



DAC GornGorn-Ma Housing Project

Native Vegetation Clearing Referral



WESTERN
ENVIRONMENTAL

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Native Vegetation Clearing Referral

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1. Introduction

1.1 Project Background

Western Environmental Approvals Pty Ltd (WEPL) presents this document to support a Native Vegetation Clearing Referral (NVCR) for the proposed Djarindjin Aboriginal Corporation (DAC) GornGorn-Ma Housing Project (the 'Project'). The Project area comprises a portion of Lot 297 on Deposited Plan (DP) 93256 (Crown Lease - Djarindjin Aboriginal Corporation) near the intersection of Djarindjin Lombadina Road and Djarindjin Junction Street (Figure 1).

The Project area is currently zoned as 'Settlement (Broome)' under the Shire of Broome Local Planning Scheme No. 7. DAC are the leaseholder for the above crown lease, which expires on 30 June 2041. Special Lease 3116/10633 under Section 116 of the *Land Act 1933* grants DAC the land for special purpose of 'use and benefit of Aboriginal inhabitants'. This Special Lease is subject to 12 conditions, with a term of 50 years from 1 July 1991 (WAPC, 2008). DAC will be the developer and owner of the Project.

The Project aims are to provide secure, appropriate accommodation that promotes the wellbeing, stability and homeownership opportunities for the DAC community and staff. Strategic objectives for the Project include advocating for improved and greater numbers of houses, with DAC to establish a community housing service provider subsidiary, or similar business, to design, construct and/or make available 70 new housing units within 10 years to ensure comfortable and safe residency for community members.

The Project Area is within a mapped Bushfire Prone Area (OBRM-021) and, as such, a Bushfire Management Plan (BMP) is being prepared concurrently with this NVCR. The BMP identifies that a 22 m Asset Protection Zone (APZ) will be required to facilitate the Project. The total extent of clearing required to facilitate the Project is 5.23 ha.

Given that native vegetation will be cleared to facilitate the Project, authorisation is required under Part V Division 2 of the *Environmental Protection Act 1986* (EP Act). The proposed clearing is considered to be consistent with the Department of Water and Environmental Regulation (DWER) *Guideline: Native vegetation clearing referrals* (DWER, 2021) and, as such, authorisation under the EP Act is sought via a clearing referral rather than permit application.

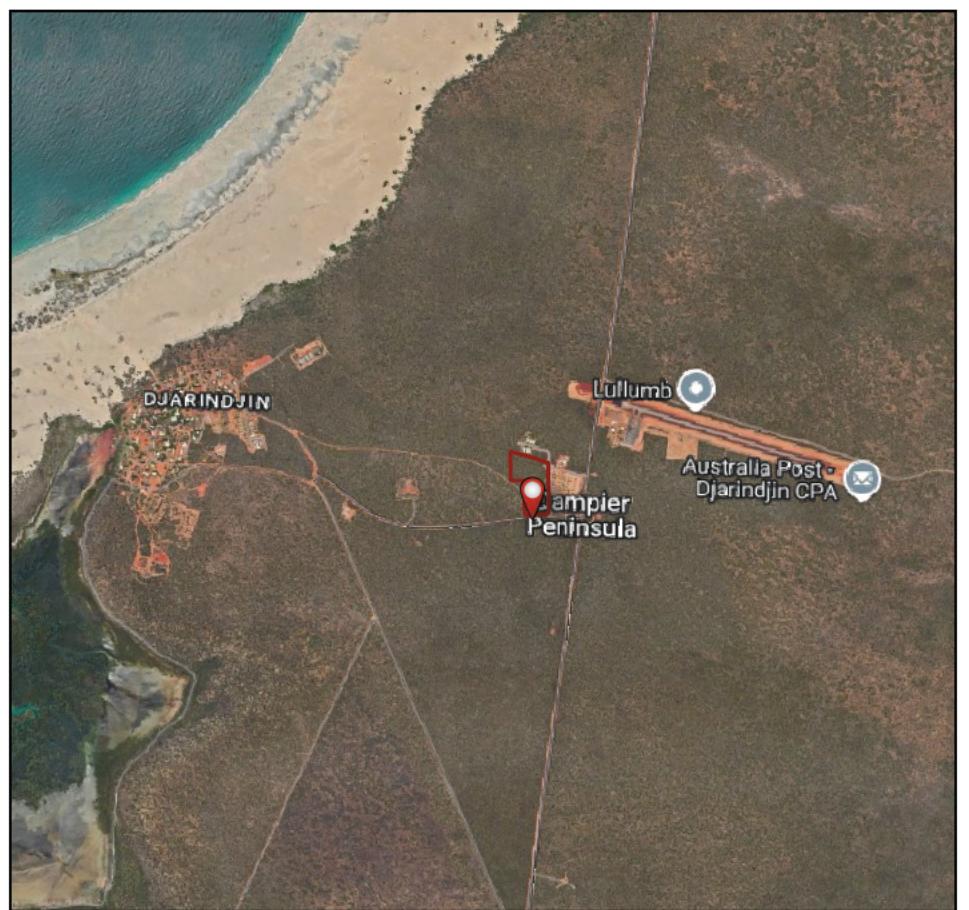
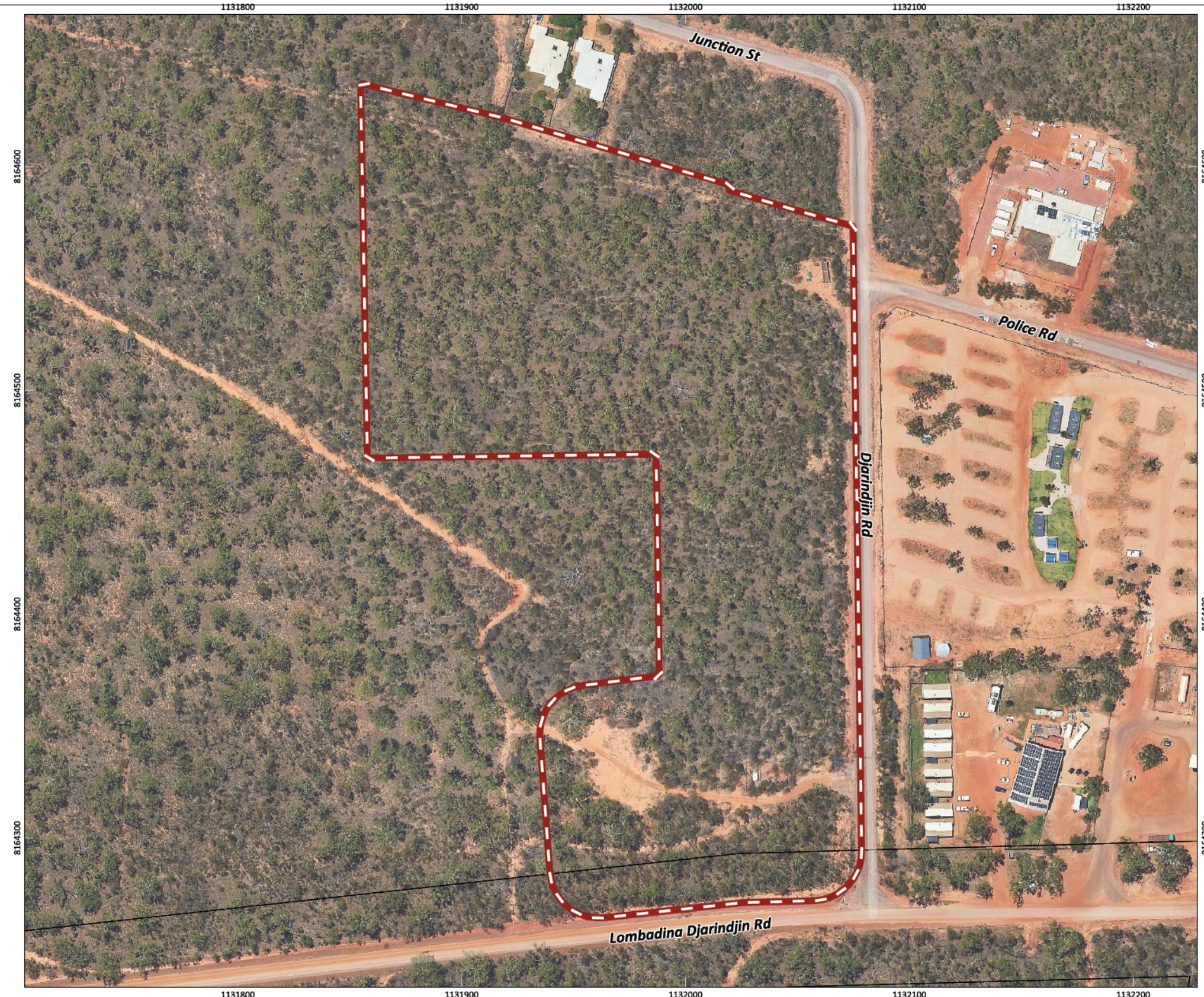
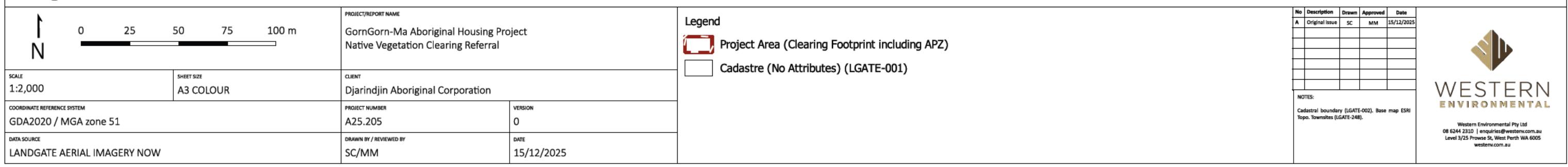


Figure 1: Project Area



2. Environmental Context

2.1 Previous Surveys

One fauna survey has been undertaken within the Project Area, and three recent biological surveys have been undertaken within the surrounding area (Table 1).

Table 1: Previous Surveys Undertaken within and Surrounding the Site

Survey Type	Survey Area	Survey Year	Contractor
Basic fauna survey and Targeted bilby and northern brushtail possum survey	Within the Project Area	2025	WEPL
Flora and vegetation survey (Detailed and Targeted post-wet season) and Basic fauna survey	Several survey sites across the Dampier Peninsula. The closest site (Djarindjin) 800 m to the east.	2023	GHD
Flora and vegetation survey (Detailed and Targeted post-wet season) and Basic fauna survey	Several survey sites across the Dampier Peninsula. The closest site (Djarindjin) 800 m to the east.	2021	GHD
Biological Desktop Assessment	Lombadina Campground, 1.6 km east of the Project Area.	2020	Biota Environmental Sciences (Biota)

2.2 Site Environmental Context

A summary of the environmental context within the Project Area location is provided in Table 2 as shown in Figure 2.

Table 2: Environmental Context

Context	Description of Existing Environment
Address	Intersection of Djarindjin Lombadina Road and Djarindjin Junction Street.
Certificate of Title	Part of Lot 297 on Deposited Plan 93256 (Crown Lease – Djarindjin Aboriginal Corporation).
Native Title Determination	In 2008, it was determined that Native Title exists within the area that intersects the Project Area (LGATE-066). The Native Title is held by Bardi and Jawi native title holders and held in trust by the Bardi and Jawi Niimidiman Aboriginal Corporation (RNTBC (BJNAC)).
Local Government Authority	Shire of Broome
Coordinates	1132019.87 mE, 8164345.07mN
Total Clearing Area	5.23 ha
Final Development Footprint	5.23 ha

Context	Description of Existing Environment
Environmentally Sensitive Areas	<p>The Project area is located within Environmentally Sensitive Area (ESA) 7290, associated with the buffer of a Threatened Ecological Community (TEC), namely Monsoon (vine) thickets on coastal sand dunes of Dampier Peninsula (Vine Thickets TEC). The TEC is not present within the Project area.</p> <p>The mapped ESA is the result of a 2 km being applied to the TEC occurrence within DBCA database records. In accordance with the <i>Environmental Protection (Environmentally Sensitive Areas) Notice 2005</i> (the 'Notice'), ESAs apply to '<i>the area covered by a threatened ecological community</i>'. As such, the buffer applied to a known occurrence by DBCA does not meet the definition of an ESA.</p> <p><u>Therefore, the Project area is not an ESA.</u></p> <p>This is discussed further in Section 2 and Section 4 (Table 3).</p>
Conservation Areas	<p>The nearest conservation area, Bardi Jawi Gaarra Marine Park, is located approximately 2.4 km west of the Project area.</p>
Topography	<p>Contour mapping is limited within the region and does not extend across the Project area.</p>
Soil Landscape	<p>Regional soil landscape and system mapping (DPIRD-027) indicates the Project area is located within the Yeeda System (335), described as red sandplains supporting pindan vegetation with dense acacia shrubs, scattered bloodwood and grey box trees and curly spinifex and ribbon grass.</p>
Contaminated Sites and Acid Sulfate Soils (ASS)	<p>No occurrences of PASS or ASS were identified on or near the Project area (DWER-050). No contaminated sites are identified on or near the Project area (DWER-059).</p>
Surface Water	<p>There are no mapped important wetlands within the Project area (DBCA-010; DBCA-045). The nearest mapped watercourse is a river located approximately 470 m southeast of the Project area, which connects with the ocean to the west (WAPC, 2008; DPLH-015). The coastal waterline is located 3.5 km northwest of the Project area.</p>
Groundwater	<p>The Project area is located within the Canning-Kimberley Proclaimed Groundwater Area, and Canning-Pender subarea (DWER-034). Total salinity across the Project area is broadly mapped as <500 milligrams(mg)/litre(L) total dissolved solids (TDS) (DWER-026).</p> <p>The depth to the watertable in the Canning-Pender subarea is 2-120 m (Searle, 2012). No groundwater mapping dataset is available for the Project area.</p>
Threatened and Priority Ecological Communities	<p>The Project area is located within the 2 km mapped buffer of the Vine Thickets TEC as per DBCA records (DWER-046), however previous surveys (GHD, 2021; 2023; Biota, 2020) have identified that the vegetation does not support the Vine Thickets TEC vegetation community or the correct landform (coastal sand dunes).</p>
Flora	<p>No historic records of Threatened or Priority flora are present within the Project area.</p> <p>No Threatened or Priority flora have been recorded in the surrounding area in previous surveys (GHD, 2021; 2023; Biota, 2020). One species, <i>Triodia acutispicula</i> (Priority 3), was assessed by Biota (2020) as 'May occur' in their survey envelope due to suitable habitat and numerous records within the locality.</p> <p>The Project area consists of Open Eucalypt woodlands which is core habitat for <i>Tiliqua scincoides intermedia</i> (Northern blue tongued skink), and supporting habitata for <i>Erythrura gouldiae</i> (Gouldian Finch) and <i>Trichosurus vulpecula arnhemensis</i> (NBP).</p>

