

Greater Princess Vlei Conservation Area



Environmental Management Plan

Owner: City Of Cape Town - City Parks

Name: Greater Princess Vlei Conservation Area

Date: 01 June 2013

Prepared by: City of Cape Town

Table of Contents

Section 1: Administration	2
1.1 Introduction	2
1.2 Physical Description and Land Use	2
1.3 Ownership and Management	3
1.4 Significance	4
1.5 Vision, Mission and Objectives	5
1.6 Priority Goals	5
1.6.1 Objective 1: Conservation Security of Site	5
1.6.2 Objective 2: Appropriate Conservation Management	6
1.6.3 Objective 3: Sustainable and Compatible Use	7
1.7 Legislative Framework	7
1.8 Zonation of Conservation Area	7
1.9 Conservation Development Framework	10
Section 2: Management	11
2.1 Management Actions	11
2.1.1 Objective 1	11
2.1.2 Objective 2	12
2.1.3 Objective 3	16
2.2 Restrictions: Appendix J	17
2.3 List of Permissible Activities: Appendix K	18
2.4 Annual Review	18
Section 3: General	18
3.1 Useful Contacts	18
4: Appendices	19
Appendix A: Annual Plan of Operation (APO)	20
Appendix B: Relevant Legislation	23
Appendix C: List of Proposed Erven for the GPVCA	29
Appendix D: Species List: PV	31
Appendix E: Species List: LPV	38
Appendix F: Alien Clearing Schedule	41
Appendix G: Biodiversity Agreement	42
Appendix H: MOU – City Parks and Biodiversity Management	43
Appendix I: MOU – Western Leopard Toad	48
Appendix J: Restricted Activities (Copy)	54
Appendix K: Permissible Activities (Copy)	55

Section 1: Administration

1. 1 Introduction

This Environmental Management Plan (EMP) serves to provide the Mission, Vision, Objectives and Action Plans towards conserving and restoring the biodiversity as well as historical assets of the Greater Princess Vlei Conservation Area (GPVCA)

1.2 Physical Description and Land Use

The GPVCA is a portion of City of Cape Town owned land managed by the City Parks Department. The area is surrounded by the suburbs of Grassy Park, Southfield, Elfindale, Heathfield and Retreat on the Cape flats of which its focal natural features are its two wetlands; Princess Vlei and Little Princess Vlei (Figure 1).

Princess Vlei drains a storm water catchment of approximately 800 ha and is fed by the Southfield canal and discharges via the Italian road canal into Rondevlei. Little Princess Vlei is fed by both the Diep and the Mocke Rivers on its south western and northern sides respectively and is canalised to the Greater Zandvlei Estuary Nature reserve via the Sand River Canal.

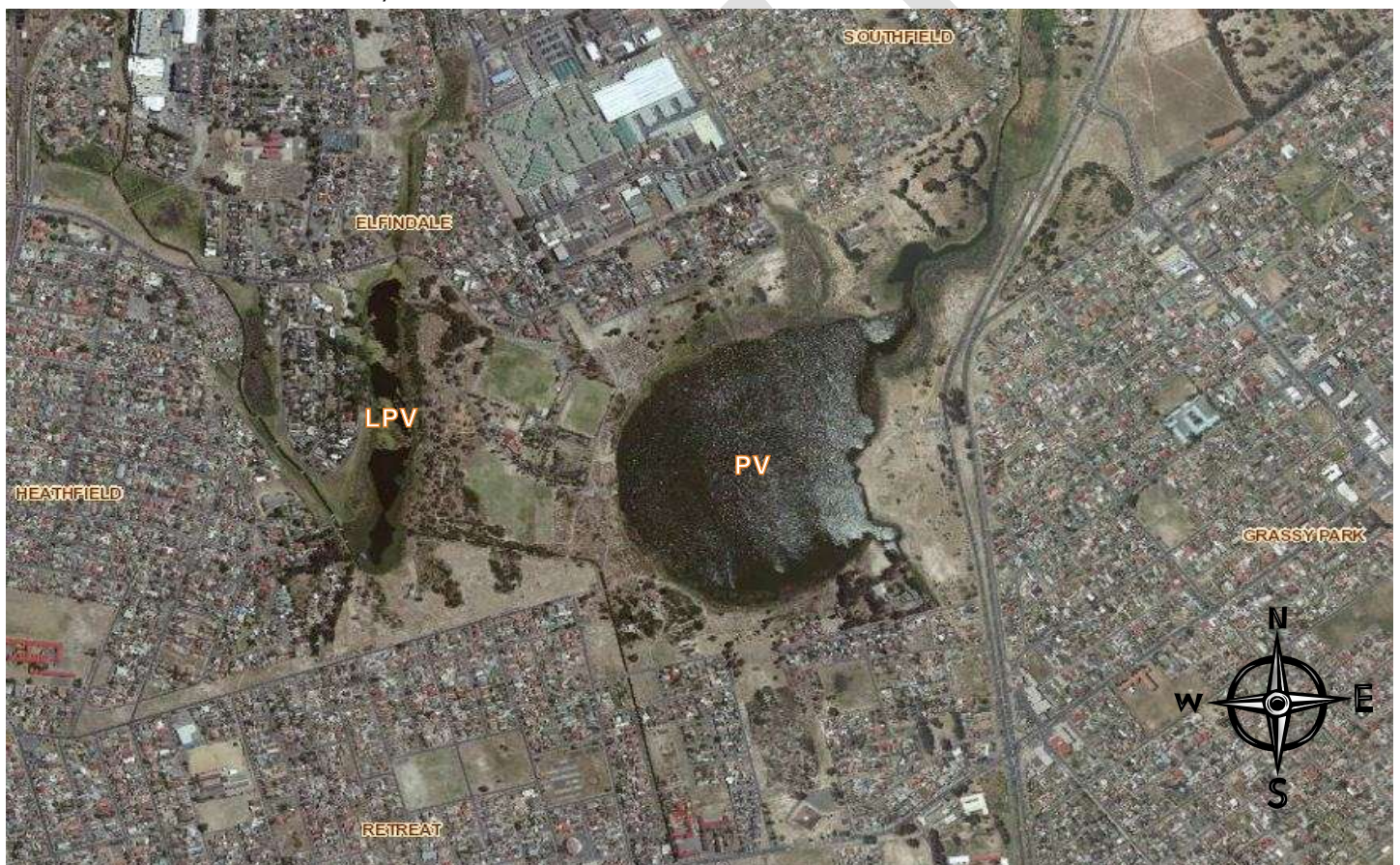


Figure 1: The Geographic location of the GPVCA, surrounded by the suburbs of Grassy Park, Southfield, Heathfield and Retreat. The two main water bodies Princess Vlei (PV) and Little Princess Vlei (LPV) lie to the east and west respectively.

Historically the area has been utilised extensively by man. The most common past practice was vegetable and flower farming while more recently the vleis have been utilised for recreation such as angling, braaiing, dog walking and sport. Farming increased in the 1840's with the construction of roads while soils were reclaimed by planting rooikrans (*Acacia cyclops*) and Port Jackson (*Acacia saligna*) trees around the vleis so that a variety of plants could be grown. However, seasonal floods regularly washed away the plants important to the livelihoods of these communities and as a direct result the construction of canals commenced in 1943 in order to channel and control stormwater.

1.3 Ownership and Management

The erven (Appendix C) incorporated in the conservation area are registered to the City of Cape Town and zoned Public Open Space. City Parks manages the greater part of the conservation area while Sport and Recreation manages the area (Erf 80955 & Erf 80951) known as Galaland (Figure 2).



Figure 2: Boundary and CCT owned erven to be included in the Greater Princess Vlei Conservation Area

1.4 Significance

The GPVCA forms part of the City of Cape Town's biodiversity network (BioNet) – a network of sites making up the viable minimum area required to conserve a representative sample of the City's biodiversity. Three vegetation types, illustrated in figure 3, occur in the area: Cape Lowlands Freshwater Wetlands, Cape Flats Dune Strandveld from False Bay (endangered) and Cape Flats Sand Fynbos (critically endangered). In addition Princess Vlei, Little Princess Vlei and the Mocke River are utilised extensively for breeding and foraging by the endangered Western Leopard Toad (*Amietophrynus pantherinus*) and are home to a number of rare bird species.

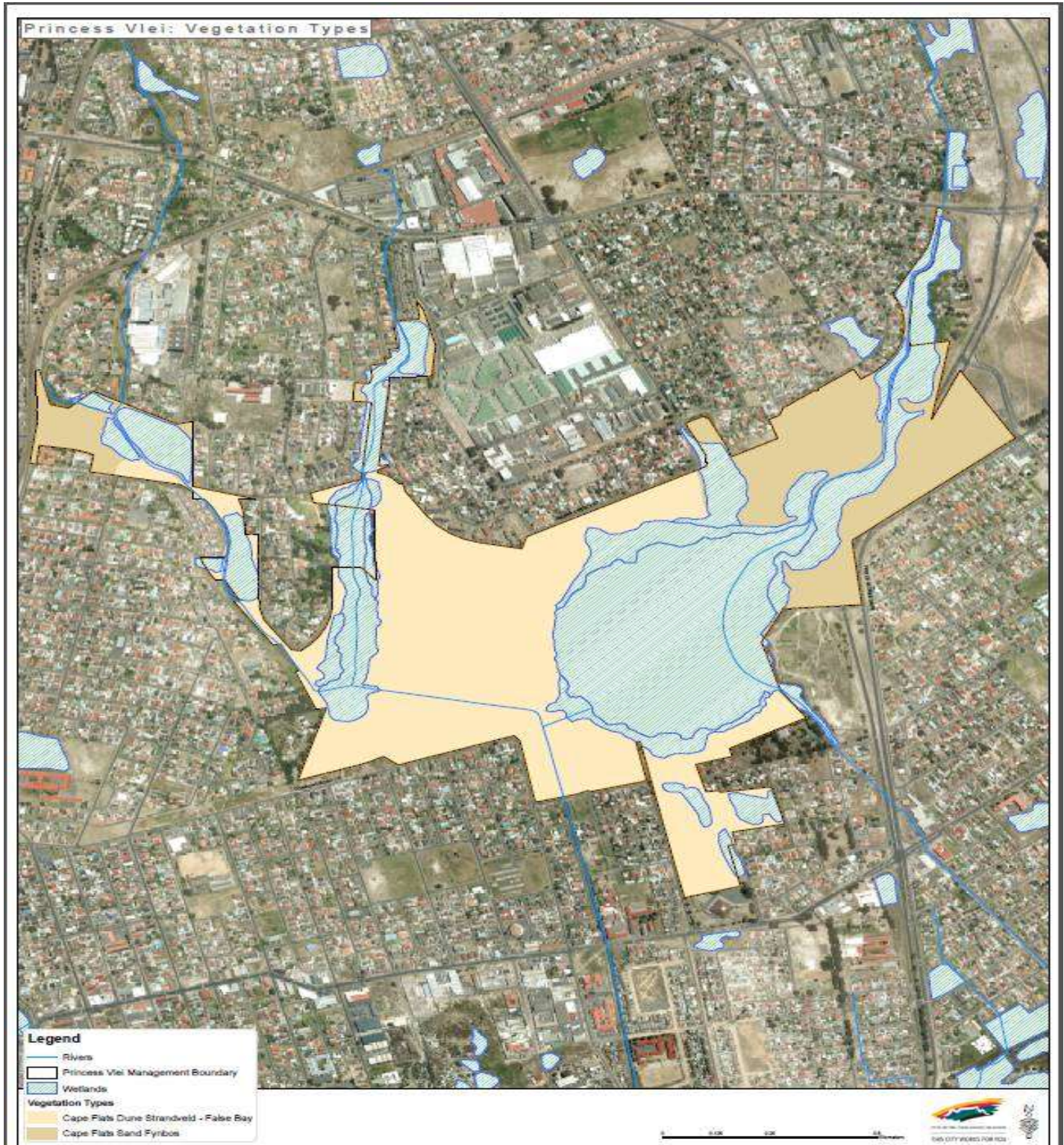


Figure 3: Vegetation types of the Greater Princess Vlei Conservation Area.

Princess Vlei is further of cultural and historical significance in that it is a place where local people have for years conducted baptisms and other religious ceremonies. The tragic legend of Princess Vlei recounts the story of a powerful Khoi princess who was abducted by Portuguese sailors while swimming in the vlei in 1510. Either murdered or taken back to Portugal, local lore claims her tears formed the adjacent Little Princess Vlei, and that each year a life is taken by Princess Vlei in retribution. Many Khoi descendants on the Cape Flats regard Princess Vlei to be one of their culturally and historically most valued sites in Cape Town.

1.5 Vision, Mission and Objectives

VISION	"To Protect and manage the Conservation Area while providing opportunities for environmental education and recreation.
MISSION	"To effectively manage, improve and conserve the natural and cultural heritage offered within the Conservation Area".
OBJECTIVE 1	To ensure that the conservation area and its associated biodiversity and cultural heritage is protected in perpetuity and contributes to the conservation of Cape Town's unique Natural Heritage.
OBJECTIVE 2	To manage, maintain, and improve the ecological and historical integrity of the Conservation Area
OBJECTIVE 3	To fulfil the conservation goals of the conservation area whilst exploring opportunities for sustainable recreational and educational activities.

1.6 Priority Goals

1.6.1 Objective 1: Conservation Security of Site

To ensure that the Greater Princess Vlei Conservation Area and its associated biodiversity and cultural heritage is **protected in perpetuity** and contributes to the conservation of Cape Town's unique Natural Heritage.

