



Lessons Learned from Bioregional Plans

Outline

- Process of developing a bioregional plan
- Update on bioregional plans
- Key lessons learned from bioregional plans



Systematic biodiversity planning process

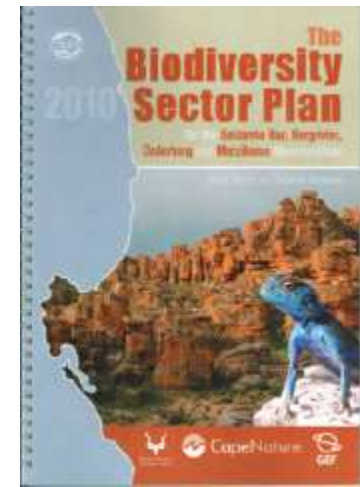
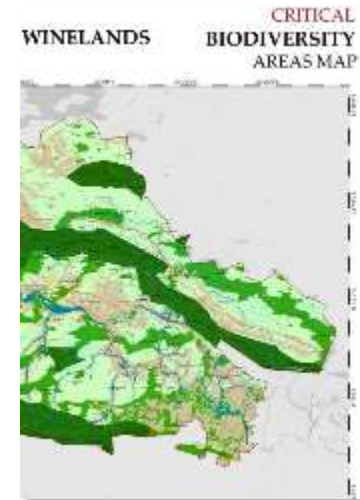
Biodiversity Plan (showing CBAs)

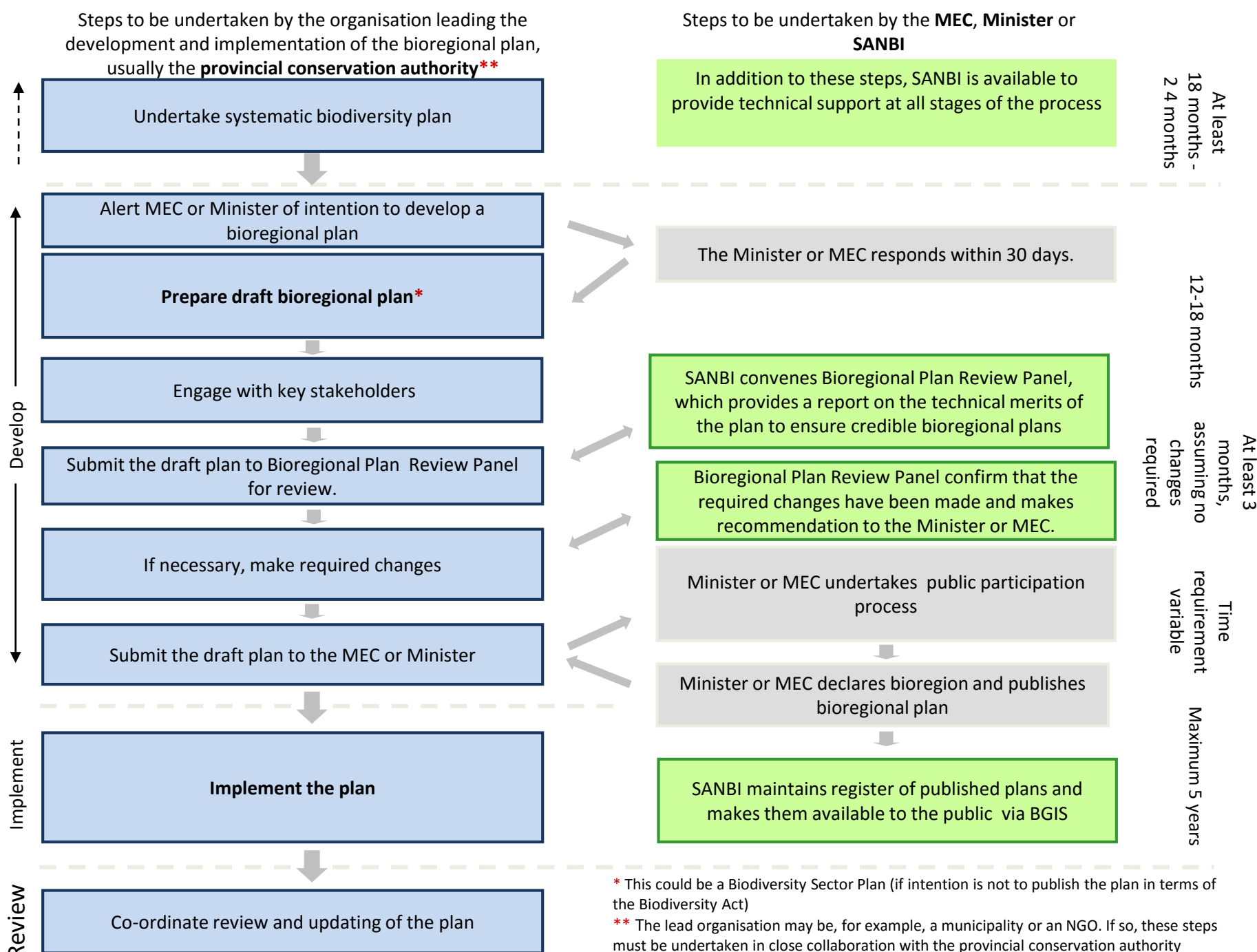
... plus profile and land-use guidelines

