

Biodiversity & Climate Change
Policy Framework:
Response Principles and Philosophy

Stakeholder Consultation Roundtable

26 August 2009

Starting points

- Biodiversity and healthy ecosystems are critical for human wellbeing and quality of life.
- Biodiversity and healthy ecosystems support adaptation to climate change by humans, including through providing resilience to extreme climate events. This has direct economic value.
- There is a need to adapt to increased climate variability as well as long-term climatic shifts.

Starting points

- The vulnerability and adaptive capacity of ecosystems is closely linked to the social and economic systems that surround them.
- The economic cost of adapting to climate change is likely to be substantial, but the economic cost of not adapting would be even greater.

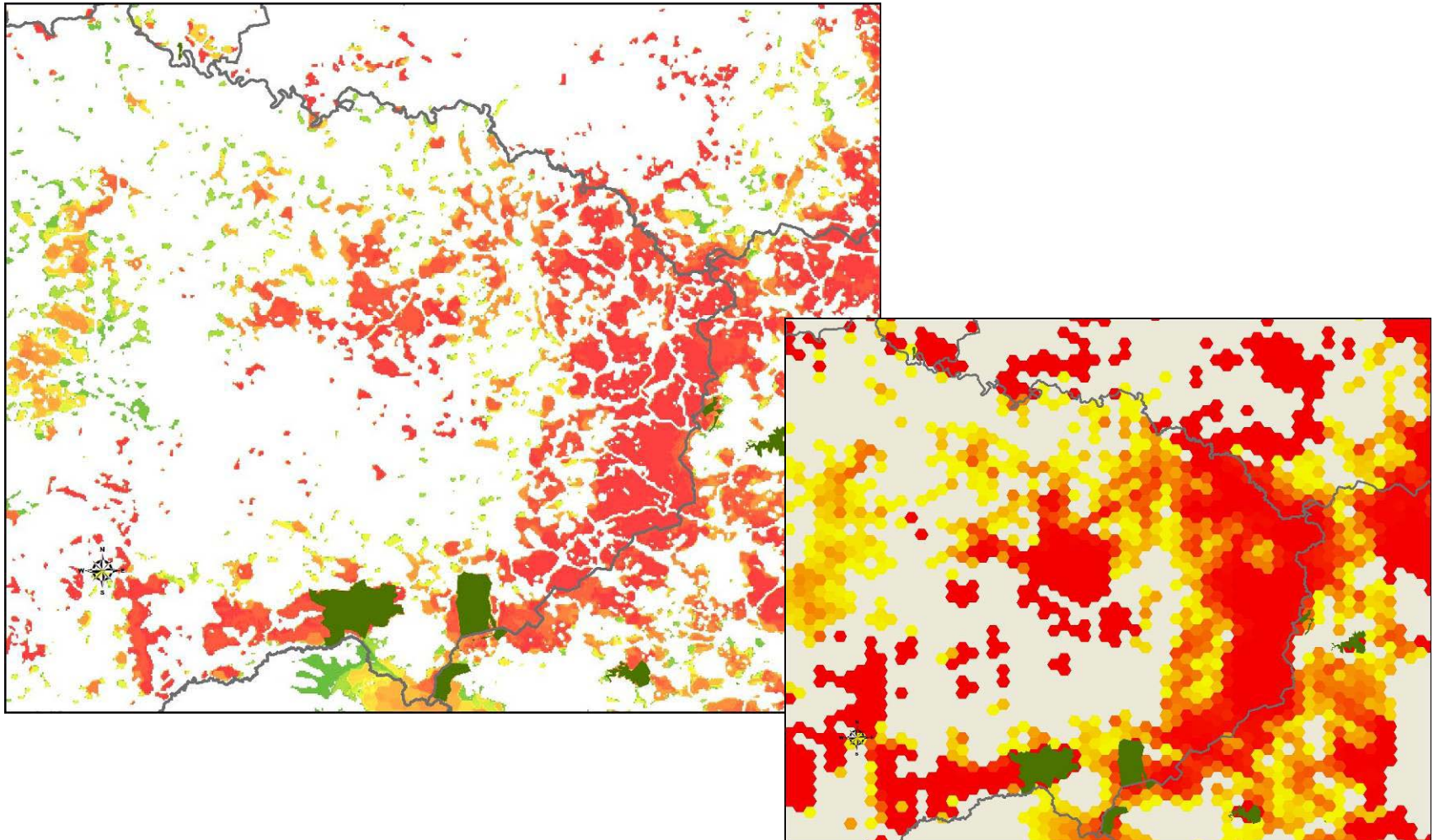
Principle 1

- Halt further loss and degradation of natural ecosystems in priority areas for climate change resilience

