

Clearing Desktop Report CPS 818

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Minilya Exmouth Road (H048) - [REDACTED] SLK Material Pit
Minilya Exmouth Road (H048)
Region: Mid-West Gascoyne
EOS: 3786

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1 PROPOSAL

1.1 Purpose and Justification

Main Roads Western Australia proposes to clear 6.82 hectares (ha) of native vegetation for the extraction of road-building materials. The potential Material Pit Area is situated on Minilya-Exmouth Road (H048) at the [REDACTED] Straight Line Kilometre (SLK) mark, approximately 37 km southeast of Coral Bay in the Shire of Carnarvon. This proposal is necessary to support future road construction and maintenance works in the locality and improve road user safety.

1.1.1 Main Roads Approach to Road Safety and the Environment

Main Roads is committed to minimising the environmental impacts of all of its activities and manages the State road network to achieve balanced economic, social, safety and environmental benefits for the community. Main Roads recognises that Western Australia's environment is significant from a global perspective and the unique conservation values that are contained within its road reserve. Main Roads road network often adjoins natural areas and, in some locations, the reserve itself hosts remnant vegetation with high environmental values. Although the reserves were not established for this purpose, Main Roads recognises that it has a responsibility to conserve the environmental values that occur within the State's road network and minimise the impact its proposals have on the environment. In addition to providing a safe and efficient road network for all people using the roads under its control, Main Roads is also committed to protecting the natural environment.

In accordance with National and State Government road safety policies, Main Roads is also committed to substantially reducing road trauma on the road network through Safe System principles. The Safe System approach acknowledges that more than two thirds of all serious crashes are due to human error rather than deliberate risk taking (e.g. speeding or drink driving) and seeks to improve behaviour through education and enforcement while managing the safety of vehicles, speeds and the road and road infrastructure. It is shown that improving sub-optimal road formation will substantially reduce the likelihood and severity of road crashes. For example, according to the Road Safety Management Guideline, increasing the sealed shoulder from 0.5 m to 2 m will reduce Killed and Seriously Injured numbers by more than 50%.

As the statutory authority responsible for providing and managing a safe and efficient main road network in Western Australia, Main Roads focuses on improving road safety by thoroughly considering all environmental, economic and community benefits and impacts. It operates on a hierarchy of avoiding, minimising, reducing and then, if required, offsetting our environmental impacts. This has been achieved through changes in proposal scope and design. Main Roads regularly reduces its clearing footprint by restricting earthworks limits for proposals, steepening batters, installing barriers, establishing borrow pits in cleared paddocks and avoiding temporary clearing for storage, stockpiles and turn around bays to avoid and minimise its impacts.

Further details on measures to avoid, minimise and reduce are provided in Section 1.5.

1.2 Proposal Scope

Main Roads WA proposes to clear 6.82 ha of native vegetation for a new material pit located adjacent to Minilya-Exmouth Road (H048) at the [REDACTED] SLK mark. Test pitting will be undertaken prior to clearing to determine the presence of suitable material and avoid any unnecessary clearing. Following clearing, road building material will be extracted and stockpiled for use in future road construction and maintenance works.

1.3 Proposal Location

The Clearing Area is located on Minilya-Exmouth Road (H048) at the [REDACTED] SLK mark, approximately 37 km southeast of Coral Bay in the Shire of Carnarvon.

Figure 1 displays the Clearing Area in reference to the Minilya-Exmouth Road and the 20 km Study Area.

The central coordinate of the proposal is:

- Latitude: 23.4293566°S
- Longitude: 113.9569351°E

1.4 Clearing Details

Proposed Clearing to be undertaken using CPS 818:

6.82 ha

Areas of Native Vegetation Clearing:

The areas of native vegetation to be cleared are shown in Figure 2.

Type of Native Vegetation:

The Clearing Area covers 6.82 ha and consists of one vegetation type, VT08, which is described as *Acacia sclerosperma subsp. sclerosperma*, *Stylobasium spathulatum* and *Eremophila spp.* Mid open shrubland over *Solanum lasiophyllum*, *Indigofera occidentalis* and *Enchylaena tomentosa var. tomentosa* low sparse shrubland over **Cenchrus ciliaris*, *Aristida holathera var. holathera* and *Eriachne aristidea* grassland

Vegetation within the Clearing Area is in Degraded condition.

