19 February 2026

TO WHOM IT MAY CONCERN

BOTANICAL COMMENT

Portion 5 of Farm Zandhoogte 139, Mossel Bay

The botanical comment below was requested by Sharples Environmental Services (SES), George. The undersigned was appointed as an independent botanical specialist to comment specifically on the ecological corridor (passage) proposed in a terrestrial biodiversity assessment report for the above properties. The latter report was prepared by Chepri Scientific Services in June 2023.

The applicant is currently investigating development opportunities on the above property, which is located between the R102 and the N2, north of Tergniet (**Figure 1**). The site is currently lying vacant (fallow). Erf 998, the triangular property directly west of the site, is also part of the larger site, but it is completely transformed and of no botanical interest.

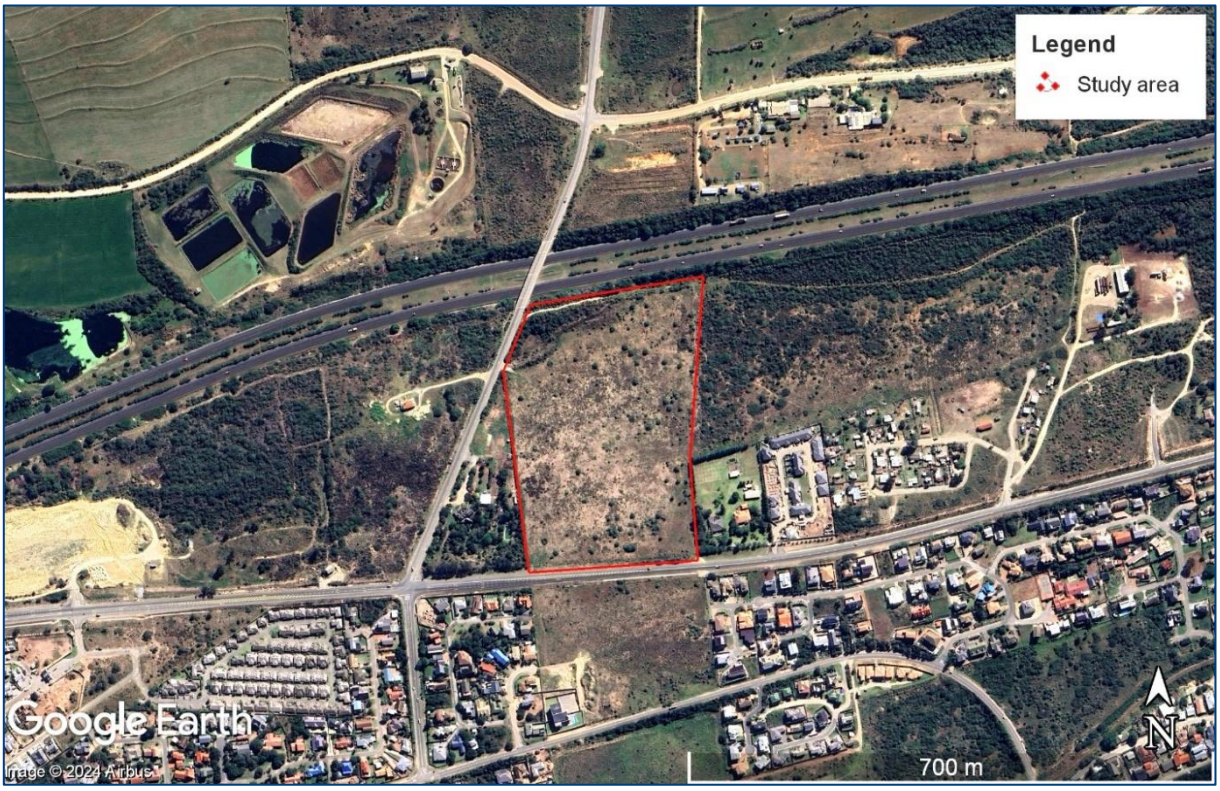

Figure 1: Locality map.

Site survey

A brief botanical survey of the site was undertaken on 18 January 2024 by the undersigned, in the company of the faunal specialist Dr Jaco Visser. Special attention was given to the proposed ecological corridor on the northern side of the site, next to the N2. An additional assessment of the type and condition of vegetation on site, disturbances and presence of alien species and species of conservation concern (SCC) was carried out. Reference is also made to the 2018 South African Vegetation Map.

