

Government of **Western Australia** Office of the **Appeals Convenor** Environmental Protection Act 1986

## Appeals Convenor's Report to the Minister for Environment

Appeal objecting to grant of Clearing Permit CPS 9339/1 Karnup Road and Bishop Road road reserves, Mundijong



Appellant	Urban Bushland Council WA Inc	
Applicant	Shire of Serpentine Jarrahdale	
Authority	thority Department of Water and Environmental Regulation (DWEF	
Appeal No.	018 of 2022	
Date	November 2022	

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Cover image: Bishop Road Mundijong, provided by Shire of Serpentine Jarrahdale

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#### Acknowledgement of Country

The Office of the Appeals Convenor acknowledges the traditional custodians throughout Western Australia and their continuing connection to the land, waters and community.

We pay our respects to all members of the Aboriginal communities and their cultures, and to Elders past, present and emerging.

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### **1** Executive summary

### 1.1 Decision under appeal

This report relates to an appeal against the decision of the Department of Water and Environmental Regulation (DWER) to grant Clearing Permit CPS 9339/1 (the permit) under section 51E (5) of the *Environmental Protection Act 1986* (EP Act). The permit was granted on 22 May 2022 and authorises the Shire of Serpentine Jarrahdale (the applicant) to clear up to 0.188 hectares (ha) of native vegetation within Karnup Road and Bishop Road Reserves, Mundijong, for the purpose of road construction and upgrades (Figure 1).

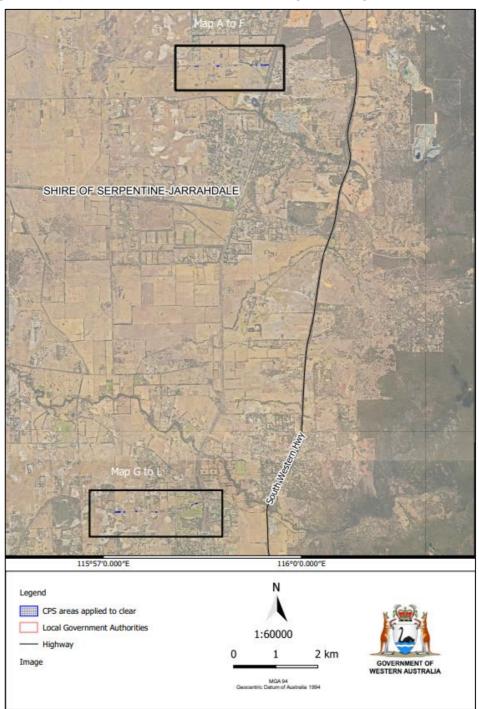


Figure 1 Location of clearing authorised by CPS 9339/1 in blue within black boxes

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### 1.2 Grounds of appeal and appellant concerns

In June 2022, the Urban Bushland Council WA (the appellant) lodged an appeal against the decision to grant the permit.

In summary, the appellant raised general concerns about the significance and environmental values of the vegetation to be cleared, including the provision of fauna habitat and ecological linkages. The appellant also submitted that the trees held significance to Aboriginal people and contributed to reducing heat island effect and carbon storage. The appellant requested that the trees along both roads be retained.

### 1.3 Key issues and conclusions

The threshold question for the Minister on appeal is whether, based on the concerns raised by the appellant, this permit should be granted.

To answer this question, it is necessary to consider the grounds of the appeal in the context of the relevant considerations set out in section 510 of the EP Act, including the clearing principles, planning instruments, and other relevant matters.

Our consideration of these issues is summarised below. Section 2 provides further reasons for our conclusions, and supporting information is provided in Section 3.

### What are the environmental values of the vegetation proposed to be cleared?

The applicant advised that the clearing will involve the removal of 30 native trees, 28 of which are identified as *Corymbia calophylla* (marri). Marri is preferred foraging habitat for three species of black cockatoos<sup>1</sup> listed under State and Federal legislation.

On this basis, the clearing is inconsistent with the protection of habitat for conservation significant fauna species and is "at variance" to clearing principle (b).

While DWER considered that the small, fragmented nature of the clearing, along with the abundant foraging resources nearby means that the clearing will not have a significant residual impact on habitat for black cockatoos, we consider, consistent with the approved conservation advice for all three species of black cockatoo, that all remaining habitat is critical for the survival of the species.

## Is the clearing consistent with planning instruments and other relevant matters?

The clearing will occur entirely within a road reserve, and therefore the purpose of the clearing (road upgrades) is consistent with the purpose of the reserve.

The Shire of Serpentine Jarrahdale's *Local Planning Strategy*<sup>2</sup> (Planning Strategy) recognises the importance of natural corridors along roads in the protection of biodiversity. This is a relevant consideration in the assessment of a clearing permit.

DWER's *Guide to the assessment of applications to clear native vegetation*<sup>3</sup> (Guide to Assessment) prioritises clearing for public benefit over private gain. The applicant has established the road safety concerns along the two roads based on crash data. An

<sup>&</sup>lt;sup>1</sup> Carnaby's cockatoo (*Calyptorhynchus latirostris*, Endangered), Baudin's cockatoo (*Calyptorhynchus baudinii*, Endangered/Critically Endangered), and forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*, Vulnerable)

<sup>&</sup>lt;sup>2</sup> Shire of Serpentine Jarrahdale, *Local Planning Strategy*, March 2022.

<sup>&</sup>lt;sup>3</sup> Department of Environment Regulation (2014a) A guide to the assessment of applications to clear native vegetation under Part V Division 2 of the Environmental Protection Act 1986. December 2014.

application for Black Spot funding has been successful, based on the number of crashes at these sites. The clearing will remove hazardous trees that are too close to the road and allow road upgrades including sealing of shoulders. We therefore accept the advice that the clearing will have a public benefit through improved road safety.

The applicant has also advised that it has reduced the required clearing as much as possible, by firstly identifying isolated trees that are growing within Main Roads WA's recommended 'clear zones', and then prioritising pruning where practical over clearing. In this way, the applicant advised that its clearing requirement has reduced from 47 trees to 30 trees. We therefore consider that the clearing is necessary, and has been avoided as far as practical while still achieving an improved safety outcome.

### Should the permit have been granted? And if so, should an offset be applied?

Having reached the conclusion that the clearing is necessary, the applicant has adopted measures to avoid clearing as far as practical, and the clearing will have a public benefit through road safety improvements, we find that the decision to grant of the clearing permit is justified.

Notwithstanding, the clearing is "at variance" to one of the biodiversity related clearing principles and therefore, consistent with DWER policy, an offset should be considered if a significant residual impact remains.

The recently published guidance from the Commonwealth government on the three black cockatoo species<sup>4</sup> highlights the ongoing loss of habitat across the Swan Coastal Plain, and states that all remaining habitat is critical to the survival of the species.

By the above, we consider that the residual impact to black cockatoo foraging habitat from the clearing of 28 marri trees should be counterbalanced. We note that during the investigation the applicant proposed to revegetate along Bishop Road with foraging habitat species, with the objective of establishing 68 marri trees. Consistent with the WA offsets metric and guidance, we consider this can offset 100 per cent of the impact to black cockatoo foraging habitat. By planting foraging species next to a road we consider that the ecological linkage can be improved, and that this outcome is consistent with the Shire's Planning Strategy<sup>5</sup> which promotes the identification and retention of natural corridors along roads.