[REDACTED]

Figure 1: 20 km Study Area

[REDACTED]

Figure 2. Clearing Area

1.5 Alternatives to Native Vegetation Clearing Considered During Proposal Development

The following alternatives to clearing were considered during the development of the proposal:

- Exploring for material in unvegetated areas, however there are no areas in the vicinity available that contain suitable material.
- Outsourcing material from a commercial provider, which would be uneconomical.
- Main Roads retains frangible vegetation where a clear zone is to be established for road projects. For this project, however, clearing will only be required for extraction of materials, with no clear zone being established. Accordingly, the retention of frangible vegetation does not apply to this proposal.
- Reducing the speed limit to minimise clearing requirements, while still balancing safety (driver fatigue) and freight efficiency. Speed Limits are an essential mechanism to ensure the safe and efficient operation of road networks. The application of appropriate speed limits and other traffic management measures is a key mechanism in managing vehicle speeds to achieve desired safety, mobility, traffic management, local amenity, and road user expectations. There are several factors involved in road safety, including road conditions, driver behaviour and overall road design. Except in special situations, reducing speed limits below national standards on state and national roads is not typically supported as it has the potential to contribute to driver frustration, impatience, tiredness and recklessness. The environmental values protected by reducing the speed limit, do not justify the impacts on freight efficiencies nor road user safety. As this proposal relates to the expansion of an existing material pit, the reduction of speed limits to avoid clearing of native vegetation for this proposal is not proposed.

1.6 Measures to Avoid, Minimise, Reduce and Manage Proposal Clearing Impacts

The design and management measures implemented to avoid and minimise the potential clearing impacts of the Proposal are provided in Table 1.

Table 1. Measures Undertaken to Avoid, Minimise, Reduce and Manage the Proposal Clearing Impacts

Design or Management Measure	Discussion and Justification
Use of existing cleared areas for access tracks, construction storage and stockpiling	• The proposal will utilise existing cleared and disturbed areas where practicable. This includes utilising existing access tracks and cleared sections utilised as vehicle resting areas.
Material Investigation Check	• Material investigations will be undertaken prior to substantial clearing occurring. If the proposed Clearing Area does not contain appropriate material, no additional clearing will take place.

1.7 Approved Policies and Planning Instruments

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, Main Roads has also had regard to the below instruments where relevant.

Other Legislation potentially relevant for assessment of clearing and planning/other matters:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Country Areas Water Supply Act 1947* (WA) (CAWS Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Planning and Development Act 2005* (WA) (P and D Act)
- *Soil and Land Conservation Act 1945* (WA)
- *Rights in Water and Irrigation Act 1914*
- *Aboriginal Heritage Act 1972* (WA).

Environmental Protection Policies:

- Environmental Protection (Peel Inlet - Harvey Estuary) Policy 1992
- Environmental Protection (Western Swamp Tortoise Habitat) Policy 2011.

Other relevant policies and guidance documents:

- Environmental Offsets Policy (Government of Western Australia, 2011)
- A guide to the assessment of applications to clear native vegetation (Government of WA, December 2014)
- Procedure: Native vegetation clearing permits (Government of WA, October 2019)
- Environmental Offsets Guidelines (Government of Western Australia, 2014)
- Technical guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA, 2016)
- Technical guidance – Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment (EPA, 2020)
- Approved conservation advice under section 266B of the EPBC Act for threatened flora/fauna/vegetation communities.

2 SCOPE AND METHODOLOGY ASSESSMENT OF CLEARING

Native vegetation will be cleared to accommodate this Proposal. This clearing will be undertaken using the Main Roads Statewide Clearing Permit CPS 818.

To comply with CPS 818, Main Roads must prepare a Clearing Desktop Report (CDR)

The CDR outlines the key activities associated with the Proposal, the existing environment and an assessment of native vegetation clearing. This assessment provides an evaluation of the vegetation clearing impacts associated with the Proposal using the ten Clearing Principles listed under s51 of the *Environmental Protection Act 1986* (EP Act) and strategies used to manage vegetation clearing.

2.1 Report Terminology and Sources

The following terms are used in this Clearing Report:

- **Clearing Area** – The maximum amount of native vegetation to be cleared for the Proposal under CPS818/17. The Clearing Area will accommodate the designed earthworks and, typically, a nominal buffer to allow for the safe movement of machinery during construction.
- **Survey Area** – The Area covered by the Biological Survey. This involves six locations which constitute a combined survey area of 930.05 ha.
- **Survey Area 6A:** A 7.16 ha area surveyed over and around the proposed material pit area and includes the proposed Clearing Area under this scope of works.
- **Study Area** – Area covered by the Desktop Assessment. The Study Area for the Proposal is confined to a local area of a 20km radius.

2.2 Desktop Assessment

A desktop assessment of the Clearing Area was undertaken by viewing internal datasets and other government agency managed databases, and consulting with relevant stakeholders where necessary. Results from searches can be found in Appendix 1

GIS layer viewing and mapping is done using ArcMap and/or Main Roads corporate mapping system known as iMaps. Referencing of the GIS layers accessed is done under the relevant methodology section of each clearing principle. Government managed databases were searched to locate additional information, which are found under References in Section 9.

2.3 Surveys and Assessments

The following surveys/assessments (presented within the same report) were undertaken to inform this CDR:

- Detailed flora and vegetation and Targeted Flora surveys - (GHD, 2022); and
- Basic fauna survey (2022) - (GHD, 2022).

Biological and targeted surveys conducted for the proposal are outlined in Table 2 and a summary of the findings in these reports are presented in Sections 3.1 to 3.2.

