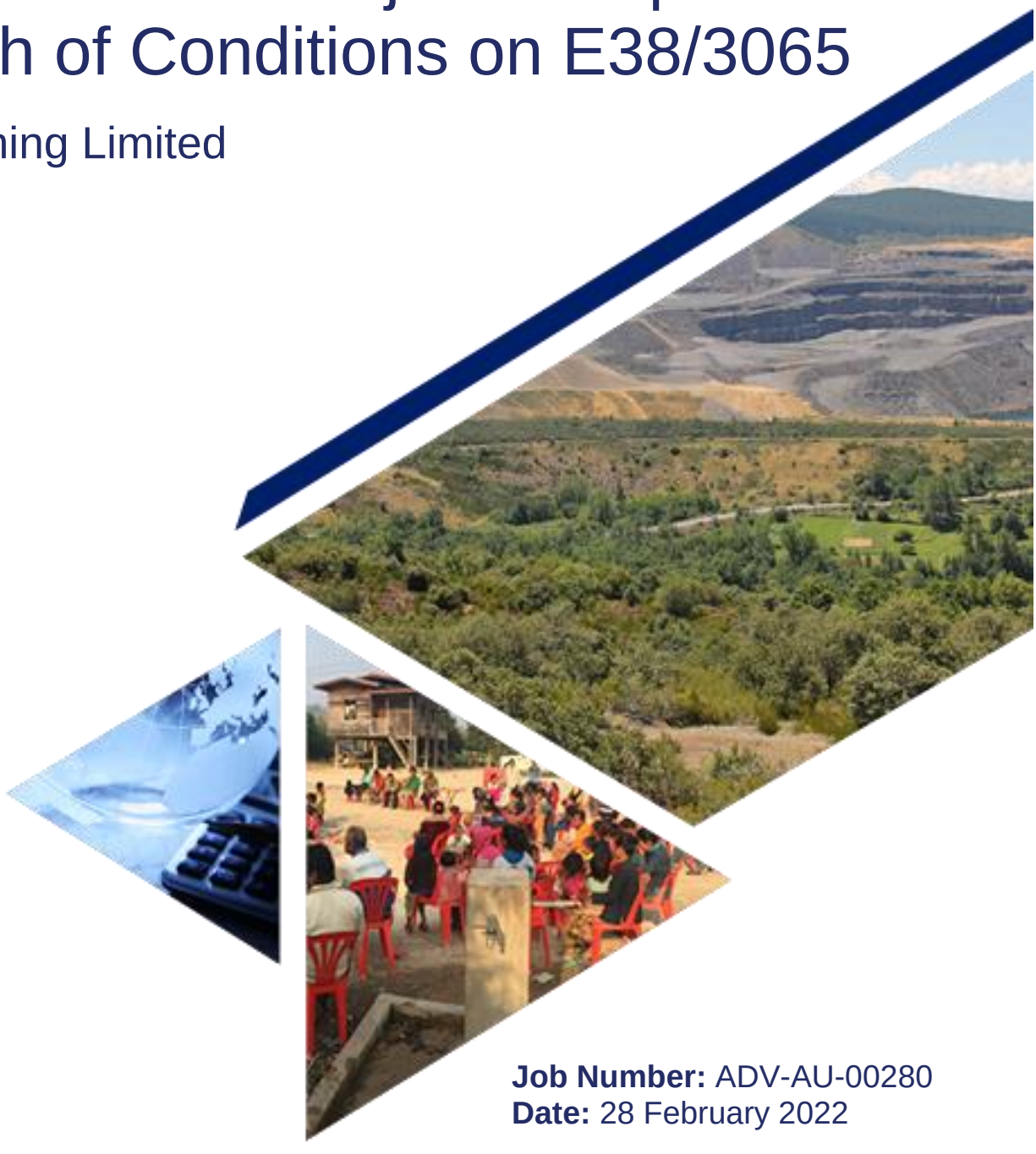
RPMGLOBAL

Lake Throssell Project: Response to Breach of Conditions on E38/3065

Trigg Mining Limited



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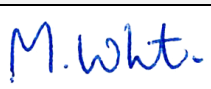
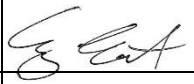
Prepared By:	Matthew Whitehouse	Senior Environmental Advisor		28/02/2022
Reviewed By	Craig Roberts	Consulting Director		28/02/2022
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Executive Summary

RPM Advisory Services Pty Ltd ("RPM") has been engaged by Trigg Mining Limited ("Trigg" or the "Client") to complete a Non-compliance Incident Report ("Report") summarising the breach of conditions on E38/3065 for the Lake Throssell Project (the "Project"). This Report has been prepared for the Department of Mines, Industry Regulation and Safety (DMIRS) Resource and Environmental Compliance Division in relation to exploration activities at Lake Throssell on E38/3065. Lake Throssell is owned and operated by Trigg.

Following a review of exploration activities undertaken across the Lake Throssell Project from May 2021 to February 2022, Trigg became aware of several non-compliance breaches from their approved disturbance footprint (under their Programme of Work (POW)). These additional disturbance areas involved clearing for access tracks and drill pads and have been described in this document as 'unauthorised clearing'.

Unauthorised clearing was recorded within and outside of Trigg's Exploration Licence area (E38/3065). Similarly, unauthorised clearing was also recorded within and outside of the Lake Throssell Environmentally Sensitive Area (ESA). Approximately 17.42 ha of unauthorised disturbance has been recorded across the Project area, triggering breaches of Trigg's POWs and Native Vegetation Clearing Permits (NVCPs).

This clearing was conducted by track mounted drilling equipment and support vehicles driving over vegetation to access various exploration sites. No formed roads were built or clearing with a blade occurred. The root stock and topsoil remain in place.

An Environmental and Reportable Incident Non-Compliance Form ENV-PEB-189 has been completed and has been submitted with this Report.

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1. INTRODUCTION

RPM Advisory Services Pty Ltd ("RPM") has been engaged by Trigg Mining Limited ("Trigg" or the "Client") to complete a Non-compliance Incident Report ("Report") summarising the breach of conditions on E38/3065 for the Lake Throssell Project ("Lake Throssell" or the "Project"). This Report has been prepared for the Department of Mines, Industry Regulation and Safety (DMIRS) Resource and Environmental Compliance Division in relation to exploration activities at Lake Throssell on E38/3065. Lake Throssell is owned and operated by Trigg.

1.1 Objectives

This Report has been developed to support the accompanying Environmental and Reportable Incident / Non-compliance Reporting Form and provides the following information:

- A background on Trigg;
- An overview of the Project's approvals and operational history;
- A summary of the incident that occurred on E38/3065;
- Incident findings; and
- A description of the improvements to Trigg's clearing related procedures.

This information has been provided to assist the Resource and Environmental Compliance Division at DMIRS with its assessment of the activities at Lake Throssell.

1.2 Company Background

Trigg is exploring for the essential potassium mineral fertiliser, Sulphate of Potash (SOP) or potassium sulphate (K_2SO_4), which provides necessary nutrients for agricultural production and human nutrition. SOP is particularly important for chloride sensitive crops such as fruits and vegetables, avocados, berries, coffee, cocoa, flowers and all crops grown under glass.

Trigg has 100% ownership of three SOP projects located east of Laverton in Western Australia which are all in the exploration phase including; Lake Throssell, Lake Rason and Lake Yeo. Trigg is listed on the Australian Stock Exchange as ASX:TMG.

1.3 Site Summary

The Lake Throssell Sulphate of Potash Project is located 180 km east of Laverton on the Great Central Road connecting Laverton to Alice Springs (**Figure 1-1**). It comprises five Exploration Licences; E 38/3065, E 38/3458, E38/3483, E 38/3537, E 38/3544 which cover approximately 1,080 km², including 190 km² of salt lake playa and over 70 km of underlying interpreted palaeochannels. The Project layout is shown on **Figure 1-2**.

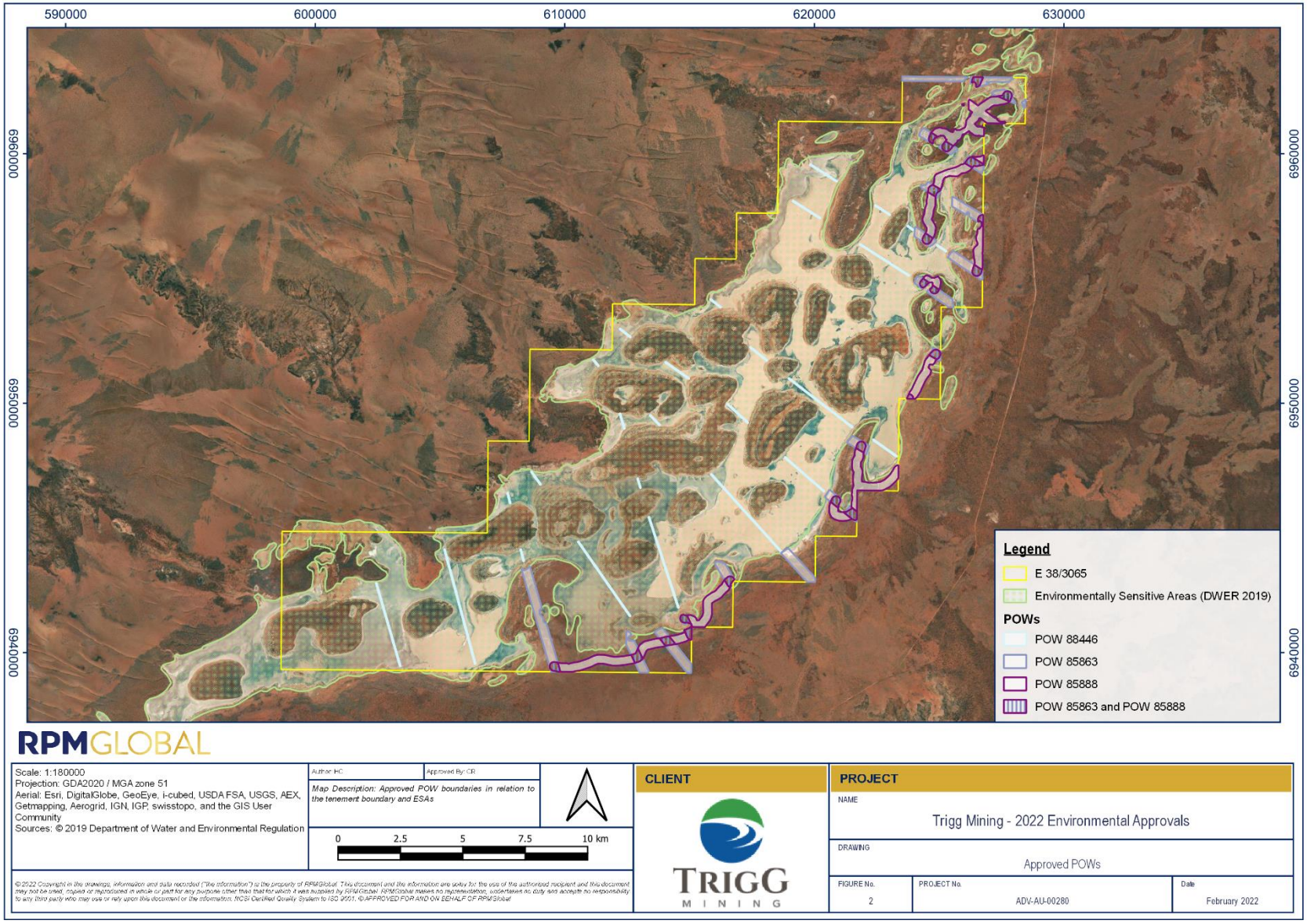
1.4 Project History

A summary of the Project's approvals and operational history has been provided below:

- Exploration license E38/3065 was granted in 2018, with the remaining licenses granted in 2022;
- Programs of Work (POW) were approved under POW 85863, 85888 and 88446;
- Native vegetation clearing permit (NVCP) was approved on CPS 8988; and
- Exploration to date has comprised surface brine pumping, air-core drilling, and auger sampling.

Figure 1-1 Regional Location Plan

Figure 1-2 Site Layout



2. INCIDENT DETAILS

2.1 Incident Description

Following a review of exploration activities undertaken across the Lake Throssell Project from May 2021 to February 2022, Trigg became aware of several non-compliance breaches from their approved disturbance footprint (under their POWs). These additional disturbance areas involved clearing for access tracks and drill pads and have been described in this document as 'unauthorised clearing'.

Unauthorised clearing was recorded within and outside of Trigg's Exploration Licence area (E38/3065). Similarly, unauthorised clearing was also recorded within and outside of the Lake Throssell Environmentally Sensitive Area (ESA). This disturbance has triggered breaches of Trigg's POWs and NVCPs.

This clearing was conducted by track mounted drilling equipment and support vehicles driving over vegetation to access various exploration sites. No formed roads were built or clearing with a blade occurred. The root stock and topsoil remain in place.

A summary of all authorised and unauthorised clearing across the Project area in comparison to Trigg's approved clearing areas (under POW 85863, 85888 and 88446) has been provided below in **Table 2-1** and shown on **Figure 2-1** to **Figure 2-6**.

An Environmental and Reportable Incident Non-Compliance Form ENV-PEB-189 has been completed and has been submitted with this Report.

Table 2-1 Summary of Unauthorised and Authorised clearing across the Project

Activity Type	Authorised Clearing (ha)	Unauthorized Clearing (ha)
Clearing Outside POWs	-	17.42
POW 85863	3.75	-
POW 85863 & POW 85888 (intersection)	0.795	-
POW 85888	1.59	-
POW 88446	0.25	-
Total	**6.37**	**17.42**

Figure 2-1 Approved Clearing Footprints and Unauthorised Clearing (Part 1)

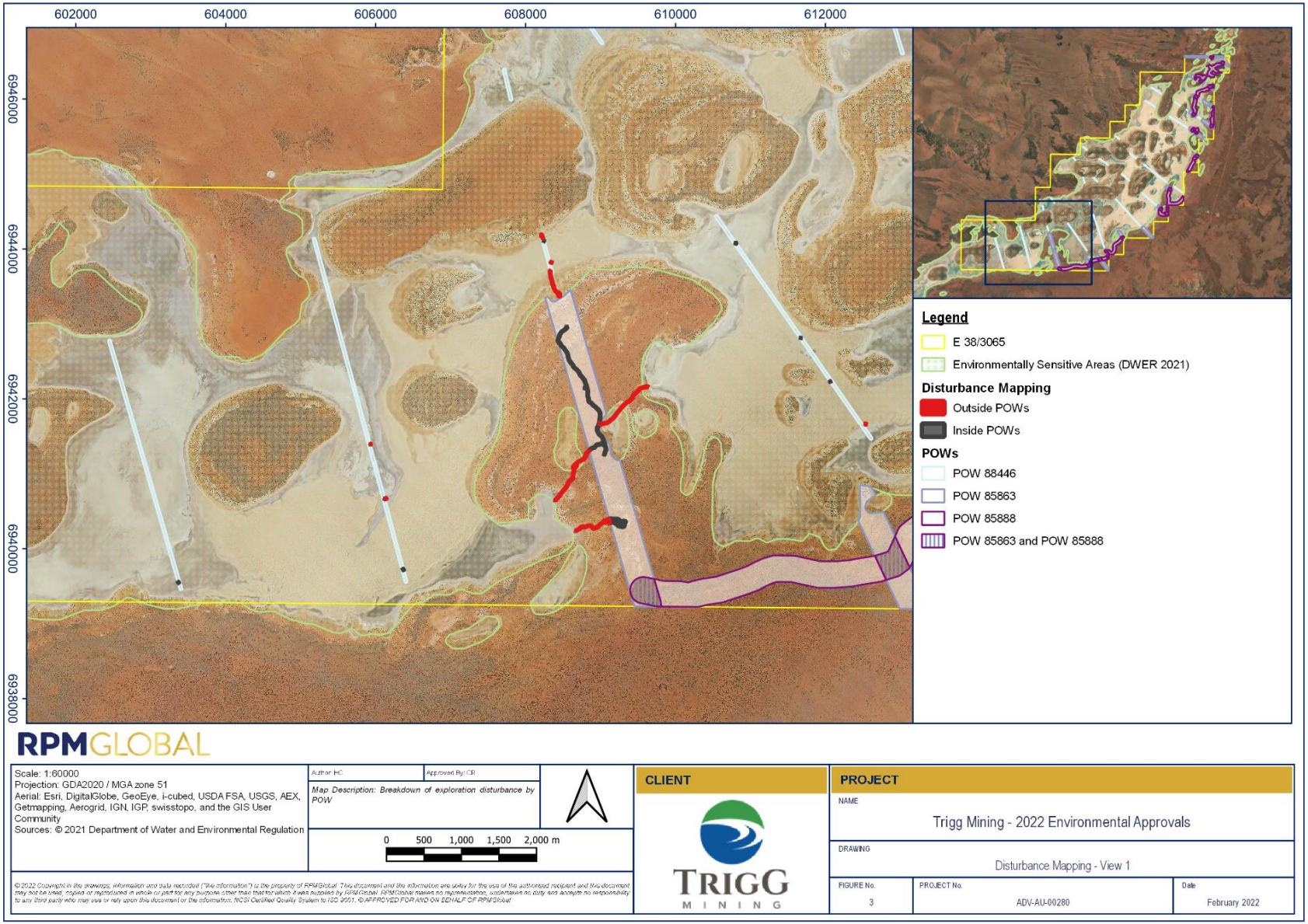


Figure 2-2 Approved Clearing Footprints and Unauthorised Clearing (Part 2)

