



# Eco Route

ENVIRONMENTAL CONSULTANCY  
REGISTRATION NO. 1998/031976/23

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## DRAFT CONSERVATION MANAGEMENT PLAN

FOR

Proposed Residential Development on Portion 91 of Farm Matjes  
Fontein 304, Keurboomstrand, Plettenberg Bay, Western Cape  
Province.



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<b>DATE:</b>	20/06/2025

# ECO-ROUTE ENVIRONMENTAL CONSULTANCY



REGISTRATION NO. 1998/031976/23

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EAP SIGNATURE: \_\_\_\_\_

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**COMMITMENT TO THE CONSERVATION MANAGEMENT PLAN**

I/We, \_\_\_\_\_, the legal owner(s) of Portion 91 of Farm Matjes Fontein 304, Keurboomstrand, Plettenberg Bay, Western Cape Province, hereby commit to the Conservation Management Plan for the property. I/We agree to adhere to the guidelines and actions outlined in the document.

Furthermore, I/We acknowledge and accept responsibility for enforcing and implementing the environmental specifications associated with the aforementioned contract.

Signed: \_\_\_\_\_

Place: \_\_\_\_\_

Date: \_\_\_\_\_

Witness 1: \_\_\_\_\_

Witness 2: \_\_\_\_\_

# 1. INTRODUCTION

The Conservation Management Plan is written for the management and protection of Portion 91 of Farm Matjes Fontein 304, Keurboomstrand, Plettenberg Bay giving effect to a long-term vision of incorporating neighbouring properties into a unique environmental corridor. The Conservation Management Plan aims to guide the sustainable conservation of important habitats and to maintain ecological connectivity through the broader landscape.

Portions 91 of the Farm Matjes Fontein 304 is situated in the Keurboom area in the Bitou Municipal Area to the northeast of Plettenberg Bay. The property can be accessed directly from Keurboom Road (Minor Road PO349 Rd) which connects with the N2 via Divisional Road DR1888. The site is approximately 1.8km west of Keurboomstrand.



Figure 1: Location of Portion 91 of Farm 304 Matjes Fontein.

The vision of the proposed development on Portion 91 of Farm Matjes Fontein 304 is to create an affordable and sustainable housing product specifically targeting the middle-income group. The aim is to create a pleasant yet affordable residential neighbourhood where the average person can own a home and live with dignity. The architecture will be based on green principles which will include smaller but well-designed houses, which are more cost-efficient, energy-efficient and healthy.

The property is currently zoned “Agricultural I” in terms of the Section 8 Zoning Scheme applicable to the area. To facilitate the development of the land the property will have to be rezoned to a “Sub-divisional Area”. The goal is to rezone a portion of the property to Open Space Zone III (nature conservation area) providing the zoning foundation for sustainable conservation effort. The remaining undeveloped 83 512m<sup>2</sup> will be zoned as

Open Space III and will be managed as a conservation area. The conservation area also incorporates an ecological corridor for wildlife movement and the historical fountain. The ecological corridor will run between the west and east boundary of the property along the foot of the slope and creates a buffer zone of 20 meters between the development and the forest area.



DIAGRAM 10



Figure 2: Portion 91 of Farm Matjes Fontein 304 Conservation Management Plan for all remaining areas outside the development area (pink line).

### 1.1. VISION

The vision is to sustainably manage the open space area and to encourage and improve biodiversity and ecological connectivity as well as educate residents and visitors to this beautiful area. To preserve sensitive habitats and species of conservation concern for future generations. The motivation is to protect, manage and conserve 57% of the property purely for conservation purposes.

It is envisioned that this Conservation Management Plan be implemented in two phases:

**Phase 1:** Implementation, monitoring and assessment of Portion 91 of Farm Matjes Fontein 304 (2-5yrs) with a clear focus of developing a working conservation model established between freehold title holders, the municipal authority, neighbouring conservancies and the conservation authority overseeing the greater Keurboomstrand area.

**Phase 2:** Extending the Conservation Model and tested Conservation Management Plan to the immediate neighbouring properties (Portions 10/304, 11/304, 12/304, and 13/304 to the west, Portions 129/304, 92/304, and 16/304 to the east, and RE/2/304 to the north) through joint cooperation. Allowing for the Implementation of a permeable Environmental Corridor extending across more than 48 hectares of indigenous landscape into the Keurbooms River Forest Reserve.

Achieving landscape-level connectivity with many individual landowners requires collaborative effort, such as voluntary conservation agreements. Ecological corridors and buffer zones can be created through land use planning, which would act to link critical habitats across properties. If this is done it can also help mitigate long-term landscape-level cumulative impacts.

## 1.2. OBJECTIVES

### ❖ **Ecological Services:**

- Conserve the intact indigenous vegetation on site.
- Protect threatened species and habitats.
- Maintaining or enhancing biodiversity within a specific area.

### ❖ **Landscape Connectivity:**

- Maintain functional habitat on more level land with access to water for the wildlife that occur in the area.
- Effective management to ensure the corridor remains functional through the operational phase of the development.

### ❖ **Animal Wildlife Corridor Management:**

- Ensuring ecological corridors for fauna and flora.
- Ensuring the landscape is permeable, free of litter and alien objects that might harm animal species

### ❖ **Secondary Vegetation Restoration:**

- Rehabilitate areas of secondary vegetation.
- Establishment of site-appropriate indigenous species.

### ❖ **Community Engagement:**

- Increase public awareness and appreciation of the conservation value of the site and adjoining areas through Eco Tourism.
- Establish effective liaison and co-operation with landowners, legal users and relevant authorities.

### ❖ **On-Site Monitoring & Reporting by an Environmental Resource Consultant / Control Officer:**

- An ECO will have oversight of all conservation activities.
- Tracking the effectiveness of conservation actions through regular monitoring and data collection.
- Ensuring the long-term sustainability of natural resources through planned monitoring and adaptation strategies.

### ❖ **Botanical Identification, Labelling and Monitoring:**

- Identify, label and monitor species of importance. Provide supporting literature to present to visitors to inform & educate principles of conservation. Share findings and data with the local conservation agencies.

- ❖ **Animal Observation & Tracking:**
  - Implementation of camera traps with guidance from specialists.
  - Identifying species & monitoring.
  - Ensuring the landscape is free of litter and alien objects that might be harmful to animal species.
  
- ❖ **Managing Human Activities**
  - Minimize negative environmental impacts through human interaction.
  - Continuous monitoring for illegal gin traps which have already been found in the area.
  - Prevention of unsanctioned human activity and behavior.
  
- ❖ **Alien Monitoring & Clearing:**
  - The monitoring and removal of alien plant species with oversight from specialists in the field.
  
- ❖ **Fire Monitoring & Management:**
  - Responsible Fire Management as guided by the authorities.
  - This will include firebreaks and a fire management plan when required under the guidance of CapeNature and Southern Cape Fire Protection Agency (SCFPA).
  - Register as a member of the Southern Cape Fire Protection Service.

