

**Ref.: Scientific Services**

**Enquiries:** Mervyn Lötter, Private Bag X1088, Lydenburg, 1200 South Africa  
Tel: (013) 235 2395 / Fax: (013) 2351674 Email: Mervyn@mtpa.co.za

19 March 2013

The Regional Manager  
Dept. Mineral Resources  
Private Bag X7279  
EMALAHLENI  
1035

**RE: BIODIVERSITY SENSITIVITY OF DULLSTROOM PLATEAU GRASSLANDS**

The purpose of this document is to provide an overview of the biodiversity sensitivity of the region between Belfast and Dulstroom, known as the Dullstroom Plateau Grasslands (DPG). This is not to be confused with the Steenkampsberg Wet Grassland (SWG) that has been proposed to DMR to be gazetted in terms of Section 49 of the MPRDA (Act 28 of 2002). Until such time as the boundaries of the proposed SWF have been proclaimed, this document serves to publicly summarise the biodiversity values within a very similar area.

The MTPA are concerned of the increased prospecting and mining interest in the area between Dullstroom and Belfast. This area is of exceptional biodiversity value and because of the recent threats to the biodiversity and future tourism value of this area, it has been proposed for proclamation in terms of Section 49 of the MPRDA (decision pending), and it has recently been gazetted as an Endangered Threatened Ecosystem in terms of the NEM: BA (Act 10 of 2004) on the 9 December 2011 (Government Gazette No 34809).

The government gazette describes this Threatened Ecosystem as:

Reference number	MP 4
Listed under Criterion	F
Biome	Grassland and Forest
Province	Mpumalanga



Municipalities	Highlands LM and Thaba Chwea LM
Original area of ecosystem	114 000 ha
Remaining natural area of ecosystem (%)	85%
Proportion of ecosystem protected	5% of original area
Known number of species of special concern	33 threatened or endemic plant and animal species.

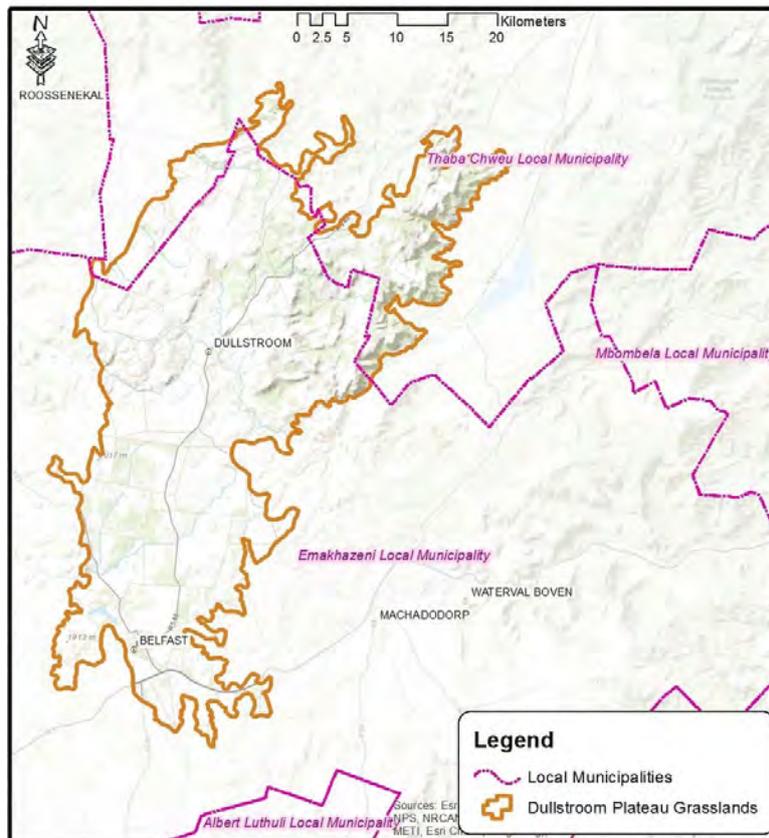
#### *Geographical location*

Grassland plateau occurring between Die Berg in the north and Belfast in the south (2530AA, 2530AC, 2530AD, and 2530CA). Ecosystem delineated by breeding and feeding habitat for cranes and Rudd's Lark. Ecosystem redefined using geology and landtypes.