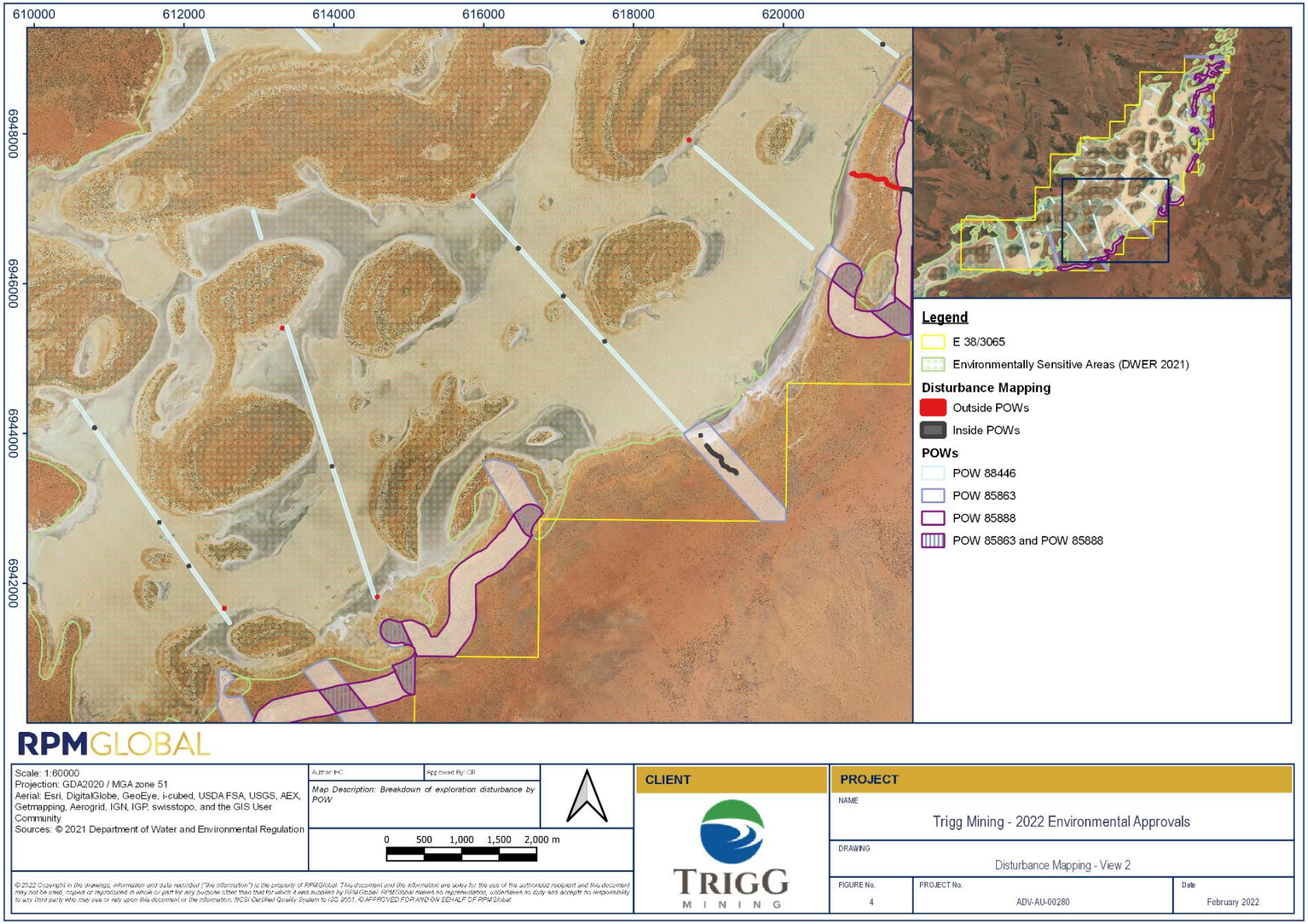


Figure 2-3 Approved Clearing Footprints and Unauthorised Clearing (Part 3)

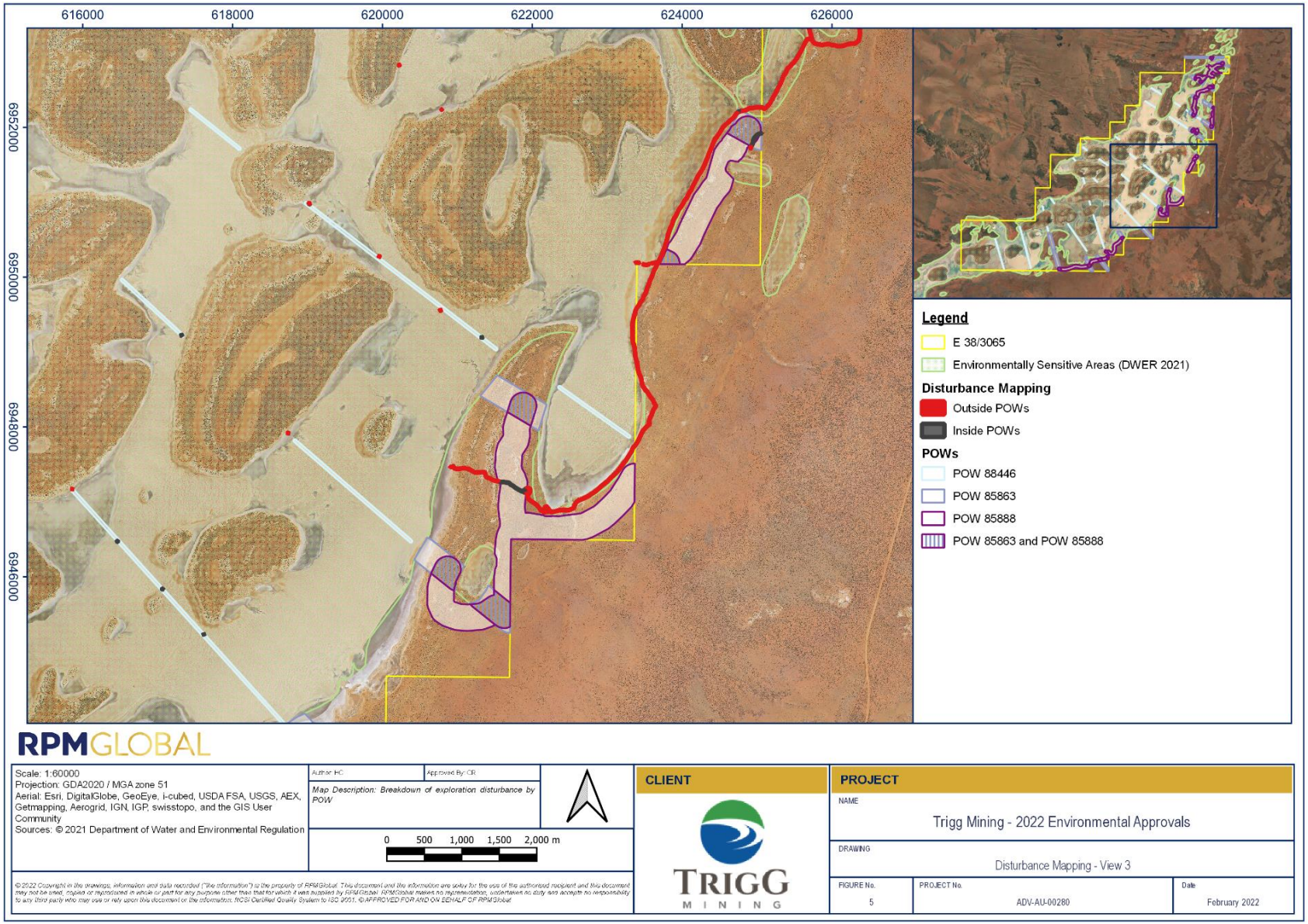


Figure 2-4 Approved Clearing Footprints and Unauthorised Clearing (Part 4)

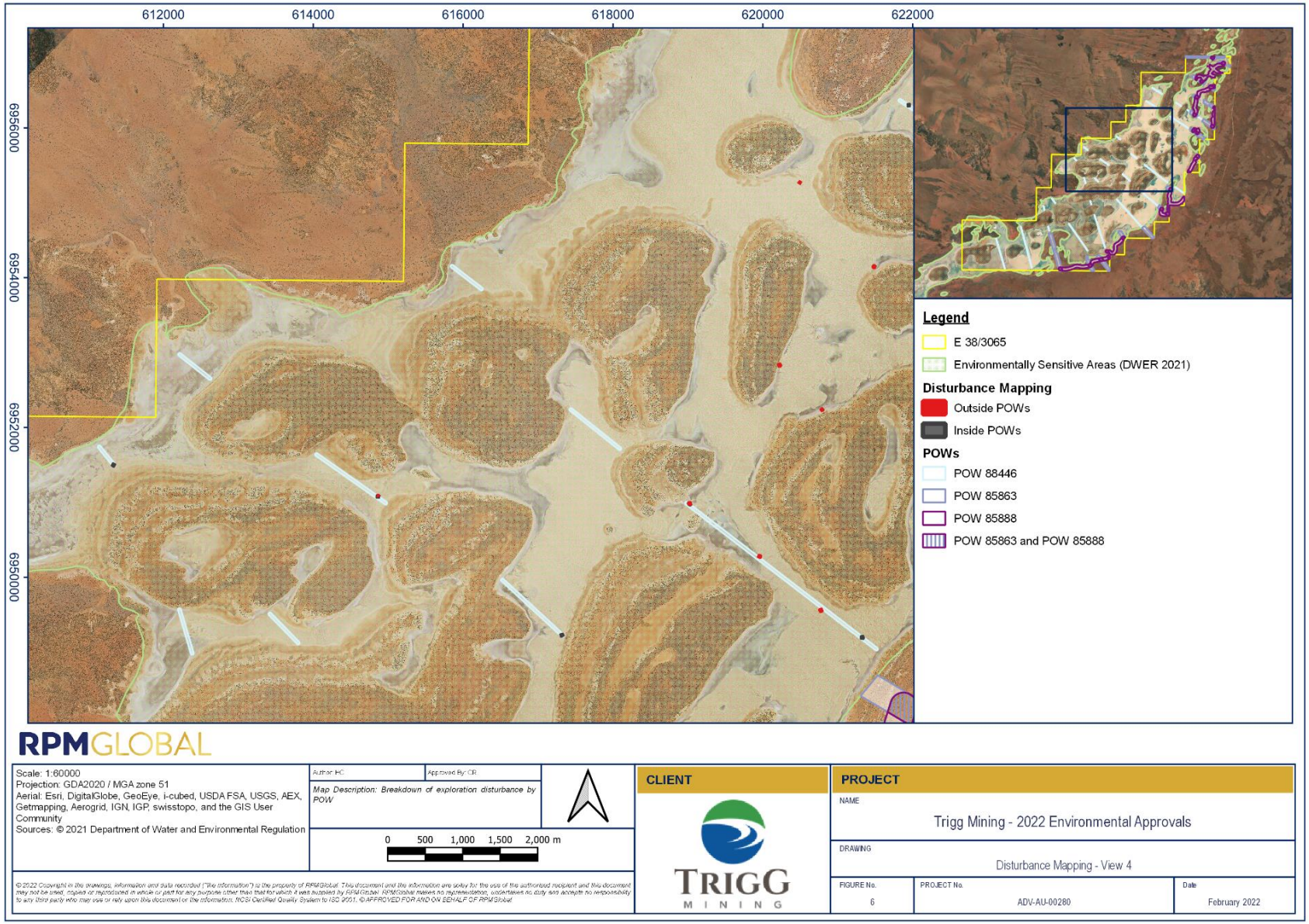


Figure 2-5 Approved Clearing Footprints and Unauthorised Clearing (Part 4)

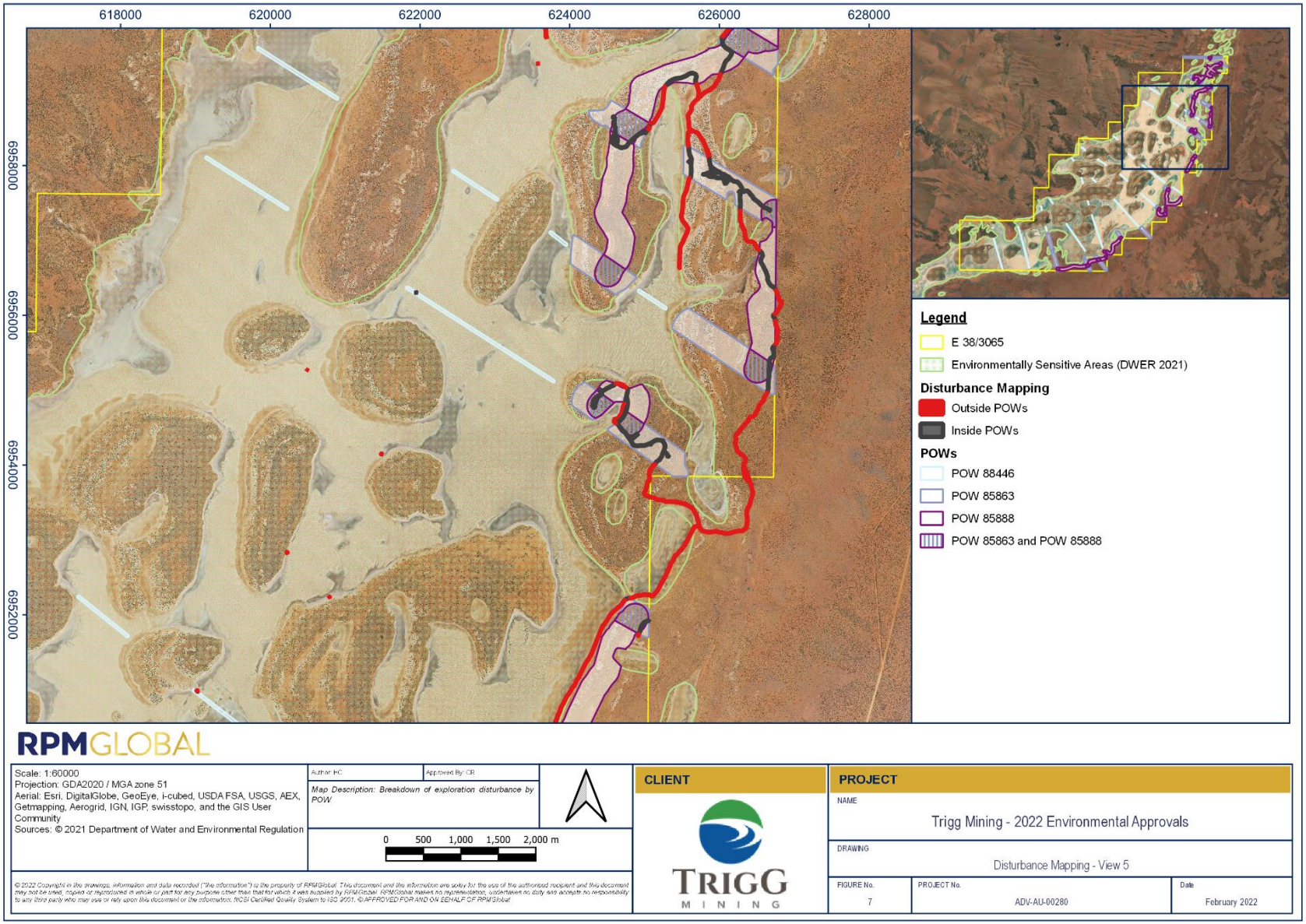
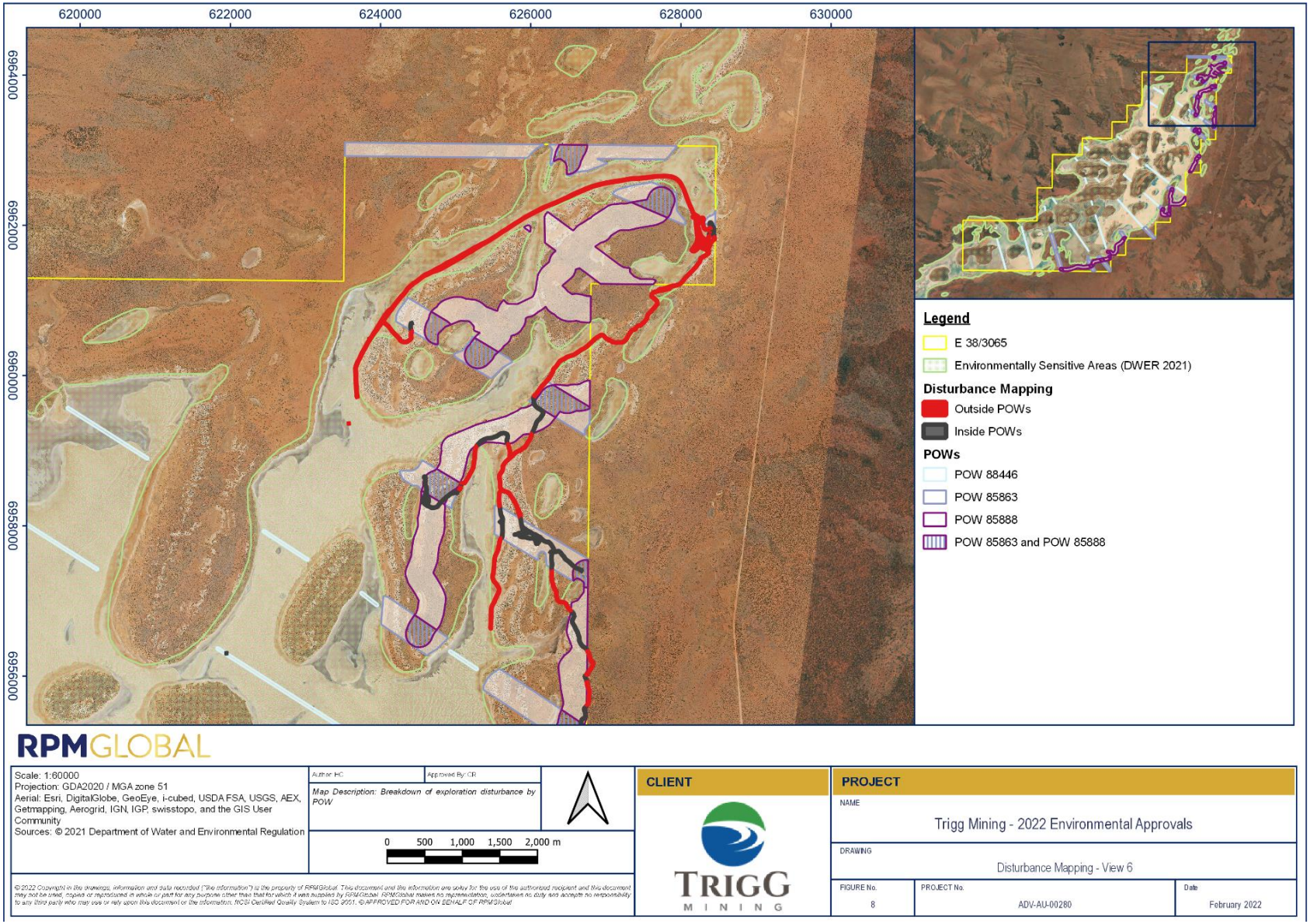


Figure 2-6 Approved Clearing Footprints and Unauthorised Clearing (Part 6)



2.2 Environmental Impacts

Several desktop and field based environmental assessments have been undertaken across the Project area, the most recent of which conducted by Maia Environmental Consulting Pty Ltd (Maia, 2021). This flora and vegetation survey (**Appendix A**) made the following observations:

- No Threatened Ecological Communities (TECs) protected under the federal *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) or state *Biodiversity Conservation Act 2016* (WA) (BC Act – (WA)) were identified in any database searches or during the various survey programs undertaken in 2021. Similarly, no Priority Ecological Communities (PECs) listed by the State Government Department of Biodiversity, Conservation and Attractions (DCBA) were identified in the region surrounding the Project.
- The Project area intersects three of Beard's pre-European Vegetation System Associations, including:
  - 24.3 – Low woodland or open low woodland;
  - 125 – Salt lake, lagoon, clay pan; and
  - 676.22 – *Tecticornia spp*. Communities in saline areas (samphire shrubland).
- No threatened flora species protected under the EPBC Act of the BC Act (WA) were recorded within the Project area.
- A single species listed under the DCBA as a Priority 3 (P3) flora species was recorded within the Project area (*Melaleuca apostiba*). 10 individuals were recorded within the Project area, with a further 50 individuals recorded just outside of the Project area. Neither of these populations have been affected by the authorized or unauthorised clearing.
- Much of the Project area is situated on top of an Environmentally Sensitive Area (ESA) due to the presence of Lake Throssell, and as such an NVCP was applied for and received.