## 2. ENVIRONMENTAL CONTEXT

### 2.1. Critical Biodiversity Area and Ecological Support Area

The 2023 WC BSP map for the property shows that the northern area of the site below the public road ( $\pm 41.34\%$ ) is within a Critical Biodiversity Area (CBA1: Terrestrial) (Figure 3). This indicates that the Garden Route Shale Fynbos on site is considered to be highly important for the conservation of biodiversity in the province as well as for maintaining ecological patterns in the landscape. However, the forest exists in the areas designated as Critical Biodiversity Area 1. A small section along the foot of the slope, is shown as CBA Estuary. The area of the site north of the CBA1 is classified as Degraded CBA2 (Terrestrial), and to the south it is classified as Degraded CBA2 (Earmarked). The proposed development is within the Degraded CBA2 (Earmarked) and overlaps with the CBA1 areas as shown in figure 3. The definition and objectives of the different WC BSP layers:

#### Critical Biodiversity Area 1:

- ❖ Definition: Areas in a natural condition. Required to meet biodiversity targets for species, ecosystems or ecological processes and infrastructure.
- ❖ Objective: Maintain in a natural or near-natural state, with no further loss of habitat. Degraded areas should be rehabilitated. Only low-impact, biodiversity-sensitive land uses are appropriate.

#### Critical Biodiversity Areas (Degraded):

- ❖ Definition: Areas in a degraded or secondary condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure.
- ❖ Objective: Maintain in a natural or near-natural state, with no further loss of habitat. Degraded areas should be rehabilitated. Only low-impact, biodiversity-sensitive land-uses are appropriate.

The vast majority of the property will be zoned as a conservation area, which is in accordance with the objectives of a CBA.



Figure 3: The mapped Western Cape Biodiversity Spatial Plan (WC BSP).

## 2.2. Vegetation Types

The entire site is within one regional vegetation type, namely Garden Route Shale Fynbos (Figure 4). There is another vegetation type nearby, Garden Route Granite Fynbos. In the event that natural habitat remains on site, there are likely to be floristic and vegetation structural influences from either of these vegetation types within the site, depending on local ecological conditions. The national vegetation map is, however, not mapped at a fine scale and it is probable that local topography could support other habitat types, such as thicket or low forest<sup>1</sup>. Garden Route Shale Fynbos that occurs on site and nearby areas, according to the national map, is briefly described below.

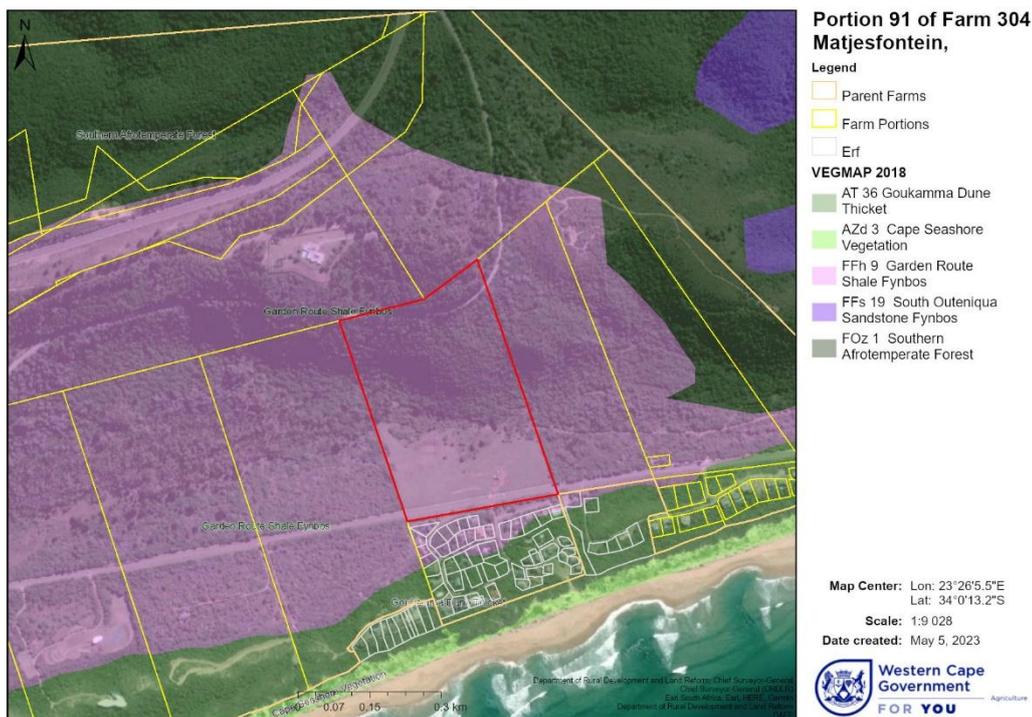


Figure 4: Regional vegetation types of the site and surrounding areas.

<sup>1</sup> David Hoare Consulting (Pty) Ltd: Plant Species, Animal Species and Terrestrial Biodiversity Assessment Report. Dated 16 March 2023.

**Distribution:**

This vegetation type is found in the Western and Eastern Cape Provinces: Patches along the coastal foothills of the Langeberg at Grootberg (northeast of Heidelberg), the Outeniqua Mountains from Cloete's Pass via the Groot Brak River Valley, Hoekwil, Karatara, Barrington and Knysna to Plettenberg Bay. Patches from the Bloukrans Pass along coastal platform shale bands south of the Tsitsikamma Mountains via Kleinbos and Fynboshoek to south of both Clarkson and the Kareedouw Mountains. Altitude 0–500 m.

**Vegetation & Landscape Features:**

Undulating hills and moderately undulating plains on the coastal forelands. Structurally this is tall, dense proteoid and ericaceous fynbos in wetter areas, and graminoid fynbos (or shrubby grassland) in drier areas. Fynbos appears confined to flatter more extensive landscapes that are exposed to frequent fires—most of the shales are covered with afrotemperate forest. Fairly wide belts of *Virgilia oroboides* occur on the interface between fynbos and forest. Fire-safe habitats nearer the coast have small clumps of thicket, and valley floors have scrub forest (Vlok & Euston-Brown 2002).

**Geology & Soils:**

Acidic, moist clay-loam, prisma-cutanic and pedocutanic soils derived from Caimans Group and Ecca (in the east) shales. Land types mainly Db and Fa.

**Climate:**

Non-seasonal rainfall dominates the region, with MAP 310–1 120 mm (mean: 700 mm), relatively even throughout the year, but with a slight low in winter. Mean daily maximum and minimum temperatures 27.6°C and 6.5°C for January and July, respectively. Frost incidence 2 or 3 days per year.

**Important Taxa:**

<b>Growth form</b>	<b>Species</b>
<b>Tall shrubs</b>	<i>Leucadendron eucalyptifolium</i> (d), <i>Protea aurea</i> subsp. <i>aurea</i> (d), <i>P. coronata</i> (d), <i>Leucospermum formosum</i> , <i>Metalasia densa</i> , <i>Passerina corymbosa</i> , <i>Protea neriifolia</i> , <i>Rhus lucida</i> <sup>†</sup>
<b>Low shrubs</b>	<i>Acmadenia alternifolia</i> , <i>A. tetragona</i> , <i>Anthospermum aethiopicum</i> , <i>Cliffortia ruscifolia</i> , <i>Elytropappus rhinocerotis</i> , <i>Erica hispidula</i> , <i>Helichrysum cymosum</i> , <i>Leucadendron salignum</i> , <i>Pelargonium cordifolium</i> , <i>Phyllica axillaris</i> , <i>P. pinea</i> , <i>Psoralea monophylla</i> , <i>Selago corymbosa</i> .
<b>Herbs</b>	<i>Helichrysum felinum</i>
<b>Geophytic herb</b>	<i>Pteridium aquilinum</i> (d), <i>Eriospermum vermiforme</i>
<b>Succulent herb</b>	<i>Crassula orbicularis</i>
<b>Herbaceous succulent climber</b>	<i>Crassula roggeveldii</i>
<b>Graminoid</b>	<i>Ischyrolepis sieberi</i> (d), <i>Aristida junciformis</i> subsp. <i>galpinii</i> , <i>Brachiaria serrata</i> , <i>Cymbopogon marginatus</i> , <i>Elegia juncea</i> , <i>Eragrostis capensis</i> , <i>Ischyrolepis gaudichaudiana</i> , <i>Restio triticeus</i> , <i>Themeda triandra</i> , <i>Tristachya leucothrix</i> .