GOAL 1.1	Clearly define the area to be subjected to the Biodiversity Agreement.
GOAL 1.2	Have a Biodiversity Agreement and EMP in place with CapeNature thereby providing statutory protection for the Conservation Area.
GOAL 1.3	Register voluntary Title Deed restrictions against the conservation area to ensure that it remains protected for perpetuity.
GOAL 1.4	Rezone the Conservation Area to POS1 (Environmental Conservation)
GOAL 1.5	Investigate the status of adjacent erven (City and Private) for possible inclusion in the conservation area.

1.6.2 Objective 2: Appropriate Conservation Management

To manage, maintain, and improve the ecological and historical integrity of the Conservation Area and associated wetland and fynbos habitats.

GOAL 2.1	<p>Adopt this EMP and review it every five years. Prepare and implement an Annual Plan of Operation (APO) and review the site annually.</p> <p>The Annual Plan of Operation (APO) will express what management actions are expected to be conducted in a given financial year. These management actions will be constrained by resource availability but will align to the Vision, Mission and Objective of the Conservation Area. The APO is attached as Annexure A.</p>
GOAL 2.2	Have an Invasive species control programme and clearing schedule in place which is in line with approved Invasive Alien Species programme norms and standards.
GOAL 2.3	Develop and implement a fire management and response plan for the Conservation Area.
GOAL 2.4	Compile baseline data collection of the flora and fauna, especially all threatened species on site.
GOAL 2.5	Effectively implement management interventions to ensure the continued survival and protection of any faunal and floral species, or historical feature of conservation significance.
GOAL 2.6	Develop and implement an ecological monitoring plan.
GOAL 2.7	Develop and implement an appropriate restoration plan for the Conservation Area. This must define any prescribed introduction and other relevant detail such as restoration methods, material, source, origin, etc.
GOAL 2.8	Develop and Implement a Response Plan for environmental transgressions and emergencies

GOAL 2.9	Adapt Standard Operating Procedures for all required management interventions to ensure minimum negative ecological impact.
GOAL 2.10	Develop and implement SLAs with the appropriate Departments for the Water course management issues such as Storm Water; Siltation; litter; sewerage spills; excessive weed growth

1.6.3 Objective 3: Sustainable and Compatible Use

To fulfil the conservation goals while exploring opportunities for sustainable recreational and educational activities.

GOAL 3.1	Compile a list of acceptable activities that will be permitted within the Conservation Area and to have a list of unacceptable activities and restrictions within the conservation area for both the general public and the management teams.
GOAL 3.2	Develop and implement a desirable infrastructure plan for the site that would facilitate use while being compatible with the conservation goals of the Conservation Area.
GOAL 3.3	Develop and install appropriate signage and educational material.
GOAL 3.4	Create educational and research opportunities through the promotion of the area to local schools and other educational institutions, as well as the general public.
GOAL 3.5	Facilitate Stakeholder involvement

1.7 Legislative Framework

This Conservation Area agreement is to be signed under the **Western Cape Nature Conservation Board Act No 15 of 1998 as a Biodiversity Agreement**. This Act allows Cape Nature to sign contractual agreements with any land owner concerning the conservation of important natural systems. One Biodiversity Agreement will be signed for all 16 City Parks Sites.

See Annexure B for a list of the other relevant legislation which pertains to this site.

1.8 Zonation of Conservation Area

One of the objectives of this management plan is to achieve an appropriate balance between conservation and recreational use of the conservation area. An important tool in achieving this

objective is zonation, or the delineation of different use zones. The proposed zonation plan for the Greater Princess Vlei Conservation Area is based on the City of Cape Town's Guidelines for Visitor Use Zoning for Nature Reserves and Conservation Areas and is shown in Figure 4 below.

The aforementioned guidelines make provision for the following zones and associated conservation objectives:

- **Conservation:** Natural areas should be kept intact in order to protect habitat required to meet biodiversity targets for various vegetation types and to provide undisturbed habitat for a range of species. Where possible degraded areas should be rehabilitated.
 - The conservation zones may be used for self-guided walks, bird watching, etc. Access to the land areas is pedestrian only, while the water body may be used by canoeists for relaxation purposes by individuals and small groups only i.e. not for competitive purposes. Moreover, canoes should not be launched or landed within these zones.
- **Low Intensity Leisure:** Although some areas will be impacted by a range of activities and limited infrastructure, most areas should be kept largely intact and ecological processes should remain functioning. Where possible degraded areas should be rehabilitated.
 - In general these areas are intended for relatively frequent recreational and educational activities including walking, bird watching etc. Facilities should be eco-friendly and promote conservation-related experiences and may include parking for access to this and other zones.
- **High Intensity Use:** The activities and infrastructure in these areas should be managed to minimize impacts on biodiversity and visitor experience in other zones. Where feasible, non-crucial infrastructure should over time be removed from the reserve and the sites rehabilitated.
 - The high intensity use areas within the boundaries of the GPVCA are limited to Princess Vlei and to the area known as *Galaland* (Fig. 2) managed by Sport's and Recreation. Princess Vlei may be used for a variety of boating activities and fishing from the banks. Where these might impinge on the Conservation Zone, prior approval must be sought from the Reserve Manager. In addition, there are areas and facilities in *Galaland* which are used intensively for a variety of activities by sport and recreation – including bmxing, cricket and youth education.
- **Utility Zones:** The activities and infrastructure in these areas should be managed to minimize impacts on biodiversity and visitor experience in other zones. Where feasible, non-crucial infrastructure should over time be removed from the reserve and the sites rehabilitated.

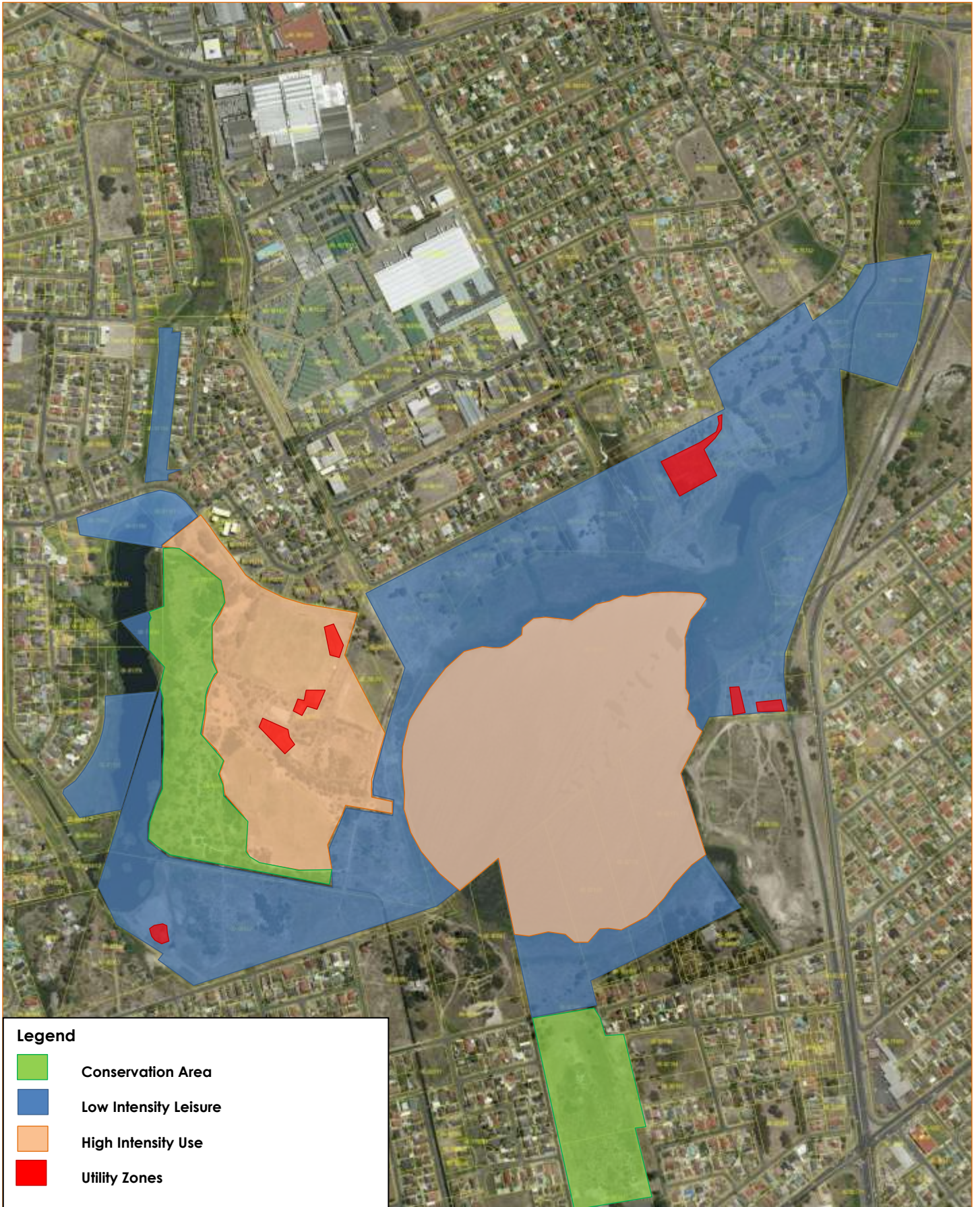


Figure 4: Visitor use zones of the GPVCA

1.9 Conservation Development Framework



Figure 5: Greater Princess Vlei Conservation Area showing existing infrastructure

Section 2: Management

2.1 Management Actions

2.1.1 Objective 1

To ensure that the conservation area and its associated biodiversity and cultural heritage is protected in perpetuity and contributes to the conservation of Cape Town's unique Natural Heritage.

Management Action 1 – Define the Conservation Area, Sign the Biodiversity Agreement with CapeNature and Finalize an EMP	
Management objective	To ensure that the Greater Princess Vlei Conservation Area and its associated biodiversity and cultural heritage is protected in perpetuity and contributes to the conservation of Cape Town's unique Natural Heritage.
Management Activities next 5 years	<ul style="list-style-type: none"> • Define the Conservation Area Boundaries and zonation of the conservation area – to be defined spatially. • Develop an EMP which includes the Conservation Development Framework/Master Plan. • Finalise and sign Biodiversity Agreement with CapeNature. • Rezone the areas as POS1 (Environmental Conservation). • Register voluntary Title Deed restrictions against the conservation area. • Investigate the status of adjacent erven for possible inclusion in the conservation area. • Liaise with Sport and Recreation regarding usage definition and align to the management plan
Responsible Party	<ul style="list-style-type: none"> ▪ City Parks & Biodiversity Management
Timeframes	<ul style="list-style-type: none"> • Bi-lateral discussion with Sport and Rec December 2013 • Define the Conservation Area Boundaries – June 2013. • Develop an EMP – June 2013 • Signed Biodiversity Agreement – December 2013 • Rezone the areas as POS1 (Environmental Conservation): December 2013 • Register voluntary Title Deed restrictions against the conservation area: June 2014. • Investigate the status of adjacent erven June 2013

2.1.2 Objective 2

To manage, maintain, and improve, the ecological and historical integrity of the Conservation Area.

Management Action 2 – Develop an APO and Review Annually	
Management objective	To manage, maintain, and improve the ecological and historical integrity of the Conservation Area and associated habitats.
Management Activities	<ul style="list-style-type: none"> ▪ City Parks and Biodiversity Management to meet on site to draft an APO for the site. ▪ Annual review of APO in March / April to review progress made. ▪ At this site visit, the APO for the next financial year will be developed. ▪ Key stakeholders will be given opportunity to comment
Responsible Party	▪ City Parks & Biodiversity Management
Timeframe	Annually: March / April.