Context	Description of Existing Environment
Vegetation	<p>The Project Area is mapped within the Dampierland (750) vegetation association, described as shrublands, pindan; <i>Acacia tumida</i> shrubland with grey box & cabbage gum medium woodland over ribbon grass & curly spinifex (GoWA, 2019). Currently, approximately 99.68% of this vegetation association remains within the Shire of Broome.</p> <p>From aerial imagery, it is evident vegetation within the Project area is already intact. A fauna survey was undertaken by WEPL in August 2025 which traversed the Project area and confirmed that one vegetation unit covered the Project area. This vegetation unit was consistent with vegetation unit recorded in the surrounding area and described by GHD (2023) as VT04 - <i>Eucalyptus miniata</i> and <i>Corymbia greeniana</i> woodland to isolated clumps of trees on Pindan red sand loam on low plain.</p>
Fauna	<p>A fauna survey was undertaken by WEPL (2025) which identified a single fauna habitat type within the Project area. This is described as an Open Eucalypt Woodland dominated by <i>Corymbia greeniana</i> and <i>Eucalyptus miniata</i>.</p> <p>A DBCA and PMST database search identified historic records of 26 migratory bird taxa, 27 Threatened fauna taxa, one Specially Protected bird taxa and five Priority listed species within 20 km of the Project area. A likelihood of occurrence was undertaken for the Project Area (WEPL, 2025) which identified a total of eight conservation significant fauna taxa to have a high or medium likelihood of occurring within the Project area (Appendix A).</p> <p>Taxa with high likelihood of occurrence included:</p> <ul style="list-style-type: none"> • Peregrine Falcon (<i>Falco peregrinus</i>) - BC Act Other Significance. • Gouldian Finch (<i>Chloebia gouldiae</i>) - EPBC Act Endangered, DBCA Priority 4. • Northern Blue-tongued Skink (<i>Tiliqua scincoides intermedia</i>) - EPBC Act and BC Act Critically Endangered. <p>Taxa with medium likelihood of occurrence included:</p> <ul style="list-style-type: none"> • Greater Bilby, Dalgyte, Ninu (<i>Macrotis lagotis</i>) - EPBC & BC Act Vulnerable. • Northern Brushtail Possum (<i>Trichosurus vulpecula arnhemensis</i>) - EPBC Act and BC Act Vulnerable. • Northern coastal free-tailed bat (<i>Ozimops cobourgianus</i>) - DBCA Priority 1 • Dampier plain slider (<i>Lerista separanda</i>) - DBCA Priority 2 • Dampier burrowing snake (<i>Simoselaps minimus</i>) - DBCA Priority 2 <p>For possibly occurring conservation listed fauna species, habitat types are assessed as either core, supporting or non-significant habitat. As per Commonwealth <i>Matters of National Environmental Significance (MNES) – Significant Impact Guidelines 1.1</i> “core” habitat is defined as that critical to the survival of the species and considered to contain denning/ breeding sites, primary foraging areas and refuge from drought, fire and other stresses (DotE, 2013). “Supporting” habitat is defined as that which is likely used for foraging and dispersing/ connective purposes but is not essential habitat for the continuation of a local population. “Non-significant” habitat is that which would be used only very infrequently for foraging or dispersing.</p> <p>The Greater Bilby was considered to have medium likelihood to occur within the Project area (pre-survey) given the presence of potentially suitable habitat and records throughout the local and regional area, however the survey undertaken within the Project area did not record Bilby presence (WEPL, 2025).</p> <p>While the conservation significant species listed above may use the area for foraging and dispersal, there were no observations of, or secondary evidence recorded for threatened and priority fauna within the Project area (WEPL, 2025). Further, the habitat present is not considered core habitat for any of the species,</p>

Context	Description of Existing Environment
	<p>and it is unlikely that the scale and extent of works would have long term impact on the distribution of any species.</p>

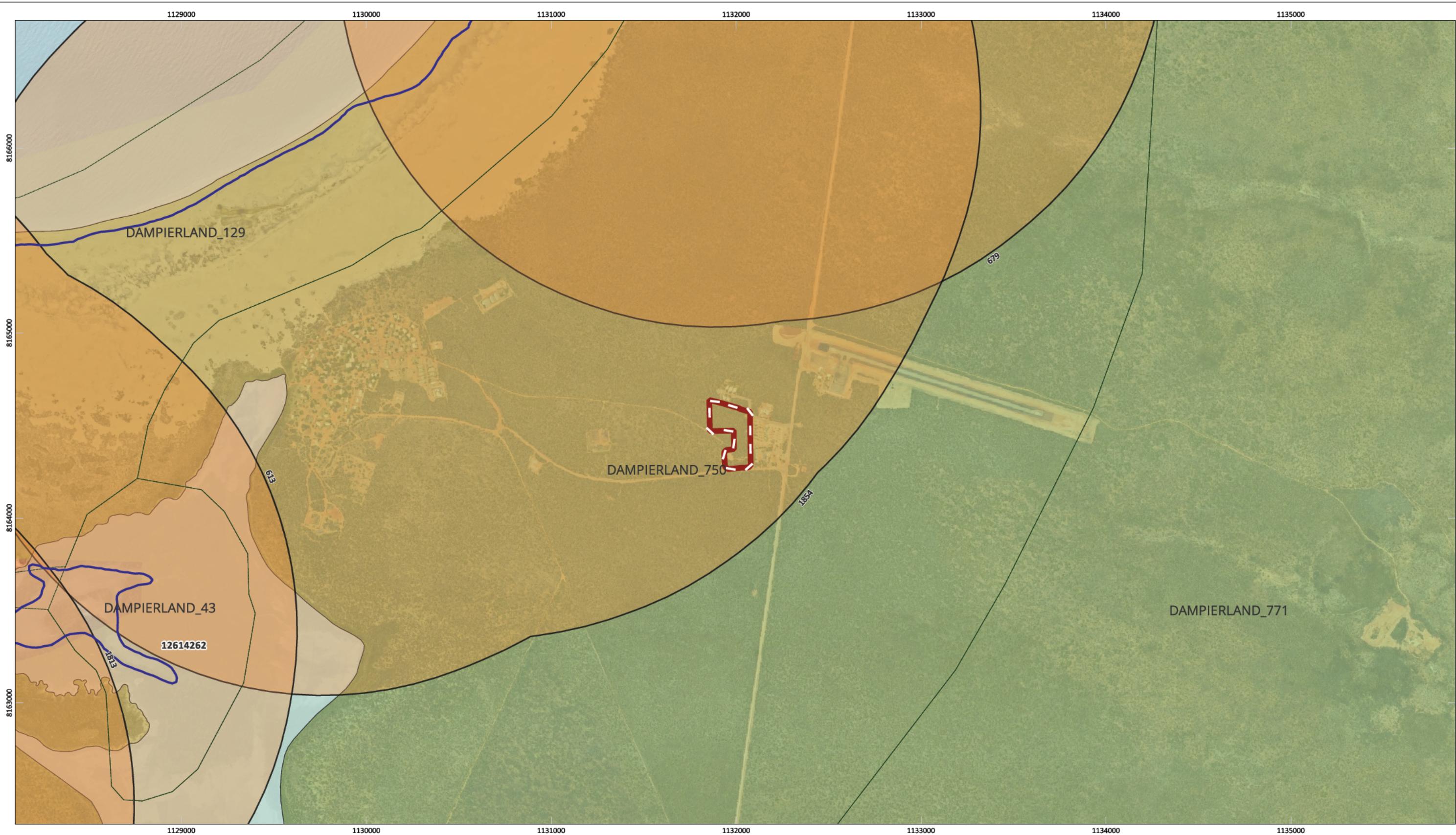
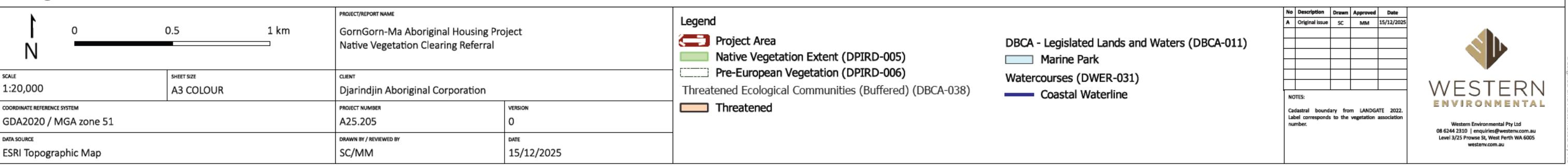


Figure 2: Environmental Context



3. Assessment of Consistency with Referral Guidelines

As identified in the DWER (2021) *Guideline: Native vegetation clearing referrals*, four criteria must be satisfied in order for a permit not to be required. These include:

- Criterion 1: the area proposed to be cleared is small relative to the total remaining vegetation.
- Criterion 2: there are no known or likely significant environmental values within the area.
- Criterion 3: the state of scientific knowledge of native vegetation within the region is adequate.
- Criterion 4: conditions will not be required to manage environmental impacts.

An assessment against these referral guidelines is provided under the following subsections. The proposed clearing is considered to meet all four criteria.

Criterion 1: the area proposed to be cleared is small relative to the total remaining vegetation

The Project area is located within the Damperland region (DCCEEW, 2021) and contains 5.23 ha of vegetation representative of the Dampierland (750) vegetation association. The extent of proposed clearing is well below the 10 ha threshold for which a clearing permit is considered necessary in this region, as detailed in DWER (2021).

There is approximately 99.68% remaining of the estimated pre-European extent of this vegetation association within the IBRA Region (DBCA, 2018).

Additionally, there is approximately 20,880.82 ha (99.28%) of native vegetation within 10 km of the Project Area (DPIRD-005). This is above the 30% threshold and indicates that the Project Area is not within an area that has been subject to intensive clearing.

The proposed clearing therefore represents 0.0004% of the current extent remaining of the pre-European vegetation association, and approximately 0.03% of native vegetation within a 10 km radius.

Based on the information above, the proposed clearing is consistent with this Criterion.

Criterion 2: there are no known or likely significant environmental values within the area

There are no identified significant environmental values within or in close proximity to the Project area based on database records and previous ecological surveys within and surrounding the Project area (Table 1). As detailed in Table 2, the vegetation type is consistent with the surrounding vegetation, which has been described as '*Eucalyptus miniata* and *Corymbia greeniana* woodland to isolated clumps of trees on Pindan red sand loam on low plain (GHD, 2023).

Further, there are no historic records conservation significant flora or ecological communities within the Project area, and it does not comprise of core habitat for any conservation significant fauna (WEPL, 2025). The Project area intersects with a mapped buffer (2 km) applied by DBCA for the Vine Thickets TEC. This TEC

occurs on coastal sand dunes, which are absent from the Project area. The purpose of the mapped buffer is to obscure the exact location and extent of the known occurrence, and does not comprise part of the TEC itself.

Whilst the pre-survey likelihood of occurrence assessment identified three fauna species to have a 'high' likelihood of occurring within the Project area (and an additional five to have a 'medium' likelihood of occurring) the fauna survey (WEL, 2025) did not identify any primary or secondary evidence of any species. Habitat within the Project area is considered to comprise non-significant habitat for conservation significant fauna in the area, rather than core or supporting habitat.

No wetlands or watercourses are present.

Based on the information above, the Project area is not considered to contain significant environmental values, and the proposed clearing is therefore consistent with this Criterion.

Criterion 3: the state of scientific knowledge of native vegetation within the region is adequate

The following sources of information were utilised in preparing this NVCR:

- Publicly available datasets held by government agencies.
- Database records for flora, fauna, and ecological communities held by DBCA.
- The EPBC Act Protected Matters Search Tool managed by the Department of Climate Change, Energy, the Environment and Water (DCCEEW).
- The survey report prepared by WEPL (Attachment A).
- Previous surveys undertaken in the surrounding area (see Table 1).

Given the extent of information available for the Project area and surrounds, the state of information in the area is considered to form adequate basis for this assessment. Therefore, the proposed clearing is consistent with this Criterion.

Criterion 4: conditions will not be required to manage environmental impacts

Conditions are not considered to be necessary to manage environmental impacts due to the small scale of clearing, that no temporary clearing or revegetation is proposed, and that clearing and construction will be undertaken to minimise environmental impacts. To manage and mitigate potential environmental impacts of the proposed clearing, mitigation measures would include:

- Pre-clearance survey.
- Clearly delineating clearing boundaries to avoid incidental impacts.
- Ensuring equipment laydown/storage and vehicle movement is restricted to cleared areas.

- Undertaking directional and seasonal clearing to minimise risk of fauna death or injury.
- Ensuring that any trenches and excavations which are to remain open for an extended period have adequate egress for any fauna that may become trapped. This will be inspected regularly.
- Application of standard hygiene measures for the duration of construction to minimise the risk of weeds and/or disease being introduced or spreading through the Project area.

These mitigation measures may be implemented through a Construction Environmental Management Plan (CEMP) or similar.

Based on the above, the proposed clearing is consistent with this Criterion.

4. Assessment Against the Ten Clearing Principles

An assessment of the potential clearing of native vegetation against the ten native vegetation clearing principles contained in Schedule 5 of the EP Act is provided in Table 3.

The proposed clearing within the Project area is not at variance with any of the clearing principles.

Table 3: Assessment Against the Ten Clearing Principles

Assessment	Data Source/Tools for Assessment	Conclusion
<p>Principle (a) - Native vegetation should not be cleared if it comprises a high level of biological diversity.</p> <p>The Project Area is mapped to occur within the Dampierland (750) vegetation association which is well represented with over 99% of the pre-European extent is remaining on a state, regional and local scale.</p> <p>From database searches, no historic records of Threatened flora pursuant to the EPBC Act or BC Act, or Priority flora listed by DBCA, are located within the Project Area. No Threatened or Priority flora have been recorded in the surrounding area in previous surveys. One species, <i>Triodia acutispicula</i> (Priority 3), was assessed by Biota (2020) as 'May occur'. The species has since been considered unlikely to occur due to not being detected after suitable survey effort within 1 km of the Project Area.</p> <p>From the database search, it was evident that the Project Area intersects a DBCA mapped buffer associated with a TEC (Vine Thickets TEC). TECs do not have buffers applied to them and the buffer identified is mapped by DBCA as to avoid the whereabouts of TECs being available to the public. The Project Area does not occur on suitable landform for the TEC (coastal sand dunes) to be considered present.</p> <p>Given that the vegetation association is well-represented in the region and that no conservation significant flora or ecological community has been recorded, the proposed clearing is not at variance with this principle.</p>	<ul style="list-style-type: none"> • GHD (2021;2023). • Biota (2020). • PMST Database search (DCCEEW, 2022). • DBCA Threatened and Priority Flora Database Search (DBCA, 2025b). • GoWA (2019). • Pre-European Vegetation dataset (DPIRD-006). 	Not at variance.
<p>Principle (b) - Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia</p> <p>The survey undertaken by WEPL (2025) did not record any Threatened and Priority fauna species within the Project Area pursuant to the EPBC Act or BC Act.</p> <p>Seven conservation significant species were considered to have 'High' or 'Medium' likelihood of occurring within the Project Area, including:</p> <ul style="list-style-type: none"> • Peregrine falcon (<i>Falco peregrinus</i>) - Listed Other Significance under the BC Act. • Gouldian finch (<i>Chloebia gouldiae</i>) - Listed Endangered under the EPBC Act and Priority 4 by DBCA. • Northern blue-tongued skink (<i>Tiliqua scincoides intermedia</i>) - Listed Critically Endangered under the EPBC Act and BC Act. • Greater bilby, dalgyte, ninu (<i>Macrotis lagotis</i>) - Listed Vulnerable under the EPBC Act and BC Act. • Northern brushtail possum (<i>Trichosurus vulpecula arnhemensis</i>) - Listed Vulnerable under the EPBC Act and BC Act. • Northern coastal free-tailed bat (<i>Ozimops cobourgianus</i>) - Listed Priority 1 by DBCA. • Dampier plain slider (<i>Lerista separanda</i>) - Listed Priority 2 by DBCA. 	<ul style="list-style-type: none"> • WEPL (2025). • PMST Database search (DCCEEW, 2025). • DBCA Threatened and Priority Fauna Database Search (DBCA, 2025c). 	Not at variance

Assessment	Data Source/Tools for Assessment	Conclusion
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- Dampier burrowing snake (*Simoselaps minimus*) - Listed Priority 2 by DBCA.

During the biological survey, there were no observations of, or secondary evidence recorded for threatened and priority fauna within the Survey Area. The Project area itself does not provide core habitat for any of the species listed above and the clearing will not impact the availability of suitable habitat for any of these species. To minimise the risk of fauna impact during clearing, mitigation measures such as those listed in Section 0 is recommended to be applied. These mitigation measures may be implemented through a CEMP.

Based on the above, the proposed clearing is not at variance with this principle.

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

No historic records of Threatened flora pursuant to the EPBC Act or BC Act, or Priority flora listed by DBCA, are located within the Project Area. No Threatened or Priority flora have been recorded in the surrounding area in previous surveys. The proposed clearing is therefore not at variance with this principle.

