



Government of **Western Australia**  
Office of the **Appeals Convenor**  
Environmental Protection Act 1986

## Appeals Convenor's Report to the Minister for Environment

Appeals against amendment of clearing permit CPS 3891/3:  
Balline Garnet Mine, M70/1280 and L70/134, Shire of  
Northampton



|                      |   |
|----------------------|---|
| <b>Appellants</b>    | Dr Indre Asmussen<br>Mrs Myra Neumann<br>Mr Paul Eley       |
| <b>Permit holder</b> | Australian Garnet Pty Ltd                                   |
| <b>Authority</b>     | Department of Mines, Industry Regulation and Safety (DMIRS) |
| <b>Appeal No.</b>    | 035 of 2021   |
| <b>Date</b>          | November 2022   |

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**This report**

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**Acknowledgement of Country**

The Office of the Appeals Convenor acknowledges the traditional custodians throughout Western Australia and their continuing connection to the land, waters and community.

We pay our respects to all members of the Aboriginal communities and their cultures, and to Elders past, present and emerging.

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# 1 Executive summary

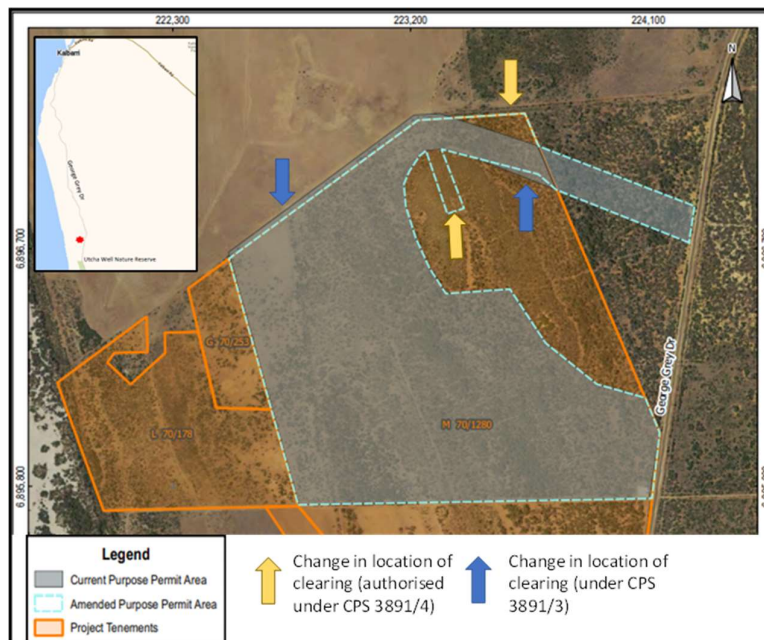
## 1.1 Decision under appeal

This report relates to appeals against the decision of the Department of Mines, Industry Regulation and Safety (DMIRS) to amend 'purpose' Clearing Permit CPS 3891/3 under Part V of the *Environmental Protection Act 1986* (EP Act). The clearing permit was first granted in November 2010, and has been amended on three occasions (refer section 3.1).

The current amendment (CPS 3891/4) alters the shape and size of the permit footprint by: adding two new areas of 1.54 hectares (ha) and 1.67 ha at the northern end (added areas); and removing 2.2 ha along Sandalwood Bay Road and a 0.5 ha portion at the northern end (refer Figure 1 below). Overall, the effect of the amendment increases the permit footprint to 145.785 ha<sup>1</sup> but does not change the extent of native vegetation authorised to be cleared within permit footprint, nor to the permit conditions or duration of the permit.

The amended permit authorises Australian Garnet Pty Ltd (permit holder) to clear up to 90 ha of native vegetation within Mining Lease 70/1280 and Miscellaneous Licence 70/134, located approximately 18 kilometres (km) north of Port Gregory in the Shire of Northampton, for the purpose of mineral production and associated activities (refer Figure 1). The amendment aligns the permit footprint with tenement boundaries, and facilitates the construction of a communications tower, access track and 12 m wide infrastructure corridor.

**Figure 1** Changes to permit footprint (yellow arrows indicate areas added, blue arrows indicate areas removed)<sup>2</sup>; with inset<sup>3</sup> showing proximity (red star) to Kalbarri



Related to the broader Lucky Bay (Balline) Garnet Mine, the permit holder also holds Clearing Permit CPS 9057/1, Clearing Permit CPS 8358/2 and Works Approval W6214/2019/1 under Part V of the EP Act (refer section 3.2).

<sup>1</sup> As digitised in CPS Database: <https://cps.dwer.wa.gov.au/main.html>

<sup>2</sup> Adapted from: MBS Environmental (2021a) *Request to Amend Native Vegetation Clearing Permit CPS 3891/3*. 9 July 2021. Page 2 Figure 1.

<sup>3</sup> Source: Whereis.com, November 2021.

The permit holder referred the broader proposal to the Environmental Protection Authority (EPA) under Part IV of the EP Act in September 2021. In July 2022 the EPA determined that potential impacts can be adequately managed in line with the referral documents, the permit holder’s management and mitigation measures, and other statutory processes.<sup>4</sup>

## 1.2 Grounds of appeal and appellant concerns

Three appeals were received against DMIRS’ decision to amend the permit. The appellants are Dr Indre Asmussen, Mrs Myra Neumann and Mr Paul Eley.

In summary, the appellants sought for the amendment to be refused. The matters raised in the appeals include: alternatives to clearing; inadequate biological and Aboriginal heritage surveys; significant habitat for flora and fauna; ecological linkage; impacts to hydrology and wetlands; and inadequate consultation and engagement with Traditional Owners and nearby landholders. The appellants’ concerns are summarised in Table 1 below.

**Table 1** Grounds of appeal

| Ground  | Main concerns the appellant submitted  |
|---|--|
| 1 Environmental values                        | <p>High level of biological diversity. High quality native vegetation patch.</p> <p>Fauna corridor between coast and inland. Necessary for the maintenance of a significant habitat for fauna, including threatened fauna, rainbow bee-eaters and bush turkeys.</p> <p>Significant remnant native vegetation surrounded by an area that has been cleared by historical agriculture.</p> <p>Changes to hydrology will impact the <i>Casuarina</i> / Coastal Salt Marsh threatened ecological community (TEC) where migratory birds nest. Water use and changes to the hydrology within the clearing area will impact this TEC, located downstream/south of the permit footprint in an ecosystem that is recognised nationally and globally as having high ecological value.</p> <p>The proposed clearing is at variance with clearing principles.</p> |
| 2 Aboriginal Heritage values and consultation | <p>Neighbours and Traditional Owners of the Native Title Allotment have not been informed and consulted enough on the clearing. The area has not been surveyed for Aboriginal Heritage by the Hutt River Mob, part of the Yamatji Nation. Consult with neighbours and the community on integration of mining and tourism, and a redesign of the proposal to protect remnant vegetation.</p>  |

## 1.3 Key issues and conclusions

The question for the Minister on appeal is whether, based on the concerns raised by the appellants, the clearing permit should have been amended.

To resolve this question, it is necessary to consider the grounds of the appeal in the context of the relevant considerations set out in section 51O of the EP Act, including the clearing principles, planning instruments, and other relevant matters. Also relevant is the extent to which the conditions, if the amendment was appropriate, are sufficient to ensure potential environmental impacts are appropriately managed.

These issues are summarised below. Section 2 provides further details about the reasons for our conclusion, including a brief summary of the matters considered to be beyond the scope of the appeal, and supporting information is provided in section 3.

<sup>4</sup> Environmental Protection Authority (2022) *Public record pursuant to s.39 of the Environmental Protection Act 1986 – Proposal title: Lucky Bay Garnet Mine*. 6 July 2022.

## **What are the environmental values of the vegetation proposed to be cleared?**

The amendment alters the shape and size of the permit footprint by: adding two new areas at the northern end of 1.54 ha (western added area) and 1.67 ha (eastern added area); and removing 2.2 ha along Sandalwood Bay Road and a 0.5 ha portion at the northern end.

During the appeals investigation the permit holder provided the reports of two additional biological surveys conducted in 2021, which reflected the findings from previous surveys.

We conclude that the environmental values of the two added areas, and the risks to these values from proposed clearing within them, are generally consistent with those identified for the adjacent existing areas of the permit footprint. However, we conclude differently to DMIRS on clearing principles (a) and (b):

- In 2013 the priority flora taxa *Beyeria cinerea* subsp. *cinerea* (Priority 3) was recorded from a sample site that appears to be within or immediately adjacent to the western added area. By the permit holder's 2021 referral documents<sup>5</sup> the proposed clearing will not directly impact on known records of this species. We note, however, that the proposed clearing may impact on supporting habitat for this species. Given this, we find that the proposed clearing 'may be at variance' with clearing principle (a).
- The western added area extends into a mapped 20 ha extent of fauna habitat type 'VSA3', which was previously excluded from the permit footprint. The 2013 Fauna Assessment<sup>6</sup> (based on desktop review and site inspection) identified that the first known example of an undescribed isopod *Buddelundia* '81', considered 'likely' to be a short-range endemic (SRE) and thus of conservation significance, was recorded from this habitat type. Given this, we agree with DMIRS that the proposed clearing 'may be at variance' with clearing principle (b) but for different/additional reasons.

## **Is the amendment consistent with planning instruments and other relevant matters?**

We conclude that the clearing purpose is consistent with the State and local government planning frameworks.

We accept DMIRS' advice that it has undertaken adequate consultation in relation to the amendment application in accordance with the *Native Title Act 1993* (Cth), and has had regard for registered Aboriginal sites of significance in its assessment. We note that it is the responsibility of the permit holder to comply with the *Aboriginal Heritage Act 1972*, and to ensure that no unauthorised damage to Aboriginal sites occurs during clearing activities.

## **Should the clearing permit have been amended and if so, are the conditions appropriate to manage impacts?**

Having considered DMIRS' assessment of the amendment application for environmental values and other relevant matters, we considered whether the amendment should have been made and if so, whether the conditions are adequate to manage impacts. We conclude that DMIRS' decision to amend the clearing permit was justified, and that DMIRS has generally applied reasonable conditions to manage the identified impacts so that the proposed clearing does not lead to unacceptable risks to the environment. We consider, however, that the amended permit should be strengthened for the benefit of environmental values.

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<sup>5</sup> MBS Environmental (2021c) *Lucky Bay Garnet Mine; S38 Referral; Part B – Assessment of Environmental Impacts*. Parts 1-5, November 2021. Unpublished report prepared for Australian Garnet Pty Ltd.

<sup>6</sup> M.J & A.R. Bamford Consulting Ecologists (2013) *Balline Garnet Project – Fauna Assessment*. Unpublished report prepared for Pemaco Services. 9 December 2013.

In this regard, based on the permit holder's advice, we consider that the width of the western added area should be reduced from its current 57-67 m to about 40 metres by removing a linear strip along the length of the west-south-west facing perimeter. This approach retains a separation distance to the nearest record of *Beyeria cinerea* subsp. *cinerea* (Priority 3), thereby avoiding clearing impacts on possible supporting habitat for this species. Further, this approach, in combination with the permit holder's intent to reduce the width of the infrastructure corridor, reduces the extent of the permit footprint and clearing within fauna habitat 'VSA3', thereby minimising clearing impacts on any SRE fauna that may be present.

We consider that environmental values on a local scale, including fauna habitat and ecological linkage values, may be mitigated through rehabilitation requirements under other regulatory processes, including a Mining Proposal and Mine Closure Plan.

### **Additional changes to conditions recommended**

We reviewed other clearing permits relating to mining activities, and noted that many (including the permit holder's adjacent Clearing Permit CPS 9057/1) contain a fauna management requirement that clearing is to be conducted in a slow, progressive and single-directional manner to allow fauna to move out of the clearing path. To ensure a level of consistency with other clearing permits and for the benefit of fauna that might be impacted by clearing activities, we recommend that a similar condition is added to the amended permit.

## **1.4 Recommendation to the Minister**

We recommend that the appeals are allowed to the extent that the clearing permit is amended to strengthen protection for environmental values in the amended footprint:

- Figure 1 in Schedule 1 is revised to reflect that the width of the western added area is reduced from its current 57-67 metres to about 40 metres by removing a linear strip along the length of the west-south-west facing perimeter (as indicated in Figure 3)
- a new condition is added that specifies that the permit holder must conduct clearing activities in a slow, progressive manner from one direction to the other to allow fauna to move into adjacent native vegetation ahead of the clearing activity.

It is otherwise recommended that the appeals be dismissed.

## 2 Reasons for recommendation

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### 2.1 What are the environmental values of the vegetation proposed to be cleared?

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Appellants noted the time that has passed since the original clearing permit was granted, and that the remnant native vegetation is on land that has not been used for farming for about 30 to 40 years, has regenerated, and provides habitat for more diverse species of flora and fauna. Appellants submitted that DMIRS, in granting the amendment, has not recognised the high environmental values of the permit footprint in the absence of updated surveys, and has instead relied on biological surveys from 2013 and a compliance inspection in 2015. One appellant submitted that DMIRS incorrectly applied the clearing principles in the assessment of these environmental values, and that the proposed clearing is at variance.

Appellants sought for baseline studies to support a strategic ecological plan for the area, and a redesign of the proposal to protect remnant native vegetation. In this regard appellants submitted that the amendment could be avoided by locating the communications tower on an alternative elevated site within the permit footprint, and by a review of the entire mining project to make better use of cleared farmland.

We conclude that DMIRS had sufficient information to inform its assessment of the amendment application, including of the biological, ecological linkage and water resource values of the added areas against the clearing principles in the EP Act. Noting the vegetation types and condition and the findings of the flora and vegetation surveys, we consider that the environmental values within the two added areas (Figure 1), and the risks to these areas from the proposed clearing, are generally consistent with those identified for the adjacent existing areas of the permit footprint (Section 3). However, for the reasons outlined below and with regard for examples set out in Department of Water and Environmental Regulation's (DWER) *A guide to the assessment of applications to clear native vegetation*<sup>7</sup> (Guide to Assessment), we conclude differently to DMIRS on clearing principles (a) and (b). We explain our reasoning below.

#### **Amendment limited to changes to permit footprint**

As noted under section 1.1, the amendment alters the shape and size of the permit footprint by: adding two new areas at the northern end of 1.54 ha (western added area) and 1.67 ha (eastern added area); and removing 2.2 ha along Sandalwood Bay Road and a 0.5 ha portion at the northern end (refer Figure 1).<sup>8</sup>

The purpose of the amendment is to align the permit footprint with tenement boundaries, and to extend the permit footprint for the construction and installation of a communications tower and infrastructure.<sup>9</sup>

The appeal right in relation to the amendment of a clearing permit relates to the amendment, and not to elements of the clearing permit that are not amended. The appeal scope is therefore limited to the changes to the permit footprint in this case, and excludes the assessments for the original clearing permit, previous amendments and the broader Lucky Bay Garnet Mine proposal.

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<sup>7</sup> 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*. December 2014

<sup>8</sup> As digitised in CPS Database: <https://cps.dwer.wa.gov.au/main.html>

<sup>9</sup> MBS Environmental (2021a), page 1 and Figure 1.