Management Action 3 – Invasive Vegetation Management	
Management objective	Control all invasive plants from the reserve and sustain follow up and maintenance programme (See Alien Clearing Subsidiary Plan)
Management Activities	<ul style="list-style-type: none"> ▪ Map entire reserve to determine species and density distribution. Update maps Annually. ▪ Eradicate alien invasive species ▪ Develop a strategy to manage invasive indigenous species ▪ Prioritise areas for clearing – update annually. ▪ Divide areas to be cleared into management blocks. ▪ Draw up an Alien Clearing Schedule to be followed– update annually ▪ Estimate an appropriate budget for the Alien Clearing Schedule. ▪ Liaise with the Invasive Species Office and transport Roads and Stormwater to implement.
Responsible Party	City of Cape Town – City Parks & Biodiversity Management: Invasive Species Unit, Roads, Transport and Stormwater
Timeframe	Refer to Alien Clearing Schedule.
Means	<ul style="list-style-type: none"> ▪ As per the Alien Clearing schedule for the site ▪ Any Invasive Species Management intervention must be done according to accepted Norms & Standards to ensure that the activities have a minimum negative impact on the indigenous biodiversity. ▪ Mechanical clearing and application of herbicide to felled stumps where needed in initial as well as follow-up operations. ▪ Biological Control can be considered where applicable. ▪ Integration with fire management must also be considered. ▪ Accurate records should be kept of all clearing and associated costs. ▪ Alien Clearing Schedule and Map to be used and updated. ▪ High level bilateral between City Parks and Transport, Roads and Stormwater

Management Action 4 – Fire Management	
Management Activities	To have developed and implemented a fire management and response plan for the Conservation Area (See Fire Subsidiary Plan)
Management Activities	<p>Fire in the Fynbos Biome</p> <p>There are three vegetation types within the conservation area; Cape lowland freshwater wetlands, Cape flats dune strandveld and Cape flats sand fynbos, each of which requires a unique fire management strategy;</p> <ul style="list-style-type: none"> ▪ Wild fire response: Cape Flats Dune Strandveld The biological diversity in Strandveld vegetation can persist with the absence of fire. Too frequent fires badly degrade the vegetation type. As such, the management action with regards to fire management at the Greater Princess Vlei Conservation Area is to exclude fire. ▪ Wild fire response: Cape Flats Sand Fynbos There are currently no remaining patches of this vegetation type in the conservation area however it is imperative that any future restoration projects include an appropriate fire regime if they are to be successful. ▪ Wild fire response: Wetlands These could be classified as Cape lowland freshwater wetlands and Cape Flats Sand Fynbos wetlands. Fire is an important driving force in such habitat types and can potentially be used as a management tool in the future. However, due to the close proximity of the site to the residential areas and the flammable infrastructure on site, all wildfires must be extinguished immediately and no prescribed ecological fires will be planned for the next 5 years. <p>Emergency Procedures</p> <ul style="list-style-type: none"> ▪ In the case of a wildfire, the fire department should be contacted immediately and they must attempt to extinguish the fire as soon as possible. ▪ Fire fighting intervention must not include bulldozing fire breaks in the conservation area. ▪ Where possible, no fire fighting vehicles should drive across the conservation area. ▪ Maintain accurate fire history records for all areas of the reserve <ul style="list-style-type: none"> ○ Update fire history records including a fire map ○ Link fire history with follow-up alien clearing programs <p>Fuel reduction burns:</p> <ul style="list-style-type: none"> ▪ Fire can be used to reduce biomass following alien vegetation clearing operations. ▪ Brush piles must be packed as to ensure the smallest possible footprint. ▪ Brush piles must be packed on degraded areas as far as possible. ▪ All wood with a diameter greater than 50mm must be removed from the site and not stacked in the brush piles. ▪ Burning permits must be obtained and brush pile burns will be conducted in winter. <p>Fire prevention</p> <ul style="list-style-type: none"> ▪ Assess and include the need and position of any existing or potential firebreaks. ▪ Fire breaks must be prepared and maintained. The width and extent of these must be defined and clearly indicated on the site map. ▪ The APO must include the maintenance of the firebreaks.
Responsible	City of Cape Town – Wild fire prevention and response: City Fire Services

Party	Ecological burns (if required): City Parks/Biodiversity Management
Timeframe	Continuous for wildfire response. Winter for fuel reduction burns. Firebreak mapping December 2013 Firebreak preparation and maintenance annually in early summer (October)
Means	<ul style="list-style-type: none"> ▪ The firebreaks are to be prepared and maintained accordingly and specified in the APO. ▪ City Fire must respond to wildfires. ▪ Biodiversity Management will assist if ever ecological burns are required.

Management Action 5 – Fauna And Flora Baseline Data Collection And Monitoring

Management objective	To complete baseline data collection of the flora and fauna, especially all threatened species on site (See Monitoring Subsidiary Plan).
Management Activities	<p><u>Flora Management</u></p> <ul style="list-style-type: none"> ▪ Baseline data collection is a priority. ▪ Identify any threatened species or species of conservation concern. ▪ Identify any particular management actions required to ensure the effective protection of species or areas of concern. ▪ Identify appropriate long term monitoring objectives and plan. ▪ The populations of threatened plant species must be evaluated annually. <p><u>Fauna Management</u></p> <ul style="list-style-type: none"> ▪ Baseline data collection ▪ Assess impacts of fauna on the vegetation.  ▪ Any species introduction or removals must be done with approval of the City's Fauna Management Committee and with the relevant Cape Nature permits. <p>Identify responsible official for vetting biological observations on the biodiversity data base. (Grant Smith : BM)</p>
Responsible Party	<ul style="list-style-type: none"> ▪ City of Cape Town: City Parks and Biodiversity Management. ▪ Volunteers; CPUT Nature Conservation Students ▪ Biodiversity management to assist with data management (on the Biodiversity Database www.biodiversity.co.za)
Timeframe	Continuous. Baseline data collection will take at least 3 years. Refer to APO.

Management Action 6 – Develop Appropriate Restoration Plans

Management objective	Develop and implement an appropriate restoration plan for the Conservation Area. (See Restoration Subsidiary Plan)
Management Activities	<ul style="list-style-type: none"> ▪ Prevent introduction of locally exotic species and plants where the origin is not known. This is critical in order to ensure that the genetic integrity of the locally occurring plant populations is maintained. ▪ In the medium term, a restoration plan which details the species and source locations must be developed. ▪ In the absence of a detailed restoration plan, all plantings within the Conservation Area must be approved by the Biodiversity Management Branch. ▪ Removal of concrete canals (where possible) ▪ Rehabilitation of Wetlands

Responsible Party	<ul style="list-style-type: none"> ▪ CCT – City Parks
Timeframe	Vegetation - Five years. Other restoration activities budget dependant
Means	<ul style="list-style-type: none"> ▪ Comprehensive restoration plans will need to be outsourced and collated by relevant specialists. In the interim setting simple parameters for vegetation restoration of what can be planted and from what origin is critical.

Management Action 7 – Develop A Prevention And Response Plan For Chemical And Sewage Spills	
Management objective	To prevent and or minimise the effects of pollution (See Environmental Emergencies Subsidiary Plan)
Management Activities	<ul style="list-style-type: none"> ▪ Ensure Response Plan is in place to deal swiftly and effectively with any pollution ▪ Any management intervention must be done according to accepted Norms & Standards to ensure that the activities have a minimum negative impact on the indigenous biodiversity.
Responsible Party	<ul style="list-style-type: none"> ▪ City Parks ▪ Catchment Management ▪ Scientific Services
Timeframe	December 2013
Means	<ul style="list-style-type: none"> ▪ MOA to be entered into ▪ Clear and precise Specifications and Conditions for internal and external service providers

Management Action 8 – Management of Litter	
Management objective	To keep Conservation Area free of litter
Management Activities	Ensure a program is in place for the removal of litter from the entire Conservation Area in accordance with City Parks' Minimum Maintenance Standards
Responsible Party	CCT – City Parks
Timeframe	On-going
Means	In-house teams or outsourcing

Management Action 9 – Maintenance Of Paths, Boardwalks & Parking Areas	
Management objective	To maintain infrastructure in safe and good working order
Management Activities	<ul style="list-style-type: none"> ▪ Monthly inspections ▪ Effect repairs when necessary
Responsible Party	<ul style="list-style-type: none"> ▪ CCT – City Parks
Timeframe	On-going
Means	<ul style="list-style-type: none"> ▪ On-site inspections ▪ Public Reporting ▪ Repairs by handymen or contractors

Management Action 10– Species of Conservation Concern: Western Leopard Toad	
Management objective	Maintain and increase the population of Western Leopard Toad at the Greater Princess Vlei Conservation Area
Management Activities	<ul style="list-style-type: none"> • Implement the MOA between City Parks and Environmental Resource Management and insure that all contractors are aware of the specifications of this MOA. • Implement precautionary measures to all maintenance activities during the breeding season (July – Aug) of the Western Leopard Toad (WLT) – exact times of movement can be confirmed with Environmental Resource Management (ERM) or the Western Leopard Toad Conservation Committee (WLT-CC). • Confirm the period of emergence of the Western Leopard Toad toadlets with ERM and / or the WLT-CC. During the days of active emergence, no mowing is to be allowed for that particular area. • Avoid the use of herbicide, insecticides and fungicides during the breeding season and emergence of the WLT. • Do not install infrastructure (i.e. low walls, kerbs etc.) that could act as faunal movement barriers. • Ensure permeable fencing or suitable gaps are provided in perimeter treatment of sites. • Ensure that excavations (i.e. trenches or holes) are not left uncovered during the WLT breeding and emergence period. If unavoidable, excavations must be checked early each morning to ensure no animals are trapped within. • Educate staff members involved and ensure contracts include an awareness clause to ensure effective protection of the WLT. (ERM to provide basic one-page hand-outs)
Responsible Party	City Parks / Environmental Resource Management / Western Leopard Toad Conservation Committee
Timeframe	On-going

2.1.3 Objective 3

To fulfill the goals of the conservation area whilst exploring opportunities for recreational and educational activities.

Management Action 10 – Permissible Activities	
Management objective	Maintain a list of acceptable activities that will be permitted within the Conservation Area and to have a list of unacceptable activities and restrictions within the conservation area for both the general public and the management teams.
Management Activities	<ul style="list-style-type: none"> ▪ City Parks to define what activities are acceptable within the Conservation Area. ▪ Permissible activities must be sustainable. ▪ Permissible activities must be compatible with other user groups ▪ It may be necessary to monitor the effects of a particular recreational use / activity. This is to be included in the APO. ▪ Activities not permitted are listed in section 2.2.
Responsible Party	<ul style="list-style-type: none"> ▪ City Parks with input from Biodiversity Management.
Timeframe	<ul style="list-style-type: none"> ▪ By June 2013

Management Action 11 – Awareness, Education, Training and Stakeholders	
Management	To inform users of the area, surrounding communities, abutting landowners about

objective	the significance of the site.
Management Activities	<ul style="list-style-type: none"> ▪ <u>Facilitate Stakeholder Engagement</u>: Develop and maintain mutually beneficial partnerships with communities and interest groups. ▪ <u>Signage</u>: Maintain a common theme so that all the City Parks Biodiversity agreement sites have the same "feel".
Responsible Party	CCT – City Parks
Timeframe	Continuous
Means	<ul style="list-style-type: none"> ▪ All signage to be included in CDF ▪ Informative signage if appropriate ▪ Use the community newspapers for positive stories regarding the site ▪ Work in partnership with existing structures ▪ Identify areas for volunteer involvement ▪ Develop volunteer program ▪ Publicise the area to neighbouring schools.

2.2 Restrictions: Appendix J

#	Activity	Controlling Legislation
1	No unauthorised buildings or other structures (application procedure)	Protected Areas Act 2003
2	No ploughing, harvesting, ripping of any indigenous vegetation, ecosystems or habitats in in the biodiversity area unless specified in the EMP. No manipulation of sensitive environments (such as wetlands and streams) that would have a negative impact on the system.	National Environmental Management Act, as amended. Biodiversity Act 2004.
3	No mining	Protected Areas Act.
4	No rubbish dumping	By agreement
5	No act that adversely affects biodiversity	Protected Areas Act
6	No alien invasive species	Biodiversity Act
7	No non-indigenous fauna or extralimital species (except where prior permission has been obtained by CapeNature)	Biodiversity Act
8	No destruction or removal of indigenous flora (except for seed collection for restoration projects or where prior permission has been obtained from CapeNature)	Cape Nature Conservation Ordinance 1974
9	No hunting unless it is necessary for the proper ecological management of the Conservation Area and is catered for in the management plan.	Cape Nature Conservation Ordinance 1974
10	No activities will be permitted which may adversely affect the natural state, flow, supply, quantity or quality of any water resource located in the Conservation Area.	National Water Act 1998 Storm Water Bylaw
11	No placement of any transmission lines, telecommunication lines, cellular towers or public works in the Conservation Area.	By agreement
12	No motorcycles or four-wheel drive vehicles in the Conservation Area unless their use is necessary for the proper management and protection of the Conservation Area.	By agreement
13	No Fires permissible outside of designated areas	Veld and Forests Act
14	No Overnighing	City's By laws
15	No Fire works	City's By laws
16	No Fire arms	City's By laws
17	No alcohol or usage of illegal substance	City's By laws
18	No excessive noise or sound amplification	City's By laws
19	No Transgression of any of the City's By laws	City's By laws

2.3 List of Permissible Activities: Appendix K

- Nature appreciation
- Braaiing in designated areas
- Walking/Hiking
- Bird Watching
- Educational Activities
- Dog walking on a leash
- Geo caching
- Fishing with angling licence
- Non-motorised water sports
- Any other sustainable and compatible activities or practices with prior permission from City Parks in terms of the events bylaw
- Sustainable and compatible events permitted by the City

2.4 Annual Review

Progress at the Greater Princess Vlei Conservation Area will be reviewed internally by City Parks and Biodiversity Management Staff, on an annual basis according to the management schedule and priorities set out for that year. Management interventions will align with the Vision, Objectives and Goals of the site but will be constrained by resource availability. Such annual reviews will be as per the signed MOA between City Parks and Biodiversity Management.