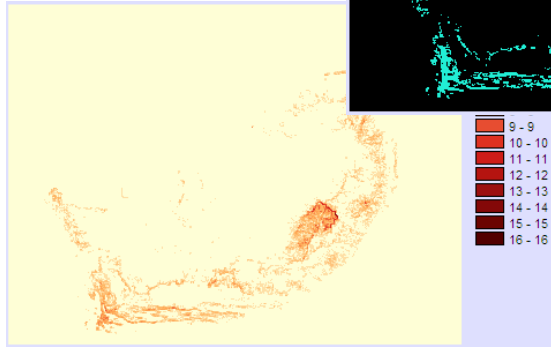
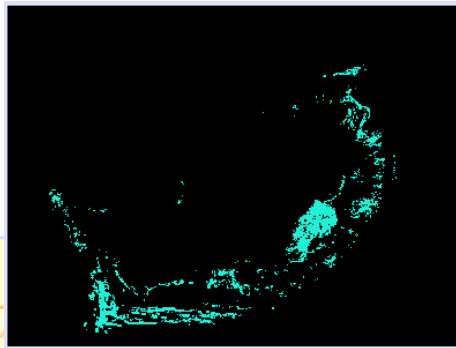
What are priority areas for climate change resilience?

→ NPAES and NSBA 2010 include analysis of areas where healthy natural ecosystems contribute to climate change resilience

