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CITY OF CAPE TOWN

**ENVIRONMENTAL RESOURCE MANAGEMENT
DEPARTMENT –
BIODIVERSITY MANAGEMENT BRANCH**

**STRATEGIC PLAN
2009 - 2019**

TO BE EVALUATED ANNUALLY, AND REVISED BY 2014



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Adele Pretorius
Julia Wood;
Cliff Dorse;
Amy Davison;
Gregg Oelofse;
Louise Stafford;
Dr Pat Holmes

ACRONYMS AND ABBREVIATIONS

APO	Annual Plan of Operation
BCA	Blaauwberg Conservation Area
C.A.P.E	Cape Action Plan for People and the Environment
CAPENATURE	Western Cape Provincial Conservation Authority
CCT	City of Cape Town
CFR	Cape Floristic Region
CPPNE	Cape Peninsula Protected Natural Environment
CWCBR	Cape West Coast Biosphere Reserve
DEAD&P	Department of Environmental Affairs and Development Planning
DME	Department of Minerals and Energy
EIA	Environmental Impact Assessment
ERMD	Environmental Resource Management Department (CCT)
IAA	Invasive Alien Animals
IAP	Invasive Alien Plants
IAS	Invasive Alien Species
IDP	Integrated Development Plan
METT	Management Effectiveness Tracking Tool
MOSS	Metropolitan Open Space System
PA	Protected Area
SANPARKS	South African National Parks
SDF	Spatial Development Framework
SWOT	Strengths, Weaknesses, Opportunities and Threats

DEFINITIONS

ALIEN SPECIES	Species that were introduced to areas outside of their natural range. Invasive alien species are alien species whose establishment and spread modify habitats and/or species
BIODIVERSITY	Biodiversity (biological diversity) is the totality of the variety of living organisms, the genetic differences among them, and the communities and ecosystems in which they occur. It is the 'natural wealth' of the earth, which supplies all our food and much of our shelter and raw materials (CCT biodiversity strategy).
ENDEMISM	A situation in which a species or other taxonomic group is restricted to a particular geographic region, owing to factors such as isolation or in response to soil or climatic conditions (Allaby, 1998).
INDIGENOUS	A species that occurs naturally in an area, and therefore one that has not been introduced by humans either accidentally or intentionally (Allaby, 1998).
INVASIVE SPECIES	See alien species

- MUTUALISM** The interaction of species populations that benefits both populations (Allaby, 1998).
- RED DATA** Inventory of the global conservation status of plant and animal species. Regional red lists are produced by countries to evaluate the extinction risk of species within a political management unit.
- VASCULAR PLANT** A division comprising plants that have vascular tissue (xylem and phloem) through which water and nutrients are transported (Allaby, 1998).

TIMEFRAMES

ONGOING	Actions that underpin the implementation process and are incorporated into annual planning and budget processes.
SHORT	1 – 3 years: Actions are to be planned or completion from 2009-2011.
MEDIUM	4 – 6 years: Actions are to be planned for completion from 2012-2015
LONG	7 – 10 years: Actions are to be planned for completion from 2016 - 2019

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SECTION 1. INTRODUCTION TO THE ENVIRONMENTAL RESOURCE MANAGEMENT DEPARTMENT

1.1 Our Background

Bounded by ocean and mountains and situated in the smallest of the Worlds Six Floral Kingdoms, Cape Town is one of the most environmentally rich cities in the world. Cape Town is also a unique historic city. It derives its character from evidence of a layered and multi-faceted history, its dramatic scenic setting, its historical townscapes and cultural landscapes, its cultural and heritage diversity and the traditions and memories that arise from its past.

The role of the City is to co-ordinate the protection and enhancement of this unique character. This environmental and cultural heritage wealth is the foundation of the City's economy and underpins its future. However, all evidence points to an environment that is under increasing pressure with a steady decline and erosion in our natural and heritage base. The Five-Year Review of the City's first Integrated Metropolitan Environmental Policy (IMEP) - adopted by Council in 2001 - identified the need for the City and its communities to actively shift from a business as usual approach to driven and targeted sustainability agenda if environmental decline is to be reversed. As such, IMEP is revised and refined to represent key measurable environmental commitments by the City of Cape Town for the next five year period. These environmental commitments to a sustainable future are represented here as the City's Environmental Agenda.

1.2 Our Context

Rich in natural assets, diverse ecosystems, landscapes, heritage, cultural and social diversity, the City of Cape Town represents the global challenge of the need to find the sustainable balance between environmental protection and the ongoing economic and social development needs of a growing population.

Cape Town is an urban centre with a growing population of 3.5 million people. It is the economic hub of the Western Cape and represents the challenge of developing nations; that of building the economy so as to extend services, reduce the wealth gap, uplift the poor and ensure equitable economic and social opportunities to all communities without eroding its natural capital. Cape Town offers some of the highest quality and standard of living in the world while also some of the poorest. It is within this imperative of social development that the City frames its approach and commitment to environmental protection and sustainable development.

As such, Cape Town is committed to mainstreaming environmental protection and sustainable utilisation of resources across its responsibilities and decision making processes, while ensuring that the social and economic benefits of a healthy environment are transferred to develop a more equitable society.

1.3 Our Future

Increasingly, globalisation has redefined the way in which cities view their development agenda. More so than ever before, global competitiveness, global resource constraints, global events, and global perceptions are central drivers to the future of individual cities. This global environment within which cities interact is itself facing new and challenging trends. The financial crisis, climate change and increasing risks to resource availability have become and are likely to remain the defining development parameters for cities across the world. These global challenges have brought about a realisation that sustainability and environmental resource protection are no longer interesting concepts but must become central strategies within the development strategies of cities if economic and social stability and resilience are to be achieved in a fast changing world.

1.4 Our Definition of Sustainable Development

The City of Cape Town recognises that unless determined steps are taken to reverse the current environmental decline and resource consumption patterns, the social and economic cost and risk to the City and its citizens will increase dramatically. Natural, heritage, and scenic resource management needs to be sustainable to ensure success, and should balance the aims of social progress, effective protection of the historic environment, the prudent use of resources and the maintenance of significant levels of economic growth and employment as means towards sustainable development.

The City therefore recommits itself to a respect and recognition of the value and importance of its natural and heritage assets. In so doing the City will enhance, manage, utilise and protect these assets so as to grow the economy, extend social opportunity, develop its communities and build a more equitable and resilient society.

1.5 Our responsibilities

Responsible environmental governance that:

- Works towards providing a quality living environment for all citizens of Cape Town
- Protects, enhances, and manages our natural and heritage assets to ensure they continue to underpin our economy, social opportunity and provide a host of ecological services to the people of Cape Town, both now and in the future
- Complies with national environmental and heritage legislation, meets provincial requirements and supports international environmental treaties, agreements and initiatives
- Regulates our natural and heritage assets in a balanced manner that secures our environment for the common good, promotes sustainability while creating opportunity, stimulating economic growth and promoting enjoyment
- Works continuously to invest in our natural and heritage assets as key drivers of our social and economic development, integrated with other City responsibilities
- Proactively engages and partners with national and provincial government on all environmental and heritage issues including those beyond our jurisdiction but which are central to our identity, sense of place, economy, and resource security.
- Empowers its communities through social development and education while entrenching a shared environmental accountability and responsibility.
- Leads in defining the appropriate balance between socio economic growth and environmental protection.

