



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 10435/1
File Number: DWERVT14128
Duration of Permit: From 26 February 2026 to 26 September 2033

PERMIT HOLDER

Shire of Nungarin

LAND ON WHICH CLEARING IS TO BE DONE

Koorda–Bullfinch Road reserve (PINs 11657495 and 11657500), Chandler

AUTHORISED ACTIVITY

The permit holder must not clear more than 0.80 hectares of native vegetation within the area 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 26 February 2028.

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 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:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no known *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 shall conduct clearing in a slow progressive manner towards adjacent native vegetation to allow fauna to move into adjacent native vegetation ahead of the clearing activity.

5. Wind erosion management

The permit holder must commence drain upgrades no later than three (3) months after undertaking the authorised clearing activities to reduce the potential for wind erosion.

6. Flora management – Avoidance of *Eremophila virens*

- (a) Prior to undertaking any clearing authorised under this permit, the permit holder must flag and demarcate the boundaries of the clearing area.
- (b) The permit holder must not clear within 5 metres of any occurrence of the Threatened flora species *Eremophila virens*, as identified in the *Flora Survey* and observed at the location outlined in Table 1.

Table 1. Recorded GPS location of *Eremophila virens* adjacent to the permit area

	Easting	Northings
<i>Eremophila virens</i>	118.435973 E	-31.024058 S

7. Revegetation – mitigation

Within 12 months of the commencement of clearing, and no later than 26 February 2028, at an *optimal time*, the permit holder must undertake *revegetation* and *rehabilitation* of 0.70 hectares of *native vegetation* within the area cross-hatched red in Figure 1 of Schedule 2, including but not limited to the following actions:

- (a) deliberately undertake *direct seeding* and tube stock *planting* of *native vegetation* that will result in the species composition, structure and density that align with the completion criteria detailed in Table 1 of Schedule 2;
- (b) ensuring only *local provenance* seeds and propagating material are used to *revegetate* the area;
- (c) implement hygiene protocols by cleaning earth-moving machinery of soil and vegetation prior to entering leaving the site;
- (d) undertake *weed* control activities, annually, for at least five years after the commencement of the *revegetation*;
- (e) establish no less than two 10 x 10 metre quadrat monitoring sites with the *revegetation* area;
- (f) engage an *environmental specialist* to undertake annual monitoring of the *revegetation* area, for a minimum of five years or until the completion criteria specified in Table 1 of Schedule 2 has been met; and
- (g) undertake *remedial actions* where monitoring indicates the completion criteria, outlined in Table 1 of Schedule 2, has not been met, including:
 - i. deliberately *planting* and/or *direct seeding native vegetation* that will result in the minimum targets specified in Table 1 of Schedule 2;
 - ii. undertake further *weed* control activities; as required; and
 - iii. undertake annual monitoring of the *revegetated* area by an *environmental specialist*, until the completion criteria, outlined in Table 1 Schedule 2 has been met.

- (h) Where an *environmental specialist* has determined that the completion criteria, outlined in Table 1 of Schedule 2 has been met, that determination must be submitted to the *CEO* within three months of the determination being made by the *environmental specialist*.

8. 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 2.

Table 2: Records that must be kept

No.	Relevant matter	Specifications
1.	In relation to the authorised clearing activities generally	<ul style="list-style-type: none"> (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 direction that clearing was undertaken; (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 <i>weeds</i> in accordance with condition 3. (h) actions taken in accordance with condition 6.
2.	In relation to <i>rehabilitation</i> pursuant to condition 7	<ul style="list-style-type: none"> (a) a description of the <i>rehabilitation</i> activities undertaken; (b) the size of the area <i>rehabilitated</i> (in hectares); (c) the date the <i>rehabilitation</i> works began; (d) the boundaries of the area <i>rehabilitated</i>, recorded using a Global Positioning System (GPS) unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings; (e) any remediation works undertaken; (f) monitoring results by the <i>environmental specialist</i>; (g) the date the completion criteria are considered to be met; and (h) other actions taken in accordance with condition 7.

9. Reporting

- (a) The permit holder must provide to the *CEO*, on or before the 30 June each financial year, a written report containing:
 - i. the records required under condition 8; and
 - ii. records of activities done by the permit holder under this permit between 1 January and 31 December of the preceding financial year
- (b) If no clearing authorised under this permit has been undertaken, a written report confirming that no clearing under this permit has been undertaken, must be provided to the *CEO* on or before 30 June of each financial year.
- (c) The permit holder must provide to the *CEO*, no later than 90 calendar days prior to the expiry date of the permit, a written report of records required under condition 8, where these records have not been provided under condition 8(a).

DEFINITIONS

In this permit, the terms in Table 3 have the meanings defined.

Table 3: Definitions

Term	Definition
CEO	Chief Executive Officer of the department responsible for the administration of the clearing provisions under the <i>Environmental Protection Act 1986</i> .
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.
dieback	means the effect of <i>Phytophthora</i> species on native vegetation.
direct seeding	means a method of re-establishing vegetation through establishment of a seed bed and the introduction of seeds of the desired plan species.
department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
Environmental specialist	means a person who holds a tertiary qualification in environmental science or equivalent and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this permit, or who is approved by the <i>CEO</i> as a suitable environmental specialist.
EP Act	<i>Environmental Protection Act 1986</i> (WA)
fill	means material used to increase the ground level, or to fill a depression.
Flora Survey	means the document titled 'A Declared Rare and Priority flora search of a small section of the Koorda Bullfinch Road at the English Road intersection in the Shire of Nungarin'. Prepared for the Shire of Nungarin by Malcolm Trudgen, M.E Trudgen and Associates, February 2025.
local provenance	means native vegetation seeds and propagating material from natural sources within 50 kilometres and the same IBRA subregion of the area cleared.
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.
optimal time	means the optimal time for undertaking direct seeding and planting for that

Term	Definition
	region.
planting(s)/plant	means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species.
rehabilitate/rehabilitated/ rehabilitation	means actively managing an area containing native vegetation in order to improve the ecological function of that area using methods such as natural regeneration, direct seeding and/or planting, so that the species composition, structure and density similar to pre-clearing vegetation types in that area.
remedial action/s	means, for the purpose of this permit, any activity that is required to ensure successful re-establishment of vegetation with similar composition, structure and density identified in the completion criteria shown in Table 1 of Schedule 2.
weeds	means any plant – <ul style="list-style-type: none"> (a) that is a declared pest under section 22 of the <i>Biosecurity and Agriculture Management Act 2007</i>; 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


C Robertson
02.02.2026
4.54PM

Caron Robertson
MANAGER

NATIVE VEGETATION REGULATION

*Officer delegated under Section 20
of the Environmental Protection Act 1986*

2 February 2026

SCHEDULE 1

The boundary of the area authorised to be cleared is shown in the map below.