3. INCIDENT INVESTIGATION

3.1 Incident Findings

Trigg acknowledges that some of the exploration as part of the Project were in areas unapproved for disturbance. Trigg have attributed this unauthorised clearing to have resulted from:

- A lack of communication between the Exploration Manager and exploration personnel on the approved exploration areas at Lake Throssell; and
- An absence of supervision by the Exploration Manager at the site overseeing the activities.

3.2 Immediate Incident Response

Since becoming aware of the clearing incident on the Project, Trigg have:

- Communicated the approved footprint to exploration personnel; and
- Completed this self-notification for submission to DMIRS.

3.3 Actions to Prevent Recurrence

To prevent this type of incident occurring again, Trigg has instigated several process for the Project including:

- Development of a Clearing Procedure, provided as **Table 3-1**;
- Development and implementation of an internal clearing permit – a Land Clearing Request Form (**Appendix B**); and
- Development and implementation of a Land Clearing Compliance Register (**Appendix C**) to provide guidance to the Project Manager when assessing the clearing request.

Table 3-1 Trigg Exploration Clearing Procedure

No.	Description	Responsibility
1	Identify area of land requiring clearing. Produce a map that clearly shows the location and size of the area to be cleared.	Exploration Manager
2	Verify that all the necessary approvals exist for the proposed clearing (PoW and/or NVCP.	Exploration Manager
3	Access tracks and drill pads will be planned and constructed in a way that avoids significant vegetation where possible, and clearing will be carried out using a raised blade.	Exploration Manager
4	Check that the area is within the boundaries approved by DMIRS for clearing.	Exploration Manager
5	Inspect any earthworks equipment that has arrived at site or may have been used in an area where weed species are recorded. Ensure the underside of the machinery and implements are free of weed seeds, pieces of vegetation and caked mud or earth. Any machinery that is not free of weed seeds, vegetation or caked earth must not be allowed to operate until it is thoroughly cleaned.	Exploration Manager
6	Hold a pre-start meeting with the explorations personnel to ensure they are advised of the following: ▪ The exact requirements of the earthworks (e.g. where the clearing pegs are located); ▪ Any clearing conditions specified in the permit; ▪ The location where vegetation and topsoil are to be stockpiled or re-spread (if stated); and ▪ The location of any environmental or rehabilitated areas that are to be avoided.	Exploration Manager
7	When constructing access tracks and drill pads in the field, staff are to be mindful of and not interfere with any nests, burrows, or other habitats during clearing activities and to avoid them where possible.	Earthworks Operator & Exploration Manager
8	On drill pads, once vegetation has been removed, commence the removal of topsoil to the depth specified by the Exploration Manager and in accordance with the POW/NVCP. Push the topsoil to the area where it is to be stored. If the topsoil is to be stockpiled elsewhere, push the topsoil into an area where it can be easily loaded and removed.	Exploration Manager
9	Ensure the topsoil stockpile is less than two meters high and is not located in an area where it can be inundated by water, driven over or disturbed.	Earthworks Operator
10	During earthworks, regularly inspect the activities and ensure the conditions of this procedure and associated approval documents are complied with.	Exploration Manager
11	Should any non-compliance with the permit conditions or this procedure, or the potential disturbance of an environmental or rehabilitated area be noticed or suspected, immediately stop the earthworks until the issues are solved.	Exploration Manager & Earthworks Operator
12	Undertake a post-clearing inspection, recording the final area of disturbance, location of the vegetation and topsoil stockpiles, volume and date.	Exploration Manager
13	Ensure all clearing is reported in the annual environmental report submission.	Exploration Manager

4. OTHER INFORMATION

4.1 Future Work

Trigg will continue to progress their exploration compliance through:

- Implementation of the Land Clearing Request Form (**Appendix B**);
- Implementation of the Land Clearing Compliance Register (**Appendix C**); and
- Continued rehabilitation of disturbed explorations areas in compliance with the Environmental Management Program (Drilling) (Trigg Mining, TGM-F-005).

4.2 REHABILITATION

4.2.1 Rehabilitation Activities

Rehabilitation will be completed as outlined in the Environmental Management Program (Drilling) (Trigg Mining, TGM-F-005) and tenement conditions, within 6 months of completion of the drilling program.

No rehabilitation has been completed to date, as the exploration program is still underway.

5. CONCLUSION

Trigg acknowledges the unauthorised clearing on E38/3065 and is committed to:

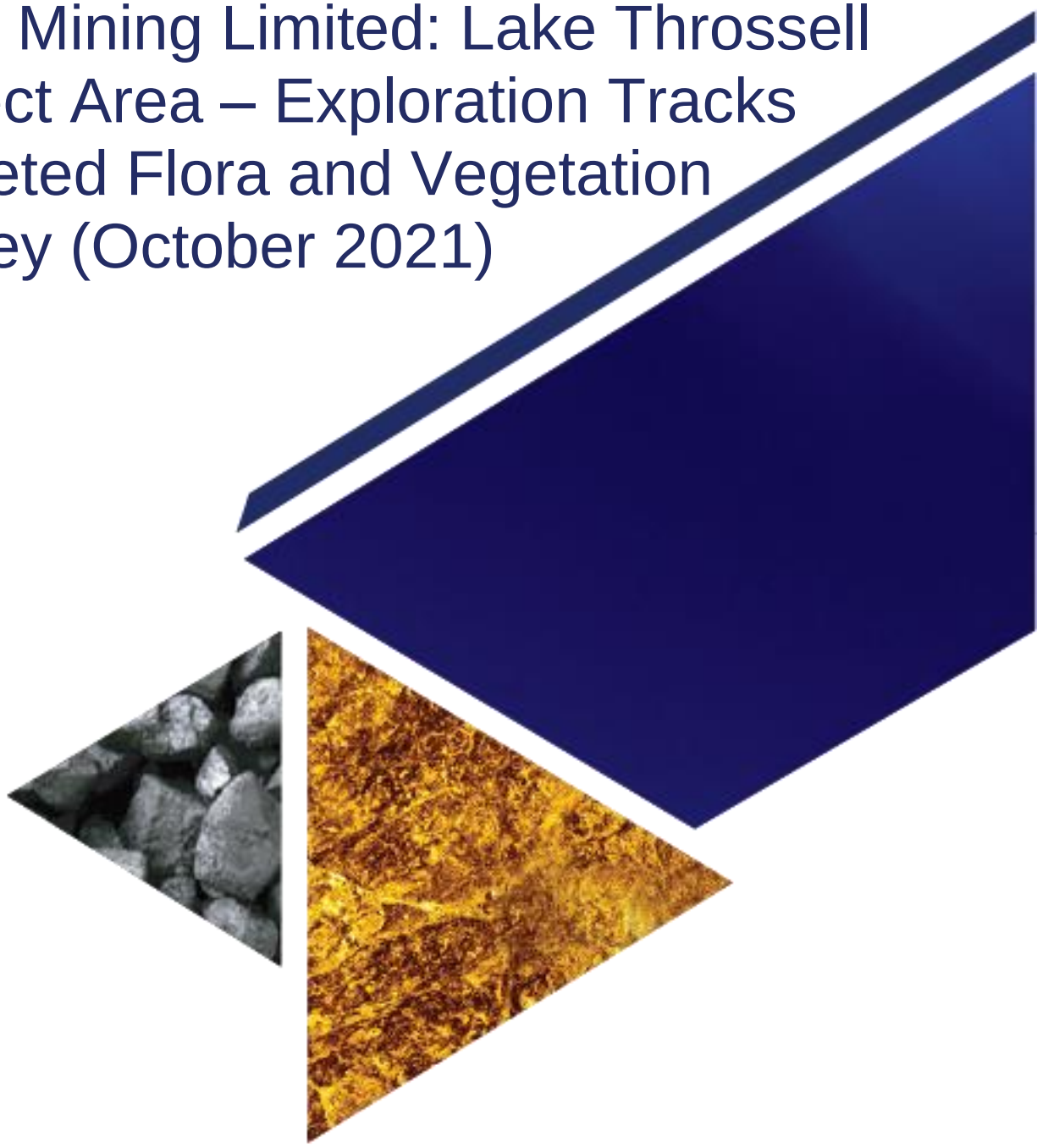
- Implementation of the Land Clearing Request Form and Land Clearing Register; and
- Rehabilitation of disturbed areas following completion of the exploration program.

Trigg sincerely regrets this oversight of its environmental controls at Lake Throssell and is committed to implementing improvements to its clearing processes at all of its operational sites.

Endorsement:

I hereby certify that to the best of my knowledge, the information contained within this report is true and correct and addresses all the requirements of the Guidance Note on Environmental Non-compliance and Incident Reporting in Western Australia set out by DMIRS.

Appendix A.
Trigg Mining Limited: Lake Throssell Project Area – Exploration Tracks Targeted Flora and Vegetation Survey (October 2021)



Trigg Mining Limited: Lake Throssell Project Area – Exploration Tracks Targeted Flora and Vegetation Survey, October 2021

Survey Results and 10 Clearing Principles – Short Report

DRAFT
Maia Environmental Consultancy Pty Ltd
December 16, 2021

Trigg Mining Limited: Lake Throssell Project Area – Exploration Tracks Targeted Flora and Vegetation Survey, October 2021

Survey Results and 10 Clearing Principles

1 INTRODUCTION

Trigg Mining Limited (TMG) plans to carry out exploration activities at its Lake Throssell project area in the Shire of Laverton in Western Australia (WA).

Maia Environmental Consultancy Pty Ltd (Maia) was engaged by TMG to carry out a targeted flora and vegetation survey over selected areas for proposed tracks and causeways within tenement E 38/3065.

The areas to be surveyed are referred to as the Survey Area in this report and they are shown on **Figure1**.

This short report includes native vegetation clearing permit (NVCP)-relevant background information, survey methods, survey results, and a table addressing the 10 clearing principles required for an NVCP application.

2 BACKGROUND INFORMATION

2.1 Conservation Significant Flora

Searches of the Department of Biodiversity, Conservation and Attractions' (DBCA) threatened and priority flora databases (WAHERB and TPFL) were requested (12-0621FL) to determine what conservation significant flora (CSF) species have been located in or close to the Survey Area previously (**Figure 2**).

Some flora species can be protected by Australian Government legislation (*Environment Protection and Biodiversity Conservation Act 1999*, EPBC Act) or by WA legislation (*Biodiversity Conservation Act 2016*, BC Act) (Department of the Environment and Energy (DAWE) 2021a, DBCA, 2021a). Species protected by these acts are referred to as threatened species and can be listed as Critically Endangered, Endangered or Vulnerable or Extinct in the Wild.

One Threatened flora species listed under both the EPBC Act and BC Act has been recorded approximately 50 km southwest of the southern section of the Survey Area - *Seringia exastia* (Critically Endangered). It could potentially occur in the Survey Area.

Seringia exastia was a species previously known from the Kimberley region, but a recent taxonomic study concluded that *S. exastia* and *S. elliptica* are the same species, and the two species have been synonymised under the oldest name – *S. exastia*. *S. elliptica* is common and widespread through the Pilbara region, central WA and the Northern Territory and it extends into South Australia. A nomination by the WA Threatened Species Scientific Committee (TSSC) to delist the species has recently been advertised on DBCA's website (DBCA, 2021b). However, until changes are officially made to the threatened species list, *S. exastia* is still legally listed as threatened flora.

Possible threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Flora List under Priorities (P) 1, 2, 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened flora. Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species list for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring (DBCA, 2019a).

- The two closest priority flora species locations to the Survey Area are *Grevillea* sp. Victoria Desert (Priority (P) 1; approximately 41 km to the southwest), and *Comesperma viscidulum* (P4; approximately 60 km to the southwest). All other records are more than 60 km away from the Survey Area. They could potentially occur in the Survey Area.

