

Clearing Desktop Report – CPS 818

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Western Australia.*

Little Bridge & Maralla Creek Floodway Upgrades, Fitzroy Crossing

Little Bridge – Russ Road (0030102)

Maralla Creek – Geikie Gorge Rd (0030016)

Kimberley Region

EOS 3451

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1 PROPOSAL

1.1 Purpose and Justification

The Little Bridge on Russ Road connects the Aboriginal Communities of Darlgunaya and Bungardi to Fitzroy Crossing and is the only means of access. The Maralla Creek floodway on Geikie Gorge Rd connects Bungardi Community with Russ Road. The floodways were significantly damaged during the 2023 Ex-Tropical Cyclone Ellie Flood Event. Temporary repairs have been undertaken but the condition of the floodways will continue to deteriorate if a reconstruction is not completed. Reconstruction work was not completed in 2023 due to prioritising other higher priority works (e.g., the Fitzroy River Bridge).

Both Communities have requested that the floodways be permanently repaired, and improvements made to their serviceability. The floodways are impassable several times during the wet season which cuts off access for Communities for essential services only available in Fitzroy Crossing Townsite.

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 and enhancing 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

The proposed scope of work includes:

- An unsealed sidetrack will be constructed at both the Little Bridge and Maralla Creek during floodway upgrade works, which will be located adjacent and downstream to each of the existing floodways. Alignment of which will follow the sidetracks that were utilised when the original floodways were constructed.

1.3 Proposal Location

The Project Development Envelope is located on Russ Road (0030102) between SLK 0.33 - 0.60 (Little Bridge Floodway) and Geikie Gorge Road (0030016) between SLK 2.15 - 2.37 (Maralla Creek Floodway), approximately 2 km northeast of the townsite of Fitzroy Crossing in the Shire of Derby-West Kimberley, as shown in Figure 1. The coordinate of the proposal is:

Little Bridge Floodway

Latitude: 18.1792623°S

Longitude: 125.5724413°E

Maralla Creek Floodway

Latitude: 18.1596618°S

Longitude: 125.6004106°E

1.4 Clearing Details

Proposed Clearing to be undertaken using CPS 818: 1.06 ha in a Project Development Envelope (PDE) of approximately 7.02 ha.

Areas of Native Vegetation Clearing:

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

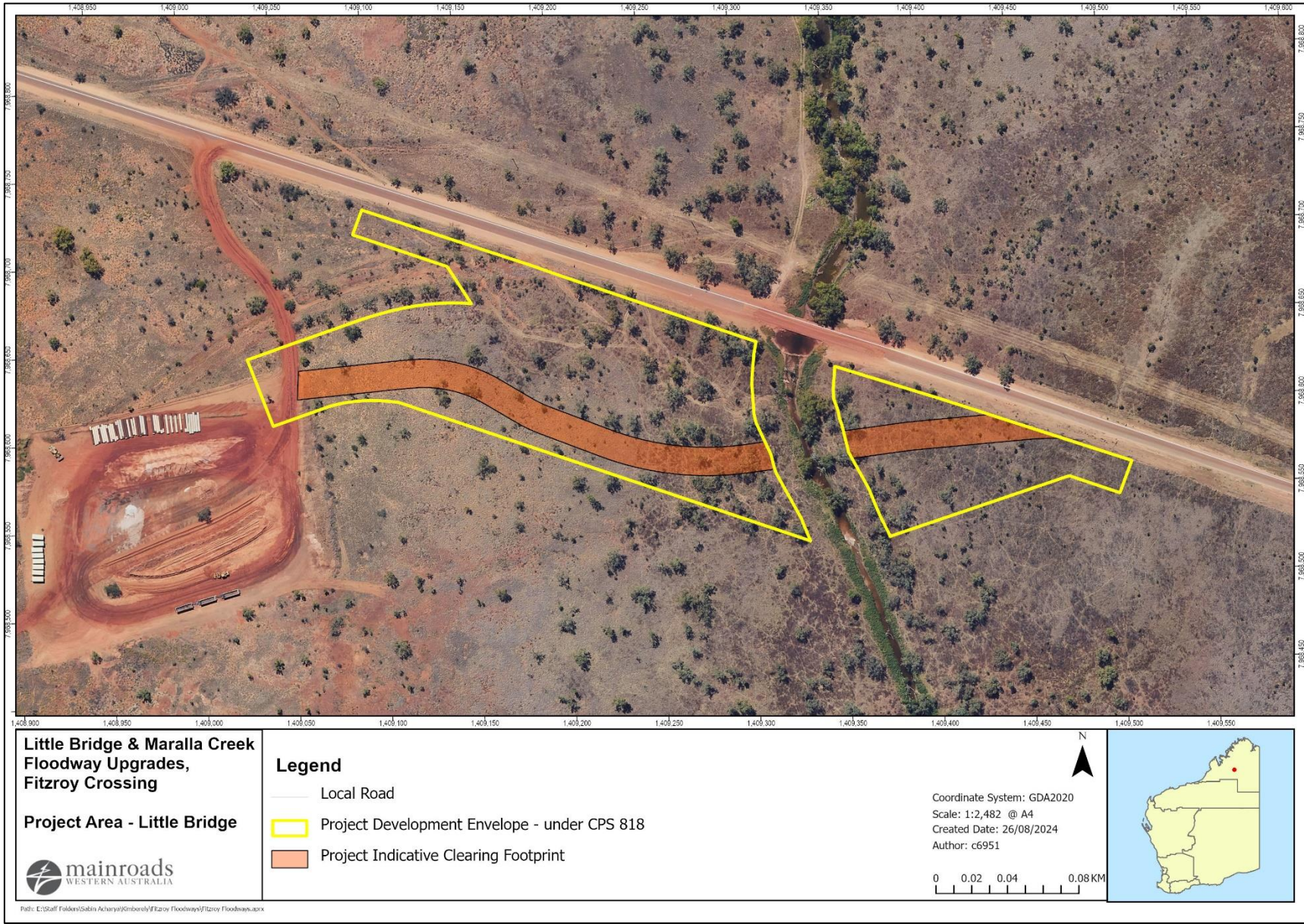


Figure 1a. Proposal Area – Little Bridge, Russ Road

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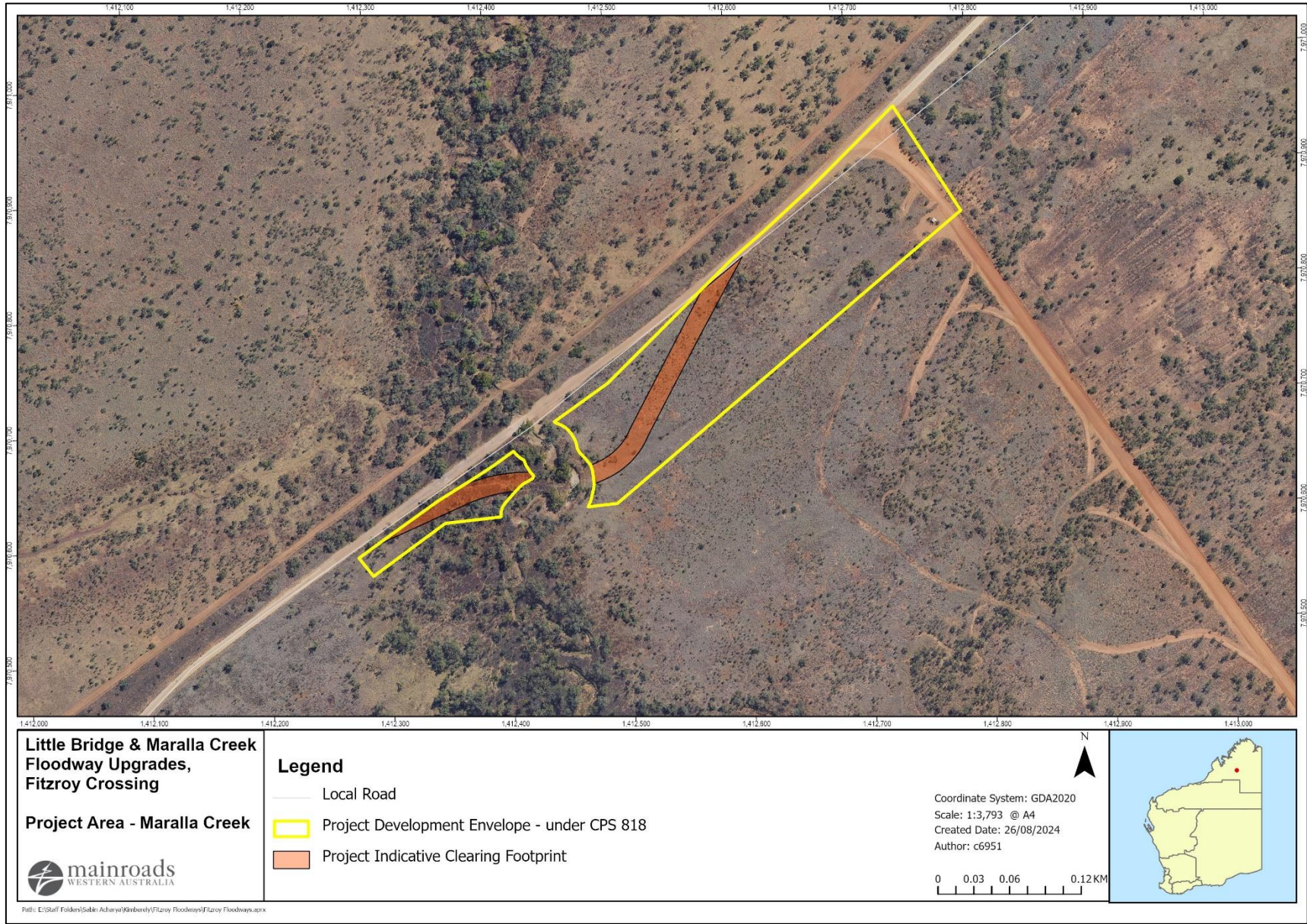


Figure 1b. Proposal Area – Maralla Creek, Geikie Gorge Road

1.5 Alternatives to Native Vegetation Clearing Considered During Proposal Development

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

- Preferentially detouring the vehicles from an alternative route, however this is not possible because this is only route to the local communities.
- Do not upgrade or repair the floodways, however this will potentially result in a poorer safety outcome and may result in road being impassable and further degradation of the State road asset.
- 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 to accommodate the road formation, 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. Accordingly, the reduction of the 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
Alignment to one side of existing road	The Project is surrounded by remnant vegetation and is only route to the local communities. There are no alternate routes available to reduce the amount of clearing required. The project will utilise existing cleared areas where possible, subject to safety requirements being met.
Alternative alignment located within pasture or degraded areas	Few options for sidetrack locations were considered. The current option was considered in terms of minimum disturbance, ease of detour and construction flexibility.
Simplification of design to reduce number of lanes and/or complexity of intersections	The design cannot be further simplified whilst retaining the necessary safety benefits. If the floodways are not upgraded, this would likely result in no improvements to the drainage and the road serviceability. The floodways will be impassable during the wet season which will cut off access for Communities for essential services available in Fitzroy Crossing Townsite.
Use of existing cleared areas for access tracks, construction storage and stockpiling	Further clearing will be avoided as the site office, materials storage areas, stockpile area construction vehicles/machinery and access tracks will be located on previously disturbed or cleared areas.
Drainage modification	The proposed sidetrack clearing will not modify the existing natural drainage.

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&D Act)
- *Soil and Land Conservation Act 1945* (WA)
- *Rights in Water and Irrigation Act 1914* (WA)
- *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 2021)
- 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

- **Project Indicative Clearing Footprint** – The maximum amount of native vegetation to be cleared for the project that will accommodate the designed earthworks and, typically, a nominal buffer to allow for the safe movement of machinery during construction.
- **Project Development Envelope (PDE)** – The maximum extent within which the Project Clearing Footprint will be located. This envelope is larger than the Project Indicative Clearing Footprint to account for minor and unexpected changes in the design or that may occur during construction, such as working to avoid a large tree or encountering buried boulders or services. This flexibility allows the site personnel to make modifications in the project design to avoid areas that may contain better environmental values. The CDR has assessed all environmental values within the PDE as though all of these values will be impacted, up to the amount specified within the Project Indicative Clearing Footprint.
- **Study Area** – Area covered by the Desktop Assessment. The Study Area for the Proposal is confined to a 40 km radius from the PDE.

2.2 Desktop Assessment

A desktop assessment of the Development Envelope 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 3.

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.

3 VEGETATION DETAILS

3.1 Proposal Site Vegetation Description

The Proposal Area is located in the Dampierland Interim Biogeographic Regionalisation of Australia (IBRA) region. The Dampierland IBRA region is characterised by characterised by extensive plains, ranges and spectacular gorges. The vegetation is characterised by acacia thickets with scattered trees and areas of grasslands and savannas (DCCEEW, 2008). The Dampierland IBRA region is further classified into subregions, and the project occurs in Fitzroy Trough which is the semi-arid northern periphery of Canning Basin containing the middle and lower catchments of the Fitzroy River. It includes the alluvial plains associated with this river and areas of sandplain and eroded dune surfaces derived from the Canning Basin. There are woodlands of Pindan, Boab (*Adansonia gregorii*) and Eucalyptus. Rainforest patches and hummock grassland occur on limestone (Graham, G., 2001):

Table 2 provide details of the Pre-European Vegetation Association within the PDE and the remaining extent of this association at the State, Bioregional, Sub-regional and Local Government Authority scale.

Table 2. 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. 61 described as “Grasslands, tall bunch grass savanna woodland, coolabah over ribbon grass (<i>Crysopogon spp.</i>)”.	Statewide	185,472.52	185,315.67	99.92	0.55
	IBRA Bioregion Dampierland	130,880.70	130,785.16	99.93	0.77
	IBRA Sub-region Fitzroy Trough	130,664.11	130,568.56	99.93	0.77
	Local Government Authority Shire of Derby/West Kimberley	182,467.61	182,310.76	99.91	0.55

4 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 at variance to Principle (f) and is not at variance, or not likely to be at variance, with the remaining Clearing Principles.