Section 3: General

3.1 Useful Contacts

City Parks Area Manager:	Johann Herholdt	021 762 9180
GPVCA Site Manager:	Grant Smith	021 705 3762
Biodiversity Management Emergency:	Standby Official	083 499 1717
CapeNature:	Metro office	021 959 5900
City Law Enforcement:	Hillstar	021 710 8305
Fire department:	Ottery	021 703 1892
Invasive Species Unit:	Westlake	021 713 1944
Land Invasion:	Stephen Hayward	021 913 3347
SAPS:	Grassy Park	021 700 3900
Solid Waste:	Bylaw	021 400 6301
SPCA Wildlife Unit:	Brett Glasby	083 326 1610
SPCA:	Cape of Good Hope	021 700 4140
Subcouncil 18 Office:	Lotus River Rondevlei	021 700 4025
Transport, Roads & Stormwater	Talcott Persent	021 710 8130
Water and Sanitation Pump Station:	Brian Thomson	021 710 8014
Water Pollution Control:	Melissa Tang	021 710 8353

4: Appendices

- A:** Annual Plan of Operation
- B:** Relevant legislation pertaining to this area
- C:** List of Proposed Erven
- D:** PV Species List
- E:** LPV Species List
- F:** Alien Clearing Schedule
- G:** Biodiversity Agreement
- H:** MOU between City Parks and Biodiversity Management
- I:** MOU Western leopard toad
- J:** Restricted Activities (Copy)
- K:** Permissible Activities (Copy)

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Appendix A: Annual Plan of Operation (APO)



Figure 1: Management Blocks of the GPVCA and adjoining areas

Table 1: Management Schedule 2013/2014

2013 /2014

Management Intervention	Management Action	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Alien Clearing: Terrestrial (See Subsidiary Plan)	Initial Clearing: Blocks 1,2,3,5,6,7,9,15												
	1 st Follow-up	Light Green											
	2 nd Follow-up					Light Green							
	Maintenance Sweep								Light Green			Light Green	
	Initial Clearing: Block 16												
	1 st Follow-up	Dark Green											
	2 nd Follow-up					Dark Green							
	Maintenance Sweep								Dark Green				Dark Green
	Initial Clearing: Blocks 11,12	Green											
	1 st Follow-up				Green								
	2 nd Follow-up							Green					
	Maintenance Sweep												
Alien Clearing: Aquatic (See Subsidiary Plan)	Initial Clearing: Block 4												
	1 st Follow-up	Blue											
	2 nd Follow-up							Blue					
	Maintenance Sweep									Blue		Blue	
	Initial Clearing Blocks 8,13,14												
	1 st Follow-up	Dark Blue											
	2 nd Follow-up							Dark Blue					
Maintenance Sweep									Dark Blue		Dark Blue		
Fire Management: (See Subsidiary Plan)	Fire Break Maintenance												
	Burn Permit Application	Pink	Pink										
	Scheduled Block burn												
	Post Fire Monitoring												
Infrastructure Maintenance:	Foot path - maintenance												
	Toilets & Braais (Monthly)	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red	Dark Red
	Post & Rail Fencing (Monthly)	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange

Management Intervention	Management Action	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Indigenous Flora Management (See Subsidiary Plan)	Baseline Data Collection												
	Endangered Plant Pop's Mapping												
	Annual review												
	Monitoring (Monthly)												
Other management interventions:	Restoration (e.g. planting)												
	Quarterly Friends meeting												
	Litter pick up (bi-monthly)												
Fauna Management: Western Leopard Toads (See Subsidiary Plan)	Public Awareness												
	Habitat Maintenance												
	Toad Saving												
	Monitoring												
Guinea Fowl & Feral Cats (See Subsidiary Plan)	Trapping												
	Monitoring												
Baseline Data Collection & Monitoring Relating to Wetland Health (See Subsidiary Plan)	Bird Counts (Monthly)												
	Fish Trek												
	Frogs												
	Ad Hoc												
PV Drawdowns (See Subsidiary Plan)	Initiation												
	Monitoring (Weekly)												
	Cessation												

Appendix B: Relevant Legislation

Legislation: Act, Ordinance, By-law	Relevance: Description	Amendment: Latest Amendment Date	Comment: Other Notes
Constitution of the Republic of South Africa Act; No 108 of 1996	Lists South African citizen's environmental rights.	N/A	Chapter 2: Bill of rights assigns citizens with particular rights.
ENVIRONMENTAL LEGISLATION			
National Legislation			
National Environmental Management Act, No 107 of 1998	One of the most important environmental laws relating to most aspects of the environment including EIA's the roles of DWE, environmental information and legal standing etc.	Amendment Act 56 of 2002 Amended by GN. 26018 Vol. 464 – of 2004-02-13	Provides for cooperative environmental governance
National Environmental Management: Biodiversity Act No 10 of 2004	<p>The objectives of the Act are to provide for:</p> <ul style="list-style-type: none"> the management and conservation of South Africa's biodiversity within the framework of the National Environmental Management Act, 1998 the protection of species and ecosystems that warrant national protection the sustainable use of indigenous biological resources the fair and equitable sharing of benefits arising from bio-prospecting involving indigenous biological resources the establishment and functions of a South African National Biodiversity Institute <p>In essence, the Act was put in place to safeguard the important biodiversity attributes in the country, whilst allowing people to benefit equally from the natural resources. In order to achieve these goals, the Act made provision for the South African National Biodiversity Institute (SANBI), which has been designated certain functions and has been afforded powers and duties in respect of this Act.</p>	N/A	
National Environmental Management: Protected Areas Act No 57 of 2003	<ul style="list-style-type: none"> To provide for the protection and conservation of ecologically viable areas representative of South Africa's biological diversity and its natural landscapes and seascapes; for the establishment of a national register of all national, provincial and local protected areas; for the management of those areas in accordance with national norms 	Amendment Act 62 of 2008 Amendment Act 15 of 2009	Regulations Notice 1029 of 2009 list specific regulations for nature reserves proclaimed by the MEC (draft August 2009)

	<p>and standards;</p> <ul style="list-style-type: none"> • for inter-governmental cooperation and public consultation in matters concerning protected areas; • and for matters in connection therewith. 		
Conservation of Agricultural Resource Act, 1983 (ACT 43 OF 1983)	CARA Regulations contain a list of alien invasive vegetation categorized according to their legal status. Act regulates sale position and use of listed species	Amended by GN R 2687 of 1985-12-06 and GN R 280 of 2001-03-30	Alien invasive plant legislation to be included under NEM:BA in future
National Veld and Forest Fire Act; No 101 of 1998	Relates to veld fire prevention, fire protection associations, fire danger indexing, enforcement of fire legislation and the fighting of fires	N/A	
Environment Conservation Act 73 of 1989	<p>The Environment Conservation Act is the other law that relates specifically to the environment. Although most of this Act has been replaced by NEMA there are still some important sections that remain in operation. These sections relate to:</p> <ul style="list-style-type: none"> • protected natural environments • littering • special nature reserves • waste management • limited development areas • regulations on noise, vibration and shock • environmental impact assessment (EIA) 	<ol style="list-style-type: none"> 1. Environment Conservation amendment Act 98 of 1991 2. Environment Conservation amendment Act 79 of 1992 3. Environment Conservation Second amendment Act 115 of 1992 4. Environment Conservation amendment Act 94 of 1993 5. Environment Conservation Second amendment Act 52 of 1994 6. Proclamation R27 of 1995 7. Proclamation R43 of 1996 8. National Environment Act 107 of 1998 	
National Water Act, 36 of 1998	Relates to all use of water and the management of all water resources within South Africa.	N/A	
National Environmental Management: Air Quality Act 39 of 2004	To provide for enhancing the quality of ambient air for the sake of securing an environment which is not harmful to the health and well-being of the people		Promulgated to give effect to section 24(b) of the Constitution. South African Air Quality Information System

			(SAAQIS) is a web-based system which provides information on the quality of ambient air across the country
Animal Protection Act, 71 of 1962	To consolidate and amend the laws relating to the prevention of cruelty to animals	Animal Matters Amendment Act 42 of 1993	
Animal Diseases Act 35 of 1984	Provides for control measures relating to animal diseases		
Animal Health Act 7 of 2002	Regulates animal health		
Game Theft Act 105 of 1991	Regulates the ownership and protection of game		
Mountain Catchment Areas Act 63 of 1970	Provides for catchment conservation		Administered under the Western Cape Nature Conservation Board Act 15 of 1998
National Heritage Resources Act 25 of 1999	Provides for the protection of heritage resources		
Problem Animal Control Ordinance 26 of 1957	Regulates problem animals		Administered under the Western Cape Nature Conservation Board Act 15 of 1998
Atmospheric Pollution Prevention Act 45 of 1965		Whole repealed 01 April 2010 in favour of the National Environmental Management: Air Quality Act 39 of 2004	
Provincial Legislation			
Land Use Planning Ordinance, No 15 of 1985	The purpose of the ordinance is to regulate land use and to provide for incidental matters related to land use.	. Assented to 22 November 1985 0. Western Cape Land Use Planning Ordinance, 1985, Amendment Act, 2004	
Cape Nature and Environmental Conservation Ordinance, no 19 of 1974	The purpose of this ordinance is to regulate wild animals and plants and the establishment of nature reserves.	Publication date 1 September 1975	Administered under the Western Cape Nature Conservation

			Board Act 15 of 1998
Western Cape Nature Conservation Board Act 15 of 1998			Biodiversity Agreements are signed under this act
Municipal Legislation			
City Of Cape Town By-Law Relating To Stormwater Management , LA 31420	To provide for the regulation of stormwater management in the area of the City of Cape Town, and to regulate activities which may have a detrimental effect on the development, operation or maintenance of the stormwater system	Publication date 23 September 2005	
City of Cape Town: Air Pollution Control By-Law; LA 12649	The purpose of this by-law is: to give effect to the right contained in section 24 of the Constitution of the Republic of South Africa Act, 1996 (Act 108 of 1996) by controlling air pollution within the area of the Council's jurisdiction; to ensure that air pollution is avoided, or where it cannot be altogether avoided, is minimized and remedied.	Publication date 4 February 2003	
By-Law Relating to Community Fire Safety; Province of the Western Cape; LA 11257	The purpose and scope of the By-law is: to promote the achievement of a fire-safe environment for the benefit of all persons within the area of jurisdiction of the Municipality; to provide for procedures, methods and practices to regulate fire safety within the area of jurisdiction of the Municipality.	Publication date 28 February 2002	
City of Cape Town Draft Animal By-Law, 2009	The purpose of this By-law is: To formulate a new single by-law including 10 different municipal dog by-laws and the Animal Protection Act of 1962. This includes chapters on dogs, cats, poultry and working equines.	Draft, 2009	
HUMAN RESOURCES/ADMINISTRATION LEGISLATION			
National Legislation			
Occupational Health and Safety Act, 1993	To provide for the health and safety of persons at work and for the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work; to establish an advisory council for occupational health and safety; and to provide for matters connected therewith.	Occupational Health and Safety Amendment Act , No 181 of 1993	
Basic Conditions of Employment Act 3 of 1997	Provides for control measures pertaining to employment	Amendment Act 11 of 2002	
Labour Relations	The labour relations act aims to	Amendment	

Amendment Act, 66 of 1995	promote economic development, social justice, labour peace and democracy in the work place.	Labour Relations Act , 42 of 1996 Amendment Afrikaans Labour Relations Act 1998 Amendment Labour Relations Act , 127 of 1998 Amendment Labour Relations Act 2000 Amendment Act 12 of 2002	
Local Government Municipal Systems Act 32 of 2000	Establishes core principles, process and mechanisms relating to local government		
Promotion of Equality/Prevention of Unfair Discrimination Act 4 of 2000	Provides for the prevention of discrimination and other related matters		
Criminals Procedures Act			
Fire Arm Act			
Civil Aviation Act 13 of 2009			
Fencing Act 31 of 1963	Regulates all matters relating to fencing		
Hazardous Substances Act 15 of 1973	Controls substances which may cause injury or ill health to, or death of, human beings by reason of their toxic nature		
Land Survey Act 8 of 1997	Regulates land surveying, beacons and other related matters		
Promotion of Access to Information Act 2 of 2000	Promotes access to information		
Promotion of Administrative Justice Act 3 of 2000	Provides for the promotion of administrative justice	Amendment Act 53 of 2002	
Regional Services Council Act 109 of 1985	Regulates and controls land, land usage and other related matters		
Skills Development Act 97 of 1998	Promotes the development of skills		
State Land Disposal Act 48 of 1961	Regulates the disposal of state owned land		
Subdivision of Agricultural Land Act 70 of 1970	Regulates the subdivision of agricultural land		
Tourism Act 72 of 1993	Provides for the promotion of tourism and regulates the tourism industry		
Municipal Ordinance 20 of 1974	Regulates pollution and waste management		
South African National Road Agency Limited (SANRAL) and National Road Act 7 of 1998			
Aviation Act 74 of 1962	Provides for the control, regulation and encouragement of aviation activities in	Repealed in favour of the Civil	

	the Republic of South Africa	Aviation Act 13 of 2009	
Provincial Legislation			
Western Cape Constitution Act 1 of 1998	Introduces a constitutional framework for the province		
Western Cape Land Administration Act 6 of 1998	Regulates land and land usage		
Western cape Planning and Development Act 7 of 1999	Regulates planning and development within the province		
Municipal Legislation			
City of Cape Town By-Law relating to Filming	The Purpose of the By-law is to regulate and facilitate filming in the City of Cape Town	Provincial Gazette 6277, 24 June 2005	
By-law relating to Streets, Public Places and the prevention of noise nuisances 2007	The purpose of the by-law is to regulate activities in streets and public places and prevent excessive noise nuisance	Promulgated 28 September 2007, PG 6469; LA 44559	
Signage			

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Appendix C: List of Proposed Erven for the GPVCA