<sup>&</sup>lt;sup>4</sup> Commonwealth of Australia, Referral guideline for 3 WA threatened black cockatoo species Carnaby's Cockatoo (Zanda latirostris), Baudin's Cockatoo (Zanda baudinii) and the Forest Red-tailed Black-cockatoo (Calyptorhynchus banksii naso), 2022

<sup>&</sup>lt;sup>5</sup> Shire of Serpentine-Jarrahdale, Local Planning Strategy, March 2022

### 1.4 Recommendation to the Minister

We find that DWER's decision to grant the permit was justified, however there is a significant residual impact in relation to black cockatoo foraging habitat that requires counterbalancing, and recommend that the appeal be allowed to the extent that an offset is required.

On this basis we recommend that the permit be amended to require the following:

- the permit holder to undertake tree planting to achieve at least 68 established *Corymbia calophylla* (marri) trees to provide habitat for black cockatoos
- extend the duration of the permit to achieve revegetation requirements set out in the recommended condition.

Consistent with the Offsets Guidelines, the offset details are recorded in the publicly available WA Environmental Offsets Register.

The final wording of these changes being at DWER's discretion in giving effect to the Minister's decision under section 110 of the EP Act.

### 2 Reasons for recommendation

It is DWER's role to assess the proposed clearing including the identification of environmental values and the potential significance of impacts from clearing, and consider the planning instruments and any other matters deemed relevant to the assessment.

Based on the available information, we consider that the clearing is inconsistent with the protection of habitat necessary for the maintenance of threatened fauna, as set out in clearing principle (b). Despite the environmental values identified, the applicant has provided evidence that the proposed clearing will have an improved safety outcome, and DWER guidance supports clearing for public benefit over private gain. On this basis, the decision to grant the permit is justified.

Notwithstanding, a finding of "at variance" to one of the biodiversity clearing principles indicates that an offset could be required.

While we note DWER's advice that in its view, the clearing is not likely to have a significant residual impact on foraging habitat for black cockatoo species, we consider that the residual impact is substantial enough to require counterbalancing.

The reasons for this conclusion are set out in detail below.

### 2.1 What are the environmental values of the vegetation to be cleared?

The key point raised by the appellant is the need to protect existing native trees in urban areas. Specifically, the appellant contends that each tree provides habitat for fauna and collectively provides 'stepping stones' for fauna movement. The appellant submits that marri trees in particular provide important foraging for black cockatoos and should be retained.

The primary issue identified through DWER's assessment of the proposed clearing was that the vegetation within the application area provides foraging habitat for three threatened black cockatoo species; and DWER concluded the proposed clearing "may be at variance" to clearing principle (b). In response to the appeal, DWER revised its finding to "at variance". DWER's overall conclusion, however, was that the loss of foraging habitat is not significant due to the limited extent of each portion of clearing will not result in a significant residual impact to fauna habitat. DWER also found that the clearing is consistent with the other clearing principles.

In general, we agree that the nature of the proposed clearing, including the limited extent, the targeted individual trees, and absence of an intact native understorey layer, suggest that the level of impact is somewhat reduced. However, consistent with the recently published Commonwealth *Referral guideline for 3 WA threatened black cockatoo species* <sup>6</sup> we consider that any native vegetation that is used for foraging by black cockatoos at any time is important for recovery of the species.

These and other environmental values of the application area are discussed below, following a description of the proposed clearing.

<sup>&</sup>lt;sup>6</sup> <u>https://www.dcceew.gov.au/sites/default/files/documents/referral-guideline-3-wa-threatened-black-cockatoo-species-2022.pdf</u>

### Local context and description of clearing

The permit authorises clearing in two separate locations within the Shire of Serpentine Jarrahdale. DWER did not consider that the clearing is occurring in an extensively cleared area. The Decision Report states that the local area (10-kilometre (km) radius) retains approximately 33.40 per cent of its pre-European native vegetation extent, and describes the local area as "scattered patches of native vegetation connected by road reserves, rail reserves, and riparian zones".<sup>7</sup>

We note that a significant proportion of the vegetation within the local area exists on the Darling Scarp in the Jarrah Forest bioregion, and within nearby conservation reserves. Focusing on the Swan Coastal Plain bioregion (within which the application area is located) the remaining extent of native vegetation cover is calculated as about 11.4 per cent. Therefore the proposed clearing is occurring within the largely cleared context of the Swan Coastal Plain.

Jarrahdale State Forest is 3.6 km east of Bishop Road, and Serpentine National Park is 2.9 km from Karnup Road (both in the Jarrah Forest bioregion). These conservation areas contain approximately 10,000 ha<sup>8</sup> and 4,362 ha<sup>9</sup> of bushland, respectively.

In its Decision Report, DWER describes the proposed clearing as:

The vegetation proposed to be cleared includes sections of Bishop Road and Karnup Road, 10.4 kilometres to the south. Karnup road comprises 11 individual patches covering an area of 0.08 hectares. Bishop road comprises 13 individual patches covering an area of 0.108 hectares.

The applicant commissioned a targeted flora survey on request of DWER to identify any threatened or priority flora in the application area.<sup>10</sup> The flora survey states that the vegetation within the application area is largely planted trees and regrowth from previous clearing of remnant vegetation within the road reserves. The survey found the application areas are subject to ground disturbance and weed invasion with most of the understorey dominated by non-native shrubs, herbs, and grasses. In several sections, there is limited to no understorey (for example, Figure 2 below). DWER considered, based on photographs provided by the applicant, that the condition of the vegetation is 'degraded' to 'completely degraded'. DWER's Decision Report states that the trees within the proposed clearing footprint are regrowth and planted vegetation of the following species:

- Corymbia calophylla (marri)
- Nuytsia floribunda (WA Christmas tree)
- Casuarina obesa (swamp sheoak)
- Melaleuca rhaphiophylla (swamp paperbark)
- Eucalyptus wandoo (wandoo)
- Eucalyptus marginata (jarrah) woodland.

By the applicant's advice, the proposed clearing will involve the removal of 30 individual trees which have been identified as too close to the road or within the areas required for road upgrades. During the investigation the applicant confirmed that the vegetation to be cleared on Bishop Road includes marri and swamp paperbark, and on Karnup Road is swamp sheoak and introduced species. The applicant advised that no jarrah will be removed in this

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<sup>&</sup>lt;sup>7</sup> DWER, Decision Report CPS 9339/1, 22 May 2022

<sup>&</sup>lt;sup>8</sup> https://www.bushlandperth.org.au/wp-content/uploads/2017/11/Jarrahdale-State-Forest-JF6-site-description.pdf

<sup>&</sup>lt;sup>9</sup> <u>https://www.bushlandperth.org.au/wp-content/uploads/2018/01/SerpentineNP\_MgmtPlan.pdf</u>

<sup>&</sup>lt;sup>10</sup> Emerge, Targeted Flora Survey – Part Karnup and Bishop Road Reserves, 30 November 2021

project. <sup>11</sup> The process of identifying clearing requirements, and the applicant's avoidance and mitigation measures including selective pruning are discussed in section 2.2 of this report.



