

Offset Proposal

Lot 1113 West Break, Myalup

JULY 2024



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Summary

DATE:	27/07/2024	
CLEARING PERMIT:	CPS 9881/1	Area Permit
CONTACT DETAILS:		
Area permit applicant	Pennie Patane Managing Director Patane Farms Pty Ltd	0407 993 580 pennie@pataneproduce.com.au
Environmental specialist	Shane Priddle Principal SW Environmental	0437700917 shane@swenvironmental.com.au
Environmental specialist's qualifications or equivalent, and relevant experience:	Ba Sc. (Marine Science) CEnvP No. 310.	Shane has nearly 25 years' experience surveying for fauna (including black cockatoos) and providing EIA and environmental management services in NSW and WA.
PROPERTY DETAILS		
Proposed clearing location	Lot 8 on Diagram 78649, Myalup (Vol. No: 1939 Folio No: 808)	
Proposed offset location	Lot 1113 West Break, Myalup	
CLEARING PERMIT		
Principle/s clearing is at, or may be at, variance to	Principle b)	In particular Carnaby's cockatoo (<i>Zanda latirostris</i>) and Forest red-tailed black cockatoo (<i>Calyptorhynchus banksii naso</i>) (FRTBC) foraging habitat.
Impact of the clearing	Loss of 0.90 ha of native vegetation including Marri and Peppermint paddock trees	Loss of 0.77 ha of potential black cockatoo foraging habitat including 36 suitable DBH trees, no suitable breeding hollow, and no existing roost sites. Additional 0.12 ha of primarily Peppermint trees.
OFFSETS PROPOSED		
Area	3.19 ha	Planted with a variety of native vegetation, in line with the Revegetation Management Plan (RMP 2024).
Offset calculator minimum offset	0.92 ha	3.19 ha is proposed over 20 years to meet the targets proposed in the RMP (2024)
Aims	To revegetate an existing cleared area and provide increased connectivity and black cockatoo foraging habitat locally over the medium to long term, and to offset the residual impacts to black cockatoo foraging habitat posed by the clearing of 0.90 ha of vegetation, of which 0.77 ha is potential foraging habitat.	

1 Background

The proponent, Patane Farms Pty Ltd, proposes to clear 0.90 hectares of native vegetation within Lot 8 on Diagram 78649, Myalup, for the purpose of horticulture (Figure 1 Appendix A). The total proposed cropping area will cover approximately 12.9 ha (herein referred to as the 'project') (Figure 2 Appendix A)

Vegetation consists of mostly Marri (*Corymbia calophylla*) and some Peppermint (*Agonis flexuosa*) paddock trees with no native understory and little midstorey remaining within the project area. The native vegetation within the proposed clearing area is in a completely degraded condition (EPA 2016). A reduction in the proposed crop areas will render the project unviable.

Lot 8 is zoned General Farming under the Shire's District Planning Scheme No. 1 (Scheme). Development Approval from the Shire as Viticulture/Horticulture is an "AA" use under the Scheme which means it is a discretionary use. On 25 March 2022, the Shire of Harvey approved the Development Application subject to conditions (Application No: P125/21).

Exemptions are relevant for this project. There are no Environmentally Sensitive Areas (ESA's) mapped within the project site. The following exemptions apply as prescribed in the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (Clearing Regulations)* under section 51B of the *Environmental Protection Act 1986* (EP Act), and are excluded:

- 0.05 ha Clearing for fence lines (Regulation 5, Item 10)
- 0.05 ha Clearing of isolated trees (Regulation 5 Item 19)

Patane Farms Pty Ltd has applied to the Department of Water and Environmental Regulation (DWER) for an Area Permit under section 51E(1) of the *Environmental Protection Act 1986* (the EP Act), to clear the residual 0.90 hectares of native vegetation within Lot 8 for the purpose of horticulture. The area under application (0.90 ha) has been subject to preliminary assessment by DWER through CPS 9881/1 and advised that the clearing would be at variance to Principle b). Form offsets (revegetation) would be required to counterbalance the significant residual impact of the proposed clearing. A 3.19 ha offset site has been proposed for revegetation (Figure 3 Appendix A).

