilities or infrastructure for the refining, extraction or processing of gas, oil or petroleum products where the installed capacity of the facility will be increased by 50 cubic metres or more per day, excluding facilities for the refining, extraction or processing of gas from landfill sites.	👎	BA	👎	BA	BA	BA
60.	The expansion and related operation of facilities or infrastructure for the bulk transportation of dangerous goods- (i) in gas form, outside an industrial complex, by an increased throughput capacity of 700 tons or more	👎	BA	BA	BA	BA	BA



Activity no.	Activity description	Environmental Management Zones					
		FPA	TB	AB	A	H	UA
	per day; (ii) in liquid form, outside an industrial complex or zone, by an increased throughput capacity of 50 cubic metres or more per day; or (iii) in solid form, outside an industrial complex or zone, by an increased throughput capacity of 50 tons or more per day.						
61.	The expansion of airports where the development footprint will be increased.	S&EIA	BA	BA	BA	BA	BA
62.	The expansion of facilities or infrastructure for marine telecommunication where there will be an increased development footprint.						
63.	The expansion of facilities or infrastructure for the transfer of water from and to or between any combination of the following- (i) water catchments; (ii) water treatment works; or (iii) impoundments; where the capacity will be increased by 50 000 cubic metres or more per day, but excluding water treatment works where water is treated for drinking purposes.	S&EIA	BA	BA	BA	BA	BA
64.	The expansion of railway lines, stations or shunting yards where there will be an increased development footprint, excluding- (i) railway lines, shunting yards and railway stations in industrial complexes or zones; (ii) underground railway lines in mines; or (iii) additional railway lines within the railway line reserve.	S&EIA	BA	BA	BA	BA	BA
65.	The expansion of an island, anchored platform or any other permanent structure on or along the sea bed, where the expansion will constitute an increased development footprint.						
66.	The expansion of a dam where- (i) the highest part of the dam wall, as measured from the outside toe of the wall to the highest part of the wall, was originally 5 metres or higher and where the height of the wall is increased by 2,5 metres or more; or (ii) where the high-water mark of the dam will be increased with 10 hectares or more.	S&EIA	BA	BA	BA	BA	BA
67.	Phased activities.	BA	BA	BA	BA	BA	BA



LISTING NOTICE 2 (GN NO. R984)

Activity no.	Activity description	Environmental Management Zones					
		FPA	TB	AB	A	H	UA
1.	The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more, excluding where such development of facilities or infrastructure is for photovoltaic installations and occurs within an urban area.	👎	S&EIA	👎	S&EIA	👎	As per activity
2.	The development and related operation of facilities or infrastructure for the generation of electricity from a non-renewable resource where the electricity output is 20 megawatts or more.	👎	S&EIA	👎	S&EIA	👎	S&EIA
3.	The development and related operation of facilities or infrastructure for nuclear reaction including energy generation, the production, enrichment, processing, reprocessing, storage or disposal of nuclear fuels, radioactive products, nuclear waste or radioactive waste.	👎	S&EIA	👎	👎	👎	S&EIA
4.	The development of facilities or infrastructure, for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 cubic metres.	👎	S&EIA	👎	S&EIA	👎	S&EIA
5.	The development and related operation of facilities or infrastructure for the refining, extraction or processing of gas, oil or petroleum products with an installed capacity of 50 cubic metres or more per day, excluding - (i) facilities for the refining, extraction or processing of gas from landfill sites; or (ii) the primary processing of a petroleum resource in which case activity 22 in this Notice applies.	👎	S&EIA	👎	S&EIA	S&EIA	S&EIA
6.	The development of facilities or infrastructure for any process or activity which requires a permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent, excluding (i) activities which are identified and included in Listing Notice 1 of 2014; (ii) activities which are included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; or (iii) the development of facilities or infrastructure for the treatment of effluent, wastewater or sewage where such facilities have a daily throughput capacity of 2000 cubic metres or above does not apply to the less.	👎	S&EIA	👎	S&EIA	S&EIA	S&EIA
7.	The development and related operation of facilities or infrastructure for the bulk transportation of dangerous goods - (i) in gas form, outside an industrial complex, using pipelines, exceeding 1000 metres in length, with a throughput capacity of more than 700 tons per day; (ii) in liquid form, outside an industrial complex, using pipelines, exceeding 1000 metres in length, with a throughput capacity of more than 50 cubic metres per day; or (iii) in solid form, outside an industrial complex, using funiculars or conveyors with a throughput capacity of more than 50 tons day.	👎	S&EIA	S&EIA	S&EIA	S&EIA	S&EIA
8.	The construction of (i) airports, or (ii) runways or aircraft landing strips longer than 1,4 kilometres.	👎	S&EIA	👎	S&EIA	S&EIA	S&EIA
9.	The construction of facilities or infrastructure for the transmission and distribution of electricity with a capacity of 275 kilovolts or more, outside an urban area or industrial complex.	👎	S&EIA	S&EIA	S&EIA	S&EIA	As per activity
10.	The construction of facilities or infrastructure for marine telecommunication.						
11.	The development of facilities or infrastructure for the transfer of 50 000 cubic metres or more water per day, from and to or between any combination of the following - (i) water catchments; (ii) water treatment works; or	👎	S&EIA	S&EIA	S&EIA	S&EIA	S&EIA



