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# RPI DEVELOPMENT APPLICATION SUPPORTING INFORMATION

# AEON WALFORD CREEK LIMITED

## WALFORD CREEK EXTENDED

JUNE 2022

AEO001



## **Document Control Sheet**

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| Project:         | Walford Creek<br>Extended    | Issue Date:  | 17 June 2022 |  |  |
|------------------|------------------------------|--|--------------|--|--|
| Title:           | RPI Development Applica      | RPI Development Application Supporting Information |              |  |  |
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| Revision Number | Date       |
|-----------------|------------|
| Rev A           | 14/06/2022 |
| Rev B           |            |
| Rev C           |            |
| 01              | 17/06/2022 |
| 02              |            |

| Number of Copies  |   |   |   |   |    |    |    |    |    |
|-------------------|---|---|---|---|----|----|----|----|----|
| Revision Number   | А | В | С | D | 01 | 02 | 03 | 04 | 05 |
| Ardent Group File | 1 |   |   |   | 1  |    |    |    |    |
| Client            | 1 |   |   |   | 1  |    |    |    |    |
| Department        |   |   |   |   | 1  |    |    |    |    |



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## 1. Introduction

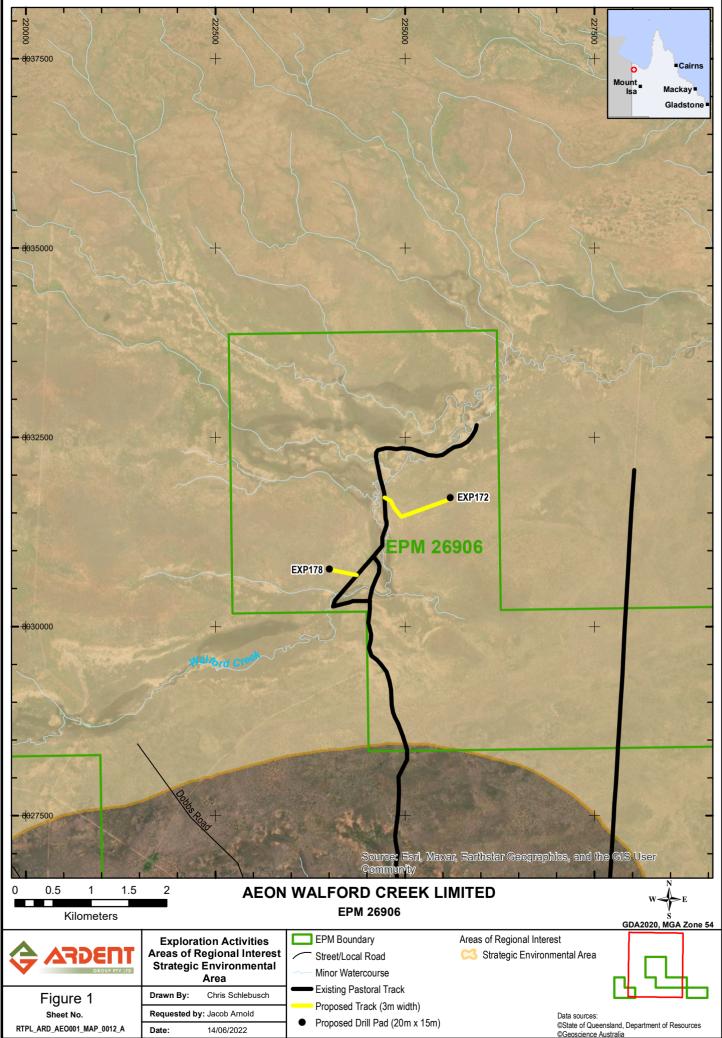
Aeon Walford Creek Limited (Aeon) proposes to undertake exploration drilling for minerals on Exploration Permit for Minerals (EPM) 26906 as part of the Walford East Project located approximately 340km northnorthwest of Mount Isa in northwest Queensland. The Walford Creek Extended Project makes up part of the overall Aeon's Walford Creek Project.

The Walford Creek Extended exploration project is situated within the Gulf Rivers Strategic Environmental Area (SEA) (*Figure 1*) and therefore Aeon requires approval under section 28 of the *Regional Planning Interests Act* 2014 (RPI Act). Aeon holds an existing Environmental Authority (EA) (EA0001272) and is therefore an eligible person under section 28 of the RPI Act.

Pursuant to section 34(2) of the RPI Act and section 13 of *Regional Planning Interests Regulation 2014* (RPI Regulation), the assessment application is not notifiable as the proposed exploration activities will be carried out in a SEA and not a priority living area. However, in accordance with section 34(4) of the RPI Act, the assessment application can become notifiable if the chief executive provides Aeon with a notice requiring the application to be notifiable.

Pursuant to section 12(2) of the RPI Regulation, the assessing agencies for a SEA are the Department of Environment and Science (DES) and the Department of Resources (DoR). The function of DES is to assess the expected impact of the activity on the ecological integrity of the environmental attributes for the area that relate to riparian processes, wildlife corridors or water quality. While the function of DoR is to assess the expected impact of the activity on the hydrodynamics of, and interactions with, the environmental attributes for the area that relate to hydrologic or geomorphic processes or beneficial flooding.

This report will discuss the environment attributes and expected impacts of this proposed exploration project on the environmental attributes.



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## 1.1 The Applicant and Project Overview

Aeon Walford Creek Limited (ACN 121 478 993) is a wholly owned subsidiary of Aeon Metals Limited (ACN 121 964 725) (Aeon Metals). Aeon Metals is an Australian-based mineral exploration company listed on the Australian Stock Exchange (ASX code: AML). The Company has an extensive exploration tenement portfolio in the world-class Mt Isa mineral province in North West Queensland; as well as the Rawbelle district in South East Queensland. Aeon Metals' tenements are prospective for Copper, Cobalt, Gold, Lead, Zinc, Molybdenum and Silver. Aeon Metals' flagship asset, and highest priority tenement, is the 100% owned Walford Creek Project, which is an advanced world-class Copper-Cobalt project and one of the highest-grade significant cobalt deposits in Australia.

## 1.2 Property and Tenure Details

A summary of the property and tenure details situated within EPM 26906 are shown in **Table 1**. Title searches have been attached at **Appendix 1**.

| Category      | Land Parcel 1                     | Land Parcel 2                 |  |
|---------------|-----------------------------------|-------------------------------|--|
| Lot/Plan      | Lot 1 on CP887914                 | Lot 11 on SP320130            |  |
| Property Name | Turn Off Lagoons                  | Bowthorn                      |  |
| Tenure        | Lands Lease                       | Lands Lease                   |  |
|               | Turn Off Lagoons Pastoral Holding |                               |  |
| Landholder    | Company Pty Ltd                   | Edward Sparke Charles Throsby |  |
|               | A.C.N. 085 377 304                |                               |  |

#### Table 1 Property and Tenure details within EPM 26906

EPM 26906 is situated within Lot 1 on CP887914 and Lot 11 on SP320130, however all disturbance associated with exploration activities will solely occur within Lot 11 on SP320130.

EPM 26906 was granted to Aeon on 18 December 2018 for a period of five years expiring on 17 December 2023. The tenement was granted over an area of 12 sub-blocks (approximately 3,911ha).

Standard EA EA0001272 was granted as a part of the approval for EPM 26906, requiring Aeon to comply with the terms and conditions of the *"Eligibility criteria and standard conditions for exploration and mineral development projects – ESR/2016/1985"*, as produced by DES.



## 2. Proposed Activities

Aeon proposes to undertake the following resource activities under the Walford East Project, which will fall within EPM 26906, Lot 11 on SP320130 and the Gulf Rivers SEA:

- 1. Construction of an access track; and
- 2. Establishment of two drill pads.

There will be two drillholes over EPM 26906.

A summary of the proposed activities, their locations and expected disturbance levels are summarised in **Table 2**. Definitions of each activity are described in **Table 3**, in addition, a schematic of the proposed drill pad is illustrated in **Figure 2**.

| Activity                              | Number         | Location   |                  | Location                                     |                            | Total disturbance<br>(ha) |
|---------------------------------------|----------------|--|------------------|--|----------------------------|---------------------------|
| Access tracks                         | As<br>required | Lot 11 on SP320130   |                  |  | 0.43ha<br>(3m wide tracks) |                           |
| Drill pads                            | 2              | Drillhole<br>Lot 11 on SP<br>EXP172<br>EXP178<br>Coordinates a | 225600<br>224002 | Northing<br>8031700<br>8030760<br>GA Zone 54 | 0.06ha<br>2 x (20m x 15m)  |                           |
| TOTAL DISTURBANCE FOR 2 TARGET SITES: |                |  |                  |  | 0.49ha                     |                           |

#### Table 2 Summary of proposed activities and their estimated disturbance

#### **Table 3 Definitions of resource activities**

| <b>Resource Activity</b> | Definition  |
|--------------------------|---|
| Access tracks            | A cleared track approximately 3m wide to facilitate vehicular access of drilling  |
|                          | equipment and personnel.  |
| Drill pads               | As shown in <b>Figure 2</b> , the drill pad is a 20m x 15m (0.03ha) area used to provide a stable platform for the reverse circulation and diamond tail drilling procedure. |



