ARDENT GROUP PTY LTD
3 Water Street Red Hill 4059
T: +61 7 3368 1033
E: information@ardent-group.com.au
W: ardent-group.com.au
ABN: 38 609 696 764

12 March 2020

Mr Darren Brewer
Manager – Development Assessment Division
Dept of State Development, Manufacturing, Infrastructure and Planning

Via email: darren.brewer@dsdmip.qld.gov.au ; RPIAct@dsdmip.qld.gov.au

Dear Darren

Re: RPI18-014 Tupiza – seeking minor amendment

We refer to the amended Regional Interests Development Approval (RIDA) approval provided to our client Lynd Resources Pty Ltd on 25 June 2019 (application reference RPI18-014 Tupiza).

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 amendment drilling programme is sought.

The amended work programme would 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. The amended work programme will have less impact in comparison to the original RIDA – 3.08ha as opposed to 3.40ha.

Accordingly, pursuant to Section 55 of the *Regional Planning Interests Act 2014*, we hereby seek the Chief Executive's approval to amend the amended RIDA granted on 25 June 2019. We believe the change in work programme is a 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 holes, 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 RPI18-014.

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)

ARDENT GROUP PTY LTD

3 Water Street Red Hill 4059
T: +61 7 3368 1033
E: information@ardent-group.com.au
W: ardent-group.com.au
ABN: 38 609 696 764

REGIONAL INTERESTS DEVELOPMENT APPROVAL AMENDMENT

LYND RESOURCES PTY LTD

RPI18/014 - TUPIZA

MARCH 2020

LYN001

Document Control Sheet

Ardent Group Pty Ltd	
Street Address:	3 Water Street, Red Hill Qld 4059
Postal Address:	PO Box 320 Red Hill Qld 4059
Phone:	+61 7 3368 1033
Email:	Information@ardent-group.com.au
Web:	www.ardent-group.com.au

Project:	RPI18/014 - Tupiza	**Issue Date:**	12 March 2020
Title:	RPI Development Application Supporting Information		
Project Manager:	Richard Smith		
Author:	Richard Smith / Jacob Arnold		
Client:	Lynd Resources Pty Ltd		
Client Contact:	Mark Dugmore		

Revision Number	Date
Rev A	
Rev B	
Rev C	
00	12/03/2020
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Number of Copies									
Revision Number	**A**	**B**	**C**	**D**	**00**	**01**	**02**	**03**	**04**
Ardent Group File					1				
Client					1				
Department					1				

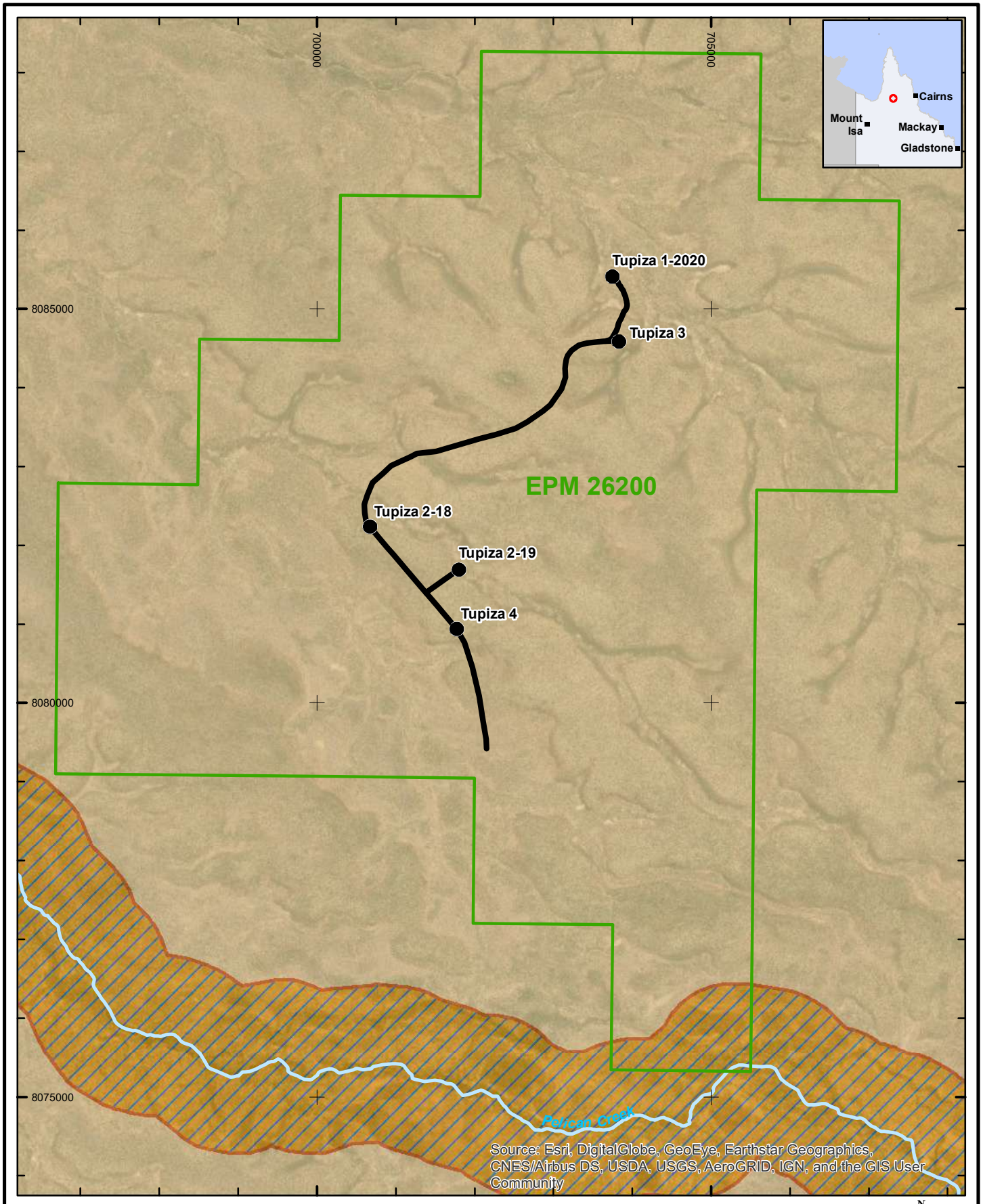
Table of Contents

1. Introduction

Lynd Resources Pty Ltd (Lynd Resources) proposes to undertake exploration drilling for minerals on EPM 26200 as part of the Tupiza Project located approximately 120km north-northeast of Croydon in North Queensland. The Tupiza Project makes up part of the overall Lynd Resources' North Queensland exploration project.

The Tupiza exploration project is situated within the Gulf Rivers Strategic Environmental Area (SEA) (**Figure 1**) and therefore Lynd Resources are required to seek approval under s28 of the *Regional Planning Interests Act* 2014 (RPI Act). Lynd Resources were granted a Regional Interests Development Approval (RIDA) (RPI18-014) under s53 of the RPI Act on 11 September 2018 before being granted an amended approval under s55 of the RPI Act on 25 June 2019.

Since then, further geological investigation work on the Tupiza project has been undertaken which has resulted in an additional exploratory drill hole being required, known as Tupiza 1-2020.



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Exploration Activities Areas of Regional Interest Strategic Environmental Area

Figure 1

Sheet No. RTPL_ARD_LYN001_MAP_0048_C

Drawn By:	Chris Schlebusch
Requested by:	Jacob Arnold
Date:	5/03/2020

- EPM Boundary
- Major Watercourse
- Proposed Drill Pad (20m x 20m)
- Proposed Track (3m width)

Areas of Regional Interest

- Strategic Environmental Area
- Strategic Environmental Area - Designated Precinct

Data sources:
Qld Department of Natural Resources, Mines & Energy, Geoscience Australia, Esri

Path: S:\Plans\Project_Specific\Ardent\LYN001\RTPL_ARD_LYN001_MAP_0048_C EPM26200 RPI SEA.mxd

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 26200 are shown in **Table 1**.

Table 1 Property and Tenure details within EPM 26200

Category	Property
Lot/Plan	Lot 4 on SE1
Property Name	Strathmore Station
Tenure	Lands Lease
Landholder	Scott Alexander Harris

EPM 26200 is situated wholly within Lot 4 on SE1 and all disturbance associated with exploration activities will occur within this lot and tenement.

EPM 26200 was originally granted to Lynd Resources on 31 October 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 30 October 2020. Lynd Resources will apply to DNRME to renew the tenement for an extended period in due course.

EPM 26200 was granted over an area of 24 sub-blocks (approximately 7,842.52ha). Standard EA EPSX03892416 was granted as a part of the approval for EPM 26200, 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 explorations activities within the Gulf Rivers SEA, further reconnaissance and geological investigation has been undertaken in the area which has identified an additional target location, resulting in the addition of the Tupiza 1-2020 drill site. As a result of the additional drill site, there are also minor amendments to the Tupiza project access tracks. The temporary fuel and laydown area and temporary mobile campsite will remain within the drill pad footprints for Tupiza 2-18 and Tupiza 4.

While there is an additional drill site and further access tracks, the amended project is considered to be minor as the disturbance footprint is only increased by 0.34ha to 3.08ha, which is lower than the original approved disturbance area of 3.4ha.

Consequently, Lynd Resources are seeking to amend Condition 1 of the RIDA, resulting in subsequent changes to Table 1 (Approved Activities), Table 3 (Tupiza 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: Tupiza 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: Tupiza resource activities and associated locations. d) The approved plans: • *Figure 1: Location of Proposed Exploration Activities within the Gulf Rivers SEA,* ***Sheet No. PG_ARD_LYN001_MAP_0048_B, dated 30/04/19, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**; • *Figure 2: Footprint of the Tupiza 2****-18*** *drill pad,* ***Sheet No. PG_ARD_LYN001_MAP_0079_B, dated 30/04/19, submitted***	At all times

Condition Number	Condition	Timing for condition
	with the applicant's request for an amended RIDA on 22 May 2019 **(refer Attachment 1)**; • *Figure 3: Footprint of the Tupiza 3 drill pad (non-target drill pad),* ***Sheet No. PG_ARD_LYN001_MAP_0080_B, dated 30/04/19, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**; • *Figure 4: Footprint of the Tupiza 4 drill pad,* ***Sheet No. PG_ARD_LYN001_MAP_0081_B, dated 30/04/19, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**; • *Figure 5: Footprint of the Tupiza* ***2-19 drill pad, Sheet No. PG_ARD_LYN001_MAP_2002_A, dated 30/04/2019, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**; • *Figure* ***10****: Tupiza* ***Access Track Crossing 1, Sheet No. PG_ARD_LYN001_MAP_0094_B, dated 30/04/2019, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**; • *Figure* ***11****: Tupiza* ***Access Track Crossing 2, Sheet No. PG_ARD_LYN001_MAP_0095_C, dated 30/04/2019, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**; • *Figure* ***12****: Schematic of proposed drill pad, undated, provided by the applicant and lodged with the application on 30 May 2018* (refer **Attachment 1**); • *Figure* ***13****: Schematic of fuel storage and Laydown Area, undated, provided by the applicant and lodged with the application on 30 May 2018* (refer **Attachment 1**); • *Figure* ***14****: Schematic of Temporary Mobile Campsite, undated, provided by the applicant and lodged with the application on 30 May 2018* (refer **Attachment 1**).	

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 additional drill site location and further access tracks. The temporary fuel storage and laydown area and temporary mobile campsite disturbance will remain within the Tupiza 2-18 and Tupiza 4 drill pads.

Table 3 Current RIDA approved activities

Area of Regional Interest	Location	Resource activity	Area of disturbance (hectares)
Gulf Rivers Strategic Environmental Area	Part Lot 4 on SE1	Access Tracks	2.5
		Drill pad (four in total, each being 20m x 30m)	0.24
		Temporary Fuel Storage and Laydown Area (20m x20m)	0.0*
		Temporary Mobile Campsite (20m x 20m)	0.0*
		Total area of disturbance is 2.74 ha.	