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

SCHEDULE 2

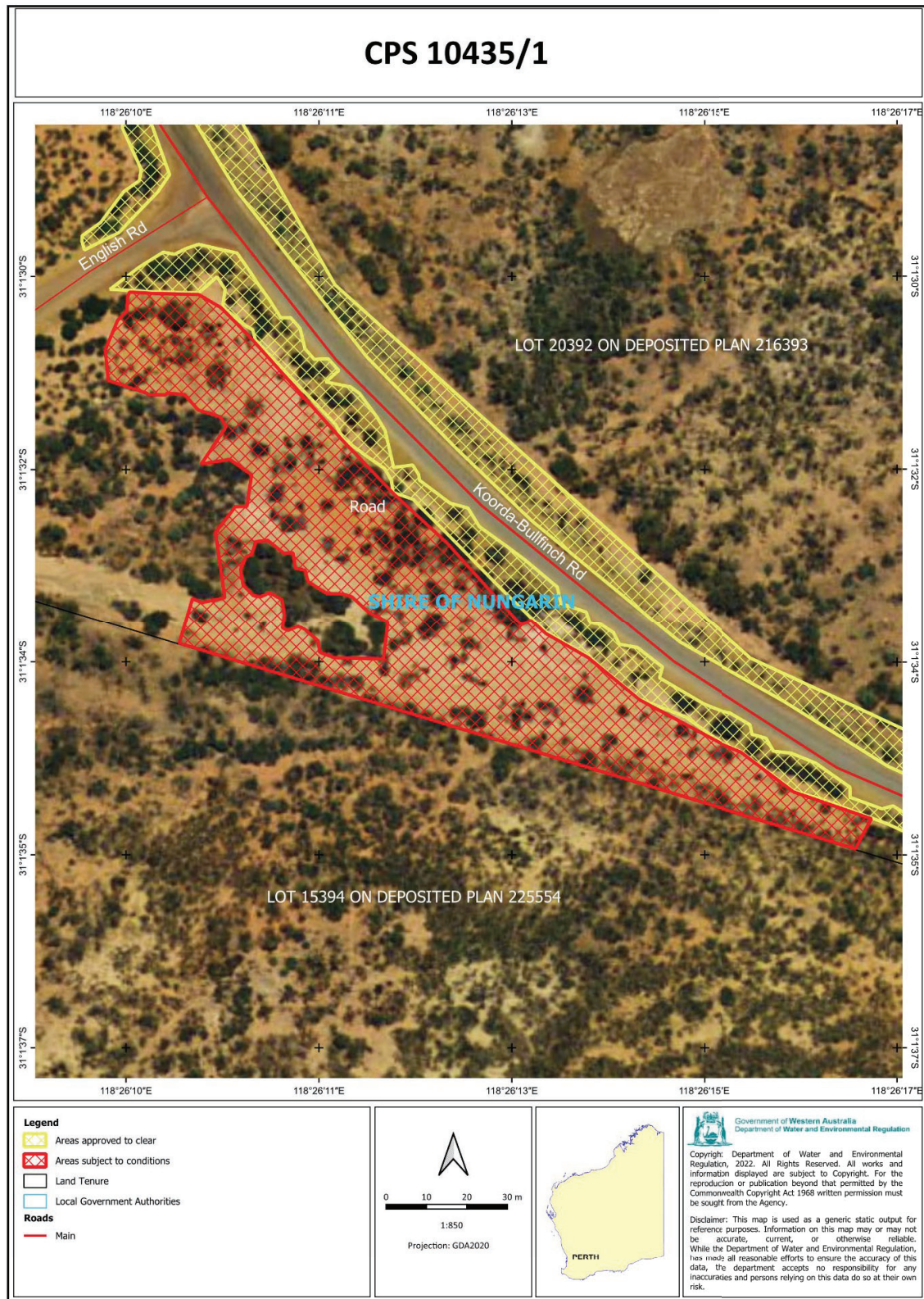


Figure 1: Map of the boundary area subject to conditions.

Table 1: Completing Criteria for the *revegetation* and *rehabilitation* within the area cross-hatched red in Figure 1 of Schedule 2 in accordance with condition 7.

No.	Aspect	Completion Criteria	Monitoring
1.	Species density	The <i>revegetation</i> site to achieve an average density of 1200 stems per hectare.	Annually, for a minimum of five years.
2.	Vegetation composition and structure	The <i>revegetation</i> site to achieve a target structure of: <ul style="list-style-type: none"> • 20 % overstorey species; • 60 % midstory species; • 20 % understory species; and • Consistent with the composition and structure of neighboring vegetation. 	Annually, for a minimum of five years.
3.	Species diversity	The revegetation site to achieve a target native diversity of at least 25 native species.	Annually, for a minimum of five years.
4.	Percentage of weeds present.	Weed coverage within the <i>revegetation</i> site to be less than 20 per cent.	Annually, for a minimum of five years
5.	Declared weeds	No Declared Weeds under the <i>Biosecurity and Agricultural Management Act 2007</i> present.	Annually, for a minimum of five years.



Clearing Permit Decision Report

1 Application details and outcome

1.1. Permit application details

Permit number:	CPS 10435/1
Permit type:	Area permit
Applicant name:	Shire of Nungarin
Application received:	1 December 2023
Application area:	0.80 hectares of native vegetation
Purpose of clearing:	Road maintenance
Method of clearing:	Mechanical
Property:	Koorda–Bullfinch Road reserve (PINs 11657495 and 11657500)
Location (LGA area/s):	Shire of Nungarin
Localities (suburb/s):	Chandler

1.2. Description of clearing activities

The Shire of Nungarin proposes to clear 0.80 hectares of native vegetation contained within three linear areas in the intensive land use zone of Western Australia (see Figure 1, Section 1.5). The proposed clearing will allow maintenance of regrowth vegetation along Koorda-Bullfinch Road. The size of the area and amount of clearing proposed was reduced during assessment from 0.82 hectares to 0.80 hectares due to additional avoidance measures.

