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19 June 2020

Morag Elliott

Manager – Development Assessment Division

Planning Group – Queensland Treasury

Via email: Morag.Elliott@dsdmip.qld.gov.au; RPIAct@dsdmip.qld.gov.au

Dear Morag

#### Re: RPI18-016 Oruro – seeking minor amendment

We refer to the Regional Interests Development Approval (RIDA) approval provided to our client Lynd Resources Pty Ltd on 11 September 2018 (application reference RPI18-016 Oruro).

Since this approval, our client has continued to investigate exploration options that better reflect the geological targets sought as well as minimises their likely environmental impact and, as a result, approval for an amended drilling programme is sought. The chosen site for the Oruro 2-2020 drill pad has been identified as it is considered more likely to accurately reflect the geological anomaly of interest.

The amended work programme will have negligible impact on the Gulf Rivers Strategic Environmental Area environmental attributes, namely, natural hydrological and geomorphic processes, functioning riparian processes and wildlife corridors, and natural water quality.

Accordingly, pursuant to Section 55 of the *Regional Planning Interests Act 2014*, we hereby seek the Chief Executive's approval to amend the RIDA granted on 11 September 2018. We believe the change in work programme is minor and would have negligible impact on the area of regional interest from the resource activity.

Considering that this slight amendment is an internal property change (and that no comment was received following previous public notification), we do not believe that anyone other than the landholder may be impacted by the change and therefore do not believe that further public notification is required in this instance. We therefore request the Chief Executive's consideration in waiving the notification requirements under Section 55(2).



Please find attached an amended RPI Act application, detailing the amended access and proposed drill hole, as well as our environmental management consideration of the proposed disturbance. Please note that all strategies and commitments detailed in the original application remain in this amendment. We have also incorporated the additional requirements from the information request issued prior to the approval of RPI18-016.

We trust this is all in order, however should you have any questions, please contact me on 3368 1033 or at Richard.smith@ardent-group.com.au.

Regards

**Richard Smith** 

**General Manager (Approvals)** 



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# REGIONAL INTERESTS DEVELOPMENT APPROVAL AMENDMENT LYND RESOURCES PTY LTD RPI18/016 - ORURO

**JUNE 2020** 

LYN001



# **Document Control Sheet**

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Appendix 1 Environmentally Sensitive Area Map

Appendix 2: Protected Plants Flora Survey Trigger Map

**Appendix 3: EPBC Protected Matters Report** 

Appendix 4: Wildlife Online Extract

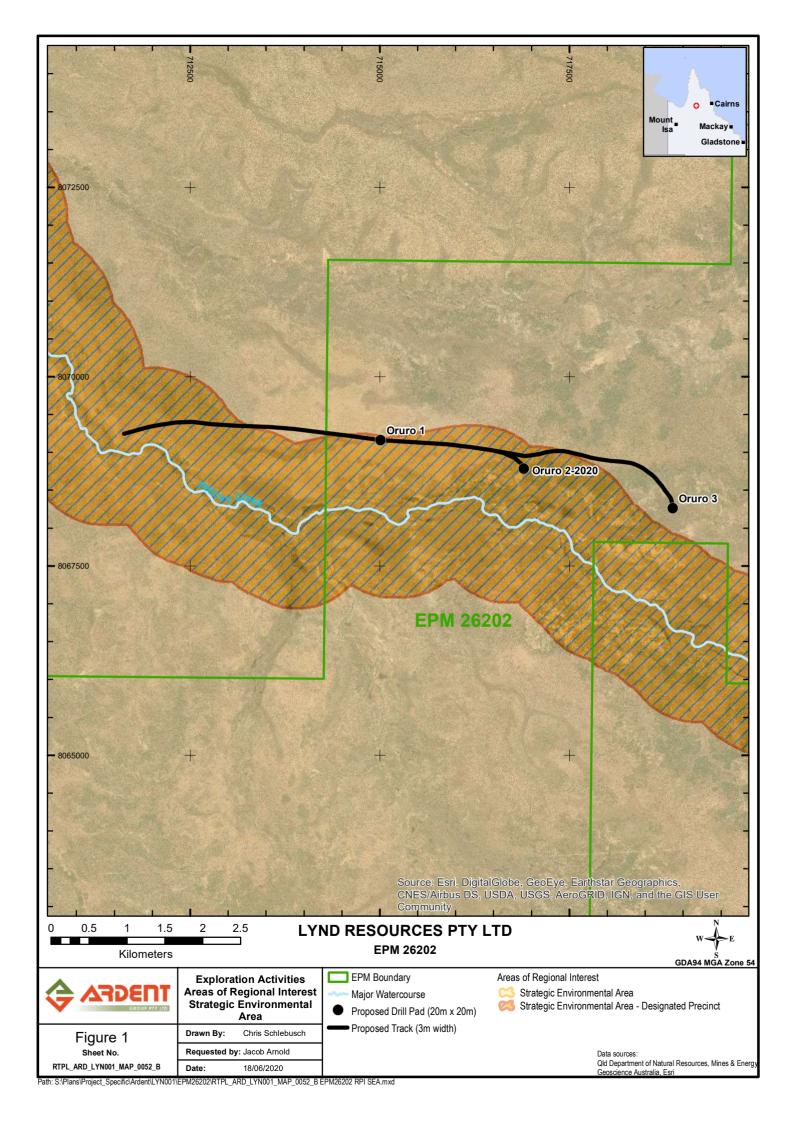


#### 1. Introduction

Lynd Resources Pty Ltd (Lynd Resources) proposes to undertake exploration drilling for minerals on EPM 26202 as part of the Oruro Project located approximately 100km north-northwest of Georgetown in North Queensland. The Oruro Project makes up part of the overall Lynd Resources' North Queensland exploration project.

The Oruro exploration project is situated within the Gulf Rivers Strategic Environmental Area (SEA) (Figure 1) and therefore Lynd Resources are required to seek approval under section 28 of the *Regional Planning Interests Act* 2014 (RPI Act). Lynd Resources were granted a Regional Interests Development Approval (RIDA) (RPI18-016) under section 53 of the RPI Act on 11 September 2018.

Since then, further geological investigation work on the Oruro project has been undertaken which has resulted in a minor relocation of the Oruro 2 drill pad and subsequently renamed the Oruro 2-2020 drill pad. As such, Lynd Resources are seeking to amend their RIDA pursuant to section 55 of the RPI Act.





#### 1.1 The Applicant and Project Overview

Lynd Resources (ACN 610 450 498) is a wholly-owned subsidiary of North Queensland Resources Pty Ltd (NQR) (ACN 610 450 185) which also has two other subsidiaries Gamboola Resources Pty Ltd and Yappar Resources Pty Ltd. In 2016/17, NQR acquired 100% of the mineral rights to a large tenement package in North Queensland.

In February 2018, NQR entered into a Strategic Alliance Agreement (SAA) with diversified global miner South32 to appraise a number of these exploration opportunities with significant potential across an area of 200km by 500km in North Queensland. The area comprises tenements (granted and under application), wholly-owned by NQR as well as several subject to farm-in with third parties.

NQR has defined at least 50 exploration targets across an area it has identified as prospective for Tier 1 mineral deposits. The prospective area is concealed under 20 to 200 metres of cover and historically has had minimal exploration.

### 1.2 Property and Tenure Details

A summary of the property and tenure details situated within EPM 26202 are shown in Table 1.

Table 1 Property and Tenure details within EPM 26202

Category	Property	
Lot/Plan	Lot 171 on El835473	
Property Name	Abingdon Downs Station	
Tenure	Lands Lease	
Landholder	The Trust Company Limited	
Lanunoider	(A.C.N. 004 027 749)	

EPM 26202 is situated wholly within Lot 171 on EI835473 and all disturbance associated with exploration activities will occur within this lot.

EPM 26202 was originally granted to Lynd Resources on 17 November 2016 for a period of two years. Lynd Resources has renewed the tenement for a further two-year period with the tenement now expiring on 16 November 2020. Lynd Resources will apply to DNRME to renew the tenement for an extended period in due course.

EPM 26202 was granted over an area of 37 sub-blocks (approximately 12,081.32ha). Standard EA EPSX03893416 was granted as a part of the approval for EPM 26202, requiring Lynd Resources 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 Amendments

Since the RIDA was granted for the proposed exploration activities within the Gulf Rivers SEA, further reconnaissance and geological investigation has been undertaken in the area which has identified a more preferred target location for the Oruro 2 drill site. The new location is situated approximately 160m south of the original Oruro 2 drillsite and will now be referred to as Oruro 2-2020. As a result of the relocated drill site, there are also minor amendments to the Oruro project access tracks. The changes to the access track involve the access to the Oruro 2-2020 drill pad and repositioning the beginning of the access track to avoid the mapped 'of concern' regional ecosystem. The locations of the Oruro 1 drill pad, Oruro 3 drill pad, temporary fuel and laydown area, and temporary mobile campsite will remain unchanged.

The amended project is considered to be minor as one drill site has been relocated approximately 160m and the disturbance footprint has only increased by 0.12ha to 2.67ha.

Consequently, Lynd Resources are seeking to amend Condition 1 of the RIDA, resulting in subsequent changes to Table 1 (Approved Activities), Table 3 (Proposed Oruro resource activities and associated locations) and the approved plans.

#### 2.1 Condition 1 Amendment

Condition 1 is reproduced below as **Table 2**. Within Condition 1, the information associated with points a, c and d are sought to be amended. The amendments required are detailed in this application as set out below:

- Point a) "Table 1: Approved activities" are described in Section 2.2;
- Point c) "Table 3: Proposed Oruro resource activities and associated locations" are described in Section 2.3; and
- Point d) "The approved plans"; replacement plans will be described in Section 2.4.