- PMST Database search (DCCEEW, 2022).
- DBCA Threatened and Priority Flora Database Search (DBCA, 2025b).
- Biota (2020).
- GHD (2023).

Principle (d) - Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a Threatened Ecological Community

The Project area is 2 km from the nearest mapped occurrence of a TEC, which is the Vine Thickets TEC (Endangered conservation status).

The vegetation within the Project Area was identified by WEPL (2025) as consistent with the vegetation identified in the GHD (2021; 2023) surveys. GHD deemed the TEC not to occur within the area they surveyed as the landform for the TEC (coastal sand dunes) is considered not present and the vegetation did not align with that associated with the TEC.

The vegetation present within the Project Area does not comprise whole or part of, nor is it likely to be necessary for the maintenance of a TEC. Consequently, the proposed clearing is not at variance with this principle.

- WEPL (2025).
- GHD (2023).

Not at variance

Principle (e) - Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been significantly cleared

The Project Area is not within a constrained area (Dampierland). The high-level vegetation association in this area has been mapped by Beard (1990) as the Dampierland (750) vegetation association. It is described as shrublands, pindan; *Acacia tumida* shrubland with grey box & cabbage gum medium woodland over ribbon grass & curly spinifex (GoWA, 2019). The extent of this vegetation association remaining at the state, regional and local scale is over 99% is displayed below.

- Beard (1990).
- GoWA (2019).
- Pre-European Vegetation dataset (DPIRD-006).

Not at variance.

Assessment				Data Source/Tools for Assessment	Conclusion
Vegetation Association	% Remaining Western Australia	% Remaining Carnarvon IBRA Region	% Remaining Shire of Broome		
Dampierland (750)	99.56	99.68	99.51		

The extent of native vegetation in the local area is consistent with the national objectives and targets for biodiversity conservation in Australia and is not considered to be part of any significant linkage in the locality.

The proposed clearing is therefore not at variance with this principle.

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

There are no watercourses mapped within the Project Area. The nearest mapped watercourse is a river located approximately 470 m southeast of the Project Area, which connects with the ocean to the west. The coastal waterline is located 2.5 km northwest of the Project Area. There are no nationally significant wetlands within a 50 km radius of the Project Area.

The vegetation within the Project Area is not considered riparian vegetation or growing in association with riparian vegetation.

Therefore, the proposed clearing is not at variance to this principle.

- Hydrography (DWER-031).
- Directory of Important Wetlands in Australia (DBCA-045).
- Aboriginal Settlements - Land Use (DPLH-015).
- WAPC (2008).

Not at variance.

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

The Project Area is situated on the Yeeda System (335), characterised by red sandplains supporting pindan vegetation. Sandplain and dunefields with little organised drainage; sandplain up to 16 km in extent, with shallow valleys, plains with thin sand cover, and scattered pans.

The limited surface drainage may result in sheet-flow and the potential for short-term water erosion may occur during the wet season (December to March) due to heavy rainfall. This is not considered to be a long-term impact due to the highly porous soils within the application area.

The proposed clearing is mapped as sandy soils which may result in minor wind erosion within the locality, however the surrounding vegetation will provide some protection and limit any wind erosion.

Given the nature of soils within the Project Area, and the extent of clearing only consisting of 5.23 ha, it is unlikely that appreciable land degradation will occur and therefore the proposed clearing is not at variance with this clearing principle.

- Australian Bureau of Meteorology (2023).
- Soil Landscape Mapping Best Available dataset (DPIRD-027).
- Payne and Schoknecht (2011).

Not at variance.

Principle (h) - Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area

Assessment	Data Source/Tools for Assessment	Conclusion
------------	----------------------------------	------------

The Project area is located with a mapped ESA associated with a buffer of Vine Thickets TEC per DBCA database record, however in accordance with the clearing regs, ESAs associated with TECs cover only the TEC occurrence, and do not refer to a buffer. However, previous surveys (GHD, 2021; 2023; Biota, 2020) have identified that the vegetation throughout the Project Area does not support the Vine Thickets TEC vegetation community or the correct landform (coastal sand dunes), therefore the Project Area does not represent an actual ESA.

The nearest conservation areas, Bardi Jawi Gaarra Marine Park, is located approximately 2.4 km west of the Project Area.

The Project Area forms part of the West Kimberley National Heritage Place, which extends across the Dampier Peninsula.

The Project Area is also located within the Bardi Jawi Indigenous Protection Area (IPA). IPAs are areas of land and sea that Traditional Owners have agreed to manage for conservation, with the IPA program jointly managed by DCCEEW and the National Indigenous Australians Agency. The IPA is designated as IUCN categories IV and VI which are identified for the following purposes:

- IV: Habitat/species management area - Areas to protect particular species or habitats, where management reflects this priority. Many will need regular, active interventions to meet the needs of particular species or habitats, but this is not a requirement of the category.
- VI: Protected areas with sustainable use of natural resources - Areas which conserve ecosystems, together with associated cultural values and traditional natural resource management systems. Generally large, mainly in a natural condition, with a proportion under sustainable natural resource management and where low-level non-industrial natural resource use compatible with nature conservation is seen as one of the main aims.

The use of the Project Area for Indigenous housing infrastructure which will service DAC is not considered to be inconsistent with the management categories above. The clearing will not impact flora, fauna, or ecological communities that are of conservation significance, and the end use of the Project Area will balance ecological impacts with infrastructure that will benefit the community. The proposed works have also been cleared pursuant to a heritage survey carried out in May 2025 with BJNAC and traditional owners, subject only to monitoring of ground disturbing activities.

Given the distance from the nearest conservation area, and that the use of the Project Area is consistent with the management purposes of the Bardi Jawi IPA, the proposed clearing is not at variance with this principle.

Principle (i) - Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water

Layout Plan No. 3 identifies a Drinking Water Source Protection Area located approximately 200 m west of the Project area and the nearest mapped watercourse is a river located approximately 470 m southeast of the Project area. The vegetation type within the Project area is not associated with riparian vegetation.

It is unlikely the proposed clearing will result in significant changes to the water table and therefore the Proposed Clearing is not at variance with this principle.

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

- Biota (2020).
- GHD (2021; 2023).
- Environmentally Sensitive Areas dataset (DWER-046). Not at variance.
- DBCA Legislated lands and Waters (DBCA-011).
- DCCEEW (2022).

- Hydrography (DWER-031) Not at variance.
- WAPC (2008).

Assessment	Data Source/Tools for Assessment	Conclusion
<p>The proposed clearing may increase the risk of short-term localised flooding following periods of heavy rainfall, which is commonly experienced by the region. Given the soil within Project area is sandy is highly permeable, it is considered that the soils and conditions onsite are not prone to waterlogging or generating surface water run-off and any potential waterlogging would be short-term.</p> <p>The '<i>A Guide to the Assessment of Applications to Clear Native Vegetation</i>' (DER, 2014) states the following for Principle (j): "Consideration of this principle may require extensive modelling of the whole catchment and should only be considered for large clearing projects. For smaller applications, clearing should not cause waterlogging (localised flooding)."</p> <p>Given no watercourses, wetlands or vegetation associated with watercourses are recorded within the Project area, that the Project area is not situated in a floodplain control area, and that the clearing consists of a small area of vegetation, the proposed clearing is unlikely to contribute to waterlogging and exacerbate flooding. The proposed clearing is therefore not at variance with this principle.</p>	<ul style="list-style-type: none"> • FPM 1 in 100 (1%) AEP Floodway and Flood Fringe Area (DWER-014). • Soil Landscape Mapping Best Available dataset (DPIRD-027). • A guide to the assessment of applications to clear native vegetation (DER, 2014). • GHD (2021; 2023). 	Not at variance.

5. Avoidance and Mitigation

The proposed clearing footprint has been minimised as far as possible to provide adequate space for the necessary infrastructure as well as mitigation of bushfire risks, resulting in a total clearing footprint of 5.23 ha.

The assessment against the ten clearing principles has identified the need for pre-clearing and clearance protocols to minimise the risk of environmental impacts during construction of the Project. These may be implemented through a CEMP, or similar, developed by the contractor. Mitigation measures may include:

- Delineation of clearing footprint and provision of GPS coordinates to clearing contractors to minimise the risk of unauthorised clearing.
- Use of cleared areas within the necessary APZ for uses such as vehicle parking, equipment storage, and material laydown to avoid incidental impacts to adjacent vegetation.
- Pre-clearance walkthroughs to ensure fauna are absent from the clearing area.
- Directional clearing to allow fauna to move away from machinery during clearing into adjacent habitat.
- Vehicle speed limits and signage to minimise risk of vehicle strike.
- Dust suppression measures (e.g. use of water cart) if required.
- Minimise time between clearing and construction activities.
- Construct batters, as needed, to direct and contain stormwater to minimise uncontrolled runoff to adjacent vegetation.
- Application of standard hygiene measures to minimise the risk of weed and/or pathogen introduction and spread.
- Appropriate waste management.

6. Conclusion

Based on the assessment above, the proposed works are not at variance with any of the Ten Clearing Principles, and satisfies the four criteria identified in DWER (2021) *Guideline: Native Vegetation Clearing Referrals* that determine whether clearing activities will have a very low environmental impact.

The environmental impacts resulting from the proposed works can be effectively minimised through the application of mitigation measures, which may be implemented via a CEMP or similar, as summarised in Section 5 of this report.

References

Biota Environmental Sciences (Biota). (2020). *Lombadina Campground Biological Assessment*. Prepared for Tourism Western Australia.

Department of Climate Change, Energy, the Environment and Water (DCCEEW). (2022). *Protected Matters Search Tool*. Canberra, Australia. Retrieved on 2 September 2025 from <https://www.dcceew.gov.au/environment/epbc/protected-matters-search-tool>.

Department of the Environment (DotE). (2013). *Matters of National Environmental Significance: Significant Impact Guidelines 1.1*. Canberra, Australia.

Department of Environment Regulation. (2014). *A Guide to the Assessment of Applications to Clear Native Vegetation - Under Part V Division 2 of the Environmental Protection Act 1986*. Retrieved on 2 September 2025 from https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf.

Fitzpatrick, R., Powell, B. and Marvanek, S. (2011). Atlas of Australian Acid Sulfate Soils version 4. CSIRO Data Collection. Retrieved on 12 August 2025 from <https://data.csiro.au/collection/csiro:6181>.

GHD (2021). 283 - *West Kimberley Solar Flora and Fauna Assessment*. Unpublished report for Horizon Power.

GHD (2023). *Future Energy Systems: Dampier Peninsula and Warmum. Biological Survey*. Unpublished report for Horizon Power.

Government of Western Australia. (2019). *2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report)*. Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth.

Payne, A., L. and Schoknecht, N. (2011). *Land systems of the Kimberley region, Western Australia, Technical Bulletin 98*. Department of Agriculture and Food, Western Australia, Perth.

Searle, J. A. (2012). *Groundwater resource review, Dampier Peninsula. Hydrogeological record series, report no. HG57*. Department of Water, Perth. <https://www.wa.gov.au/system/files/2022-04/Groundwater-resource-review-Dampier-Peninsula.pdf>.

Western Environmental Approvals Pty Ltd (WEPL) (2025). *Djarindjin-Aala Goorlil Solar Project - Basic fauna survey and Targeted bilby and northern brushtail possum survey*. Unpublished report prepared for RFF Australia Pty Ltd.

Western Australian Planning Commission (WAPC). (2008). *Djarindjin Layout Plan 3 - Background Report*. Department of Planning.

Datasets Used

Department of Biodiversity, Conservation and Attractions (DBCA). (2018). *Directory of Important Wetlands in Australia - Western Australia (DBCA-045)*. Retrieved on 20 August 2025 from <https://catalogue.data.wa.gov.au/dataset/directory-of-important-wetlands-in-western-australia>.

Department of Biodiversity, Conservation and Attractions (DBCA). (2017). *Ramsar Sites (DBCA-010)*. Retrieved on 20 August 2025 from <https://catalogue.data.wa.gov.au/dataset/ramsar-sites>.

Department of Primary Industries and Regional Development (DPIRD). (2017). *Native Vegetation Extent (DPIRD-005)*. Retrieved on 2 September 2025 from <https://catalogue.data.wa.gov.au/dataset/native-vegetation-extent>.

Department of Primary Industries and Regional Development (DPIRD). (2019). *Pre-European Vegetation (DPIRD-006)*. Retrieved on 20 August 2025 from <https://catalogue.data.wa.gov.au/dataset/pre-european-dpird-006>.

Department of Primary Industries and Regional Development (DPIRD). (2022). *Soil Landscape Mapping-Best Available (DPIRD-027)*. Retrieved on 20 August 2025 from <https://catalogue.data.wa.gov.au/dataset/soil-landscape-mapping-best-available>.

Department of Planning, Lands and Heritage (DPLH) (2019). *Aboriginal Settlements - Land Use (DPLH-015)*. Retrieved on 2 September 2025 from <https://catalogue.data.wa.gov.au/dataset/aboriginal-settlements-land-use-dop-048>.

Department of Water and Environmental Regulation (DWER). (2018a). *RIWI Act, Groundwater Areas (DWER-034)*. Retrieved on 20 August 2025 from <https://catalogue.data.wa.gov.au/dataset/riwi-act-groundwater-areas>.

Department of Water and Environmental Regulation (DWER). (2018b). *Groundwater Salinity Statewide (DWER-026)*. Retrieved on 20 August 2025 from <https://catalogue.data.wa.gov.au/dataset/groundwater-salinity-statewide>.

Department of Water and Environmental Regulation (DWER). (2018c). *Surface Water Management Areas (DWER-041)*. Retrieved on 20 August 2025 from <https://catalogue.data.wa.gov.au/dataset/surface-water-management-areas>.

Department of Water and Environmental Regulation (DWER). (2018d). *FPM 1 in 100 (1%) AEP Floodway and Flood Fringe Area (DWER-014)*. Retrieved on 20 August 2025 from <https://catalogue.data.wa.gov.au/dataset/fpm-100-year-ari-floodway-and-flood-fringe-areas>.

Department of Water and Environmental Regulation (DWER). (2018e). *Hydrography, Linear (Hierarchy) (DWER-031)*. Retrieved on 20 August 2025 from <https://catalogue.data.wa.gov.au/dataset/hydrography-linear-hierarchy>.

Appendix A

DAC GornGorn-Ma Housing

Project - Fauna Surveys 2025



DAC GornGorn-Ma Housing Project

Fauna Surveys 2025



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DAC GornGorn-Ma Housing Project

Fauna Surveys 2025

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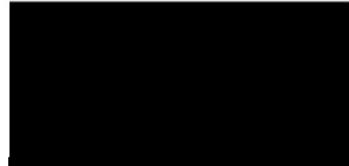


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WEPL will not be liable to update or revise this report to take into account any events or circumstances or facts becoming apparent after the date of this report.

Executive Summary

Western Environmental Approvals Pty Ltd (WEPL) was commissioned by Right Foot Forward (RFF) Australia Pty Ltd to undertake a targeted fauna survey to support the proposed DAC Corporation GornGorn-Ma Aboriginal Housing Project (the 'Project') within Lot 297 on Deposited Plan 83256 (the 'Survey Area').

The biological surveys included:

- A desktop assessment of relevant databases and previous surveys.
- Targeted surveys for Bilby and Northern Brushtail Possum (NBP).
- A basic fauna survey and Likelihood of Occurrence assessment for threatened or priority fauna.

Biological surveys were undertaken across four person days sampling fauna habitats from 7th August and 8th August 2025.