Table 2. Summary of Biological and Targeted Surveys Relevant to the Proposal

Consultant and Survey Name	Survey Details
GHD (2022) Minilya-Exmouth Road Biological Survey Technical Report.	Survey Area: The Survey Area comprised approximately 930.05 hectare (ha). This included sections of the Minilya – Exmouth Road, and five potential basic raw material extraction areas with associated tracks and bore locations. One of the potential material extraction locations included the proposed material pit at Minilya-Exmouth Road [REDACTED] SLK. Type: Three main assessments were carried out: 1. Desktop assessment; 2. Flora and Vegetation surveys – This included a combination of Detailed, Targeted, and opportunistic sampling techniques. Including the assessment of vegetation types, vegetation condition and a significant ecological communities assessment. Assessments were undertaken in accordance with the Environmental Protection Authority (EPA) Guidelines (Environmental Protection Authority (EPA), 2016); 3. Basic Fauna Survey – This included opportunistic fauna searches and fauna habitat assessment documenting the type, value and connectivity. Mapping was produced based upon vegetation units in accordance with EPA guidance (EPA, 2020) Timing: The field work component for both the Flora and Vegetation and Basic Fauna Surveys was conducted from 23 – 30 May and 27 – 29 July 2022. Survey Results Shapefile TRIM Ref: D22#1323152 Document TRIM Ref: D22#1323156

3 SURVEY RESULTS

3.1 Summary and Analysis of Flora and Vegetation Surveys

The Biological Survey was undertaken by GHD (2022) between 23 to 30 May and 27 to 29 July 2022. The Biological Survey consisted of multiple locations which constitute a combined survey area of 930.05 ha.

The Survey Area 1, 2, 3, 5, 6 (A and B) and 7 consisted of a linear strip either side of the Minilya-Exmouth Road to several proposed material pits that extended from Exmouth to ~67 km southeast of Coral Bay.

The location of the Material Pit on Minilya-Exmouth Road at [REDACTED] SLK is Survey Area 6A. This Survey Area comprised of a total area 7.16 ha for material pit investigations and extraction

The key findings of the Biological field survey for the Survey Area, and specifically Survey Area 6A (containing the Clearing Area) are detailed below:

- Nine Vegetation Types were identified within the Survey Area, with only one vegetation type identified within Survey Area 6A:
 - VT08: *Acacia sclerosperma* subsp. *sclerosperma*, *Stylobasium spathulatum* and *Eremophila* spp. open shrubland on sandy low rises.
- Vegetation condition of the Survey Area ranged from Excellent to Completely Degraded (Completely Degraded areas representing Historically Cleared areas).
 - Vegetation within Survey Area 6A is primarily in Degraded condition (6.82 ha / 98%), with the remaining 0.15 ha (2%) being described as roads or cleared areas.
- No Threatened Ecological Communities listed under the EPBC Act or BC Act or Priority Ecological Communities listed by DBCA were identified within the Survey Area during the field survey;
- No Ramsar Wetlands of International Importance are located within the Survey Area.
- Two hundred and one flora taxa (including subspecies and varieties) representing 45 families and 119 genera were recorded from the Survey Area during the field survey. This total is comprised of 192 native taxa and nine introduced flora taxa.
 - 17 taxa (15 native and 2 introduced taxa) from 17 genera were recorded within one quadrat in Survey Area 6A.
- Nine introduced flora taxa were recorded in the survey area. One is listed as a Declared Pest under the *Biosecurity and Management Act 2007*, **Prosopis pallida* (Mesquite) (Plate 11). No Weeds of National Significance (WoNS) were recorded during the survey. The remaining eight introduced flora have been recorded in the study area before.
 - No species listed as a Declared Pest or WoNS were identified within Survey Area 6A.
- No EPBC Act or BC Act listed Threatened flora were recorded within the Survey Area. Seven DBCA Priority listed flora species were identified within the Survey Area during the field survey.
 - No Threatened or Priority flora species were identified in Survey Area 6A.

3.2 Summary and Analysis of Fauna Surveys

- Nine broad Fauna Habitat types (including cleared and disturbed areas) were identified during field investigations in the Survey Area,
 - One fauna habitat occurs within Survey Area 6A - Mixed Open Shrubland Over *Triodia* Hummock or Tussock Grasslands on Sandplains (VT08):
- One hundred and twenty-three fauna species, including 75 birds, 33 reptiles, 12 mammals and three frogs were recorded in the Survey Area. Of these, four species are introduced: dingo/dog, cow, cat and rabbit. The species recorded during the survey are typical for the habitats they were found in and are generally well represented in the region.
- Five significant fauna listed under the EPBC Act and/or BC Act or Priority fauna listed by the DBCA were recorded within the Survey Area.
 - None of these species were identified in Survey Area 6A.