**As the resource activity will now be located within a drill pad, separate disturbance area is no longer required. There will be no additional disturbance, as disturbance is accounted for within drill pad disturbance.*

Table 4 Proposed amendments to approved activities

Area of Regional Interest	Location	Resource activity	Area of disturbance (hectares)
Gulf Rivers Strategic Environmental Area	Part Lot 4 on SE1	Access Tracks	2.78
		Drill pad (five in total, each being 20m x 30m)	0.3
		Temporary Fuel Storage and Laydown Area (20m x20m)	0.0*
		Temporary Mobile Campsite (20m x 20m)	0.0*
		Total area of disturbance is 3.08 ha.	

**As the resource activity will now be located within a drill pad, separate disturbance area is no longer required. There will be no additional disturbance, as disturbance is accounted for within drill pad disturbance.*

2.3 Table 3 – Tupiza 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.

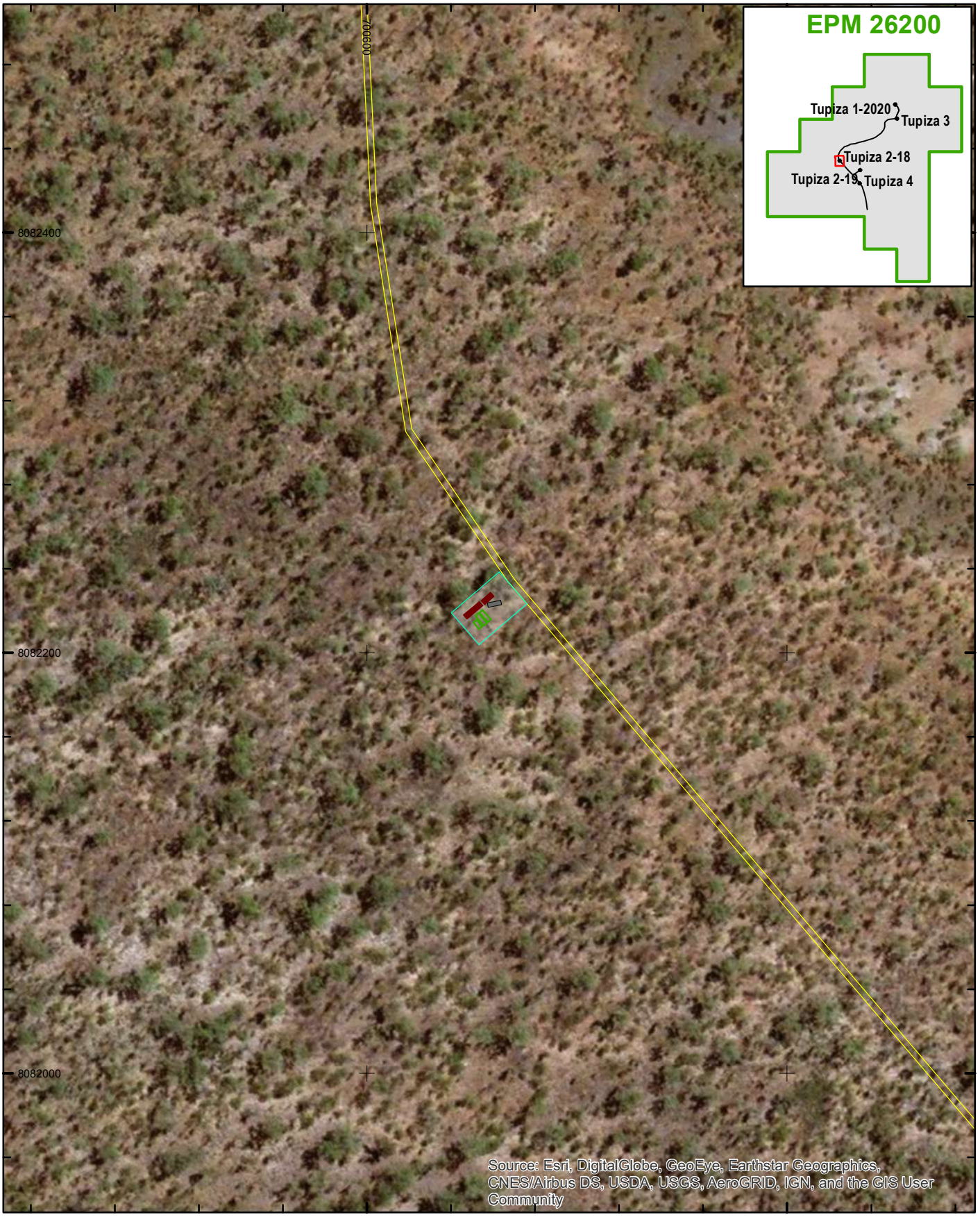
Table 5 Current resource activities and associated locations

Resource Activity	Number	Location (coordinates)
Access tracks	As required	Beginning of access track: -17.361677°, 142.902557
Drill pads	2 initially, maximum of 4	Tupiza 2-**18**: -17.336490°, 142.888340° Tupiza 3: -17.314980°, 142.917850° Tupiza 4: -17.348100°, 142.898850° **Tupiza 2-19: -17.341282°, 142.899001°**
Temporary Fuel and Laydown Area	1	**Within either** **Tupiza 2-18: -17.336490°, 142.888340°**
Temporary Mobile Campsite	1	**Within either** **Tupiza 4: -17.348100°, 142.898850°**

Table 6 Proposed resource activities and associated locations

Resource Activity	Number	Location (coordinates)
Access tracks	As required	Beginning of access track: -17.361677°, 142.902557
Drill pads	2 initially, maximum of 5	Tupiza 2-18: -17.336490°, 142.888340° Tupiza 3: -17.314980°, 142.917850° Tupiza 4: -17.348100°, 142.898850° Tupiza 2-19: -17.341282°, 142.899001° Tupiza 1-2020: - 17.30753°, 142.91699°
Temporary Fuel and Laydown Area	1	Within either Tupiza 2-18: -17.336490°, 142.888340°
Temporary Mobile Campsite	1	Within either Tupiza 4: -17.348100°, 142.898850°

Figure 2 to **Figure 5**, showing the extent of the currently approved Tupiza drill pads have been updated to reflect the overview of exploration activities within EPM 26200. **Figure 6** shows the footprint of the proposed Tupiza 1-2020 drill pad.



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Meters

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Tupiza 2-18
Drill Pad

- EPM Boundary
- Proposed Track (3m width - to scale)
- Proposed Pad (20m x 30m)
- Vehicle (Drill Rig & Rod Sloop)
- Core Trestle
- Sump

Figure 2

Sheet No.
RTPL_ARD_LYN001_MAP_0079_C

Drawn By: Chris Schlebusch
Requested by: Jacob Arnold
Date: 5/03/2020

Data sources:
Qld Department of Natural Resources, Mines and Energy, Geoscience Australia, Esri

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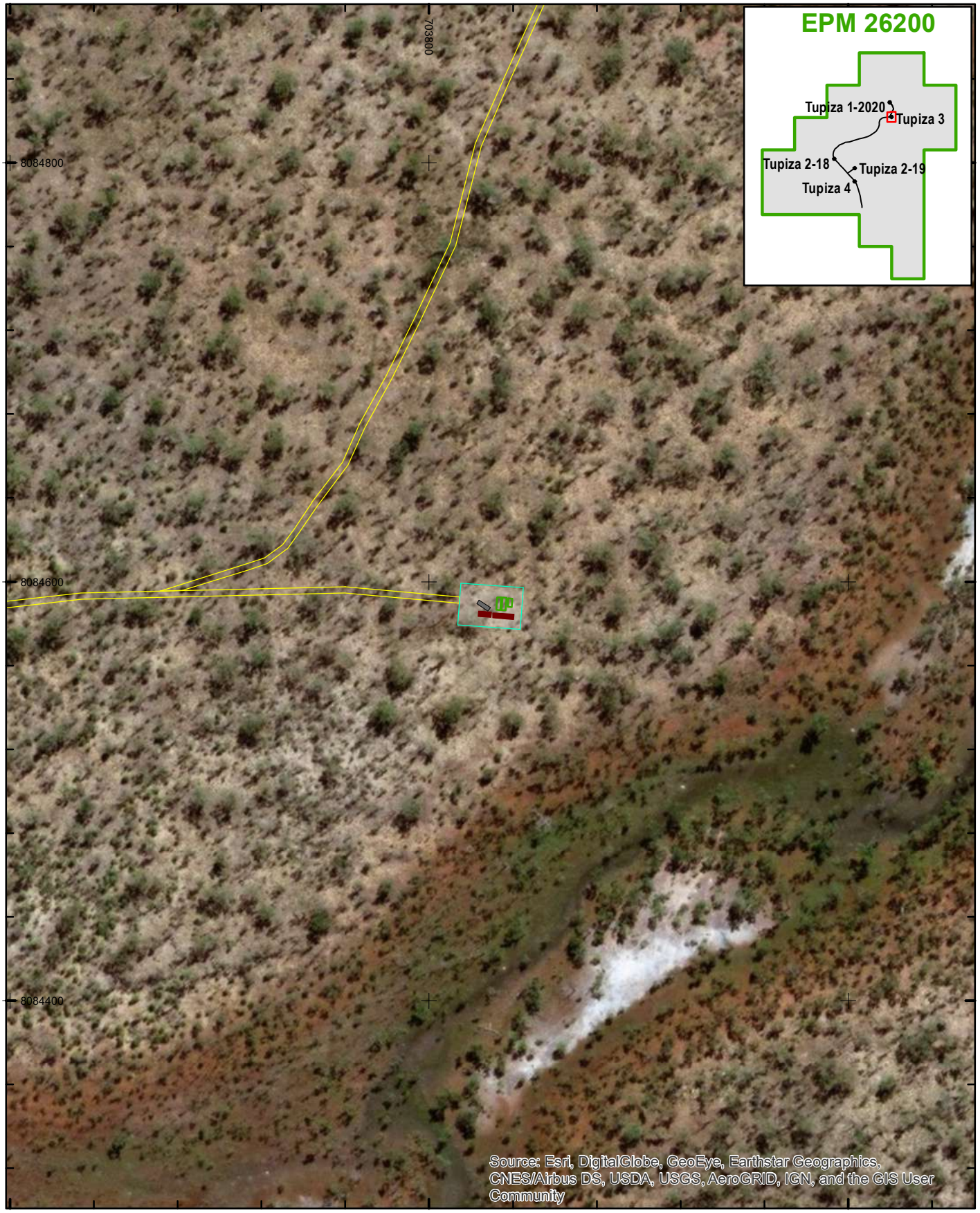

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ARDENT GROUP PTY LTD

Tupiza 3
Drill Pad

- EPM Boundary
- Proposed Track (3m width - to scale)
- Proposed Pad (20m x 30m)
- Vehicle (Drill Rig & Rod Sloop)
- Core Trestle
- Sump

Figure 3

Sheet No.
RTPL_ARD_LYN001_MAP_0080_C

Drawn By: Chris Schlebusch
Requested by: Jacob Arnold
Date: 5/03/2020

Data sources:
Qld Department of Natural Resources, Mines and Energy, Geoscience Australia, Esri