1.3. Decision on application

Decision:	Granted
Decision date:	2 February 2026
Decision area:	0.80 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 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),
- the findings of a flora survey (see Appendix E),
- the clearing principles set out in Schedule 5 of the EP Act (see Appendix C), and
- relevant planning instruments and any other matters considered relevant to the assessment (see Section 3.3).

The Delegated Officer took into consideration that the purpose of the clearing provides a benefit to the public by upgrading the public road network.

This environmental assessment identified that the proposed clearing will result in:

- the loss of significant remnant native vegetation in an area that has been extensively cleared,
- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values,
- potential indirect impacts to one *Eremophila virens* (EN) individual,
- land degradation in the form of wind erosion, and
- a risk of injury to fauna if present during clearing activities.

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 considered the extent of the environmental impacts, the necessity of clearing, and the applicant's adherence to the mitigation hierarchy, and determined it was appropriate to grant a clearing permit subject to conditions requiring the applicant to:

- undertake avoidance and minimisation measures to reduce the impacts and extent of clearing,
- take hygiene steps to minimise the risk of the introduction and spread of weeds,
- undertake works within three months of clearing to minimise wind erosion,
- undertake slow, progressive one directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity,
- demarcate the clearing area to avoid inadvertent clearing of adjacent native vegetation,
- avoid clearing within five metres of the *Eremophila virens* individual,
- prior to undertaking the clearing, clearly demarcate *Eremophila virens* individual, and
- undertake rehabilitation of 0.70 hectares of native vegetation within Koorda–Bullfinch Road Reserve (PINs 11657500 and 11657495).

1.5. Site maps



Figure 1: Map of the area crosshatched yellow indicating the area authorised to be cleared under the granted clearing permit.

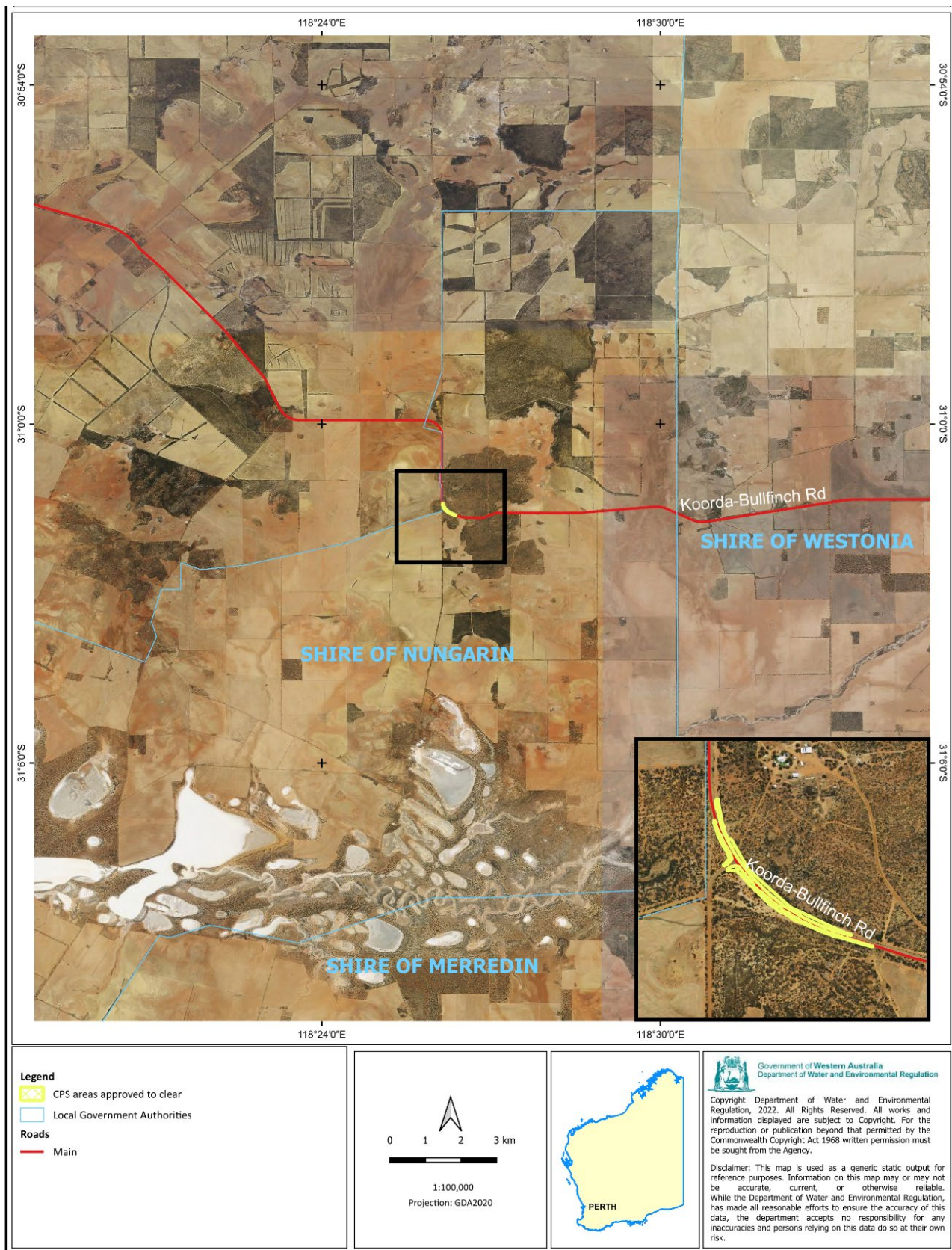


Figure 2: Context map of the area crosshatched yellow indicating the area authorised to be cleared under the granted clearing permit.

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 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)
- *Planning and Development Act 2005* (WA) (P&D Act)
- *Soil and Land Conservation Act 1945* (WA)

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 – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

The Shire of Nungarin (the Shire) has advised that the following avoidance, minimisation and mitigation measures have been or will be undertaken (Shire of Nungarin, 2023, Shire of Nungarin, 2025a; 2025b) in relation to this project.

Avoidance and minimisation

- the Shire has designed the clearing to minimise the clearing of good quality vegetation. The vegetation within the application area is predominantly poor quality with much of the vegetation being regrowth from clearing approximately 10 years prior to this application;
- the Shire modified the clearing area by reducing the amount required from 0.82 to hectares to 0.80 hectares;
- the Shire modified the clearing area to create a 5 metre buffer around a threatened flora species (*Eremophila virens*) (see Figure 3); and
- the Shire will prioritise pruning of native vegetation where appropriate to avoid clearing.