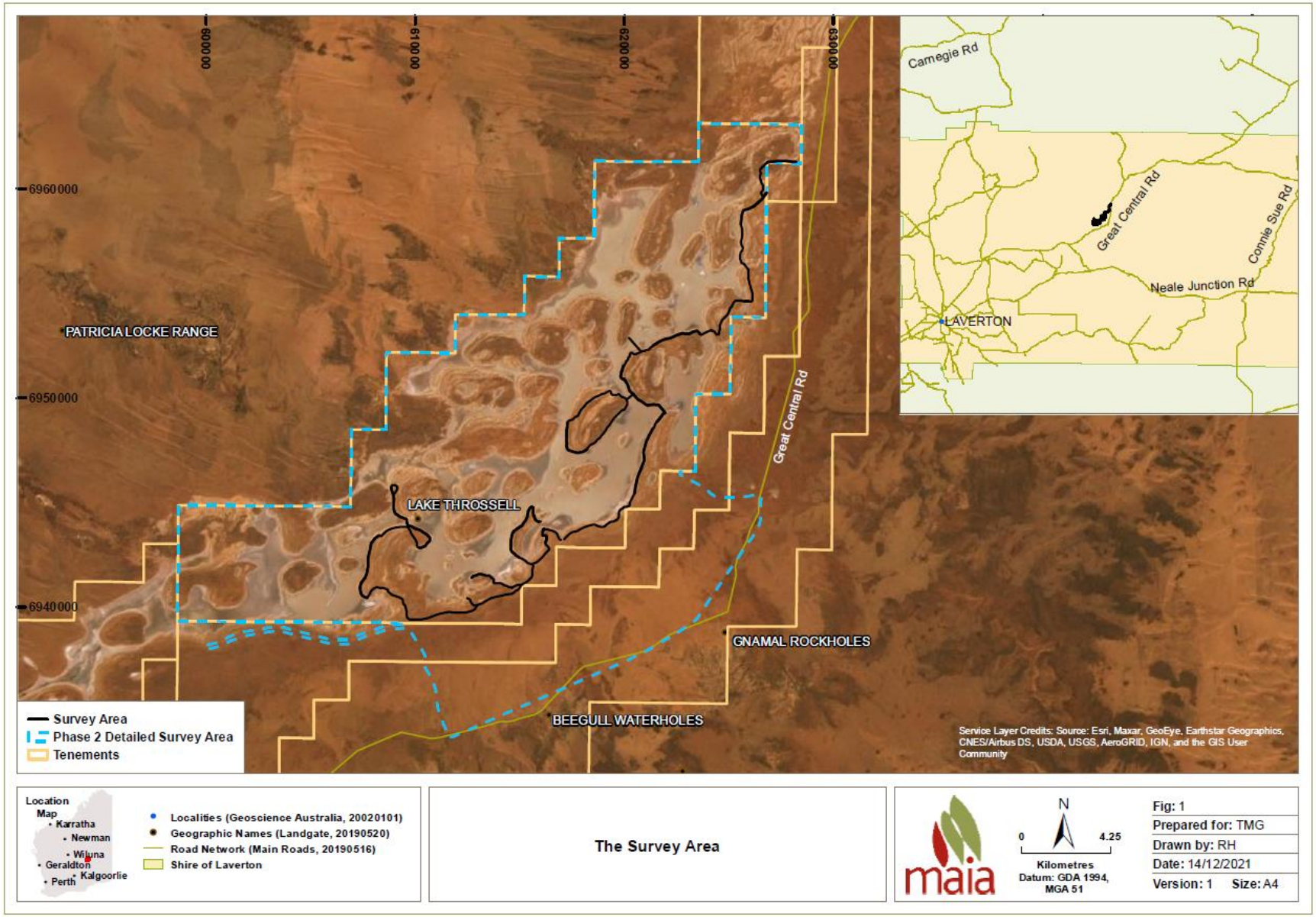


Figure 1: General location of the Survey Area

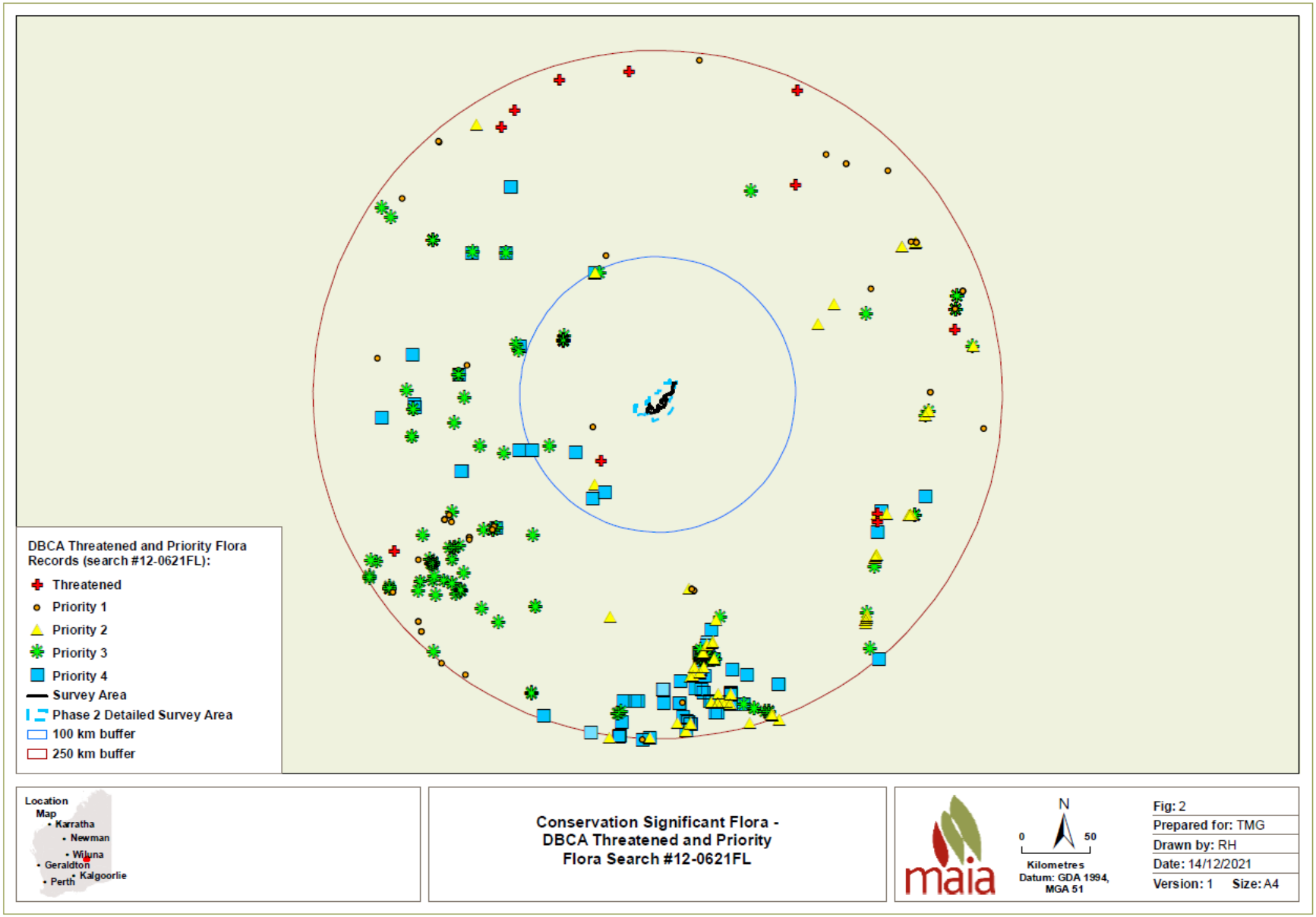


Figure 2: Conservation Significant Flora, DBCA Threatened and Priority Flora Search (12-0621FL)

2.2 Threatened and Priority Ecological Communities

A search of the DBCA's threatened and priority communities' database was requested (09-0621EC) to determine what conservation significant communities have been recorded previously in or close to the Survey Area (**Figure 3**).

Three categories exist for listing threatened ecological communities (TECs) under the EPBC Act: Critically Endangered, Endangered and Vulnerable (DAWE, 2021b).

- No TEC protected by the EPBC Act occurs in or close to the Survey Area (DAWE, 2021c).

Under WA legislation the BC Act provides for the statutory listing of TECs by the Minister for Environment. The legislation also describes statutory processes for preparing recovery plans for TECs, the registration of their critical habitat, and penalties for unauthorised modification of TECs (DBCA, 2021c). The department has been identifying and informally listing TECs since 1994 through the previous non-statutory process. The most recent TEC list was published on 28 June 2018 (DBCA, 2018a). The Minister for Environment has endorsed 69 ecological communities as threatened in the following categories: 20 critically endangered, 17 endangered, 28 vulnerable, 4 presumed totally destroyed (DBCA, 2018a).

The Survey Area is in DBCA's Goldfields Region and the IBRA (Interim Biogeographic Regionalisation for Australia) Central Subregion of the Great Victoria Desert Bioregion (DBCA, 2007-).

- One TEC is listed for the Goldfields Region; however, it is in the Murchison Bioregion rather than the Great Victoria Desert Bioregion (DBCA, 2018a).

As of July 2021, an additional 390 ecological communities (community types and sub-types) with insufficient information available to be considered a TEC, or which are rare but not currently threatened, have been placed on the Priority list and are referred to as priority ecological communities (PECs) (DBCA, 2021c).

The July 2021 PEC list includes 63 PECs in the Goldfields Region (DBCA, 2021d).

- The Survey Area does not occur within the boundaries of a currently known PEC **(Figure 3).**
- The closest PEC to the Survey Area is the P1 PEC Laverton Downs calcrete groundwater assemblage type on Carey palaeodrainage on Laverton Downs Station; it has unique assemblages of invertebrates in the groundwater calcretes (DBCA, 2021d): it is approximately 200 km southwest of the Survey Area.

2.3 Pre-European Vegetation

The Environmental Protection Authority's (EPA) broad principles for the protection of native terrestrial vegetation and flora indicate that biodiversity should be maintained at sustainable levels. This generally means that ecological communities should be retained at an overall level of at least 30% of the original extent of the ecological community in each region (EPA, 2000). This level is the threshold level below which species loss appears to accelerate exponentially at an ecosystem level. A level of 10% of the original extent is regarded as being a level representing "endangered" (EPA, 2000).

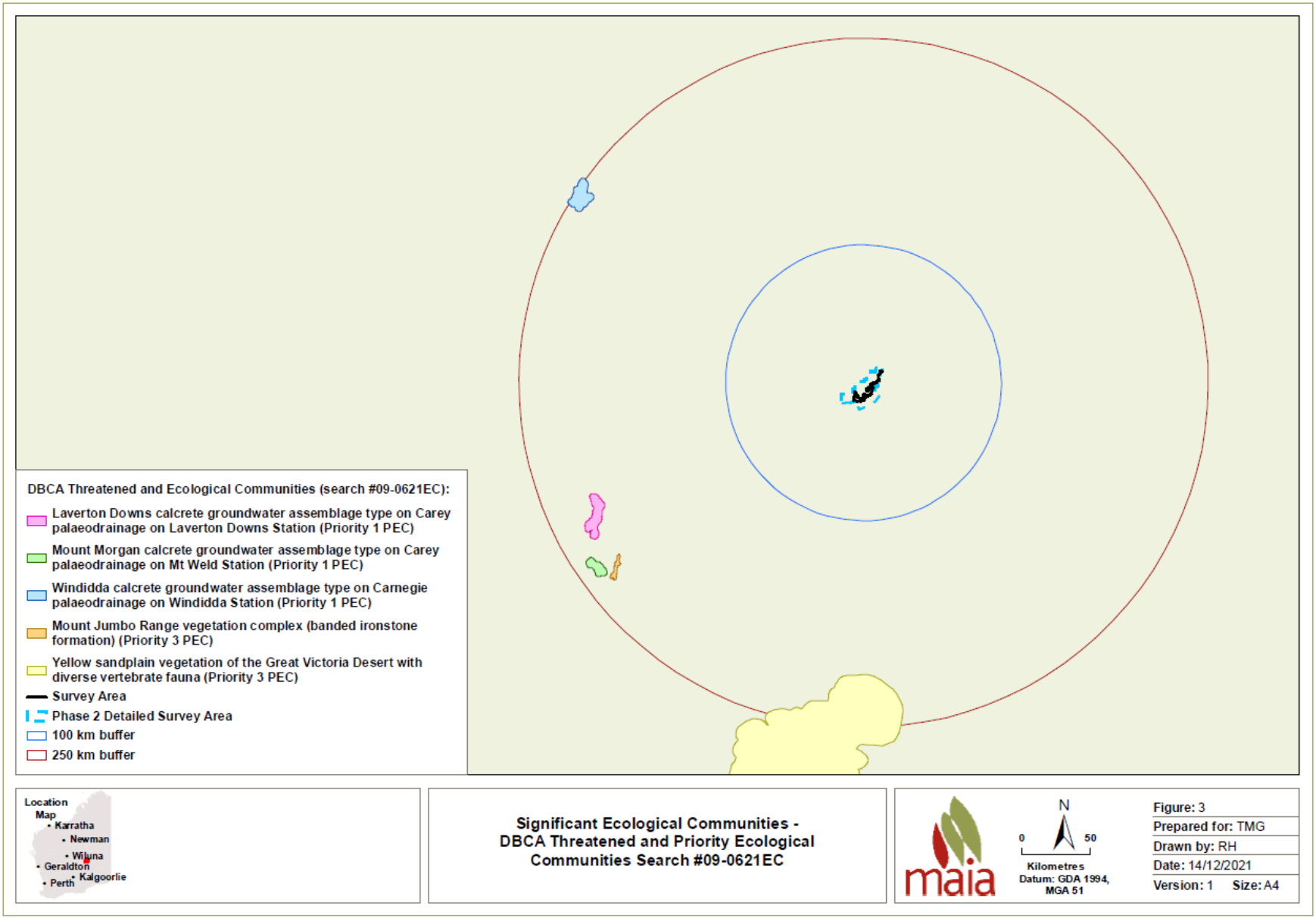


Figure 3: Significant Ecological Communities, DBCA Significant Ecological Communities Search (09-0621EC)

The Survey Area intersects three of Beard's pre-European vegetation associations and system associations mapped in the Great Victoria Desert Bioregion – vegetation associations (VA) 24, 125 and 676 and vegetation system associations (VSA) 24.3, 125 and 676.22 (Department of Primary Industries and Rural Development (DPIRD), 2019; **Figure 4**). The pre-European extent of the VSAs in the Great Victoria Desert Bioregion and Central Subregion, their current extent, the percentage remaining, and the current extent protected for conservation in the bioregion and subregion are listed in **Table 1**.

Currently, between 100% and 99.95% of each of the VSAs remains in the Great Victoria Desert Bioregion and 100% of the VSAs in the Central Subregion (GOWA, 2019).

Table 1: Beard's Vegetation System Associations of the Survey Area– Past and Current Extent and Reservation Status

Vegetation System Association (VSA)	System	Structure: Broad Description
24.3	Low woodland or open low woodland	Other acacia, banksia, peppermint, cypress pine, casuarina, York gum, *Acacia* spp., *Banksia* spp., *Agonis flexuosa*, *Callitris* spp., *Allocasuarina* spp., *Eucalyptus loxophleba*
125	Salt lake, lagoon, clay pan	No floristic description
676.22	*Tecticornia* spp. Communities in saline areas	Samphire

Pre-European Extent (ha) of VSA in:		Current Extent (ha) of VSA in:	Remaining (%) of VSA in	Current Extent of VSA Protected (IUCN 1-4) for Conservation (proportion of pre-European extent) (%) in:
Great Victoria Desert (GVD) Bioregion		GVD Bioregion	GVD Bioregion	GVD Bioregion
Central subregion		Central subregion	Central subregion	Central subregion
24.3	225,874.12	225,874.12	100	0
	204,204.42	204,204.42	100	0
125	225,072.99	225,001.77	99.97	18.14
	149,366.62	149,366.62	100	27.34
676.22	204,682.84	204,570.83	99.95	13.37
	103,609.56	103,609.56	100	14.65

Source: GOWA, 2019.

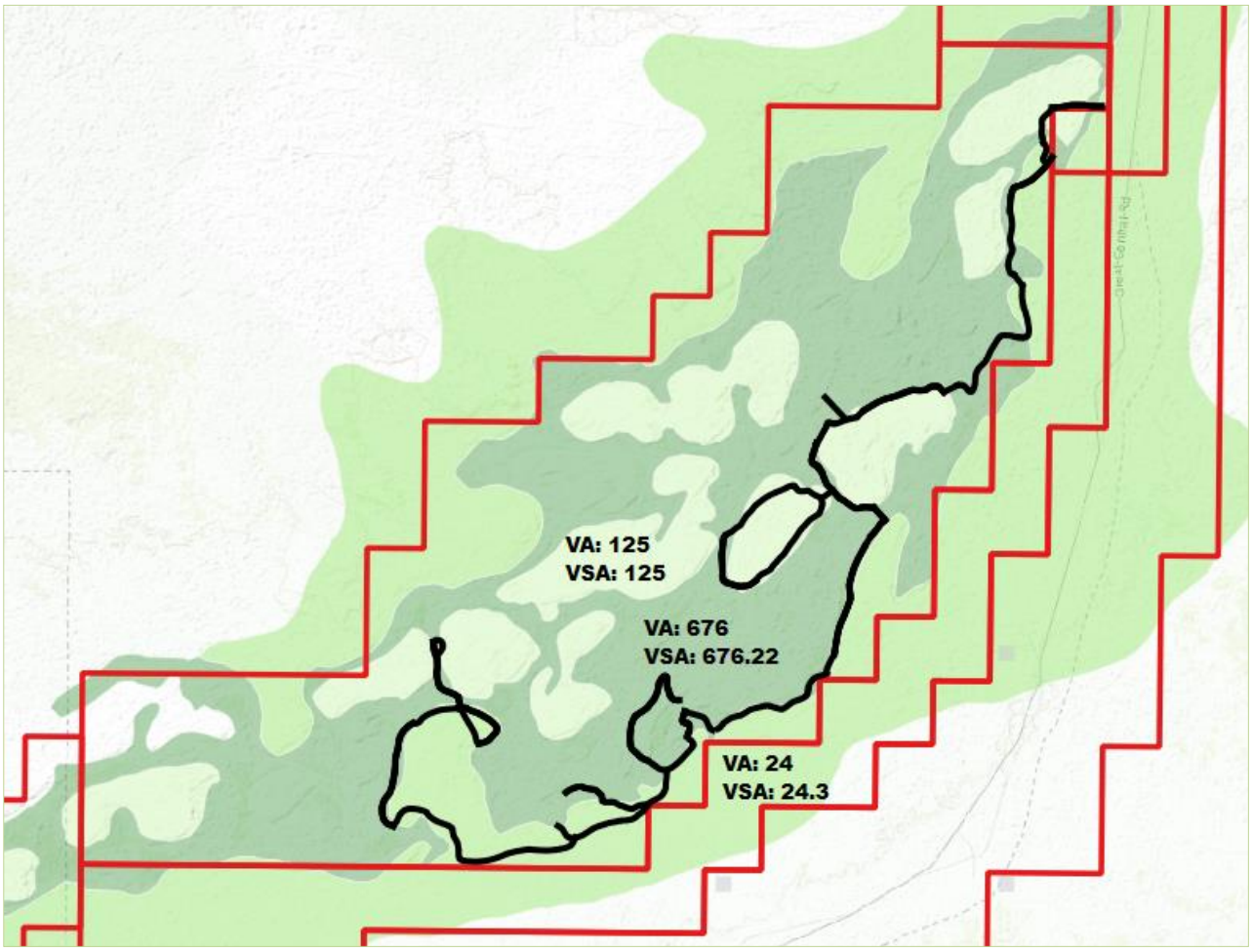


Figure 4: Pre-European Vegetation Associations and System Associations

2.4 Protected and Significant Areas

Protected and significant areas are described in **Table 6 Appendix 1**. Each of the areas mentioned below are shown on **Figure 5**.

- None of the Survey Area lies is in DBCA Legislated Lands and Waters. The closest is Yeo Lake Nature Reserve, approximately 41 km to the south of the Survey Area (DBCA, 2021e).
- No DBCA Lands of Interest occur in or close to the Survey Area (DBCA, 2021f).
- Lake Throssell and surrounds (including the Survey Area) is in a Schedule 1 Area (DWER, 2017).
- Lake Throssell itself is an Environmentally Sensitive Area (ESA) and most, but not all, of the Survey Area lies within the boundaries of the ESA (DWER, 2020a).
- The Survey Area lies in an area listed as an EPA Redbook Recommended Conservation Reserves 1976-1991 area (DBCA, 2017a).

