

# Concise Kranshoek Management Plan

## Portions 7 & 8 of the farm Kranshoek No.432

Written by:

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### Ecosystem Corridor Environmental Management Plan (Biodiversity offset area)

#### Introduction:

This document serves as a suggested management plan for ecosystem corridors of farm Kranshoek No.432 that have been allocated as sensitive areas prohibited from development. These areas include the riparian zone of the freshwater stream and floodplain which is connected to the 3ha area where the Duthie's golden moles were found, depicted in the map below:

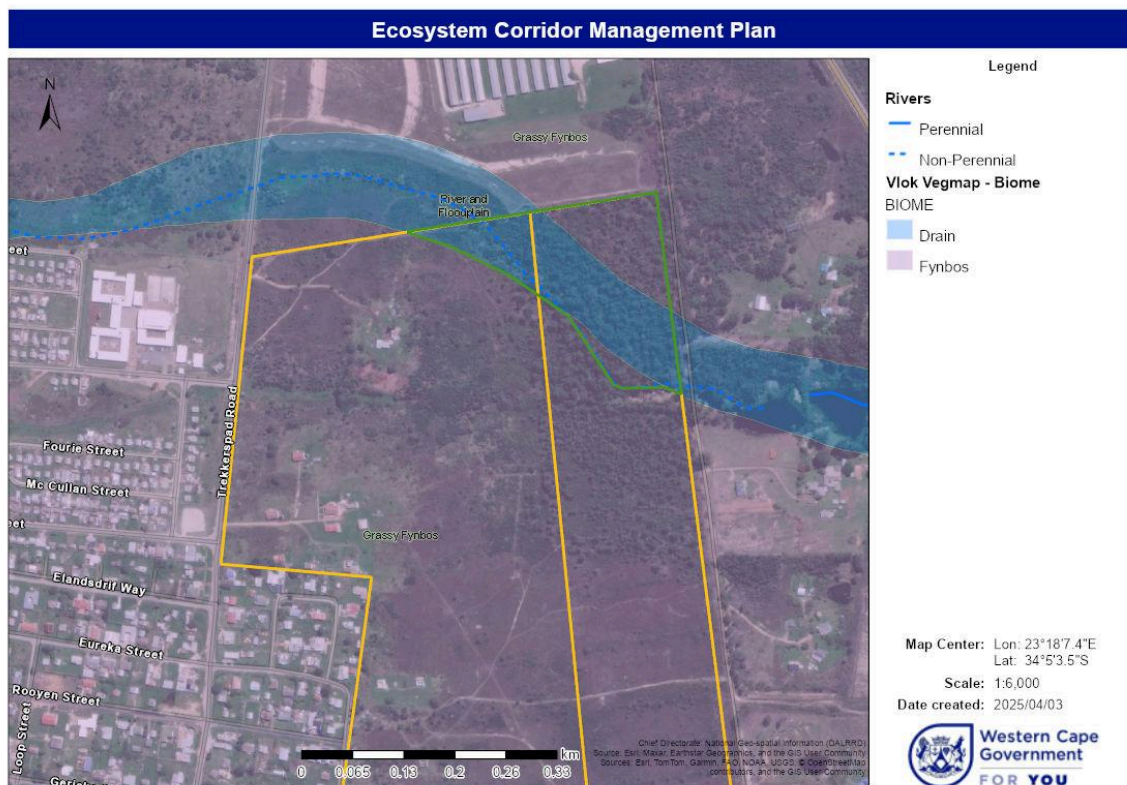


Figure 1: Conservation area is demarcated in green in the north east corner

This suggested management includes recommendations from conversations with representatives of Cape Nature (Conservation Intelligence Agency) & Fauna specialist - Dr Jacobus Visser.

### **Conservation Objectives:**

The objectives are to care for Kranshoek farm No.432 ecosystem corridor by:

In order of priority:

- Fencing the conservation area to prevent negative impacts from livestock grazing, illegal dumping, fire risks, general pollution and vagrants.
- Controlling alien invasive plant species.
- Reintroduce orchid species from the Kranshoek plant search and rescue.
- Plant localised indigenous trees to replace the Eucalyptus population in order to secure a long term habitat for the Duthie's Golden Moles

### **Limitations:**

The challenge with managing this area is to conduct the alien invasive plant control in a manner that does not disturb the population of Duthie's Golden Moles. The limitations to exotic plant clearing include no use of heavy machinery and no fire in this site. It is important to consider that the work done in this area should be sensitive towards the conservation area and aim towards enhancing biodiversity in this area.

