Government of South Australia
Department for Energy and Mining

24 April 2026

Mr. Marc Twining,
General Manager – Exploration,
Tunkillia 2 Pty Ltd,
Level 4, 12, Giles Street,
Adelaide, South Australia, 5000

Email: m.twining@bartongold.com.au

Dear Mr Twining

**Notification of Approved Exploration Program for Environment Protection and Rehabilitation (EPEPR) Review**

In reference to your final submission dated16 April 2026, the EPEPR has been approved pursuant to section 70C(5) of the *Mining Act 1971* (the Mining Act).

The approved EPEPR will be made publicly available on the Mining Register and the Department for Energy and Mining (DEM) website. Details of the approved EPEPR are listed below.

| | |
|---|---|
| **Approval Granted to** | **Tunkillia 2 Pty Ltd** |
| **Tenement Type & Number** | *Exploration License EL5901* |
| **Program Number** | EPR-04108 review |
| **EPEPR Description** | Ongoing EPEPR - Activities include DD (including rotary mud), RC, AC, water drilling methods (percussion, rotary mud) and water well establishment for the purpose of pump testing & groundwater evaluation (including the construction of turkeys next dams 1-2ML capacity). Earthmoving activities to facilitate access upgrading and construction of bulk sample disposal pits.<br><br>EPEPR Review to include trenching, costeaning and test pitting. |

You are reminded that you must always implement and comply with this approved EPEPR.

This approval does not constitute endorsement of the systems that you have in place to manage the mining operations in compliance with the Mining Act. Whilst your capability to undertake this activity has been considered in this approval, the responsibility for compliance with the Mining Act always remains with the tenement holder.

The legislative requirements associated with the EPEPR are outlined below, and certain requirements must be actioned prior to commencement of operations authorised by the EPEPR.

Government of South Australia
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| | |
|---|---|
| 1 | **PEPR Conditions**<br>In accordance with section 70B(7a)(b) of the Mining Act, the approved EPEPR is subject to the conditions listed in the Notice of Approval Conditions – EP-04108. (Appendix 1) |
| 2 | **Public Liability Insurance**<br>Pursuant to Regulation 81 of the *Mining Regulations 2020* (the Mining Regulations), you are required to provide a copy of a certificate evidencing the insurance coverage over the tenement. |
| 3 | **Compliance Reporting**<br>You are required to submit an annual exploration compliance report. The report is required to be submitted **within 2 months** after the anniversary of the date the licence was granted, or in accordance with joint reporting requirements agreed to with the Minister. Please refer to the DEM website for more information on the reporting requirements.<br><br>You are reminded that a separate compliance report is required **2 months after** the expiry or surrender of the EL. |
| 4 | **Work, Health and Safety Compliance**<br>In accordance with Chapter 10 of the *Work Health and Safety Regulations 2012* (SA), you must meet the requirements for mine operators in South Australia, which include a notification for mining operations, the establishment of a Safety Management System, the identification of Principal Mining Hazards and development of a Principal Mining Hazard Management Plan. Further information on your responsibilities, including a guide to Chapter 10, and the Mine Operator Notification Form, is available on the SafeWork SA website. |
| 5 | **EPEPR Timeframe**<br>The EPEPR is approved for the term of Exploration Licence: EL5901. A further 3 months after expiry of the program notification is provided to complete all rehabilitation. |

Please note, proposed changes to exploration operations stated in the approved EPEPR may require a EPEPR review to be submitted for assessment. Where a EPEPR review is required, implementation of the operational changes can only occur after the revised EPEPR is approved. Further information on when an exploration PEPR review is required can be found in Departmental guideline *MG22 Conducting mineral exploration.*

In addition to the requirements under the Mining Act, you are reminded that your operation will have other legislative requirements that you will need to comply with.

If you have any further queries, please contact DEM staff as below:

Government of South Australia
Department for Energy and Mining

| | |
|---|---|
| **General enquiries** | Jason Perry<br>Senior Assessment Officer, Exploration Regulation<br>DEM.exploration@sa.gov.au |

Yours sincerely

Simon Constable
**DIRECTOR, MINERALS REGULATION**
In accordance with delegated powers and functions

Att.: Appendix 1

The Department's Regulatory Guidelines, Ministerial Determinations and Information Sheets are available at: https://energymining.sa.gov.au/industry/minerals-and-mining/forms-legislation-and-guidance

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Department for Energy and Mining

## Appendix 1

### Notice of Approval Conditions – EPR-04108

In accordance with section 70B(7a)(b) of the *Mining Act 1971*, EPR-04108 is approved subject to the following conditions:

| Notice of Approval Conditions – EPR-04108 | |
|---|---|
| **1** | Prior to conducting exploration operations an EPEPR Program Notification must be submitted to the Department for Energy and Mining via MERS Portal in accordance with the approved EPEPR, **21 days prior** to commencement of operations.<br><br>The EPEPR notification must be submitted using the template provided on the DEM website. |

# Exploration PEPR - EPEPR | Ongoing PEPR Review

Reference Number: **EPR-04108** • Status: **Assessment**

## Begin

### PEPR Type

Ongoing PEPR Review

## Request for Information

Listed below are any RFIs that impact your application. Confirmation of which RFI you are responding to may be required on the Review step.

## Select Applicable PEPR

### Is historical?

No Yes

### Previous PEPR ID

### Search PEPRs

EP-03908

## Applicant and General Details

### Applicant Details

**Full Name ***

Marc Twining

**Business Phone**

**Mobile Phone**

0429 881 471

**Email ***

m.twining@bartongold.com.au (mailto:m.twining@bartongold.com.au)

**Project Supervisor**

Marc Twining

## General Details

### Tenement Details

| Tenement Type | Tenement Name | Tenement Holder |
|---|---|---|
| Exploration Licence | EL 5901 | Tunkillia 2 Pty Ltd |

### Operating Company

Tunkillia 2 Pty Ltd

### If there is another Operating Company, please provide

| Account Name | Entity Type | Registered Address | Registered Email |
|---|---|---|---|

There are no records to display.

### Project/prospect name

Tunkillia

### Mineral Model

The Tunkillia deposit is a Proterozoic-aged shear zone hosted gold deposit, located within the Yarlbrinda Shear Zone in the central Gawler Craton.

### Primary Commodities

| Commodity Name ↑ | Commodity Group |
|---|---|
| Gold | Exploration |

### Secondary Commodities

| Commodity Name ↑ | Commodity Group |
|---|---|
| Silver | Exploration |

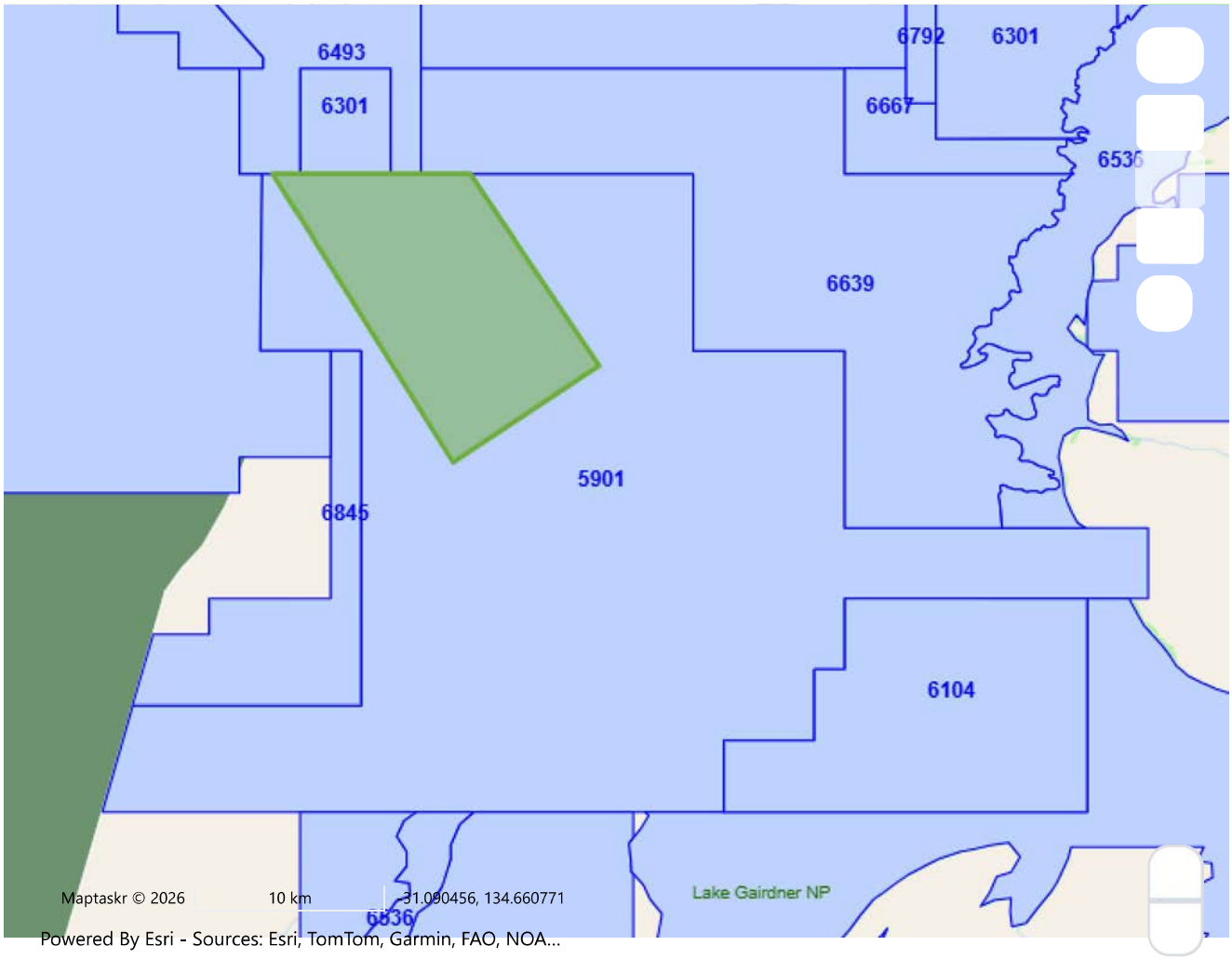
### Project Description

The purpose of this project-focused E-PEPR is to consider the advanced exploration and project-focused requirements for the Tunkillia project. This EPEPR is intended to operate in parallel with the existing EPEPR2022-022, which has a broader geographical focus and less intensive project-related scope of activities. Since 2020 Barton Gold has increased the resource base of the Tunkillia project and is at the point of undertaking further on-ground work to progress the project to the pre-development stage and submission of a Mine Lease application in the near future. Activities to be included within this E-PEPR will include close-spaced resource definition, metallurgical and geotechnical drilling, costeaning and trenching, groundwater drilling (including water-bore establishment and pump testing) and other project related activities.