4 DESKTOP ASSESSMENT OF VEGETATION

4.1 Desktop Vegetation Description

One Beard (1979) vegetation association (VA 658) occurs within the Clearing Area (DBCA, 2019). The National Objectives and Targets for Biodiversity Conservation recognise that it is important that ecological communities are maintained above the threshold level of 30% of pre-European extent for each community and therefore ecological communities with levels below 30% should be fully retained (Commonwealth of Australia, 2001). Vegetation associations all exceed the 30% retention threshold at State, Regional and Local contexts.

Table 3 and Table 4 provide details of the vegetation type and condition within the Clearing Area and the remaining extent of the association.

Table 3. Summary of Vegetation Type within Clearing Area

Vegetation Type	Extent within Native Vegetation Clearing Area (ha)	Total Extent Mapped (ha) within Survey Area
VT08: <i>Acacia sclerosperma</i> subsp. <i>sclerosperma</i> , <i>Stylobasium spathulatum</i> and <i>Eremophila</i> spp. open shrubland on sandy low rises.	6.82 ha	49.02 ha

Table 4. Pre-European Vegetation Representation

Pre-European Vegetation Association	Scale	Pre-European Extent (ha)	Current Extent (ha)	% Remaining	% Current Extent in DBCA Managed Land (proportion of pre-European Extent)
Veg Assoc No. 658 Shrublands; <i>Acacia sclerosperma</i> & snakewood scrub (also, with some waterwood)	Statewide	~200, 281	~200, 281	100	22.05
	IBRA Bioregion <i>Carnarvon</i>	~200, 281	~200, 281	100	22.05
	IBRA Sub-region <i>Cape Range</i>	~133, 266	~133, 266	100	33.14
	Local Government Authority <i>Shire of Carnarvon</i>	~131, 767	~131, 767	100	0

5 ASSESSMENT AGAINST THE TEN CLEARING PRINCIPLES

In assessing whether the Proposal's proposed clearing is likely to have a significant impact on the environment, the Proposal was assessed against the ten Clearing Principles (EP Act, Schedule 5).

Each principle has been assessed in accordance with the former Department of Environment Regulation (now Department of Water and Environmental Regulation (DWER) 'A Guide to the Assessment of Applications to Clear Native Vegetation' (Department of Environment Regulation, 2014) and other relevant clearing permit application decision reports prepared by DWER.

The proposed clearing is not at or not likely to be at variance with the ten Clearing Principles.

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Proposed clearing is not at variance to this Principle.

According to GHD (2022), the Clearing Area (6.82 ha) is composed of one vegetation type (VT08) and is described as *Acacia sclerosperma* subsp. *sclerosperma*, *Stylobasium spathulatum* and *Eremophila* spp. *Mid open shrubland over Solanum lasiophyllum, Indigofera occidentalis and Enchylaena tomentosa* var. *tomentosa* *low sparse shrubland over *Cenchrus ciliaris, Aristida holathera* var. *holathera* and *Eriachne aristidea* grassland.

The Desktop study by GHD (2022) has categorised the Vegetation Association (VA) in the DE as VA 658: Shrublands; *Acacia sclerosperma* & *snakewood* scrub (also, with some *waterwood*) (Department of Primary Industries and Regional Development (DPIRD)-006). This vegetation association remains well represented, with 100% of its pre-European extent remaining at the state and LGA levels (Shire of Exmouth) (Table 4). The proposed clearing of 6.82 ha from the Clearing Area will not significantly reduce the extent of VA 658 at either local or regional levels.

Vegetation within the Clearing Area is in Degraded condition (GHD, 2022).

According to the DBCA Threatened and Priority flora spatial data (DBCA-036), the Western Australian Herbarium (WAHerb) and Main Roads Flora data, seven conservation significant flora species were identified within the 20 km Desktop Study Area. This includes three Priority 2 species, three Priority 3 species and one Priority 4 species. No species were listed in the EPBC Act Protected Matters (PMST) Report (Department of Climate Change, Energy, and Environment (DCCEE), 2026).

GHD (2022) conducted a Detailed and Targeted Flora Survey of the Clearing Area, and no conservation significant flora species were recorded.

The DBCA spatial data (DBCA-038) and the EPBC Act PMST Report (DCCEE, 2026) indicates no listed Threatened Ecological Communities (TEC) or Priority Ecological Communities (PEC) occur within 20 km of the Clearing Area.

According to GHD (2022), there are no Threatened or Priority Ecological Communities present in the Clearing Area.

The Clearing Area, consists of a single fauna habitat type GHD (2022) (Table 5).