#### *Description*

Key biodiversity features include five mammal species for example Robust Golden Mole, Roughhaired Golden Mole, Cape Molerat, Oribi and Welwitch's Hairy Bat; eight bird species including Blue Crane, Wattle Crane, Grey Crowned Crane, Blue Korhaan, Southern Bald Ibis, Whitewinged Flufftail, Yellowbreasted Pipit and Rudd's Lark; one amphibian, *Bufo gariepensis nubicolus*; twenty plant species for example *Eucomis vandermerwei*, *Gladiolus cataractarum* *Gladiolus malvinus*, *Nerine gracilis*, *Streptocarpus denticulatus* and *Watsonia occulta*; and two vegetation types Including the Steenkampsberg Montane Grassland and Dry Afromontane Forest. The ecosystem forms part of the Lydenburg Centre of Plant Endemism; includes important sub-catchments; provides an escarpment corridor; contains important caves, pans and wetlands; and is important for grassland and forest processes.

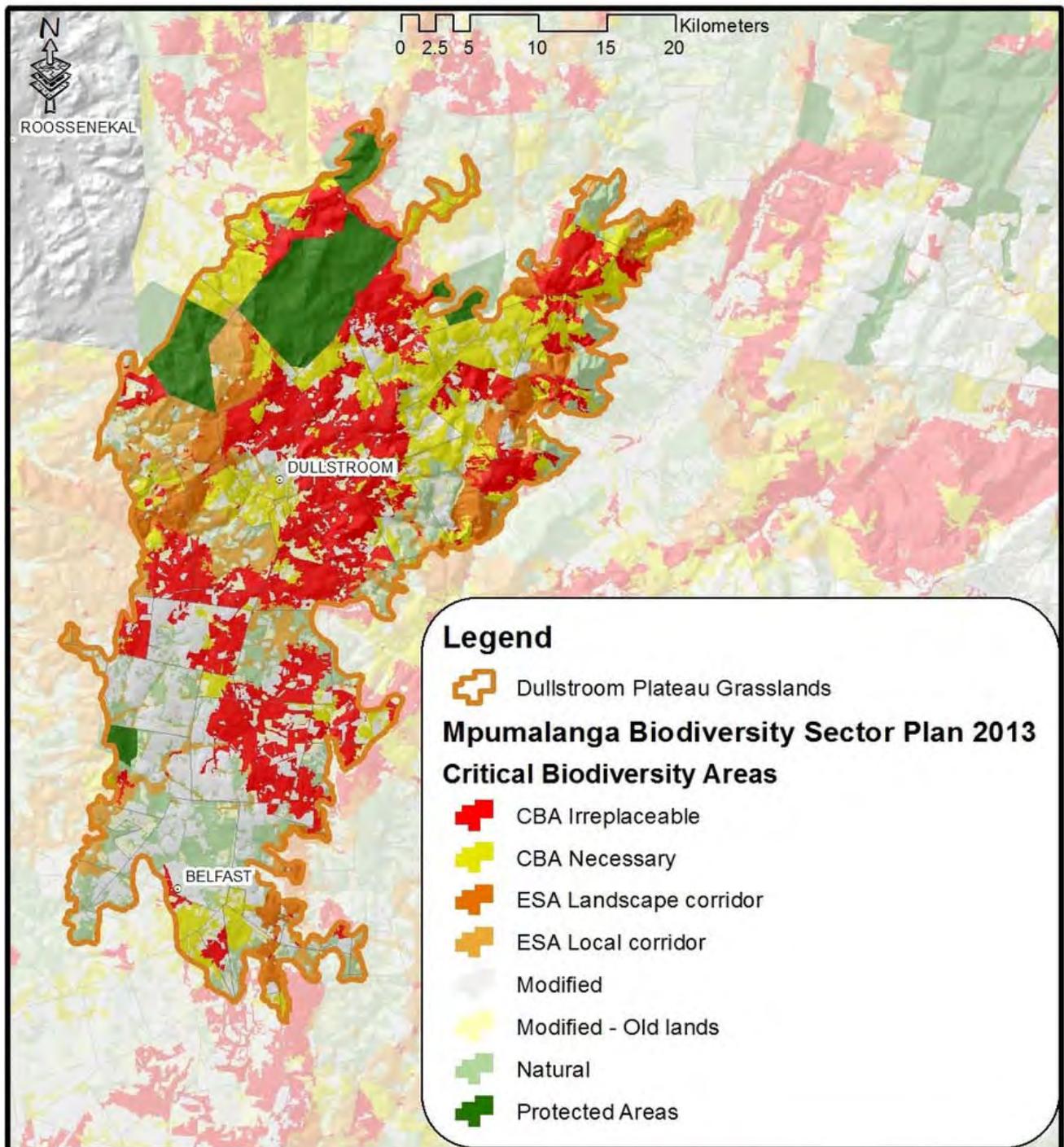