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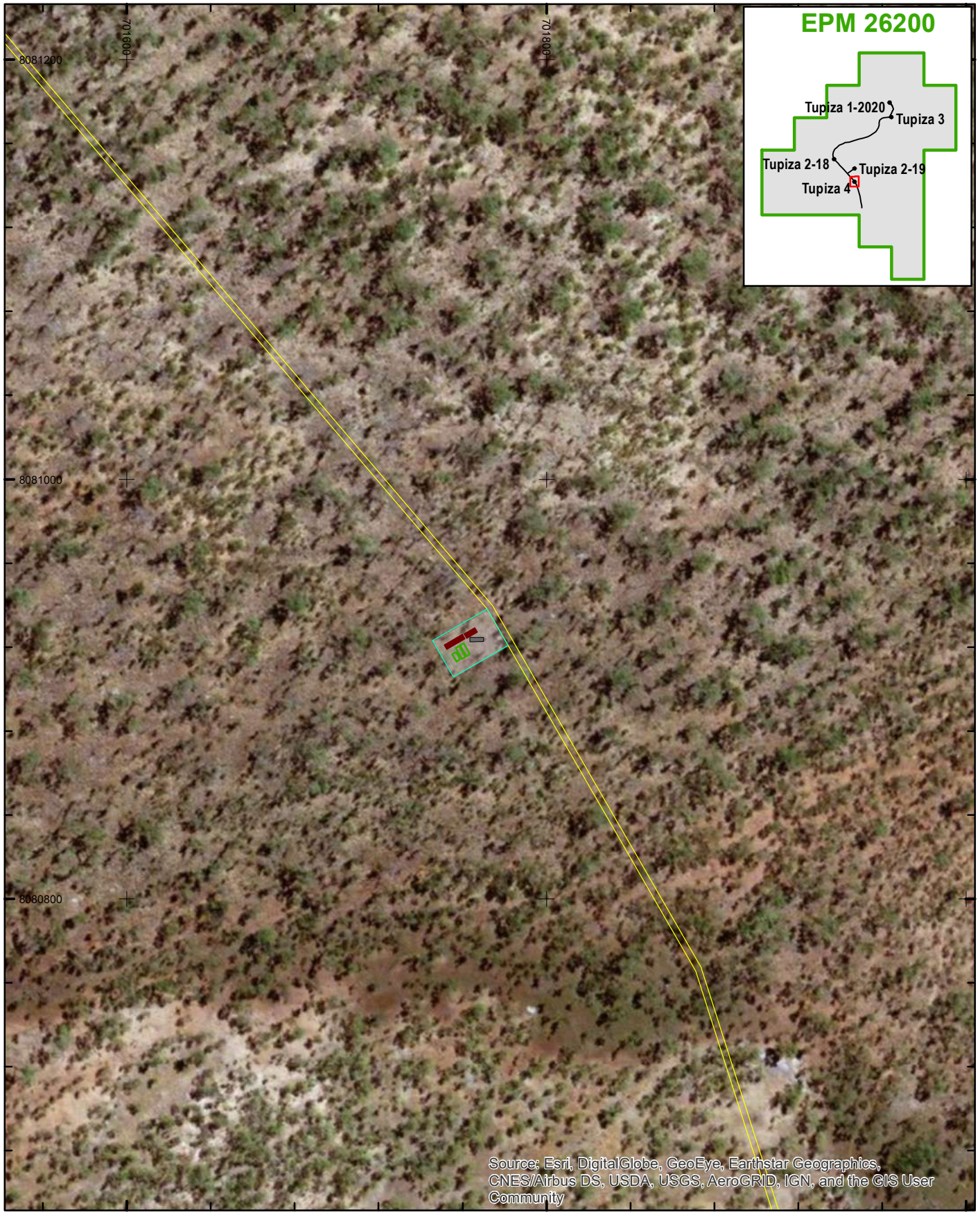

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ARDENT GROUP PTY LTD

Tupiza 4
Drill Pad

- EPM Boundary
- Proposed Track (3m width - to scale)
- Proposed Pad (20m x 30m)
- Vehicle (Drill Rig & Rod Sloop)
- Core Trestle
- Sump

Figure 4

Sheet No.
RTPL_ARD_LYN001_MAP_0081_C

Drawn By: Chris Schlebusch
Requested by: Jacob Arnold
Date: 5/03/2020

Data sources:
Qld Department of Natural Resources, Mines and Energy, Geoscience Australia, Esri

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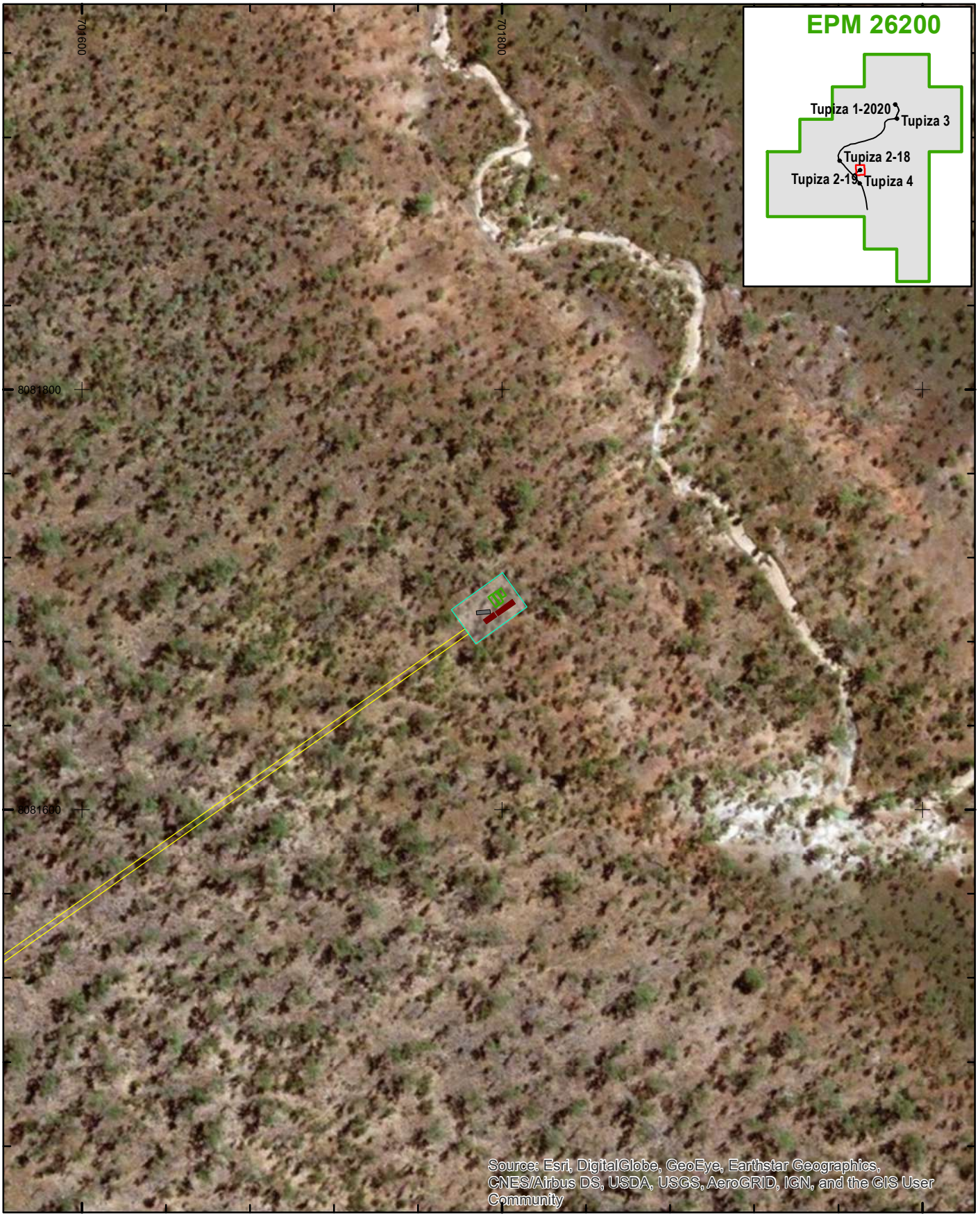

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Tupiza 2-19 Drill Pad

- EPM Boundary
- Proposed Track (3m width - to scale)
- Proposed Pad (20m x 30m)
- Vehicle (Drill Rig & Rod Sloop)
- Core Trestle
- Sump

Figure 5

Sheet No.

RTPL_ARD_LYN001_MAP_2002_B

Drawn By: Chris Schlebusch

Requested by: Jacob Arnold

Date: 5/03/2020

Data sources:
Qld Department of Natural Resources, Mines and Energy, Geoscience Australia, Esri

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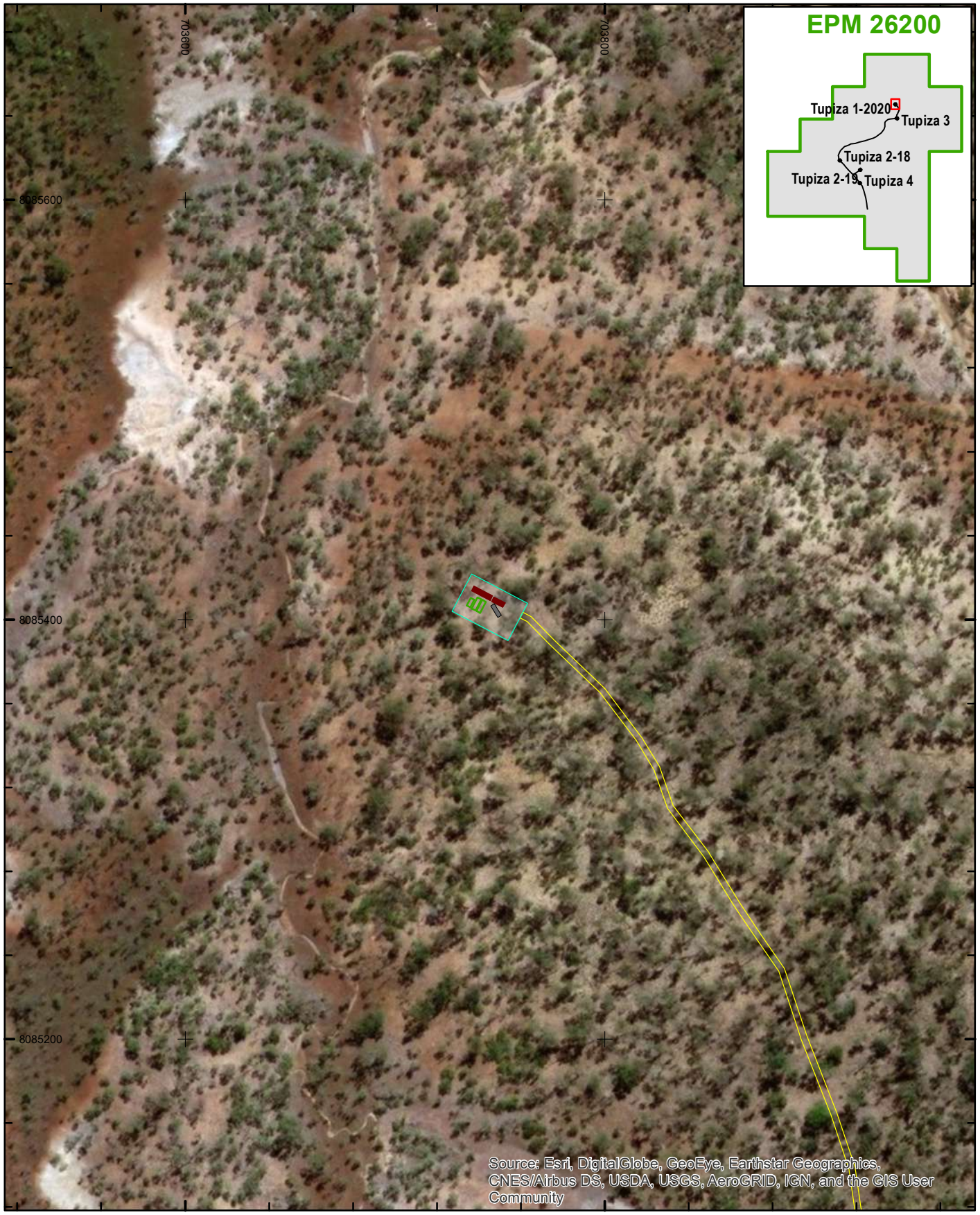

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Tupiza 1-2020 Drill Pad

- EPM Boundary
- Proposed Track (3m width - to scale)
- Proposed Pad (20m x 30m)
- Vehicle (Drill Rig & Rod Sloop)
- Core Trestle
- Sump

Figure 6

Sheet No.

RTPL_ARD_LYN001_MAP_2003_A

Drawn By: Chris Schlebusch

Requested by: Jacob Arnold

Date: 5/03/2020

Data sources:
Qld Department of Natural Resources, Mines and Energy, Geoscience Australia, Esri

Path: S:\Plans\Project_Specific\Ardent\LYN001\RTPL_ARD_LYN001_MAP_2003_A_EPM26200 Tupiza 1-2020 DrillPad.mxd

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 to the plans, however, the replacement plans within this report have been included to reflect the overview of exploration activities within EPM 26200 present on the plans.