Table 2 Condition 1 of the RIDA approval

Condition Number	Condition	Timing for condition
1	Carry out the approved activities and disturbance of land generally in accordance with:  a) The activities identified in Table 1: Approved activities.  b) The activities defined in Table 2: Definitions of Activities.  c) The locations provided in Table 3: Oruro resource activities and associated locations.  d) The approved plans:  • Figure 1: Location of Proposed Exploration Activities within the Gulf Rivers SEA, Sheet No. ADMG_ARD_LYN001_MAP_0052_A, dated 30/04/18, provided by the applicant and lodged with the application on 30 May 2018 (refer Attachment 1);  • Figure 1: Footprint of the Oruro 1 drill pad, Sheet No.	At all times



Condition Number	Condition	Timing for condition
	<ul> <li>ADMG_ARD_LYN001_MAP_0091_A, dated 2/07/18, submitted with the applicant's response to the Requirement Notice on 13 July 2018 (refer Attachment 1);</li> <li>Figure 2: Footprint of the Oruro 2 drill pad (non-target drill pad), Sheet No. ADMG_ARD_ LYN001_MAP_0092_A, dated 2/07/18, submitted with the applicant's response to the Requirement Notice on 13 July 2018 (refer Attachment 1);</li> <li>Figure 3: Footprint of the Oruro 3 drill pad (non-target drill pad), Sheet No. ADMG_ARD_ LYN001_MAP_0093_A, dated 2/07/18, submitted with the applicant's response to the Requirement Notice on 13 July 2018 (refer Attachment 1);</li> <li>Figure 4: Footprint of the Oruro campsite and laydown area, Sheet No. ADMG_ARD_LYN001_MAP_0070_A, dated 2/07/18, submitted with the applicant's response to the Requirement Notice on 13 July 2018 (refer Attachment 1);</li> </ul>	
	<ul> <li>Figure 9: Oruro Designated Precinct Disturbance Section 1, Sheet No. ADMG_ARD_LYN001_ MAP_0114_A, dated 6/07/18, submitted with the applicant's response to the Requirement Notice on 13 July 2018 (refer Attachment 1);</li> <li>Figure 10: Oruro Designated Precinct Disturbance Section 2, Sheet</li> </ul>	
	No. ADMG_ARD_LYN001_MAP_0115_A, dated 6/07/18, submitted with the applicant's response to the Requirement Notice on 13 July 2018 (refer <b>Attachment 1</b> );	
	<ul> <li>Figure 11: Schematic of proposed drill pad, undated, provided by the applicant and lodged with the application on 30 May 2018 (refer Attachment 1);</li> </ul>	
	<ul> <li>Figure 12: Schematic of fuel and laydown storage area, undated, as provided by the applicant and lodged with the application on 30 May 2018 (refer Attachment 1);</li> </ul>	
	<ul> <li>Figure 13: Schematic of mobile campsite, undated, provided by the applicant and lodged with the application on 30 May 2018 (refer Attachment 1).</li> </ul>	



# 2.2 Table 1 – Approved Activities Amendment

Table 1 of the RIDA is reproduced as **Table 3** and details the current approved resource activities and areas of disturbance within the Gulf Rivers SEA. **Table 4** details the proposed amendment disturbance areas associated with the relocation of the Oruro 2 drill site location and further access tracks. The locations and areas of the Oruro 1 drill pad, Oruro 3 drill pad, temporary fuel and laydown area, and temporary mobile campsite will remain unchanged.

Table 3 Current RIDA approved activities

Area of Regional Interest	Location	Resource activity	Area of disturbance (hectares)
Gulf Rivers	Part Lot	Access Tracks	2.29
Strategic Environmental	171 on El835473	Drill pad (three in total, each being 20m x 30m)	0.18
Area (and designated		Temporary Fuel Storage and Laydown Area (20m x20m)	0.04
precinct)		Temporary Mobile Campsite (20m x 20m)	0.04
		Total area of	disturbance is 2.55 ha.

Table 4 Proposed amendments to approved activities

Area of Regional Interest	Location	Resource activity	Area of disturbance (hectares)
Gulf Rivers	Part Lot	Access Tracks	2.41
Strategic Environmental	171 on El835473	Drill pad (three in total, each being 20m x 30m)	0.18
Area (and designated		Temporary Fuel Storage and Laydown Area (20m x20m)	0.04
precinct)		Temporary Mobile Campsite (20m x 20m)	0.04
		Total area of	disturbance is 2.67 ha.



# 2.3 Table 3 – Proposed Oruro resource activities and associated locations amendment

Table 3 of the RIDA is reproduced as **Table 5** and details the locations of the currently approved resource activities. Due to the proposed additional drill pad, **Table 6** provides the location of this proposed resource activity.

Table 5 Current resource activities and associated locations

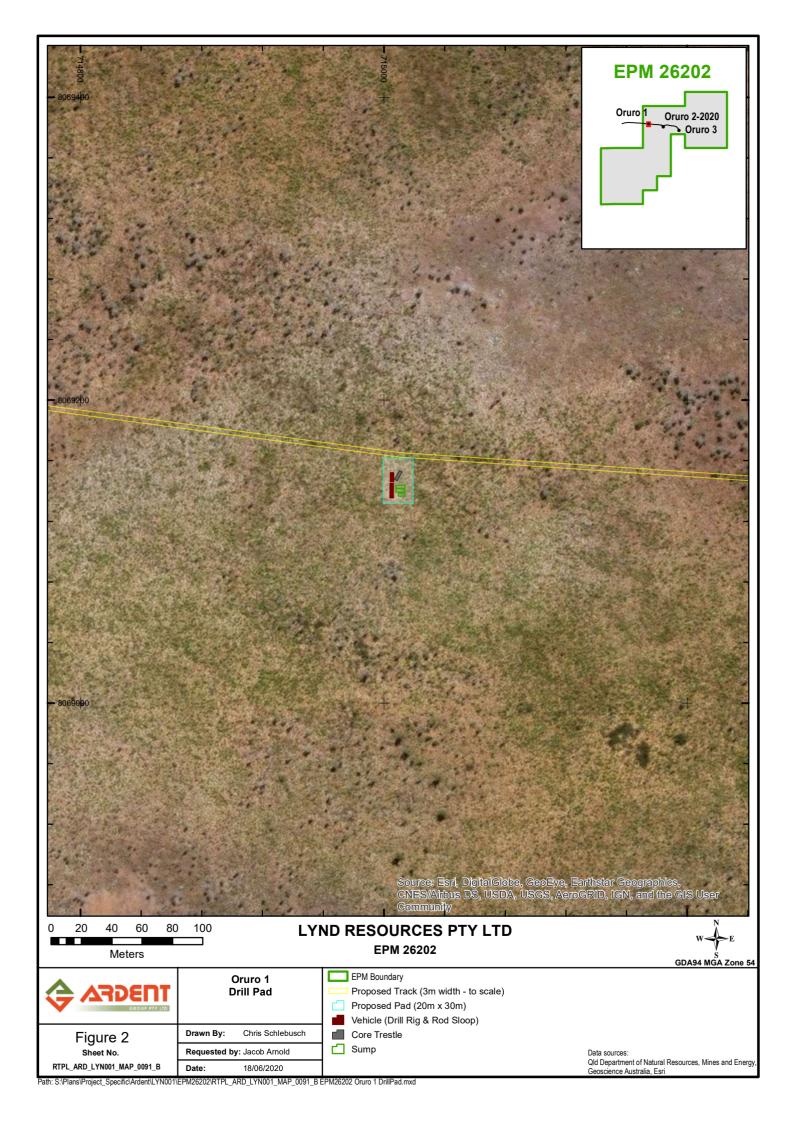
Resource Activity	Number	Location (coordinates)
Access tracks	As required	Beginning of access track: -17.452988°, 142.991839°
Drill pads	1 initially, maximum of 3	Oruro 1: -17.453240°, 143.024520°* Oruro 2: -17.455130°, 143.042390° Oruro 3: -17.461020°, 143.060910°
Temporary Fuel and Laydown Area	1	-17.451894°, 143.013245°
Temporary Mobile Campsite	1	-17.451869°, 143.012293°

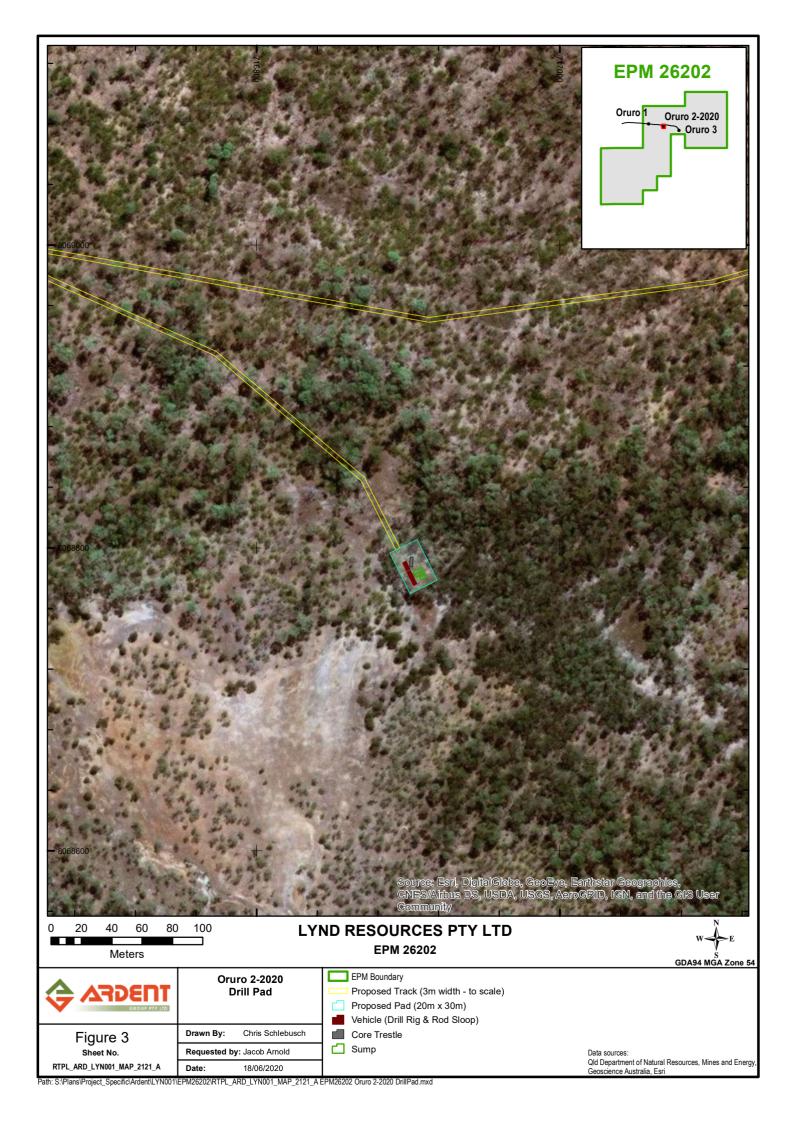
<sup>\*</sup>Denotes initial target sites.