1.6 Our General Environmental Principles

- Protection of all of our constitutional rights
- Long term benefits will be valued over short term gain
- Entrenching sound environmental values and responsibility within all aspects of society, governance and decision making
- A recognition of the large disparity in environmental wealth and opportunities across our City and the need for environmental redress
- A recognition of the need for broad representivity of Cape Town's places, structures and memories in the lives of various communities over time; including the struggle for democratic rights
- A commitment to the unique historic city where the heritage of its past and present inhabitants is respected, protected and enhanced through appropriate heritage management practices; adherence to sensitive, socially aware and appropriate heritage concepts.
- A commitment to building an environmentally resilient city

- A commitment to acting at all times in the interests of the broader community as well as those of future generations
- A commitment to fostering informed and empowered communities
- A commitment to building resilience, independence and sustainable livelihoods within our communities
- A commitment to open and transparent environmental governance
- A commitment to the inherent rights of all living creatures and the humane treatment of animals, both domestic and wild

1.7 Our Implementation

The environmental commitments will be met through implementing a range of detailed strategies and programmes through a number of City business units. These strategies and programmes will be reflected within internal Key Performance and Monitoring mechanisms and the IDP, and where relevant will make use of by-laws, procedures and policies. The City has already endorsed the following environmental strategies:

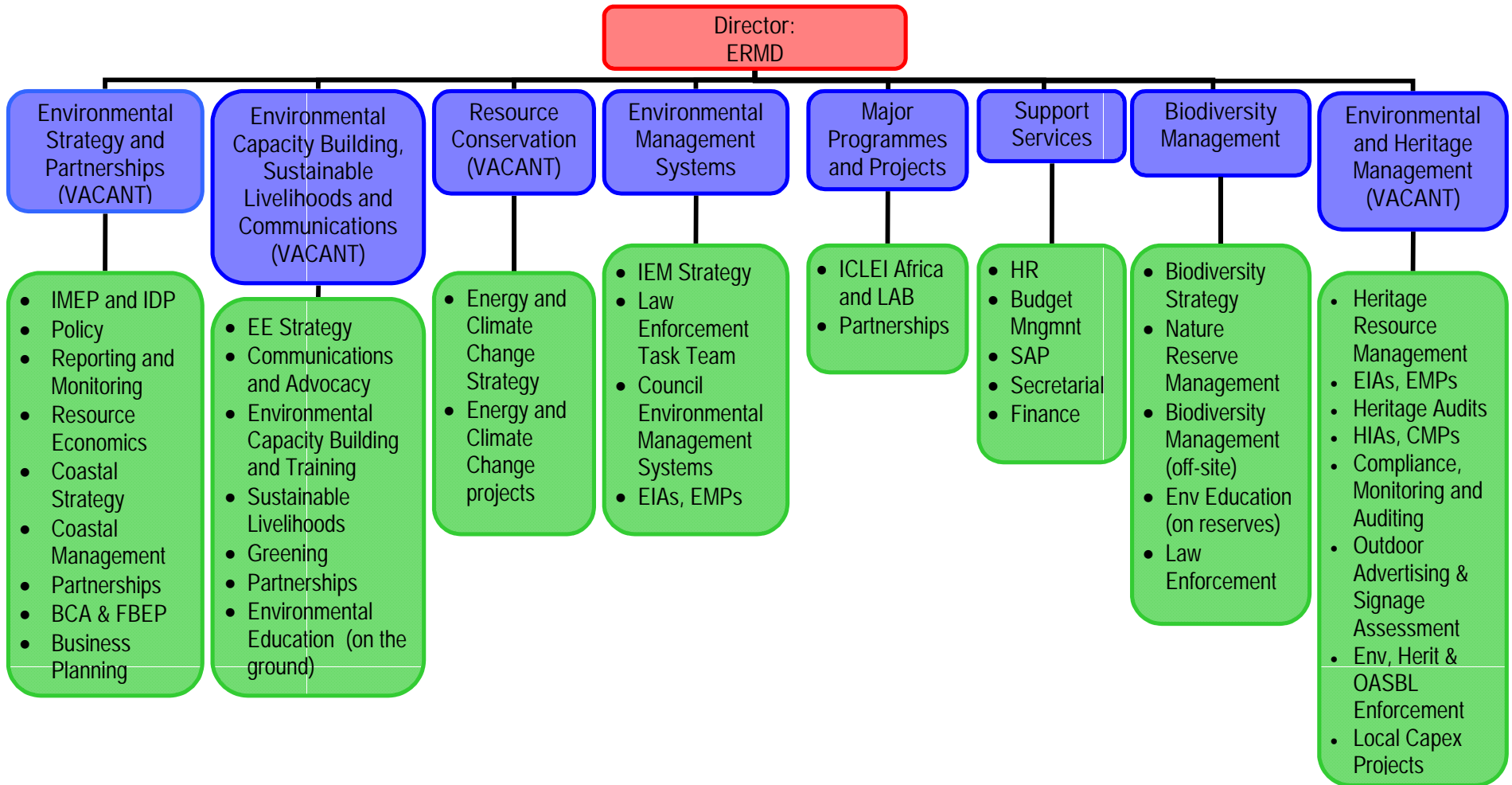
- a) Biodiversity (ERMD)
- b) Coastal Management (jointly ERMD with Sport and Recreation)
- c) Environmental Law Enforcement (ERMD with Law Enforcement)
- d) Cultural Heritage Management (ERMD)
- e) Air Pollution (Health)
- f) Integrated Environmental Management (ERMD)
- g) Integrated Waste Management (Solid Waste)
- h) Energy and Climate Change (ERMD)
- i) Fresh water and Coastal Water systems (Stormwater Management)
- j) Environmental Awareness and Communication (ERMD)
- k) Visual and Scenic Resource Management (ERMD)
- l) Sustainable Livelihood Programme (ERMD)
- m) Environmental Partnerships (TMNP Bilateral and Greening 2010) (ERMD)
- n) Informal Settlements servicing and upgrading and the establishment of Emergency Settlement areas (Housing)
- o) Integrated Human Settlement Development (Breaking New Ground) (Housing)

