GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 10575/1

File Number: DWERVT14932

Duration of Permit: From 18 July 2024 to 18 July 2026

PERMIT HOLDER

Shire of Mundaring

LAND ON WHICH CLEARING IS TO BE DONE

Reservoir Road reserve (PIN 11440525), Chidlow

Rosedale Road reserve (PIN 11440531), Chidlow

AUTHORISED ACTIVITY

The permit holder must not clear more than 0.082 hectares of *native vegetation* within the areas cross-hatched yellow in Figure 1 of Schedule 1.

CONDITIONS

1. Period during which clearing is authorised

The permit holder must not clear any *native vegetation* after 18 July 2026.

2. Avoid, minimise, and reduce impacts and extent of clearing

In determining the *native vegetation* authorised to be cleared under this permit, the permit holder must apply the following principles, set out in descending order of preference:

(a) avoid the clearing of *native vegetation*;

(b) minimise the amount of *native vegetation* to be cleared; and

(c) reduce the impact of clearing on any environmental value.

3. Weed and dieback management

When undertaking any clearing authorised under this permit, the permit holder must take the following measures to minimise the risk of introduction and spread of *weeds* and *dieback*:

(a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;

(b) ensure that no known *dieback* or *weed*-affected soil, *mulch*, *fill*, or other material is brought into the area to be cleared; and

(c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

4. Directional clearing

The permit holder must:

(a) conduct *clearing* activities in a slow, progressive manner towards adjacent *native vegetation*; and

(b) allow a reasonable time for fauna present within the area being cleared to move into adjacent *native vegetation* ahead of the *clearing* activity.

5. Records that must be kept

The permit holder must maintain records relating to the listed relevant matters in accordance with the specifications detailed in Table 1.

Table 1: Records that must be kept

No.	Relevant matter	Specifications
1.	In relation to the authorised clearing activities generally	(a) the species composition, structure, and density of the cleared area; (b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings; (c) the date that the area was cleared; (d) direction of clearing; (e) the size of the area cleared (in hectares); (f) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 2; and (g) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 3.

6. Reporting

The permit holder must provide to the *CEO* the records required under condition 5 of this permit when requested by the *CEO*.

DEFINITIONS

In this permit, the terms in Table 2 have the meanings defined.

Table 2: Definitions

Term	Definition
CEO	Chief Executive Officer of the department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*.
clearing	has the meaning given under section 3(1) of the EP Act.
condition	a condition to which this clearing permit is subject under section 51H of the EP Act.
ill	means material used to increase the ground level, or to fill a depression.
dieback	means the effect of *Phytophthora* species on native vegetation.
department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
EP Act	*Environmental Protection Act 1986* (WA)
mulch	means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation.
native vegetation	has the meaning given under section 3(1) and section 51A of the EP Act.
weeds	means any plant – (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or (c) not indigenous to the area concerned.

END OF CONDITIONS

Mathew Gannaway
MANAGER
NATIVE VEGETATION REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

24 June 2024

SCHEDULE 1

The boundary of the areas authorised to be cleared is shown in the map below (

Figure **1**).