- *Figure 1: Location of Proposed Exploration Activities within the Gulf Rivers SEA*, ***Sheet No. PG_ARD_LYN001_MAP_0048_B, dated 30/04/19, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**;
- *Figure 2: Footprint of the Tupiza 2**-18** drill pad*, ***Sheet No. PG_ARD_LYN001_MAP_0079_B, dated 30/04/19, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**;
- *Figure 3: Footprint of the Tupiza 3 drill pad (non-target drill pad)*, ***Sheet No. PG_ARD_LYN001_MAP_0080_B, dated 30/04/19, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**;
- *Figure 4: Footprint of the Tupiza 4 drill pad*, ***Sheet No. PG_ARD_LYN001_MAP_0081_B, dated 30/04/19, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**;
- *Figure 5: Footprint of the Tupiza* ***2-19 drill pad, Sheet No. PG_ARD_LYN001_MAP_2002_A, dated 30/04/2019, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**;
- *Figure* ***10****: Tupiza* ***Access Track Crossing 1, Sheet No. PG_ARD_LYN001_MAP_0094_B, dated 30/04/2019, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**;
- *Figure* ***11****: Tupiza* ***Access Track Crossing 2, Sheet No. PG_ARD_LYN001_MAP_0095_C, dated 30/04/2019, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(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 9: Schematic of proposed drill pad, undated, provided by the applicant and lodged with the application on 30 May 2018* (refer **Attachment 1**)";
- *"Figure 10: Schematic of fuel storage and Laydown Area, undated, provided by the applicant and lodged with the application on 30 May 2018* (refer **Attachment 1**);
- "*Figure 11: Schematic of Temporary 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. PG_ARD_LYN001_MAP_0048_B, dated 30/04/19, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**;	**Figure 1**
*Figure 2: Footprint of the Tupiza 2****-18*** *drill pad,* ***Sheet No. PG_ARD_LYN001_MAP_0079_B, dated 30/04/19, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**;	**Figure 2**
Figure 3: Footprint of the Tupiza 3 drill pad (non-target drill pad), ***Sheet No. PG_ARD_LYN001_MAP_0080_B, dated 30/04/19, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**;	**Figure 3**
Figure 4: Footprint of the Tupiza 4 drill pad, ***Sheet No. PG_ARD_LYN001_MAP_0081_B, dated 30/04/19, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**;	**Figure 4**
Figure 5: Footprint of the Tupiza ***2-19 drill pad, Sheet No. PG_ARD_LYN001_MAP_2002_A, dated 30/04/2019, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**;	**Figure 5**
New Plan – Footprint of the Tupiza 1-2020 drill pad	**Figure 6**
Figure ***10****: Tupiza* ***Access Track Crossing 1, Sheet No. PG_ARD_LYN001_MAP_0094_B, dated 30/04/2019, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**;	**Figure 11**
Figure ***11****: Tupiza* ***Access Track Crossing 2, Sheet No. PG_ARD_LYN001_MAP_0095_C, dated 30/04/2019, submitted with the applicant's request for an amended RIDA on 22 May 2019*** **(refer Attachment 1)**;	**Figure 12**
New Plan – Tupiza Access Track Crossing 3	**Figure 13**
New Plan – Tupiza Access Track Crossing 4	**Figure 14**
Figure ***12****: Schematic of proposed drill pad, undated, provided by the applicant and lodged with the application on 30 May 2018* (refer **Attachment 1**);	No change.
Figure ***13****: Schematic of fuel storage and Laydown Area, undated, provided by the applicant and lodged with the application on 30 May 2018* (refer **Attachment 1**);	No change.
Figure ***14****: Schematic of Temporary Mobile Campsite, undated, provided by the applicant and lodged with the application on 30 May 2018* (refer **Attachment 1**).	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.

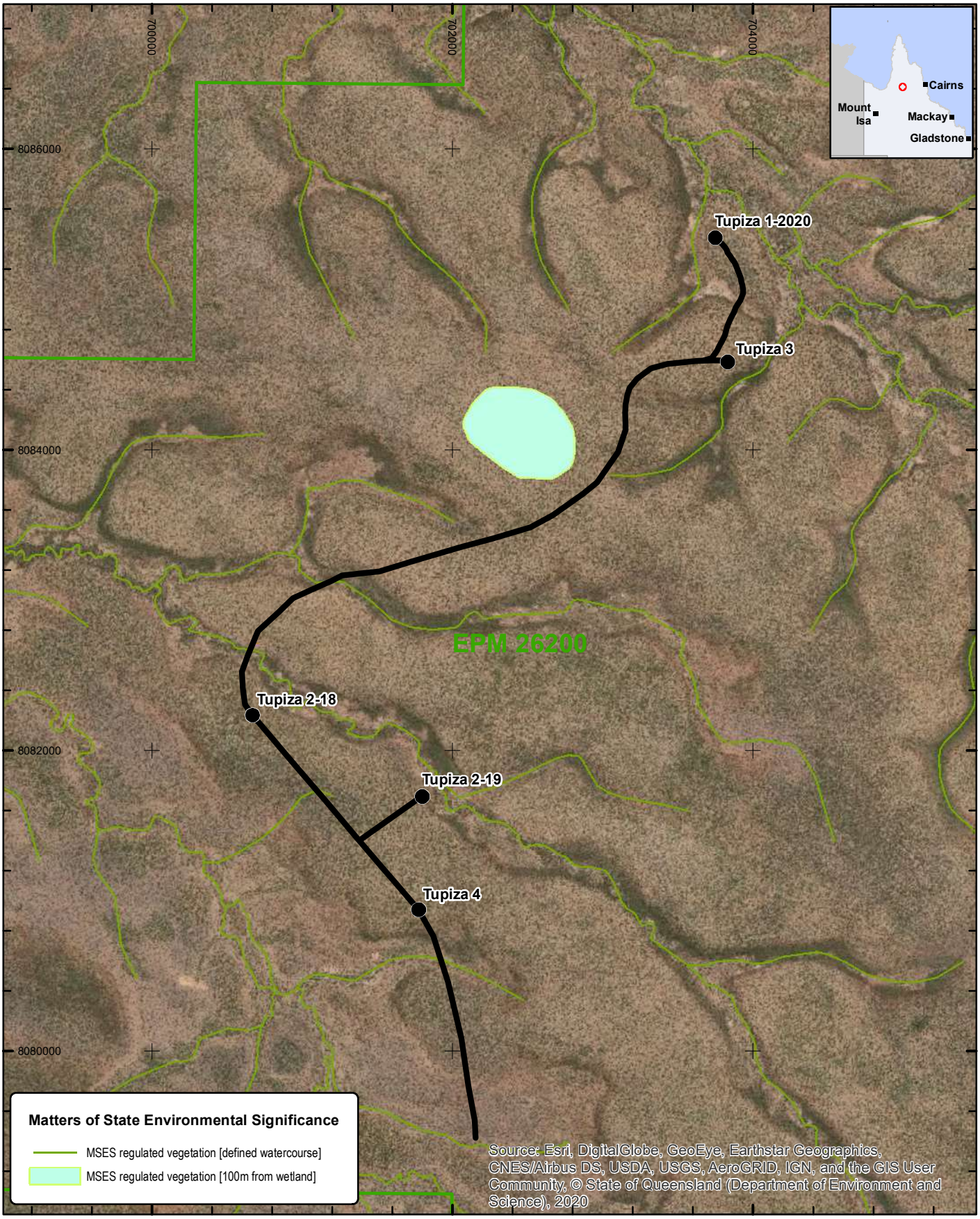
Sub-sections 3.1 to 3.8 detail the existing environment, with potential impacts and mitigation strategies detailed in Section 4 of this Report.

3.1 Riparian Process

Since the amended Tupiza approval was issued on 25 June 2019, the Matters of State Environmental Significance (MSES) Regulated vegetation (defined watercourse) dataset has been updated. The update has seen two additional MSES regulated vegetation (defined watercourse) corridors added to intersect the existing Tupiza access track. All four of these crossings are only associated with minor drainage features. The track between Tupiza 2-18 and Tupiza 3 will continue to pass approximately 190m from regulated vegetation associated with a wetland (**Figure 7**).

The Tupiza project will not involve the disturbance of any 'of concern' Regional Ecosystems (RE). There are no known estuaries or lakes that will be encountered as a result of the drill pads or access tracks. An Environmentally Sensitive Area map has been obtained for EPM 26200 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 4 on SE1, 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 8**.



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Kilometers

LYND RESOURCES PTY LTD

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ARDENT GROUP PTY LTD

Exploration Activities Matters of State Environmental Significance (MSES)

EPM Boundary

Proposed Drill Pad (20m x 20m)

Proposed Track (3m width)

Figure 7

Sheet No.

RTPL_ARD_LYN001_MAP_0047_C

Drawn By: Chris Schlebusch

Requested by: Jacob Arnold

Date: 5/03/2020

Data sources:
Qld Department of Natural Resources, Mines & Energy
National Native Title Tribunal
Geoscience Australia, Esri

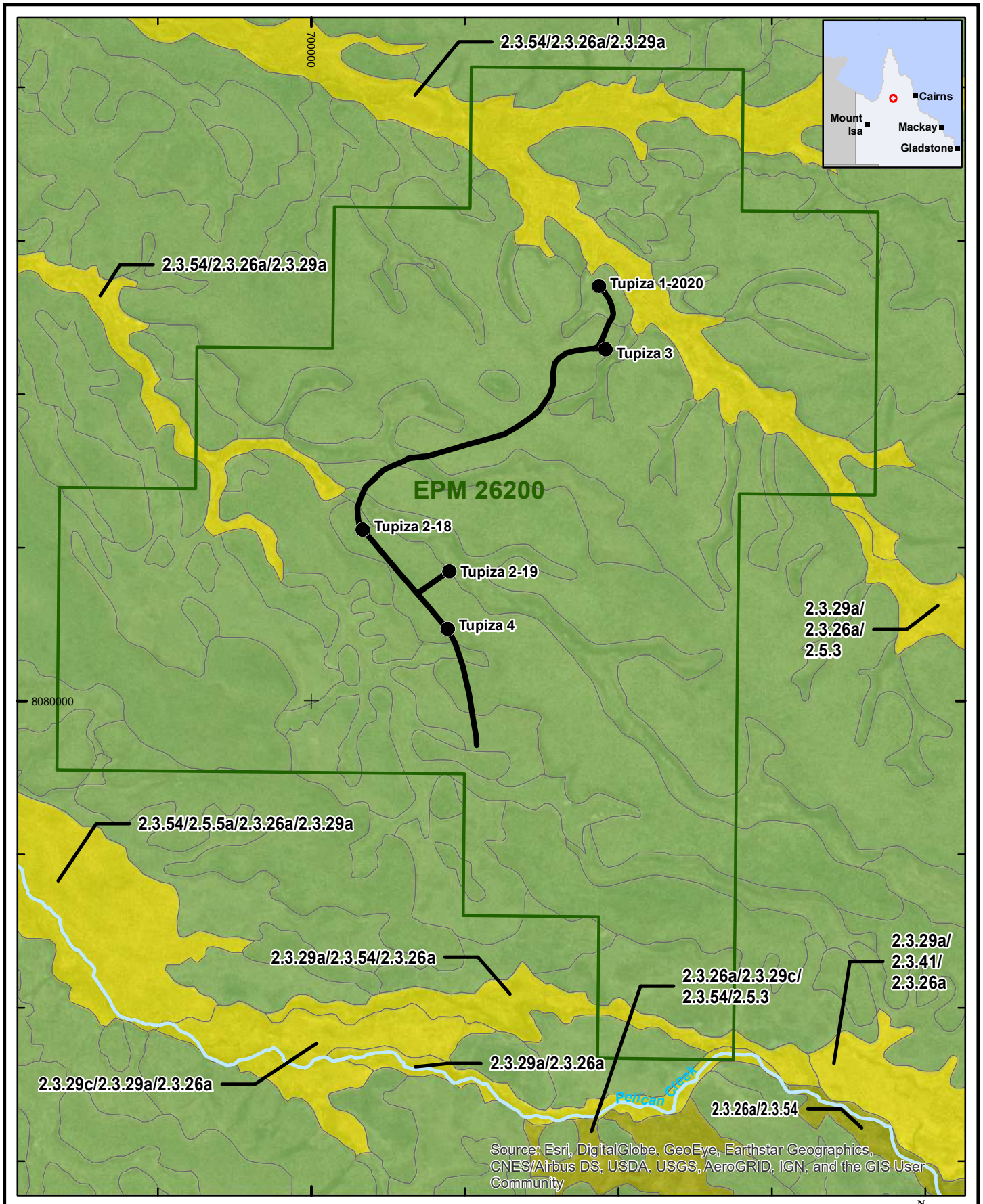
Path: S:\Plans\Project_Specific\Ardent\LYN001\RTPL_ARD_LYN001_MAP_0047_C EPM26200 MSES.mxd