**Figure 1:** Extent of the Endangered Threatened Ecosystem, Dullstroom Plateau Grassland (DPG).

But the importance of this area is not confined to the above descriptions. This same area has been identified as a biodiversity priority in terms of several other projects and processes. Foremost of these is the Mpumalanga Biodiversity Conservation Plan (MBCP) of 2006. To align and standardise terminology, the recent revision of this plan is now called the Mpumalanga Biodiversity Sector Plan (MBSP) 2013. All of the provinces' biodiversity data has been synthesised within the MBSP to achieve national and provincial targets. Figure 2 presents the updated MBSP 2013, showing the spatial priorities in terms of new categories (aligned with requirements of Bioregional plans in terms of NEM:BA). A summary of the biodiversity categories is presented for the Dullstroom Plateau Grassland (DPG), as well for the province (Table 1) to highlight the extent to which the DPG contains biodiversity values much higher than other parts of the province.





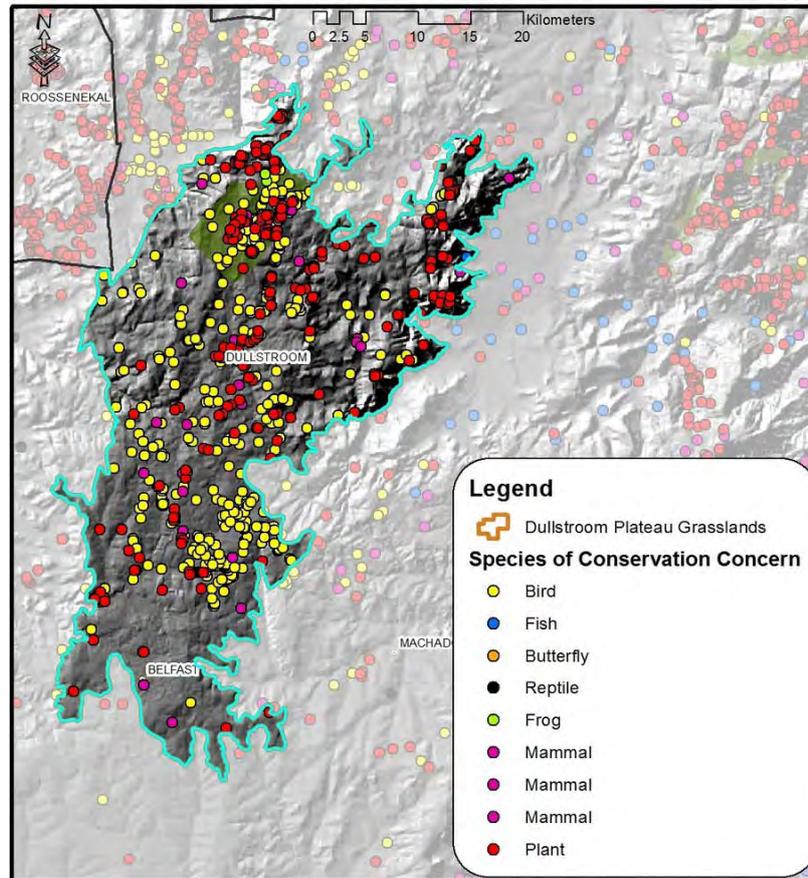
**Figure 2:** The revised Mpumalanga Biodiversity Sector Plan 2013 showing spatial biodiversity priorities for the DPG.