### Figure 2 Understorey at one portion of the Bishop Road application area is very limited <sup>12</sup>

### The vegetation provides habitat for conservation significant fauna

The appellant raised broad concerns about the value of all trees, including those within the application area, in providing habitat for a range of fauna species. The appellant quoted research by Perth NRM about the value of a single Jarrah tree:

A study of one old jarrah tree in Kings Park revealed a level of visitation that is almost incredible. **This one mature jarrah tree supports 83 species** of native animals, birds, reptiles and insects [emphasis theirs].<sup>13</sup>

Specifically, the appellant contends that marri is an important foraging tree for black cockatoos. The appellant submitted that the declining populations of the three black cockatoo species means they need all the food that is available.

While DWER's overall conclusion was that the proposed clearing does not result in a significant residual impact to fauna habitat, it agreed that some of the trees proposed to be cleared provide habitat for fauna. In response to the appeal, DWER found that the proposed clearing is "at variance" to clearing principle (b), which provides that 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.

### DWER's focus on conservation significant fauna is consistent with guidance

As noted above, the appellant raised concerns about the broad range of animal and insects that may utilise the trees in the application area. DWER's assessment of clearing impacts focussed on the impact to conservation significant fauna because these species are at the greatest threat of being impacted by loss of habitat.<sup>14</sup>

<sup>&</sup>lt;sup>11</sup> Shire of Serpentine Jarrahdale, pers com, 7 November 2022 and 16 November 2022.

<sup>&</sup>lt;sup>12</sup> Shire of Serpentine Jarrahdale, provided as part of its application

<sup>&</sup>lt;sup>13</sup> Urban Bushland Council WA, Appeal in objection to CPS 9339/1, 13 June 2022, page 1

<sup>&</sup>lt;sup>14</sup> DWER, Appeal Report CPS 9339/1, 15 July 2022, page 3

DWER's focus on conservation significant species is in accordance with its Guide to Assessment. This Guide includes examples of situations likely to be at variance to clearing principle (b):

- clearing of native vegetation that is habitat for **specially protected or threatened fauna**
- clearing of native vegetation that is habitat for meta-populations of fauna
- clearing of native vegetation that is necessary for the maintenance of habitat of priority, migratory, specially protected, threatened fauna or meta-populations of fauna.

### Black cockatoos are recorded in the local area

Carnaby's cockatoo and Baudin's cockatoo are listed as Endangered, and the forest redtailed black cockatoo is listed as Vulnerable, under both the *Biodiversity Conservation Act* 2016 and the *Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act).

In November 2021, Baudin's cockatoo was listed as "Critically Endangered" on the IUCN Red List.<sup>15</sup> The IUCN Red List categories and criteria provide a consistent approach for classifying and listing species at high risk of extinction. It represents current peer-reviewed literature and therefore is a relevant consideration in determining the conservation significance of environmental values (in this case black cockatoos).

All three species of black cockatoos have been recorded in the local area, with the nearest being a record for Carnaby's cockatoo approximately 0.036 km from the application area. In addition, Baudin's cockatoo and forest red-tailed black cockatoo have been recorded about 0.07 km and 0.35 km from the application area, respectively.<sup>16</sup>

### The vegetation provides black cockatoo foraging habitat

By the Decision Report, DWER identified that the application area includes tree species which provide foraging habitat for black cockatoos, and concluded that the proposed clearing, given its limited extent, is unlikely to significantly impact on this foraging habitat.<sup>17</sup> On this basis, DWER's assessment found the clearing "may be at variance" to principle (b). DWER explained its reasoning for this conclusion as follows:

Noting the mobile nature of black cockatoo species, the foraging distances of the three black cockatoo species from known roosts and breeding areas, and amount of remnant native vegetation in the local area, it is unlikely that the black cockatoos are heavily reliant upon the individual trees (0.188 ha spread over a large distance) within the proposed clearing area for foraging. The availability of the foraging resources within the local area will not be significantly altered by the clearing activities under this permit.<sup>18</sup>

In response to the appeal, DWER remained of the view that the clearing would not likely result in a significant impact to the black cockatoo foraging value at a local or regional scale:

Although a small area of black cockatoo foraging habitat would be removed, the remaining remnant vegetation within the local area (a 10-km radius of the clearing area) is likely to provide abundant foraging resources, specifically noting that the Jarrahdale State Forest and the Serpentine National Park are within a five-km radius of the clearing area.

<sup>&</sup>lt;sup>15</sup> IUCN Red List (2022) The IUCN Red List of threatened species, <u>https://www.iucnredlist.org/species/22684727/210840935</u>

<sup>&</sup>lt;sup>16</sup> DWER, Decision Report CPS 9339/1, 22 May 2022, page 16

<sup>&</sup>lt;sup>17</sup> DWER, Decision Report CPS 9339/1, 22 May 2022, page 16

<sup>&</sup>lt;sup>18</sup> DWER, Appeal Report CPS 9339/1, 15 July 2022, page 4

The State Forest and National Park will likely comprise of higher quality denser black cockatoo foraging habitat in comparison to the isolated foraging value available within the Application Area. The small, fragmented nature of the clearing will not result in a large patch of critical foraging resource being removed from one location.<sup>19</sup>

However, DWER also advised that based on new information since its decision, namely the recently published Commonwealth *Referral guideline for 3 WA threatened black cockatoo species*, it now considered the proposed clearing to be "at variance" to clearing principle (b). This is based on the potential foraging value of the vegetation, and the guidance that any native vegetation that is used for foraging by black cockatoos at any time is important for its recovery.<sup>20</sup>

We note that the referral guideline also provides detail on the quality of foraging habitat and a methodology for an objective assessment of its value. Based on this methodology, the application area scores well for many of the attributes of high-quality foraging habitat.

The Recovery Plan for Baudin's cockatoo and forest red-tailed black cockatoo states:

The habitat critical to survival and important populations of Forest Black Cockatoos comprises all Marri *Corymbia calophylla*, Karri *Eucalyptus diversicolour* and Jarrah *Eucalyptus marginata* forests, woodlands and remnants in the south-west of Western Australia receiving more than 600 mm of annual average rainfall.<sup>21</sup>

Similarly, the Recovery Plan for Carnaby's cockatoo states:

Success in breeding is dependent on the quality and proximity of feeding habitat within 12 km of nesting sites. Along with the trees that provide nest hollows, the protection, management and increase of this feeding habitat that supports the breeding of Carnaby's cockatoo is a critical requirement for the conservation of the species.<sup>22</sup>

During the investigation the applicant confirmed that following avoidance and mitigation measures (discussed further in section 2.2), the proposed clearing will involve the removal of 28 marri trees, largely located on Bishop Road.

Based on the following points, we consider that the clearing forms part of a habitat for specially protected or threatened fauna, and is therefore "at variance" to clearing principle (b):

- the potential for black cockatoos to utilise trees in the application area for foraging due to the proximity of recorded roosts and breeding hollows,
- the vegetation types (marri) within the clearing footprint being consistent with the 'critical habitat' types for Baudin's cockatoo, Carnaby's cockatoo and forest red-tailed black cockatoo according to the recovery plans for these species,
- the clearing representing high quality foraging, despite its small size,
- the key focus of the referral guideline for black cockatoos on the Swan Coastal Plain being "ongoing viability of foraging resources for black cockatoos".