Biodiversity Planning Context

The site is located in a semi transformed strandveld environment in the southern Cape coastal region. The 2018 Vegetation Map of South Africa classifies the vegetation type found here as Hartenbos Dune Thicket. The latter is currently listed as Endangered[1]. It is described as "a mosaic of low (1-3 m) thicket, occurring in small bush clumps dominated by small trees and woody shrubs, in a mosaic of low (1-2 m) asteraceous fynbos. Thicket clumps are best developed in fire-protected dune slacks, and the fynbos shrubland occurs on upper dune slopes and crests".

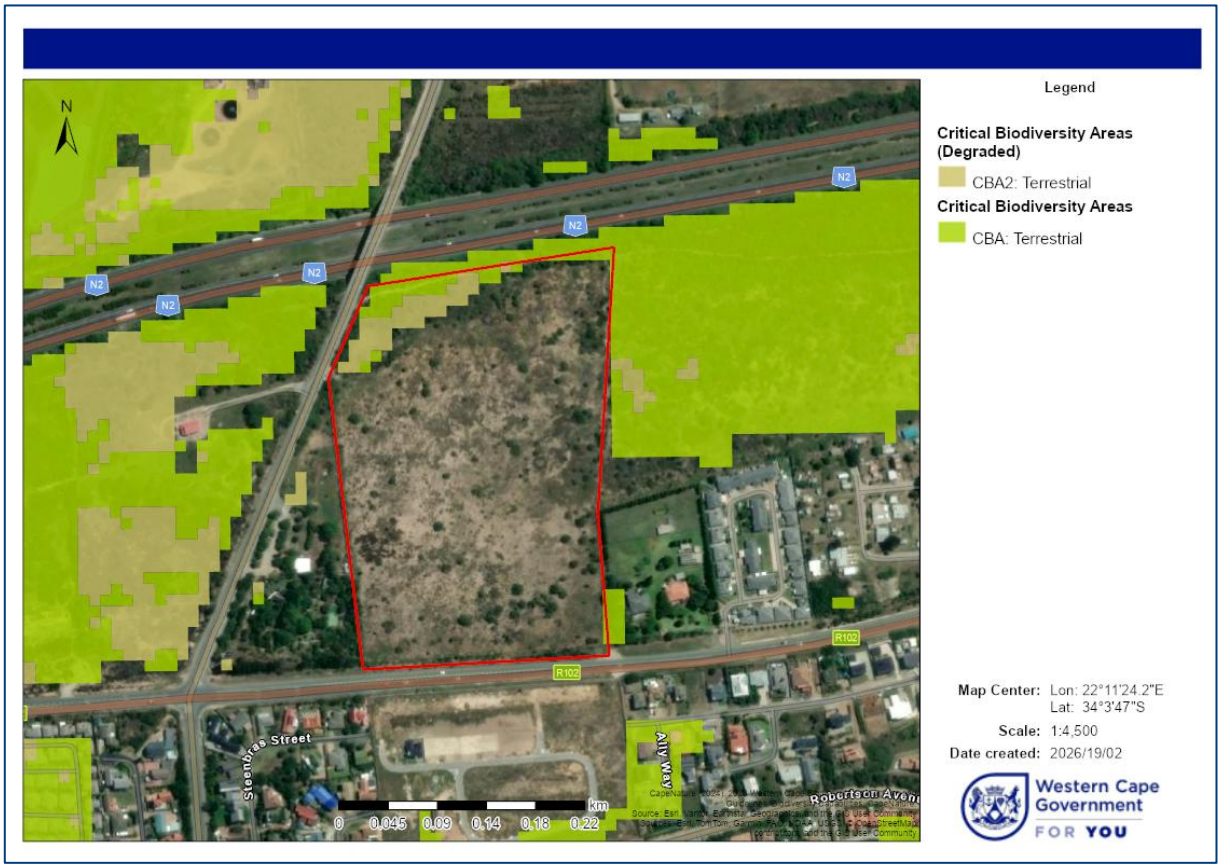

Figure 2: Biodiversity network (CBA) map.