Activity no.	Activity description	Environmental Management Zones					
		FPA	TB	AB	A	H	UA
	(iii) impoundments; excluding treatment works where water is to be treated for drinking purposes.						
12.	The development of railway lines, stations or shunting yards excluding - (i) railway lines, shunting yards and railway stations in industrial complexes or zones; (ii) underground railway lines in a mining area; or (iii) additional railway lines within the railway line reserve.	👎	S&EIA	S&EIA	S&EIA	S&EIA	S&EIA
13.	The physical alteration of virgin soil to agriculture, or afforestation for the purposes of commercial tree, timber or wood production of 100 hectares or more.	👎	S&EIA	S&EIA	S&EIA	S&EIA	S&EIA
14.	The development and related operation of- (i) an island; (ii) anchored platform; or (iii) any other structure or infrastructure on, below or along the sea bed; excluding - (a) development of facilities, infrastructure or structures for aquaculture purposes; or (b) the development of temporary structures or infrastructure where such structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared.						
15.	The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for- (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.	S&EIA	S&EIA	👎	S&EIA	S&EIA	S&EIA
16.	The development of a dam where the highest part of the dam wall, as measured from the outside toe of the wall to the highest part of the wall, is 5 metres or higher or where the highwater mark of the dam covers an area of 10 hectares or more.	👎	S&EIA	S&EIA	S&EIA	S&EIA	S&EIA
17.	Any activity including the operation of that activity which requires a mining right as contemplated in section 22 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including associated infrastructure, structures and earthworks, directly related to the extraction of a mineral resource, including activities for which an exemption has been issued in terms of section 106 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002).	👎	S&EIA	👎	S&EIA	S&EIA	S&EIA
18.	Any activity including the operation of that activity which requires an exploration right as contemplated in section 79 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including associated infrastructure, structures and earthworks.	👎	S&EIA	👎	S&EIA	S&EIA	S&EIA
19.	The removal and disposal of minerals contemplated in terms of section 20 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource, including activities for which an exemption has been issued in terms of section 106 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002).	👎	S&EIA	👎	S&EIA	S&EIA	S&EIA
20.	Any activity including the operation of that activity which requires a production right as contemplated in section 83 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including associated infrastructure, structures and earthworks, directly related to the primary processing of a petroleum resource.	👎	S&EIA	👎	S&EIA	S&EIA	S&EIA
21.	Any activity including the operation of that activity associated with the primary processing of a mineral resource including winning, reduction, extraction, classifying, concentrating, crushing, screening and washing but excluding the smelting, beneficiation, refining, calcining or gasification of the mineral resource in which case activity 6 in this Notice applies.	👎	S&EIA	👎	S&EIA	S&EIA	S&EIA
22.	Any activity including the operation of that activity associated with the primary processing of a petroleum resource including winning, extraction, classifying, concentrating, water removal, but excluding the refining of gas, oil or petroleum products in	👎	S&EIA	👎	S&EIA	S&EIA	S&EIA