## Biological surveys relevant to amended permit footprint

Biological surveys relevant to the amended permit footprint include the following:

- Ecoscape Australia Pty Ltd (2009) *Haddington Resources Balline – Level 1 Flora and Fauna Assessment*;<sup>10</sup> conducted September 2008 (2008 Flora and Fauna Assessment)
- Goater, S. and Knott, B. (2009) *Balline Garnet Project, Kalbarri, Western Australia: Subterranean Fauna Pilot Survey*;<sup>11</sup> conducted December 2009 (2009 Subterranean Fauna Survey)
- M.J. & A.R. Bamford Consulting Ecologists (2013) *Balline Garnet Project – Fauna Assessment*;<sup>12</sup> conducted September 2013 (2013 Fauna Assessment)
- Onshore Environmental Consultants Pty Ltd (2013) *Balline Garnet Project, Level 2 Flora and Vegetation Survey*;<sup>13</sup> conducted October 2013 (2013 Flora and Vegetation Survey)
- Onshore Environmental Consultants Pty Ltd (2022a) *Lucky Bay Garnet Project, Detailed Flora and Vegetation Survey*;<sup>14</sup> conducted September 2021 (2021 Flora and Vegetation Survey)
- Onshore Environmental Consultants Pty Ltd (2022b) *Lucky Bay Garnet Project, Detailed Vertebrate Fauna Survey*;<sup>15</sup> conducted November 2021 (2021 Vertebrate Fauna Survey).

Further information on these biological surveys is provided in section 3.2.

The 2021 biological surveys were provided by the permit holder during the appeals investigation. These surveys were conducted in areas adjacent to the amended permit footprint, and included review of previous biological surveys:

Onshore Environmental was commissioned to undertake a single season detailed flora and vegetation survey with targeted significant flora searches within tenements M 70/1387 and E 70/5117. Additional sampling was also completed within approved project areas previously surveyed by Onshore Environmental in 2013 to ensure that minimum sampling intensity for all recorded vegetation types was compliant with current Environmental Protection Authority (EPA) technical guidelines ...<sup>16</sup>

Previous fauna assessment includes basic fauna surveys completed over part of the study area in 2008 (Ecoscape 2009) and 2013 (Bamford and McHarrie, 2013). Onshore Environmental was commissioned to undertake a detailed vertebrate fauna survey during 2021 to determine the presence of significant fauna species and complete fauna habitat mapping across the study area to inform a Site Impact Assessment (SIA) for fauna.<sup>17</sup>

## DMIRS considered environmental values in the amended permit footprint

In its assessment DMIRS took into account the clearing principles<sup>18</sup>, planning instruments and other matters in line with section 51O of the EP Act, as well as information provided by the permit holder and obtained from other sources (including current GIS datasets).<sup>19</sup>

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<sup>10</sup> Ecoscape Pty Ltd (2009) *Haddington Resources Balline – Level 1 Flora and Fauna Assessment*. 14 April 2009. Unpublished report prepared for Environ Australia Pty Ltd.

<sup>11</sup> Goater, S. and Knott, B. (2009) *Balline Garnet Project, Kalbarri, Western Australia: Subterranean Fauna Pilot Survey*. December 2009. Unpublished report prepared for Altura Mining Ltd.

<sup>12</sup> M.J. & A.R. Bamford Consulting Ecologists (2013).

<sup>13</sup> Onshore Environmental Consultants Pty Ltd (2013) *Balline Garnet Project, Level 2 Flora and Vegetation Survey*. November 2013. Unpublished report prepared for Australian Garnet Pty Ltd.

<sup>14</sup> Onshore Environmental Consultants Pty Ltd (2022a) *Lucky Bay Garnet Project, Detailed Flora and Vegetation Survey*. 29 January 2022. Unpublished report prepared for Australian Garnet Pty Ltd.

<sup>15</sup> Onshore Environmental Consultants Pty Ltd (2022b) *Lucky Bay Garnet Project, Detailed Vertebrate Fauna Survey*. 29 January 2022. Unpublished report prepared for Australian Garnet Pty Ltd.

<sup>16</sup> Onshore Environmental Consultants Pty Ltd (2022a), page 1.

<sup>17</sup> Onshore Environmental Consultants Pty Ltd (2022b), page 1.

<sup>18</sup> As listed in Schedule 5 of the EP Act and in accordance with section 51O of the EP Act.

<sup>19</sup> Department of Mines, Industry Regulation and Safety (2021) *Clearing Permit and Clearing Permit Decision Report for CPS 3891/4*. 7 September 2021. Decision report, page 3.

The decision report for original permit concludes that the proposed clearing would impact on the viability of the remnant native vegetation including ecological linkage value, and 'is at variance' with clearing principle (e) and 'may be at variance' with clearing principles (b), (g) and (h). These findings have not changed in DMIRS' assessments for subsequent amendments. In summary, DMIRS found that the proposed clearing:

- will impact on remnant native vegetation in 'Very Good' to 'Degraded' condition
- may impact on habitat (but not significant habitat) for conservation significant fauna
- may impact on part of an ecological linkage with a conservation area
- may cause wind erosion of sandy soils.

DMIRS granted the original clearing permit, and subsequent amendments, subject to conditions. Further information on DMIRS' assessment is provided in section 3.1.

The biological surveys considered by DMIRS in its assessment of the amendment application (as referenced in the decision report) include the following:

- 2008 Flora and Fauna Assessment
- 2013 Fauna Assessment
- 2013 Flora and Vegetation Survey.

In response to appellants' concerns about the age of these surveys, DMIRS advised:

DMIRS acknowledges that there has not been any recent biological surveys undertaken in the permit area, with the survey information supporting CPS 3891/4 being from 2013. However, the surveys from 2013 were used as a guide during the assessment and were not wholly relied upon for the assessment of the Clearing Principles.

Given that the permit boundary increase is focussed in the middle of the permit area, and that the permit boundary change is ... with no increase to the amount of approved clearing, DMIRS considered it unnecessary to request further survey information. This conclusion was reached on the basis that no Threatened or Priority flora, TECs, PECs, or Threatened fauna were previously recorded in the permit area, and there is no new information to suggest that these might now be present.<sup>20</sup>

More broadly, DMIRS provided the following advice in relation to the amended permit:

- the majority of the permit footprint has been impacted by agricultural activities and it is likely that the area represents native vegetation regrowth rather than remnant vegetation
- clearing within the added areas is likely to have a negligible impact on any species populations associated with this habitat type as a whole (clearing principles (a) and (b))
- the vegetation associations, fauna habitats and landform types present are well represented in the broader surrounding areas (clearing principle (a))
- ecological linkage values are unlikely to be present as the permit footprint is largely surrounded by other approved clearing (clearing principle (e))
- the water resource values are the same as determined in the assessment for the original permit, and any significant impacts to surface or groundwater outside the permit footprint are unlikely (clearing principle (f)).

DMIRS advised that there are several areas in the broader location that are considered to have higher environmental values than the clearing area, and have some form of recognition or protection, including:

- Northern Sandheaps 'Schedule One' area, about 1.5 km west of the added areas
- Utcha Well Nature Reserve, about 3.8 km south of the added areas
- Hutt Lagoon System (an ANCA listed Wetland), about 8.3 km south of the added areas

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<sup>20</sup> Department of Mines, Industry Regulation and Safety response to Appeal 035/21 (22 October 2021), page 9.

- Kalbarri National Park, about 16.2 km north of the added areas.<sup>21</sup>

These areas are discussed in more detail in section 3.4.

### **Areas added to permit footprint may include priority flora habitat**

The 2008 Flora and Fauna Assessment, 2013 Flora and Vegetation Survey and 2021 Flora and Vegetation Survey describe the vegetation types within the two added areas as follows:

- western added area: 'CHMC: Closed Heath *Melaleuca cardiophylla*' / 12 *Rhagodia* Shrubland and 13 *Melaleuca* Low Closed Heath / HCMc *Melaleuca* Low Heath C and HSMca *Melaleuca* Dwarf Scrub C
- eastern added area: 6a Acacia High Shrubland / HSArOKR *Acacia* Scrub.

These vegetation types are described in more detail in section 3.2.

Neither of the 2013 or 2021 fauna surveys reported the occurrence of conservation significant flora within the original permit footprint. The decision report for the amended permit reflects these findings (on the basis of the 2013 survey only).

The sample sites (50 m x 50 m quadrats) considered in the 2013 and 2021 flora and vegetation surveys in proximity to the amended permit footprint are described in section 3.2. Of note, sample site 'B01' appears to be within or immediately adjacent to the western added area. Although sample sites 'B02', 'B14' and 'AG-02' are not within the added areas, they are in near proximity and in the same vegetation types as occur within the added areas. Given this, we consider the findings for these sample sites can be extrapolated.

According to the 2013 and 2021 surveys, two Priority 3 flora occur within or in close proximity to the added areas:

- *Beyeria cinerea* subsp. *cinerea* (Priority 3) was recorded within sample site 'B01', located within the western portion of the amended permit footprint and within vegetation type '13 *Melaleuca* Low Closed Heath'. This species was also recorded south of this sample site. The FloraBase website<sup>22</sup> describes this species as a low, spreading shrub to 0.3(-1) metres high and 0.4 metres wide with green/yellow flowers in July to October, growing in association with heath (e.g. *Melaleuca* and *Acacia* species) on dry, rocky, brown sand on a limestone ridge; recorded as 53 populations (some may overlap) in the local government areas of Cambridge, Carnamah, Coorow, Dandaragan, Gingin, Greater Geraldton, Irwin, Mandurah, Mosman Park, Northampton, Rockingham and Wanneroo.<sup>23</sup>
- *Melaleuca huttensis* (Priority 3) was recorded north-east and south-east of sample site 'B14', and while not within the amended permit footprint it was recorded within vegetation type '6a Acacia High Shrubland' and fauna habitat 'VSA2' which occur within it. Since the 2013 Flora and Vegetation Survey, the conservation status of the species has changed from Priority 1 to Priority 3. The FloraBase website describes this species as an upright shrub to 3 metres high, with grey to white gnarled bark, and cream-yellow flowers in June to July or September, growing in association with light yellow or beige sand on lower slopes of undulating plains; recorded as 17 populations (some may overlap) in the local government areas of Chapman Valley, Greater Geraldton and Northampton.<sup>24</sup>

<sup>21</sup> Department of Mines, Industry Regulation and Safety response to Appeal 035/21 (22 October 2021), page 5.

<sup>22</sup> Western Australian Herbarium (1998-). *Florabase—the Western Australian Flora*. Department of Biodiversity, Conservation and Attractions.

<sup>23</sup> <https://florabase.dpaw.wa.gov.au/browse/profile/34236>

<sup>24</sup> <https://florabase.dpaw.wa.gov.au/browse/profile/19451>

The Department of Biodiversity, Conservation and Attractions (DBCA) describes the category 'Priority 3' as 'Poorly-known species – known from several locations':

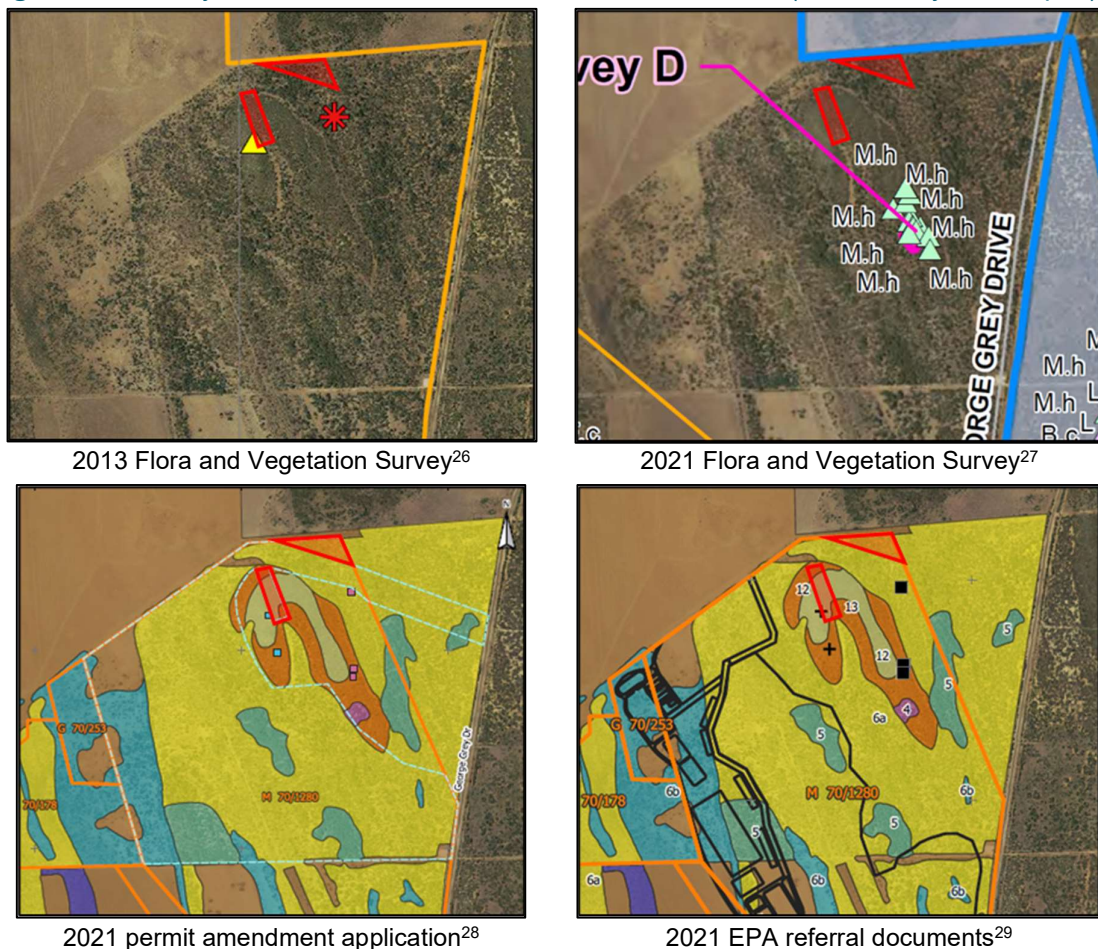
Species that are known from several locations and the species does not appear to be under imminent threat or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat.

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. These species need further survey.<sup>25</sup>

By maps contained in the 2013 and 2021 survey reports, the locations of these two priority taxa (as relevant to the amended permit footprint) are indicated in Figure 2:

- *Beyeria cinerea* subsp. *cinerea* (Priority 3) locations are indicated by the yellow triangle ▲, blue squares ■ and black crosses +
- *Melaleuca huttensis* (Priority 3) locations are indicated by red star ★, pink squares ■, green triangles ▲ and black squares ■.

**Figure 2** Priority flora locations, as relevant to the added areas (indicated by red shapes)



<sup>25</sup> <https://www.dpaw.wa.gov.au/plants-and-animals/threatened-species-and-communities>

<sup>26</sup> Onshore Environmental Consultants Pty Ltd (2013), page 22 Figure 'Significant Flora'.

<sup>27</sup> Onshore Environmental Consultants Pty Ltd (2021), page 29 Figure 7.

<sup>28</sup> MBS Environmental (2021a), page 5 Figure 2.

<sup>29</sup> MBS Environmental (2021b), *Lucky Bay Garnet Mine; S38 Referral; Part A – Proposal Content Document and Consultation*. November 2021. Unpublished report prepared for Australian Garnet Pty Ltd. Page 32 Figure 2.

In relation to *Beyeria cinerea* subsp. *cinerea* (Priority 3), the 2021 Flora and Vegetation Survey states that this subspecies was 'Recorded' within the study area, associated with light yellow sands on dry flats.<sup>30</sup> The report acknowledges that this species was recorded during the 2013 Flora and Vegetation Survey, and goes on to state:

Detailed examination was undertaken of multiple *Beyeria cinerea* specimens collected from within the 2013 and 2021 study areas. All specimens from the current survey were identified as *Beyeria cinerea* subsp. *borealis*. This subspecies is not listed as a Priority flora taxon by the DBCA. The specimens recorded from the study area generally have cordate bases and recurved leaves which are more consistent with *Beyeria cinerea* subsp. *borealis*.<sup>31</sup>

The FloraBase website describes *Beyeria cinerea* subsp. *borealis* as a low, compact or spreading shrub to 0.3(-1) metres high with green/yellow flowers in June to August, growing in association with mallee/*Eucalyptus* woodland and heath on sand over limestone; recorded as 48 populations (some may overlap) in the local government areas of Carnarvon, Exmouth, Northampton and Shark Bay.<sup>32</sup> There is no description provided for base and leaf shape.