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

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

Ecological Communities

No Threatened Ecological Communities (TECs) listed under the EPBC Act or BC Act were recorded from within the Project's 40km radius study area. Five Priority Ecological Communities (PECs) listed by the Department of Biodiversity, Conservation and Attractions (DBCA) were recorded from within the study area:

- Kimberley Vegetation Association 719 (P1)
- Monsoon vine thickets and Camaenid land snails of limestone ranges (Napier Range) (P1)
- Boab dominated assemblages of Devonian limestone reef complex (previously 'Monsoon vine thickets of limestone ranges') (P3)
- Gogo Land System (P3)
- Leopold Land System (P3)

The PDE falls within the mapped boundary of the Gogo Land System (P3). Gogo Land System is described as an "active flood-plains with broad levee zones and moderately extensive alluvial back plains of cracking clays with grasslands and grassy woodlands". Over grazing and agriculture expansions leading to soil loss and loss of vegetation structure at landscape levels are considered as the major threats to this land system (Payne, A. and Schoknecht, N., 2011). Approximately 59,183 ha of this land system occurs within the project 40 km radius study area. Impacts as a result of proposed clearing of 1.06 ha represents less than 0.002% of this land system which is unlikely to be significant in a local or regional level. No other above listed PECs occur within or adjacent to the PDE.

Pre-European Vegetation

As evident from Table 2 above, Vegetation Association 61 has more than 99% of its pre-European extent remaining intact at all levels (Statewide, IBRA Bioregion, IBRA Sub-region and Local Government Authority). The project is not located in an area that has been extensively cleared and the vegetation proposed for clearing is not significant as a remnant.

Flora

The desktop assessment identified the following conservation significant flora species from within the project 40 km radius search:

- *Cullen candidum* (P1)
- *Cucumis* sp. Bastion Range (A.A. Mitchell et al. AAM 10710) (P1)
- *Euploca foveolate* (P1)
- *Euploca geocharis* (P1)
- *Mitrasacme* sp. I Kimberley Flora (K.F. Kenneally s.n. PERTH 04115058) (P1)
- *Nymphaea kimberleyensis* (P1)

- *Cayratia cardiophylla* (P2)
- *Hibiscus calcicole* (P2)
- *Corchorus fitzroyensis* (P3)
- *Fimbristylis sieberiana* (P3)
- *Goodenia byrnesii* (P3)
- *Goodenia sepalosa* var. *glandulosa* (P3)
- *Schoenus punctatus* (P3)

***Cullen candidum* (P1)** – The closest record is in the Fitzroy River more than 1.5 km from the PDE. This species has been recorded on clayey sand or heavy soil on river floodplains (Astron, 2017). They have the potential to occur in the PDE. However, the PDE occurs right on the edge of the Fitzroy active floodplains area and as such more preferred habitat is likely to occur outside the PDE. However, given the clearing is minor, any impacts would not be significant.

***Cucumis* sp. Bastion Range (A.A. Mitchell et al. AAM 10710) (P1)** – There is one record of this species more than 19 km from the PDE recorded in 1962. The species is an annual vine mostly found in among rocks, limestone cliffs, sandstone scree and creek beds (Phoenix, 2020). This species has been recorded from four IBRA bioregions (Central Kimberley, Dampierland, Northern Kimberley and Victoria Bonaparte) and five IBRA subregions. Given the small extent of the proposed clearing and noting that more preferred habitat for this species occurs outside the PDE, impacts to this species are unlikely to be significant.

***Euploca foveolata* (P1)** – The closest record is more than 13 km from the PDE. This species has previously been found to occur on scalded areas with sandy loam soils with *Eucalyptus* and *Terminalia* woodland over *Triodia pungens* hummock grassland (described as *Heliotropium foveolatum* in Astron, 2017). Preferred habitat for this species is not likely to occur within the PDE.

***Euploca geocharis* (P1)** – The closest record is more than 14 km from the PDE. The species prefers alluvium, black soils (Western Australian Herbarium, 1998-), river frontage, black soil with tussock grassland on alluvial plains (Astron, 2017). Preferred habitat for this species is not likely to occur within the PDE.

***Mitrasacme* sp. I Kimberley Flora (K.F. Kenneally s.n. PERTH 04115058) (P1)** – It is a poorly known species. The closest record is more than 35 km from the PDE, recorded in 1976 in black soil of boggy soak. Preferred habitat for this species is unlikely to occur in the PDE.

***Nymphaea kimberleyensis* (P1)** – Four records within the study area, the closest being 5 km from the PDE. It is a species of waterlily endemic to WA and occurs in small watercourses with less intense flows, and in a lagoon experiencing seasonal droughts (ALA, 2024). Preferred habitat for this species may occur in the PDE. However given the minor proposed clearing, the impact is not likely to be significant.

***Cayratia cardiophylla* (P2)** – Four records within the study area, the closest record being more than 10 km from the PDE. The species usually occur in limestone and in seepage areas, often amongst rocks (Western Australian Herbarium, 1998-), grows in vine thicket, beach forest, monsoon forest and some of the drier more seasonal types of rain forest (Astron, 2017). Preferred habitat for this species doesn't occur in the PDE.

***Hibiscus calcicole* (P2)** – One record more than 10 km from the project location. The species has been found occurring on red clay soils on limestone and at the base of rocky outcrops (Western Australian Herbarium, 1998-). Preferred habitat for this species is unlikely to occur in the PDE.

***Corchorus fitzroyensis* (P3)** – 11 known records of the species within the study area, the closest being 700 m from the PDE. The species has been recorded from 14 populations across the Central Kimberley and Dampierland bioregions along the Fitzroy River valley. It grows in sandy soil or grey alluvial silt in open areas, on flat, cracking, stony ground, eroded floodplains, sand banks in river channels, along roadsides, and in moist seepage areas around billabongs. Usually found in open savannah woodland or riverine woodland in

association with *Acacia sp.*, *Corymbia bella*, *C. polycarpa*, *Eucalyptus microtheca*, *Sesbania sp.* and *Sorghum sp.* (Dillon et. al, 2020). The habitat suitable for the species may be present within the PDE. However, given the proposed clearing is minor, even if the species was present the impact is not likely to be significant.

***Fimbristylis sieberiana* (P3)** – Closest record 15 km from the project location. The species is a perennial plant usually found in mud at pool edges or in skeletal soil pockets on sandstone cliffs Western Australian Herbarium, 1998-). Preferred habitat for this species is not likely to occur in the PDE.

***Goodenia byrnesii* (P3)** – One record 27 km away. An annual species that prefers sand, edge of creek (Western Australian Herbarium, 1998-). The species has been recorded on various soil types, ranging from clayey black soil flats and brown rocky loams to pindan sands. *Goodenia byrnesii* has also been found located on flat ledge above a rock face; hillside; limestone and sandstone slopes; basalt; creek edges; dry margins of a billabong (Astron, 2017). Preferred habitat may occur in the PDE. However, given the proposed clearing is minor and this species has been recorded from a broad distribution spanning four IBRA bioregions (Dampierland, Northern Kimberley, Ord Victoria Plain and Victoria Bonaparte), any impacts would not likely be significant.