Erf no.	Owner	Prior Zonation	Current
75571	Mun Cape Town	Unspecified	POS
75607	Mun Cape Town	POS	POS
75608	Mun Cape Town	Res Vacant	POS
75770	Petra Estates	POS	POS
75771	Petra Estates	POS	POS
78116		POS	POS
78118		POS	POS
78215		POS	POS
79281		Res Vacant	State Land
79285	Mun Cape Town	Res Vacant	POS
79287	Mun Cape Town	Unspecified	POS
79294	Roscommon Pty Ltd	POS	Ordinary Erf
79295	Mun Cape Town	POS	POS
79307	Colderco Pty Ltd	Res Vacant	POS
79556		POS	POS
79572	Mun Cape Town	1 Dwell Res	POS
79573	Mun Cape Town	Unspecified	POS
79574	Mun Cape Town	POS	POS
79575	Mun Cape Town	POS	POS
79576	Mun Cape Town	POS	POS
79577	Mun Cape Town	POS	POS
79578	Mun Cape Town	POS	POS
79579	Mun Cape Town	POS	POS
79580	Mun Cape Town	POS	POS
79581	Mun Cape Town	POS	POS
79582	Mun Cape Town	POS	POS
79583	Mun Cape Town	Unspecified	POS
79584	Mun Cape Town	Unspecified	POS
79585	Mun Cape Town	Unspecified	POS
79586	Mun Cape Town	Unspecified	POS
79587	Mun Cape Town	POS	POS
79588	Mun Cape Town	Unspecified	POS
79589	Mun Cape Town	POS	POS
79590	Mun Cape Town	Unspecified	POS
79591	Mun Cape Town	POS	POS
79594	Mun Cape Town	POS	POS
79595	Mun Cape Town	POS	POS
79863	Mun Cape Town	POS	POS
79964	Garden Cities	POS	POS
79965	Garden Cities	POS	POS
80948			POS & Street
80951	City of Cape Town	Unspecified	POS
80952	City of Cape Town	Unspecified	POS
80953	City of Cape Town	Res Vacant	POS
80954	City of Cape Town	Res Vacant	POS
80955	City of Cape Town	Unspecified	POS
81120	Princess Vlei Estates	POS	POS
81121	Princess Vlei Estates	POS	POS
81168	Dorothy Kolbe	POS	POS
81170	City of Cape Town	POS	POS
81180	Garden Cities	POS	POS

81181	Mun Cape Town	POS	POS
81196	Garden Cities	POS	POS
81328	Catherine Paulson	POS	POS
81344		POS	POS
82087	Mun Cape Town	Vac Gen Res	POS
82088	Sonia Bersin	Vac Gen Res	POS
82092	Mun Cape Town	Unspecified	POS
82093	Mun Cape Town	Vac Gen Res	POS
82166	Mun Cape Town	POS	POS
82167	Mun Cape Town	Unspecified	POS
82169	Mun Cape Town	POS	POS
82170	Mun Cape Town	POS	POS
82171	Mun Cape Town	POS	POS
82172	Mun Cape Town	POS	POS
82175	Mun Cape Town	Unspecified	POS
82193	Mun Cape Town	POS	POS
82194	Mun Cape Town	Res Vacant	POS
82195	Mun Cape Town	Res Vacant	POS
108978	City of Cape Town	POS	POS
109045	Henry Thompson	Unknown	POS
149100-2	City of Cape Town	Unspecified	POS
75617-1	Petra Estates	Unspecified	POS
80949-1	Douglas Lee	POS	POS
80949-2	Douglas Lee	POS	POS

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Appendix D: Species List: PV

Species Name	Common Name	Class	Alien
<i>Amietia fuscigula</i>	Cape River Frog	Amphibia	No
<i>Amietophrynus pantherinus</i>	Western Leopard Toad	Amphibia	No
<i>Strongylopus grayii</i>	Clicking Stream Frog	Amphibia	No
<i>Opisthophthalmus capensis</i>	Cape Burrowing Scorpion	Arachnida	No
<i>Accipiter melanoleucus</i>	Black Sparrowhawk	Birds (Aves)	No
<i>Alcedo cristata</i>	Malachite Kingfisher	Birds (Aves)	No
<i>Alopochen aegyptiaca</i>	Egyptian Goose, Kolgans	Birds (Aves)	No
<i>Anas smithii</i>	Cape Shoveler	Birds (Aves)	No
<i>Anas undulata</i>	Yellow-billed Duck	Birds (Aves)	No
<i>Anhinga rufa</i>	African Darter	Birds (Aves)	No
<i>Ardea cinerea</i>	Grey Heron	Birds (Aves)	No
<i>Ardea melanocephala</i>	Black-headed Heron	Birds (Aves)	No
<i>Ardea purpurea</i>	Purple Heron	Birds (Aves)	No
<i>Bostrychia hagedash</i>	Hadedda Ibis	Birds (Aves)	No
<i>Bradypterus baboecala</i>	Little Rush-Warbler	Birds (Aves)	No
<i>Bubulcus ibis</i>	Cattle Egret	Birds (Aves)	No
<i>Burhinus capensis</i>	Spotted Dikkop, Spotted Thick-knee	Birds (Aves)	No
<i>Cairina moschata</i>	Muskovy Duck, Muskovy Duck	Birds (Aves)	Yes
<i>Cecropis cucullata</i>	Greater Striped Swallow	Birds (Aves)	No
<i>Ceryle rudis</i>	Pied Kingfisher	Birds (Aves)	No
<i>Charadrius pecuarius</i>	Kittlitz's Plover	Birds (Aves)	No
<i>Charadrius tricollaris</i>	Three-banded Plover	Birds (Aves)	No
<i>Chlidonias hybrida</i>	Whiskered Tern	Birds (Aves)	No
<i>Chroicocephalus hartlaubii</i>	Hartlaub's Gull	Birds (Aves)	No
<i>Chrysococcyx caprius</i>	Diderick Cuckoo	Birds (Aves)	No
<i>Cinnyris chalybeus</i>	Southern Double-collared Sunbird	Birds (Aves)	No
<i>Cisticola finniens</i>	Levaillant's Cisticola	Birds (Aves)	No
<i>Colius striatus</i>	Speckled Mousebird	Birds (Aves)	No
<i>Columba livia</i>	Feral Pigeon, Rock Dove	Birds (Aves)	Yes
<i>Corvus albicollis</i>	White-necked Raven	Birds (Aves)	No
<i>Corvus albus</i>	Pied Crow	Birds (Aves)	No

<i>Corvus splendens</i>	Indian House Crow	Birds (Aves)	Yes
<i>Egretta alba</i>	Great Egret	Birds (Aves)	No
<i>Egretta garzetta</i>	Little Egret	Birds (Aves)	No
<i>Estrilda astrild</i>	Common Waxbill	Birds (Aves)	No
<i>Euplectes capensis</i>	Yellow Bishop	Birds (Aves)	No
<i>Fringilla coelebs</i>	Common Chaffinch	Birds (Aves)	No
<i>Fulica cristata</i>	Red-knobbed Coot	Birds (Aves)	No
<i>Gallinula chloropus</i>	Common Moorhen	Birds (Aves)	No
<i>Haliaeetus vocifer</i>	African Fish-Eagle	Birds (Aves)	No
<i>Hirundo fuligula</i>	Rock Martin	Birds (Aves)	No
<i>Hydroprogne caspia</i>	Caspian Tern	Birds (Aves)	No
<i>Lanius collaris</i>	Common Fiscal, Fiscal Shrike	Birds (Aves)	No
<i>Larus dominicanus</i>	Kelp Gull	Birds (Aves)	No
<i>Milvus migrans</i>	Black Kite	Birds (Aves)	No
<i>Motacilla capensis</i>	Cape Wagtail	Birds (Aves)	No
<i>Numida meleagris</i>	Helmeted Guineafowl	Birds (Aves)	Yes
<i>Onychognathus morio</i>	Red-winged Starling	Birds (Aves)	No
<i>Pelecanus onocrotalus</i>	Great White Pelican, Wit Pelikan	Birds (Aves)	No
<i>Phalacrocorax africanus</i>	Reed Cormorant	Birds (Aves)	No
<i>Phalacrocorax lucidus</i>	White-breasted Cormorant	Birds (Aves)	No
<i>Platalea alba</i>	African Spoonbill	Birds (Aves)	No
<i>Plectropterus gambensis</i>	Spur-winged Goose	Birds (Aves)	No
<i>Podiceps cristatus</i>	Great Crested Grebe	Birds (Aves)	No
<i>Porphyrio madagascariensis</i>	African Purple Swamphen	Birds (Aves)	No
<i>Prinia maculosa</i>	Karoo Prinia	Birds (Aves)	No
<i>Pternistis capensis</i>	Cape Francolin, Cape Spurfowl	Birds (Aves)	No
<i>Serinus canicollis</i>	Cape Canary	Birds (Aves)	No
<i>Sphenoeacus afer</i>	Cape Grassbird	Birds (Aves)	No
<i>Streptopelia semitorquata</i>	Red-eyed Dove	Birds (Aves)	No
<i>Sturnus vulgaris</i>	Common Starling, European Starling	Birds (Aves)	Yes
<i>Tachybaptus ruficollis</i>	Little Grebe	Birds (Aves)	No
<i>Threskiornis aethiopicus</i>	African Sacred Ibis	Birds (Aves)	No
<i>Vanellus armatus</i>	Blacksmith Lapwing, Blacksmith Plover	Birds (Aves)	No
<i>Anax imperator</i>	Blue Emperor	Insecta (Insects)	No
<i>Crematogaster peringueyi</i>	Cocktail Ant	Insecta (Insects)	No
<i>Dira clytus clytus</i>	Cape Autumn Widow	Insecta (Insects)	No

<i>Pseudonympha magus</i>	Silver- bottom Brown	Insecta (Insects)	No
<i>Tramea limbata</i>	Ferruginous Glider	Insecta (Insects)	No
<i>Vanessa cardui</i>	Painted lady	Insecta (Insects)	No
<i>Aonyx capensis</i>	Cape Clawless Otter	Mammals	No
<i>Bathyergus suillus</i>	Cape Dune Molerat	Mammals	No
<i>Cryptochloris asiatica</i>	Cape Golden Mole	Mammals	No
<i>Felis silvestris catus</i>	Domestic cat	Mammals	Yes
<i>Mus minutoides</i>	African Pygmy Mouse	Mammals	No
<i>Mus musculus</i>	House Mouse	Mammals	Yes
<i>Papio ursinus</i>	Chacma Baboon	Mammals	No
<i>Sciurus carolinensis</i>	Grey Squirrel	Mammals	Yes
<i>Sylvicapra grimmia</i>	Common Duiker	Mammals	No
<i>Gambusia affinis</i>	Mosquito Fish	Pisces (Fish)	No
<i>Cyprinus carpio</i>	Carp	Pisces (Fish)	Yes
<i>Micropterus salmoides</i>	Largemouth Bass	Pisces (Fish)	Yes
<i>Oreochromis mossambicus</i>	Mozambique tilapia	Pisces (Fish)	Yes
<i>Tilapia sarrmanii</i>	Banded Tilapia	Pisces (Fish)	Yes
<i>Acacia cyclops</i>	Rooikrans	Plants	Yes
<i>Acacia longifolia</i>	Long-leafed Wattle	Plants	Yes
<i>Acacia mearnsii</i>		Plants	Yes
<i>Acacia saligna</i>	Port Jackson	Plants	Yes
<i>Aloe arborescens</i>		Plants	Yes
<i>Anthospermum aethiopicum</i>		Plants	No
<i>Arctotheca calendula</i>		Plants	No
<i>Asparagus asparagoides</i>		Plants	No
<i>Athanasia dentata</i>		Plants	No
<i>Athanasia trifurcata</i>		Plants	No
<i>Avena fatua</i>	common wild oats	Plants	Yes
<i>Briza maxima</i>	Large quaking grass	Plants	Yes
<i>Bromus diandrus</i>	ripgut brome; predikantsluis	Plants	Yes
<i>Canna indica</i>	Canna	Plants	Yes
<i>Carpanthea pomeridiana</i>		Plants	No
<i>Carpobrotus edulis</i>	sour fig	Plants	No
<i>Cestrum laevigatum</i>		Plants	Yes
<i>Chasmanthe aethiopica</i>	Suurkanol	Plants	No

<i>Chrysanthemoides incana</i>		Plants	No
<i>Chrysanthemoides monilifera</i>	Bitoubos	Plants	No
<i>Ciclospermum leptophyllum</i>		Plants	No
<i>Commelina benghalensis</i>	Blouselblommetjie	Plants	No
<i>Conicosia pugioniformis</i>		Plants	No
<i>Cortaderia selloana</i>	Pampas Grass	Plants	Yes
<i>Cotula turbinata</i>		Plants	No
<i>Cyperus textilis</i>		Plants	No
<i>Datura stramonium</i>		Plants	Yes
<i>Dimorphotheca pluvialis</i>		Plants	No
<i>Disa bracteata</i>		Plants	No
<i>Echium plantagineum</i>	Paterson's Curse	Plants	Yes
<i>Ehrharta calycina</i>		Plants	No
<i>Ehrharta villosa</i> var. <i>villosa</i>		Plants	No
<i>Eichhornia crassipes</i>	Water Hyacinth	Plants	Yes
<i>Elegia nuda</i>		Plants	No
<i>Erica verticillata</i>	Cape Flats Erica	Plants	No
<i>Eriocephalus africanus</i> ~		Plants	No
<i>Erodium cicutarium</i>		Plants	No
<i>Erodium moschatum</i>	Musk heron's bill	Plants	Yes
<i>Eucalyptus camaldulensis</i>		Plants	Yes
<i>Eucalyptus cladocalyx</i>	Sugar gum	Plants	Yes
<i>Eucalyptus gomphocephala</i>		Plants	No
<i>Eucalyptus lehmannii</i>		Plants	No
<i>Euphorbia helioscopia</i>	Umbrella milkweed	Plants	Yes
<i>Ficinia nodosa</i>		Plants	No
<i>Geranium incanum</i> ~		Plants	No
<i>Geranium molle</i>		Plants	No
<i>Gladiolus quadrangulus</i>		Plants	No
<i>Gymnosporia buxifolia</i>		Plants	No
<i>Helichrysum patulum</i>		Plants	No
<i>Hellmuthia membranacea</i>		Plants	No
<i>Ixia paniculata</i>		Plants	No
<i>Jordaaniella dubia</i>		Plants	No
<i>Lachenalia bulbifera</i>		Plants	No
<i>Lagurus ovatus</i>	Hare's tail	Plants	Yes
<i>Lampranthus reptans</i>		Plants	No