1.8 Our Transparency

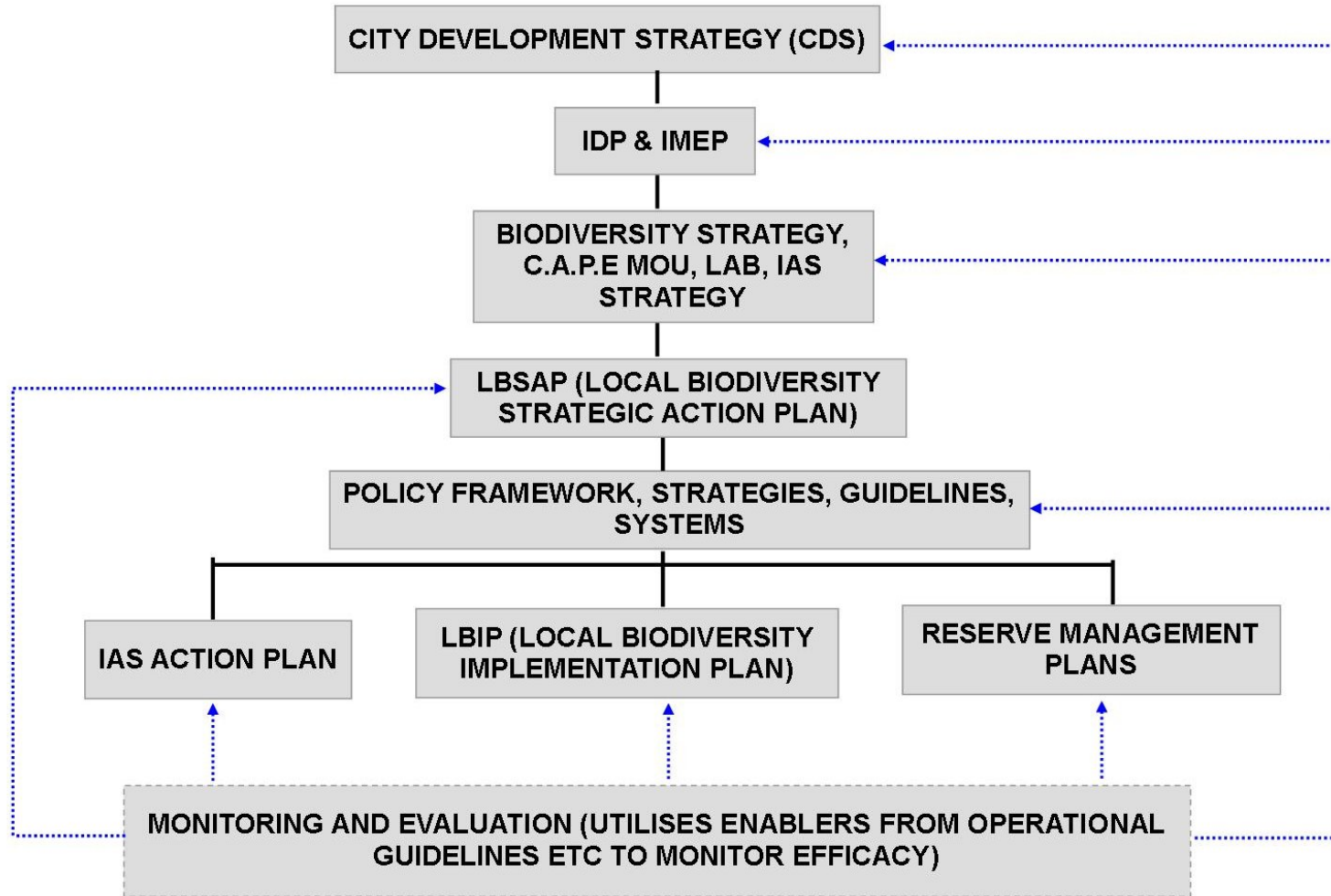
The City will report on these commitments through the following mechanisms:

1. An annual State of the Environment Report
2. An annual internal Environmental Performance Report
3. A mid-term Environmental Agenda performance report (January 2012) reporting on progress in meeting the defined commitments
4. A mid-term Environmental Business Case review (January 2012)

1.9 CURRENT ORGANISATIONAL STRUCTURE OF THE ENVIRONMENTAL RESOURCE MANAGEMENT DEPARTMENT



1.10 BIODIVERSITY MANAGEMENT BRANCH FLOW CHART OF STRATEGY AND POLICIES



SECTION 2. LOCAL ACTION FOR BIODIVERSITY (LAB) AND THE CITY OF CAPE TOWN

The Integrated Metropolitan Environmental Policy (IMEP) was adopted by Council on October 2001 and the IMEP Review adopted in June 2008. This policy recognised and committed the City to conserving Cape Town's unique and globally important biodiversity for both present and future generations. Arising out of this Policy, on 29 October 2003, Council adopted the Biodiversity Strategy, one of IMEP's Sectoral Strategies.

The City of Cape Town was instrumental in developing Local Action for Biodiversity (LAB) as a project under the auspices of ICLEI-Local Governments for Sustainability following the ICLEI World Congress in Cape Town in 2006. In April of the same year, the City re-affirmed its commitment to the conservation of Biodiversity by approving its participation in ICLEI's Local Action for Biodiversity (LAB) Project. LAB focuses on enhancing the planning for and implementation of biodiversity integration within urban precincts and empowering local authorities in this respect. In August 2008, Council signed the Durban Commitment which committed the city to recognising biodiversity as "the variety of life on earth on which human well-being is dependent and that biodiversity provides ecosystem services that underpin all our community needs". At the same time Council signed the IUCN Countdown 2010, a programme which commits partners to halting biodiversity loss by 2010.

The Local Action for Biodiversity (LAB) programme has provided an excellent framework in which to align the City's conservation work. The main actions required by partners were to support the initiative, attend lesson sharing conferences, publish a LAB State of Biodiversity Report, identify 5 biodiversity implementation projects (see below), and compile and adopt a Local Biodiversity and Action Plan (LBSAP). The foundation for this is the Biodiversity Strategy that has already been adopted, but the LBSAP takes strategy further into action. The LBSAP plan follows from various policies and programmes such as the IDP, IMEP, Biodiversity Strategy, Cape Action for People and the Environment) CAPE and of course LAB.

The City of Cape Town has chosen the following projects as the 5 biodiversity implementation projects:-

- 1) **The Green Goal 2010 Programme:** This programme aims to ensure that the planning and implementation of the 2010 Soccer World Cup is based on an environmentally sustained footing. The project involves working with partners to ensure green principles are integrated into the construction of the Green Point stadium as well as associated events, including tourism.
- 2) **ERMD – City Parks Conservation Status Project:** This project will undertake an assessment of 65 City Parks and Biodiversity Management Sites. Every City line function that manages land has to take our unique biodiversity into account. Line functions managing land with important biodiversity include City Parks, Amenities, Bulk Water and Waste Water. City Parks were identified as a priority as they have numerous important biodiversity areas under their control. Firstly most of the areas are not formally protected (or are protected under "old" legislation) and in several cases there is a lack of clarity on which line function is actually responsible for management. To this end 65 of the City of Cape Town's City Park's and Biodiversity Management sites have been identified for assessment in terms of the CapeNature Stewardship criteria to gain status under the Protected Areas Act.
- 3) **The Diep River Fynbos Restoration Project:** Involves the first section of the proposed ecological corridor which will link the Rietvlei Wetland Reserve and the

Blaauwberg Conservation Area. This entire corridor once secured could be a flagship ecological corridor for the City and serve as a showcase for other potential corridor areas within the City. Effective management of this important corridor would enable the City's Biodiversity Management Branch to extend its reach onto private land in order to implement the Biodiversity Network.

- 4) **Cape Flats Nature Project:** This partnership project between the City, South African National Biodiversity Institute, Botanical Society and the Table Mountain Fund builds good practice in sustainable management of nature sites in the City's Biodiversity Network in a people-centred way that develops local leadership for conservation action and benefits the surrounding communities, particularly townships where incomes are low and living conditions poor. It is a catalytic stewardship project that involves citizens and communities taking responsibility for management of biodiversity in partnership with City nature conservation officials.
- 5) **Invasive Alien Species Co-ordination Programme:** Invasive Alien Species (IAS) is the second biggest threat to the biodiversity of the City of Cape Town. Current interventions are uncoordinated, ad hoc and not always according to the appropriate standard. The city requires a strategic framework for managing invasive species. An IAS strategy has been developed to address the current challenges and to provide the framework for improved IAS management. The successful implementation of the strategy depends on high-level buy-in, political support and appropriate resources, without these, IAS will continue to expand and threaten the valuable economic, biodiversity and social assets of the City of Cape Town.

(Completed LAB state of Biodiversity report can be viewed at URL:
<http://www.capetown.gov.za/en/EnvironmentalResourceManagement/publications/Documents/Biodiversity%20Report%20CCT-LAB%202008.pdf>)

SECTION 3. CONTEXTUAL FRAMEWORK

3.1 The City Of Cape Town in its bioregional context:

The City of Cape Town (CCT) falls within the Cape Floristic Region (CFR). The CFR in South Africa is the smallest and richest of the six floral kingdoms in the world, and it is the only one to be found entirely within one country. Its rich biodiversity is under serious threat for a variety of reasons including conversion of natural habitat to permanent agriculture, inappropriate fire management, rapid and insensitive development, overexploitation of water resources, marine resources, and infestation by alien species. The region has been identified as one of the worlds "hottest" hotspots of biodiversity.