Table 8 Summary of Regional Ecosystems disturbed by exploration activities

RE	Summary Description	Biodiversity Status	Vegetation Management Act Class	Structure Category
2.3.36a	*Melaleuca viridiflora* and/or *M. citrolens* low woodland to low open woodland, occasionally with *Asteromyrtus symphyocarpa, M. acacioides* and *Acacia torulosa. Emergent Corymbia polycarpa, C. clarksoniana, C. dallachiana* and *Livistona muelleri* may occur. A sparse shrub layer may occur, including *Melaleuca spp*. and *Petalostigma banksii*. The ground layer is tussock grasses and sedges, including *Eriachne spp*., *Aristida spp., Schizachyrium spp.* and *Fimbristylis spp*. Occurs in drainage depressions in undulating Tertiary sand sheets in the north-east of the bioregion. Texture contrast soils. A narrow band of tussock grassland in the centre of depressions may occur. 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
2.3.54	*Corymbia polycarpa* open woodland to woodland. A lower tree layer commonly occurs, including *Melaleuca viridiflora, Grevillea spp., Erythrophleum chlorostachys* and *Pandanus sp*. A sparse shrub layer may occur. The ground layer is tussock grasses, including *Schizachyrium spp., Thaumastochloa spp.* and *Pseudopogonatherum contortum*. Occurs in depressions and on fringes of minor watercourses in broad, Tertiary sand sheets in the north-east of the bioregion. (BVG1M: 16b). **Special values:** None	No concern at present	Least concern	Sparse
2.5.3	Evergreen mixed scrub that includes a combination of *Eucalyptus spp*. and/*or Corymbia spp., Melaleuca spp., Acacia spp., Alphitonia excelsa, Banksia spp., Cochlospermum gillivraei, Erythroxylum ellipticum, Excoecaria spp., Gardenia spp., Coelospermum spp., Grevillea spp., Hakea spp., Pandanus spp., Sersalisia sericea, Persoonia falcata, Petalostigma pubescens* and *Thryptomene oligandra*. Occurs on gently undulating plains on Quaternary and Tertiary terrestrial deposits; deep sands, yellow earths and texture contrast soils, some clays. (BVG1M: 14b). **Special values:** Provincial refuge for some flora and fauna species. Potential habitat for golden-shouldered parrot (*Psephotus chrysopterygius).*	No concern at present	Least concern	Mid-dense

RE	Summary Description	Biodiversity Status	Vegetation Management Act Class	Structure Category
2.5.6a	Mixed woodland, including combinations of the species *Eucalyptus tetrodonta, Corymbia pocillum, Erythrophleum chlorostachys, C. polycarpa* and *C. setosa. Eucalyptus chartaboma* and *C. dallachiana* may occur in the canopy. A variable shrub commonly occurs, including canopy species, *Melaleuca spp., Grevillea spp.* and *Petalostigma spp.* The ground layer is tussock grasses, including *Aristida spp., Heteropogon spp., Schizachyrium fragile* and *Sarga plumosum*. Occurs on undulating Tertiary sand sheets. Red and yellow sands or earths. (BVG1M: 14b). **Special values:** Potential habitat for the golden-shouldered parrot (Psephotus chrysopterygius).	No concern at present	Least concern	Sparse
2.5.6e	Mixed woodland, including combinations of the species *Eucalyptus tetrodonta*, *Corymbia polycarpa, Erythrophleum chlorostachys, Eucalyptus leptophleba* and *C. confertiflora. C. pocillum* may occur in the canopy. A sparse shrub layer may occur, including canopy species, *Planchonia careya* and *Grevillea glauca*. The ground layer is tussock grasses, including *Heteropogon contortus, Pseudopogonatherum contortum* and *Aristida spp*. Occurs on residuals of Tertiary sand sheets, commonly within re-worked surfaces. Brown sands and loams. (BVG1M: 14a).**Special values**: Potential habitat for the golden-shouldered parrot (Psephotus chrysopterygius).	No concern at present	Least concern	Sparse
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

RE	Summary Description	Biodiversity Status	Vegetation Management Act Class	Structure Category
2.5.18b	*Corymbia setosa* open woodland to woodland, commonly with *C. polycarpa, Erythrophleum chlorostachys* and *C. pocillum*. Occasional canopy species include *Melaleuca nervosa* and *Eucalyptus tetrodonta*. A lower tree or shrub layer may occur, including *Grevillea glauca, Petalostigma pubescens, Asteromyrtus symphyocarpa* and *Alphitonia pomaderroides*. The ground layer is tussock grasses, including *Schizachyrium fragile, Aristida spp*. and *Chrysopogon fallax*. Occurs on undulating, dissected, Tertiary sand sheets in the north of the bioregion. Brown sandy loam soils. (BVG1M: 18a). **Special values:** Potential habitat for the golden-shouldered parrot (*Psephotus chrysopterygius).*	No concern at present	Least concern	Very sparse
2.5.26	Mixed low woodland to woodland, including combinations of the species *Eucalyptus melanophloia, Acacia julifera subsp. gilbertensis, Corymbia setosa, Melaleuca spp., E. microneura* and *Erythrophleum chlorostachys*. A variable shrub layer commonly occurs, including canopy species, *Acacia spp*. and *Petalostigma banksii*. The ground layer is tussock grasses, including *Thaumastochloa spp., Schizachyrium fragile* and *Chrysopogon sp*. Occurs on undulating, erosional, Tertiary sand sheets. Yellow to brown sands and loams. (BVG1M: 17b). **Special values:** None	No concern at present	Least concern	Sparse
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 plant species with restricted geographic ranges.	No concern at present	Least concern	Mid-dense



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Kilometers

LYND RESOURCES PTY LTD

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Exploration Activities Of Concern Regional Ecosystems (Biodiversity Status v11)

Figure 8

Sheet No. RTPL_ARD_LYN001_MAP_0046_C

Drawn By: Chris Schlebusch

Requested by: Jacob Arnold

Date: 5/03/2020

- EPM Boundary
- Major Watercourse
- Proposed Drill Pad (20m x 30m)
- Proposed Track (3m width)
- Of Concern - Sub-dominant
- Of Concern - Dominant
- No concern at present

Data sources:
Qld Department of Natural Resources, Mines and Energy
Geoscience Australia, Esri

Path: S:\Plans\Project_Specific\Ardent\LYN001\RTPL_ARD_LYN001_MAP_0046_C EPM26200 Of Concern RE.mxd

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 access tracks will intersect four mapped regulated vegetation (defined watercourse) corridors which may be used as habitat and movement corridors for fauna.

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 Tupiza sites will flow into the Red River before it converges with Pelican Creek 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 Tupiza 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
pH	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	11720	862	358168
February	98090	0	23382	9331	635999
March	98712	11	19667	7733	609675
April	93797	0	3682	583	108850
May	30996	0	508	55	15441
June	2917	0	74	2	2176
July	407	0	10	0	318
August	31	0	1	0	16
September	1	0	0	0	0
October	508	0	1	0	31
November	3162	0	20	0	589
December	72052	0	1313	0	39923
All months	**98712**	**0**	**4717**	**0**	**141722**

In terms of groundwater, the Tupiza project is situated on the Great Artesian Basin in the Gulf Gilbert River Aquifer area. There are no known artesian springs located near the Tupiza sites. The nearest registered groundwater bore within the catchment is bore RN157934 located approximately 15km from the Tupiza 2-18 drill site, however, no groundwater quality data has been collected at this bore.

3.4 Hydrological Processes

The nearest Water Act defined watercourse (Pelican Creek) is approximately 5.5km south of the Tupiza 4 drill site. There will not be any dams, waterholes or springs located near the proposed exploration activities. The access track between Tupiza 2-18 and Tupiza 3 will pass within 190m of a seasonal swamp ecosystem which is classed as regulated vegetation (wetland). There are no dams, lakes, waterholes or springs within 500m of any proposed resources activities.

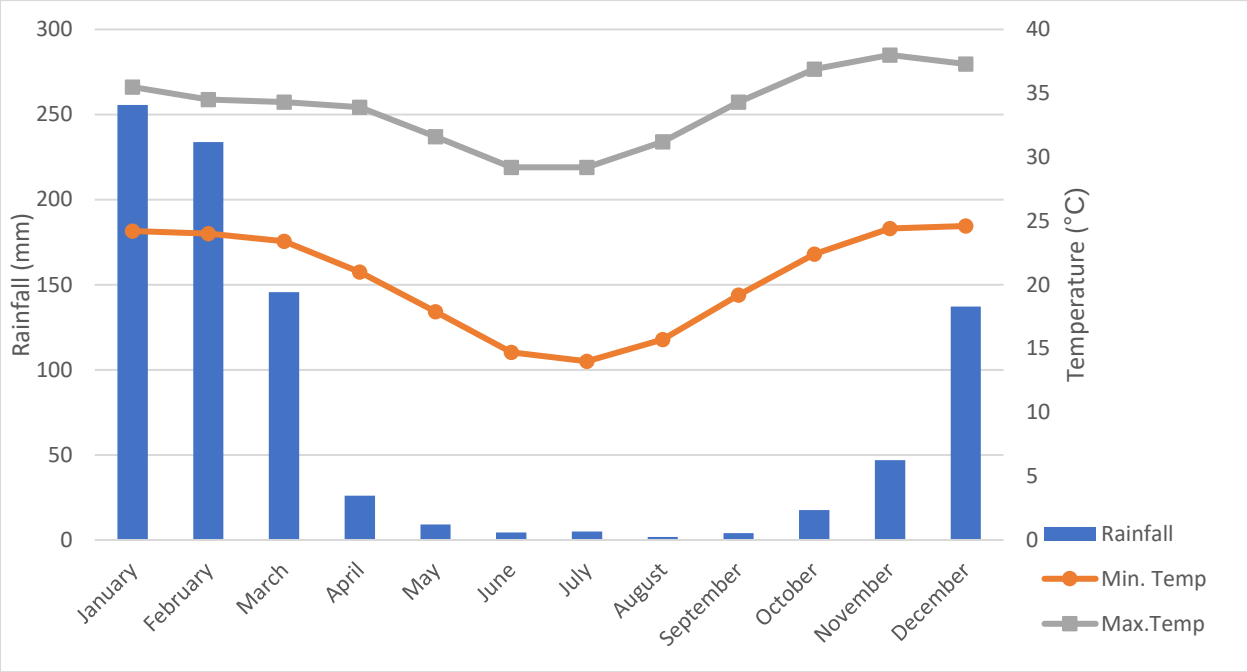
3.5 Geomorphic Processes

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.

A bore report from bore RN157934 drilled on 14 July 2015 appeared to have struck a sub-artesian aquifer 24m below the surface with a yield of 5.5L/s.

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 14°C in winter to 24.6°C in summer and maximum temperatures range from 29.2°C in winter to 38.0°C in summer (**Figure 9**).



Rainfall data taken from Abingdon Downs Station weather station located approximately 42km from the Tupiza sites using monthly rainfall data beginning in 1945. The temperature data is taken from the Croydon Township weather station located approximately 115km from the Tupiza Sites. Monthly data used for mean maximum and minimum temperatures is from 1912 to 2014.

Figure 9 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 4 on SE1 being a cattle station owned by Scott Alexander Harris.

