



**By 2030 eThekweni will be Africa's  
most caring and liveable city**



The integration of nature-based solution in land use  
planning – a case study on biodiversity planning in  
eThekweni Municipality

Connective Cities Regional Dialogue Event

11 May 2021

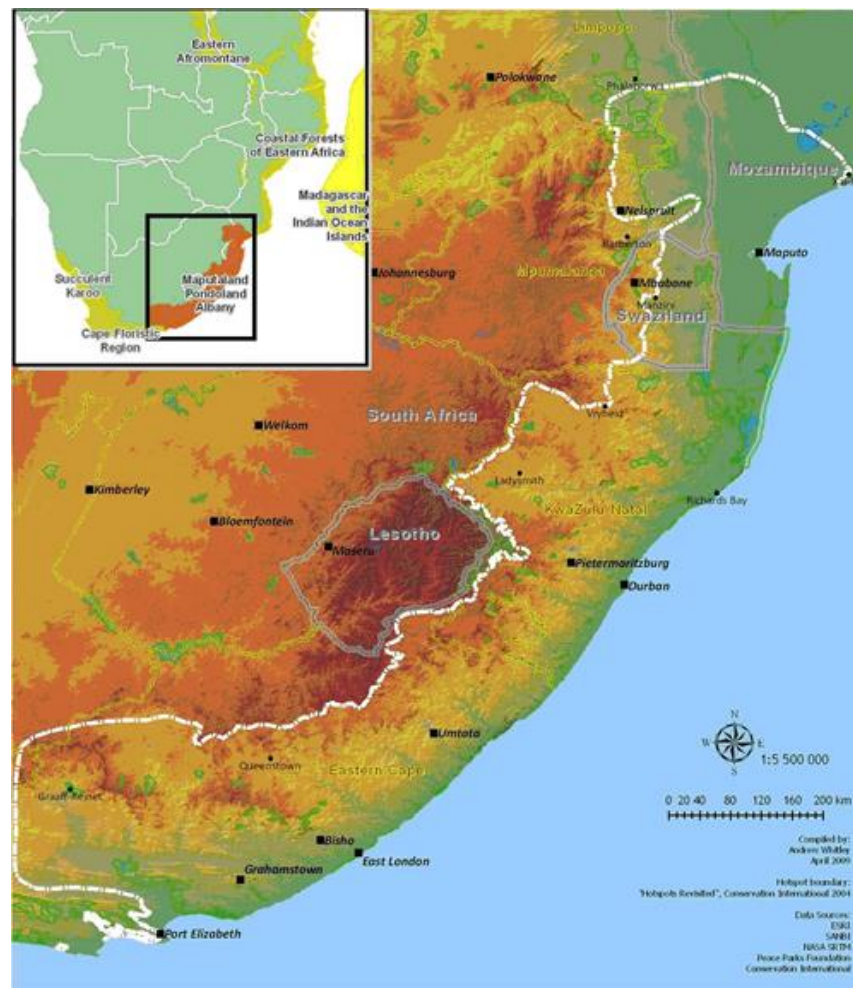
Sabelo B Nkosi

# Outline

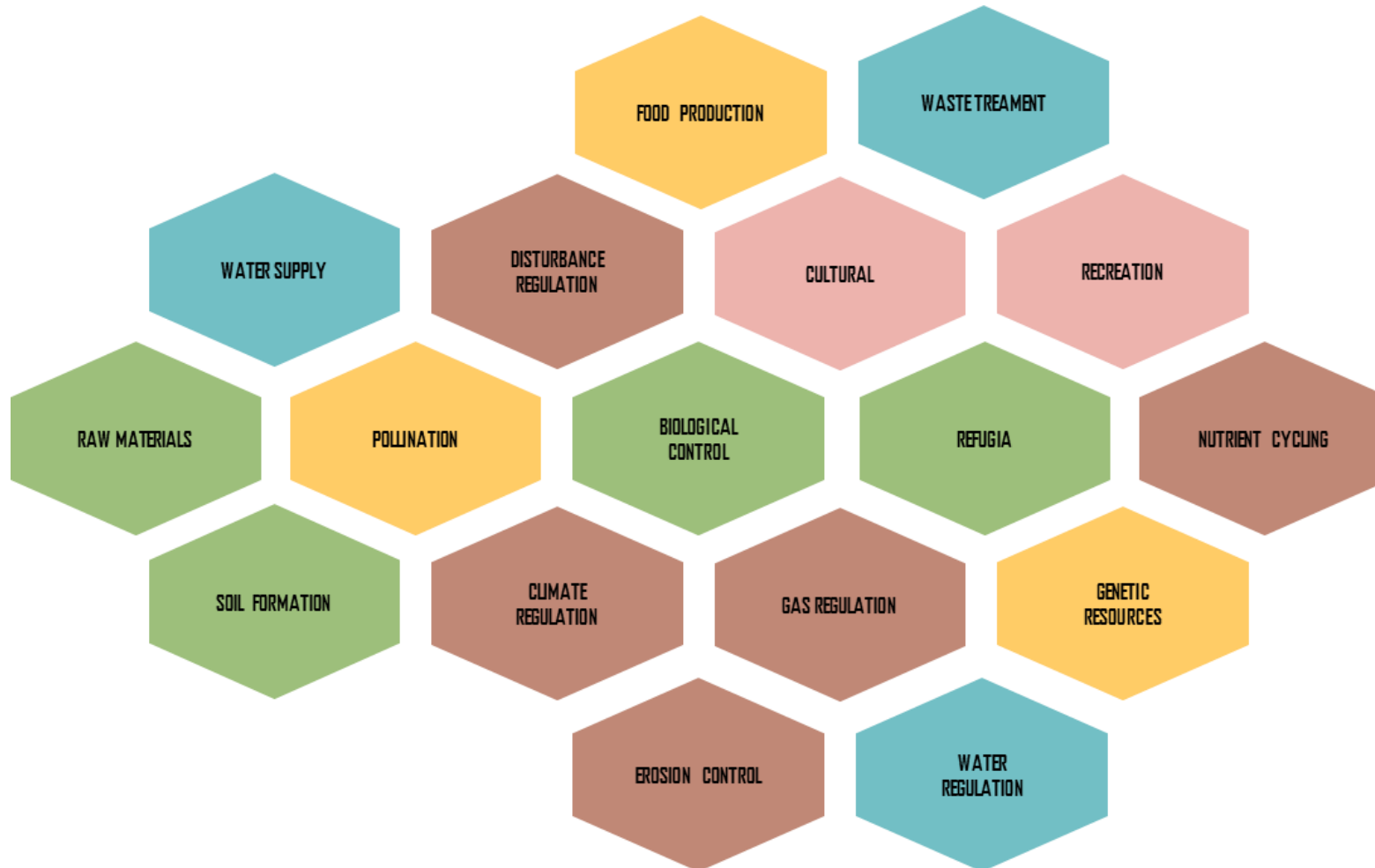
- Starting point
- Institutional setting
- Approach
- Outputs
- Lessons
- Transfer

# 1. Starting point - Background to Durban's Natural Assets

- EThekweni Municipal Area (EMA) of 2297 km<sup>2</sup> with a population of 3.5 million
- Durban is located in the middle of the Maputaland-Pondoland-Albany hotspot
- Three of the countries eight terrestrial biomes, eight broad vegetation types and over 2000 plant species
- 97 kilometres of coastline
- 18 river catchments with over 4000 kms of river
- 16 estuaries (approx ¼ of KwaZulu-Natal's estuaries)
- 75000 ha of open space