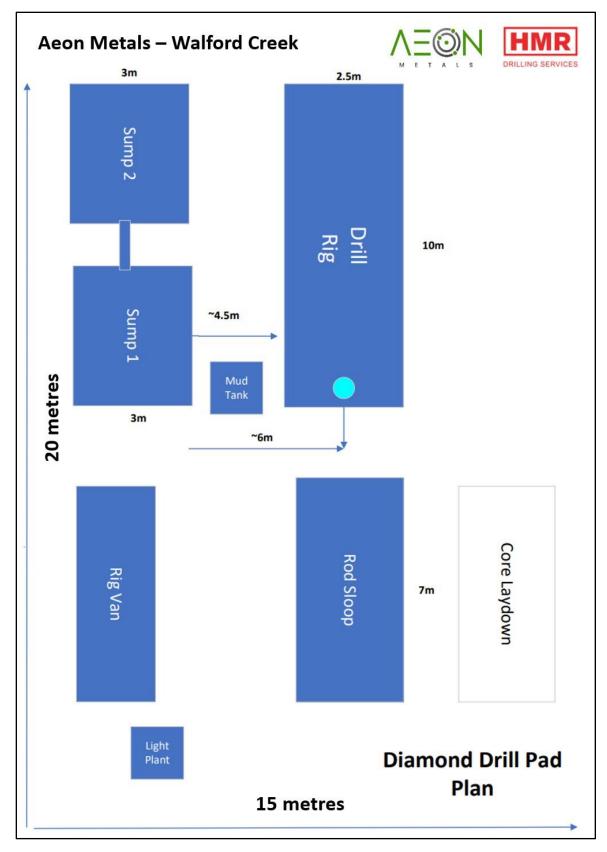


Figure 2 Schematic of the Proposed Drill Pad



## 2.1 Drilling Program

The exploration target is for new economy critical minerals, primarily cobalt and copper identical to that seen at the adjacent Walford Creek mineral resources. The existing resources are bound by breccia hosted and/or replacement copper ± cobalt with a Zn-Pb-Ag halo in dolomitic, carbonaceous and pyritic sediments of the Paleoproterozoic Mt Les Unit adjacent to the Fish River Fault. The proposed drilling intents to test for extensions of this mineralised system along the regionally East West trending Fish River Fault. Drill planning has taken place by applying the Walford Creek geological model using existing geophysical data, to target interpreted locations where the Fish River Fault or its splays have intersected the PY3 unit within the lower Mount Less Siltstones. Minimal drilling data exists for the area, so knowledge of the aquifers within the area is limited, however no significant aquifers are expected.

The target depths for drillholes are below in **Table 4** and range from 210m to 700m. Actual hole depths may exceed predicted depths. The on-duty geologist will inform if the target has been reached.

#### Table 4 Drillhole Depths

| Site   | Estimated Target<br>Depth (m) | Site   | Estimated Target<br>Depth (m) |
|--------|-------------------------------|--------|-------------------------------|
| EXP172 | 700                           | EXP178 | 210                           |

Drillholes will be completely grouted following the completion of drilling to prevent groundwater leakage between aquifers and the surface according to the Minimum Construction Requirements for Water Bores in Australia.

Clearing and minor earthworks may be required to prepare drill pads at the proposed sites. The drill pad will contain the drill rig and associated vehicles in addition to the drill sumps to hold drilling waters.

Drill pads have been selected on both geological and environmental grounds. Aeon has, where necessary, after determining the location of the geological anomaly also considered the corresponding environmental attribute(s) for that area. Geological anomalies are typically large enough that drill hole locations can be moved, without losing confidence in the quality of the drilling results.

Clearing is likely to be undertaken with the following equipment:

- Grader; and
- wheeled loader / backhoe.

The vegetation clearing will use the "blade up" method where possible, so that vegetation is cleared while minimising disturbance to roots and topsoil. The preparation of the drill sites may involve topsoil disturbance (to create a safe, level site) and in this case, cleared vegetation will be stockpiled separately from topsoil. The excavation of drill sumps is likely to use a wheeled loader/backhoe. Excavated subsoil soils will be stockpiled separately from topsoil.



Drilling equipment is likely to include the following equipment:

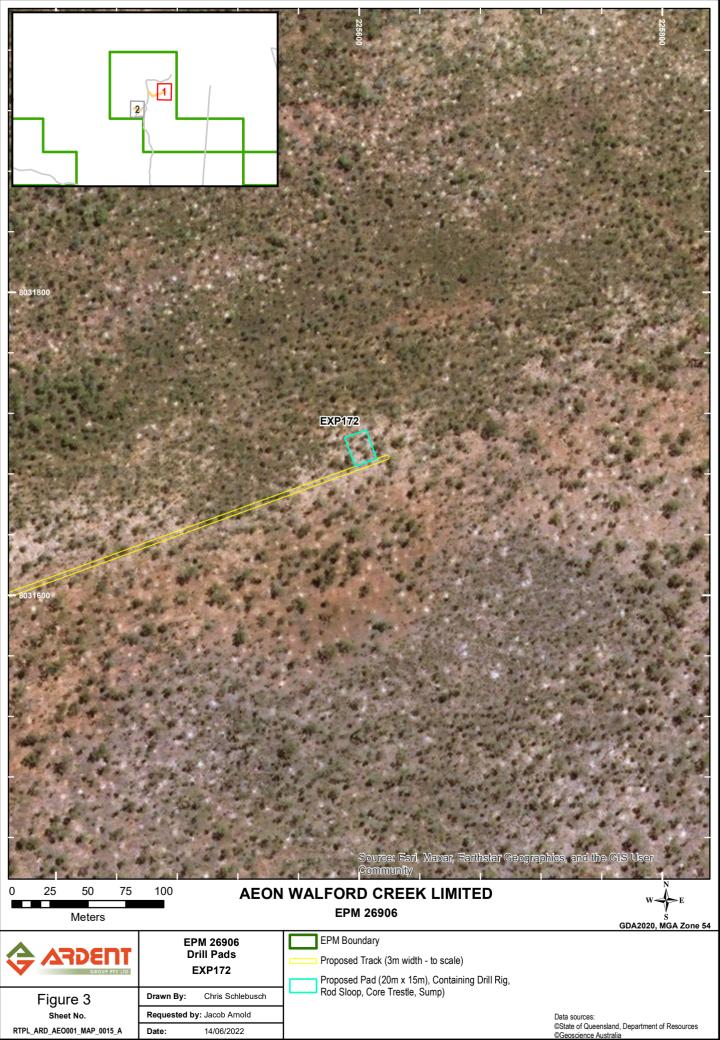
- drill rig (3 or 4 axle body truck);
- support truck (3 or 4 axle body truck);
- water truck (3 or 4 axle body truck); and
- light vehicles (4WD ute).

**Figure 3** and **Figure 4** show the extent of the proposed drill pads. Each drill pad will be no larger than 20m x 15m (0.03ha).

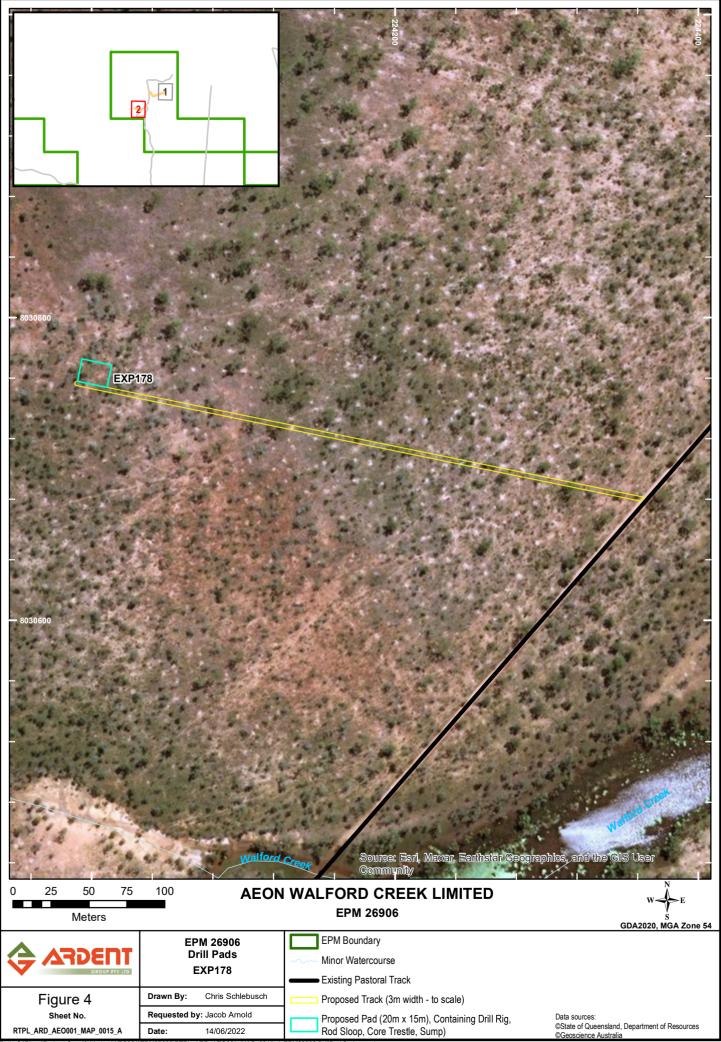
Site rehabilitation will be undertaken in accordance with the *Eligibility criteria and standard conditions for exploration and mineral development projects – Version 2 (2016)*. This includes, but not limited to:

- Condition B26: The holder of the environmental authority must backfill all excavations, drill holes or sampling sites as soon as practical following the completion of exploration activities.
- Condition B27: Condition B26 does not apply to any excavations, drill holes or sampling sites that are to remain after the completion of exploration activities, by agreement with the landowner.
- Condition B28: The holder of the environmental authority must rehabilitate areas disturbed by mining activities to a stable landform similar to that of surrounding undisturbed areas.
- Condition B29: The holder of the environmental authority must spread seeds or plant species that will promote vegetation of a similar species and density of cover to that of the surrounding undisturbed areas or vegetation that is appropriate for providing erosion control and stabilisation of the disturbed areas.

In regard to Condition B27, if the landowner requests that the drill hole be kept as a water bore, the appropriate approvals will be applied for in order to retain the drill hole as a water bore for the landholder.



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#### 2.2 Access Tracks

Access tracks will be required to allow access for all drilling equipment and personnel to each of the proposed drilling sites. The proposed access tracks will begin from existing pastoral tracks where possible to minimise the level of overall disturbance and disturbance to environmental attributes. The width of the proposed access tracks will be kept to a maximum of 3m wide to provide enough room for vehicular access. Access to the drill sites has been minimised as far as practicable using an existing pastoral track (Figure 5). The track will be constructed by driving the loader along the route, with the blade up where possible, to minimise disturbance to topsoil.

