GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 10157/1
Permit Holder:	Shire of Manjimup
Duration of Permit:	From 24/07/2025 to 24/07/2030

The permit holder is authorised to clear *native vegetation* subject to the following conditions of this permit.

PART I – CLEARING AUTHORISED

1. Clearing authorised (purpose)

The permit holder is authorised to clear *native vegetation* for the purpose of cemetery expansion

2. Land on which clearing is to be done

Lot 9547 on Deposited Plan 140889, Northcliffe

3. Clearing authorised

The permit holder must not clear more than seven (7) native trees within the area cross-hatched yellow in Figure 1 of Schedule 1.

PART II – MANAGEMENT CONDITIONS

4. 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.

5. 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.

6. Fauna management – western ringtail possum

(a) In relation to the area cross-hatched yellow in Figure 1 of Schedule 1, the permit holder must engage a *fauna specialist* to inspect that area within 24 hours prior to, and for the duration of *clearing*, for the presence of western ringtail possum(s) (*Pseudocheirus occidentalis*).

(b) *Clearing* must cease in any area where fauna referred to in condition 6(a) are identified until either:

(i) the western ringtail possum individual(s) has moved on from that area to adjoining *suitable habitat*; or

(ii) the western ringtail possum individual(s) has been removed by a *western ringtail possum specialist*.

(c) Any western ringtail possum individuals removed in accordance with condition 6(b)(ii) of this permit must be relocated by a *western ringtail possum specialist* to *suitable habitat*.

(d) Where fauna is identified under condition 6(a), the permit holder must within 14 calendar days provide the following records to the *CEO*:

(i) the number of individuals identified;

(ii) the date each individual was identified;

(iii) the location where each individual was identified recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 2020 (GDA2020), expressing the geographical coordinates in Eastings and Northings or decimal degrees;

(iv) the number of individuals removed and relocated;

(v) the relevant qualifications of the *western ringtail possum specialist* undertaking removal and relocation;

(vi) the date each individual was removed;

(vii) the method of removal;

(viii) the date each individual was relocated;

(ix) the location where each individual was relocated to, recorded using a GPS unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings or decimal degrees; and

(x) details pertaining to the circumstances of any death of, or injury sustained by, an individual.

PART III - RECORD KEEPING AND REPORTING

7. 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) the size of the area cleared (in hectares); (e) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 4; (f) actions taken to minimise the risk of the introduction and spread of *weeds* and dieback in accordance with condition 5; and (g) actions taken to manage and mitigate impacts to western ringtail possums in accordance with condition 6.

8. Reporting

The permit holder must provide to the *CEO* the records required under condition 7 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.
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.
dieback	means the effect of *Phytophthora* species on native vegetation.
EP Act	*Environmental Protection Act 1986* (WA)
fauna specialist	means a person who holds a tertiary qualification specialising in environmental science or equivalent, and has a minimum of 2 years work experience in fauna identification and surveys of fauna native to the region being inspected or surveyed, or who is approved by the *CEO* as a suitable fauna specialist for the bioregion, and who holds a valid fauna licence issued under the *Biodiversity Conservation Act 2016*.

Term	Definition
fill	means material used to increase the ground level, or to fill a depression.
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.
suitable habitat (western ringtail possum)	means habitat known to support western ringtail possums (*Pseudocheirus occidentalis*) within the known current distribution of the species, typically characterised by abundant foliage, presence of suitable nesting structures such as tree hollows, as well as high canopy cover and continuity. Known habitat includes peppermint (*Agonis flexuosa*) dominated woodlands, jarrah (*Eucalyptus marginata*) and marri (*Corymbia calophylla*) forests, riparian vegetation with a canopy of Bullich (*Eucalyptus megacarpa*) or flooded gum (*Eucalyptus rudis*), karri (*Eucalyptus diversicolor*) forests, sheoak (*Allocasuarina fraseriana*) dominated woodlands, and other stands of myrtaceous trees growing near swamps, watercourses or floodplains.
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.
western ringtail possum specialist	means a *fauna specialist* who holds a tertiary qualification specialising in environmental science or equivalent, has a minimum of two years of work experience in western ringtail possum (*Pseudocheirus occidentalis*) identification, surveys of western ringtail possums and capture and handling of western ringtail possums, and holds a valid fauna licence issued under the *Biodiversity Conservation Act 2016*.