<sup>&</sup>lt;sup>19</sup> DWER, Appeal Report CPS 9339/1, 15 July 2022, page 4

<sup>&</sup>lt;sup>20</sup> DWER, Appeal Report CPS 9339/1, 15 July 2022, page 4

<sup>&</sup>lt;sup>21</sup> Error! Hyperlink reference not

valid.https://www.dcceew.gov.au/environment/biodiversity/threatened/recovery-plans/forest-black-cockatoo-and-forest-red-tailed-black-cockatoo-2008, page 13.

<sup>&</sup>lt;sup>22</sup> <u>https://www.dcceew.gov.au/environment/biodiversity/threatened/recovery-plans/calyptorhynchus-latirostris-recovery-plan, page 11.</u>

### The vegetation is unlikely to provide black cockatoo roosting and breeding

Forty-two black cockatoo roosts have been recorded within the local area, with the closest 0.34 km from the application area. Despite the proximity, DWER advised that it considered that the application area is unlikely to represent roosting habitat, based on the preference of black cockatoos to utilise the tallest trees in the landscape for roosting. DWER advised that vegetation proposed to be cleared does not include the tallest trees in the local area and therefore "roosting habitat is unlikely to be impacted [by the clearing]".<sup>23</sup>

Regarding breeding habitat, DWER advised that eleven black cockatoo breeding sites are recorded in the local area (mostly confined to the woodlands of the Darling scarp), with the nearest breeding site at 1.8 km east of the application area. DWER considered, based on aerial imagery and photographs supplied by the applicant, that the application area is unlikely to include trees with a suitable nest hollow, or of a suitable diameter at breast height to develop a nest hollow. It therefore concluded that the proposed clearing is not considered to impact black cockatoo breeding habitat.

The applicant also advised:

With regards to the vegetation to be removed in the Karnup project, the majority of the trees to be removed are saplings, with only a few medium to larger sized trees, with no breeding hollows present in these trees. Also this area overall has more vegetation across the landscape, so the impact of the removal of these trees would be much less on the movement of fauna and coverage in general.<sup>24</sup>

### The clearing is unlikely to significantly impact habitat of other conservation significant species

DWER also advised that other fauna species, including arboreal and ground dwelling conservation significant fauna may range through the application area. The following fauna are recorded in the local area:

- Phascogale tapoatafa subsp. wambenger (south-western brush-tailed phascogale)
- Dasyurus geoffroii (Chuditch)
- Pseudocheirus occidentalis (western ringtail possum)
- Falsistrellus mackenziei (western false pipistrelle, western falsistrelle)
- Isoodon fusciventer (quenda)
- Setonix brachyurus (quokka)
- Ctenotus delli (Dell's skink)
- Lerista lineata (Perth slider, lined skink)
- Acanthophis antarcticus (southern death adder)

DWER considered that due to the limited number of trees, their trunk size, and proximity to the road, the application area is unlikely to contain breeding habitat for arboreal species<sup>25</sup>.

Furthermore, DWER concluded that given the limited extent of the proposed clearing, the degraded condition of the vegetation, and the availability of more extensive, higher quality vegetation associated with the Darling Scarp to the east, the proposed clearing is unlikely to significantly impact available habitat for the ground dwelling species.<sup>26</sup>

In this regard, we note that the application area is largely devoid of understorey and the clearing is limited to approximately 30 individual trees. Flora surveys indicate that where

<sup>&</sup>lt;sup>23</sup> DWER, Decision Report CPS 9339/1, 22 May 2022, page 16

<sup>&</sup>lt;sup>24</sup> Shire of Serpentine-Jarrahdale, Response to Appeal against CPS 9339/1

<sup>&</sup>lt;sup>25</sup> DWER, Decision Report CPS 9339/1, 22 May 2022, page 17

<sup>&</sup>lt;sup>26</sup> DWER, Decision Report CPS 9339/1, 22 May 2022, page 17

understorey exists it is largely dominated by non-native shrubs, herbs and grasses<sup>27</sup>. The clearing will not remove the vegetation across the entire width of the road reserve nor all the remaining scattered native understorey (where it exists). Given this, we consider that some degree of connectivity along the roadsides will be retained.

We also note that the clearing does not include peppermint trees, the critical habitat for western ringtail possum (listed as critically endangered)<sup>28</sup> nor is it suitable habitat for phascogale and chuditch. While the application area may provide suitable habitat for quenda, it is not its preferred habitat, similarly, the vegetation is not the preferred habitat for the other ground dwelling species above, given it is not associated with a watercourse or dense swampy forest vegetation which is the preferred habitat of quenda<sup>29</sup> and quokka<sup>30</sup>; scrub-dominated understorey of jarrah forests, the preferred habitat of Dell's skink; coastal – preferred by Perth slider <sup>31</sup>; or containing deep leaf litter (southern death adder)<sup>32</sup>.

Notwithstanding, DWER advised that due to the risk of these species occasionally traversing through the application area as they forage, it placed a condition on the clearing permit to undertake slow, directional clearing towards adjacent native vegetation to mitigate the risk of potential mortality of any fauna species that may be utilising the application area at the time of clearing (condition 3). DWER advised that the implementation of this condition will assist in mitigating impacts to all fauna, not just conservation significant species.

### The vegetation is unlikely to represent a Threatened Ecological Community

Approximately 0.002 ha of the Karnup Road application area is mapped as the 'Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region' ecological community, listed as a 'Priority 3' priority ecological community (PEC) by the Department of Biodiversity, Conservation and Attractions and as an 'Endangered' threatened ecological community (TEC) under the EPBC Act.

Based on the flora survey and photographs provided by the applicant, DWER considered that while part of the application area is mapped as this PEC/TEC, the vegetation proposed to be cleared does not include some of the key species representative of it. On this basis, DWER concluded that the application area does not contain vegetation representative of the PEC/TEC and is 'not at variance' to clearing principles (a) and (d) in this regard.

The EPBC Act Approved Conservation Advice for this TEC states that for vegetation to be considered representative, it must include:

- at least one of the following key species Banksia attenuata (candlestick banksia), Banksia menziesii (firewood banksia), Banksia prionotes (acorn banksia) and/or Banksia ilicifolia (holly-leaved banksia)
- an emergent tree layer, often including marri, jarrah or *Eucalyptus gomphocephala* (tuart), and other medium trees including the WA Christmas tree, western sheoak
- an understorey which is often highly species rich. <sup>33</sup>

The flora survey found that the vegetation within the application area is comprised of mainly marri trees over an understorey largely devoid of native species, and the applicant has

<sup>&</sup>lt;sup>27</sup> Emerge, *Targeted Flora Survey – Part Karnup and Bishop Road Reserves*, 30 November 2021

<sup>&</sup>lt;sup>28</sup> <u>http://www.environment.gov.au/biodiversity/threatened/species/pubs/25911-conservation-advice-11052018.pdf</u>

<sup>&</sup>lt;sup>29</sup> https://www.dpaw.wa.gov.au/images/documents/conservation-management/pests-diseases/quenda\_2012.pdf

<sup>&</sup>lt;sup>30</sup> https://www.dpaw.wa.gov.au/images/documents/plantsanimals/animals/animal\_profiles/quokka\_fauna\_profile.pdf <sup>31</sup> http://www.environment.gov.au/biodiversity/threatened/species/pubs/1346-listing-advice-01092020.pdf

 <sup>&</sup>lt;sup>32</sup> https://apps.des.qld.gov.au/species-search/details/?id=511

<sup>&</sup>lt;sup>33</sup> Threatened Species Scientific Committee, *Approved Conservation Advice for the Banksia Woodlands of the Swan Coastal Plain ecological community*, August 2016, page 19

confirmed that no Banksia species will be cleared. Based on this, we agree with DWER's conclusion that the vegetation within the application area is unlikely to represent the mapped PEC/TEC.