[1] Ecosystem Detail - Biodiversity BGIS (sanbi.org)

From a biodiversity network perspective, the northern side of the site encroaches on a terrestrial critical biodiversity area (CBA) and a degraded critical biodiversity area (CBA2) (see **Figure 2** above). CBA's are defined as areas in a natural condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure[2]. Many of these areas support known occurrences of threatened plant species, and/or may be essential elements of designated ecological corridors. Loss of designated CBA's is therefore not recommended. The site forms part of an ecological link between the Groot Brak and Klein Brak Estuaries. However, the link may have been compromised by development approvals further away to the west between the R102 and the N2! There is also an unrehabilitated or active sand mine 500 m away to the west that also impacts on the link, The areas to the north and south of the site have been transform for agricultural and residential purposes. Other (probably lesser) links run along the railway line, the N2 road reserve and primary dune above the beach.

Findings & recommendation

The site is situated in a shallow dune slack and the vegetation can be described as an open grassy (dune) thicket or strandveld type, typically associated with dune slacks (**Figures 3** to **5**). It comprises mainly grasses, restioids (*Thamnochortus insignis*) and a few scattered shrubs and trees, including *Osteospermum moniliferum, Helichrysum cymosum, H. patulum, H. odoratissimum, Chrysocoma ciliata, Senecio burchellii, Metalasia* sp, *Seriphium plumosum, Wiborgia obcordata, Carpobrotus edulis, Passerina corymbosa, Cliffortia cf linearifolia, Muraltia ericoides, Pelargonium capitatum, Leonotis ocymifolia, Crassula cf subulata* and *Selago corymbosa*. There are also a few dune thicket elements here and there, such as *Searsia glauca, S. crenata, S. pallens, Sideroxylon inerme, Pittosporum viridiflorum, Gymnosporia buxifolia, Grewia occidentalis, Diospyros dichrophylla* and *Aloe arborescens*. Both *Sideroxylon inerme* (milkwood) and *Pittosporum viridiflorum* (kasuur) are protected tree species under the National Forests Act (Act 84 of 1998). The farm dam in the north-western corner of site is surrounded by tall shrubs and trees, including several exotics such as *Schinus terebinthifolia* and *Psidium guajava* (**Figure 6**). One would not expect any notable species of conservation concern (SCC) to occur here, but the site certainly has some value as a part of the local biodiversity network.

The recommendation for an ecological corridor on the N2 side of the site is supported, which will provide a passage for fauna (pollinators & seed dispersal agents) to migrate across the site. This will theoretically maintain the ecological link between the natural vegetation on the western and eastern sides of the site. The N2 road reserve could serve as an extension to this corridor. The minimum width for such a corridor is difficult to determine, but probably depends on what is required from the corridor. In this instance

[2] Pool-Stanvliet, R., Duffell-Canham, A., Pence, G. & Smart, R. 2017. The Western Cape Biodiversity Spatial Plan Handbook. CapeNature, Stellenbosch.

there is probably no need to accommodate significant natural habitat, but more a need to maintain the functioning of the larger biodiversity network. I would suggest a minimum width of 40 m in order to minimise undesirable edge influences. A width of 40-50 m is considered suitable for small fauna, such as amphibian movement according to Cotter *et al*[3]. The biodiversity assessment report recommended a width of ±80 m for the corridor.