In response to this a process of extensive consultation involving various interested parties, including local government and non governmental organisations resulted in the establishment of a strategic plan referred to as Cape Action Plan for the Environment (C.A.P.E). It identified the key threats and root causes of biodiversity losses that need to be addressed in order to conserve the floral kingdom. This resulted in a spatial plan identifying areas which need to be conserved and a series of broad program activities which need to be undertaken over a 20 year period. Based on the situation assessment and analysis of threats, three overarching themes that complement and reinforce one another were developed: C.A.P.E. will:

- establish an effective reserve network, enhance off-reserve conservation, and support bioregional planning;
- strengthen and enhance institutions, policies, laws, co-operative governance, and community participation; and
- develop methods to ensure sustainable yields, promote compliance with laws, integrate biodiversity concerns into catchment management, and promote sustainable eco-tourism.

3.2 City Of Cape Town in its ecological context:

The City Of Cape Town has recently produced a Biodiversity Report which documents the current knowledge and state of biodiversity within the metropolitan boundaries. A summary of the city's biodiversity and threats to this biodiversity is provided below. For more detailed information please refer to the Cape Town Biodiversity Report 2008.

The world-renowned richness of Cape Town's biodiversity is in large part due to the wide range of biophysical characteristics across the landscape, supporting many different terrestrial ecosystems (i.e. vegetation types), habitats and their associated flora and fauna. Vegetation type represents biodiversity at the landscape scale. Wetlands, rivers and the coastal ecosystems also are important contributors to Cape Town's biodiversity.

Cape Town, located in the south-west biogeographical region of the CFR, is an area harbouring a very high concentration of biodiversity and is a centre of endemism within the CFR, which as a whole is considered one of the 34 global "biodiversity hotspots". A biodiversity hotspot is a region rich in endemic plant species that has lost 70% of its habitat and is threatened with further destruction (Conservation International: www.biodiversityhotspots.org).

Currently there is an intensifying biodiversity conservation crisis in the Cape Town lowlands (a large part of which is known as the "Cape Flats"), with only extremely small areas of lowland vegetation formally conserved. Although the CCT's Biodiversity Management Branch has identified in its Biodiversity Network the remnants required to conserve samples of this biodiversity, for many vegetation types it is too late to achieve the necessary conservation targets for adequate

conservation of this biodiversity. In these cases, all remaining remnants are crucial to secure in retaining some of this biodiversity for posterity. For the few lowland vegetation types with sufficient habitat remaining to meet the required conservation targets, there is yet insufficient habitat secured and managed for biodiversity conservation. Although the City has a good record in biodiversity conservation planning, we need to accelerate the implementation of the Biodiversity Network before remaining options are lost.

It is probable that the entire city supports in excess of 3000 indigenous vascular plant species. Thirteen plant species are extinct or extinct in the wild with two others potentially extinct. Of the 450 Red Data listed species, an additional 318 are threatened with extinction of which 203 are on the Cape Flats (IUCN South African Red Data Plant List – November 2007 draft). New plant species are still being discovered across the Cape Floristic Region and occasionally those thought to be extinct are rediscovered (e.g. the beautiful red Irid, *Babiana blanda*).

3.2.1 Descriptions of broad vegetation types

More extensive, detailed information on the individual vegetation types is available in Mucina and Rutherford (2006).

Sand Fynbos

Cape Town has three types: Cape Flats Sand Fynbos, which is confined to Cape Town; Hangklip Sand Fynbos, which occurs on the Peninsula as well as east of False Bay; and Atlantis Sand Fynbos, which extends north of Cape Town. Sand Fynbos occurs on moderately undulating and flat plains on leached, acid Tertiary sand. All three Sand Fynbos types are species-rich and harbour a number of endemic plant species: for example *Erica margaritacea* in Cape Flats Sand Fynbos and *Leucospermum parile* in Atlantis Sand Fynbos.

Alluvium Fynbos

Cape Town has two types: Lourensford Alluvium Fynbos, which is confined to Cape Town; and Swartland Alluvium Fynbos, which extends north of Cape Town. Alluvium Fynbos is either found on low-lying plains with duplex, silty soils or on granite and shale metasediments often with small cobbles and pebbles embedded. Previously this was considered to be part of renosterveld, but it is clearly a Fynbos type. There are several endemic species, such as *Diastella buekii* and *Marasmodes undulata* in Swartland Alluvium Fynbos.

Granite Fynbos

Cape Town has two types: Peninsula Granite Fynbos, which is confined to Cape Town; and Boland Granite Fynbos, which extends to the north-east of Cape Town. Granite Fynbos occurs on moderately undulating plains and hills or on steep to gentle slopes below the sandstone mountain slopes, with soils varying from extensive and deep, to localised deep soils between large granite domes and sheets. Endemic taxa include *Leucospermum grandiflorum* (Boland Granite Fynbos) and *Hermannia micrantha* (Peninsula Granite Fynbos).

Sandstone Fynbos

Cape Town has two types: Peninsula Sandstone Fynbos, which is confined to the Peninsula Mountain Chain in Cape Town; and Kogelberg Sandstone Fynbos, which extends to the south-east of Cape Town. Sandstone Fynbos occurs in the high mountains, on steep to gentle slopes, and on undulating plains and hills of varied aspect. The soils are acidic lithosols derived from Ordovician sandstones of the Table Mountain Group (Cape Supergroup). Both these vegetation types are extremely species-rich with a staggeringly high concentration of local endemic species (>130 in each). Examples are *Mimetes fimbriifolius* and *Leucadendron strobilinum* on the Peninsula and *Erica sitiens*, *Leucospermum bolusii* and *Aspalathus acanthiloba* on the Kogelberg.

Shale Fynbos

Two types occur in higher rainfall areas where the shale soils are sufficiently leached of nutrients: Cape Winelands Shale Fynbos (incorporating Peninsula Shale Fynbos), which extends north-east of Cape Town; and Elgin Shale Fynbos, which extends to the east of Cape Town. Shale Fynbos occurs

on moderately undulating plains and steep slopes against the mountains. Soils are acidic, moist clay-loams. Many species are shared with Granite Fynbos and include several local endemics (e.g. *Leucadendron argenteum*, *Leucadendron daphnoides* and *Leucospermum grandiflorum*).

Cape Flats Dune Strandveld

This vegetation type is largely confined to Cape Town, but shares affinities with coastal thicket vegetation to the east and succulent Karoo to the north. Cape Flats Dune Strandveld occurs on flat to slightly undulating dune field landscapes. The soils are alkaline sands derived from Tertiary to recent calcareous sand of marine origin. Outcrops of limestone occur, particularly along the False Bay coastline. Strandveld has few endemic species compared to Fynbos but one example is the succulent, *Lampranthus tenuifolium*.

Cape Seashore vegetation

This is considered a separate national vegetation type in the latest vegetation book of South Africa (Mucina and Rutherford 2006); however it may be considered a subcommunity of Cape Flats Dune Strandveld that occurs predominantly on the unstable fore-dunes above the beaches. Characteristic species include *Pelargonium capitatum*, *Tetragonia decumbens*, *Didelta carnosus* and *Carpobrotus acinaciformis*.