END OF CONDITIONS

C Robertson
2.44PM
30.06.2025

Caron Robertson
MANAGER
NATIVE VEGETATION REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

30 June 2025

Schedule 1

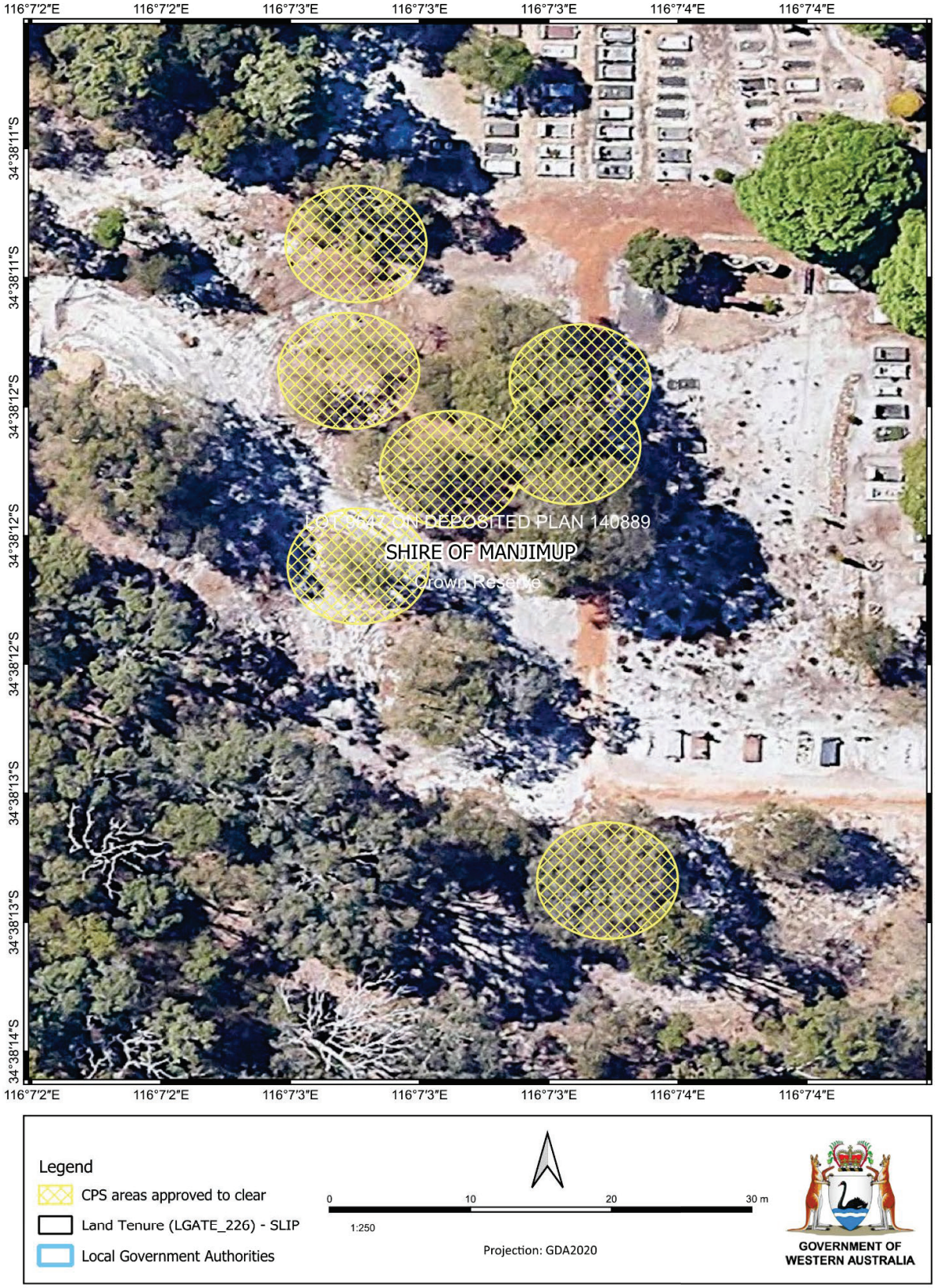

Figure 1: Map of the boundary of the area within which clearing may occur (cross-hatched yellow)