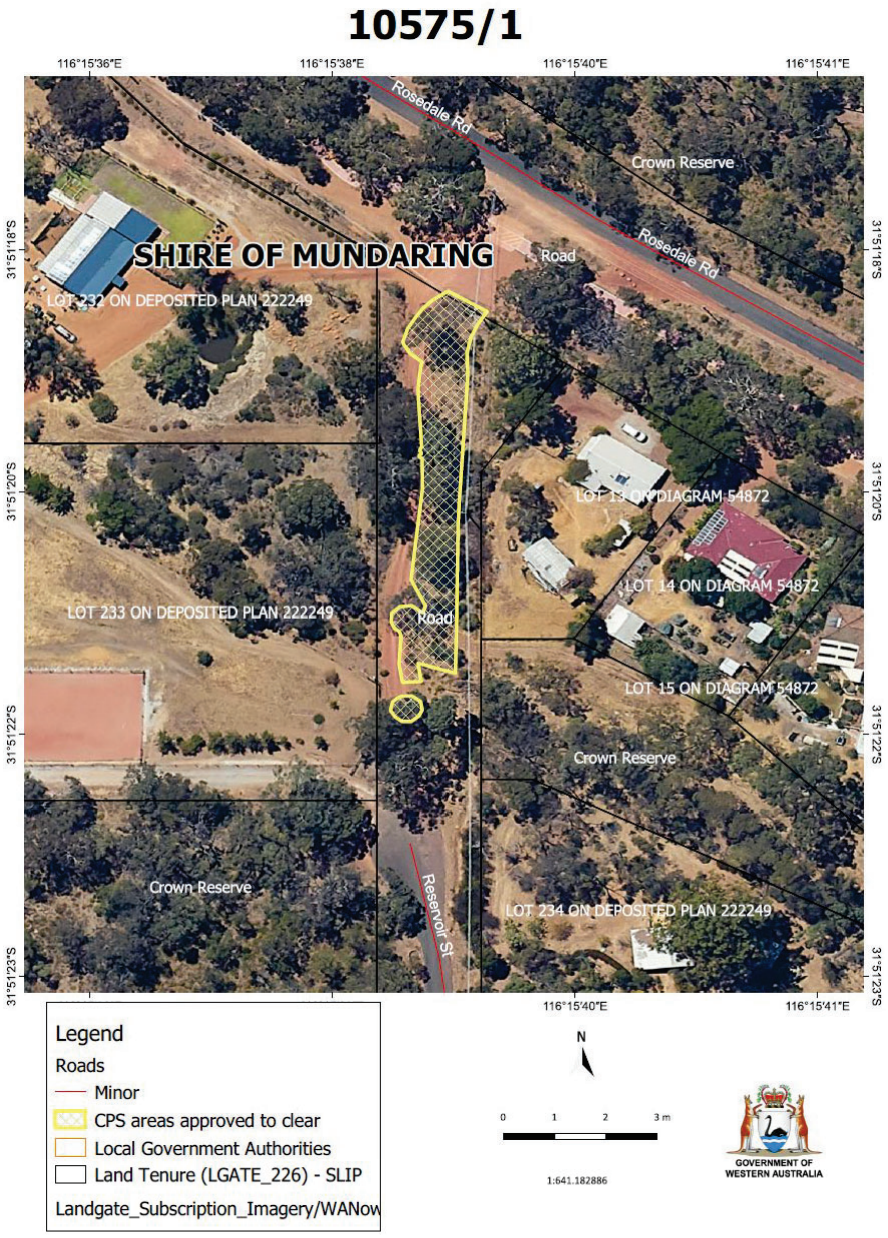

Figure 1: Map of the boundary of the areas within which clearing may occur

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 10575/1
Permit type:	Area permit
Applicant name:	Shire of Mundaring
Application received:	2 April 2024
Application area:	0.082 hectares of native vegetation
Purpose of clearing:	Road upgrades
Method of clearing:	Mechanical clearing, cutting, and pruning.
Property:	Reservoir Street Road reserve (PIN 11440525) Rosedale Road Reserve (PIN 11440531)
Location (LGA area/s):	Chidlow
Localities (suburb/s):	Shire of Mundaring

1.2. Description of clearing activities

The Shire of Mundaring (the Shire) is proposing to undertake the clearing of 0.082 hectares of native vegetation within the Reservoir Road reserve (PIN 11440525) and the Rosedale Road reserve (PIN 11440531), Chidlow. The proposed clearing will facilitate road upgrades for driver safety. The vegetation proposed to be cleared is distributed across two areas within the road reserves (see Figure 1, Section 1.5).

1.3. Decision on application

Decision:	Granted
Decision date:	24 June 2024
Decision area:	0.082 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 (DWER) advertised the application for 21 days and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (see Appendix B), relevant datasets (see Appendix F.1), site visit notes supplied by the Shire of Mundaring (see Appendix E), the clearing principles set out in Schedule 5 of the EP Act (see Appendix C), 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 to improve driver safety.

The assessment identified that the proposed clearing will result in:

- the loss of native vegetation that is suitable foraging habitat for Carnaby's cockatoo, Baudin's cockatoo and forest red-tailed black cockatoo (black cockatoo species);
- the loss of native vegetation that is suitable habitat for quenda;
- potential impacts to conservation significant fauna if present during the clearing activities;
- the potential loss of native vegetation, growing in, or in association with an environment associated with a watercourse; and
- the potential introduction and spread of weeds and dieback into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing can be minimised and managed to unlikely lead to an unacceptable risk to conservation significant fauna species. Due to the small scale of the clearing and vegetation extent in the local area, there is not likely to be a significant impact to conservation significant fauna species.