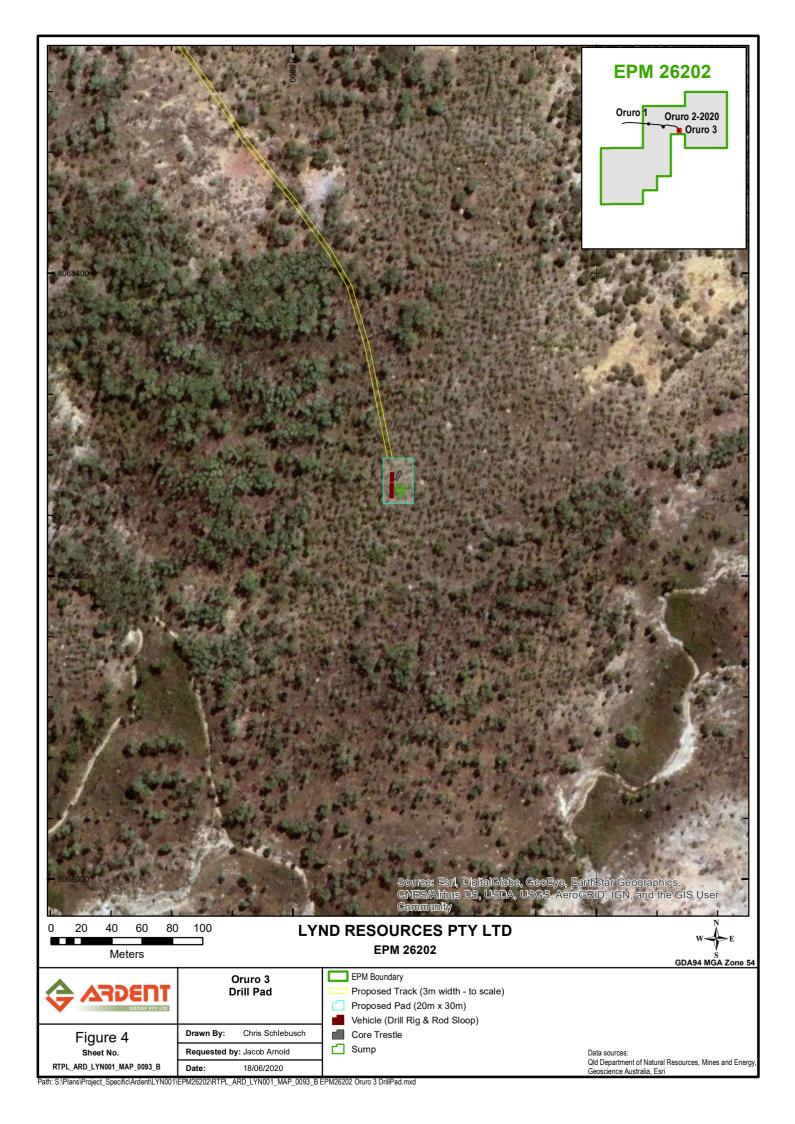
Table 6 Proposed resource activities and associated locations

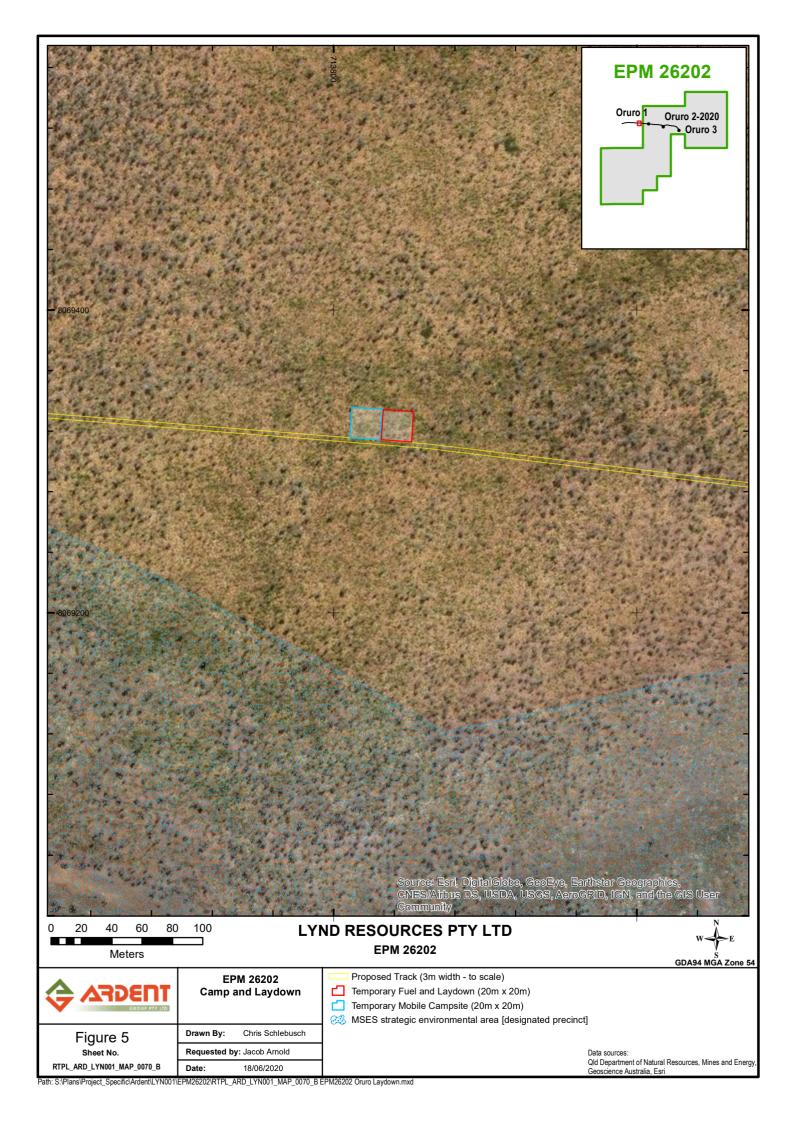
Resource Activity	Number	Location (coordinates)
Access tracks	As required	Beginning of access track: -17.45284°, 142.99268°
Drill pads	1 initially, maximum of 3	Oruro 1: -17.453240°, 143.024520°* Oruro 2-2020: -17.45649°, 143.04236° Oruro 3: -17.461020°, 143.060910°
Temporary Fuel and Laydown Area	1	-17.451894°, 143.013245°
Temporary Mobile Campsite	1	-17.451869°, 143.012293°

**Figure 2** and **Figure 4**, show the extent of the currently approved Oruro drill pads have been updated to reflect the overview of exploration activities within EPM 26202. Similarly, **Figure 5** shows the extent of the currently approved temporary mobile campsite and temporary fuel and laydown area that has been updated to reflect the EPM 26202 exploration activities overview. While **Figure 3** shows the footprint of the proposed Oruro 2-2020 drill pad.











#### 2.4 Approved Plans and Amendments

As amendments to the drill pads and access tracks are proposed, the approved plans are also required to be amended. Table 7 details the current approved plans and the associated replacement plan reference within this report.

The following approved plans have not had significant amendments, however, the replacement plans within this report have been included to reflect the overview of exploration activities within EPM 26202 that are present on the plans.

- Figure 1: Footprint of the Oruro 1 drill pad, Sheet No. ADMG\_ARD\_LYN001\_MAP\_0091\_A, dated 2/07/18, submitted with the applicant's response to the Requirement Notice on 13 July 2018 (refer **Attachment 1**);
- Figure 3: Footprint of the Oruro 3 drill pad (non-target drill pad), Sheet No. ADMG\_ARD\_LYN001\_MAP\_0093\_A, dated 2/07/18, submitted with the applicant's response to the Requirement Notice on 13 July 2018 (refer **Attachment 1**); and
- Figure 4: Footprint of the Oruro campsite and laydown area, Sheet No. ADMG\_ARD\_LYN001\_MAP\_0070\_A, dated 2/07/18, submitted with the applicant's response to the Requirement Notice on 13 July 2018 (refer **Attachment 1**).

The following approved plans do not require amending as the size and composition of the drill pad, temporary campsite and temporary fuel and laydown storage area will remain the same.

- Figure 11: Schematic of proposed drill pad, undated, provided by the applicant and lodged with the application on 30 May 2018 (refer **Attachment 1**);
- Figure 12: Schematic of fuel and laydown storage area, undated, as provided by the applicant and lodged with the application on 30 May 2018 (refer **Attachment 1**); and
- Figure 13: Schematic of mobile campsite, undated, provided by the applicant and lodged with the application on 30 May 2018 (refer **Attachment 1**).

