Municipal Biodiversity Summaries project

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Outline

• Background

• Components

• Progress

• Timelines

• Wall maps
First project phase was completed in 2009 as an initiative by SANBI and DEA

Project objectives:

• Provide easily accessible biodiversity information

• Ensure that municipalities have reliable biodiversity information to use and integrate into their various plans
Biodiversity priority areas

Features in the landscape and seascape that are important for conserving a representative sample of ecosystems and species, for maintaining ecological processes, or for the provision of ecosystem services.
Biodiversity Priority Areas map
Amahlathi Local municipality

2009

2014
Buffalo City Local municipality

2009

2014
Components

- Municipal biodiversity summaries maps
- Shape files
- Statistics
- Factsheets
- Wall maps
## Summary statistics

### General Statistics
- Size of Municipality
- Total natural
- Total remaining

### Critical Biodiversity Areas
- Land-based protected areas (formally protected)
- Marine Protected Areas
- Critical Biodiversity Areas
- Ecological Support Areas
- Other Natural Areas
- No natural remaining areas

### Threatened Ecosystems
- By area/length
  - Terrestrial Ecosystems
  - Rivers
  - Wetlands
- By number
  - Terrestrial Ecosystems
  - Rivers
  - Wetlands

### Aquatic Ecosystems
- Freshwater FEPAs
  - non FEPAs
  - Total
- Rivers
- Wetlands
- Priority estuaries
- Other estuaries
- Total

### Least threatened

# Detailed statistics

## Protected Areas

### Land Based Protected areas

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Area (ha)</th>
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## Terrestrial Ecosystems

### Biomes

<table>
<thead>
<tr>
<th>Name</th>
<th>Area (ha)</th>
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### Vegetation Types

<table>
<thead>
<tr>
<th>Name</th>
<th>Area (ha)</th>
<th>Threat Status</th>
<th>Eco Protection level</th>
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## Aquatic Ecosystems

### Rivers

<table>
<thead>
<tr>
<th>River name</th>
<th>Length (km)</th>
<th>FEPA length</th>
<th>non FEPA length</th>
<th>% River FEPA</th>
</tr>
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<tbody>
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### Wetlands

<table>
<thead>
<tr>
<th>WETTYPE</th>
<th>Area (ha)</th>
<th>FEPA area</th>
<th>Non FEPA area</th>
<th>% FEPAs</th>
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Progress

Completed 121
Outstanding 113
Timelines

Maps

Data to BGIS

Statistic sheets
SUPPORTING PRODUCTS

What is currently being used

- The National Biodiversity Priority Areas Map (‘Fruit Salad Map) represents a compilation of the latest spatial biodiversity information for South Africa.
- The map is the core of the municipal summaries factsheets
- There are 8 factsheets with the following topics:
  1. Introduction to the project
  2. Definitions
  3. Environmental Legislation
  4. Terrestrial Ecosystems
  5. Freshwater Ecosystems
  6. Coastal and Inshore Marine Ecosystems
  7. Bioregional Plans
  8. How to use the products available
- Information presented mainly as text
What is being developed

- To allow for better understanding and easier interaction with the maps, two products are being developed.
- These products will unpack the complexity of the map by breaking down the layers into the various themes.

**WALL MAP**
- National Scale
- General information per theme
- High visual appeal

**WEB BASED PRODUCT**
- Move from national to municipal scale
- Specific information per theme for that specific municipality
- Interactive map.
**PROTECTED AREAS**

Protected Areas: an area of land or sea that is formally protected by law and managed mainly for biodiversity conservation.

**CATEGORIES OF PROTECTED AREAS AS SET OUT IN THE ACT**
Special Nature Reserves, National Parks, Nature Reserves (includes Botanical Gardens), Protected Environments (and other biodiversity stewardship sites), World Heritage Sites, Protected Forest Areas, Mountain Catchment Areas and Marine Protected Areas.

1. **PROTECTED AREAS FOR CLIMATE CHANGE REGULATION**
   Protected Areas present the most effective option for implementing climate change response strategies.

   - The role of Protected Areas in the climate change response:
     - Mitigation: Store (remit the loss of stored carbon from vegetation and soils) and capture (absorb more carbon from the atmosphere into the natural eco-systems).
     - Adaptation: Protect by maintaining ecosystem integrity, buffer local climate, and reduce risk and impact from extreme climatic events.

2. **PROTECTED AREAS FOR BIODIVERSITY CONSERVATION AND ECOLOGICAL SUSTAINABILITY**

   - Conservation:
     - Conservation of biodiversity is the central purpose of Protected Areas.
     - High levels of biodiversity keep ecosystems healthy and resilient.
     - Protecting biodiversity is vital to safeguard the economy, our cultural, spiritual and aesthetic values as well as the intrinsic value of species.

   - National Protected Areas Expansion Strategy
     - The National Protected Area Expansion Strategy serves to function as a national framework for an integrated, co-ordinated and uniform approach to the expansion and consolidation of National Protected Areas.

   - National Protection Area System: is made up of formal terrestrial and marine protected areas. The long-term objective of this strategy is to adequately conserve a representative sample of the country's biodiversity and maintain key ecological processes across the land- and seascape. Two focus areas have been identified in this regard: Land-based Focus Areas (LBA) and Offshore Focus Areas (OFA).

3. **PROTECTED AREAS FOR SOCIO-ECONOMIC BENEFITS**

   - In the next few decades, the world will experience unprecedented change through urbanisation, exploration, which will place further strain on ecosystems. The environment, as one of the key drivers of change, will play a vital role in lifting another billion people out of poverty.

   Tourism: South Africa's tourism sector is emerging as one of the most important pillars in terms of growth and competitiveness with other emerging economies.

   - Biodiversity Stewardship: Biodiversity stewardship can support the stimulation of local economies by developing rural livelihood options, thereby creating nodes of rural development, stimulating job creation and skills development.

   - Job Creation Statistics:
     - 400,000 people employed in environmental, conservation and tourism-based jobs.
     - 10,000 jobs created through natural resource job creation programmes since 1994.
     - 70,000 jobs in game ranching and eco-tourism.

Protected Areas are the most secure way of protecting critical biodiversity for ecological sustainability, climate change adaptation, land reform and rural livelihoods.
Special Nature Reserves

Special Nature Reserves are highly protected areas from where all people and human activities are excluded except for conservation activities and scientific research.


Number of Special Nature Reserves in South Africa: 2

Continued research on the natural environment and how it functions.

Marion Island
Location: Southeast from Port Elizabeth; politically part of the Western Cape.
Area: 290 km². Coastline of 72 km mostly made up of high cliffs.

Animals that can be found on the island include the king penguin and the elephant seal.
Thank you