The Delegated Officer decided to grant a clearing permit subject to conditions to:

- avoid, minimise to reduce the impacts and extent of clearing
- take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback, and
- undertake slow, progressive one directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity

1.5. Site map

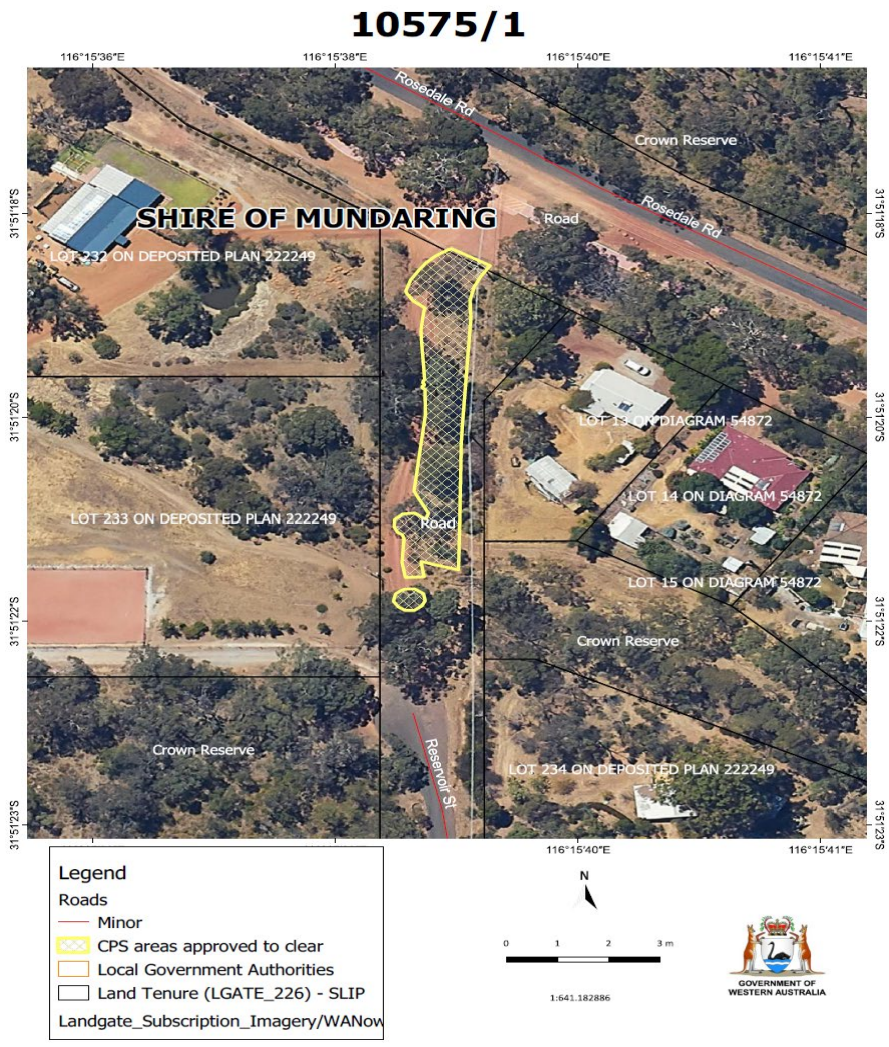

Figure 1 Map of the application area. The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit 10575/1.

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)
- *Rights in Water and Irrigation Act 1914* (RIWI Act)

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)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

The applicant has advised that the following avoidance and minimisation measures have been undertaken (Shire of Mundaring, 2024a):

- Shire of Mundaring is looking to undertake roadworks on a 150m stretch of Reservoir Street, Chidlow in FY 24/25. The works include to provide a sealed linkage to Rosedale Road for the vehicle easy access and have been designed in such a way that impacts on vegetation are minimised.

The Delegated Officer was satisfied that the applicant has made a reasonable effort 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 B) 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 C) identified that the impacts of the proposed clearing present a risk to biological values (fauna) and land and water resources. The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

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

Assessment

The application is located within the Jarrah Forest IBRA bioregion. According to available databases a total of 22 conservation significant fauna species have been recorded within the local area (10-kilometre radius of the application area). Of the conservation significant fauna species recorded within the local area, the application area may provide habitat for the following four fauna species:

- *Calyptorhynchus banksii naso* - forest red-tailed black cockatoo (VU)
- *Isoodon fusciventer* – quenda (P4)
- *Zanda baudinii* – Baudin's cockatoo (EN)
- *Zanda latirostris* – Carnaby's cockatoo (EN)

This assumption is based on habitat requirements, distribution, mapped vegetation type and the condition of the vegetation. Photographs provided by the applicant identified that the vegetation type within the application area was largely consistent with the mapped vegetation types of the area, consisting of open forest of *Eucalyptus marginata*

subsp. *thalassica-Corymbia calophylla* on slopes and open woodland of *Eucalyptus wandoo* with some *Eucalyptus patens* on the lower slopes in semiarid and arid zones (Shire of Mundaring, 2024b).