Biodiversity sector plan

... plus process of publishing in terms of Biodiversity Act

Bioregional plan





Parts of a Bioregional Plan

- Part A: Introduction & Objectives
- Part B: Biodiversity Profile
- Part C: Map of Critical Biodiversity Areas
- Part D: Land Use Guidelines
- Part E: Additional Measures for Biodiversity Management
- Part F: Monitoring, Reviewing & Updating
- Part G: GIS Data



Submission documents

- The following documents need to be submitted to the Review Panel:
 - Draft Bioregional Plan
 - Process & Consultation Report
 - Technical Report from the systematic biodiversity plan
 - GIS Shapefiles



Bioregional Plan for the Ekurhuleni Metropolitan Municipality

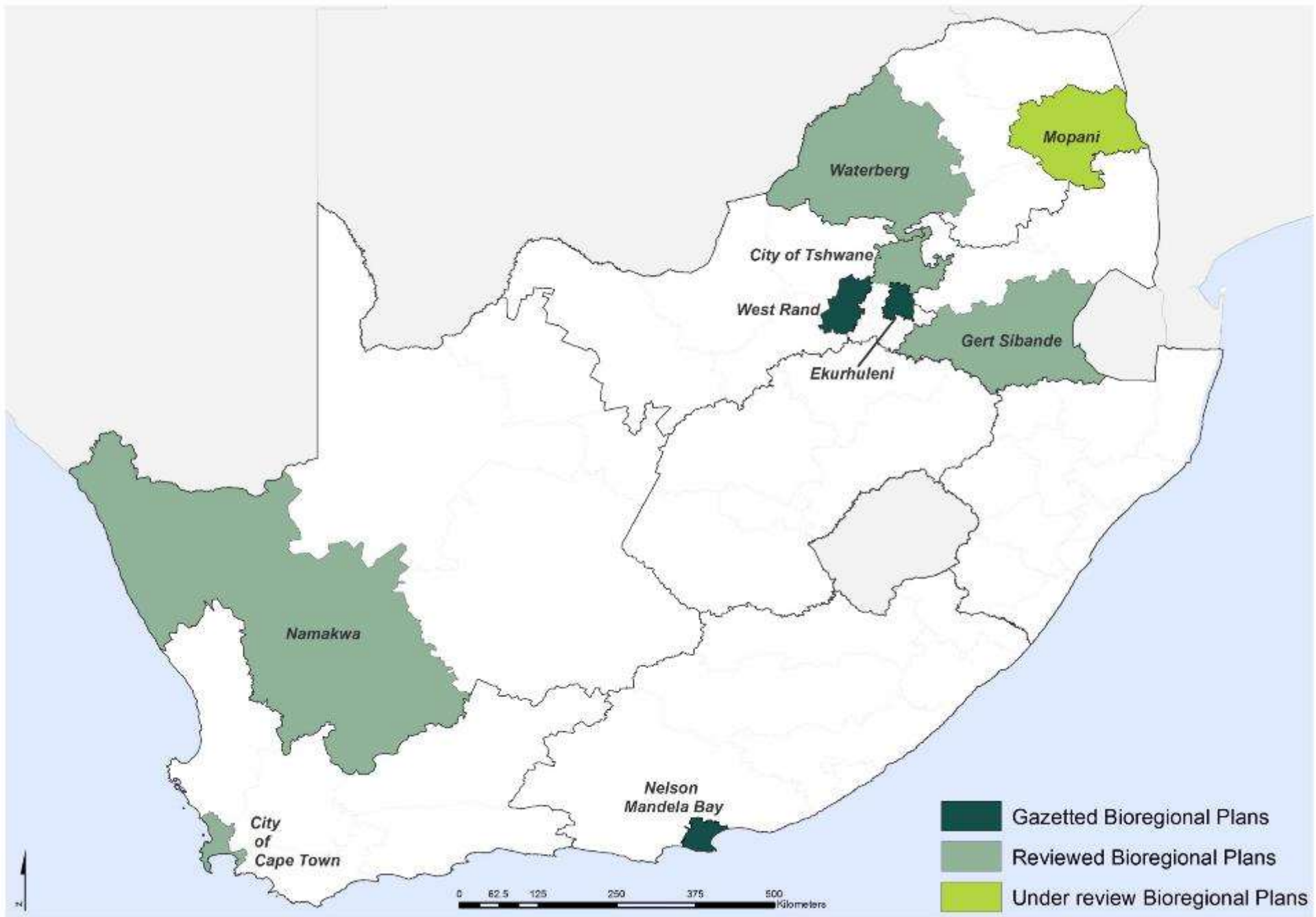


Compiled by