Basic Fauna Survey

Database searches identified 58 conservation listed fauna species that potentially occur, or habitat likely occurs within the Survey Area, comprising:

- Three species had a high likelihood of occurrence.
 - *Erythrura gouldiae* (Gouldian finch) P4/EN
 - *Falco peregrinus* (peregrine falcon) OS
 - *Tiliqua scincoides intermedia* (northern blue-tongued Skink) C
- Five species had a medium likelihood of occurrence.
 - *Ozimops cobourgianus* (northern coastal free-tailed bat) P1
 - *Macrotis lagotis* (bilby) VU
 - *Trichosurus vulpecula arnhemensis* (northern brushtail possum) P4
 - *Lerista separanda* (Dampier plain slider) P2
 - *Simoselaps minimus* (Dampier burrowing snake) P2
- Fifty species had a low likelihood of occurrence. These were primarily marine species and pelagic seabirds.

- One fauna habitat type was described. The habitat comprises an open eucalypt woodland.
- No species of conservation significance were recorded within the Survey Area.

Threatened Fauna Survey

No evidence or sightings of bilby or Northern Brushtail Possum were detected within the Survey Area. None of the habitat within the Survey Area is considered significant for bilby. The habitat within the Survey Area is considered supporting habitat for Northern Brushtail Possum.

Given that neither signs nor individuals of these two species were recorded during the targeted survey it is considered that they do not utilise the Survey Area.

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Appendices

Appendix A	Legislation
Appendix B	Definitions and Criteria
Appendix C	Fauna Database Search Results and Likelihood of Occurrence

1. Introduction

1.1 Project Background

Western Environmental Approvals Pty Ltd (WEPL) was commissioned by Right Foot Forward (RFF) Australia Pty Ltd to undertake a targeted fauna survey to support the proposed DAC GornGorn-Ma Housing Project (the 'Project').

The Survey Area comprises a portion of Lot 297 on Deposited Plan (DP) 83256 (Crown Lease - Djarindjin Aboriginal Corporation) near the intersection of Djarindjin Lombadina Road and Djarindjin Junction Street (Figure 1). The Survey Area is located 190 km northwest of the Town of Broome in the west of the Kimberley region and comprised a total area of 9.25 ha.

1.2 Objectives and Scope of Work

The objective of the survey was to delineate key fauna values as well as determine the value of the Survey Area to support bilby (*Macrotis lagotis*) and Northern brushtail possum (NBP) (*Trichosurus vulpecula arnhemensis*).

The scope of work included:

- Desktop assessment of State and Commonwealth databases and other sources.
- Basic fauna survey consistent with Environmental Protection Authority (EPA) *Technical Guidance - Terrestrial vertebrate fauna surveys for environmental impact assessment* (EPA, 2020)
- Targeted bilby survey consistent with the *Survey guidelines for Australia's Threatened Mammals* (DSEWPaC, 2011), and the Department of Biodiversity, Conservation and Attractions' (DBCA) Guidelines for survey to detect the presence of bilbies, and assess the importance of habitat in Western Australia (DBCA, 2017)
- Targeted NBP survey consistent with the Survey guidelines for Australia's threatened mammals (DSEWPaC, 2011).
- Technical report including the results of the desktop assessment.

This report presents the results of the desktop assessment and field survey undertaken to support the above objectives.

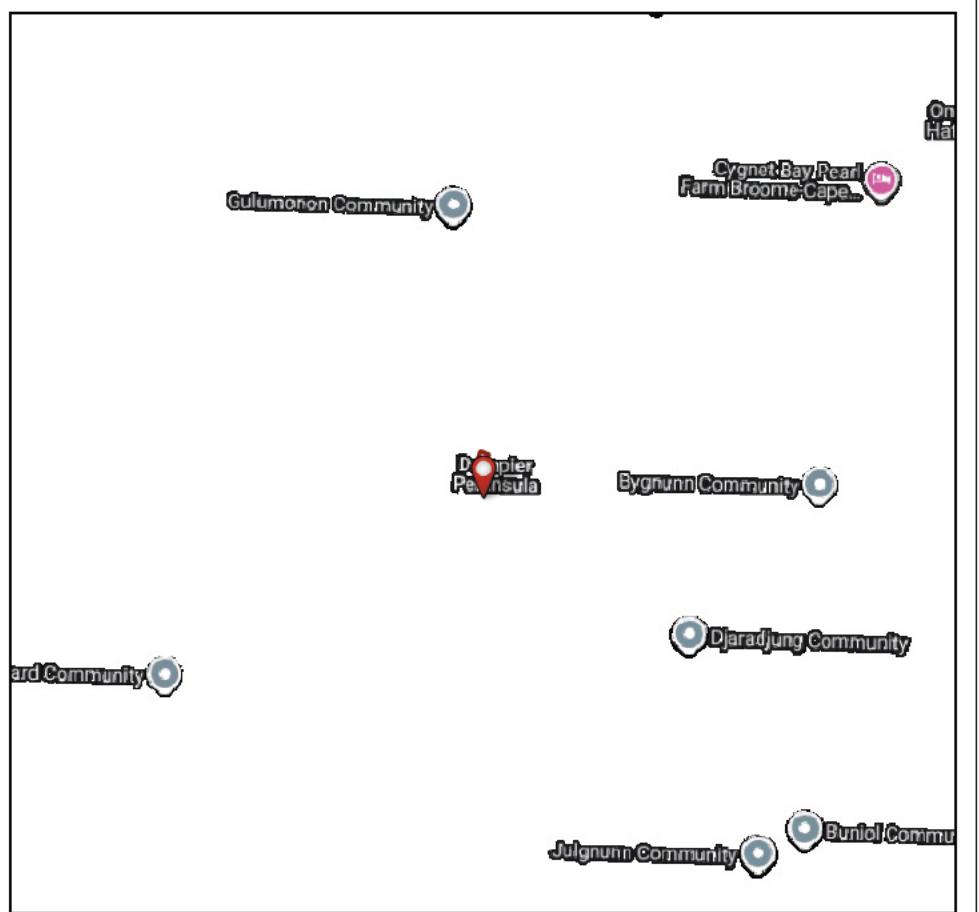
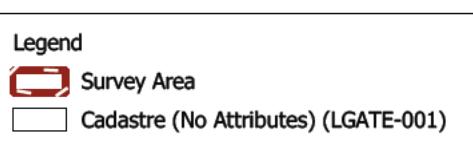
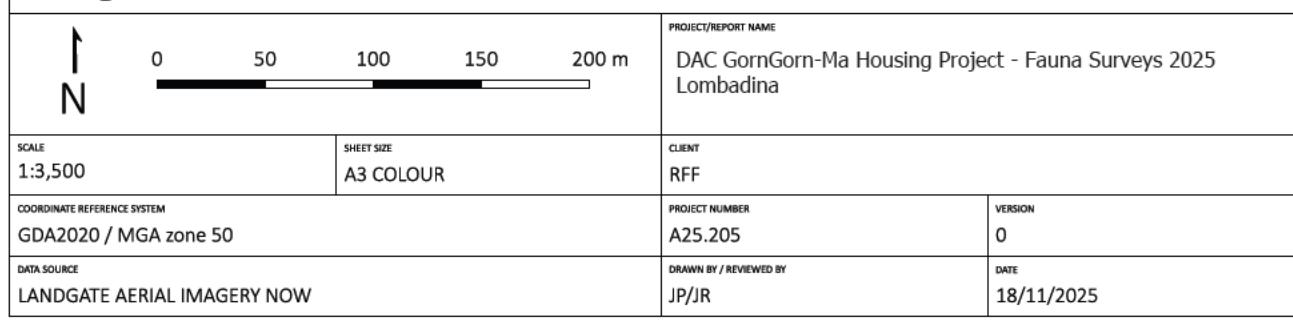


Figure 1: Survey Area



Description	Drawn	Approved	Date
Original Issue	JP	JR	18/11/2025

3:

Central boundary (LGATE-002). Base map ESRI
Townsites (LGATE-248).

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1.3 Relevant Legislation and Guidance

This environmental assessment was conducted in accordance with Commonwealth and State legislation and guidelines:

- Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- Western Australian *Environmental Protection Act 1986* (EP Act).
- Western Australian *Biodiversity Conservation Act 2016* (BC Act).
- Western Australian *Biodiversity Conservation Regulations 2018*.
- Department of the Environment (DotE). (2013). *Matters of National Environmental Significance. Significant Impact Guidelines 1.1 - Environment Protection and Biodiversity Conservation Act 1999*.
- Department of Sustainability, Environment, Population and Communities (DSEWPaC). (2011). *Survey Guidelines for Australia's Threatened Mammals*. Canberra, Australia.
- Department of Agriculture, Water and the Environment (DAWE). (2021) *Conservation Advice - Trichosurus vulpecula arnhemensis Northern Brushtail Possum*.
- Department of Agriculture, Water and the Environment (DAWE) (2016) *Conservation Advice - Macrotis lagotis - Greater Bilby*.
- Department of the Environment Water Heritage and the Arts (DEWHA) (2010). *Survey Guidelines for Australia's Threatened Birds*.
- DBCA (2017) *Guidelines for survey to detect the presence of bilbies, and assess the importance of habitat in Western Australia*
- Environmental Protection Authority (2020) *Terrestrial vertebrate fauna surveys for environmental impact assessment*. Hereafter referred to as the 'Fauna Survey Technical Guidance'.

A short description of key legislation is provided in Appendix A. Other definitions, including species and ecological community conservation categories, are provided in Appendix B.

1.4 Survey Limitations and Constraints

Limitations and constraints of the fauna survey as outlined in the Fauna Survey Technical Guidance (EPA, 2020) are detailed below in Table 1.

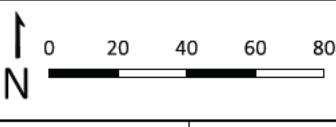
Table 1: Limitations and Constraints of the Flora, Vegetation and Fauna Survey

Possible Limitation	Degree of Limitation (Significant, Moderate or Negligible)	Potential Constraints on Survey Outcomes
Survey Level/ Scope	Negligible	The Targeted bilby and NBP surveys and basic fauna survey is considered suitable based on species expected to be present and the extent and condition of vegetation/habitat present within the Survey Area. The level of information collected was suitable to provide information required to inform and support approvals and referrals.
Availability of contextual information at a regional and local scale	Negligible	All data required to complete the scope of works including regional and local contextual information was available. DBCA data was requested as part of the desktop assessment.
Site Access	Negligible	The entire Survey Area was readily accessed by vehicle and on foot.
Survey Intensity and Extent	Negligible	<p>Suitable survey effort by experienced ecologists was applied. Survey effort included:</p> <p>Four person days for Targeted bilby, NBP and basic fauna survey.</p> <p>All planned Survey Areas were adequately sampled in line with the project scope of works.</p> <p>See Figure 2 for survey effort represented by tracklogs.</p>
Experience	Negligible	<p>The ecologist leading the field survey (Sam Lostrom) has been conducting Targeted Fauna surveys in Western Australia for over 8 years.</p> <p>The second field ecologist the fauna field survey (Jack Rogers) has been conducting fauna targeted assessments in Western Australia as well as Targeted Ornithological Surveys in the UK, with over 4 years' experience. Back-office support was provided by senior ecologists who have worked in the region for over 10 years.</p>
Timing, weather, season	Negligible	<p>Bilby and NBP do not have hibernation periods within the Kimberly region, as such there is not a preferable season for surveying for these species. Bilby diggings, scat and burrows can persist in the environment for multiple years and as such timing is not considered a significant limitation to the Survey.</p> <p>The temperatures and weather experienced during the field survey was warm and dry (typically 28°C in the day and 18°C at night) not considered a limitation to the survey and did not affect the ability to record fauna or habitats.</p>
Proportion of the fauna recorded and/or collected, and any identification issues	Negligible	<p>A total of 34 vertebrate fauna species were recorded, including 1 introduced species. The number of species identified was considered good for this region. There were no other factors considered a limitation to the survey.</p> <p>Species sampling was in line with the Technical Guidance for a basic fauna survey.</p>
Mapping Reliability	Negligible	<p>The entirety of the Survey Areas was traversed by foot and mapping reliability is considered high.</p> <p>Mapping accuracy and reliability was not considered a limitation.</p>

Possible Limitation	Degree of Limitation (Significant, Moderate or Negligible)	Potential Constraints on Survey Outcomes
Disturbances (fire, flood etc.)	Negligible	<p>There was no evidence of clearing and some historical evidence of fire which is not considered a limitation to the field survey. However, post survey (before 3rd of September 2025) all vegetation within the Survey Area was burnt by a bushfire. This is not considered a limitation to the Survey as it occurred post Survey.</p>



Figure 2: Survey Effort

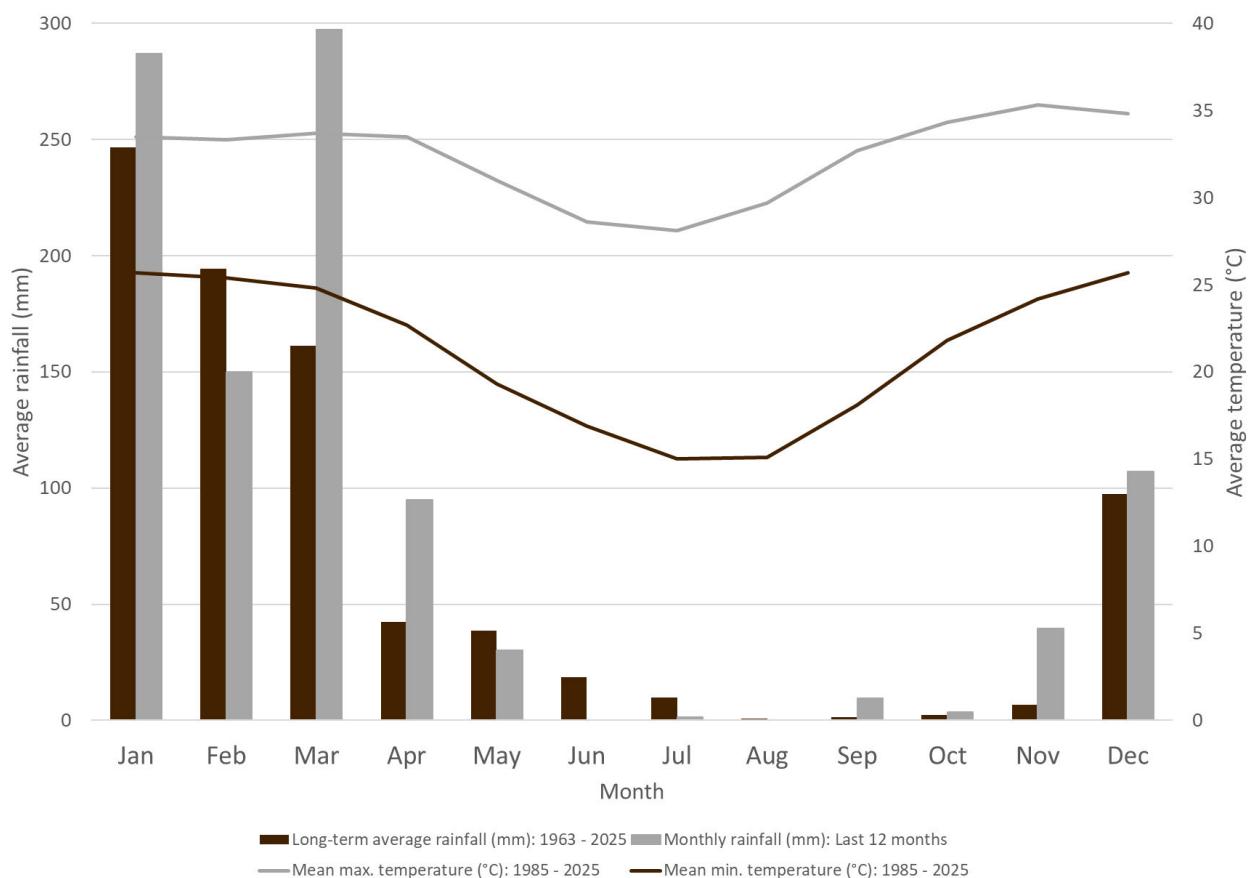
		PROJECT/REPORT NAME DAC GornGorn-Ma Housing Project - Fauna Surveys 2025 Lombadina		Legend  Tracklog  	<table border="1"> <thead> <tr> <th>No</th><th>Description</th><th>Drawn</th><th>Approved</th><th>Date</th></tr> </thead> <tbody> <tr> <td>A</td><td>Original issue</td><td>JP</td><td>JR</td><td>18/11/2025</td></tr> <tr> <td></td><td></td><td></td><td></td><td></td></tr> <tr> <td></td><td></td><td></td><td></td><td></td></tr> <tr> <td></td><td></td><td></td><td></td><td></td></tr> <tr> <td></td><td></td><td></td><td></td><td></td></tr> <tr> <td></td><td></td><td></td><td></td><td></td></tr> <tr> <td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table> <p>NOTES: Cadastral boundary (LGATE-002). Label corresponds to the vegetation association number.</p>	No	Description	Drawn	Approved	Date	A	Original issue	JP	JR	18/11/2025																														
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2. Existing Environment

2.1 Climate and Rainfall

The Dampier Peninsula is characterized by a semi-arid climate which experiences warm/dry winters and hot/humid summers with occasional tropical cyclones in the summer months. The majority of rainfall occurs in the summer months followed by an average of five to six cooler months of low rainfall. The Bureau of Meteorology (BoM) Cygnet Bay Station (ID-003057) provides the closest and most consistent long term weather data for the site (1985-2025). Mean daily maximum temperatures ranges from 28.1 in June to 35.3 in November (BoM, 2025). Summary of daily temperature statistics below in Graph 1.