***Goodenia sepalosa var. glandulosa* (P3)** – Two records within the study area, the closest being more than 5 km away. The species grows in mixed acacia woodlands on red sandy loam, sand, or loam along edge of minor drainage channel, *Corymbia* woodland over tall *Acacia* shrubland on the crest of a rise in brown loam, *Corymbia* woodland over tall *Acacia* shrubland on a plain in reddish brown sandy loam, Pindan woodland mid slope in red sand (Phoenix, 2023). The habitat suitable for the species is not likely to occur in the PDE.

***Schoenus punctatus* (P3)** – One record 18 km away. Only few records in the Kimberley but reasonably common in the Northern Territory. It is tufted perennial grass-like or herb (sedge) and prefers watercourses and damp habitats (Western Australian Herbarium, 1998- & ALA 2024). Preferred habitat for the species may occur in the PDE. However, given the proposed clearing is minor, any impacts are unlikely to be significant.

Conservation Significant Fauna

A more detailed assessment of fauna values is contained in Principle (b). The species identified in the desktop assessment have a large known distribution range and habitat within the PDE is very limited in comparison to similar habitat in the largely uncleared local and regional surrounds. Migratory and shorebirds may only use the area in a fly-over nature while passing through the landscape. Fauna species diversity in the small PDE is not likely to be higher than the extensive uncleared local and regional landscape.

Ecological Linkages

There are no known conservation areas, DBCA managed lands, Ramsar Sites or Important Wetlands within the immediate vicinity of the PDE. Remnant native vegetation in the local and regional area is widespread and the proposed clearing is unlikely to fragment the landscape. Habitat critical for conservation significant species does not occur in the PDE. The species identified in the desktop assessment are not unique to the area and have been recorded both locally and regionally.

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

Methodology

- ALA (2024)
- Astron (2017)
- DCCEEW (2024b)
- Dillon et. al (2020)
- Government of Western Australia (2019)
- Phoenix (2023)
- Phoenix (2020)
- Payne, A. and Schoknecht, N. (2011)
- Western Australian Herbarium (1998-)
- Government GIS Shapefiles (Accessed 16/08/2024):
 - DBCA Threatened and Priority Ecological Community database search
 - DBCA Threatened and Priority flora database search
 - Pre-european Vegetation

(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.

The desktop assessment (PMST Search & Government GIS Shapefiles) identified following conservation significant fauna species from within the project study area:

- | | |
|--|--|
| • <i>Calidris ferruginea</i> | Curlew Sandpiper (CR) |
| • <i>Tiliqua scincoides intermedia</i> | Northern Blue-tongued Skink (CR) |
| • <i>Varanus mitchelli</i> | Mitchell's Water Monitor (CR) |
| • <i>Dasyurus hallucatus</i> | Northern Quoll (EN) |
| • <i>Erythrura gouldiae</i> | Gouldian Finch (EN) (P4) |
| • <i>Malurus coronatus coronatus</i> | Purple-crowned Fairy-wren (western) (EN) |
| • <i>Pezoporus occidentalis</i> | Night Parrot (EN) |
| • <i>Rostratula australis</i> | Australian Painted Snipe (EN) |
| • <i>Varanus mertensi</i> | Mertens' Water Monitor (EN) |
| • <i>Calidris acuminata</i> | Sharp-tailed Sandpiper (VU) |
| • <i>Erythrorhynchus radiatus</i> | Red Goshawk (VU) |
| • <i>Falco hypoleucos</i> | Grey Falcon (VU) |
| • <i>Macrotis lagotis</i> | Greater Bilby (VU) |
| • <i>Macroderma gigas</i> | Ghost Bat (VU) |
| • <i>Pristis pristis</i> | Freshwater Sawfish (VU) (P3) |
| • <i>Polytelis alexandrae</i> | Princess Parrot (VU) (P4) |
| • <i>Trichosurus vulpecula arnhemensis</i> | Northern brushtail possum (Kimberley) (VU) |
| • <i>Tyto novaehollandiae kimberli</i> | Masked Owl (northern) (VU) |
| • <i>Actitis hypoleucos</i> | Common Sandpiper (MI) |
| • <i>Apus pacificus</i> | Fork-tailed Swift (MI) |
| • <i>Calidris subminuta</i> | Long-toed Stint (MI) |
| • <i>Charadrius veredus</i> | Oriental Plover (MI) |
| • <i>Hydroprogne caspia</i> | Caspian Tern (MI) |
| • <i>Pandion haliaetus</i> | Osprey (MI) |
| • <i>Plegadis falcinellus</i> | Glossy Ibis (MI) |

- | | |
|---|--|
| • <i>Pluvialis fulva</i> | Pacific Golden Plover (MI) |
| • <i>Tringa glareola</i> | Wood Sandpiper (MI) |
| • <i>Tringa nebularia</i> | Common Greenshank (EN) (MI) |
| • <i>Falco peregrinus</i> | Peregrine Falcon (OS) |
| • <i>Crocodylus johnstoni</i> | Australian Freshwater Crocodile (OS) |
| • <i>Anilius micromma</i> | Small-eyed blind snake (Leopold Downs) (P1) |
| • <i>Hannia greenwayi</i> | Greenway's Grunter (P1) |
| • <i>Westraltrachia recta</i> | Camaenid Land Snail (Limestone Billy Hills) (P1) |
| • <i>Craterocephalus lentiginosus</i> | Prince Regent Hardyhead (P2) |
| • <i>Kimboraga micromphala</i> | Camaenid Land Snail (Windjana and Geiki Gorges) (P2) |
| • <i>Vespadelus douglasorum</i> | Yellow-lipped Cave Bat (P2) |
| • <i>Elanus scriptus</i> | Letter-winged Kite (P4) |
| • <i>Lagorchestes conspicillatus leichardti</i> | Spectacled Hare-wallaby (mainland) (P4) |
| • <i>Rhinonictes aurantia</i> | Orange Leaf-nosed Bat (P4) |

MNES

Curlew Sandpiper (CR) – Mainly occurs on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets and lagoons. Forage on mudflats and nearby shallow water. Roosts on bare dry shingle, shell or sand beaches, sandspits and islets in or around coastal or near-coastal lagoons and other wetlands (DCCEEW, 2024c). Preferred habitat does not occur in the PDE.

Northern Blue-tongued Skink (CR) – Occurs in a wide variety of ecosystems and has been recorded from dissected sandstone plateaus and gorges, limestone ranges, granite, sand plains, cracking clay floodplains and coastal flats. Vegetation includes riparian forest, monsoon rainforest, melaleuca forest, eucalypt woodland and spinifex and tussock grassland (DCCEEW, 2024c). Habitat within the PDE is very limited for the species to permanently occur, therefore impacts from the proposed clearing are unlikely to be significant.

Northern Quoll (EN) – Habitat in Kimberley comprises rocky areas and tall open coastal eucalypt forests. Prime habitat in the northern regions is sandstone escarpment (DCCEEW, 2024c). Preferred habitat does not occur in the PDE.