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 10157/1
Permit type:	Purpose permit
Applicant name:	Shire of Manjimup
Application received:	19 April 2023
Application area:	Seven (7) native trees
Purpose of clearing:	Cemetery expansion
Method of clearing:	Mechanical removal
Property:	Lot 9547 on Deposited Plan 140889 (Reserve 18677)
Location (LGA area/s):	Shire of Manjimup
Localities (suburb/s):	Northcliffe

1.2. Description of clearing activities

The application is to selectively clear seven trees to expand an existing cemetery adjacent to Main Road, Northcliffe (see Figure 1, Section 1.5). The amount of clearing proposed was reduced during assessment (see Section 3.1 for further details).

1.3. Decision on application

Decision:	Granted
Decision date:	30 June 2025
Decision area:	Seven (7) native trees 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 A),
- the clearing principles set out in Schedule 5 of the EP Act (see Appendix B),
- relevant datasets (see Appendix D.1),
- the findings of a fauna habitat survey (Harewood, 2023),
- relevant planning instruments and any other matters considered relevant to the assessment (see Section 3).

The Delegated Officer also took into consideration the purpose of the clearing is to expand an existing public cemetery.

The assessment identified the proposed clearing will result in:

- the loss of native vegetation that is suitable foraging habitat for *Pseudocheirus occidentalis* (western ringtail possum),
- potential direct impacts to fauna individuals present in the application area at the time of clearing,
- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the 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 impacts to the above environmental values can be appropriately managed through conditions on the clearing permit.

The Delegated Officer determined it was appropriate to grant a clearing permit subject to conditions requiring the applicant to:

- undertake avoid and minimise measures to reduce the impacts and extent of clearing,
- take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback,
- undertake pre-clearing inspections to confirm absence of western ringtail possum individuals.

1.5. Site map

Figure 1 Map of application area

The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit.

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 polluter pays principle
- 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)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC 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)
- Technical guidance - *Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment* (EPA, 2020)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

The applicant reduced the application area during the clearing permit assessment (Shire of Manjimup, 2025a; Shire of Manjimup, 2024). The original application proposed to clear 0.75 hectares of native vegetation (see Figure 2, below). The applicant reduced this to the proposed clearing of seven (7) native trees (see Figure 1, Section 1.5).

The revised application area reduced potential impacts to significant environmental values, including:

- avoiding all suitable black cockatoo foraging and potential breeding habitat, including retaining the two trees with hollows identified in the fauna survey (Harewood, 2023),
- avoiding higher quality vegetation by selectively clearing trees located over bare ground,
- avoiding clearing of large trees (trees over 50cm diameter at breast height).

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.

Figure 2. Original application area for CPS 10157/1. The applicant proposed to clear 0.75 hectares of native vegetation.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix A) 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 B) identified that the impacts of the proposed clearing present a risk to biological values (fauna) and ecological linkages. 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) and ecological linkage - Clearing Principles (b) and (e)

Assessment

Photographs (Shire of Manjimup, 2025b) and a targeted fauna survey (Harewood, 2023) identified the vegetation in the application area is in Completely Degraded (Keighery, 1994) condition and consists of seven peppermint (*Agonis flexuosa*) trees.

The desktop assessment identified 20 conservation significant fauna species recorded in the local area (10-kilometre radius from the application area). In determining the likelihood of each species occurring in the application area, the following was considered:

- the preferred habitat and vegetation types of the species,
- their recorded proximity to the application, and
- date of record (see Appendix A.3).

The likelihood analysis identified two conservation significant fauna species which may occur in the application area: *Pseudocheirus occidentalis* (western ringtail possum; CR) and *Isoodon fusciventer* (quenda; P4).

Western ringtail possum (WRP)

The application area is near the Southern Forest management zone, where critical habitat for WRP includes forests with limited anthropogenic disturbance and low fragmentation (DPAW, 2017). WRP are known to forage on peppermint trees, use tree hollows as daytime resting sites and rely on canopy connectivity to avoid predation (DPAW, 2017).