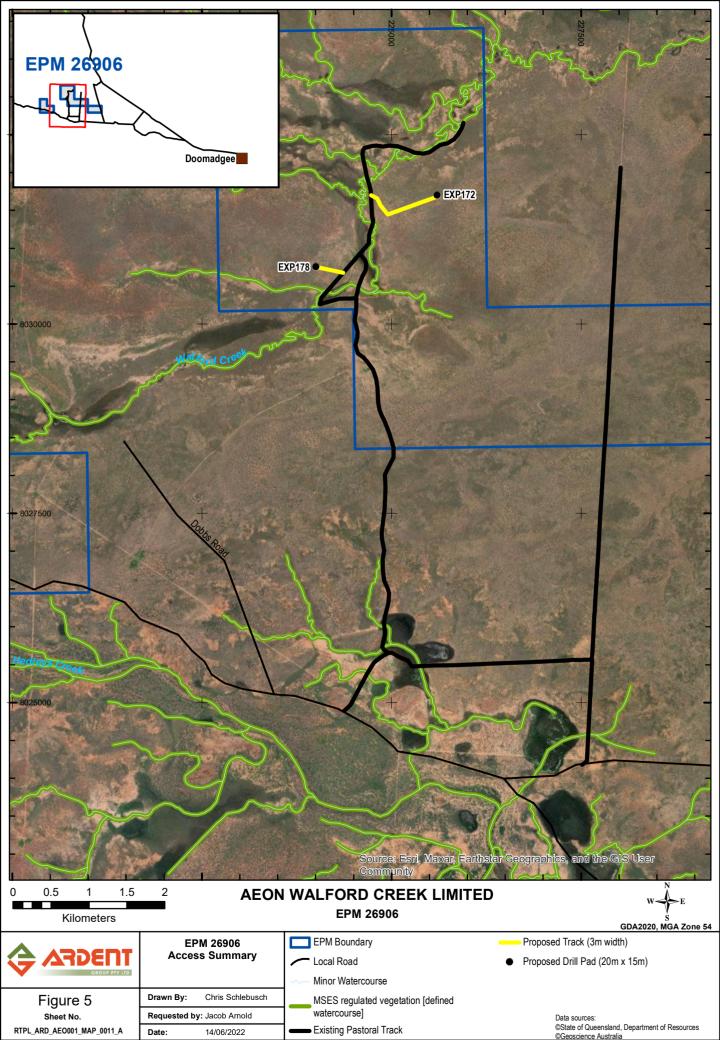
All access tracks used for exploration purposes will be rehabilitated as soon as practical following the competition of drilling or geological interest in the area in accordance with the *Eligibility criteria and* standard conditions for exploration and mineral development projects – Version 2 (2016).

#### 2.3 Water Supply

Water will be obtained by agreement with local landholders from water storages on the property. Water will be trucked to the drill site, as required.

## 2.4 Timing

Exploration activities will occur in the dry season with activities concluding by mid-November to avoid conditions of high precipitation in the region. At this stage, depending on the approval timeframe, site activities will likely occur between July and mid-November. Following assessment of this application, Aeon will immediately seek access to the site to commence the exploration programme. The rehabilitation of all disturbance will commence as soon as practical after the conclusion of drilling if the area is of no longer of geological interest and the access track is not needed by the landholder.



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## 3. Gulf Rivers Environmental Attributes

The relevant environmental attributes for the Gulf Rivers SEA are described in section 9 of the RPI Regulation and are reproduced below.

- a) The natural hydrologic processes of the area characterised by
  - i. Natural, unrestricted flows in and along watercourses and estuaries; and
  - ii. Overflow from watercourses onto the flood plains of the area, or the other way; and
  - iii. Natural flow paths of water across flood plains connecting waterholes, lakes and wetlands in the area; and
  - iv. Natural flow in and from groundwater and springs;
- b) The natural geomorphic processes of the area characterised by
  - i. Natural erosion; and
  - ii. The transport and deposit of sediment by water throughout the catchments and along the watercourse systems and estuaries;
- c) The functioning riparian processes of the area characterised by native riparian vegetation associated with watercourses, estuaries, lakes and floodplains and wetlands;
- d) The functioning wildlife corridors of the area characterised by
  - i. Natural habitat in the watercourse systems; and
  - ii. Permanent waterholes and springs;
- e) The natural water quality in the watercourse channels and aquifers and on flood plains in the area characterised by physical, chemical and biological attributes that support and maintain natural aquatic and terrestrial ecosystems.

Sub-sections 3.1 to 3.8 detail the existing environment, with potential impacts and mitigation strategies detailed in Section 4 of this Report.

#### 3.1 Riparian Process

The proposed exploration activities are unlikely to impact upon riparian processes of the Gulf Rivers SEA as no drill pads are located in the immediate vicinity of watercourses, estuaries, lakes or wetlands and proposed new access tracks do not cross these areas. There are no mapped areas of Matters of State Environmental Significant (MSES) regulated vegetation (defined watercourses) or MSES regulated vegetation (100m from wetland) being impacted by the proposed drill pads or newly constructed access tracks (Figure 6).

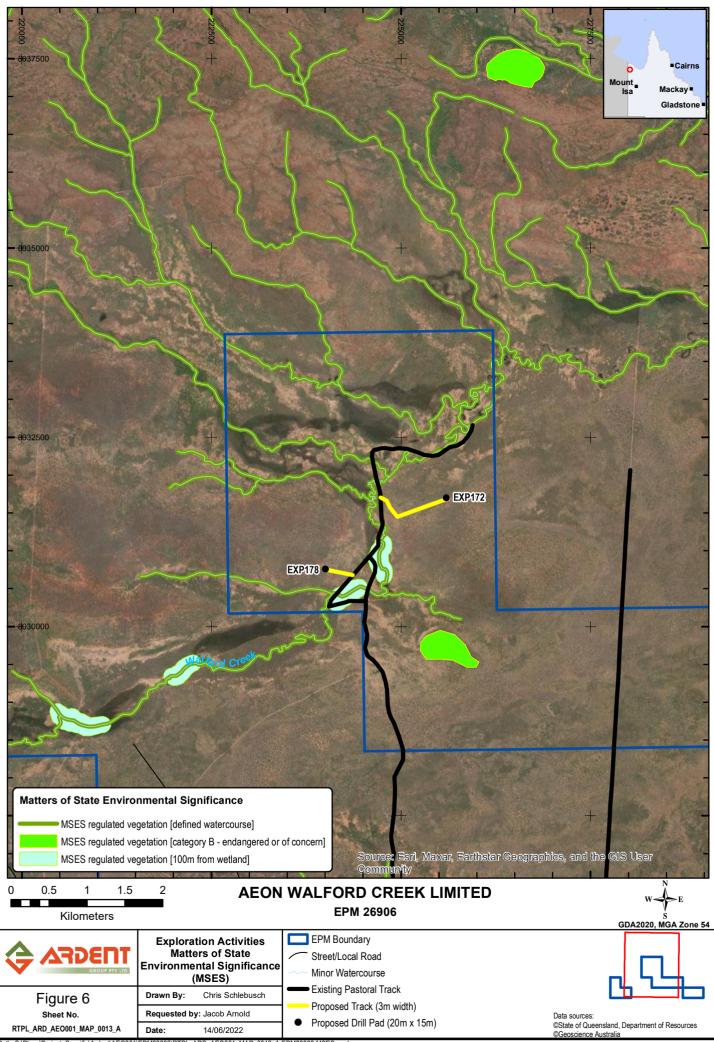
The proposed drill pads and new access tracks are located in areas mapped as 'Category A or B area that is least concern regional ecosystems'. A summary of all regional ecosystems (REs) which will be disturbed through access tracks and/or drill pads are described in **Table 5** with REs illustrated in **Figure 7**.

An Environmentally Sensitive Area (ESA) map (**Appendix 2**) indicates no mapped Category A, Category B or Category C ESAs will be impacted by exploration activities. In addition, the proposed exploration activities are no located in a high-risk area for protected plants (**Appendix 3**).



As detailed in Sections 2.1 and 2.2 of this Report, Aeon has endeavoured to avoid areas of regulated vegetation and limit creek crossings during the desktop assessment process. This has meant:

- Reviewing drill pad locations to ensure that, wherever practicable, holes are drilled outside of areas that may have the potential to be wetlands or watercourses.
- Refining proposed access tracks to avoid creek crossings or areas of significant vegetation.