The field component of the 2013 Flora and Vegetation Survey was conducted from 5-11 October 2013; in 2013 rainfall 'was below average for the six months prior to the October field survey, with the June 2013 total significantly lower than the long term average'.<sup>33</sup> The 2021 Flora and Vegetation Survey field component was conducted from 13-26 September 2021; in 2021 rainfall 'was above average for the six months prior to the September field survey ... totals were particularly high in May and July'.<sup>34</sup> Despite the seasonal variations, both surveys appear to have been appropriately timed to identify both subspecies.

We note the similarities between the two subspecies, and the possibility that they might co-exist. We also note that the extent to which seasonal variation might affect the priority subspecies is not known. In this regard we consider that there is insufficient evidence from the available information to confirm that the records of *Beyeria cinerea* within sample site 'B01' do not include the Priority 3 subspecies.

In relation to *Melaleuca huttensis* (Priority 3), by the growth form of this species it is likely that it would be readily identified if present within the permit footprint. Further, the amendment to the permit footprint removes a 0.5 ha portion at the northern end (Figure 1), thereby retaining a buffer to the nearest record from the 2013 Flora and Vegetation Survey (Figure 2).

The permit holder's 2021 referral documents acknowledge that priority flora was recorded within the broader study areas, however contend that the amended permit footprint avoids known locations (indicated in Figure 2):

Four Priority Flora taxa, as defined by the State's Department of Biodiversity and Conservation and Attractions (DBCA) were recorded from the study area, including:

- *Melaleuca huttensis* (Priority 1)
- *Cryptandra glabriflora* (Priority 2)
- *Anthocercis intricata* (Priority 3)
- *Beyeria cinerea* subsp. *cinerea* (Priority 3).<sup>35</sup>

No threatened flora have been detected in the study area and the Onshore (2013) mapped locations of Priority Flora have been avoided in the amendment to CPS 3891/3.

By the permit holder's 2021 referral documents, the proposed clearing will not directly impact on known records of *Beyeria cinerea* subsp. *cinerea* (Priority 3).

<sup>30</sup> Onshore Environmental Consultants Pty Ltd (2022a), page 17.

<sup>31</sup> Onshore Environmental Consultants Pty Ltd (2022a), page 30.

<sup>32</sup> <https://florabase.dpaw.wa.gov.au/browse/profile/34237>

<sup>33</sup> Onshore Environmental Consultants Pty Ltd (2013), page 3.

<sup>34</sup> Onshore Environmental Consultants Pty Ltd (2022a), page 3.

<sup>35</sup> MBS Environmental (2021c), pages 1-2.

### Proposed clearing ‘may be at variance’ with clearing principle (a)

Clearing principle (a) sets out that native vegetation should not be cleared if it comprises a high level of biodiversity.

By its assessment, DMIRS concluded that the proposed clearing ‘is not likely to be at variance’ with this clearing principle on the basis that the 2013 Flora and Vegetation Survey did not record any threatened or priority flora within the amended permit footprint.

Above we note that *Beyeria cinerea* subsp. *cinerea* (Priority 3) was recorded in 2013 within sample site ‘B01’ which appears to be within or immediately adjacent to the western added area. Although this species was not recorded in 2021, we consider that there is insufficient evidence from the available information to confirm that this species does not occur. In any event, the permit holder’s 2021 referral documents indicate that the proposed clearing will not directly impact on the 2013 records of this species. We note, however, that if the species is present the proposed clearing may impact on its supporting habitat.

DWER’s Guide to Assessment provides examples of proposed clearing that is likely to be at variance with clearing principle (a):

- clearing of native vegetation that is representative of an area of high biodiversity, such as the northern sandplains in the vicinity of Mount Lesueur
- clearing of a diverse native vegetation remnant that supports the whole, or a part of, a significant population of priority flora
- clearing of a diverse native vegetation remnant that comprises the whole, or a part of, a significant occurrence of a priority ecological community
- clearing of native vegetation that has a higher diversity than other examples of an ecological community in a bioregion
- clearing of native vegetation that is in ‘degraded’ condition yet is in better condition than other vegetation of the same ecological community in the local area (for example, a largely degraded rangelands ecological community).<sup>36</sup>

On the basis that the vegetation within the added areas is described as being in ‘Very Good’ to ‘Good’ condition (refer section 3.2) in a broader area subject to past and present clearing, and may impact on habitat that supports a population of priority flora, we conclude that the proposed clearing ‘may be at variance’ with clearing principle (a).

### Areas added to permit footprint may include short-range endemic (SRE) fauna habitat

The 2013 Fauna Assessment and 2021 Vertebrate Fauna Survey describe two fauna habitats within the two added areas:

- western added area: ‘VSA3’ / ‘Melaleuca Shrublands’
- eastern added area: ‘VSA2’ / ‘Acacia Shrublands’.

These fauna habitats are described in more detail in section 3.2.

Neither of the 2013 or 2021 fauna surveys identified conservation significant fauna within the amended permit footprint.

The decision report for the original clearing permit (CPS 3891/1) acknowledges that while some of the fauna species of conservation significant ‘may utilise’ the permit footprint, ‘it is

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<sup>36</sup> Department of Environment Regulation (2014), page 7.

not likely to represent significant habitat for conservation significant fauna'. The decision report further noted that the permit footprint 'may provide an ecological linkage'.<sup>37</sup>

By contrast, the decision report for the amended permit states:

The amendment area has previously been significantly impacted by historical agricultural activities ... Given the impacts of agricultural activities, the application area is not likely to support large numbers of fauna species. As the amendment area location is surrounded by other clearing permits, it is unlikely to form part of an ecological linkage with other remnants that may persist as important fauna habitats and refuges (GIS Database).<sup>38</sup>

This is reflected in DMIRS' response to the appeals. DMIRS considered that conservation significant fauna are unlikely to be frequent visitors to the amended permit footprint, and further that fauna values of the added areas are low due to previous disturbance, current vegetation condition and surrounding clearing approvals.<sup>39</sup>

Based on our review of conservation significant fauna recorded within 20 km of the permit footprint (refer section 3.2), we consider that the added areas may form part of a habitat for some of these species but is unlikely to comprise significant habitat for them.

### **Invertebrate and short-range endemic fauna**

The western added area extends into a mapped 20 ha extent of fauna habitat 'VSA3', which was previously excluded from the permit footprint (refer section 3.2). The 2013 Fauna Assessment<sup>40</sup> (based on desktop review and site inspection) identified that the first known example of an undescribed isopod was recorded from this habitat type:

An isopod (slater) collected during the site inspection is the first known example of an undescribed species and has been described as *Buddelundia '81'* by Phoenix Environmental (2013), who concluded that it was likely to be a short range endemic (SRE and thus [of conservation significance]). It was recorded only in areas of native vegetation where limestone was present on the surface (VSA 3 ...).<sup>41</sup>

The permit holder's referral documents indicate that a further 90 ha of fauna habitat 'VSA3' occurs to the north-west of the permit footprint.<sup>42</sup> Based on this, the extent of fauna habitat 'VSA3' in the amended permit footprint represents 1.4 per cent of the extent in the local area.

In relation to SRE surveys in the area, the permit holder's referral documents state:

SRE invertebrate sampling occurred as part of the Subterranean Fauna Pilot Survey conducted in December of 2009 (Goater and Knott, 2009) and the Level 1 fauna survey conducted by Bamford Consulting Ecologists (Bamford and McHarrie 2013).

No SREs were collected in litter sampling ..., but three species of ground-dwelling spiders were collected in the sampling programme in bores PB1, PB3 and HUT4 as shown in Figure 4. One species of Collembola with surface affinities was recovered from four bores, which indicates a reasonably widespread occurrence through the study area. SREs are to be included in the 2021 Fauna Survey, in addition to assessed in winter 2022.<sup>43</sup>

The EPA's *Technical Guidance: Sampling of short range endemic invertebrate fauna*<sup>44</sup> (SRE Technical Guidance) states that 'SREs are defined as terrestrial and freshwater invertebrates

<sup>37</sup> Department of Mines and Petroleum (2010), decision report, page 2.

<sup>38</sup> Department of Mines, Industry Regulation and Safety (2021), decision report, page 2.

<sup>39</sup> Department of Mines, Industry Regulation and Safety response to Appeal 035/21 (22 October 2021), page 4.

<sup>40</sup> M.J & A.R. Bamford Consulting Ecologists (2013) *Balline Garnet Project – Fauna Assessment*. Unpublished report prepared for Pemaco Services. 9 December 2013.

<sup>41</sup> M.J & A.R. Bamford Consulting Ecologists (2013), page 19.

<sup>42</sup> MBS Environmental (2021c), page 10.

<sup>43</sup> MBS Environmental (2021c), page 12.

<sup>44</sup> Environmental Protection Authority (2016) *Technical Guidance Sampling of short range endemic invertebrate fauna*. December 2016. Government of Western Australia.

that have naturally small distributions of less than 10,000 km<sup>2</sup> (after Harvey 2002)', and that it is necessary to consider SRE species as their potential restriction to small spatial scales generally put them at greater risk of changes in conservation status, local population or taxon extinctions.

The SRE Technical Guidance describes key threatening processes for SRE as including: clearing of native vegetation, introduction or spread of weeds and fragmentation and subdivision of habitats. The Guidance goes on to state that proposals that could have a significant impact on SRE taxa by: clearing of vegetation or habitats with known potential to support SRE fauna; changing hydrology or fire regimes, introduce weeds or soil pathogens, or otherwise indirectly affect such habitats; or directly affecting known populations of SRE fauna (particularly if listed as Specially Protected), require referral to the EPA.

We note that the sample site within which the isopod *Buddelundia* '81' was recorded during the 2013 Fauna Assessment is not clearly disclosed in the survey report. We also note that the survey report states that this species is 'likely' to be an SRE (i.e. not confirmed). In addition, we note that a reference to 'Onshore - Level 2 (Detailed) Fauna and SRE Survey scheduled 18-28 November 2021' in the permit holder's referral documents<sup>45</sup> is separate to the 2021 Vertebrate Fauna Survey. On the basis of the available information it is not possible to determine whether this species or SRE fauna occurs in the western added area.

By the above, there are to be gaps in the available information as relevant to SRE fauna, in particular within the fauna habitat 'VSA3'. This is further supported by recommendations for further survey work in the 2009 Subterranean Fauna Survey,<sup>46</sup> and by the reference to an SRE survey in the permit holder's referral documents. We understand from the permit holder's correspondence during the appeal investigation that an SRE survey has recently been conducted, with the report currently in preparation.

### **Proposed clearing 'may be at variance' with clearing principle (b)**

Clearing principle (b) sets out that 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.

DWER's Guide to Assessment defines 'significant habitat' as: 'habitat that provides resources (breeding, resting and feeding), connectivity or habitat area for a species or community that is critical for its survival'.<sup>47</sup>

Despite finding that the amended permit footprint is unlikely to comprise significant habitat for fauna and is unlikely to support large numbers of fauna, DMIRS concluded that the proposed clearing 'may be at variance' with this clearing principle. From decision reports for earlier versions of the clearing permit, we understand DMIRS' conclusion is based on the value of the vegetation within the broader permit footprint as part of an ecological linkage with the nearby Utcha Well Nature Reserve.

DWER's Guide to Assessment provides the following examples of proposed clearing that is likely to be at variance with clearing principle (b):

- clearing of native vegetation that is habitat for specially protected or threatened fauna
- clearing of native vegetation that is habitat for meta-populations of fauna
- clearing of native vegetation that is necessary for the maintenance of habitat of priority, migratory, specially protected, threatened fauna or meta-populations of fauna.<sup>48</sup>

<sup>45</sup> MBS Environmental (2021c), page 10.

<sup>46</sup> Goater, S. and Knott, B. (2009), page 12.

<sup>47</sup> Department of Environment Regulation (2014), page 49.

<sup>48</sup> Department of Environment Regulation (2014), page 11.



From the above, the native vegetation proposed to be cleared within the added areas may form part of a habitat for threatened, priority and SRE fauna, and the proposed clearing may impact on ecological linkage. Given this, we agree with DMIRS' finding that the proposed clearing 'may be at variance' with clearing principle (b).

### **Areas added to permit footprint not likely to impact on downstream ecological communities**

Appellants submitted that water use and changes to hydrology will impact on the *Casuarina* / Coastal Salt Marsh TEC located south/downstream of the amended permit footprint.

DMIRS advised that it is 'unaware of the referenced 'Casuarina woodland and saltmarsh' TEC referred to by the appellants'.<sup>49</sup>

Available datasets indicate that the nearest conservation significant ecological community is an occurrence of the 'Kalbarri ironstone community' priority ecological community (PEC), located about 16 km south-east of the added areas. The landscape position and vegetation composition within the added areas are inconsistent with the characteristics of this PEC:

Winter wet, mallee/*Melaleuca* over herbs. Dense shrubland when burnt. Surrounded by sandplain. Yerina springs and north Eurardy Station. Z-bend loop, Junga Dam. The taxon *Eremophila microtheca* (previously declared rare flora) occurs in community.<sup>50</sup>

It is assumed that appellants' reference to a downstream occurrence of a '*Casuarina* / Coastal Salt Marsh' TEC refers to the Hutt Lagoon System, including Utcha Swamp. This System is listed in *A directory of Important Wetlands in Australia*<sup>51</sup> on the basis of its significance as a good example of a coastal brine lake. This System was listed prior to 2001, and the potential impacts to it resulting from the proposed clearing were considered in the assessment for the original clearing permit application.

Noting that the extent of clearing authorised has not changed in the amended permit, we consider that the overall increase in the permit footprint of about 0.51 ha<sup>52</sup> is unlikely to alter local hydrology to the extent that it might impact on downstream ecological communities.

## **2.2 Is the amendment consistent with planning instruments and other relevant matters?**

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Appellants submitted that the amended permit has a long history, that neighbours have changed, including the Hutt River Mob (Nhunda people) who became a significant neighbour and landholder in 2020 when the Yamatji ILUA was determined. Appellants raised concern that the area has not been surveyed for Aboriginal heritage by the Hutt River Mob, who are part of the Yamatji Nation, and that the Hutt River Mob has not been adequately consulted. Appellants sought for engagement with the community and new neighbours to consider a review and redesign of the entire project, including input on what happens to Country and integration of the mining project with tourism, rather than implementing 'old' clearing permits.

DMIRS advised that it invited comments from interested parties on, and publicly advertised, the amendment application. We accept DMIRS' advice that it has undertaken consultation in accordance with the *Native Title Act 1993* (Cth), and that the grant of the clearing permit in

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<sup>49</sup> Department of Mines, Industry Regulation and Safety response to Appeal 035/21 (22 October 2021), page 5.

<sup>50</sup> Department of Biodiversity, Conservation and Attractions (2022) *Priority ecological communities for Western Australia Version 3*. 1 June 2022.

<sup>51</sup> Environment Australia (2001) *A Directory of Important Wetlands in Australia* (ANCA), Third edition. Canberra.

<sup>52</sup> Calculated as the addition of 1.54 ha and 1.67 ha, and the removal of 2.2 ha and 0.5 ha.

this case does not constitute a future act. We also accept DMIRS' advice that it has had regard for registered Aboriginal sites of significance in its assessment.