Black cockatoos
Black cockatoos are known to nest in hollows of live and dead trees, including *Corymbia calophylla* (marri), *Eucalyptus marginata* (jarrah), *Eucalyptus diversicolor* (karri), *Eucalyptus wandoo* (wandoo), *Eucalyptus gomphocephala* (tuart), *Eucalyptus rudis* (flooded gum), and other *Eucalyptus* spp. (DAWE, 2022). 'Breeding habitat' for black cockatoos includes trees of these species that either have a suitable nest hollow or are of a suitable diameter at breast height (DBH) to develop a nest hollow, where suitable DBH for nest hollows is 500 millimetres for most tree species (DAWE, 2022). Although *Eucalyptus wandoo* trees are species that can provide breeding and roosting habitat for black cockatoos if of a suitable size, the wandoo trees proposed to be cleared within the application area are immature and are below the DBH to develop hollows based on photographs provided by the applicant. Therefore, the vegetation proposed to be cleared is unlikely to provide any significant roosting or breeding value to black cockatoo species at present.

Black cockatoos generally breed in woodland or forest but may also breed in former woodland or forest now present as isolated trees (Commonwealth of Australia, 2022). Black cockatoo species are noted to forage on a range of plant species, with the primary foraging resources varying between species (Commonwealth of Australia, 2012). Carnaby's cockatoos forage on the seeds, nuts, and flowers of a variety of plants, including Proteaceous species (*Banksia spp., Hakea spp*., and *Grevillea spp*.), as well as *Allocasuarina* and *Eucalyptus* species, marri, and a range of introduced species (Valentine and Stock, 2008). Forest red-tailed black cockatoos feed predominantly on the seeds of marri and jarrah, which comprise approximately 90 per cent of their diet (DEC, 2008). Baudin's cockatoos primarily feed on the seeds of marri but may also forage on the seeds of jarrah and Proteaceous species (DEC, 2008). Given the application area contains *Eucalyptus wandoo* trees and occurs within the predicted occurrence range for all the black cockatoo species, the application area may provide suitable foraging habitat for black cockatoos. However, due to the immaturity of the trees, the extent of the clearing and the vegetated local area, it is unlikely to result in significant impacts to black cockatoo species.

Quenda
Quenda inhabit areas of dense vegetation including wetland fringes and heathlands. They have been observed in areas of native bushland and where exotic shrub species are prevalent. Quenda rarely venture from cover and will feed by digging in leaf litter and soil to find food and will construct nests under vegetation (DEC, 2012). Given the extent of the application area and the degraded condition of the vegetation, it is unlikely that the application area will comprise of significant habitat for the species. It is possible that the quenda may occur within the application area, while moving through the landscape. However, the implementation of slow, directional clearing will allow any individuals present at the time of clearing to move into adjacent suitable habitat in the local area.

Ecological linkage
The application area may function as an ecological linkage for fauna to move between larger remnants of native vegetation within the local area. The ecological linkage values will not likely be severed by the proposed clearing, noting native vegetation will remain within the road reserve. Notwithstanding the above, given that native vegetation remains surrounding the application area, a weed and dieback management condition will be required to assist in mitigating impacts to surrounding vegetation and maintaining ecological linkage values.

Conclusion
Based on the above assessment, the application area is not considered likely to represent significant habitat for any conservation significant species or to be critical for the continuation of the species. However, individuals may be present at the time of clearing whilst they transverse the landscape. Slow directional clearing will mitigate the risk to individuals. In addition, the clearing activities have the potential to impact the quality of the surrounding fauna habitat by facilitating the spread of weeds and dieback.

Conditions
To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- Directional clearing, which requires clow progressive, one directional clearing to allow terrestrial fauna to disperse ahead of the clearing activity should they occur at the time of clearing,
- Weed and dieback management measures to assist in mitigating impacts to surrounding vegetation that provides fauna habitat.