Ekurhuleni Metropolitan Municipality
November 2011, revised March 2014

Bioregional Plan for the West Rand District Municipality



Compiled by
West Rand District Municipality
November 2011, revised March 2014



Observations about bioregional plans

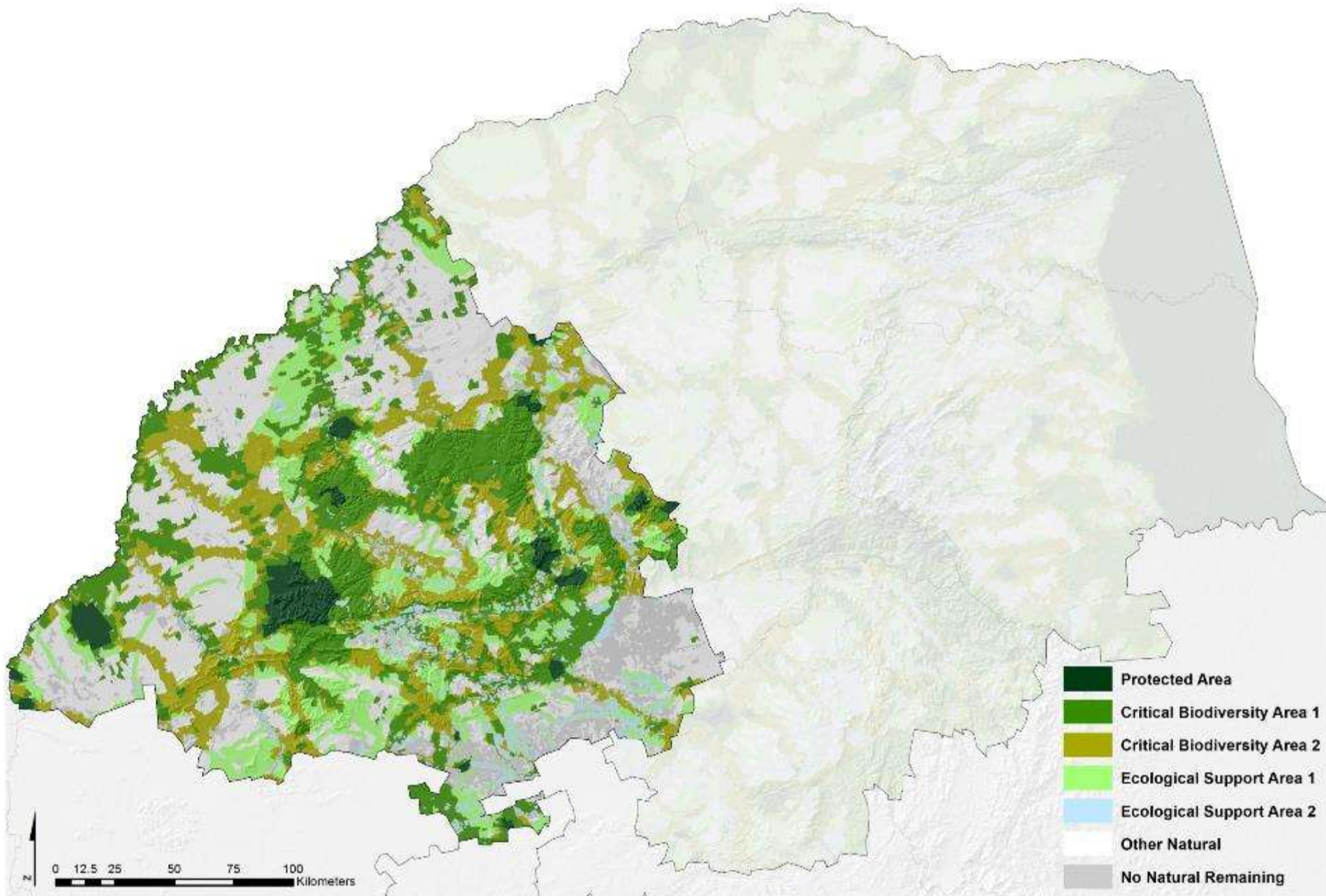
- Strength of a Bioregional Plan
 - Bioregional plans take municipal plans into consideration, e.g., SDF's and EMF's-may require realignment (conflict resolution) of CBA's if its in development area of SDF
 - Extensive stakeholder consultation-e.g. in Waterberg, stakeholders wanted the entire biosphere reserve to be included as a CBA
 - These plans have specific land use guidelines and can therefore be used in site specific decision making