The appellant submitted that the proposed clearing is near a mapped environmentally sensitive area<sup>34</sup> (ESA) which has significant environmental value. In response to this point, DWER agreed that an ESA is mapped within the application area. DWER advised that this part of the mapped ESA relates to the buffer of the TEC, and that while the TEC itself is an ESA, the buffer is not. On this basis, the proposed clearing is unlikely to impact the ESA.

### The clearing is unlikely to sever any ecological linkages

The appellant submitted that trees provide "living stepping stones" for native fauna. The trees along both Bishop and Karnup Roads form a "green corridor between cleared fields". <sup>35</sup>

DWER broadly agreed, and advised that it recognises that an ecological linkage supports the movement of fauna through the landscape and that continuous and non-continuous patches of vegetation, by virtue of the proximity to each other, act as 'stepping stones' of habitat for fauna.<sup>36</sup>

The far eastern extents of both portions of the application area are within a mapped Perth Regional Ecological Linkage associated with Richardson / Wright / Soldiers Road. In DWER's view, this linkage will not be severed as native vegetation will remain within the road reserves to be utilised by ground dwelling fauna.<sup>37</sup>

In response to this aspect of the appeal, DWER advised:

It is noted that the selective clearing along the roads is limited to one side of the road at each clearing location with a small clearing width that will not significantly reduce the native vegetation patch sizes at the respective locations...

...The clearing is unlikely to impact fauna movement as it will not leave substantially open/bare areas. The clearing will not sever an essential ecological linkage for fauna, including black cockatoos, due to the small patches of vegetation being removed over a large geographical area.<sup>38</sup>

As noted previously, the applicant advised that the proposed clearing is limited to 30 individual trees, and not the entire width of the road reserves nor all of the remaining native vegetation. Given this, we consider that the proposed clearing is unlikely to sever, or affect the functionality of the mapped ecological linkage.

### The clearing is unlikely to result in land degradation

The appellant noted that swamp sheoak trees, being one of the species identified in the Karnup Road application area, act as windbreaks, and can improve soil quality by lowering the saline water table.

DWER agreed that swamp sheoak occurs in the application area. DWER noted, however, that this species is associated with wetlands, and occurs more broadly in the local area as the local area is largely mapped as wetlands.

<sup>&</sup>lt;sup>34</sup> Environmentally sensitive areas declared under section 51B of the *Environmental Protection Act 1986* are listed in the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*.

<sup>&</sup>lt;sup>35</sup> Urban Bushland Council WA, Appeal in objection to CPS 9339/1, 13 June 2022

<sup>&</sup>lt;sup>36</sup> DWER, Appeal Report CPS 9339/1, 15 July 2022 page 3

<sup>&</sup>lt;sup>37</sup> DWER, Decision Report CPS 9339/1, 22 May 2022, page 16

<sup>&</sup>lt;sup>38</sup> DWER, Appeal Report CPS 9339/1, 15 July 2022, page 3

DWER advised that, based on images provided with the application (indicating that the proposed clearing is limited to individual trees and not the entirety of the road reserves), swamp sheoak trees will likely remain within the road reserves following the proposed clearing. DWER also noted that groundwater salinity over most of the clearing area is mapped as fresh at between 500-1000 milligrams per litre total dissolved solids.<sup>39</sup>

On this basis, DWER considered that the remaining swamp sheoak will still have potential to act as windbreaks, and that the potential for increased salinity as a result of the proposed clearing area is unlikely to be an issue.

### Summary of environmental values

Overall, we agree with the appellant that the remaining native vegetation in urban areas is important for a broad range of reasons, and note that the recently published *Native Vegetation Policy*<sup>40</sup> specifically identifies the Swan Coastal Plain as an area where historic clearing has been extensive.

Based on the above, we find that DWER had regard for the value of the vegetation proposed to be cleared as fauna habitat, and as part of a mapped ecological linkage. In general, DWER found that the proposed clearing is unlikely to have a significant impact on fauna habitat or the ecological linkage. We note, however, that the marri trees proposed to be cleared form part of the habitat for specially protected or threatened fauna and are consistent with the critical habitat types described for black cockatoos. We consider therefore that the proposed clearing "is at variance" with clearing principle (b).

Having established that the vegetation has environmental value in relation to fauna habitat, the investigation turned to other relevant considerations in the decision to grant the permit.

## 2.2 Is the clearing consistent with planning instruments and other relevant matters?

The proposed clearing is within gazetted road reserves, and the clearing purpose is consistent with this reservation. We accept that the proposed clearing will have a public benefit through improved road safety. We also note that the permit holder has undertaken steps to avoid and minimise the extent of clearing as far as practical.

These conclusions are explained below.

### EP Act requires DWER to consider relevant planning and other matters

Section 51O(4) of the EP Act provides that DWER must have regard to the clearing principles, and any development approval, planning instrument, or other relevant matters when making decisions as to whether a clearing permit should be granted.

'Planning instruments' are defined in the EP Act to include local planning schemes and planning strategies. We note that DWER's decision document does not reference local planning documents in the context of this clearing permit application.

While 'other matters' are not defined in the EP Act, DWER has published guidance on what types of 'other matters' could be relevant to a clearing permit application:

<sup>&</sup>lt;sup>39</sup> DWER, Appeal Report CPS 9339/1, 15 July 2022, page 4

<sup>&</sup>lt;sup>40</sup> https://www.wa.gov.au/system/files/2022-07/Native-vegetation-policy-for-Western-Australia.pdf

Other matters typically include consideration of land use impacts, previous decisions related to the area, other legislative requirements related to the application and the **necessity** of the clearing.<sup>41</sup> [emphasis added]

## Public works exempt from planning approval, but must have regard to intent etc of Planning Scheme

The clearing here is for public roadworks by a local government. As public works, the proposal is exempt from the requirement to obtain planning approval.<sup>42</sup> However, while planning approval is not required, the body carrying out the works must have regard to:

- the purpose and intent of any planning scheme that has effect in the locality where, and at the time when, the public works are undertaken,
- the orderly and proper planning, and the preservation of the amenity, of that locality at that time.<sup>43</sup>

This general proposition is reinforced in the Shire of Serpentine-Jarrahdale's *Town Planning Scheme No. 2* (Planning Scheme), which indicates that public works should have regard for (among other things) the preservation of trees.<sup>44</sup>

### The entire application area is within road reserve

Under the Planning Scheme, the land to be cleared is reserved as a 'local road'. The purpose of a road reserve is to provide a transport and service corridor. The purpose of the proposed clearing is stated to be for road construction and upgrades. As such, it is considered that the clearing is consistent with the reservation of the land.