The mean annual rainfall for Cygnet Bay Bureau Station is 820.2 mm and in the 2024/2025 season presurvey was 1019.9 mm (199.7mm above average). Rainfall primarily falls during the months of October-April. Mean monthly rainfall ranges between 0.9 mm in August to 246.5 mm in January (BoM, 2025). Summary of monthly rainfall statistics below in Graph 1.



Graph 1: Long-term and Monthly Total Rainfall, Maximum and Minimum Temperatures for Cygnet Bay (ID-003057) (BOM, 2025)

2.2 Interim Biogeographic Regionalisation for Australia

The Interim Biogeographic Regionalisation of Australia (IBRA) divides Australia into 89 bioregions based on major biological, geographical and geological attributes. These bioregions are subdivided into 419 subregions as part of a refinement of the IBRA framework (DSEWPaC, 2012). The Survey Area occurs within the Dampier land Biogeographic Region, subregion Pindanland (DAL02).

2.3 Geology and Soils

2.3.1 Geology systems

The soil landscape mapping units by the Department of Primary Industries and Regional Development (DPIRD) (DPIRD-027) intersecting the Survey Areas are listed below in Table 2 and shown in Figure 3.

Table 2: Geology Systems Intersecting the Survey Area (DPIRD-027)

Mapping Unit Symbol	Map Unit Name	Description
335Ye	Yeeda system	Red sandplains supporting pindan vegetation with dense acacia shrubs, scattered bloodwood and grey box trees and curly spinifex and ribbon grass

2.3.2 Soil Landscape Mapping

Soil Landscape Mapping Zones by DPIRD (DPIRD-017) indicates that the Site is mapped as being within of the De Grey-Roebourne Lowlands Zone of the Pilbara soil-landscapes (Table 3).

Table 3: Soil Systems Intersecting the Survey Area (DPIRD-017)

Mapping Unit Zone	Map Unit Name	Description
335	Dampier Peninsula Sandplain Zone	Sandplains and dunes (with some sandy plateaux and coastal mudflats) on sedimentary rocks of the Canning Basin with Red deep sands and some Yellow sandy earths and Tidal soils.

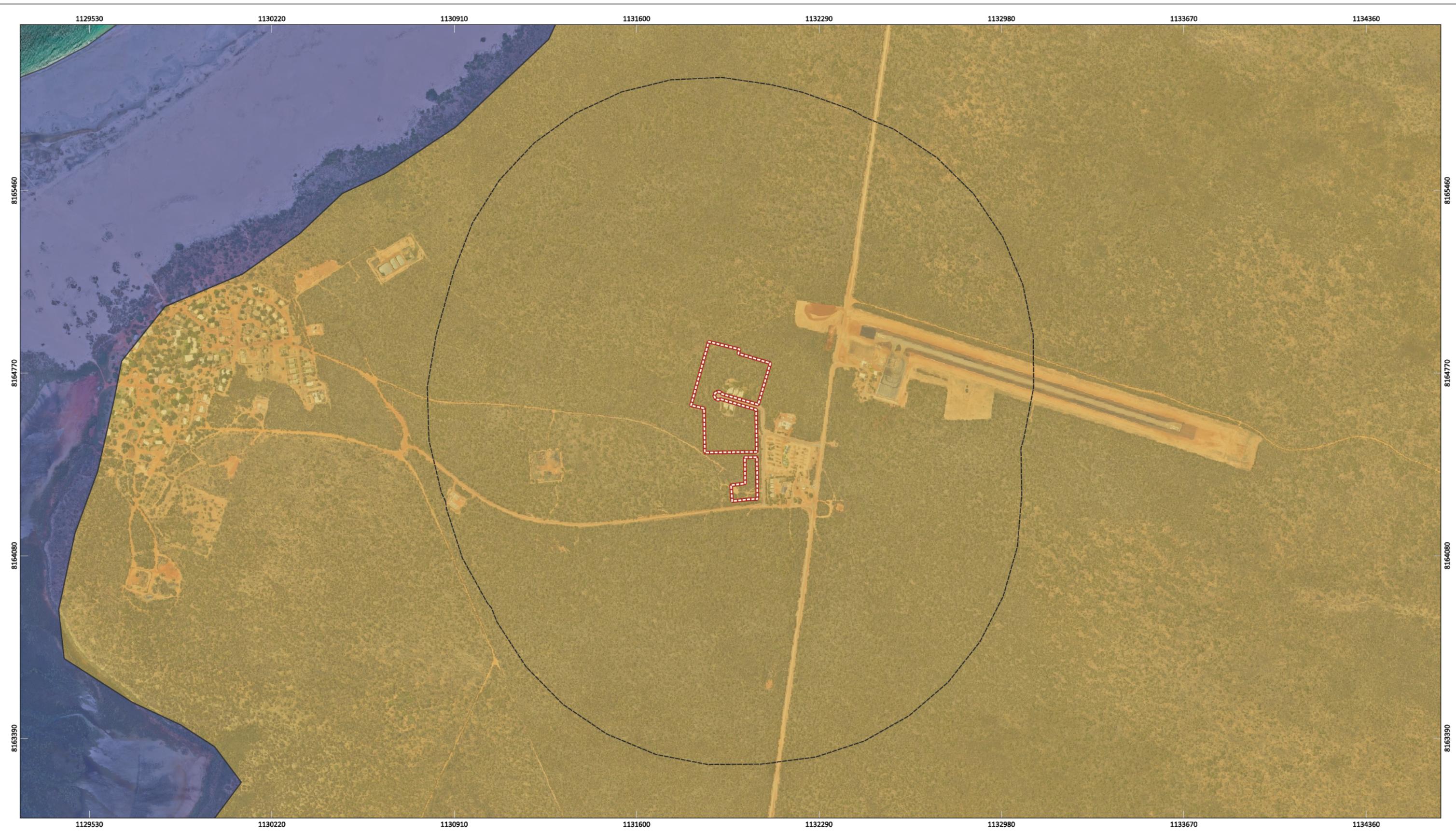
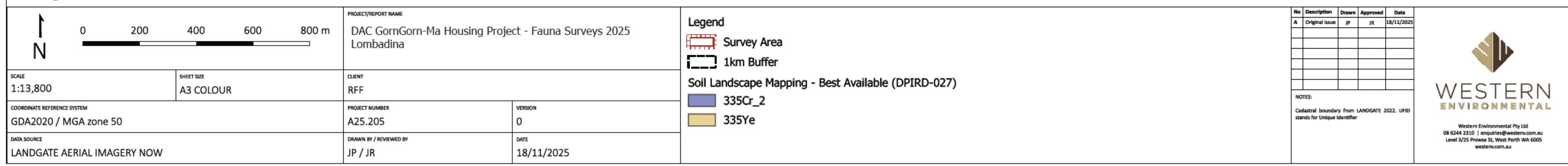


Figure 3: Geology and Soils



2.4 Pre-European Vegetation

2.4.1 Vegetation Association Mapping

During the 1970s, John Beard and associates conducted a systematic survey of native vegetation, describing the vegetation systems in Western Australia at a scale of 1:250 000 in the south-west and at a scale of 1:1,000,000 in less developed areas (Beard, 1976).

Beard's mapping attempted to depict the native vegetation as it was presumed to be at the time of settlement and is known as the pre-European vegetation type and extent. Beard's vegetation maps are maintained in digital form by Department of Primary Industries and Resource Development (DPIRD), in the DPIRD-006 (2019) dataset. Extents are updated periodically by Department of Biodiversity, Conservation and Attractions (DBCA, 2019). Pre-European vegetation associations are shown in Figure 4 and summarised in Table 4.

Table 4: Pre-European Vegetation Intersecting the Survey Area (DPIRD-006)

Vegetation Type	Description
DAMPIERLAND_750	Acacia thicket with eucalypt woodland over spinifex, <i>Acacia tumida</i> , <i>Eucalyptus tectifica</i> , <i>Corymbia grandifolia</i> , <i>Triodia pungens</i> , <i>T. bitextura</i>

The pre-European vegetation associations identified as intersecting the Survey Areas and their pre-European and current extents are listed in Table 5 (DBCA, 2018).

Table 5: Pre-European Vegetation Association Representation

Vegetation Association	Original Extent (ha)	Current Extent (ha)	% Remaining	% Managed for Conservation
DAMPIERLAND_750	195,860.89	191,711.41	97.88	-

*Percentage managed for conservation not available.

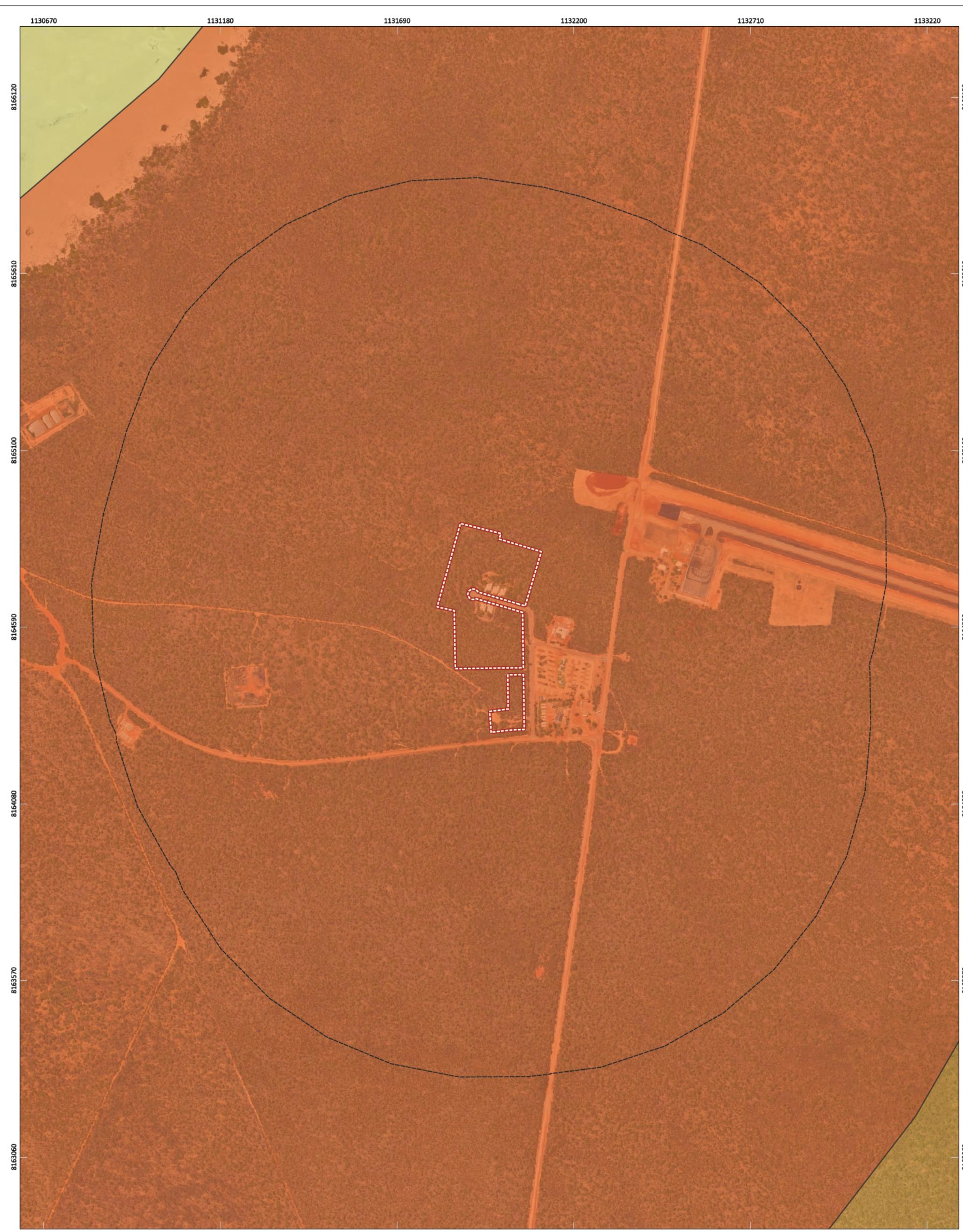
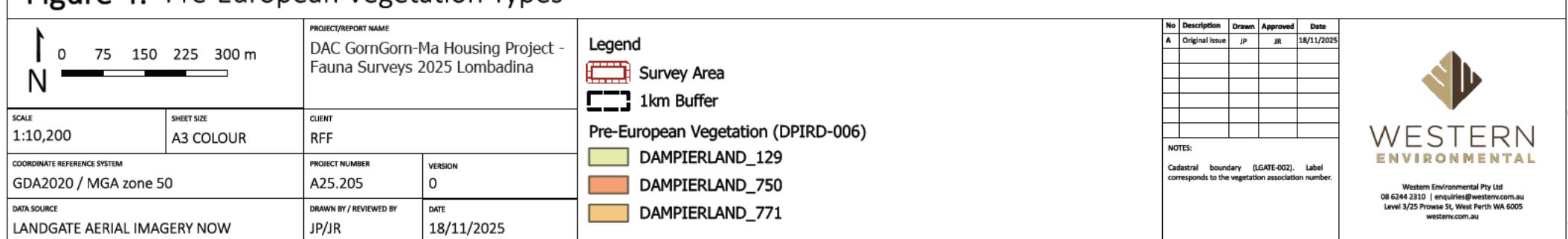


Figure 4: Pre-European Vegetation Types



2.5 Environmentally Sensitive Areas

Environmentally Sensitive Areas (ESAs) are declared by the Department of Water and Environmental Regulation (DWER) to prevent the degradation of important environmental values such as Threatened Flora, Threatened Ecological Communities (TECs) or significant wetlands.

The entire Survey Area occurs within an Environmentally Sensitive Area (DWER-046). The nearest ESAs and Conservation Areas to the Survey Area are shown in Figure 5.

2.6 Wetlands and Hydrology

The Survey Area does not intersect any wetlands listed under the Directory of Important Wetlands in Australia (DBCA-045). According to DWER Hydrography linear (DWER-031) the coastal waterline hydrology feature is 2 km northwest of the Survey Area and does not interact hydrologically with the Survey Area.

DWER Hydrology Catchment Tool (DWER-027) indicates that the Survey Area is within the Cape Leveque Coast catchment (Basin No.801), and within the groundwater subareas (DWER-083) of Canning-Kimberley.

The nearest hydrological features to the Survey Area are shown in Figure 6.