Activity no.	Activity description	Environmental Management Zones					
		FPA	TB	AB	A	H	UA
	which case activity 5 in this Notice applies.						
23.	The reclamation of an island or parts of the sea.						
24.	The extraction or removal of peat or peat soils, including the disturbance of vegetation or soils in anticipation of the extraction or removal of peat or peat soils, but excluding where such extraction or removal is for the rehabilitation of wetlands in accordance with a maintenance management plan.	👎	S&EIA	S&EIA	S&EIA	S&EIA	S&EIA
25.	The development and related operation of facilities or infrastructure for the treatment of effluent, wastewater or sewage with a daily throughput capacity of 15000 cubic metres or more.	👎	S&EIA	👎	S&EIA	👎	S&EIA
26.	Development-- (i) in the sea; (ii) in an estuary; (iii) within the littoral active zone; (iv) in front of a development setback; or (v) if no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater; in respect of - (a) facilities associated with the arrival and departure of vessels and the handling of cargo; (b) piers; (c) inter- and sub-tidal structures for entrapment of sand; (d) breakwater structures; (e) coastal marinas; (f) coastal harbours or ports;						
27.	The development of - (i) a national road as defined in section 40 of the South African National Roads Agency Limited and National Roads Act, 1998 (Act No. 7 of 1998); (ii) a road administered by a provincial authority; (iii) a road with a reserve wider than 30 metres; or (iv) a road catering for more than one lane of traffic in both directions; but excluding the development and related operation of a road for which an environmental authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010, in which case activity 24 in Listing Notice 1 of 2014 applies.	👎	S&EIA	S&EIA	S&EIA	S&EIA	S&EIA
28.	Commencing of an activity, which requires an atmospheric emission license in terms of section 21 of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), excluding - (i) activities which are identified and included in Listing Notice 1 of 2014; (ii) activities which are included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; or (iii) the development of facilities or infrastructure for the treatment of effluent, wastewater or sewage where such facilities have a daily throughput capacity of 2000 cubic metres or less.	👎	S&EIA	👎	S&EIA	S&EIA	S&EIA
29.	The expansion and related operation of facilities for nuclear reaction including energy generation, the production, enrichment, processing, reprocessing, storage or disposal of nuclear fuels, radioactive products, nuclear waste or radioactive waste	👎	S&EIA	👎	👎	S&EIA	S&EIA



LISTING NOTICE 3 (GN NO. R985)

Activity no.	Activity description	Geographical areas based on environmental attributes	UDM EMF Requirements
1.	The development of billboards exceeding 18 square metres in size outside urban areas, mining areas or industrial complexes.	(d) In KwaZulu-Natal: i. Trans-frontier protected areas managed under international conventions; ii. Community Conservation Areas; iii. Biodiversity Stewardship Programme Biodiversity Agreement areas; iv. A protected area identified in terms of NEMPAA, excluding conservancies; v. World Heritage Sites; vi. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; vii. Sites or areas identified in terms of an International Convention; viii. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional ix. Core areas in biosphere reserves; x. In an estuarine functional zone; xi. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, or zoned for a conservation purpose; xii. Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve; or xiii. Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined.	Unchanged
2.	The development of reservoirs for bulk water supply with a capacity of more than 250 cubic metres.	(d) In KwaZulu-Natal: i. Trans-frontier protected areas managed under international conventions; ii. Community Conservation Areas; iii. Biodiversity Stewardship Programme Biodiversity Agreement areas; iv. World Heritage Sites; v. In an estuarine functional zone; vi. In a protected area identified in terms of NEMPAA, excluding conservancies; vii. Sites or areas identified in terms of an International Convention; viii. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; ix. Core areas in biosphere reserves; x. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, or zoned for a conservation purpose; xi. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; xii. Outside urban areas: (aa) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve; or (bb) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or xiii. In urban areas: (aa) Areas zoned for use as public open space;	BA – also for Agriculture EMZ (if earmarked area is not transformed)



Activity no.	Activity description	Geographical areas based on environmental attributes	UDM EMF Requirements
		(bb) Areas seawards of the development setback line or within 100 metres from the high-water mark of the sea if no such development setback line is determined; or (cc) Within urban protected areas.	
3.	The development of masts or towers of any material or type used for telecommunication broadcasting or radio transmission purposes where the mast or tower- (a) is to be placed on a site not previously used for this purpose; and (b) will exceed 15 metres in height but excluding attachments to existing buildings and masts on rooftops.	(d) In KwaZulu-Natal: i. In an estuarine functional zone; ii. Trans-frontier protected areas managed under international conventions; iii. Community Conservation Areas; iv. World Heritage Sites; v. Biodiversity Stewardship Programme Biodiversity Agreement areas; vi. A protected area identified in terms of NEMPAA, excluding conservancies; vii. Sites or areas identified in terms of an International Convention; viii. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; ix. Core areas in biosphere reserves; x. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; xi. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; xii. Outside urban areas: (aa) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve; or (bb) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or xiii. In urban areas: (aa) Areas seawards of the development setback line or within 100 metres from the high-water mark of the sea if no such development setback line is determined; (bb) Within urban protected areas; (cc) Areas zoned for use as public open space; or (dd) Areas within 1 kilometre from protected areas identified in terms of NEMPAA .	Unchanged
4.	The development of a road wider than 4 metres with a reserve less than 13,5 metres.	(d) In KwaZulu-Natal: i. In an estuarine functional zone; ii. Trans-frontier protected areas managed under international conventions; iii. Community Conservation Areas; iv. Biodiversity Stewardship Programme Biodiversity Agreement areas; v. World Heritage Sites; vi. A protected area identified in terms of NEMPAA; vii. Sites or areas identified in terms of an International Convention; viii. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; ix. Core areas in biosphere reserves; x. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; xi. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;	BA – also for Agriculture EMZ (if earmarked area is not transformed)