Observations about bioregional plans (cont.)

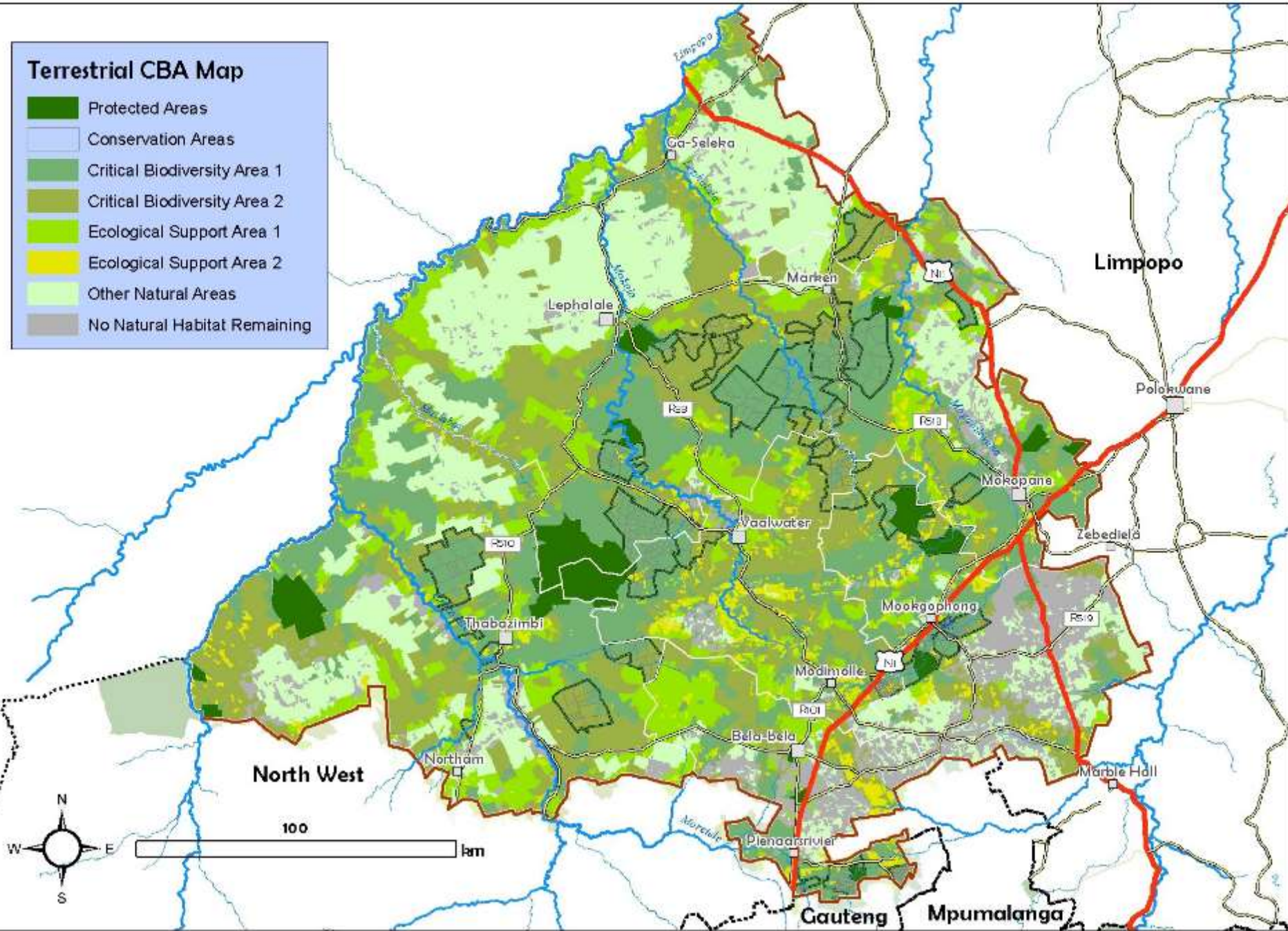
- You can't simply cookie cut provincial biodiversity plan to the area
- Provincial plans generally do not take other sector plans into consideration
- No comprehensive stakeholder engagement
- They have very broad land use guidelines