## Biodiversity matters to people

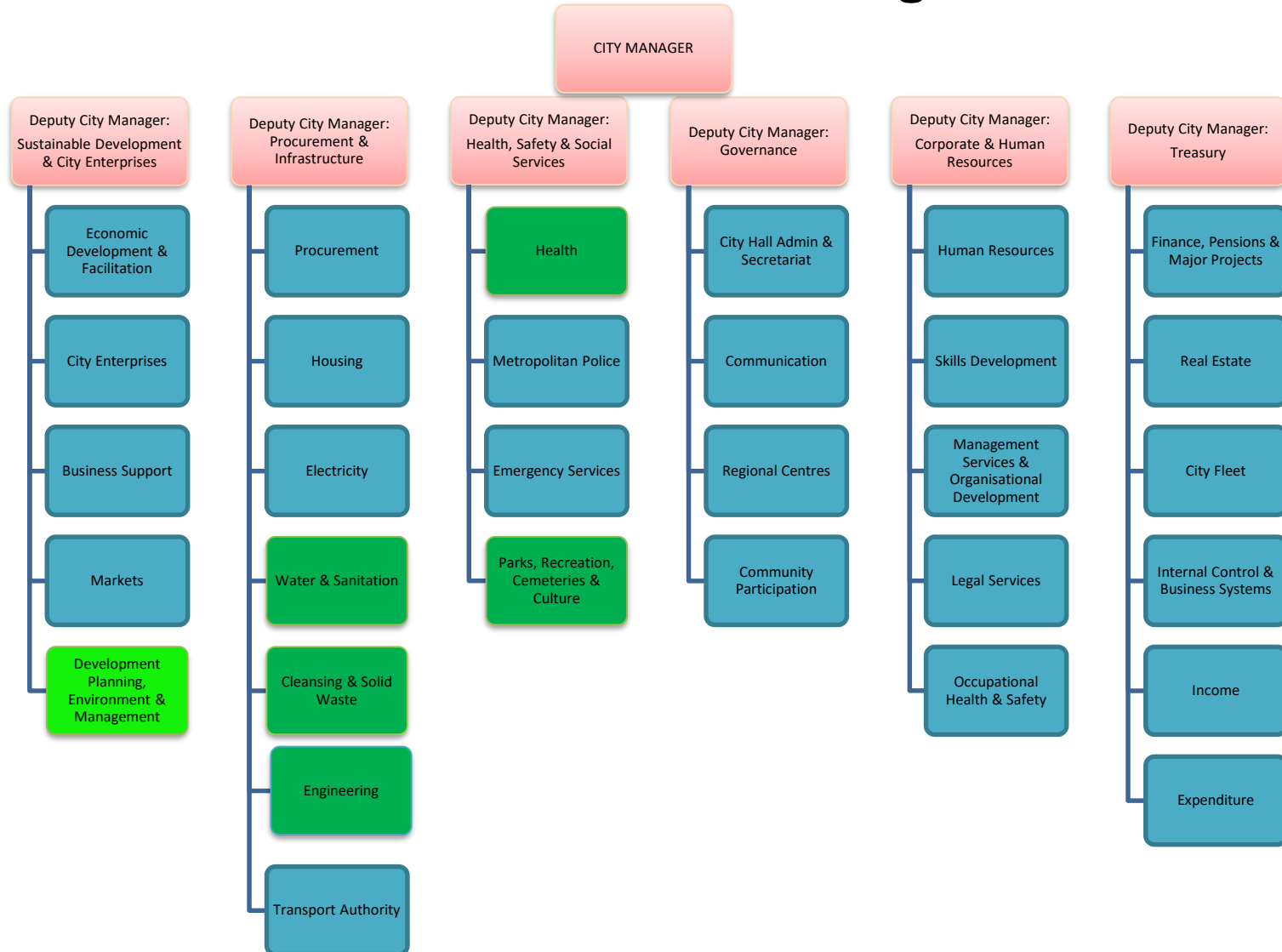


Total asset value of natural & semi-natural capital in the EMA estimated to be in the order of **R47.8 billion**. These assets give rise to ecosystem services flows worth in the order of **R4.2 billion per year** (2017).