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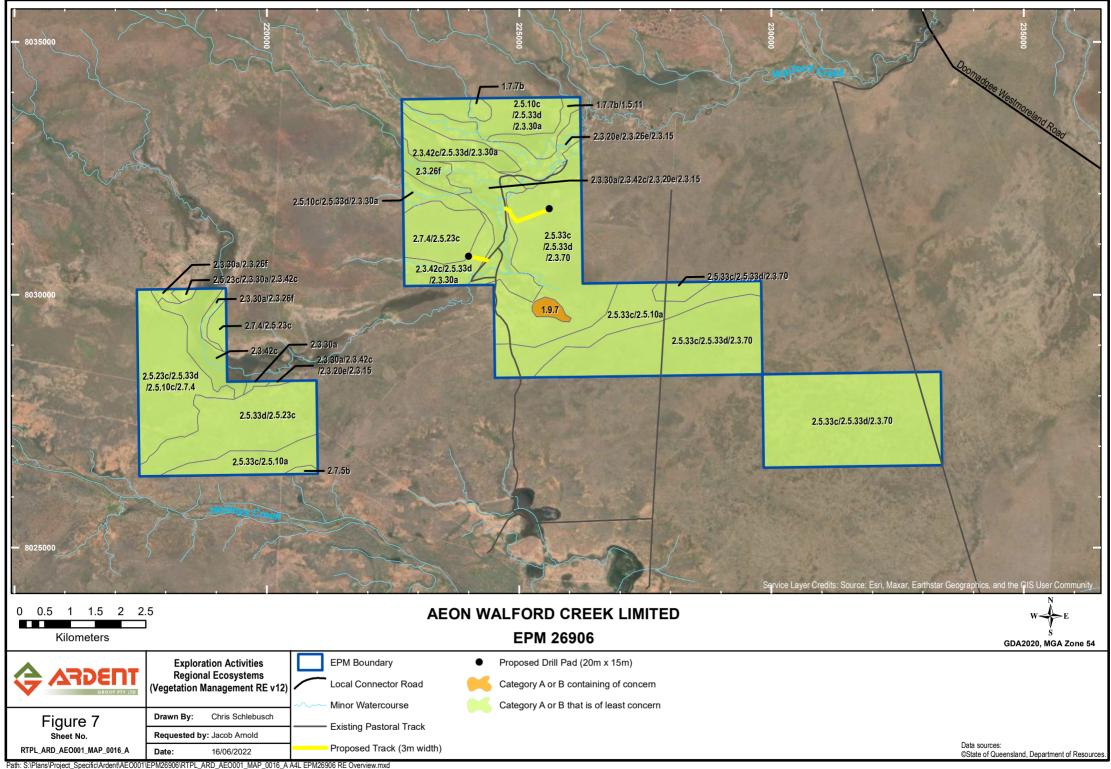


#### Table 5 Summary of Mapped Regional Ecosystems Disturbed by Exploration Activities

| RE      | Summary Description  | Vegetation<br>Management<br>Act Class | Biodiversity<br>Status   | Structure<br>Category |
|---------|--|---------------------------------------|--------------------------|-----------------------|
| 2.3.15  | <i>Eucalyptus microtheca</i> woodland with <i>Sarga spp</i> . understorey. Sparse lower tree storey of <i>Melaleuca leucadendra</i> and <i>Excoecaria parvifolia</i> . Occurs on seasonally flooded depressions and lagoons on Tertiary and Quaternary alluvium; gleyed podzolics. <b>Special values</b> : Provides seasonal wetland habitat for a flora and fauna. Important feeding sites for water birds.   | Least<br>concern                      | No concern<br>at present | Sparse                |
| 2.3.20e | Mixed low open woodland to woodland, including combinations of the species <i>Corymbia bella, Eucalyptus chlorophylla, E. tectifica, Erythrophleum chlorostachys, C. curtipes</i> and <i>C. confertiflora</i> . Common canopy species include <i>Eucalyptus pruinosa</i> and <i>Lysiphyllum cunninghamii</i> . A variable shrub layer may occur. The ground layer is tussock grasses. May contain small areas of tussock grassland. Occurs on active levees and minor alluvial plains of watercourses associated with dissected lateritic landscapes (Doomadgee Plains subregion). Sandy loam soils. | Least<br>concern                      | Of concern               | Sparse                |
| 2.3.30a | Melaleuca viridiflora low woodland, commonly with Eucalyptus microtheca, <i>E. pruinosa, E. chlorophylla</i> and <i>Corymbia polycarpa</i> . Occurs on minor, active Quaternary alluvial plains and shallow depressions at the fringes of Tertiary lateritic landscapes around the Doomadgee Plains subregion. Texture contrast soils.   | Least<br>concern                      | No concern<br>at present | Sparse                |
| 2.3.42c | <i>Eucalyptus microtheca</i> low open woodland to woodland, commonly with <i>Excoecaria parvifolia</i> , <i>Grevillea striata</i> , <i>Lysiphyllum cunninghamii</i> and <i>Atalaya hemiglauca</i> . The ground layer is tussock grasses, including <i>Eulalia aurea</i> , <i>Dichanthium spp.</i> , <i>Aristida spp.</i> and <i>Chrysopogon fallax</i> . Occurs on active Quaternary alluvial plains derived from coarse-grained parent materials of the Northwest Highlands bioregion. Red to brown silty loam and clay loam soils.   | Least<br>concern                      | Of concern               | Very<br>Sparse        |
| 2.3.70  | <i>Eucalyptus pruinosa</i> low woodland, occasionally with <i>Atalaya hemiglauca</i> . The ground layer is commonly dominated by <i>Eulalia aurea</i> . Occurs on old alluvial plains (recent Pleistocene surface). Brown clay loam soils.   | Least<br>concern                      | Of concern               | Sparse                |
| 2.5.33c | Melaleuca citrolens and/or Eucalyptus pruinosa and/or M. viridiflora low open<br>woodland, occasionally with E. tectifica, M. stenostachya and Cochlospermum gregorii.<br>A shrub layer commonly occurs, including canopy species and Carissa lanceolata. The<br>ground layer is tussock grasses and Triodia pungens. Occurs on level, old alluvial plains   | Least<br>concern                      | No concern<br>at present | Sparse                |



| RE      | Summary Description  | Vegetation<br>Management<br>Act Class | Biodiversity<br>Status   | Structure<br>Category |
|---------|--|---------------------------------------|--------------------------|-----------------------|
|         | (early Pleistocene surface) between Tertiary lateritic surfaces and active alluvial systems. Yellow-brown silty loam soils.  |                                       |                          |                       |
| 2.5.33d | <i>Melaleuca viridiflora</i> and/or <i>M. citrolens</i> low open woodland to low woodland. A sparse shrub layer may occur, including <i>Acacia spp.</i> and <i>Carissa lanceolata</i> . The ground layer includes <i>Schizachyrium fragile, Triodia pungens</i> and <i>Aristida spp.</i> Occurs on Tertiary outwash plains and sand sheets around the margins of dissected lateritic surfaces and the Northwest Highlands bioregion. Yellow to brown loams and texture contrast soils. | Least<br>concern                      | No concern<br>at present | Sparse                |





## 3.2 Wildlife Corridors

Vegetation communities along watercourses and drainage features not only function as habitat for fauna but also as a movement corridor. According to the Vegetation Management Watercourse and Drainage Feature Mapping for the area, no mapped watercourses will be impacted by drill pads or newly constructed access tracks.

There are no known waterholes or groundwater dependent ecosystems (GDE) mapped nearby to the proposed disturbance areas.

## 3.3 Water Quality

The exploration activities will occur in the upper catchment of the Settlement drainage basin within the Cliffdale Creek drainage sub-basin. The location of the proposed exploration is very remote with little to no data on the water quality of watercourses within the upper catchment of the Settlement drainage basin. Drainage from the exploration activities will into Walford Creek before it converges with Cliffdale Creek which ultimately flows into Elizabeth Creek and, subsequently, into the Gulf of Carpentaria.

There are no open or closed Department of Regional Development, Manufacturing and Water (DRDMW) gauging stations within the Settlement drainage basin.

There are no known artesian springs located near the exploration activities. There are no registered groundwater bores within 10km of the proposed exploration activities. The nearest registered groundwater bore is bore RN183175 located just over 10km from the exploration activities, however, no groundwater quality data has been collected at this bore.

#### 3.4 Hydrological Processes

The nearest Water Act defined watercourses are the Nicholson River and Cliffdale Creek located approximately 10km south and 20km north of the exploration activities respectively. There will not be any dams, lakes or springs located near the proposed exploration activities.

#### 3.5 Geomorphic Processes

Drillholes will encounter breccia hosted and/or replacement copper ± cobalt with a Zn-Pb-Ag halo in dolomitic, carbonaceous and pyritic sediments of the Paleoproterozoic Mt Les Unit adjacent to the Fish River Fault. Minimal drilling data exists for the area, so knowledge of the aquifers within the area is limited, however no significant aquifers are expected.

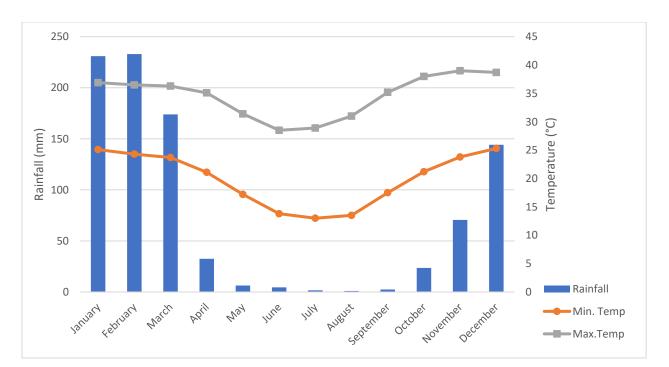
#### 3.6 Beneficial Flooding

The proposed areas of disturbance are not situated in the mapped "flood hazard area - Level 1 - Queensland floodplain assessment overlay" for floodplain areas which are potentially at threat of inundation.



## 3.7 Climate

The region is characterised by having a distinct wet and dry season, the mean annual rainfall for the region is 924.4mm with approximately 85% of the annual rainfall falling between December and March. Mean daily minimum temperatures range from between 13°C and 25.3°C, while mean maximum temperatures range from 28.5°C to 39°C (Figure 8).



Rainfall data is taken from Westmoreland Station weather station located approximately 52km from the Walford Creek Extended Project using monthly rainfall data beginning in 1965. The temperature data is taken from the BoM Century Mine QLD weather station located approximately 112km from the Walford Creek Extended Project. Monthly data used for mean minimum and maximum temperatures is from 2003 to present.

#### Figure 8 Monthly mean rainfall, minimum and maximum temperatures for the region (BOM, 2022)

#### 3.8 Land Use

The land use of the surrounding area is largely classified as grazing native vegetation. Exploration activities will be located on land mapped as 'grazing native vegetation' land use.



## 4. Potential Impacts on Environmental Attributes

To address Section 9 of the RPI Regulation (as shown in Section 3 of this Report), sub-sections 4.1 to 4.5 below detail the required outcomes in relation to:

- Riparian process;
- Wildlife corridors;
- Water quality;
- Hydrologic processes and beneficial flooding; and
- Geomorphic processes.

