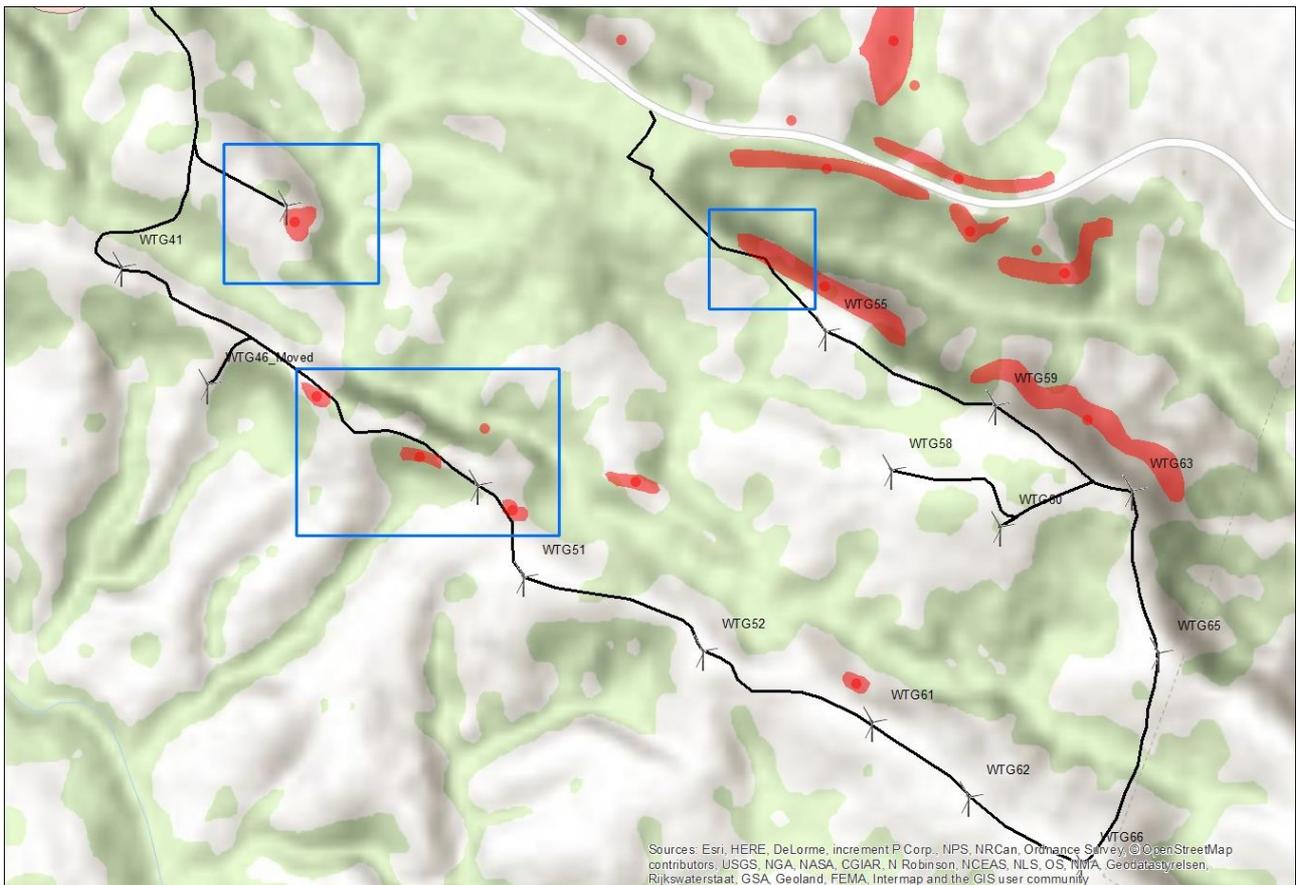


Ecological Assessment Report: Species of Special Concern

The Albany Wind Energy Facility (WEF) Ecological Assessment, (DEFF Ref: 14/12/16/3/3/2/1131) refers.

My comments relate specifically to Section 4.1.1 page 24 (Species of Special Concern) of the Ecological Report. The section on *Special of Special Concern* is disturbingly short and does not mention Makhanda's iconic species, *Oldenburgia grandis* (Near Threatened according to an outdated IUCN assessment) as a species of special concern. Populations of *Oldenburgia grandis* were mapped as part of my MSc thesis in 2008 (Swart, 2008) in order to determine population densities across its range. I overlapped my GIS data with the proposed project infrastructure and found a few areas of concern (see map – blue boxes).



The areas in blue boxes on the map overlap or are very close to *O. grandis* populations and are likely to negatively impact these populations. We had a similar scenario with the Waainek Wind Farm application

where the construction of the service road required the removal of adult *O. grandis* plants. There are a number of reasons why this is problematic.

1. The Population Viability Assessment for the species revealed that the survival of adults and mature trees is crucial to population survival and removing or destroying adult trees is likely to result in local extinctions;
2. *O. grandis* is a rare species with a small geographic range and narrow habitat specificity making the species more vulnerable to extinction and less likely to recover from disturbances of this nature;
3. *O. grandis* are long-lived plants with limited recruitment by seed. It is therefore important to save the adult plants rather than re-seed an area where they need to be removed;
4. Page 18 of the report mentions the Suurberg Quartzite Fynbos (vegetation type associated with *O. grandis* populations) are already heavily invaded. The concern is that further disturbance will open areas to more invasions which are a direct threat to *O. grandis* populations. There does not seem to be a long-term plan to remove the aliens (in the future) as a direct result of the disturbance.

Recommendations:

It is recommended that the adult plants are removed and replanted (this might require the use of heavy machinery to remove the plant with the rock it is attached to). The tree with the rock can then be placed in the immediate vicinity of the road/turbine but out of harm's way in a similar sized hole. The plants can be watered once a week for a month until (and if) they recover. This was done for the Waainek Project when concerns were raised, and survival outcome of the plants at the Waainek Site need further investigating to determine if there is a way this method can be improved.

As a side note - historically, this area held a large population of the Critically *Endangered Encephalartos latifrons* and is still critical habitat for the species. We have previously uncovered unknown *E. latifrons* populations in the recent past and cannot discount the fact that individuals may still exist in the project area. If any individuals of the Albany Cycad are found, please inform the DEDEA Makhanda office at once.

References

Swart, C. (2008). *Life history, population dynamics and conservation status of Oldenburgia grandis (Asteraceae), an endemic of the Eastern Cape of South Africa.*
Makhanda/Grahamstown: Rhodes University MSc thesis.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'SWART' with a stylized flourish at the end.

CARIN SWART