3.2.2. Water resources - Clearing Principles (f) and (i)

Assessment
A minor non-perennial watercourse bisects the application area at the southern point. Therefore, some of the vegetation within the application area may be growing in, or associated with, an environment associated with a watercourse. Given the extent of the proposed clearing across a linear footprint, the non-perennial nature of the waterbody, the extensively vegetated local area, it is not considered likely that the proposed clearing will result in any significant or long-term impacts to surface or underground water quality or to the ecological values of the vegetation communities associated with the watercourse within the application area.

It is acknowledged that the extent of the application area that runs adjacent to this watercourse is minimal. The vegetation in these areas is in a Degraded (Keighery, 1994) condition and is subject to ongoing disturbance from the adjacent Reservoir Road and Rosedale Road. Therefore, it is unlikely that the vegetation within the application area is contributing significantly to the function of riparian communities within the Swan River System. Given the extent and location of the proposed clearing, the condition of the vegetation, and adjacent land use, the proposed clearing is not considered likely to result in any significant or long-term impacts to the ecological values of the vegetation communities associated with the non-perennial tributaries of the Swan River System.

Conclusion
Based on the above assessment, the proposed clearing may result in the loss of vegetation growing in, or in association with an environment associated with a watercourse or wetland and may facilitate the spread of invasive weeds into adjacent vegetation in the local area. For the reasons set out above, the proposed clearing is unlikely to result in any significant or long-term impacts to the quality of surface or underground water or the ecological values of the riparian communities associated with the watercourses and wetlands within the application area.

It is considered that the impacts of the proposed clearing can be managed through permit conditioning by taking steps to minimise the risk of the introduction and spread of weeds. In considering the above, the Delegated Officer determined that the impacts of the proposed clearing on land and water resources does not constitute a significant residual impact.

Conditions
To address the above impacts, the following management measure will be required as a condition on the clearing permit:

- Dieback and weed control, which ensures protocols are in place to limit the introduction and transportation of dieback and weed affected materials.

3.3. Relevant planning instruments and other matters

The application was advertised on DWER's website and no submissions were received.

The Shire advised DWER that local government approvals are not required, and that the proposed clearing is consistent with the Shire's Local Planning Scheme.

The application area is located within the Swan River Surface Water Area proclaimed under the RIWI Act. Advice received from the DWER's Water Licensing branch indicates that the proposed clearing area bisects a non-perennial watercourse. If the proposed works involve removing the pipework and interfering with the bed and banks of this section of the watercourse, then the Shire will need to apply for a permit under section 11 of the RIWI Act (DWER, 2024). The Shire have confirmed that they will apply for a 3P permit to interfere with bed and banks under section 11/17/21A of the RIWI Act as the watercourse requires pipework and will require a bridge to be constructed. Long term impacts to this watercourse are expected to be minimal.

Several Aboriginal sites of significance have been mapped within the local area. It is the permit holder's responsibility to comply with the *Aboriginal Heritage Act 1972* (WA) and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

End

Appendix A. Additional information provided by applicant

Summary of comments	Consideration of comment
On the 18 June 2024, the applicant provided a response to a request for further information issued by DWER, regarding RIWI Act requirements for the application area.	See Section 3.3

Appendix B. Site characteristics

B.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 C.

Characteristic	Details
Local context	The area proposed to be cleared consists of 0.082 hectares of native vegetation within the intensive land use zone of Western Australia. It is surrounded by remnant vegetation and residential dwellings. Spatial data indicates the local area (10-kilometre radius from the centre of the area proposed to be cleared) retains approximately 57.44 per cent of the original native vegetation cover.
Ecological linkage	The application area does not intersect any formally mapped ecological linkages. Perth Regional Linkage 112 is located approximately 0.3 kilometres north west of the application area. Noting the extent of the vegetation being cleared, the proposed clearing is not considered likely to significantly impact this linkage.
Conservation areas	The nearest conservation area is the Wooroloo Regional Park which is located approximately 0.02 kilometres to the south of the application area.
Vegetation description	Photographs supplied by the applicant (Shire of Mundaring, 2024b) indicate the vegetation within the proposed clearing area consists of roadside *Eucalyptus wandoo* trees and native shrubs. Representative photos are available in Appendix E. This is consistent with the mapped vegetation type: • Pindalup, Pn, which is described as Open forest of *Eucalyptus marginata* subsp. *thalassica-Corymbia calophylla* on slopes and open woodland of *Eucalyptus wandoo* with some *Eucalyptus patens* on the lower slopes in semiarid and arid zones. (Heddle et al, 1980) The mapped vegetation type retains approximately 76.79 per cent of the original extent (Government of Western Australia, 2019).
Vegetation condition	Photographs supplied by the applicant (Shire of Mundaring, 2024b) indicate the vegetation within the proposed clearing area is in Degraded (Keighery, 1994) condition. The full Keighery (1994) condition rating scale is provided in Appendix D. Representative photos are available in Appendix E.
Climate and landform	Rainfall Mean Annual- 810mm Evapotranspiration Areal Actual- 700mm Topography- 250-300 AHD