Table 7 Replacement approved plan reference table

Approved Plan	Replacement Plan reference within this report
Figure 1: Location of Proposed Exploration Activities within the Gulf Rivers SEA, Sheet No. ADMG_ARD_LYN001_MAP_0052_A, dated 30/04/18, provided by the applicant and lodged with the application on 30 May 2018 (refer <b>Attachment 1</b> );	Figure 1
Figure 1: Footprint of the Oruro 1 drill pad, Sheet No. ADMG_ARD_LYN001_MAP_0091_A, dated 2/07/18, submitted with the applicant's response to the Requirement Notice on 13 July 2018 (refer <b>Attachment 1</b> );	Figure 2



Approved Plan	Replacement Plan reference within this report
Figure 2: Footprint of the Oruro 2 drill pad (non-target drill pad), Sheet No. ADMG_ARD_ LYN001_MAP_0092_A, dated 2/07/18, submitted with the applicant's response to the Requirement Notice on 13 July 2018 (refer <b>Attachment 1</b> );	Figure 3
Figure 3: Footprint of the Oruro 3 drill pad (non-target drill pad), Sheet No. ADMG_ARD_ LYN001_MAP_0093_A, dated 2/07/18, submitted with the applicant's response to the Requirement Notice on 13 July 2018 (refer <b>Attachment 1</b> );	Figure 4
Figure 4: Footprint of the Oruro campsite and laydown area, Sheet No.  ADMG_ARD_LYN001_MAP_0070_A, dated 2/07/18, submitted with the applicant's response to the Requirement Notice on 13 July 2018 (refer <b>Attachment 1</b> );	Figure 5
Figure 9: Oruro Designated Precinct Disturbance Section 1, Sheet No.  ADMG_ARD_LYN001_ MAP_0114_A, dated 6/07/18, submitted with the applicant's response to the Requirement Notice on 13 July 2018 (refer <b>Attachment 1</b> );	Figure 9
Figure 10: Oruro Designated Precinct Disturbance Section 2, Sheet No. ADMG_ARD_LYN001_MAP_0115_A, dated 6/07/18, submitted with the applicant's response to the Requirement Notice on 13 July 2018 (refer <b>Attachment 1</b> );	Figure 10
Figure 11: Schematic of proposed drill pad, undated, provided by the applicant and lodged with the application on 30 May 2018 (refer <b>Attachment 1</b> );	No change
Figure 12: Schematic of fuel and laydown storage area, undated, as provided by the applicant and lodged with the application on 30 May 2018 (refer <b>Attachment 1</b> );	No change
Figure 13: Schematic of mobile campsite, undated, provided by the applicant and lodged with the application on 30 May 2018 (refer <b>Attachment 1</b> ).	No change



#### 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.

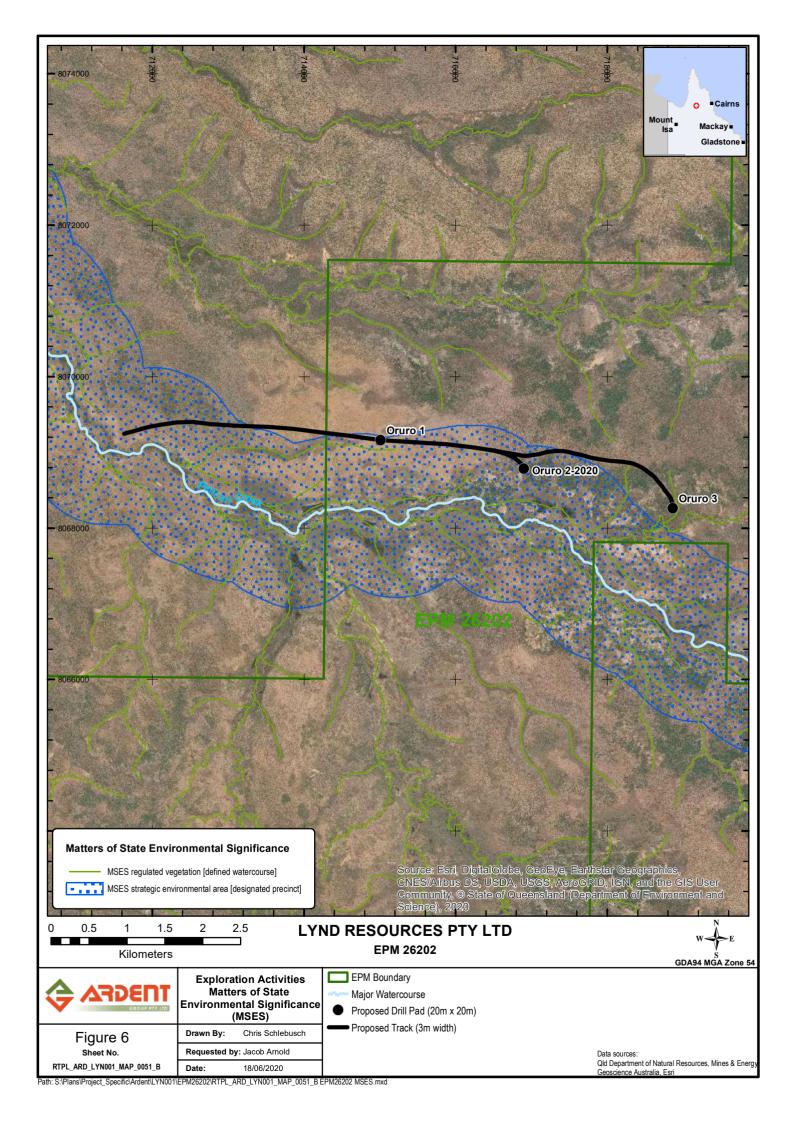
# 3.1 Riparian Process

There will be no Matters of State Environmental Significance (MSES) Regulated vegetation (defined watercourse) corridors impacted by exploration activities (Figure 6). The Oruro project exploration activities will require some disturbance to the riparian vegetation corridor (Designated Precinct) associated with Pelican Creek.

The slight amendment in the beginning of the access track will ensure the Oruro project will not disturb any 'of concern' Regional Ecosystems (RE). There are no known estuaries, lakes or wetlands that will be encountered as a result of the drill pads or access tracks.

An Environmentally Sensitive Area map has been obtained for EPM 26202 which has indicated that there are no Category A, B or C environmentally sensitive areas that are within the scope of proposed activities (**Appendix 1**). All proposed activities will occur wholly within Lot 171 on EI835473, a protected plants flora survey trigger map for this Lot has indicated it is not a high-risk area (**Appendix 2**).

A summary of all REs which will be disturbed through access tracks and/or drill pads are described in **Table 8** with REs illustrated in **Figure 7**.





# Table 8 Summary of Regional Ecosystems disturbed by exploration activities

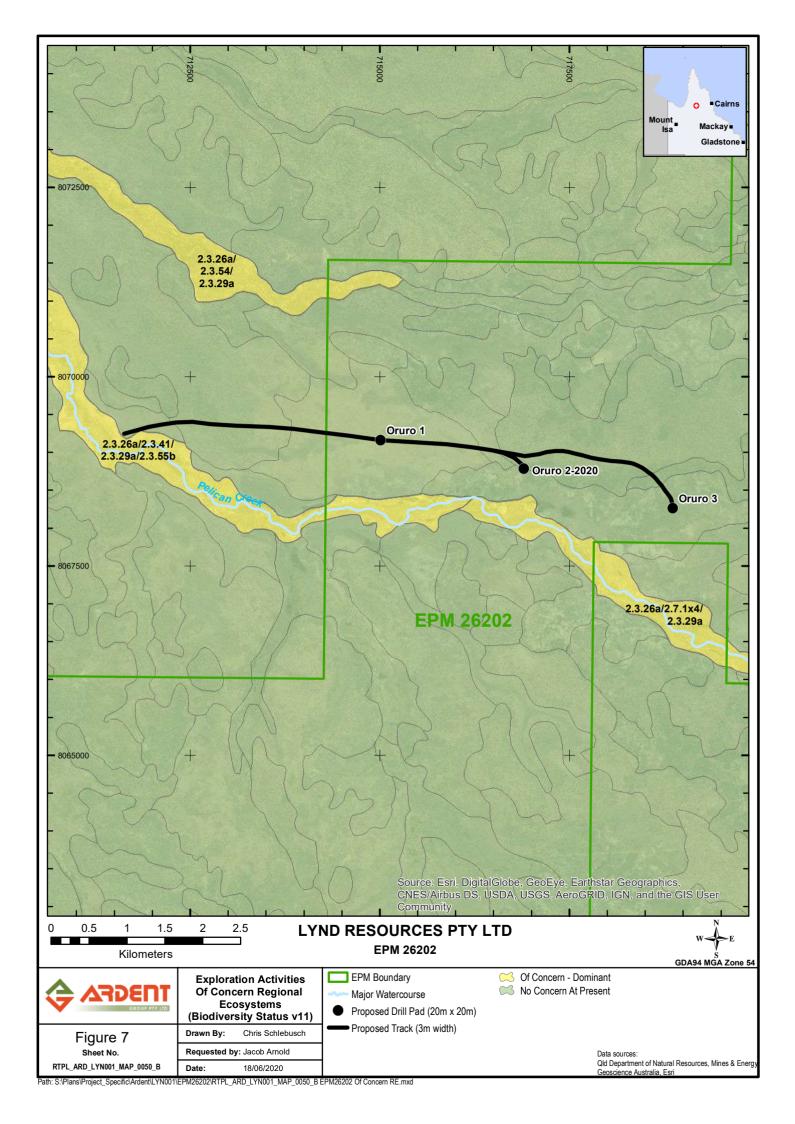
RE	Summary Description	Biodiversity Status	Vegetation Management Act Class	Structure Category
2.3.29a	Melaleuca viridiflora low woodland to low open woodland, occasionally with M. citrolens, M. stenostachya. M. acacioides, Grevillea striata and Terminalia spp. may occur in the canopy. Emergent Corymbia polycarpa, Eucalyptus chlorophylla, E. microtheca and C. clarksoniana may occur. A shrub layer commonly occurs, including Melaleuca spp., Petalostigma spp. and Carissa lanceolata. The ground layer is tussock grasses, commonly Eriachne spp. Occurs on active Quaternary alluvial plains and drainage depressions in the north-east of the bioregion. Silty clay and texture contrast soils. Floodplain (other than floodplain wetlands). (BVG1M: 21a). Special values: Potential habitat for the golden-shouldered parrot (Psephotus chrysopterygius)	No concern at present	Least concern	Sparse
2.3.29c	Melaleuca viridiflora low open woodland to woodland, occasionally with M. citrolens and M. stenostachya. Emergent Corymbia polycarpa, Eucalyptus chlorophylla and C. dallachiana may occur. A shrub layer commonly occurs, including Melaleuca viridiflora and Petalostigma banksii. The ground layer is tussock grasses, including Eriachne spp., Schizachyrium fragile and Aristida spp. Occurs on old alluvial plains (recent Pleistocene surface) in the north-east of the bioregion. Grey-brown sandy loam and sandy clay loam soils. Floodplain (other than floodplain wetlands). (BVG1M: 21a). Special values: Potential habitat for the golden-shouldered parrot (Psephotus chrysopterygius)	No concern at present	Least concern	Sparse
2.5.5a	Eucalyptus tetrodonta and/or Corymbia polycarpa woodland to open woodland. Erythrophleum chlorostachys and C. curtipes may occur in the canopy. A lower tree or shrub layer commonly occurs, including Melaleuca spp. and Petalostigma spp. The ground layer is tussock grasses, including Aristida spp., Schizachyrium fragile and Thaumastochloa spp. Occurs on sandy rises and abandoned levees on broad, Tertiary sand sheets. Pale brown sands. (BVG1M: 14a). Special values: None	No concern at present	Least concern	Very sparse



