National municipal biodiversity summaries

Thicket Forum

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MUNICIPAL BIODIVERSITY SUMMARY PROJECT

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National Municipal Biodiversity programme

- ***GOAL:*** **Biodiversity** and **ecosystem services** contribute to **economic development** and human well-being in municipalities.
- ***PURPOSE:*** To build **capacity of local authorities** and civil society partners to enable wise and informed **biodiversity management**.
- ***PARTNERS***: SANBI, COGTA, DEA, SALGA

- **KRA 1:** **Mainstreaming Biodiversity into integrated development planning, spatial planning and land-use management**
- KRA 2: Unlocking **Socio-Economic opportunities** from Municipal Nature Reserves and Open Spaces
- KRA 3: Strengthening regulatory, legislative and fiscal **policy for protection of biodiversity** by local governments
- KRA 4: Strengthening Biodiversity-related **Climate Change response Strategies** within local authorities

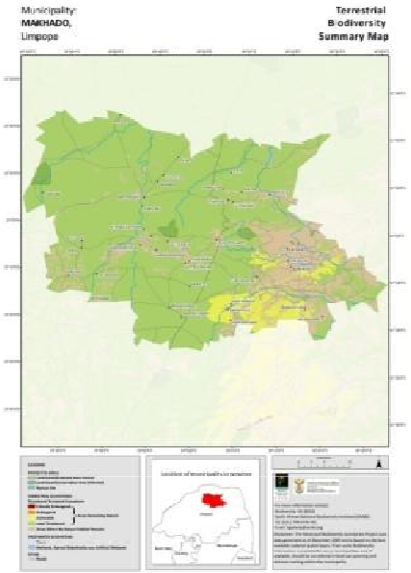
Why a Biodiversity Summaries project ?

- SANBI mandate: Reporting on levels of biodiversity, developing tools for reporting, informing policy and actions affecting biodiversity
  - Biodiversity planning

- Road blocks
  - Data availability
  - Capacity within municipalities

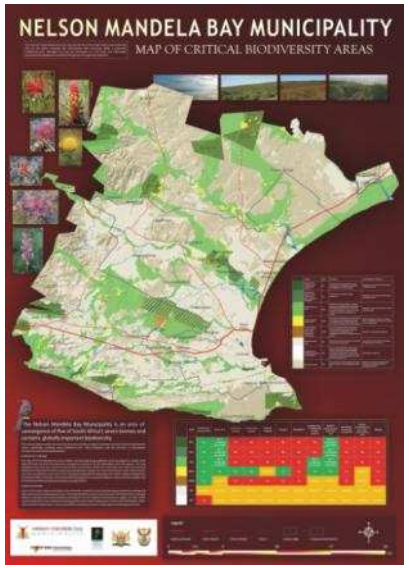
Provincial or fine-scale spatial biodiversity plan

Municipal Biodiversity Summary



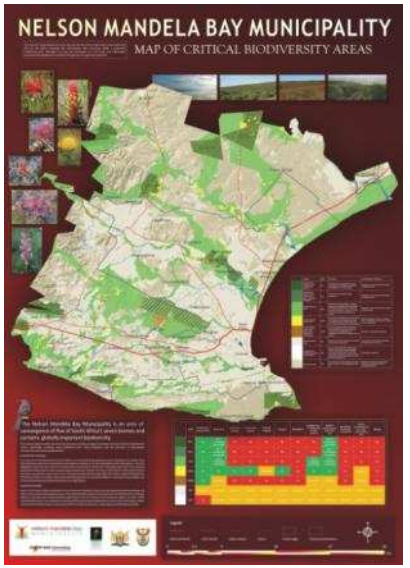
- Map of biodiversity features (threatened ecosystems, rivers, wetlands, estuaries, protected areas)
- Supplementary information (e.g. vegetation types)
- Summary statistics
- No guidelines but some planning implications
- Primarily a reporting tool