We note that it is the responsibility of the permit holder to comply with the *Aboriginal Heritage Act 1972*, and to ensure that no unauthorised damage to Aboriginal sites occurs during clearing activities. We explain our reasoning below.

### **EP Act states CEO to consider relevant planning and other matters**

Section 51O of the EP Act sets out the principles and instruments that the CEO shall have regard to when making decisions about clearing applications, which include: the clearing principles as far as they are relevant to the matter under consideration; and any development approval, planning instrument, or other matter, that the CEO considers relevant.

DWER's Guide to Assessment sets out the considerations for these relevant matters:

When assessing planning instruments, relevant local and regional level planning strategies, by-laws and policies should be considered as part of the recommendations to the CEO. Examples of these include local biodiversity guidelines and related local biodiversity plans prepared by local government, or regional planning strategies dealing with public infrastructure ...

'Other matters' are not defined in the EP Act, and consequently are any matters the CEO considers relevant. Other matters are generally environmental issues not directly within the scope of the clearing principles, but within the object and principles of the Act.<sup>53</sup>

### **Local planning framework recognises value of natural resources**

The aims in the *Shire of Northampton Local Planning Scheme No. 10* (Planning Scheme) include to: 'make optimum use of ... natural resources while maintaining a high level of environmental management', and 'ensure significant landscape and environmental features, conservation values and places of heritage value are conserved and/or enhanced'.<sup>54</sup>

The land on which the amended permit footprint is located is zoned 'Rural'. The broad objectives of the 'Rural' zone include: 'To maintain and enhance the environmental qualities of the landscape, vegetation, soils and water bodies, to protect sensitive areas especially the natural valley and watercourse systems from damage'. Mining operations are allowed on 'Rural' zoned land where the local government has granted development approval.<sup>55</sup>

The *Shire of Northampton Local Planning Strategy* (Planning Strategy) has four objectives, including: 'To protect and enhance, in a sustainable manner, the key physical resources and environmental values of the Shire'.<sup>56</sup> The Planning Strategy describes objectives, strategies and actions in relation to four key areas; under 'Physical Environment', which has the objective 'To protect and enhance in a sustainable manner the key physical resources and environmental values of the Shire', the importance of the natural environment is recognised:

... Manage natural resources, including significant vegetation, diverse and dynamic rural landscapes and visual qualities of areas surrounding townsites and areas adjacent to major tourist routes in an environmentally and ecologically sustainable manner.<sup>57</sup>

The Planning Strategy also recognises the importance of mineral resources in this section:

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<sup>53</sup> Department of Environment Regulation (2014), page 39.

<sup>54</sup> Department of Planning, Lands and Heritage (2020), *Shire of Northampton Local Planning Scheme No. 10*. Original gazettal 6 January 2012, last updated 24 December 2020. Clause 9.

<sup>55</sup> Department of Planning, Lands and Heritage (2020), Part 3 and clause 18(2).

<sup>56</sup> Larry Smith Planning (2022) *Shire of Northampton Local Planning Strategy*. Endorsed by the Western Australian Planning Commission, 19 May 2022. Part 1 section 2.3.

<sup>57</sup> Larry Smith Planning (2022), Part 1 section 2.8.

Operating mines and quarries should be protected from sterilisation or hindrance by the encroachment of incompatible development, and adequate separation distances between mining operations and nearby sensitive land uses should be maintained.

Known resources and areas of identified high resource potential should not be unnecessarily sterilised by incompatible zoning, land use permissibility or development.

Access to land for exploration and possible development should be maintained over as much of the Local Planning Strategy area as possible.<sup>58</sup>

Of particular note, the Planning Strategy acknowledges the mining of various mineral resources within the Shire of Northampton since the 1850s, including garnet.<sup>59</sup>

### **Permit holder holds tenure over amended permit footprint**

The permit holder owns the land parcel on which the amended permit footprint is located (being Lot 1 on Plan 91564, freehold). The amended permit footprint is wholly located within Mining Lease M70/1280 and Miscellaneous Licence 70/134, held by the permit holder.

### **Clearing purpose consistent with State and regional planning frameworks**

*State Planning Policy 1: State Planning Framework Policy* brings together existing State and regional policies, strategies, plans and guidelines within a central State Planning Framework.<sup>60</sup> It intends for sub-regional strategies to guide change and to establish a basis for cooperative action to be taken by State and local governments on land use change.

In this regard, we note that the *Mid West Regional Planning and Infrastructure Framework* recognises mining (and oil and gas) as ‘the Mid West region’s most valuable sector’ with at least 30 mineral types mined; the location of the amended permit footprint is identified as a source of ‘heavy mineral sands’.<sup>61</sup> In addition, the *Guilderton to Kalbarri Sub-regional Strategy* identifies the location of the amended permit as a source of ‘industrial mineral’.<sup>62</sup>

*State Planning Policy 2.4: Planning for Basic Raw Materials* is the strategic planning guidance which sets the high order policy matters to be considered when making decisions in relation to extraction proposals or development that may impact on extraction activities.<sup>63</sup> Under this Policy, the *GeoVIEW.WA*<sup>64</sup> mapping identifies three types of sites of importance in relation to basic raw materials: Significant Geological Supplies; Extraction Sites; and Exclusion Areas. The amended permit footprint is not mapped as any of these.

### **DMIRS undertook consultation and considered heritage values**

Under section 51E(4A)-(4C) of the EP Act, the CEO must invite comments on a clearing application within a specified period from any public authority or person who has, in the opinion of the CEO, a direct interest in the subject matter of that application. Further, the CEO must publish the application in the prescribed manner, inviting any person to comment within a specified period. There is no requirement under the EP Act to publicly advertise or invite comment on a clearing permit amendment application.

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<sup>58</sup> Larry Smith Planning (2022), Part 1 section 2.8.

<sup>59</sup> Larry Smith Planning (2022), Part 1 section 2.8 and Part 2 section 3.9 and Figure 6.

<sup>60</sup> Western Australian Planning Commission (2017) *State Planning Policy 1: State Planning Framework Policy*. Originally gazetted on 22 December 1998, last updated November 2017.

<sup>61</sup> Department of Planning (2015) *Mid West Regional Planning and Infrastructure Framework*. Western Australian Planning Commission, February 2015. Part A page 9 and Figure 11.

<sup>62</sup> Department of Planning (2019) *Guilderton to Kalbarri Sub-regional Strategy*. Western Australian Planning Commission, May 2019. Page 47 Map 9.

<sup>63</sup> Western Australian Planning Commission (2021) *State Planning Policy 2.4: Planning for Basic Raw Materials*. 16 July 2021.

<sup>64</sup> <https://www.dmp.wa.gov.au/GeoView-WA-Interactive-1467.aspx>

DMIRS advised that in the interest of transparency, it publicly advertises all amendment applications for a minimum of seven days, and invites direct interest parties to comment on a case by case. In relation to this amendment, DMIRS advised:

Amendment application CPS 3891/4 was publicly advertised on 30 July 2021 for a 21 day public comment period. Direct interest party letters were also sent to the Shire of Northampton, Yamatji Marlpa Aboriginal Corporation and the Bundi Yamatji Aboriginal Corporation inviting comment on the amendment application.<sup>65</sup>

DMIRS considered that the requirements for public consultation under the EP Act were fulfilled for the original clearing permit application, and that there has been adequate consultation for this (as well as previous) amendment. DMIRS recommended, however, that the permit holder undertake further engagement and consultation with stakeholders, in particular neighbours and parties that may be impacted by the proposed works:

This is particularly pertinent to any submission of a Mining Proposal or Mine Closure Plan, regulated under the *Mining Act 1978*. As per the *Statutory Guidelines for Mining Proposals*, the mining proposal must include information on the engagement that has been undertaken with stakeholders, a record of the engagement undertaken to date and include a strategy for ongoing engagement. For any Mine Closure Plan, a Stakeholder Engagement Register and Stakeholder Engagement Strategy must be included with the submission.<sup>66</sup>

DMIRS acknowledged the native title claim (WC2019/008) over the application area, which was determined by the Federal Court on behalf of the claimant. The future acts regime in the *Native Title Act 1993* (Cth) establishes procedures to be followed so that the future act, including for instance the grant or renewal of mining and exploration licences or permits, can be validly done. The procedures differ depending on the type of future act. Most relevant in the resources sector is the 'right to negotiate' given to native title parties<sup>67</sup>. Future acts can include the making, amendment or repeal of legislation, and the grant or renewal of licences and permits, e.g. for mining and exploration. DMIRS advised that the amended permit does not constitute a future act under the *Native Title Act 1993* (Cth):

The mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.<sup>68</sup>

DMIRS advised that it invited the Yamatji Marlpa Aboriginal Corporation and the Bundi Yamatji Aboriginal Corporation, being representative bodies on behalf of the Hutt River Mob (Nhunda people), to comment on the amendment application, and that in response the Yamatji Southern Regional Corporation advised that it had entered into a Standard Heritage Agreement with the permit holder.<sup>69</sup>

In relation to Aboriginal sites of significance, DMIRS advised that by available databases there are no registered sites within the permit footprint. We note that it is the responsibility of the permit holder to comply with the *Aboriginal Heritage Act 1972*, and to ensure that no unauthorised damage to Aboriginal sites occurs during clearing activities.

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<sup>65</sup> Department of Mines, Industry Regulation and Safety response to Appeal 035/21 (22 October 2021), page 7.

<sup>66</sup> Department of Mines, Industry Regulation and Safety response to Appeal 035/21 (22 October 2021), page 8.

<sup>67</sup> Attorney General, Australian Government, 2022; <https://www.ag.gov.au/legal-system/native-title/future-acts-regime#:~:text=The%20future%20acts%20regime%20in,given%20to%20native%20title%20parties>.

<sup>68</sup> Department of Mines, Industry Regulation and Safety response to Appeal 035/21 (22 October 2021), page 7.

<sup>69</sup> Department of Mines, Industry Regulation and Safety response to Appeal 035/21 (22 October 2021), page 7.

## 2.3 Should the clearing permit have been amended and if so, are the conditions adequate to manage impacts?

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Having considered DMIRS' assessment of the amendment application for environmental values and other relevant matters, our investigation now turns to whether the amendment should have been made and if so, whether the conditions are adequate to manage impacts.

We conclude that DMIRS' decision to amend the clearing permit was justified and that DMIRS has generally applied reasonable conditions to manage the identified impacts so that the proposed clearing does not lead to unacceptable risks to the environment. We consider, however, that the amended permit should be strengthened for the benefit of environmental values. We explain our reasoning below.

### **Purpose of clearing is necessary for mine safety**

On the available information, we understand that:

- the western added area is for the construction of a 12 metre wide infrastructure corridor and access road to a proposed communications tower on a high point in the landscape
- the eastern added area is to align the permit footprint with tenement boundaries.

By the above, we note that the clearing is to support improvements to the communications aspect of the mining operation. We also note that the original clearing permit was granted in November 2010, is supported by various other approvals, and that the amendment in this case centres around altering the shape and size of the permit footprint but does not increase the extent of native vegetation authorised to be cleared nor change any of the conditions.

While we find that, in addition to DMIRS' assessment conclusions, the proposed clearing may be at variance to clearing principles (a) and (b) for the reasons set out in section 2.1, we consider that the purpose of the proposed clearing is important for operational safety. On this basis we consider that DMIRS was justified in amending the clearing permit.

Having established that the amendment of the clearing permit is justified, we now consider the adequacy of the conditions to manage the identified environmental impacts.

### **Risk of potential impacts on supporting habitat for priority flora and short-range endemic fauna minimised**

In section 2.1 we found that *Beyeria cinerea* subsp. *cinerea* (Priority 3) was recorded within sample site 'B01', and that the proposed clearing may impact on its supporting habitat. Given this we consider that a buffer between the supporting habitat of known records of the species and the proposed clearing is warranted to protect the species from edge effects.

To ensure a level of consistency for the protection of conservation significant flora, we reviewed a number of other clearing permits relating to mining activities where buffers have been applied. This included reviewing three clearing permits where buffers have been considered on appeal (refer section 3.2). Based on our review we consider that a buffer of 10 metres (m) appears to be reasonable in relation to Priority 3 flora.

We also found that the western added area extends into an area of fauna habitat 'VSA3', which has been identified as suitable habitat for a 'likely' SRE isopod by the 2013 Fauna Assessment. This fauna habitat was avoided in previous versions of the clearing permit. We also noted the permit holder's commitment to undertaking an SRE survey. Given this we considered a precautionary approach by restricting clearing within fauna habitat 'VSA3' (within the western added area) pending the outcome of the SRE survey.

We afforded the permit holder an opportunity to consider and comment on our suggestions that a 10 m buffer is applied to known records of *Beyeria cinerea* subsp. *cinerea* (Priority 3), and to restrict clearing within the western added area pending further SRE survey work.

In response the permit holder advised that *Beyeria cinerea* subsp. *cinerea* (Priority 3) does not occur within the amended permit footprint and will not be directly impacted by the proposed clearing, and considered that a buffer is not required on this basis. The permit holder also advised that the isopod *Buddelundia '81'* has not been confirmed to be an SRE, and that the limited extent of clearing within the western added area is likely to have a negligible impact on any potential SRE species populations associated with fauna habitat 'VSA3' as a whole. Further, the permit holder noted that an SRE survey had been recently conducted with a report currently in preparation, and considered that on this basis restricting clearing until further SRE survey work had been completed is not warranted.

During a subsequent meeting, we invited the permit holder to consider reducing the width of the western added area (which is currently about 57-67 m wide, over a length of about 237-250 m) to provide a buffer in proximity to sample site 'B01' and to avoid areas of limestone outcropping that may be present<sup>70</sup>. We also invited the permit holder to provide an outline of the preliminary findings from the recent SRE survey as relevant to the western added area.

The permit holder advised that the current broad width of the western added area allows for flexibility in locating the infrastructure corridor (which includes the access road), however noted that there may be scope to reduce these. In this regard the permit holder proposed to reduce the width of the infrastructure corridor to 8 m (from 12 m) to avoid potential limestone outcroppings, and to reduce the width of the western added area by removing a linear strip along the length of the west-south-west facing perimeter:

... AGPL can reduce the width of the permit clearing area (57-67m width) for the access road (referred to as the south-west perimeter adjacent to sample site B01) to the actual extent of the western side of the access road. The access road is ~8m wide. This will give a separation distance of ~43m from site B01 to the western edge of the access road. Rough figure given below as visual aid.<sup>71</sup>



The permit holder also provided the preliminary findings from the recent SRE survey, which indicate that potential SRE fauna are unlikely to be significantly impacted by the clearing.

<sup>70</sup> Being habitat within which the isopod *Buddelundia '81'* (a 'likely' SRE) was recorded in 2013.

<sup>71</sup> MBS Environmental (2022) Email correspondence on behalf of permit holder email correspondence with this Office about buffers and fauna habitat, 7 September-16 November 2022.

In this regard, the preliminary findings note that ‘a total of 27 invertebrate samples representing eight species belonging to SRE groups were collected’ from two SRE sample sites located within the broader 20 ha of fauna habitat ‘VSA3’ traversed by the western added area<sup>72</sup>. Of these, one species *Buddelundia* ‘BIS497’ (recorded from two specimens) was considered to be potentially restricted to ‘VSA3’ and a ‘Likely Potential’ SRE:

It is possible that the [*Buddelundia*] ‘BIS497’ aligns with *Buddelundia* ‘81’ recognized by Phoenix Environmental, but even if both species align, all known records will remain potentially restricted to the VSA3 area. The WAM database shows eleven records from an undescribed species of *Buddelundia* collected from around the Project area. There is a possibility that those records could align with *B.* ‘BIS497’, but that would require examining of museum specimens to confirm. However, our findings agree with those discussed in Bamford 2013, where the current records for the undescribed *Buddelundia* species found at the VSA3 appear to show a potentially restricted distribution range, although other factors need to be considered to assess the SRE status ...