### Clearly describe why a PEPR review is required, summarise all content changes made to the approved PEPR, and provide appropriate justification where a time extension is required.

A PEPR review is required on account of additional activities with a purpose different to those previously included. Specifically, there is a requirement to include trenching, costeaning and test pitting, albeit that the impacts are very similar to previously described activities such as bulk sample disposal pits and turkeys nest construction.

## Identify Application Area




# Map Layer Intersects

## Application Area Details

### Location Description

Approximately 60km SW of Kingoonya, SA.

### Area (Sqkm)

133.31

## Spatial Data Intersects - Summary Table

Show 10 entries

Search:

| Spatial Layer Name | Category | Referral | Intersect Count |
|---|---|---|---|
| 1:250K mapsheets | Other | | 1 |
| Cadastral Parcels | Other | | 1 |
| Determinations of Native Title | Other | | 1 |

| Spatial Layer Name | Category | Referral | Intersect Count |
|---|---|---|---|
| Exploration licences (mineral/opal) | No-Go Area | | 1 |
| Pastoral Lease Boundaries | Other | | 1 |
| Registered and Notified ILUAs | Other | | 3 |
| Terrestrial - BOM Groundwater Dependant Atlas (GDE Atlas) | Other | | 92 |

Showing 1 to 7 of 7 entries Previous 1 Next

## Spatial Data Intersects - Details Table

Show 10 entries Search:

| Spatial Layer Name | Shape | Primary Attribute | All Attributes | Category |
|---|---|---|---|---|
| 1:250K mapsheets | Tunkillia Project Area | CHILDARA | View attributes | Other |
| Cadastral Parcels | Tunkillia Project Area | F252139QP205 | View attributes | Other |
| Determinations of Native Title | Tunkillia Project Area | Gawler Ranges People | View attributes | Other |
| Exploration licences (mineral/opal) | Tunkillia Project Area | EL 5901 | View attributes | No-Go Area |
| Pastoral Lease Boundaries | Tunkillia Project Area | WILGENA | View attributes | Other |
| Registered and Notified ILUAs | Tunkillia Project Area | Gawler Ranges Native Title Claim Settlement ILUA | View attributes | Other |
| Registered and Notified ILUAs | Tunkillia Project Area | Gawler Ranges Mineral Exploration ILUA | View attributes | Other |
| Registered and Notified ILUAs | Tunkillia Project Area | Wilgena Pastoral ILUA (AJ & PA McBride Pty Ltd) | View attributes | Other |
| Terrestrial - BOM Groundwater Dependant Atlas (GDE Atlas) | Tunkillia Project Area | 17 | View attributes | Other |
| Terrestrial - BOM Groundwater Dependant Atlas (GDE Atlas) | Tunkillia Project Area | 1359 | View attributes | Other |

Showing 1 to 10 of 100 entries Previous 1 2 3 4 5 … 10 Next

# Program Preparation

### Work Undertaken in Preparing the Proposal

• Detailed desktop reviews of existing Tunkillia Gold Pty Ltd environmental reports that were compiled for and included in the (2012) Tunkillia Mine Lease Application including: <br>o EBS Flora Fauna Survey & Monitoring (2012), <br>o Parsons Brinkerhoff Hydrological Impact Assessment (2012), <br>o Various environmental studies and reports prepared in 2012-2014 as part of a Mining Lease Application (Parsons Brinkerhoff 2014)<br>o Tunkillia and Tarcoola Gold Projects Community Engagement Strategy and Register (Parsons Brinkerhoff 2014)<br>o Historical compliance reports<br>o ACHM Cultural Heritage Desktop Assessment (July 2012)<br>• Landscape South Australia (Water Management) Regulations 2020<br>• Data SA<br>• WaterConnect<br>• Environment Protection (Water Quality) Policy (2015 v 1.7.2020)<br>• Australian Dept. Environment & Energy (EPBC Protected Matters)<br>• SA Dept. for Environment & Water (SA DEW)<br>• SA DEM<br>• SA Health<br><br>Additional relevant work undertaken by Barton Gold since 2021:<br>• extensive (& ongoing) local stakeholder consultation (landholders/pastoralists, Aboriginal representatives, local community)<br>• 5+ drilling campaigns (authorised under existing E-PEPR)

### Operator Capability

All personnel working for Barton Gold (including contractors) are provided with company and site specific inductions, which include materials relevant to environmental and operational compliance and any specific requirements as contained in applicable EPEPRs.

All on-ground works authorised by an E-PEPR are planned, executed and supervised by company personnel familiar with the requirements of the EPEPR(s). Barton staff are responsible for routine compliance reporting and as part of activity management processes ensure both compliance during activity planning and execution, as well as ensuring compliant data is captured to provide inputs for statutory reporting against criteria in approved EPEPRs.

Barton Gold maintais a catalogue of standard operating procedures which includes procedures where necessary to ensure consistent execution of field operations that comply with the statutory approvals (ie EPEPRs)

Barton Gold maintains a system of incident reporting which includes scope for reporting regulatory non-compliance. Barton also has dedicated administrative support to independently review all incident reports and inform senior management if statutory reporting is required in accordance with various operating statutes (eg Mining Act, WHS Act). Barton maintains regular contact with relevant stakeholders during the planning, execution and public reporting of works involving their interests (eg pastoralists). Material dialogue with stakeholders is recorded in a database, including any dialogue relating to complaints, together with the actions required or agreed to remedy related matters.

### Lease Conditions

no applicable lease-specific non-standard conditions.

# Land Access

### Identify the Owners of Land and authority to access land

| Land Title Reference | Plan Parcel Reference | Type of Land | Owner of Land ↑ | Land Access Authorisation Method | Date of Form 21 or Agreement Signed | Instrument or Uploaded Document Id | Uncheck land not applicable to your application ar |
|---|---|---|---|---|---|---|---|
| CL 6190/393 | F252139QP205 | Leasee | AJ & PA McBride Pty Ltd (Pastoralist) | Service of Notice of Entry | 23/02/2021 | 50113 | Checked |

### Regulation 4 Consent – Exercise a right over a road, street or highway

No

## Woomera Prohibited Area (WPA)

### Will activities be conducted within the WPA?

No

### In which zone will activities be conducted?

| Name | Are you intending to undertake work? | Closure start date | Closure end date |
|---|---|---|---|

There are no records to display.

### Do you have a resource exploration permit in place?

—

### Permit No.

—

### What is the expiry date of the exploration permit?

—

### Does the Exploration Permit allow the operator to conduct exploration operations in the WPA?

—

## Other Land Owned or Controlled by the Commonwealth Department of Defence

**Indicate if you are intending to undertake exploration operations within the identified defence land?**

No

**Other Commonwealth Defence Land**

| Defence Land | Applicable |
| --- | --- |
| There are no records to display. | |

**Do you have a Deed of Access with Defence?**

—

**Expiry date of the Deed of Access**

—

**Enter the date the Range Control Officer granted permission to conduct the proposed exploration operations**

—

**Describe the results of consultation and how any concerns raised were addressed**

—

## Native Title

**Does 'Native Title land' exist within the application area?**

Yes

**Using the table below, describe how you have complied with the requirements of Part 9B of the Mining Act for each tenement.**

| Name of Determined / Claimant Group | Agreement Type | Instrument Number | Applicable |
|---|---|---|---|
| Gawler Ranges People | Native Title | 50133 | Yes |
| Gawler Ranges Native Title Claim Settlement ILUA | | | No |
| Gawler Ranges Mineral Exploration ILUA | | | No |
| Wilgena Pastoral ILUA (AJ & PA McBride Pty Ltd) | | | No |

**Provide any additional relevant information**

—

## Exempt Land

**Has Exempt land been identified?**

No

| Land Title | Plan Parcel | Owner of Land that has benefit of exemption ↑ | Why is the land exempt land? | Waiver of exemption(s) been negotiated | Instrument Number or Uploaded Document Id |
|---|---|---|---|---|---|
| CL 6190/393 | F252139QP205 | AJ & PA McBride Pty Ltd (Pastoralist) | | | |
| CL 6190/393 | F252139QP205 | AJ & PA McBride Pty Ltd (Pastoralist) | | | |

## Consultation

| Stakeholder ↑ | Land Use | Matters raised | Stakeholder concerns raised and how addressed |
|---|---|---|---|
| AJ & PA McBride Pty Ltd (Pastoralist) | | | |

**If any individual or group of similar affected persons were not able to be consulted, what steps were taken to consult with them?**

not applicable

**Describe any council policies (or out of council) or development plans that may impact the program area and a description of any known plans for future land use changes by other parties.**

Out of Council area

**Provide any additional relevant information.**

Barton Gold maintain regular communication with the pastoral manager where the Tunkillia project is located, particularly with respect to any upcoming work programs and operational considerations during field operations such as road conditions and managing wet weather events.

# Description of Environment

## Proximity to Infrastructure and Housing

**Proximity to infrastructure and housing**

The Tunkillia area has no known infrastructure and is rarely used by the pastoral lease holders due to poor grazing potential as the area is dominated by sand dunes.
There is an existing exploration camp and tracks that were established by exploration companies working at Tunkillia.