Characteristic	Details
Soil description	The soil is mapped as: • Yarragil 4 Phase (255DpYG4) which is described as valley floors with some poorly drained mottled yellow duplex soils and gentle lower slopes with moderately well to well drained loamy and sandy earths, gravels and duplex soils. Low woodland of *E. wandoo, E. marginata and Acacia spp*.
Land degradation risk	The mapped soils within the application area are mapped as having a high risk of subsurface acidification and phosphorus export. The depth of the road construction will be negligible, any potential impacts from land degradation will not likely affect the surrounding environment (DPIRD, 2024).
Waterbodies and hydrogeography	The desktop assessment and aerial imagery indicated that the application area intersect one non perennial minor river at the southern point. The closest waterbody to the application area is Lake Leschenaultia which is located 0.75 kilometres east of the application area. The application area is mapped within the Swan River Surface Water Area proclaimed under the RIWI Act. Groundwater salinity within the application area is mapped at 1000-3000 milligrams per total dissolved solids.
Flora	The desktop assessment identified that a total of 18 conservation significant flora species have been recorded within the local area, comprising of three threatened flora species and 15 priority flora species (Western Australian Herbarium, 1998-). None of these existing records occur within the application area, with the closest record being an occurrence of *Adenanthos cygnorum* subsp*. chamaephyton* (P3) approximately 0.79 kilometres from the application area. With consideration for the relevant datasets (see Appendix F.1), the habitat preferences and conservation statuses of the aforementioned species, the distribution and extent of existing records and a site visit (Shire of Mundaring, 2024b), the application area is unlikely to provide significant habitat for threatened or priority flora species.
Ecological communities	The desktop assessment identified that there are no conservation significant ecological communities within the application area. The closest mapped ecological community is the Central Northern Darling Scarp Granite Shrubland Community which is listed as a Priority 4 priority ecological community (PEC) by the Department of Biodiversity, Conservation and Attractions in Western Australia, which is located 14 kilometres west of the application area. With consideration for the site characteristics, relevant datasets (see Appendix F.1) and a site visit (Shire of Mundaring, 2024b), the application area is not considered likely to contain vegetation representative of a Threatened Ecological Community (TEC) or PEC.
Fauna	The desktop assessment identified that a total of 22 conservation significant fauna species have been recorded within the local area including 13 threatened fauna species, eight priority fauna species and one other specially protected fauna species (DBCA, 2007-). None of these existing records occur within the application area, with the closest record being an occurrence of *Isoodon fusciventer* approximately 0.53 kilometres from the application area. With consideration for the site characteristics set out above, relevant datasets (see Appendix F.1) and the habitat preferences of the aforementioned species, and a site visit (Shire of Mundaring, 2024b), the application area is likely to provide habitat for conservation significant fauna species and impacts to these species required further consideration (see Section 3.2.1).

B.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*					
Jarrah Forest	4506660.25	2399838.15	53.25	1673614.25	37.14
Vegetation complex					
Pindalup, Pn *	167151.00	128358.24	76.79	100531.53	61.14
Local area					
10km radius	31642.41	18070.40	57.44	-	-

*Government of Western Australia (2019a)

B.3. Fauna 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 (total)	Are surveys adequate to identify? [Y, N, N/A]
Calyptorhynchus banksii naso (forest red-tailed black cockatoo)	VU	Y	Y	3.6	70	N/A
Isoodon fusciventer (quenda)	P4	Y	Y	0.53	530	N/A
Zanda baudinii (Baudin's cockatoo)	EN	Y	Y	0.91	98*	N/A
Zanda latirostris (Carnaby's cockatoo)	EN	Y	Y	0.56	97*	N/A
Zanda sp. 'white-tailed black cockatoo'	EN	Y	Y	3.88	45	N/A

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

* An additional 45 records of Zanda sp. 'white-tailed black cockatoo' (White-tailed black cockatoo) were recorded in the local area, which may comprise either of these species.