## 4.1 Riparian Process

The proposed exploration activities are unlikely to impact on riparian vegetation as there are no disturbance to MSES regulated vegetation (defined watercourse) or MSES regulated vegetation (100m from wetland) from the drill pads or newly constructed access tracks.

Desktop and preliminary investigations have considered riparian ecosystems and therefore, there is no current intention to have setback areas for this particular project. The proposed activities will not cause widespread or irreversible impacts to the riparian processes in the region as:

- exploration activities will be small-scale, of a temporary nature and conducted during the dry season;
- widespread areas of riparian vegetation will not be cleared;
- disturbance rehabilitation will occur immediately after works have been completed; and
- all activities and disturbance rehabilitation will be in accordance with the *Eligibility criteria and* standard conditions for exploration and mineral development projects Version 2 (2016).

## 4.2 Wildlife Corridors

The proposed routes for the access tracks will minimise isolation, fragmentation and edge effects as access tracks will only be 3m wide and have utilised existing pastoral tracks where possible. Wildlife corridors in the exploration area will largely involve MSES regulated vegetation (defined watercourse). There will be no new disturbance to these corridors from the drill pads or access tracks. As such, it is considered that widespread irreversible disturbance to wildlife corridors will not occur as a result of the proposed exploration activities.

#### 4.2.1 Consideration of Rare and Threatened Fauna

**Appendix 4** is a copy of the *Environment Protection and Biodiversity Conservation Act 1999* (C'wlth) (EPBC Act) Protected Matters Report for the site activities. This report lists threatened species or threatened species habitat that may, is likely to, or is known to occur, in the proposed disturbance area.

The EPBC Act Protected Matters report lists one threatened species or their habitat as known to occur in the exploration area. The Gouldian Finch (*Erythrura gouldiae*) is listed as endangered under both the EPBC



Act and *Nature Conservation Act 1992* (NC Act). Two threatened fauna species or their habitat as likely to occur in the exploration area. The Red Goshawk (*Erythrotriorchis radiatus*) is listed as Vulnerable under the EPBC Act and Endangered under the NC Act. The Red Goshawk inhabits tall open forests and woodlands and typically nests in trees that are taller than 20m. Consequently, mature trees greater than 20m, will not be cleared or damaged during exploration activities. The Grey Falcon (*Falco hypoleucos*) is listed as vulnerable under both the EPBC Act and NC Act. Grey Falcon breeding occurs from June to November with nests usually chosen are in the tallest trees along watercourses, particularly River Red Gum (*Eucalyptus camaldulensis*) and Coolibah (*E. coolabah*). Exploration activities is unlikely to impact upon riparian vegetation and will avoid mature trees.

A Queensland Government Wildlife Online Extract was completed for the area. The species list search displayed no records for the area for the above species (**Appendix 5**).

#### 4.2.2 Management Strategies

A number of impact management strategies will be used during exploration activities. Management measures include:

- Timing activities to take place in the dry season;
- Toolbox talks with exploration staff to raise the importance of protecting the natural environment;
- Minimise width of access tracks;
- Minimise vegetation clearing;
- Avoid areas of environmental significance;
- Retain mature trees;
- Retain rootstock where practical; and
- Rehabilitate crossing points at the completion of exploration activities at that site.

The connectivity between native terrestrial vegetation along and across the watercourse systems will not be altered or disturbed and will continue to be sufficient for the migration, shelter and habitat of fauna.

Watercourses near exploration activities are not permanent and will have little, if any flow at the time of the proposed activity (in the dry season), it is unlikely that the watercourses will be functioning as passage for aquatic/marine fauna. Even if sufficient flow is present when exploration activities are occurring, it is not expected that vehicles crossing drainage lines will inhibit flow in the watercourse.

The proposed exploration activities will not compromise the spatial extent and species diversity, structure and density of native terrestrial and aquatic vegetation. The habitat will continue to provide shelter and connectivity for fauna, including passage into and along watercourses. As the access tracks are only 3m wide, and are not formed and graded, minimal edge effects will be created. Consequently, it is unlikely that habitat, feeding, roosting or nesting of fauna in areas adjacent to the track will be compromised.

Drilling at each of the drill sites is expected to be completed within two to five days. Rehabilitation of disturbance will commence immediately after the completion of exploration activities in the area, in accordance with the rehabilitation conditions set out in the *"Eligibility criteria and standard conditions for exploration and mineral development projects – Version 2"* document.



## 4.3 Water Quality

The proposed exploration activities will occur in the dry season with minimal if any precipitation falling resulting in reduced watercourse flows in the region. As illustrated in **Figure 8**, the mean average rainfall during proposed exploration activities occurring between July and November is minimal. During exploration activities, the physical, chemical and biological water quality immediately downstream of the activities will remain consistent with water quality immediately upstream of the activity. Therefore, there will be negligible impacts on the physical, chemical and biological attributes that support and maintain natural aquatic and terrestrial ecosystems in the area.

In regard to drilling, each drill hole is expected to be completed in 2 to 5 days. The drilling and casing methodology will be undertaken in a manner to case off any aquifers encountered in the overburden. There may be some additives added to the water recirculated in the drill hole to improve drilling conditions, including materials such as bentonite clay. The drill fluid is recirculated within the casing (once placed) in the upper part of the drill hole, and therefore there will be little, if any exchange with the near surface aquifers. Deeper in the hole, pore pressure in the basement rock are such that drilling fluids will not migrate out of the drill hole. Therefore, there should be no impact on groundwater quality from the drilling.

Upon completion of drilling, the drill hole will be backfilled to surface with grout (cement) so as to fully seal the drill hole. This will ensure that any aquifers encountered are fully sealed and there can be no connection between aquifers, nor surface seepage. Therefore, there should be no impact on aquifer pressure from the drilling. Suitably qualified and experienced drillers (for artesian conditions) will supervise the drilling.

All drill sites and associated sumps will be rehabilitated in accordance with the *Eligibility criteria and standard conditions for exploration and mineral development projects – Version 2 (2016).* Due to the high evaporation rates in the region, drill water remaining in the sumps will likely evaporate within two to three weeks. Temporary fencing of the sumps will occur to prevent cattle or wildlife access. Once dry, rehabilitation of the site will occur with the bentonite clay material remaining at the bottom of the sumps to be covered with the stockpiled subsoil and topsoil. Timing of all activities will aid in minimising surface water impacts.

## 4.4 Hydrologic processes and beneficial flooding

The proposed access tracks will be constructed and used in the dry season and will have minimal influence on the gradient of the land to ensure the overflow or flow of surface water in or out of a watercourse will not be inhibited. Watercourse flows are expected to be minimal if at all throughout the exploration area during the time of exploration activities. Crossings of minor drainage features should not impact any waterflow. The exploration activities will not alter the natural patterns and levels of runoff, stream flow and connectivity with other elements of the river and flood plain system to the extent of causing significant adverse outcomes.



The proposed activities will not be situated near any major watercourses or floodplains that have the potential of being inundated. In addition, the proposed activities will not compromise beneficial flooding where the activity will alter natural flow paths and the natural extent of flooding across the floodplain.

#### 4.5 Geomorphic processes

The proposed exploration activities will not have widespread or irreversible impact on the natural erosion and transport and deposit of sediment by water throughout the catchment. As activities will occur in the dry season when negligible precipitation is expected, and water flow is heavily reduced, the transport and deposit of sediment by water throughout the catchment will be minimal reducing the possibility of any widespread or irreversible impacts. The exploration activities will not compromise the preservation of the natural erosion, transport and deposition of sediments by water throughout the catchment. Whereby, activities will not alter the delivery of sediment to the river system from adjacent lands and the erosion of the bed, banks and floodplains to the extent of causing significant adverse outcomes.

Erosion and sediment control may be required for the access tracks, drill pads and other disturbance areas. Measures will be undertaken in accordance with the *Eligibility criteria and standard conditions for exploration and mineral development projects – Version 2 (2016)* and in line with the guiding principles contained within the International Erosion Control Association (IECA) Best Practice Erosion and Sediment Control (BPESC) manual.

For the access tracks, drill pads and other disturbance areas, it will be the intention to:

- Select appropriate areas (for example: avoiding areas of environmental significance, retention of mature or habitat trees, minimise vegetation clearing, retain rootstock where practicable); and
- Ensure the effect of exploration activities are minimised on surrounding vegetation or watercourses.

To meet these key principles, following appropriate site selection, mitigation measures such as the following will be implemented as necessary:

- Minimise all vegetation clearing;
- Store topsoil and subsoil for use in rehabilitation;
- Ensure all fuel is appropriately bunded;
- Store all exploration materials (drilling muds etc) on pallets;
- Construct all drill pads on flat surfaces;
- Stabilise access tracks wherever necessary and, if necessary, employ geotextile;
- Repair any damage caused by traffic as soon as practicable;
- Limit traffic along the access tracks;
- Direct all drilling muds to appropriately sized sumps;
- Conduct regular inspections for fuel discharge, and sedimentation and erosion, as a result of exploration activities; and
- Commence rehabilitation as soon as practicable after final use.



## 5. Regional Planning Interests Regulation 2014 Assessment Criteria

Schedule 2, Part 5 of the RPI Regulation provide criteria for the assessment or decision of the RPI application. The required outcome and prescribed solutions are detailed below in **Table 6**. This table provides a summary of the details described in this project against the assessment criteria.