**Attach Files**

**Expand/Collapse**

| File Name | File Size (Mb) | Created On | Download |
|---|---|---|---|
| 2025 PEPR Map 1.jpg | 0.9 Mb | 14-04-2026 11:56:07 | Download (MERS/EP-03908/Proximity to infrastructure/2025 PEPR Map 1_2025-07-27T07-17-31.533Z.jpg) |

## Landform, Topography, Soil and Surface Cover

**Describe the topography and soil and surface cover (e.g. gibber) of the general area affected by the exploration program. Include details on the susceptibility to compaction, erosion, dust, runoff and visual attributes (steep or undulating slopes, plains, rocky outcrops, dunes, saltpans, claypans etc) any other characteristics (e.g. acid sulphate soils) that may require control strategies to reduce environmental impacts during operations or rehabilitation.**

The Tunkillia area consists of low longitudinal sand dunes with wide, flat interdunal corridors, orientated in an approximate E-W direction. Sand dune heights can vary from 5-13m height. There is minor outcrop of calcrete and basement in low lying areas. The topography ranges in height from 180 to 215m above sea level. The project area is moderately vegetated with mixed woodland and mulga, especially in the interdunal areas. As a function of the extensive aeolian sand cover across the project area, the susceptibily to erosion, compaction, dust and run-off is very low. Similarly, the extensive mallee-dominant vegetation community across the project area combined with regular seasonal rainfall combines to provide for regrowth of vegetation in a relatively short time frame compared with areas further northwards. The sand dunes themselves are typically heavily vegetated and whilst considered a mobile dune field, are There are no environmental characteristics that require specific control strategies or rehabilitation considerations (eg acid sulphate soils).

**Attach Files**

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## Surface Water

**Will the proposed program interfere with surface water bodies and natural drainage (e.g. drainage lines, creeks, floodplains, wetlands)?**

No

**Describe the potential interference and surface water bodies and natural drainage on maps**

—

**Indicate how you will avoid disturbance**

not applicable

**Is the program area located within water protection areas defined under the River Murray Act 2003?**

No

**Select the name(s) of protected water areas**

---

**Is the program area located within any prescribed watercourses or prescribed surface water areas under the Landscape South Australia Act 2019?**

No

**Select the name(s) of the prescribed watercourses or prescribed surface water areas under the Landscape South Australia Act 2019.**

---

| Name | Applicable |
|---|---|
| There are no records to display. | |

**Attach Files**

Expand/Collapse

| File Name | File Size (Mb) | Created On | Download |
|---|---|---|---|
| No Files Uploaded | | | |

## Groundwater

**Is groundwater likely to be intersected when conducting the exploration program?**

Yes

**Provide evidence or any supporting information why groundwater is unlikely to be intersected.**

—

**Description of the localities/area where different groundwater conditions may be encountered**

At the Tunkillia project, groundwater studies have identified that fractured rock aquifers are the most likely locations host to groundwater. These studies are similarly supported by field evidence where all groundwater known in close proximity to the Tunkillia project site is hosted within fractured basement. The nearest known differing groundwater conditions are located >10km to the east of the project location, where groundwater is understood to be hosted within tertiary age near-surface strata. None of the activities proposed within this PEPR will impact on this groundwater system to the east.

**Add the different groundwater conditions for each localities/areas to the table below.**

| Name ↑ | Formation age and/or stratigraphic unit | Stratigraphic intervals (depth range) (m) | Aquifer formation name | Aquifer Interval/thinkness (from-to) (m) | Aquifer Type | Aquifer salinity (TDS) | Depth to groundwater (m) | Comments |
|---|---|---|---|---|---|---|---|---|
| Tunkillia | Tunkillia Granite (Mesoproterozoic) | 50 | Fractured basement | 50-300 | Unconfined | 30000 | 50 | unconfined basement aquifer. irregular occurrence across project area. watertyically occurs (if present) below saprolitic clays from the transition zone and into basement rock. groundwater productivity (flows) varies significantly across the |

| Name ↑ | Formation age and/or stratigraphic unit | Stratigraphic intervals (depth range) (m) | Aquifer formation name | Aquifer Interval/thinkness (from-to) (m) | Aquifer Type | Aquifer salinity (TDS) | Depth to groundwater (m) | Comments |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | project area. |

**Provide the environmental value of each aquifer present determined according to the current Environment Protection (Water Quality) Policy.**

No Environmental Value as hyper saline (>30,000TDS)

**Provide a description of the existence, location and value of all Groundwater Dependent Ecosystems (GDE) within and immediately surrounding the project area**

Refer attached map for GDE mapping and distribution.
Metadata for GDE spatial domains attached

**Is the proposed program located within a prescribed wells area?**

No

**Select the prescribed wells**

---

**Is the proposed program located within a prescribed water resource area?**

No

**Select the prescribed water resource areas**

---

**Provide any additional information**

—

**Attach Files**

Expand/Collapse

| File Name | File Size (Mb) | Created On | Download |
|---|---|---|---|
| 2025 PEPR Map 2.jpg | 0.8 Mb | 14-04-2026 11:56:08 | Download (MERS/EP-03908/Groundwater/2025 PEPR Map 2_2025-07-27T08-04-09.733Z.jpg) |

| File Name | File Size (Mb) | Created On | Download |
|---|---|---|---|
| Tunkillia GDE spatial metadata.xlsx | 0.01 Mb | 14-04-2026 11:56:08 | Download (MERS/EP-03908/Groundwater/Tunkillia GDE spatial metadata_2025-07-27T08-04-09.734Z.xlsx) |

## Native Vegetation

### Will you be working within areas of native vegetation?

Yes

### Provide the following information:

Previous flora and fauna surveys at Tunkillia have identified five broad vegetation associations.

Casuarina pauper (Black Oak) Woodland
Acacia aneura (Mulga) Woodland
Mixed Eucalyptus sp. Mallee Woodland
Chenopod Open Shrubland
Mixed Woodland.

The central Tunkillia area is dominated by Mixed Eucalyptus sp. Mallee Woodland. Casuarina pauper (Black Oak) Woodland was present mainly to the north and east of the project area. Acacia aneura (Mulga) Woodland was scattered throughout the project area, and was present along the road from Kingoonya to camp. Chenopod Open Shrubland was present predominantly along the road from Kingoonya to the Tunkillia camp.

Chenopod Open Shrubland and Acacia aneura (Mulga) Woodland were the two dominant vegetation associations recorded across the project area.

### Indicate why you will not be working within areas of native vegetation?

—

**Attach Files**

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|---|---|---|---|
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## Fauna

**Describe the native and feral fauna that may be present in the application area, including feral species.**

Native species observed include Red and Western Grey Kangaroos, Emus, Southern hariy nose wombats, echidnas, several Dasyuridae species (Kultarr, little long-tailed dunnart) and Mitchell's hopping mouse. Previous fauna surveys have identified a range of avian species, some of which are migratory and/or seasonal. The range of species sited at Tunkillia during field campaigns since 2021 includes (common names) the wedgetail eagle, mulga parrot, butcher bird, Major Mitchell cockatoo, little corella, rainbow bee-eater, mallee fowl, red-throated wattlebird, redback kingfisher, cockatiel and budgerigar.

Introduced and feral species observed include: Common Starling, Domestic Dogs, Goats, Domestic Cats, Red Fox, Camels, House Mouse and Rabbits.

## Significant Habitats, Flora and Fauna

**Are there any significant habitats, flora and fauna within the project area?**

Yes

**Use the table below to list any significant habitats and any rare or endangered flora and fauna species located or reported to have been in the area that may be impacted by the proposed program. Include known sightings of listed species on a locality plan/map.**

| Species name/habitat | Common name | NPW Act Rating | EBPC Act Rating |
|---|---|---|---|
| Calidris ferruginea | Cerlew Sandpiper | Endangered (EN) | Critically endangered |

**Attach Files**

**Expand/Collapse**

| File Name | File Size (Mb) | Created On | Download |
|---|---|---|---|
| Listed Fauna Map.png | 0.85 Mb | 14-04-2026 11:56:11 | Download (MERS/EP-03908/Fauna/Listed Fauna Map_2025-07-22T10-24-50.697Z.png) |
| Listed Flora Map.png | 0.93 Mb | 14-04-2026 11:56:11 | Download (MERS/EP-03908/Fauna/Listed Flora Map_2025-07-22T10-24-50.817Z.png) |
| Significant Fauna Table.docx | 0.02 Mb | 14-04-2026 11:56:11 | Download (MERS/EP-03908/Fauna/Significant Fauna Table_2025-07-22T10-18-51.702Z.docx) |

| File Name | File Size (Mb) | Created On | Download |
|---|---|---|---|
| Significant Flora Table.docx | 0.01 Mb | 14-04-2026 11:56:11 | Download (MERS/EP-03908/Fauna/Significant Flora Table_2025-07-22T10-24-38.216Z.docx) |

## Weeds and Pathogens

**Provide information of the extent the area is affected or potentially affected by weeds and pathogens (e.g. phytophthora; buffel grass Cenchrus ciliaris).**

Previous flora studies at Tunkillia completed by EBS Ecology (2012) have identified six weed species at one control site, although located greater than 15km from the Tunkillia project area and outside the area of this EPEPR. There was no record of any weeds at the five impact sites studied by EBS Ecology 2012.

*Carrichtera annua Ward's Weed
*Cucumis myriocarpus Paddy Melon
*Hypochaeris glabra Smooth Cat's Ear
*Salvia verbenaca var. Wild Sage
*Sonchus oleraceus Common Sow-thistle
The recorded presence for each weed listed above at the control site is trace (sparsely present).

Buffel Grass (Cenchrus ciliaris) has also recently been recognised at Glendambo thus there is potential for introduction to the Tunkillia region.

**Attach Files**

Expand/Collapse

| File Name | File Size (Mb) | Created On | Download |
|---|---|---|---|
| No Files Uploaded | | | |

## Aboriginal Heritage

**Describe the steps taken to identify Aboriginal heritage sites within the proposed area of exploration. Include a statement advising if an Aboriginal heritage survey has been conducted by the proponent and if so, the results of the survey.**

Aboriginal heritage surveys have been undertaken both by past operators of the Tunkillia project and by Barton Gold. Given the elapsed time from past heritage surveys (2012, 2013), Barton Gold provided the opportunity for traditional owners to aquaint themselves with past heritage survey outcomes at Tunkillia whilst undertaking new heritage survey work for Barton Gold in 2023. Several areas of cultural sensitivity have been identified from survey work and which form the basis for operational (exploration) exclusion zones. Additional heritage surveys are commissioned as necessary if ground disturbing works are required in previously uncleared areas.

