



WILDFLOWER SOCIETY OF WESTERN AUSTRALIA (Inc)

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CPS 9882-1 Southern Link Road Stage 3 - City of Canning, WA, 6107, Western Australia

To Whom it May Concern,

The Wildflower Society of Western Australia is responding to the City of Canning's application for a Clearing Permit of 0.41 ha of native vegetation within the Cannington Swamp for the construction of the Southern Link Road, Stage 3. The society strongly opposes this clearing application and asks that it is rejected in its entirety due to the location of this project in a Threatened Ecological Community (TEC) and a Conservation Category Wetland. A minimum of seven out of ten principles are at variance, and therefore is evident based off the Environmental Protection Act 1986 (EP Act) that a project to this scope cannot proceed due to the environmental impacts.

For the listed reasons, this Clearing Permit is seen to be at variance with;

Principle (a) **Native vegetation should not be cleared if it comprises a high level of biological diversity**, and;

Principle (d) **Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community**

- 0.16 ha of the application area is considered to represent the EPBC-listed endangered Shrublands and Woodlands on Muchea Limestone of the Swan Coastal Plain Threatened Ecological Community (TEC) and its state equivalent, in Western Australia the community is considered to be critically endangered. It is also listed as a matter of national environmental significance under the Environment Protection and Biodiversity Conservation Act 1999 (Cwlth) (DPaW, 2015e; Department of the Environment, 2015c).
- There are nine different vegetation types which occur within the TEC and Conservation Category Wetlands (CCW), with 36 vascular flora species (excl. alien species) conveying the diversity of this area.
- There are only 16 occurrences of this TEC, including Cannington Swamp globally. The other 15 occurrences are situated North of Perth, making this TEC a geographical outlier.
- Two Priority listed flora species are recorded in the Survey Area (SA); *Aponogeton hexatpalus* (P4) and *Schoenus natans* (P4). These species are endemic, and clay pan specialist taxa of the Clay Pans of the Swan Coastal Plain ecological community (from Gibson et al., 2005, and Gibson 2011 pers. comm.)
- There are also four other Priority listed flora species which have been previously recorded at this site;
 - *Eremophila glabra subsp. chlorella* (Endangered)



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- *Ornduffia submersa* (priority 4) (previously known as *Villarsia submersa*)
- *Schoenus capillifolius* (priority 3) (endemic, clay pan specialist taxa)
- *Babingtonia urbana* (priority 3) (previously known as *Baekkea tenuifolia*)
- While not observed during the survey period, this does not exclude these species from the possibility of currently occurring or re-occurring.

As portions of the proposal area are categorised as ‘Good’ and ‘Very Good’ condition; it is therefore likely that this area is a high biological diversity area and should be at a high priority for protection against clearing. A section of vegetation has been described as ‘Degraded’ where it is also stated that this is as a result of fire, and is only ‘temporarily degraded’, and therefore should not be considered in ‘Degraded’ condition.

Due to the following reasons, the Cannington Claypans should be considered to have additional conservation value;

- Patches that occur in those areas in which the ecological community has been most heavily cleared and degraded, that are at the natural edge of its range, and components of the ecological community that are the least protected in conservation reserves; and/or
- Patches (clay pan occurrences) that contain listed threatened species (state or national);
- High biodiversity (native flora and to a lesser extent fauna)

The Clearing Permit is seen to be at variance with;

Principle (e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

The Guildford Complex has a mosaic of vegetation through the differing dry and wet areas. The pre-European estimate of vegetation was 90,513.13 ha with 305.22 ha located in the City of Canning. As of 2018, only 6,607.91 ha or 5.09% remained within Western Australia, and only 4.66 ha or 1.53% remains in the City of Canning. 1.53% is a devastating percentage of remaining vegetation of the Guildford Complex in the City of Canning, and further clearance should not be permitted as there is nothing that could justify the current percentage, let alone anything lower. This is significantly less than the 30% or more of the pre-clearing extent of each ecological community that is necessary if Australia’s biological diversity is to be protected.