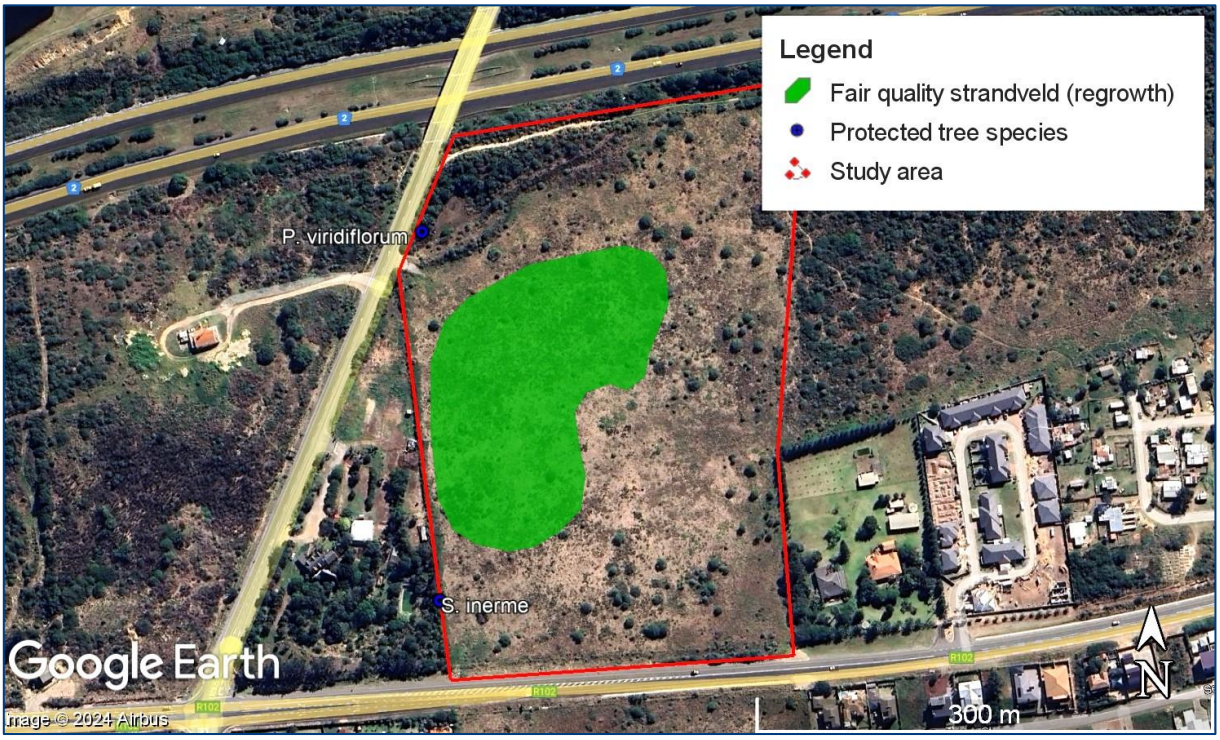

Figure 3: Botanical attributes of the site. The untoned area is degraded.

Site ecological importance (SEI) was determined by applying the criteria described in the Species Environmental Assessment Guideline (SANBI, 2020). The SEI considers the biodiversity importance of the affected area or habitat and its resilience to impacts. The habitat in this instance is described as degraded strandveld. SEI has been determined to be Medium for the site due to its size, the threat status of the vegetation type and limited connectivity that remains. This means that minimisation and restoration mitigation is recommended according to the Guideline.

Currently, motivation for the ecological corridor seems weak if development proposals further away to the west between the R102 and the N2 are going ahead. These will sadly further compromise the biodiversity link between the Groot Brak and Klein Brak Estuaries and other vegetation remnants in the area, such as the one in Reebok, 1 km southwest of the site. In a previous study for the municipality, I motivated for a connection between the latter and the biodiversity corridor between the R102 and the N2.

[3] Cotter, M., Berkhoff, K., Gibreel, T., Ghorbani, A., Golbon, R., Nuppenau, E.-A. & Sauerborn, J. 2014. Designing a sustainable land use scenario based on a combination of ecological assessments and economic optimization. Ecological Indicators, 36, 779– 787