## Environmentally Sensitive Locations

**Indicate if you are intending to undertake exploration operations within the environmentally sensitive locations listed.**

No

| Name | Applicable |
|---|---|
| There are no records to display. | |

**Are you likely to impact on the environmentally sensitive area?**

—

**Detail the likely effects the proposed program may have.**

—

**Attach Files**

Expand/Collapse

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|---|---|---|---|
| No Files Uploaded | | | |

# Exploration Operations

## Exploration Scope

**Describe all exploration methods to be covered by the PEPR**

Methods to be covered by this EPEPR include:
Diamond drilling (including rotary mud drilling)
Reverse Circulation (RC) drilling
Aircore drilling
Sonic drilling
Water drilling methods (percussion, rotary mud) and water well establishment for the purpose of pump testing & groundwater evaluation (including the the construction of turkeys next dams)
Earthmoving activities to facilitate access upgrading and construction of bulk sample disposal pits
Earthmoving activities to undertake the construction of trenches, costeans or shallow test pits for the purpose of near surface civil engineering investigations

**Describe the extent of exploration operations – e.g. drillhole spacing and drill line density.**

Drill collar spacings at Tunkillia are aligned with the following requirements and associated drill collar spacings:
Indicated Resources - 25m spaced lines with holes spaced 25m along lines
Measured Resources - 25m spaced lines with holes spaced between 12m and 15m along lines.

The majority of resource drilling utilises the RC drilling method, although diamond drilling is required in some instances where ground conditions are not amendable to RC drilling (eg high groundwater flows).

Diamond drilling for geotechnical and geometallurgical purposes does not have a set spacing but is designed to intersect specific down hole target zones. Sonic drilling may used to substitute for other drilling methods on occasion.

Drill holes targeting ground water are typically more widely spaced (eg >100m apart).

**Describe the geographic extent of the area covered by the PEPR, including a general locality plan with tenement details, landowner boundaries and areas with environmental classifications or sensitivities.**

refer to '2025 PEPR Map 1'

**Describe the specific environments where exploration operations will not be conducted – e.g. parks, reserves, salt lakes etc.**

not applicable

## Equipment and Personnel Requirements

**Describe the maximum composition of field crews (operator, contractors, and geologists) and proposed working hours/days for each type of activity.**

The number of personnel associated with exploration operations varies on account of the number of activities which may be run in parallel.
A typical RC drill rig requires 4 drilling crew, supported by 3 company personnel.
A typical diamond drill rig requires 6 drilling crew (2 shifts/24hrs), supported by 2 company personnel.
Earthmoving acitivities typically require a single operator plus one or two technical staff that may be required to supervise where there is a specific sampling requirement (eg geotechnical investigations). Earthmoving activities are run on day shift only.
All day shift operations are run across a nominal 12-hour shift, with night shift operations run across the corresponding 12-hour shift.
The Tunkillia camp has accommodation for 12 personnel and contractors provide their own mobile independent accommodation and messing facilities.

**Using the table below, describe the equipment (size, number and contractor details) required to conduct the proposed operations.**

| Name | Owner/Operator | Description/capacity | Activity/purpose |
|---|---|---|---|
| RC drill rig (eg Schramm T685 or equivalent) | TBA (jobs tendered each time) | 500m drilling depth capacity nominal 1000psi/2400cfm air generation capacity Includes accompanying equipment such as rod truck, support truck, compressor truck | Resource drilling Water drilling Sterilisation drilling |
| Diamond drill rig (eg UDR1200) | TBA (jobs tendered each time) | diamond core to 1200m depth (NQ size) Larger core diameters to lesser depths in line with rig capabilities | Resource drilling Geotechnical drilling Metallurgical drilling |
| Backhoe &/or Loader | TBA | machines selected for the required purpose, eg a smaller backhoe-loader is utilised for drill pad preparation and sump digging, whereas a larger loader or excavator (eg 10m3 bucket) may be required for larger applications. | drill pad preparation drill line access creation drill site & drill line rehabilitation trenching/costeans/test pits |
| Rod truck / compressor truck (8x8) | TBA - associated with RC & Diamond drilling | n/a | supporting RC &/or diamond drilling |
| Light vehicles (4x4) | Barton Gold, various contractors | 4WD vehicles | Personnel transport, sampling, general utility purpose |

## Low Impact Exploration Activities

**Will low impact exploration operations be conducted that are not covered by the Generic program for environment protection and rehabilitation – low impact mineral exploration in South Australia, (generic PEPR)?**

No

**Describe each type of low impact operations proposed.**

—

## Drilling Operations

**Will exploration drilling operations be conducted?**

Yes

**Identify all the drilling methods that will be used.**

Rotary Mud, Reverse Circulation, Diamond Drilling, Rotary Mud with Diamond Tails, Reverse Circulation with Diamon...

**Where 'Other' drilling method is selected, provide a description of the drilling method.**

—

## Drillsite Preparation

**If exploration drilling activities are proposed, describe the methods used to prepare sites, including vegetation clearance requirements, site levelling and digging of sumps.**

- Drill sites will be prepared using a backhoe/loader which is likely to be undertaken by Andrew Brockoff (Coober Pedy).
- Only minimal site preparation is required to allow safe work practices and contain the environmental impact.
- Where possible, drill sites will be selected where ground is naturally level and the area will only be gently scraped if necessary to remove loose rocks and to minimise trip-hazards. Due to the likely close spacing of some drill holes, there will be less flexibility in the placement of some drill holes.
- Areas of established vegetation will be avoided wherever possible.
- When excavating sumps or undertaking any earthworks the top-soil profile will be carefully stock-piled for sequential layering during rehabilitation. Attention will be paid to the presence of calcrete which will be sequentially buried as the sites are rehabilitated

RC/AC Drilling:

- RC drill pads would typically approximate 25m x 25m however the shape will always be determined by the natural contour of the area.
- Only small shallow sumps will be dug where holes are planned to be drilled deeper that may potentially encounter minor groundwater. Sumps will be designed with at least one shallow side so small fauna can easily escape. The nominal size of a sump is 3m x 3m x 1m. Sumps would not be plastic lined.
- RC drillholes are a nominal 150mm diameter.
- RC or open hole drilling for water wells may range from a nominal 150mm up to 200mm diameter, and in some instances may be collared at 250mm diameter (to enable drilling to a nominal 200mm down hole)

Diamond Drilling:

- It is estimated that diamond drill pads would typically approximate 40m x 25m however the shape will always be determined by the natural contour of the area.
- Up to two sumps (3m x 3m x 1m each) may be required which may be plastic-lined to conserve drilling fluids.

## Drillhole Construction and Decommissioning

### Drillhole construction and decommissioning

RC and diamond drill holes are typically constructed with a nominal 6m (sometimes 12m) x 6" PVC collar pipe, set in the ground using expanding foam to provide a secure collar seal and preventing collar blow-outs. Diamond drilling utilises additional removable steel casing of a size determined by the drill core size selected and may be changed mid-hole. Drill holes are decommissioned by cutting off PVC collar pipe approximately 1m below surface and plugging the collar with a plastic cone or cement drill plug and backfilled to surface with top soil, compacted and finally mounded at surface to minimise the likelihood of water pooling within the drill collar.

Water wells:
All water wells will be authorised with an appropriate well permit that will be provided with the relevant Program Notification. Wells will be constructed in line with Department for Environment and Water (DEW) permit requirements. Water drill holes are collared to a size determined by the subsequent down hole casing requirements for the well. Water wells will likely be cased through the weathered profile as a minimum with PVC casing which is left in the well post completion. Water wells will not be decommissioned but have bolt-down collar flanges and lids fitted to prevent ingress of objects or animals into completed wells.

### Have the personnel responsible for implementing the proposed program read and understood the Earth Resources Information Sheet M21, Mineral exploration drillholes – general specifications for construction and backfilling?

Yes

### Describe how drillholes will be constructed, including the casing material to be used, depth of casing, if the casing will be cemented, cementing intervals and the class of driller that will install the casing.

Construction and casing requirements for water well drill holes will be planned and determined on a case-by-case basis, taking into account the type of aquifer to be drilled and drill hole requirements. The guidelines provided in Earth Resources Information sheet M21 will be followed and a driller with the appropriate class of water drilling licence will be used for drilling operations.

### When describing drillhole decommissioning requirements, include the materials to be used, stratigraphic intervals where cement plugs will be placed, if the casing will be removed and when decommissioning will occur after drilling is completed.

At the completion of drilling the PVC casing will be pulled out of the ground or cut-off at least 1m underground and the hole will be backfilled as much as possible with drill cuttings. Drill holes at Tunkillia typically collapse in the upper part of the profile shortly following completion, resulting in the back fill of drill cuttings into drill holes not being possible.

Decommissioning & rehabilitation of drill holes occurs as soon as practicable following completion of drilling, subject to receipt of analytical results, determination of further requirements for residual drilling materials (eg drilling samples for metallurgical testwork) & availability of resourcing to complete required rehabilitation (internal or contractors). Drill holes have temporary caps placed immediately post drilling and the condition of plastic sample bags is regularly monitored post-drilling / pre-rehabilitation to ensure any premature degradation of bags is acted upon before complete degradation occurs.
All sample bags and any non-natural material will be removed and appropriately disposed.

Any excess drill cuttings that could not be backfilled into the holes will be either removed from site, buried in the back filled sumps, or disposed of in sample disposal pits

The ground will be re-contoured, and the preserved topsoil will be restored.

Should unexpected aquifers be encountered they will be separated and plugged according to best practice and DEM guidelines (e.g. Guidelines M21).

**Attach Files**

**Expand/Collapse**

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## Costeans and Bulk Sample Disposal Pits

### Will costeans/bulk sample disposal pits be required for the proposed program?

Yes

### Indicate the maximum dimensions and size of pits and costeans.

144.00

### Describe site preparation methods, vegetation clearance, and safety and maintenance requirements

Sample disposal pit locations will be chosen and sited to minimise disturbance to existing vegetation and as close as practicable to the location required for disposal of drill cuttings. As pits are excavated the various stratum will be separately stockpiled for later backfilling in reverse order. Where vegetation removal is required a protocol of removing common species (eg eucalypts) will be applied. An initial sample disposal pit location has been nominated at the site of a previous and a no longer required (pump-testing) turkeys nest (2025 PEPR Map 3, attached). A ramp will be constructed at one end of the pit to enable fauna to escape if they inadvertently fall into the pit. Bunting will be used to mark out an open pit to avoid accidental falling (pedestrians, vehicles) into open pits. Where possible as much plastic will be removed from the burial pile (legacy drilling) and will be bagged for disposal off site in a licenced waste facility. The maximum size of a single bulk disposal site will be 12 x 6 x 2m.
Disposal pits will left open for the shortest possible duration. Pits will be backfilled with at least 30cm stockpiled topsoil. Excavated material will be returned to the pit to cover the deposited drill cuttings in the reverse order to which it was excavated. Excess material will be smoothed to achieve a smooth contour with the surrounding landscape.