Figure 3: Map of a 5-metre radius around the threatened flora species found near the application area.

Rehabilitation

The assessment identified the proposed clearing will result in the loss of 0.80 hectares of native vegetation that is significant as a remnant in an extensively cleared landscape (see Section 3.2.3). The applicant committed to mitigate this impact through on site mitigation actions: rehabilitation (Shire of Nungarin, 2025a).

The Shire will rehabilitate 0.70 hectares of native vegetation within Koorda–Bullfinch Road Reserve (PIN 11657495; see Figure 4 below). The rehabilitation will include infill planting of native vegetation to a density of 1200 stems per hectare. Aerial imagery indicates the area comprises predominantly bare ground with scattered vegetation of wattle, casuarina and teatree.

The adequacy of the quantum of the proposed revegetation was assessed for consistency with the WA Environmental Offsets Calculator. The clearing permit contains conditions that require contingency measures for the proposed rehabilitation.

The Delegated Officer is satisfied the applicant has made a reasonable effort to avoid and minimise the potential impacts of the proposed clearing on environmental values. The Delegated Officer determined the proposed rehabilitation appropriately mitigates significant impacts in accordance with the mitigation hierarchy to the extent that significant residual impacts do not remain and an environmental offset is not required.

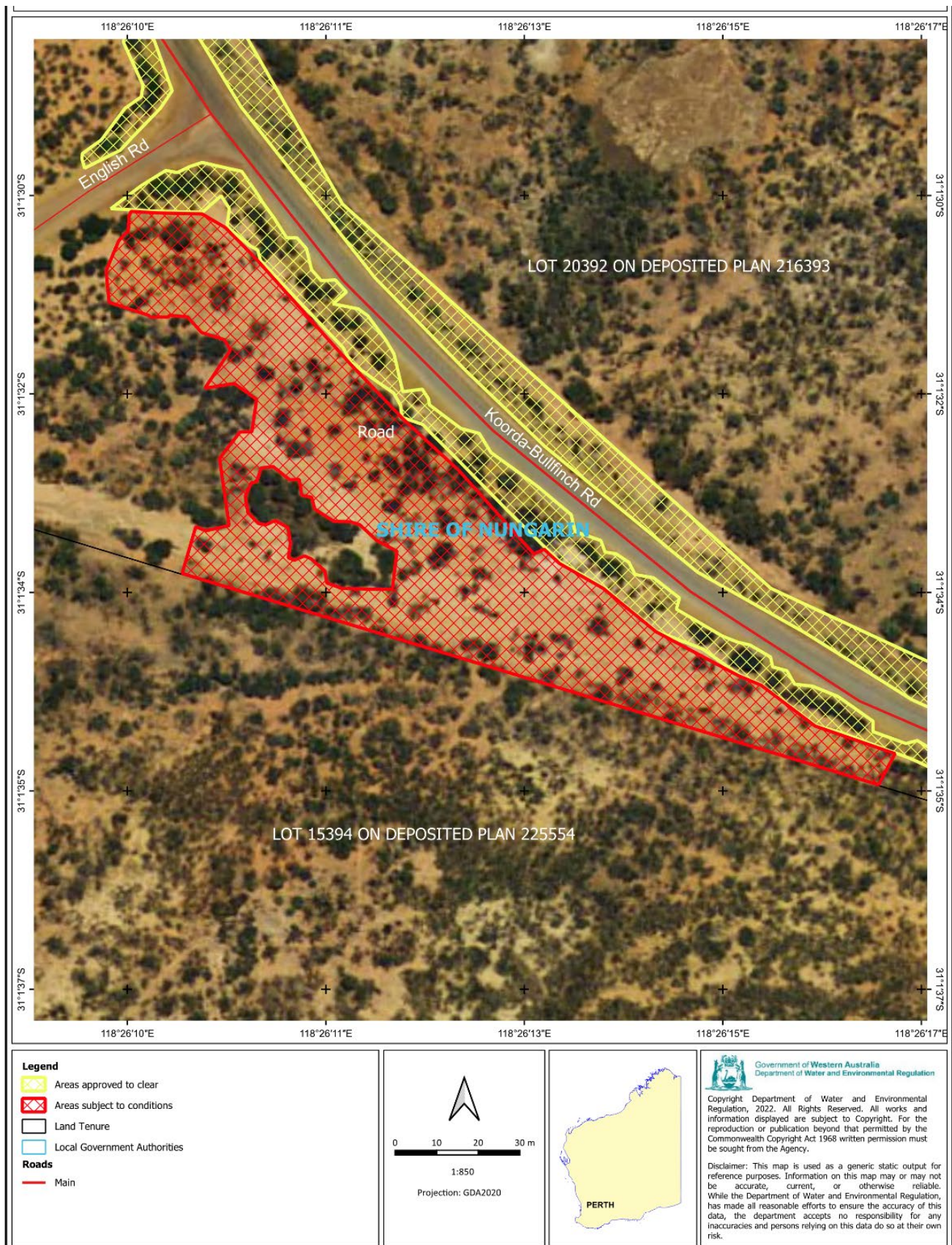


Figure 4: Map of the rehabilitation area. The area crosshatched red indicates the 0.70 hectare area where rehabilitation planting will be undertaken.

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 B) identified that the impacts of the proposed clearing present a risk to biological values (fauna, flora and significant remnant vegetation). 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 (Biodiversity and fauna) - Clearing Principles (a) and (b)

Assessment

A fauna likelihood assessment was conducted based on the preferred habitat and vegetation types of conservation significant fauna species recorded in the local area (10-kilometre radius from the application area), the site characteristics (see Appendix B), and known species distributions. The likelihood analysis identified the application area may provide suitable habitat for the *Leipoa ocellata* (malleefowl; VU) and *Idiosoma castellum* (tree-stem trapdoor spider; P4).

Malleefowl (VU)

Malleefowl in the semi-arid to arid zone are generally found in shrublands and mallee dominated low woodlands (DCCEEW, 2024). Malleefowl are known to occur in Broombush (*Melaleuca uncinata*), Acacia shrublands, and *Eucalyptus* woodlands (DCCEEW, 2024). Malleefowl require abundant leaf litter and a sandy substrate for the successful construction of nest mounds (DCCEEW, 2024). Malleefowl populations are highly fragmented due to extensive land clearing (DCCEEW, 2024).