The trees proposed to be cleared provide suitable foraging habitat for WRP. The tree canopies are separated from surrounding vegetation by cleared tracks. The application area is within a cemetery subject to ongoing anthropogenic disturbance. Given this, and the extent of surrounding suitable foraging habitat with high canopy connectivity, the application area is unlikely to provide significant foraging habitat for WRP. Additionally, the proposed clearing is unlikely to alter WRP movement through the landscape.

The fauna survey (Harewood, 2023) did not identify WRP dreys in the application area. During the assessment process, the Shire reduced the application area to exclude hollow-bearing trees (see section 3.1). Given this, the application area does not provide suitable refuge habitat for WRP.

Quenda

Quenda diggings were observed in the application area during the fauna survey (Harewood, 2023). Quenda prefer habitat with dense understorey (DEC, 2012). As the application area lacks understorey, it does not provide preferred habitat for quenda. Given this, quenda are likely transient visitors to the application area while moving through nearby vegetation.

Ecological linkage

The application area is connected to the South West Regional Ecological Linkages (SWREL; Molloy et al., 2009). Given the degraded condition and small extent of vegetation proposed to be cleared, and that it is located along the edge of a larger patch of connected native vegetation, the proposed clearing is unlikely to alter the functioning of the SWREL. Given the extent of surrounding connected vegetation, the application area does not provide significant linkage value for fauna moving through the landscape.

Conclusion

Based on the above assessment, the application area does not provide significant habitat for conservation significant fauna. The management measures specified below will reduce impacts to WRP if present in or near the application area during clearing activities.

Conditions

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

- undertake avoid and minimise measures to reduce the impacts and extent of clearing,
- take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback,
- undertake pre-clearing inspections to confirm absence of western ringtail possum individuals.

3.3. Relevant planning instruments and other matters

According to available databases, there are no Aboriginal sites of significance mapped within the application 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. Site characteristics

The information provided below describes the key characteristics of the application area 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 B.

A.1. Site characteristics

Characteristic	Details
Local context	The application area is within a parkland cleared cemetery in the intensive land use zone of Western Australia. It is surrounded by an extensive patch of native vegetation. Spatial data indicates the local area (10-kilometre radius from the centre of the application area) retains approximately 57 per cent of the original native vegetation cover.
Ecological linkage	The application area is connected to the South West Regional Ecological Linkages.
Conservation areas	The application area does not intersect a mapped conservation area. The closest mapped conservation area is a DBCA managed reserve (R 28101) about 300 metres from the application area.
Vegetation description	Photographs (Shire of Manjimup, 2025b) and a targeted fauna survey (Harewood, 2023) indicate the application area comprises seven scattered peppermint (*Agonis flexuosa*) trees. This is inconsistent with the mapped vegetation type: • Darling Plateau – Collis 1 (62), described as tall open forest to woodland of *Eucalyptus marginata subsp. marginata - Corymbia calophylla - Banksia grandis - Allocasuarina fraseriana* on low hills and with *Allocasuarina decussata* on slopes in perhumid and humid zones. *The mapped vegetation type retains approximately 83 per cent of the original extent (Government of Western Australia, 2019).*
Vegetation condition	Photographs (Shire of Manjimup, 2025b) and a targeted fauna survey (Harewood, 2023) indicate the vegetation in the application area is in Completely Degraded (Keighery, 1994) condition. The full Keighery (1994) condition rating scale is provided in Appendix C.
Climate and landform	The average annual rainfall received over the application area from 1991 to 2020 is 1000 to 1500 millimetres (Commonwealth of Australia, 2021). The application area is at an altitude of 100 to 110 meters above sea level.
Soil description	The soil is mapped as Collis yellow duplex Phase (254NfCOy), described as gravelly yellow duplex soils; Jarrah-Marri Forest.
Land degradation risk	Land degradation risks are summarised in Table A.4.
Waterbodies	The desktop assessment and aerial imagery indicate no waterbodies transect the application area. The application area is surrounded by multiple mapped waterbodies. The nearest waterbody is a nonperennial minor river about 50 metres west of the application area.
Hydrogeography	The application area is within the Warren - Denmark hydrological zone and within the Gardner River catchment. The application area is not within an area proclaimed under the *Rights in Water and Irrigation Act 1914* (RIWI Act) or protected under the *Country Water and Supply Act 1917* (CAWS Act). The groundwater salinity level (total dissolved solids) is mapped as 500-1000 milligrams per litre.
Flora	The desktop assessment identified eight priority flora species in the local area. No threatened flora species were identified in the local area. The nearest record is the Priority 4 *Lomandra ordii*, located one kilometre from the application area.
Ecological communities	No conservation significant ecological communities are mapped over the application area. The closest mapped ecological community is the Priority 3 Epiphytic Cryptogams of the karri forest, located about eight kilometres from the application area. No threatened ecological communities (TECs) have been recorded in the local area.

