Government of Western Australia
Department of Water and Environmental Regulation

Clearing Permit Decision Report

1 Application details and outcome

1.1. Permit application details

Permit number:	CPS 10588/1
Permit type:	Area permit
Applicant name:	Martindale Pty Ltd
Application received:	16 April 2024
Application area:	23 hectares of native vegetation
Purpose of clearing:	Grazing, cropping and hazard reduction
Method of clearing:	Mechanical
Property:	Lot 2622 on Deposited Plan 87181
Location (LGA area/s):	Shire of Victoria Plains
Localities (suburb/s):	Old Plains

1.2. Description of clearing activities

The vegetation proposed to be cleared is contained within a single contiguous area within Lot 2622 on Deposited Plan 87181 (see Figure 1, Section 1.5). The applicant proposes to utilise the land for cropping, consisting of a rotation of clover-based pasture, canola, wheat and barley, as well as grazing for sheep. The applicant also considers that the clearing will reduce bushfire hazard.

1.3. Decision on application

Decision:	Refused
Decision date:	14 March 2025
Decision area:	23 hectares of native vegetation as depicted in Section 1.5 below

1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Water and Environmental Regulation (the Department) advertised the application for 21 days and two submissions were received. Consideration of matters raised in the public submissions is summarised in Appendix B.

In making this decision, the Delegated Officer had regard for the site characteristics (see Appendix C), relevant datasets (see Appendix G.1), the findings of a site inspection (see excerpts in Appendix F), the clearing principles set out in Schedule 5 of the EP Act (see Appendix D), relevant planning instruments and any other matters considered relevant to the assessment (see Section 3). The Delegated Officer also took into consideration that the purpose of the clearing is for agriculture and that limited public benefit would result from the proposed clearing.

The assessment identified that the proposed clearing:

- will result in the loss of significant foraging habitat for Carnaby's cockatoo;
- may result in the loss of habitat for Western brush wallaby;

- may result in impacts to multiple conservation significant flora species;
- will result in in the loss of 23 hectares of vegetation that is significant as a remnant within a highly cleared landscape;
- may result in further salinity and increase the risk of waterlogging in low lying areas to the west and south of the application area; and
- may result in salinisation of water in watercourses west and south of the application area.

In response to increasing pressure on environmental values and the increased recognition of the needs of threatened species and biodiversity, especially in extensively cleared landscapes such as the Wheatbelt region, clearing that has a significant impact on the environment is generally not supported unless there is a good reason for allowing the impacts, such as public benefit or an underlying State planning instrument or policy that identifies the area as a priority area that should be developed. With consideration to the above, DWER is of the view that the purpose for which the clearing is proposed is not justified in the context of the environmental impacts, particularly the loss of vegetation that is significant within a highly cleared landscape.

Noting the above, the Delegated Officer determined to refuse to grant a clearing permit.

The Department acknowledges that the determination to refuse the clearing has been made in the absence of site specific vegetation or fauna surveys, however, considered that the information available at the time of assessment was sufficient to inform its decision to refuse the clearing permit. The Department recognises there is a level of uncertainty regarding several of the environmental values assessed due to the lack of site-specific survey information and has acknowledged this (where relevant) in Section 3 and in the assessment of the clearing principles (Appendix D) of the Decision Report.

1.5. Site map

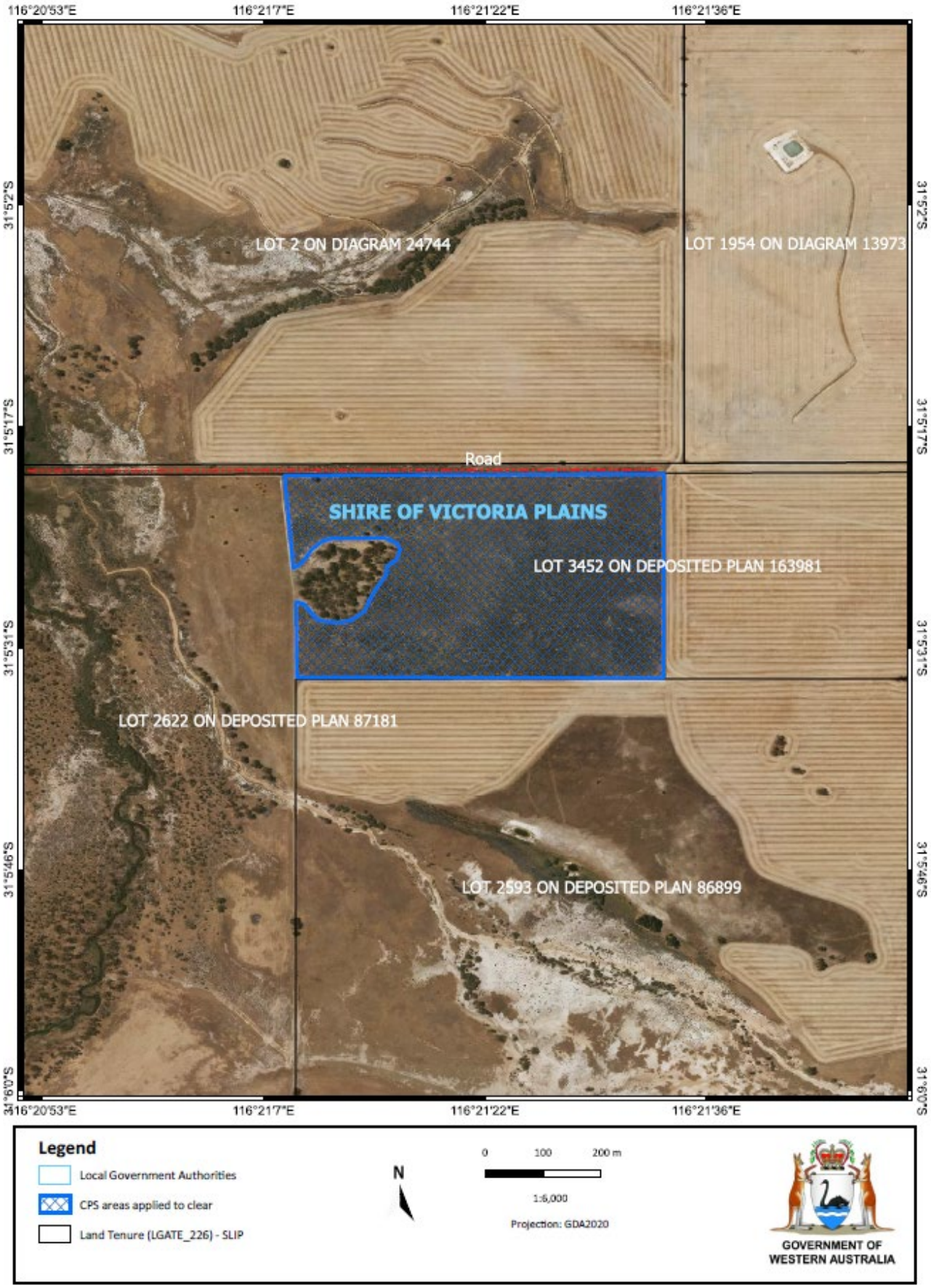

Figure 1. Map of the application area.