#### Table 6 Criteria for assessment or decision in a SEA

| Schedule 2 Part 5 of the RPI Regulation  | Response   |
|--|--|
| (14) Required Outcome  |  |
| The activity will not result in a widespread or<br>irreversible impact on an environmental attribute<br>of a strategic environmental area.<br>(15) Prescribed Solution<br>(1) The application demonstrates <u>either</u> –<br>(a) the activity will not, and is not likely to, have a<br>direct or indirect impact on an environmental | The proposed activities will not result in widespread or irreversible damage to the environmental attributes listed in section 9 of the RPI Regulation for the Gulf Rivers SEA as described in Sections 4.1-4.5 of this report (and summarised in the response components of this table, below).   |
| <ul> <li>attribute of the strategic environmental area; or</li> <li>(b) all of the following –</li> <li>(i) if the activity is being carried out in a designated precinct in the strategic environmental area – the activity is not an unacceptable use for the precinct;</li> </ul>   | The proposed activities will not be carried out<br>within a designated precinct. Furthermore, the<br>proposed activities do not include any of the<br>unacceptable uses listed in Schedule 2 Part 5<br>section 15(2).  |
| (ii) the construction and operation footprint of the activity on the environmental attribute is minimised to the greatest extent possible;   | <ul> <li>Desktop investigations have been conducted to refine the access tracks to the drill sites in order to minimise the operational footprint on environmental attributes.</li> <li>Searches of Queensland (MSES, RE, ESA, Vegetation Management Watercourse and Drainage Features and Protected Plants Flora Survey Triggers) and Commonwealth (EPBC Act) databases have been undertaken.</li> <li>Site access construction will be limited to a 3m wide track. Existing tracks have been utilised where possible.</li> <li>Drill pads are limited to 20m x 15m.</li> <li>During on-site access road construction and drill pad location, all mature trees and areas of ecological significance will be avoided.</li> </ul> |
| (iii) the activity does not compromise the preservation of the environmental attribute within the strategic environmental area;  | <ul> <li>Desktop investigations have been conducted<br/>to refine the access tracks to the drill sites in<br/>order to minimise the operational footprint on<br/>environmental attributes.</li> <li>The exploration activities will have minimal<br/>impacts on the natural hydrologic processes of</li> </ul>   |





| Schedule 2 Part 5 of the RPI Regulation   | Response   |
|---|--|
|   | stockpiled subsoil and topsoil. Timing of all activities will aid in minimising surface water impacts. |
| (iv) if the activity is to be carried out in a strategic<br>environmental area identified in a regional plan –<br>the activity will contribute to the regional<br>outcomes, and be consistent with the regional<br>policies, stated in the regional plan. | The Gulf Regional Development Plan (November 2000) does not identify the Gulf River SEA.               |



## 6. Conclusion

Aeon intends to conduct a small-scale exploration drilling programme within its granted EPM 26906. As part of this programme, two drill pads will be constructed. To access these sites, a 3m wide access track will be constructed.

Disturbance areas are detailed in Table 2 of this Report and are summarised below:

- Drill pads 0.06ha (2 x 20m x 15m)
- Access track 0.43ha (3m wide tracks)

Therefore, the total disturbance for two target sites is 0.49ha. The vast majority of this is created by the access track to the drill sites which has been minimised to a 3m wide corridor to limit broader disturbance. The largest area of disturbance in any one location is 0.03ha (20m x 15m), which is the size of the drill pad.

In line with Section 15 (1)(b) of the RPI Regulation, it is not considered that the proposed activities will cause widespread or irreversible impacts to the SEA in the region, as:

- The activity is not being carried out in a designated precinct and is not considered an unacceptable use;
- exploration activities will be small-scale, of a temporary nature and conducted during the dry season;
- drilling at each site is expected to be completed within two to five days;
- searches of appropriate State and Commonwealth databases have been undertaken and a desktop assessment has been included in the final selection of drill sites and preferred access routes;
- widespread areas of riparian vegetation will not be cleared;
- disturbance rehabilitation will occur as soon as possible after works have been completed; and
- all activities and disturbance rehabilitation will be in accordance with the *Eligibility criteria and* standard conditions for exploration and mineral development projects Version 2 (2016).



#### 7. References

Bureau of Meteorology (BOM) 2022, Daily rainfall Westmoreland Station, accessed 9 June 2022,<www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p\_nccObsCode=136&p\_display\_type=dailyData File&p\_startYear=&p\_c=&p\_stn\_num=029069>.

BOM 2022, Daily mean maximum temperature Century Mine, accessed 9 June 2022, <www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p\_nccObsCode=122&p\_display\_type=dailyDataFile&p \_startYear=&p\_c=&p\_stn\_num=029167>.

BOM 2022, Daily mean minimum temperature Century Mine, accessed 9 June 2022, <www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p\_nccObsCode=123&p\_display\_type=dailyDataFile&p \_startYear=&p\_c=&p\_stn\_num=029167>.



## RPI DEVELOPMENT APPLICATION SUPPORTING INFORMATION AEON WALFORD CREEK LIMITED

Appendix 1 Title Searches



#### Queensland Titles Registry Pty Ltd ABN 23 648 568 101

| Title Reference:           | 17664127   | Search Date: |
|----------------------------|------------|--------------|
| Date State Tenure Created: | 21/10/1995 | Request No:  |

Creating Dealing:

#### DESCRIPTION OF LAND

Tenure Reference: PH 8/5440

| Lease T | уре: | RC      | DLLING  | TERM | LEASE |
|---------|------|---------|---------|------|-------|
| LOT 1   | CROV | VN PLAN | N 88792 | 14   |       |

Area: 208000.000000 Ha. (ABOUT)

No Land Description

No Forestry Entitlement Area

Purpose for which granted: NO PURPOSE DEFINED

#### REGISTERED LESSEE

Dealing No: 703482089 28/07/1999 TURN OFF LAGOONS PASTORAL HOLDING COMPANY PTY LTD

A.C.N. 085 377 304

#### TERM OF LEASE

Term and day of beginning of lease Term: 30 years commencing on 01/07/1984 Expiring on 30/06/2014 Extended to 30/06/2034

#### CONDITIONS

NIL

#### ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Crown by Lease No. 17664127

#### ADMINISTRATIVE ADVICES

| Dealing   | Туре  | Lodgement Date   | Status  |
|-----------|---|------------------|---------|
| 716869987 | ADMIN NOTING                                | 06/11/2015 11:42 | CURRENT |
|           | SEE DEALING FOR RELEVANT LEGISLATION        |                  |         |
| 717833857 | CON COM AGMT                                | 10/02/2017 15:25 | CURRENT |
|           | MINERAL AND ENERGY RESOURCES (COMMON PROVIS | IONS) ACT 2014   |         |
| 717994336 | NT DETERM                                   | 02/05/2017 15:13 | CURRENT |
|           | NATIVE TITLE ACT 1993 (CTH)                 |                  |         |
| 718205111 | NT DETERM                                   | 10/08/2017 14:21 | CURRENT |
|           | NATIVE TITLE ACT 1993 (CTH)                 |                  |         |
| 718674880 | ADMIN NOTING                                | 06/04/2018 10:03 | CURRENT |
|           | SEE DEALING FOR RELEVANT LEGISLATION        |                  |         |
| 719767646 | EXEMPT CONS                                 | 02/12/2019 08:28 | CURRENT |
|           | SEC 322AA LAND ACT 1994                     |                  |         |
| 721172647 | NT DETERM                                   | 14/10/2021 14:55 | CURRENT |
|           |   |                  |         |



#### **Current State Tenure Search**

| Queensland<br>ABN 2364 | d Titles Registry Pty Ltd<br>8 568 101     | Title Refer    | rence: | 17664127 |
|------------------------|--|----------------|--------|----------|
| ADMINIST               | RATIVE ADVICES (Continued)                 |                |        |          |
| Dealing                | <b>Type</b><br>NATIVE TITLE ACT 1993 (CTH) | Lodgement Date | Status |          |
| UNREGIST               |  |                |        |          |

NIL

\*\* End of Current State Tenure Search \*\*

Information provided under section 34 Land Title Act (1994) or section 281 Land Act (1994)



#### Queensland Titles Registry Pty Ltd ABN 23 648 568 101

| Title Refere | nce:           | 17657048   | Search Date: |
|--------------|----------------|------------|--------------|
| Date State 1 | enure Created: | 21/10/1995 | Request No:  |

Creating Dealing:

#### DESCRIPTION OF LAND

Tenure Reference: GHPL 8/50 Lease Type: PERPETUAL LOT 11 SURVEY PLAN 320130 Local Government: BURKE Area: 234000.000000 Ha. (ABOUT) No Land Description

No Forestry Entitlement Area

Purpose for which granted: GRAZING OR AGRICULTURAL

#### REGISTERED LESSEE

Dealing No: 708770341 27/06/2005 EDWARD SPARKE CHARLES THROSBY

#### TERM OF LEASE

Day of beginning of lease

Lease in perpetuity commencing on 01/07/1984

#### CONDITIONS

- M76 The Lessee shall, within five (5) years from the date of the commencement of the lease and to the satisfaction of the Minister provide two (2) earth dams each with a capacity of 7500 cubic metres, such dams to be provided in the eastern and central parts of the additional area.
- M76 The Lessee shall, within two (2) years from the date of the commencement of the lease and to the satisfaction of the Minister erect approximately 20 kilometres of new boundary fence on the additional area.
- M76 The Lessee shall, within five (5) years from the date of the commencement of the Lease and to the satisfaction of the Minister, erect approximately 50 kilometres of new internal fencing on the area with 40 kilometres of such fencing to be erected on the additional area.
- M76 The Lessee shall, during the whole term of the lease, maintain all improvements on the holding existing at the commencement thereof, together with the improvements effected in compliance with conditions 1, 2 and 3 hereof, in a good and substantial state of repair.