<i>Lemna gibba</i>		Plants	No
<i>Leonotis leonurus</i>		Plants	No
<i>Leucadendron lanigerum</i> var. <i>lanigerum</i>		Plants	No
<i>Leucadendron levisanus</i>	Cape Flats Conebush	Plants	No
<i>Linum thunbergii</i>		Plants	No
<i>Lolium multiflorum</i>	Italian ryegrass; annual ryegrass	Plants	No
<i>Lolium perenne</i>		Plants	No
<i>Ludwigia adscendens diffusa</i>		Plants	No
<i>Lupinus angustifolius</i>	Blue Lupin	Plants	Yes
<i>Lupinus luteus</i>	Yellow Lupin	Plants	Yes
<i>Malva parviflora</i> ~		Plants	No
<i>Medicago polymorpha</i>		Plants	No
<i>Metalsia muricata</i>		Plants	No
<i>Moraea flaccida</i>		Plants	No
<i>Myoporum tenuifolium</i>	Manatoka	Plants	Yes
<i>Nasturtium officinale</i>	Watercress	Plants	No
<i>Nylandtia spinosa</i>	Skilpadbessie Bos, Tortoise Berry Bush	Plants	No
<i>Oxalis caprina</i>		Plants	No
<i>Oxalis luteola</i>		Plants	No
<i>Oxalis obtusa</i>		Plants	No
<i>Oxalis pes-caprae</i> ~		Plants	No
<i>Paraserianthes lophantha</i> ~		Plants	No
<i>Parthenocissus vitacea</i>		Plants	No
<i>Pelargonium betulinum</i>		Plants	No
<i>Pelargonium capitatum</i>		Plants	No
<i>Pennisetum clandestinum</i>	Kikuyu grass	Plants	Yes
<i>Phragmites australis</i>		Plants	No
<i>Phylica ericoides</i> var. <i>ericoides</i>		Plants	No
<i>Phylica ericoides</i> ~		Plants	No
<i>Phylica</i> sp.1		Plants	No
<i>Phyllobolus canaliculatus</i>		Plants	No
<i>Plantago lanceolata</i>		Plants	No
<i>Plecostachys serpyllifolia</i>		Plants	No
<i>Polygala myrtifolia</i> var. <i>myrtifolia</i>		Plants	No
<i>Polygonum plebeium</i>		Plants	No
<i>Psoralea pinnata</i>		Plants	No

<i>Pterocelastrus tricuspidatus</i>		Plants	No
<i>Putterlickia pyracantha</i>		Plants	No
<i>Raphanus raphanistrum</i>	Wild Mustard	Plants	Yes
<i>Ricinus communis</i> ~		Plants	Yes
<i>Romulea hirsuta</i> ~		Plants	No
<i>Romulea rosea</i> ~		Plants	No
<i>Rumex crispus</i>		Plants	No
<i>Salsola kali</i>		Plants	No
<i>Salvia africana-lutea</i>		Plants	No
<i>Satyrion odorum</i>		Plants	No
<i>Schinus molle</i>		Plants	No
<i>Schinus terebinthifolius</i>		Plants	No
<i>Schoenoplectus scirpoides</i>		Plants	No
<i>Searsia glauca</i>	Blou Taaibos, Taaibos	Plants	No
<i>Searsia laevigata</i>		Plants	No
<i>Searsia lucida</i> ~		Plants	No
<i>Senecio burchellii</i>		Plants	No
<i>Senecio elegans</i>		Plants	No
<i>Senecio halimifolius</i>	Tabakbos	Plants	No
<i>Senecio pterophorus</i>		Plants	No
<i>Serruria aemula foeniculaceae</i>	Rondevlei Spiderhead	Plants	No
<i>Sesbania punicea</i>		Plants	No
<i>Sideroxylon inerme inerme</i>		Plants	No
<i>Sideroxylon inerme</i> ~		Plants	No
<i>Solanum americanum</i>		Plants	No
<i>Solanum nigrum</i>		Plants	No
<i>Sparaxis bulbifera</i>		Plants	No
<i>Spartium junceum</i>	Spanish broom	Plants	Yes
<i>Stenotaphrum secundatum</i>	Buffalo Grass	Plants	No
<i>Syzygium paniculatum</i>	Eugenia berry	Plants	No
<i>Tarchonanthus camphoratus</i>		Plants	No
<i>Tetragonia fruticosa</i>		Plants	No
<i>Trachyandra ciliata</i>		Plants	No
<i>Trachyandra divaricata</i>		Plants	No
<i>Tribulus terrestris</i>		Plants	No
<i>Trifolium repens</i>		Plants	No
<i>Tropaeolum majus</i>	Garden Nasturtium	Plants	Yes
<i>Typha capensis</i>	Bulrush, Papkuil	Plants	No

<i>Verbena bonariensis</i>		Plants	No
<i>Vicia hirsuta</i>		Plants	Yes
<i>Xanthium strumarium</i>		Plants	No
<i>Zaluzianskya villosa</i>		Plants	No
<i>Zantedeschia aethiopica</i>	Arum Lily	Plants	No
<i>Bradypodion pumilum</i>	Cape Dwarf Chameleon	Reptilia	No
<i>Chersina angulata</i>	Angulate Tortoise	Reptilia	No
<i>Dubertia lutrix lutrix</i>	Common Slugeater	Reptilia	No
<i>Lycodonomorphus rufulus</i>	Common Brown Water Snake	Reptilia	No
<i>Pachydactylus geitje</i>	Ocellated Thick-toed Gecko	Reptilia	No
<i>Pseudaspis cana</i>	Mole Snake	Reptilia	No
<i>Scelotes bipes</i>	Silvery Dwarf Burrowing Skink	Reptilia	No
<i>Trachylepis capensis</i>	Cape Skink	Reptilia	No

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Appendix E: Species List: LPV

Species Name	Common Name	Class	Alien
<i>Amietia fuscigula</i>	Cape River Frog	Amphibia	No
<i>Amietophrynus pantherinus</i>	Western Leopard Toad	Amphibia	No
<i>Strongylopus grayii</i>	Clicking Stream Frog	Amphibia	No
<i>Xenopus laevis</i>	Common Platanna	Amphibia	No
<i>Accipiter melanoleucus</i>	Black Sparrowhawk	Birds (Aves)	No
<i>Alopochen aegyptiaca</i>	Egyptian Goose, Kolgans	Birds (Aves)	No
<i>Anas platyrhynchos</i>	Mallard	Birds (Aves)	Yes
<i>Anas undulata</i>	Yellow-billed Duck	Birds (Aves)	No
<i>Anhinga rufa</i>	African Darter	Birds (Aves)	No
<i>Bostrychia hagedash</i>	Hadedda Ibis	Birds (Aves)	No
<i>Bubulcus ibis</i>	Cattle Egret	Birds (Aves)	No
<i>Cecropis cucullata</i>	Greater Striped Swallow	Birds (Aves)	No
<i>Chroicocephalus hartlaubii</i>	Hartlaub's Gull	Birds (Aves)	No
<i>Colius colius</i>	White-backed Mousebird	Birds (Aves)	No
<i>Columba livia</i>	Feral Pigeon, Rock Dove	Birds (Aves)	Yes
<i>Corvus albus</i>	Pied Crow	Birds (Aves)	No
<i>Egretta intermedia</i>	Yellow-billed Egret	Birds (Aves)	No
<i>Elanus caeruleus</i>	Black-shouldered Kite	Birds (Aves)	No
<i>Fulica cristata</i>	Red-knobbed Coot	Birds (Aves)	No
<i>Gallinula chloropus</i>	Common Moorhen	Birds (Aves)	No
<i>Hirundo albigularis</i>	White-throated Swallow	Birds (Aves)	No
<i>Numida meleagris</i>	Helmeted Guinea fowl	Birds (Aves)	Yes
<i>Nycticorax nycticorax</i>	Black-crowned Night-Heron	Birds (Aves)	No
<i>Onychognathus morio</i>	Red-winged Starling	Birds (Aves)	No
<i>Pelecanus onocrotalus</i>	Great White Pelican, Wit Pelikan	Birds (Aves)	No
<i>Phalacrocorax lucidus</i>	White-breasted Cormorant	Birds (Aves)	No
<i>Platalea alba</i>	African Spoonbill	Birds (Aves)	No
<i>Plegadis falcinellus</i>	Glossy Ibis	Birds (Aves)	No
<i>Ploceus capensis</i>	Cape Weaver	Birds (Aves)	No
<i>Pycnonotus capensis</i>	Cape Bulbul	Birds (Aves)	No
<i>Streptopelia senegalensis</i>	Lag Duifie, Laughing Dove	Birds (Aves)	No
<i>Sturnus vulgaris</i>	Common Starling, European Starling	Birds (Aves)	Yes
<i>Telophorus zeylonus</i>	Bokmakierie	Birds (Aves)	No
<i>Threskiornis aethiopicus</i>	African Sacred Ibis	Birds (Aves)	No

<i>Aonyx capensis</i>	Cape Clawless Otter	Mammals	No
<i>Bathyergus suillus</i>	Cape Dune Molerat	Mammals	No
<i>Canis lupus familiaris</i>	Domestic dog	Mammals	Yes
<i>Felis silvestris catus</i>	Domestic cat	Mammals	Yes
<i>Rattus rattus</i>	Black Rat, House Rat	Mammals	Yes
<i>Clarias gariepinus</i>		Pisces (Fish)	No
<i>Cyprinus carpio</i>	Carp	Pisces (Fish)	Yes
<i>Gambusia affinis</i>	Mosquito Fish	Pisces (Fish)	Yes
<i>Lepomis macrochirus</i>	Bluegill sunfish	Pisces (Fish)	Yes
<i>Micropterus salmoides</i>	Largemouth Bass	Pisces (Fish)	Yes
<i>Oreochromis mossambicus</i>	Mozambique tilapia	Pisces (Fish)	Yes
<i>Acacia cyclops</i>	Rooikrans	Plants	Yes
<i>Acacia saligna</i>	Port Jackson	Plants	Yes
<i>Amaryllis belladonna</i>	March Lily	Plants	No
<i>Araujia sericifera</i>		Plants	No
<i>Arundo donax</i>	Spaanseriet, Spanish Reed	Plants	No
<i>Canna indica</i>	Canna	Plants	Yes
<i>Carpobrotus edulis</i>	sour fig	Plants	No
<i>Cestrum laevigatum</i>		Plants	Yes
<i>Chrysanthemoides monilifera</i>	Bitoubos	Plants	No
<i>Commelina benghalensis</i>	Blouselblommetjie	Plants	No
<i>Echium plantagineum</i>	Paterson's Curse	Plants	Yes
<i>Foeniculum vulgare</i> ~	Wild fennel	Plants	Yes
<i>Lantana camara</i>	Common lantana	Plants	Yes
<i>Lavatera arborea</i>		Plants	Yes
<i>Ludwigia adscendens diffusa</i>		Plants	No
<i>Moraea flaccida</i>		Plants	No
<i>Myoporum tenuifolium</i>	Manatoka	Plants	Yes
<i>Myriophyllum aquaticum</i>		Plants	No
<i>Nymphaea mexicana</i>		Plants	No
<i>Pennisetum clandestinum</i>	Kikuyu grass	Plants	Yes
<i>Salix babylonica</i> ~		Plants	No
<i>Schinus terebinthifolius</i>		Plants	No
<i>Sesbania punicea</i>		Plants	No
<i>Xanthium strumarium</i>		Plants	No

Duberria lutrix lutrix	Slug-eater	Reptilia	No
Lycodonomorphus inornatus	Olive Ground Snake	Reptilia	No
Pseudaspis cana	Mole Snake	Reptilia	No
Scelotes bipes	Silvery Dwarf Burrowing Skink	Reptilia	No
Trachylepis capensis	Three striped skink	Reptilia	No






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Appendix F: Alien Clearing Schedule

For full schedule, see Alien Clearing Subsidiary Plan. Current extent of alien vegetation to be cleared illustrated in the map below.