The shrubland and mallee woodland vegetation types in the application area provide suitable habitat for Malleefowl. The vegetation in the application area is predominantly historically cleared vegetation in degraded (Keighery, 1994) condition with multiple areas of bare land and minimal leaf litter. Given this, the linear nature of the application area, and that it is adjacent to the existing road and therefore highly disturbed, the application area does not provide suitable breeding habitat for malleefowl.

Malleefowl may be a transient visitor to the application area while moving through the surrounding landscape. The application area is surrounded by a large patch of remnant native vegetation. Given this, the linear nature of the application area and the condition of the vegetation, the proposed clearing is unlikely to exacerbate the restriction of malleefowl movement and dispersal through this fragmented landscape.

Tree-Stem Trapdoor Spider (P4)

Idiosoma castellum occurs on flood prone depressions and flats which support myrtaceous shrub communities (DEC, 2007). *I. castellum* dig burrows in sandy loam soils at the base of shrubs or trees, including myrtaceous shrubs, sheoaks and eucalypts (Inglis, 2013). Important habitat includes *Melaleuca uncinata* (broom bush) and sheoak (DEC, 2007).

The Allocasuarina shrubland, *Eucalyptus loxophleba* subsp. *supralaevis* mallee over Acacia and *Melaleuca* shrubland, *Grevillea paniculata* shrubland and scattered *Eucalyptus loxophleba* vegetation types within the application area may comprise suitable habitat for *I. castellum*.

I. castellum has been recorded approximately nine (9) kilometres from the application area. Given this species has a short home range, and is sensitive to disturbance, the vegetation within the application area is unlikely to provide significant or critical habitat for *I. castellum*.

Conclusion

Based on the above assessment, the application area is not likely to provide significant habitat for conservation significant fauna species however it will reduce the overall habitat available to native fauna within the local area. Management measures, including rehabilitation of adjacent vegetation will reduce the impact of the loss of habitat on fauna living in the immediate vicinity of the application area.

Conditions

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

- avoidance and minimisation to reduce the impacts and extent of clearing,

- take hygiene steps to minimise the risk of the introduction and spread of weeds,
- slow directional clearing to allow terrestrial fauna to move into adjacent vegetation ahead of the clearing activity, and
- undertake rehabilitation of a 0.70-hectare area of native vegetation within Koorda–Bullfinch Road Reserve (PIN 11657495).

3.2.2. Biological values (flora) - Clearing Principles (c)

Assessment

A flora likelihood assessment was conducted based on habitat and soil preferences, vegetation in the application area, and known species distribution. The assessment identified the application area may comprise suitable habitat for one conservation significant flora species: *Eremophila virens* (Campion Eremophila; EN). The targeted flora survey (M.E. Trudgen and Associates, 2025) did not record any conservation significant flora species within the application area. One *Eremophila virens* individual was recorded within the broader survey area (M.E. Trudgen and Associates, 2025).

Eremophila virens

Eremophila virens (Green Flowered Emu-bush) is a tall, slender shrub ranging from 1.5 to 5 metres in height. It has large, broad, shiny green leaves that are folded lengthwise and pointed at the tip. Flowering occurs between August and October, producing green flowers with small calyx lobes (Western Australian Herbarium, 1998). This species is endemic to Western Australia, occurring within a 55 km range in the Mukinbudin, Warralakin, and Bonnie Rock areas. It typically grows in light brown to red sandy loam over granite in rocky situations, often within thickets or shrublands alongside acacias and sheoaks (DEC, 2008).

According to spatial data, there are two recorded *E. virens* within one kilometre of the application area. During a targeted flora survey (M.E. Trudgen and Associates, 2025), one individual was identified within the broader survey area (Appendix E, Figure 13). No individuals were recorded within the application area boundary; however, the recorded individual was approximately 0.2 metres from the clearing area boundary. According to the recovery plan, the main threats to the species area drought, weeds, inappropriate fire regimes, restricted habitat, grazing, disturbance by stock and feral animals, and maintenance activities for roads, tracks, power lines and firebreaks (DEC, 2008). *E. virens* are also highly susceptible to waterlogging and often dies during localised runoff events.

Advice received from the Department of Biodiversity, Conservation and Attractions (DBCA) indicates that the sub-population within the application area has remained stable since 1991, with a limited number of individuals. Given that this sub-population has persisted despite the presence of the road, and considering that the proposed activities are largely restricted to regrowth areas adjacent to the road, any localised impact on surface hydrology from clearing and road maintenance is unlikely to significantly affect the species at this location (DBCA, 2026).

DBCA recommends a 50-metre buffer between the individual and clearing activities. If this buffer is not feasible, the following mitigation measures should be implemented to minimise impacts on the species:

- Section 40 license authorisation under the *Biodiversity Conservation Act 2016* is required where clearing occurs within 50 metres of the record. This accounts for the likely take of soil-stored seed and potential indirect impacts on plants.
- Demarcation of work areas and identification of threatened flora to avoid accidental clearing.
- Weed and disease management measures for the duration of clearing and maintenance activities.

During the assessment, the applicant amended the application area, removing approximately 0.018 hectares from the clearing footprint to provide a minimum five-metre buffer from the *E. virens* individual (Shire of Nungarin, 2025b) (See section 3.1 for further details).

The buffer of 5 metres was seen as suitable due protection for the *E. virens* individual due to:

- the individual's location approximately 10 metres from existing road infrastructure,
- the linear nature of the clearing works, which is unlikely to increase threats,
- vegetation condition ranging from Very Poor to Good (Trudgen, 1991), with most of the clearing area comprising variable regrowth (M.E. Trudgen and Associates, 2025),
- the surrounding vegetation not cleared being 0.018 hectares,
- the individual being located on a section of exposed granite that extends from individual to the modified clearing area, providing a natural barrier (Shire of Nungarin, 2025b),

- the individual being upslope of proposed drainage works with the proposed works reducing susceptibility to waterlogging impacts, and
- the larger extent of better-quality remnant vegetation remaining.

Given the impacts are largely contained to historically cleared areas and immediately adjacent to the existing road, impacts, the reduction in clearing footprint by implementing a five-metre buffer around the *E. virens* and the appropriate avoidance and mitigation measures are implemented. The clearing is not likely to be significant.

Conclusion

Based on the above assessment, the proposed clearing is likely to result in indirect impacts to one *E. virens* individual. Potential indirect impacts such as weed infiltration can be managed subject to the below conditions.

A section 40 license from DBCA must be obtained prior to clearing.