Table 5: Fauna Habitat Type, Description and extent within the Clearing Area (GHD, 2022)

Fauna Habitat	Information	Clearing Area (ha) and (%)
Mixed Open Shrubland Over		6.82 ha (100%)

<i>Triodia</i> Hummock or Tussock Grasslands on Sandplains	Sandplains of mixed low open shrubs over dominant <i>Triodia</i> hummock grassland with scattered areas of Buffel tussock grasslands. Soils comprise primarily of deep sands with areas of silty clays and sand. Litter and woody debris were common and associated to areas of shrublands. In areas where the shrubland is denser, this vegetation would provide suitable habitat for a variety of fauna species, in particular foraging opportunities, breeding habitat and refugia for bush birds and small mammals. Litter build up was present and would provide habitat to fossorial species. Dominant <i>Triodia</i> areas would support small mammals and abundance of reptiles.	
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Based on the DBCA Threatened and Priority Fauna spatial data (DBCA-037) and the Main Roads Fauna data, six conservation significant fauna species were identified within the 20 km Desktop Study Area.

GHD (2022) did not identify any conservation significant fauna species within the Clearing Area during the Basic Fauna Survey.

Following the Basic Fauna Survey, GHD (2022) conducted a post-survey Likelihood of Occurrence (LOO) assessment and concluded twenty conservation significant fauna species are considered likely or known to be present within the Survey Area.

Sixteen of the 20 species identified in the LOO assessment are birds. Given these species can easily fly over the terrain and egress away from disturbance areas, they are unlikely to be impacted by the clearing works undertaken within the Clearing Area.

Three species were unlikely to occur as the Clearing Area does not support the species habitat types:

- Ningaloo Worm Lizard (*Aprasia rostrata*);
- Cape Range Stone Gecko (*Diplodactylus capensis*) and;
- Western Pebble-mound Mouse - *Pseudomys chapmani*)

The remaining species is the Brush-tailed Mulgara which is addressed in detail in Principle (b)(Table 6)). Although the Clearing Area is representative of the species preferred habitat type, no individuals or burrows (active and inactive) were recorded at the time of the Basic Fauna Survey. In addition, there are no historical DBCA records of occurrence in the 20 km Study Area. The proposed clearing is unlikely to impact any individuals or significantly impact habitat availability for the species.

Based on the above, the Clearing Area does not comprise a high level of biological diversity.

The proposed clearing is not likely to be at variance to this Principle.

Methodology

- Atlas of Living Australia (ALA, 2025)
- Biological Survey (GHD, 2022)
- Statewide Vegetation Statistics (DBCA, 2019)
- DCCEEW Protected Matters Search Tool Report (DCCEEW, 2026)
- Government GIS Shapefiles:
 - DBCA Threatened and Priority flora database search (DBCA-036, Accessed: February 2026)
 - DBCA Threatened and Priority fauna database search (DBCA-037, Accessed: February 2026)
 - DBCA TEC and PEC database search (DBCA-038, Accessed: February 2026)
 - DPIRD Pre-European Vegetation spatial data (DPIRD-006, Accessed: February 2026)

- DPIRD Rangelands spatial data (DPIRD-063, Accessed: February 2026)
- The mammals of Australia (van Dyck & Strahan, 2008)

(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 .

Proposed clearing is not likely to be at variance to this Principle.

GHD (2022) conducted a Basic Fauna Survey of the Clearing Area, in which a single fauna habitat was mapped (Table 5).

Based on the DBCA Threatened and Priority Fauna spatial data (DBCA-037) and Main Roads Fauna data, six conservation significant fauna species were identified within the 20 km Desktop Study Area.

Following the Basic Fauna Survey, GHD (2022) conducted a post-survey Likelihood of Occurrence (LOO) assessment and concluded twenty conservation significant fauna species are considered likely or known to occur within the Survey Area.

Sixteen of the twenty species identified in the Likelihood of Occurrence assessment are birds. Given these species can easily fly over the terrain and egress from disturbance areas, it is unlikely they would be impacted by the proposed clearing.

Three species were unlikely to occur as the Clearing Area does not represent the species habitat types:

- Ningaloo Worm Lizard (*Aprasia rostrata*);
- Cape Range Stone Gecko (*Diplodactylus capensis*) and;
- Western Pebble-mound Mouse - *Pseudomys chapmani*)

The remaining species is addressed below in Table 6

Table 6: Clearing impact on species that may occur in the Clearing Area

Fauna Species	Information
Brush-tailed Mulgara (<i>Dasycercus blythi</i>) (P4)	The Brush-tailed Mulgara is primarily a nocturnal species which shelters in burrows and feeds on insects, other arthropods, and small vertebrates. This species inhabits spinifex grasslands and, in central Australia, lives in burrows that it digs on the flats between low sand dunes (van Dyck & Strahan, 2008). This habitat type is quite widespread throughout the region, According to Atlas of Living Australia (2025) the species is widely distributed, having been observed during different expeditions in the north-western, central, and south-western areas of the arid zone of Australia. During the Basic Fauna Survey, no indications of the species were identified within the Clearing Area, and DBCA (DBCA-037) records show the species were not present in the 20 km Study Area. Although the Clearing Area is representative of the species preferred habitat type, no individuals or burrows (active and inactive) were recorded at the time of the Basic Fauna Survey. In addition, there are no historical DBCA records of occurrence in the 20 km Study Area. The progressive clearing of 6.82 ha for material extraction within the Clearing Area is unlikely to impact any individuals or significantly impact habitat availability for the species.