Terrestrial CBA Map

- Protected Areas
- Conservation Areas
- Critical Biodiversity Area 1
- Critical Biodiversity Area 2
- Ecological Support Area 1
- Ecological Support Area 2
- Other Natural Areas
- No Natural Habitat Remaining



Observations about bioregional plans (cont.)

- Land Use Guidelines
 - Different plans have different approaches:
 - We will be working with provincial planners to come up with a more standardised approach but its difficult, i.e., difference between Rural & Urban areas and the choice
 - Review Panel's Guidance:
 - Only have land use guidelines for CBA's and ESA's
 - PA's, ONA, and NNA do not need them



Category on the CBA Map	Description	Land Management Objective	Land Management Recommendations	Compatible Land-Use	Incompatible Land-Use
Protected Areas	Formal Protected Areas and Protected Areas pending declaration under Protected Areas Act. ⁴	Maintain in a natural or near-natural state. Rehabilitate degraded areas to a natural or near natural state, and manage for no further degradation.	Maintain or obtain formal protection.	Conservation and associated activities. See the management plan for the protected area concerned.	All other land-uses.
Critical Biodiversity Areas 1	Areas required to be maintained in a natural or near natural state to meet targets for biodiversity pattern (features) or ecological processes.	Maintain in a natural or near-natural state. Rehabilitate degraded areas to a natural or near natural state, and manage for no further degradation.	Obtain formal protection where possible. Implement appropriate zoning to avoid loss of intact natural habitat or intensification of land-use.	Conservation and associated activities. Extensive game farming and eco-tourism operations with strict control on environmental impacts and carrying capacities, where overall a biodiversity compatible land-use is secured across a property. Extensive Livestock Production on natural rangeland with strict control on environmental impacts and carrying capacities. Urban Open Space Systems	Urban land-uses including Residential (including golf estates, rural residential, resorts), Business, Mining & Industrial; Infrastructure (roads, pipelines and power lines ⁵). Intensive Animal Production (all types including dairy farming associated with confinement, imported foodstuffs, and improved/irrigated pastures). Arable Agriculture (forestry, dry land & irrigated cropping). Small holdings.
Critical Biodiversity Area 2	Cultivated landscapes which retain importance for supporting threatened species.	Maintain suitability for key threatened species.	Maintain as an agricultural landscape.	Maintain current agricultural activities. Ensure that land-use is not intensified and that activities are managed to minimize impact on threatened species.	Avoid conversion of agricultural land to more intensive land-uses which may have a negative impact on threatened species or ecological processes.

