

Quick reference of biodiversity tools for planners in Gauteng

Tool	Map	Land-use Guidelines	Summary	Action required
Gauteng Conservation Plan (Gauteng C-Plan)			Map of Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs) in Gauteng.	Should be used to inform Integrated Development Plans (IDPs) and Spatial Development Frameworks (SDFs), land-use planning and management.
Bioregional plans			Maps of CBAs and ESAs at the municipality level. In Gauteng, bioregional plans exist (in draft or gazetted) for 10 municipalities.	Must be used to inform IDPs, SDFs, land-use planning and management.
List of ecosystems threatened and in need of protection			Ecosystems gazetted as critically endangered (CR), endangered (EN), or vulnerable (VU). Only terrestrial ecosystems have been listed to date.	The need to protect CR and EN listed ecosystems must be taken into account in IDPs and SDFs.
National Freshwater Ecosystem Priority Areas (NFEPA)			Maps and management guidelines of priority freshwater ecosystems.	Spatial planning should take into account the need for appropriate land uses in Freshwater Ecosystem Priority Areas (FEPAs) sub-catchments.
Grassland Ecosystem Guidelines			Management guidelines specific to grassland ecosystems.	Aids the development of biodiversity-compatible land use management plans and EMFs.
Environmental Management Frameworks (EMF)			Map and land use guidelines for areas of environmental and cultural importance.	EMFs support the compilation of SDFs and identify areas where development is encouraged or should be excluded.
Gauteng ridges guideline			Map and guideline for ridges in Gauteng.	The guideline indicates applicable use for ridges in the each of the four classes.
Mining and Biodiversity Guideline			Guidelines for mainstreaming biodiversity into mining applications and operations, including map of high and low risk sites.	The map details areas that would be more suitable for mining. This information should be included in the development of IDPs and SDFs.
Gauteng Protected Areas Expansion Strategy (GPAES)			Provincial map of priority areas for expanding and consolidating the protected area network.	IDPs and SDFs should limit development in the areas outlined in the GPAES. Areas neighbouring those in the GPAES should have appropriate (i.e. low impact) development.

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The full *Biodiversity Mainstreaming Toolbox for land-use planning and development in Gauteng* is available online at: <http://cbc.iclei.org/biodiversity-mainstreaming-toolbox> and <http://bgis.sanbi.org.za>



Find more information about each of these key tools on the associated page number in the Biodiversity Mainstreaming Toolbox.

Land management recommendations for biodiversity priority areas

Systematic biodiversity plans such as the Gauteng Conservation Plan (Gauteng C-Plan) and bioregional plans identify Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs) and provide guidelines of compatible and incompatible land-uses in these areas. The table below summarises land management goals to be used when developing Spatial Development Frameworks, Environmental Management Frameworks or similar strategic land-use planning tools. The full guidelines are available in the relevant bioregional plans.

Description	Land Management Recommendations	Compatible Land-Use
CBA (1) are areas required to be maintained in a natural or near natural state to meet targets for biodiversity pattern (features) or ecological processes.	<ul style="list-style-type: none"> Obtain formal conservation protection where possible. Implement appropriate zoning to avoid net loss of habitat or intensification of land use. 	<ul style="list-style-type: none"> Conservation and associated activities. Extensive game farming (at low intensity over large areas) and eco-tourism operations. Extensive livestock production on natural rangeland. Urban Open Space Systems.
CBA (2) are cultivated landscapes which retain importance for supporting threatened species.		<ul style="list-style-type: none"> Maintain current agricultural activities. Ensure land-use is not intensified and that activities are managed to minimize impact on threatened species.
ESA (1) are natural, near natural and degraded areas required to be maintained in an ecologically functional state to support Critical Biodiversity Areas.	<ul style="list-style-type: none"> Implement appropriate zoning and land management guidelines to avoid impacting ecological processes such as key landscape corridors and linkages and avoiding areas important for hydrological processes (e.g. floodplains). Avoid intensification of land-use. 	<ul style="list-style-type: none"> Conservation and associated activities. Extensive game farming and eco-tourism operations. Extensive livestock production (at low intensity over large areas). Urban Open Space Systems. Low density rural residential, smallholdings or resorts where development design and layout allow maintenance of ecological functioning.
ESA (2) are areas with no natural habitat but which retain potential importance for supporting ecological processes.	<ul style="list-style-type: none"> Avoid intensification of land use, which may result in additional impact on ecological processes. 	<ul style="list-style-type: none"> Existing activities (e.g. agriculture) should be maintained, but where possible a transition to less intensive land-uses should be favoured.
Other natural areas Natural and intact but not required to meet biodiversity targets.	<ul style="list-style-type: none"> No management objectives, land management recommendations or land-use guidelines are provided but where possible, existing severely modified areas should be favoured for infrastructure development before these "Other natural areas". 	
No natural habitat areas are severely modified or degraded areas not required as CBA or ESA.	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Intensive agriculture, urban development, industry; and infrastructure.

 **Key Point:** CBAs are geographical areas that are irreplaceable or important in terms of achieving biodiversity targets and trigger a Basic Assessment in terms of Listing Notice 3 of the EIA regulation. Bioregional plans must be used to inform IDPs, SDFs, land-use planning and management.

Planners *Quick Guide* to the Biodiversity Mainstreaming Toolbox for land-use planning and development in Gauteng



Urban development and biodiversity are not mutually exclusive and through mindful planning, both can co-exist. In fact, the management and conservation of biodiversity and ecosystems in natural areas within an urban environment actually improves the quality of life for urban populations. Healthy functioning ecosystems provide ecological infrastructure that deliver services of benefit to people, and open spaces are important for cultural and social well-being. The consideration of biodiversity in urban planning is therefore not only a legal necessity but is also important to happy and healthy urban dwellers.

This *Planners Quick Guide* provides municipal planners with a brief and accessible overview of the tools available to efficiently incorporate biodiversity into municipal planning across Gauteng. Further information is available in the user-friendly *Biodiversity Mainstreaming Toolbox for land-use planning and development in Gauteng*.