Biodiversity Sector Plan



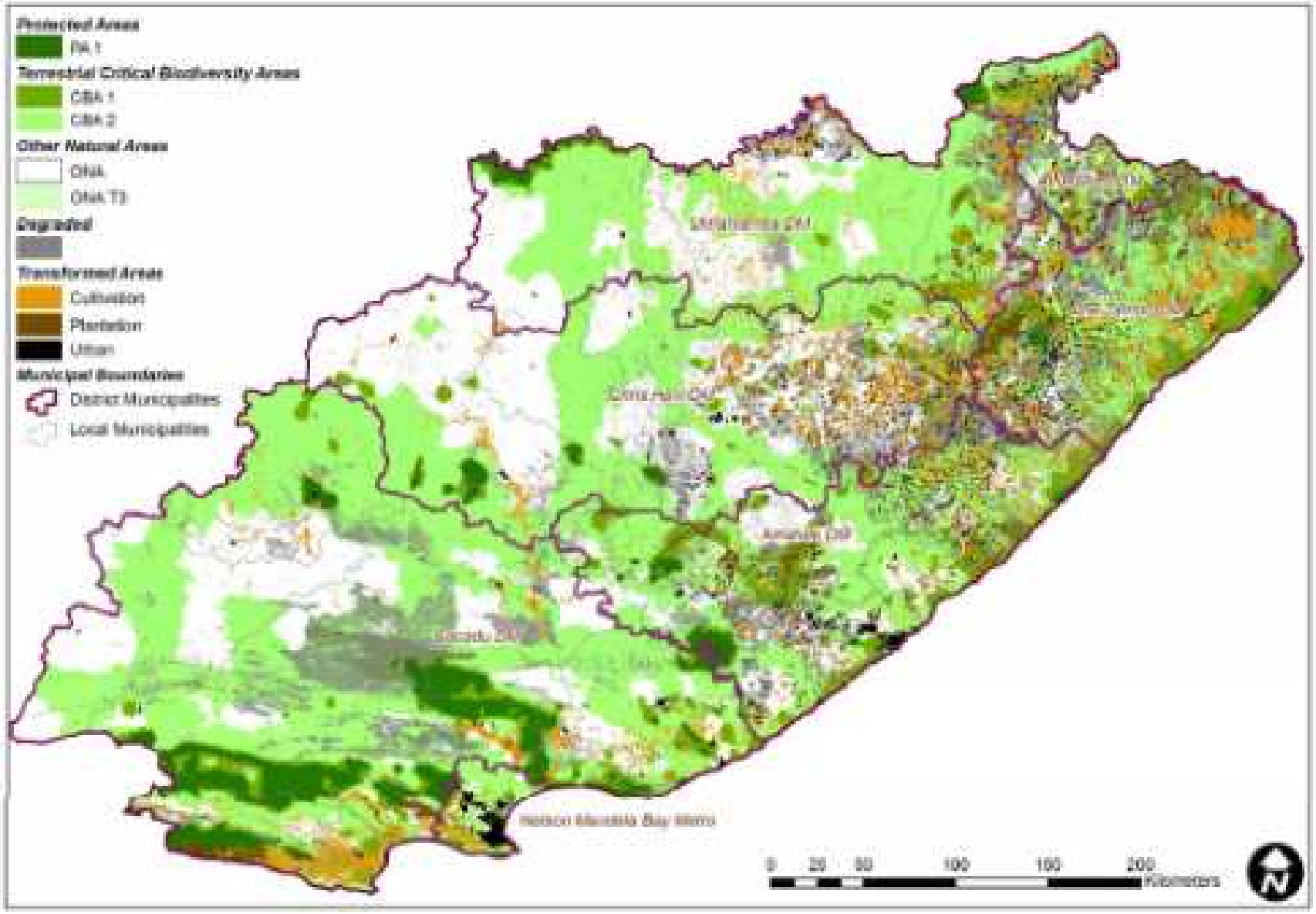
- Map of Critical Biodiversity Areas (CBAs)
- Design-based to achieve biodiversity targets (SBP principles)
- Land management objectives
- Land-use guidelines (optional)
- Land-use planning & decision-making (LUPDM) tool

Published Bioregional Plan



- Map of Critical Biodiversity Areas (CBAs)
- Design-based to achieve biodiversity targets (SBP principles)
- Land management objectives
- Land-use guidelines
- Additional requirements ito Guideline
- LUPDM tool
- Published ito the Biodiversity Act

ECBP


Protected Areas
PA 1
Terrestrial Critical Biodiversity Areas
CBA 1
CBA 2
Other Natural Areas
ONA
ONA T3
Degraded
Transformed Areas
Cultivation
Plantation
Urban
Municipal Boundaries
District Municipalities
Local Municipalities
0 25 50 100 150 200
Kilometers