### **Recommended Methods for Exotic Clearing:**

Exotic clearing is to be conducted in the whole 4ha environmental corridor and we would recommend implementing this action in different phases.

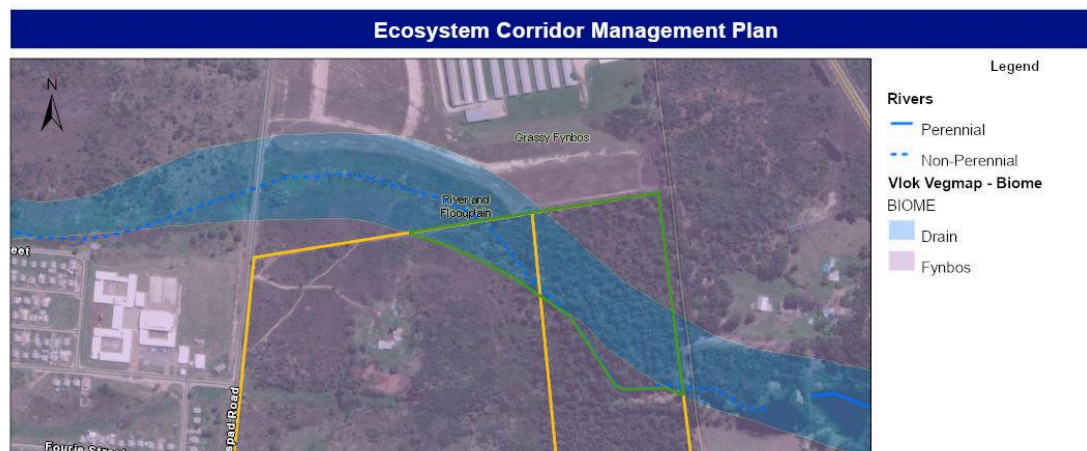


Figure 2: Conservation area in need of alien invasive plant control

It is recommended that the alien invasive plant control is done by mainly using a method known as ringbarking conducted by experienced manual labour. This is the least destructive manner of removing the unwanted exotic species and it also does not require the use of herbicide which is a great positive as there is also a freshwater stream in this area that needs to be worked around with sensitivity. All small trees can be tackled with tools known as tree poppers which remove the tree root and all.

Medium sized trees that are able to be felled with chainsaws could be cut into manageable sized biomass and processed into wood for the Kranshoek community and branches to be chipped adjacent to the reserve area.

Alien invasive plant species present include:  
*Acacia cyclops*, *Eucalyptus*, *Hakea*, *Pinus radiata*.

We recommend that the exotic clearing be conducted by a team of experienced workers from the Kranshoek community (Andre Vlok mentioned that he knows of a contractor within Kranshoek). Garden Roots Project would be interested in overseeing this process by doing an initial introduction of the methodology to the chosen contractor and follow up with bi-weekly site visits to oversee the progress.

Year 1: It would be good to start with removing all young aliens with tree poppers and aim for a 50% reduction in medium and large alien invasive species in the first phase in order to allow local vegetation to fill those gaps in vegetation. Clear cutting all the alien invasives in one phase would lead to an aggressive regrowth from the aliens so it is important to do this systematically and work with the local vegetation to fill the gaps formed from a phased clearing approach.

Year 2: Follow up on any young alien invasives that sprout up after the 50% reduction and continue with a further reduction of alien invasive species and biomass removal.

Year 3: Final work to be done on exotic clearing and get the conservation area to the desired state of predominantly local indigenous species.

### **Reintroduction of Search & Rescue Species:**

Once the fence is up and the alien invasive species control phase 1 is complete the site would be due for a visit from Garden Roots & Cape Nature to do a vegetation survey and assess whether it would be wise to introduce the orchid species to this allocated conservation area.