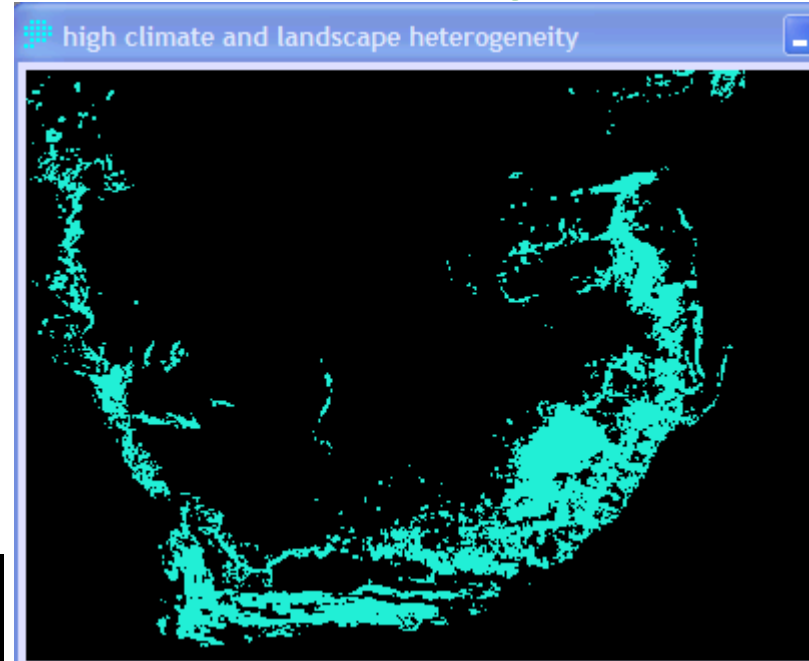
Large natural connected areas



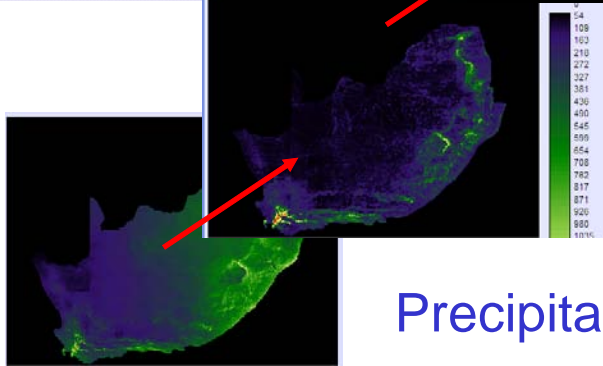
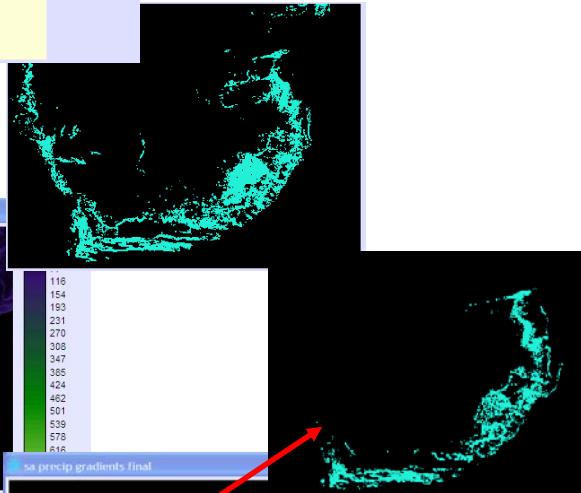
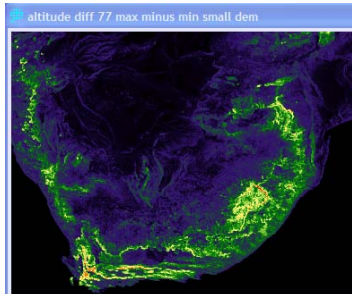
Temperature



Potential climate change resilience (topographic & climatic heterogeneity)



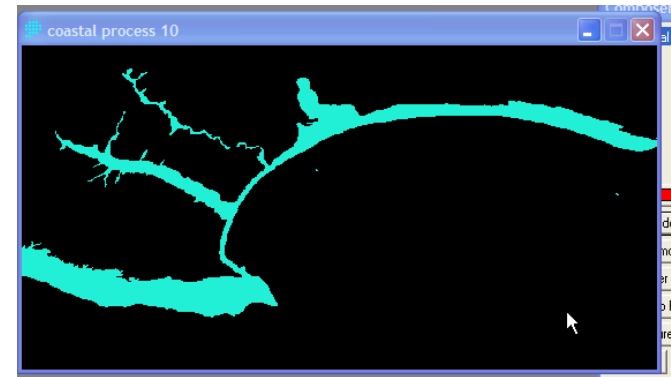
Altitude



Precipitation

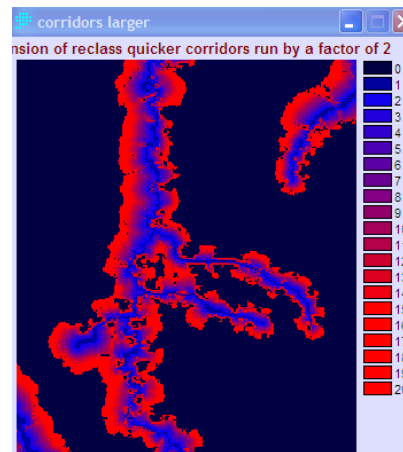
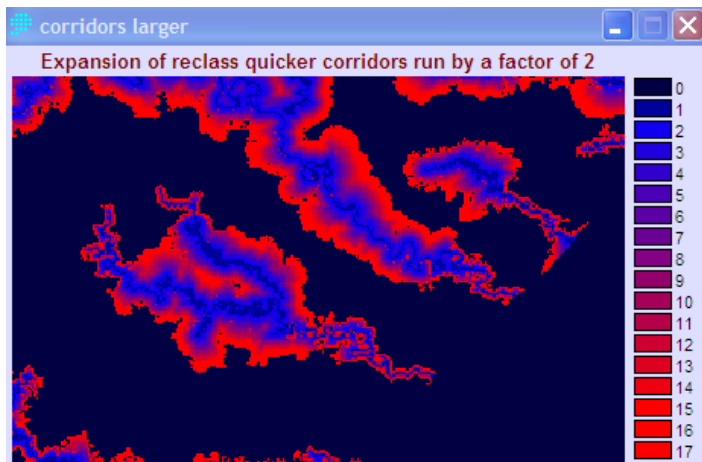
Coastal processes

