

# **RIDGES GUIDELINES**

SEPTEMBER 2001 (AS REVIEWED AND UPDATED IN JANUARY 2004 AND APRIL 2006)

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## **1. Introduction**

The quartzite ridges of Gauteng are one of the most important natural assets in the northern provinces of South Africa. This is because these ridges, and the area immediately surrounding the ridges, provide habitat for a wide variety of fauna and flora, some of which are Red List, rare or endemic species or, in the case of certain of the plant species, are found nowhere else in South Africa or the world. The ridges also fulfill functions that are necessary for the sustainability of ecosystems such as the recharging of groundwater, wetlands and rivers, wildlife dispersal and providing essential habitat for pollinators. Ridges also have a socio-cultural role in that they provide aesthetically pleasing environments that are valued by residents, tourists and recreational users. Human activities such as urbanization, mining and the planting of alien vegetation may undermine the contribution that ridges make to the environment.

The environmental right, which is set out in section 24 of the Constitution, requires government to take -

*“...reasonable legislative and other measures that -*

- (i) prevent pollution and ecological degradation;*
- (ii) promote conservation; and*
- (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”*

The conservation of ridges therefore falls within the ambit of the environmental right and this document comprises one of the measures that the Department of Agriculture, Conservation and Environment (“the Department”) has taken to give effect to the environmental right in respect of ridges.

## **2. Purpose of this document**

The purpose of this guideline is to set out the Department’s policy on the conservation, development and use of ridges with a view to ensuring that –

- the use of ridges is sustainable;
- members of the public are able to make informed decisions regarding proposals for development on ridges and the use of ridges;
- officials make consistent decisions in respect of planning and environmental applications that involve negative impacts on ridges; and
- the Department’s responsibility in respect of the protection of the environment is carried out in an efficient and considered manner.

The guidelines set out in this document are also intended to assist applicants who are required to undertake an environmental impact assessment and to facilitate the quicker administration of such applications.

In developing the guideline, the Department has considered international approaches, the views of stakeholders, the Department's legislative obligations and its experience in the processing of applications. The way in which these issues were considered have been summarised in a separate document titled *Background to the Development of a Ridge Policy Guideline for Gauteng*.

**It should be noted that this document is a guideline and that the Department accordingly reserves the right to deviate from the guideline where appropriate. Furthermore, this document is current as of the April 2006 above and may be changed from time to time. Any person who needs to consider the relevance of the guideline to their activities is advised to ensure that they are in possession with the most up to date version.**

### **3. Scope of the policy**

This guideline applies to all ridges in Gauteng. For the purposes of this document, a ridge includes hills, koppies, mountains, kloofs and gorges and/or a landscape type or topographic feature that is characterized by two or more of the following features - a crest, plateau, cliff or footslope. In addition, ridges are characterized by slopes of 5° or more (that is equivalent to slopes of  $\geq 8.8\%$  or  $\geq 1:11$  gradient) when modeled in a Geographic Information System digital elevation model that is based on 20m contour intervals at a scale of 1:50 000.

Most ridges which fall within the scope of this guideline have been mapped by the Department in an ArcView shapefile. Ridges that have been identified by the Department include the Bronberg, Daspoortrant, Gatsrant, Klipriviersberg, Kwaggasrant, Linksfield Ridge, Magaliesberg, Meintjeskop, Melville Koppies, Perdeberg, Pyramind Koppies, Roodepoort Ridge, Silverton Ridge, Skurweberg, Smuts Koppie, Suikerbosrand, Swartkop and Witwatersberg.

Information on these ridges or other ridges mapped within the shape file may be requested from the Department by e-mailing [gdace@gauteng.gov.za](mailto:gdace@gauteng.gov.za). It should be noted, however, that this guideline applies to all ridges in Gauteng, irrespective of whether a ridge is mapped in the shapefile or not. The Department may also be contacted for verification as to whether a landscape type or topographic feature falls within the scope of the guideline.

### **4. General objective in respect of ridges**

The general objective of the Department is that the ecological and socio-cultural value of ridges must be conserved. The ridges have, however, undergone different degrees of habitat loss due to human activities such as urban development and quarrying. The approach which the Department has adopted to realizing its general objective is to provide for the maximum feasible conservation of a ridge within the existing constraints of the habitat loss that has already taken place.

In order to give practical effect to this policy, the Department has classified all ridges in Gauteng into one of four classes, based on the existing extent and percentage of area converted to urban development or other human activities. The classes are as follows -

- 1) Class 1 ridges include ridges of which 5% or less of their surface area has been converted to urban development, quarries and/or alien vegetation. (Approximately 51% of ridges currently fall within Class 1, including the Suikerbosrand and parts of the Magaliesberg.)