#### ENCUMBRANCES AND INTERESTS

- 1. Rights and interests reserved to the Crown by Lease No. 17657048
- 2. MORTGAGE No 720577949 09/02/2021 at 15:14 NATIONAL AUSTRALIA BANK LIMITED A.C.N. 004 044 937

COPYRIGHT QUEENSLAND TITLES REGISTRY PTY LTD [2022] Requested by: D-ENQ TITLES QUEENSLAND



Queensland Titles Registry Pty Ltd ABN 23 648 568 101 **Current State Tenure Search** 

Title Reference:

17657048

| <b>ADMINISTR</b> | ATIVE ADVICES                          |                     |         |
|------------------|--|---------------------|---------|
| Dealing          | Туре                                   | Lodgement Date      | Status  |
| 717924170        | CON COM AGMT                           | 27/03/2017 14:40    | CURRENT |
|                  | MINERAL AND ENERGY RESOURCES (COMMON P | ROVISIONS) ACT 2014 |         |
| 718173089        | CON COM AGMT                           | 25/07/2017 14:01    | CURRENT |
|                  | MINERAL AND ENERGY RESOURCES (COMMON P | ROVISIONS) ACT 2014 |         |
| 718674901        | ADMIN NOTING                           | 06/04/2018 10:05    | CURRENT |
|                  | SEE DEALING FOR RELEVANT LEGISLATION   |                     |         |
| 719422391        | CON COM AGMT                           | 23/05/2019 14:47    | CURRENT |
|                  | MINERAL AND ENERGY RESOURCES (COMMON P | ROVISIONS) ACT 2014 |         |
| 719690627        | CON COM AGMT                           | 22/10/2019 15:44    | CURRENT |
|                  | MINERAL AND ENERGY RESOURCES (COMMON P | ROVISIONS) ACT 2014 |         |
| 719690642        | CON COM AGMT                           | 22/10/2019 15:45    | CURRENT |
|                  | MINERAL AND ENERGY RESOURCES (COMMON P | ROVISIONS) ACT 2014 |         |
| 719767646        | EXEMPT CONS                            | 02/12/2019 08:28    | CURRENT |
|                  | SEC 322AA LAND ACT 1994                |                     |         |
|                  |  |                     |         |

#### UNREGISTERED DEALINGS

NIL

Corrections have occurred - Refer to Historical Search

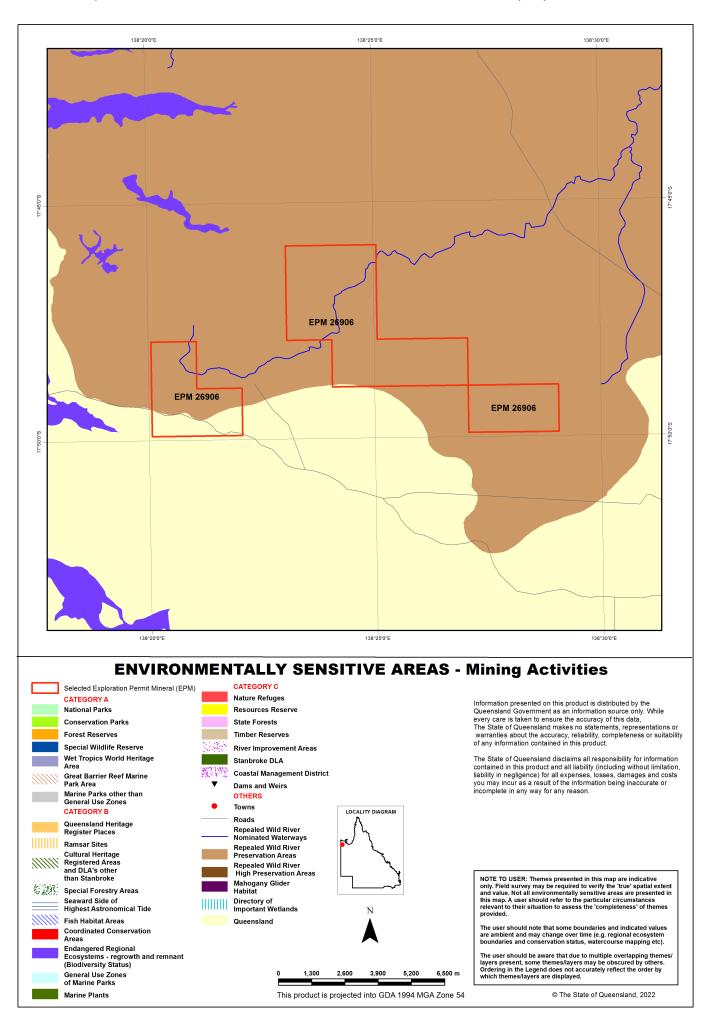
Caution - Charges do not necessarily appear in order of priority

\*\* End of Current State Tenure Search \*\*

Information provided under section 34 Land Title Act (1994) or section 281 Land Act (1994)

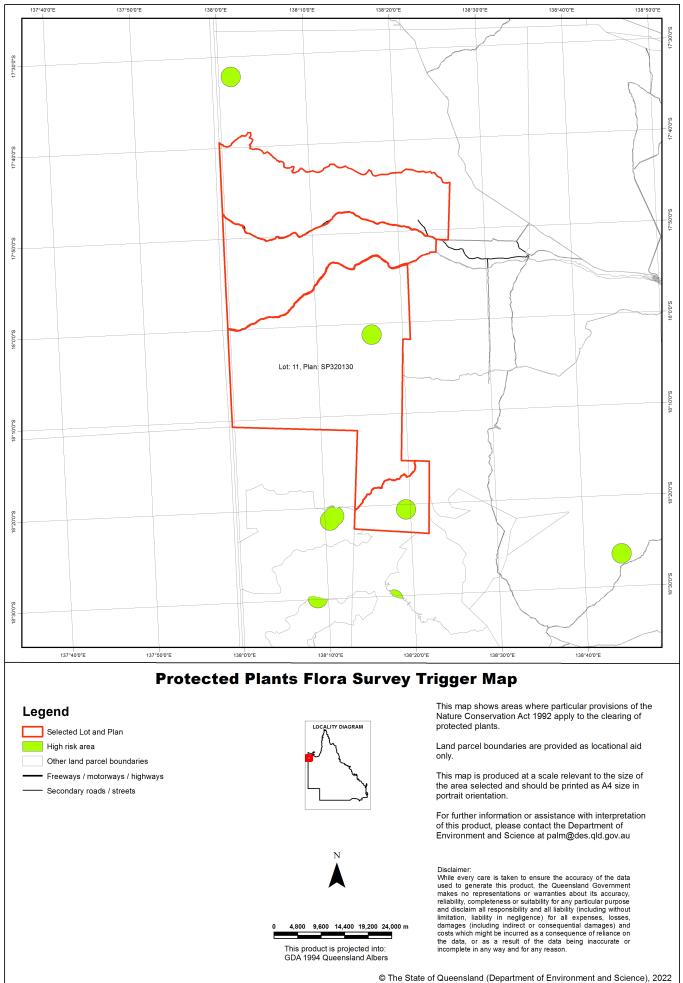


Appendix 2 EPM 26906 Environmentally Sensitive Areas Map





Appendix 3 Protected Plants Flora Survey Trigger Map



### Protected plants flora survey trigger map

The protected plants flora survey trigger map identifies 'high risk areas' where endangered, vulnerable or near threatened plants are known to exist or are likely to exist. Under the *Nature Conservation Act 1992* (the Act) it is an offence to clear protected plants that are 'in the wild' unless you are authorised or the clearing is exempt, for more information see <u>section 89</u> of the Act.

Please see the Department of Environment and Science webpage on the <u>clearing of protected plants</u> for information on what exemptions may apply in your circumstances, whether you may need to undertake a flora survey, and whether you may need a protected plants clearing permit.

#### Updates to the data informing the flora survey trigger map

The flora survey trigger map will be reviewed, and updated if necessary, at least every 12 months to ensure the map reflects the most up-to-date and accurate data available.

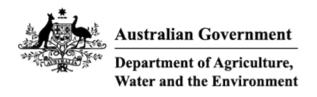
#### **Species information**

Please note that flora survey trigger maps do not identify species associated with 'high risk areas'. While some species information may be publicly available, for example via the <u>Queensland Spatial Catalogue</u>, the Department of Environment and Science does not provide species information on request. Regardless of whether species information is available for a particular high risk area, clearing plants in a high risk area may require a flora survey and/or clearing permit. Please see the Department of Environment and Science webpage on the <u>clearing of protected plants</u> for more information.





Appendix 4 EPBC Act Protected Matters Search Report



# **EPBC Act Protected Matters Report**

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

Report created: 14-Jun-2022

Summary Details Matters of NES Other Matters Protected by the EPBC Act Extra Information Caveat Acknowledgements

## Summary

### Matters of National Environment Significance

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

| World Heritage Properties:                   | None |
|--|------|
| National Heritage Places:                    | None |
| Wetlands of International Importance (Ramsar | None |
| Great Barrier Reef Marine Park:              | None |
| Commonwealth Marine Area:                    | None |
| Listed Threatened Ecological Communities:    | None |
| Listed Threatened Species:                   | 13   |
| Listed Migratory Species:                    | 14   |

### Other Matters Protected by the EPBC Act

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

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

A <u>permit</u> may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

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

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

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

## Details

## Matters of National Environmental Significance

| Listed Threatened Species                         |                          | [Resource Information]                                       |
|---|--------------------------|--|
| Status of Conservation Dependent and I            | Extinct are not MNES und | er the EPBC Act.   |
| Number is the current name ID.<br>Scientific Name | Threatened Category      | Presence Text  |
| BIRD  |                          |  |
| Calidris ferruginea                               |                          |  |
| Curlew Sandpiper [856]                            | Critically Endangered    | Species or species<br>habitat may occur<br>within area       |
| Erythrotriorchis radiatus                         |                          |  |
| Red Goshawk [942]                                 | Vulnerable               | Species or species<br>habitat likely to occur<br>within area |
| Erythrura gouldiae                                |                          |  |
| Gouldian Finch [413]                              | Endangered               | Species or species<br>habitat known to<br>occur within area  |
| Falco hypoleucos                                  |                          |  |
| Grey Falcon [929]                                 | Vulnerable               | Species or species<br>habitat likely to occur<br>within area |
| Grantiella picta                                  |                          |  |
| Painted Honeyeater [470]                          | Vulnerable               | Species or species<br>habitat may occur<br>within area       |
| Numenius madagascariensis                         |                          |  |
| Eastern Curlew, Far Eastern Curlew<br>[847]       | Critically Endangered    | Species or species<br>habitat may occur<br>within area       |
| Rostratula australis                              |                          |  |
| Australian Painted Snipe [77037]                  | Endangered               | Species or species<br>habitat may occur<br>within area       |