2 Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)

Relevant policies considered during the assessment include:

- *Environmental Offsets Policy* (2011)

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2013)
- *Procedure: Native vegetation clearing permits* (DWER, October 2019)
- *Environmental Offsets Guidelines* (August 2014)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

The applicant advised they wish to plant saltbush in a saline area adjacent to the clearing area as an offset. The suitability of this offset proposal is discussed in Section 4. No other information was provided to demonstrate consideration of alternate measures to avoid and mitigate the impacts of the proposed clearing.

The above information did not adequately demonstrate that all reasonable efforts had been taken to avoid and minimise potential impacts of the proposed clearing on environmental values.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix C) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The assessment against the clearing principles (see Appendix D) identified that the risk of impacts of the proposed clearing to biological values (fauna, flora and vegetation), significant remnant vegetation, and land and water resources required further consideration, as set out below.

3.2.1. Biological values (fauna) - Clearing Principles (a) and (b)

Assessment

Based on the vegetation type and habitat present within the application area, the following conservation significant fauna species were considered likely or possible to occur within the application area:

- *Zanda latirostris* (Carnaby's cockatoo) (Endangered)
- *Notamacropus irma* (western brush wallaby) (Priority 4)

Carnaby's cockatoo

The application is within range, including the modelled breeding range, of Carnaby's cockatoo. No trees large enough to support a suitable nesting hollow (i.e. with a diameter at breast height (DBH) of at least 30 centimetres) or tree species where tree hollows are typically found (i.e. salmon gum (*Eucalyptus salmonophloia)*, wandoo (*E. wandoo)*, tuart (*E. gomphocephala)*, jarrah (*E. marginata)*, flooded gum (*E. rudis*), York gum (*E. loxophleba)*, powderbark wandoo (*E. accedens*), karri (*E. diversicolor)* and marri (*Corymbia calophylla*) (DAWE, 2022)) were observed during the site inspection (DWER, 2024). It is therefore considered unlikely that breeding habitat would be present within

the application area. Noting the absence of large trees, it is also considered unlikely that significant roosting habitat is present within the application area.

Carnaby's cockatoo forage upon native shrubland, kwongan heathland and woodland on seeds, flowers and nectar of native proteaceous plant species (*Banksia* spp., *Hakea* spp. and *Grevillea* spp.) (DAWE, 2022). Some areas within the application area are either dominated by *Banksia* species (see Figures F-4 and F-5), and other areas contained numerous *Banksia* (see Figure F-16), *Hakea*, *Grevillea* and other proteaceous plant species (DWER, 2024), although a vegetation and/or black cockatoo habitat survey would be required to delineate the extent of suitable foraging vegetation. Black cockatoo species are known to forage up to 20 kilometres from night roosting habitat and 12 kilometres from their nest during breeding season (DAWE, 2022), although recent findings suggest lesser distances are more likely (Murdoch University, pers. comm). The manager of the property has advised that no Carnaby's cockatoo have been observed foraging within the application area (McCusker, 2024c), and the Department notes that the application area has not been surveyed for the presence of Carnaby's cockatoo or habitat. However, given the presence of suitable vegetation within proximity of known breeding and roosting sites, the application area is considered to provide potential foraging habitat for Carnaby's cockatoo. Given the ongoing loss of foraging habitat for this species across its range, it is reasonable to conclude that this suitable foraging habitat may be used in the future. This foraging habitat is considered to be significant for Carnaby's cockatoo, noting the following:

- the scarcity of proteaceous scrub habitat remaining within the local area (refer to Section 3.2.3), and relative lack of foraging habitat available more broadly within the Wheatbelt region;
- the application area is within the Calingiri Important Bird Area, an area known to support up to 20 breeding pairs of Carnaby's cockatoo which nest in woodland remnants and isolated paddock trees and feed in native shrublands. Food resources for breeding birds includes proteaceous plants in native kwongan heath (i.e. vegetation present within the application area) (BirdLife International, 2025);
- the presence of 20 black cockatoo breeding sites within a 10 kilometre radius of the application area, with two breeding "hot spots" approximately 6.5 kilometres southwest and 8.2 kilometres east of the application area;
- the presence of a confirmed roost site for white tailed black cockatoos approximately 6.9 kilometres southwest of the application area;
- the presence of water sources within 1 kilometre; and
- the presence of potential breeding and roosting habitat immediately adjacent to the application area in vegetation that the applicant plans to retain.

Furthermore, the *Carnaby's cockatoo Recovery Plan* (DPAW, 2013) summarises the habitat critical for the survival of this species as follows:

- the eucalypt woodlands that provide nest hollows used for breeding, together with nearby vegetation that provides feeding, roosting and watering habitat that supports successful breeding
- woodland sites known to have supported breeding in the past and which could be used in the future, provided adequate nearby food and/or water resources are available or are re-established
- in the non-breeding season the vegetation that provides food resources as well as the sites for nearby watering and night roosting that enable the cockatoos to effectively utilise the available food resources

Vegetation within the application area is considered to provide food resources for Carnaby's cockatoo in the nearby Calingiri Important Bird Area used by the species for breeding, and can therefore be considered critical habitat for the species. DPAW (2013) states that as much habitat critical to survival as possible should be protected.

Given the limited extent of potential Carnaby's cockatoo foraging habitat in the region and local area, it is considered that the proposed clearing would have impacts upon Carnaby's cockatoo that could not be reversed within the short term through an offset. As such, it is considered that offsets would be insufficient to mitigate the impacts of the proposed clearing to this species.

Western brush wallaby

Western brush wallaby is known to inhabit open forest or woodland, particularly favouring open, seasonally-wet flats with low grasses and open scrubby thickets, but is also found in some areas of mallee and heath-land (DEC, 2012). The application area may provide habitat for western brush wallaby, although surveys would be required to assess the presence of this species and the importance of habitat within the application area.

Conclusion

Based on the above assessment, the proposed clearing:

- will result in the loss of significant foraging habitat for Carnaby's cockatoo;
- may result in the loss of habitat for Western brush wallaby.

3.2.2. Biological values (flora and ecological communities) - Clearing Principles (a) and (c)

Assessment

Flora

Based on the vegetation type and habitat present within the application area, the following conservation significant fauna species were considered likely or possible to occur within the application area:

- *Acacia vassalii (Threatened)*
- *Gastrolobium hamulosum* (Threatened)
- *Conostylis caricina* subsp. *elachys* (Priority 1)
- *Grevillea synapheae* subsp. *latiloba* (Priority 1)
- *Petrophile clavata* (Priority 2)
- *Acacia anarthros* (Priority 3)
- *Acacia pulchella* var. *reflexa* acuminate bracteole variant (R.J. Cumming 882) (Priority 3)
- *Dielsiodoxa leucantha* subsp. *leucantha* (Priority 3)
- *Grevillea florida* (Priority 3)
- *Stylidium sacculatum* (Priority 3)
- *Calothamnus pachystachyus* (Priority 4)
- *Persoonia sulcata* (Priority 4)

Acacia vassalii is found on sand and loam in low scrub and heath (Brown et al., 1998; Maslin, 2001). *Gastrolobium hamulosum* grows on pale yellow clay loam with some sand and gravel on clay flats. It also grows in white and grey sand or sandy clay. It sometimes occurs in disturbed ground with other colonising shrubs, such as in low heath with Tamma (*Allocasuarina campestris*), *Melaleuca* spp., *Eucalyptus* spp., and tall sedge (Brown et al., 1998; Johnston et al., 2006), and has been recorded within 1.5 kilometres of the application area. *Grevillea bracteosa* subsp. *bracteosa* has been recorded in shrubland and heath in various soil types, including sandy loam (Western Australian Herbarium, 1998-). Noting the presence of suitable habitat for these species, in the absence of surveys it is considered that these species may be present within the application area. If any of these species were to be present, the clearing of any individuals or populations could potentially impact upon their conservation status.