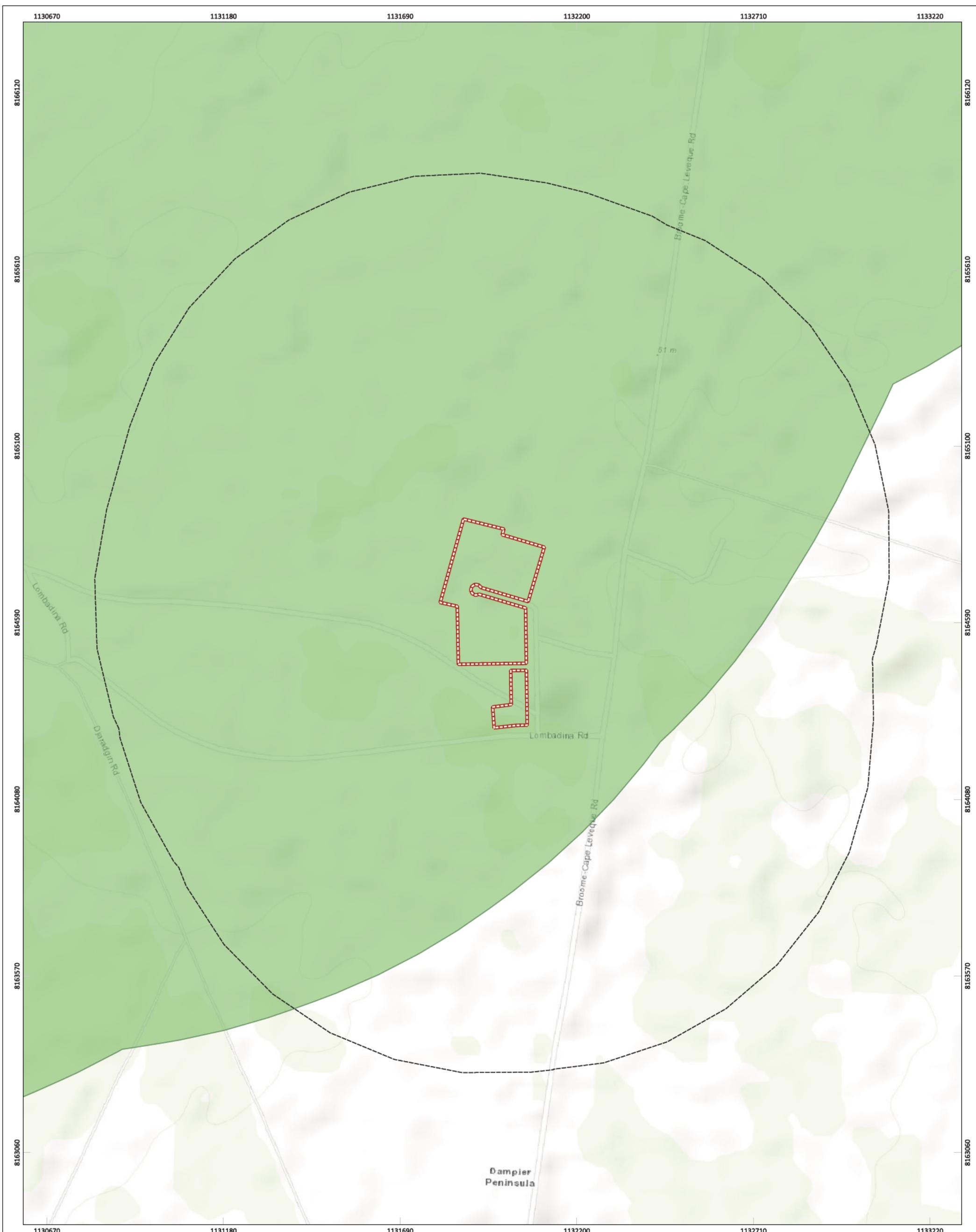


Figure 5: Environmentally Sensitive Areas

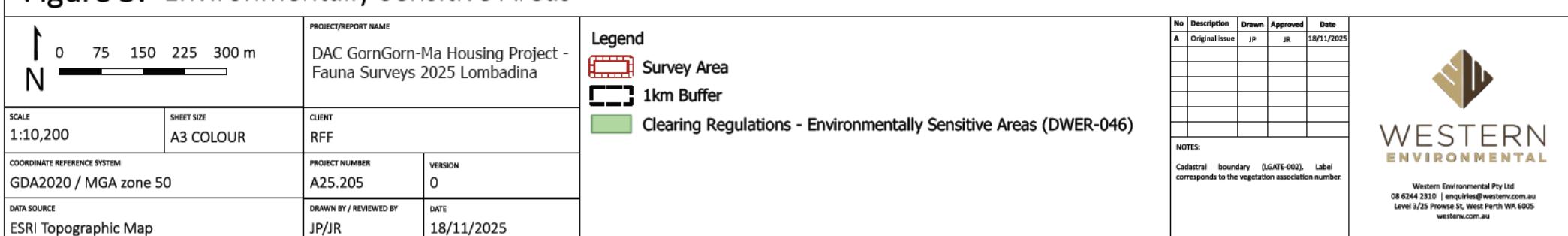
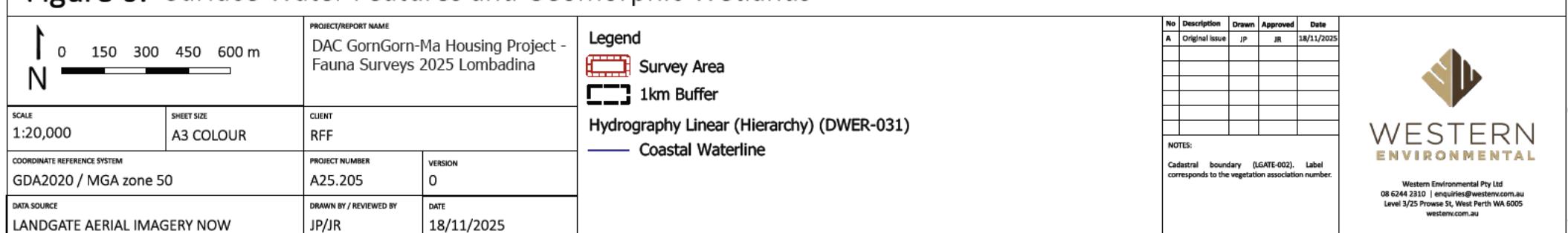




Figure 6: Surface Water Features and Geomorphic Wetlands



3. Methodology

3.1 Desktop Assessment

3.1.1 Database Searches

Database searches of DBCA records were undertaken to compile a list of potential conservation significant flora, fauna and ecological communities previously recorded within or surrounding the Survey Area (Table 6). In addition, an EPBC Act Protected Matters Search Tool (PMST) was undertaken to identify the potential for Matters of National Environmental Significance (MNES) to occur within or surrounding the Survey Area (DCCEEW, 2025).

Table 6: Database Searches

Database Name	Date Received and Reference Number	Search Type	Search Area
DBCA Threatened and Priority Fauna database search	21/01/2025 48-0125FA	Threatened and Priority Fauna	50 km buffer around the Survey Areas
Protected Matters Search Tool	15/08/2025	Commonwealth listed, fauna	50 km buffer around the Survey Areas

3.1.2 Likelihood of Occurrence

Conservation listed flora, fauna and ecological communities identified from the desktop assessment were assessed to determine the likelihood of their occurrence within the Survey Area, both prior to and post field survey. The assessment was completed based on the likelihood of occurrence criteria presented in Table 7.

Only species either recorded within the Survey Area or considered as having a high or medium likelihood of occurrence in post field survey assessment will be discussed in detail. Species classified as having a low likelihood of occurrence will not be discussed unless a justification for this classification is required.

The likelihood of occurrence assessment is contained within Appendix C.

Table 7: Likelihood of Occurrence Criteria

Likelihood	Criteria
Recorded	Recorded in the Survey Area from database searches, previous survey by others or by current survey.
High	Records of fauna species <10 km from the Survey Area. With record <20 years old; or For species with well understood and specific habitat preference/requirements, when specific habitat is present in the Survey Area, and records present <10 km from the Survey Area. Species with general habitat preference, which is present in the Survey Area, and records present <5 km from the Survey Area.

Likelihood	Criteria
Medium	<p>There are records <10 km from the Survey Area, however:</p> <p>The species is strongly linked to a specific habitat, which is marginally suitable or small in extent in the Survey Area or</p> <p>Species has a general habitat preference, but small extent of suitable habitat is present.</p> <p>There is suitable habitat in the Survey Area, but records are >10 km from Survey Area.</p>
Low	<p>Records are historical only or are pre mapping procedures (e.g. records assigned to towns or place names).</p> <p>The species has well understood and specific habitat preference/requirements, which are absent from the Survey Area; or</p> <p>Suitable habitat is present, however there are no existing records of the species from the region despite reasonable previous search effort; or</p> <p>There is some suitable habitat in the Survey Area, however the species is very infrequently recorded in the locality (e.g. migratory bird species).</p>

3.2 Basic Fauna Survey

The basic fauna survey incorporated a number of survey techniques as per the Terrestrial Fauna Technical Guidance (EPA, 2020). A basic survey is a low-intensity survey, conducted at the local scale to gather broad fauna and habitat information. The primary objectives are to verify the overall adequacy of the desktop study, and to map and describe habitats, with a focus on habitat for conservation listed fauna.

Fauna species were identified by active searches, secondary evidence such as scats, tracks, calls, remains, diggings and other signs. A fauna inventory was not compiled as part of this survey (not required under basic level survey) however observations are used to inform the fauna habitat type assessment.

The fauna survey was undertaken by two ecologists on the 7th and 8th of August 2025, totalling a four-person day effort (including time allowed for travel to site).

Potential habitats for conservation listed species were identified and evaluated and the likelihood of occurrence assessed.

3.2.1 Fauna Habitat Type Assessment

The fauna habitat types present within the Survey Area were defined considering landform, vegetation, structure such as rockpiles and logs and fauna assemblage occupying the area.

The following information was used to define and map all fauna habitat types within the Survey Area at specific fauna habitat assessment points and during traverses of the Survey Area:

- Land systems and landform.
- Vegetation type and condition mapping.
- Soil characteristics.

- Structure such as rockpiles and logs.
- Fauna assemblage information from desktop assessment and field observations.
- Aerial imagery and historic imagery.

Each fauna habitat type is described considering suitability for various fauna species groups or conservation listed species. In addition, the fauna habitat type's likelihood to harbour specialised fauna species which are not found in adjacent areas was taken into consideration. Habitat types were delineated in the field and digitised upon return from the field survey.

3.2.2 Fauna Taxonomy

Terrestrial vertebrate fauna taxa were identified in the field by an experienced ecologist.

Taxonomy and nomenclature follow the Checklist of the Terrestrial Vertebrate Fauna of Western Australia (Western Australian Museum [WAM], 2025). Conservation status follows DBCA Threatened and Priority Fauna List (DBCA, 2025). Where required verification of identification of secondary evidence (tracks, scats, diggings) may be undertaken by a relevant species group expert.

3.2.3 Targeted Transect Searches for Bilby and NBP

Targeted transect searches were undertaken to search for evidence of bilby and NBP presence.

Bilby survey

Bilby are reliably detected from their foraging and denning evidence (scats, digging evidence and burrow entrances). With sufficient survey coverage, absence of foraging and denning evidence of bilby is a reliable metric for determining species absence within an area (DAWE, 2016). Targeted searches comprised of regularly spaced transects being walked at approximately 20 metre spacing through the most likely habitat for this species. Transects were walked twice, once during the morning (between 8 am and 11 am), and again at nighttime between 8 pm and 11 pm. Any evidence of bilby was recorded as a GPS point. Survey effort for fauna transects is presented in Figure 2.

NBP survey

NBP are primarily nocturnal and are reliably detected by spotlight searching for individual animals within eucalypt trees. NBP are relatively large (30-50cm body length not including 20-40cm tail length) animals and can be detected by spotlight because of the presence of Tapetum lucidum, which is a layer of tissue behind the retina that allows greater vision in dimmer light and is present in many vertebrates. This layer brightly reflects visible light, a trait known as 'eyeshine', and detection of eyeshine is a reliable way of detecting individual animals during nocturnal survey. With sufficient survey coverage, absence of individual NBP observations is a reliable metric for determining species absence within an area (DAWE, 2021). Targeted searches comprised of regularly spaced transects walked at approximately 30-40 metres through appropriate habitat for this species. This spacing allowed observation of the canopy and trunk of every tree within the surveyor's torch beams. Transects were walked during the nighttime after last light (8pm to 11pm), during the time that NBP are more likely to be active and observed in surveyor torch beams. Observations of dreys (NBP nests, comprising rough spheres of vegetation), tree hollows, and foraging evidence were opportunistically recorded during the diurnal transect survey (see Bilby survey above). Survey effort for fauna transects is presented in Figure 2.

4. Results

4.1 Fauna Desktop Assessment

4.1.1 Fauna Assemblage

A desktop assessment of expected conservation significant fauna assemblage was undertaken through searches of DBCA database records and the EPBC Act PMST, shown in Figure 7. Results are summarised in Appendix C.

Database searches identified 58 conservation listed fauna species that potentially occur, or whose habitat likely occurs within the Survey Area, comprising:

- Forty-seven bird species.
- Six mammal species.
- Five reptile species.

4.1.2 Fauna Likelihood of Occurrence

Species listed as Marine only under the EPBC Act (e.g. sharks, whales, turtles) as well as pelagic seabirds (Albatrosses, petrels, prions, shearwaters and frigatebirds) have been excluded from the likelihood of occurrence list as there is no marine habitat present within the Survey Area.

The likelihood of occurrence for conservation listed fauna species found that:

- Three species had a high likelihood of occurrence.
- Five species had a medium likelihood of occurrence.
- Fifty species had a low likelihood of occurrence.

The three species that had a high likelihood of occurrence were:

- *Erythrura gouldiae* (Gouldian Finch): P4; EN.
- *Falco peregrinus* (peregrine Falcon): OS.
- *Tiliqua scincoides intermedia* (northern blue-tongued Skink): CR.

The species that had a medium likelihood of occurrence were:

- *Ozimops cobourgianus* (northern coastal free-tailed bat): P1.
- *Macrotis lagotis* (bilby): VU.

- *Trichosurus vulpecula arnhemensis* (NBP): P4.
- *Lerista separanda* (Dampier plain slider): P2.
- *Simoselaps minimus* (Dampier burrowing snake): P2.

The species assessed as low likelihood of occurrence are species that are locally extinct, have no recent records or for which no suitable habitat is present (e.g. wading birds). Species recorded or assessed as having a high or medium likelihood of occurrence are discussed in detail in Section 4.2.2.



Figure 7: DBCA Database Search Results Fauna

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4.2 Fauna Field Survey

4.2.1 Fauna Habitat Types

The entire Survey Area consists of one fauna habitat type. The fauna habitat types are described below in Table 8 and shown in Figure 8.

For possibly occurring conservation listed fauna species, habitat types are assessed as either core, supporting or non-significant habitat. As per Commonwealth Matters of National Environmental Significance – Significant Impact Guidelines 1.1 “core” habitat is defined as that critical to the survival of the species and considered to contain denning/breeding sites, primary foraging areas and refuge from drought, fire and other stresses (DEWHA, 2013). “Supporting” habitat is defined as that which is likely used for foraging and dispersing/ connective purposes but is not essential habitat for the continuation of a local population. “Non-significant” habitat is that which would be used only very infrequently for foraging or dispersing.

4.2.2 Threatened and Priority Fauna

There were no observations of, or secondary evidence recorded for threatened and priority fauna within the Survey Area. Discussion of habitat type suitability for species identified as having a high or medium likelihood of occurrence is presented below in Table 9.

Table 8: Fauna Habitat Type Description within the Survey Area.