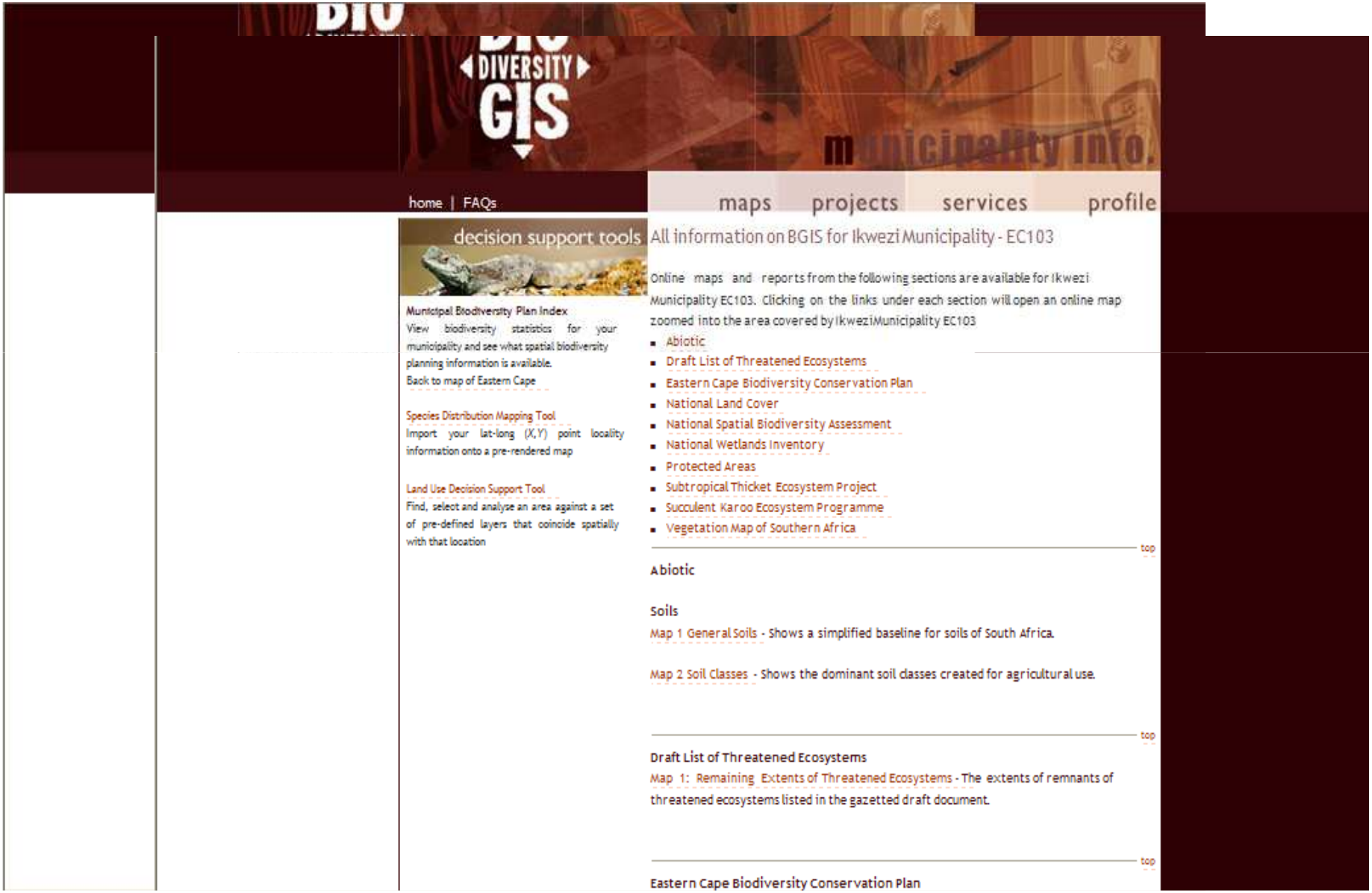
Summaries provide:

- To each municipality:
  - Biodiversity summary **statistics**
  - Terrestrial biodiversity summary **map**
  - Shape **files** for biodiversity features
  - Access to an **interactive** map
  - Series of generic **fact sheets**