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

As mentioned above, since the amended Tupiza approval was issued on 25 June 2019, the MSES Regulated vegetation (defined watercourse) dataset has been updated. The update has seen two additional MSES regulated vegetation (defined watercourse) corridors be added to intersect the existing Tupiza access track. The main Tupiza access track from the pastoral track to the Tupiza 3 drill pad is existing and was constructed prior to the addition of these two MSES regulated vegetation (defined watercourse) corridors. All four of these crossings are only associated with minor drainage features and the amendment of the current RIDA approval will not create additional impact to these corridors. The four crossing points do not have well-defined riparian zones or clearly identifiable changes in vegetation structure, density or composition adjacent to the drainage line, and it is unlikely that crossing these drainage lines will have an impact on the structure and function of the regulated vegetation corridors.

Criteria used to decide the location of access tracks and watercourse crossing points include:

- The distance from the nearest constructed property track or fence line to the crossing point,
- The nature of the vegetation between the start point and the crossing point – i.e. dense or open, 'Endangered', 'Of Concern', or 'Least Concern at Present' Regional Ecosystems,
- The stream order at the crossing point – with reference to the amount or area of increased disturbance if the watercourse were crossed at a lower stream order,
- Vegetation at the crossing point – dense or open, woody or grassy, etc.,
- The entry and exit from the proposed crossing point – incised or gradual, sandy or rocky etc.,
- The nature of the watercourse at the crossing point – deep or shallow, incised channel or braided riffles,
- The position on the watercourse – on a bend or on a straight,
- Evidence or likelihood of high use by fauna – footprints, hollow bearing trees, nest or den sites etc.

Applying the criteria to route selection for the 3m wide access tracks through the regulated vegetation (defined watercourse) corridors ensures that they will not interfere with the ecological function of the riparian vegetation communities. The access tracks were selected to start at the nearest existing track to each of the sites selected for drilling and were designed to reduce the extent of environmental disturbance by avoiding dense vegetation and regulated vegetation corridors.

Figure 11 to Figure 14 (Figure 10 shows an overview) are site-specific vegetation maps for each of the four regulated vegetation (defined watercourse) corridors that are to be crossed. MSES regulated vegetation (defined watercourse) corridor crossings 1 and 2 have been added since the amended approval was issued on 25 June 2019 and the construction of the access track. As the track is already existing through these newly added mapped corridors, this amendment will not create further impact to these corridors.

In addition, as illustrated in Figure 11 and Figure 12, regulated vegetation (defined watercourse) corridor crossings 1 and 2 do not show a defined watercourse or distinguishable riparian vegetation, in particular at crossing 2.

MSES regulated vegetation (defined watercourse) crossings 3 and 4 (Figure 13 and Figure 14) were subject to the original and amendment RIDA applications. These crossings of the regulated vegetation corridors were at the lowest stream order practical, and/or where vegetation disturbance can be minimised. While these two regulated vegetation corridors were crossed, a detailed desktop assessment identified routes that minimised environmental disturbance.

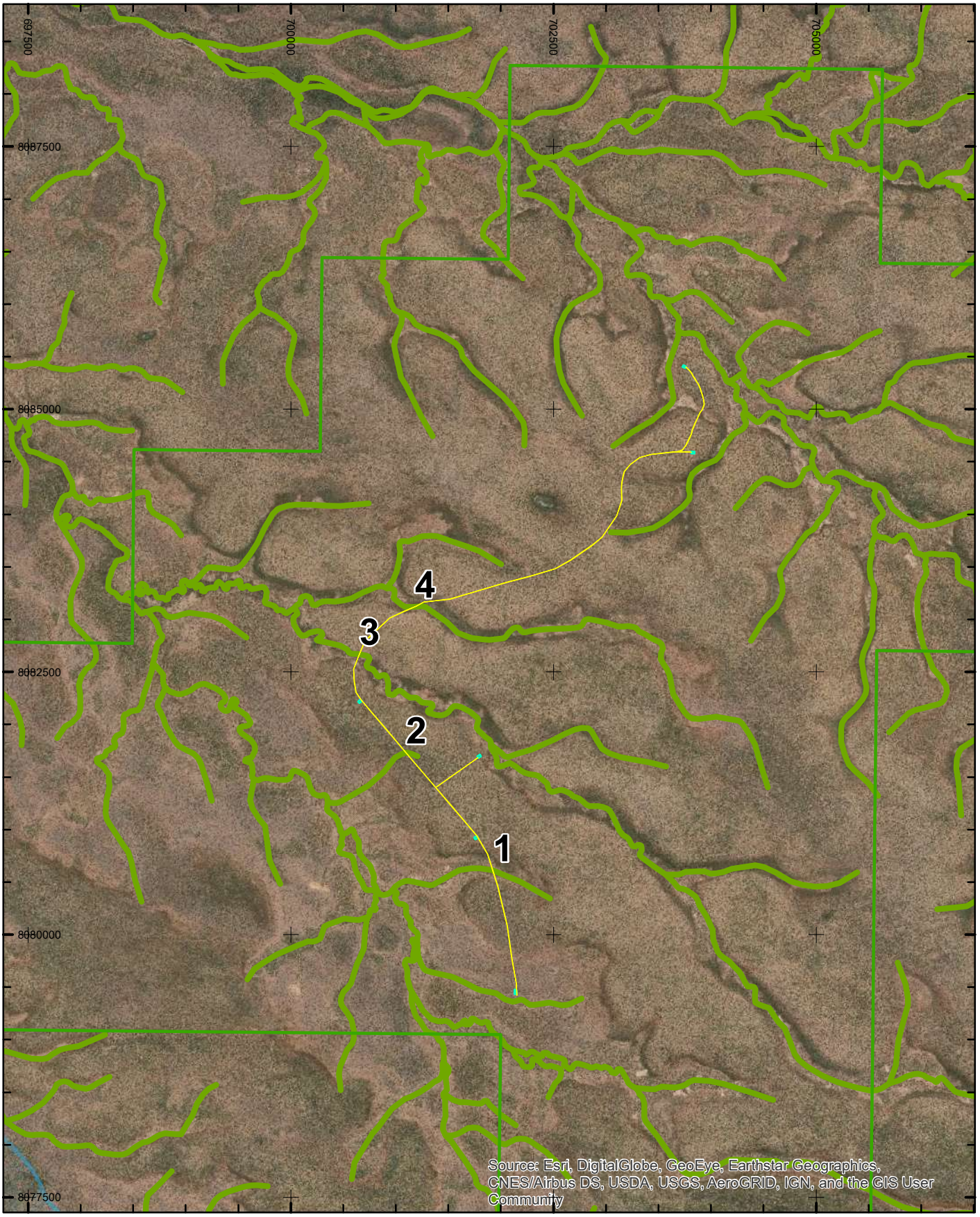
The two regulated vegetation corridor crossing points were chosen at points where riparian vegetation is sparse and subsequently only required minimal clearing. It is in Lynd's best interests to minimise the amount of clearing conducted during track layout and subsequently requiring rehabilitation. This amendment will not increase disturbance to these MSES regulated vegetation (defined watercourse) corridors as the core Tupiza access track from the pastoral track to Tupiza 3 is currently in existence.

In the 'RPI Development Application Response to Requirement Notice' submitted on 13 July 2018, a significant impact test was conducted and identified that the access tracks would not create a significant residual impact as the linear tracks are limited to 3m wide. A number of management strategies were also identified in Section 2.2.4 of the report.

The area of land disturbance caused to these areas of regulated vegetation is considered to be minor, as only 3m wide tracks will be created which will not cause widespread, irreversible damage to the riparian processes.

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 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)*.



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Kilometers

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EPM 26200
Access Track Crossings Summary

Figure 10

Sheet No.

RTPL_ARD_LYN001_MAP_0074_D

Drawn By: Chris Schlebusch

Requested by: Jacob Arnold

Date: 6/03/2020

- EPM Boundary
- Proposed Track (3m width - to scale)
- Drill Pad or Laydown
- MSES regulated vegetation [defined watercourse]
- MSES strategic environmental area [designated precinct]

Data sources:
Qld Department of Natural Resources, Mines and Energy, Geoscience Australia, Esri

Path: S:\Plans\Project_Specific\Ardent\LYN001\RTPL_ARD_LYN001_MAP_0074_D EPM26200 Access Crossing Summary.mxd

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Meters

LYND RESOURCES PTY LTD

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GDA94 MGA Zone 54

ARDENT GROUP PTY LTD

Tupiza Access Track Crossing 1

- Proposed Track (3m width - to scale)
- MSES regulated vegetation [defined watercourse]
- MSES strategic environmental area [designated precinct]

Figure 11

Sheet No.

RTPL_ARD_LYN001_MAP_2004_A

Drawn By: Chris Schlebusch

Requested by: Jacob Arnold

Date: 6/03/2020

Data sources:
Qld Department of Natural Resources, Mines and Energy, Geoscience Australia, Esri

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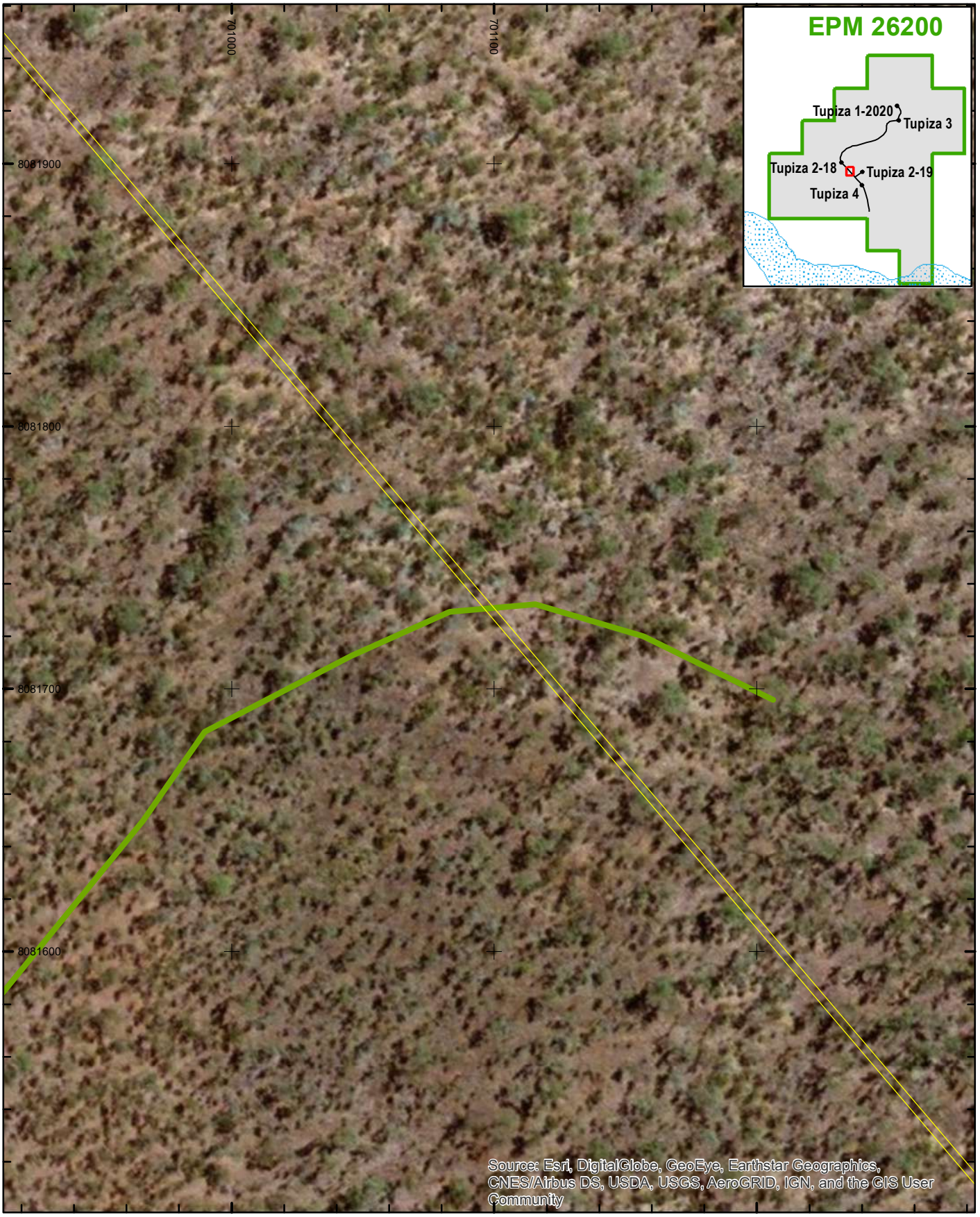

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LYND RESOURCES PTY LTD

EPM 26200

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GDA94 MGA Zone 54

ARDENT GROUP PTY LTD

Tupiza Access Track Crossing 2

- Proposed Track (3m width - to scale)
- MSES regulated vegetation [defined watercourse]
- MSES strategic environmental area [designated precinct]

Figure 12

Sheet No.

