Biota Environmental Sciences

11 October 2023

Department of Water and Environmental Regulation (DWER)
via email: info@dwer.wa.gov.au

Biota (n): The living creatures of an area; the flora and fauna together

Dear DWER,

Kerosene Lane Native Vegetation Clearing Permit Referral: Supporting Information

1.0 Appreciation of the Scope

The client (CPS Technology and Infrastructure) is planning a 'Mini pillar to Uni pillar upgrade' which involves removing an existing mini pillar on Lot 800 Kerosene Lane, Baldivis, adjacent to a road reserve (local road), installing a new power pole (Uni pillar) in its place, and running a cable through the road reserve underground to connect it to an existing power pole on the opposite side of the road reserve.

The client commissioned Western Power to produce a design plan and scope of work for the 'Mini pillar to Uni pillar upgrade' proposed works (Attachment 1). It is understood that Western power will be completing the construction and electrical connection for this project. The design plan indicates that native vegetation is required to be removed as part of the proposed works. It identifies the need for either a Clearing Permit from DWER, or a referral determination notice issued by DWER confirming a clearing permit is not required.

According to the design plan, the cable will run underground for 19 m from the Uni pillar on Lot 800, underneath the road to the opposite verge, then another 18.5 m underground via trenching to the existing power pole adjacent to the road reserve. The area of impact is approximately 2 m wide along this route. As such, clearing of native vegetation is proposed within a 0.0075 ha impact area (a 37.5 m x 2 m corridor) (henceforth referred to as the 'impact area'), which begins approximately 1m inside Lot 800 and ends at the existing power pole on the opposite side of the road in the road reserve.

Biota Environmental Sciences was commissioned to conduct a site visit of the impact area and assist with the preparation of any associated clearing application documentation, if required.

2.0 Methods and Limitations

A brief site visit to the area was conducted by a Senior Botanist from Biota in order to confirm the presence of native vegetation, and to take photographs of the area to support the 'Application for new permit or referral to clear native vegetation' (form NV-F01) from DWER. No formal biological survey was conducted, other than documenting the native vegetation within the impact area.

No description and mapping of vegetation types, vegetation condition, and fauna habitats was conducted. No Targeted searches for significant (Threatened and Priority) flora was conducted. No systematic fauna, vegetation or flora sampling was undertaken.

Photographs are attached as supporting information to this letter, but no biological survey document or map was produced to accompany the application. The map figure provided by Western Power is also included. The 10 Clearing Principles have not been addressed, as this did not form part of the scope.

3.0 Description of the Site

3.1 Vegetation of the Road Reserve

The impact area consists largely of a section of the road reserve along Kerosene Lane. The vegetation of the road reserve was largely in Degraded condition, with the structure severely impacted by disturbance. The ground layer was dominated by annual weeds (**Ehrharta calycina, *Euphorbia terracina, *Pelargonium capitatum, *Lupinus* sp., **Ursinia anthemoides, *Lolium* sp., **Bromus* sp., and **Oxalis pes-capre*). The remaining native species within the road reserve were largely isolated or consisting of small stands of trees (mainly *Corymbia calophylla* (Marri), with occasional *Eucalyptus gomphocephala* (Tuart), over isolated shrubs (e.g. *Banksia sessilis* (Parrot bush), *Hakea prostrata* (Harsh Hakea), and *Macrozamia riedlei* (Zamia)).

3.2 Vegetation of the Adjacent Properties

Although no properties were entered, it was observed that the vegetation in the property adjacent to the southern section of the impact area comprised a woodland of *Eucalyptus gomphocephala* (Tuart) over *Jacksonia sternbergiana* (Stinkwood) over weed species. This area was not accessed, and a determination of whether it qualifies as the Threatened Ecological Community 'Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain ecological community' was not made. No Tuart trees occur in the road reserve immediately around the impact area.

The vegetation in Lot 800 adjacent to the north of the impact area was observed to contain patches of *Corymbia calophylla* (Marri) trees over perennial weeds (**Eragrostis curvula*) and annual weeds (**Pelargonium capitatum, *Lupinus* sp., **Ursinia anthemoides, *Lolium* sp., **Bromus* sp., and **Oxalis pes-capre*), with *Banksia sessilis* (Parrot bush) and *Acacia* spp. that had colonised disturbed areas, in an area that appears to be an active mine site.