BGIS Municipal Biodiversity Index

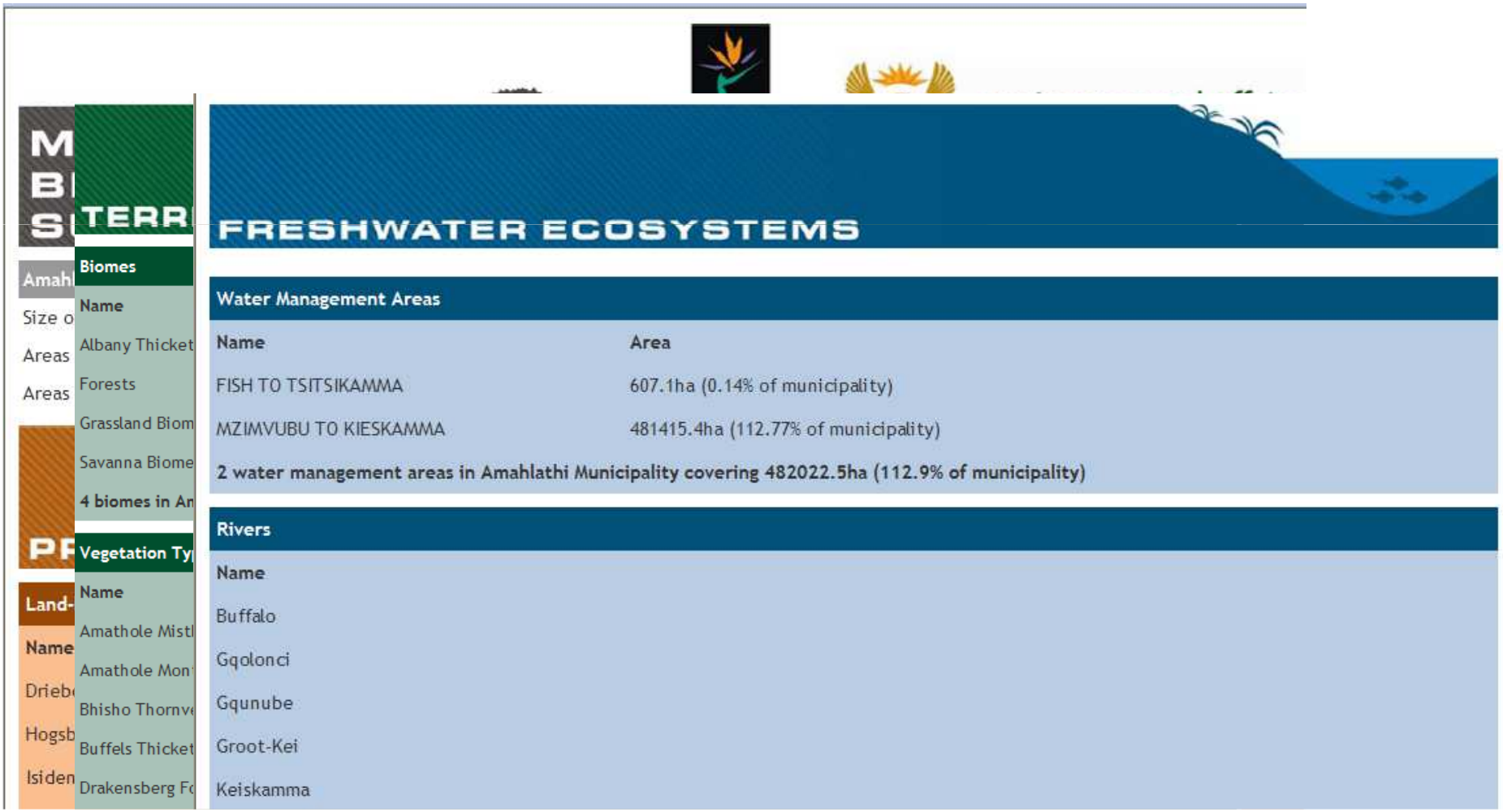
http://bgis.sanbi.org

Biodiversity statistics and data downloads



1. Biodiversity statistics report

- Download an automatically generated report



FRESHWATER ECOSYSTEMS

Water Management Areas

Name	Area
FISH TO TSITSIKAMMA	607.1ha (0.14% of municipality)
MZIMVUBU TO KIESKAMMA	481415.4ha (112.77% of municipality)

2 water management areas in Amahlathi Municipality covering 482022.5ha (112.9% of municipality)