### The local planning framework recognises the importance of native vegetation

The aims set out in the Planning Scheme include to:

[M]ake provisions for the conservation and preservation of places of natural beauty, historic buildings and objects of historic or scientific interest ...

[C]reate a pedestrian and vehicular circulation system together with landscape environment which complements the wide range of activities carried on and proposed to be carried in the District ...

The Planning Strategy addresses environmental and natural resources:

This category addresses areas of significance to the environment and natural resources including environmentally sensitive areas, Bush Forever sites, conservation areas, natural corridors, waterways, flood prone areas, bushfire risk and basic raw materials. These elements are important considerations in guiding land use planning and development.<sup>45</sup>

The Planning Strategy includes the following objectives in relation to vegetation and biodiversity, and sets out strategies to achieve these:

Promote the conservation and sustainable management of natural areas.

Preserve significant flora and fauna, including threatened ecological communities, and protect biodiversity.

<sup>&</sup>lt;sup>41</sup> DWER, A guide to the assessment of applications to clear native vegetation, December 2014, page 39

<sup>&</sup>lt;sup>42</sup> Planning and Development Act 2005, section 6(1).

<sup>&</sup>lt;sup>43</sup> Ibid, section 6(2).

<sup>&</sup>lt;sup>44</sup> Shire of Serpentine-Jarrahdale, *Town Planning Scheme No.* 2, 4 June 2021, clause 7.12.

<sup>&</sup>lt;sup>45</sup> Shire of Serpentine-Jarrahdale, *Local Planning Strategy*, March 2022, page 80.

Protect and enhance tree canopy coverage to increase amenity, create a leafy character, provide shade and reduce urban heat island effect.<sup>46</sup>

The Planning Strategy also recognises:

In some areas, road reserves contain the only remaining native vegetation and provide ecological corridors. Protection of this vegetation is very important for the sustainability of native vegetation and habitats for smaller animals as well as for achieving sustainable urban design outcomes.<sup>47</sup>

The Planning Strategy acknowledges and builds on the Shire's *Serpentine-Jarrahdale Local Biodiversity Strategy* (2008), which recognised the need to prevent further loss of natural areas, to protect and manage a portion of each vegetation type, specific ecological features and processes, and to manage, restore and increase natural areas and fauna habitat.

### Road safety concerns were identified

The appellant concedes that there are safety considerations at both locations, for example, it notes in the appeal that:

Karnup road has had 44 crashes for the period 2015-2019, including two fatal.48

This is supported by information provided by the applicant including recent crash data for both roads:

- At Bishop Road, between 2016 and 2020, there have been 7 crashes within a 1.86 km section of road, including 5 major property damage only (PDO) crashes and 2 minor PDO crashes.
- At Karnup Road, between 2016 and 2020, there have been 3 major PDO crashes along a 2.27 km stretch of road.

This data was the basis of the applicant's Black Spot funding application, submitted to Main Roads WA in July 2021. Following an assessment, the application for funding was approved.

The applicant advised:

Both projects are also part of the Black spot funding program, which means that these areas have been selected for road upgrades due to the number of crashes, hence the works are to increase the safety to the road conditions through the bitumising of the road shoulders.<sup>49</sup>

### The proposed clearing is necessary

The applicant proposes to address the safety concerns through the following treatments:

The proposed treatment to increase the safety of this road, is to seal the shoulders on both approaches and remove the frangible items within the clear zone including the trees.

Unfortunately, without removing the identified trees, the Shire is not sure how to achieve clear zone requirement and road modification. $^{50}$ 

According to AUSTROADS Guide to Road Design, Part 6, Roadside Design, Safety and Barriers (2009), a safety 'clear zone' or 'recovery zone' adjacent to both sides of a roadway is maintained clear of non-frangible objects, to help reduce the severity of accidents if

<sup>&</sup>lt;sup>46</sup> Ibid, section 5.4.2.

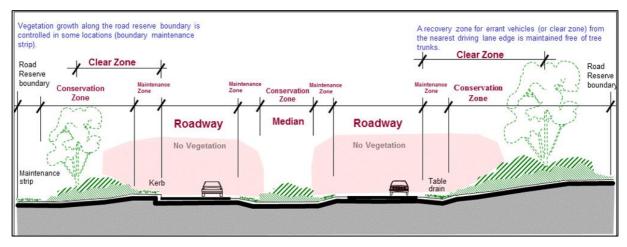
<sup>&</sup>lt;sup>47</sup> Ibid, appendix 2.

<sup>&</sup>lt;sup>48</sup> The appellant sourced this data from the Shire of Serpentine-Jarrahdale's 'Hypergrowth Road Network Implementation Plan'. It is assumed that this figure relates to a longer stretch of Karnup Road than the application area

<sup>&</sup>lt;sup>49</sup> Shire of Serpentine-Jarrahdale, Response to Appeal against CPS 9339/1

<sup>&</sup>lt;sup>50</sup> Shire of Serpentine-Jarrahdale, Response to Appeal against CPS 9339/1

vehicles run off the road. Restrictions apply for trees and fixed objects within this band of variable width (Figure 3 below).



### Figure 3 Typical cross section of a road reserve in agricultural regions <sup>51</sup>

The Main Roads WA standard distance for a clear zone on the straight sections of an 80 km/hr road is 5.5 m.

The applicant advised that its project design calculated a clear zone of 2 m from edge of the sealed (widened) road. In some sections, even the proposed road widening (1.2m on both sides of the road) is not possible without removing the trees.

To provide a 2 m clear zone, free of tree trunks, the applicant identified 47 trees that need to be removed. Through a selective approach and a preference for pruning rather than clearing, the applicant has subsequently reduced this number to 30 trees.<sup>52</sup>

We consider that based on the above, the applicant has undertaken steps to avoid clearing as much as practical while still achieving improved safety outcomes. As DWER advised, it is the responsibility of the applicant to plan, build and maintain road reserves within its jurisdiction, and it has the relevant expertise and experience to determine the technical options, solutions, and engineering standards of the proposed road upgrades.

Notwithstanding, we note that condition 1 on the permit requires further avoidance, minimisation or reduction in the impacts of clearing wherever possible, and we encourage the applicant to reduce its impact as far as feasible.

## 2.3 Should the permit have been granted? And if so, should an offset be applied?

DWER's Guide to Assessment prioritises clearing for public use:

In determining the necessity of the clearing higher priority will be given to clearing for public use than private benefit or commercial gain.<sup>53</sup>

On the available information, we accept that the proposed clearing will have a public benefit through improved road safety. While the proposed clearing is "at variance" to clearing principle (b) and is inconsistent with the some of the broad purposes and intent of the

<sup>&</sup>lt;sup>51</sup> Main Roads WA, *Environmental Guideline, Vegetation Placement within the Road Reserve, Corporate Procedure*, November 2013

<sup>&</sup>lt;sup>52</sup> Shire of Serpentine-Jarrahdale, Response to Appeal against CPS 9339/1

<sup>&</sup>lt;sup>53</sup> DWER, A guide to the assessment of applications to clear native vegetation, December 2014, page 40

Planning Scheme and Planning Strategy, we consider that DWER's decision to grant the clearing permit was justified based on the necessity of the works to improve road safety.