RE	Summary Description	Biodiversity Status	Vegetation Management Act Class	Structure Category
2.5.14c	Melaleuca viridiflora low open woodland to low woodland, commonly with M. citrolens and Asteromyrtus symphyocarpa. Emergent Corymbia polycarpa and Cochlospermum gregorii may occur. A shrub layer commonly occurs, including Petalostigma banksii, Acacia spp. and Gardenia vilhelmii. The ground layer is tussock grasses, including Schizachyrium fragile, Thaumastochloa spp. and Aristida spp. Occurs on level to gently undulating Tertiary sand sheets in the north-east of the bioregion. Yellow to brown sandy loams and texture contrast soils. (BVG1M: 21a). Special values: Potential habitat for the golden-shouldered parrot (Psephotus chrysopterygius)	No concern at present	Least concern	Sparse
2.5.17a	Melaleuca stenostachya and/or M. citrolens low woodland to woodland, occasionally with Eucalyptus microneura, E. provecta, Acacia leptostachya and Terminalia platyptera. A shrub layer of Petalostigma banksii may occur. The ground layer is variable, commonly tussock grasses. Occurs on undulating outwash deposits and erosional Tertiary sand sheets in the north of the bioregion. Brown sandy and texture contrast soils. (BVG1M: 21b). Special values: None	No concern at present	Least concern	Sparse
2.5.19a	Eucalyptus tetrodonta and Erythrophleum chlorostachys woodland commonly with Eucalyptus chartaboma. Occasional canopy species include Corymbia pocillum and C. polycarpa. A lower tree or shrub layer commonly occurs, including canopy species, Grevillea spp. and Petalostigma spp. The ground layer is tussock grasses, including Schizachyrium fragile, Heteropogon spp. and Aristida spp. Occurs on undulating sand sheets on Mesozoic sandstone plateaus. Red to brown sands and sandy loams. (BVG1M: 14a). Special values: None	No concern at present	Least concern	Sparse
2.5.19b	Eucalyptus chartaboma and/or Corymbia pocillum woodland to open forest, occasionally with Eucalyptus tetrodonta and Erythrophleum chlorostachys. A lower tree or shrub layer may occur, including canopy species, Petalostigma spp. and Acacia spp. The ground layer is tussock grasses, including, Schizachyrium fragile and Aristida spp. Occurs on sand sheets on Mesozoic sandstone plateaus. Red to brown sands and sandy loams. (BVG1M: 14a). Special values: None	No concern at present	Least concern	Sparse



RE	Summary Description	Biodiversity Status	Vegetation Management Act Class	Structure Category
2.7.1x3a	Melaleuca citrolens low open woodland. A sparse shrub layer may occur, including Petalostigma pubescens, Carissa lanceolata, Acacia meiosperma and Calytrix leptophylla. The ground layer is commonly bare rock with sparse grasses, including Aristida spp., Schizachyrium fragile and Eriachne spp. Occurs on breakaways and outcrops of exposed ferricrete on erosional surfaces in Tertiary sand sheets. (BVG1M: 21b). Special values: Supports plants with restricted geographic ranges.	No concern at present	Least concern	Mid-dense
2.7.1x6	Triodia spp. hummock grassland, commonly with emergent Eucalyptus melanophloia, Melaleuca citrolens, Corymbia pocillum, M. stenostachya and Acacia meiosperma. Small areas of Eucalyptus melanophloia and/or Melaleuca citrolens low open woodland with Triodia spp. understorey occasionally occur. Occurs on crests and slopes of lateritised, Tertiary sandstone hills. (BVG1M: 33b). Special values: Supports plants with restricted geographic ranges.	No concern at present	Least concern	Mid-dense
2.7.2x5	Acacia shirleyi and/or Melaleuca foliolosa woodland. Corymbia pocillum, C. setosa, M. citrolens, C. polycarpa, M. viridiflora and Corymbia grandifolia subsp. grandifolia may occur in the canopy or as lower trees. A shrub layer may occur, including Petalostigma banksii, Gardenia vilhelmii and Bossiaea armitii. The ground layer is tussock grasses, including Schizachyrium fragile, Thaumastochloa sp. and Eriachne spp. Occurs on exposures of ferricrete in erosional, Tertiary sand sheets. Shallow to skeletal sandy soils over ferricrete. (BVG1M: 24a). Special values: Supports plant species with restricted geographic ranges.	No concern at present	Least concern	Sparse
2.10.5a	Acacia shirleyi low woodland to open forest, commonly with Corymbia serendipita, C. pocillum and Eucalyptus chartaboma. C. gilbertensis, Callitris intratropica, E. similis and E. tetrodonta occasionally occur in the canopy. A shrub layer commonly occurs, including Acacia shirleyi, Gardenia spp. and Grevillea decora. The ground layer is tussock grasses, including Schizachyrium sp. and Cleistochloa subjuncea. Occurs on Mesozoic sandstone plateaus, scarps and steps. (BVG1M: 24a). Special values: Supports plant species with restricted geographic ranges.	No concern at present	Least concern	Sparse





#### 3.2 Wildlife Corridors

Vegetation communities along watercourses and drainage features not only function as habitat for particular fauna but also as a movement corridor. According to the Vegetation Management Watercourse and Drainage Feature Mapping for the area, the proposed tracks will not intersect any corridors of regulated vegetation.

There are no known 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 Staaten River 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 Staaten Basin. Drainage from the Oruro sites will flow into Pelican Creek before it converges with the Red River which then diverges into Pelican and Wyaaba Creeks. The watercourses then converge into Wyaaba Creek before flowing into the Staaten River which ultimately flows into the Gulf of Carpentaria. There are no open or closed DNRME gauging stations directly downstream of the Oruro sites. There is currently only one open DNRME gauging station within the Staaten Basin. While this gauging station will not display the exact characteristics of the exploration sites, the Staaten River at Dorunda gauging station will provide some insight to the characteristics of the catchment.

Water quality characteristics and flow conditions can be observed in **Table 9** and **Table 10**. Water flow in the catchment is seasonal, exhibiting large flows throughout the wet season from December to April before flows decrease dramatically over the dry season.

Table 9 Water Quality Characteristics at Site 918003A Staaten River at Dorunda (Queensland Government, 2020)

Parameter	Count	Mean	Median
EC @ 25°C (μS/cm)	28	52.58	48.5
рН	28	6.90	6.91
Turbidity (NTU)	28	6.86	6
Total Nitrogen (mg/L)	25	0.42	0.38
Total Phosphorous (mg/L)	25	0.06	0.04



Table 10 Water Flow Volume (ML) at Site 918003A Staaten River at Dorunda (Queensland Government, 2020)

	Daily				Monthly
Month	Max	Min	Mean	Median	Mean
January	92107	0	11459	674	350719
February	98090	0	23046	8875	628826
March	98712	11	19384	7733	600891
April	93797	0	3625	661	107333
May	30996	0	467	53	14220
June	2917	0	67	2	1996
July	407	0	9	0	294
August	35	0	1	0	16
September	1	0	0	0	0
October	508	0	1	0	27
November	3162	0	17	0	508
December	72052	0	1170	0	35662
All months	98712	0	4640	0	139468

In terms of groundwater, the Oruro project is situated on the Great Artesian Basin in the Gulf Gilbert River Aquifer area. There are no known artesian springs located near the Oruro sites. The nearest registered groundwater bore within the catchment is bore RN14732 located approximately 23km from Oruro 1, the most recent water quality analysis conducted at this location was on 29 October 1968.

# 3.4 Hydrological Processes

The nearest *Water Act 2000* defined watercourse (Pelican Creek) is approximately 240m north of the beginning of the access track and is situated approximately 700m south of the Oruro 2-2020, the closest drillhole. There will be nineteen non-perennial waterholes situated within 2km of the access track or drill pads, with the closest located approximately 650m from the access track. These non-perennial waterholes appear to be associated with Pelican Creek as they are all located within 350m of Pelican Creek. There will not be any dams, lakes or springs located near the proposed exploration activities.

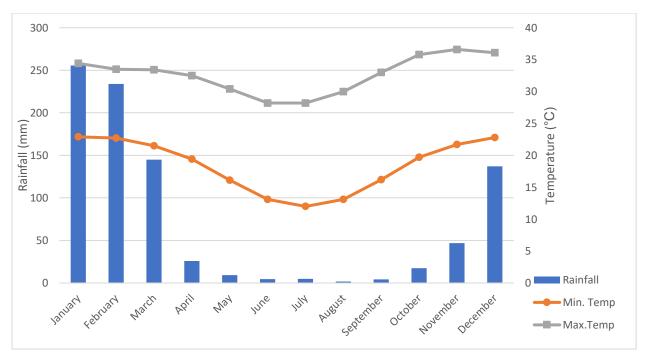
# 3.5 Geomorphic Processes

Drillholes will encounter sedimentary rocks of the Karumba and Carpentaria Basins before bottoming in Palaeozoic rocks, possibly volcanic or intrusive rocks. Several aquifers occur in the Karumba and Carpentaria Basin stratigraphy and are likely to be encountered, including weakly to moderately producing aquifers of the Gilbert River Formation, which is a sub-artesian to artesian aquifer.



#### 3.6 Climate

The region is characterised by having a distinct wet and dry season, the mean annual rainfall for the region is 883.9mm with 87% of the annual rainfall falling between December and March. Daily minimum temperatures range from 12°C in winter to 22.9°C in summer and maximum temperatures range from 28.2°C in winter to 36.6°C in summer (Figure 8).