**Table 1:** Summary table showing the proportional percentage of the Mpumalanga Biodiversity Sector Plan 2013 for the Dullstroom Plateau Grasslands (DPG) and the province as a whole. Items in red are Critical Biodiversity Areas required to meet targets, while blue items are Ecological Support Areas, also important for supporting ability of species to adapt to climate change.

<b>MBSP 2013</b>	<b>% of DPG</b>	<b>% of Mpumalanga</b>
Protected Areas	9.0%	19.6%
<b>CBA Irreplaceable</b>	<b>26.4%</b>	<b>9.6%</b>
<b>CBA Necessary</b>	<b>15.8%</b>	<b>9.4%</b>
<b>ESA Landscape corridor</b>	<b>6.4%</b>	<b>1.0%</b>
<b>ESA Local corridor</b>	<b>8.5%</b>	<b>3.8%</b>
Natural	12.6%	16.9%
Modified - old lands	5.6%	6.8%
Modified - not natural	15.7%	32.8%
<i>Total</i>	<i>100.0%</i>	<i>100.0%</i>

In terms of the MTPA's threatened species database, we have 969 observations for species of conservation concern within the DPG (see Figure 3). This is for 96 species of which 1 are birds, 1 fish, 2 butterflies, 1 reptile, 1 frog, 13 mammals and 57 plant species. Species of conservation concern are defined here as Threatened, Rare, or Declining species. Of the species occurring in DPG, three are nationally assessed as Critically Endangered. These are likely to go extinct within the near future if conservation efforts are not successful. Most noteworthy is the White-winged Flufftail known only from about 10 localities across South Africa. One of these is on the farm Middelpunt 320 JT.





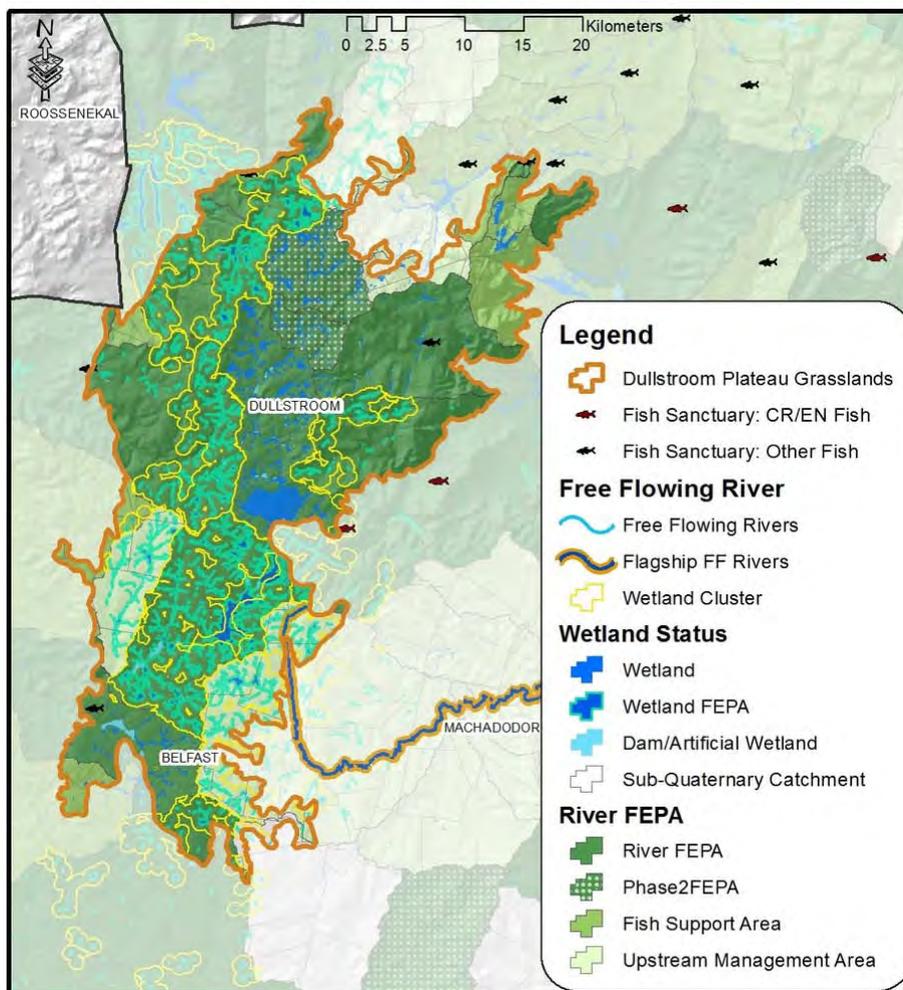
**Figure 3:** Distribution of species of Conservation Concern (threatened, rare or declining) within the Dullstroom Plateau Grasslands.