Costeans, trenches or test pits for civil engineering evaluation purposes will be constructed using the same principals as outlined for sample disposal pits, only their configuration and geometry may vary. A single trench or pit will be dug for shallower depths (<2m), whereas if greater depth is required (up to 4m), a benched pit may be required to meet the requirements set out in safe operating procedures for the task. The excavations are temporary in nature and backfilled immediately following completion. Excavations that may be required to be left open temporarily will be bunted to prevent accidental access and have stepped or ramped access to enable any fauna to egress access. A 4m-deep test pit will have a nominal length of approximately 10m, width at the base of 1m with an additional steps along the length 1m-wide as necessary to maintain stability.

## Sample management

**Describe the size of samples collected (including drilling samples and bulk sampling), collection methods, materials used when collecting the sample, sample disposal methods (including removal of sample bags), safety management and any other sample management requirements at the exploration site (e.g. tarps or matting used to contain cuttings). Include requirements for on-site geological sample management (splitting of archive samples, bag farms, core processing and storage).**

RC drilling samples are typically a nominal 35-40kg per metre drilled, with sub-samples taken for analysis. The residual sample per metre is delivered via a closed cyclone +/- attached sample splitter unit and collected in numbered plastic bags. Samples are typically laid out in rows of 20-40m bags, depending upon available room at the drill site. Sub samples of 1-3kg are collected in calico bags and either removed from site for off-site analysis or retained for later collection and analysis.
Some drill contractors elect to bag only a portion of sample materials (on the basis of OHS/ manual handling considerations) and a pile of drill cuttings will accumulate beneath the sample cyclone.
Irrespective of sample management methods employed during drilling activities, all drill cuttings left on ground are scraped up during rehabilitation and buried in a sump or disposal pit. It is not practicable to use tarps to collect samples from RC drilling activities.
Drill core produced from diamond drilling is collected in core trays and removed + stored at the exploration camp in a dedicated drill core storage area.
As part of both forward drilling plans and the rehabilitation of the historic exploration activities it will be necessary to construct bulk sample disposal sites.

## Access Routes to Work Areas

**Will existing tracks require upgrading and/or maintenance?**

Yes

**Detail the work required to upgrade/maintain existing tracks.**

The primary access to the Tunkillia project has several dune crossings requiring the removal of soft wind blown sand, particularly where there are longer dune crossings. The requirement is to enable safe passage of heavy drill rigs along primary access routes. The work will utilise a large front end loader to cut the loose top of the dunes down to a level where competent loamy-sand is encountered that provides suitable traction for the passage of heavy wheeled equipment. A width of 3.5m across the track is required, with a batter angle of 45 degrees either side requiring sand removal. The sand will stockpiled adjacent to the dune for either subsequent reinstatement upon eventual completion of the exploration phase of work, or for later consideration as a Mining Lease Application is submitted in relation to the project. All of the dunes requiring access upgrading lie within a proposed future open-pit outline.

**Will access off existing tracks be required?**

Yes

**Detail the method(s) for gaining access and if vegetation clearance is required. Details of the total area of disturbance (includes drill traverses and seismic lines) required off existing tracks (i.e. length (km) and width (m) of new tracks) must be provided in the program notification.**

If vegetation clearance is required to facilitate access, the following protocols will be applied:
a) Choosing the path of least resistance entailing the least impact to existing vegetation
b) Where vegetation impact is unavoidable, pruning of trees will take preference to removal of trees
c) Where vegetation removal is required, choosing a clearance path that impacts only common species (eg mallee gums) and younger specimens will be applied.

**Attach Files**

**Expand/Collapse**

| File Name | File Size (Mb) | Created On | Download |
|---|---|---|---|
| 2025 PEPR Map 3.jpg | 1.26 Mb | 14-04-2026 11:56:08 | Download (MERS/EP-03908/Access routes to work areas/2025 PEPR Map 3_2025-07-27T11-06-01.334Z.jpg) |

## Campsites and Equipment Laydown Areas

**Indicate where staff and contractors will be accommodated during the exploration program.**

The Tunkillia exploration camp is a pre-existing camp that was initially constructed in 1997 and upgraded to the current facility in 2005. It comprises several accommodation transportable buildings with ablution facilities, a kitchen / mess building, an office building, several storage sheds and storage containers. Power will be provided by diesel generators and all electrics will be checked and serviced by a licenced electrician. Potable water will be sourced externally and stored on site in plastic water tanks. SA Health have been appraised of the existing septic and waste management facilities and have approved its ongoing use for the purposes of an exploration camp.

**What is the maximum number of personnel requiring accommodation?**

25

**Is a campsite required to be established?**

No

**Provide a description and justification of the camp location (e.g. previously cleared areas etc.), and any other relevant information.**

existing camp site

**What will be the total area (ha) of the campsite(s)?**

—

**Will native vegetation clearance required?**

—

**What will be the total area (ha) of vegetation clearance for the campsite?**

—

**Describe the methods used to prepare the campsite includuing vegetation requirements and site levelling.**

—

**Will any excavations be required?**

—

**Describe the purpose of the excavation**

—

**Describe the maximum volume (m3) of material to be excavated.**

—

**Provide confirmation that the proposed ablution facilities have been endorsed for use by the Department of Health or local council, where applicable.**

—

**Indicate why endorsement approval is not required by the Department of Health or local council.**

—

**Proposed Infrastructure (includes caravans, tents, offices, hydrocarbon and water storage requirements etc)**

| Proposed infrastructure | Quantity | Description / capacity |
|---|---|---|
| existing campsite | 1 | 25 pax camp |

**Will laydown areas be required?**

Yes

**Will the laydown area(s) be located at the same location as the campsite?**

Yes

**Provide a description and justification of the laydown area location (e.g. previously cleared areas etc.), and any other relevant information.**

Previously cleared area

**What will be the maximum area (ha) required for the laydown area(s)?**

0.50

**Will native vegetation clearance be required?**

No

**What will be the total area (ha) of vegetation clearance for the laydown area?**

—

**Describe the methods used to prepare the laydown area includuing vegetation requirements and site levelling.**

—

**Will any excavations be required?**

No

**Describe the purpose of the excavation.**

—

**What will be the volume (m3) of material to be excavated.**

—

**Proposed infrastructure (includes hydrocarbon and water storage requirements)**

| Proposed infrastructure | Quantity | Description / capacity |
|---|---|---|
| water storage | 110000 | 4x water tanks for potable water storage |

## Other Exploration Methods and/or Ancillary Operations

**Are any other proposed exploration methods (e.g. seismic) and/or ancillary exploration operations required?**

No

**Describe the activity(s), site preparation, vegetation clearance, and safety and maintenance requirements.**

—

## Water Supply and Management

**Will camp and/or drilling water be required?**

Yes

**Describe how and where water will be sourced for drilling, track maintenance and camping purposes (e.g. groundwater, surface water, mains). Indicate how wastewater and/or runoff water will be managed.**

Drilling water will be sourced from either an existing registered water bore or from supply provided by the pastoralist.
Potable water is trucked to the exploration camp by tanker sourcing water from SA Water mains at Woomera.
Camp waste water is managed by an installed septic system.
Excess ground water from drilling is contained in sumps dug at each drill site.

**Will surface water and/or mineral drillholes be used as a water source/supply?**

Yes

**Indicate if a licence for water extraction/usage is required (refer to relevant Natural Resources Management water allocation plan available on the Department for Environment and Water (DEW) website.**

No

**Attach a copy of the licence or include a statement confirming that a licence will be obtained before the extraction and/or usage of water.**

No water license is required to extract water from the existing registered water well at Tunkillia
Permit number: 211446; a copy of the original license cannot be located either in company records (inherited) or state records (SA Water, Waterconnect) as DEW's retention of well construction permits does not extend this far back (DEW Mt Gambier office, pers comm).

## Groundwater Investigation and Water Affecting Activities

**Will any water investigation (e.g. pump testing, water monitoring sites, water storage, turkey nests/dams) and/or water affecting activities, be undertaken (refer to s. 127 of the Landscape South Australia Act 2019)?**

Yes

**Describe the water investigation and/or water affecting activities, including site preparation, vegetation clearance, and safety and maintenance requirements.**

Pump testing will be undertaken at selected sites to assess the potential for project water supply requirements. Site preparation will follow protocols previously described in this EPEPR. A Turkeys Nest style dam will be required for each pump testing site. Specific size and volume requirements for each Turkeys Nest will be described in subsequent program notifications, although a capacity of 1-2ML is anticipated.
The siting of a Turnkeys Nest will be chosen to minimise disturbance to existing vegetation where possible.
Approximately 2m depth will likely be required for a turkeys nest, constructed utilising suitable earthmoving equipment for the task. A cut & mound approach will be deployed, where by a mounded perimeter will be built utilising material derived from within the turkeys nest. Topsoil will be first removed and stockpiled separately. If variation in the excavated stratum is experienced the difference layers will be grouped in the mound wall and ultimately replaced in reverse order to which they were extracted.
The bund wall to the turkeys nest will serve as a natural barrier to accidental ingress by 3rd party personnel. An internal ramp will be included in the construction to allow for egress in the event an animal falls into the turkeys nest (full or empty).
Additional temporary fencing may be considered depending upon individual circumstances and will be discussed in the related program notification.

**Indicate if water affecting activities permits (eg well and water extraction/discharge permits) have been obtained and in accordance with the Landscape South Australia Act 2019.**

No

**Attach a copy of the permit(s) or include a statement confirming that permits will be obtained prior to the commencement of the water investigation activities.**

—

## Management of Hazardous Materials

**Will activities be conducted in areas of known uranium and thorium mineralisation?**

No

**Attach Files**

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**Will any other hazardous material be encountered when exploring in the area?**

Yes

**List the types of hazardous materials and provide a management plan on how these materials will be managed.**

Respirable crystalline silica may be encountered as a function of RC percussion drilling of granitic (gneissic) lithologies. All RC percussion rigs engaged by Barton Gold are required to comply with current legislation which mandates engineering controls to manage this hazard. Suitable PPE is also required where deemed necessary.