Based on a detailed field survey by Dr Hoare to verify conditions on site, a detailed landcover and habitat mapping exercise was undertaken for the site. This identified three main habitats occurring on site, shown in Figure 22. These are mapped as Forest, Secondary vegetation and Pastures. There are also transformed areas associated with roads, localised patches of alien trees, and residual individual milkwood trees (*Sideroxylon inerme*). The habitat assessment is important for understanding the suitability of habitat on site for various plant and animal species of concern, which usually have very specific habitat requirements.



Figure 5: Map of habitats on site as per the Plant, Animal and Terrestrial Biodiversity Assessment.

### 2.2.1. Forest

The steep-sided slopes in the northern half of the site contain indigenous forest that should probably be classified and mapped as Southern Afrotemperate Forest. It has a closed canopy, open understorey and relatively tall structure, therefore does not qualify to be mapped as thicket. No detailed vegetation survey was undertaken within this area because it had already been decided that these forested areas would be excluded from any development. Based on observations of peripheral species, it resembles mesic forest in other coastal parts of the Garden Route.

### 2.2.2. Secondary vegetation

Between the forest and the pastures is an irregularly-shaped band of vegetation that contains a mixture of shrubs and weeds that indicates that it is various stages of post-disturbance development. Historical aerial photographs show that this entire area was once cultivated but has gone through various iterations of being cleared and then recovering somewhat.

Tall woody shrubs and small trees found here include the following: *Buddleja saligna*, *Capparis sepia*, *Clausena anisata*, *Dovyalis rhamnoides*, *Grewia occidentalis*, *Gymnosporia buxifolia*, *Pterocelastrus tricuspidatus*, *Putterlickia pyracantha*, *Scutia myrtina*, *Searsia crenata*, *Searsia lucida*, *Rhoicissus digitata*, and *Mystroxydon aethiopicum*, as well as *Lauridia tetragona* and *Trimeria grandifolia*, but these last two are probably forest margin species detected along the forest margin. Lower shrubs included *Acalypha* sp, *Euryops virgineus*, *Nidorella ivifolia*, *Helichrysum cymosum*, *Helichrysum petiolare*, *Helichrysum teretifolium*, *Osteospermum moniliferum*, *Otholobium stachyerum*, *Passerina corymbosa*, *Podalyria myrtillifolia*, and *Polygala myrtifolia*, many of which are typical colonisers of cleared plantation areas. Herbaceous species included a mixture of understorey species, such as *Anemia caffrorum*, *Asparagus asparagoides*, *Diets cf bicolor*, *Isoglossa* sp, *Rubia petiolaris*, and *Stachys aethiopica*, and weedy species, such as *Cerastium glomeratum*, *Felicia amoena*, *Pelargonium elongatum*, *Rubus pinnatus* and *Vicia sativa*.

Alien invasive and exotic species detected in this area included *Acacia cyclops*, *Paraserianthes lophantha*, *Pinus* sp., and *Yucca aloifolia*.

### 2.2.3. Pastures

The pastures occur in the entire southern part of the site in areas that were historically cultivated. The landscape here is flat. They are currently being used as pasture for horses and are therefore grazed relatively short.

The pasture areas were dominated largely by the grasses, *Stenotaphrum secundatum* and *Cenchrus clandestinus*, along with a large number of weeds and species that are tolerant of disturbance, including *Abutilon sonneratianum*, *Arctotheca prostrata*, *Carpobrotus deliciosus*, *Cerastium glomeratum*, *Chenopodium sp.*, *Euphorbia helioscopia*, *Felicia amoena*, *Medicago sp.*, *Moraea sp*, *Hebenstretia integrifolia*, *Lepidium africanum*, *Lycium ferocissimum*, *Lysimachia arvensis*, *Massonia depressa*, *Mesembryanthemum aitonis*, *Rumex hypogaeus*, *Salvia aurea*, *Senecio inaequidens*, *Solanum linnaeanum*, and *Brunsvigia orientalis*.

### 2.2.4. Milkwood trees

There are a small number of scattered milkwood trees (*Sideroxylon inerme*) that, based on their size, are possibly remnants of the original vegetation that occurred there. It was common practice to leave large trees as shade within agricultural areas. Alternatively, they became established after the cessation of active cultivation, but this would not have given them time to grow to their current stature. Three large and one small tree were counted on site, in the area between the secondary vegetation and the pastures. The milkwoods are protected trees and removal would require a permit.

## 2.3. Species of Conservation Concern

According to the National Web-Based Environmental Screening Tool, a number of plant species of concern are flagged as of concern for the site. These are mostly fynbos species, or forest species. There are two species that could occur within forest habitats on site. These are *Ocotea bullata* (Endangered) that has a high probability of occurring on site, and *Faurea macnaughtonii* (Rare) that has a moderate possibility of occurring there. There are therefore two threatened, near threatened or rare species that could occur in the study area

There is habitat on site that is suspected habitat for threatened plant and animal species. This is the forest habitat, which is outside the proposed development footprint and will not be affected by the proposed development. The species that could potentially occur within this habitat are as follows<sup>2</sup>:

- ❖ Knysna Warbler (Vulnerable) has a moderate probability of occurring in forest margin areas.
- ❖ Crowned Eagle (Near Threatened) - the forests on site may constitute part of the general foraging range but it is unlikely that they are resident on site, or are dependent on it.
- ❖ Tunnelling Dung Beetle (Endangered). The type locality of the species is forest habitats in the Keurboomstrand area.
- ❖ Small antelope (Vulnerable). There is a moderate to high probability of it occurring in the forests on site.
- ❖ *Ocotea bullata* (Stinkwood, Endangered) probably occurs in the forests on site.

None of these species are expected to be negatively affected by the proposed development (both options). On the basis that it has been recorded from Plettenberg Bay and the site has suitable habitat, the Knysna Warbler (Vulnerable) has a moderate to high probability of occurring in forest margin areas on site. The forests on site may constitute part of the general foraging range of Crowned Eagle (Near Threatened), but it is unlikely that they occur on site, or are dependent on it. The type locality of the Tunnelling Dung Beetle

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<sup>2</sup> David Hoare Consulting (Pty) Ltd: Plant Species, Animal Species and Terrestrial Biodiversity Assessment Report. Dated 16 March 2023.

(Endangered) is forest habitats in the Keurboomstrand area. It therefore has to be assumed that there is a high probability of it occurring there. There is a moderate to high probability of the small antelope (Vulnerable) occurring in the forests on site.

## 2.4. Invasive Species

A total of 69 plant species were recorded on site within the proposed development footprint and along the margins of the forest (see Appendix 1), of which three are declared weeds and/or alien invader plants, three are naturalized exotic species, and the remainder are indigenous species, some of which are weedy species commonly found in disturbed places or are species that commonly colonise areas of disturbance.

The alien invasive species are as follows:

- ❖ *Acacia cyclops*\* (NEMBA Category 1b)
- ❖ *Pinus sp*\* (NEMBA Category 2)
- ❖ *Paraserianthes lophantha*\* (Invader category 1b)

An ongoing alien invasive management programme should take place on site. This will protect riparian habitats downslope from degradation and could potentially be the biggest contribution to maintaining and protecting biodiversity on site and in surrounding areas.