The above Priority species may also occur within the application area, given they are mapped within the same soil and/or vegetation types as the application area and noting the following habitats they are associated with (Western Australian Herbarium, 1998-):

- *Conostylis caricina* subsp. *elachys* - gravel, clayey loam, sand, often in heath
- *Grevillea synapheae* subsp. *latiloba* - sand, gravel, usually in woodland but has been recorded in heath
- *Petrophile clavata* (Priority 2) – hills and slopes, laterite, in heath or mallee
- *Acacia anarthros* (Priority 3) - lateritic gravelly soils, slopes, in heath or shrubland
- *Acacia pulchella* var. *reflexa* acuminate bracteole variant (R.J. Cumming 882) (Priority 3) - sandy loam or sandy clay over laterite, generally in woodland but occasionally in heath
- *Dielsiodoxa leucantha* subsp. *leucantha* (Priority 3) – gravelly soils, in heath or shrubland
- *Grevillea florida* (Priority 3) - sand, sandy clay, gravel, laterite, sandplain, slopes, road verges, in heath or woodland
- *Stylidium sacculatum* (Priority 3) - clayey sand or sand, lower slopes and flats, in open woodland or *Allocasuarina* shrubland.
- *Calothamnus pachystachyus* (Priority 4) - lateritic soils, often gravelly. Ridges, road verges, heath, shrubland, woodland
- *Persoonia sulcata* (Priority 4) - lateritic or granitic soils, usually woodland but sometimes heath or shrubland

Further to the above, although not recorded within the desktop search radius (10 kilometres), possible individuals of Priority 3 species *Beaufortia eriocephala* were found within the application area (see Figure F-11). The closest record of this species to the application area is 22.1 kilometres to the northwest, and it is found within lateritic sandy soils and slopes between York and Boothendarra (Western Australian Herbarium, 1998-).

Should any of the above species be present within the application area, the clearing may have a significant impact on these species. Flora surveys would provide further information against which the significance of impacts could be assessed.

Ecological communities

Although mapped within the application area, noting the lack of *Eucalyptus* trees (except for one smaller tree along the northern boundary), vegetation within the application area is not indicative of the Eucalypt woodlands of the

Western Australian Wheatbelt Priority 3 (and federally listed Threatened) ecological community (hereafter referred to as Wheatbelt woodlands PEC/TEC). However, the 2.2 hectare area of vegetation along the western boundary of the application area that the applicant proposes to retain comprised of *Eucalyptus* (likely *E. wandoo*) trees (DWER, 2024). Although only examined from a distance during the site inspection, this area appeared to be in Degraded condition, with an understorey predominantly comprised of weeds. As areas of suitable vegetation between 2 to 5 hectares need to have less than 50 per cent weed cover to be considered the Wheatbelt woodlands PEC/TEC (Department of the Environment, 2015), this area of adjacent *Eucalyptus* trees is considered unlikely to comprise a patch of this ecological community. As such, the proposed clearing is considered unlikely to impact upon the Wheatbelt woodlands PEC/TEC.

Conclusion

Based on the above assessment, the proposed clearing:

- may result in impacts to multiple conservation significant flora species; and
- would be unlikely to impact the Wheatbelt woodlands PEC/TEC.

Flora surveys would be required to determine the presence of conservation significant flora species and potential impacts of the clearing on the conservation status of these species.

3.2.3. Significant remnant vegetation - Clearing Principle (e)

Assessment

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). The application area is within the 'Avon Wheatbelt' IBRA bioregion, which retains approximately 18.51 per cent of its pre-European vegetation extent. The local area (10 kilometre radius from the application area) retains approximately 15.59 per cent of its original vegetation extent. Given this, the application areas occur within an area which has been extensively cleared.

The Beard vegetation complex (7) mapped within the application area retains approximately 10.60 per cent of its original vegetation extent in the 'Avon Wheatbelt' IBRA bioregion, although it is noted that vegetation within the application area is not representative of this vegetation association. From a review of the aerial imagery, the vegetation type present within the application area (i.e. largely heath to thicket) appears to be relatively scarce within the local area, with woodland vegetation more commonly present in the remnant native vegetation in the area. As such, the application area is considered likely to play an important role in maintaining flora and habitat biodiversity within the local area, particularly noting that Carnaby's cockatoo in the area forage within proteaceous plants in native kwongan heath (Birdlife International, 2025). While not directly adjoining a mapped or informal ecological linkage, noting the limited extent of vegetation present within the local area, the application area is also likely to act as a 'stepping stone' for birds flying through the area.

For the reasons set out above, it is considered that the vegetation within the application area is significant as a remnant in an extensively cleared landscape, and that any avoidance, minimisation or mitigation measures would not result in an environmentally acceptable outcome.

Conclusion

Based on the above assessment, the proposed clearing will remove 23 hectares vegetation that is significant as a remnant within a extensively cleared landscape.

3.2.4. Land and water resources - Clearing Principles (g), (h), (i), (j)

Assessment

Following an inspection and desktop assessment of the application area, the Commissioner of Soil and Land Conservation (the Commissioner) (CSLC, 2024) concluded that while the mapped soils are highly susceptible to wind erosion, the gravel present within the soil surface is likely to prevent significant wind erosion occurring as a result of the proposed clearing. As such, the Commissioner considered that land degradation is unlikely to increase with the proposed clearing of native vegetation provided that good management is continued to protect the surface against wind erosion.

While the mapped soil types within the application area do not indicate that clearing will result in land degradation within the application area, the mapped soil type (Wannamal System, 253Wa) in the lower lying areas to the west and south of the application area has a moderate risk of salinity and high risks of waterlogging and flooding.

Significant decreases in perennial vegetation cover, such as the proposed clearing, can result in increased recharge of groundwater aquifers, which may result in an expansion of salt affected land or additional volumes of saline groundwater discharging at the surface in low lying areas. Remote sensing mapping (Land Monitor) indicates land within the low-lying Wannamal System soils mapped west and south of the application area is already experiencing salinity. It is considered that the proposed clearing may result in further salinity and increase the risk of waterlogging occurring in adjacent low lying areas. Water quality within the watercourses in the adjacent low-lying areas may also be impacted by this salinity.

Conclusion

Based on the above assessment, the proposed clearing:

- is unlikely to result in land degradation within the application area;
- may result in further salinity and increase the risk of waterlogging in low lying areas to the west and south of the application area;
- may result in salinisation of watercourses west and south of the application area.