Notwithstanding, we consider that the clearing of 28 marri trees represents an impact to black cockatoo foraging habitat that should be offset. The policy context for this conclusion is discussed below, as well as the offset proposed by the applicant during the investigation.

### Impact to black cockatoo habitat should be counterbalanced

As established in section 2.1, we found that the proposed clearing is "at variance" to clearing principle (b) on the basis that the vegetation proposed to be cleared forms part of a habitat significant for endangered species. This leads to a secondary question: is this impact a significant residual impact, and if so, what should be done to counterbalance it?

Section 51H(1) of the EP Act provides that DWER can apply a condition to a clearing permit requiring the loss of the vegetation to be offset. DWER's *Clearing of Native Vegetation Offsets Procedure*<sup>54</sup> (Offsets Procedure) sets out that offsets are required when clearing is at variance with one or more of the biodiversity-related clearing principles<sup>55</sup> and a significant residual impact remains following application of the mitigation hierarchy.

This is consistent with Principles 1 and 2 in the *WA Environmental Offsets Policy*<sup>56</sup>, which state that 'Environmental offsets address environmental impacts that remain after on-site avoidance and mitigation measures have been undertaken', and 'While environment offsets may be appropriate for significant residual environmental impacts, they will not be applied to minor environmental impacts', respectively. In other words, where a residual impact is not considered to be 'significant', an offset would not be required.

We acknowledge that the applicant has reduced the impact of the clearing by avoiding the clearing of 17 trees present in the clear zone, and DWER has included a condition requiring further avoidance where possible, however in this case, we conclude that there is still a residual impact resulting from the clearing. This conclusion is reached in the context of the advice that all remaining foraging habitat is critical to the survival of black cockatoo species. On this basis we recommend the residual impact is significant enough to require counterbalancing. Our conclusion is further explained below.

DWER originally concluded that the proposed clearing was consistent with the clearing principles and therefore offsets were not considered further. On revision, DWER considered the clearing to be "at variance" to clearing principle (b), however did not identify the impact to be a significant residual impact that would require a counterbalance or otherwise accounting for.

The *WA Environmental Offsets Guidelines*<sup>57</sup> (Offsets Guidelines) explains significant residual impacts as follows:

In general, significant residual impacts include those that affect rare and endangered plants and animals (such as declared rare flora and threatened species that are protected by statute), areas within the formal conservation reserve system, important environmental systems and species that are protected under international agreements (such as Ramsar listed wetlands) and areas that are already defined as being critically impacted in a cumulative context. Impacts may also be significant if, for example, they could cause plants

<sup>&</sup>lt;sup>54</sup> Department of Environment Regulation (2014) *Guideline: Clearing of native vegetation Offsets procedure under the Environmental Protection Act 1986.* August 2014.

<sup>&</sup>lt;sup>55</sup> Being clearing principles (a), (b), (c), (d), (e), (f) and (h).

<sup>&</sup>lt;sup>56</sup> Government of Western Australia (2011) WA Environmental Offsets Policy. September 2011.

<sup>&</sup>lt;sup>57</sup> Government of Western Australia (2014) WA Environmental Offsets Guidelines. August 2014.

or animals to become rare or endangered, or they affect vegetation which provides important ecological functions.<sup>58</sup>

The Offsets Guidelines goes on to identify four levels of significance, noting that 'In determining the significance of an impact, it is important to consider the impacts in the regional context. In isolation, a project may not be considered to have a significant impact':

- unacceptable impacts (being impacts which are environmentally unacceptable or where an offset cannot be applied to reduce the impact)
- significant impacts requiring an offset (generally relating to impacts to species, ecosystems, or reserves or where cumulative impact is at a critical level)
- potentially significant impacts which may require an offset (impacts likely to result in a species or ecosystem requiring protection increasing cumulative impact to a critical level)
- impacts which are not significant (residual impacts that are not expected to have a significant impact on the environment and therefore do not require an offset).<sup>59</sup>

Examples from the Offsets Guidelines of residual impacts that are considered to be significant in relation to clearing principle (b) are copied in Table 1.

Significant impacts requiring an offset	Potentially significant impacts which may require an offset
Impact to or removal of habitat necessary to	Impact likely to result in a species being listed as
maintain species declared as specially protected	specially protected under the <i>Biodiversity</i>
under the <i>Biodiversity Conservation Act 2016</i> or	<i>Conservation Act 2016</i> or listed as threatened
listed as threatened species under the	under the <i>Environment Protection and</i>
<i>Environment Protection and Biodiversity</i>	<i>Biodiversity Conservation Act 1999</i> or impact
<i>Conservation Act 1999</i> .	affects significant habitat for a species.

### Table 1 Residual impact significance model: Clearing principle (b)<sup>60</sup>

When considered against Table 1, the proposed clearing meets the criteria of 'significant impacts requiring an offset' in relation to clearing principle (b), in that the native vegetation proposed to be cleared forms part of a habitat significant for fauna.

In addition, the Offsets Guidelines address the cumulative context of the proposal:

In determining the significance of an impact, it is important to consider the impacts in the regional context. In isolation, a project may not be considered to have a significant impact. However, when considered along with other projects, activities and threats in the region, the cumulative impacts may be significant.<sup>61</sup>

In this regard, the Recovery Plan for Carnaby's cockatoo highlights that a key threat to that species is the clearing of feeding habitat on the Swan Coastal Plain.<sup>62</sup>

The Commonwealth *Referral guideline for 3 WA threatened black cockatoo species* support the avoidance or mitigation of impacts:

<sup>&</sup>lt;sup>58</sup> Ibid, page 8.

<sup>&</sup>lt;sup>59</sup> Ibid, page 9.

<sup>&</sup>lt;sup>60</sup> Adapted from: Government of Western Australia (2014), Figure 3 on page 11.

<sup>&</sup>lt;sup>61</sup> Government of Western Australia (2014) WA Environmental Offsets Guidelines. August 2014, page 9

<sup>&</sup>lt;sup>62</sup> Department of Parks and Wildlife, *Carnaby's cockatoo (Calyptorhynchus latirostris) Recovery Plan.* 2013, Western Australia, page 15

Swan Coastal Plain is a critical foraging area for Carnaby's Cockatoo during the nonbreeding season. If your action is likely to impact foraging habitat on the Swan Coastal Plain, you would consider avoiding this habitat and/or adopting mitigation measures to reduce the impact on foraging habitat for that region.<sup>63</sup>

We accept that the applicant has avoided clearing and therefore undertaken steps to reduce the impact. However, given the above, we consider that the impact to black cockatoo foraging habitat in this case is a significant residual impact that requires counterbalancing.

## The applicant's proposed offset is sufficient to counterbalance the impact to foraging habitat

During the appeal investigation, the applicant proposed to offset the impact of the clearing on black cockatoo foraging habitat. The environmental value to be offset is the 28 marri trees to be cleared (see section 3.2 for the identification of these trees on Bishop Road), which represent preferred foraging habitat. The applicant used the 'Offset calculation (feature)' function in the State calculator. The offset proposed to counterbalance this impact includes the following (see Appendix 2 for details):

Revegetation by planting marri tree stems along Bishop Road to achieve at least 68 established marri trees, representing foraging habitat for three species of black cockatoos.