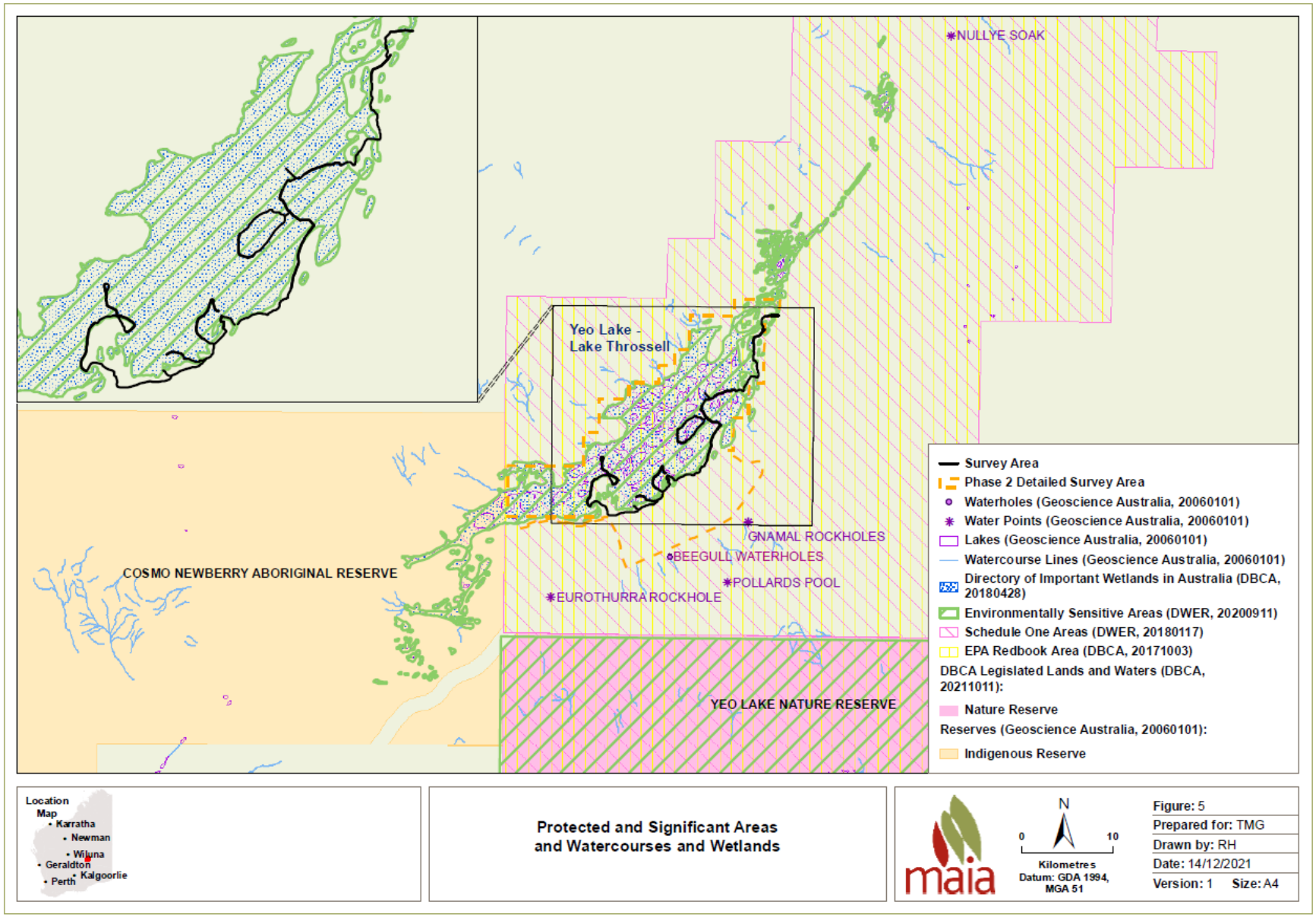


Figure 5: Protected and Significant Areas and Watercourses and Wetlands

2.5 Water Courses, Wetlands and Groundwater Dependent Ecosystems

Watercourses and wetlands in the vicinity of the Survey Area are also shown on **Figure 5**. The Survey Area is in Lake Throssell.

- Lake Throssell is not a Ramsar wetland (DBCA, 2017b).
- Lake Throssell is a Directory of Important wetlands in Australia (DIWA) wetland (Yeo Lake – Lake Throssell; DBCA, 2018b). Much of the Survey Area lies within the boundary of the DIWA wetland (**Figure 5**).
- There are no rivers in the project area or surrounds.

Groundwater Dependant Ecosystems (GDE) are important for the sustainability of aquatic and terrestrial ecosystems such as wetlands, springs, rivers, and vegetation. The Groundwater Atlas (BOM, 2021a) indicates the potential for aquatic and terrestrial GDEs to occur in an area from (mostly) national assessment.

- Based on this national assessment, Lake Throssell is indicated as having high potential to be an aquatic GDE (**Figure 6**). Approximately 50% of the Survey Area lies over these areas classified as having high potential to be aquatic GDE.
- Based on this national assessment, Lake Throssell is indicated as having high potential to be a terrestrial GDE, the surrounding area as having mostly low potential to be GDE and one area to the southwest having moderate potential (**Figure 7**). Approximately 50% of the Survey Area lies over the area classified as having high potential to be a terrestrial GDE.

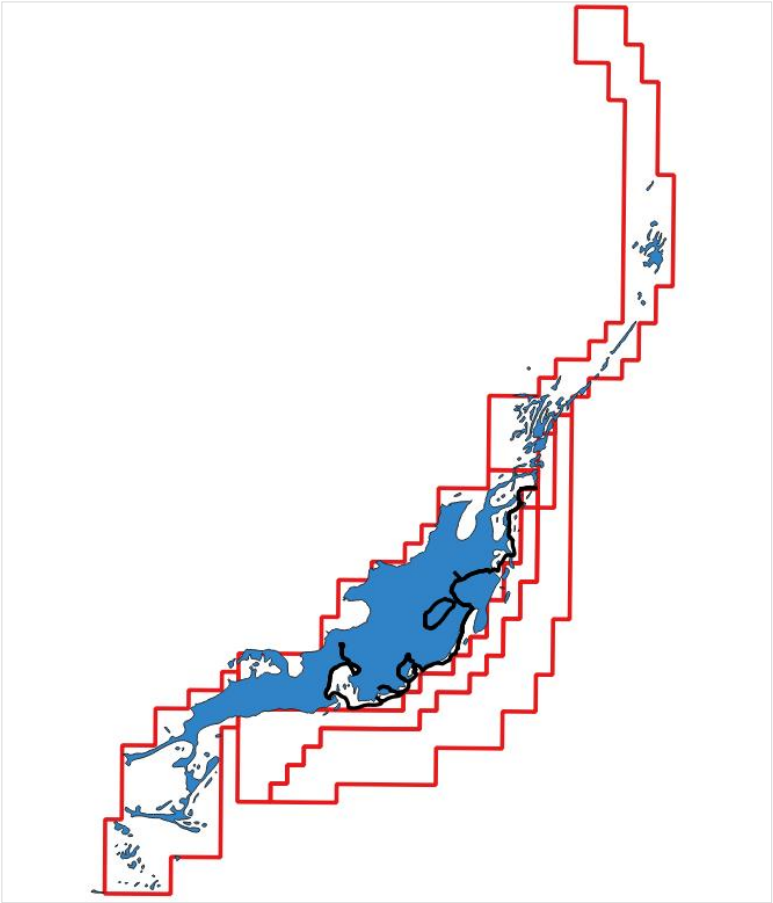


Figure 6: Aquatic Groundwater Dependent Ecosystems (blue fill indicates high potential) (National Assessment; BOM, 2021a)

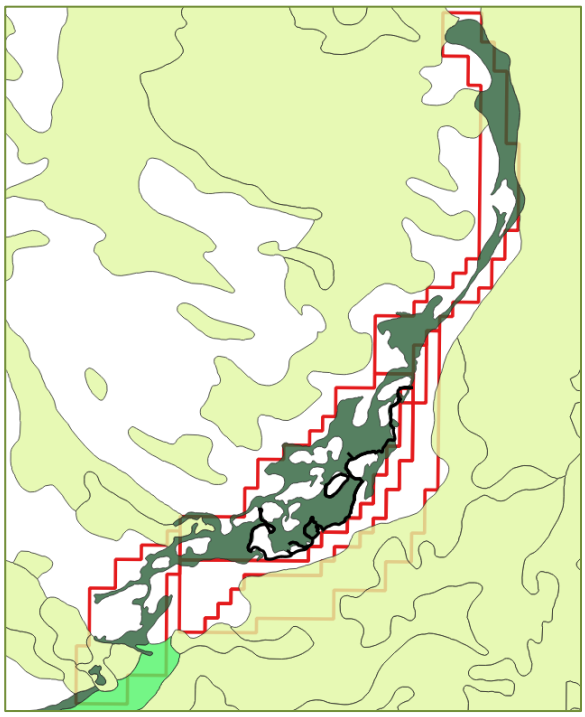


Figure 7: Terrestrial Groundwater Dependent Ecosystems (dark green areas indicate high potential, mid green moderate potential and light green low potential to be a terrestrial GDE) (National Assessment; BOM, 2021a)

2.1 Rainfall Records

Rainfall received in the Survey Area over the three months before the survey is indicated by the WA rainfall deciles map for July to September 2021 (**Figure 8**; BOM, 2021b). The rainfall in the general area was below average for those three months.

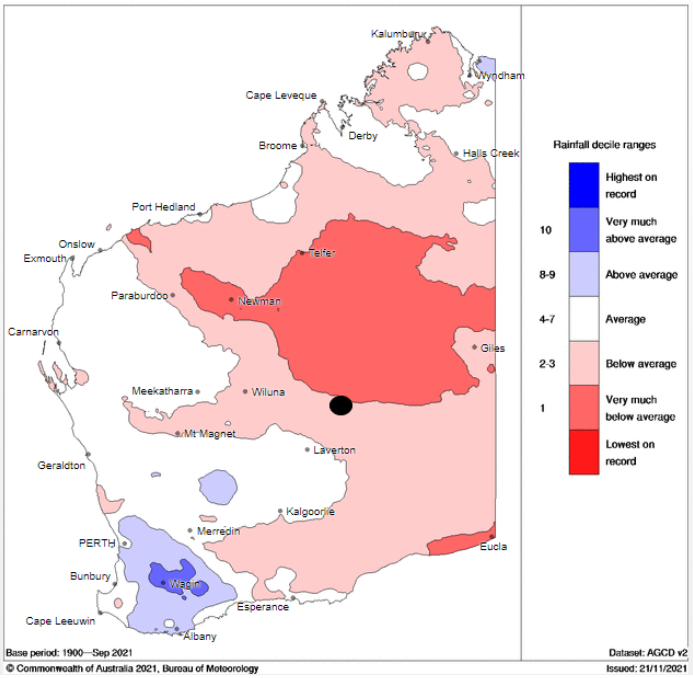


Figure 8: WA Rainfall Deciles for July, August and September 2021 (BOM, 2021b) (black spot indicates approximate location of the Survey Area)

3 SURVEY METHODS AND AREA SURVEYED

The survey methodology was developed to comply with the following:

- Technical Guide – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA, 2016).

The optimal times for flora and vegetation surveys in the Eremaean Botanical Province are 6-8 weeks post wet season (March – June) or in the dry season (after winter rainfall if available) (EPA, 2016). A helicopter was needed to access the Survey Area and it was not available until early to mid-October. The targeted survey was carried out while the botanists were in the area carrying out the dry season phase of a detailed survey over the wider project area. Before undertaking the survey, the botanists familiarised themselves with any conservation significant flora species produced by the database search.

Shape files for the Survey Area were provided by TMG and the targeted survey was carried out by two botanists from October 9 to 13, 2021. Each botanist used a Global Positioning System (GPS) with the tracks to be surveyed uploaded onto it. The botanists walked the Survey Area and traverse paths varied depending on the terrain and vegetation.

While carrying out the survey the botanists noted the vegetation and any changes in vegetation condition or any disturbances to the vegetation were also noted. CSF species, weeds and uncommon species were targeted by the botanists. When encountered, their locations were recorded on a GPS and their numbers were counted. Specimens of known or suspected CSF species encountered during the survey were collected for verification by a plant taxonomist.

The Survey Area covers approximately 174 ha (approximately 87 km long and 20 m wide). As the helicopter was not available for all of the time scheduled for the targeted flora survey and, the Survey Area is approximately 6 to 10 km from the closest road, it could not all be surveyed. Approximately 12 km of track (24 ha / 14% of the Survey Area) was not assessed (black lines on **Figure 9**) and 75 km (86%) of it was assessed (cerise lines on **Figure 9**).

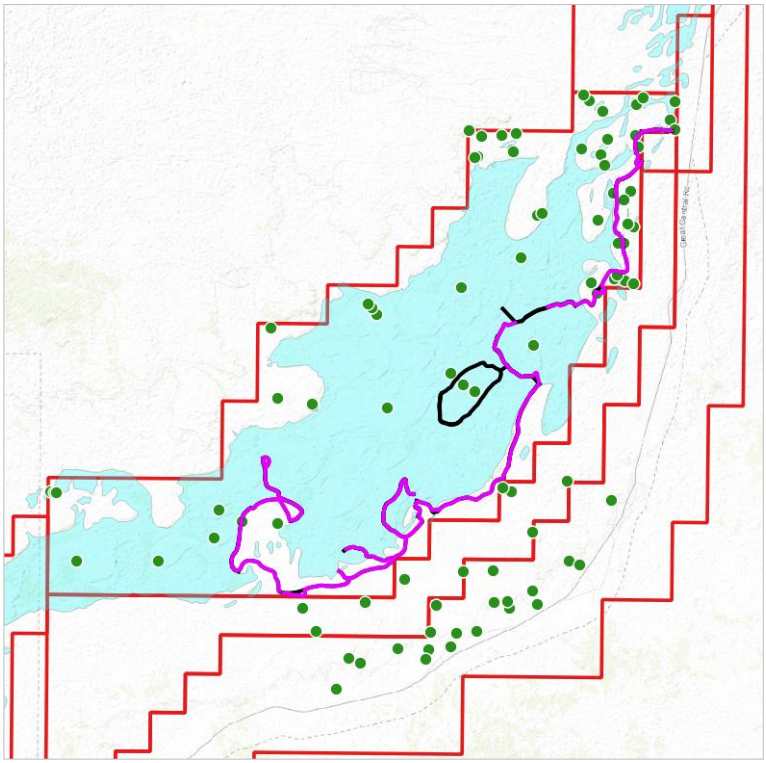


Figure 9: Traverses walked within the Survey Area (cerise) and quadrats sampled at Lake Throssell (green dots)

4 SURVEY RESULTS

4.1 General Flora

The flora of the area is indicated by the combined list of 257 taxa (230 described species) that was collated from the results of the two-phase detailed survey and the targeted flora survey carried out by Maia in 2021 in the Lake Throssell project Area (**Figure 1**).

The taxa recorded in the wider Lake Throssell project area, the number of families and genera represented, the percentage of annual and perennial species, and the percentage of the species list that was flowering or fruiting or flowering and fruiting while the surveys were carried out are listed in **Table 2**. The full species list is included as **Table 7, Appendix 2**.

Nine taxa are queried in the species list because the specimens collected were either sterile or the material collected was inadequate for identification.

Table 2: Flora Information

General Area	
Families	38
Genera	102
Species	230
Taxa (includes species and those listed as sp.)	257
Annual % / perennial %	16.3% / 83.7%
Flowering % / fruiting % / flowering and fruiting % / fertile overall %	11.3 / 19.1 / 39.3 / 69.6

4.2 Conservation Significant / Potentially Significant Flora

- No threatened flora species protected by the Commonwealth EPBC Act, or the West Australian BC Act were in the Survey Area. One *Seringia exastia* (Critically Endangered) plant was located approximately 8.5 km northeast of the Survey Area.
- One Priority species was recorded within the Survey Area–*Melaleuca apostiba* (P3; 10 plants). Another 50 plants were recorded at a second location approximately 180 m outside the Survey Area.
- One new *Tecticornia* species and one potential new *Sida* species were collected from the wider project area; however, they were 5.3 km northwest of the centre of the Survey Area (*Sida* sp. ? nov.) and 16.2 km northeast of it (*Tecticornia* sp. nov.).

Their locations are shown on (**Figure 10**). FloraBase and NatureMap each list 13 records for *Melaleuca apostiba* (WAH, 1998-) (DPaW, 2007-). One of the FloraBase records is in the Eastern Murchison Subregion of the Murchison Bioregion, while the remainder are in the Central Subregion (one record) and Shield Subregion (11 records) of the Great Victoria Desert Bioregion.

An estimate of the number of *Melaleuca apostiba* plants currently known was carried out using WAHerb (DBCA search 12-0621FL), FloraBase (WAH, 1998-), NatureMap (DBCA, 2007-) and Maia records. Using this data, plotting the locations and removing those that appear to be in areas that have been cleared, Maia estimates that there are 2,805 currently known *M. apostiba* plants. If the 10 plants occurring in the Survey Area were to be impacted by the proposed works this would be 0.36% of the plants known to Maia (and excluding those in disturbed areas).

4.3 Weed Species

- No weed species listed on any of the national weeds lists or listed as a declared pest in Western Australia was located in the Survey Area.

- No general weed species were located in the Survey Area. One - Cenchrus ciliaris (Buffel Grass) - was located approximately 0.4 km north of the middle section of the Survey Area.

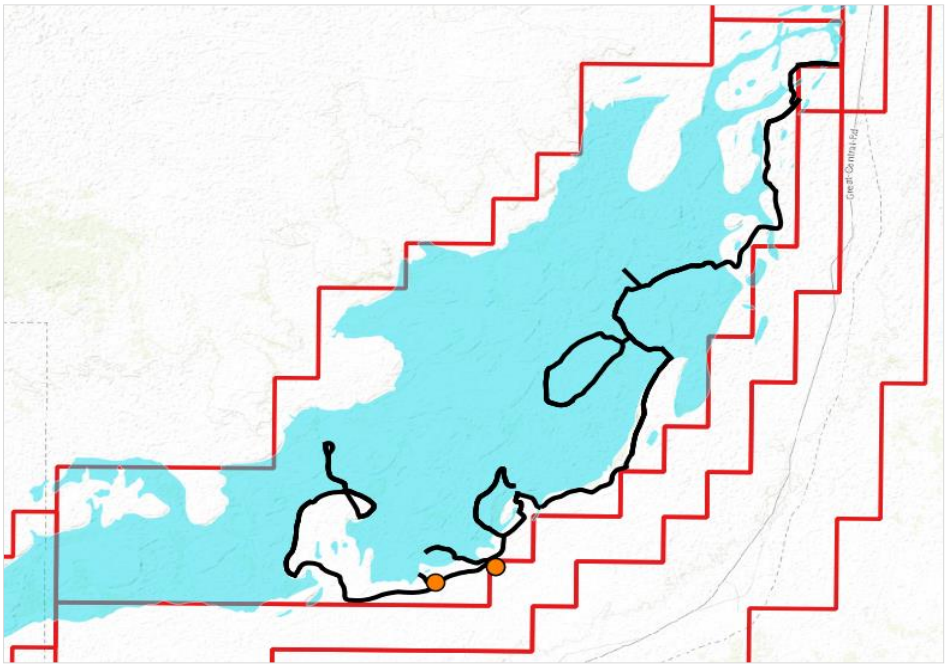


Figure 10: *Melaleuca apostiba* (Priority 3) Locations (orange circles)

4.4 Range Extensions

Species have a typical range which is indicated by their known distribution records. Sometimes species are recorded during a survey and their distribution records show that they have not been located in the area previously. The new records can either extend the range of a species out from its known distribution or fill a gap in the distribution records. The new distribution records can be a result of few surveys having been carried out in an area, or of low survey effort in an area, or the time of year of survey with respect to flowering season for a species. However, range extensions and gap fillers can also reflect a lack of submission of flora records to the WA Herbarium, as relatively common species or those not classified as significant are often not submitted.