Rivers

Name
Buffalo
Gqolonci
Gqunube
Groot-Kei
Keiskamma

Biomes

Name

Albany Thicket

Forests

Grassland Biom

Savanna Biome

4 biomes in An

Vegetation Ty

Name

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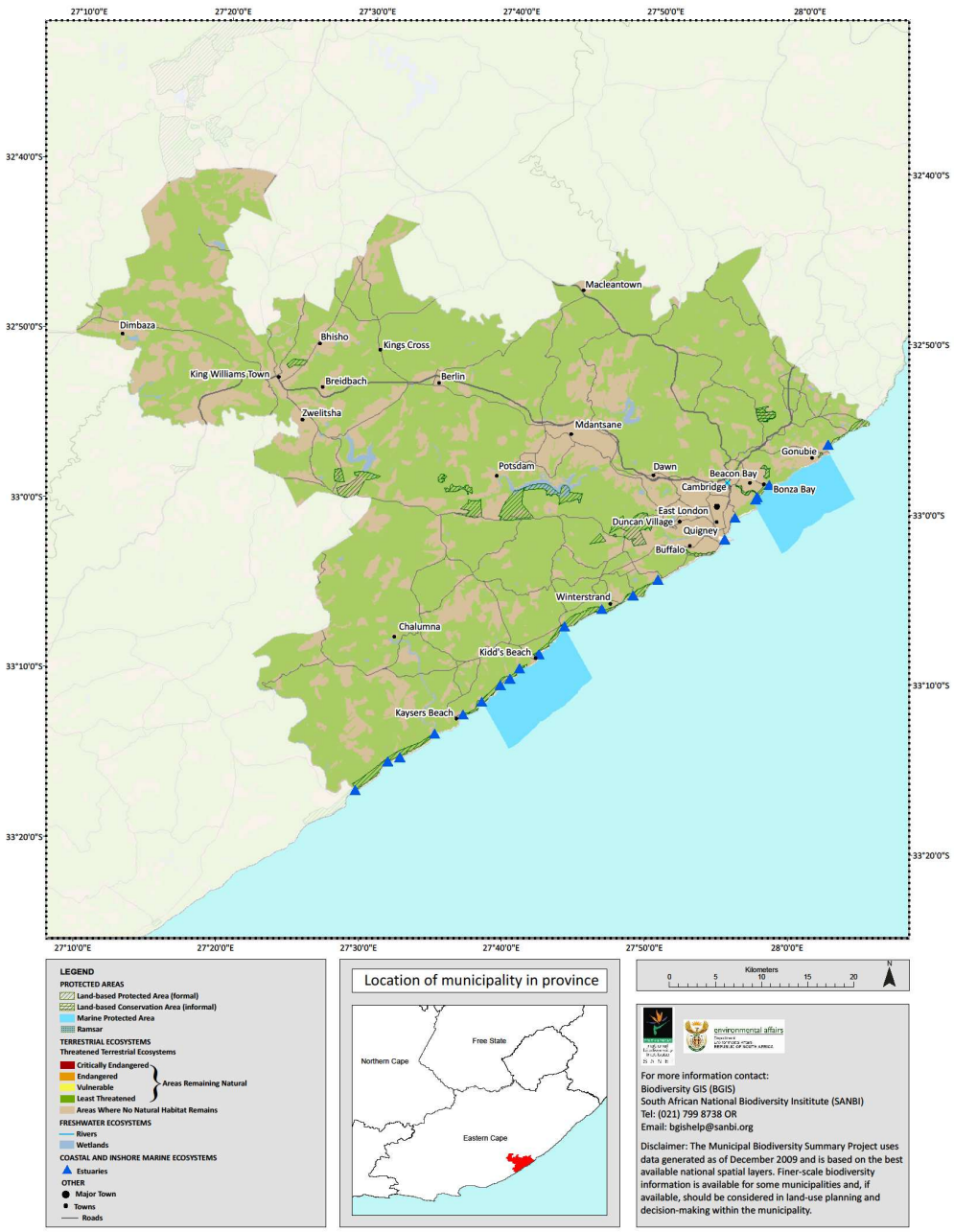
2. Biodiversity summary maps:



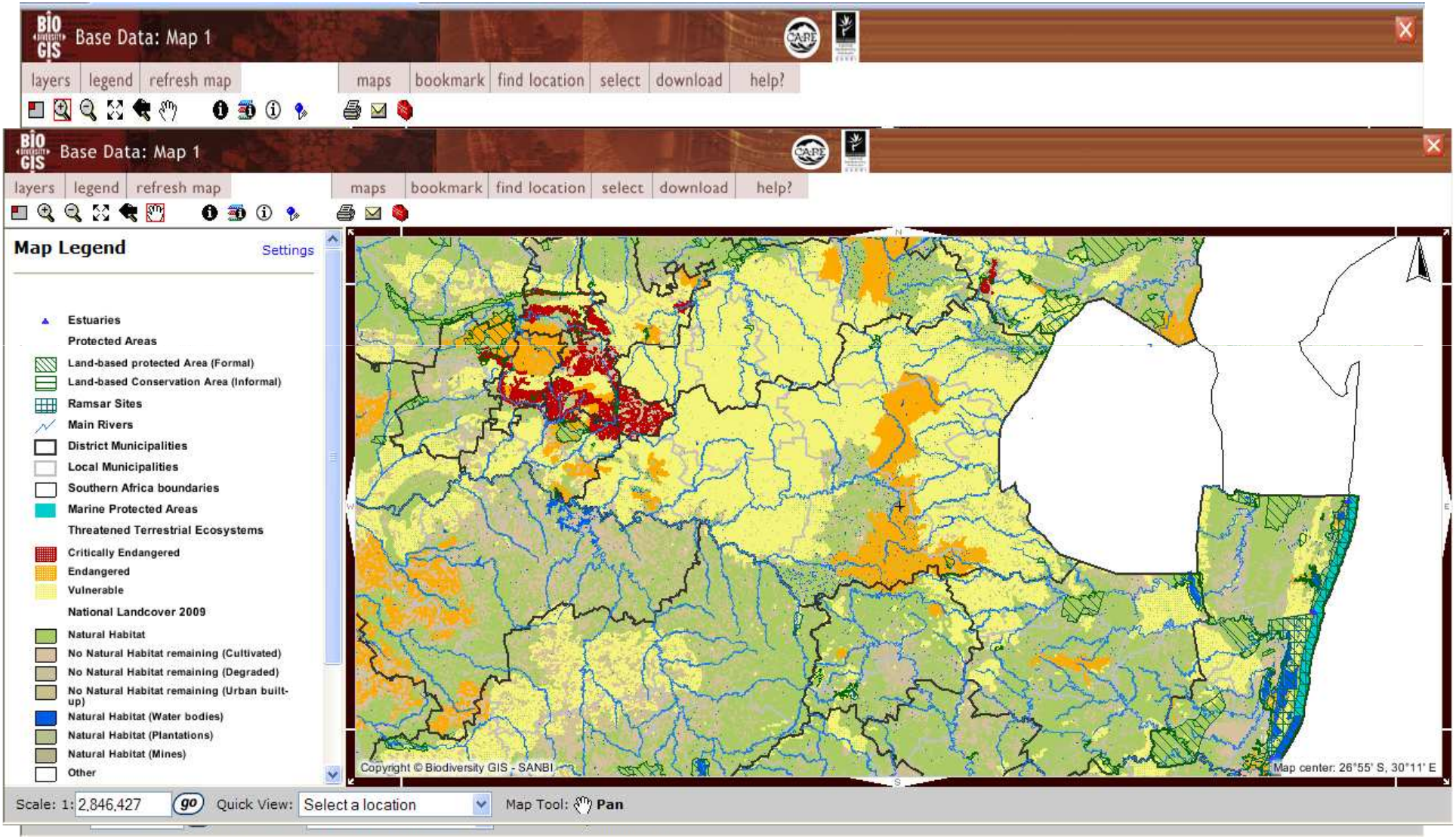
LEGEND
PROTECTED AREAS
Land-based Protected Area (formal)
Land-based Conservation Area (informal)
Marine Protected Area
Ramsar
TERRESTRIAL ECOSYSTEMS
Threatened Terrestrial Ecosystems
Critically Endangered
Endangered
Vulnerable
Least Threatened
Areas Remaining Natural
Areas Where No Natural Habitat Remains
FRESHWATER ECOSYSTEMS
Rivers
Wetlands
COASTAL AND INSHORE MARINE ECOSYSTEMS
Estuaries
OTHER
Major Town
Towns
Roads

Amahlathi

3. GIS Shape files

- Series of shape files for biodiversity features:
  - Municipal Boundary
  - Land Cover
  - Land-based Protected Areas
  - Marine Protected Areas
  - Biomes
  - Vegetation types
  - Threatened terrestrial ecosystems (pending)
  - Water Management Areas
  - Main Rivers
  - Estuaries