Renosterveld

Cape Town has four types: Peninsula Shale Renosterveld, which is confined to Cape Town; and three other types which extend north of Cape Town on their respective soil types: Swartland Granite, Shale and Silcrete Renosterveld. Renosterveld occurs on soils with a heavier texture (clays and loams) where rainfall is not sufficiently high to leach out the nutrients (<600mm p.a.). Clay soils are derived from Malmesbury Group Shale's, and loams from Cape Granite or silcrete parent materials. Renosterveld is mainly found in the moderately undulating lowlands and foot slopes. Some renosterveld vegetation is rich in bulbs. Endemic plants include *Asteraceae*, succulent and bulb species (e.g. *Marasmodes oligocephala*, *Lampranthus dilutus*, *Babiana longiflora*).

Southern Afrotropical Forest

Southern Afrotropical Forest occurs throughout South Africa on a variety of substrata. In the Mediterranean-climate areas of the CFR forest is confined to fire protected kloofs in the mountains. The emergent tree species have a subtropical affinity and are mostly widespread throughout South Africa. Tree species which occur in Cape Town Southern Afrotropical Forest patches include *Podocarpus latifolius*, *Rapanea menaphloeos*, *Cunonia capensis*, *Curtisia dentate* and *Kiggelaria africana*.

3.2.2 Fresh Water Ecosystems

In addition to its rich terrestrial biodiversity, Cape Town supports a variety of wetlands and rivers. Historically a large proportion of lowland Cape Town was dotted with seasonal and perennial wetlands interconnected via the groundwater system (Day 1987). Low-lying areas of the Cape Flats which support marsh and floodplain wetlands are known locally as "vleis". As a result of urbanisation, most of the vleis and rivers on the Cape Flats have been modified, with vleis drained and rivers canalised. In the vegetation book of southern Africa (Mucina and Rutherford 2006), two wetland types are described that occur in Cape Town. These are nested within the terrestrial vegetation types described above.

Cape Lowland Freshwater Wetlands

These wetlands occur on the Cape Flats and in landscape depressions and may be permanently or seasonally flooded areas. Soils may be fine sands, silts or clays. Typically the vegetation in the seasonal wetlands comprises restio, sedge or rush-beds as well as macrophytic vegetation embedded in permanent water bodies. Important species include *Senecio halimnifolius*, *Pennisetum macrourum*, *Triglochin bulbosa*, *Bolboschoenus maritimus* and *Juncus kraussii*. An endemic species of seasonal marshes in the south is *Passerina paludosa*.

Cape Inland Salt Pans

These wetlands occur in areas that were formerly coastal lagoons that have been cut off from the sea and become seasonally dry. They are small depressions in the landscape dominated by low succulent scrub composed of creeping chenopods and salt-tolerant herbs and grasses. Examples may be seen at Rondevlei Nature Reserve, Zandvlei Estuary Nature Reserve and Noordhoek Wetlands.

3.2.3 Marine Ecosystems

Cape Town's shoreline is approximately 300km long, and exhibits different coastal landforms such as rocky shores, sandy beaches, estuaries, islands and sea cliffs. The coastline supports an immensely diverse range of marine and coastal ecosystems, which are home to over 80 rare and endangered species. This is one of the most diverse and productive stretches of coastline in South Africa. Cape Town's coastal zone is also an area of high recreational activity and a sought-after living environment for both local people as well as national and international tourists. For these reasons, the City's coastline is one of its greatest ecological, social and economic assets.

The coastal waters around the CCT are situated in the transition zone between two biogeographic provinces: the cool temperate west coast, and the warm temperate south coast marine zones. The seas around the peninsula are rich in marine biodiversity because this is where the distributions of the organisms of the cold Benguela and warm Atlantic currents overlap. In addition, there are also organisms unique to the temperate waters of the transitional area between these two major zones, centred on False Bay. Of the approximately 2000 marine species in False Bay, 61% are endemic to South African waters and 14% of these to False Bay itself.

3.2.4 Endemic and Threatened Species

A sixth of South Africa's flora may be found in Cape Town (Table 1). This is a remarkable figure considering that Cape Town covers less than 0.1% of the country's surface area! At least 190 plant species are locally endemic to Cape Town (i.e. found nowhere else in the world). Unfortunately Cape Town has already lost 49 plant species and 13 of these are now globally extinct or extinct in the wild. The precarious status of many of Cape Town's habitats is reflected in the latest IUCN Red Data List total for plants, which includes a high tally of 450 taxa (Table 2).

Associated with the extremely rich plant diversity are rich small-vertebrate and invertebrate faunas. Of the 27 species of amphibian recorded from the boundaries of the City of Cape Town, 25 are endemic to South Africa and 10 are threatened with extinction. There are two species that are endemic to the City. Fortunately both are found within the Table Mountain National Park although both have Red Data status.

It is estimated that an impressive 57 species of reptile are to be found within the City. Twenty eight of these are endemic to South Africa and eight are considered to be threatened with extinction although this figure may change as the process to review the status of South Africa's reptiles is currently underway.

Over 360 bird species have been recorded from the CCT area. Eighteen of these are endemic to South Africa and 22 have been assigned Red Data status. Of special interest to the bird enthusiast are the six Fynbos endemic birds, all of which are found within the City boundaries.

Eighty three mammal species are thought to occur within the City boundaries and sixteen are endemic to South Africa. Many of the mammals in the Fynbos Biome are secretive and nocturnal and are therefore difficult to observe.

The CCT has a rather depauperate fresh water fish fauna largely due to the lack of major river systems within our boundaries. Of the six indigenous species recorded two are listed as Vulnerable and a third as extinct. The *Sandelia* and *Galaxia* fish genera are however under taxonomic revision and this will result in some new species being described. All our indigenous fish species are

threatened by pollution, invasive vegetation and exotic fish species of which at least 12 alien species are established within in CCT.

While the small vertebrates have not been adequately sampled it is glaringly evident that our invertebrate fauna has been grossly neglected. From the groups that are better known, such as the butterflies and dragonflies, it is evident that many species are under threat and some species have already been lost. The realisation that we are losing species we don't even know exist is a sobering thought.

Table 1: Total species counts for higher plants and vertebrates in the CCT

Taxon	Total indigenous species in CCT	% of South African Taxa	Endemic to South Africa	Endemic to CCT	Red List Data	Extinct in CCT	Naturalized species
Plants	± 3000	16.7%	± 2800	190	450	49	>350
Mammals*	83	28.1%	16	0	24	8	7
Birds	361	42.4%	18	0	22*	9	10
Reptiles	57	13.7%	28	0	8	4	6
Amphibians	27	32.14%	25	2	10	0	3
Fresh Water Fish***	6	5.36%	5	0	3**	1	12

* excluding vagrant and pelagic species ** including locally extinct species *** under taxonomic revision

Table 2: Global status of Red Data taxa of higher plants and vertebrates in the CCT

Taxon	Total Red Data Taxa	Data Deficient	Near Threatened	Vulnerable	Endangered	Critically Endangered	Extinct in the Wild	Extinct
Plants	450*	53	66	122	112	84	4	9
Mammals	24	9	9	5	1	0	0	0
Birds	22	0	13	7	2	0	0	0
Reptiles**	8	2	3	1	1	1	0	0
Amphibians	10	0	3	3	2	2	0	0
Fresh Water Fish	3	0	0	2	0	0	0	1

* Excludes 18 species still to be assessed (November 2007 draft of IUCN Red Data List of South African Plants)

** A review of the conservation status of South African Reptiles is currently underway.

3.2.5 Threats to Biodiversity

Several threats to the City's biodiversity have been identified and are listed below.

Urbanization

The city coincides with an extremely high concentration of unique biodiversity, making it almost impossible to completely avoid negative impacts of urban development. High immigration rates to Cape Town, particularly during the past two decades, and inappropriate development in the form of urban sprawl, constitute the greatest threats to remaining biodiversity in the city. Urbanization causes fragmentation of natural habitats, exposing flora and fauna to greater impacts of invasive alien species, pollution and other disturbances. In turn, these impacts lead to declines in populations and increased extinction risks. Loss of key species, such as insect pollinators, can then lead to lack of seed production in plants.