CBA Map Category	Land Management Objective
Protected areas	<i>As per protected area management plan</i>
Critical Biodiversity Area 1 (CBA1)	<p><i>Maintain in a natural or near-natural state that maximizes the retention of biodiversity pattern and ecological process:</i></p> <ul style="list-style-type: none"> • Ecosystems and species fully or largely intact and undisturbed • These are areas with high irreplaceability or low flexibility in terms of meeting biodiversity targets. If the biodiversity features targeted in these areas are lost then targets will not be met. • These are biodiversity features or parts of landscapes that are at or passed their limits of acceptable ecological change.
Critical Biodiversity Area 2 (CBA2)	<p><i>Maintain in a natural or near-natural state that maximizes the retention of biodiversity pattern and ecological process:</i></p> <ul style="list-style-type: none"> • Ecosystems and species fully or largely intact and undisturbed. • Features with some flexibility in terms of where in the landscape biodiversity targets can be met. There are options for loss of some components of biodiversity in these landscapes without compromising the ability to achieve biodiversity targets, although loss of these sites would require alternative sites to be added to the portfolio of CBAs. • These are biodiversity features or parts of landscapes that are approaching but have not passed their limits of acceptable ecological change.
Ecological Support Area 1 (ESA1)	<p><i>Maintain in at least a fair ecological condition as ecologically functional landscapes that retain basic natural attributes:</i></p> <ul style="list-style-type: none"> • Ecosystem still in a natural, near-natural or semi-natural state, and has not been previously developed. • Ecosystems moderately to significantly disturbed but still able to maintain basic functionality. • Individual species or other biodiversity indicators may be severely disturbed or reduced. • These are areas with low irreplaceability with respect to biodiversity pattern targets only.

No	Land use Zone	Associated Land use Activities	CBA1	CBA2	ESA1	ESA2
1	Environmental Conservation	Conservation management, low-intensity eco-tourism activities and sustainable consumptive activities.	Y	Y	Y	Y
2	CBA Map Overlay Zone / Bioregional Planning Overlay Zone	These are areas that are designated as biodiversity priority areas, namely CBAs and ESAs;.	Y	Y	Y	Y
3	Tourism and Accommodation	Low Impact Tourism / Recreational and Accommodation.	R	R	Y	Y
		High Impact Tourism / Recreational and Accommodation (e.g. golf estates).	N	N	N	R
4	Rural Residential	Low density rural housing or eco-estates.	R	R	R	R
		Traditional Areas (existing) and Rural Communal Settlement (New).	N	N	R	R
5	Agriculture	Extensive Game Farming	Y	Y	Y	Y
		Extensive Livestock Production	Y	Y	Y	Y
		Game Breeding / Intensive Game Farming	N	N	N	N
		Arable Land - Dryland and Irrigated Crop Cultivation	N	N	R	Y
		Plantation Forestry: Timber Production.	N	N	N	Y
		Agricultural Infrastructure - Intensive Animal Farming (e.g. feedlot, dairy, piggery, chicken battery).	N	N	N	N
6	Municipal Commonage	Local agri-economic development.	N	R	R	Y
7	Open-Space	Public or Private Open-Space, including recreational areas, parks etc.	Y	Y	Y	Y
8	Residential	Low, low-medium, medium-high, and high density urban residential development. (= NW = Urban & Business Development)	N	N	N	N
9	Urban Influence	An amalgamation of land use zones, including Institutional, Urban Influence, General Mixed Use, Low Impact Mixed Use, Suburban Mixed Use and General Business. (= NW = Urban & Business Development)	N	N	N	N

Observations about bioregional plans (cont.)

- Definitions and terminology
 - E.g., using the term “transformed” rather than “Irreversibly Modified”; etc. Please refer to Biodiversity Lexicon for a list of terms and definitions to use in biodiversity plans
- Naming of bioregional plans
 - If it’s a District Municipality, the name “municipality” does not need to appear in the name of the plan, i.e., Mopani District Bioregional Plan



Observations about bioregional plans (cont.)

- Colour issues
 - Some provinces use different colours than the standard ones and once all the provincial conservation plans, biodiversity sector plans, and bioregional plans are combined to form a national map, then the standard colours will be used.
 - However, when these plans are incorporated into SDFs, the colours may change



Questions?

- Sagwata Manyike
- s.manyike@sanbi.org.za