1.1 Purpose

The purpose of this document is to provide an offset proposal for residual impacts of the clearing of the 0.90 ha of native vegetation proposed in accordance with the WA Environmental Offsets Guidelines (Government of Western Australia 2011) for CPS 9881/1.

1.2 Proposed clearing and offset locations

Both the vegetation under application and the proposed offset site are located within the rural locality of Myalup, on the southern Swan Coastal Plain, approximately 27 km north of Bunbury. The proposed offset site is located approximately one kilometre north of Lot 8, within Lot 1113 West Break, Myalup. Both Lot 8 (clearing) and Lot 1113 (offset site) are located within a broader coastal agricultural landscape within the Swan Coastal Plain. The 3.19 ha proposed offset site contains approximately 0.56 ha of existing native vegetation. The proposed clearing area and offset site is shown in Figures 2 and 3 in Appendix A.

1.3 Clearing principles likely to be at variance

Under section 51C of the EP Act, clearing of native vegetation is an offence unless it is done under the authority of a clearing permit, or an exemption applies. Schedule 5 of the EP Act defines Ten Clearing Principles for native vegetation. These principles aim to ensure that all potential impacts resulting from removal of native vegetation

can be assessed in an integrated way. The ten clearing principles are principles against which applications to clear are assessed, with each principle being assessed in accordance with DWER's A Guide to the Assessment of Applications to Clear Native Vegetation (Department of Environment Regulation 2014) to determine whether the application is at variance to the principles. DWER has identified that the proposal is at variance to 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.*

1.4 Residual impacts against the Clearing Principles

Structural flora and vegetation surveys identified that the vegetation within the application area is in a completely degraded condition, with only paddock trees remaining over the proposed clearing footprint. Fauna habitat values are generally low, due to the site having been historically cleared and heavily grazed. Native flora within the area under application includes mostly paddock trees of Marri (*Corymbia calophylla*) isolated Peppermints (*Agonis flexuosa*) over weeds / pasture grass. Approximately 34 suitable table DBH trees occur within the clearing footprint, including 2 dead and 34 Marri.

Endangered Baudin's cockatoo and Carnaby's cockatoo and Vulnerable Forest Red Tailed Black Cockatoo (FRTBC) may occur locally and may utilise the site. Fauna habitat quality within the study area is poor due to the limited structural and species diversity. Fauna habitat opportunities were considered limited for most threatened fauna.

Baudin's cockatoo (*Zanda baudinii*)

The project site is located within an area mapped as 'the species is likely to occur' in the Referral Guidelines (Australian Government 2022). The site is located just to the north of the mapped likely breeding distribution (Australian Government 2022). Black cockatoo surveys (SW Environmental 2020) identified that the study area may contain foraging habitat for Baudin's cockatoo. However, no feed sign was observed.

Carnaby's cockatoo (*Zanda latirostris*) and Forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) (FRTBC)

There were no trees with hollows currently suitable for black cockatoo breeding within the application area. One tree contained a hollow that was considered unsuitable for black cockatoo breeding. The remaining suitable 35 DBH trees within the clearing footprint did not contain hollows (SW Environmental 2020).

The nearest known black cockatoo breeding tree, Carnaby's cockatoo, occurs within Lot 6, approximately 650m northwest of the development envelope (SW Environmental 2020). While breeding, black cockatoos will generally forage within a 6–12 km radius of their nesting site (Australian Government 2022). There is potential for minor indirect impacts on locally breeding black cockatoos due to the potential loss of local foraging habitat (approximately 0.77 ha Marri canopy of the total 0.90 ha under application). Feed residue (chewed Marri nuts) were observed within the application area, in low abundances from Carnaby's cockatoo and FRTBC.

There was no evidence of black cockatoo roosts observed at the site.