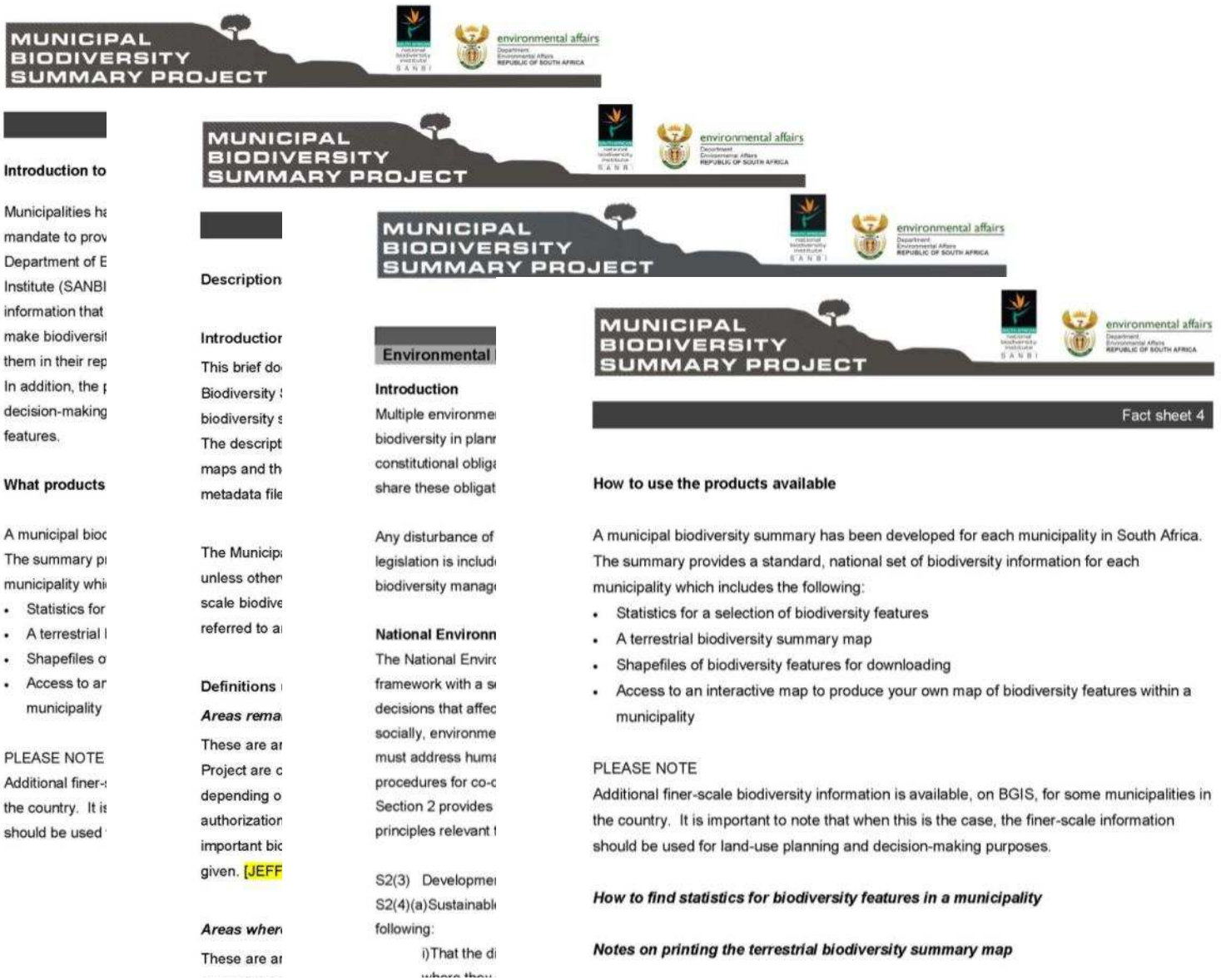
4. Interactive map



5. Series of fact sheets

- Fact sheet 1: Introduction to the project
- Fact sheet 2: Descriptions of biodiversity features
- Fact sheet 3: How to use the products
- Fact sheet 4: Environmental legislation
- Fact sheet 5: Terrestrial ecosystems
- Fact sheet 6: Freshwater ecosystems
- Fact sheet 7: Marine and coastal ecosystems
- Fact sheet 8: Bioregional plans & biodiversity sector plans

Series of factsheets cont.



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environmental affairs
Department: Environmental Affairs
REPUBLIC OF SOUTH AFRICA

SANBI

Introduction to

Municipalities ha
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In addition, the p
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features.

What products

A municipal bioc
The summary p
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- Statistics for
- A terrestrial
- Shapefiles o
- Access to ar
  municipality

PLEASE NOTE
Additional finer-
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should be used

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Department: Environmental Affairs
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SANBI

Description

Introductior

This brief do
Biodiversity
biodiversity s
The descript
maps and th
metadata file

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Definitions

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SANBI

Environmental

Introduction

Multiple environme
biodiversity in plan
constitutional oblig
share these obligat

Any disturbance of
legislation is includ
biodiversity manag

National Environn

The National Envirc
framework with a s
decisions that affec
socially, environme
must address huma
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Section 2 provides
principles relevant

S2(3) Developmer
S2(4)(a)Sustainabl
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i)That the di

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REPUBLIC OF SOUTH AFRICA

SANBI

Fact sheet 4

How to use the products available

A municipal biodiversity summary has been developed for each municipality in South Africa. The summary provides a standard, national set of biodiversity information for each municipality which includes the following:

- Statistics for a selection of biodiversity features
- A terrestrial biodiversity summary map
- Shapefiles of biodiversity features for downloading
- Access to an interactive map to produce your own map of biodiversity features within a municipality

PLEASE NOTE
Additional finer-scale biodiversity information is available, on BGIS, for some municipalities in the country. It is important to note that when this is the case, the finer-scale information should be used for land-use planning and decision-making purposes.