... Known linear ranges for several of the described *Buddelundia* species can extend anywhere between 120 to 350 linear km, sometimes even broader than that ...

Considering the known linear ranges for the genus, and the fact that the habitat where the species was recorded appears to be widespread around and beyond the Project, it is not expected that *Buddelundia* ‘BIS497’ will represent an SRE. Nonetheless, without further records, it is impossible to consider the species as Widespread, and by following the SRE criteria established by Harvey 2002 and suggested by the EPA 2016b, the current known range for this species will classify it as a Likely Potential SRE.<sup>73</sup>

By our calculation, the permit holder’s proposed reduction in the width of the western added area along the length of the west-south-west facing perimeter ‘to the actual extent of the western side of the access road’ (being a reduction of about 17-27 m to 40 m):

- avoids clearing impacts on possible supporting habitat for the nearest record of priority flora from the 2013 Flora and Vegetation Survey by retaining a separation distance to sample site ‘B01’
- reduces the width of the western added area to about 40 m (from about 57-67 m) and reduces its footprint to about 0.97 ha (from 1.54 ha), while still allowing for flexibility in locating the infrastructure corridor
- reduces the overall amended permit footprint and its extent within fauna habitat ‘VSA3’ by about 0.57 ha.

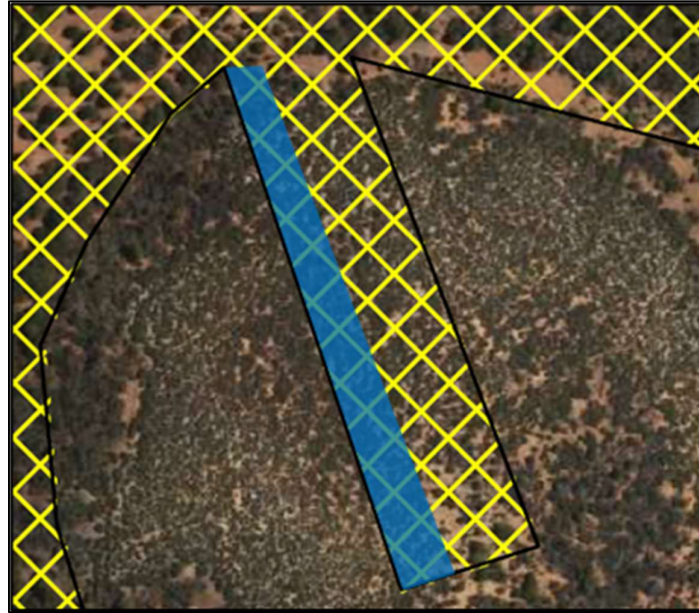
Given this, we recommend that Figure 1 in Schedule 1 of the amended permit is revised to reduce the width of the western added area by removing a linear strip along the length of the west-south-west facing perimeter in line with the permit holder’s proposal (Figure 3).

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<sup>72</sup> Neither of these is located within the western added area.

<sup>73</sup> MBS Environmental (2022) Email correspondence on behalf of permit holder email correspondence with this Office about buffers and fauna habitat, 7 September-16 November 2022. Attachment (preliminary findings).

**Figure 3** Indicative area to be removed from western added area (blue shading)<sup>74</sup>



Further, while not conditioned in the amended permit, the permit holder's proposed reduction in the width of the infrastructure corridor to 8 m (from 12 m) will reduce the extent of clearing within the western added area to about 0.2 ha (from about 0.3 ha). With regard for the extent of fauna habitat 'VSA3' in the local area (20 ha plus a further 90 ha to the north), we consider that the clearing risk on any SRE fauna that may be present has been minimised.

In relation to the mitigation of impacts to local habitat and ecological linkage values, we understand from DMIRS' advice that the permit holder has committed to continuous rehabilitation. In addition, DMIRS advised that submission of a Mining Proposal or Mine Closure Plan under the *Mining Act 1978* should take account of the *Statutory Guidelines for Mining Proposals*. We note that these guidelines include requirements for rehabilitation.

## **2.4 Additional changes to conditions recommended**

During our review of other clearing permits relating to mining activities (discussed in section 2.3) we noted that many clearing permits (including adjacent Clearing Permit CPS 9057/1) contain a fauna management requirement that clearing is to be conducted in a slow, progressive and single-directional manner to allow fauna to move out of the clearing path.

In this case the amended permit authorises the clearing of 90 ha of native vegetation within a footprint of about 145 ha. In this report we identified that the amended permit footprint (subject to our recommended reduction) contains native vegetation in 'Very Good' to 'Good' condition, and is located in a broader area subject to past and present clearing.

To ensure a level of consistency with other clearing permits and for the benefit of fauna impacted by the proposed clearing, we recommend that a condition is added to the amended permit that requires the permit holder to conduct clearing activities in a slow, progressive manner from one direction to the other to allow fauna to move into adjacent native vegetation ahead of the clearing activity.

<sup>74</sup> Excerpt from: Department of Mines, Industry Regulation and Safety (2021), clearing permit, Figure 1 in Schedule 1.



## 2.5 Other matters

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Appellants raised matters in the appeals that were not directly related to the amendment of the clearing permit and clearing. However, for completeness, the appellants' concerns in relation to these matters are noted below, together with DMIRS' advice.

### Alternative location for infrastructure

In response to the appeals the permit holder advised that the communications tower would support safety at the mine and requires placement on the crest of a hill to provide a clear path for the transmitted signal to receiving antennas.

DMIRS advised that available databases and contours of the land indicate that the added areas are the highest points of the tenement.<sup>75</sup>

### Impacts of water use

One appellant raised concern with the volume of water that will be used and the effect on bordering ecosystems and wetlands.

DMIRS noted that water abstraction associated with the proposed mining operation, including taking water, constructing wells and interfering with the bed and banks of watercourses, is regulated by DWER under the *Rights in Water and Irrigation Act 1914*.<sup>76</sup>

In this case the permit holder has been issued a Licence to Take Water from the Carnarvon-Tumblagooda aquifer for mineral ore processing and other mining purposes, including dust suppression<sup>77</sup>.

We note that Works Approval W6214/2019/1, issued by DWER for mineral sands mining or processing, contains conditions that require the permit holder to implement groundwater monitoring before the commencement of mining operations. Refer to section 3.3 for more detail.

### Impacts from project activities after clearing

Two appellants raised concerns about project activities after clearing, including road safety from more trucks, noise, light and visual impacts. One appellant submitted that the proposal is adjacent to a tourist route and that any clearing, noise and light pollution would be visible.

In response to these concerns, DMIRS advised that:

- DWER regulates noise under the *Environmental Protection (Noise) Regulations 1997*
- wind erosion could occur within cleared areas; condition 7 on the amended permit requires the permit holder to implement and adhere to a dust management plan
- in regard to light, aesthetics and visual amenity, it is unlikely that the added areas will result in significant changes since the previous permit footprint
- traffic on local roads is managed by the local government and/or Main Roads WA.<sup>78</sup>

Further to the above, we note that Works Approval W6214/2019/1 contains environmental management conditions that require the permit holder to address the risk of land use related impacts, including noise and dust.

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<sup>75</sup> Department of Mines, Industry Regulation and Safety response to Appeal 035/21 (22 October 2021), page 6.

<sup>76</sup> Department of Mines, Industry Regulation and Safety response to Appeal 035/21 (22 October 2021), page 6.

<sup>77</sup> Department of Water and Environmental Regulation (2019) *Decision Report for Works Approval number W6215/2019/1 for Balline Garnet Mine*. 29 April 2019. Page 9.

<sup>78</sup> Department of Mines, Industry Regulation and Safety response to Appeal 035/21 (22 October 2021), page 8-9.

### 3 Supporting information

#### 3.1 DMIRS' assessment of the amendment application

Clearing Permit CPS 3891/1 was granted by the former Department of Mines and Petroleum (DMP; now DMIRS) on 25 November 2010 under section 51E of the EP Act, authorising the permit holder to clear up to 90 ha of native vegetation within Mining Lease 70/1280 and Miscellaneous Licence 70/134, for the purpose of mineral production and associated activities.

Since the original grant, the clearing permit has been amended on three occasions. These amendments are summarised in Table 2.

**Table 2** Versions of Clearing Permit CPS 3891

| Version | Grant date       | Agency | Amendments  |
|---------|------------------|--------|---|
| 3891/1  | 25 November 2010 | DMP    | Original permit to clear 90 ha within a permit footprint of 144.518 ha <sup>79</sup> , with a duration five years expiring 31 December 2015.  |
| 3891/2  | 30 July 2015     | DMP    | To remove 'avoid, minimise, reduce' condition, and to extend duration by five years from 31 December 2015 to 31 December 2020. Assessment identified three registered Aboriginal sites not recognised in /1.  |
| 3891/3  | 29 October 2020  | DMIRS  | To extend purpose to 'and associated activities', to reinstate 'avoid, minimise, reduce' condition, to add an erosion management conditions, and to extend duration by five years from 31 December 2020 to 31 December 2025. Aboriginal sites from /2 not recognised. |
| 3891/4  | 7 September 2021 | DMIRS  | To change shape and size of permit footprint for an overall increase to 145.785 ha.   |

The amended permit footprint is indicated in Figure 4.

**Figure 4** Changes to permit footprint (cross-hatched yellow) from CPS 3891/3 (left) to CPS 3891/4 (right)<sup>80</sup>; areas added in amended permit indicated by red circles



<sup>79</sup> As digitised in CPS Database: <https://cps.dwer.wa.gov.au/main.html> (136.677 + 7.841)

<sup>80</sup> Department of Mines, Industry Regulation and Safety (2021), decision report, page 2.

DMIRS' assessment of the environmental values of the permit footprint (all permit versions) concluded that the proposed clearing 'is at variance' with clearing principle (e), 'may be at variance' with clearing principles (b), (g) and (h), and 'is not likely to be at variance' or 'is not at variance' with clearing principles (a), (c), (d), (f), (i) and (j). DMIRS' considerations in relation to these matters are outlined below.

### **Biodiversity, fauna, flora and ecological communities**

- The condition of vegetation in the permit footprint ranges from 'Very Good' to 'Degraded'.
- Ten conservation significant fauna species have been recorded in the local area; the permit footprint may be utilised by some of these species however is not likely to comprise significant habitat for them.
- Surveys did not identify any conservation significant flora or ecological communities in the permit footprint.
- Given impacts from past agricultural activities, the permit footprint is unlikely to support large numbers of fauna species.

### **Vegetation extent, riparian vegetation, conservation areas**

- The IBRA bioregion, mapped vegetation association in IBRA bioregion, and local government area all retain more than 30 per cent<sup>81</sup> native vegetation extent.
- There are no watercourses or wetlands in the permit footprint.
- The nearest conservation area is Utcha Well Nature Reserve, located about 2.7 km from the permit footprint.
- The permit footprint may form part of an ecological corridor with a conservation area; the proposed clearing will result in further remnant fragmentation and may affect its viability.
- Highly mobile species such as birds are unlikely to be affected by potential impacts on ecological connectivity as a result of the proposed clearing.

### **Land and water resources**

- The sandy soils in the permit footprint have a high infiltration rate, implying little surface runoff to lower lying areas.
- The sandy soils in the permit footprint may be at risk of wind erosion if left cleared.
- Groundwater underlying the permit footprint is considered to be fresh to brackish.
- Average rainfall and evaporation rates, and absence of a fresh water lens at the top of the water table, suggest that rainfall recharge rates are low.

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<sup>81</sup> The *National Objectives and Targets for Biodiversity Conservation 2001-2005* aims to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level. This threshold is also recognised by the Environmental Protection Authority in *Environmental Guidance for Planning and Development*.

## 3.2 Environmental values of areas added to permit footprint

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### Fauna and fauna habitats

Fauna surveys relevant to the amended permit footprint include the following:

- 2008 Flora and Fauna Assessment<sup>82</sup>
- 2009 Subterranean Fauna Survey<sup>83</sup>
- 2013 Fauna Assessment<sup>84</sup>
- 2021 Vertebrate Fauna Survey<sup>85</sup>.

The fauna habitats determined through the biological surveys are described in Table 3. The locations of fauna sample sites are indicated in Table 4.

Within a 20 km radius of the amended permit footprint, there are records for 10 threatened, three priority, one conservation dependent, one other specially protected and 24 migratory fauna species. Excluding those species which frequent marine, estuarine and wetland environments (which are not present within the added areas), the species that may utilise the added areas are outlined in Table 5.

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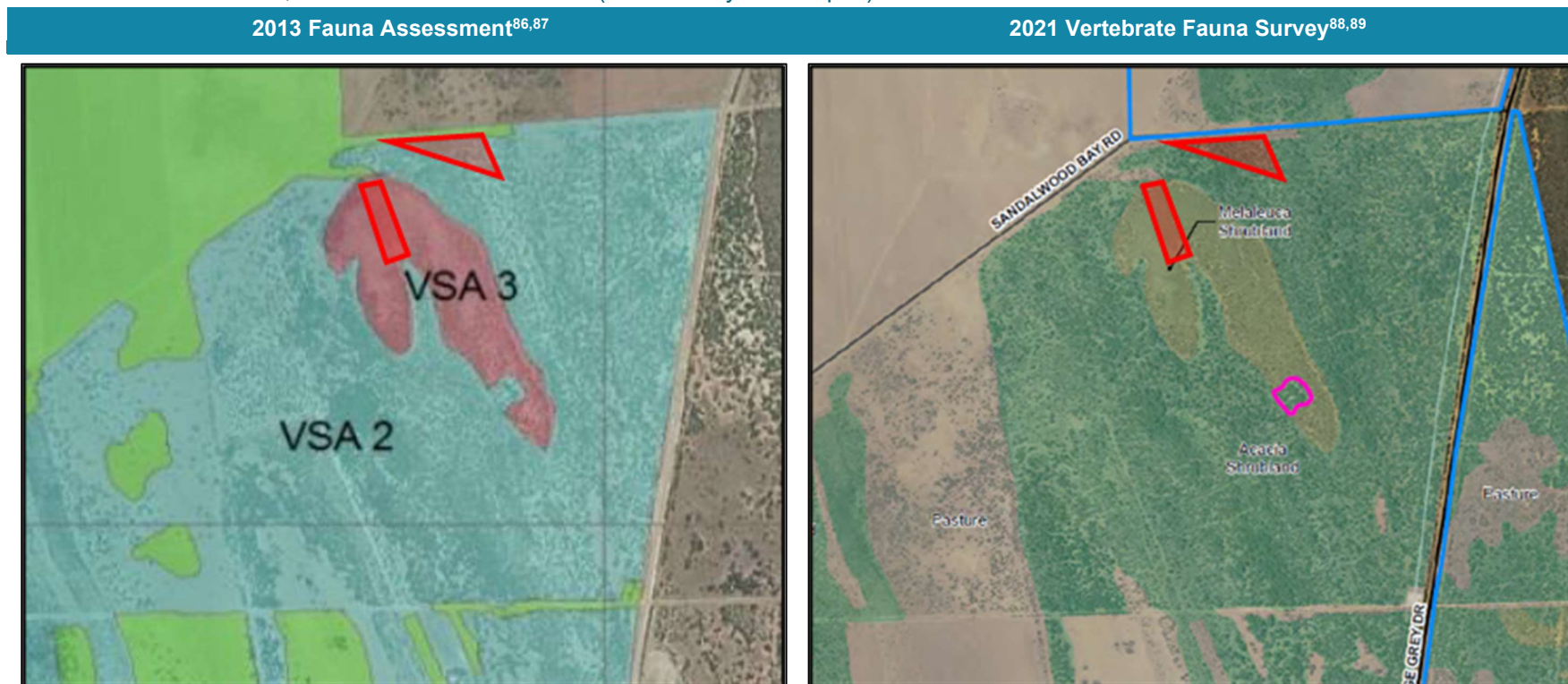
<sup>82</sup> Ecoscape Pty Ltd (2009).