Rainfall data taken from Abingdon Downs Station weather station located approximately 23km from the Oruro sites using monthly rainfall data beginning in 1945. The temperature data is taken from the Georgetown Post Office weather station located approximately 107km from the Oruro Sites. Monthly data used for mean maximum temperature is from 1909 to 2007, while mean minimum temperatures is from 1894 to 2007.

Figure 8 Monthly mean rainfall, minimum and maximum temperatures for the region (BOM, 2020)

#### 3.7 Land Use

The land use of the surrounding area is classified as grazing native vegetation with the land use on Lot 171 on El835473 being a cattle station leased to The Trust Company Limited (A.C.N. 004 027 749) as trustees. Cunningham Cattle Company Pty Ltd are the operating company of Abingdon Downs Station.



#### 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

There will not be any MSES regulated vegetation (defined watercourse) crossings as part of the Oruro exploration activities. Activities for the Oruro project will require some disturbance to the riparian vegetation corridor (Designated Precinct) associated with Pelican Creek. Figure 9 and Figure 10 are site-specific vegetation maps of disturbance within the Designated Precinct. Disturbance in the Designated Precinct will predominately be in sparsely vegetated areas, composed largely of sparse woodland ecosystems with a tussock grass layer.

Criteria used to decide the location of access tracks include:

- The distance from the nearest constructed property track or existing disturbance (in this case airstrip/pastoral track) to the drill sites;
- The nature of the vegetation between the start point and the drill pads i.e. dense or open, Endangered, Of Concern, or Least Concern at Present Regional Ecosystems; and
- Evidence or likelihood of high use by fauna footprints, hollow bearing trees, nest or den sites etc.

Applying this criteria to route selection for the 3m wide access tracks through the Designated Precinct ensures that they will not interfere with the ecological function of the riparian vegetation communities in the Designated Precinct. Access tracks will be constructed by driving the grader (or bulldozer) along the route, with the blade up where possible, to minimise disturbance to topsoil, retaining most grasses, herbs and small shrubs while avoiding woody vegetation as much as possible and practical.

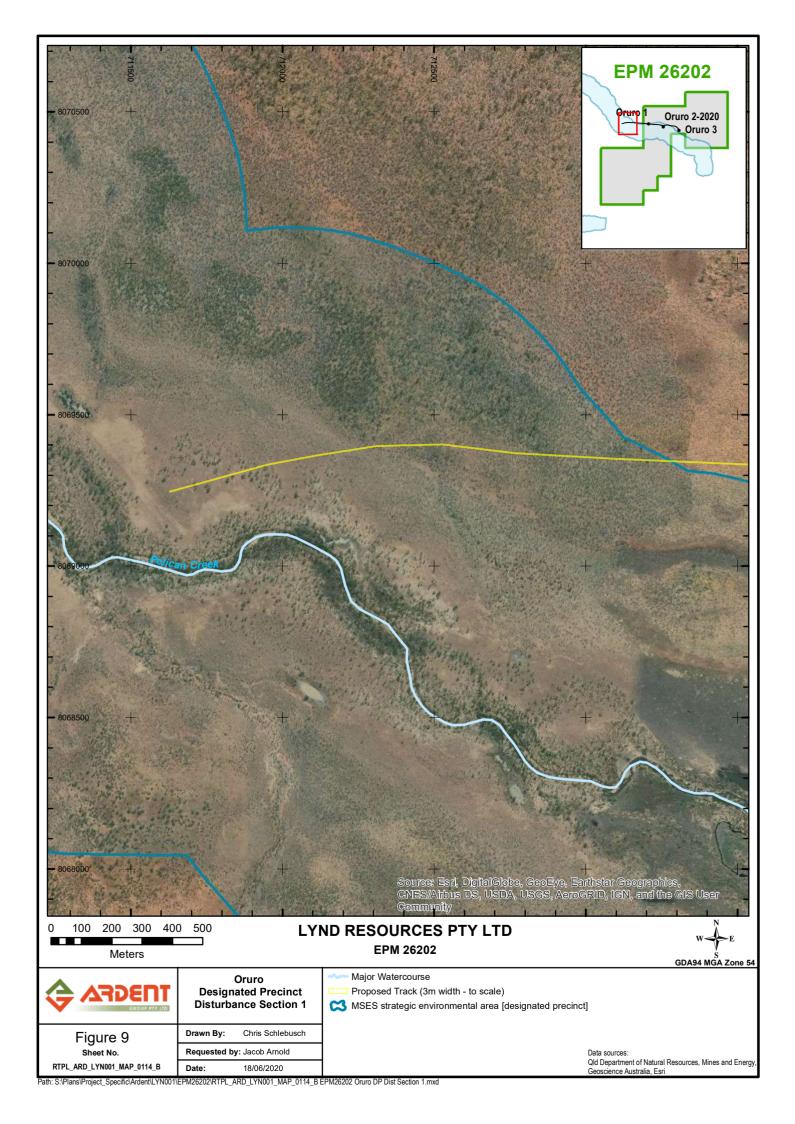
The access tracks were selected to start at the nearest existing track to each of the proposed drill sites and were designed to reduce the extent of environmental disturbance by avoiding dense vegetation. Although disturbance within the Designated Precinct will occur, detailed desktop assessment has identified routes that will minimise environmental disturbance.

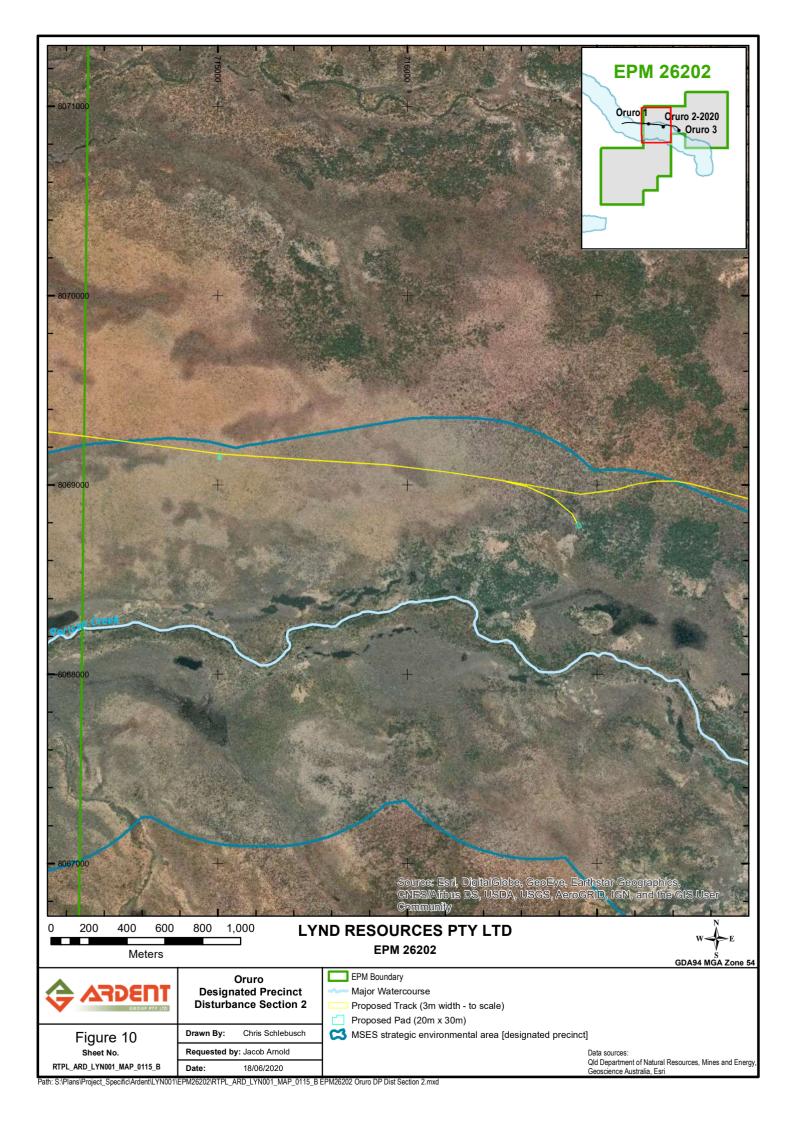
Further desktop and preliminary reconnaissance investigations have considered riparian ecosystems and therefore, there is no current intention to have further setback areas for this particular project. The proposed activities will not cause widespread or irreversible impacts to the riparian processes 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 as soon as practicable 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. Wildlife corridors in the exploration area will involve the Designated Precinct associated with Pelican Creek. All proposed disturbance caused by the exploration activities is situated at least 200m from Pelican Creek. The disturbance to this corridor will only involve 3m wide sections of track and it is not considered that widespread irreversible disturbance of this corridor will occur.

The proposed disturbance in the Designated Precinct will be in open woodland where clearing mature trees can easily be avoided. The unmodified structure of this vegetation association does not have canopy closure or a continuous or contiguous woody vegetation canopy cover; because no trees or large shrubs will be removed, there will be no modification of the woody vegetation canopy and consequently the structure and function of the corridor will be unaltered. As track construction is usually 'blade up', the proposed access track for exploration activities will not affect the connectivity and functionality of vegetation in the area, and the area will continue to provide habitat for fauna and facilitate movement of fauna.

The proposed disturbance will not impede the movement of fauna or impact on any ecological functions of a riparian vegetation community. The fauna in the region using corridors of particular vegetation communities should not be impacted through the temporary disturbance. The clearing of vegetation will minimise the clearing of mature native trees and all disturbance will be rehabilitated as soon as practical following the conclusion of geological interest in the region. The exploration activities will not compromise the preservation of wildlife corridor function of the riparian vegetation as the connection between native terrestrial vegetation along and across any watercourse systems will maintain sufficient migration, shelter and habitat and will not impede passage for aquatic/marine fauna along watercourses.

There are no permanent waterholes and springs nearby that will be impacted as a result of the exploration activities.

#### 4.2.1 Rare and Threatened Species

**Appendix 3** is a copy of an *Environment Protection and Biodiversity Conservation Act 1999 (C'wlth)* (EPBC Act) Protected Matters Report. This report lists threatened species or threatened species habitat that may, is likely to or is known to occur within the areas surrounding the resource activities.