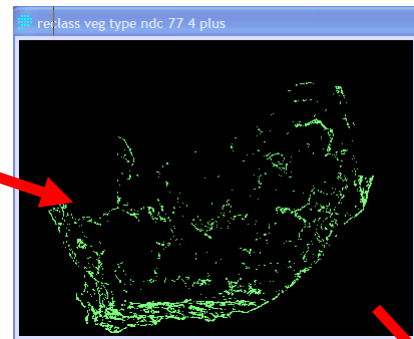
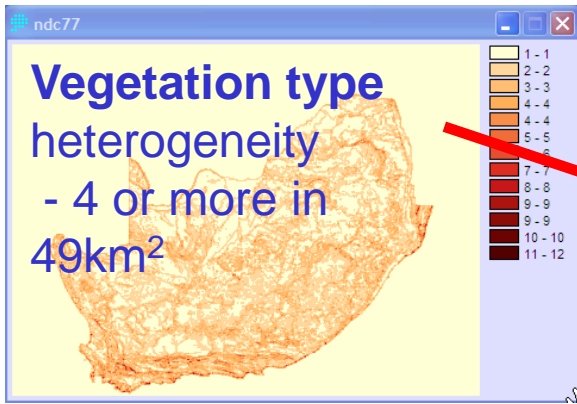
Coastal vegetation types, buffer, landtypes associated with coastal processes, coastal wetland types, gaps



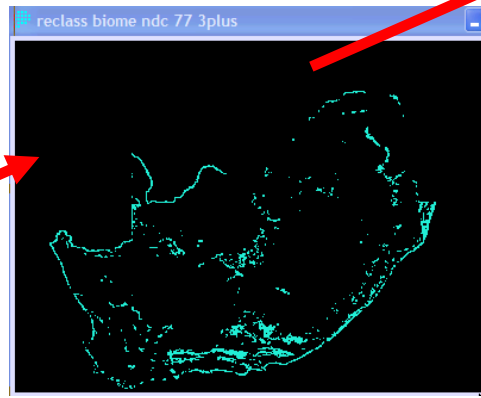
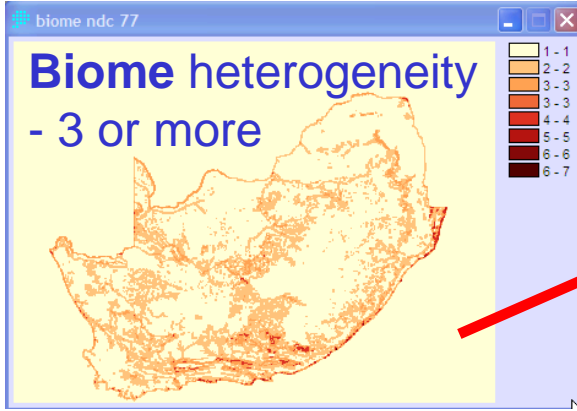
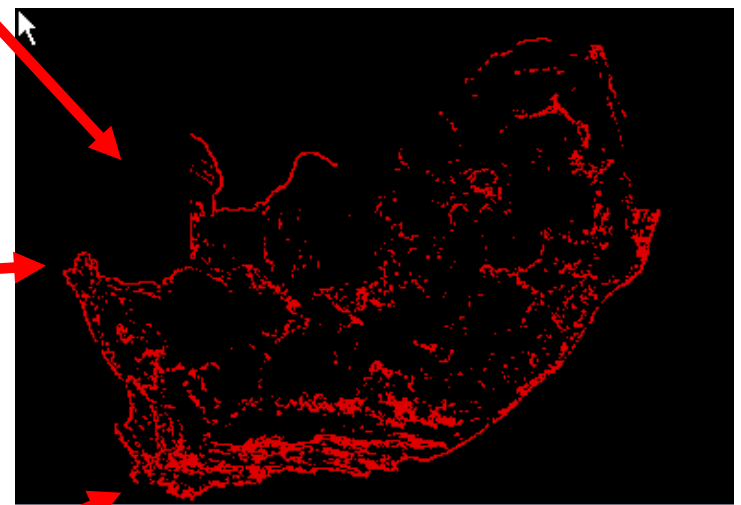
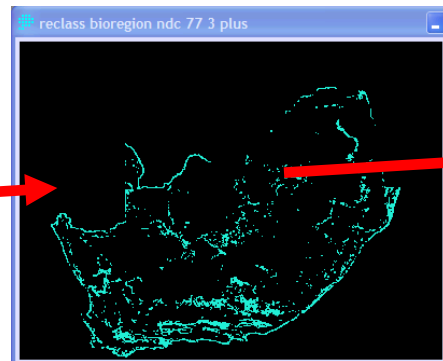
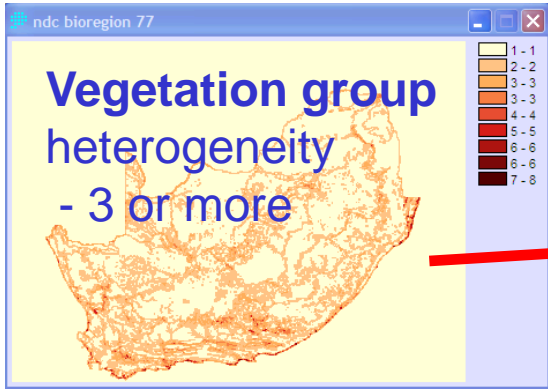
River associated movement corridors

