# promoting sustainable development

The identification of biodiversity projects for the IDP through the CBA map supports Local Economic Development and poverty alleviation.

Protecting biodiversity protects us from climate change.

One of the goals of the CBA map & guidelines is persistence (long term survival), which means - in part - planning for climate change through the establishment of a network of biodiversity linking mountains to coast and providing guidelines that integrate climate change into land-&resource use planning and decision-making, including management guidelines.

# biodiversity is all of nature

In 2000 it was estimated that the pollinating services of bees to the fruit industry and for honey production amounted to R594 million, whilst bird-watching tourism generated R16 million per annum in 2003 in the Cape Region.

Biodiversity is the cornerstone of sustainable development. Both NATURAL & SOCIAL capital provide the inputs for ECONOMIC capital. The level of their quality and the ability of NATURE to manage the waste generated by economic activity have a major effect on the overall competitiveness & success of our economy as a whole.



MAP







A Biodiversity Sector Plan Handbook has been compiled for the -

(1) Western Cape, known as the Garden Route (GR) BSP for the George, Knynsa and Bitou Municipalities; and the

(2) Eastern Cape, known as the GR BSP for the Southern Regions of the Kouga and Koukamma Municipalities. (Note: CBA Maps have been compiled for the northern regions of both these municipalities by the Baviaanskloof Mega-Reserve Project. Contact Eastern Cape Parks and Tourism (042-283 0058) for the data.











This pamphlet has been compiled in conjunction with the Garden Route Critical Biodiversity Areas Map and its associated products (see below). The information was prepared by the Garden Route Initiative (SANParks), funded by the Global Environmental Facility through the Cape Action for People and the Environment (C.A.P.E) programme.

## WHAT IS BIODIVERSITY?

Biodiversity is all of nature. The term biodiversity refers not just to species (plants, animals and micro-organisms), but also to ecosystems, landscapes, and the ecological and evolutionary processes that allow biodiversity to persist over time. It includes the diversity within species, between species, and of ecosystems.

The Garden Route CBA Map was produced through a systematic biodiversity planning process conducted at a fine-scale (1:10 000). Systematic biodiversity (conservation) planning identifies those areas which are most in need of conservation (i.e. safeguarding) in order to meet national biodiversity thresholds (targets). It is a scientifically defensible plan that prioritises actions by setting quantitative thresholds for biodiversity features (e.g. vegetation types). The network of areas on the CBA Map is designed to be spatially efficient (i.e. to meet biodiversity thresholds on the least amount of land possible) and aims to avoid conflict with other land-uses, where feasible.

**The biophysical planning domain of the Garden Route CBA Map** covers, for the most part, the region of South Africa known as the Garden Route. More specifically, it covers the George, Knysna, and Bitou municipal areas, and beyond their northern boundaries, up to the N9 and R62 roads in the Western Cape. It also includes the southern regions of the Koukamma and Kouga Local Municipalities in the Eastern Cape.



# The CBA Map provides the information needed for three broad categories of day-to-day land and water use decisions:

1) Reactive decision making, such as environmental impact assessment (EIA), agricultural land-use decisions, water-use licensing and other development control decisions through the Land-use Planning Ordinance (LUPO) or other land-use legislation;

2) Proactive forward planning, such as Integrated Development Plans (IDPs), Spatial Development Frameworks (SDFs), Environmental Management Frameworks (EMFs and Zoning Schemes; and

3) Proactive conservation, such as stewardship, land acquisition and clearing of invasive alien plants.

#### The CBA Map can:

- Serve as the primary source of information on biodiversity for land and water resource use decision-making and forward planning processes, such as municipal Spatial Development Frameworks (SDFs), Environmental Management Frameworks (EMFs) and Integrated Development Plans (IDPs);
- Provide more accurate and detailed information and therefore replaces broad-scale biodiversity plans, e.g. NSBA, STEP and CAPE;
- Provide the spatial framework and policy recommendations for the drafting of a bioregional plan by identifying priority areas for conservation action and the establishment of Protected Areas, required in terms of Chapter 3 of the NEMBA;
- Identify a network of Critical Biodiversity Areas whose safeguarding is required to meet national biodiversity thresholds (targets);
- Provide regional biodiversity priorities thereby creating a strategic framework for sustainable development; and
- Assist municipalities to comply with environmental and planning legislation that promotes the protection and management of biodiversity, acting as the spatial framework and policy for sustainable development set by international and national environmental and planning legislation and policy.

## What are Critical Biodiversity Areas and Ecological Support Areas?

Critical Biodiversity Areas (CBA) are terrestrial (land) and aquatic (water) areas which must be safeguarded in their natural or near-natural state because they are critical for conserving biodiversity and maintaining ecosystem functioning. These areas include:

- natural areas identified as requiring safeguarding in order to meet national biodiversity thresholds;
- areas required to ensure the continued existence and functioning of species and ecosystems, including the delivery of ecosystem services; and/or
- c. important locations for biodiversity features or rare species.

Associated with the Critical Biodiversity Areas are areas known as **Ecological Support Areas (ESA)**. The ESA are supporting zones or areas which must be safeguarded as they are needed to prevent degradation of Critical Biodiversity Areas and formal Protected Areas.

Biodiversity Threshold - the target area which must be safeguarded in order for the component plants and animals to exist and for ecosystems to continue functioning (e.g. pollination, migration of animals). The thresholds for various types of habitats have been set nationally within the National Spatial Biodiversity Assessment planning process.

The Garden Route CBA map forms part of what is known as a Biodiversity Sector Plan (BSP) and comprises the following information:

- 1. Primary products: The Biodiversity Sector Plan Handbooks, the CBA Wall Map, the CBA Mapbook and GIS maps.
- 2. Associated products: a legislative user guide, the Fynbos Forum Ecosystem Guidelines for Environmental Impacts Assessment in the Western Cape (de Villiers et al., 2005)g; the Cape FSP Aquatic Ecosystem Guidelines (Job *et al.*, 2008), the Garden Route Vegetation Report (Vlok & Euston-Brown, 2008) and the Garden Route Conservation Planning Report (Holness *et al.* 2010).

### The GIS (Geographical Information Systems) maps include:

- Primary data: the Critical Biodiversity Areas Map (includes all CBA Map categories: Protected Areas, Critical Biodiversity Areas, Ecological Support Areas, Other Natural Areas and No Natural Areas Remaining), the Desired Management Objectives and the recommended Spatial Planning Category (as per the Provincial WC SDF). A CBA Lookup Table is provided which indicates the key criteria that determined whether a site is a CBA or ESA. Refer to the technical report (Holness et al., 2010) for further details on the CBA Lookup Table.
- Associated data: Vegetation types, land cover (transformation shapefile); and an alien plant map.