Fauna Habitat Type	Habitat Description	Total Area, Proportion of the Survey Area (ha)	Representative Photo
FHT-01 Open Eucalypt woodland	<p>Open eucalypt woodland dominated by <i>Corymbia greeniana</i> and <i>Eucalyptus miniata</i>. Canopy dominated by moderate combined cover of 30% <i>C. greeniana</i> and <i>E. miniata</i>, with occasional <i>Acacia</i>, open midstory, mostly saplings, high ground cover of tussock grass. light leaf litter cover with exposed soil, brown red pindan sand with high burrowing suitability, moderate cover of woody debris, moderate presence of small to medium tree hollows (<10 cm diameter), low presence of large (>10 cm diameter) tree hollows, isolated large rocks on ground. Habitat within the Survey Area is contiguous with approximately 500 ha of the same habitat bounded by sand/dirt tracks approximately 5 - 15 m wide.</p> <p>From a review of aerial images, a grove of mangroves and an extensive area of sand dunes occur approximately 2.5 km west of the Survey Area. Due to this proximity, mangrove and dune specialist species have been assigned a medium likelihood of occurrence</p> <p>Core habitat for:</p> <ul style="list-style-type: none"> • <i>Tiliqua scincoides intermedia</i> (Northern blue tongued skink). <p>Supporting habitat for:</p> <ul style="list-style-type: none"> • <i>Erythrura gouldiae</i> (Gouldian Finch). • <i>Trichosurus vulpecula arnhemensis</i> (NBP). 	8.5 ha 90.8 %	

Fauna Habitat Type	Habitat Description	Total Area, Proportion of the Survey Area (ha)	Representative Photo
	Not significant habitat for: <ul style="list-style-type: none"> • <i>Falco peregrinus</i> (peregrine falcon). • <i>Macrotis lagotis</i> (bilby). • <i>Ozimops cobourgianus</i> (northern coastal free-tailed bat). • <i>Lerista separanda</i> (Dampier plain slider). • <i>Simoselaps minimus</i> (Dampier burrowing snake). 		
BG- Bare ground and built structure	Unvegetated surfaces such as road or fire break, and built structures included houses and garages	0.9 ha	
	No Fauna Habitat Value	9.2 %	
Total		8.5 ha	

Table 9: Threatened and Priority Fauna

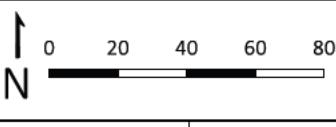
Scientific Name	Common Name	Habitat significance in Survey Area (ha)			Post Survey likelihood of occurrence	Habitat use and species description
		Core	Supporting	Not Significant		
<i>Erythrura gouldiae</i>	Gouldian finch	0	8.4	0	High	<p>Gouldian finch are small granivorous (seed eating) birds. They are widespread but uncommon in a number of habitats in the Kimberley region. Core habitat for this species is eucalypt woodland over dense grasses on stony plain, and usually near fresh water. Although habitat within the Survey Area was eucalypt woodland, the ground cover of grasses was not considered dense enough to constitute core foraging habitat for Gouldian finch.</p> <p>There are 11 records of this species within 50 km of the Survey Area within the previous 20 years, with a number of records in open eucalypt woodland 2km from the Survey Area.</p>
<i>Falco peregrinus</i>	Peregrine falcon	0	0	8.4	High	<p>This species is a common and wide-ranging raptor, occurring across most regions of Australia. It occupies an extremely diverse range of habitats of Australia. The species typically nests on cliff ledges, shallow hollows in tall trees, or artificial structures such as building ledges and communication towers.</p> <p>The habitat within the Survey Area is not considered core or supporting for this species, however they may occasionally forage their preferred prey (other bird species) in or over the eucalypt woodland.</p> <p>There are two records of this species within 50km of the Survey Area within the previous 20 years, the nearest record is of an individual sighting 13km north of the Survey Area in Kooljaman community.</p>
<i>Tiliqua scincoides intermedia</i>	Northern blue-tongued skink (blue tongue)	8.4	0	0	High	<p>Northern bluetongue skink is the northern subspecies of the abundant and common blue tongue skink, and occurs from Broome to Kununurra in WA.</p> <p>Bluetongue skinks are relatively large slow-moving omnivores. There were no records of northern blue tongue returned by the DBCA database search; however they were identified by the PMST.</p>

Scientific Name	Common Name	Habitat significance in Survey Area (ha)			Post Survey likelihood of occurrence	Habitat use and species description
		Core	Supporting	Not Significant		
						Northern blue tongue was opportunistically sighted by the surveyors at Cygnet bay Pearl Farm, 13 km northeast of the Survey Area, in similar habitat (open Acacia and eucalypt woodland transitioning to rocky coastline).
<i>Macrotis lagotis</i>	Greater bilby, dalgyte, ninu	0	0	8.4	Medium	<p>Bilby are medium sized nocturnal omnivores which forage for food by digging. Bilby are known to utilise a number of different habitat types; however, eucalypt woodland (FHT-01) is not considered core habitat for this species</p> <p>Bilby are reliably surveyed for by searching for digging and foraging evidence and survey effort was considered sufficient to show that digging and foraging evidence as absent within the Survey Area</p> <p>There are three records of Bilby within 50km of the Survey Area within the previous 20 years. The nearest record is of a sighting of an individual in similar habitat 40km southwest of the Survey Area.</p> <p>The targeted transect survey effort is considered sufficient to determine that there was no foraging, denning or scat evidence within the Survey Area.</p>
<i>Trichosurus vulpecula arnhemensis</i>	NBP	0	8.4	0	Medium	<p>NBP are nocturnal arboreal omnivores that make nests within balls of vegetation (dreys) and large tree hollows. FHT-01 contained a number of large eucalypts with hollows, but none of them appeared suitable to support NBP nesting, these hollows were observed with head torches during the nocturnal survey, but no observations of NBP were made. NBP usually prefer dense eucalypt woodland or forest with a connected canopy, FHT-01 had an estimated canopy cover of 30% which is comparatively sparse, and as such FHT-01 does not constitute core habitat for this species.</p> <p>There were no records of NBP returned by the DBCA database search; however, they were identified by the PMST.</p>
<i>Ozimops cobourgianus</i>	Northen coastal free-tailed bat	0	0	8.4	Medium	Northen coastal free-tailed bat are a mangrove specialist bat that roosts in mangrove hollows.

Scientific Name	Common Name	Habitat significance in Survey Area (ha)			Post Survey likelihood of occurrence	Habitat use and species description
		Core	Supporting	Not Significant		
						<p>There are 10 records of this species within 50 km of the Survey Area within the previous 20 years. All records have been from mangrove habitat on the coast of Cape Leveque. The nearest mangrove habitat to the Survey Area is 1.5 km west, and as such it is possible that the species occasionally commutes or forages (for nocturnal insect prey) near or within the Survey Area, however roosting is unlikely.</p> <p>Small bat species were observed foraging through the upper story of vegetation during the nocturnal field survey; however, they were not identified to species.</p>
<i>Lerista separanda</i>	Dampierland plain slider, skink	0	0	8.4	Medium	<p>Dampier plains slider are cryptic, nocturnal, subterranean reptiles endemic to the Dampier Peninsula. Due to these cryptic habits, very little is known about this species. All previous records of this species have been from sand dunes and dune adjacent habitat.</p> <p>There are two records of this species within 50km of the Survey Area within the previous 20 years, both records were of individuals trapped on Packer Island, 15km east of the Survey Area.</p> <p><i>Lerista</i> tracks were detected in the sand road on western edge of the Survey Area.</p>
<i>Simoselaps minimus</i>	Dampierland burrowing snake	0	0	8.4	Medium	<p>Dampier burrowing snake are cryptic, nocturnal, subterranean reptiles endemic to the Dampier Peninsula. Due to these cryptic habits, very little is known about this species. All previous records of this species have been from sand dunes and dune adjacent habitat. The Survey Area is approximately 1.5 km from a complex sand dune system.</p> <p>There are two records of this species within 50km of the Survey Area within the previous 20 years, both records were of individuals trapped on Packer Island and Chile Creek area.</p>



Figure 8: Fauna Habitat Types And Conservation Significant Fauna Observations

 <p>0 20 40 60 80 m</p>		<p>PROJECT/REPORT NAME DAC GornGorn-Ma Housing Project - Fauna Surveys 2025 Lombadina</p>		<p>Legend</p> <p> Survey Area</p> <p>Fauna Habitat</p> <p> BG - Bare Ground and Built Structure</p> <p> FHT-01 - Open Eucalypt Woodland</p>	<table border="1"> <thead> <tr> <th>No</th><th>Description</th><th>Drawn</th><th>Approved</th><th>Date</th></tr> </thead> <tbody> <tr> <td>A</td><td>Original issue</td><td>JP</td><td>JR</td><td>18/11/2025</td></tr> <tr> <td></td><td></td><td></td><td></td><td></td></tr> <tr> <td></td><td></td><td></td><td></td><td></td></tr> <tr> <td></td><td></td><td></td><td></td><td></td></tr> <tr> <td></td><td></td><td></td><td></td><td></td></tr> <tr> <td></td><td></td><td></td><td></td><td></td></tr> <tr> <td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table> <p>NOTES: Cadastral boundary (LGATE-002). Label corresponds to the vegetation association number.</p>	No	Description	Drawn	Approved	Date	A	Original issue	JP	JR	18/11/2025																															 <p>WESTERN ENVIRONMENTAL</p> <p>Western Environmental Pty Ltd 08 6244 2310 enquiries@westernenv.com.au Level 3/25 Prowse St, West Perth WA 6005 westernenv.com.au</p>
No	Description	Drawn	Approved	Date																																										
A	Original issue	JP	JR	18/11/2025																																										
SCALE 1:2,200	SHEET SIZE A3 COLOUR	CLIENT RFF																																												
COORDINATE REFERENCE SYSTEM GDA2020 / MGA zone 50	PROJECT NUMBER A25.205	VERSION 0																																												
DATA SOURCE LANDGATE AERIAL IMAGERY NOW	DRAWN BY / REVIEWED BY JP/JR	DATE 18/11/2025																																												

5. Discussion

5.1 Fauna Habitat Significance

One fauna habitat type was described within the Survey Area. The habitat comprises open eucalypt woodland dominated by *Corymbia greeniana* and *Eucalyptus miniata*. The habitat type is present extensively surrounding the Survey Area.

Database searches identified 58 conservation listed fauna species that potentially occur, or whose habitat likely occurs, within the Survey Area, comprising:

- Forty-seven bird species.
- Six mammal species.
- Five reptile species.

A Likelihood of Occurrence Assessment concluded that of these 58 species:

- Three species had a high likelihood of occurrence, being (State/Commonwealth conservation codes in brackets):
 - *Erythrura gouldiae* (Gouldian finch): (P4/EN).
 - *Falco peregrinus* (peregrine falcon): (OS).
 - *Tiliqua scincoides intermedia* (northern blue-tongued Skink): (CR/CR).
- Five species had a medium likelihood of occurrence, being (State/Commonwealth conservation codes in brackets):
 - *Ozimops cobourgianus* (northern coastal free-tailed bat): (P1).
 - *Macrotis lagotis* (bilby): (VU/VU).
 - *Trichosurus vulpecula arnhemensis* (NBP): (VU/VU).
 - *Lerista separanda* (Dampier plain slider): (P2).
 - *Simoselaps minimus* (Dampier burrowing snake): (P2).
- Fifty species had a low likelihood of occurrence. These are mainly marine species and pelagic birds.
- No species of conservation significance were recorded within the Survey Area.

The extent of core and supporting habitat present within the Survey Area by species is summarised in Table 10.

Table 10: Summary of Habitat Values

Species	Extent Core Habitat (ha)	Extent Supporting Habitat (ha)
<i>Erythrura gouldiae</i>	0	8.4
<i>Falco peregrinus</i>	0	0
<i>Tiliqua scincoides intermedia</i>	8.4	0
<i>Macrotis lagotis</i>	0	0
<i>Trichosurus vulpecula arnhemensis</i>	0	8.4
<i>Ozimops cobourgianus</i>	0	0
<i>Lerista separanda</i>	0	0
<i>Simoselaps minimus</i>	0	0

5.2 Threatened Fauna Survey

No evidence or sightings of bilby or NBP were detected within the Survey Area. Of the habitat within the Survey Area, none is considered significant for bilby. However, it is all considered supporting habitat for NBP.

Given that neither signs or individuals of these two species were recorded during the targeted survey it is concluded that they do not utilise the Survey Area.

References

Beard, J. S. (1976). Vegetation Survey of Western Australia - Western Australia 1: 1 000 000 Vegetation Series. Department of Geography, University of Western Australia.

Bureau of Meteorology (BOM). (2007). About Climate Statistics. Retrieved on 18 August 2025 from <http://www.bom.gov.au/climate/cdo/about/about-stats.shtml>.

Bureau of Meteorology (BOM). (2025). Monthly Climate Data Statistics. Retrieved on 18 August 2025 from www.bom.gov.au/climate/data.

Department of Agriculture, Water and the Environment (DAWE). (2021) Conservation Advice - *Trichosurus vulpecula arnhemensis* Northern Brushtail Possum. Accessed August 2025 [Conservation Advice Trichosurus vulpecula arnhemensis Northern Brushtail Possum](#)

Department of Agriculture, Water and the Environment (DAWE) (2016) Conservation Advice - *Macrotis lagotis* - Greater Bilby. [282 - Conservation Advice - 150716](#) accessed August 2025.

Department of Biodiversity, Conservation and Attractions (DBCA) (2017) Guidelines for survey to detect the presence of bilbies, and assess the importance of habitat in Western Australia. <https://library.dbca.wa.gov.au/FullTextFiles/072208.pdf> Accessed August, 2025.

Department of Biodiversity, Conservation and Attractions (DBCA) (2019). 2018 Statewide Vegetation Statistics (formerly the CAR Reserve Analysis). [DBCA Statewide Vegetation Statistics - 2018 Statewide Vegetation Statistics - Full report - data.wa.gov.au](#) Accessed August 2025.

Department of Biodiversity Conservation and Attractions (DBCA). (2025). Threatened and Priority Fauna List. Retrieved on 18 August 2025 from [Threatened and Priority Fauna List - July 2025.xlsx](#)

Department of Climate Change, Energy, the Environment and Water (DCCEEW). (2025). Protected Matters Search Tool [Protected Matters Search Tool: Interactive Map](#). Accessed August 2025.

Department of Climate Change, Energy, the Environment and Water (DCCEEW). (2025). Species Profile and Threats Database. Retrieved on 15 May 2025 from <http://www.environment.gov.au/cgi-bin/sprat/public>.

Department of the Environment Water Heritage and the Arts (DEWHA). (2010). Survey Guidelines for Australia's Threatened Birds: Guidelines for Detecting Birds Listed as Threatened under the EPBC Act. Canberra, Australia.

Department of the Environment Water Heritage and the Arts (DEWHA). (2013). Matters of National Environmental Significance: Significant Impact Guidelines 1.1. [Significant Impact Guidelines 1.1 - Matters of National Environmental Significance - DCCEEW](#) Accessed August 2025.

Department of Sustainability Environment Population and Communities (DSEWPaC). (2011). Survey Guidelines for Australia's Threatened Mammals. Canberra, Australia.

Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC). (2012) Interim Biogeographic Regionalisation for Australia, Version 7.

Environmental Protection Authority (EPA). (2020). Technical Guidance - Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment.

Western Australian Museum (WAM). (2025). Checklist of the Terrestrial Vertebrate Fauna of Western Australia. [WA-Checklist-Terrestrial-Vertebrates-September-2025.xlsx](#) Accessed September 2025

Appendix A

Legislation

Environment Protection and Biodiversity Conservation Act 1999

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) aims to protect matters of national environmental significance (MNES). Under the EPBC Act, the Commonwealth Department of Climate Change, Energy and the Environment lists Threatened species and communities in categories determined by criteria set out in the EPBC Act.

Projects likely to cause a significant impact on MNES should be referred to the DCCEEW for assessment under the EPBC Act.