Using 100 km as the minimum distance from an existing record to define a range extension or gap filler species, 48 range extension or gap filler species were collected from the general area. None of the 46 species is listed as conservation significant. Another 31 species were recorded during a reconnaissance survey carried out at Lake Throssell by Maia (2021) and, as they have already been reported on, they are not included in the range extension counts for this report.

4.5 Vegetation Types

Eight vegetation types were noted in the Survey Area; they are described and shown in **Table 3**, and the species associated with each vegetation type are also listed in the table.

The vegetation in the Survey Area does not resemble that in any of the PECs currently listed for the Great Victoria Desert Bioregion.

Table 3: Vegetation Types Recorded in the Survey Area

Code	Broad floristic formation, vegetation type and associated information		Photograph
ASTSL	**Broad floristic formation**: Acacia Sparse Tall Shrubland **Vegetation type**: Tall Sparse Shrubland of *Acacia burkittii* with a Sparse Shrubland of *Eremophila miniata*, and Isolated mixed Low Shrubs mainly of *Ptilotus obovatus*, *Frankenia laxiflora* and *F. cinerea*	**Associated species:** *Dodonaea viscosa* subsp. *angustissima*, *Enneapogon caerulescens*, *Enteropogon ramosus*, *Eragrostis laniflora*, *Scaevola spinescens*, *Sclerolaena fimbriolata*	
	Habitat: Sand over calcrete adjacent to the lake shores	**Vegetation condition:** Very Good: grazing, animal tracks - trampled vegetation	
CLWL	**Broad floristic formation**: Casuarina Low Woodland. **Vegetation type**: Low Woodland of *Casuarina obesa* with an Open Shrubland of *Acacia tysonii*	**Associated species:** *Aristida contorta*, *Dodonaea viscosa* subsp. *angustissima*, *Enneapogon caerulescens*, *Eragrostis laniflora*, *Eremophila miniata*, *Ptilotus obovatus*	
	Habitat: Calcrete and gypsum islands	**Vegetation condition:** Very Good: grazing, camel tracks and vehicle tracks were noted in this vegetation type	

Code	Broad floristic formation, vegetation type and associated information		Photograph
MLOSL	**Broad floristic formation**: Mixed Low Open Shrubland **Vegetation type**: Mixed Low Open Shrubland of *Frankenia laxiflora*, *Maireana pyramidata* and *M. amoena* with Isolated mixed Tussock Grasses of *Enteropogon ramosus*, *Enneapogon caerulescens* and *Eragrostis laniflora*	**Associated species:** *Aristida contorta*, *Atriplex nana*, *Eragrostis dielsii*, *Eremophila miniata*, *Maireana tomentosa*, *Salsola australis*, *Sclerolaena cuneata*, *S. diacantha*, *Tecticornia auriculata, T. calyptrata* and *T. halocnemoides* subsp. *longispicata*	
	Habitat: Depressions with orange sandy-clay surface crust	**Vegetation condition:** Good: grazing, animal tracks - trampled vegetation.	
MLSSL	**Broad floristic formation**: Mixed Low Samphire Shrubland **Vegetation type**: Low Open Mixed Samphire Shrubland mainly of, *Tecticornia calyptrata, T. halocnemoides* subsp. *Longispicata* and *T. pruinosa*	**Associated species:** *Eragrostis* ?*lacunaria*, *Frankenia cordata*, *Maireana amoena, Tecticornia auriculata*, *T.* sp. Dennys Crossing (K.A. Shepherd & J. English KS 552)	

Code	Broad floristic formation, vegetation type and associated information		Photograph
MSSL	**Broad floristic formation**: Mixed Sparse Shrubland **Vegetation type**: Mixed Sparse Shrubland mainly of *Dodonaea viscosa* subsp. *angustissima*, *Grevillea juncifolia* subsp. *juncifolia* and *Aluta maisonneuvei* subsp. *auriculata* with a Sparse Low Shrubland of *Ptilotus obovatus* and +/- a Sparse Hummock Grassland of *Triodia schinzii* and/or *T. basedowii*	**Associated species:** *A. burkittii*, *A. ligulata*, *Alyogyne pinoniana*, *Aristida contorta*, *A. holathera* var. *holathera*, *Eragrostis laniflora*, *Eremophila glabra* subsp. *tomentosa*, *E. miniata*, *Senna artemisioides* subsp. *petiolaris*	
	Habitat: Low sand dunes, swales and sandplains	**Vegetation condition:** Excellent / Very Good: grazing, animal tracks - trampled vegetation	
THG (1)	**Broad floristic formation**: Triodia Open Hummock Grassland **Vegetation type**: Open Hummock Grassland of *Triodia schinzii* with an Open Forbland of *Lomandra leucocephala* subsp. *robusta* and a Sparse Low Shrubland of *Jacksonia arida*	**Associated species:** *Acacia burkittii*, *A. ligulata*, *A. prainii*, *Aluta maisonneuvei* subsp. *auriculata*, *Aristida holathera* var. *holathera*, *Dicrastylis sessilifolia*, *Prostanthera wilkieana*	
	Habitat: Lake fringing sand dunes with red-orange sand	**Vegetation condition:** Excellent: grazing, animal tracks - trampled vegetation	

Code	Broad floristic formation, vegetation type and associated information		Photograph
THG (2)	**Broad floristic formation**: Triodia Hummock Grassland **Vegetation type**: Open Hummock Grassland of *Triodia schinzii* with a mixed Open Shrubland mainly of *Acacia burkittii*, *A. prainii* and *Dodonaea viscosa* subsp. *angustissima* and a mixed Open Low Shrubland mainly of *Eremophila platythamnos* subsp. *exotrachys* and *Ptilotus obovatus*	**Associated species:** *Acacia ligulata*, *A. murrayana*, *Aluta maisonneuvei* subsp. *auriculata*, *Alyogyne pinoniana*, *Aristida holathera* var. *holathera*, *Eragrostis laniflora*, *Eucalyptus gongylocarpa*, *Grevillea juncifolia* subsp. *juncifolia*, *Paractaenum refractum*	
	Habitat: Swales and sandy plains with orange sand	**Vegetation condition:** Excellent: grazing, animal tracks - trampled vegetation	
THG (3)	**Broad floristic formation**: Triodia Open Hummock Grassland **Vegetation type**: Open Hummock Grassland of *Triodia basedowii* with an Open Mallee Woodland of *Eucalyptus concinna* and/or E. *eremicola* subsp. *peeneri*	**Associated species:** *Acacia ligulata*, *Aluta maisonneuvei* subsp. *auriculata*, *Alyogyne pinoniana*, *Anthotroche pannosa*, *Euphorbia tannensis* subsp. *eremophila*, *Ptilotus obovatus*, *Senna artemisioides* subsp. *petiolaris*	
	Habitat: Sandy plains and undulating plains	**Vegetation condition:** Excellent: camel tracks were noted in this vegetation type	

4.6 Vegetation Condition

Vegetation condition was assessed using the vegetation condition scale for the Eremaean and Northern Botanical Provinces (**Table 4**) (EPA, 2016).

The vegetation of the Survey Area was generally Very Good, as there were obvious signs of damage from feral animals. Large numbers of camels were noted throughout the Lake Throssell area and there was evidence of grazing and trampling of vegetation within the Survey Area. There are also some older exploration tracks and drill pads in the Survey Area.

Table 4: Vegetation Condition Scale (adapted from Keighery 1994 and Trudgen 1988; EPA, 2016)

Vegetation Condition	Eremaean and Northern Botanical Provinces
Excellent	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Very Good	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds or occasional vehicle tracks.
Good	More obvious signs of damage caused by human activity since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds.
Poor	Still retains basic vegetation structure or ability to regenerate it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
Degraded	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.
Completely Degraded	Areas that are completely or almost completely without native species in the structure of their vegetation: i.e., areas that are cleared or 'parkland cleared' with their flora comprising weed or crop species with isolated native trees or shrubs.

5 CLEARING PRINCIPLES

Under the *Environmental Protection Act 1986* (EP Act), clearing of native vegetation requires a permit unless its purpose is exempt. Any vegetation clearing requiring a NVCP needs to address 10 clearing principles as part of the permitting process. The 10 clearing principles are addressed with respect to the Survey Area in **Table 5**.

Table 5: Clearing Principles and the Survey Area

	Clearing Principle	Lake Throssell Survey Area
1	**Native vegetation should not be cleared if it comprises a high level of biological diversity.**	**Unlikely to be at variance to this principle**
		Maia has carried out a two-phase detailed flora and vegetation survey in the Lake Throssell project area. Ninety-two 0.25 ha quadrats have been sampled in the 37,465 ha project area. Two hundred and fifty-seven taxa were recorded over the two phases of the detailed flora and vegetation survey (from quadrats and opportunistic collections). The average species richness per quadrat is 16.37 (with a standard deviation of 6.98). Species richness per quadrat ranged from one species (a single *Tecticornia* species in a quadrat) to 38 species. As a comparison, Botanica Consulting surveyed the Lake Wells Potash project area and recorded 256 species from 110 quadrats (Botanica, 2019). NatureMap indicates the project area is not one of high species diversity (DBCA, 1998-). The results of a NatureMap search for flora recorded in the four nature reserves (NR) closest to Lake Throssell - Yeo Lake NR (60 taxa), Neale Junction NR (197 taxa), De La Poer Range NR (104 taxa) and Plumridge Lake NR (260 taxa) – likely indicates survey effort in the different areas rather than species diversity. Using this information, the Lake Throssell area has similar diversity to the surrounding areas.
2	**Native vegetation should not be cleared if it comprises the whole or part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.**	**Not assessed**
		Fauna habitat was not assessed by Maia.

	Clearing Principle	Lake Throssell Survey Area
		Not at variance to this principle
3	**Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.**	No Threatened flora species were located in the Survey Area. One Threatened species has been recorded by Maia in quadrats assessed at the Lake Throssell project area – *Seringia exastia*. *Seringia exastia* was a threatened species previously known from the Kimberley region. *S. elliptica* is common and widespread through the Pilbara region, central WA and the Northern Territory and extends into South Australia. A recent taxonomic study has concluded that *S. exastia* and *S. elliptica* are the same species, and the two species have been synonymised under the oldest name – *S. exastia* (i.e., the threatened species). A nomination by the WA Threatened Species Scientific Committee (TSSC) to delist the species has recently been advertised on DBCA's website (DBCA, 2021b). One Priority species was recorded within the Survey Area – *Melaleuca apostiba* (P3) - 10 plants were recorded in the Survey Area and another 100 were recorded approximately 180 m from the Survey Area. FloraBase and NatureMap both list 13 records for this species in Western Australia. Twelve records are in the Great Victoria Desert Bioregion, and one is in the Murchison. None of the NatureMap records are located in a conservation reserve. Maia believes that the area where this species was recorded could be avoided during clearing activities and therefore it is likely that no direct impacts to this taxon will occur. Nonetheless, an estimate of the number of *Melaleuca apostiba* plants has been carried out using WAHerb (DBCA search 12-0621FL), FloraBase (WAH, 1998-), NatureMap (DBCA, 2007-) and Maia records. Using this data and removing those that appear to be in areas that have been cleared, Maia estimates that there are currently 2,805 extant *M. apostiba* plants. If the 10 plants occurring in the Survey Area were to be impacted this would amount to an impact of 0.36% of the extant plants known to Maia. Two potentially new species were located in the wider project area (Tecticornia sp. nov. and Sida sp. ?nov.); however, they were 16.2 km and 5.3 km to the northeast and northwest of the centre of the Survey Area respectively and will not be impacted by the proposed clearing.

	Clearing Principle	Lake Throssell Survey Area
4	**Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a TEC.**	**Not at variance to this principle** The vegetation of the Survey Area does not comprise the whole or part of a currently listed TEC. The vegetation of the Survey Area does not comprise the whole or part of a currently listed PEC.
5	**Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.**	**Not at variance to this principle** Native vegetation in the Great Victoria Desert Bioregion has not been extensively cleared. The three vegetation system associations that occur in the Survey Area have more than 99.9% remaining. Two of the three (125 and 676.22) have 18.14% and 13.37% (respectively) of their area protected for conservation in the Great Victoria Desert Bioregion and 27.34% and 14.65% (respectively) in the Central Subregion. If a maximum width of 10 m of vegetation were to be cleared, this would equate to approximately 87 ha. Of this, approximately 13 ha is VSA 125, which is lake-bed and contains no vegetation, 24.63 ha is VSA 24.3 and 49.58 ha is VSA 676.22. These areas equate to an impact of 0.05% of VSA 676.22 mapped in the Central Subregion and 0.01% of VSA 24.3. If all of the corridor were to be cleared the remaining extents of the VSAs would still be greater than 99%. The native vegetation to be cleared is not significant as a remnant of native vegetation in an area that has been extensively cleared.
6	**Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.**	**At variance to this principle** Yeo Lake - Lake Throssell is listed in the Directory of Important Wetlands in Australia. They are classified as Inland Wetlands (B) described as B2 (seasonal and irregular rivers and streams; includes minor anabranches, braided channel complexes) and B8 (seasonal / intermittent saline lakes). The Directory Criteria for Inclusion on the list are 1 (it is a good example of a wetland type occurring within a biogeographic region in Australia) and 6 (the wetland is of outstanding historical or cultural significance) (DAWE, 2021d). Lake Throssell is also an Environmentally Sensitive Area (ESA). Using a 10 m track clearing width, approximately 63 ha (72%) of the Survey Area lies within the DIWA and the ESA boundaries.

	Clearing Principle	Lake Throssell Survey Area
7	**Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.**	**Not at variance to this principle** As the clearing will take place within a large lake system (approximately 92 km long x 11 km wide), and the area to be cleared is relatively small (87 ha if a 10 m wide corridor were to be cleared) compared with the size of the lake itself, it is unlikely that the activity will cause appreciable land degradation.
8	**Native vegetation should not be cleared if the clearing of vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.**	**Not at variance to this principle** The closest conservation area is Yeo Lake Nature Reserve, and its northern boundary is approximately 41 km south of the Survey Area. The vegetation clearing will not impact on the environmental values of this conservation area.
9	**Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.**	**Not at variance to this principle** Short term deterioration in the quality of any water flowing over / around the proposed tracks could occur if it rains soon after clearing, but this should stop once the disturbed soils become compacted. The relatively small area of clearing within this large lake system is unlikely to cause the quality of underground water to deteriorate.
10	**Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.**	**Not at variance to this principle** The clearing is to be carried out within the boundaries of a large lake system and it is unlikely to cause or exacerbate the incidence and intensity of flooding in the area.

6 PROJECT TEAM

This report was prepared by Eva Karikis, Scott Hitchcock and Christina Cox.

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APPENDIX 1: CONSERVATION SIGNIFICANCE AND DATA DESCRIPTIONS

Threatened Flora

Some flora species can be protected by Australian Government legislation (*Environment Protection and Biodiversity Conservation Act 1999*, EPBC Act) or by WA legislation (*Biodiversity Conservation Act 2016*, BC Act) (DAWE, 2021a; GoWA, 2016). Species specially protected by these acts are referred to as threatened species and can be listed as critically endangered, endangered or vulnerable.

On 1 January 2019, the BC Act and *Biodiversity Conservation Regulations 2018* replaced both the *Wildlife Conservation Act 1950* and the *Sandalwood Act 1929* and their associated regulations (DBCA, 2019b; GoWA, 2016 and 2018). The new BC Act and regulations provide greater protection for threatened species and ecological communities.

Priority Flora

Possible threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Flora List under Priorities (P) 1, 2, 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened flora. Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species list for other than taxonomic reasons, are placed in Priority 4 and require regular monitoring (DBCA, 2019a). The most recent priority flora list was issued in December 2018 (DBCA, 2018c).

Threatened Ecological Communities

Some ecological communities are protected by Australian Government legislation (the EPBC Act) based on the perceived levels of threat to the community or species population at a national level. They are listed as threatened ecological communities – TECs – and can be listed as critically endangered, endangered or vulnerable: the communities are listed by state on the DAWE website (DAWE, 2021e).

In WA, the BC Act provides for the statutory listing of TECs by the Minister. The new legislation also describes statutory processes for preparing recovery plans for TECs, the registration of their critical habitat, and penalties for unauthorised modification of TECs. These TECs are listed as presumed totally destroyed, critically endangered, endangered or vulnerable (DBCA, 2018a; Department of Environment and Conservation (DEC), 2013).

Priority Ecological Communities

Ecological communities with insufficient information available to be considered a TEC, or which are rare but not currently threatened are placed on a priority list and are referred to as priority ecological communities (PECs). The most recent list was released in July 2021 (DBCA, 2021d). Definitions, categories and criteria for threatened and priority ecological communities can be found on the DBCA's website (DEC, 2013).