- Cost surface based with 1:500 000 rivers
- For completely transformed areas total corridor width of 1 km was aimed for, & maximum of 10 km for completely natural areas
- Complicated patterns of land use were also taken into consideration, including allowing corridors to take into account transformation on only one side of a river

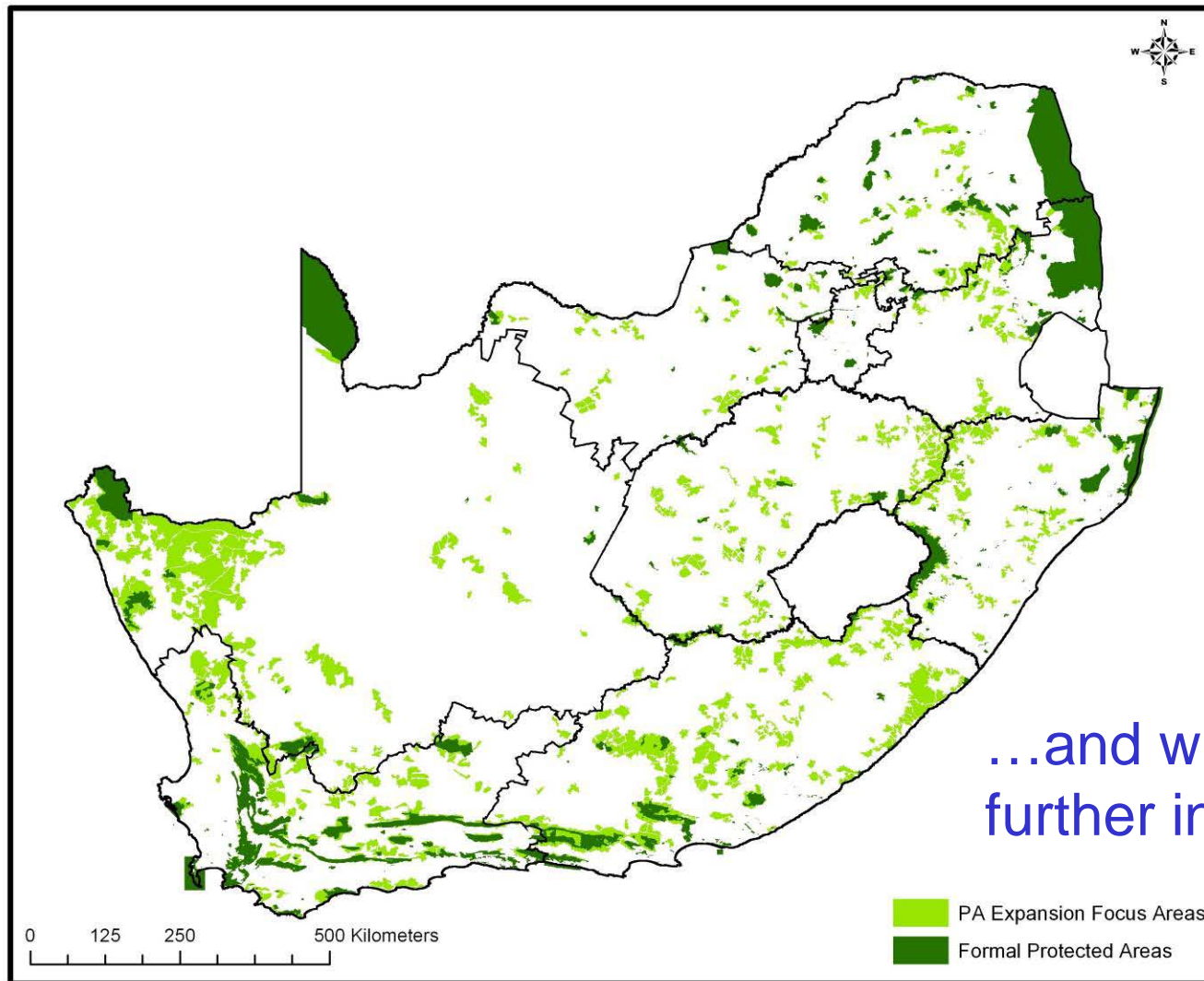




Habitat heterogeneity



Climate change resilience = key factor in determining focus areas for protected area expansion in NPAES