3.3. Relevant planning instruments and other matters

The Shire of Victoria Plains advised DWER that the current and proposed use of the land for extensive agricultural purposes is permitted under the land's current Rural' zoning classification in the Shire's Local Planning Scheme No 5 (Shire of Victoria Plains, 2024). The Shire advised that one of the key objectives of the Shire's Local Planning Strategy and Local Planning Scheme No 5 as they apply specifically to all 'Rural' zoned land is to maintain and enhance the environmental qualities of the landscape, vegetation, soils and water bodies and to protect sensitive areas, especially the natural valley and watercourse systems, from damage. The Shire has no objection to the proposed clearing works if DWER is satisfied it will not have any negative environmental impacts and is consistent with the Shire's planning scheme.

The application area has been identified as a site with perennial vegetation in the Shire of Victoria Plains Local Planning Strategy (Planwest, 2012), and this strategy states that "in terms of woody vegetation a strategy should be put in place to promote the identification and acquisition of such areas in order to protect areas of viable vegetation that cannot be cleared".

The Commissioner of Soil and Land Conservation advised that, following an assessment of the land capability, the subject land is largely suitable for the proposed end land use of grazing and cropping, with some moderate physical limitations (mainly wind erosion) (CSLC, 2024).

4 Suitability of offsets

Through the detailed assessment outlined in Section 3.2 above, the Delegated Officer has determined that the clearing would result in the following significant impacts:

- the loss of 23 hectares of significant foraging habitat for Carnaby's cockatoo; and
- the loss of 23 hectares vegetation that is significant as a remnant within an extensively cleared landscape.

The applicant proposed an environmental offset consisting of planting of saltbush in a saline area adjacent to the clearing area as an offset (McCusker, 2024a). The Delegated Officer considers that this does not adequately counterbalance the impacts listed above, as this proposed planting will not provide habitat for Carnaby's cockatoo nor provide the same ecosystem services (including maintenance of biodiversity and value as a 'stepping stone' for birds) as vegetation within the application area.

In response to increasing pressure on environmental values and the increased recognition of the needs of threatened species and biodiveristy, especially in extensively cleared landscapes such as the Wheatbelt region, it is necessary for DWER to place more weight on the genuine need for clearing to occur as a consideration when deciding whether to grant a clearing permit in cases where a significant residual impact exists. Furthermore, the Offsets Policy states that "environmental offsets are not appropriate in all circumstances". In weighing the necessity of clearing against environmental impacts in circumstances where there is limited genuine and material public benefit, and in accordance with the objects and principles of the EP Act (section 4A), DWER has taken a precautionary approach in assessing this application. On that basis, and that the proposed clearing would result in removal of vegetation that is significant as a remnant within an extensively cleared landscape and provides significant foraging habitat for Carnaby's cockatoo, DWER decided to refuse the clearing permit application (refer to Section 1.4 for further details), obviating any further discussion of offsets.

End

Appendix A. Additional information provided by applicant

Information provided by the applicant during the course of DWER's assessment of this clearing permit is summarised below.

Summary of comments	Consideration of comment
Information regarding proposed land use (McCusker, 2024b)	Considered in Section 1.2
Applicant's response to DWER's letter advising of intent to refuse the application (McCusker, 2024c): 1. DWER's assessment that the vegetation to be cleared is significant as a remnant of native vegetation in an area that has been extensively cleared is incorrect, as the quality nor quantity of vegetation could be regarded as significant. If the vegetation were to be retained, to whom and for what purpose would it provide value? 2. DWER's assessment was that the application area is "likely to be used" for foraging for Carnaby's cockatoo, however this does not mean that the application area actually comprises the whole or part of or is necessary for the maintenance of a significant habitat for Carnaby's cockatoo. The applicant notes that the farm's manager has never seen Carnaby's cockatoo foraging in the application area. 3. DWER's assessment was that the application area may also provide significant habitat for the shield backed trapdoor spider, however, there is no evidence that the application area provides habitat or significant habitat for this species. 4. DWER's assessment was that the vegetation to be cleared may contain conservation significant flora, however Principle (c) requires that the vegetation to be cleared does include such species. 5. DWER has asserted that it is not apparent that the clearing will provide any significant public benefit, and that clearing that is seriously at variance with any of the clearing principles should not be cleared unless significant public benefit exists. However: a. It is not established that the proposed clearing is at variance or seriously at variance with any of the clearing principles b. There is significant public benefit in making land, which would otherwise remain as unproductive scrub, productive. Production of food, and the payment of tax on the proceeds of sale of such food, is a public benefit. c. Leaving the land uncleared increases the bushfire hazard d. The Minister for Environment has stated that it is important to find "a balance between delivery of the full economic potential of our resources and the protection of the environment". To clear and crop this land would utilise the full	Considered as below: 1. DWER considers that the vegetation to be cleared is significant and has value to local biodiversity and fauna within an area that has been extensively cleared, as outlined in Section 3.2.3. 2. As discussed in Section 3.2.1, DWER acknowledges that no Carnaby's cockatoo foraging evidence has been recorded within the application area and no foraging has been observed. However, given the ongoing loss of foraging habitat for this species across its range, it is reasonable to conclude that this suitable foraging habitat may be utilised in the future, for the reasons outlined in Section 3.2.1. 3. While discussed in its letter, DWER has not discussed shield backed trapdoor spider in this decision report, noting the species has not been recorded within a 10 kilometre radius of the application area. 4. As discussed in Section 3.2.2, DWER acknowledges there this no evidence that threatened flora species are present within the application area and acknowledges there is some uncertainty that priority flora species are present. As such, DWER has assessed that the clearing may be at variance with principles (a) and (c) (Refer to Appendix D). DWER has based its decision to refuse this clearing permit application on the basis that the clearing is at variance with principle (e), and not its determination regarding principles (a) and (c). 5a. DWER considers that the clearing is at variance with principle (e) (refer to Appendix D). The reasons for this are discussed in Section 3.2.3. 5b. While production of food and taxes generated from the sale of such food may broadly deliver a level of benefit to the public, DWER does not consider that these benefits outweigh the environmental impacts of the proposed clearing. If the proposed clearing was to result in production of a resource that was limited or could not easily be provided elsewhere, the resultant public benefits may be considered significant. However, the proposed cropping and grazing (as detailed in Section 1.2) is a common agricultural practice within the region and not likely to generate any resources of scarcity.