How to find statistics for biodiversity features in a municipality

Notes on printing the terrestrial biodiversity summary map

Series of factsheets cont.

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TERRESTRIAL ECOSYSTEMS

Threatened terrestrial ecosy

Background

The Biodiversity Act (Act 10 of 2
in one of four categories: critica
protected. The purpose of listing
ecosystem and species extinctio
structure, function and composi
protected ecosystems is primari
conservation value.

It was agreed early on in the list
the complexity of the process. T
ecosystems in the terrestrial en
ecosystems in the freshwater, e
ecosystems in all environments

Threatened terrestrial ecosyste
consistently applied national cri
available science as well as on
threatened ecosystems is both
developed for threatened terres

The threatened terrestrial ecosy
endangered and endangered e
ecosystems a further 6.8%.

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FRESHWATER ECOSYSTEMS

Rivers and riparian habitats

What are rivers and riparian habita

River systems depend on the surrou
keep them healthy. This vegetation p
bind the soil of riverbanks preventing
assists in maintaining natural water t
life in the river and acts as a buffer p

A river catchment is all the land area
flows towards a single river and its tr
from one another by watersheds

Why are rivers and riparian habita

Some of the reasons why rivers and

- Rivers supply us with water for ag
- Rivers provide a source of food, f
  people
- Rivers provide opportunities for to
  boating
- Rivers provide areas of cultural ar
- Medicinal plants are found growin
- Rivers and riparian habitat provid

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COASTAL & INSHORE MARINE ECOSYSTEMS

Estuaries

What are estuaries?

Estuaries are formed where fres
fully enclosed bodies of water w
and within which the sea water c
freshwater drained from the land

Estuaries can be divided into five
estuaries, river mouths, estuarin
are distributed across three zone
warm temperate zone (on the so
giving 13 groups of estuaries.

The health of estuaries have bee

- Excellent, if they are in near p
  impact;
- Good, if there are no major n
  catchment;
- Fair, if there is moderate impa

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Fact sheet 8

Bioregional plans and biodiversity sector plans

Background

The Biodiversity Act (Act 10 of 2004) provides for the management and conservation of biological diversity in South Africa and has introduced a number of new tools to help achieve this. One of these tools is publishing bioregional plans. To assist with the development and publishing of bioregional plans in South Africa, SANBI and DEA developed a guideline entitled "Guideline regarding the determination of bioregions and the preparation of bioregional plans". This guideline was gazetted on 16 March 2009 (Government Gazette No 32006). SANBI has also produced a summary of this guideline, highlighting the key elements, processes and procedures of publishing a bioregional plan.

The purpose of a bioregional plan is to inform land-use planning and decision-making by a range of sectors whose policies and decisions impact on biodiversity. This is done through providing a map of biodiversity priorities with accompanying land-use planning and decision-making guidelines. Bioregional plans are intended to feed into a range of multi-sectoral planning and assessment processes such as Environmental Management Frameworks (EMFs), Spatial Development Frameworks (SDFs), Strategic Environmental Assessments

6. Benefits of biodiversity info for municipalities

- NEMA listed acitivities and Ecosystem Threat Status
- Early warning signal, Planning Filter
- Inform:
  - further investigation requirements
  - scale and type of development
  - alternative location
- Desk-top Tool/Aid, not replace biodiversity specialist and in-field assessment

6. Benefits of biodiversity info for municipalities

- SDF
  - Legally binding spatial framework
  - Spatial depiction of IDP
  - Tool that integrates all Sector Plans of the IDP

  [often lacking in biodiversity representivity]

  – Biodiversity Summaries can be used for spatially highlighting priority biodiversity for avoiding development; and for prioritising green LED action.

  – Status quo reporting

6. Benefits of biodiversity info for municipalities

- Integrated Development Plan (IDP)
  - Multi-sectoral planning at municipal level
  - Includes an Environmental Sector Plan
- Biodiversity Summary in IDP development input to:
  - Environmental Management Framework
  - Strategic Environmental Assessment
  - State of the Environment Reports
  - Land and Water Use Applications
  - Stewardship, LED projects, agri-clearing

Thank you!

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