...and will be taken further in NSBA 2010

Principle 2

- **Avoid** adaptation strategies which pose a **high risk to the integrity of natural ecosystems** and which thus compromise the ability of ecosystems to contribute to human adaptation to climate change



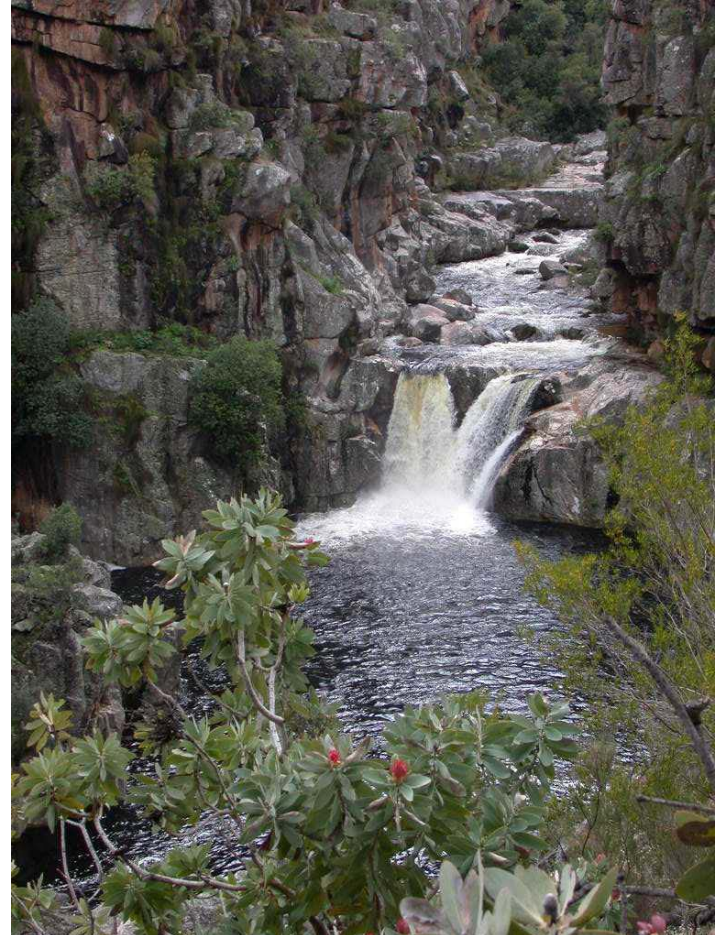
Principle 3

- Prioritise adaptation strategies which deliver **multiple benefits across several sectors** (e.g. benefits for the safety of human settlements and for agriculture and for natural ecosystems)