## Rehabilitation

**Detail all the activities and strategies relating to the remediation of all impacts associated with the proposed exploration operations (includes exploration camps and laydown areas, tracks). Completion of rehabilitation must be achieved within 3 months after the expiry of each program notification.**

Drilling:

- All drill sites will be photographed as they are initially pegged to monitor original environmental status. Selected sites will be photographed during drilling, pre- and post-rehabilitation.
- Sites will be carefully prepared to minimise impact.
- Post drilling all rubbish will be immediately removed from site
- Drill cuttings will be tipped back into the open hole where possible. Below surface plugs will only be used as a last resort if the hole will not accept the chips or there are insufficient.
- If there are excess chips these will be buried in the drill sump as it is back filled, or bulk disposal pit as may be required.
- All PVC collars will either be removed completely or cut-off ~1m below surface.
- Plastic bags (ie associated with drilling) from both legacy drilling rehabilitation and new drilling activities will be emptied and disposed of off-site.
- Should plastic bags associated with the rehabilitation of legacy drill holes become damaged and are unable to be handled as coherent pieces of plastic (ie may break apart very easily as a consequence of years of UV exposure) some plastic might be buried below surface in the bulk disposal pit.
- Sumps will be back filled as soon as the sumps have adequately dried.
- The surface will be recontoured and levelled with preserved topsoil laid as the uppermost veneer.
- The surface will be raked and scattered with available dead vegetation, although access along drill lines will often be left open as future access is required.

Tracks (grid line access):

- No new tracks are contemplated, other than the establishment or reestablishment of close-spaced (ie 25m line spacing) drill lines
- New tracks will be minimised and only cleared, if necessary, with the bucket of a loader.
- When a drill track in complete the drill track will be rehabilitated by recontouring and raking out any ruts
- Grid line access tracks associated with this program will not be closed off

Tracks (baseline):

- Three large sand dunes along the primary baseline have been identified as requiring removal of loose sand across their crests (the baseline crosses approximately perpendicular to the dune crests).
- A track of approximately 3.5m width is required across the dunes, with additional sand to be removed as a function of the batters required adjacent to the track. Only sufficient sand is to be removed to access a firm base in the dune (ie removal of wind blown sand).
- Removed sand will be stored as close as practicable and adjacent to the dune cutting, for subsequent reinstatement at the conclusion of the exploration programs and in the event progression to mining operations (subject to a future MLA & mining PEPR) does not occur.

Trenching/Costeans/Test pits:

- Rehabilitation of works will take place immediately following completion of the trenching, or as soon as practicable if any delays are experienced.
- excavated material will be returned to the hole on a last-out, first-in basis to restore the original vertical profile of the excavated area.
- The surface will be levelled over upon completion, with previously removed vegetation scattered over the site to assist with trapping seed to promote expedited revegetation.

The Camp and Laydown are existing established facilities, and they will be required for ongoing use. They are included in the longer-term strategy for rehabilitation of the Tunkillia Project.

**State the estimated budget required to rehabilitate all impacted sites. Include a breakdown of the cost associated with each rehabilitation component.**

Rehabilitation budgets will be provided as each Program Notification is submitted.

### Vegetation Clearance

**Will any area of cleared native vegetation be unrehabilitated after the authorised period?**

Yes

**Provide a map and description of the vegetation present in the application area, the extent of any proposed vegetation clearance and the likelihood of the presence of threatened flora.**

A map of the exploration camp and associated laydown area is provided in PEPR Map 4. Approximately 1Ha total of land associated with these areas will remain unrehabilitated, but is existing cleared vegetation - ie no new vegetation clearance is proposed at these sites.

**State the estimated quantum of significant environmental benefit (SEB) to be gained in exchange for the proposed native vegetation clearance and describe how the SEB will be provided.**

Vegetation clearance associated with the exploration camp and camp laydown area is pre-existing clearance, undertaken prior to Barton Gold's acquisition of this project and subsequent exploration activities. An SEB in relation to the exploration camp (and laydown) will be considered when the project progresses to mining.

## Management of Environmental Impacts

### Applicable environmental aspects and potential impacts

| Environmental Aspect | Receptor | Potential Impact | Control Strategies | Risk | Outcomes | Outcome Measurement Criteria |
|---|---|---|---|---|---|---|
| Fauna | All fauna | Entrapment of fauna through open drillholes and excavations. | All drillholes will be either immediately backfilled on completion or covered until backfilling has been completed to prevent fauna becoming trapped. If in-ground sumps are used, they will be designed so wildlife can escape if they accidently fall into the sumps (ramp wall at one end.) Excavations that may be required to remain open will be bunted to prevent accidental access and have a ramped side to enable egress to fauna. | Low | No fauna traps created as a result of exploration activities. | Maintain before, during and after photographic evidence of all drillholes and/or excavations demonstrating that: • All drillholes were permanently or temporarily capped/plugged immediately upon completion. • No fauna and livestock became trapped in drillholes and/or excavations throughout the duration of the program. • All rehabilitation was completed within 3 months of expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised. Representative photos are to be included within the annual exploration compliance report. Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report. |
| Third party access | Soil/vegetation/fauna | Degradation of rehabilitated access tracks caused by third party access (includes previously closed and rehabilitated access tracks). | All access tracks will be rehabilitated as soon as practical once the drilling or other activities have been completed. This will include placing dead tree branches and rocks to prevent unauthorised access. By virtue of the project's location, the Tunkillia site is very remote and distant from any public thoroughfares and difficult to access. | Low | Rehabilitated access tracks remain permanently closed, unless prior approval under the relevant legislation is obtained. | Maintain before and after photographic evidence demonstrating that all tracks are closed and rehabilitated within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised. Representative photos are to be included within the annual exploration compliance report. Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report. |

| Environmental Aspect | Receptor | Potential Impact | Control Strategies | Risk | Outcomes | Outcome Measurement Criteria |
|---|---|---|---|---|---|---|
| Groundwater | Groundwater/aquifer | Groundwater contamination: • contamination of aquifers through entry of pollutants from the surface • interconnection between aquifers • degradation of natural hydrostatic conditions (maintain pre-drilling pressures). | Whilst the intersection of significant groundwater is considered unlikely there is always the potential to intersect minor fracture rock aquifers in this geological setting. Should significant groundwater be intersected it will be documented and managed according to best industry practice and in accordance with SA DEM Guidelines (e.g. M21). Only biodegradable drilling additives are used during drilling. | Low | Drillholes restored to controlling geological conditions that existed before the hole was drilled or, where it is intended to re-enter the hole, the hole must be completed with casing of adequate strength and the casing cemented so that all aquifers are isolated to prevent the movement of any fluids behind the casing. | Maintain evidence demonstrating that drillholes are decommissioned in accordance with Earth Resources Information Sheet M21, Mineral exploration drillholes – general specifications for construction and backfilling, and/or specific conditions from DEW (Groundwater) within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised. Provide the information requested within the 'Groundwater' section of the annual exploration compliance report. |

| Environmental Aspect | Receptor | Potential Impact | Control Strategies | Risk | Outcomes | Outcome Measurement Criteria |
|---|---|---|---|---|---|---|
| Fire | Community/landowners | Damage to infrastructure and loss of income through fire. | The remote location of activities on the pastoral lease and distance to 3rd party infrastructure is reduced. All vehicles will have adequate available fire suppression or extinguishes available. Hot works that are required on drill rigs are not to be performed on total fire ban days or in prevailing conditions assessed to have an unacceptable risk for fire ignition & spread (site/activity-specific risk assessments to be undertaken). Hot work to be carried out only in designated cleared areas and only after a full formal risk assessment has been completed. Adequate firefighting equipment will be at hand to manage specific activities with a risk of fire ignition. | Low | No loss of infrastructure or income through fire as a result of exploration activities. | Provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report confirming that no uncontrolled fires* occurred. Alternatively, provide a report on the independent investigation of all uncontrolled fires* demonstrating that the licensee could not have reasonably prevented the fire through the implementation of precautionary measures. |

| Environmental Aspect | Receptor | Potential Impact | Control Strategies | Risk | Outcomes | Outcome Measurement Criteria |
|---|---|---|---|---|---|---|
| Weeds and Pathogens | All flora and fauna, especially listed species. | Loss/modification of the environment (biological, social and economic) through the introduction of weeds and pathogens. | All vehicles and equipment will be thoroughly cleaned and inspected before the commencement of work. Should listed weeds be encountered during a work program all equipment will be thoroughly cleaned before relocation to another area within the project. No ground disturbance to occur after rainfall, as this is the most likely period when weeds can spread to newly disturbed ground. | Low | No introduction of new species of weeds and plant pathogens, nor increase in abundance of existing weeds species. | Provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report, confirming that: • Vehicle logs were kept during the exploration program, demonstrating that all vehicles are clean and free of plant and mud material prior to entering properties† within the tenement areas, unless otherwise agreed to with the relevant landowners. • Photographic evidence before and during exploration operations and after rehabilitation of disturbed sites was captured, demonstrating that no new weeds and plant pathogens were introduced, nor an increase in abundance of existing weeds recorded. |
| Other | not applicable | not applicable | not applicable | Low | not applicable | not applicable |

| Environmental Aspect | Receptor | Potential Impact | Control Strategies | Risk | Outcomes | Outcome Measurement Criteria |
|---|---|---|---|---|---|---|
| Aboriginal heritage | Aboriginal heritage sites | Disturbance to Aboriginal heritage | Known aboriginal sites within the project area have been identified and exploration activities are not conducted in those areas. A 25m buffer zone has been requested by the GRAC for these sites. Site induction to include the location of no-go zones and tracks that lead to these areas closed off. In the event of a discovery of a potrential Aboriginal heritage artifact all work will stop in the immediate vicinity. The site supervisor and project manager will be notified. The area will be clearly marked and isolated for other work areas. The relevant authorities and traditional owners will be notified. Work will only recommence once authorisation to continue has been received. | Low | No disturbance to Aboriginal artefacts or sites of significance unless prior approval under the relevant legislation is obtained. | Maintain a database and provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report demonstrating that: • Heritage sites were not impacted during the conduct of the exploration program, unless prior approval was obtained under the appropriate legislation • Work ceased on discovery of a significant site and recommenced only after authorisation. • Aboriginal heritage sites identified during the exploration program were appropriately recorded and reported to authorities, if not previously known. |