Legend:

-  Mixed aquatics dominated by *Ludwigia stolonifera*
-  Mixed aquatics: *L. stolonifera* and *Eichhornia crassipes*
-  Reed beds and sparsely mixed woody exotics
-  Mixed sparse woody invasives dominated by *Acacia saligna* ($\pm 2\%$ total cover)
-  Various gum tree and pine tree species

Appendix G: Biodiversity Agreement

To be signed with CapeNature

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Appendix H: MOU – City Parks and Biodiversity Management

10. JUL. 2012 11:54

S P A PARKS & REC

NO. 550 P. 1



CITY OF CAPE TOWN | ISIXEKO SASEKAPA | STAD KAAPSTAD

Memorandum of Agreement (MOA)

Between

Environmental Resource Management Department

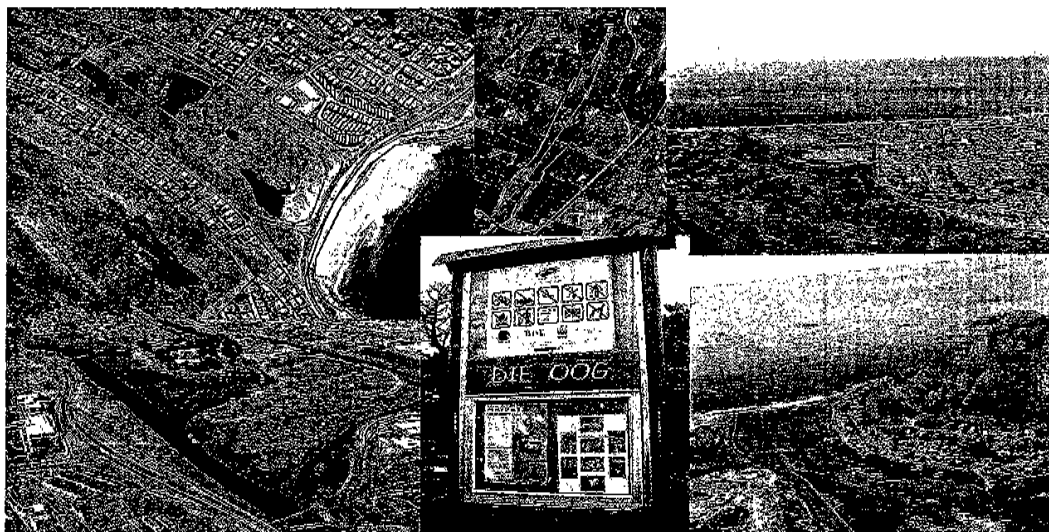
Biodiversity Management Branch

and

City Parks

concerning

the City Parks Conservation Areas



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M.W.
8 10

1. Objective

This Memorandum of Agreement is designed to clearly define the responsibilities of the City Parks and Environmental Resource Management Department (ERMD) line functions with regards to the City Parks Conservation Areas. This MOU stipulates the standard responsibilities of both departments for all the sites. Any site specific conditions will be captured as annexures to this MOU.

2. Background

Several sites under the jurisdiction of City Parks contain critically important biodiversity. Both City Parks and Environmental Resource Management Department are committed to seeing these sites conserved and managed in perpetuity. Seventeen City Parks sites have been evaluated in terms of their conservation value by the CapeNature Protected Area expansion committee. Sixteen of these were deemed to warrant status as Biodiversity Agreements. The Lourens River's existing status of Protected Natural Environment was deemed to be appropriate for the site. A report detailing the conservation protection for important City Parks areas was tabled on the PEPCO agenda on 5 October 2010. This report was also tabled at all Sub-councils during February 2011. Sites signed as Biodiversity Agreements will be known as Conservation Areas.

A single Biodiversity Agreement which pertains to all the Conservation Areas has been drafted. See annexure A. This agreement will be signed between CapeNature and the City. The City will place voluntary title deed restrictions against the properties which will ensure that they remain Public Open Space for perpetuity. City Parks and Environmental Resource Management Department are standardising a template for the Environmental Management Plan's (EMP's).

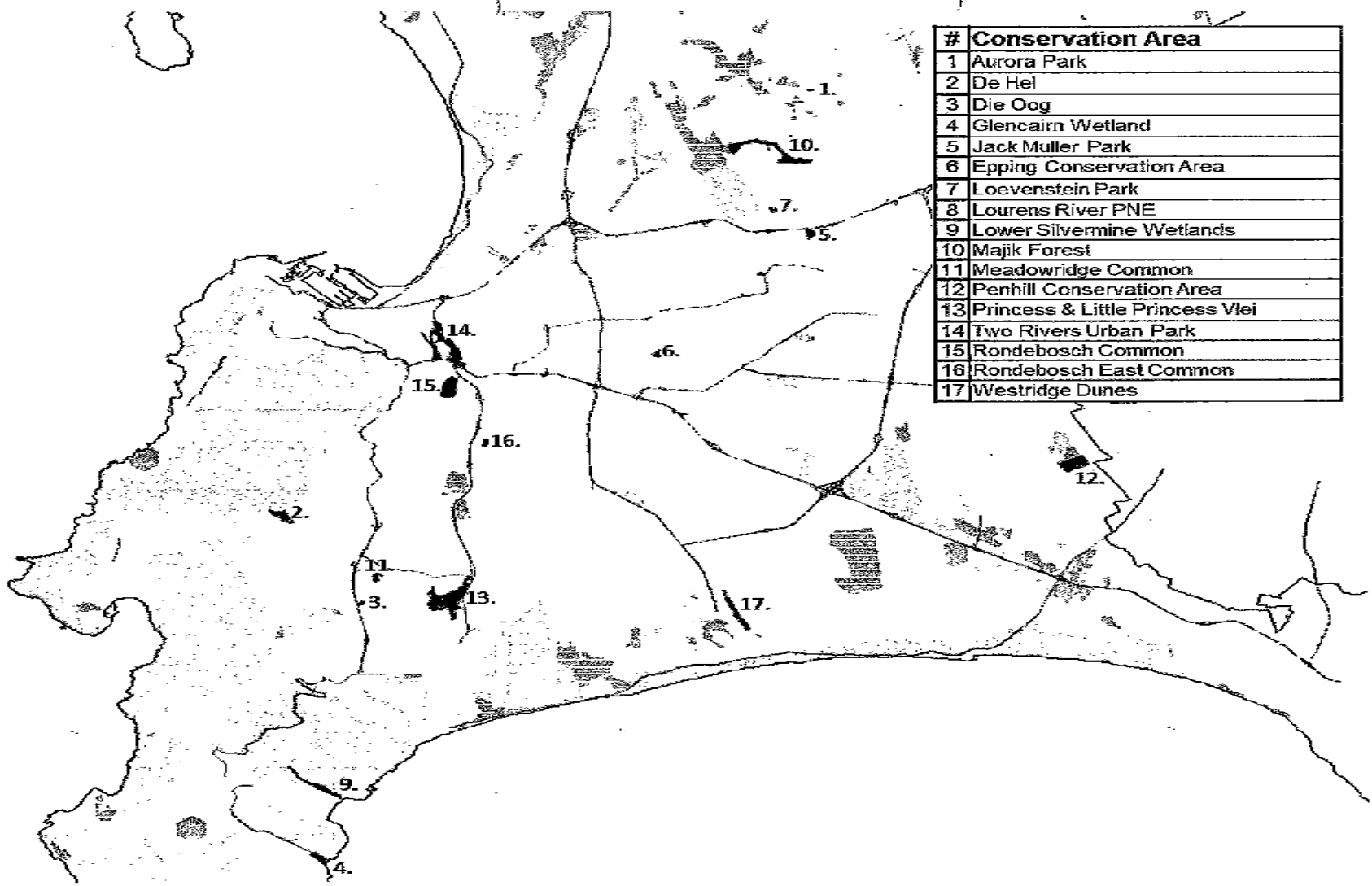
City Parks have limited operational budget and management capacity will be limited in many instances. The full potential of the sites can only be unlocked if adequate funds are available. As such, while the EMP will state the long term objectives of the site, the annual plan of operation will only be able to include the activities where resources are available. Public / private partnerships are a very important tool in assisting the City to meet the objectives of these sites and such partnerships will be pursued where possible.

Table 1: City Park's biodiversity sites

#	Conservation Area	Type	Area (ha)	City Park Contact	BM Contact
1	Aurora Park	Biodiversity Agreement	0.98	Altus de Wet	Vibeke Maass
2	De Hel	Biodiversity Agreement	20.93	Jolyon Schmidt	Dalton Gibbs
3	Die Oog	Biodiversity Agreement	2.13	Johan Herholdt	Cassandra Sheasby
4	Glencairn Wetland	Biodiversity Agreement	11.3	Leon Swartz	Cassandra Sheasby
5	Jack Muller Park	Biodiversity Agreement	5	R van Rooyen, George Gilbert	Penny Glanville
6	Epping Conservation Area	Biodiversity Agreement	4.14	Henry Willems	Tshepo Mamabolo
7	Loevenstein Park	Biodiversity Agreement	2.92	Altus de Wet	Penny Glanville
8	Lourens River PNE	PNE	35	John Jarvis/Lynn January	Owen Wittridge
9	Lower Silvermine Wetlands	Biodiversity Agreement	20.64	Leon Swartz	Cassandra Sheasby
10	Majik Forest	Biodiversity Agreement	35	Altus de Wet	Penny Glanville
11	Meadowridge Common	Biodiversity Agreement	5.39	Johan Herholdt	Cassandra Sheasby
12	Penhill Conservation Area	Biodiversity Agreement	Aprox. 50	Nondumiso Magija	Lewine Walters
13	Princess & Little Princess Vlei	Biodiversity Agreement	96.3	Johan Herholdt	Dalton Gibbs
14	Two Rivers Urban Park	Biodiversity Agreement	60	Pauline McConney/Joseph Strydom	Dalton Gibbs
15	Rondebosch Common	Biodiversity Agreement	38.7	Jolyon Schmidt	Dalton Gibbs
16	Rondebosch East Common	Biodiversity Agreement	5.13	Francois Loubser	Dalton Gibbs
17	Westridge Dunes	Biodiversity Agreement	23.29	Rohland Williams	Lewine Walters
Total:			416.83		

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#	Conservation Area
1	Aurora Park
2	De Hei
3	Die Oog
4	Glencairn Wetland
5	Jack Muller Park
6	Epping Conservation Area
7	Loevenstein Park
8	Lourens River PNE
9	Lower Silvermine Wetlands
10	Majik Forest
11	Meadowridge Common
12	Penhill Conservation Area
13	Princess & Little Princess Vlei
14	Two Rivers Urban Park
15	Rondebosch Common
16	Rondebosch East Common
17	Westridge Dunes



*Waste
S.P. & M.V.*

3. Memorandum of Agreement (MOA) (1 July 2011 – 30 June 2014)

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S P A PARKS & REC

NO. 550 P. 4

NO	ACTIVITY	TIME FRAME	COMMENTS	RESPONSIBLE LINE FUNCTION
1	Management Authority	On-going	City Parks is the line function responsible for the site. This includes day to day management, all budgetary requirement and public liaison.	City Parks
2	Ecological advice / assistance	On-going	The ERMD will assist the relevant City Parks officials with ad hoc ecological advice with regards to ecological management of the BA site as and when required. Such ecological advice will include flora & fauna management and ecological law enforcement issues. The ERMD will nominate an official who will be the contact person for each BA site. The ERMD will provide ecological advice for any City Parks site.	Environmental Resource Management Department
3	Ecological fire management	As and when required	All natural vegetation remnants require ecological fire management. When the vegetation becomes senescent, ERMD will assist with the planning and executing of the ecological control burns. The frequency of these will vary between the sites and will be referred to in the site specific management plan. Fire suppression, when there is an unplanned fire, will be the responsibility of City Parks but ERMD will make every effort to assist and respond if they have resources available. The ERMD will offer this assistance to City Parks anywhere on the Biodiversity Network.	Environmental Resource Management Department and City Parks
4	Progress review	Annually (Jan, Feb, Mar)	CapeNature require that any of their agreement sites must be audited annually to ensure compliance with the Environmental Management Plan (EMP). As they do not have the capacity to do this, the ERMD together with the relevant City Parks official will review the site annually in terms of the Annual Plan of Operation (APO) and the EMP. During this visit, the APO for the following year will be determined and agreed to by both line functions.	Environmental Resource Management Department and City Parks
5	Data base for ecological monitoring	On-going	The ERMD has developed a database for capturing all ecological information on our Nature Reserves. The City Parks BA sites have been added to this data base so that the officials and the public can lodge any sightings and records on this database. The ERMD will offer to train any officials or members of the public regarding the use of this database.	Environmental Resource Management Department
6	Conservation protection	By Dec 2012	Together with City Parks, the ERMD will continue to drive the process to get conservation protection for the City Parks sites.	Environmental Resource Management Department
7	Compiling the EMPs	By Dec 201X	City Parks is responsible for collating the EMP for each of the BA sites. ERMD will assist by reviewing and commenting on the draft EMPs.	City Parks & Environmental Resource Management Department
8	Revising of the MOU	Every three years or as required	Environmental Resource Management Department and City Parks will review and resign the MOU every three years. However, changes can be made at any time if required and agreed to by both parties.	City Parks & Environmental Resource Management Department

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CITY OF CAPE TOWN | ISIXEKO SASEKAPA | STAD KAAPSTAD

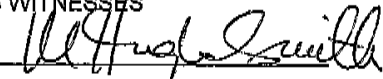

4. DISPUTE

4.1 All issues, which arise between the parties to this Agreement, shall be resolved amicably through consultation and negotiations.

4.2 In the event where an issue remains unresolved, any of the parties may upon notice to the other, declare a dispute and refer the dispute to a single arbitrator in accordance and subject to the provisions of the Arbitration Act, 42 of 1965, or any re-enactment or amendment thereto.

Date at Cape Town on this 26th day of June 2012.

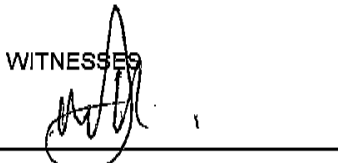
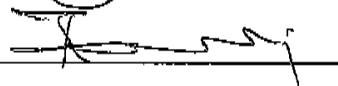
AS WITNESSES


- 1. 
- 2. 