Principle 4

- Prioritise adaptation strategies that facilitate **resilience both to increased climate variability and to long-term climatic shifts**



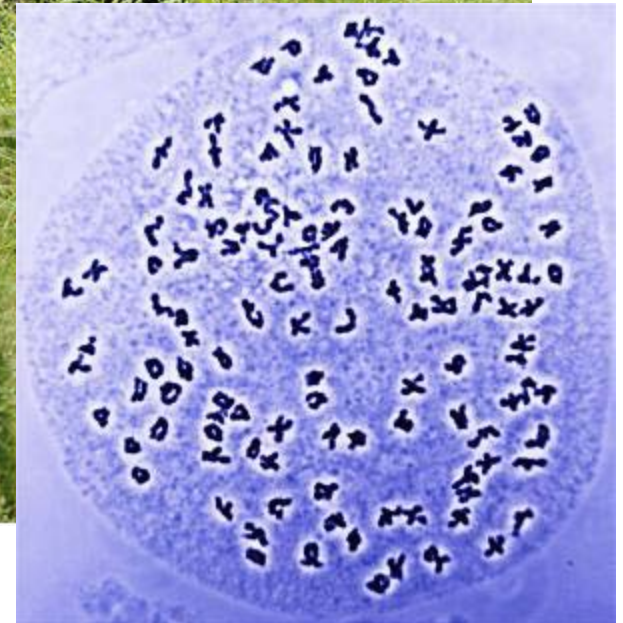
Principle 5

- Prioritise cost-effective adaptation measures where possible



Principle 6

- Address adaptation to climate change at landscape, ecosystem, species and genetic levels



Principle 7

- Where possible, integrate climate change adaptation and mitigation responses into **existing programmes and institutional arrangements** rather than creating new programmes and institutional arrangements



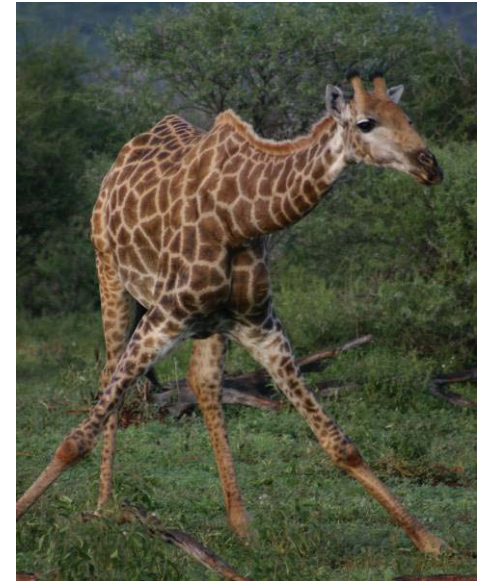
Principle 8

- Ensure **ongoing generation of scientific knowledge** to support climate change adaptation and mitigation, and facilitate **strong links between science, policy and implementation** to ensure that the best available science informs the biodiversity and climate change response strategy and action plan



Principle 9

- Draw on **indigenous and traditional knowledge** to support climate change adaptation



Principle 10

- Improve **communication and public awareness** efforts and encourage **active public participation** in biodiversity matters that relate to climate change



Principles

- These ten principles have informed the **policy directions** and **key elements** of the biodiversity and climate change response strategy – see Section 4 of draft document

Philosophy

- Strong focus on **ecosystem-based adaptation**
- Adaptation of humans to climate change with the help of healthy natural ecosystems (“green infrastructure”)
- Social, economic and ecological benefits
- Key component of our national climate change response strategy? (not just the biodiversity sector strategy)

Must-read

- World Bank publication, June 2009
- *Convenient Solutions to an Inconvenient Truth: Ecosystem-Based Approaches to Climate Change*
- Available at www.worldbank.org/biodiversity
- Exec summary only 5 pages!