Summary of comments	Consideration of comment
economic potential of this land whereas to refuse the clearing permit would serve no significant or valid environmental purpose. Retaining the vegetation on the basis of the possibility that the land may be used for black cockatoo foraging or may contain threatened flora is not striking a balance. 6. When considering an application for a clearing permit, the CEO should start from the premise that a private landowner should be able to clear the land unless there are valid evidence based environmental reasons for refusing a permit. To start from the premise that a permit should not be granted unless the applicant can prove there is no possibility that it may affect the environment is to set an impossible task for the applicant and makes it pointless for a landowner to spend the time and money applying for a permit.	5c. The EP Act includes exemptions under Schedule 6, Clause 10 that allow for clearing of vegetation in accordance with the *Bush Fires Act 1954*. The applicant has not provided any justification that clearing is required for bush fire prevention purposes that could otherwise be achieved through clearing in accordance with these exemptions. d. DWER acknowledges that a balance does need to be struck between development and protection of the environment. DWER does grant clearing permits where there is evidence that some environmental harm may occur when it considers that this harm is minimal and/or may be sufficiently mitigated or offset. The extent to which the clearing will provide public benefit is also a relevant factor in such decision making. For this application, DWER based its decision to refuse a permit on the basis that the proposed clearing is significant within an extensively cleared area, and in accordance with the objects and principles of the EP Act (section 4A), DWER did not consider that the purpose of the clearing could be justified in the context of the environmental impacts. 6. For this application, DWER based its decision to refuse a permit on the basis that the proposed clearing is significant within an extensively cleared area. In weighing the necessity of clearing against environmental impacts in circumstances where there is limited genuine and material public benefit, and in accordance with the objects and principles of the EP Act (section 4A), DWER has taken a precautionary approach in assessing this application and determined that offsets are not appropriate in this instance. In addition, the Offsets Policy states that "environmental offsets are not appropriate in all circumstances". DWER considers that it has sufficient evidence to make this decision and as such has not requested any proof from the applicant that the clearing would not result in significant environmental impacts.

Appendix B. Details of public submissions

Two public submissions were received for CPS 10588/1 (Submission 2024a and 2024b). The issues identified by the submitters are summarised below.

Summary of comments	Consideration of comment
Clearing purpose and necessity • The proposed purpose does not provide an essential product or public benefit not otherwise available from existing cleared land.	The clearing purpose has been factored into the Department's decision to refuse the permit, as described in Section 1.4

Summary of comments	Consideration of comment
• "Hazard reduction" is stated as one of the activity purposes, however, it is not adequate that the applicant not avoid clearing this extent by use of other fire mitigation means such as firebreaks.	
Inadequate demonstration of avoidance and minimisation measures • No information nor explanation is provided on any native vegetation clearance avoidance measures, including demonstration of how the planned use minimises the clearing undertaken. • No alternatives to clearing are provided. There are very substantial areas previously cleared for agricultural purposes that could be used for the proposed land use.	Considered in Section 3.1
Inadequate information provided in application for assessment No surveys have been provided and the information provided (photos only) is inadequate for undertaking an assessment of habitat value.	DWER notes that in order to accept a clearing permit application for assessment, it does not need to include information about the vegetation or flora or fauna surveys. Should DWER determine that surveys are warranted in order to undertake a clearing permit assessment, these will be requested during the assessment stage. It is acknowledged that a lack of available information at the time of advertising a clearing permit for public comment may present a challenge for the public when submitting comments. In the instance of this clearing permit application, DWER undertook a site inspection of the application to inform the Department's decision.
Offset is inadequate • No area of proposed planting is provided. • Planting of saltbush is unlikely to offset impacts from land degradation. • Planting of saltbush will not provide replacement habitat value.	The Department discussed the proposed offset in Section 4. The offset proposed by the applicant is considered by DWER to lack detail and is insufficient to counterbalance the impacts of the proposed clearing to habitat values and biodiversity. DWER considered that in the context of the vegetation remaining within the local area, no further details regarding offsets or mitigation were sought from the applicant (see Section 4).
Region has been subject to extensive historical clearing and fragmentation The area in this application is one of few remaining larger intact areas of native vegetation and as such should not be cleared.	Considered in Section 3.2.3
Land degradation The application area lies in proximity to drainage systems and in an extensively cleared landscape, further clearing in areas such as these are likely to exacerbate salinity, water and wind erosion. Soils within the application area are mapped as having a high to extreme wind erosion hazard.	Considered in Section 3.2.4

Appendix C. Site characteristics

C.1. Site characteristics

The information provided below describes the key characteristics of the area proposed to be cleared and is based on the best information available to DWER at the time of this assessment. This information was used to inform the assessment of the clearing against the Clearing Principles, contained in Appendix D.

Characteristic	Details
Local context	The area proposed to be cleared is part of a 26-hectare isolated patch of native vegetation in the intensive land use zone of Western Australia. It is surrounded by land cleared for agriculture with the exception of an approximately 2.2 ha area of native vegetation along the western boundary of the application area. Spatial data indicates the local area (10-kilometre radius from the centre of the area proposed to be cleared) retains approximately 15.59 per cent of the original native vegetation cover.
Ecological linkage	The application area does not intersect a formal ecological linkage. Vegetation alongside the portion of Old Telegraph Road located approximately 750 m west of the application area is mapped as having medium low (left side) and low (right side) conservation value. The proposed clearing area is not directly connected to an informal ecological linkage, although it is broadly associated with ecological linkages associated with Fletcher Brook and an unnamed watercourse approximately 150 m to the west of the application area.
Conservation areas	The closest formally recognised conservation area to the application area is an area under an Agreement to Reserve located approximately 1.5 km south of the application area. The closest mapped Nature Reserve is the Rica Erickson Nature Reserve approximately 7 km southwest.
Vegetation description	A DWER site inspection (2024) observed the vegetation within the proposed clearing area to comprise of: • Mixed heath (e.g. Figures F-2, F-3); • *Banksia* species heath (e.g. Figures F-4, F-5); • Myrtaceous species heath (e.g. Figures F-6, F-7); • *Allocasuarina* species heath to thicket, with occasional *Allocasuarina* trees, particularly towards the eastern end of the application area (e.g. Figures F-8, F-9), • Tall sedges (e.g. Figure F-10). An excerpt from the site inspection report, with more detail regarding the species observed, and photographs of the vegetation are available in Appendix F. This is inconsistent with the mapped vegetation type: • Beard vegetation association 7, which is described as Woodland other. Wheatbelt; York gum, salmon gum etc. *Eucalyptus loxophleba*, *E. salmonophloia*. Goldfields; gimlet, redwood etc. *E. salubris, E. oleosa*. Riverine; rivergum *E. camaldulensis*. Tropical; messmate, woolybush (Shepherd et al, 2001). The mapped vegetation type retains approximately 12.73 per cent of the original extent across Western Australia (Government of Western Australia, 2019).
Vegetation condition	A DWER site inspection (2024) observed that the vegetation within the proposed clearing area is in a Degraded (e.g. Figure F-10) to Very Good to Excellent condition (e.g. Figure F-2) (Keighery, 1994). The full Keighery (1994) condition rating scale is provided in Appendix E. Representative photos are available in Appendix F.
Climate and landform	The average annual rainfall received over the application area from 1991 to 2020 is 600 to 1,000 millimetres (Commonwealth of Australia, 2024).