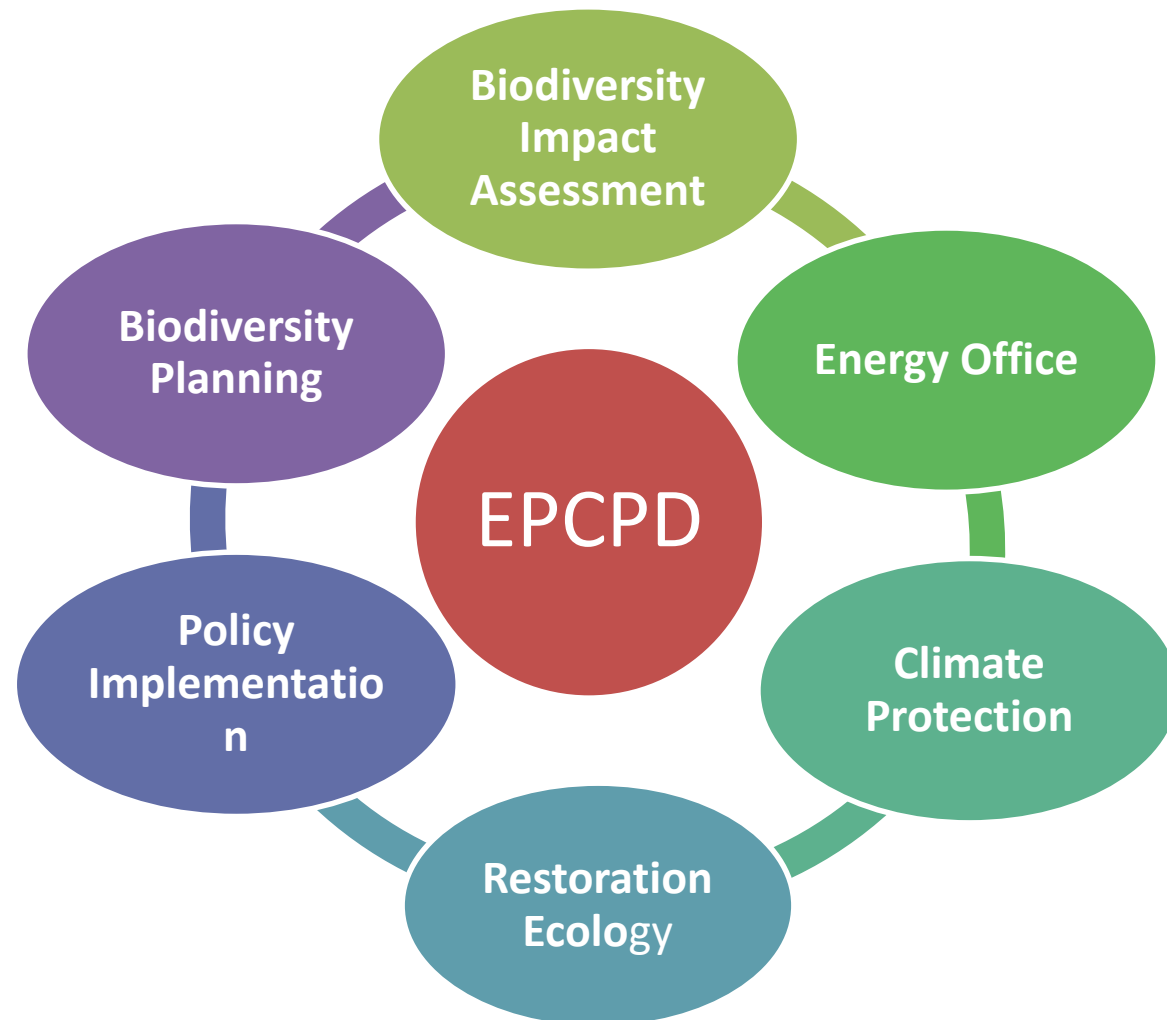




## 2. Institutional setting



## Environmental Planning and Climate Protection Department

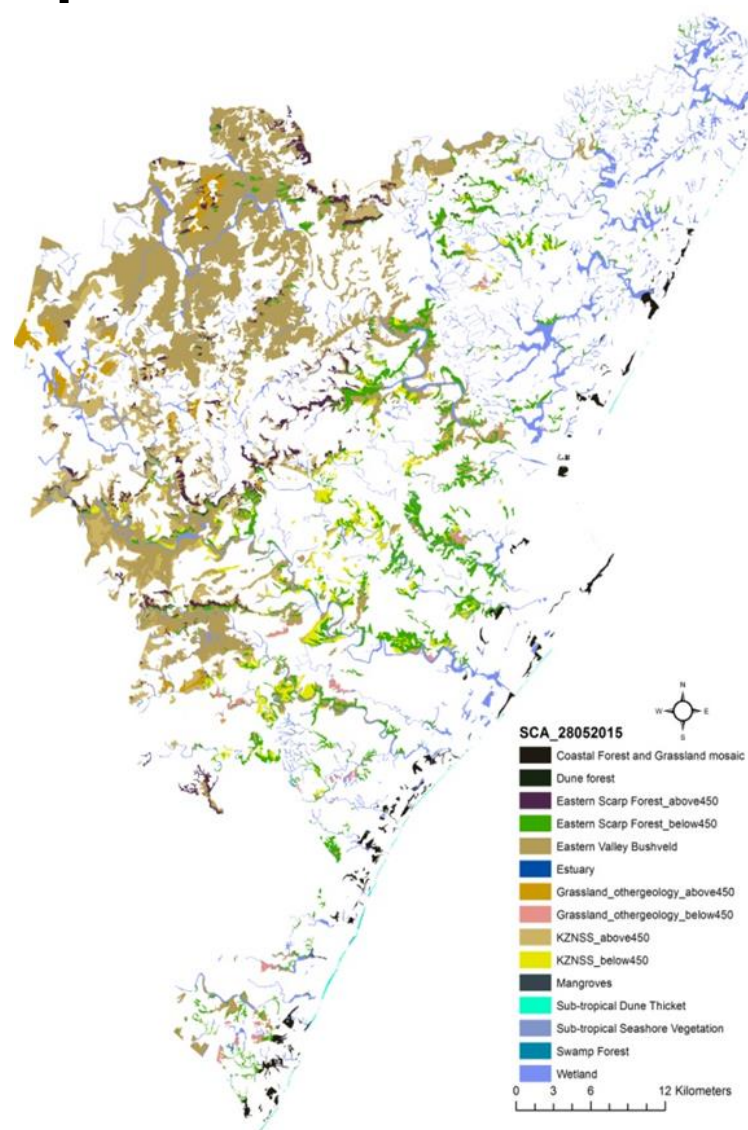
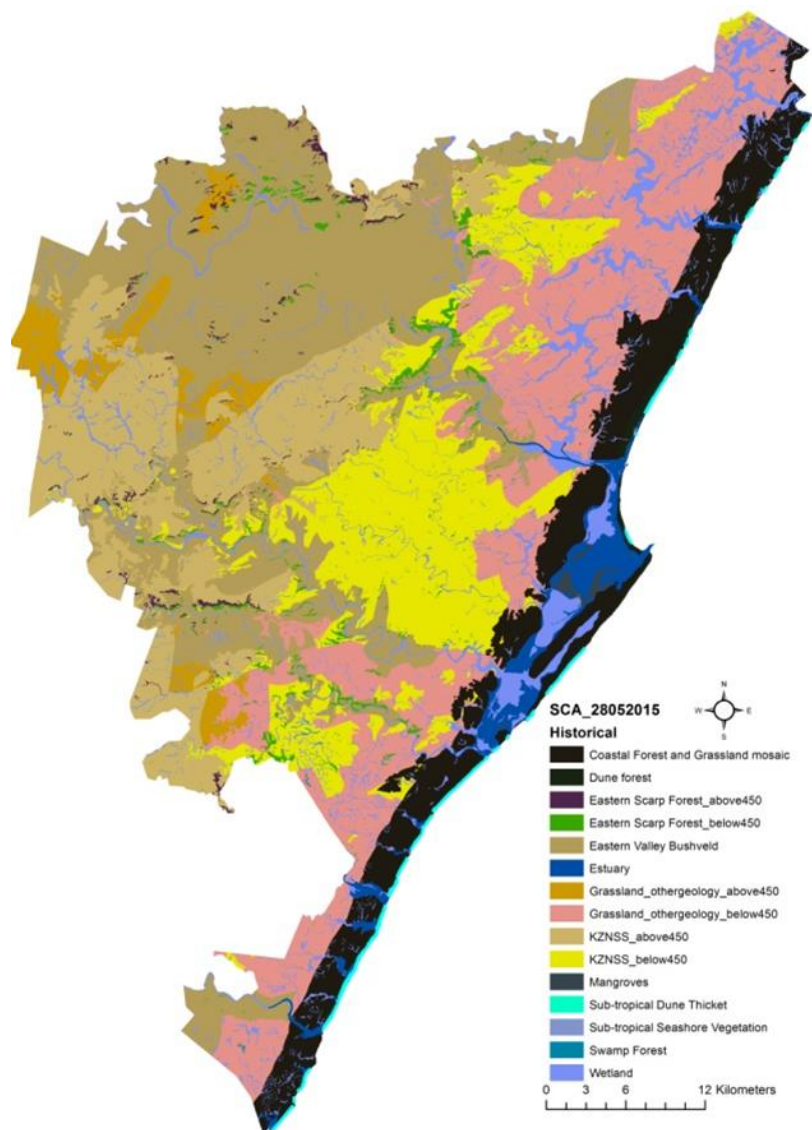


### 3. Approach – Systematic Conservation Assessment

- Scientific approach to identifying important areas for environmental protection.
- It is premised on conserving a representative sample of biodiversity pattern & the ecological and evolutionary processes that maintain biodiversity over time.
- Repeatable, objective and efficient & target driven.
- Considered global & national best practice.