Based on the methodology in the State offsets guidance, we consider that the offset proposed by the applicant can counterbalance 100 per cent of the residual impact resulting from the clearing. Completion criteria of at least 68 trees should be included as an outcomebased condition on the clearing permit and if the completion criteria are not met, the permit can be extended to allow for contingency measures.

Revegetation planted for threatened species is classified as 'native vegetation' under the EP Act. Given this, the revegetation at the offset site would require assessment under Part V of the EP Act should further road widening or clearing be required. Consistent with the offsets policy, we are of the view that this environmental offset can be secure, enduring and enforceable and deliver a long-term strategic outcome close to the impact site which we consider to be ecologically preferrable.

Consistent with the Offsets Guidelines, the offset will be recorded in the publicly available WA Environmental Offsets Register.

<sup>63</sup> Referral guideline for 3 WA threatened black cockatoo species (dcceew.gov.au) Page 9

### 2.4 Other matters

### Importance for Aboriginal people

The appellant raised concerns about the significance of particular tree species to Aboriginal people. The appellant contends that the application area contains the mentioned species.

Regarding the specific species, DWER advised:

*Nuytsia floribunda* (Kaan-ya / WA Christmas tree) and *Melaleuca rhaphiophylla* (Yowarl / Swamp Paperbark) were not identified from the photographs supplied by the [Applicant]. Therefore, the Department's assessment of the proposed clearing did not consider impacts to these species. However, these trees are known to occur within the mapped vegetation complexes and are likely to be present in other areas within the local area. The small area of clearing scattered along Bishop and Karnup Roads is not likely to significantly reduce the occurrence of these species in the local context.<sup>64</sup>

In relation to Aboriginal heritage values more broadly, DWER's Decision Report identified that a portion of the Karnup Road application area is mapped as a place of Aboriginal heritage. The area, associated with the Serpentine River, has ceremonial and mythological significance.

In response to the appeal, DWER advised:

There is a relatively large buffer placed on the Aboriginal heritage place (Ceremonial/ Mythical) from the Serpentine River. The proposed clearing is approximately one km from the Serpentine River at its closest point. The small area of clearing associated with this Application is not likely to impact on the heritage values of the Serpentine River.

Nonetheless, DWER also advised that it is the applicant's responsibility to comply with the *Aboriginal Heritage Act 1972* (WA) and to ensure that no Aboriginal sites of significance are damaged through the clearing process.

### Value of native vegetation in mitigating climate change

The appellant submitted that individual trees can influence global and local climate through carbon storage and reducing heat island effect.

DWER's advise in this regard is:

The contribution of clearing 0.188 ha to climate change is negligible.65

We note that the recently published *Native Vegetation Policy* recognises the pressures on Western Australia's native vegetation and its ongoing loss and degradation since European settlement. The policy notes the role of native vegetation in mitigating climate change by sequestering carbon and urban cooling. The policy's objective is to achieve a net gain in native vegetation at a regional / landscape scale. A regional approach to planning and managing native vegetation can effectively address cumulative impacts, competing priorities, and assist in managing broader threats such as climate change.

<sup>64</sup> DWER, Appeal Report CPS 9339/1, 15 July 2022, page 6

<sup>65</sup> DWER, Appeal Report CPS 9339/1, 15 July 2022, page 6

### 3 Supporting information

### 3.1 Images of clearing



Figure 4 Proposed Clearing along Bishop Road (blue)



Figure 5 Proposed clearing along Karnup Road (blue)

### 3.2 Marri trees to be offset



# **Figure 6** Diagram of marri trees to be cleared on Bishop Road under CPS 9339/1 and the environmental value proposed to be offset by the applicant (Shire of Serpentine Jarrahdale)

### Appendix 1 Appeal process

### The Minister assesses the merits of a decision

Environmental appeals follow a merits-based process. This means the Minister can consider all the relevant facts, legal and policy aspects of the decision and decide whether it was correct and preferable.

For clearing permits, the Minister can overturn the original decision to grant the permit if this was the basis of the original appeal submission. Alternatively, if the appeal submission was against the conditions of the permit, the Minister may modify the conditions only.

The appeal investigation will consider the extent to which conditions can address the issues raised, as well as any new information that may not have been available at the time of the original decision.

While process issues can be raised in an appeal, the focus of investigations will be on the substantive environmental matters relevant to DWER's conditions.

### We report to the Minister, as does the decision-making authority

To decide an appeal's outcome, the Minister for Environment must have a report from both:

- the Appeals Convenor [see section 109(3) of the EP Act], and
- the authority that originally made the decision under appeal [see section 106(1)].

To properly advise the Minister in our report, our investigation included:

- discussions with the applicant on 20 July 2022
- discussions with the appellant on 21 July 2022.

### **Table 2** Documents we reviewed in the appeals investigation

Document	Date
DWER, clearing permit, plans and decision report for CPS 9339/1	22 May 2022
DWER, response to appeal (s106 report)	15 July 2022
Applicant response to appeal	July 2022
Emerge, Targeted Flora Survey – Part Karnup and Bishop Road Reserves	30 November 2021
Threatened Species Scientific Committee, Approved Conservation Advice for the Banksia Woodlands of the Swan Coastal Plain ecological community	August 2016
Department of Environment and Conservation, Interim Recovery Plan 2012- 2017 for Banksia attenuata and/or Eucalyptus marginata woodlands of the eastern side of the Swan Coastal Plain	October 2012
Shire of Serpentine-Jarrahdale, Local Planning Strategy	March 2022
WA Government, Native Vegetation Policy	May 2022
Main Roads WA, Environmental Guideline, Vegetation Placement within the Road Reserve, Corporate Procedure	November 2013
WA Government, Environmental Offsets	2022

Document	Date
WA Environmental Offsets Policy 2011	2011
WA Environmental Offsets Guidelines 2014	2014
Commonwealth of Australia, Referral guideline for 3 WA threatened black cockatoo species	2022

## Appendix 2 WA Environmental offsets score rationale

Calculation	Score (Feature)	Rationale
Conservation significance		
Description	28 trees	3 species of Black Cockatoo foraging habitat
Type of environmental value	threatened fauna	Species (flora/fauna)
Conservation significance of environmental value	6.8%	Rare/ threatened species – critically endangered (Baudin's cockatoo)
Significant impact		
Description	28 marri trees	Clearing of 28 marri trees in poor – degraded condition vegetation
Significant impact / Type of feature	No. of individual trees	
Offset		
Description	Revegetation adjacent to same road as the cleared trees	
Start number (of feature)	0	
Future number WITHOUT offset	0	
Future number WITH offset	68 trees	Metric output to counterbalance 100 % of the significance residual impact.
Time until ecological benefit (years)	10 years	Time for marri to reach maturity to produce nuts readily available for foraging.
Confidence in offset result (%)	80%	*Marri are easily obtainable from nurseries and not dieback susceptible. The impact area is within one of the higher rainfall parts of the State so rainfall may be adequate for survival in the early years of revegetation. However, stochastic events remain including summer heatwaves and reduced rainfall due to climate change.
Landscape level values of offset?	Yes	*The offset will enhance ecological connectivity of a local linkage in an extensively cleared agricultural landscape for threatened fauna species.

 Table 3
 Calculation and justification of proposed offset by the applicant