Characteristic	Details
	The property has a high point of 264m AHD at the eastern boundary of the clearing area, descending to 244m AHD at the western boundary (CSLC, 2024).
Soil description	The soil is mapped as: • Udamong 1 Subsystem (253Ug_1), described as residual plateau, very gently to gently undulating plain and hillslopes. Shallow loamy gravel over duricrust, loamy gravel and sandy gravels. Woodland, heath and some mallee spp. *E. wandoo* (DPIRD, 2025). The site inspection (DWER, 2024), found that soils within the application area consisted of loamy sand with varying amounts of laterite – sometimes consisting of small gravel, sometimes larger rocks (refer to Figure F-12).
Land degradation risk	Mapped soils have high risks of subsurface acidification and wind erosion, moderate risks of water repellence and subsurface compaction and low risk of other land degradation issues (see Table A.5). Following a site inspection by DPIRD, the Commissioner for Soil and Land Conservation provided the following information regarding land degradation risks resulting from the clearing and proposed end land use (CSLC, 2024): • the mapped soil type has a high capability for the proposed land use; and • the mapped soil type has a high to very high risk of wind erosion when cleared of vegetation. However, it was noted that the loamy gravel soils have a protective layer of course gravelly fragments which should reduce this risk till a ground cover is established.
Waterbodies	The desktop assessment, aerial imagery and site inspection (DWER, 2024) indicate that no wetlands or watercourses are present within the application area. Two medium scale, non-perennial watercourses are located 180 m (Fletcher Brook) and 360 m west of the application area. A minor non-perennial watercourse which feeds into these watercourses is present approximately 370 m north of the application area. The application area is uphill from these watercourses. All of these watercourses are surrounded by floodplain areas, which have evidence of impacts of salinity, particularly Fletcher Brook (from Land Monitor update mapping).
Hydrogeography	The application area falls within the Avon River System Surface Water Area as proclaimed under the *Rights in Water and Irrigation Act 1914* (RiWI Act). The groundwater salinity level (total dissolved solids) is mapped as 7000-14,000 mg/L TDS. Hydrogeology: Rocks of Low Permeability, Fractured and Weathered Rocks - Local Aquifers (Gneiss, migmatite lithology) The application area is within the Moore River catchment.
Flora	The desktop assessment identified 31 conservation significant flora species within a 10 km radius of the application area, which comprises of 3 threatened flora and 28 priority flora species. Of these, 22 species were recorded in the same mapped vegetation type or similar mapped soil type as the application area. The nearest record is a Priority 4 species, *Persoonia sulcata*, approximately 60 metres from the application area.
Ecological communities	The Eucalypt woodlands of the Western Australian Wheatbelt ecological community (EPBC Act listed threatened, DBCA listed Priority 3) is mapped within the application area, with a further 194 occurrences mapped within a 10 km radius of the application area. No other conservation significant ecological communities are mapped within the local area. DWER's site inspection (2024) did not identify vegetation representative of this community within the application area.
Fauna	The desktop assessment identified two threatened and one priority fauna species within a 10 km radius of the application area. The closest record is *Zanda latirostris* (Carnaby's cockatoo), recorded 760 metres from the application area. The application area is within the Carnaby's cockatoo known distribution zone. There is one confirmed black cockatoo roost site (for white-tailed black cockatoos) recorded within a 10 km radius of the application area, approximately 6.8 km southwest of the

Characteristic	Details
	application area. There are 20 white tailed black cockatoo breeding sites recorded within a 10 km radius of the application area, the closest of which is 6.5 km southwest of the application area. The application area is within the Calingiri Important Bird Area as recognised by BirdLife International (2025). DWER's site inspection (2024) did not record the presence of any conservation significant fauna species, although possible macropod scats were observed. Some degraded Banksia species cones were also observed, although it could not be determined whether this degradation had resulted from natural degradation over time or from foraging by fauna (such as black cockatoo species). Vegetation along the western border of the application area, which the applicant proposes to retain, was noted to contain large *Eucalyptus* (likely wandoo) trees that may provide roosting habitat for black cockatoos (see Figures F-13 and F-14, Appendix F). Although most of the trees in this area appeared to have a DBH of less than 30 centimetres, at least one tree appeared to have a DBH larger than 30 centimetres, and this tree also had a hollow which may be suitable for black cockatoo nesting (Figure F-15, Appendix F).

C.2. Vegetation extent

	Pre-European extent (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre-European extent in all DBCA managed land
IBRA bioregion*					
Avon Wheatbelt	9,517,109.95	1,761,187.42	18.51	174,980.68	1.84
Vegetation complex across WA					
Beard vegetation association 7*	179,724.65	22,885.35	12.73	1,216.04	0.68
Vegetation complex in IBRA bioregion					
Beard vegetation association 7*	144,189.50	15,279.52	10.60	156.26	0.11
Local area					
10km radius	33,513.98	5,223.54	15.59	-	-
Post clearing calculations					
10km radius	33,513.98	5,200.54	15.51	-	-

*Government of Western Australia (2019a)

C.3. Flora analysis table

With consideration for the site characteristics set out above and relevant datasets (see Appendix G.1) impacts to the following conservation significant flora required further consideration.

Species name	Conservation status	Suitable habitat features?	Same mapped vegetation type?	Similar mapped soil type?	Distance of closest record to application area (km)	Number of records in 0km radius	Number of Florabase records	Are surveys adequate to identify?
Acacia anarthros	P3	Y	Y	Y	6.2	10	32	N/A
Acacia drummondii subsp. *affinis*	P3	N	Y	Y	8.2	1	38	N/A

Species name	Conservation status	Suitable habitat features?	Same mapped vegetation type?	Similar mapped soil type?	Distance of closest record to application area (km)	Number of records in 0km radius	Number of Florabase records	Are surveys adequate to identify?
Acacia oncinophylla subsp. *oncinophylla*	P3	N	Y	Y	4.7	1	42	N/A
Acacia pulchella var. *reflexa acuminate* bracteole variant (R.J. Cumming 882)	P3	Y	N	Y	5.9	2	21	N/A
Acacia vassalii	T	Y	Y	N	7.7	1	39	N/A
Calothamnus pachystachyus	P4	Y	Y	Y	2.7	1	36	N/A
Conostylis caricina subsp. *elachys*	P1	Y	Y	N	6.8	6	12	N/A
Dielsiodoxa leucantha subsp. leucantha	P3	Y	Y	Y	4.7	1	32	N/A
Eucalyptus sargentii subsp. *onesis*	P3	N	Y	N	5.5	1	23	N/A
Gastrolobium hamulosum	T	Y	Y	Y	1.5	17	43	N/A
Gastrolobium rotundifolium	P3	N	Y	N	7.3	2	34	N/A
Grevillea drummondii	P4	N	Y	Y	6.8	9	27	N/A
Grevillea florida	P3	Y	N	Y	6.7	2	20	N/A
Grevillea synapheae subsp. *latiloba*	P1	Y	Y	Y	7.3	1	24	N/A
Melaleuca sclerophylla	P3	N	Y	N	4.9	1	47	N/A
Persoonia sulcata	P4	Y	Y	Y	0.1	6	39	N/A
Petrophile clavata	P2	Y	Y	Y	5.8	5	14	N/A
Spirogardnera rubescens	T	N	N	Y	9.7	1	37	N/A
Stylidium cymiferum	P3	N	N	Y	9.2	2	13	N/A
Stylidium sacculatum	P3	Y	Y	Y	7.1	3	20	N/A
Stylidium scabridum	P4	N	N	Y	6.8	3	53	N/A
Verticordia huegelii var. *tridens*	P3	N	Y	N	10.0	1	32	N/A

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

C.4. Fauna analysis table

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Number of known records in 10 km radius	Are surveys adequate to identify? [Y, N, N/A]
Idiosoma nigrum (shield-backed trapdoor spider)	EN	N	4.7	14	N/A
Notamacropus irma (western brush wallaby)	P4	Y	8.3	4	N/A
Zanda latirostris (Carnaby's cockatoo)	EN	Y	0.8	86	N/A