Characteristic	Details
Fauna	The desktop assessment identified 20 conservation significant fauna species in the local area. The closest records are the *Galaxiella munda* (mud minnow) and *Galaxiella nigrostriatal* (black-stripe minnow) recorded 300 metres from the application area.

A.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*					
Warren	833,985.56	659,432.21	79.07	558,485.38	66.97
Vegetation complex **					
Darling Plateau – Collis 1 (62)	23,057.01	19,028.01	82.53	16,984.30	73.66
Local area					
10km radius	31,808.02	18,046.75	56.74	-	-

*Government of Western Australia (2019a)

**Government of Western Australia (2019b)

A.3. Fauna analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix D.1), and biological survey information, impacts to the following conservation significant fauna species required further consideration.

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)
Isoodon fusciventer (quenda)	P4	Y	Y	0.32
Pseudocheirus occidentalis (western ringtail possum)	CR	Y	Y	1.62

A.4. Land degradation risk table

Risk categories	*Land Unit 1*
Subsurface Acidification	H2: >70% of map unit has a high subsurface acidification risk or is presently acid
Wind erosion	H2: >70% of map unit has a high to extreme wind erosion risk
Phosphorus export risk	M1: 10-30% of map unit has a high to extreme phosphorus export risk
Water erosion	L2: 3-10% of map unit has a high to extreme water erosion risk
Water repellence	L2: 3-10% of map unit has a high water repellence risk
Flood risk	L1: <3% of the map unit has a moderate to high flood risk
Salinity	L1: <3% of map unit has a moderate to high salinity risk or is presently saline
Water logging	L1: <3% of map unit has a moderate to very high waterlogging risk

Appendix B. 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: Given the size and condition of the vegetation proposed to be cleared, it is not likely to comprise a high level of biodiversity. The application area does not contain suitable habitat for conservation significant flora or ecological communities.	Not likely to be at variance	No
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 application area contains habitat for conservation significant fauna and is part of a mapped ecological linkage.	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: A flora likelihood assessment was conducted based on habitat and soil preferences, vegetation in the application area, and known species distribution. According to available databases, no threatened flora species have been recorded in the local area. Given the application area is parkland cleared, it 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: According to available databases, there are no TECs recorded in the local area. The application area does not contain species that indicate a TEC.	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."* Assessment: The extent of the mapped vegetation type and native vegetation in the local area are consistent with the national objectives and targets for biodiversity conservation in Australia (Commonwealth of Australia, 2001). The vegetation proposed to be cleared is connected to the South West Regional Ecological Linkages. Given the application area is separated from nearby vegetation by cleared tracks, the proposed clearing is unlikely to impact the functioning of the mapped ecological linkage.	Not likely to be at variance	Yes Refer to Section 3.2.1, 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, and the small extent and degraded condition of the vegetation in the application area, the proposed	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
clearing is not likely to impact the environmental values of nearby conservation areas.		
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: The application area is likely hydrologically connected to nearby mapped watercourses. The application area has been subject to historical disturbance given it is a parkland cleared cemetery. The proposed clearing is unlikely to significantly impact the environmental associated with this watercourse.	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 and subsurface acidification. Given the extent and condition of the vegetation in the application area, 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: The application area is likely hydrologically connected to nearby mapped watercourses. The application area has been subject to historical disturbance given it is a parkland cleared cemetery. The proposed clearing is unlikely to significantly impact surface or ground water quality.	Not likely to be at variance	No
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: According to available soil mapping, the application area has a low risk of flooding or waterlogging. Given the small extent and degraded condition of the vegetation proposed to be cleared, it is unlikely the proposed clearing will cause or exacerbate flooding.	Not likely to be at variance	No

Appendix C. 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.

Condition	Description
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 D. Sources of information

D.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
- 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)
- 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)

D.2. References

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