Invasive Species

The second most important threat to biodiversity conservation in Cape Town is invasive species. The CFR is particularly susceptible to invasion by alien trees, particularly species of Australian *Acacia*, *Hakea* and *Eucalyptus*, and pines from the Northern Hemisphere. Many of these trees are considered ecosystem transformers as they out-compete the indigenous vegetation and alter ecosystem processes, such as nutrient cycling, fire and hydrological regime.

Invasive alien animal species that are of concern include the Argentine Ant (*Linepithema humile*), which disrupts the fynbos seed dispersal mutualism with indigenous ants, the Mallard Duck (*Anas platyrhynchos*) which hybridizes with the indigenous Yellow-billed Duck (*Anas undulata*), and the Indian House Crow (*Corvus splendens*) which preys on small indigenous animal species and birds' eggs. Feral and domestic cats are a major threat to vertebrate biodiversity in Cape Town especially small mammals and reptiles, and require continuous control.

Agriculture

Most of the productive land in Cape Town has already been developed. However the ploughing of marginal agricultural land still occurs, particularly for extension of wine farms, and this can impact negatively on threatened biodiversity. Agricultural activity has caused fragmentation of natural remnants, particularly renosterveld vegetation types, with similar impacts to those mentioned above under urbanisation.

Inappropriate Fires

Fynbos is a fire-prone shrubland that requires fire for the long-term conservation of its species. However, if fires are too frequent, then slower-growing species may be eliminated. Conversely, if fires are excluded, then forest species invade and the species rich Fynbos community is lost. Not all vegetation types in Cape Town are fire-prone. For example, Cape Flats Dune Strandveld often has a high succulent and/or thicket component and does not require fire to persist, although it can withstand the occasional fire. Conversely if this vegetation is burnt too often in quick succession it becomes degraded and alien species, especially grasses invade. Grasses in turn maintain the shorter fire-cycle and permanently change the vegetation structure and biodiversity value.

Mowing

Current City policy is to mow Public Open Spaces and road verges three times a year. In higher rainfall areas' mowing eliminates all but the hardiest indigenous plant species (some winter flowering geophytes can persist) and leads to a domination by grasses. In drier areas, mowing destroys most of the vegetation and reduces plant cover, with wind-blown sand often becoming a nuisance. However, because of the large scale of urban development in Cape Town, some of our vegetation types persist mainly in these pockets of Public Open Space systems, usually managed by the City's Parks Department. In some cases, the vegetation is too transformed to be amenable to restoration, but in other sites indigenous seed banks remain and there is potential to restore portions of the sites for biodiversity conservation if mowing is stopped and conservation-friendly management implemented.

Over-exploitation

The majority of Cape Town comprises relatively unpalatable vegetation on nutrient-poor sandy soils. Historically, stock would have been grazed for short periods in some of this vegetation then moved on to better grazing ground with higher carrying capacity, such as the inland renosterveld areas. However today, small stock farmers are herding cattle and goats year round on our low-nutrient vegetation types. This results in the vegetation being over-utilized, opening up gaps for alien grasses to colonize.

The proximity of a large metropolitan area to the marine environment provides great challenges and opportunities for marine conservation. The exploitation of natural resources along the CCT coastline is an important source of recreation, employment and food. Unfortunately the intensity of harvesting has exceeded the capacity of the many of the fish to recover, and many of severely overexploited.

Pollution

In terrestrial ecosystems, nitrogen deposition from car exhausts enriches the soil and makes it less suitable for Fynbos species adapted to a low-nutrient regime.

A large part of the Cape Town lowlands comprises seasonal wetlands. These ecosystems and our rivers are all polluted to a greater or lesser extent via the stormwater system and failing sewerage systems. Nutrient enrichment of wetlands causes the loss of indigenous biota and the colonization by less sensitive, often alien species.

Hydrology

Changes to hydrology resulting from urbanization on the Cape Flats, such as large-scale hardening of catchment areas, drainage and canalization of streams, alters natural ecosystem functioning in wetlands and vegetation remnants, and this can lead to changes in species composition over time.

Crime

The currently high level of crime in the city, particularly relating to personal safety, is a major threat to the conservation of our natural ecosystems, as people perceive bushy remnants as areas that harbour criminals. Until crime prevention is countered more successfully, natural areas will be under threat from developments that may seem in the short-term to be more expedient, such as sand mining and housing. Activities such as the dumping of rubble and toxic waste, poaching and arson, also directly impact negatively on biodiversity.

3.3 City Of Cape Town in its Socio Economic context:

Cape Town is a coastal city of 3.5 million people. The municipal area extends over 2 487km² which comprises 1.9% of the Western Cape Province. About 70% of the province's people reside in Cape Town.

Cape Town's population contains a diversity of cultures and races, with the main groups currently comprising about 48% Coloured, 32% Black, 18% White and 2% Asian. In terms of age demographics, 66% of the Black population are younger than 30 years compared to 47%, 40% and 54% in the Coloured, White and Asian populations, respectively. Afrikaans is the dominant first language at 41% of the population, compared to 29% and 28% for IsiXhosa and English, respectively.

SECTION 4. MANAGEMENT OBJECTIVES FRAMEWORK

4.1 Vision of the Biodiversity Management Branch

To be a City that leads by example in the protection and enhancement of biodiversity. A City within which biodiversity plays an important role, where the right of present and future generations to healthy, complete and vibrant biodiversity is entrenched, and to be a City that actively protects its biological wealth and prioritises long term responsibility over short-term gains.

4.2 Goals of the Biodiversity Management Branch

Biodiversity in the City of Cape Town is conserved and restored where appropriate, has resulted in significant involvement, and has delivered benefits to its present and future citizens, in a way that is endorsed by the City.

4.3 Objectives of the Biodiversity Management Branch

- Strategic Objective 1: Develop, implement and maintain relevant policies and strategies to ensure legal compliance and alignment with relevant International, National, Provincial and City of Cape Town legislation, policies and strategies.
- Strategic Objective 2: Secure formal conservation status, manage and maintain identified and existing terrestrial and wetland priority sites.
- Strategic Objective 3: Identify, enhance and maximise socio-economic benefits and opportunities.
- Strategic Objective 4: Significantly reduce the threat posed by invasive alien species (IAS) to the City of Cape Town's nature, economic and social assets through developing and implementing an IAS strategy.
- Strategic Objective 5: Improve awareness raising and environmental education and enhance the branches profile.
- Strategic Objective 6: Build the capacity of the branch to manage, maintain, monitor and evaluate the implementation of the biodiversity strategy.