## 4. Outputs





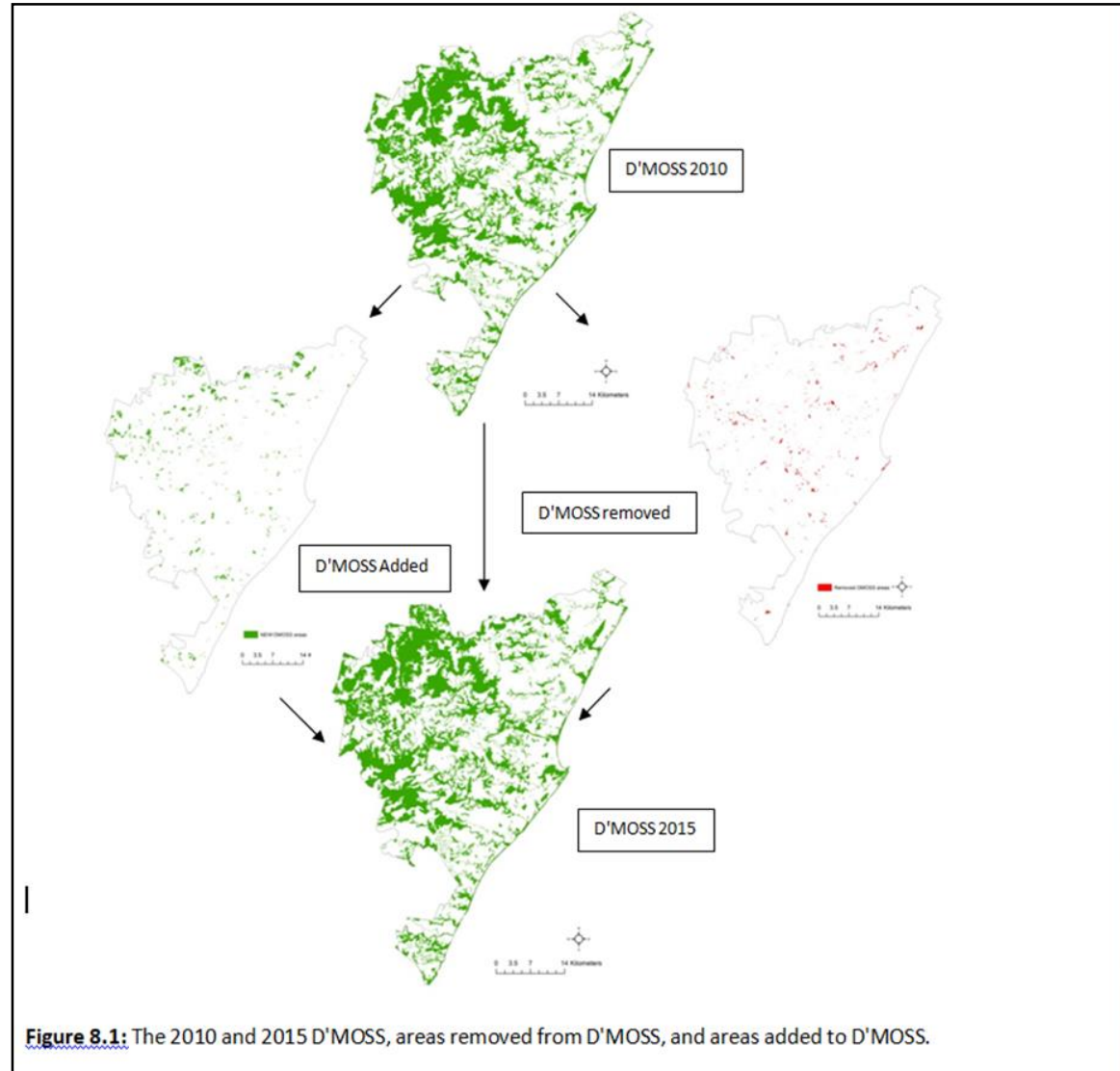
## **Durban Metropolitan Open Space System (DMOSS)**

- D'MOSS is a spatial layer representing a series of interconnecting open spaces in private, public and traditional authority ownership that seeks to protect the biodiversity and associated environmental services of the eThekweni Municipal Area for current & future generations
- Includes Municipal Nature Reserves that are formal protected and managed by the Natural Resources Division and those under KZN Wildlife
- D'MOSS informs all levels of plans in the EMA from the broad-scale Integrated Development Plan (IDP) and its spatial representation, the Spatial Development Framework (SDF), to the regional, i.e. Spatial Development Plans (SDP), and local, i.e. Local Area Plans (LAP) and town planning schemes