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

C.5. Ecological community analysis table

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)	Number of known records in 10 km radius	Are surveys adequate to identify? [Y, N, N/A]
Eucalypt woodlands of the Western Australian Wheatbelt	P3	N	N	0	195	NA

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

C.1. Land degradation risk table

Risk categories	*Udamong 1 Subsystem*
Subsurface Acidification	H2: >70% of map unit has a high subsurface acidification risk or is presently acid
Wind erosion	H1: 50-70% of map unit has a high to extreme wind erosion risk
Water repellence	M1: 10-30% of map unit has a high water repellence risk
Subsurface compaction risk	M1: 10-30% of the map unit has a high subsurface compaction risk
Water erosion	L1: <3% of map unit has a high to extreme water erosion risk
Salinity	L1: <3% of map unit has a moderate to high salinity risk or is presently saline
Flood risk	L1: <3% of the map unit has a moderate to high flood risk
Water logging	L1: <3% of map unit has a moderate to very high waterlogging risk
Phosphorus export risk	L1: <3% of map unit has a high to extreme phosphorus export risk

Appendix D. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
Principle (a): *"Native vegetation should not be cleared if it comprises a high level of biodiversity."* Assessment: The area proposed to be cleared may contain regionally significant flora and habitat for a range of conservation significant fauna species. On that basis, the application area may potentially comprise a high level of biodiversity.	May be at variance	Yes *Refer to Sections 3.2.1, 3.2.2 and 3.3.3 above*
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."* Assessment: The area proposed to be cleared contains foraging habitat for black cockatoo species and may contain habitat for other conservation significant fauna species.	At variance	Yes *Refer to Section 3.2.1 above*
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: The area proposed to be cleared may contain threatened flora species.	May be at variance	Yes *Refer to Section 3.2.2 above*
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."* Assessment: The area proposed to be cleared does not contain species indicative of a threatened ecological community (DWER, 2024).	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
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."*	At variance	Yes

Assessment against the clearing principles	Variance level	Is further consideration required?
Assessment: The extent of native vegetation in the local area is inconsistent with the national objectives and targets for biodiversity conservation in Australia. Native vegetation within the application area plays an important role in maintaining flora and habitat biodiversity within the local area.		*Refer to Section 3.2.3 above*
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."* Assessment: Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas.	Not likely to be at variance	No
Environmental value: land and water resources		
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."* Assessment: No wetlands or watercourses, or vegetation associated with wetlands or watercourses, are present within the application area.	Not likely to be at variance	No
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: The mapped soils are highly susceptible to wind erosion, although the gravel present within the soil surface is likely to prevent significant wind erosion occurring as a result of the proposed clearing. The proposed clearing is considered unlikely to result in significant land degradation within the application area, however, may contribute to salinisation of low lying areas adjacent to the application area.	May be at variance	Yes *Refer to Section 3.2.4, above.*
Principle (i): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water."* Assessment: Noting the extent of native vegetation to be cleared and that land surrounding nearby watercourses have been impacted by salinity, it is considered that the proposed clearing may result in increased salinity within nearby watercourses.	May be at variance	Yes *Refer to Section 3.2.4 above.*
Principle (j): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."* Assessment: The mapped soils and topographic contours in the surrounding area do not indicate the proposed clearing is likely to contribute to increased incidence or intensity of waterlogging or flooding within the application area. However, noting the high risk of waterlogging in soils to the west of the application area and the extent of the clearing and in the absence of more detailed assessments in this regard, the proposed clearing could contribute to waterlogging within this area.	May be at variance	Yes *Refer to Section 3.2.4 above.*

Appendix E. Vegetation condition rating scale

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation's ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types. Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from Keighery (1994).

Measuring vegetation condition for the South West and Interzone Botanical Province (Keighery, 1994)

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species.
Very good	Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing.
Completely degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

Appendix F. DWER site inspection report excerpt and photographs of the vegetation

Vegetation observations:

- Vegetation consisted of heath to occasional scrub, sometimes mixed in composition (i.e. Photographs 2, 3, 46, 51), sometimes *Banksia* species dominated (i.e. Photographs 22, 43, 53, 55), Myrtaceous species dominated (i.e. Photographs 26, 49), *Allocasuarina* dominated (i.e. Photographs 28, 32) or sedge dominated (Photograph 39)
- Tree species observed included occasional large *Allocasuarina* spp. tree (i.e. Photograph 27). One large *Eucalyptus* tree (*E. loxophleba* - York gum?) on edge of application area near NW corner (Photographs 36, 37)

- Middle storey species seen included many *Allocasuarina* spp., *Xanthorrhoea* sp. (Photographs 2, 24), numerous Proteaceae species including many *Banksia* spp. (Photographs 10, 15, 19, 22, 25), *Hakea* spp. (Photograph 50), *Isopogon* sp. (Photograph 45), *Adenanthos* sp. *(Photograph 12), Conospermum* sp. (Photograph 47). and *Persoonia* sp. (Photograph 54), numerous Myrtaceae *species* including *Melaleuca* spp., *Leptospermopsis* sp., *Calothamnus quadrifidus, Beaufortia* sp., *Calytrix* spp., *Verticordia* spp., and *Thryptomene* sp. Other species included *Acacia spp., Gastrolobium* spp., *Hibbertia* sp., *Daviesia* sp., and *Pimelea* sp.
- Lower storey species observed included various sedges and grasses (inc *Austrostipa* sp.), *Dampiera* spp. (Photograph 6), *Dianella* sp., *Isotropis* sp., *Tripterococcus brunonis*, *Glischrocaryon* sp. (Photograph 51), *Stylidium* spp., *Drosera* spp., *Thysanotus* sp., *Platysace* sp., *Anigozanthos humilis.*
- **Possible** Priority flora seen: *Beaufortia eriocephala W.Fitzg.* (Photograph 34)
- Vegetation observed (except in cleared areas) was in Degraded (particularly in northeastern and south eastern corners where weeds were dominant, i.e. Photographs 31, 25, 39) to Very Good to Excellent condition (according to Keighery, 1994 – scale). Majority would have been in at least Very Good condition. Weedy grasses were present throughout the observed portions of the application area, with more weeds closer to the tracks. was weedy close to the track but less weeds further inwards.
- Vegetation was considered very diverse.

Figure F-1. Excerpt from DWER (2024) site inspection report

Figure F-2. Mixed heath vegetation in Very Good to Excellent condition in foreground - looking west from southern edge of application area (DWER, 2024)

Figure F-3. Mixed heath vegetation near southern edge of application area (DWER, 2024)

Figure F-4. Area of taller shrubland in Very Good to Excellent condition dominated by *Banksia* species in southwest corner of application area (DWER, 2024)

Figure F-5. Heath vegetation dominated by *Banksia* species (in background) along eastern border of application area (DWER, 2024)

Figure F-6. Area of taller shrubland dominated by Myrtaceous species midway along southern border of application area (DWER, 2024)

Figure F-7. Area of taller shrubland dominated by Myrtaceous species midway along southern border of application area (DWER, 2024)

Figure F-8. Area of *Allocasuarina* dominated shrubland midway along southern border of application area (DWER, 2024)

Figure F-9. Area of *Allocasuarina* dominated shrubland along eastern border (high point) of application area (DWER, 2024)

Figure F-10. Sedge dominated heath vegetation in Degraded condition with high proportion of weeds near NW corner of the application area (DWER, 2024)

Figure F-11. *Beaufortia* sp (*eriocephala*?) along eastern border (high point) of application area (DWER, 2024)

Figure F-12. Loamy sand soils with laterite gravel (left) and larger laterite concretion (right) along southern border of application area (DWER, 2024)

Figure F-13. Looking into woodland vegetation excluded from application area from its western edge - wandoo (?) trees over weedy grass understorey. Large eagle nest in left tree

Figure F-14. Looking into woodland vegetation excluded from application area from its western edge - wandoo (?) trees over weedy grass understorey.