3.3 Vegetation of the Impact Area

The impact area consists of a section of the road reserve along Kerosene Lane, plus a small area approximately 1m inside Lot 800. The vegetation of the impact area was in degraded condition, and consisted of isolated native shrubs over weeds (**Eragrostis curvula*, **Ehrharta calycina, *Euphorbia terracina, *Pelargonium capitatum, *Lupinus* sp., **Ursinia anthemoides, *Lolium* sp., **Bromus* sp., and **Oxalis pes-capre*). The native species present, and number of each, within the impact area are documented in Section 3.3.1 below. There is a patch of *Corymbia calophylla* (Marri) trees to the west of the impact area which will not be impacted (see Section 4.0 on Mitigation measures).

Native species within the Impact Area

3.3.1 Flora

Photographs of the impact area are provided below, where:

- Fig 1a and Fig 1b shows the location where the mini pillar will be upgraded to the Uni Pillar on the northern side of the road within the edge of Lot 800 adjacent to the road reserve; and
- Fig 2a and Fig 2b shows the location of the cable trenching on the southern side of the road within the road reserve to meet up with the existing pillar.

The native plant species within the impact area that are likely to be cleared are as follows:

1. Between one and three *Banksia sessilis* (Parrot bush) shrubs around the pillar upgrade on the northern side of the road; and
2. Seven individuals within the southern road reserve consisting of;
    - four *Macrozamia riedlei* (Zamia) cycads,
    - one *Hibbertia hypericoides* (Yellow Buttercups) shrub,
    - one almost dead *Jacksonia sternbergiana* (Stinkwood) shrub.
    - one *Ptilotus polystachyus* (Prince of Wales Feather) herb.

None of these five species are of elevated conservation significance, and are not listed as Threatened under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) or the Western Australian *Biodiversity Conservation Act 2016*. However, *Banksia sessilis* (Parrot bush) is a proteaceous plant used by Black Cockatoos for foraging.

3.3.2 Fauna

The Quenda (*Isoodon fusciventer*) (DBCA Priority 4) was recorded via secondary evidence (distinct conical digging) within the impact area. Although the impact area is largely devoid of native vegetation (see above), the weeds within the impact area are providing dense cover, which is preferred by Quenda. The weed species observed were annuals and therefore temporary, dying off in the summer, and thus the area likely provides secondary foraging habitat only. The impact area does not represent core habitat for the species, with suitable habitat likely occurring in the native vegetation of the adjacent properties (see Section 3.2) which also has a dense lower stratum. The area is well within the distribution of the species, and while there have been few records in close proximity (only one previous record within 1 km), there are numerous records from the Baldivis locality (NatureMap database). The Quenda occurs patchily through the south-west of WA, from just north of Perth through to Esperance. It occurs in a variety of habitat types, including forest, woodland, shrubland and heathland, but prefers areas with dense undergrowth for shelter. It also favours sandy substrates to allow for digging, and often occurs in association with wetland areas (van Dyck and Strahan 2008, van Dyck et al. 2013).

Fig 1a: Location of mini pillar to uni pillar upgrade on the edge of Lot 800.

Fig 1b: **Location of mini pillar to uni pillar upgrade on the edge of Lot 800 adjacent to the road reserve.**
(Approximate boundary of indicative impact area marked in red).

Fig 2a: **Location of proposed trenching in the southern road reserve towards the proposed connection at existing power pole. (photo taken facing west along Kerosene Lane).**
(Approximate boundary of indicative impact area marked in red).

Fig 2b: Showing the same as Fig 2a but facing east along Kerosene Lane from existing power pole.
(Approximate boundary of indicative impact area marked in red).

4.0 Mitigation measures

The installation of the power pole upgrade and power cable will be constructed according to the scope and design plan of Western Power (Attachment 1). It is noted that the design for the cable laying utilises the southern road reserve rather than the northern road reserve, which means that impact to the patch of Marri trees to the west of the proposed pole installation location (Fig 3a and Fig 3b) is avoided.

Fig 3a: Patch of Marri trees to the west of the proposed pole installation location.

Fig 3b: Showing the same as Fig 3a from the opposite direction.

I hope the information contained herein is adequate for your needs. Please contact me if you require more information.

Yours sincerely,

Biota Environmental Sciences Pty Ltd

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Senior Botanist

Attachment 1: Western Power design drawing and Scope of Work

References

van Dyck, S., I. Gynther, and A. Baker (Eds.) (2013). *Field Companion to the Mammals of Australia*. New Holland Publishers, Sydney, Australia.

van Dyck, S., and R. Strahan (Eds.) (2008). *The Mammals of Australia*, 3rd edition. Reed New Holland, Sydney.

Attachment 1