Activity no.	Activity description	Geographical areas based on environmental attributes	UDM EMF Requirements
		xii. Outside urban areas: (aa) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve; or (bb) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or xiii. In urban areas: (aa) Areas zoned for use as public open space; (bb) Seawards of the development setback line or within 100 metres from the high-water mark of the sea if no such development setback line is determined; or (cc) Within urban protected areas.	
5.	The development of resorts, lodges, hotels and tourism or hospitality facilities that sleep less than 15 people.	(a) A protected area identified in terms of the NEMPAA. (b) Outside urban areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve; (b) Outside urban areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve. (f) KwaZulu-Natal: i. Trans-frontier protected areas managed under international conventions; ii. Community Conservation Areas; iii. Biodiversity Stewardship Programme Biodiversity Agreement areas; iv. Provincial Protected Area Expansion Strategy Focus areas; v. In an estuarine functional zone; vi. World Heritage Sites; vii. A protected area identified in terms of NEMPAA; viii. Sites or areas identified in terms of an International Convention; ix. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; x. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; xi. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; xii. Outside urban areas: (aa) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or (bb) Areas within 100 metres of a watercourse or wetland; or xiii. In urban areas: (aa) Areas zoned for use as public open space; or (bb) Areas seawards of the development setback line or within 100m from the high-water mark of the sea if no such development setback line is determined.	Unchanged
6.	The development of resorts, lodges, hotels and tourism or hospitality facilities that sleeps 15 people or more.	(d) In KwaZulu-Natal: i. In an estuarine functional zone; ii. Trans-frontier protected areas managed under international conventions; iii. Community Conservation Areas;	Unchanged



Activity no.	Activity description	Geographical areas based on environmental attributes	UDM EMF Requirements
		iv. Biodiversity Stewardship Programme Biodiversity Agreement areas; v. A protected area identified in terms of NEMPAA, excluding conservancies; vi. Sites or areas identified in terms of an International Convention; vii. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; viii. Core areas in biosphere reserves; ix. World Heritage Sites; x. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; xi. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; xii. Outside urban areas: (aa) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve; (bb) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or (cc) Areas within 100 metres from the edge of a watercourse; or xiii. In urban areas: (aa) Areas zoned for use as public open space; (bb) Areas seawards of the development setback line or within 100m from the high-water mark of the sea if no such development setback line is determined; or (cc) Areas within 500 metres from protected areas identified in terms of NEMPAA.	
7.	The development of aircraft landing strips and runways 1.4 kilometres and shorter.	(d) KwaZulu-Natal: i. In an estuarine functional zone; ii. Community Conservation Areas; iii. Biodiversity Stewardship Programme Biodiversity Agreement areas; iv. A protected area identified in terms of NEMPAA, excluding conservancies; v. World Heritage Sites; vi. Sites or areas identified in terms of an International Convention; vii. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; viii. Core areas in biosphere reserves; ix. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; x. Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core of a biosphere reserve; xi. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; xii. Outside urban areas: (aa) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or (bb) Areas within 100 metres from the edge of a watercourse; or xiii. In urban areas: (aa) Areas zoned for use as public open space; or	BA – also for Agriculture EMZ (if earmarked area is not transformed)