Figure F-15. View of canopy in tree within woodland vegetation excluded from application area from its western edge. Large eagle nest and hollow present.

Figure F-16. *Bankia* species observed within the application area (DWER, 2024).

Appendix G. Sources of information

G.1. GIS databases

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- Contours (DPIRD-073)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography – Inland Waters – Waterlines
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Imagery
- Land Monitor Salinity Extent 2018 (DPIRD-100)
- Local Planning Scheme – Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- Offsets Register – Offsets (DWER-078)
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Roadside Conservation (DBCA-030)
- Soil Landscape Land Quality – Flood Risk (DPIRD-007)
- Soil Landscape Land Quality – Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality – Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality – Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality – Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality – Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality – Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping – Best Available
- Soil Landscape Mapping – Systems
- Wheatbelt Wetlands Stage 1 (DBCA-021)

Restricted GIS Databases used:

- ICMS (Incident Complaints Management System) – Points and Polygons
- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

G.2. References

BirdLife International (2025). *Important Bird Area factsheet: Calingiri (Australia)*. Retrieved from https://datazone.birdlife.org/site/factsheet/calingiri-iba-australia

Brown, A, Thomson-Dans, C & Marchant, N (eds) 1998, Western Australia's Threatened Flora, Department of Conservation and Land Management, Western Australia

Commissioner of Soil and Land Conservation (CSLC) (2024). *Land Degradation Advice and Assessment Report for clearing permit application CPS 10588/1,* received 29 October 2024, Department of Primary Industries and Regional Development, Western Australia (DWER Ref: DWERDT1028234).

Commonwealth of Australia (2001) *National Objectives and Targets for Biodiversity Conservation 2001-2005*, Canberra.

Commonwealth of Australia (2024). *Average annual, seasonal and monthly rainfall maps.* Retrieved from http://www.bom.gov.au/climate/maps/averages/rainfall/

Department of Agriculture, Water and the Environment (DAWE) (2022). *Referral guideline for 3 WA threatened black cockatoo species: Carnaby's cockatoo, Baudin's cockatoo and the Forest Red-tailed Black-cockatoo*, Department of Agriculture, Water and the Environment, Canberra, February

Department of Environment and Conservation (DEC) (2012). *Fauna profiles - Western Brush Wallaby* - Macropus irma. Department of Environment and Conservation, Western Australia.

Department of Environment Regulation (DER) (2013). *A guide to the assessment of applications to clear native vegetation*. Perth. Available from: https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf.

Department of the Environment (DoE) (2015). *Approved Conservation Advice - Appendices for the Eucalypt Woodlands of the Western Australian Wheatbelt*. Canberra: Department of the Environment. Available from: http://www.environment.gov.au/biodiversity/threatened/communities/pubs/128-conservation-advice-appendices.pdf

Department of Parks and Wildlife (DPAW) (2013). *Carnaby's Cockatoo (Calyptorhynchus latirostris) Recovery Plan*. Wildlife Management Program No.52.

Department of Primary Industries and Regional Development (DPIRD) (2025). *NRInfo Digital Mapping. Department of Primary Industries and Regional Development.* Government of Western Australia. URL: https://maps.agric.wa.gov.au/nrm-info/ (accessed 28 January 2025).

Department of Water and Environmental Regulation (DWER) (2019). *Procedure: Native vegetation clearing permits*. Joondalup. Available from: https://dwer.wa.gov.au/sites/default/files/Procedure_Native_vegetation_clearing_permits_v1.PDF.

Department of Water and Environmental Regulation (DWER) (2024). *Site Inspection Report for Clearing Permit Application CPS 10588/1,* 17 October 2024. Department of Water and Environmental Regulation, Western Australia (DWER Ref: DWERDT1066900).

Government of Western Australia. (2019). *2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019.* WA Department of Biodiversity, Conservation and Attractions. https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics

Heddle, E. M., Loneragan, O. W., and Havel, J. J. (1980) *Vegetation Complexes of the Darling System, Western Australia*. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.

Johnston, W., Thomas, S., Dougall, S., Hamersley, C., Phillips, L., & Smith, I. (2006). *Threatened, poorly known and other flora of Wongan-Ballidu,* Department of Environment and Conservation, Western Australia.

Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Shire of Victoria Plains (2024). *Advice for clearing permit application CPS 10588/1*, received 12 June 2024 (DWER Ref: DWERDT962502).

Maslin, B.R. (2001). Acacia vassalii. In A.E. Orchard, & J.G. Wilson (Eds.), *Flora of Australia*, vol. 11A (p 562). CSIRO Publishing, Melbourne.

Mattiske, E.M. and Havel, J.J. (1998) *Vegetation Complexes of the South-west Forest Region of Western Australia.* Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.

McCusker, M. (2024a). *Clearing permit application CPS 10588/1*, received 16 April 2024 (DWER Ref: DWERDT934677).

McCusker, M. (2024b, 2024c). *Additional information to support clearing permit application CPS 10588/1*, received 16 April 2024 and 23 December 2024 (DWER Refs: DWERDT942171 and DWERDT1066896).

Molloy, S., Wood, J., Hall, S., Wallrodt, S. and Whisson, G. (2009) *South West Regional Ecological Linkages Technical Report*, Western Australian Local Government Association and Department of Environment and Conservation, Perth.

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68) *Atlas of Australian Soils*, Sheets 1 to 10, with explanatory data. CSIRO and Melbourne University Press: Melbourne.

Planwest (2012). Shire Of Victoria Plains Local Planning Strategy. Retrieved from https://www.wa.gov.au/system/files/2021-11/LST-Victoria_Plains_Local_Planning_Strategy.pdf

Schoknecht, N., Tille, P. and Purdie, B. (2004) *Soil-landscape mapping in South-Western Australia – Overview of Methodology and output*s Resource Management Technical Report No. 280. Department of Agriculture.

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) *Native Vegetation in Western Australia, Extent, Type and Status*. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

Submission (2024a). *Public submission in relation to clearing permit application CPS 10588/1,* received 29 May 2024 (DWER Ref: DWERDT956146).

Submission (2024b). *Public submission in relation to clearing permit application CPS 10588/1,* received 4 June 2024 (DWER Ref: DWERDT958972).

Western Australian Herbarium (1998-). *FloraBase - the Western Australian Flora*. Department of Biodiversity, Conservation and Attractions, Western Australia. https://florabase.dpaw.wa.gov.au/ (Accessed 23 January 2025)