## 2.5. Site Ecological Importance

Following the procedures within the Species Environmental Assessment Guidelines, the forests on site have been assessed as having Very High sensitivity / Ecological Importance, secondary vegetation as having Medium sensitivity / Ecological Importance, and remaining areas Low or Very Low sensitivity. The forest on the site would form part of the National Forest Inventory for South Africa. Forests are protected in South Africa, and therefore the forest on the site is a viable CBA 1 area that will be protected by the owner.

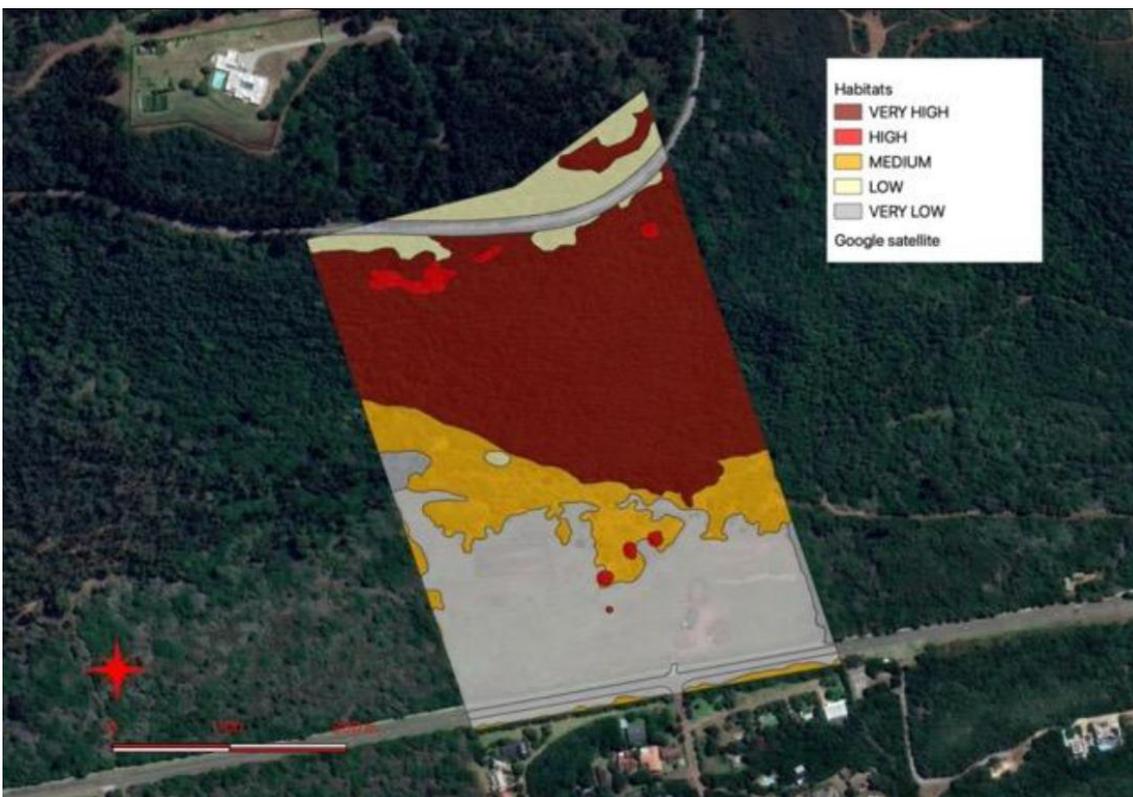


Figure 6: Habitat sensitivity on site as per the Plant, Animal and Terrestrial Biodiversity Assessment.

## 2.6. Wetlands and Watercourses

The site is quaternary catchment K60E. No freshwater features such as drainage lines, rivers or wetlands are indicated to occur within the footprint of the property or within close proximity to the property (Figure 12). The only mapped aquatic feature is the Estuarine Functional Zone (EFZ) which is identified as any area below 5 m.a.m.s.l. (metres above mean sea level). It must be stressed that the 5 m contour is a desktop delineation of estuarine habitat intended to indicate likely areas of estuarine habitat. However, this must always be groundtruthed to confirm the presence / absence of estuarine conditions. The northern portion of the property is fairly steep and forested, while the southern portion is very flat with pasture currently grazed by horses. The development will be focussed on the southern, flatter portion of the property where historical clearing of vegetation has taken place. This area is also aligned with the lower-lying contours of the site mapped as the EFZ.

A small natural spring is present on the site and was identified by the landowner. Water flowing from the spring is stored to a minor extent in a small, excavated pond measuring approximately 2-3 square metres (Figure 14). Soil is very sandy on the site and should therefore be relatively well drained. The dam is roughly circular, and measures approximately 90m<sup>2</sup> in extent<sup>3</sup>.



Figure 7: Photographs indicating the location of the spring and associated dam.

<sup>3</sup> Aquatic Impact Assessment by Dr. Jackie Dabrowski of Confluent Environmental (Pty) Ltd, dated March 2024.

### 3. BIODIVERSITY VALUE

Vegetation types present	<p>The entire site is within one regional vegetation type, namely Garden Route Shale Fynbos. There is another vegetation type nearby, Garden Route Granite Fynbos. In the event that natural habitat remains on site, there are likely to be floristic and vegetation structural influences from either of these vegetation types within the site, depending on local ecological conditions.</p> <p>The steep-sided slopes in the northern half of the site contain indigenous forest that should probably be classified and mapped as Southern Afrotemperate Forest. It has a closed canopy, open understorey and relatively tall structure, therefore does not qualify to be mapped as thicket.</p>
Contribution to vegetation targets	The forest exists in the areas designated as Critical Biodiversity Area 1. The site occurs within Garden Route Shale Fynbos, which is listed as Endangered. The forest habitat on site is not typical of the listed ecosystem within which it occurs but it is nevertheless a listed ecosystem.
Condition of the property	Historical aerial photographs show that the entire Secondary vegetation area was once cultivated but has gone through various iterations of being cleared and then recovering somewhat. Indigenous forest in good condition.
<p>Threatened Ecosystems / endemic species present</p> <p>(fauna &amp; flora – please list)</p>	<p>There is forest habitat on site that is suspected habitat for threatened plant and animal species. The species that could potentially occur within this habitat are as follows:</p> <ul style="list-style-type: none"> <li>❖ Knysna Warbler (Vulnerable) has a moderate probability of occurring in forest margin areas.</li> <li>❖ Crowned Eagle (Near Threatened) - the forests on site may constitute part of the general foraging range but it is unlikely that they are resident on site, or are dependent on it.</li> <li>❖ Tunnelling Dung Beetle (Endangered). The type locality of the species is forest habitats in the Keurboomstrand area.</li> <li>❖ Small antelope (Vulnerable). There is a moderate to high probability of it occurring in the forests on site.</li> <li>❖ <i>Ocotea bullata</i> (Stinkwood, Endangered) probably occurs in the forests on site.</li> </ul> <p>According to the National Web-Based Environmental Screening Tool, a number of plant species of concern are flagged as of concern for the site (see Terrestrial Biodiversity, Plant and Animal Species Assessment). These are mostly fynbos species, or forest species. There are two species that could occur within forest habitats on site. These are <i>Ocotea bullata</i> (Endangered) that has a high probability of occurring on site, and <i>Faurea macnaughtonii</i> (Rare) that has a moderate possibility of occurring there.</p>
Special features present	<p>The forest on the site would form part of the National Forest Inventory for South Africa. Forests are protected in South Africa, and therefore the forest on the site is a viable CBA 1 area that will be protected by the owner. It has a very high terrestrial biodiversity sensitivity.</p> <p>A small natural spring is present on the site and was identified by the landowner. Water flowing from the spring is stored to a minor extent in a small, excavated pond measuring approximately 2-3 square metres. The pond and associated spring are identified as a watercourse as defined in the National Water Act.</p>

Threats / risks	Alien plant infestations	The alien invasive species are as follows: ❖ <i>Acacia cyclops</i> * (NEMBA Category 1b) ❖ <i>Pinus sp</i> * (NEMBA Category 2) ❖ <i>Paraserianthes lophantha</i> * (Invader category 1b)
	Invasive alien fauna	None identified.
	Fire	The Forest habitat to the south of the property should not be burnt. The property can be managed for fire.
	Erosion	None identifies on site.