Conditions

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

- avoidance and minimisation to reduce the impacts and extent of clearing,
- take hygiene steps to minimise the risk of the introduction and spread of weeds,
- demarcation of the clearing area to avoid inadvertent clearing of threatened flora,
- clearing must not occur within at least five metres of any *Eremophila virens* individuals.

3.2.3. Significant remnant vegetation - Clearing Principle (e)

The National Objectives and Targets for Biodiversity Conservation in Australia has a target to prevent the clearing of ecological communities with less than 30 per cent of their pre-1750 (i.e. pre-European settlement) extent (Commonwealth of Australia, 2001). This threshold represents the point below which species loss tends to accelerate exponentially at the ecosystem level.

The application area is in the Avon Wheatbelt IBRA Bioregion, which retains approximately 18.51 per cent of the pre-European vegetation extent (Commonwealth of Australia, 2019). The application area is broadly representative of the Moorine Rock vegetation complex 551, which retains approximately 25.86 per cent of its pre-European vegetation extent (Commonwealth of Australia, 2019). According to available databases, the local area retains approximately 20.29 per cent of the pre-European native vegetation extent.

The vegetation extent for the IBRA Bioregion, local area and Moorine Rock vegetation complex fall below national targets. Given this, and noting the value of the vegetation in supporting threatened flora and transient and dispersal habitat for fauna, the application area is significant as a remnant of native vegetation in an extensively cleared landscape. The applicant has proposed a rehabilitation action to mitigate this impact (see Section 3.1).

Conclusion

Based on the above assessment, the application area is significant as a remnant of native vegetation in an extensively cleared landscape. Rehabilitation of a 0.70 hectare area within the Koorda–Bullfinch Road Reserve is sufficient to mitigate this impact in accordance with the mitigation hierarchy (see Section 3.1).

Conditions

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

- avoidance and minimisation to reduce the impacts and extent of clearing,
- take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback,
- demarcation of the clearing area to avoid inadvertent clearing of adjacent native vegetation,
- undertake rehabilitation of a 0.70-hectare area of native vegetation within Koorda–Bullfinch Road Reserve (PIN 11657495).

3.3. Relevant planning instruments and other matters

Other relevant authorisations required for the proposed land use include:

- Permit to interfere with bed and banks under the *Rights in Water and Irrigation Act 1914*.
- Section 40 license under the *Biodiversity Conservation Act 2016*

No Aboriginal sites of significance have been 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. Additional information provided by applicant

Summary of comments	Consideration of comment
<p>Rehabilitation planting of native vegetation</p> <p>The applicant provided a mitigation rehabilitation actions for 0.25 hectares of native vegetation to be infill planted within the same road reserve as the clearing area.</p> <p>Rehabilitation infill planting is intended to mitigate the residual impacts of the clearing in an extensively cleared landscape.</p>	<p>The department assessed the applicants mitigation commitment and advised that a larger area (of 0.70 hectares) is required to mitigate the residual impacts of the clearing.</p>
<p>Avoidance of <i>Eremophila virens</i></p> <p>The applicant removed 0.02 hectares of native vegetation from the application area comprising a single occurrence of <i>Eremophila virens</i>. The exclusion area provides a minimum 5 metre buffer to the occurrence.</p>	<p>The department considered that a 5-metre buffer is acceptable in this instance, given the constraints of the road reserve. A section 40 licence from DBCA is required for the management of clearing within the buffer zone of this threatened flora. The applicant has been advised of this requirement accordingly.</p> <p>The removal of 0.02 hectares has been removed from the application area.</p>

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 the department 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	<p>The area proposed to be cleared is a 0.80-hectare part of an expansive tract of native vegetation in the intensive land use zone of Western Australia.</p> <p>Spatial data indicates the local area retains approximately 20.94 per cent of the original native vegetation cover.</p>
Ecological linkage	<p>The application area is not a part of a mapped ecological linkage. Parts of the application area intersects Mukinbudin and Nungarin road vegetation which has been mapped by the Roadside Conservation Committee as having conservation value scores of 7-8.</p>
Conservation areas	<p>The application area does not overlap with a mapped reserve or conservation areas. The closest mapped conservation area is Weira Nature Reserve (R 42501) approximately six kilometres north west of the application area.</p>
Vegetation description	<p>A targeted flora and vegetation survey (M.E. Trudgen and Associates, 2025) indicates the vegetation within the application area consists of:</p> <ul style="list-style-type: none"> • Acacia open shrubland regrowth, • Allocasuarina shrubland, • <i>Eucalyptus loxophleba</i> subsp. <i>supralaevis</i> mallee over Acacia and Melaleuca shrubland, • Scattered <i>Eucalyptus loxophleba</i> mallee over grassland, • <i>Grevillea paniculata</i> shrubland. <p>This is broadly consistent with the mapped vegetation type: Moorine Rock (551), described as Wattle, Casuarina and Teatree (Acacia, Allocasuarina, melaleuca alliance).</p> <p>Representative photos and full survey descriptions are available in Appendix E. The mapped vegetation type retains approximately 25.86 per cent of the original extent (Government of Western Australia, 2019).</p>

