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reference LE14/2/6/1/6/6/257-19_housing_vleesbaai
date **21 April 2022**

Cape EAPrac,
P.O Box 2070,
George,
6530

Attention: Ms Melissa Mackay
By email: mel@cape-eaprac.co.za

Dear Ms Melissa Mackay

DRAFT BASIC ASSESSMENT REPORT FOR HOUSE STEENEKAMP ON PORTION 19 OF FARM 257 MISGUNST AAN DE GOURITZ RIVIER, MOSSEL BAY LOCAL MUNICIPALITY, WESTERN CAPE.

DEA&DP Reference: 16/3/3/1/D6/37/0003/22

CapeNature would like to thank you for the opportunity to review the above report. Please note that our comments only pertain to the biodiversity related impacts and not to the overall desirability of the application. CapeNature wishes to make the following comments:

According to the Western Cape Biodiversity Spatial Plan (Pool-Stanvliet *et.al*. 2017)[1] the farm has Critical Biodiversity Areas (CBA 1: Terrestrial and fragments of CBA 2: Terrestrial). The farm does not have any aquatic features. The reasons behind WCBSP delineation on the site are the following:

- Bontebok Extended Distribution Range
- Coastal resource protection-Eden
- Coastal Habitat Type
- Foredune
- Canca Limestone Fynbos (LT)
- Cape Seashore Vegetation (LT)

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

Mucina and Rutherford[2] and the Western Cape Biodiversity Spatial Plan (Pool-Stanvliet *et.al*. 2017) mapped the vegetation as Cape Seashore Vegetation which is Least Threatened. In the draft ecosystem threat listings for the updated 2018 National Biodiversity Assessment the vegetation will be listed as Least Concerned Cape Seashore Vegetation and Hartenbos Dune Thicket (Skowno *et al*. 2018)[3].

CapeNature is satisfied that the WCBSP (Pool-Stanvliet *et.al*. 2017) reasons layer and land use guideline handbook were considered and included in the proposed development considering the entire site is mapped as natural CBA. The underlying biodiversity objectives and ecological functioning of the CBA must not be compromised.

Eradication of invasive alien plant species are of high priority and CapeNature agrees. Alien plant species that occur outside of the development footprint must be cleared during the alien clearing phase. In this way, more alien plant species can be removed. The removal of alien plant species can be a phased approach and we agree with the botanist that only local plant species must be used for rehabilitation and stabilization of the dune fields.

The specialist must determine a suitable location before search-and-rescue is undertaken for the indigenous dune vegetation that will be transplanted. The season should also be considered to give the plants an adequate chance to re-establish.

Coastal ecosystems are ecological infrastructures that provides a range of regulatory services to coastal communities[4]. The foredunes play an essential role in providing physical buffering against sea storm surges and other potential climate change related impacts. Therefore, they should be in a functional near-natural state. Furthermore, the property forms part of a coastal corridor, which is an important ecological infrastructure. As these areas are important corridors to maintain landscape connectivity it is crucial that no further disturbances occur, and that the area must be restored to improve connectivity and reduce landscape fragmentation.

The preferred alternative is within the Littoral Active Zone (LAZ). The National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) (NEM: ICMA) defines the LAZ as:

"any land forming part of, or adjacent to, the seashore that is –

a) unstable and dynamic as a result of natural processes, and

b) characterised by dunes, beaches, sand bars and other land forms composed of unconsolidated sand, pebbles or other such material which is either unvegetated or only partly vegetated."

Thus, the proposed location must consider the LAZ considering the dynamic nature of dune fields. CapeNature does not support constructing a house within the LAZ even if it is vegetated. Furthermore, the house must be located outside the dune fields and sand movement corridors to avoid any damage from coastal processes.

[2] Mucina, L. & Rutherford, M. C. (EDS) 2006. The Vegetation of South Africa, Lesotho and Swaziland. Strelitzia 19. South African National Biodiversity Institute, Pretoria. (revised 2012)

[3] Skowno, A. L., Poole, C. J., Raimondo, D. C., Sink, K. J., Van Deventer, H., Van Niekerk, L., Harris, L. R., Smith-Adao, L. B., Tolley, K. A., Zengeya, T. A., Foden, W. B., Midgley, G. F. and Driver, A. 2019. National Biodiversity Assessment 2018: The status of South Africa's ecosystems and biodiversity. Synthesis Report. Pretoria, South Africa. 214 pp.

[4] Cadman, M. (ed.). 2016. Fynbos Forum Ecosystem Guidelines for Environmental Assessment in the Western Cape, Edition 2. Fynbos Forum, Cape Town.

The current edge of the dune/plant interface is largely being stabilized by alien plant species. Currently these alien plant species are effectively preventing the westerly to south westerly direction of movement of the dune field. Considering the legislated requirement to remove alien plant species it would be expected that the edge of the dune field would extend in these directions once aliens are removed. As a result, the proposed development position would be heavily exposed to sand inundation in the future and infrastructure such as the road will also be exposed.

If this development will be approved, additional development applications and application to protect these new developments (this would further extent hard infrastructure into the dune fields) can be expected.

In conclusion, the positioning of the house in the LAZ is the most concerning aspect of the proposed development. CapeNature does not support any of the three options for the proposed house.

CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.

Yours sincerely,

Megan Simons
For: Manager (Landscape Conservation Intelligence)