| Environmental Aspect | Receptor | Potential Impact | Control Strategies | Risk | Outcomes | Outcome Measurement Criteria |
|---|---|---|---|---|---|---|
| General Public | General Public | Injury or death to members of the public as a result of exploration activities. | The Tunkillia site is very remote and distant from any public thoroughfares. High-visibility safety signs will be used at each drill site and at the start of any access track that leads off any existing station tracks. As part of the induction process all workers will be instructed to keep a careful visual for members of the public and will be instructed to cease work until they have safely left the area. The company will introduce by policy which will be reinforced in the induction process speed-limits for all workers using public and station tracks to access work sites. | Low | No accidents involving the public that could have been reasonably prevented by the licensee. | Provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report confirming no accidents occurred involving the public during and after the exploration program. If an accident involving the public did occur, provide a copy of the independent investigation report within the annual exploration compliance report demonstrating that the licensee could not have reasonably prevented the accident through the implementation of precautionary measures. |

| Environmental Aspect | Receptor | Potential Impact | Control Strategies | Risk | Outcomes | Outcome Measurement Criteria |
|---|---|---|---|---|---|---|
| Groundwater | Soil/vegetation/fauna | Discharge of groundwater into the surrounding environment. | The discharge of groundwater will at all times be closely monitored and will be captured in shallow sumps next to the drill rig. All groundwater will be contained withing the confines of the drill pad. The sumps if required will be allowed to dry out and will be backfilled during rehabilitation. | Low | No discharge of groundwater outside of the exploration site (e.g. drillsite) into the surrounding environment and no discharge of water into a watercourse, unless prior approval under the relevant legislation is obtained. | Maintain photographic evidence of all drillsites demonstrating that groundwater was not discharged into the surrounding environment, unless water affecting activity permits were obtained allowing the discharge of groundwater into watercourses and/or lakes. Representative photos and water affecting activity permits (where applicable) to be included within the annual exploration compliance report. |
| Groundwater users | Groundwater users | Interference to existing water users when extracting water from existing dams, water bores or mineral drillholes. | Water bores at the Tunkillia project site do not abstract water from station stock aquifers. Station-stock water only used with the permission of the pastoralist. | Low | No public nuisance impacts resulting from the extraction of water for exploration purposes, unless prior approval under the relevant legislation is obtained. | Provide the information requested within the 'Complaints' section of the annual exploration compliance report demonstrating that all reasonable complaints from stakeholders were resolved to the satisfaction of both parties, prior to and ongoing during the course of the exploration program without the involvement of DEM. Where permits are required for the extraction and/or usage of groundwater, provide copies of the licence or permit within the annual exploration compliance report. |

| Environmental Aspect | Receptor | Potential Impact | Control Strategies | Risk | Outcomes | Outcome Measurement Criteria |
|---|---|---|---|---|---|---|
| Contamination | Soil/vegetation/fauna | Soil/vegetation contamination (e.g. hydrocarbons, rubbish, drill samples/cuttings, ablutions, other sources) | Drill cuttings will be placed in green retention bags and stacked near the hole. On completion of the program the remainder of the green bag samples will be removed from the site and disposed of at an appropriate waste depository. Drill cutting material from around the collar and cyclone will be removed from the soil surface and either returned down the hole or buried in sumps. Immediate remedial action will be taken for any fuel/oil spills. As the drill sites are typically on sandy loam, any affected material will be collected by shovel into leak proof bags and taken to a rubbish facility that accepts fuel/oil waste. For temporary fuel storage at the camp site, a containment area with a bunding wall will be built around bulk container ensuring around to catch and any spills. A large plastic liner between container and ground bunding will prevent hydrocarbon fuel spills soaking into ground surface. A hydrocarbon spill kit placed close to fuel containment area. Inspection of | Low | No contamination of soil and vegetation as a result of exploration activities. | Demonstrate that all domestic or industrial waste (includes general rubbish and hydrocarbons) is disposed of in accordance with the Environment Protection Act 1993 within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), and that all fuel and chemicals are stored in accordance with EPA requirements, by providing: • The name, location and contact details of the authorised waste disposal facility. • A statement within the 'Compliance with approved programs' section of the annual exploration compliance report confirming domestic and industrial waste was removed from all exploration sites and disposed of at an authorised waste disposal facility. • Photographic evidence within the annual exploration compliance report demonstrating that all fuel and chemical storage facilities were managed in accordance with EPA requirements. Maintain photographs of all exploration sites and provide representative photos within the annual exploration compliance report demonstrating that drill cuttings are: • removed from site and disposed of at a licensed facility • buried under a minimum of 30 cm of soil, or in accordance with EPA guideline, Radiation protection guidelines on mining in South Australia: mineral exploration, available on the EPA website, or • backfilled down the drillhole, within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised. Provide the information requested within |

| Environmental Aspect | Receptor | Potential Impact | Control Strategies | Risk Outcomes | Outcome Measurement Criteria |
|---|---|---|---|---|---|
| | | | drill rig and other ancillary vehicles for weeds and seeds. Tarps placed under drill rig to catch any oil leaks (if applicable). SA Health have been consulted regarding the existing ablution facilities at the Tunkillia Exploration Camp hand have approved its ongoing use. All waste will be taken off-site and be disposed in licensed facilities. Local facilities at Kingoonya, Tarcoola and Glendambo will be will be evaluated for smaller volumes of waste, whereas larger facilities at Coober Pedy Waste Transfer, Roxby Downs Opal Road landfill or Port Augusta, Collex Spencer Gulf Waste landfill will be used if found to be not sufficient. | | the 'Rehabilitation' section of the annual exploration compliance report. |

| Environmental Aspect | Receptor | Potential Impact | Control Strategies | Risk | Outcomes | Outcome Measurement Criteria |
|---|---|---|---|---|---|---|
| Native Vegetation | Flora and fauna and their habitats; includes Common wealth and state schedule d species. | Loss/modificatio n of native vegetation and associated habitats through the clearance of vegetation. | All ground disturbing activities such as developing access tracks and drill pads will be assessed before and disturbance is undertaken with specific regard to EPBC listed protected matters to ensure vulnerable or endangered habits are not disturbed. Specific reference is made to the Grey Falcon (listed) species and that to date none have been noted at the project site. Site assessment will consider the presence of nesting birds (particularly bird of prey with large nests) and avoidance of activities if nesting birds are detected. Drill sites will be relocated to avoid large vegetation and black oak trees. Previously disturbed areas/tracks will be re-used to reduce the clearance footprint. Hot works that are required on drill rigs are not to be performed on total fire ban days. New tracks will be constructed by driving across unprepared ground to retain root stock and minimise potential for erosion. Any new tracks to allow access to target areas will be designed along the | Low | No permanent loss/modifi cation of native flora and fauna population s and their habitats through: • clearance • fire • other unless prior approval under the relevant legislation is obtained. | Maintain before, during and after photographic evidence of all exploration sites (e.g. drillsites, new track exit/entry points off existing tracks, costeans, campsites) demonstrating that: • The area and method of disturbance is consistent with that described in the PEPR. • No uncontrolled fires* occurred as a result of exploration activities. Representative photos to be included within the annual exploration compliance report. |

| Environmental Aspect | Receptor | Potential Impact | Control Strategies | Risk Outcomes | Outcome Measurement Criteria |
|---|---|---|---|---|---|
| | | | shortest possible route in accordance with SA DEM guidelines. A preferential protocol of vegetation avoidance, followed by vegetation pruning and as a last resort vegetation clearing will be applied. Removal of mature trees will be undertaken as a last resort and with common species such as mallee eucalypts impacted before less common species. Any vegetation clearing activities will aim to leave rootstock intact in soil, to promote new growth after rehabilitation. During drilling phase, all vehicle movements to be limited to already created tracks and pads where possible. All new pads are to be rehabilitated after the drilling program is complete and tracks to be closed off to allow root stock to regenerate. CFS website to be monitored daily with regard to Fire Ban ratings and discussed at daily pre-work meetings. Adequate firefighting equipment will be at hand. No fires to be lit on fire ban days and only then once a formal risk assessment has | | |

| Environmental Aspect | Receptor | Potential Impact | Control Strategies | Risk Outcomes | Outcome Measurement Criteria |
|---|---|---|---|---|---|
| | | | been completed Hot work to be carried out only in designated cleared areas and only after a full formal risk assessment has been completed. Contact list on site at all times, listing emergency contact phone numbers. Factsheets of all threatened, vulnerable, and endangered (TVE) species will be generated and will be copied into induction booklets which will be handed out to each worker and made available in each work vehicle. Photographs and fact sheets of TVE and weeds / pathogens will be displayed in the camp. | | |

| Environmental Aspect | Receptor | Potential Impact | Control Strategies | Risk | Outcomes | Outcome Measurement Criteria |
|---|---|---|---|---|---|---|
| Soil | Soil | Disturbance to the soil profile and topography, and accelerated soil erosion caused by exploration activities (e.g. construction of sumps, new tracks and drill pads; ground compaction at laydown areas and camps). | The soil profile at Tunkillia contains sandy soil and calcrete and it can be difficult to segregate topsoil. Every effort will be made though to ensure calcrete rubble is not left on the surface. Each site will be checked and photographically monitored post rehabillitation. Sumps and excavations to be backfilled in the correct order i.e. subsoil in first, top layer in last All drill sites and tracks (other than dune crossings) will be scarified during rehabilitation depending on whether it will be deleterious to root stock or if regrowth has occurred. New dune crossings will be avoided where possible. If dune crossings are unavoidable, they will be undertaken in a manner which minimises vegetation and soil disturbance. Low dunes will be crossed at right angles whereas steep dunes will be cut at lesser angles, whichever causes the least disturbance. Use existing tracks where possible. Minimise potential for erosion on new tracks by not clearing low shrubby vegetation, before | | Where soil disturbance occurs as a result of exploration activities, ensure that: • topsoil quality and quantity is maintained • the soil profile and topography is reinstated to original conditions • there is no accelerated soil erosion. | Maintain before, during and after photographic evidence of all excavations, drillsites, camps, laydown areas and new tracks demonstrating that: • The soil profile and topography is reinstated to original conditions and is consistent with natural surroundings within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised. • Where required, sufficient topsoil is removed (depending on soil profile), stored separately from subsoil and reinstated (in the correct order) within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised. • There are no signs of accelerated soil erosion during and post rehabilitation of disturbed sites. Representative photos to be included within the annual exploration compliance report. Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report. |