Based on the above, the Clearing Area does not comprise the whole or a part of and is not necessary for the maintenance of a significant habitat for fauna.

The proposed clearing is not likely to be at variance to this Principle.

Methodology

- Biological Survey (GHD, 2022)
- DCCEEW Protected Matters Search Tool Report (DCCEEW, 2026)
- Government GIS Shapefiles:
 - DBCA Threatened and Priority fauna database search (DBCA-037, Accessed: February 2026)
 - Main Roads Fauna Data Points (unpublished; Accessed: February 2026)

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.

Proposal is not at variance to this Principle.

Based on the DBCA Threatened and Priority Flora spatial data (DBCA-036) and the EPBC Act Protected Matters Report (DCCEEW, 2026) no Threatened flora taxa occur within a 20 km radius of the Clearing Area.

No Threatened Flora species were recorded within the Clearing Area during the Biological Survey (GHD, 2022).

The proposed clearing is not at variance to this Principle.

Methodology

- Biological Survey (GHD, 2022)
- DCCEEW Protected Matters Search Tool Report (DCCEEW, 2026)
- Government GIS Shapefiles:
 - DBCA Threatened and Priority flora database search (DBCA-036, Accessed: February 2026)

(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.

Proposed clearing is not at variance to this Principle.

Desktop searches identified there are no Threatened Ecological Communities listed under the EPBC Act or *Biodiversity Conservation Act 2016* that occur within the 20 km Study Area (DCCEEW, 2026).

According to GHD (2022), no occurrences of Threatened ecological communities were recorded during the field survey.

Based on the above, the Clearing Area does not comprise the whole or a part of and is not necessary for the maintenance of a Threatened Ecological Community.

The proposed clearing is not at variance to this Principle.

Methodology

- Biological Survey (GHD, 2022)
- DCCEEW Protected Matters Search Tool Report (DCCEEW, 2026)
- Government GIS Shapefiles:
 - DBCA Threatened and Priority Ecological Community database search (DBCA-038, Accessed: February 2026)

(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.

Proposed clearing is not at variance to this Principle.

The National Objectives and Targets for Biodiversity Conservation recognise that the retention of 30% or more of the pre-clearing extent of each ecological community is necessary if Australia's biological diversity is to be protected (Commonwealth of Australia, 2001).

The Clearing Area is representative of one vegetation association, VA 95 (DPIRD-006). This vegetation association retains greater 100% of its pre-European extent at all scales and therefore, exceeds the 30% retention national objectives and targets for biodiversity conservation in Australia (Table 6)

The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area and is contained within a broad landscape of relatively undisturbed vegetation within the IBRA region. The proposed clearing of 6.82 ha of vegetation from the Clearing Area will not significantly reduce the availability of vegetation remaining at a local or regional level.

Based on the above, the proposed clearing is not at variance to this Principle.

Methodology

- National Objective Targets for Biodiversity Conservation (Commonwealth of Australia, 2001)
- Biological Survey (GHD, 2022)
- Government GIS shapefiles:
 - DPIRD Pre-European Vegetation spatial data (DPIRD-006, Accessed: October 2026)
- Statewide Vegetation Statistics (DBCA, 2019)

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Proposed clearing is not at variance to this Principle

GHD (2022) identified one vegetation type (VT08) within the Clearing Area. Based on the vegetation type description (Table 3), VT08 is not representative of riparian species.

The Clearing Area is not located within and does not intersect:

- a Geomorphic Wetland (DBCA 013-016);
- an Internationally Important Wetland (RAMSAR) (DBCA-010);
- a Nationally Important Wetland (DBCA-045);
- any minor or major watercourse areas (DWER-031);
- Rivers (DWER-036); or
- Surface HydroLines (Region) (Geoscience Australia.dataset).

The vegetation proposed for clearing is not growing in or in association with an environment associated with a watercourse or wetland.

The proposed clearing is not at variance to this Principle.

Methodology

- Biological Survey (GHD, 2022)
- Government GIS shapefiles:
 - Geomorphic Wetlands (DBCA 013-016, Accessed: February 2026)
 - Ramsar Wetlands (DBCA 013-016, Accessed: February 2026)
 - Important Wetlands (DBCA-045, Accessed: February 2026)
 - Hydrography Linear (Hierarchy) (DWER-031, Accessed: February 2026)
 - RIWI Act Rivers (DWER-036, Accessed: February 2026)
 - Surface HydroLines (Region) (Geoscience Australia.dataset) (Accessed: February 2026)

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Proposed clearing is not at variance to this Principle

Based on the DPIRD Soil landscape spatial data (DPIRD-017), the Clearing Area is located within Zone 204 (Cape Giralia Coastal Zone). The area is described as Sandy plains, alluvial plains and hills and ranges on Cainozoic deposits and marine limestone over sedimentary rocks of the Carnarvon Basin with Red deep sands and Red loamy earths.