The freshwater biodiversity assessment is presented in terms of the National Freshwater Ecosystem Priority Areas (FEPAs). The FEPA project is a multi-partner project between CSIR, South African National Biodiversity Institute (SANBI), Water Research Commission (WRC), Department of Water Affairs (DWA), Department of Environmental Affairs (DEA), Worldwide Fund for Nature (WWF), South African Institute of Aquatic Biodiversity (SAIAB) and South African National Parks (SANParks).

FEPAs provides guidance on the status of rivers, wetlands and estuaries, and which ones should remain in a natural or near-natural condition. Urgent attention is needed to ensure that we conserve some different examples of the different freshwater ecosystems that make up the natural heritage of this country (i.e. they have representation targets set). Important rivers that meet national targets are called River FEPAs, and important wetlands that meet national targets are called Wetland FEPAs.



River FEPA and associated sub-quarternary catchments are required to achieve biodiversity targets for river ecosystems and fish of conservation concern, and were identified in rivers that are currently in good condition. They need to remain in a good condition. FEPA wetland clusters are clusters of wetlands that are still in a healthy condition and important for supporting ecological processes and ecosystem services associated with these wetland clusters. The FEPA project also identified large free flowing rivers that are still in a good condition (very few of these charismatic and important rivers remain in SA). Figure 4 maps the FEPA subcatchments, fish sanctuaries, wetland clusters, FEPA wetlands and free flowing rivers, for the DPG.