4.4 Values of the Biodiversity Management Branch

Mission:-

- Manage biodiversity proactively and effectively
- To ensure an integrated approach to biodiversity between CCT line functions & departments and actively pursue external partnerships
- To adopt a long-term approach with regards to biodiversity
- To ensure sustainability of our rich biodiversity
- To adopt a holistic and multifaceted approach to biodiversity
- To continually measure and monitor the CCT's performance in the protection and enhancement of biodiversity
- To continually measure and monitor the state of biodiversity in Cape Town

Principles which underpin strategy:-

- The importance of both biodiversity pattern and ecological process
- Best management practice
- Promotion of biodiversity as an asset in all communities
- No ecology without equity – no equity without ecology
- Conservation, enhancement and protection of biodiversity across the entire City
- Recognition of the unquestionable importance of all of Cape Town's biodiversity
- Equitable access to biodiversity for all
- Social upliftment & economic development through the conservation & enhancement of biodiversity
- Open, transparent & responsible governance
- Participation & partnerships
- Integrated, coordinated planning & management
- Responsible stewardship of our unique biodiversity
- Commitment to biodiversity goals
- The pre-cautionary principle

SECTION 5. STRATEGIC PLANNING FRAMEWORK

STRATEGIC OBJECTIVE 1: DEVELOP, IMPLEMENT AND MAINTAIN RELEVANT POLICIES AND STRATEGIES TO ENSURE LEGAL COMPLIANCE AND ALIGNMENT WITH RELEVANT INTERNATIONAL, NATIONAL, PROVINCIAL AND COCT LEGISLATION POLICIES AND STRATEGIES

OUTCOME: BIODIVERSITY MANAGEMENT IS CONSISTENT WITH RELEVANT LEGISLATION, POLICIES AND STRATEGIES

OUTPUT	ACTIVITY	TIMEFRAME FOR COMPLETION
OUTPUT 1: Maximum alignment of all branch policies and strategies by 2012	Review existing policies, identify gaps and develop new/update existing	Short
OUTPUT 2: Operational framework developed and implemented by November 2009, maintained and updated when required	Review existing frameworks and integrate into one operating framework	Ongoing
	Identify and fill gaps	Ongoing
OUTPUT 3: Environmental fiscal reform policy framework adopted and implemented 2010	Develop and an implement Biodiversity Offsets policy	Short
	Implement Rates Rebate policy and By-Law	Short
	Develop and implement developers contribution policy	Short

	Develop Green tax (households) policy framework	Short
	Participate in CAPE and Resource economics initiatives, ensure CCT requirements are addressed	Ongoing
OUTPUT 4: Legislative tools for biodiversity protection developed and implemented by 2010	Develop Biodiversity policy to give effect to Biodiversity By-law	Short
	Develop and implement Bionet implementation guidelines	Ongoing
	Declaration of the Biodiversity Network as a Bioregional plan and maintaining up to date Biodiversity Network informatives/datasets	Short
	Ensure adequate biodiversity considerations are imbedded in the CCT IDP, SDF, integrated zoning scheme and MOSS	Ongoing
OUTPUT 5: Establish and maintain appropriate partnerships	Identify appropriate Partnerships: Enter into agreements with Partners; Maintain Partnerships; develop and implement partnership database	Ongoing

STRATEGIC OBJECTIVE 2: SECURE FORMAL CONSERVATION STATUS, MANAGE AND MAINTAIN IDENTIFIED AND EXISTING TERRESTRIAL AND WETLAND PRIORITY SITES

OUTCOME: ADEQUATE PROTECTION, MANAGEMENT AND RESOURCES MITIGATE FURTHER BIODIVERSITY LOSS

OUTPUT	ACTIVITY	TIMEFRAME FOR COMPLETION
OUTPUT 1: Implementation of Biodiversity Network	Prioritization of the Biodiversity Network and identification of erven and clusters	Short
	City Parks & Biodiversity Management Conservation Site Assessments	Short
	Workshops on the interpretation of the Biodiversity Network with consultants and DEAD&P	Short
	Process agreement with DME regarding applications for mining of sites within the Biodiversity Network	Short
	Identify case studies which can be utilised to establish protocols for biodiversity network implementation on various landownership scenarios	Medium
	Ground-truthing and prioritization of the wetland layer of the biodiversity network	Short
OUTPUT 2: Appropriate conservation status is obtained for the 24 protected areas	Contracts signed for priority Biodiversity Network sites	Medium

and the Biodiversity Network in terms of the Protected Areas Act and/or stewardship options by 2012		
	Biodiversity Network sites status	Medium
	Protected Area status	Short
OUTPUT 3: Local Biodiversity Strategic Action Plans (LBSAP) developed for the Biodiversity Network linked with a business plan	Development of LBSAP's	Short
OUTPUT 4: Fundraising Strategy developed and implemented	Fundraising to implement LBSAP's / Business Plan	Ongoing
OUTPUT 5: Management Plans developed are implemented for PA's and Biodiversity Network sites	Coordinate the development of Management Plans	Ongoing
	Coordinate an Annual Plan of Operation framework linked to management plan, strategic objectives and strategic planning framework	Short
OUTPUT 6: Ecological monitoring plan developed for the branch and implemented	Coordinate the development of an Ecological Monitoring Plan for the Branch	Short

	Develop and implement fauna monitoring programmes for PA's	Ongoing
	Develop and implement vegetation monitoring programmes for PA's	Ongoing
	Develop and implement wetland monitoring programmes for PA's	Ongoing
OUTPUT 7: Research programme developed and implemented	Align & initiate research priorities and opportunities with key research institutions; particularly in the field of ecological restoration	Ongoing
OUTPUT 8: Landuse advice provided where required	Develop a protocol for commenting on EIA applications	Short

STRATEGIC OBJECTIVE 3: IDENTIFY, ENHANCE AND MAXIMISE SOCIO-ECONOMIC BENEFITS AND OPPORTUNITIES

OUTCOME: BIODIVERSITY IS MAINSTREAMED INTO THE CCT ECONOMY AND SOCIO-ECONOMIC BENEFITS OPTIMIZED WITHOUT JEOPARDIZING THE BIODIVERSITY OBJECTIVES OF THE PROTECTED AREA NETWORK

OUTPUT	ACTIVITY	TIMEFRAME FOR COMPLETION
OUTPUT 1: Access policy and strategy developed and implemented (To be integrated into the CCT biodiversity strategy once developed)		Short
OUTPUT 2: Job opportunities identified and maximised		Ongoing
OUTPUT 3: Visitor policy, strategy and plan developed and implemented		Short

It should be noted that this strategic objective requires further planning. It is envisaged that a partnership will be entered into with the Environmental Capacity Building, Sustainable Livelihoods and Communications Branch of the ERMD to ensure integrated planning and implementation across the City.

STRATEGIC OBJECTIVE 4: SIGNIFICANTLY REDUCE THE THREAT POSED BY INVASIVE ALIEN SPECIES (IAS) TO THE COCT NATURAL, ECONOMIC AND SOCIAL ASSETS THROUGH DEVELOPING AND IMPLEMENTING AN INVASIVE ALIEN SPECIES STRATEGY

OUTCOME: REDUCE THE IAS THREAT AGAINST THE BIODIVERSITY OF CCT THROUGH IMPLEMENTATION OF SUSTAINABLE PROGRAMMES

OUTPUT	ACTIVITY	TIMEFRAME FOR COMPLETION
OUTPUT 1: Invasive Alien Species (IAS) Strategy and Action Plans developed and implemented by 2009	Develop and produce an IAS strategy and Action Plan and maintain	Ongoing
	Source funding for sustainable implementation of IAS Action Plan and align with C.A.P.E IAS, IAP and IAA strategies and plans.	Short to long term
	Obtain political and executive level buy-in and support	Short term (ongoing)
	Optimise institutional arrangements in order to ensure an enabling environment for IAS management in the CCT	Short term (ongoing)
	Establish and maintain appropriate partnerships to ensure sustainable implementation of strategy	Ongoing
	Develop and produce IAS legal framework and policy	Short term
	Build capacity to implement strategy	Short to medium term

	Develop IAS systems, norms and standards to support objectives	Short term (ongoing)
OUTPUT 2: Invasive Alien Animal (IAA) control projects implemented to address identified priorities	Identify projects for existing invasions	Short term
	Develop Prevention Early Detection and Rapid Response strategy,	Short term
	Source funding and implement strategies	Ongoing
OUTPUT 3: Invasive Alien Plant (IAP) control projects implemented according to IAS Strategy	Collect baseline data	Short term
	Plan and prioritise and implement according to plan	Ongoing
	Monitor and evaluate	Ongoing
	Establish coordination committee, agree on and align targets and coordinate actions	Short term (ongoing)
	Source funding for implementation	Ongoing