RTPL_ARD_LYN001_MAP_2005_A

Drawn By: Chris Schlebusch

Requested by: Jacob Arnold

Date: 6/03/2020

Data sources:
Qld Department of Natural Resources, Mines and Energy, Geoscience Australia, Esri

Path: S:\Plans\Project_Specific\Ardent\LYN001\RTPL_ARD_LYN001_MAP_2005_A_EPM26200 Access Crossing 2.mxd

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Meters

LYND RESOURCES PTY LTD

EPM 26200

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GDA94 MGA Zone 54

ARDENT GROUP PTY LTD

Tupiza Access Track Crossing 3

- Proposed Track (3m width - to scale)
- MSES regulated vegetation [defined watercourse]
- MSES strategic environmental area [designated precinct]

Figure 13

Sheet No.

RTPL_ARD_LYN001_MAP_2006_A

Drawn By: Chris Schlebusch

Requested by: Jacob Arnold

Date: 6/03/2020

Data sources:
Qld Department of Natural Resources, Mines and Energy, Geoscience Australia, Esri

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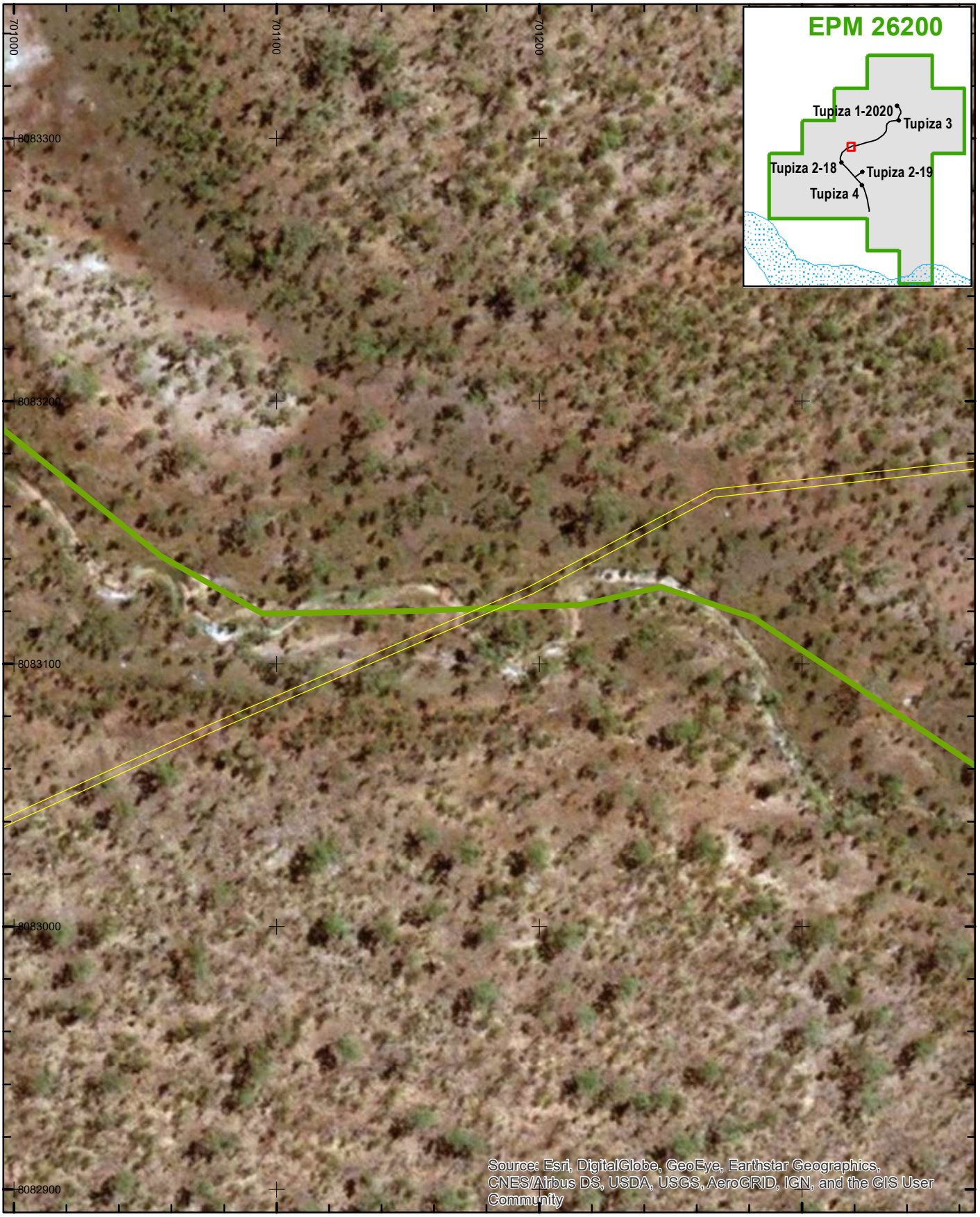

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LYND RESOURCES PTY LTD

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GDA94 MGA Zone 54

ARDENT GROUP PTY LTD

Tupiza Access Track Crossing 4

- Proposed Track (3m width - to scale)
- MSES regulated vegetation [defined watercourse]
- MSES strategic environmental area [designated precinct]

Figure 14

Sheet No.

RTPL_ARD_LYN001_MAP_2007_A

Drawn By: Chris Schlebusch

Requested by: Jacob Arnold

Date: 6/03/2020

Data sources:
Qld Department of Natural Resources, Mines and Energy, Geoscience Australia, Esri

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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 largely constructed within the RE 2.5.6a. Wildlife corridors in the exploration area will largely involve four crossings of regulated vegetation (defined watercourse) associated with minor drainage features. The disturbance to these corridors will only involve 3m wide sections of track and it is not considered that widespread irreversible disturbance of these corridors will occur. The regulated vegetation corridors are sparsely vegetated and do not have a well-defined or densely vegetated riparian corridor, and consequently 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 to occur within the Tupiza 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 listed as Vulnerable under the EPBC Act and 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 2.3.36a, 2.5.3, 2.5.6a, 2.5.6e, 2.5.14c and 2.5.18b 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 Tupiza 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 no records for the area (Appendix **4**).

4.3 Water Quality

The change in the Tupiza 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. As illustrated in **Figure 9**, the mean average rainfall during proposed exploration activities that are likely to occur within August and/or September is 1.9mm and 4.2mm respectively. 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. As detailed in **Table 10**, mean monthly water flow at the DNRME water monitoring site 918003A Staaten River at Dorunda during the planned months of exploration in August and September is 16ML and 0ML respectively. 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 watercourse crossings, it will be the intention to:

- Select appropriate crossing areas (for example: lower order streams, areas with less significant vegetation or with less vegetation requiring clearing and streams with sand/gravel/rocky streambeds);
- Minimise any significant bank damage during the construction of any required access ramps;
- Minimise the risk of sediment-laden runoff from the access ramps being allowed to discharge directly into the watercourse without passing through an appropriate sediment trap or vegetative filter; and
- Minimise harm (including sediment accumulation) to the streambed.

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

- Minimise all vegetation clearing;
- Construct the crossing perpendicular to the channel;
- Install overland flow diversions to prevent run-off from the access road entering the watercourse directly;
- Stabilise access ramps and, if necessary, employ geotextile;
- Stabilise the streambed , if necessary, with a geogrid;
- Conduct regular inspections for erosion or channel scour; and
- Commence rehabilitation as soon as practicable after final use.

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 s9 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).*
(b) all of the following – (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;	The proposed activities will not be carried out in a designated precinct and also 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;	• Extensive desktop and preliminary investigations were conducted during the application phase for the current RIDA. This included: ○ Access track refinement to minimise operational footprint on environmental attributes; ○ Assessment of resource activities on the Gulf Rivers SEA environmental attributes; ○ State and Commonwealth environmental database searches; ○ Desktop assessment of potential impacts from activities by a qualified botanist-ecologist. Implement recommendations from this desktop assessment. ○ Minimise extent of access track width and areas of drill pads, temporary campsite and temporary fuel storage and laydown areas. ○ Avoid or minimise clearance of vegetation, in particular mature trees,

Schedule 2 Part 5 of the RPI Regulation	Response
	threatened vegetation and riparian vegetation.
(iii) the activity does not compromise the preservation of the environmental attribute within the strategic environmental area;	• Resources activities will have minimal short- and long-term impacts on natural hydrologic processes in the area. Waterflows associated with watercourses, floodplains and groundwater will be minimal due to activities being conducted in the dry season when precipitation and waterflow is likely to be very low. • Resource activities will have minimal short- and long-term impacts on geomorphic processes in the area. There will be limited impact to the natural erosion of the region, in addition to the movement of sediment by water throughout the catchment as waterflow will be minimal in the dry season. • Resource activities will have minor short- term impacts and minimal long-term impacts on the functioning riparian processes and functioning wildlife corridors in the region. Disturbance to riparian vegetation will be minor due to the small-scale and temporary nature of the activities. Vegetation clearing will be avoided and minimised where possible and all disturbance from exploration activities will be undertaken in accordance with the *Eligibility criteria and standard conditions for exploration and mineral development projects – Version 2 (2016)* as soon as practicable. As a result, it is considered unlikely that there will be widespread or irreversible impact to the functioning riparian processes or the functioning wildlife corridors. • Water quality in the region that supports and maintains natural aquatic and terrestrial ecosystems will have minimal impact. Watercourses and associated floodplains are unlikely to have flows during the dry season when exploration works are being conducted. The drilling and case method will be conducted cautiously and in a manner to case off any aquifers encounters in the overburden. The drillholes will be properly decommissioned to ensure impact to aquifer water quality will be minimised.

Schedule 2 Part 5 of the RPI Regulation	Response
(iv) if the activity is to be carried out in a strategic environmental area identified in a regional plan – the activity will contribute to the regional outcomes, and be consistent with the regional policies, stated in the regional plan.	The Far North Queensland Regional Plan 2009-2031 does not identify the Gulf River SEA.

6. Conclusion

Lynd Resources have identified an additional target location (Tupiza 1-2020) as part of the Tupiza project (RPI18/014). As such, Lynd Resources are applying to amend Condition 1 (and associated references) of their current RIDA, originally granted on 11 September 2018 and amended on 25 June 2019, pursuant to s55 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 4 March 2020, <http://www.bom.gov.au/jsp/ncc/cdio/wData/wdata?p_nccObsCode=139&p_display_type=dataFile&p_stn_num=030000>.