At variance

The proposed impacts to black cockatoo habitat values in the short to medium term are associated with potential loss of foraging habitat (0.77 ha). Native vegetation, which may provide black cockatoo habitat values, in a local context has approximately 37% (13,000 ha) mapped remaining within 10 km of the study area (Government of Western Australia 2019), plus additional areas of pine forest. Approximately 18% (6,150 ha) of local lands within 10 km of the study area include DBCA managed reserves (SLIP 2020) (SW environmental 2020):

- Myalup State Forest 3,200 ha
- Yalgorup National Park 1,595 ha
- Other reserves 1,265 ha
- Byrd Swamp Nature Reserve 40 ha

- Crampton Nature Reserve 35 ha
- Wellard Nature Reserve 10 ha

The Myalup State Forest is the closest, sharing its western boundary with the eastern edge of Lot 8. Vegetation in Lots 8, is mapped as Yoongarillup Complex - Woodland to Tall Woodland and Open Forest from the Swan Coastal Plain Vegetation Complexes dataset (Government of WA 2020). At a high level, this vegetation type may provide similar black cockatoo and foraging habitat values to those at the site. Approximately 2,135 ha of this vegetation complex remains within the locality (10 km) (Government of WA, 2020). The total clearing area, comprising 0.77 ha of potential foraging habitat, would account for approximately 0.05 % of this vegetation complex within 10 km.

In considering the impact at both site and local scales (within 1 km of the development envelope and within 5 km of the development envelope), there is a total of 186 ha and 4354 ha, respectively, of native vegetation or pine forest remaining that has the potential to be high quality foraging habitat. This accounts for potential foraging resources within approximately 41% of local lands that are within 1 km, and 51% of the land that is within 5 km.

Based on 0.77 ha of potential foraging habitat, the clearing would account for a loss of approximately 0.5% of potential foraging habitat within 1 km, and less than 0.03% of vegetation within 5 km.

2 Offset Proposal requirements

2.1 Aims

The aim of this Offset Proposal is to provide an offset for the residual impacts of the proposed clearing of 0.90 ha of native vegetation, outlining requirements based on Clearing Principle b). In particular, the impacts of proposed clearing on black cockatoos (0.77 ha of foraging habitat), in accordance with the relevant guidelines and policies as described below.

2.2 Environmental Offset Policy principles

The WA *Environmental Offsets Policy* (Government of Western Australia, 2011) provides a framework for consistent application of environmental offsets to protect and conserve environmental and biodiversity values. The WA *Environmental Offsets Guidelines* (Government of Western Australia, 2014) complement the WA Environmental Offsets Policy (2011) and ensure that the basis for decision-making on environmental offsets is understood and consistently applied. The guidelines apply to all biodiversity offsets, required as a condition of Western Australian environmental approval processes.

The Offset Policy states that environmental offsets are to be used as a last resort, and six principles are outlined that are to be applied in the assessment and decision-making process, with respect to such offsets. The application of the principles to the Offset Proposal is provided in Table 2.1.

Table 2.1 Application of the WA Environmental Offset Policy Principles principles to the Offset Proposal

Principle no.	Principal	Comment
1.	Environmental offsets will only be considered after	The following strategies to avoid and mitigate environmental impacts have been extensively considered and adopted: <ul style="list-style-type: none"> • The project footprint has been selected to minimize impacts on

Principle no.	Principal	Comment
	avoidance and mitigation options have been pursued.	<p>soils / land that are not critical to the project.</p> <ul style="list-style-type: none"> • Vegetation along the wetland belt in the east of Lot 8 will be retained to provide a substantial vegetated corridor both within and off site. • Vegetation along the western boundary of Lot 8 (where a single Western Ringtail Possum was observed) will be retained. • The two large artificial dams will be retained, providing watering points for fauna. • Retained a significant buffer in the north and northwest of Lot 8 (increased from an initial 20 m to approximately 160 m). • This will involve the retention of most of the DBH trees (63), provide a significant buffer from houses in the north, improve visual amenity and enhance black cockatoo habitat and habitat connectivity within and off site.
2.	Environmental offsets are not appropriate for all projects	DWER, through a preliminary assessment of CPS 9881/1, confirmed that environmental offsets in the form of offset revegetation would be suitable for this project.
3.	Environmental offsets will be cost-effective, as well as relevant and proportionate to the significance of the environmental value being impacted	The proponent believes that the proposed offset represents a cost-effective solution that is relevant and proportionate to the environmental value being impacted by the proposed clearing. The offset will likely increase black cockatoo habitat quality in the medium to long term, to a quality of equal or higher value than the vegetation proposed to be cleared.
4.	Environmental offsets will be based on sound environmental information and knowledge.	The planning and implementation of the offset proposed will be based on sound environmental information and knowledge, and will be delivered through an appropriate Revegetation Plan.
5.	Environmental offsets will be applied within a framework of adaptive management.	The offset will be revegetated and then placed under Conservation Covenant for long term protection. The Revegetation Plan will include measures of adaptive management.
6.	Environmental offsets will be focussed on longer term strategic outcomes.	The environmental offsets proposed aim to improve revegetation and black cockatoo habitat values over the long term, in secure tenure to longer term strategic outcomes.