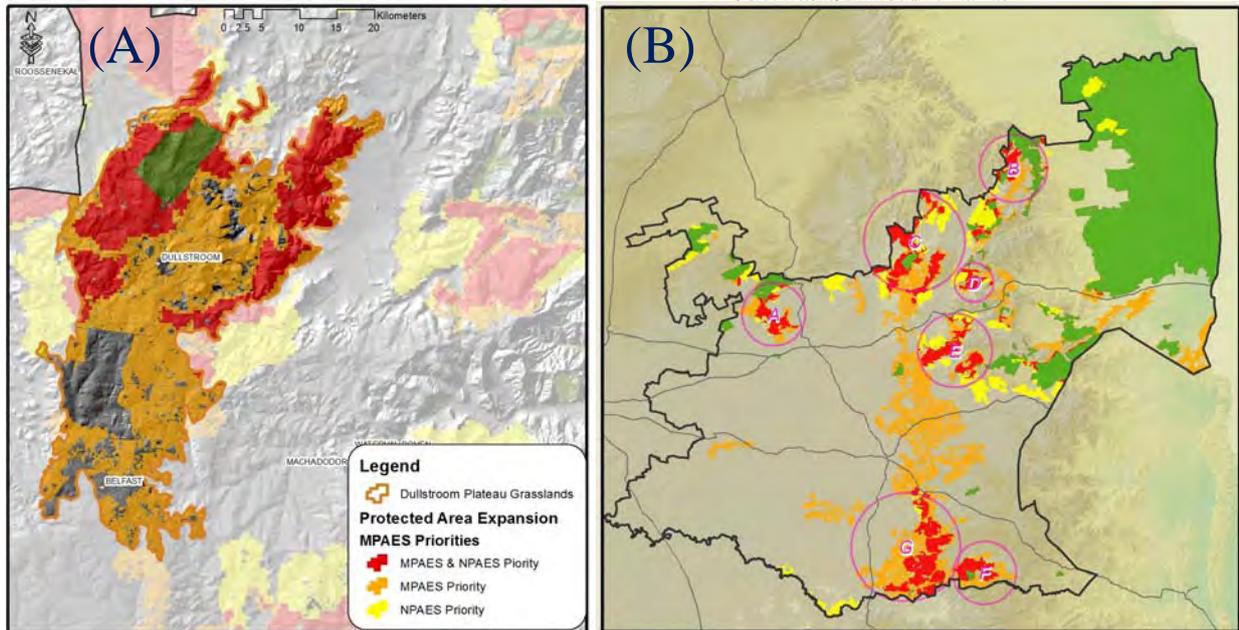
**Figure 4:** The Freshwater Ecosystem Priority Areas for the DPG highlighting the significant importance of this area towards meeting FEPA targets. Most parts of the DPG are a priority for one of the FEPA categories. Of importance is the Flagship Free Flowing Rivers with its source in the farms Elandsfontein 322 JT and Middelpunt 320 JT.



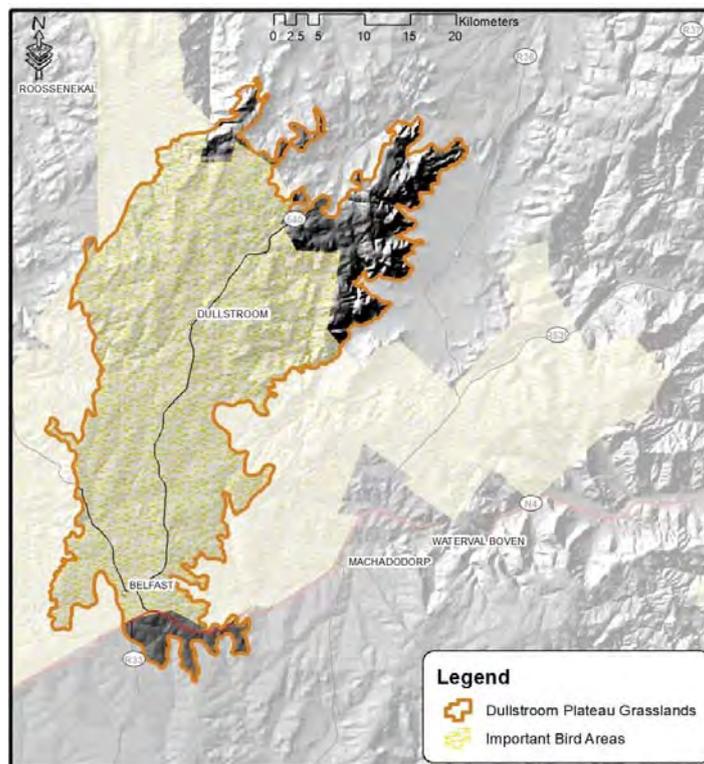
The biodiversity importance of the Dullstroom Plateau Grasslands has attracted the interest and concerns of the conservation sector who have now invested significant resources within this area. The Endangered Wildlife Trust's Highlands Crane Group and Oribi Custodians, and BirdLife South Africa have actively worked with the landowners as far back as 1994. In 2010 the MTPA, together with EWT, BirdLife South Africa and WESSA, started with a process of trying to ensure the long-term security of this area, and continuation of current land-uses, by proclaiming important areas as Protected Environments (under Section 23 of the NEM:PAA; see Figure 5 below), and working on specific threatened species on specific properties to avoid their local extinction. There have also been several large financial investments into several key projects in this area such as numerous alien invasive weed control initiatives (with support from Working for Water) and key wetland rehabilitation projects (with support from Working for Wetlands).