## 4. MANAGEMENT OF THE OPEN SPACE AREA DURING DESIGN AND CONSTRUCTION PHASE

### 4.1. Establishment of Open Space Area

All construction-related impacts shall be excluded from the open space area; unless specifically unavoidable and in accordance with approvals granted. Prior to construction, the disturbance footprint of the proposed developments should be clearly defined and demarcated to prevent unnecessary damage to the surrounding environment. Construction netting or fencing must be used to clearly indicate construction areas. Access roads must be clearly marked so there is no confusion as to where the tracks are or how wide the road is.

Clear signs for "no-go" areas for vehicles and personnel should be placed strategically on the site and along access roads. No-go areas are anywhere outside of the direct area of influence of the construction phase.

All vehicles, construction or inspection, must only access the sites via a planned access road with no additional roads, tracks to be made in the environment. Roads are to be clearly marked to prevent additional tracks or unnecessarily widening the access road.

### 4.2. Construction Staff

All new staff must be briefed about the layout of the construction site and must be made aware of the no-go areas and informed of the sensitive surrounding environment that is not to be disturbed.

No littering, waste dumping or burning is allowed on the site or in the surrounding environment. All waste is to be collected in designated bins with lids that can be secured or stored in a secure area when construction is not taking place (evenings, weekends, holidays, etc.) to prevent interference by animals (i.e. baboons). All waste is to be transported to a registered waste disposal facility off site.

Adequate ablution facilities must be provided for every construction project in suitable location. Ablution facilities must be regularly maintained and cleaned.

### 4.3. Fencing

Special consideration will be given to fencing in consultation with the ECO. Any fencing installed will strictly not prevent animal movement across the dedicated conservation area of the property as well as in context to the greater landscape. The need for this will be balanced with prioritizing security for people and managing human-wildlife conflicts in the operations phase of the development. Only the development area will be fenced. Reduced connectivity has adverse effects on wildlife at population level and individually: it has the potential to reduce gene flow in populations that occur at the site and limits the pool of resources available to fauna (food, territory, etc) and may result in reductions in animal welfare due to competition.

It is recommended that fencing does not intersect the corridor between properties. Security is unlikely to be a concern along the base of the slope and it is therefore not necessary to fence off the area. If considered absolutely necessary however, it is feasible to fence the development off from the 20m corridor, while keeping the corridor as a continuous habitat between adjacent properties. Preferable fencing would be palisade because it allows the movement of small mammals between bars whereas clearvu type fencing prohibits all movement barring very small animals like frogs.

### 4.4. Indigenous species

No indigenous plant species are to be removed from the open space area. Indigenous species will be used for rehabilitation of any disturbed areas.

Prior to the commencement of construction and earth movement on the site, a plant search and rescue must be conducted of all fynbos taxa on the site (preferably with a botanist or suitably informed ECO on the site to supervise the search and rescue and provide guidance on best practice).

The rescued plants must be kept in a nursery that should preferably be set up on the property. Alternatively, arrangements for a suitable nursery site should be made to keep and care for removed plants during the construction phase of the project.

The rescued plants must be planted back with the aid of the ECO or horticultural specialists within the 20m buffer and open space areas within the development. This will promote the regeneration of natural vegetation around the developments and reduce the possibility of negative edge effects on the site.

Additional plants that are observed during construction within a development footprint must be rescued and added to the rescued plants in the indigenous nursery.

The development may not have any additional gardening, especially lawn areas, in order to prevent negative edge effects and long-term habitat degradation. The only additional landscaping / gardening on the site should be limited to rehabilitated indigenous species, potted plants and potted beds.

Erect temporary fencing along the entire green corridor and open space to protect the pond as well as the corridor from impact during construction. Add signage to the fence indicating the area as No-Go. Site inductions for all staff must ensure contractors and works area aware they may not enter the pond and spring area.

### 4.5. Control of alien species

The law requires that alien clearing and monitoring be conducted on the property. The control of alien invasive species and non-declared alien plants must begin as soon as possible, as it will be an ongoing process. Priority should be given to the immediate eradication of all Category 1 declared weeds and invasive

species. Removed plants must be disposed of responsibly to prevent their spread and reseedling, at a registered disposal site or through a licensed waste removal service.

#### 4.6. The Conclusion of the Construction Phase

The conclusion of any project is an essential but often overlooked aspect of projects. This relates primarily to the cleaning up of the site once construction has concluded. All of the mitigation measures proposed above are only meaningful if construction is properly concluded.

- ❖ Construction sites must be cleared of all waste material, rubble, and debris associated with the construction phase at regular intervals during, and at the conclusion of the construction phase.
- ❖ Revegetation of bare soil following construction is an essential part of concluding the construction phase of the project.
- ❖ Drainage structures must be checked to ensure that there are no blockages or pollution that is blocking the free flow of water over the site; these checks will prevent erosion during and after the construction phase that could have potentially far-reaching implications beyond the project area of influence (PAOI) for the proposed development.

## 5. MANAGEMENT OF THE OPEN SPACE AREA DURING THE OPERATIONAL PHASE

Effective management of the open space area during the operational phase is essential to maintaining the ecological integrity, biodiversity, and overall health of the environment within the private Open Space III Zone, particularly in the indigenous forest habitat. Conservation management practices should be implemented to ensure long-term sustainability, prevent degradation, and promote the restoration of natural ecosystems.

### 5.1. Ecological Services

Maintaining intact indigenous vegetation is essential for preserving ecosystem stability, supporting local wildlife, and preventing soil erosion. Indigenous plant species have adapted to the local climate and provide critical habitat and food sources for indigenous fauna. Invasive alien species, however, can outcompete indigenous plants, disrupt ecological processes, and alter habitat conditions. A key management strategy involves regular monitoring and the systematic removal of invasive species through mechanical, chemical, or biological control methods. Replanting with indigenous species can further restore the ecological balance and enhance the natural resilience of the ecosystem. Conservation efforts should prioritize the protection of threatened species and their habitats to prevent further biodiversity loss.

### 5.2. Landscape Connectivity

For landscape connectivity to be effective, the landscape must remain permeable, allowing species to move freely between habitats. This can be impeded by barriers such as roads and fences. In addition to structural barriers, environmental pollution can significantly hinder species movement and survival. It is vital to ensure that the landscape is free of litter, waste, and alien objects that may pose a threat to animals. Plastics, metal scraps, and other debris can cause injury or death to wildlife, while alien species—whether plants, animals, or pathogens—can disrupt natural ecosystems and block migratory routes. Regular clean-up efforts, waste management strategies, and education on responsible human activity can help minimize these risks. The

removal of invasive species and the prevention of their spread is also essential to maintaining ecosystem integrity and landscape permeability.