Activity no.	Activity description	Geographical areas based on environmental attributes	UDM EMF Requirements
		(bb) Areas seawards of the development setback line or within 100m high-water mark of the sea if no such development setback line is determined.	
8.	The development and related operation of above ground cableways and funiculars.	(c) In KwaZulu-Natal: i. All areas outside urban areas; or ii. In urban areas: (aa) In an estuarine functional zone; (bb) A protected area identified in terms of NEMPAA, excluding conservancies; (cc) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; (ee) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; (ff) Areas zoned for use as public open space; (gg) Areas on the watercourse side of the development setback line or within 100 metres from the edge of a watercourse where no such setback line has been determined.; (hh) Areas seawards of the development setback line or within 100 metres from the high-water mark of the sea if no such development setback line is determined; or Areas within 500 metres from protected areas identified in terms of NEMPAA.	Unchanged
9.	The development and related operation of zip- lines or foefieslides exceeding 100 metres in length.	(c) In KwaZulu-Natal: i. All areas outside urban areas; or ii. In urban areas: (aa) A protected area identified in terms of NEMPAA, excluding conservancies; (bb) In an estuarine functional zone; (cc) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; (ee) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; (f-f) Areas zoned for use as public open space; (gg) Areas on the watercourse side of the development setback line or within 100 metres from the edge of a watercourse where no such setback line has been determined; (hh) Areas seawards of the development setback line or within 100 metres from the high-water mark of the sea if no such development setback line is	Unchanged
10.	The construction of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres.	(d) In KwaZulu-Natal: i. In an estuarine functional zone; ii. Trans-frontier protected areas managed under international conventions; iii. Community Conservation Areas; iv. Biodiversity Stewardship Programme Biodiversity Agreement areas; v. World Heritage Sites; vi. Within 500 metres of an estuarine functional zone; vii. A protected area identified in terms of NEMPAA, excluding conservancies; viii. Sites or areas identified in terms of an International Convention;	BA – also for Agriculture EMZ (if earmarked area is not transformed)



Activity no.	Activity description	Geographical areas based on environmental attributes	UDM EMF Requirements
		ix. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; x. Core areas in biosphere reserves; xi. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; xii. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; xiii. Outside urban areas: (aa) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve; (bb) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or (cc) Areas within 100 metres from the edge of a watercourse; or xiv. In urban areas: (aa) Areas zoned for use as public open space; or (bb) Areas seawards of the development setback line or within 100 metres from the high-water mark of the sea if no such development setback line is determined.	
11.	The development of tracks or routes for the testing, recreational use or outdoor racing of motor powered vehicles excluding conversion of existing tracks or routes for the testing, recreational use or	(d) In KwaZulu-Natal: i. In an estuarine functional zone; ii. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; iii. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; iv. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; v. Outside urban areas: (aa) Within areas of indigenous vegetation; or (bb) In areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or In urban areas: (aa) Areas seawards of the development setback line or within 100 metres from the high-water mark of the sea if no such development setback line is determined; (bb) Areas within 32 metres from the edge of a watercourse; or (cc) Areas zoned for use as public open space.	BA – also for Agriculture EMZ (if earmarked area is not transformed)
12.	The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.	(b) In KwaZulu-Natal: i. Trans-frontier protected areas managed under international conventions; ii. Community Conservation Areas; iii. Biodiversity Stewardship Programme Biodiversity Agreement areas; iv. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004; v. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; vi. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone,	BA – also for Agriculture EMZ (if earmarked area is not transformed)



Activity no.	Activity description	Geographical areas based on environmental attributes	UDM EMF Requirements
		whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas; vii. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; viii. A protected area identified in terms of NEMPAA, excluding conservancies; ix. World Heritage Sites; x. Sites or areas identified in terms of an International Convention; xi. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; xii. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; or xiii. In an estuarine functional zone.	
13.	The development and related operation of facilities of any size for any form of aquaculture.	(c) In KwaZulu-Natal: i. Trans-frontier protected areas managed under international conventions; ii. Community Conservation Areas; iii. Biodiversity Stewardship Programme Biodiversity Agreement areas; iv. In an estuarine functional zone; v. In a Protected Area identified in the NEMPAA; vi. World Heritage Sites; vii. Areas on the watercourse side of the development setback line or within 100 metres from the edge of a watercourse where no such setback line has been determined; viii. Sites or areas identified in terms of an International Convention; ix. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; x. Core areas in biosphere reserves; xi. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; or xii. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority.	BA – also for Agriculture EMZ (if earmarked area is not transformed)
14.	The development of- (i) canals exceeding 10 square metres in size ; (ii) channels exceeding 10 square metres in size; (iii) bridges exceeding 10 square metres in size; (iv) dams, where the dam, including infrastructure and water surface area exceeds 10 square metres in size; (v) weirs, where the weir, including infrastructure and water surface area exceeds 10 square metres in size;	(d) In KwaZulu-Natal: i. In an estuarine functional zone; ii. Community Conservation Areas; iii. Biodiversity Stewardship Programme Biodiversity Agreement areas; iv. A protected area identified in terms of NEMPAA, excluding conservancies; v. World Heritage Sites; vi. Sites or areas identified in terms of an International Convention; vii. Critical biodiversity areas or ecological support areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; viii. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; ix. Core areas in biosphere reserves; x. Outside urban areas: (aa) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve; or	Unchanged