The land zone has been further classified as the Donovan system (204Dn), described as Gently sloping outwash plains and minor stony plains with alkaline loamy and clayey soils supporting tall shrublands of snakewood and other acacias and low shrublands of bluebush (DPIRD-064).

DPIRD (2026) mapping indicates the land degradation risk in the Clearing Area to be extremely low (Table 7).

Table 7: Soil Landscape System Description (DPIRD, 2026)

Risk Percentage	Information
1 %	Very poor to poor drainage potential
1 %	Very high to extreme water erosion hazard
1 %	High to extreme wind erosion hazard
1 %	Moderate salinity hazard
0 %	Has pHCa <4.5 surface acidity
1 %	Moderate to very high waterlogging risk
1 %	Moderate to high flood hazard

The CSIRO Australian Soil Resource System (ASRIS) has been used to determine the Clearing Area is in an area of 'extremely low probability of occurrence' of Acid Sulfate Soils (ASS) occurring.

The proposed clearing is not likely to cause appreciable land degradation with surrounding areas remaining intact across the broader landscape.

Based on the above, the proposed clearing is not at variance to this Principle.

Methodology

- Government GIS Shapefiles:
 - Acid Sulphate Soil Risk Map (Accessed: February 2026)
 - Soil landscape land quality – Water Erosion Risk (DPIRD-013, Accessed: February 2026)
 - Soil landscape land quality – Wind Erosion Risk (DPIRD-016) (Accessed: February 2026)
 - Soil landscape land quality – Salinity Risk (DPIRD-009) (Accessed: February 2026)
 - Soil landscape land quality – Waterlogging Risk (DPIRD-015) (Accessed: February 2026)
 - Soil landscape land quality – Flood Risk (DPIRD-007) (Accessed: February 2026)
- Department of Primary Industries and Regional Development Natural Resource Management System maps (DPIRD, 2026)

(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.

Proposed clearing is not at variance to this Principle

Based on the DBCA Legislated Lands and Waters spatial data (DBCA-011) and the EPBC Act Protected Matters Report (DCCEEW, 2026) no Nature Reserves, Conservation Areas or Bush Forever Areas are located within 20 km of the Clearing Area. The proposed clearing will not impact on the environmental values of any conservation areas.

The proposed clearing is not at variance to this Principle.

Methodology

- DCCEEW Protected Matters Search Tool Report (DCCEEW, 2026)
- Government GIS Shapefiles:
 - DBCA Legislated Lands and Waters & Lands of Interest (Accessed: February 2026)

(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.

Proposed clearing is not likely to be at variance to this Principle.

The DWER spatial data indicates the Clearing Area is located within the Gascoyne Groundwater Area (DWER-034), and the Pilbara Surface Water Area (DWER-037), both proclaimed under the RIWI Act.

The Clearing Area is not located within and does not intersect any watercourses or wetlands.

The proposed clearing of 6.82 ha of vegetation from the Clearing Area is not likely to cause deterioration in the quality of surface or underground water when vegetation in areas surrounding the Clearing Area will remain intact.

The proposed clearing is not likely to be at variance to this Principle.

Methodology

- Government GIS Shapefiles:
 - CAWSA Part 2A Clearing Control Catchments (DWER-004; Accessed January, 2026)
 - RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037; Accessed January, 2026)
 - RIWI Act, Groundwater Areas (DWER-034; Accessed January, 2026)

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Proposed clearing is not at variance to this Principle

According to the Bureau of Meteorology (BoM, 2026) the average annual rainfall in Warroora, located approximately 17.50 km east from Clearing Area is 267 mm. The topography for the land system area (204Dni) is described as Gently sloping outwash plains and minor stony plains with alkaline loamy and clayey soils supporting tall shrublands of snakewood and other acacias and low shrublands of bluebush (DPIRD- 064).

Given the low rainfall rate and the low flood potential, the minor clearing proposed is not likely to cause or exacerbate the incidence or intensity of flooding.

The proposed clearing is not at variance to this Principle.

Methodology

- BoM Website (Accessed: February 2026)
- Government GIS Shapefiles:
 - Soil Mapping (Accessed: February 2026)
 - Soil landscape land quality - Waterlogging Risk (Accessed: February 2026)
 - Soil landscape land quality - Flood Risk (Accessed: February 2026)

6 VEGETATION MANAGEMENT

Main Roads will avoid clearing native vegetation where possible. Where clearing cannot be avoided then this clearing is kept to a minimum.

7 REHABILITATION, REVEGETATION AND OFFSETS

7.1 Revegetation and Rehabilitation

No temporary clearing will be undertaken as part of the Proposal activities and therefore no revegetation or rehabilitation will be conducted under CPS 818.

8 COMPLIANCE WITH CPS 818

The clearing associated with the proposal is unlikely to be, at variance with the Clearing Principles. Additional management actions under CPS 818 are detailed in Table 8.