Appendix C. 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 contains habitat for conservation significant fauna. The application area is not likely to contain threatened or priority flora or a unique assemblage of plants that resembles a TEC or PEC.	May be at variance	Yes *Refer to Section 3.2.1, 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."*	At variance	Yes *Refer to Section 3.2.1, above.*

Assessment against the clearing principles	Variance level	Is further consideration required?
Assessment: The area proposed to be cleared contains habitat for conservation significant fauna. Individuals may be present at the time of the clearing.		
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 is unlikely to contain habitat for threatened flora species.	Not likely to be at variance	No
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 that can indicate a TEC.	Not 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."* Assessment: The extent of native vegetation in the local area is consistent with the national objectives and targets for biodiversity conservation in Australia. The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area.	Not at variance	No
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: Whilst the application area is located within 20 metres of a conservation area, weed and dieback management actions will minimise the risk or impacts occurring to the adjacent vegetation. The proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas.	May 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: Given one non perennial water course is recorded within the application area, the proposed clearing is growing in an environment associated with a watercourse.	At variance	Yes *Refer to Section 3.2.2, above.*
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 moderately susceptible to subsurface acidification and phosphorus export. Noting the extent of the application area and the condition of the vegetation, the proposed clearing is not likely to have an appreciable impact on land degradation.	Not likely to be at variance	No
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: Given one water course bisects the application area, the proposed clearing may impact surface water quality, however impacts are likely to be minimal and short term. The applicant is not proposing to excavate at depth, so groundwater quality is not likely to be impacted.	Not likely to be at variance	Yes *Refer to Section 3.2.2, above.*

Assessment against the clearing principles	Variance level	Is further consideration required?
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 flooding.	Not at variance	No

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

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 E. Photographs of the vegetation (Shire of Mundaring, 2024b)

Figure 2. *Eucalyptus wandoo* trees proposed to be cleared (Shire of Mundaring, 2024b)

Figure 3. Small cluster of native vegetation on the eastern verge (Shire of Mundaring, 2024b)

Figure 4. View of the eastern side of Reservoir Road (Shire of Mundaring, 2024b)

Figure 5. Eastern side of Reservoir Road-, dead tree and native vegetation and weeds underneath (Shire of Mundaring, 2024b)

Figure 6. Eastern side of Reservoir Road-, dead tree and native vegetation and weeds underneath (Shire of Mundaring, 2024b)

Figure 7. Eastern Side of Reservoir Road (Shire of Mundaring, 2024b)

Figure 8. Eastern side of Reservoir Road (Shire of Mundaring, 2024b)

Figure 9. Western side of Reservoir Road (Shire of Mundaring, 2024b)

Figure 10. Two *Eucalyptus wandoo* trees proposed to be cleared (Shire of Mundaring, 2024b)

Figure 11. Eastern side of Reservoir Road near the intersection of Rosedale Road (Shire of Mundaring, 2024b)

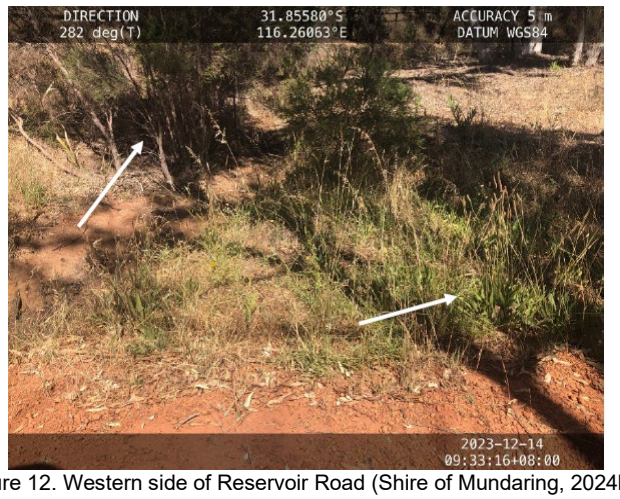

Figure 12. Western side of Reservoir Road (Shire of Mundaring, 2024b)

Appendix F. Sources of information

F.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)
- 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
- Local Planning Scheme – Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- 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)
- 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

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)

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