Activity no.	Activity description	Geographical areas based on environmental attributes	UDM EMF Requirements
	<p>(vi) bulk storm water outlet structures exceeding 10 square metres in size;</p> <p>(vii) marinas exceeding 10 square metres in size;</p> <p>(viii) jetties exceeding 10 square metres in size;</p> <p>(ix) slipways exceeding 10 square metres in size;</p> <p>(x) buildings exceeding 10 square metres in size;</p> <p>(xi) boardwalks exceeding 10 square metres in size; or</p> <p>(xii) infrastructure or structures with a physical footprint of 10 square metres or more;</p> <p>where such development occurs</p> <p>(a) within a watercourse;</p> <p>(b) in front of a development setback; or</p> <p>(c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</p> <p>excluding the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour.</p>	<p>(bb) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or</p> <p>xi. In urban areas:</p> <p>(aa) Areas zoned for use as public open space;</p> <p>(bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, zoned for a conservation purpose; or</p> <p>(cc) Areas seawards of the development setback line or within 100 metres from the high-water mark of the sea if no such development setback line is determined.</p>	
15.	<p>The transformation of land bigger than 1000 square metres in size, to residential, retail, commercial, industrial or institutional use, where, such land was zoned open space, conservation or had an equivalent zoning, on or after 02 August 2010.</p>	<p><i>No applicable to KZN.</i></p>	<p>N/A</p>
16.	<p>The expansion of reservoirs for bulk water supply where the capacity will be increased by more than 250 cubic metres.</p>	<p>(c) In KwaZulu-Natal:</p> <p>i. Trans-frontier protected areas managed under international conventions;</p> <p>ii. Community Conservation Areas;</p> <p>iii. Biodiversity Stewardship Programme Biodiversity Agreement areas;</p> <p>iv. World Heritage Sites;</p> <p>v. In an estuarine functional zone;</p> <p>vi. In a protected area identified in terms of NEMPAA, excluding conservancies;</p> <p>vii. Sites or areas identified in terms of an International Convention;</p>	<p>Unchanged</p>



Activity no.	Activity description	Geographical areas based on environmental attributes	UDM EMF Requirements
		<ul style="list-style-type: none"> viii. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; ix. Core areas in biosphere reserves; x. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, or zoned for a conservation purpose; xi. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; xii. Outside urban areas: <ul style="list-style-type: none"> (aa) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve; or (bb) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or xiii. In urban areas: <ul style="list-style-type: none"> (aa) Areas zoned for use as public open space; (bb) Areas seawards of the development setback line or within 100 meters from the high-water mark of the sea if no such development setback line is determined; or (cc) Within urban protected areas. 	
17.	The expansion of a resort, lodge, hotel and tourism or hospitality facilities where the development footprint will be expanded.	<ul style="list-style-type: none"> (d) In KwaZulu-Natal: <ul style="list-style-type: none"> i. Trans-frontier protected areas managed under international conventions; ii. Community Conservation Areas; iii. Biodiversity Stewardship Programme Biodiversity Agreement areas; iv. In an estuarine functional zone; v. A protected area identified in terms of NEMPAA, excluding conservancies; vi. Sites or areas identified in terms of an International Convention; vii. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; viii. Core areas in biosphere reserves; ix. World Heritage Sites; x. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; xi. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; xii. Outside urban areas: <ul style="list-style-type: none"> (aa) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve; (bb) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or (cc) Areas within 100 metres from the edge of a watercourse; or xiii. In urban areas: <ul style="list-style-type: none"> (aa) Areas zoned for use as public open space; (bb) Areas seawards of the development setback line or within 100m from the high-water mark of the sea if no such development setback line is determined; or (cc) Areas within 500 metres from protected areas identified in terms of NEMPAA. 	BA – also for Agriculture EMZ (if earmarked area is not transformed)