The pre-European extent of wetland occupancy, both seasonal and permanent, across the Swan Coastal Plain was 25%. With seasonal wetlands accounting for 88% of the total area. It has been estimated that over 70% of these wetlands have been drained, in-filled, or otherwise altered. It is estimated that over 90% of the original extent of the clay pan ecological community has been cleared (Gibson et al., 2005).

This vegetation has been fragmented from other vegetation with no continuous linkages or corridors. However, Cannington Claypan still aids travelling fauna and flora (dispersal) through ‘stepping stone’ actions. It is vital habitat within the local area, and therefore increasing its value for flora and fauna exponentially.



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The surrounding land has previously been cleared, retaining next to no bushland as seen from satellite imagery. The surrounding land uses as follows;

- North: Carousel Shopping Centre and carparking facilities.
- East: vacant land and medium density residential development alongside Wilson Street and Bent Street and a disused telecommunications tower.
- South: Greyhounds WA Cannington Racetrack.
- West: Western Power Cannington Terminal Substation facility.

The Clearing Permit is at variance with; Principle (b) **Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.**

- Two species of native bees; *Leioproctus (Andrenopsis) douglasiellus (Colletidae)*, and *Neopasiphae simplicior (Colletidae)*, have previously been found at this site and known to occur within the area respectively. Cannington is known to be the only habitat which these two species occur, placing further great significance on this area. While not observed in the survey period, it was seen likely due to the accumulative decimation of surrounding native vegetation which is still occurring in the area. The species absence is not reason to continue with this proposal but a reason to reflect on the causes for their absence. This site has not lost the capability to act as a habitat for these species again in the future, however proceeding with this proposal will essentially ensure that the species will not return, and condemn the species to local extinction, and therefore due to the endemism; global extinction.
 - The two endemic native bee species are listed as:
 - critically endangered and threatened with extinction under the EPBC Act (DAWE 2020a; 2020b, both accessed July 2020; DSEWPaC 2013; DEWHA 2008; TSSC 2009; 2013)
 - endangered under the BC Act, as listed on the DBCA's Threatened and Priority Fauna List (DBCAs 2019)
 - endangered (as per IUCN Redlist Criteria) by the Western Australian Government (TSSC 2009).
- Due to the extremely cleared surroundings, the Cannington Claypans would likely be remnant habitat for these native bee species, particularly *Leioproctus douglasiellus*, and should not be discounted, as 'not present at the time of the survey' is not a definitive conclusion and holds too much weight relevant to the status of this species.

The Clearing Permit is seen to be at variance with; Principle (g) **Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.**

Clearing any native vegetation will cause land degradation through altering soil composition; erosion; salinity increase; rising water table. The proposed area will be more susceptible to erosion and waterlogging due to the removal of native vegetation. The average rainfall was 22% above the 1961–1990 average, and 2022 had the second-wettest spring on record (BOM, 2023). Although climate change effects predict decreased rainfall per year, Western Australia are currently experiencing extreme and severe weather events, with rainfall coming in at much higher intensities than ever before, increasing the likelihood of flooding. Displaying the importance of natural drainage and



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runoffs such as the Conservation Category Wetland in Cannington. Further reducing the little remaining vegetation left in the Cannington area to construct roads, will contribute to the rising temperatures and the effects will be felt more drastically, as vegetation acts as an urban heat sink. The environmental assessment has addressed potential issues arising regarding land degradation and mitigation to avoid these impacts through pipes and overflow redirection, it has not related this to the changing environment and severe weather events which Western Australia is experiencing, and if this will hold the capacity for climate change effects.