The EPBC Act Protected Matters report lists three threatened species or their habitat as likely or known to occur within the Oruro exploration area. The Red Goshawk (*Erythrotriorchis radiatus*) is listed as Vulnerable under the EPBC Act and Endangered under the Queensland *Nature Conservation Act* 1992 (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 Ghost Bat (*Macroderma gigas*), is listed as Vulnerable under the EPBC Act and Endangered under the NC Act. Throughout the day, the Ghost Bat roosts in caves, rock crevices and old mines; the proposed exploration activities will not disturb caves, rock crevices or old mines. The plant species *Macropteranthes montana* is known to occur in the area and is listed as Vulnerable under the



EPBC Act. *Macropteranthes montana* will be surveyed for during track and pad marking. If found during the survey, these plants will be identified to ground staff and protected from harm or disturbance.

While the REs 2.3.29a, 2.3.29c, and 2.5.14c have the 'Special Value' of being potential habitat for the Golden-Shouldered Parrot (*Psephotus chrysopterygius*), the EPBC Act Protected Matters Report does not list the Golden-Shoulder Parrot as potentially being present within the Oruro project footprint. The Golden-Shouldered Parrot is listed as Endangered under the EPBC Act and NC Act. The Golden-Shouldered Parrot nests in termite mounds, in addition the Antbed Parrot Moth (*Trisyntopa scatophaga*) (listed as Endangered under both the EPBC Act and NC Act) occurs exclusively in association with the Golden-Shouldered Parrot, whereby the parrot nestlings' excreta is eaten by the larvae of the moth within the termite mound. The Antbed Parrot Moth is likely to be wholly dependent on the Golden-Shouldered Parrot. While not being listed as occurring within the project footprint, care will be taken to ensure no termite mounds are disturbed.

A Queensland Government Wildlife Online Extract was completed for the areas surrounding the proposed activities. The species list search displayed three records of three 'least concern' plant species (**Appendix 4**).

#### 4.3 Water Quality

The change in the Oruro exploration footprint will not have any increased impact on the water quality environmental attribute within the Gulf Rivers SEA.

The proposed exploration activities will occur in the dry season with minimal if any precipitation falling resulting in reduced watercourse flows in the region. 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

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. As detailed in **Table 10**, mean monthly water flow at the DNRME water monitoring site 918003A Staaten River at Dorunda during the dry season is low. This site is located within a higher order stream and significantly downstream of proposed activities. Therefore, it would be considered that watercourse flows will 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.

#### 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 deposition 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);
- 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 11**. This table provides a summary of the details described in this project against the assessment criteria.

Table 11 Criteria for assessment or decision in a SEA

Schedule 2 Part 5 of the RPI Regulation	Response
Required Outcome	Response
(14) The activity will not result in a widespread or irreversible impact on an environmental attribute of a strategic environmental area.	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).
Prescribed Solution	Response
(15)(1) The application demonstrates either – (a) the activity will not, and is not likely to, have a direct or indirect impact on an environmental attribute of the strategic environmental area; or	Note: this application addresses the requirement of section 15(1)(b).
<ul> <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>	There will be activity that occurs within a Designated Precinct. However, the proposed activities do not include any of the unacceptable uses listed in Schedule 2 Part 5 s15(2).
(ii) the construction and operation footprint of the activity on the environmental attribute is minimised to the greatest extent possible;	<ul> <li>The proposed exploration activities subject to this amendment have been reviewed through a desktop investigation and included:         <ul> <li>Access track refinement to minimise operational footprint on environmental attributes;</li> <li>Assessment of additional exploration activities on the Gulf Rivers SEA environmental attributes;</li> <li>State and Commonwealth environmental database searches;</li> <li>Minimise extent of access track width and area of drill pads.</li> <li>Avoid or minimise clearance of vegetation, in particular mature trees, threatened vegetation and riparian vegetation.</li> </ul> </li> </ul>
(iii) the activity does not compromise the preservation of the environmental attribute within the strategic environmental area;	<ul> <li>The amended exploration activities will have negligible short- and long-term impacts on natural hydrologic processes in the area. Waterflows associated with watercourses, floodplains and groundwater will be minimal</li> </ul>





#### 6. Conclusion

Lynd Resources have identified a preferred target location for the Oruro 2 drill pad as part of the Oruro project (RPI/016). This has resulted in its relocation approximately 160m south and renaming it to Oruro 2-2020. As such, Lynd Resources are applying to amend Condition 1 (and associated references) of their current RIDA, originally granted on 11 September 2018, pursuant to section 55 of the RPI Act.

Where vegetation is required to be cleared, the construction of the access tracks will generally be 'blade up' and will not involve bare-earth clearing or formed and graded track construction. Access tracks are two-wheel tracks following a route to avoid woody vegetation and fauna habitat, and swept of obstacles such as rocks or fallen trees if these cannot be avoided. Tracks generally follow natural inclines into and out of drainage lines and go around large obstacles, landform, or dense vegetation.

The resource activities will continue to have no widespread or irreversible impacts on the five environmental attributes of the Gulf River SEA. 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 an unacceptable use for a Designated Precinct;
- 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;
- Widespread areas of riparian vegetation will not be cleared;
- Disturbance rehabilitation will occur as soon as possible after works have been completed;
- 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); and
- The resource activities will continue to adhere to conditions 2 to 14 of the current RIDA.



#### 7. References

Bureau of Meteorology (BOM) 2020, Monthly rainfall Abingdon Downs Station, accessed 16 June 2020, <a href="http://www.bom.gov.au/jsp/ncc/cdio/wData/wdata?p\_nccObsCode=139&p\_display\_type=dataFile&p\_stn\_num=030000">http://www.bom.gov.au/jsp/ncc/cdio/wData/wdata?p\_nccObsCode=139&p\_display\_type=dataFile&p\_stn\_num=030000</a>>.

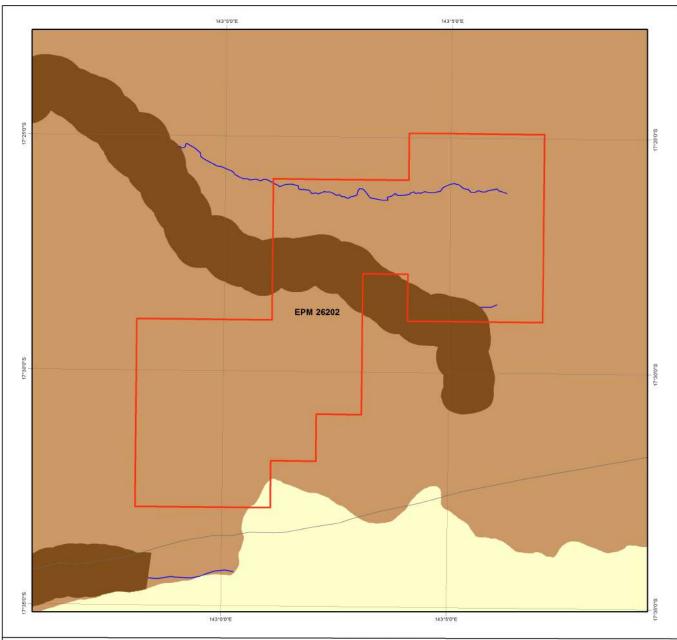
BOM 2020, Monthly mean maximum temperature Croydon Township, accessed 16 June 2020, <a href="http://www.bom.gov.au/jsp/ncc/cdio/wData/wdata?p">http://www.bom.gov.au/jsp/ncc/cdio/wData/wdata?p</a> nccObsCode=36&p display type=dataFile&p s to num=029012>.

BOM 2020, Monthly mean minimum temperature Croydon Township, accessed 16 June 2020, <a href="http://www.bom.gov.au/jsp/ncc/cdio/wData/wdata?p">http://www.bom.gov.au/jsp/ncc/cdio/wData/wdata?p</a> nccObsCode=38&p display type=dataFile&p s to num=029012>.

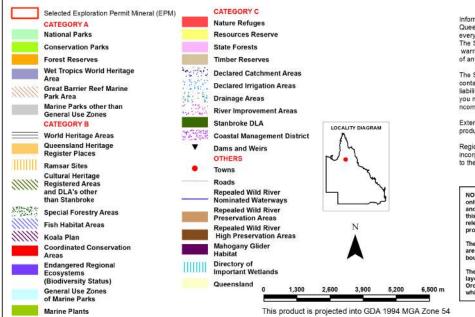
Queensland Government 2020, 918003A Staaten River at Dorunda, accessed 16 June 2020, <a href="https://water-monitoring.information.qld.gov.au/?ppbm=918003A&rs&1&rslf\_org">https://water-monitoring.information.qld.gov.au/?ppbm=918003A&rs&1&rslf\_org</a>.



Appendix 1 Environmentally Sensitive Area Map



### **ENVIRONMENTALLY SENSITIVE AREAS - Mining Activities**



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External contributors (non-government parties) of the data for this product are: Great Barrier Reef Marine Park Authority

Regional ecosystem mapping (remnant biodiversity status) may incorporate amendments, resulting from property level assessments, to the release version of the mapping available on QSpatial.

NOTE TO USER: Themes presented in this map are indicative only. Field survey may be required to verify the "true" spatial extend and value. Not all environmentally sensitive areas are presented in this map. A user should refer to the particular circumstances relevant to their situation to assess the 'completeness' of themes provided.

The user should note that some boundaries and indicated values are ambient and may change over time (e.g. regional ecosystem boundaries and conservation status, watercourse mapping etc).

The user should be aware that due to multiple overlapping themes layers present, some themes/layers may be obscured by others. Ordering in the Legend does not accurately reflect the order by which themes/layers are displayed.