Activity no.	Activity description	Geographical areas based on environmental attributes	UDM EMF Requirements
18.	The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.	<p>(d) In KwaZulu-Natal:</p> <ul style="list-style-type: none"> i. Trans-frontier protected areas managed under international conventions; ii. Community Conservation Areas; iii. Biodiversity Stewardship Programme Biodiversity Agreement areas; iv. World Heritage Sites; v. In an estuarine functional zone; vi. A protected area identified in terms of NEMPAA; vii. Sites or areas identified in terms of an International Convention; viii. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; ix. Core areas in biosphere reserves; x. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; xi. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of - the Act and as adopted by the competent authority; xii. Outside urban areas: <ul style="list-style-type: none"> (aa) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve; or (bb) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or xiii. In urban areas: <ul style="list-style-type: none"> (aa) Areas zoned for use as public open space; (bb) Seawards of the development setback line or within 100 metres from the high-water mark of the sea if no such development setback line is determined; or (cc) Within urban protected areas. 	BA – also for Agriculture EMZ (if earmarked area is not transformed)
19.	The expansion of runways or aircraft landing strips where the expanded runways or aircraft landing strips will be longer than 1,4 kilometres in length.	<p>(d) In KwaZulu-Natal:</p> <ul style="list-style-type: none"> i. Community Conservation Areas; ii. Biodiversity Stewardship Programme Biodiversity Agreement areas; iii. In an estuarine functional zone; iv. A protected area identified in terms of NEMPAA, excluding conservancies; v. World Heritage Sites; vi. Sites or areas identified in terms of an International Convention; vii. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; viii. Core areas in biosphere reserves; ix. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; x. Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core of a biosphere reserve; xi. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; xii. Outside urban areas: <ul style="list-style-type: none"> (aa) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or 	Unchanged



Activity no.	Activity description	Geographical areas based on environmental attributes	UDM EMF Requirements
		(bb) Areas within 100 metres from the edge of a watercourse; or xiii. In urban areas: (aa) Areas zoned for use as public open space; or (bb) Areas seawards of the development setback line or within 100m high-water mark of the sea if no such development setback line is determined.	
20.	The expansion and related operation of above ground cableways and funiculars where the development footprint will be increased.	(d) In KwaZulu-Natal: i. All areas outside urban areas; or ii. In urban areas: (aa) In an estuarine functional zone; (bb) A protected area identified in terms of NEMPAA, excluding conservancies; (cc) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; (ee) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; (ff) Areas zoned for use as public open space; (gg) Areas on the watercourse side of the development setback line or within 100 metres from the edge of a watercourse where no such setback line has been determined; (hh) Areas seawards of the development setback line or within 100 metres from the high-water mark of the sea if no such development setback line is determined; or (ii) Areas within 500 metres from protected areas identified in terms of NEMPAA.	Unchanged
21.	The expansion of tracks or routes for the testing, recreational use or outdoor racing of motor powered vehicles excluding conversion of existing tracks or routes for the testing, recreational use or outdoor racing of motor powered vehicles, where the development footprint will be expanded.	(d) In KwaZulu-Natal: i. In an estuarine functional zone; ii. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; iii. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; iv. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; v. Outside urban areas: (aa) Within areas of indigenous vegetation; or (bb) In areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or vi. In urban areas: (aa) In areas seawards of the development setback line or within 100 metres from the high-water mark of the sea if no such development setback line is determined; (bb) Areas within 32 metres from the edge of a watercourse; or (cc) Areas zoned for use as public open space.	Unchanged
22.	The expansion of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage facilities will be expanded by 30 cubic metres	(d) In KwaZulu-Natal: i. Trans-frontier protected areas managed under international conventions; ii. Community Conservation Areas; iii. Biodiversity Stewardship Programme Biodiversity Agreement areas; iv. World Heritage Sites;	Unchanged