Inundation from rising saline groundwater is generally not evident in the clay pans. However, in the medium term, it may prove to be a serious threat to the ecological community. Due to the widespread clearance of native perennial vegetation and its replacement with annual agricultural regimes and urbanisation, rising groundwater in the surrounding region may flow overland into clay-based wetlands (Gibson et al., 2005). Salinity risk mapping indicates that almost all the known clay pans occur on susceptible land (NLWRA, 2001). Evidence suggests that during heavy rainfall events unnaturally large volumes of surface water (a result of clearing of native vegetation) flow into the area of the clay pan. This threatens the clay pan ecological community through the introduction of nutrients and altered water regimes. Evidence suggests that if hydrological function is intact, the clay soils (which result in a period of immersion followed by a hard, relatively impermeable soil when dry) provide ecological community resilience in maintaining vegetation condition and biodiversity even when reduced to small areas (Government of Western Australia, 2000).

Surface water flow into the wetlands from cleared land also brings topsoil and weed seed into the vegetation around the clay pan and is a significant threat to the ecological community. Therefore putting the vegetation quality and native species survival in the adjacent wetlands to the proposal at great risk.

The Clearing Permit is seen to be at variance with;

Principle (f) **Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland; and**

Principle (h) **Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.**

While the Cannington Claypans are isolated, the City of Canning's Local Biodiversity Strategy (page 42) recognises this area as part of an ecological linkage between the Canning River Regional Park, to the southwest, and Queens Park Regional Open Space, to the northeast. In combination with other steppingstones, the TEC helps to create an ecological linkage between the two larger natural areas through an extensively cleared landscape. It is not a continuous linkage but provides essential refuge for fauna when travelling between habitats.

The Conservation Category Wetland (6.71 ha) which is considered environmentally significant and is adjacent to and directly involved with the application area. Approximately 0.44 ha of the wetland is in the application area.

Wetlands play a critical role in the environment;



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- they supply water,
- improve water quality;
- support primary industries;
- provide flood and storm mitigation;
- act as a carbon sink;
- provide habitat for biodiversity and threatened species, some of which are endemic to a specific environment;
- They are often places of significance for Indigenous people.

Project Justification

- The society acknowledges the rationale for construction of the Southern Link Road is that it will provide traffic with access to Albany Highway. However, we do not see the project is justified as there is already an alternative to Albany Highway in the form of Sevenoaks Street.
- Sevenoaks Street runs parallel to Albany Highway and has been undergoing work to increase its capacity by widening it from one lane to two lanes in each direction. From Sevenoaks Street there are several other roads that can be used to access Albany Highway.
- Access to two of these other roads, Wharf Street, Cannington, and William Street, Beckenham, is expected to become more attractive in the future with the introduction of the WA Government's Metronet. It is planned to alter the road layout and rail crossings so that traffic will no longer be impacted by trains. When this occurs, these routes to Albany Highway will become viable alternatives to the currently congested Southern Link Road.
- With the addition of Metronet, road congestion will decrease on the Southern Link Road by offering an improved and alternative method of transport to cars and roads, as well as train lines and roads no longer intersecting, therefore no wait times. Upgraded roads to accommodate for increased vehicle usage is a temporary solution which can take years to complete. Alternatives such as Metronet provides a more sustainable solution while decreasing carbon footprint, compared to road expansion projects which only encourage and increase carbon emissions.

Summary

The Wildflower Society of Western Australia urges that this Clearing Permit be rejected, due to the high level of importance of this area at a local and regional scale. The native vegetation clearing which has occurred in the City of Canning is extensive, leaving this proposed area isolated and fragmented, but still aids the travel of fauna as a 'steppingstone' action rather than a continuous corridor. The TEC has degradation caused by human disturbances, surrounding construction and vegetation clearing. We believe the importance of these wetlands and TEC should be valued and protected, rather than condemning it due to accumulative human impacts. This project has little justification due to the surrounding road works and public transport upgrade. TECs, Conservation Category Wetlands and all their inhabitants including priority and endangered flora and fauna are under imminent threat for no justifiable reason, and the society implores the Department to carefully consider the detriment of this project compared to the very temporary benefits. With just over 1% of the Guildford Complex remaining locally in the City of Canning, which is listed as a Threatened



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Ecological Community in efforts to advance some level of protection from clearing, what level of protection will be actively given?



<http://www.wildflowersocietywa.org.au/>

Reference

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