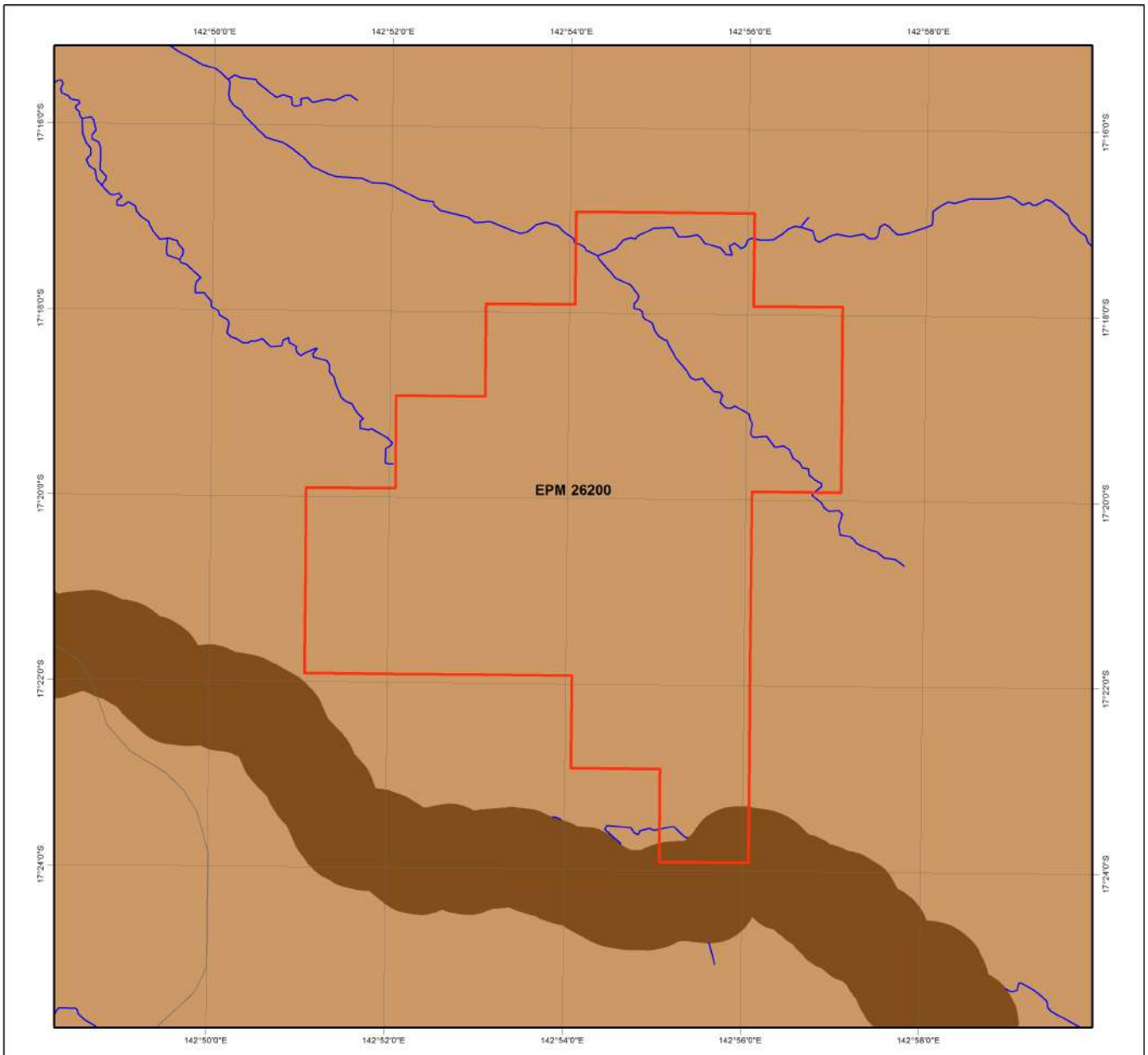
BOM 2020, Monthly mean maximum temperature Croydon Township, accessed 4 March 2020, <http://www.bom.gov.au/jsp/ncc/cdio/wData/wdata?p_nccObsCode=36&p_display_type=dataFile&p_stn_num=029012>.

BOM 2020, Monthly mean minimum temperature Croydon Township, accessed 4 March 2020, <http://www.bom.gov.au/jsp/ncc/cdio/wData/wdata?p_nccObsCode=38&p_display_type=dataFile&p_stn_num=029012>.

Queensland Government 2020, 918003A Staaten River at Dorunda, accessed 4 March 2020, <https://water-monitoring.information.qld.gov.au/?ppbm=918003A&rs&1&rslf_org>.

RPI DEVELOPMENT APPLICATION SUPPORTING INFORMATION
LYND RESOURCES PTY LTD

Appendix 1 Environmentally Sensitive Area Map



ENVIRONMENTALLY SENSITIVE AREAS - Mining Activities

- Selected Exploration Permit Mineral (EPM)

CATEGORY A
- National Parks
- Conservation Parks
- Forest Reserves
- Wet Tropics World Heritage Area
- Great Barrier Reef Marine Park Area
- Marine Parks other than General Use Zones

CATEGORY B
- World Heritage Areas
- Queensland Heritage Register Places
- Ramsar Sites
- Cultural Heritage Registered Areas and DLA's other than Stanbroke
- Special Forestry Areas
- Fish Habitat Areas
- Koala Plan
- Coordinated Conservation Areas
- Endangered Regional Ecosystems (Biodiversity Status)
- General Use Zones of Marine Parks
- Marine Plants

CATEGORY C
- Nature Refuges
- Resources Reserve
- State Forests
- Timber Reserves
- Declared Catchment Areas
- Declared Irrigation Areas
- Drainage Areas
- River Improvement Areas
- Stanbroke DLA
- Coastal Management District
- Dams and Weirs

OTHERS
- Towns
- Roads
- Repealed Wild River Nominated Waterways
- Repealed Wild River Preservation Areas
- Repealed Wild River High Preservation Areas
- Mahogany Glider Habitat
- Directory of Important Wetlands
- Queensland

LOCALITY DIAGRAM

N

0 1,100 2,200 3,300 4,400 5,500 m

This product is projected into GDA 1994 MGA Zone 54

Information presented on this product is distributed by the Queensland Government as an information source only. While every care is taken to ensure the accuracy of this data, The State of Queensland makes no statements, representations or warranties about the accuracy, reliability, completeness or suitability of any information contained in this product.

The State of Queensland disclaims all responsibility for information contained in this product 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 ncomplete in any way for any reason.

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 extent 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.

RPI DEVELOPMENT APPLICATION SUPPORTING INFORMATION
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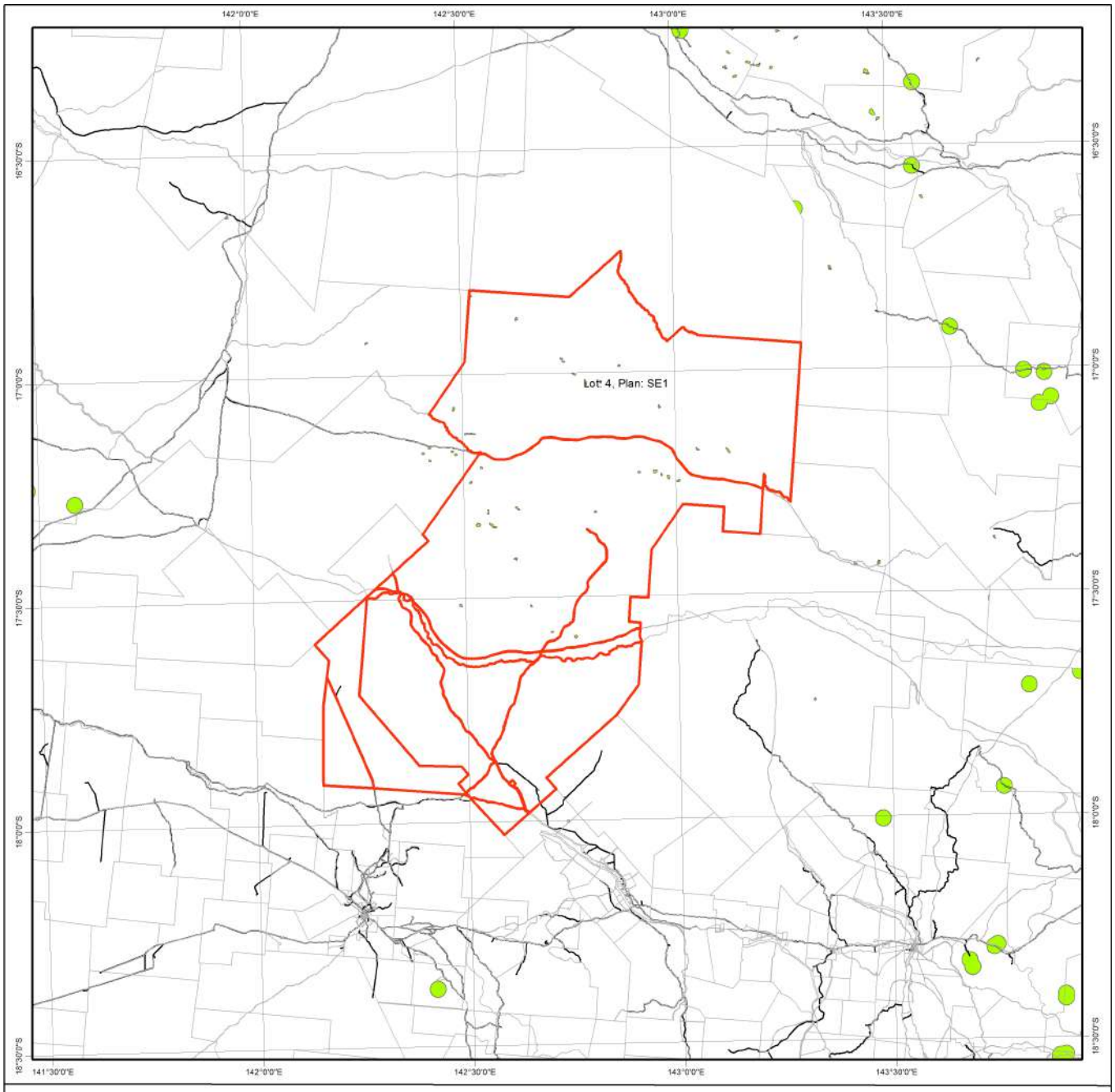
Appendix 2: Protected Plants Flora Survey Trigger Map

04/03/2020 12:02:19
Lot: 4 Plan: SE1



Protected Plants Flora Survey Trigger Map

Legend

- Lot and Plan
- High risk area
- Cadastral line
  Property boundaries shown are provided as a locational aid only
- Freeways / motorways / highways
- Secondary roads / streets

N

0 9,600 19,200 28,800 38,400 48,000 m

This product is projected into:
GDA 1994 Queensland Albers

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

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

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 clearing of protected plants 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 Queensland Spatial Catalogue, 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 clearing of protected plants for more information.

RPI DEVELOPMENT APPLICATION SUPPORTING INFORMATION

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Appendix 3: EPBC Protected Matters Report

Australian Government
Department of the Environment and Energy

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 Environment Assessments and the EPBC Act including significance guidelines, forms and application process details.

Report created: 04/03/20 16:48:23

No Image Available

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

Coordinates
Buffer: 1.0Km

No Image Available

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 Administrative Guidelines on Significance.

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

Commonwealth 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:	6
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 likely to occur within area
Erythrura gouldiae 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 likely to occur within area

Listed Migratory Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
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

Other Matters Protected by the EPBC Act

Listed Marine Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Birds		
[Actitis hypoleucos](#) Common Sandpiper [59309]		Species or species habitat may occur within area
[Anseranas semipalmata](#) Magpie Goose [978]		Species or species habitat may occur within area
[Apus pacificus](#) Fork-tailed Swift [678]		Species or species habitat likely to occur within area
[Ardea alba](#) Great Egret, White Egret [59541]		Species or species habitat likely to occur within area
[Ardea ibis](#) Cattle Egret [59542]		Species or species habitat may occur within area
[Calidris acuminata](#) Sharp-tailed Sandpiper [874]		Species or species habitat may occur within 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 may 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		
Freshwater Crocodile, Johnston's Crocodile, Johnston's River Crocodile [1773]		Species or species habitat may occur within area

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 likely to occur

Name	Status	Type of Presence within area
Equus caballus 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		
Cryptostegia grandiflora Rubber Vine, Rubbervine, India Rubber Vine, India Rubbervine, Palay Rubbervine, Purple Allamanda [18913]		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 qualifications 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

-17.3051 142.8862,-17.3051 142.9205,-17.3637 142.9205,-17.3637 142.8862,-17.3051 142.8862

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.

Department of the Environment
GPO Box 787
Canberra ACT 2601 Australia
+61 2 6274 1111

RPI DEVELOPMENT APPLICATION SUPPORTING INFORMATION
LYND RESOURCES PTY LTD

Appendix 4: Wildlife Online Extract

Queensland Government

Wildlife Online Extract

Search Criteria: Species List for a Defined Area
Species: All
Type: All
Status: All
Records: All
Date: All
Latitude: 17.3051 to 17.3637
Longitude: 142.8862 to 142.9205
Email: jacob.arnold@ardent-group.com.au
Date submitted: Wednesday 04 Mar 2020 12:26:27
Date extracted: Wednesday 04 Mar 2020 12:30:10

There were no records retrieved for your selection