The MTPA have incorporated the priorities of the National Protected Area Expansion Strategies spatial priorities areas and developed their own fine-scale Mpumalanga Provincial Protected Area Expansion Strategy (MPAES) to prioritise the securing of high-value biodiversity areas under some form of legislative protection. The Dullstroom-Belfast area was identified as one of 7 provincial priority areas (see map B, Figure 5). Figure 5 (A) shows the distribution of the MPAES spatial priority areas which covers 75% of the surface area of DPG. Furthermore, of this priority area 28% was identified as a priority in both the national and provincial spatial assessments, 47% as provincial priority area only, and 0.2% as a national priority only.





**Figure 5:** Two maps showing the importance of the Dullstroom Plateau Grassland in terms of (A) the Mpumalanga Protected Area Expansion Strategy (MPAES) and (B) provincial perspective prioritising seven provincial areas for protection in terms of MPAES.



**Figure 6:** Birdlife South Africa's Important Bird Areas (IBAs) for the Dullstroom Plateau Grasslands.



BirdLife South Africa has also identified important areas for the conservation of birds. A total of 124 Important Bird Areas (IBAs) have been identified across South Africa, of which the Steenkampsberg is one of these IBAs. The Steenkampsberg IBA (SA016) makes up 79% of the Dullstroom Plateau Grasslands (see Figure 6). Based on the bird species that occur there, the Steenkampsberg IBA is ranked as the eighth most important IBA nationally, and second most important in Mpumalanga Province