### 5.3. Animal Wildlife Corridor Management

The aim of the wildlife corridor is to maintain functional habitat on more level land with access to water for the wildlife that occur in the area. For this area to remain functional through the operational phase of the development, it would need to be managed effectively.

The recommendations for the wildlife corridor would be to:

- ❖ A perimeter fence is recommended along the northern section of the property to preserve the wildlife corridor and natural area beyond. The fenceline should not extend into the 20m corridor and should aim to separate the development area from the conservation / wildlife area.
- ❖ Use clearVu fencing to separate the corridor from the development area. The spring must be incorporated into the corridor. The fence is to keep domestic animals (cats and dogs, etc) out of the wildlife corridor.
- ❖ Clear vu type fencing would have the important benefit of excluding pets (cats and dogs) from the wildlife corridor area where they could deter or kill wildlife large and small.
- ❖ No fencing should be permitted along the boundary either side of the corridor. It should be continuous to neighbouring properties to allow free animal movement.
- ❖ The fence can have a pedestrian gate or two which can be kept locked. No electric fencing should be permitted. If security is required, cameras can be used to monitor fence lines.
- ❖ Dense planting along the corridor side of the fencing should be done using plant species found on the site. This will aim to screen light and sound from the development.
- ❖ No garden waste disposal over the fence line into corridor. This must be strictly enforced by the HOA as it will smother indigenous vegetation and introduce alien / exotic species.
- ❖ No landscaping, mowing or weedeating should be permitted in the corridor. Only clearance of alien vegetation should be allowed.
- ❖ Recreational use of the corridor should be restricted to walking (no dogs) and bird-watching during daylight hours only. The gates should be locked and access restricted from dusk to dawn. No mountain biking should be permitted as this causes too much disturbance.
- ❖ Lighting within the development should be minimised as far as possible. Use motion detector lights / bollards instead of tall lights along streets. Minimise insect attraction to lights by installing yellow spectrum vs blue spectrum lights. Provide specifications to all residents for their outdoor lighting and recommend that motion sensor lights be installed instead of permanent lights through the HOA.

### 5.4. Secondary Vegetation Restoration

Retain secondary vegetation within the ecological corridor along the base of the steep slopes. Steps should be taken to rehabilitate margins of the forest area by encouraging growth of species, such as *Pterocelastrus tricuspidatus* and *Sideroxylon inerme*, that are mesic and fire-resistant. An open space management system should be developed to formalize such steps for forest protection.

Rehabilitation of disturbed areas, as well as previously invaded areas, should promote establishment of site-appropriate indigenous species.

The purpose of the pond and spring is to provide a sustained water source for wildlife in the green corridor -

- ❖ Landscaping and gardening staff must not undertake any clearing of vegetation inside of the 10m buffer.

- ❖ A bird hide in the buffer to spot wildlife would be acceptable, but no additional recreational activities. The point is to create a quiet habitat with suitable vegetation cover for continued use by animals, birds etc.
- ❖ Indigenous plants found in adjacent thickets may be planted around the pond. Only indigenous plants found in the immediate surrounding area may be planted.
- ❖ Do not place any fish into the pond as only alien invasive fish to the area would survive and could be transferred to other waterbodies on the feet of animals or birds.
- ❖ The only plants that should be removed from the area are listed alien invasive species.
- ❖ A list of wetland plant species is provided which can be planted around the margins of the pond to improve habitat for amphibians and water quality for wildlife making use of the pond. These plants can also be used in the stormwater ponds and are strongly recommended as alternatives to *Typha capensis* or *Phragmites australis*, both of which can become dominant and weedy, although they are indigenous.

*Isolepis prolifera; Eleocharis limosa; Persicaria decipiens; Wachendorfia thyrsiflora; Falkia repens; Juncus lomatophyllus; Juncus effusus.*

## 5.5. Community Engagement

Engaging landowners in conservation planning is essential for maintaining habitat integrity on private lands, and it encourages the adoption of sustainable land-use practices that align with broader conservation objectives. Incentives such as financial support for land management, tax breaks, or certification for sustainable practices can help encourage landowners to engage actively in conservation efforts.

In addition, liaising with local authorities and legal users ensures that the conservation plan is integrated with regional policies and regulations. Working with government agencies, environmental organizations, and community leaders can provide a stronger voice for conservation efforts and ensure that the plan is aligned with national or provincial environmental priorities. These partnerships can also facilitate better enforcement of conservation laws, the development of community-based natural resource management programs, and the mobilization of additional resources for conservation work.

## 5.6. Ongoing Monitoring and Adaptive Management

Regular ecological assessments should be carried out to track changes in vegetation, wildlife populations, and overall ecosystem health. Adaptive management strategies should be employed to respond to emerging challenges such as climate change, pest infestations, or unanticipated disturbances. The effectiveness of conservation actions can be tracked through regular monitoring and data collection.

An Environmental Control Officer (ECO) will have an oversight of all conservancy activities.

A monitoring program acts as an early warning system designed to identify environmental changes or trends resulting from management actions, inaction, or natural events. Its primary goal is to adjust management strategies in a timely manner when needed. The open space area should be routinely assessed by qualified professionals appointed by the management authority, with findings reported annually to the appropriate Conservation Body.

Key environmental components must be regularly monitored, and if any deviations from trend data are detected, a specialist in the relevant field (ecologist, etc) should be consulted to advise on the necessary corrective actions.

### 5.6.1. Weather

The rainfall received on the site should be monitored. Long-term rainfall data can be obtained from the official weather station closest to the site which can be used to make reliable deductions for a specific area. Data on the minimum and maximum temperatures should also be recorded.

### 5.6.2. Soil erosion

Monitoring erosion on a steep site is essential to prevent land degradation and ensure long-term stability. Regular inspections should be conducted, particularly after heavy rainfall, to assess signs of soil displacement, gully formation, or sediment buildup in lower areas. Vegetation cover should be closely monitored, as bare soil increases the risk of erosion. Erosion control measures should be evaluated for effectiveness, with adjustments made as needed. If significant erosion is detected, an environmental specialist should be consulted to recommend appropriate mitigation strategies, such as re-vegetation or engineered erosion control solutions.

### 5.6.3. Rehabilitated of disturbed areas

Monitoring rehabilitated areas after construction is crucial to ensuring the successful recovery of native flora and fauna while preventing the spread of invasive species. Regular site assessments should be conducted to track the establishment and growth of indigenous vegetation, checking for signs of stress, dieback, or insufficient regeneration. The presence of wildlife, including insects, birds, and small mammals, should be observed as an indicator of ecological recovery. Particular attention must be given to the emergence of alien invasive plants, which should be promptly removed to prevent competition with native species. Any deviations from expected recovery trends should be addressed through additional planting, soil enrichment, or habitat enhancement measures to support a healthy and self-sustaining ecosystem.

### 5.6.4. The edge effect of landscaped areas impacting on the natural areas.

Monitoring the edge effects of development on natural forest areas is essential to preserving the integrity of the ecosystem and preventing ecological degradation. Regular assessments should be conducted to evaluate changes in vegetation structure, soil composition, and microclimate conditions at the forest boundary. Particular attention should be given to the encroachment of invasive species, which can outcompete native flora and alter habitat conditions. No exotic grass species, such as Kikuyu grass (*Pennisetum clandestinum*), should be introduced for landscaping, as they can spread aggressively and suppress indigenous grasses, reducing biodiversity.