Tyto novaehollandiae kimberli

Masked Owl (northern) [26048]

Vulnerable



| Scientific Name  | Threatened Category | Presence Text  |
|--|---------------------|--|
| Dasyurus hallucatus  |                     |  |
| Northern Quoll, Digul [Gogo-Yimidir],<br>Wijingadda [Dambimangari], Wiminji<br>[Martu] [331]                                   | Endangered          | Species or species<br>habitat may occur<br>within area       |
| Macroderma gigas<br>Ghost Bat [174]  | Vulnerable          | Species or species<br>habitat may occur<br>within area       |
| REPTILE  |                     |  |
| Acanthophis hawkei<br>Plains Death Adder [83821]   | Vulnerable          | Species or species<br>habitat may occur<br>within area       |
| Elseya lavarackorum  |                     |  |
| Gulf Snapping Turtle [67197]   | Endangered          | Species or species<br>habitat may occur<br>within area       |
| SHARK  |                     |  |
| Pristis pristis<br>Freshwater Sawfish, Largetooth<br>Sawfish, River Sawfish, Leichhardt's<br>Sawfish, Northern Sawfish [60756] | Vulnerable          | Species or species<br>habitat may occur<br>within area       |
|  |                     |  |
| Listed Migratory Species   |                     | [Resource Information]                                       |
| Scientific Name  | Threatened Category | Presence Text  |
| Migratory Marine Birds   |                     |  |
| Apus pacificus   |                     |  |
| Fork-tailed Swift [678]  |                     | Species or species<br>habitat likely to occur<br>within area |
| Migratory Marine Species   |                     |  |
| Crocodylus porosus   |                     |  |
| Salt-water Crocodile, Estuarine<br>Crocodile [1774]  |                     | Species or species<br>habitat likely to occur<br>within area |
| Pristis pristis  |                     |  |

Freshwater Sawfish, LargetoothVulnerableSpecies or speciesSawfish, River Sawfish, Leichhardt'shabitat may occurSawfish, Northern Sawfish [60756]within area

Migratory Terrestrial Species

Cuculus optatus

Oriental Cuckoo, Horsfield's Cuckoo [86651]

| Scientific Name                                       | Threatened Category   | Presence Text  |
|---|-----------------------|--|
| <u>Hirundo rustica</u><br>Barn Swallow [662]          |                       | Species or species                                     |
| Barri Swallow [002]                                   |                       | Species or species<br>habitat may occur<br>within area |
| Motacilla cinerea                                     |                       |  |
| Grey Wagtail [642]                                    |                       | Species or species<br>habitat may occur<br>within area |
| Motacilla flava                                       |                       |  |
| Yellow Wagtail [644]                                  |                       | Species or species<br>habitat may occur<br>within area |
| Migratory Wetlands Species                            |                       |  |
| <u>Actitis hypoleucos</u><br>Common Sandpiper [59309] |                       | Species or species                                     |
| Common Sandpiper [53563]                              |                       | habitat may occur<br>within area                       |
| Calidris acuminata                                    |                       |  |
| Sharp-tailed Sandpiper [874]                          |                       | Species or species<br>habitat may occur<br>within area |
| Calidris ferruginea                                   |                       |  |
| Curlew Sandpiper [856]                                | Critically Endangered | Species or species<br>habitat may occur<br>within area |
| Calidris melanotos                                    |                       |  |
| Pectoral Sandpiper [858]                              |                       | Species or species<br>habitat may occur<br>within area |
| Charadrius veredus                                    |                       |  |
| Oriental Plover, Oriental Dotterel [882]              |                       | Species or species<br>habitat may occur<br>within area |
| <u>Glareola maldivarum</u>                            |                       |  |
| Oriental Pratincole [840]                             |                       | Species or species<br>habitat may occur<br>within area |

within area

Numenius madagascariensis

Eastern Curlew, Far Eastern Curlew [847]

Critically Endangered

### Other Matters Protected by the EPBC Act

| Listed Marine Species                          |                       | [Resource Information]  |
|--|-----------------------|---|
| Scientific Name                                | Threatened Category   | Presence Text   |
| Bird   |                       |   |
| Actitis hypoleucos<br>Common Sandpiper [59309] |                       | Species or species<br>habitat may occur<br>within area                              |
| Anseranas semipalmata                          |                       |   |
| Magpie Goose [978]                             |                       | Species or species<br>habitat may occur<br>within area overfly<br>marine area       |
| Apus pacificus                                 |                       |   |
| Fork-tailed Swift [678]                        |                       | Species or species<br>habitat likely to occur<br>within area overfly<br>marine area |
| Bubulcus ibis as Ardea ibis                    |                       |   |
| Cattle Egret [66521]                           |                       | Species or species<br>habitat may occur<br>within area overfly<br>marine area       |
| Calidris acuminata                             |                       |   |
| Sharp-tailed Sandpiper [874]                   |                       | Species or species<br>habitat may occur<br>within area                              |
| Calidris ferruginea                            |                       |   |
| Curlew Sandpiper [856]                         | Critically Endangered | Species or species<br>habitat may occur<br>within area overfly<br>marine area       |
| <u>Calidris melanotos</u>                      |                       |   |
| Pectoral Sandpiper [858]                       |                       | Species or species<br>habitat may occur<br>within area overfly<br>marine area       |

Chalcites osculans as Chrysococcyx osculans

Black-eared Cuckoo [83425]

Species or species habitat may occur within area overfly marine area **Scientific Name** 

Charadrius veredus **Oriental Plover, Oriental Dotterel [882]** 

Glareola maldivarum **Oriental Pratincole [840]** 

Haliaeetus leucogaster White-bellied Sea-Eagle [943]

Hirundo rustica Barn Swallow [662]

Merops ornatus Rainbow Bee-eater [670]

Motacilla cinerea Grey Wagtail [642]

Motacilla flava Yellow Wagtail [644]

Numenius madagascariensis

Eastern Curlew, Far Eastern Curlew [847]

**Critically Endangered** 

Species or species habitat may occur within area

Threatened Category **Presence Text** 

> Species or species habitat may occur within area overfly marine area

> Species or species habitat may occur within area overfly marine area

Species or species habitat may occur within area

Species or species habitat may occur within area overfly marine area

Species or species habitat may occur within area overfly marine area

Species or species habitat may occur within area overfly marine area

Species or species habitat may occur within area overfly marine area

Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]

Endangered

Species or species habitat may occur within area overfly marine area

#### Reptile

Crocodylus johnstoni

Freshwater Crocodile, Johnston's Crocodile, Johnstone's Crocodile [1773]

| Scientific Name                 | Threatened Category | Presence Text           |
|---------------------------------|---------------------|-------------------------|
| Crocodylus porosus              |                     |                         |
| Salt-water Crocodile, Estuarine |                     | Species or species      |
| Crocodile [1774]                |                     | habitat likely to occur |
|                                 |                     | within area             |

### Extra Information

| EPBC Act Referrals   |           |                          | [Resource Information] |
|--|-----------|--------------------------|------------------------|
| Title of referral  | Reference | Referral Outcome         | Assessment Status      |
| Not controlled action  |           |                          |                        |
| Improving rabbit biocontrol: releasing<br>another strain of RHDV, sthrn two<br>thirds of Australia | 2015/7522 | Not Controlled<br>Action | Completed              |

| Geological and Bioregional Assessments |       |                    |  |
|--|-------|--------------------|--|
| Name                                   | State | Website            |  |
| Isa GBA region                         | QLD   | <u>GBA website</u> |  |

## Caveat

#### 1 PURPOSE

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

The report contains the mapped locations of:

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

#### 2 DISCLAIMER

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

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

#### 3 DATA SOURCES

#### Threatened ecological communities

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

#### Threatened, migratory and marine species

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

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

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

#### 4 LIMITATIONS

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

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

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

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

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

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

## Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales -Department of Environment and Primary Industries, Victoria -Department of Primary Industries, Parks, Water and Environment, Tasmania -Department of Environment, Water and Natural Resources, South Australia -Department of Land and Resource Management, Northern Territory -Department of Environmental and Heritage Protection, Queensland -Department of Parks and Wildlife, Western Australia -Environment and Planning Directorate, ACT -Birdlife Australia -Australian Bird and Bat Banding Scheme -Australian National Wildlife Collection -Natural history museums of Australia -Museum Victoria -Australian Museum -South Australian Museum -Queensland Museum -Online Zoological Collections of Australian Museums -Queensland Herbarium -National Herbarium of NSW -Royal Botanic Gardens and National Herbarium of Victoria -Tasmanian Herbarium -State Herbarium of South Australia -Northern Territory Herbarium -Western Australian Herbarium -Australian National Herbarium, Canberra -University of New England -Ocean Biogeographic Information System -Australian Government, Department of Defence Forestry Corporation, NSW -Geoscience Australia -CSIRO -Australian Tropical Herbarium, Cairns -eBird Australia -Australian Government – Australian Antarctic Data Centre -Museum and Art Gallery of the Northern Territory -Australian Government National Environmental Science Program

-Australian Institute of Marine Science

-Reef Life Survey Australia

-American Museum of Natural History

-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania

-Tasmanian Museum and Art Gallery, Hobart, Tasmania

-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact Us page.

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Appendix 5 Wildlife Online Extract



#### WildNet species list

Search Criteria: Species List for a Defined Area Species: All Type: All Queensland status: All Records: All Date: All Latitude: 17.77 to 17.81 Longitude: 138.43 to 138.496 Email: jacob.arnold@ardent-group.com.au Date submitted: Wednesday 15 Jun 2022 14:05:40 Date extracted: Wednesday 15 Jun 2022 14:10:08

There were no records retrieved for your selection

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