Gouldian Finch (EN) – Inhabits open woodlands dominated by Eucalyptus trees, annual and perennial grasses (especially Sorghum), a nearby source of surface water and in the breeding season, unburnt hollow-bearing Eucalyptus trees particularly *Eucalyptus brevifolia* (DCCEEW, 2024c). Given this is a very common environment in the top end of Australia, 1.06 ha of clearing is not likely to impact significant habitat for this species.

Purple-crowned Fairy-wren (western) (EN) – Inhabits dense, riparian vegetation in the wet-dry tropics of WA. Found near permanent rivers and springs (or associated billabongs and swamps). Habitats usually contain tall emergent trees, which are generally species of *Eucalyptus* and *Melaleuca* (DCCEEW, 2024c). More preferred habitat for the species occurs outside the PDE, therefore the proposed clearing areas are unlikely to comprise significant habitat for this species.

Night Parrot (EN) – Current distribution is not known. Most habitat records are of *Triodia* (Spinifex) grasslands or chenopod shrublands in the arid and semi-arid zones, *Acacia aneura* (Mulga) woodland, treeless areas as previously sighted. Roosting and nesting sites are within clumps of dense vegetation, primarily old and large Spinifex clumps (DCCEEW, 2024c). Preferred habitat does not occur in the PDE.

Australian Painted Snipe (EN) – Generally inhabits shallow terrestrial freshwater (occasionally brackish) wetlands, including temporary and permanent lakes, swamps and claypans. Also use inundated or waterlogged grassland or saltmarsh, dams, rice crops and sewage farms. This species requires suitable wetland areas even in drought conditions (DCCEEW, 2024c). Preferred habitat does not occur in the PDE.

Sharp-tailed Sandpiper (VU) – A wader species that spends the non-breeding season in Australia. Prefers muddy edges of shallow fresh or brackish wetlands such as lagoons, swamps, lakes and pools and uses intertidal mudflats in sheltered bays, inlets, estuaries or seashores. Forages and roosts at the edge of wetlands, intertidal mudflats or in shallow water (DCCEEW, 2024c). Preferred habitat does not occur in the PDE.

Red Goshawk (VU) – Endemic to Australia. Occurs in coastal and sub-coastal areas in wooded and forested lands. Nests in large trees, invariably within one km of permanent water. In Kimberley, they have been found in tall open forest and woodland, or tall fringing woodlands along rivers in grasslands, shrub-lands, and low open woodlands (DCCEEW, 2024c). Preferred habitat does not occur in the PDE.

Grey Falcon (VU) – Endemic to mainland Australia and is widely distributed. The species frequents timbered lowland plains, particularly acacia shrublands that are crossed by tree-lined water courses. Eggs are laid in the old nests of other birds and the nests chosen are usually in the tallest trees along watercourses, particularly River Red Gum and Coolibah (DCCEEW, 2024c). Given their wide distribution and the small size of the PDE, impacts are not likely to be significant.

Greater Bilby (VU) – A solitary species that shelters in burrows during daylight and intermittently during the night. Occupies three main habitats: open tussock grassland on uplands and hills, *Acacia aneura* (mulga) woodland growing on ridges and rises and hummock grassland in plains and alluvial areas (DCCEEW, 2024c). The PDE falls within the Gogo land system which is characterised by active flood-plains and extensive alluvial back plains of cracking clays with grasslands and grassy woodlands. The habitat is not ideal for the Bilby to occur. There are no known records of Bilby within the project 40 km radius and the PDE is therefore unlikely to represent significant habitat for this species.

Ghost Bat (VU) – Habitat ranges from the arid Pilbara to tropical savanna woodlands and rainforests. During the daytime they roost in caves, rock crevices and old mines. Roost sites used permanently are generally deep natural caves or disused mines with a relatively stable temperature. Forages in vegetation to ambush passing prey (DCCEEW, 2024c). Preferred habitat does not occur in the PDE.

Princess Parrot (VU) – Inhabits sand dunes and sand flats in the arid zone of WA. Occurs in open savanna woodlands and shrublands that usually consist of scattered stands of *Eucalyptus gongylocarpa*, *E. chippendalei*, *Casuarina* or *Allocasuarina* trees; understoreys especially *Acacia aneura*, *Eremophila*, *Grevillea*, *Hakea* and *Senna*; and a ground cover dominated by *Triodia* species (DCCEEW, 2024c). Preferred habitat does not occur in the PDE.

Northern Brushtail Possum (VU) – Occurs mainly in tall eucalypt open forests with large hollow-bearing trees, particularly where the understorey includes some shrubs that bear fleshy fruits. Also occurs in some mangrove communities especially where these contain hollow bearing trees (DCCEEW, 2024c). Preferred habitat does not occur in the PDE.

Masked Owl (northern) (VU) – In northern Australia, they have been recorded from riparian forest, rainforest, open forest, *Melaleuca* swamps and the edges of mangroves, as well as along the margins of sugar cane fields (DCCEEW, 2024c). Preferred habitat does not occur in the PDE.

Water Monitors and **Freshwater Sawfish** listed above will not be impacted by the proposed clearing given the PDE does not include the incised drainage channels and works are being carried out in the dry season.

Migratory species

Common Sandpiper – A non-breeding migrant to Australia; Utilises coastal and inland wetlands and mostly found around muddy margins or rocky shores. Forages in shallow water and on bare soft mud at the edges of wetlands (DCCEEW, 2024c).

Fork Tailed Swift – A non-breeding migrant to Australia, almost exclusively aerial in nature and occur mostly over inland plains but sometimes above foothills or in coastal areas, forage aerially and probably roost aerially (DCCEEW, 2024c).

Long-toed Stint – A regular summer visitor to Australia. In WA, the species is found mainly along the coast with a few scattered inland records. Prefers shallow freshwater or brackish wetlands including lakes, swamps, lagoons and sewage ponds (DCCEEW, 2024c).

Oriental Plover – A non-breeding visitor to Australia, occurs in both coastal and inland areas. Forages among short grass, on hard stony bare ground and on mudflats. Roosts on soft wet mud or in shallow water of tidal mudflats and sometimes in dry open habitats (DCCEEW, 2024c).

Caspian Tern – Occurs widely in Australia in both coastal and inland habitats. Mostly found in sheltered coastal embayment such as lagoons and inlets. Forages in open wetlands and open coastal waters. Breeds on banks, ridges, sand beaches and terrestrial wetlands (DCCEEW, 2024c).

Osprey – Moderately common in Australia. Occurs in littoral and coastal habitats and terrestrial wetlands and offshore islands. Requires extensive areas of open fresh, brackish or saline water for foraging (DCCEEW, 2024c).

Glossy Ibis – Generally located east of the Kimberley. Preferred habitat for foraging and breeding are freshwater marshes at the edges of lakes and rivers, lagoons, floodplains, reservoirs and cultivated areas under irrigation (DCCEEW, 2024c).