<sup>83</sup> Goater, S. and Knott, B. (2009).

<sup>84</sup> M.J & A.R. Bamford Consulting Ecologists (2013).

<sup>85</sup> Onshore Environmental Consultants Pty Ltd (2022b).

**Table 3** Fauna habitats, as relevant to added areas (indicated by red shapes)



<sup>86</sup> M.J & A.R. Bamford Consulting Ecologists (2013), page 22 Figure 4.

<sup>87</sup> M.J & A.R. Bamford Consulting Ecologists (2013), pages 24-25 Figures 7 and 9.

<sup>88</sup> Onshore Environmental Consultants Pty Ltd (2022b), page 30 Figure 7.

<sup>89</sup> Onshore Environmental Consultants Pty Ltd (2022b), pages 27-28.

**VSA3:** *Melaleuca* Acacia Shrubland to Tall Shrubland on grey sand over limestone, important for most native fauna still present in the area, providing habitat and connectivity across the landscape.



**Melaleuca Shrublands:** Low Heath C of *Melaleuca cardiophylla* over Dwarf Scrub D of *Melaleuca cardiophylla*, *Beyeria cinerea* subsp. *borealis* and *Melaleuca campanae* Open Low Scrub A of *Grevillea argyrophylla* and (*Melaleuca cardiophylla*).



**VSA2:** *Acacia* Shrubland to Tall Shrubland on yellow-brown sands, important for most native fauna still present in the area, providing habitat and connectivity across the landscape.



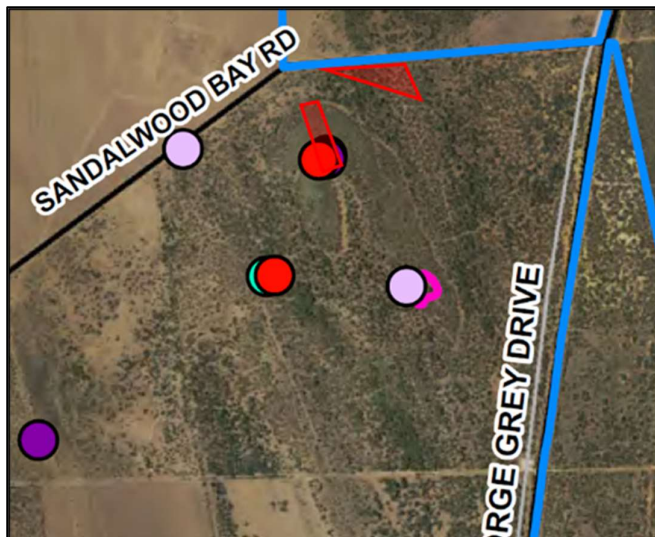
**Acacia Shrublands:** Scrub of *Acacia rostellifera* over Low Scrub B of *Olearia* cf. sp. Kennedy Range (G. Byrne 66), *Pimelea microcephala* and *Rhagodia preissii* subsp. *obovata* over Very Open Herbs of *\*Brassica tournefortii*, *Calandrinia polyandra* and *\*Urospermum picroides*.



\* Denotes an introduced (non-native) species.

**Table 4** Fauna sample sites, as relevant to added areas (indicated by red shapes)

2021 Vertebrate Fauna Survey<sup>90,91</sup>



**Red circle 'Trap site':** Four trapping sites were established within the study area; with two sites within each habitat type. Two trapping sites were established within the proposed impact area and two were located outside the proposed impact area. Trap location was chosen to target higher quality habitat with consideration of habitat features likely to support a variety of species. Each trapping site consisted of split trap lines comprising five drift fences. Trap lines were split to provide greater spatial representation across the habitat type and to target areas of high-quality microhabitats (i.e. areas with shade, dense vegetation cover and leaf litter cover). Each drift fence comprised two pit-fall traps (20 litre buckets), two funnel traps and one small Elliot (Elliot A) trap. Pit fall traps were located approximately 4 m apart, with funnels at each end of the drift fence. Small Elliot traps were strategically located at each trap line. A total of 110 traps (40 pit-falls, 40 funnel and 20 small Elliot traps) were deployed for seven nights across the two sites. Funnel traps were covered with branches and debris was placed in the bottom of pit fall traps to provide shade for captures. Traps were checked early in the day and were cleared within four hours of sunrise.

**Purple circle 'Bat detector':** A Bioacoustics Audio Recorder (BAR) was used to record crepuscular audio within the study area. One unit was deployed for one night at each of the two trapping sites with additional deployments throughout the study area. This BAR unit was set up to record for an hour before and after sunrise and sunset.

**Pale green circle 'ARD':** Autonomous Recording Units (ARU) were also deployed throughout the study area. These units are designed to record bird calls at dawn when birds are most active. Each trap site had an ARU deployed for one morning, with additional deployments occurring throughout the study area.

**Pink/mauve circle 'Camera trap':** Motion cameras were set up throughout the study area within all habitats identified. Motion cameras were baited with universal bait. A total of eleven cameras were deployed, with five cameras deployed for six nights, one camera deployed for five nights, and four cameras deployed for four nights.

<sup>90</sup> Onshore Environmental Consultants Pty Ltd (2022b), page 14 Figure 4.

<sup>91</sup> Onshore Environmental Consultants Pty Ltd (2022b), pages 10-13.

**Table 5** Terrestrial fauna records, as relevant to added areas

| Species   | Description  | Distance |
|---|--|----------|
| Geraldton Sandplain shield-backed trapdoor spider ( <i>Idiosoma arenaceum</i> ; Priority 3) | A paper by researchers from the WA Museum and other institutions <sup>92</sup> describes unique characteristics of spiders of the genus <i>Idiosoma</i> , including 'moustache-like' burrow entrances and typically restricted short-range endemic distributions, and outlines some threats to their continued survival. The paper indicates that the species has a moderately widespread distribution in the Geraldton Sandplains and far northern Avon Wheatbelt bioregions. The Commonwealth Conservation Advice for related species shield-backed trapdoor spider ( <i>Idiosoma nigrum</i> ; Vulnerable) <sup>93</sup> indicates that <i>Idiosoma</i> typically inhabits soils of <i>Eucalyptus</i> woodlands and <i>Acacia</i> vegetation, and relies heavily on leaf litter to build its burrow. | 8.1 km   |
| Stripe-sided robust slider ( <i>Lerista axillaris</i> ; Priority 2)                         | The Reptile Database website <sup>94</sup> indicates that this species is known only from a few specimens recorded at and around a locality about 21 km south of Kalbarri.   | 13.8 km  |
| <i>Calyptorhynchus</i> sp. 'white-tailed black cockatoo'                                    | The Carnaby's cockatoo Recovery Plan <sup>95</sup> describes the habitat critical to the survival of this species as: the eucalypt woodlands that provide nest hollows used for breeding, together with nearby vegetation that provides feeding, roosting and watering habitat that supports successful breeding; woodland sites known to have supported breeding in the past and which could be used in the future, provided adequate nearby food and/or water resources are available or are re-established; and in the non-breeding season the vegetation that provides food resources as well as the sites for nearby watering and night roosting that enable the cockatoos to effectively utilise the available food resources.   | 15.1 km  |
| Carnaby's cockatoo ( <i>Calyptorhynchus latirostris</i> ; Endangered)                       | The EPBC Act <sup>96</sup> Black Cockatoo Referral Guideline <sup>97</sup> describes the foraging habitat of Carnaby's cockatoo as: native shrubland, kwongan heathland and woodland on seeds, flowers and nectar of native proteaceous plant species ( <i>Banksia</i> spp., <i>Hakea</i> spp. And <i>Grevillea</i> spp.), as well as <i>Callistemon</i> spp. And marri ( <i>Corymbia calophylla</i> ); and also seeds and fruits of introduced species, and insects and insect larvae.  | 19.2 km  |

<sup>92</sup> Rix, M.G., Huey, J.A., Cooper, S.J.B., Austin, A.D. and Harvey, M.S. (2018) *Conservation systematics of the shield-backed trapdoor spiders of the nigrum-group (Mygalomorphae, Idiopidae, Idiosoma): integrative taxonomy reveals a diverse and threatened fauna from south-western Australia*. ZooKeys 756: 1-121.

<sup>93</sup> Department of Sustainability, Environment, Water, Population and Communities (2013) *Approved Conservation Advice for Idiosoma nigrum (shield-back spider)*. Canberra.

<sup>94</sup> Australian Reptile Guide (2022) *Stripe-sided Robust Slider*.

<sup>95</sup> Department of Parks and Wildlife (2013) *Carnaby's Cockatoo (Calyptorhynchus latirostris) Recovery Plan*. Wildlife Management Program No. 52. October 2013.

<sup>96</sup> *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth).

<sup>97</sup> Department of Agriculture, Water and the Environment (2022) *Referral guideline for 3 WA threatened black cockatoo species*. Commonwealth of Australia, Canberra.



| Species   | Description  | Distance |
|---|--|----------|
| Chuditch/western quoll ( <i>Dasyurus geoffroii</i> ; Vulnerable)        | The chuditch National Recovery Plan <sup>98</sup> describes the habitat critical to the survival of this species as: a range of habitats including forest, mallee shrublands, woodland and desert (the most dense populations have been found in riparian jarrah forest); adequate numbers of suitable den and refuge sites (horizontal hollow logs or earth burrows) and sufficient prey biomass (large invertebrates, reptiles and small mammals) to survive; and habitats of a suitable size and not excessively fragmented (they have large home ranges and travel long distances).<br>The chuditch population in this locality is understood to have been translocated. <sup>99</sup> | 18.9 km  |
| Short-tongued bee ( <i>Neopasiphae simplicior</i> ; Endangered)         | The EPBC Act Conservation Advice <sup>100</sup> lists this species as 'Critically Endangered', and states that it is known only from a single location within Forrestdale Lake Nature Reserve, collected from the flowers of <i>Goodenia filiformis</i> (thread-leaved goodenia), <i>Lobelia tenuior</i> (slender lobelia), <i>Angianthus preissianus</i> , and <i>Velleia</i> sp.<br>It is unclear whether the occurrence in this locality has been mis-identified or is a new population.  | 19.2 km  |
| Peregrine falcon ( <i>Falco peregrinus</i> ; Other Specially Protected) | The Australian Museum website <sup>101</sup> states that this species 'is found in most habitats, from rainforests to the arid zone, and at most altitudes, from the coast to alpine areas. It requires abundant prey and secure nest sites, and prefers coastal and inland cliffs or open woodlands near water, and may even be found nesting on high city buildings'.  | 19.2 km  |
| Malleefowl ( <i>Leipoa ocellata</i> ; Vulnerable)                       | The malleefowl National Recovery Plan <sup>102</sup> describes the habitat critical to the survival of this species as: semi-arid to arid shrublands and low woodlands, especially those dominated by mallee and associated habitats, in some shrublands dominated by <i>Acacia</i> , and occasionally in woodlands dominated by <i>Eucalyptus</i> ; and a sandy substrate and abundance of leaf litter are required for the construction of nest mounds. The National Recovery Plan states that radio tracking studies indicate that birds may range over one to several square km and have overlapping home-ranges.  | 19.5 km  |
| Graceful sun-moth ( <i>Synemon gratiosa</i> ; Priority 4)               | DBCA describes the habitat of this species as: sedgelands, heathlands, woodlands and sometimes open parts of the forest where 'foodplants' (various grasses, sedges and mat-rushes) occur; breeding occurs on <i>Lomandra maritima</i> and <i>Lomandra hermaphrodita</i> mat-rushes, on which the caterpillars are reliant for food. <sup>103</sup>  | 20 km    |

<sup>98</sup> Department of Environment and Conservation (2012) *Chuditch (Dasyurus geoffroii) National Recovery Plan*. Wildlife Management Program No. 54.

<sup>99</sup> Department of Biodiversity, Conservation and Attractions (2017) *Fauna profiles: Chuditch Dasyurus geoffroii*.

<sup>100</sup> Department of the Environment, Water, Heritage and the Arts (2008) *Approved Conservation Advice for Neopasiphae simplicior (a short-tongued bee)*. Canberra.

<sup>101</sup> Australian Museum (2022) *Peregrine Falcon*. Government of New South Wales.

<sup>102</sup> Benschmeh, J. (2007). *National Recovery Plan for Malleefowl*. Department for Environment and Heritage, South Australia.

<sup>103</sup> Department of Environment and Conservation (2011) *Science Division Information Sheet 41/2011: Graceful Sun-moth (Synemon gratiosa)*. Perth.

## Flora and ecological communities

Flora and vegetation surveys relevant to the amended permit footprint include the following:

- 2008 Flora and Fauna Assessment<sup>104</sup>
- 2013 Flora and Vegetation Survey<sup>105</sup>
- 2021 Flora and Vegetation Survey<sup>106</sup>

The vegetation types determined through the biological surveys are described in Table 6.

The locations of vegetation sample sites are indicated in Table 7.

A list of flora species identified within vegetation sample sites 'B01', 'B02', 'B14' and 'AG-02', as relevant to the added areas, is provided in Table 8.

The added areas are broadly mapped as Beard vegetation association 17, described as: Shrublands; *Acacia rostellifera* thicket.

Within a 20 km radius of the amended permit footprint, there are records for seven threatened and 37 priority flora taxa, and one priority ecological community 'Kalbarri ironstone community'. Two of these, *Beyeria cinerea* subsp. *cinerea* (Priority 3) and *Melaleuca huttensis* (Priority 3), were recorded within or adjacent to the amended permit footprint during the 2013 and/or 2021 surveys.

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<sup>104</sup> Ecoscape Pty Ltd (2009).

<sup>105</sup> Onshore Environmental Consultants Pty Ltd (2013).

<sup>106</sup> Onshore Environmental Consultants Pty Ltd (2022a).



**12 Rhagodia Shrubland:** Shrubland of *Rhagodia latifolia* var. *latifolia*, *Pimelea microcephala*, *Olearia* sp. indet with High Open Shrubland of *Grevillea argyrophylla*, *Acacia rosterlifera*, *Santalum spicatum* over Low Open Shrubland of *Melaleuca cardiophylla*, *Scholtzia* sp. Kalbarri (N. Hoyle 623), *Diplopeltis petiolaris*; 'Very Good' condition.



**HS Mca Melaleuca Dwarf Scrub C:** Dwarf Scrub C of *Melaleuca campanae*, *Olearia pimeleoides* and *Melaleuca cardiophylla* with Open Low Scrub B of *Grevillea argyrophylla*, *Melaleuca campanae* and *Melaleuca cardiophylla* with Very Open Low Grass of *Austrostipa elegantissima*, *Austrostipa flavescens* and *\*Rostraria pumila* on brown/orange sand on Hillslopes; 'Very Good' to 'Degraded' condition.



**13 Melaleuca Low Closed Heath:** Low Closed Heath of *Melaleuca cardiophylla*, *Melaleuca campanae*, *Cryptandra arbutiflora* over Very Open Herbs of *\*Brassica tournefortii*, *\*Anagallis arvensis*; 'Very Good' condition.