Characteristic	Details																				
Vegetation condition	<p>The targeted flora survey (M.E. Trudgen and Associates, 2025) and site photos provided by the applicant (Shire of Nungarin, 2023a), indicate the vegetation within the proposed clearing area is in Very Poor to Good (Trudgen, 1991) condition with the majority of the vegetation in Very Poor condition.</p> <p>The full Trudgen (1991) condition rating scale is provided in Appendix D. Representative photos are available in Appendix E.</p>																				
Climate and landform	<p>The climate experienced in the application area is mediterranean, characterized by hot and dry summers and cool and wet winters. The application area has an average annual rainfall of 278.7 millimetres, with most rain in April to August (Bureau of Meteorology, 2021; data obtained from the closest meteorological station Campion Weira (010300) approximately 3.1 kilometres from the application area). The elevation of the application area is flat with the surrounding area.</p>																				
Soil description	<p>The soil type across the application area is mapped (DPIRD, 2019) as:</p> <table><tr><th>Name</th><th>Symbol</th><th>Description</th></tr><tr><td>Kwolyin, Kwelkan Subsystem</td><td>258KyKW</td><td>Undulating granitic low hills, in the central Zone of Ancient Drainage, with bare rock, deep sandy duplex (grey and red), shallow sand (red and yellow/brown) and red loamy duplex. York gum-jam woodland.</td></tr></table>	Name	Symbol	Description	Kwolyin, Kwelkan Subsystem	258KyKW	Undulating granitic low hills, in the central Zone of Ancient Drainage, with bare rock, deep sandy duplex (grey and red), shallow sand (red and yellow/brown) and red loamy duplex. York gum-jam woodland.														
Name	Symbol	Description																			
Kwolyin, Kwelkan Subsystem	258KyKW	Undulating granitic low hills, in the central Zone of Ancient Drainage, with bare rock, deep sandy duplex (grey and red), shallow sand (red and yellow/brown) and red loamy duplex. York gum-jam woodland.																			
Land degradation risk	<p>The degradation risk factors mapped over the application area are:</p> <table><tr><th>Degradation risk</th><th>Kwolyin, Kwelkan Subsystem</th></tr><tr><td>Subsurface acidification</td><td>H2: >70% of map unit has a high subsurface acidification risk or is presently acid</td></tr><tr><td>Wind erosion</td><td>M1: 10-30% of map unit has a high to extreme wind erosion risk</td></tr><tr><td>Water erosion</td><td>L1: <3% of map unit has a high to extreme water erosion risk</td></tr><tr><td>Salinity risk</td><td>L1: <3% of map unit has a moderate to high salinity risk or is presently saline</td></tr><tr><td>Phosphorous export</td><td>L1: <3% of map unit has a high to extreme phosphorus export risk</td></tr><tr><td>Waterlogging</td><td>L1: <3% of map unit has a moderate to very high waterlogging risk</td></tr><tr><td>Flooding</td><td>L1: <3% of the map unit has a moderate to high flood risk</td></tr><tr><td>Floodplains</td><td>Not mapped as a floodplains area</td></tr><tr><td>Acid sulphate soils</td><td>Not mapped</td></tr></table>	Degradation risk	Kwolyin, Kwelkan Subsystem	Subsurface acidification	H2: >70% of map unit has a high subsurface acidification risk or is presently acid	Wind erosion	M1: 10-30% of map unit has a high to extreme wind erosion risk	Water erosion	L1: <3% of map unit has a high to extreme water erosion risk	Salinity risk	L1: <3% of map unit has a moderate to high salinity risk or is presently saline	Phosphorous export	L1: <3% of map unit has a high to extreme phosphorus export risk	Waterlogging	L1: <3% of map unit has a moderate to very high waterlogging risk	Flooding	L1: <3% of the map unit has a moderate to high flood risk	Floodplains	Not mapped as a floodplains area	Acid sulphate soils	Not mapped
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Flooding	L1: <3% of the map unit has a moderate to high flood risk																				
Floodplains	Not mapped as a floodplains area																				
Acid sulphate soils	Not mapped																				
Waterbodies and Hydrogeography	<p>The desktop assessment and aerial imagery indicate the application area intersects a nonperennial minor river that crosses Koorda–Bullfinch Road. The application area is within a mapped potential groundwater dependent ecosystem.</p> <p>The application area is within the Avon River System surface water area as proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> (RIWI Act). The salinity of the application area is mapped as 14000 - 35000 milligrams per litre total dissolved solids.</p>																				
Flora	<p>The desktop assessment identified nine conservation significant flora species recorded within the local area, comprising three Priority 1, two Priority 2, one Priority 3, and three threatened flora taxa. The targeted flora survey (M.E. Trudgen and Associates, 2025) identified one threatened species (<i>Eremophila virens</i>) within the survey area.</p>																				
Ecological communities	<p>The desktop assessment identified one conservation significant ecological community in the local area, the Eucalypt woodlands of the Western Australian Wheatbelt. There are no mapped TECs or PECs within the application area.</p>																				
Fauna	<p>The desktop assessment identified three conservation significant fauna species recorded within the local area comprising one Priority 4, one endangered, and one vulnerable fauna taxa.</p>																				

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*					
Avon Wheatbelt	9,517,109.95	1,761,187.42	18.51	174,980.68	1.84
Vegetation complex*					
Moorine Rock (551)	107,859.90	27,890.93	25.86	2,829.50	2.62
Local area					
10km radius	32,317.20	6,768.86	20.94	-	-

*Government of Western Australia (2019)

B.3. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix F.1), and the targeted flora survey (M.E. Trudgen and Associates, 2025), impacts to the following conservation significant flora required further consideration.

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil 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]
<i>Eremophila virens</i>	T	Y	Y	Y	0.00	13	Y

T: threatened

Appendix C. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
<p>Principle (a): “Native vegetation should not be cleared if it comprises a high level of biodiversity.”</p> <p>Assessment: Given the application area is comprised of regrowth vegetation along an existing road, it is not considered to comprise a high level of biodiversity. Surveys of the application area did not identify high levels of biological diversity, when compared to local vegetation complexes, within the application area.</p>	Not likely to be at variance	Yes Refer to Section 3.2.1, above.
<p>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.”</p> <p>Assessment: Given the linear nature of the application area, the condition of the vegetation, existing disturbance, and the extent of surrounding connected vegetation, the application area does not provide significant habitat for conservation significant fauna. The vegetation within the application area may provide transient and/or dispersal habitat for native fauna in an extensively cleared habitat.</p>	Not likely to be at variance	Yes Refer to Section 3.2.1, above.
<p>Principle (c): “Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</p>	May be at variance	Yes