Activity no.	Activity description	Geographical areas based on environmental attributes	UDM EMF Requirements
	<p>or more but less than 80 cubic metres.</p>	<p>v. In an estuarine functional zone; vi. Within 500 metres of an estuarine functional zone; vii. A protected area identified in terms of NEMPAA, excluding conservancies; viii. Sites or areas identified in terms of an International Convention; ix. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; x. Core areas in biosphere reserves; xi. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; xii. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; xiii. Outside urban areas: (aa) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core of a biosphere reserve; or (bb) Areas seawards of the development setback line or within 100m high-water mark of the sea if no such development setback line is determined; or (cc) Areas within 100 metres from the edge of a watercourse; or xiv. In urban areas: (aa) Areas zoned for use as public open space; or (bb) Areas seawards of the development setback line or within 100m high-water mark of the sea if no such development setback line is determined.</p>	
23.	<p>The expansion of- (i) canals where the canal is expanded by 10 square metres or more in size; (ii) channels where the channel is expanded by 10 square metres or more in size; (iii) bridges where the bridge is expanded by 10 square metres or more in size; (iv) dams where the dam is expanded by 10 square metres or more in size; (v) weirs where the weir is expanded by 10 square metres or more in size; (vi) bulk storm water outlet structures where the structure is expanded by 10 square metres or more in size; (vii) marinas where the marina is expanded by 10 square metres or more in size; (viii) jetties where the jetty is</p>	<p>(e) In KwaZulu-Natal: i. Community Conservation Areas; ii. Biodiversity Stewardship Programme Biodiversity Agreement areas; iii. In an estuarine functional zone; iv. A protected area identified in terms of NEMPAA, excluding conservancies; v. World Heritage Sites; vi. Sites or areas identified in terms of an International Convention; vii. Critical biodiversity areas or ecological support areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; viii. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; ix. Core areas in biosphere reserves; x. Outside urban areas: (aa) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve; or (bb) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or xi. In urban areas: (aa) Areas zoned for use as public open space; (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, zoned for a conservation purpose; or (cc) Areas seawards of the development setback line or within 100 metres from the high-water mark of the sea if no such development setback line is determined.</p>	Unchanged



Activity no.	Activity description	Geographical areas based on environmental attributes	UDM EMF Requirements
	<p>expanded by 10 square metres or more in size;</p> <p>(ix) slipways where the slipway is expanded 10 square metres or more in size;</p> <p>(x) buildings where the building is expanded by 10 square metres or more in size;</p> <p>(xi) boardwalks where the boardwalk is expanded by more than 10 square metres or more in size; or</p> <p>(xii) infrastructure or structures where the physical footprint is expanded by 10 square metres or more;</p> <p>where such development occurs-</p> <p>(a) within a watercourse;</p> <p>(b) in front of a development setback adopted in the prescribed manner; or</p> <p>(c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</p> <p>excluding the expansion of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour.</p>		
24.	<p>The expansion and related operation of facilities of any size for any form of aquaculture.</p>	<p>(c) In KwaZulu-Natal:</p> <ul style="list-style-type: none"> i. Trans-frontier protected areas managed under international conventions; ii. Community Conservation Areas; iii. Biodiversity Stewardship Programme Biodiversity Agreement areas; iv. In an estuarine functional zone; v. In a Protected Area identified in the NEMPAA; vi. World Heritage Sites; vii. Areas on the watercourse side of the development setback line or within 100 metres from the edge of a watercourse where no such setback line has been determined; viii. Sites or areas identified in terms of an International Convention; ix. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; x. Core areas in biosphere reserves; xi. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose; or xii. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and 	<p>BA – also for Agriculture EMZ (if earmarked area is not transformed)</p>



Activity no.	Activity description	Geographical areas based on environmental attributes	UDM EMF Requirements
25.	The expansion and related operation of zip- lines or foefie-slides, where the zip- line or foefie-slide is expanded by 100 metres in length or more.	<p>as adopted by the competent authority.</p> <p>(c) In KwaZulu-Natal:</p> <p>i. All areas outside urban areas; or</p> <p>ii. In urban areas:</p> <p>(aa) A protected area identified in terms of NEMPAA, excluding conservancies;</p> <p>(bb) In an estuarine functional zone;</p> <p>(cc) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p> <p>(dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;</p> <p>(ee) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose;</p> <p>(ff) Areas zoned for use as public open space;</p> <p>(gg) Areas on the watercourse side of the development setback line or within 100 metres from the edge of a watercourse where no such setback line has been determined;</p> <p>(hh) Areas seawards of the development setback line or within 100 metres from the high-water mark of the sea if no such development setback line is determined; or</p> <p>(ii) Areas within 500 metres from protected areas identified in terms of NEMPAA.</p>	Unchanged
26.	Phased activities.	All the areas as identified for the specific activities listed in this Notice.	Unchanged