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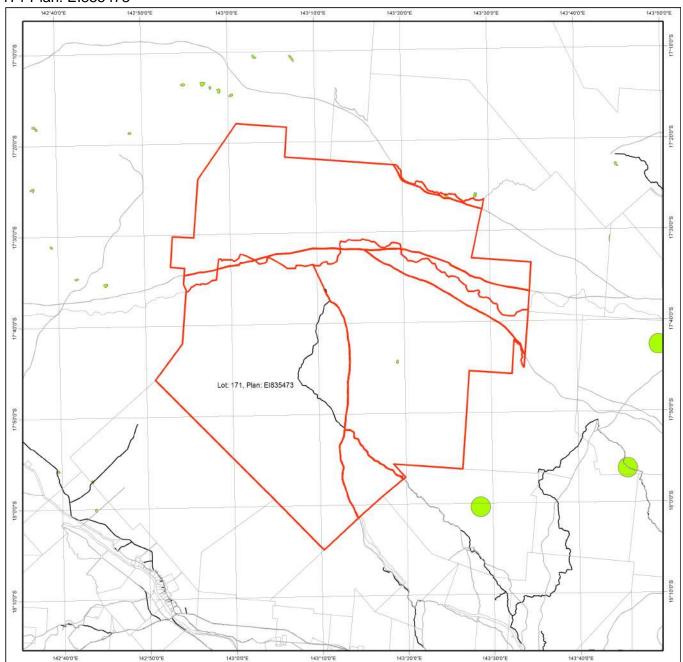




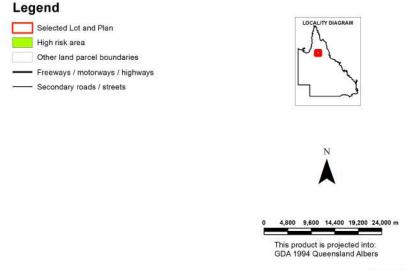


Appendix 2: Protected Plants Flora Survey Trigger Map

Lot: 171 Plan: El835473



### **Protected Plants Flora Survey Trigger Map**



This map shows areas where particular provisions of the Nature Conservation Act 1992 apply to the clearing of protected plants.

Land parcel boundaries are provided as locational aid

This map is produced at a scale relevant to the size of the area selected and should be printed as A4 size in portrait orientation.

For further information or assistance with interpretation of this product, please contact the Department of Environment and Science at palm@ehp.qld.gov.au

Disclaimer:

While every care is taken to ensure the accuracy of the data used to generate this product, the Queensland Government makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaim all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damages) and costs which might be incurred as a consequence of reliance on the data, or as a result of the data being inaccurate or incomplete in any way and for any reason.

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#### 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 section 89 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.

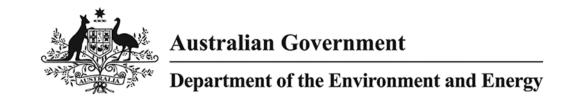
#### **Species information**

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 3: EPBC Protected Matters 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.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about <u>Environment Assessments</u> and the EPBC Act including significance guidelines, forms and application process details.

Report created: 16/06/20 11:23:46

**Summary** 

**Details** 

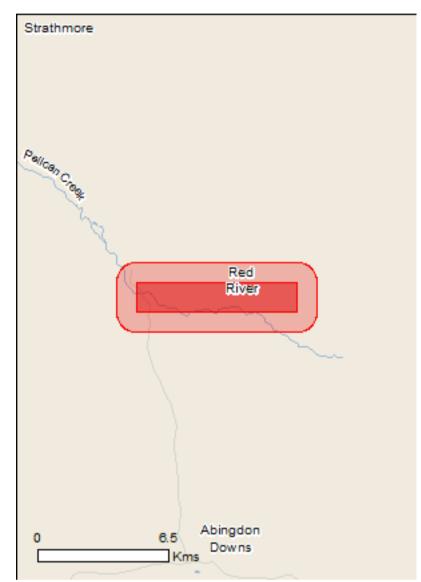
Matters of NES

Other Matters Protected by the EPBC Act

**Extra Information** 

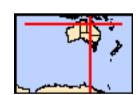
Caveat

<u>Acknowledgements</u>



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

Coordinates
Buffer: 1.0Km



## **Summary**

### Matters of National Environmental 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 <u>Administrative Guidelines on Significance</u>.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	None
Listed Threatened Species:	8
Listed Migratory Species:	11

### Other Matters Protected by the EPBC Act

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

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at 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 Land:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	18
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

### **Extra Information**

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

State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	7
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

## Details

## Matters of National Environmental Significance

Listed Threatened Species		[ Resource Information ]
Name	Status	Type of Presence
Birds		
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Erythrotriorchis radiatus Red Goshawk [942]	Vulnerable	Species or species habitat
Erythrura gouldiae		likely to occur within area
Gouldian Finch [413]	Endangered	Species or species habitat may occur within area
Rostratula australis		
Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area
Tyto novaehollandiae kimberli		
Masked Owl (northern) [26048]	Vulnerable	Species or species habitat may occur within area
Mammals		
Macroderma gigas		
Ghost Bat [174]	Vulnerable	Species or species habitat likely to occur within area
Saccolaimus saccolaimus nudicluniatus		
Bare-rumped Sheath-tailed Bat, Bare-rumped Sheathtail Bat [66889]	Vulnerable	Species or species habitat may occur within area
Plants		
Macropteranthes montana		
[9003]	Vulnerable	Species or species habitat known to occur within area
Listed Migratory Species		[ Resource Information ]
* Species is listed under a different scientific name o		
Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Cuculus optatus		
Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Hirundo rustica Barn Swallow [662]		Species or species habitat may occur within area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area

	may occur w	ithin area
Other Matters Protected by the EPBC Act		
Listed Marine Species	[ Resource	e Information ]
* Species is listed under a different scientific name on	the EPBC Act - Threatened Species list.	
Name	Threatened Type of Pres	ence
Birds		
Actitis hypoleucos		
Common Sandpiper [59309]	Species or s may occur w	pecies habitat rithin area
Anseranas semipalmata		
Magpie Goose [978]	Species or s may occur w	pecies habitat rithin area
Apus pacificus		
Fork-tailed Swift [678]	•	pecies habitat ır within area
Ardea alba		
Great Egret, White Egret [59541]	·	pecies habitat ır within area
Ardea ibis		
Cattle Egret [59542]	Species or	pecies habitat rithin area
Calidris acuminata		
Sharp-tailed Sandpiper [874]	Species or	pecies habitat rithin area

Name	Threatened	Type of Presence
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Chrysococcyx osculans Black-eared Cuckoo [705]		Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
Hirundo rustica Barn Swallow [662]		Species or species habitat may occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area
Pandion haliaetus		
Osprey [952]		Species or species habitat may occur within area
Rostratula benghalensis (sensu lato)		
Painted Snipe [889]	Endangered*	Species or species habitat may occur within area
Reptiles		
Crocodylus johnstoni  Ereshwater Crocodile Johnston's Crocodile		Species or species habitat

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

Species or species habitat may occur within area

likely to occur

### **Extra Information**

### Invasive Species [Resource Information]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resouces Audit, 2001.

Name	Status	Type of Presence
Frogs		
Rhinella marina		
Cane Toad [83218]		Species or species habitat likely to occur within area
Mammals		
Canis lupus familiaris		
Domestic Dog [82654]		Species or species habitat

Name	Status	Type of Presence
Equus caballus		within area
Horse [5]		Species or species habitat likely to occur within area
Felis catus		
Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Sus scrofa		
Pig [6]		Species or species habitat likely to occur within area
Plants		
Acacia nilotica subsp. indica		
Prickly Acacia [6196]		Species or species habitat may occur within area
Cryptostegia grandiflora		
Rubber Vine, Rubbervine, India Rubber Vine, India Rubbervine, Palay Rubbervine, Purple Allamanda [18913]	1	Species or species habitat likely to occur within area

### Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the gualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, 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 distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for 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 reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

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

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

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

### Coordinates

 $-17.44993\ 142.99143, -17.44993\ 143.06279, -17.46264\ 143.06279, -17.46264\ 142.99143, -17.44993\ 142.99143$ 

## 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.



Appendix 4: Wildlife Online Extract



#### Wildlife Online Extract

Search Criteria: Species List for a Defined Area

Species: All Type: All

Status: All

Records: All

Date: All

Latitude: 17.4469 to 17.4671

Longitude: 142.9914 to 143.0628

Email: jacob.arnold@ardent-group.com.au

Date submitted: Tuesday 16 Jun 2020 11:35:19

Date extracted: Tuesday 16 Jun 2020 11:40:02

The number of records retrieved = 3

#### **Disclaimer**

As the DSITIA is still in a process of collating and vetting data, it is possible the information given is not complete. The information provided should only be used for the project for which it was requested and it should be appropriately acknowledged as being derived from Wildlife Online when it is used.

The State of Queensland does not invite reliance upon, nor accept responsibility for this information. Persons should satisfy themselves through independent means as to the accuracy and completeness of this information.

No statements, representations or warranties are made about the accuracy or completeness of this information. The State of Queensland disclaims all responsibility for this information and all liability (including without limitation, liability in negligence) for all expenses, losses, damages and costs you may incur as a result of the information being inaccurate or incomplete in any way for any reason.

Feedback about Wildlife Online should be emailed to wildlife.online@science.dsitia.qld.gov.au

Kingdor	n Class	Family	Scientific Name	Common Name	1	Q	Α	Records
plants plants plants	land plants land plants land plants	Myrtaceae Sparrmanniaceae Stylidiaceae	Melaleuca clarksonii Corchorus sericeus subsp. densiflorus Stylidium centrolepoides			C C C		1/1 1/1 1/1

#### **CODES**

- I Y indicates that the taxon is introduced to Queensland and has naturalised.
- Q Indicates the Queensland conservation status of each taxon under the *Nature Conservation Act 1992*. The codes are Extinct in the Wild (PE), Endangered (E), Vulnerable (V), Near Threatened (NT), Least Concern (C) or Not Protected ().
- A Indicates the Australian conservation status of each taxon under the *Environment Protection and Biodiversity Conservation Act 1999*. The values of EPBC are Conservation Dependent (CD), Critically Endangered (CE), Endangered (E), Extinct (EX), Extinct in the Wild (XW) and Vulnerable (V).

Records – The first number indicates the total number of records of the taxon for the record option selected (i.e. All, Confirmed or Specimens).

This number is output as 99999 if it equals or exceeds this value. The second number located after the / indicates the number of specimen records for the taxon. This number is output as 999 if it equals or exceeds this value.