Illegal dumping of garden waste, cut flowers, or other plant materials over boundary fences and into the wildlife corridor must be strictly prohibited and closely monitored, as it can introduce non-native species that may establish and spread within the natural forest. Edge monitoring should also assess wildlife movement and behaviour, as habitat fragmentation can affect species distribution and increase human-wildlife conflicts. If negative trends are observed, mitigation measures should be implemented, including buffer zone enhancement, controlled removal of invasive species, and strategic planting of indigenous vegetation to restore ecological balance and protect the forest ecosystem.

No additional gardening, particularly lawn areas adjacent to the wildlife corridor, should be included in the development to prevent negative edge effects and long-term habitat degradation. The following impacts may arise and should be closely monitored:

- ❖ A gradual increase in negative edge effects, where exotic garden plants outcompete native species.
- ❖ Biodiversity loss due to the introduction and establishment of invasive plants within the natural fynbos vegetation.
- ❖ Habitat degradation, affecting not only plant species but also essential pollinators.
- ❖ The eventual displacement of native vegetation as exotic garden plants become naturalized.

- ❖ A decline in natural genetic diversity (e.g., through introgression; Mitchell & Holsinger, 2018) among plant populations and species.
- ❖ Loss of specific adaptations that enhance plant species' resilience.
- ❖ Disruption of plant population structures, leading to fragmentation of sub-populations of species of conservation concern (SCC).
- ❖ Changes in soil composition, including alterations in microbial communities and seed banks.
- ❖ Modifications to natural fire regimes.

## 5.7. Botanical Identification, Labelling and Monitoring

Implementing a comprehensive program for botanical identification, labelling, and monitoring can aid in preserving biodiversity, and also serves as an educational tool for homeowners, fostering a deeper understanding and appreciation of the natural environment.

Accurate identification of plant species is the foundation of conservation efforts. This can be done by a Botanical Specialist, or by collaborating with reputable institutions such as the South African National Biodiversity Institute (SANBI). This will enhance the accuracy of species identification. SANBI's National Herbarium specializes in identifying and naming plants, collecting specimens to fill distribution data gaps, and studying plant relationships to publish taxonomic reviews.

Once identified, labelling these species within the conservation area can be done. Labels should include both scientific and common names, and can also include information on the plant's ecological role, traditional uses, and conservation status. This practice not only aids in species monitoring but also enriches the visitor experience by providing educational insights into the flora.

To promote conservation principles among homeowners, providing well-crafted educational materials is essential. These resources can include brochures, informational panels, and interactive digital content that detail the significance of local plant species and their roles within the ecosystem. Highlighting conservation efforts and the importance of biodiversity can inspire visitors to support and engage in preservation activities.

## 5.8. Trail Establishment, Preservation and Maintenance

Implementation of a walking trail for homeowners to explore and enjoy the beautiful landscape as well as ensuring accessibility by monitoring agents within the program guideline.

Proper upkeep and maintenance of a low impact walking trail are essential to ensure safety, accessibility, and minimal environmental impact. Regular inspections should be conducted to identify erosion, fallen trees, overgrown vegetation, or damaged trail markers. Clearing debris, trimming encroaching plants, and reinforcing trail edges help maintain a clear and stable path for hikers. Trail surfaces may require periodic grading, resurfacing, or reinforcement in sensitive areas.

Signage and wayfinding markers should be kept visible and updated to guide visitors safely while minimizing off-trail excursions that could disturb wildlife or vegetation. Pathways should be clearly marked to minimize human impact on sensitive areas. Informational signage should be placed at key locations to educate visitors on conservation principles, restricted activities, and the importance of preserving the natural environment.

Engaging local communities, volunteers, and conservation groups in regular maintenance efforts can enhance long-term trail sustainability while fostering a sense of stewardship for the forest environment.

## 5.9. Animal Observation & Tracking

Effective animal observation and tracking are crucial for the monitoring of wildlife populations, behaviour, and habitat use. One key method is the implementation of camera traps, strategically placed with guidance from specialists to capture images and videos of animals with minimal human disturbance. These devices provide valuable data on species presence, movement patterns, and population trends over time.

Identifying and monitoring species is essential for assessing biodiversity and detecting any changes in wildlife populations. Regular surveys and tracking methods, such as footprint analysis, scat identification, and direct observation, help conservationists understand species distribution and ecological interactions. This information can inform management decisions to protect vulnerable species and maintain ecosystem balance.

Additionally, ensuring that the landscape remains free of litter and alien objects is vital for animal safety. Waste and non-natural materials can pose serious threats to wildlife through ingestion, entanglement, or habitat degradation. Routine patrols and clean-up efforts help maintain a pristine environment, reducing risks to animals and preserving the natural integrity of the forest habitat. By integrating these measures, conservation efforts can effectively support and protect wildlife populations while promoting a healthy and sustainable ecosystem.

## 5.10. Managing Human Activities

Effective management of human activities is essential for minimizing negative environmental impacts and ensuring the long-term sustainability of forest ecosystems. One key strategy is to regulate and control human interaction with the environment to prevent habitat degradation, soil erosion, and disturbance to wildlife. This can be achieved through designated walking trails, homeowner education programs, and clear guidelines on responsible behaviour, such as prohibiting littering, restricting off-trail excursions, and enforcing no-disturbance zones for sensitive habitats.

Continuous monitoring for illegal gin traps is a critical component of conservation management, as these harmful devices pose a severe threat to wildlife. Since such traps have already been found in the area, routine patrols and surveillance efforts must be intensified to detect and remove them promptly. Collaboration with law enforcement and local communities can help identify perpetrators and prevent further illegal activities. Public awareness campaigns highlighting the dangers of gin traps to both wildlife and domestic animals can also encourage community support in reporting suspicious activities.

By proactively managing human activities, enforcing regulations, and addressing illegal threats, conservation efforts can protect biodiversity while allowing for sustainable and responsible human interaction with the natural environment.

## 5.11. Alien Monitoring & Clearing

The continued monitoring and eradication of alien invasive species must be a priority. Regular inspections should be conducted to identify and remove alien vegetation, with a particular focus on Category 1 declared weeds and invasive species. The monitoring and removal of alien plant species will be done with oversight from specialists in the field. Effective management of alien species, with ongoing follow-up to prevent reinvasion, is identified as the primary and most necessary intervention for maintaining the integrity of the CBA.

An ongoing alien invasive management programme should take place on site in accordance with the Alien Invasive Control Plan. This will protect forest habitats from degradation and could potentially be the biggest

contribution to maintaining and protecting biodiversity on site and in surrounding areas. The longer-term plan for this site will comprise a continued and thorough removal and monitoring of alien plants.

The new growth of indigenous trees and vegetation will be encouraged by identifying the new sprouts of indigenous plants and preferentially allowing them to strengthen, thereby encouraging their continued growth.

Follow-up operations must be done. Monitoring involves repeated observations or recording of data to be able to track progress and determine the efficacy of control methods. Survey cleared areas and look for regrowth should be undertaken 4-6 months after every operation

## 5.12. Fire Monitoring & Management

The Landowner must be a member of the Southern Cape Fire Protection Association (SCFPA).

Buildings and infrastructure will be protected by means of:

- ❖ Applying the building industry code for fire.
- ❖ SCFPA recommendations for zoning of areas around the buildings.
- ❖ Use of fire hardy or -retardant indigenous plants.
- ❖ Fire-wise practices of keeping available fuel to a minimum.