OUTPUT 4: Prevention and Early Rapid response programme developed and implemented for IAS	Develop Prevention Early Detection and Rapid Response strategy, source funding and implement	Ongoing
OUTPUT 5: Awareness-raising programme developed for IAS and integrated with relevant CCT programmes	Develop awareness raising programme and align with existing programmes	Short term
	Source funding for implementation	Ongoing
	Monitor efficacy of awareness raising programme	Ongoing
OUTPUT 6: Improved IAS management through participating in relevant programmes and alignment to initiatives such as C.A.P.E.	Align with C.A.P. IAS, IAP and IAA strategies and plans.	Ongoing

STRATEGIC OBJECTIVE 5: IMPROVE AWARENESS RAISING AND ENVIRONMENTAL EDUCATION AND ENHANCE THE BRANCHES PROFILE

OUTCOME: INCREASED AWARENESS ABOUT THE CCT BIODIVERSITY AND THE THREATS

OUTPUT	ACTIVITY	TIMEFRAME FOR COMPLETION
OUTPUT 1: Appropriate Awareness, Communications strategies developed and implemented and aligned with partner strategies (C.A.P.E. and CapeNature) and existing city strategies	Develop Awareness strategy and implement	Ongoing
	Develop Communications Strategy and implement	Ongoing
OUTPUT 2: Appropriate Environmental education strategy developed and implemented and aligned with partner strategies (C.A.P.E. and CapeNature) and existing city strategies		Ongoing

It should be noted that this strategic objective requires further planning. It is envisaged that a partnership will be entered into with the Environmental Capacity Building, Sustainable Livelihoods and Communications Branch of the ERMD to ensure integrated planning and implementation across the City.

STRATEGIC OBJECTIVE 6: BUILD THE CAPACITY OF THE BRANCH TO, MANAGE, MAINTAIN, MONITOR AND EVALUATE THE IMPLEMENTATION OF THE BIODIVERSITY STRATEGY

OUTCOME 1: ADEQUATE CAPACITY TO IMPLEMENT MANAGEMENT ACTIONS

OUTCOME 2: IMPROVED PERFORMANCE THROUGH REGULAR MONITORING AND EVALUATION AND THE IMPLEMENTATION OF ADAPTIVE MANAGEMENT ACTIONS

OUTPUT	ACTIVITY	TIMEFRAME FOR COMPLETION
OUTPUT 1: Capacity Building Strategy and plan developed, implemented and funded	Develop a Capacity Building Strategy for the Branch	
	Conduct a skills audit of the branch.	
	Align skills audit and Capacity building strategy to develop branch training plan.	
OUTPUT 2: Career-pathing and mentorship programme is established	Develop a career-pathing and mentorship plan/programme	
	Identify mentors and mentees within the branch	
	Implement the programme	
OUTPUT 3: Personal Performance Contracts and evaluations developed for the branch	Personal Performance Contracts are developed with mechanisms for monitoring	

OUTPUT 4: Strategic Planning framework (3yrs) produced		Short
OUTPUT 5: Monitoring and evaluation framework developed and implemented	Develop Monitoring and Evaluation Framework for the branch	Short
	Maintain and update framework when required	Ongoing
	Coordinate APO framework development process	Short
	Coordinate the development of Reserve Management Plans	Ongoing
OUTPUT 6: Assessments of PA's conducted according to schedule	Conduct SWOT analysis for all PA's	Short (ongoing)
	Coordinate METT assessments every three years (from 2007)	Ongoing
	Coordinate PA Reviews annually	Ongoing
OUTPUT 7: Rapid Assessment and Prioritization conducted for 23 Protected Areas	Develop Reporting formats (Quarter/annual)	Short
	Coordinate Annual performance review	Ongoing

OUTPUT 8: Database Knowledge Management	Develop a database and protocols for knowledge management	Ongoing

SECTION 6. LOCAL BIODIVERSITY IMPLEMENTATION PLAN

PRIORITISING AREAS OF THE BIODIVERSITY NETWORK FOR ACTION

The Biodiversity Network is a spatial representation of all the priority conservation areas which are needed to meet, or get as close as possible to, national conservation thresholds. This network comprises of a complex mix of various landowners and needs to be dealt with on an erf by erf basis. Within the City of Cape Town there must be only one action plan and this will be in the form of the Local Biodiversity Implementation Plan (LBIP). This will be the action plan for the Cape Town region and as such will include the City's, SANParks, CapeNature's and the Cape West Coast Biosphere Reserve's priorities. All conservation organisations must be in agreement with regard to the plan for each erf and all will work towards the common goal for each particular site. In order to be proactive, negotiations will need to commence with individual land owners. To do this successfully priorities will need to be identified. This is challenging as there are numerous variables and each site has a unique set of characteristics and purely prioritising sites in terms of size will not necessarily reflect their importance.

It is proposed that the sites will be prioritised by using the following method:

- 1) The city would be devised into five geographical areas roughly based on the City's planning districts. This will facilitate the networking of "land negotiators" with City officials. This will include the district Environmental Management, Biodiversity and Planning staff.
- 2) Within the districts, core nodes will be identified and all the land within these nodes will be included as a conservation priority.
- 3) One land negotiator with suitable skills will be tasked with being the contact person with all State and Provincial Land within the Biodiversity Network. This person will also look after priority areas within the East district of the City.
- 4) City reserve and / or area Managers may deal with priority nodes or specific sites within each of the Biodiversity Network Consolidation areas as per the LBIP.
- 5) The City's Biodiversity coordinator will take the responsibility of interfacing with all City Line functions who are responsible for land within the Bionet
- 6) SANParks will continue to champion land consolidation on the Peninsula

TABLE 1: PROPOSED BIODIVERSITY NETWORK FOCUS AREAS AND PRIORITY IMPLEMENTATION NODES

	FOCUS AREA	BOUNDARIES	DISTRICTS	PRIORITY NODES:
	Table Mnt National Park	Cape Peninsula	District A District H	1. CPPNE
	West Coast	West Coast N7 in the east and coast in the West	District B	1. Schoongesig
2. Southern Core of CWCBR				
3. BCA/ Vissershok				
	False Bay Coastline	N1 south to False Bay coast line	District F District G	1. False bay costal strip
2. Kuils River Corridor				
3. Swartklip				
	Central	All land In between N7 and N1	District C District D	1. Tygerberg Remnants Initiative
2. CR ecosystems north and east of Tygerberg				
3.				
	East and	City Wide and	City wide	1. All Biodiversity Network

Public land	from the mouth of the Louren's River east	District E	provincial land
			2. All Biodiversity Network state land
			3. Harmony Flats area



REFERENCES

- Allaby, M. 1998.** *Oxford dictionary of plant sciences*. Oxford University Press, Cape Town.
- City Of Cape Town. 2008.** *City of Cape Town Biodiversity Report 2008*.
- Day, J.A. 1987.** *Conservation and management of wetlands in the greater Cape Town area pg's 192 – 197. In: R.D. Walmesley and M.L. Botten (compilers). Proceedings of a Symposium on Ecology and Conservation of Wetlands in South Africa. Occasional Report Series No 28. Ecosystems Programmes. Foundation for Research Development, CSIR, Pretoria.*
- Mucina, L. & Rutherford, M.L. (editors). 2006.** *The vegetation of South Africa, Lesotho and Swaziland*. Strelitzia 19, SANBI, Pretoria.