**HC Mc Melaleuca Low Heath C:** Low Heath C of *Melaleuca cardiophylla* over Dwarf Scrub D of *Melaleuca cardiophylla*, *Beyeria cinerea* subsp. *borealis* and *Melaleuca campanae* with Open Low Scrub A of *Grevillea argyrophylla* and (*Melaleuca cardiophylla*) on brown/orange sand on hillcrests and upper slopes; 'Good – Very Good' condition.



**6a Acacia High Shrubland:** High Shrubland to Open Scrub *Acacia rostelifera* over Open Annual Tussock Grassland of *\*Avena barbata*, *\*Bromus rubens* and *\*Ehrharta longiflora* with Open Shrubland of *Rhagodia latifolia* var. *latifolia*, *Pimelea microcephala* and *Olearia* sp. indet; 'Good' condition.

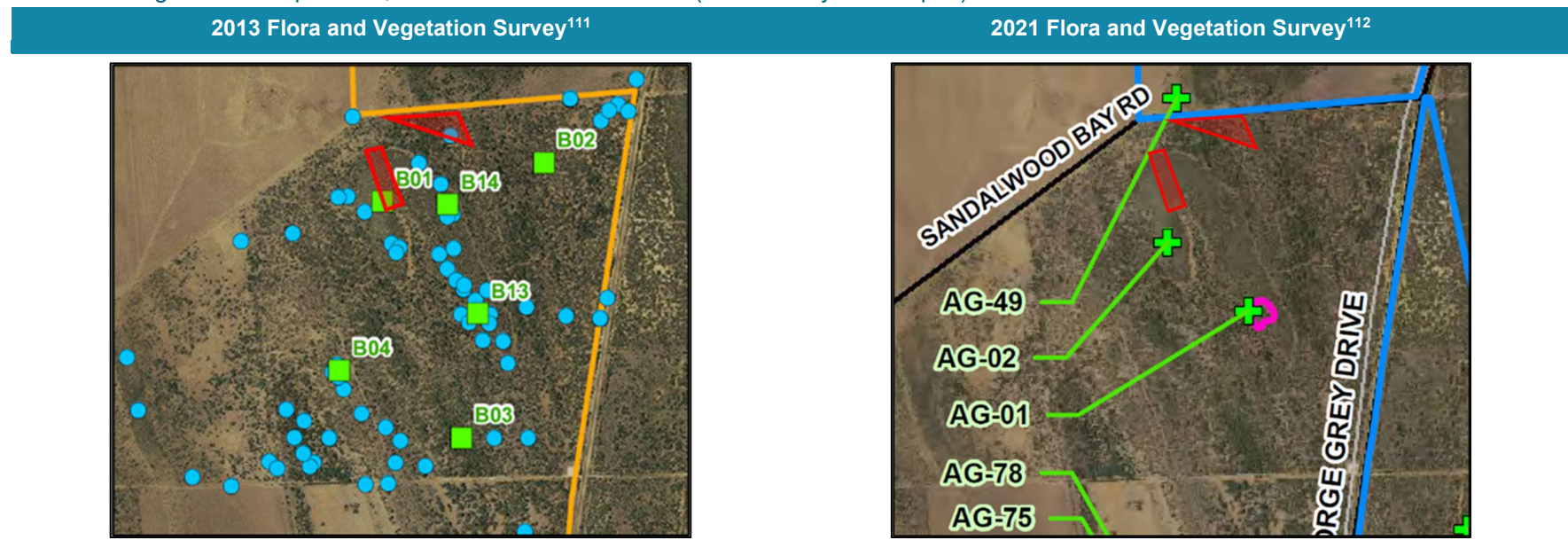


**HS Ar OKR Acacia Scrub:** Scrub of *Acacia rostelifera* over Low Scrub B of *Olearia* cf. sp. Kennedy Range (G. Byrne 66), *Pimelea microcephala* and *Rhagodia preissii* subsp. *obovata* over Very Open Herbs of *\*Brassica tournefortii*, *Calandrinia polyandra* and *\*Urospermum picroides* on orange/brown sand on hillslopes; 'Very Good' to 'Degraded' condition.



\* Denotes an introduced (non-native) species

**Table 7** Vegetation sample sites, as relevant to added areas (indicated by red shapes)



**B01** (in veg. 13/HC Mc): Low Closed Heath of *Melaleuca cardiophylla*, *Lysimachia arvensis*, *Beyria cinerea* subsp. *cinerea* over Very Open Herbs of *Brassica tournefortii*, *Anagallis arvensis*; 'Very Good' condition.

**B14** (in veg. 12/HS Mca): Shrubland of *Pimelea microcephala*, *Olearia* sp. indet, *Rhagodia latifolia* var. *latifolia* with High Open Shrubland of *Grevillea commutata*, *Acacia rostellifera* over Very Open Annual Tussock Grassland of *Austrostipa elegantissima*, *Austrostipa crinita*; 'Very Good' condition.

**B02** (in veg. 6a/HS Ar OKR): High Shrubland of *Acacia rostellifera* over Annual Open Tussock Grassland of *Avena barbata*, *Ehrharta longiflora*, *Bromus rubens* with Open Shrubland of *Rhagodia latifolia* var. *latifolia*, *Pimelea microcephala*, *Stylobasium spathulatum*; 'Good' condition.

**AG-02** (in veg. 12/HS Mca): Low Heath C of *Melaleuca campanae*, *Dodonaea aptera* and *Beyria cinerea* subsp. *borealis* over Dwarf Scrub D of *Opercularia spermacocea*, *Hibbertia spicata* and *Cryptandra mutila* with Open Low Scrub B of *Grevillea argyrophylla*; 'Very Good' condition.

<sup>111</sup> Onshore Environmental Consultants Pty Ltd (2013), page 9 Figure 'Sample Locations'.

<sup>112</sup> Onshore Environmental Consultants Pty Ltd (2022a), page 11 Figure 4.

**Table 8** Species list for vegetation sample sites 'B01', 'B02', 'B14' and 'AG-02'<sup>113</sup>

| Species  | B01 | B02 | B14 | AG-02 |
|--|-----|-----|-----|-------|
| <i>Acacia idiomorpha</i>   | Y   |     |     |       |
| <i>Acacia leptospermoides</i>                                      | Y   |     |     |       |
| <i>Acacia leptospermoides</i> subsp. <i>leptospermoides</i>        |     |     |     | Y     |
| <i>Acacia rostellifera</i> (summer-scented wattle)                 |     | Y   | Y   |       |
| <i>Acacia spathulifolia</i>  |     |     | Y   |       |
| <i>Acanthocarpus preissii</i>                                      |     | Y   |     |       |
| <i>Alyogyne hakeifolia</i>   | Y   |     |     |       |
| <i>Aphanopetalum clematideum</i>                                   | Y   |     |     |       |
| <i>Austrostipa crinita</i>   |     |     | Y   |       |
| <i>Austrostipa elegantissima</i>                                   | Y   | Y   | Y   | Y     |
| <i>Austrostipa flavescens</i>                                      |     |     |     | Y     |
| <i>Beyeria cinerea</i> subsp. <i>borealis</i>                      |     |     |     | Y     |
| <i>Beyeria cinerea</i> subsp. <i>cinerea</i> ( <b>Priority 3</b> ) | Y   |     |     |       |
| <i>Calandrinia liniflora</i>                                       | Y   | Y   |     |       |
| <i>Calandrinia polyandra</i> (parakeelya)                          | Y   |     | Y   |       |
| <i>Calandrinia</i> sp. Shark Bay (A. Markey 1405)                  |     |     |     | Y     |
| <i>Calocephalus francisii</i> (fine-leaf beauty-heads)             | Y   |     |     |       |
| <i>Carpobrotus virescens</i> (coastal pigface)                     | Y   |     |     |       |
| <i>Cassytha aurea</i> var. <i>aurea</i>                            |     |     |     | Y     |
| <i>Cassytha aurea</i> var. <i>hirta</i>                            | Y   |     |     |       |
| <i>Casuarina obesa</i> (swamp sheoak)                              | Y   |     |     |       |
| <i>Clematicissus angustissima</i>                                  |     | Y   | Y   |       |
| <i>Comesperma integerrimum</i>                                     | Y   |     |     | Y     |
| <i>Convolvulus angustissimus</i> subsp. <i>angustissimus</i>       |     |     | Y   |       |
| <i>Cryptandra arbutiflora</i> (waxy cryptandra)                    | Y   |     |     |       |
| <i>Cryptandra mutila</i>   |     |     |     | Y     |
| <i>Desmocladus asper</i>   | Y   |     |     |       |
| <i>Dillwynia pungens</i>   | Y   |     |     |       |
| <i>Dioscorea hastifolia</i> (warrine)                              | Y   | Y   | Y   | Y     |
| <i>Diplolaena grandiflora</i> (wild rose)                          | Y   |     |     |       |

<sup>113</sup> Onshore Environmental Consultants Pty Ltd (2013); Onshore Environmental Consultants Pty Ltd (2022a).

| Species  | B01 | B02 | B14 | AG-02 |
|--|-----|-----|-----|-------|
| <i>Diplolaena mollis</i>   | Y   |     | Y   |       |
| <i>Diplopeltis petiolaris</i>  | Y   |     | Y   |       |
| <i>Dodonaea aptera</i> (coast hop-bush)                                    | Y   |     |     | Y     |
| <i>Eremophila decipiens</i> (slender fuchsia)                              |     |     | Y   |       |
| <i>Eremophila decipiens</i> subsp. <i>decipiens</i> (slender fuchsia bush) | Y   |     |     |       |
| <i>Erodium cygnorum</i> (blue heronsbill)                                  |     | Y   |     |       |
| <i>Euphorbia sharkoensis</i>   |     | Y   |     |       |
| <i>Goodenia berardiana</i>   | Y   | Y   | Y   | Y     |
| <i>Grevillea argyrophylla</i> (silvery-leaved grevillea)                   |     |     |     | Y     |
| <i>Grevillea commutata</i>   |     |     | Y   |       |
| <i>Guichenotia intermedia</i>  | Y   | Y   |     |       |
| <i>Guichenotia ledifolia</i>   |     |     | Y   |       |
| <i>Hibbertia spicata</i> <sup>114</sup>                                    | Y   |     | Y   | Y     |
| <i>Hybanthus floribundus</i>   |     |     | Y   |       |
| <i>Lasiopetalum angustifolium</i> (narrow leaved lasiopetalum)             | Y   |     |     | Y     |
| <i>Lepidosperma calcicola</i>  |     |     |     | Y     |
| <i>Lepidosperma costale</i>  | Y   |     |     |       |
| <i>Logania litoralis</i>   |     |     |     | Y     |
| <i>Melaleuca campanae</i>  | Y   |     |     | Y     |
| <i>Melaleuca cardiophylla</i> (tangling melaleuca)                         | Y   |     | Y   |       |
| <i>Monotaxis bracteata</i>   |     |     | Y   |       |
| <i>Myoporum insulare</i> (blueberry tree)                                  |     |     | Y   |       |
| <i>Olearia</i> cf. sp. Kennedy Range (G. Byrne 66)                         |     |     |     | Y     |
| <i>Olearia</i> sp. indet   | Y   | Y   | Y   |       |
| <i>Opercularia spermacocea</i>   | Y   |     | Y   | Y     |
| <i>Pimelea microcephala</i> (shrubby riceflower)                           | Y   | Y   | Y   |       |
| <i>Pimelea microcephala</i> subsp. <i>microcephala</i>                     |     |     |     | Y     |
| <i>Podotheca gnaphalioides</i> (golden long-heads)                         |     | Y   |     |       |
| <i>Podotheca angustifolia</i> (sticky long-heads)                          |     |     |     | Y     |
| <i>Ptilotus divaricatus</i> (climbing mulla mulla)                         |     |     | Y   | Y     |
| <i>Ptilotus eremita</i> <sup>115</sup>                                     | Y   |     |     |       |

<sup>114</sup> Includes previously *Hibbertia spicata* subsp. *spicata* as identified in 2013 Flora and Vegetation Survey.

<sup>115</sup> Previously *Ptilotus gaudichaudii* subsp. *eremita* as identified in 2013 Flora and Vegetation Survey.

| Species   | B01 | B02 | B14 | AG-02 |
|---|-----|-----|-----|-------|
| <i>Rhagodia latifolia</i> subsp. <i>latifolia</i>                         | Y   | Y   | Y   |       |
| <i>Rhagodia latifolia</i> subsp. <i>recta</i>                             |     |     |     | Y     |
| <i>Rhodanthe polycephala</i>  |     |     |     | Y     |
| <i>Roepera fruticulosa</i> <sup>116</sup> (shrubby twinleaf)              | Y   |     | Y   | Y     |
| <i>Rytidosperma setaceum</i>  |     |     |     | Y     |
| <i>Scholtzia oligandra</i> <sup>117</sup> (pink scholtzia)                | Y   |     | Y   |       |
| <i>Senna glutinosa</i> subsp. <i>chatelainiana</i>                        | Y   |     |     |       |
| <i>Solanum oldfieldii</i>   |     | Y   |     |       |
| <i>Stylobasium spathulatum</i> (pebble bush)                              |     | Y   | Y   |       |
| <i>Tetragona implexicoma</i> (bower spinach)                              | Y   |     |     |       |
| <i>Thysanotus manglesianus</i> (fringed lily)                             |     | Y   |     | Y     |
| <i>Trachymene Pilosa</i> (native parsnip)                                 |     |     |     | Y     |
| <i>Waitzia podolepis</i>  |     |     |     | Y     |
| <i>Waitzia suaveolens</i> (fragrant waitzia)                              | Y   |     |     |       |
| * <i>Avena barbata</i> (bearded oat)                                      |     | Y   |     |       |
| * <i>Bromus diandrus</i> (great brome)                                    |     |     |     | Y     |
| * <i>Brassica tournefortii</i> (Mediterranean turnip)                     | Y   | Y   |     |       |
| * <i>Bromus rubens</i> (red brome)  |     | Y   |     |       |
| * <i>Cuscuta planiflora</i>   |     |     |     | Y     |
| * <i>Ehrharta brevifolia</i> subsp. <i>cuspidata</i> (annual veldt grass) | Y   |     |     |       |
| * <i>Ehrharta longiflora</i> (annual veldt grass)                         |     | Y   |     | Y     |
| * <i>Hypochaeris glabra</i> (smooth cats-ear)                             | Y   | Y   |     |       |
| * <i>Lysimachia arvensis</i> (pimpernel)                                  | Y   | Y   | Y   | Y     |
| * <i>Medicago truncatula</i> (barrel medic)                               | Y   | Y   |     |       |
| * <i>Rostraria pumila</i>   | Y   |     | Y   | Y     |
| * <i>Sonchus oleraceus</i> (common sowthistle)                            |     | Y   | Y   |       |
| * <i>Urospermum picroides</i> (false hawkbit)                             | Y   | Y   |     |       |
| * <i>Vulpia myuros</i> (rat's tail fescue)                                |     |     | Y   |       |

\* Denotes an introduced (non-native) species.

<sup>116</sup> Previously *Zygophyllum fruticosum* as identified in 2013 Flora and Vegetation Survey

<sup>117</sup> Previously *Scholtzia* sp. Kalbarri (N. Hoyle 623) as identified in 2013 Flora and Vegetation Survey



### Determination of buffer distances for conservation significant flora

There do not appear to be standard buffer distances for conservation significant flora and vegetation in Western Australia, and potential impacts are typically considered on a case-by-case basis. While buffer distances include scientific considerations, further considerations generally include a combination of the avoidance and mitigation measures committed to by an applicant, as well as the practical implications of proposal implementation.