Pacific Golden Plover – A non-breeding migrant to Australia, usually inhabits coastal habitats and occasionally occurs around inland wetlands. Also occurs on beaches, mudflats and sandflats in sheltered areas. Forages on sandy or muddy shores. Roost near foraging areas (DCCEEW, 2024c).

Wood Sandpiper – A small thin wader, non-breeding migrant to Australia. Typical habitat is well-vegetated, shallow, freshwater wetlands. Forages on moist or dry mud at the edges of wetlands. Roosts on a low, grassy hillock in a flooded meadow fence (DCCEEW, 2024c).

Common Greenshank – A non-breeding migrant to Australia. Found in a wide variety of inland wetlands and sheltered coastal habitats typically with large mudflats and saltmarsh. Forage and roosts around wetlands, in soft mud on mudflats (DCCEEW, 2024c).

As evident from the habitat descriptions above, none of the migratory species described have core habitat within the PDE. These species are unlikely to be significantly impacted by the proposed clearing.

Peregrine Falcon – Found across Australia in most habitats, from rainforests to the arid zone and at most altitudes, from the coast to alpine areas. Requires abundant prey and secure nest sites and prefers coastal and inland cliffs or open woodlands near water (Birdlife Australia, 2024). Unlikely to occur in the PDE, based on a lack of preferred habitat.

Australian Freshwater Crocodile – Freshwater crocodiles are widespread across northern Australia and occur in permanent freshwater rivers, gorges and billabongs. Freshwater Crocodiles occur along the Fitzroy River, particularly in the gorges upstream of the survey area but would be unlikely to occur in small creeks or non-perennial watercourses such as those in the PDE (GHD, 2017).

Priority Species

Small-eyed blind snake (Leopold Downs) (P1) – Known from only one specimen collected in 1924 at Leopold Downs Station more than 35 km from the PDE. Poorly known species and are possibly associated

with the rugged limestone of the Oscar Range and maybe associated limestone/Devonian reef type habitats (Astron, 2017). Based on available information, this species is considered unlikely to occur in the PDE.

Greenway's Grunter (P1) are freshwater fish and are known to occur in the Fitzroy River system, in moderately to swiftly flowing waters. They are considered to be most restricted and little-known species and are relatively rare in the Fitzroy River system (GHD, 2017). They are unlikely to be impacted by the proposed clearing given the PDE does not include the incised drainage channels and works will occur in the dry season.

Prince Regent Hardyhead (P2) – There are number of known records within the Fitzroy River, the closest being 400 from the PDE. They occur in still or flowing streams and occasionally from isolated brackish pools. They are restricted to a number of rivers in the Kimberley but are generally common in these rivers such as Fitzroy River (GHD, 2017). They are more likely to occur in the Fitzroy River rather than the proposed PDE in non-perennial watercourses. Given the works are to be carried out in dry period, impacts to these species is unlikely to be significant.

Yellow-lipped Cave Bat (P2) – Mostly found in areas of the region that receive more than 800 mm of rainfall per year. Prefers to roost in sandstone and limestone caves in colonies of up to 80 bats (Australian Museum, 2024).

Snails - **Camaenid Land Snail (Limestone Billy Hills) (P1)** and **Camaenid Land Snail (Windjana and Geiki Gorges) (P2)** are land snails known from Gogo Station and Limestone Billy Hills, east of Fitzroy Crossing (GHD, 2017) and are unlikely to occur in the PDE.

Letter-winged Kite (P4) – A bird of open country and grasslands in arid and semi-arid Australia, where there are tree-lined streams or watercourses. When food is plenty, may disperse to higher rainfall coastal regions. Roosts on high canopy of leafy trees (Birds in Backyard, 2024).

Spectacled Hare-wallaby (mainland) (P4) – Found extensively throughout the region. Occurs in open woodlands, shrublands and hummock grasslands. Shelters during the day in dense tussocks and forages at night on shrubs and grasses (Broome Bird Observatory, 2017).

Orange Leaf-nosed Bat (P4) – Distributed in Northern Australia. Prefers tropical woodland to semi-arid grasslands. Found in large caves cohabiting with others bat species. The preferred cave environ is warm and humid, other opportunities for roosting sites include tree hollows (ALA, 2024).

Based on the habitat requirements as described above, the Priority species identified in the desktop assessment are unlikely to have preferred habitat within the PDE.

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

Methodology

- ALA (2024)
- Astron (2017)
- Australian Museum (2024)
- Birdlife Australia (2024)
- Birds in Backyard (2024)
- Broome Bird Observatory (2017)
- DCCEEW (2024b)
- DCCEEW (2024c)
- GHD (2017)
- Government GIS Shapefiles (Accessed 16/08/2024):
 - DBCA Threatened and Priority fauna database search

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

Proposed clearing is not at variance to this Principle.

The Desktop Database Searches (PMST report and Government GIS Shapefiles) identified no known records of listed Threatened Flora taxa from the Project Development Envelope or the Study Area.

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

Methodology

- DCCEEW (2024b)
- Government GIS shapefiles (Accessed 16/08/2024):
 - DBCA Threatened flora database search

(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.

No Threatened Ecological Communities (TECs) listed under the EPBC Act or BC Act are known to occur within the Project Development Envelope or the Study Area.

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

Methodology

- Government GIS shapefiles (Accessed 16/08/2024):
 - DBCA Threatened and Priority Ecological Community database search

(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.

As evident from Table 2 above, Vegetation Association 61 has more than 99% of its pre-European extent remaining intact at all levels (Statewide, IBRA Bioregion and Local Government Authority). The project is not located in an area that has been extensively cleared and the vegetation proposed for clearing is not significant as a remnant.

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

Methodology

- Government of Western Australia (2019).
- Government GIS shapefiles (Accessed 18/04/2024):
 - Pre-European Vegetation

(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 at variance to this Principle.

Based on the 'Surface Hydrolines Regional' GIS dataset and aerial imagery analysis, the Project Development Envelope at the Little Bridge Floodway location does not include the mapped minor-non perennial watercourse or its associated fringing vegetation.

Based on the 'Surface Hydrolines Regional' GIS dataset and aerial imagery analysis, the Project Development Envelope at the Maralla Creek Floodway location does not include the incised drainage channel of the mapped minor-non perennial Maralla Creek. However, it does include up to 0.31 ha of its distinctive denser fringing vegetation and darker soils.

Based on the above, the proposed clearing is at variance to this Principle. However, no significant residual impacts are expected given the minor extent of clearing, and noting riparian vegetation associated with Maralla Creek is well represented both upstream and downstream of the proposed clearing.

Methodology

- Government GIS shapefiles (Accessed 16/08/2024):
 - Surface_HydroLines_Regional (Geoscience Australia)

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

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

The PDE is located in the Fitzroy River catchment. Overall drainage of the area flows to the south to the Fitzroy River. Two land systems are mapped over the PDE:

- St George System - Rocky sandstone plateaux and mountains supporting open spinifex with stunted trees; also, lower sandplains with pindan vegetation of acacias with curly spinifex and ribbon grass.
- Gogo System - Active flood-plains with broad levee zones supporting ghost gum and coolibah woodlands with frontage grasses, and cracking clay back plains supporting Mitchell grass and ribbon grass-blue grass grasslands

These land systems may be susceptible to land degradation or erosion if the disturbances such as grazing pressure, burning and loss of vegetation cover are not controlled (Payne, A. and Schoknecht, N., (2011).