Low-growing plants and groundcovers can be planted around the house and decks for firescaping in order to create a manageable buffer between the household and thicket vegetation. Groundcovers for sunny areas include *Cliffortia ferruginea*, *Otholobium decumbens*, *Dymondia margaretae*, *Gazania spp.*, *Helichrysum argyrophyl lum*, *Hermannia saccifera*, *Cotula lineariloba*, *Agathosma ovata* (Kluitjies kraal) and vygies. For shady areas, grow *Plectranthus verticillatus*, *P. neochilus* (which can also grow in the sun), and *P. ciliatus* (Drege). No climbers or trellises should be attached to the walls of the house in a high-risk fire area as these act as 'ladders' for the fire<sup>4</sup>. The Southern Cape Fire Protection Association (SCFPA) should be consulted in this regard.

### 5.12.1. Requirements for Preparing Firebreaks<sup>5</sup>

Landowner Responsibility: Landowners are required to prepare firebreaks on their side of the boundary where there is a reasonable risk of veldfire (Section 12(1)).

Assessing Reasonable Risk:

- ❖ The concept of "reasonable risk" is evaluated using the "reasonable person test."
- ❖ If a reasonable person in the position of the landowner would foresee that failing to prepare a firebreak could lead to a veldfire that might start or spread across their land, causing harm to others, they would take action to prepare one.
- ❖ Consequently, the landowner should also take the necessary steps.

### 5.12.2. Factors Influencing Firebreak Specifications

The specifics of each firebreak depend on various factors, including:

- ❖ Topography: Consider the slope and aspect of the land.

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<sup>4</sup> 'Firescaping your Garden' first produced in association with the Botanical Society of SA, 2001. FireWise SA.

<sup>5</sup> Section extracted from correspondence letter from SCFPA, Mr. Paul Gerber (Senior Regulations Officer: Forestry Development), Directorate: Forestry Policy Management(Western Cape).

- ❖ Vegetation Type: Assess flammability, height, and fuel load.
- ❖ Weather Patterns: Note the dominant fire wind direction.
- ❖ Environmental Considerations: Take into account visual impact, erosion potential, and the presence of rare species or wetlands.
- ❖ General Considerations: Evaluate practicality, effectiveness, and the use of natural boundaries.

Indigenous forests in South Africa are often regarded as natural firebreaks for several reasons, contributing to their acceptance as areas with minimal bushfire risk:

a. Moist Microclimate

Indigenous forests generally have a higher moisture content due to their dense canopy and rich understory. This moisture helps to suppress the intensity of potential fires, as the humidity within the forest creates conditions less conducive to fire spread.

b. Diversity of Flora

The biodiversity within indigenous forests means a variety of plant species, many of which are less flammable. The presence of species that are adapted to the local environment can help reduce the overall fuel load, making these areas less likely to ignite or sustain a fire.

c. Natural Fire Resistance

Many indigenous tree species have developed characteristics that enhance their fire resistance, such as thick bark or the ability to recover quickly after a fire. This resilience contributes to the overall stability of the forest ecosystem.

d. Canopy Coverage

The dense canopy of indigenous forests acts as a physical barrier, reducing wind speeds at the ground level and limiting the spread of fires. This canopy also shades the forest floor, further decreasing the likelihood of fire ignition from ground-level heat.

e. Soil and Ground Cover

The rich organic matter found in the soil of indigenous forests helps retain moisture. Additionally, the ground cover, including leaf litter and underbrush, can decompose and absorb moisture, which reduces the availability of dry fuel that might otherwise ignite.

f. Ecological Balance

Indigenous forests support a balanced ecosystem that includes natural predators of fire-prone species, contributing to lower fuel loads. This ecological balance helps maintain the health of the forest and minimizes the risk of uncontrolled wildfires.

g. Historical Fire Patterns

Historically, indigenous forests have coexisted with fire as part of their ecological cycle.

### 5.12.3. Conclusion

While no environment is entirely without fire risk, the characteristics of indigenous forests in South Africa contribute to their role as natural firebreaks. Their unique ecological features make them less susceptible to bushfires, providing both ecological benefits and protection for surrounding areas. I am therefore of the opinion that no fire breaks are required on your property since the whole property is covered with indigenous forest and is situated on a South facing slope.

## 6. LONG-TERM MANAGEMENT OF THE OPEN SPACE AREA IN THE BROADER LANDSCAPE

The long-term goal will be the establishment of joint effort environmental corridor. Achieving landscape-level connectivity in areas with many individual landowners requires collaborative efforts, such as voluntary conservation agreements. Ecological corridors and buffer zones can be created through land use planning, which would act to link critical habitats across properties. If this is done it can also help mitigate long-term landscape-level cumulative impacts.

Extending the Conservation Model and tested Conservation Management Plan to the immediate neighbouring properties (Portions 10/304, 11/304, 12/304, and 13/304 to the west, Portions 129/304, 92/304, and 16/304 to the east, and RE/2/304 to the north) through joint cooperation. Allowing for the Implementation of a permeable Environmental Corridor extending across more than 48 hectares of indigenous landscape into the Keurbooms River Forest Reserve.

Achieving landscape-level connectivity with many individual landowners requires collaborative effort, such as voluntary conservation agreements. Ecological corridors and buffer zones can be created through land use planning, which would act to link critical habitats across properties. If this is done it can also help mitigate long-term landscape-level cumulative impacts.

A Stewardship agreement with CapeNature or SANParks will be explored in order to achieve a collaborate conservation outcome in the establishment of the Conservation Area.

The Stewardship Concept is a new way of achieving conservation protection. CapeNature has a dedicated Biodiversity Stewardship Programme which offers a range of conservation options and which aims to set up positive, proactive partnerships with the landowner to support and encourage them to take on the responsibility of managing and protecting the natural assets that are in their care. In order to support this management, appropriate benefits will be offered for land that has been set aside for conservation<sup>6</sup>.

The four options available to landowners are Conservation Areas, Biodiversity Agreements, Protected Environments and Nature Reserves.

- ❖ All options are voluntary.
- ❖ Each one will be tailored to your needs as a landowner.
- ❖ The higher categories offer more incentives (benefits) and support by CapeNature, but have more restrictions
- ❖ and require greater commitment from landowners. It is important to note that you as the landowner retain title to the property at all times.

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<sup>6</sup> CapeNature Biodiversity Stewardship Programme Fact Sheet.

## 7. CONCLUSION

The Conservation Management Plan for Portion 91 of Farm Matjes Fontein 304 aims to ensure the long-term preservation of the site's ecological integrity while accommodating responsible residential development. By designating significant portions of the land as Open Space Zone III (Nature Conservation Area), this plan safeguards critical biodiversity, promotes ecological connectivity, and minimizes human impact on the natural environment.

Key conservation strategies outlined include invasive species management, fire risk mitigation, habitat restoration, and sustainable land-use practices. The protection of indigenous flora and fauna, particularly within designated wildlife corridors and sensitive forest areas, remains a priority. Additionally, community engagement and ongoing monitoring will play a crucial role in adaptive conservation efforts, ensuring the plan remains effective in response to environmental changes over time.

Collaboration with neighbouring landowners and conservation authorities is encouraged to expand conservation efforts beyond the site boundaries, creating a broader ecological corridor that enhances biodiversity resilience at the landscape level. The potential for a Stewardship Agreement with CapeNature or SANParks further strengthens this initiative by securing long-term conservation commitments.

Ultimately, this plan establishes a workable, proactive approach to conservation that balances environmental sustainability with responsible development. Through continued monitoring, active management, and cooperative efforts, the long-term vision of a connected, well-managed conservation area can be realized, benefiting both the local ecosystem and future generations.