Assessment against the clearing principles	Variance level	Is further consideration required?
<u>Assessment:</u> A threatened flora species was identified in close proximity to the application area in the targeted flora survey (M.E. Trudgen and Associates, 2025). The clearing will occur within the recommended 50 metre buffer for this threatened flora.		Refer to Section 3.2.2, above.
<p><u>Principle (d):</u> <i>“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.”</i></p> <p><u>Assessment:</u> The application area does not contain species that indicate a known TEC.</p>	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
<p><u>Principle (e):</u> <i>“Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</i></p> <p><u>Assessment:</u> The extent of the mapped vegetation type and native vegetation in the local area is inconsistent 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 however includes vegetation providing a buffer to threatened flora and transient/dispersal habitat for native fauna.</p>	At variance	Yes Refer to Section 3.2.3, above.
<p><u>Principle (h):</u> <i>“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.”</i></p> <p><u>Assessment:</u> 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.</p>	Not likely to be at variance	No
Environmental value: land and water resources		
<p><u>Principle (f):</u> <i>“Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</i></p> <p><u>Assessment:</u> The vegetation within the application area may continue to be hydrologically connected to a mapped minor watercourse. Hydrology within the application area is highly modified by existing road infrastructure and native vegetation within the application area is likely to be reliant on modified drainage infrastructure rather than naturally occurring watercourse hydrology.</p>	May be at variance	No
<p><u>Principle (g):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</i></p> <p><u>Assessment:</u> The mapped soils are highly susceptible to subsurface acidification and moderately susceptible to wind erosion. Noting the extent of proposed clearing and existing level of disturbance, the proposed clearing is not likely to have an appreciable impact on land degradation. Best practice management measures are conditioned on the permit to mitigate potential impacts of soil destabilisation in the short term.</p>	Not likely to be at variance	No
<p><u>Principle (i):</u> <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.”</i></p> <p><u>Assessment:</u> The vegetation within the application area may continue to be hydrologically connected to a mapped minor watercourse. Hydrology within the application area is highly modified by existing road infrastructure and native vegetation within the application area is likely to be reliant on modified drainage infrastructure. Further disturbance to vegetation within the application area is</p>	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
unlikely to significantly increase impacts to existing to surface or ground water quality.		
<p><u>Principle (j):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.”</i></p> <p><u>Assessment:</u> 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. The purpose of clearing includes drainage upgrades, which is likely to reduce the risk of flooding and waterlogging in the application area.</p>	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.

Measuring vegetation condition for the Eremaean and Northern Botanical Provinces (Trudgen, 1991)

Condition	Description
Excellent	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Very good	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
Good	More obvious signs of damage caused by human activity since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds.
Poor	Still retains basic vegetation structure or ability to regenerate it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
Very poor	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.
Completely degraded	Areas that are completely or almost completely without native species in the structure of their vegetation; i.e. areas that are cleared or 'parkland cleared' with their flora comprising weed or crop species with isolated native trees or shrubs.

Appendix E. Biological survey excerpts and photographs of the vegetation



Figure 5: Location of the vegetation and flora site photos from the survey on Koorda Bullfinch Road (M.E. Trudgen and Associates, 2025).



Figure 6 :KB1 - *Acacia burkittii*, *Acacia coolgardiensis* subsp. *coolgardiensis* open shrubland regrowth to *Acacia burkittii* closed scrub regrowth patches over *Amphipogon carcinus* scattered tussocks and *Asteraceae* spp. annual herbland. Vegetation is poor to very poor condition.



Figure 7: KB3 – vegetation in very poor condition consisting of *Acacia prairii* regrowth scrub.



Figure 8: KB5 – vegetation in very poor condition consisting of *Acacia prairii* regrowth open scrub, varying along roadwork to open scrub to scrub.



Figure 9: KB6 – vegetation in very poor condition consisting of *Allocasuarina acutivalvis* subs. *acutivalvis* open scrub.



Figure 10: KB6 – vegetation in good condition consisting of *Eucalyptus loxophleba* subsp. *supralaevis* scattered mallees over *Acacia burkittii*, *Melaleuca eleuterostachya* scattered shrubs to high open shrubland over *Austrostipa elegantissima* scattered tussocks.



Figure 11: KB8 – vegetation in very poor condition consisting of *Melaleuca eleuterostachya* high shrubland over *Vulpia myuros*, Asteraceae annual herb/grassland



Figure 12: KB10 – vegetation in very poor condition consisting of *Melaleuca hamulosa* shrubland to high shrubland and open scrub over Asteraceae, *Vulpia myuros*, *Briza maxima* herb/grassland



Figure 13: *Eremophila virens* observed at KB16. Observed at 0637060 E 6566848 S.

Table 1. Flora recorded in the Koorda Bullfinch Road survey area

Notes: The thirteen introduced (weed) species are given first then the native flora in alphabetical order.

Taxon	Number of releves recorded at.
*Avena barbata	2
*Briza maxima	2
*Bromus rubens	1
*Cuscuta sp.	1
*Dicrastylis parvifolia	1
*Echium plantagineum	1
*Hypochaeris glabra	2
*Lolium sp.	1
*Mesembryanthemum crystallinum	1
*Monoculus monstrosus	1
*Oxalis corniculata	1
*Solanum hoplopetalum	1
*Vulpia myuros	2
Acacia acuaria	2
Acacia acuminata (shrub form)	1
Acacia burkittii	10
Acacia colletioides	1
Acacia coolgardiensis subsp. coolgardiensis	11
Acacia prainii	6
Acacia tetragonophylla	1
Allocasuarina acutivalvis subs. acutivalvis	1
Allocasuarina campestris	1
Alyxia buxifolia	1
Amphipogon caricinus	4
Aristida contorta	3
Austrostipa elegantissima	5
Austrostipa hemipogon	4
Borya constricta	1
Comesperma integerrimum	5
Dianella revoluta var. divaricata	9
Dodonaea inaeqifolia	1
Enchylaena tomentosa	2
Enekbatus clavifolius	2
Eremophila drummondii	1
Eremophila virens	1
Eucalyptus loxophleba subsp. supralaevis	6
Exocarpos aphyllus	3
Gilberta tenuifolia	1
Glischrocaryon flavescens	1

Goodenia sp.	
Grevillea paniculata	4
Hakea recurva	1
Hibbertia glomerosa	1
Hysterobaeckea setifera subsp. meridionalis	1
Lobelia sp.	1
Lomandra sp. (larger species)	1
Lomandra sp. (small species)	1
Maireana carnososa	1
Maireana georgei	1
Melaleuca hamulosa	4
Melaleuca cf. uncinata	1
Melaleuca eleuterostachya	3
Melaleuca acuminata subsp. acuminata	5
Melaleuca lateriflora	4
Mirbelia spinosa	3
Monachather paradoxa	4
Olearia sp. Eremicola	5
Podolepis aristata subsp. aristata	2
Ptilotus polystachyus	2
Rhagodia drummondii	1
Rhodanthe citrina	3
Santalum acuminatum	2
Schoenia cassiniana	5
Senna artemissioides subsp. filifolia	2
Senna pleurocarpa	1
Seringia velutina	3
Siemssenia capillaris	2
Solanum cleistogamum?	1
Solanum orbiculatum subsp. orbiculatum	2
Spartochloa cyperoidea	3
Thysanotus patersonii/manglesii	1
Trachymene ornata	1
Waitzia acuminata var. acuminata	8

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)
- 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)

F.2 References

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- Shire of Nungarin (2023b) Supporting information for clearing permit application CPS 10435/1, received 1 December 2023 (DWER Ref: DWERT891170).
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