The Acid Sulfate Soil (ASS) risk mapping classifies the Project Development Envelope as "Co(p4)" - Extremely Low Probability of Occurrence" of ASS (Commonwealth of Australia (Geoscience Australia), 2021). The proposed clearing is unlikely to expose acid sulfate soils.

The PDE is in an area naturally prone to severe rainfall events, which could contribute to land degradation via flooding and heavy runoff. However, the minor clearing proposed will not significantly exacerbate land degradation risks. Clearing will be conducted in dry conditions and in accordance with Main Roads Standard Environment Management Plan, thereby reducing the potential for land degradation. The natural hydrology in the area will not be impacted as a result of clearing. Given the proposed clearing represents a relatively small amount of vegetation in a region with vast areas of intact remnant vegetation, the proposed clearing is unlikely to cause appreciable land degradation.

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

Methodology

- Commonwealth of Australia (Geoscience Australia) (2021)
- Government GIS Shapefiles:
 - CSIRO Acid Sulphate Soil
 - Soil Landscape Mapping Systems

(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.

A search of ArcGIS shapefiles indicates no conservation areas, DBCA managed lands, Ramsar Sites or Important Wetlands within or adjacent to PDE. The nearest conservation park is Warlibirri National Park (R 53913), vested under the Conservation and Parks Commission and Gooniyandi Aboriginal Corporation RNTBC, located approximately 2.3 km from the PDE at its nearest point.

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

Methodology

- Government GIS Shapefiles (Accessed 16/08/2024):
 - DBCA Legislated Lands and Waters
 - Ramsar Wetlands
 - Directory of Important Wetlands in Australia
 - Watercourses

(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 PDE is located in the Proclaimed Canning-Kimberley Groundwater Area, Fitzroy River and Tributaries Surface Water Area and Fitzroy Crossing Water Reserve Public Drinking Water Source Area. The minor proposed clearing is unlikely to cause deterioration in the quality of surface or underground water, given that clearing will occur during the dry season and be managed in accordance with Main Roads Standard Environment Management Plan.

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

Methodology

- Government GIS Shapefiles (Accessed 16/08/2024):
 - RIWI Act, Surface Water Areas and Irrigation Districts
 - RIWI Act, Groundwater Areas
 - Acid Sulphate Soil risk mapping
 - Watercourses

(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 likely to be at variance to this Principle.

The subregional climate is described as dry winter and hot semi-arid summer with an average annual rainfall of 689.8 mm (Fitzroy Crossing Aero, Site ID - 3093) (BoM, 2024). Extreme weather events are a significant component of the Kimberley climate. Tropical cyclones and tropical storms can bring heavy and sustained rainfall, particularly in the months leading up to and during the wet season. It is common for a large proportion of the region's rainfall to be recorded in one single event, leading to extensive flooding of rivers, creeks and roadways.

The proposed clearing will take place in the dry season with Main Roads standard measures for environmental management in place during on ground works to avoid the potential escalation of flooding, waterlogging or erosion. The project is in a region where the remaining native vegetation extent is approximately 99%. No changes to the incidence or intensity of flooding are anticipated given the relatively minor clearing. As noted above, climatic conditions are the main factor influencing flooding and relatively small amount of proposed clearing is unlikely to have measurable influence on flood regimes in the area.

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

Methodology

- BoM Website (Accessed 16/08/2024)

5 VEGETATION MANAGEMENT

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

6 REHABILITATION, REVEGETATION & OFFSETS

6.1 Revegetation and Rehabilitation

No temporary clearing will be undertaken as part of the Proposal activities.

6.2 Offset Proposal

No offset proposal is required as the proposed clearing will not result in significant residual impacts to native vegetation within the region.

7 STAKEHOLDER CONSULTATION

Main Roads will undertake stakeholder consultation in accordance with CPS 818 Condition 8.

8 COMPLIANCE WITH CPS 818

Table summarises what further pre-clearing impact assessment is required in accordance with CPS 818.

Table 3. 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.	Yes	No further action required. In accordance with Conditions of CPS 818/17, where the clearing is at variance or may be at variance to clearing principle (f) and no other clearing principle, and the area of the proposed clearing is less than 0.5 hectares in size and the clearing principle (f) impacts only relate to: (i) a minor non-perennial watercourse(s); and/or (ii) a wetland that is not a defined wetland the preparation of an Assessment Report is not required, and submissions are not required to be sought from interested parties.
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 26 th 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), Hygiene Checklists will be applied.
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.