Table 6: Data Layer Descriptions

Data layer	Description
DBCA Legislated Lands and Waters	The DBCA Legislated Lands and Waters data set shows all lands and waters defined under acts which are applicable to DBCA. These include the CALM Act 1984, Swan and Canning Rivers Management Act 2006 and lands identified under the Land Administration Act 1997 such as Crown reserve vested in Botanical Gardens and Parks, Crown reserve vested in the Zoological Gardens Board and Crown reserve vested in the Rottnest Island Authority. Tenure categories include but are not limited to, national park, nature reserve, conservation park, marine park, marine nature reserve, marine management area, section 5(1)(g) reserves, State forest and timber reserves (Australian Government, 2021).
DBCA Lands of Interest	The DBCA Lands of Interest data set shows all other lands not managed under a recognized Act and which are of interest to DBCA. These lands comprise of Crown land and Freehold land which DBCA has been acknowledged by the Department of Lands as the responsible agency. Examples include: • UCL as a result of pastoral lease purchases, • UCL resulting from the 2015 pastoral lease renewal program, • Freehold land purchases arranged by the department for future conservation reserve creation and held by the State of WA, • Other UCL identified by the Department of Lands for future inclusion in the CALM act tenures • Some unvested Crown reserves where DBCA have been recorded as the responsible agency and are in transition to being vested in the Conservation and Parks Commission (Australian Government, 2021).
EPA Redbook Recommended Conservation Reserves	This dataset represents areas recommended for conservation as determined by the Environmental Protection Authority, Western Australia. *** Note: An estimated 15% of areas have differences between 'systems' dataset and publication boundaries. A review is underway and until such time that it is completed, the dataset should be used with caution and with reference to the 1993 Red Book publication. Specific advice should be sought from the Terrestrial Ecosystems Branch for detailed matters. [rod n, july 2009] *** The concept of Proposed Conservation Reserves by the EPA began in the early 1970s and has evolved as areas through a series of publications. The State of Western Australia was divided into 12 broad environmental 'system' areas, each reviewed and assessed for areas of potential conservation reserve. The first series of publications released in the 1970's were the "green books' as they had green covers. A second series of publications were released in the 1980's and known as the 'Red books' (red covers). The last authoritative publication was the 'Red Book Status Report on the Implementation of Conservation Reserves for Western Australia', 1993. Digital versions of the boundaries were established in 1995, until then the Proposed Conservation Reserves existed only in paper map form. System 6 areas were used as the basis for the Bush Forever programme (Dept of Planning and Infrastructure), reserving areas for native vegetation preservation in the metropolitan area. Proposed Conservation Reserve or 'Red Book' areas are used within many planning process and environmental assessments. It is important to note that the 'Red Book' initiatives have been adopted and implemented with wide variation by Government agencies. Subsequent management plans, as well as incorporating many of these earlier recommendations, have also revisited and redefined boundaries from those that were originally identified in the "Red Book" (Australian Government, 2021).

Data layer	Description
Environmentally Sensitive Area (ESA) (DWER, 2020b)	The *Environmental Protection Act 1986* (EP Act) makes it an offence to clear native vegetation unless the clearing is done in accordance with a clearing permit, or an exemption applies. These laws apply to private and public lands throughout Western Australia. Exemptions for clearing that is a requirement of a written law, or authorised under certain statutory processes, are contained in Schedule 6 of the EP Act. These exemptions **do** apply in ESAs. Exemptions for low-impact routine land management practices are prescribed in the Environmental Protection (Clearing of Native Vegetation) Regulations 2004. These exemptions **do not** apply in ESAs and a clearing permit is required. Under section 51B of the EP Act the Minister for Environment may declare by notice either a specified area of the State or a class of areas of the State to be an Environmentally Sensitive Area (ESA). ESAs are declared in the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*, which was gazetted on 8 April 2005. The following areas are declared to be ESAs: • A declared World Heritage property as defined in section 13 of the ***Environment Protection and Biodiversity Conservation Act 1999*** of the Commonwealth. • An area that is included on the Register of the National Estate, because of its natural heritage value under the ***Australian Heritage Council Act 2003*** of the Commonwealth. • A defined wetland and the area within 50 metres of the wetland. Defined wetlands include Ramsar wetlands, conservation category wetlands and nationally important wetlands. • The area covered by vegetation within 50 metres of rare (threatened) flora, to the extent to which the vegetation is continuous with the vegetation in which the rare (threatened) flora is located. • The area covered by a threatened ecological. • A Bush Forever site listed in *Bush Forever* Volumes 1 and 2 (2000), published by the Western Australia Planning Commission, except to the extent to which the site is approved to be developed by the Western Australia Planning Commission. • The areas covered by the following policies the ***Environmental Protection (Gnangara Mound Crown Land) Policy 1992***. • The areas covered by the *Environmental Protection (Western Swamp Tortoise Habitat) Policy* ***2002***. • The areas covered by the lakes to which the ***Environmental Protection (Swan Coastal Plain Lakes) Policy 1992*** applies. • Protected wetlands as defined in the ***Environmental Protection (South West Agricultural Zone Wetlands) Policy 1998.***
Schedule One Area	Areas requiring a permit for clearing resulting from low impact mineral or petroleum activities as declared in Regulation 6 in Government Gazette No. 115 Environmental Protection (Clearing of Native Vegetation) Regulations 2004 - Schedule 1 (Australian Government, 2021).

APPENDIX 2: SPECIES LIST - THE LAKE THROSSELL PROJECT AREA

Table 7: Species List

Family	Taxa	FlFr
Aizoaceae	*Gunniopsis quadrifida*	FlFr
Aizoaceae	*Trianthema triquetrum*	FlFr
Amaranthaceae	*Ptilotus aervoides*	Fl
Amaranthaceae	*Ptilotus drummondii*	Fl
Amaranthaceae	*Ptilotus exaltatus*	Fl
Amaranthaceae	*Ptilotus helipteroides*	FlFr
Amaranthaceae	*Ptilotus obovatus*	FlFr
Amaranthaceae	*Ptilotus polystachyus*	FlFr
Amaranthaceae	*Ptilotus schwartzii*	
Amaranthaceae	*Ptilotus schwartzii* var. *georgei*	FlFr
Amaranthaceae	*Surreya diandra*	
Apocynaceae	*Vincetoxicum lineare*	
Asclepiadaceae	*Leichhardtia australis*	
Asparagaceae	*Lomandra leucocephala* subsp. *robusta*	FlFr
Asteraceae	*Brachyscome iberidifolia*	FlFr
Asteraceae	*Calocephalus multiflorus*	Fl
Asteraceae	*Chrysocephalum puteale*	FlFr
Asteraceae	*Gnephosis tenuissima*	Fl
Asteraceae	*Lawrencella davenportii*	FlFr
Asteraceae	*Olearia eremaea*	FlFr
Asteraceae	*Olearia subspicata*	FlFr
Asteraceae	*Pterocaulon sphacelatum*	FlFr
Asteraceae	*Pterocaulon sphaeranthoides*	Fl
Asteraceae	*Rhodanthe chlorocephala* subsp. *splendida*	FlFr
Asteraceae	*Rhodanthe citrina*	Fl
Asteraceae	*Senecio lacustrinus*	FlFr
Asteraceae	*Siemssenia capillaris*	FlFr
Asteraceae	*Thiseltonia gracillima*	Fl
Boraginaceae	*Halgania erecta*	Fl
Boraginaceae	*Trichodesma zeylanicum*	
Boraginaceae	*Trichodesma zeylanicum* var. *zeylanicum*	
Brassicaceae	*Stenopetalum pedicellare*	FlFr
Campanulaceae	*Lobelia heterophylla* subsp. *centralis*	FlFr
Casuarinaceae	*Casuarina obesa*	Fr
Chenopodiaceae	*Atriplex nana*	Fr
Chenopodiaceae	*Atriplex vesicaria*	FlFr
Chenopodiaceae	*Dissocarpus paradoxus*	Fl
Chenopodiaceae	*Dysphania melanocarpa forma melanocarpa*	Fr
Chenopodiaceae	*Dysphania simulans*	Fr
Chenopodiaceae	*Enchylaena tomentosa* var. *tomentosa*	Fr
Chenopodiaceae	*Eremophea spinosa*	Fr
Chenopodiaceae	*Maireana amoena*	FlFr

Family	Taxa	FlFr
Chenopodiaceae	*Maireana appressa*	FlFr
Chenopodiaceae	*Maireana carnosa*	Fr
Chenopodiaceae	*Maireana georgei*	FlFr
Chenopodiaceae	*Maireana pentatropis*	Fr
Chenopodiaceae	*Maireana platycarpa*	FlFr
Chenopodiaceae	*Maireana pyramidata*	FlFr
Chenopodiaceae	*Maireana thesioides*	
Chenopodiaceae	*Maireana tomentosa*	
Chenopodiaceae	*Maireana triptera*	FlFr
Chenopodiaceae	*Maireana villosa*	Fl
Chenopodiaceae	*Rhagodia drummondii*	FlFr
Chenopodiaceae	*Rhagodia ulicina*	FlFr
Chenopodiaceae	*Salsola australis*	Fr
Chenopodiaceae	*Sclerolaena convexula*	Fr
Chenopodiaceae	*Sclerolaena cornishiana*	FlFr
Chenopodiaceae	*Sclerolaena cuneata*	Fr
Chenopodiaceae	*Sclerolaena densiflora*	Fr
Chenopodiaceae	*Sclerolaena diacantha*	Fr
Chenopodiaceae	*Sclerolaena eriacantha*	FlFr
Chenopodiaceae	*Sclerolaena eurotioides*	Fr
Chenopodiaceae	*Sclerolaena fimbriolata*	FlFr
Chenopodiaceae	*Sclerolaena* sp.	
Chenopodiaceae	*Tecticornia auriculata*	
Chenopodiaceae	*Tecticornia calyptrata*	FlFr
Chenopodiaceae	*Tecticornia disarticulata*	fr
Chenopodiaceae	*Tecticornia halocnemoides* subsp. *longispicata*	FlFr
Chenopodiaceae	*Tecticornia indet sp.1*	
Chenopodiaceae	*Tecticornia indet sp.2*	
Chenopodiaceae	*Tecticornia indet sp.3*	
Chenopodiaceae	*Tecticornia indet sp.4*	
Chenopodiaceae	*Tecticornia indet sp.5*	
Chenopodiaceae	*Tecticornia indica* subsp. *bidens*	Fr
Chenopodiaceae	*Tecticornia pruinosa*	FlFr
Chenopodiaceae	*Tecticornia pterygosperma* subsp. *pterygosperma*	Fr
Chenopodiaceae	*Tecticornia* sp. 1 (sterile, Project 2102-2)	
Chenopodiaceae	*Tecticornia* sp. Dennys Crossing (K.A. Shepherd & J. English KS 552)	FlFr
Chenopodiaceae	*Tecticornia* sp. nov.	
Chenopodiaceae	*Tecticornia* sp.2 (sterile: 2102)	
Convolvulaceae	*Bonamia erecta*	
Cyperaceae	*Bulbostylis barbata*	
Euphorbiaceae	*Euphorbia ?tannensis*	
Euphorbiaceae	*Euphorbia boophthona*	
Euphorbiaceae	*Euphorbia drummondii*	
Euphorbiaceae	*Euphorbia ferdinandi* var. *ferdinandi*	FlFr
Euphorbiaceae	*Euphorbia tannensis* subsp. *eremophila*	Fr

Family	Taxa	FlFr
Fabaceae	*Acacia abrupta*	FlFr
Fabaceae	*Acacia aptaneura*	Fl
Fabaceae	*Acacia burkittii*	Fl
Fabaceae	*Acacia caesaneura* (narrow phyllode variant)	
Fabaceae	*Acacia caesaneura* x *incurvaneura*	Fl
Fabaceae	*Acacia doreta*	Fl
Fabaceae	*Acacia helmsiana*	Fl
Fabaceae	*Acacia incurvaneura*	Fl
Fabaceae	*Acacia incurvaneura* x *mulganeura*	
Fabaceae	*Acacia kempeana*	Fl
Fabaceae	*Acacia ligulata*	FlFr
Fabaceae	*Acacia minyura*	
Fabaceae	*Acacia minyura* (hybrid)	
Fabaceae	*Acacia mulganeura* (variant 1)	
Fabaceae	*Acacia murrayana*	FlFr
Fabaceae	*Acacia nyssophylla*	Fr
Fabaceae	*Acacia pachyacra*	Fr
Fabaceae	*Acacia prainii*	
Fabaceae	*Acacia pteraneura*	Fr
Fabaceae	*Acacia quadrimarginea*	Fr
Fabaceae	*Acacia ramulosa* var. *linophylla*	Fl
Fabaceae	*Acacia ramulosa* var. *ramulosa*	
Fabaceae	*Acacia tetragonophylla*	FlFr
Fabaceae	*Acacia tysonii*	FlFr
Fabaceae	*Indigofera georgei*	Fr
Fabaceae	*Jacksonia arida*	FlFr
Fabaceae	*Leptosema chambersii*	FlFr
Fabaceae	*Senna artemisioides* subsp. *filifolia*	
Fabaceae	*Senna artemisioides* subsp. *helmsii*	
Fabaceae	*Senna artemisioides* subsp. *petiolaris*	FlFr
Fabaceae	*Senna artemisioides* subsp. x *artemisioides*	Fr
Fabaceae	*Senna glaucifolia*	FlFr
Fabaceae	*Senna glutinosa* subsp. *chatelainiana*	
Fabaceae	*Senna pleurocarpa*	
Fabaceae	*Senna* sp. Meekatharra (E. Bailey 1-26)	
Fabaceae	*Swainsona ?tenuis*	
Frankeniaceae	*Frankenia cinerea*	FlFr
Frankeniaceae	*Frankenia cordata*	FlFr
Frankeniaceae	*Frankenia laxiflora*	FlFr
Frankeniaceae	*Frankenia pauciflora*	FlFr
Frankeniaceae	*Frankenia setosa*	FlFr
Geraniaceae	*Erodium cygnorum*	FlFr
Goodeniaceae	*Brunonia australis*	FlFr
Goodeniaceae	*Dampiera ramosa*	
Goodeniaceae	*Goodenia centralis*	FlFr

Family	Taxa	FlFr
Goodeniaceae	*Goodenia collaris*	
Goodeniaceae	*Goodenia gypsicola*	FlFr
Goodeniaceae	*Goodenia ramelii*	
Goodeniaceae	*Scaevola basedowii*	FlFr
Goodeniaceae	*Scaevola parvifolia* subsp. *parvifolia*	
Goodeniaceae	*Scaevola spinescens*	Fl
Gyrostemonaceae	*Codonocarpus cotinifolius*	Fr
Gyrostemonaceae	*Gyrostemon ramulosus*	FlFr
Haloragaceae	*Glischrocaryon aureum*	Fr
Hemerocallidaceae	*Corynotheca divaricata*	
Lamiaceae	*Dicrastylis exsuccosa*	FlFr
Lamiaceae	*Dicrastylis sessilifolia*	Fr
Lamiaceae	*Newcastelia hexarrhena*	Fr
Lamiaceae	*Newcastelia spodiotricha*	
Lamiaceae	*Prostanthera sericea*	
Lamiaceae	*Prostanthera wilkieana*	FlFr
Lamiaceae	*Teucrium teucriiflorum*	FlFr
Loranthaceae	*Lysiana exocarpi* subsp. *exocarpi*	
Malvaceae	*Abutilon otocarpum*	FlFr
Malvaceae	*Alyogyne pinoniana*	FlFr
Malvaceae	*Androcalva loxophylla*	
Malvaceae	*Hannafordia bissillii* subsp. *bissillii*	
Malvaceae	*Hibiscus ?sturtii*	
Malvaceae	*Hibiscus burtonii*	Fr
Malvaceae	*Lawrencia cinerea*	FlFr
Malvaceae	*Lawrencia densiflora*	Fl
Malvaceae	*Lawrencia glomerata*	
Malvaceae	*Lawrencia* sp.	
Malvaceae	*Seringia exastia*	
Malvaceae	*Sida* ?sp. dark green fruits (S. van Leeuwen 2260)	
Malvaceae	*Sida calyxhymenia*	
Malvaceae	*Sida sp. (inadequate material)*	
Malvaceae	*Sida* sp. ?nov.	FlFr
Malvaceae	*Sida* sp. Excedentifolia (J.L. Egan 1925)	Fl
Malvaceae	*Sida* sp. Golden calyces glabrous (H.N. Foote 32)	FlFr
Malvaceae	*Sida* sp. Golden calyces pubescent (G.J. Leach 1966)	Fr
Malvaceae	*Sida* sp. L (A.M. Ashby 4202)	FlFr
Malvaceae	*Sida* sp. Rabbit Flat (B.J. Carter 626)	FlFr
Malvaceae	*Sida spodochroma*	
Myrtaceae	*Aluta maisonneuvei* subsp. *auriculata*	FlFr
Myrtaceae	*Enekbatus eremaeus*	Fl
Myrtaceae	*Eucalyptus ?socialis*	
Myrtaceae	*Eucalyptus concinna*	Fr
Myrtaceae	*Eucalyptus eremicola* subsp. *peeneri*	Fr
Myrtaceae	*Eucalyptus glomerosa*	Fr