To ensure a level of consistency for the protection of conservation significant flora, the protection considerations from previous appeals are provided in Table 9.

**Table 9** Determination of buffer distances for conservation significant flora

| Appeal   | Conservation significant flora     | Protection considerations – Combination of avoidance and minimisation measures and buffer distances  |
|--|------------------------------------|--|
| Appeal <a href="#">005/20</a> against amendment of clearing permit CPS 7925/4: Yandin Wind Farm, Shire of Dandagaran               | P3 priority flora                  | Combination of: <ul style="list-style-type: none"> <li>• Applicant efforts to avoid and minimise</li> <li>• 30 metre buffer requirement in permit</li> <li>• 10 metre buffer requirement in locations where 30 metres is not practical in permit.</li> </ul>                                   |
| Appeal <a href="#">057/20</a> against conditions of clearing permit CPS 8953/1: Geotechnical investigations, Juna Downs and Newman | P3 and P4 priority flora           | Combination of: <ul style="list-style-type: none"> <li>• A range of avoidance and minimisation measures by the Applicant including avoidance of specific landforms and an exclusion buffer layer as internal management mechanism</li> <li>• 10 metre buffer requirement in permit.</li> </ul> |
| Appeal <a href="#">002/21</a> against amendment of clearing permit CPS 4442/6: Pilbara Iron Company (Services) Pty Ltd             | Threatened flora<br>Priority flora | <ul style="list-style-type: none"> <li>• 50m buffer requirement for threatened flora in permit</li> <li>• 10 metre buffer requirement for priority flora in permit.</li> </ul>   |

### 3.3 Other statutory approvals relevant to Lucky Bay Garnet Mine

DMP granted a Mining Proposal to then-owner Altura Mining Pty Ltd for the broader project under the *Mining Act 1978* in 2010, however the project did not proceed. In 2014, the permit holder acquired the project portfolio and completed an updated feasibility study, with changes to the design and extent of the original project. DMP granted approval for the revised and expanded project in March 2016. The permit holder advised that a Mining Proposal to update the site access road identified is currently being developed, which proposes to use an existing unsealed pastoral track largely within cleared land.

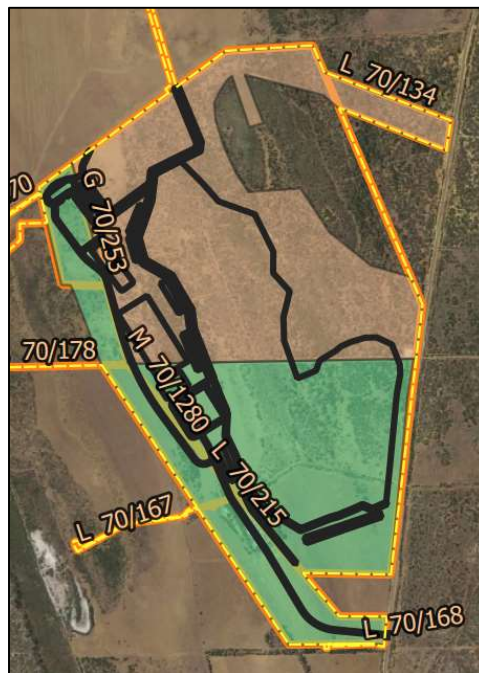
In addition to the amended permit, the permit holder holds the approvals outlined in Table 10. No appeals have been lodged against the EP Act Part V instruments listed below.

**Table 10** Related approvals

| Legislation            | Number       | Approval / Comment   |
|------------------------|--------------|--|
| EP Act, Part IV        | -            | Referred to EPA ('Not Assessed')                             |
| <i>Mining Act 1978</i> | Reg ID 55347 | Mining Proposal / Mine Closure Plan for Balline Garnet Mine. |

| Legislation                                    | Number                       | Approval / Comment   |
|--|------------------------------|--|
| <i>Rights in Water and Irrigation Act 1914</i> | GWL 170860(4)                | Licensed allocation 1.7 gigalitres/annum from Gascoyne Groundwater Area, Carnarvon-Tumblagooda aquifer, for purposes of mineral ore processing and dust suppression.   |
| EP Act, Part V                                 | <a href="#">CPS 6614/1</a>   | Permit to clear 50 hectares for mineral production on Mining Lease 70/1280 and General Purpose Lease 70/253. Expired 31 July 2020.   |
| EP Act, Part V                                 | <a href="#">CPS 7496/1</a>   | Permit to clear 4.6 hectares for mineral production on Exploration Licence 70/2509 and Miscellaneous Leases 70/166. Expired 31 May 2022.   |
| EP Act, Part V                                 | <a href="#">CPS 8358/2</a>   | Permit to clear 5.24 hectares for wind farm on General Purpose Lease 70/253 and Miscellaneous Licence 70/178; west of amended permit and partially overlapping northern portion of Clearing Permit CPS 9057/1.   |
| EP Act, Part V                                 | <a href="#">CPS 9057/1</a>   | Permit to clear 71 ha for mineral production on Mining Lease 70/1280, General Purpose Lease 70/253 and Miscellaneous Leases 70/167, 70/178, and 70/215; within a 134.72 ha footprint adjacent southern and western perimeters of amended permit (Figure 5).  |
| EP Act, Part V                                 | <a href="#">W6214/2019/1</a> | Works approval for Category 8 prescribed premises: Mineral sands mining or processing: premises on which mineral sands ore is mined, screened, separated or otherwise processed. Amended 29 May 2021 to update business details. Subject to environmental management conditions to address risk of land use related impacts, incl. noise and dust. |

**Figure 5** Clearing Permits CPS 9057/1 (pale green) and CPS 3891/4 (pale brown)<sup>118</sup>



<sup>118</sup> MBS Environmental (2021b) *Lucky Bay Garnet Mine; S38 Referral; Part A – Proposal Content Document and Consultation*. November 2021. Unpublished report prepared for Australian Garnet Pty Ltd. Page 6 Figure 2.

### 3.4 Areas of high environmental value

DMIRS advised that several locations in the locality of the amended permit are considered to have higher environmental values than the vegetation proposed to be cleared. These are summarised in Table 11.

**Table 11** Areas with high environmental values and some form of protection or recognition

| Location/area                   | Distance from permit footprint | Distance from added areas | Recognition / protection  | Approximate size (ha) |
|---------------------------------|--------------------------------|---------------------------|---|-----------------------|
| Northern Sandheaps              | 0.78 km west                   | 1.5 km west               | Schedule One Area (EPA Redbook Area within 2 km of the coastline) | 2,245.834             |
| Utcha Well Nature Reserve       | 2.5 km south                   | 3.8 km south              | DBCA managed land   | 250.83                |
| ANCA Wetland-Hutt Lagoon System | 7.2 km south                   | 8.3 km south              | Environmentally Sensitive Area                                    | 2,634.919             |
| Kalbarri National Park          | 16.2 km                        |                           | National Park / Environmentally Sensitive Area                    | 111,330.993           |

## Appendix 1 Appeal process

### The Minister assesses the merits of a decision

Environmental appeals follow a merits-based process. This means the Minister can consider all the relevant facts, legal and policy aspects of the decision and decide whether it was correct and preferable.

For appeals relating to the amendment of a clearing permit, the Minister can only consider matters directly linked to the amendment. Appeal rights do not extend to parts of the clearing permit that were not amended.

A merits review cannot overturn the original decision to grant a clearing permit. But if the appeal is upheld, the clearing permit conditions might change or an amendment might not go ahead.

### We report to the Minister, as does the decision-making authority

To decide an appeal's outcome, the Minister for Environment must have a report from both:

- the Appeals Convenor (see section 109(3) of the EP Act), and
- the authority that originally made the decision under appeal (see section 106(1)).

To properly advise the Minister in our report, our investigation included:

- reviewing the appeal and supporting documents from the appellant
- reviewing documents from DMIRS
- meetings with the appellants on 16 November 2021
- meeting with the permit holder on 15 November 2021

**Table 12** Documents we reviewed in the appeals investigation

| Document  | Date        |
|---|-------------|
| Australian Museum (2022) <i>Peregrine Falcon</i> . Government of New South Wales. Available from: <a href="https://australianmuseum.net.au/learn/animals/birds/peregrine-falcon">https://australianmuseum.net.au/learn/animals/birds/peregrine-falcon</a><br><b>Error! Hyperlink reference not valid.</b>   | Current     |
| Australian Reptile Guide (2022) <i>Stripe-sided Robust Slider</i> . Available from: <a href="https://www.australianreptileguide.com/striped_robust_slider">https://www.australianreptileguide.com/striped_robust_slider</a>   | Current     |
| Western Australian Herbarium (1998–). <i>Florabase—the Western Australian Flora</i> . Department of Biodiversity, Conservation and Attractions. Available at: <a href="https://florabase.dpaw.wa.gov.au">https://florabase.dpaw.wa.gov.au</a>   | Current     |
| MBS Environmental (on behalf of permit holder) email correspondence with this Office about buffers and fauna habitat, 7 September 2022 to 16 November 2022.   | Late 2022   |
| Environmental Protection Authority (2022) <i>Public record pursuant to s.39 of the Environmental Protection Act 1986 – Proposal title: Lucky Bay Garnet Mine</i> . 6 July 2022. Available from: <a href="https://www.epa.wa.gov.au/proposals/lucky-bay-garnet-mine">https://www.epa.wa.gov.au/proposals/lucky-bay-garnet-mine</a>   | 6 July 2022 |
| Department of Biodiversity, Conservation and Attractions (2022) <i>Priority ecological communities for Western Australia Version 3</i> . 1 June 2022. Available from: <a href="https://www.dpaw.wa.gov.au/plants-and-animals/threatened-species-and-communities/wa-s-threatened-ecological-communities">https://www.dpaw.wa.gov.au/plants-and-animals/threatened-species-and-communities/wa-s-threatened-ecological-communities</a> | 1 June 2022 |
| Larry Smith Planning (2022) <i>Shire of Northampton Local Planning Strategy</i> . Endorsed by the Western Australian Planning Commission, 19 May 2022. Available from: <a href="https://www.wa.gov.au/government/document-collections/shire-of-northampton-planning-information">https://www.wa.gov.au/government/document-collections/shire-of-northampton-planning-information</a>  | May 2022    |

| Document  | Date             |
|---|------------------|
| Onshore Environmental Consultants Pty Ltd (2022a) <i>Lucky Bay Garnet Project, Detailed Flora and Vegetation Survey</i> . 29 January 2022. Unpublished report prepared for Australian Garnet Pty Ltd.   | 29 January 2022  |
| Onshore Environmental Consultants Pty Ltd (2022b) <i>Lucky Bay Garnet Project, Detailed Vertebrate Fauna Survey</i> . 29 January 2022. Unpublished report prepared for Australian Garnet Pty Ltd.   | 29 January 2022  |
| Department of Agriculture, Water and the Environment (2022) <i>Referral guideline for 3 WA threatened black cockatoo species: Carnaby's Cockatoo (Zanda latirostris), Baudin's Cockatoo (Zanda baudinii) and the Forest Red-tailed Black-cockatoo (Calyptorhynchus banksii naso)</i> . Australian Government, Canberra. Available from: <a href="https://www.dcceew.gov.au/environment/epbc/publications/referral-guideline-3-wa-threatened-black-cockatoo-species-2022">https://www.dcceew.gov.au/environment/epbc/publications/referral-guideline-3-wa-threatened-black-cockatoo-species-2022</a> | 2022             |
| MBS Environmental (2021b) <i>Lucky Bay Garnet Mine; S38 Referral; Part A – Proposal Content Document and Consultation</i> . November 2021. Unpublished report prepared for Australian Garnet Pty Ltd. Available from: <a href="https://www.epa.wa.gov.au/proposals/lucky-bay-garnet-mine">https://www.epa.wa.gov.au/proposals/lucky-bay-garnet-mine</a>   | November 2021    |
| MBS Environmental (2021c) <i>Lucky Bay Garnet Mine; S38 Referral; Part B – Assessment of Environmental Impacts</i> . Parts 1-5, November 2021. Unpublished report prepared for Australian Garnet Pty Ltd. Available from: <a href="https://www.epa.wa.gov.au/proposals/lucky-bay-garnet-mine">https://www.epa.wa.gov.au/proposals/lucky-bay-garnet-mine</a>   | November 2021    |
| Department of Mines, Industry Regulation and Safety response to Appeal 035/21 (22 October 2021)   | 22 October 2021  |
| Department of Mines, Industry Regulation and Safety (2021) <i>Clearing Permit and Clearing Permit Decision Report for CPS 3891/4</i> . 7 September 2021. Available from: <a href="https://ftp.dwer.wa.gov.au/permit/3891/">https://ftp.dwer.wa.gov.au/permit/3891/</a>  | 7 September 2021 |
| Western Australian Planning Commission (2021) <i>State Planning Policy 2.4: Planning for Basic Raw Materials</i> . 16 July 2021. Available from: <a href="https://www.wa.gov.au/government/publications/state-planning-policy-24-basic-raw-materials">https://www.wa.gov.au/government/publications/state-planning-policy-24-basic-raw-materials</a>  | 16 July 2021     |
| MBS Environmental (2021a) <i>Request to Amend Native Vegetation Clearing Permit CPS 3891/3</i> . 9 July 2021. Available from: <a href="https://ftp.dwer.wa.gov.au/permit/3891/">https://ftp.dwer.wa.gov.au/permit/3891/</a>   | 9 July 2021      |
| Department of Planning, Lands and Heritage (2020), <i>Shire of Northampton Local Planning Scheme No. 10</i> . Original gazettal 6 January 2012, last updated 24 December 2020. Available from: <a href="https://www.wa.gov.au/government/document-collections/shire-of-northampton-planning-information">https://www.wa.gov.au/government/document-collections/shire-of-northampton-planning-information</a>  | 24 December 2020 |
| Department of Planning (2019) <i>Guilderton to Kalbarri Sub-regional Strategy</i> . Western Australian Planning Commission, May 2019. Available from: <a href="https://www.wa.gov.au/government/publications/mid-west-sub-regional-strategy">https://www.wa.gov.au/government/publications/mid-west-sub-regional-strategy</a>   | May 2019         |
| Department of Water and Environmental Regulation (2019) <i>Decision Report for Works Approval number W6214/2019/1 for Balline Garnet Mine</i> . 29 April 2019. Available from: <a href="https://www.der.wa.gov.au/component/k2/itemlist/filter?fitem_all=%09Australian+Garnet+Pty+Ltd&amp;moduleId=94&amp;ItemId=175">https://www.der.wa.gov.au/component/k2/itemlist/filter?fitem_all=%09Australian+Garnet+Pty+Ltd&amp;moduleId=94&amp;ItemId=175</a>  | 29 April 2019    |

| Document  | Date          |
|---|---------------|
| Rix, M.G., Huey, J.A., Cooper, S.J.B., Austin, A.D. and Harvey, M.S. (2018) <i>Conservation systematics of the shield-backed trapdoor spiders of the nigrum-group (Mygalomorphae, Idiopidae, Idiosoma): integrative taxonomy reveals a diverse and threatened fauna from south-western Australia</i> . ZooKeys 756: 1-121. Available from: <a href="https://zookeys.pensoft.net/article/24397">https://zookeys.pensoft.net/article/24397</a>  | 2018          |
| Western Australian Planning Commission (2017) <i>State Planning Policy 1: State Planning Framework Policy</i> . Originally gazetted on 22 December 1998, last updated November 2017. Available from: <a href="https://www.wa.gov.au/government/document-collections/state-planning-policies">https://www.wa.gov.au/government/document-collections/state-planning-policies</a>  | November 2017 |
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