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10 APPENDICES

Appendix 1: Site Photos

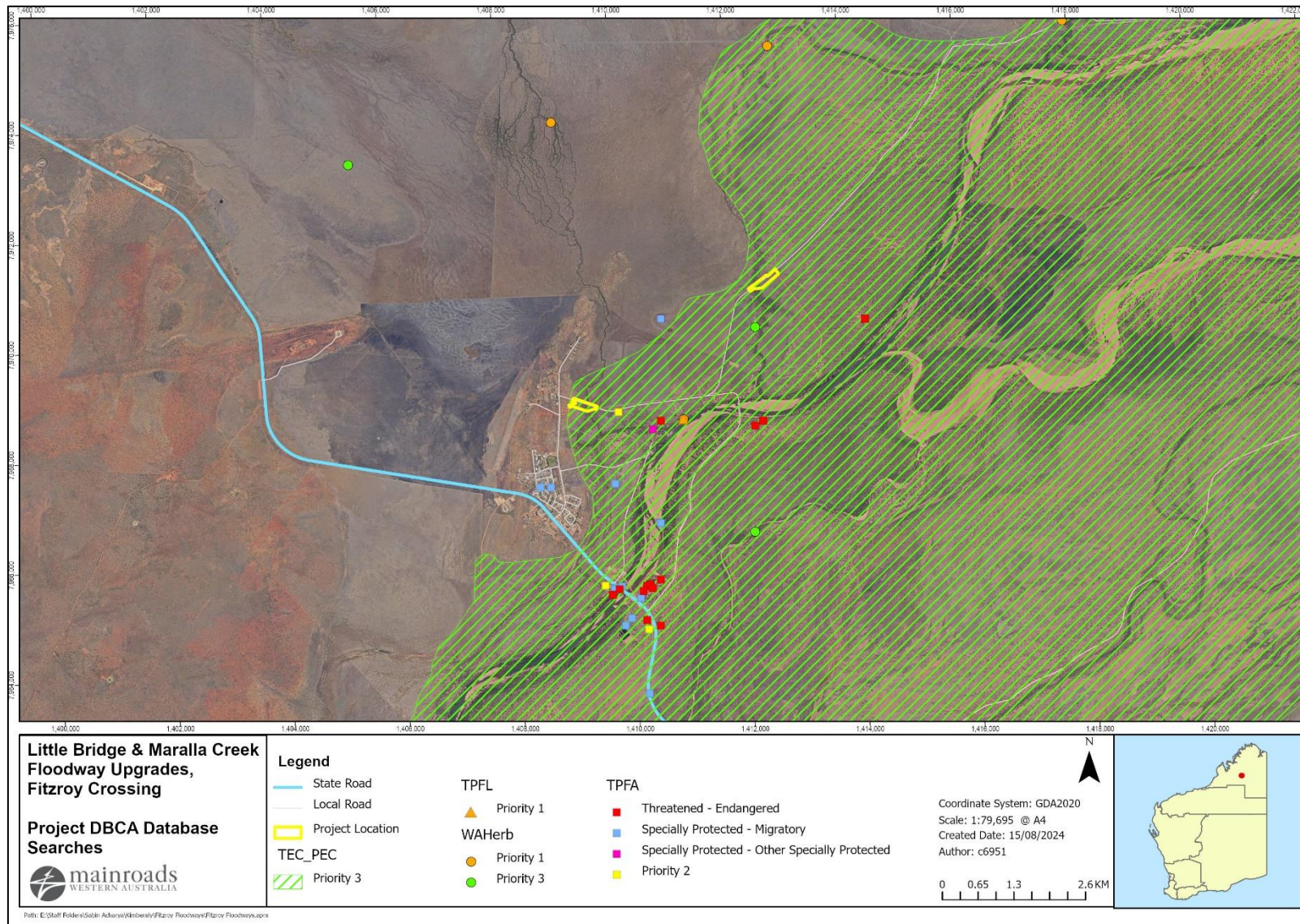


Photos 1: Little Bridge Floodway Photos



Photos 2: Maralla Creek Floodway Photos

Appendix 2: DBCA Threatened Flora and Fauna Database Searches



Appendix 3: EPBC Act Protected Matters Search Report



Australian Government

Department of Climate Change, Energy,
the Environment and Water

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 07-Aug-2024

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

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[Acknowledgements](#)

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	1
Wetlands of International Importance (Ramsar)	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	None
Listed Threatened Species:	18
Listed Migratory Species:	13

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <https://www.dcceew.gov.au/parks-heritage/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	19
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	4
Regional Forest Agreements:	None
Nationally Important Wetlands:	1
EPBC Act Referrals:	3
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

National Heritage Places		[Resource Information]
Name	State	Legal Status
Natural		
The West Kimberley	WA	Listed place

Listed Threatened Species		[Resource Information]
Status of Conservation Dependent and Extinct are not MNES under the EPBC Act. Number is the current name ID.		
Scientific Name	Threatened Category	Presence Text
BIRD		
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Erythrotriorchis radiatus Red Goshawk [942]	Endangered	Species or species habitat may occur within area
Erythrura gouldiae Gouldian Finch [413]	Endangered	Species or species habitat known to occur within area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area
Malurus coronatus coronatus Purple-crowned Fairy-wren (western) [64442]	Endangered	Species or species habitat known to occur within area
Pezoporus occidentalis Night Parrot [59350]	Endangered	Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
<u>Polytelis alexandrae</u> Princess Parrot, Alexandra's Parrot [758]	Vulnerable	Species or species habitat may occur within area
<u>Rostratula australis</u> Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area
<u>Tyto novaehollandiae kimberli</u> Masked Owl (northern) [26048]	Vulnerable	Species or species habitat may occur within area
MAMMAL		
<u>Dasyurus hallucatus</u> Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu] [331]	Endangered	Species or species habitat likely to occur within area
<u>Macroderma gigas</u> Ghost Bat [174]	Vulnerable	Species or species habitat likely to occur within area
<u>Macrotis lagotis</u> Greater Bilby [282]	Vulnerable	Species or species habitat may occur within area
<u>Trichosurus vulpecula arnhemensis</u> Northern Brushtail Possum [83091]	Vulnerable	Species or species habitat known to occur within area
REPTILE		
<u>Tiliqua scincoides intermedia</u> Northern Blue-tongued Skink [89838]	Critically Endangered	Species or species habitat likely to occur within area
<u>Varanus mertensi</u> Mertens' Water Monitor, Mertens's Water Monitor [1568]	Endangered	Species or species habitat known to occur within area
<u>Varanus mitchelli</u> Mitchell's Water Monitor [1569]	Critically Endangered	Species or species habitat likely to occur within area
SHARK		

Scientific Name	Threatened Category	Presence Text
<u>Pristis pristis</u> Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat known to occur within area
Listed Migratory Species [Resource Information]		
Scientific Name	Threatened Category	Presence Text
Migratory Marine Birds		
<u>Apus pacificus</u> Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Marine Species		
<u>Pristis pristis</u> Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat known to occur within area
Migratory Terrestrial Species		
<u>Cecropis daurica</u> Red-rumped Swallow [80610]		Species or species habitat may occur within area
<u>Hirundo rustica</u> Barn Swallow [662]		Species or species habitat may occur within area
<u>Motacilla cinerea</u> Grey Wagtail [642]		Species or species habitat may occur within area
<u>Motacilla flava</u> Yellow Wagtail [644]		Species or species habitat may occur within area
Migratory Wetlands Species		
<u>Actitis hypoleucos</u> Common Sandpiper [59309]		Species or species habitat known to occur within area
<u>Calidris acuminata</u> Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area
<u>Calidris ferruginea</u> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area
Glareola maldivarum Oriental Pratincole [840]		Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area
Other Matters Protected by the EPBC Act		
Listed Marine Species		[Resource Information]
Scientific Name	Threatened Category	Presence Text
Bird		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area
Anseranas semipalmata Magpie Goose [978]		Species or species habitat may occur within area overfly marine area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area
Cecropis daurica as Hirundo daurica Red-rumped Swallow [80610]		Species or species habitat may occur within area overfly marine area
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat known to occur within area overfly marine area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area overfly marine area
Glareola maldivarum Oriental Pratincole [840]		Species or species habitat may occur within area overfly marine area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
Hirundo rustica Barn Swallow [662]		Species or species habitat may occur within area overfly marine area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area

Scientific Name	Threatened Category	Presence Text
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area overfly marine area
Reptile		
Crocodylus johnstoni Freshwater Crocodile, Johnston's Crocodile, Johnstone's Crocodile [1773]		Species or species habitat may occur within area
Extra Information		
State and Territory Reserves		[Resource Information]
Protected Area Name	Reserve Type	State
Brooking Gorge	Conservation Park	WA
Geikie Gorge	National Park	WA
Geikie Gorge	Conservation Park	WA
Warlibirri	National Park	WA
Nationally Important Wetlands		[Resource Information]
Wetland Name		State
Geikie Gorge		WA
EPBC Act Referrals		[Resource Information]
Title of referral	Reference	Referral Outcome
		Assessment Status
Gogo Station Agricultural Development, WA	2018/8143	Assessment
Controlled action		

Title of referral	Reference	Referral Outcome	Assessment Status
Controlled action			
Great Northern Highway Upgrade	2012/6253	Controlled Action	Post-Approval
Not controlled action (particular manner)			
Fitzroy South Quarry West Kimberley Region WA	2012/6272	Not Controlled Action (Particular Manner)	Post-Approval

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Please feel free to provide feedback via the [Contact us](#) page.

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