- 2) Class 2 ridges include ridges of which more than 5%, but less than 35%, of their surface area has been converted to urban development, quarries and/or alien vegetation. (Approximately 28% of ridges currently fall within Class 2, including parts of the Magaliesberg, ridges falling within the Cradle of Humankind World Heritage Site, the Klipriviersberg, the Bronberg and the Skurweberg.)
- 3) Class 3 ridges include ridges of which 35% or more, but less than 65%, of their surface area has been converted to urban development, quarries and/or alien vegetation. (Approximately 9% of ridges currently fall within Class 3, including the ridge that traverses the Northcliff, Roodepoort and Krugersdorp areas).
- 4) Class 4 ridges include ridges of which 65% or more of their surface area has been converted to urban development, quarries and/or alien vegetation. (Approximately 11% of ridges currently fall within Class 4, including the Melville Koppies and the Linksfield Ridge).

## **5. General guidelines on ridges**

The guidelines which are applicable to the use and development of the different classes of ridges are set out below.

### **1) Class 1 ridges**

- (a) The consolidation of properties on Class 1 ridges is supported.
- (b) Further development activities and subdivisions will not be permitted on Class 1 ridges.
- (c) Only low impact activities with an ecological footprint of 5% or less will be permitted in the 200 metre buffer zone of the ridge.

### **2) Class 2 ridges**

- (a) The consolidation of properties on Class 2 ridges is supported.
- (b) The subdivision of property on Class 2 ridges will not be permitted.
- (c) Development activities and uses that have a high environmental impact on a Class 2 ridge will not be permitted.
- (d) Low impact development activities, such as tourism facilities, which comprise of an ecological footprint of 5% or less of the property may be permitted. (The ecological footprint includes all areas directly impacted on by a development activity, including all paved surfaces, landscaping, property access and service provision).
- (e) Low impact development activities on a ridge will not be supported where it is feasible to undertake the development on a portion of the property abutting the ridge.

### **3) Class 3 ridges**

- (a) The consolidation of properties on Class 3 ridges is supported.
- (b) The guidelines for Class 2 ridges will be applied to areas of the ridge that have not been significantly impacted on by human activity.
- (c) The guidelines for Class 4 ridges will be applied to areas of the ridge that have been significantly impacted on by human activity.

### **4) Class 4 ridges**

- (a) The consolidation of properties on Class 4 ridges is supported.

- (b) The subdivision of property on Class 4 ridges will not be permitted in areas of the ridge where the remaining contiguous extent of natural habitat is 4ha or more.
- (c) Further development activities will not be permitted in areas of the ridge where the remaining contiguous extent of natural habitat is 4ha or more.

## 6. Requirements for applications that must follow an environmental impact assessment process

- 1) Applications involving activities on a ridge that must be subjected to an environmental impact assessment in any form must, in addition to any other requirements of law, be supported by a study or studies which, as a minimum, describe –
  - (a) the ecological conditions – including the functional, hydrological and compositional aspects – of the ridge,
  - (b) flora and fauna – including any mammals, birds, reptiles, amphibians and invertebrates - that are present on the ridge,
  - (c) the impacts of the proposed activity on a) and b),
  - (d) the stability of the slope and any implications thereof for the application, and
  - (e) the cultural, historical, open space and visual value aspects as well as the current use and value of the ridge for social purposes and the extent to which the proposed activity will impact on these uses or values
- 2) Applications involving developments on a ridge falling within Class 1, 2 or 3 must also be supported by a study on service provision and access. The study on service provision and access must, as a minimum, describe the location of access roads to the site; what services are available; and - if no services are available - how the site will be serviced and the impact that any new infrastructure contemplated may have on the ridge.
- 3) An ecological management plan must accompany an application which sets out the measures and responsibilities in respect of the management the ecological integrity of the property, other than the specific area where the development activity is proposed.

## 7. Interpretation

<i>Buffer zone</i>	a collar of land that filters detrimental edge effects, extending from the edge of the ridge
<i>Geographic Information System</i>	a system for the input, storage, retrieval, analysis and display of geographic data
<i>Kloof</i>	South African term for gorge or ravine.
<i>Koppie</i>	South African term for hill.
<i>Red List</i>	The Red List published by the IUCN classifies all those species threatened with extinction within a particular threat category of, in order of decreasing risk of extinction, Critically Endangered, Endangered or Vulnerable.