Chantal Hanslo
Director: City Parks

Date at _____ on this 26th day of JUNE 2012.

AS WITNESSES

- 1. 
- 2. 


Osman Asmal
Director: Environmental Resource Management
Department

Appendix I: MOU – Western Leopard Toad



CITY OF CAPE TOWN | ISIXEKO SASEKAPA | STAD KAAPSTAD

Memorandum of Agreement (MOA)

Between

Environmental Resource Management Department

Biodiversity Management Branch

and

City Parks



1. Objective

In accordance with national and provincial legislation (The National Environmental Management: Biodiversity Act 10 of 2004 and the Nature & Environmental Conservation Ordinance 19 of 1974) the City has a shared responsibility to protect our natural heritage and in particular threatened and protected species. In light of this obligation and in the spirit of environmental best practice, the City is moving towards increased accountability in its code of conduct. It is therefore the intention of this document to formalize the agreement between City Departments to move towards sustainable practices with regard to our unique and irreplaceable threatened and protected species. This Memorandum of Agreement (MoA) and its Appendices will be reviewed and updated on an annual basis.

2. Introduction

The Western Leopard Toad (*Amietophrynus pantherinus*) has a very restricted range within the coastal lowlands of the south-western Cape, South Africa. Originally distributed over much of the Cape Flats, they now only occur in scattered and isolated populations. The species has been so greatly reduced that it has been classified as Endangered and conservation action is required from all authorities to ensure its protection. The Western Leopard Toad is hugely popular with the public and there are numerous active public groups and initiatives to protect this species.

The toads are only associated with water for the limited period when they are breeding. For the remainder of the year the toads frequent their foraging areas which comprise mainly of suburban gardens. The annual migration to their breeding ponds is usually in August. At this time the toads are especially vulnerable to hazards such as road traffic, storm drains and mechanical mowing equipment. The toads are faithful to their breeding sites which are usually vleis, stormwater detention ponds or sections of slow flowing rivers. The eggs hatch after 7 – 14 days and the tadpoles take up to three months to complete metamorphosis. From August to December eggs and tadpoles are thus very vulnerable to disturbances to their breeding sites in river courses and wetlands. The tiny toadlets usually leave the breeding ponds and rivers between November and December. When the toadlets have left the breeding sites they take shelter in long grass or vegetation in the immediate vicinity. Here they are vulnerable to mowing and weed eating activities. There are therefore three sensitive periods in Public Open Spaces for this species: (a) August breeding of adults, (b) August to December when the eggs and tadpoles are in the water bodies, and (c) November / December emergence of toadlets.

The dependence of this species on many water bodies that are surrounded by Public Open Space which is managed by City Parks has created the need for a formal Memorandum of Agreement to be signed between City Parks and the Biodiversity Management Branch. It is believed that the Department will be able to fulfil its critical core functions while facilitating the conservation of this charismatic species. This MoA will ensure that the requirements of both Departments are clearly defined and that City Parks will have the latest information in order to influence their planning at the onset of every financial year.



Figure 1: An important breeding habitat for the Western Leopard Toad in the Westlake River, Kirstenhof

3. Memorandum of Agreement (MOA) (1 July 2013 – 30 June 2016)

NO	ACTIVITY	APPLICABLE AREA	SENSITIVITY TIME PERIOD	COMMENTS
1.	Maintenance of POS	500 meters from Breeding sites as per Appendix A	1 November- 31 December	<p>WLT mainly breed in the month of August but they can start as early as July with the toadlets leaving the wetlands by the end of December. Differences in breeding time will result in a change in toadlet emergence. In such instances, Biodiversity Management will inform City Parks of this as soon as possible.</p> <p>All maintenance work in the POS as reflected in Appendix A must be avoided during the sensitive time period. However, if emergency work is required at any of these sites the Biodiversity Management Branch will be contacted before such work commences.</p>
2.	Landscaping projects and infrastructure development in POS	500 meters from all breeding sites as per Appendix A.	At any time	<p>City Parks will ensure that any landscaping activities or infrastructure development within the areas depicted in Appendix A will not degrade the habitat for WLTs. Every opportunity should be used to enhance the habitat for toads. The CoCT: Environmental Management Services is contactable for advice regarding the layout of landscapes and possible planting lists & plans of any sites which fall into the area covered by Appendix A.</p>
3.	River Maintenance: Including removal of riparian and in stream vegetation (such as invasive species), and dredging of canals, watercourses and wetlands (as per MoA with Transport, Roads and Stormwater).	Breeding sites as per Appendix A.	01 July - 31 December	<p>WLT mainly breed in the month of August but they can start as early as July with the toadlets leaving the wetlands by the end of December. Differences in breeding time will result in a change in toadlet emergence. In such instances, Biodiversity Management will inform City Parks of this as soon as possible.</p> <p>All work in the area reflected in Appendix A during the sensitive time period should be avoided. However, if emergency work is required at any of these sites the Biodiversity Management Branch must be contacted by City Parks before such work commences.</p>

NO	ACTIVITY	APPLICABLE AREA	SENSITIVITY TIME PERIOD	COMMENTS
4.	Construction activities in watercourses and wetlands (as per MoA with Transport, Roads and Stormwater).	Breeding sites as per Appendix A.	At any time	City Parks will ensure that any construction activities within the area depicted in Appendix A will not degrade the habitat for WLTs. Every opportunity should be used to enhance the habitat for toads. The WLT Conservation Committee, as well as the district CoCT: Environmental Resource Management officials, is contactable for advice regarding the design of any structures or the landscaping of any sites which fall into the area covered by Appendix A.
5.	Informing of all contractors	500 meters from all breeding sites as per Appendix A.	At any time	City Parks will ensure that any contractors awarded work within the area covered by Appendix A, are aware of the presence of WLT and the precautions that need to be taken with regard to work conducted in the area. Additional information can also be obtained from the website: www.leopardtoad.co.za .
6.	Training / information session with City Parks staff	All relevant staff who work in the area covered by Appendix A.	July	The WLT-CC and the Biodiversity Management Branch will provide annual information sessions to all City Parks staff or contractors who work within the Area depicted in Appendix A.
7.	Annual press release	Community & major Newspapers	October	The WLT-CC and the Biodiversity Management Branch will prepare a press release indicating the areas which will not be mowed during the toadlet emergence period. This will be done annually and detail all the reasons for this.



CITY OF CAPE TOWN | ISIXEKO SASEKAPA | STAD KAAPSTAD

This Memorandum of Agreement is hereby signed and will remain in effect for a period of three (3) years from the date of signature. All supporting information and documentation will be updated on an annual basis by the Environmental Resource Management Department when and if required.

Date at Cape Town on this 25th day of April 2013.

AS WITNESSES

1. [Signature]
2. [Signature]

[Signature]

**Chantal Hanslo
Director: City Parks**

Date at Cape Town on this 26th day of April 2013.

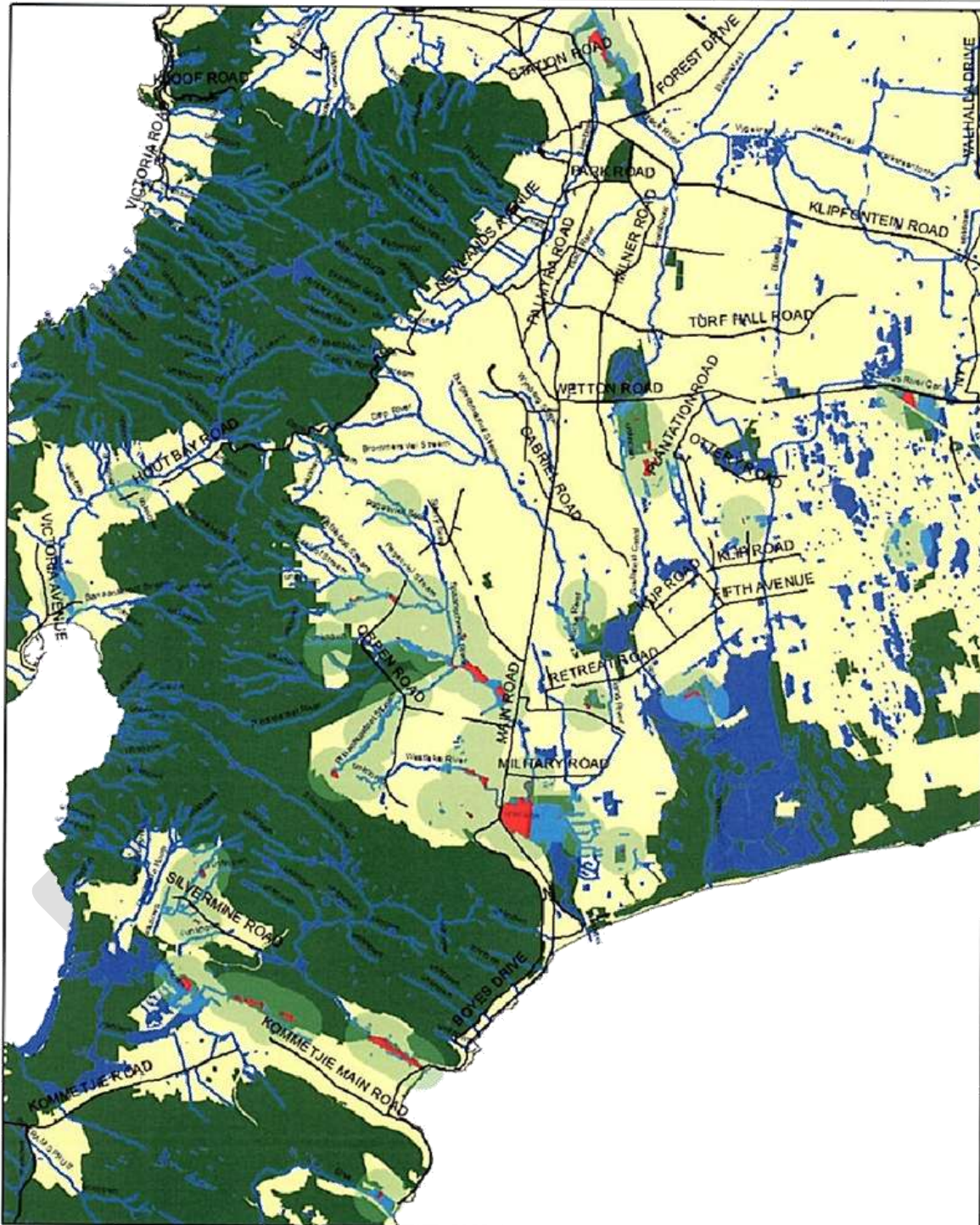
AS WITNESSES

1. [Signature]
2. [Signature]

[Signature]

**R. WISEMAN
Osman Asmal
Director: Environmental Resource Management
Department**

Appendix A: Western Leopard Toad Sensitive Areas



0 0.5 1 2 3 4 Kilometers

Biodiversity Management
Cliff Dorse
Tel: 021 5145159

26 August 2010

CITY OF CAPE TOWN | SIZENZO SASAKA | STAD KAAPSTAD

THIS CITY WORKS FOR YOU

- Western Leopard Toad Breeding Sites
- Western Leopard Toad 500m Buffer
- Wetlands
- Rivers and streams
- Roads

Appendix J: Restricted Activities (Copy)

#	Activity	Controlling Legislation
1	No unauthorised buildings or other structures (application procedure)	Protected Areas Act 2003
2	No ploughing, harvesting, ripping of any indigenous vegetation, ecosystems or habitats in in the biodiversity area unless specified in the EMP. No manipulation of sensitive environments (such as wetlands and streams) that would have a negative impact on the system.	National Environmental Management Act, as amended. Biodiversity Act 2004.
3	No mining	Protected Areas Act.
4	No rubbish dumping	By agreement
5	No act that adversely affects biodiversity	Protected Areas Act
6	No alien invasive species	Biodiversity Act
7	No non-indigenous fauna or extralimital species (except where prior permission has been obtained by CapeNature)	Biodiversity Act
8	No destruction or removal of indigenous flora (except for seed collection for restoration projects or where prior permission has been obtained from CapeNature)	Cape Nature Conservation Ordinance 1974
9	No hunting unless it is necessary for the proper ecological management of the Conservation Area and is catered for in the management plan.	Cape Nature Conservation Ordinance 1974
10	No activities will be permitted which may adversely affect the natural state, flow, supply, quantity or quality of any water resource located in the Conservation Area.	National Water Act 1998 Storm Water Bylaw
11	No placement of any transmission lines, telecommunication lines, cellular towers or public works in the Conservation Area.	By agreement
12	No motorcycles or four-wheel drive vehicles in the Conservation Area unless their use is necessary for the proper management and protection of the Conservation Area.	By agreement
13	No Fires permissible outside of designated areas	Veld and Forests Act
14	No Overnighting	City's By laws
15	No Fire works	City's By laws
16	No Fire arms	City's By laws
17	No alcohol or usage of illegal substance	City's By laws
18	No excessive noise or sound amplification	City's By laws
19	No Transgression of any of the City's By laws	City's By laws

Appendix K: Permissible Activities (Copy)

- Nature appreciation
- Braaiing in designated areas
- Walking/Hiking
- Bird Watching
- Educational Activities
- Dog walking on a leash
- Geo caching
- Fishing with angling licence
- Non-motorised water sports
- Any other sustainable and compatible activities or practices with prior permission from City Parks in terms of the events bylaw
- Sustainable and compatible events permitted by the City

DRAFT