3 Offsets proposed

3.1 Calculation of offsets

The WA Environmental Offsets Calculator was used with the *Environmental Offsets Metric: Quantifying Environmental Offsets in Western Australia* (2021) guidelines to address Section 4 of the *WA Environmental Offsets Guidelines* (2014). The black cockatoo foraging habitat scores were derived from the federal *Referral guideline for 3 WA threatened black cockatoo species* (DAWE 2022). Based on the calculator 0.92 ha of revegetation would be required to offset the proposed impacts. Copies of the WA Environmental Offsets Calculator worksheets for the residual impacts to Clearing Principle b) for the project are provided in Appendix B.

3.2 Summary and justification of offsets proposed

The proposed offset in Lot 1113, West Break, will include the revegetation of 3.20 ha of native vegetation, including a range of black cockatoo foraging species, almost 3.5 times the offset area required by the offset calculator (Appendix B). It will include a range of native plants, planted and managed in line with and meeting the performance criteria and commitments presented in the project Revegetation Plan. The Revegetation Plan commits to a 20-year target, with protection of the offset under Conservation Covenant.

The following species will be planted, including those regularly used by black cockatoos for (-) foraging, (=) breeding and/or (+) roosting. Other species with a lower priority for black cockatoos are included for enhanced general ecosystem functioning.

Trees

- *Acacia saligna*
- *Agonis flexuosa*
- *Eucalyptus gomphocephala* (-=+)
- *Eucalyptus marginata* (-=+)
- *Corymbia calophylla* (-=+)
- *Acacia cochlearis*
- *Jacksonia furcellata* (-)
- *Hakea prostrata* (-)
- *Kunzea glabrescens*

Ground covers

Shrubs

- *Acacia cyclops*
- *Conostylis candicans*
- *Hypocalymma angustifolium*

The proposed offset site is currently in completely degraded condition (old informal sand extraction site) and will be improved to a condition capable of supporting target fauna foraging and/or breeding habitat. The reintroduction of native vegetation would improve site stabilisation, general ecosystem functioning and black cockatoo habitat value (initially foraging habitat, but potentially breeding and roosting habitat in the long term). Many other fauna would also benefit from revegetation of the site, including reptiles, amphibians, many birds, and mammals.

Revegetation would also enhance overall existing local landscape connectivity, including boosting strategic connections between strips of wetlands running north south and adjacent to the Myalup pine forest (important arterial corridors for black cockatoos, WRP and other fauna).

4 References

Department of Agriculture, Water and the Environment (DAWE) (2022) Commonwealth *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)*

Department of Agriculture and Food Western Australia (DAFWA), (2004), Schoknecht, N., Tille, P. and Purdie, B., (2004) Soil -landscape mapping in south-western Australia.

DWER WA environmental offsets calculator <https://www.wa.gov.au/government/publications/dwer-wa-environmental-offsets-calculator>

Government of Western Australia (2011), WA Environmental Offset Policy (September 2011). Perth, WA. Available online: <http://www.epa.wa.gov.au/EPADocLib/WAEnvOffsetsPolicy-270911.pdf>

Appendix A Figures

Figure 1 Location map

Figure 2 Clearing location

Figure 3 Proposed environmental offset

Appendix B WA Environmental Offsets Calculator worksheets