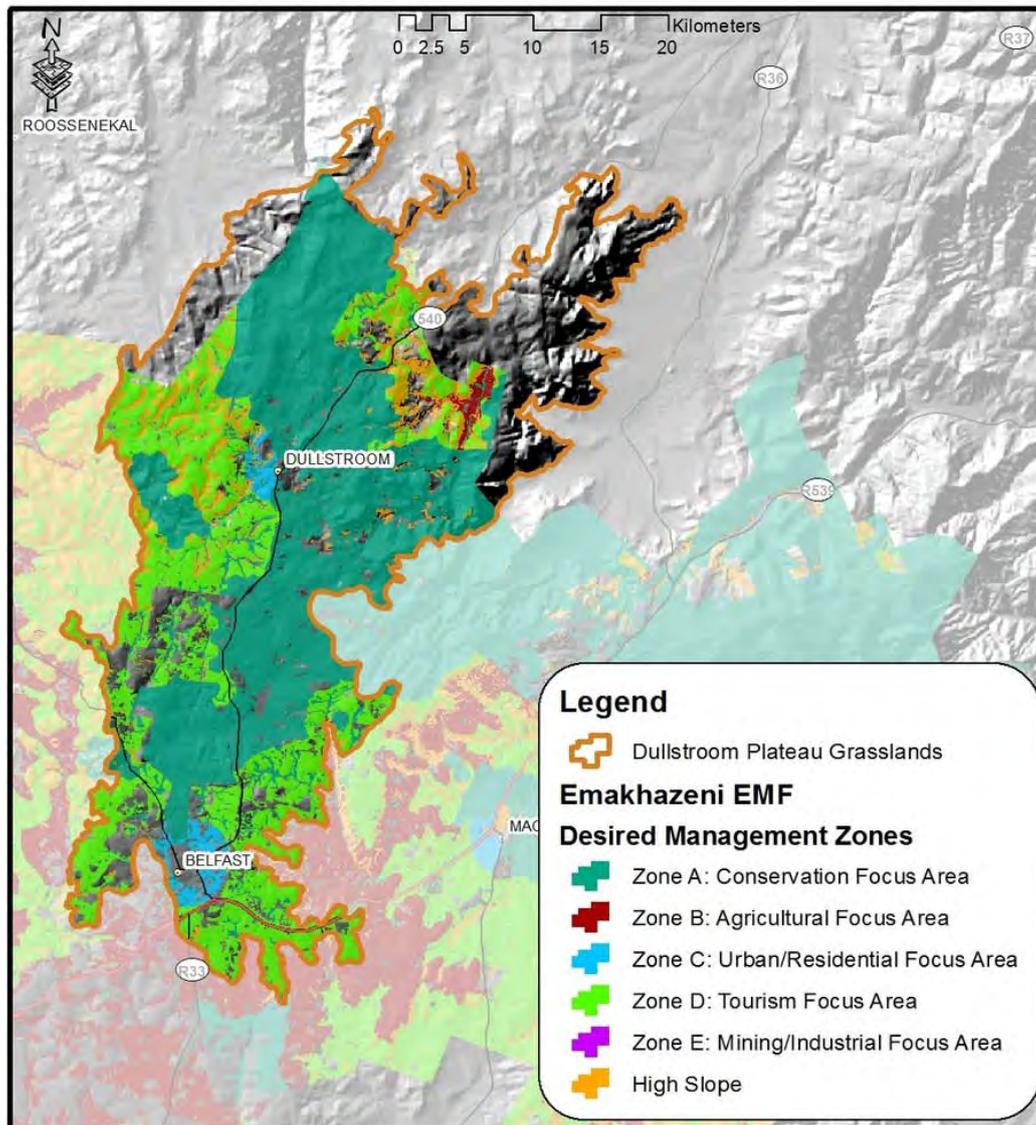
In terms of gazetted future desired land-uses for the DPG, the Emakhazeni Local Municipality (ELM), with the assistance of the Mpumalanga Department of Economic Development, Environment and Tourism (MDEDET) and the National Department of Environmental Affairs and Tourism (DEAT) developed an Environmental Management Framework (EMF) for the Municipality in 2009. The EMF was gazetted (20090930 - Provincial Gazette for Mpumalanga No 1724. Notice 316 of 2009) and followed a consultative process. An EMF is a decision support tool that delineates geographic areas in terms of environmental attributes, such as water resources, cultural and heritage resources and agricultural potential; assesses the current status quo against the vision or desired state for the ELM; and identifies environmental control zones to guide land use planning and development in the ELM. The EMF is used to proactively plan development in a sustainable manner within the Municipality and to guide decision-making by authorities on development applications, ultimately ensuring continued progress towards sustainability. Using the untransformed areas within the study area as a basis, the underlying sensitivities of the environment to development were used to delineate management zones (desired state). These form the basis for zonation of the area (Figure 7) based on appropriateness of various major land uses and areas of similar sensitivities. Only 69% of the DPG occurs within the ELM and therefore have gazetted future desired states. Table 2 summarises the gazetted desired states for the ELM occurring within DPG.

**Table 2:** Desired management zones for Emakhazeni Local Municipality within the Dullstroom Plateau Grasslands.

Zone	Focus Area	Hectares	Percentage
Zone A	Conservation	44937	57%
Zone B	Agriculture	718	1%
Zone C	Urban / Residential	1656	2%
Zone D	Tourism	25751	33%
Zone E	Mining / Industrial	0	0%
High Slope	Steep slopes	6058	8%



The EMF process is focused on multi-sectoral stakeholder consultation and participation throughout the entire process, and from Table 2 and Figure 7, it can be seen that mining is not deemed to be a sustainable land-use within this municipality. Any new mining activities within natural areas of the Emakhazeni EMF would be in conflict with the proposed gazetted future desired state.



**Figure 7:** Management zones for the Emakhazeni Environmental Management Framework

In closing I would add that the biodiversity sensitivity of this area is truly exceptional and irreplaceable, and that this sensitivity has been objectively established by means of a multitude of planning and sensitivity products that are aimed at ensuring sustainable development. We trust that the DMR respects





the concerns of the MTPA and broader biodiversity and tourism community as any proposed mining activity within this area would certainly have a very negative long-term impact on the environment, the current and future tourism industry and water resources for the province.

Kind Regards

A handwritten signature in black ink, appearing to be "H. H. H.", is placed on a light grey rectangular background.