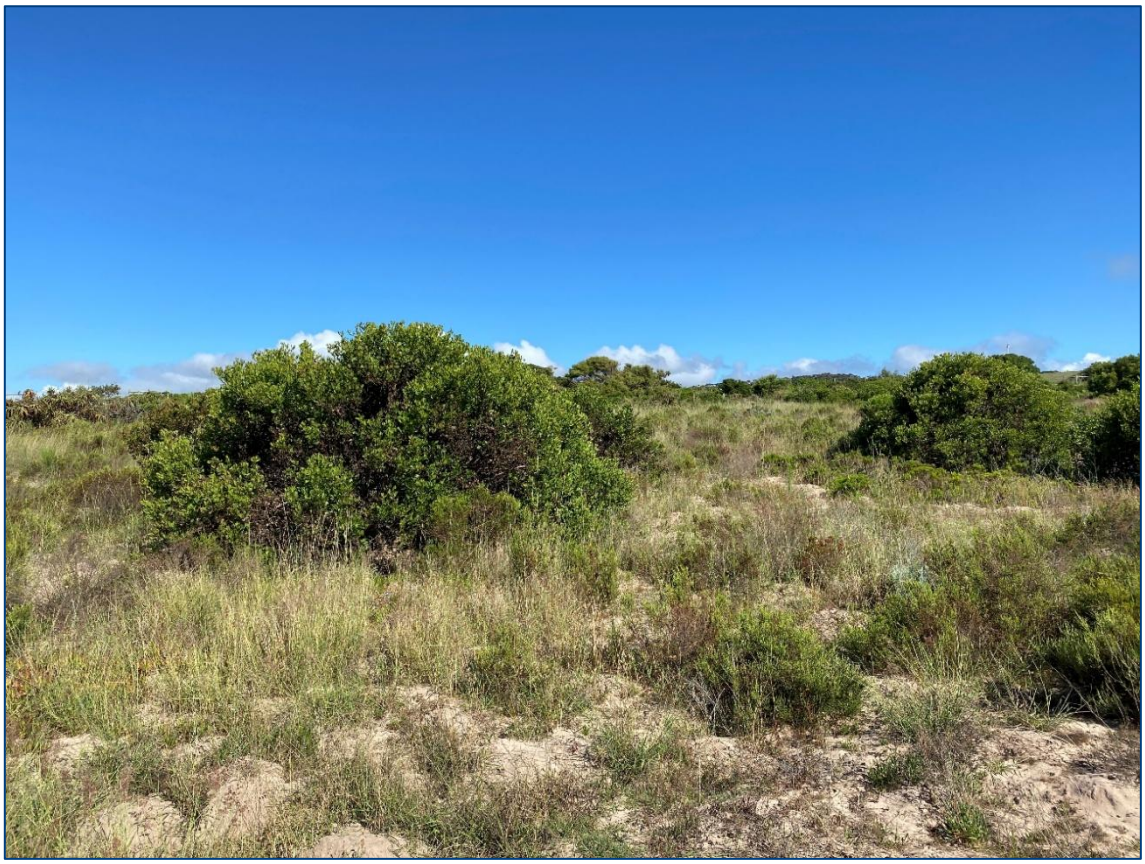

Figure 4: Open grassy thicket in the centre of the site.

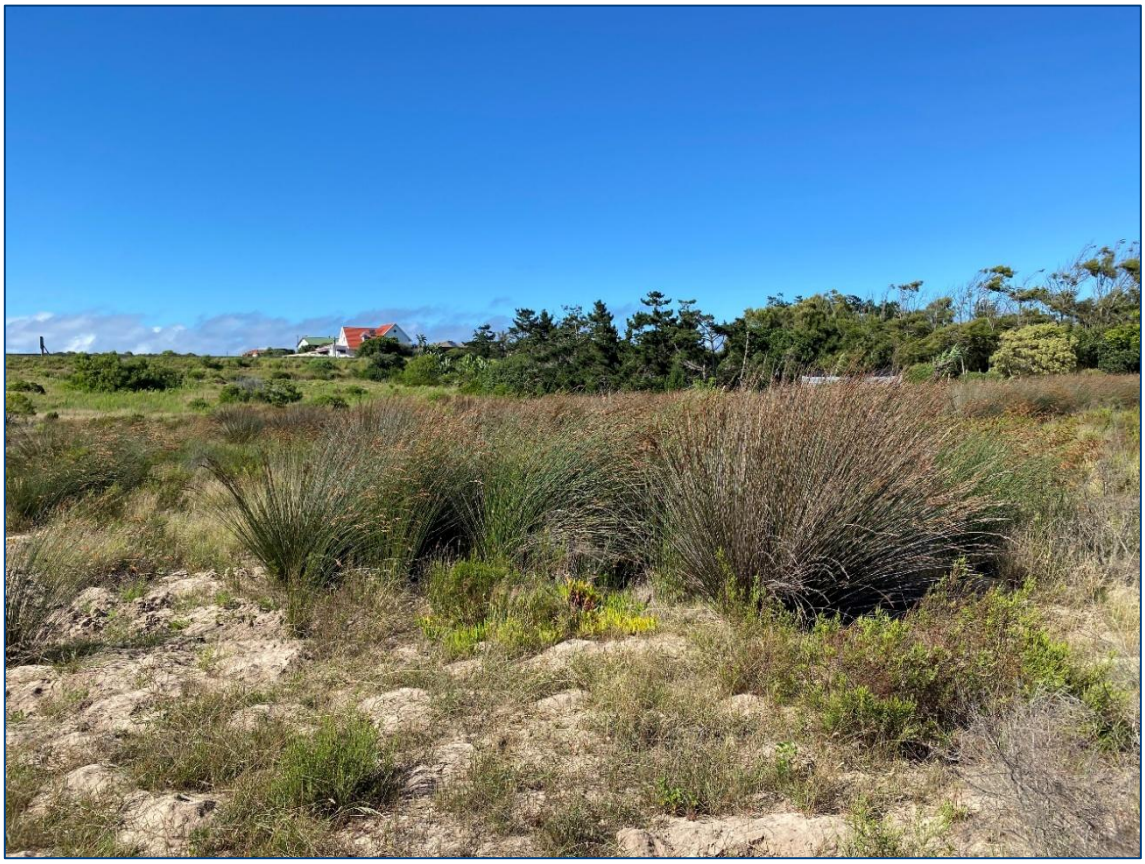

Figure 5: Patch of dekriet (*Thamnochortus insignis*).