## D'MOSS changes

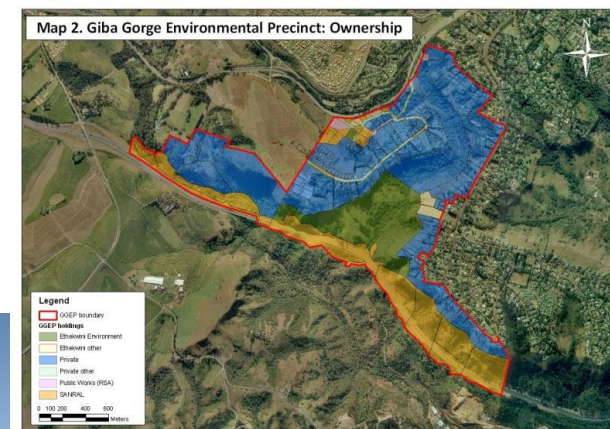
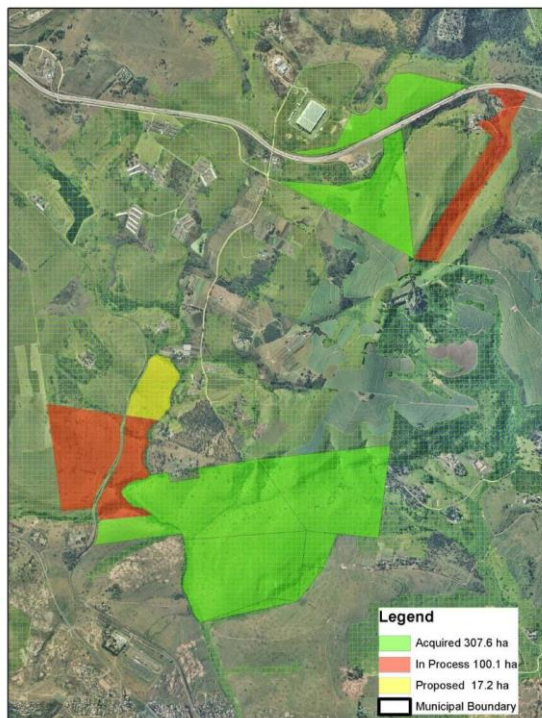
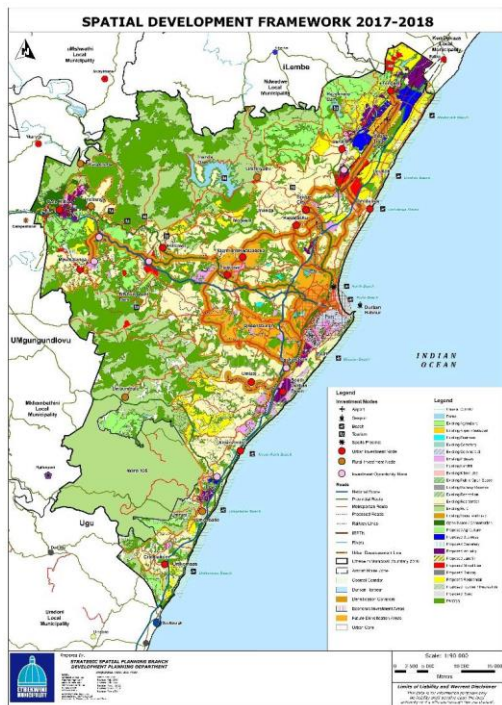
The Systematic Conservation Assessment (SCA) informed the production of an updated version of the Durban Metropolitan Open Space System (last updated and endorsed in December 2010). The approach taken was to:

- Include Critical Biodiversity Areas (CBAs) that were previously not in D'MOSS
- Remove areas that had been transformed between the two iterations
- Change areas based on Development outcomes
- Correct mapping errors from previous iteration





# D'MOSS structures other environmental programmes



## 5. Lessons

- Need for –
  - Partnerships
  - Data
  - Up-scaling
- How to use biodiversity to create and promote eco and cultural tourism initiatives?



## 6. Transfer

- Understand the key biodiversity considerations.
- Then apply the most appropriate tool
- Prioritise your actions based on outcomes

# Thank you!



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