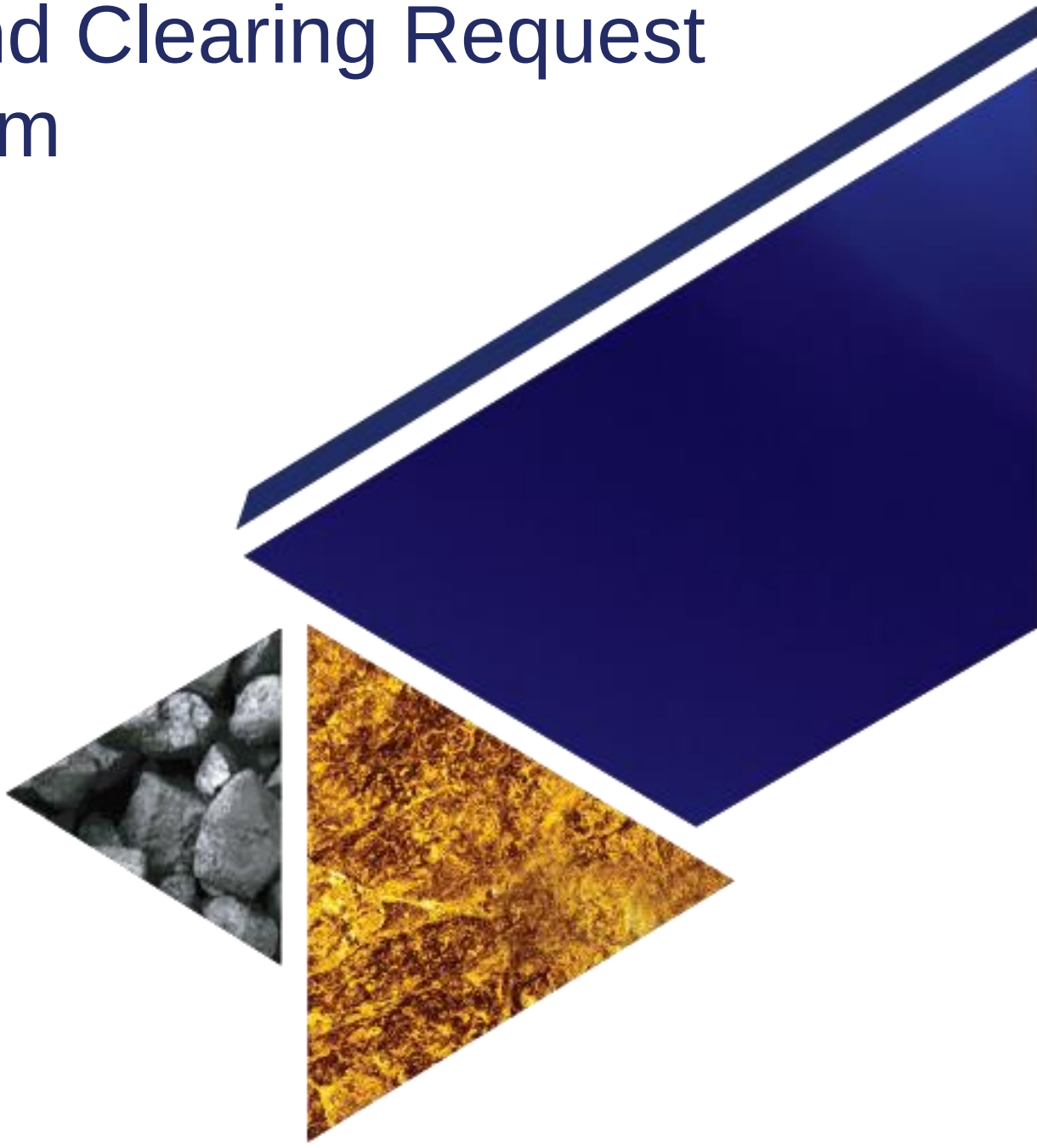
Family	Taxa	FlFr
Myrtaceae	*Eucalyptus gongylocarpa*	Fr
Myrtaceae	*Eucalyptus socialis subsp. eucentrica*	Fr
Myrtaceae	*Eucalyptus youngiana*	Fr
Myrtaceae	***Melaleuca apostiba (P3)***	Fr
Myrtaceae	*Melaleuca hamata*	
Myrtaceae	*Micromyrtus flaviflora*	
Nyctaginaceae	*Boerhavia coccinea*	
Pittosporaceae	*Pittosporum angustifolium*	
Poaceae	****Cenchrus ciliaris***	
Poaceae	*Amphipogon caricinus* var. *caricinus*	FlFr
Poaceae	*Aristida contorta*	FlFr
Poaceae	*Aristida holathera* var. *holathera*	Fr
Poaceae	*Cymbopogon obtectus*	FlFr
Poaceae	*Dactyloctenium radulans*	
Poaceae	*Enneapogon caerulescens*	FlFr
Poaceae	*Enneapogon polyphyllus*	FlFr
Poaceae	*Enteropogon ramosus*	FlFr
Poaceae	*Eragrostis ?lacunaria*	
Poaceae	*Eragrostis dielsii*	Fr
Poaceae	*Eragrostis eriopoda*	FlFr
Poaceae	*Eragrostis falcata*	FlFr
Poaceae	*Eragrostis laniflora*	FlFr
Poaceae	*Eragrostis leptocarpa*	FlFr
Poaceae	*Eragrostis setifolia*	FlFr
Poaceae	*Eriachne* aff. *helmsii*	
Poaceae	*Eriachne helmsii*	FlFr
Poaceae	*Eriachne mucronata*	FlFr
Poaceae	*Monachather paradoxus*	FlFr
Poaceae	*Panicum effusum*	FlFr
Poaceae	*Paractaenum refractum*	
Poaceae	*Paspalidium basicladum*	FlFr
Poaceae	*Paspalidium gracile*	FlFr
Poaceae	*Thyridolepis xerophila*	FlFr
Poaceae	*Triodia basedowii*	FlFr
Poaceae	*Triodia schinzii*	FlFr
Poaceae	*Triraphis mollis*	FlFr
Portulacaceae	*Calandrinia polyandra*	
Portulacaceae	*Calandrinia ptychosperma*	Fr
Portulacaceae	*Calandrinia* sp.	
Portulacaceae	*Calandrinia* sp. 1	Fl
Portulacaceae	*Calandrinia* sp. 2	Fl
Proteaceae	*Grevillea juncifolia* subsp. *juncifolia*	Fr
Proteaceae	*Grevillea* sp.	
Proteaceae	*Grevillea stenobotrya*	FlFr
Proteaceae	*Hakea lorea* subsp. *lorea*	Fl

Family	Taxa	FlFr
Pteridaceae	*Cheilanthes sieberi*	
Rubiaceae	*Psydrax rigidula*	
Rubiaceae	*Psydrax suaveolens*	
Santalaceae	*Exocarpos sparteus*	FlFr
Santalaceae	*Santalum acuminatum*	
Sapindaceae	*Dodonaea rigida*	FlFr
Sapindaceae	*Dodonaea viscosa* subsp. *angustissima*	Fr
Scrophulariaceae	*Eremophila ?arenaria*	Fl
Scrophulariaceae	*Eremophila ?forrestii*	
Scrophulariaceae	*Eremophila ?revoluta*	
Scrophulariaceae	*Eremophila forrestii* subsp. *forrestii*	Fl
Scrophulariaceae	*Eremophila gilesii* subsp. *variabilis*	FlFr
Scrophulariaceae	*Eremophila glabra* subsp. *glabra*	FlFr
Scrophulariaceae	*Eremophila glabra* subsp. *tomentosa*	Fr
Scrophulariaceae	*Eremophila latrobei* subsp. *filiformis*	Fr
Scrophulariaceae	*Eremophila latrobei* subsp. *glabra*	FlFr
Scrophulariaceae	*Eremophila latrobei* subsp. *latrobei*	
Scrophulariaceae	*Eremophila longifolia*	
Scrophulariaceae	*Eremophila maculata* subsp. *brevifolia*	FlFr
Scrophulariaceae	*Eremophila miniata*	Fr
Scrophulariaceae	*Eremophila platythamnos* subsp. *exotrachys*	FlFr
Scrophulariaceae	*Eremophila platythamnos* subsp. *platythamnos*	
Scrophulariaceae	*Eremophila punctata*	
Scrophulariaceae	*Eremophila scoparia*	Fl
Solanaceae	*Anthotroche pannosa*	Fr
Solanaceae	*Duboisia hopwoodii*	FlFr
Solanaceae	*Solanum centrale*	FlFr
Solanaceae	*Solanum cleistogamum*	Fr
Solanaceae	*Solanum coactiliferum*	FlFr
Solanaceae	*Solanum lasiophyllum*	FlFr
Solanaceae	*Solanum orbiculatum* subsp. *orbiculatum*	Fr
Thymelaeaceae	*Pimelea microcephala* subsp. *microcephala*	
Zygophyllaceae	*Roepera aurantiaca* subsp. *aurantiaca*	FlFr
Zygophyllaceae	*Roepera eremaea*	Fr
Zygophyllaceae	*Roepera glauca*	FlFr

Note: * = a weed species, P3 = a priority 3 species; aff. = affinity, forma = form, sp. = species, subsp. = subspecies, var. = variety, sp. nov. = new species, sp. ?nov. = queried new species.


maia

Appendix B.
Land Clearing Request Form



TRIGG MINING	Lake Throssell – Land Clearing Request Form	Request Form # Land Clearing Form.docx Revision No: 1- Issue Date: February 2022

Under no circumstances shall any clearing of vegetation take place without consent from Regulatory Authorities and without approval by this fully completed and signed Land Clearing Request Form (LCRF).

This form is to be completed by the applicant and forwarded to the Environmental Supervisor at least 7 working days prior to any proposed land clearing.

ONLY WORK SPECIFIED ON THIS PERMIT IS APPROVED TO BE PERFORMED. Permit No: _____

Step 1: Proposed Activities (Applicant)

Applicant Name:		**Application Date:**	
Work Group:		**Tenement:**	
Site:		**Proposed Area (ha)**	
Location (GPS):			
Clearing Plan attached	A detailed plan showing coordinates and boundary of proposed clearing, boundaries of clearing approved by DMIRS, locations of any areas of significance to be avoided (conservation significant species, drainage lines, heritage) and locations of vegetation and topsoil stockpiles **must be attached.**		☐ **Yes**
Proposed Commencement Date:		**Proposed Completion Date:**	
Description of Proposed Ground Disturbance			

Step 2: Site Assessment (Compliance Manager / Environmental Supervisor)

				Yes	**No**	**NA**
1	DMIRS has granted approval for (circle one) Access Track / Exploration Area	**Approval Type**	**Approval ID #**			
		PoW		☐	☐	☐
		Clearing Permit		☐	☐	☐
2	Total Area Approved for Activity Type in PoW (ha)					
3	Area previously cleared or approved for Activity Type in PoW (ha)					
4	Area available for Activity Type (Area in Check 2 – Area in Check 3)					
5	Is sufficient area available to be cleared for the Activity Type in the POW/?			☐	☐	☐
6	Total Area Approved under Native Vegetation Clearing Permit					
7	Area previously cleared in Native Vegetation Clearing Permit					
8	Area available for clearing under Native Vegetation Clearing Permit (Area in Check 6 – Area in Check 7)					
9	Is sufficient area available to be cleared under the Native Vegetation Clearing Permit?			☐	☐	☐
10	Have drainage lines been identified?			☐	☐	☐
11	Has a physical area inspection been undertaken?			☐	☐	☐
12	Have the Land Clearing Register and spatial data layers been reviewed and updated?			☐	☐	☐
13	Confirm that the area is outside all known heritage areas.			☐	☐	☐

Step 3: Acknowledgement and Acceptance

Standard Conditions	All vehicles and plant equipment must be properly maintained to avoid spills and minimise air and noise pollution.
	Prior to works commencing all vehicles must be quarantine inspected to ensure they are clean of soil, weeds and seeds.
	Signage must be erected to prevent public accessing the area.
	A pre-start meeting must be held immediately prior to the clearing works being conducted to ensure that all permit conditions have been met.
	Vegetation and topsoil (to a depth of at least 0.3m) must be removed and placed in designated stockpiles.
	Topsoil stockpiles must be located within the permitted area, no higher than 2 m.

	Clearing must be supervised by a suitably qualified experienced person.	
Additional Conditions and Comments	**(Example: drainage, vehicle access, erosion control)**	
Acknowledgment	A map referenced with the corresponding permit number has been attached to this LCRF.	☐ **Yes**
	A copy of the POW/NVCP has been provided to the site supervisor and person conducting the disturbance.	☐ **Yes**
	All conditions imposed under this permit are understood by all parties.	☐ **Yes**

I understand and accept all conditions stated in this approval and any associated permits and procedures. I will ensure that all conditions are strictly adhered to by myself and colleagues. The person/s carrying out this work will retain an approved copy of this permit in the work area and in all machinery at all times. Handover of this LCRF will be undertaken at shift each change.

Exploration Manager	**LCRF Conditions Accepted?**	☐ **Yes**	☐ **No (Permit Retracted)**
	(name):	***Date:***	***Signature:***

Step 4: Post Disturbance Confirmation (Compliance Manager)		
Date activity was completed		
Date the final disturbance area was surveyed		
Name of surveyor		
A post clearing inspection has been conducted.	☐ **Yes**	
Actual Clearing Area for Activity Type (e.g. Transport and service infrastructure, mining void).	**Activity Type**	**Area (ha)**
The Land Clearance Register has been updated?	☐ **Yes**	
Additional Comments		
The Compliance Manager must retain copies of the signed clearing permit, the survey pick-up of the final cleared area, photos and the updated land clearing register.		

Appendix C.
Land Clearing Compliance Register

Approved POWs

POW	Mine Activity Type	Approved Area	Disturbance Total	Rehabilitation Total	Approved Area Remaining
POW 85863	Tracks	0	3.4068	0	-3.4068
	Drill Pads	0	0.3383	0	-0.3383
POW 85888	Tracks	12.38	2.2723	0	10.1077
	Drill Pads	0.74	0.1112	0	0.6288

CPS

Date		Approved Clearing	Total Clearing	Clearing Remaining
8988/1 -		9.76	6.1286	3.6314

Instructions

Pre-filled data do not edit
Manually enter data
Choose from drop down menu
Auto-updating cells

Disturbance/Clearing Register

POW	Mine Activity Type	Date	Disturbance/Clearing	Rehabilitation	Comments
POW 85888	Tracks		2.2723	0	
POW 85888	Drill Pads		0.1112	0	
POW 85863	Tracks		3.4068	0	
POW 85863	Drill Pads		0.3383	0	

Appendix D.
Important Information about this Document

IMPORTANT INFORMATION ABOUT THIS DOCUMENT

1. Our Client

This report has been produced by or on behalf of RPM Advisory Services Pty Ltd *("RPM") solely for Trigg Mining Limited (the "Client").*

2. Client Use

The Client's use and disclosure of this report is subject to the terms and conditions of the engaging Agreement under which RPM prepared the report.

3. Notice to Third Parties

RPM prepared this report for the Client only. If you are not the Client:

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4. Independence

RPM provides advisory services to the mining and finance sectors. Within its core expertise it provides independent technical reviews, resource evaluation, mining engineering, environmental assessments and mine valuation services to the resources and financial services industries.

RPM have independently assessed the subject of the report (the "Project") by reviewing pertinent data, which may include Resources, Reserves, existing approvals, licences and permits, manpower requirements and the life of mine plans relating to productivity, production, operating costs and capital expenditures. All opinions, findings and conclusions expressed in this report are those of RPM and specialist advisors.

Drafts of this report were provided to the Client, but only for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in this report.

RPM has been paid, and has agreed to be paid, professional fees for the preparation of this report. The remuneration for this report is not dependent upon the findings of this report. RPM does not have any economic or beneficial interest (present or contingent), in the Project, in securities of the companies associated with the Project or the Client

5. Inputs, subsequent changes and no duty to update

RPM has created this report using data and information provided by or on behalf of the Client. Unless specifically stated otherwise, RPM has not independently verified that data and information. RPM accepts no liability for the accuracy or completeness of that data and information, even if that data and information has been incorporated into or relied upon in creating this report (or parts of it).

The conclusions and opinions contained in this report apply as at the date of the report. Events (including changes to any of the data and information that RPM used in preparing the report) may have occurred since that date which may impact on those conclusions and opinions and make them unreliable. RPM is under no duty to update the report upon the occurrence of any such event, though it reserves the right to do so.

6. Inherent Mining Risks

Mining is carried out in an environment where not all events are predictable.

Whilst an effective management team can identify the known risks and take measures to manage and mitigate those risks, there is still the possibility for unexpected and unpredictable events to occur. It is not possible therefore to totally remove all risks or state with certainty that an event that may have a material impact on the operation of a mine, will not occur.

The ability of any person to achieve forward-looking production and economic targets is dependent on numerous factors that are beyond RPM's control and that RPM cannot anticipate. These factors include, but are not limited to, site-specific mining and geological conditions, management and personnel capabilities, availability of funding to properly operate and capitalize the operation, variations in cost elements and market conditions, developing and operating the mine in an efficient manner, unforeseen changes in legislation and new industry developments. Any of these factors may substantially alter the performance of any mining operation.

7. Limitations and Exclusions

RPM 's report is based on data, information reports, plans and tabulations, as applicable, provided by Client or on behalf of the Client. The Client has not advised RPM of any material change, or event likely to cause material change, to the operations or forecasts since the date of assets inspections.

The work undertaken for this report is that required for a technical review of the information, coupled with such inspections as RPM considered appropriate to prepare this report.

Unless otherwise stated specifically in writing, the report specifically excludes all aspects of legal issues, commercial and financing matters, land titles and agreements, except such aspects as may directly influence technical, operational or cost issues and where applicable to the JORC Code guidelines.

RPM has specifically excluded making any comments on the competitive position of the relevant assets compared with other similar and competing producers around the world. RPM strongly advises that any potential investors make their own comprehensive assessment of the competitive position of the relevant assets in the market.

8. Indemnification

The Client has indemnified and held harmless RPM and its subcontractors, consultants, agents, officers, directors and employees from and against any and all claims, liabilities, damages, losses and expenses (including lawyers' fees and other costs of litigation, arbitration or mediation) arising out of or in any way related to:

- *RPM 's reliance on any information provided by Client; or*
- *RPM 's services or materials; or*
- *Any use of or reliance on these services or materials by any third party not expressly authorised by RPM,*

save and except in cases of death or personnel injury, property damage, claims by third parties for breach of intellectual property rights, gross negligence, wilful misconduct, fraud, fraudulent misrepresentation or the tort of deceit, or any other matter which be so limited or excluded as a matter of applicable law (including as a Competent Person under the Listing Rules) and regardless of any breach of contract or strict liability by RPM.

– END OF REPORT –

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