Table 8. Summary of Additional Management Actions Required by CPS 818

Impact of Clearing	Yes/No or NA	Further Action Required
1. The CDR indicates that the clearing is 'At Variance' or 'May be at Variance' with one or more of the Clearing Principles.	No	No further action required.
2. Clearing is at variance or may be at variance with Clearing Principle (g) land degradation, (i) surface or underground water quality or (j) the incidence of flooding.	No	No further action required.
3. Clearing is at variance with Clearing Principle (g) land degradation, (i) surface or underground water quality and (j) the incidence of flooding.	No	No further action required.
4. The Proposal involves clearing for temporary works (as defined by CPS 818).	No	No further action required.
5a. Proposal is within a Region that: - has rainfall greater than 400mm; and, - is South of the 26th parallel; and, - works are necessary in 'Other than dry conditions'; and, - works have potential for uninfested areas to be impacted.	No	Standard Vehicle and Plant management actions from Annexure 204B (TABLE 204B.9.1), <u>Hygiene Checklists (D17#859669)</u> and <u>Vehicle, Plant and Machinery Hygiene Register Template (D23#179551)</u> will be applied (<i>which include relevant sections of Condition 10</i>).
5b. Do the proposed works require clearing within or adjacent to DBCA managed lands in non-dry conditions?	No	No further action required.
6. Main Roads has been notified by DWER or an environmental specialist that the area to be cleared is susceptible to a pathogen other than dieback.	No	No further action required.
7. Weeds are likely to spread to and result in environmental harm to adjacent areas of native vegetation that are in good or better condition.	No	No further action required.

Impact of Clearing	Yes/No or NA	Further Action Required
8. Did an environmental specialist conduct the survey or field assessment?	Yes	The Environmental Specialist undertaking the biological assessments was suitably qualified and had more than three years' experience.
9. Did an environmental specialist prepare the Assessment Report and any other associated documentation including the VMP, Dieback Management Plan or Offset Proposal?	Yes	The Environmental Specialist preparing the Assessment Report and any other associated documentation including the VMP, Dieback Management Plan or Offset Proposal was suitably qualified and had more than three years' experience.

9 REFERENCES

- Atlas of Living Australia (ALA). (2025). *Atlas of Living Australia*. Retrieved from <https://www.ala.org.au/>
- Bureau of Meteorology (BoM). (2026). Climate Data Online. Bureau of Meteorology (BoM). Retrieved from <http://www.bom.gov.au/climate/data/?ref=ftr>
- Commonwealth of Australia. (2001). *National Objective and Targets for Biodiversity Conservation*. Canberra: Natural Heritage Trust and Biodiversity Policy Branch Environment Australia. Retrieved from <https://library.dbca.wa.gov.au/static/FullTextFiles/020395.pdf>
- Department of Biodiversity, Conservation and Attractions (DBCA). (2019). Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Perth, Western Australia, Australia: Department of Biodiversity, Conservation and Attractions. Retrieved from <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>
- Department of Climate Change, Energy, and Environment (DCCEEW). (2026). *Protected Matters Search Tool*. Department of Climate CHange, Energy, and Environment. Canberra: Department of Climate Change, Energy, and Environment. Retrieved from <https://www.dcceew.gov.au/environment/epbc/protected-matters-search-tool>
- Department of Primary Industries and Regional Development (DPIRD). (2026). *Department of Primary Industries and Regional Development Natural Resource Management System maps*. Retrieved from <https://www.agric.wa.gov.au/resource-assessment/nrinfo-natural-resource-information-western-australia>
- Environmental Protection Authority (EPA). (2016). *Environmental Factor Guideline: Flora and Vegetation*. Environmental Protection Authority. Perth: Government of Western Australia. Retrieved from https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/Guideline-Flora-Vegetation-131216_4.pdf
- Environmental Protection Authority (EPA). (2016). *Flora and Vegetation Surveys for Environmental Impact Assessment*. Office of the Environmental Protection Authority. Perth, Western Australia: Government of Western Australia.
- Environmental Protection Authority (EPA). (2020). *Technical Guidance – Sampling methods for terrestrial vertebrate fauna*. Environmental Protection Authority. Perth: Environmental Protection Authority. Retrieved from <https://www.epa.wa.gov.au/policies-guidance/technical-guidance-terrestrial-vertebrate-fauna-surveys-environmental-impact>
- GHD Pty Ltd (GHD). (2022). *Minilya-Exmouth Road Biological Survey*. Perth: GHD.
- van Dyck, S., & Strahan, R. (2008). *The Mammals of Australia* (Third ed.). (S. van Dyck, Ed.) Sydney, New South Wales, Australia: Reed New Holland.

10 APPENDICES

Appendix 1: DBCA Threatened Flora and Fauna Database Searches

[REDACTED]

Figure 3: Conservation Significant Species (Flora and Fauna)