Biodiversity Conservation Act 2016

The Biodiversity Conservation Act 2016 aims to conserve and protect biodiversity and biodiversity components within the State and to promote ecologically sustainable use of biodiversity components in the State.

Environmental Protection Act 1986

Declared Rare Flora (DRF) and Threatened Ecological Communities (TECs) are given special consideration in environmental impact assessments and have special status as Environmentally Sensitive Areas (ESAs) under the Environmental Protection Act, 1986 (EP Act) and the Environmental Protection (Clearing of Native Vegetation) Regulations 2004. Exemptions for a clearing permit do not apply in an ESA. In addition, habitat necessary for the maintenance of indigenous fauna is considered in the clearing principles and assessed during consideration of applications for a clearing permit.

Department of Biodiversity, Conservation and Attractions Priority Lists

Department of Biodiversity, Conservation and Attractions Priority Lists (DBCA Lists), sets out lists of 'Priority' flora and fauna that have not been assigned statutory protection as "Threatened" under the BC Act and are under consideration for declaration as Threatened. Flora and fauna assessed as Priority 1-3 are considered to be in urgent need of further survey. Priority 4 flora requires monitoring every 5 -10 years.

DBCA maintains a list of Priority Ecological Communities (PECs) which identifies plant communities that require further investigation before possible nomination for TEC status. Once listed, a community becomes a PEC and, when endorsed by the WA Minister for Environment, becomes a TEC and protected as an ESA under Environmental Protection (Clearing of Native Vegetation) Regulations 2004.

Informal Recognition of Flora and Fauna

Certain populations or communities of flora and/or fauna may be of local significance or interest because of their patterns of distribution and abundance. For example, specific locations of flora and may be locally significant because they are range extensions to the previously known distribution, or are newly discovered taxa (and have the potential to be of more than local significance). In addition, many species are in decline as a result of threatening processes (land clearing, grazing, and changed fire regimes) and relict populations of such species assume local importance for DBCA. It is not uncommon for DBCA to make comment on these species of interest.

Appendix B

Definitions and Criteria

EPBC Act Categories for Flora, Fauna and Ecological Communities

Category	Threatened Species	Threatened Ecological Communities
Extinct	<p>A native species is eligible to be included in the extinct category at a particular time if, at that time, there is no reasonable doubt that the last member of the species has died.</p>	N/A.
Extinct in the wild	<p>A native species is eligible to be included in the extinct in the wild category at a particular time if, at that time:</p> <p>(a) it is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or</p> <p>(b) it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.</p>	N/A.
Critically Endangered (CE)	<p>A native species is eligible to be included in the critically endangered category at a particular time if, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.</p>	<p>An ecological community is eligible to be included in the critically endangered category at a particular time if, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.</p>
Endangered (EN)	<p>A native species is eligible to be included in the endangered category at a particular time if, at that time:</p> <p>(a) it is not critically endangered; and</p> <p>(b) it is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.</p>	<p>An ecological community is eligible to be included in the endangered category at a particular time if, at that time:</p> <p>(a) it is not critically endangered; and</p> <p>(b) it is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.</p>
Vulnerable (VU)	<p>A native species is eligible to be included in the vulnerable category at a particular time if, at that time:</p> <p>(a) it is not critically endangered or endangered; and</p> <p>(b) it is facing a high risk of extinction in the wild in the medium term future, as determined in accordance with the prescribed criteria.</p>	<p>An ecological community is eligible to be included in the vulnerable category at a particular time if, at that time:</p> <p>(a) it is not critically endangered or endangered; and (b) it is facing a high risk of extinction in the wild in the medium term future, as determined in accordance with the prescribed criteria.</p>
Conservation Dependent	<p>A native species is eligible to be included in the conservation dependent category at a particular time if, at that time:</p> <p>(a) the species is the focus of a specific conservation program the cessation of which would result in the species becoming vulnerable, endangered or critically endangered; or</p> <p>(b) the following subparagraphs are satisfied:</p> <p>(i) the species is a species of fish.</p> <p>(ii) the species is the focus of a plan of management that provides for</p>	N/A.

Category	Threatened Species	Threatened Ecological Communities
	<p>management actions necessary to stop the decline of, and support the recovery of, the species so that its chances of long-term survival in nature are maximised.</p> <p>(iii) the plan of management is in force under a law of the Commonwealth or of a State or Territory.</p> <p>(iv) cessation of the plan of management would adversely affect the conservation status of the species.</p>	

Conservation Codes for Western Australian Flora and Fauna (DBCA)

Conservation Codes for Western Australian Flora and Fauna		
<p>Threatened, Extinct and Specially Protected fauna or flora¹ are species² which have been adequately searched for and are deemed to be, in the wild, Threatened, extinct or in need of special protection, and have been gazetted as such.</p> <p>The Wildlife Conservation (Specially Protected Fauna) Notice 2018 and the Wildlife Conservation (Rare Flora) Notice 2018 have been transitioned under regulations 170, 171 and 172 of the Biodiversity Conservation Regulations 2018 to be the lists of Threatened, Extinct and Specially Protected species under Part 2 of the Biodiversity Conservation Act 2016.</p> <p>Categories of Threatened, Extinct and Specially Protected fauna and flora are:</p>		
<p>T Threatened species Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as Threatened species under section 26(2) of the Biodiversity Conservation Act 2016 (BC Act).</p> <p>Threatened fauna is that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018 for Threatened Fauna.</p> <p>Threatened flora is that subset of 'Rare Flora' listed under schedules 1 to 3 of the Wildlife Conservation (Rare Flora) Notice 2018 for Threatened Flora.</p> <p>The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using International Union for Conservation of Nature (IUCN) Red List categories and criteria as detailed below.</p>		
<p>CR Critically endangered species Threatened species considered to be "facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines". Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018 for critically endangered fauna or the Wildlife Conservation (Rare Flora) Notice 2018 for critically endangered flora.</p>		
<p>EN Endangered species Threatened species considered to be "facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines". Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018 for endangered fauna or the Wildlife Conservation (Rare Flora) Notice 2018 for endangered flora.</p>		
VU	Vulnerable species	

Conservation Codes for Western Australian Flora and Fauna

Threatened species considered to be “facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines”.

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018 for vulnerable fauna or the Wildlife Conservation (Rare Flora) Notice 2018 for vulnerable flora.

Extinct species

Listed by order of the Minister as extinct under section 23(1) of the BC Act as extinct or extinct in the wild.

EX Extinct species

Species where “there is no reasonable doubt that the last member of the species has died”, and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018 for extinct fauna or the Wildlife Conservation (Rare Flora) Notice 2018 for extinct flora.

EW Extinct in the wild species

Species that “is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form”, and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no Threatened fauna or Threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

Specially protected species

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as Threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and fauna subject to the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018.

CD Species of special conservation interest (conservation dependent fauna)

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as Threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018.

Conservation Codes for Western Australian Flora and Fauna

Other specially protected species

OS Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act). Published as other specially protected fauna under schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018.

Priority species

Possibly Threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of Priority for survey and evaluation of conservation status so that consideration can be given to their declaration as Threatened fauna or flora.

P Species that are adequately known, are rare but not Threatened, or meet criteria for near Threatened, or that have been recently removed from the Threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

Priority 1: Poorly-known species

1 Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

Priority 2: Poorly-known species

2 Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

Priority 3: Poorly-known species

3 Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

Priority 4: Rare, Near Threatened and other species in need of monitoring

4 (a) **Rare.** Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently Threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.

(b) **Near Threatened.** Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent.

(c) Species that have been removed from the list of Threatened species during the past five years for reasons other than taxonomy.

1 The definition of flora includes algae, fungi and lichens.

Appendix C

Fauna Database Search Results and Likelihood of Occurrence

Fauna Database Search Results (DBCA Database Search using 50 Km Buffer, PMST 50 km buffer), Likelihood and Fauna Survey Records

Scientific Name	Common Name	Conservation Status		Database Source		Likelihood of Occurrence	Justification
		WA	EPBC	DBCA	PMST		
Aves							
<i>Actitis hypoleucos</i>	Common Sandpiper	MI	MI	x		Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Anous stolidus</i> (all sub-species)	Common Noddy	MI	MI	x		Low	Pelagic species, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Anous tenuirostris melanops</i>	Australian Lesser Noddy	EN	VU		x	Low	Pelagic species, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Apus pacificus</i>	Fork-tailed Swift	MI	MI	x		Low	Uncommon fly over species, unlikely to stop and perch up within Survey Area
<i>Arenaria interpres</i>	Ruddy Turnstone	MI	MI	x		Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	MI	MI	X	x	Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Calidris alba</i>	Sanderling	MI	MI	x		Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Calidris canutus</i>	Red Knot, Knot	EN	VU	x	x	Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Calidris ferruginea</i>	Curlew Sandpiper	CR	CR	x		Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Calidris ruficollis</i>	Red-necked Stint	MI	MI	x		Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Calidris tenuirostris</i>	Great Knot	CR	CR	x		Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur

Scientific Name	Common Name	Conservation Status		Database Source		Likelihood of Occurrence	Justification
		WA	EPBC	DBCA	PMST		
<i>Charadrius leschenaultii</i>	Greater Sand Plover	VU	VU	x	x	Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Charadrius mongolus</i>	Lesser Sand Plover	EN	EN	x		Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Chloebia gouldiae</i>	Gouldian Finch	P4	EN	x	x	High	Species not recorded within the Site
<i>Erythrocercus radiatus</i>	Red Goshawk	VU	VU		x	Low	Very rare species, no records within 100km in DBCA data, however perching and foraging habitat is present within Survey Area
<i>Falco hypoleucus</i>	Grey Falcon	VU	VU		x	Low	Common and widespread bird species, may perch and forage within Survey Area
<i>Falco peregrinus</i>	Peregrine Falcon	OS		x		High	Common and widespread bird species, may perch and forage within Survey Area
<i>Fregata ariel</i>	Lesser Frigatebird	MI	MI	x		Low	Pelagic species, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Gelochelidon nilotica</i>	Gull-billed Tern	MI	MI	x		Low	Coastal specialist, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Hydroprogne caspia</i>	Caspian Tern	MI	MI	x		Low	Coastal specialist, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Limnodromus semipalmatus</i>	Asian Dowitcher	MI	VU, MI		x	Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Limosa lapponica (all subspecies)</i>	Bar-tailed Godwit	MI	EN, MI	x	x	Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Limosa limosa</i>	Black-tailed Godwit	MI	MI	x		Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur

Scientific Name	Common Name	Conservation Status		Database Source		Likelihood of Occurrence	Justification
		WA	EPBC	DBCA	PMST		
<i>Numenius madagascariensis</i>	Eastern Curlew	CR	CR, MI	x	x	Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Numenius minutus</i>	Little Curlew, Little Whimbrel	MI	MI	x		Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Numenius phaeopus</i>	Whimbrel	MI	MI	x		Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Onychoprion anaethetus</i>	Bridled tern	MI	MI	x		Low	Coastal specialist, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Pandion cristatus</i>	Osprey, Eastern Osprey	MI	MI	x		Low	Although likely to occur as Survey Area is 1km from coast, unlikely to utilise any habitat within Survey Area other than a flyover
<i>Papasula abbotti</i>	Abbott's Booby	MI	EN		x	Low	Pelagic species, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Pezoporus occidentalis</i>	Night Parrot	CR	EN		x	Low	Extremely rare and hard to detect species, no records within 100km in last 20 years
<i>Phaethon lepturus fulvus</i>	Christmas Island White-tailed Tropicbird, Golden Bosunbird		EN, MI		x	Low	Pelagic species, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Phaethon rubricauda (all subspices)</i>	Red-tailed Tropicbird	P4, MI	EN	x	x	Low	Pelagic species, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Pluvialis fulva</i>	Pacific Golden Plover	MI	MI	x		Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Pluvialis squatarola</i>	Grey Plover	MI	MI	x		Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur

Scientific Name	Common Name	Conservation Status		Database Source		Likelihood of Occurrence	Justification
		WA	EPBC	DBCA	PMST		
<i>Rostratula australis</i>	Australian Painted Snipe	EN	EN		x	Low	Wetland species, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Sterna dougallii</i> (all sub-species)	Roseate Tern	MI	MI	x		Low	Coastal specialist, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Sterna hirundo</i> (all sub-species)	Common Tern	MI	MI	x		Low	Coastal specialist, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Sternula albifrons</i>	Little Tern	MI	MI	x		Low	Coastal specialist, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Sula leucogaster</i> (all sub-species)	Brown Booby	MI	MI	x		Low	Pelagic species, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Thalasseus bergii</i>	Crested Tern	MI	MI	x		Low	Coastal specialist, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Tringa brevipes</i>	Grey-tailed Tattler	P4	MI	x		Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Tringa glareola</i>	Wood Sandpiper	MI	MI	x		Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Tringa nebularia</i>	Common Greenshank, greenshank	MI	EN, MI	x	x	Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Tringa stagnatilis</i>	Marsh Sandpiper	MI	MA, MI	x		Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur
<i>Tringa totanus</i>	Common Redshank	MI	MI	x		Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur

Scientific Name	Common Name	Conservation Status		Database Source		Likelihood of Occurrence	Justification
		WA	EPBC	DBCA	PMST		
<i>Tyto novaehollandiae kimberli</i>	Masked Owl	P1	VU	x	Low	Appropriate habitat present within Survey Area, reasonably dense Eucalyptus and Corymbia woodland with sparse tree hollows, none detected during Survey	
<i>Xenus cinereus</i>	Terek Sandpiper	MI	MI	x	Low	Shorebird, Site is 1km from nearest coastline, however no utilisable habitat within Survey Area, unlikely to occur	
Mammals							
<i>Macroderma gigas</i>	Ghost bat	VU	VU	x	Low	Species requires caves to roost, no caves within or near Survey Area	
<i>Macrotis lagotis</i>	Greater Bilby, Dalgente, Ninu	VU	VU	x	x	Medium	Presence not detected during Survey, but has been recorded in habitat contiguous with Survey Area
<i>Mormopterus cobourgianus</i>	North-western free-tailed bat	P1		x		Low	Species confined to mangroves, non-present within Survey Area, mangroves occur within 1 km of Survey Area, so species may be occasional flythrough
<i>Ozimops cobourgianus</i>	northern coastal free-tailed bat	P1		x	Low	Same species as above	
<i>Saccolaimus saccolaimus nudicluniatus</i>	Bare-rumped Sheath-tailed Bat,	P3	VU		x	Low	Species not present within 100km, unlikely to occur within Survey Area
<i>Trichosurus vulpecula arnhemensis</i>	Northern Possum	Brushtail	VU	VU	x	Medium	Appropriate habitat present within Survey Area, reasonably dense Eucalyptus and Corymbia woodland with sparse tree hollows, none detected during Survey
<i>Xeromys myoides</i>	Water Mouse, False Water Rat, Yirrkoo		VU		x	Low	Species almost always associated with water features, streams and dams, none present within the Survey Area
Reptiles							
<i>Lerista separanda</i>	Dampierland plain slider, skink	P2		x		Medium	Species is a sand dune specialist, no habitat present within Survey Area

Scientific Name	Common Name	Conservation Status		Database Source		Likelihood of Occurrence	Justification
		WA	EPBC	DBCA	PMST		
<i>Simoselaps minimus</i>	Dampierland Burrowing snake	P2		x		Medium	Species is a sand dune specialist, no habitat present within Survey Area
<i>Tiliqua scincoides intermedia</i>	Northern Blue-tongued Skink	CR	CR		x	High	Species is widespread and has been known to associate with man made structure (present near or in Survey Area, although no evidence recorded in Survey, cannot discount potential presence in large area of connected habitat)
<i>Varanus mertensi</i>	Mertens' Water Monitor, Mertens's Water Monitor	EN	EN	x		Low	Species almost always associated with water features, streams and dams, none present within the Survey Area
<i>Varanus mitchelli</i>	Mitchell's Water Monitor	CR	CR		x	Low	Species almost always associated with water features, streams and dams, none present within the Survey Area