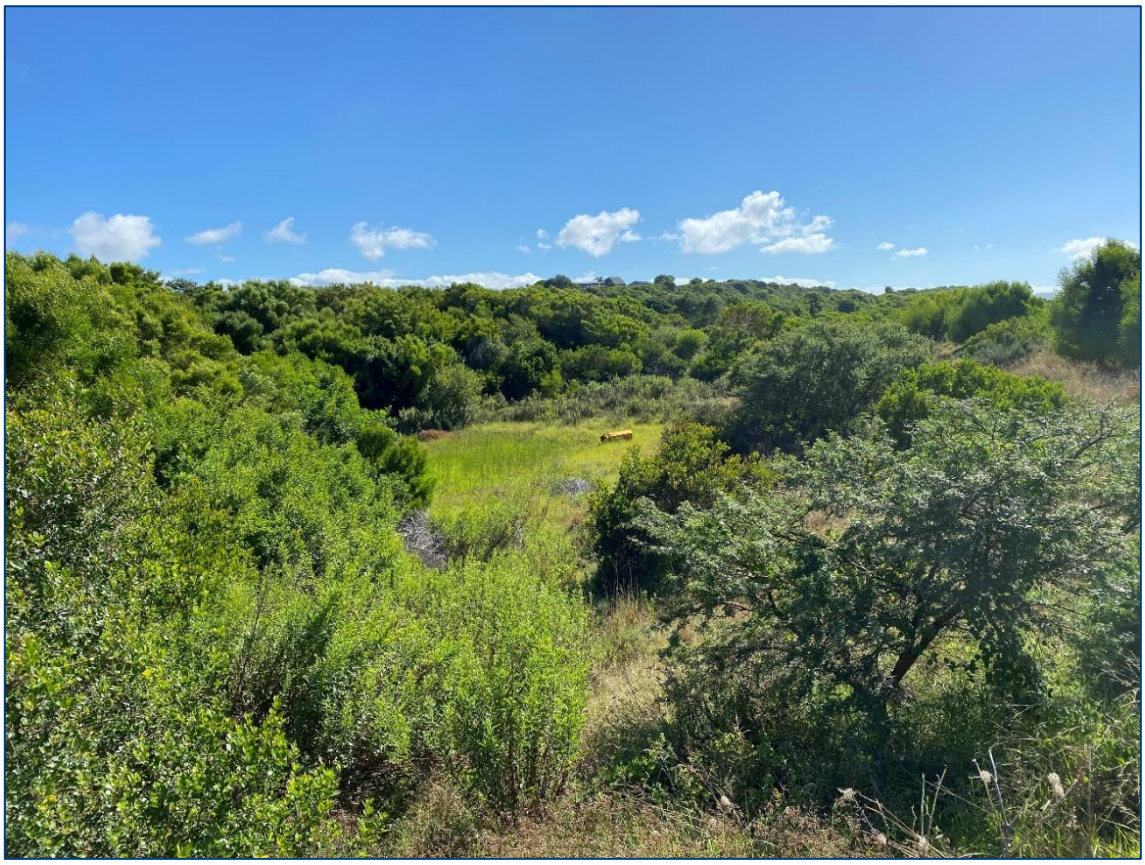

Figure 6: Farm dam surrounded by tall shrubs and trees.

Management of the corridor

The most important management or maintenance task for the corridor would be to keep it clear of aliens. Ideally, all exotic species should be removed from the corridor. A simple alien clearing plan should suffice. It is important to note that the aliens must be cleared on an annual basis. To improve biodiversity inside the corridor, it is recommended that topsoil containing seeds of indigenous species and salvageable plants, such as *Carpobrotus* spp and *Aloe arborescens*, be collected from the development areas and deposited or planted inside the corridor.

The corridor should also not be fenced off on the sides facing away from the development. If fencing is needed for security reasons, a permeable fence should be erected that will allow small mammals through. Pedestrian traffic should be minimised. But if access needs to be provided for the residents, a path network should be established. The corridor should also be assessable for fire protection purposes.

Prepared by:

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