| Environmental Aspect | Receptor | Potential Impact | Control Strategies | Risk Outcomes | Outcome Measurement Criteria |
|---|---|---|---|---|---|
| | | | driving over it. All vehicles to stay on established pads and tracks, no off-track driving. Avoid tight bends on tracks and impose speed restrictions. Maintain tracks if deterioration occurs, especially when multiple passes of heavy vehicles causes bull dust etc. Primary control for avoiding bull dust is avoiding repeated traffic in areas susceptible to bulldust (eg consideration of pipelines for water supply in place of water trucks, using alternative routes). If substitution approaches are not feasible, regular maintenance will be applied to flatten the track using towed implements such as tyres or flat bar. | | |

| Environmental Aspect | Receptor | Potential Impact | Control Strategies | Risk | Outcomes | Outcome Measurement Criteria |
|---|---|---|---|---|---|---|
| Stakeholders | Stakeholders | Stakeholders: - freehold land owners - perpetual lease holders - pastoral lease holders - Aboriginal land (Anangu Pitjantjatjara Yankunytjatjara and Maralinga Tjarutja lands) - Department of Defence - state government departments. - local government (councils) - federal government - native title parties. | All prescribed forms have been served in accordance with SA DEM requirements. The Project Manager is responsible for serving proscribed forms, managing the stakeholder engagement register and for determining all potential stakeholders. Pastoral Lease holders are kept regularly updated with planned exploration activates and exploration activates factor landholder's business concerns. Open two-way communication is promoted, and any landholder concerns are promptly resolved. The company maintains a register of stakeholder engagement and a register of complaints. GRAC, the registered Native Title Group, are likewise kept informed of planned work and formal clearances are undertaken in accordance with the NTMA. SA DEM is regularly updated on activities through statutory reporting and PEPR lodgement. SA DEM is always welcome to request additional information or | Low | Stakeholders are fully informed and satisfied with the proposed methods used to conduct exploration activities on their land, and all prescribed forms are served and agreements obtained in accordance with the Mining Act. | Provide the information requested within the 'Complaints' section of the annual exploration compliance report demonstrating that all reasonable complaints from stakeholders are resolved to the satisfaction of both parties prior to and ongoing during the course of exploration program, without the involvement of DEM. Provide the information requested within the 'Landowner details and liaison' section of the annual exploration compliance report demonstrating that prescribed forms were served and agreements obtained in accordance with the Mining Act prior to the commencement of exploration activities. |

| Environmental Aspect | Receptor | Potential Impact | Control Strategies | Risk Outcomes | Outcome Measurement Criteria |
|---|---|---|---|---|---|
| | | | updates. Any concerns or issues will be dealt with promptly. Workers through induction and ongoing supervision are kept abreast of legislative requirements and the need to maintain aesthetic values. | | |

| Environmental Aspect | Receptor | Potential Impact | Control Strategies | Risk | Outcomes | Outcome Measurement Criteria |
|---|---|---|---|---|---|---|
| Other (Hazardous Materials) | people / workers | exposure to respirable silica dust due to RC percussion drilling operations | Engineering controls on pneumatic drilling equipment that meets statutory requirements for the minimisation and control of dust generated by percussion drilling operations (eg misting of sample stream). Provision of appropriate PPE for people if exposure to dust is an operational risk. Setting up of drilling sites where possible to avoid exposure to dust generated from percussion drilling operations. Education for all workers prior to undertaking percussion drilling operations (via inductions) of the risks associated with esposure to respirable crystalline silica and how individuals can best minimise their exposure to dust. Given the remote location of the project site there are no other relevant receptors associated with this risk. Whilst the residual risk is rated as moderate on account of potential health impacts, the controls in place meet all the current requirements associated with managing this specific hazard. | | Exposure of people to fine dust from drilling reduced and minimised, | Long term health monitoring. |

# Supporting Information

## Photos

**Upload Photos**

**Expand/Collapse**

| File Name | File Size (Mb) | Created On | Download |
|---|---|---|---|
| IMG_3568.HEIC | 2.32 Mb | 14-04-2026 11:56:09 | Download (MERS/EP-03908/Supporting information/Photos/IMG_3568_2025-08-14T22-43-03.857Z.HEIC) |

| Site identification | Date taken | Photo number & PEPR section reference | Easting (GDA94) | Northing (DGA94) | Zone | Details and comments | Document ID |
|---|---|---|---|---|---|---|---|
| Main access track | 02/06/2025 | IMG_3568 | 478110 | 6545904 | 53 | representative photograph of soft dune along main access track requiring removal of soft windblown sand | IMG_3568 |

## Supporting Maps

**Upload Maps**

**Expand/Collapse**

| File Name | File Size (Mb) | Created On | Download |
|---|---|---|---|
| 2025 PEPR Map 1.jpg | 0.9 Mb | 14-04-2026 11:56:09 | Download (MERS/EP-03908/Supporting information/Maps/2025 PEPR Map 1_2025-08-14T22-46-28.976Z.jpg) |
| 2025 PEPR Map 2.jpg | 0.8 Mb | 14-04-2026 11:56:10 | Download (MERS/EP-03908/Supporting information/Maps/2025 PEPR Map 2_2025-08-14T22-46-47.613Z.jpg) |

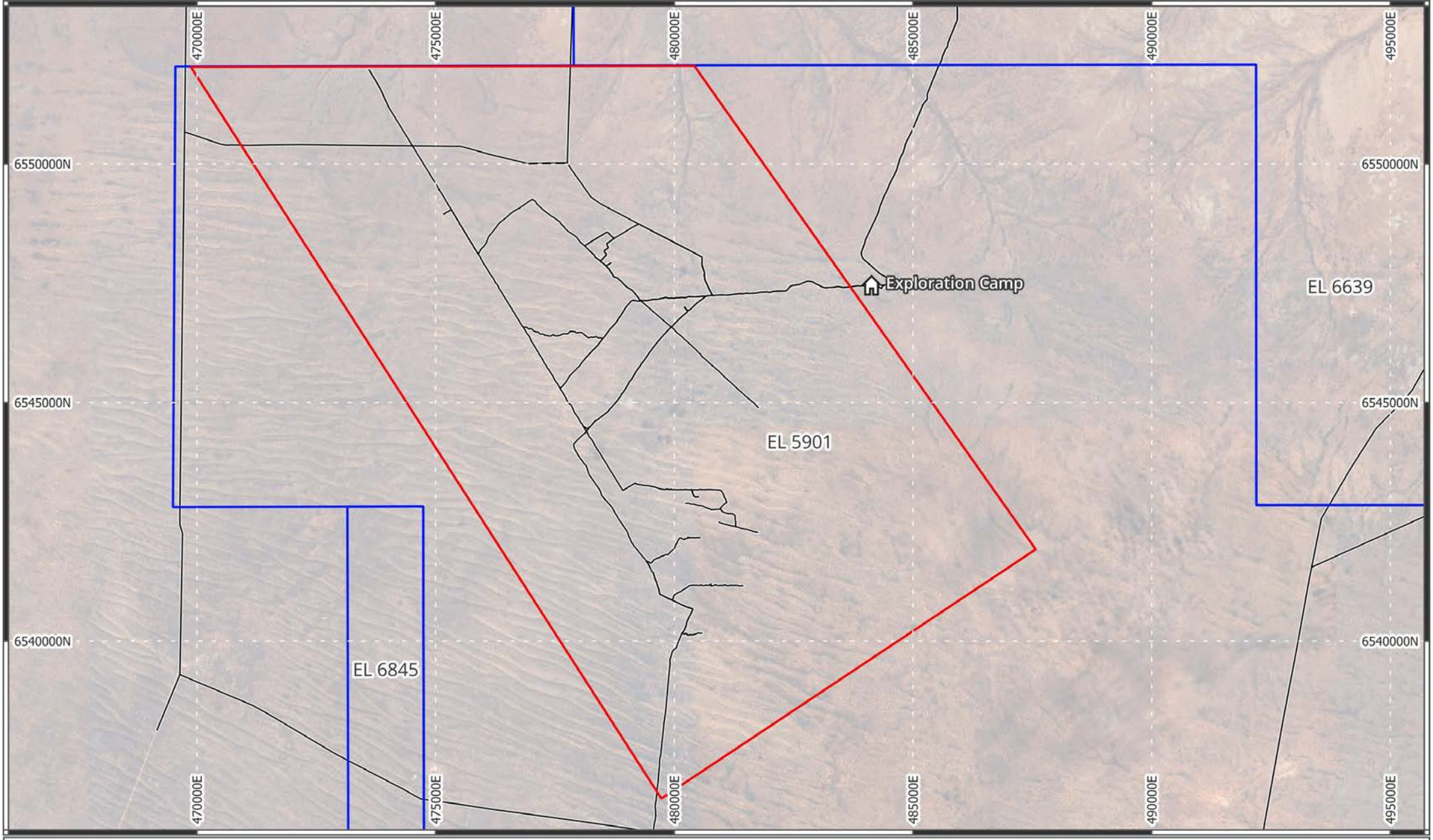
| File Name | File Size (Mb) | Created On | Download |
|---|---|---|---|
| 2025 PEPR Map 3.jpg | 1.26 Mb | 14-04-2026 11:56:11 | Download (MERS/EP-03908/Supporting information/Maps/2025 PEPR Map 3_2025-08-14T22-46-48.134Z.jpg) |
| 2025 PEPR Map 4.jpg | 0.95 Mb | 14-04-2026 11:56:10 | Download (MERS/EP-03908/Supporting information/Maps/2025 PEPR Map 4_2025-08-14T22-46-47.614Z.jpg) |

| Figure Description | Document ID |
|---|---|
| Attached maps referenced throughout the document | 2025 PEPR Maps 1,2,3,4 |

## Additional Information

**List any other supporting information and/or documents submitted with the application, including land access approvals/permits required to conduct the proposed exploration program.**

Nothing additional to provide




# Barton Gold

Tunkillia Project
2025 PEPR - Overview Map
Drawn A. Oertel 23/7/2025

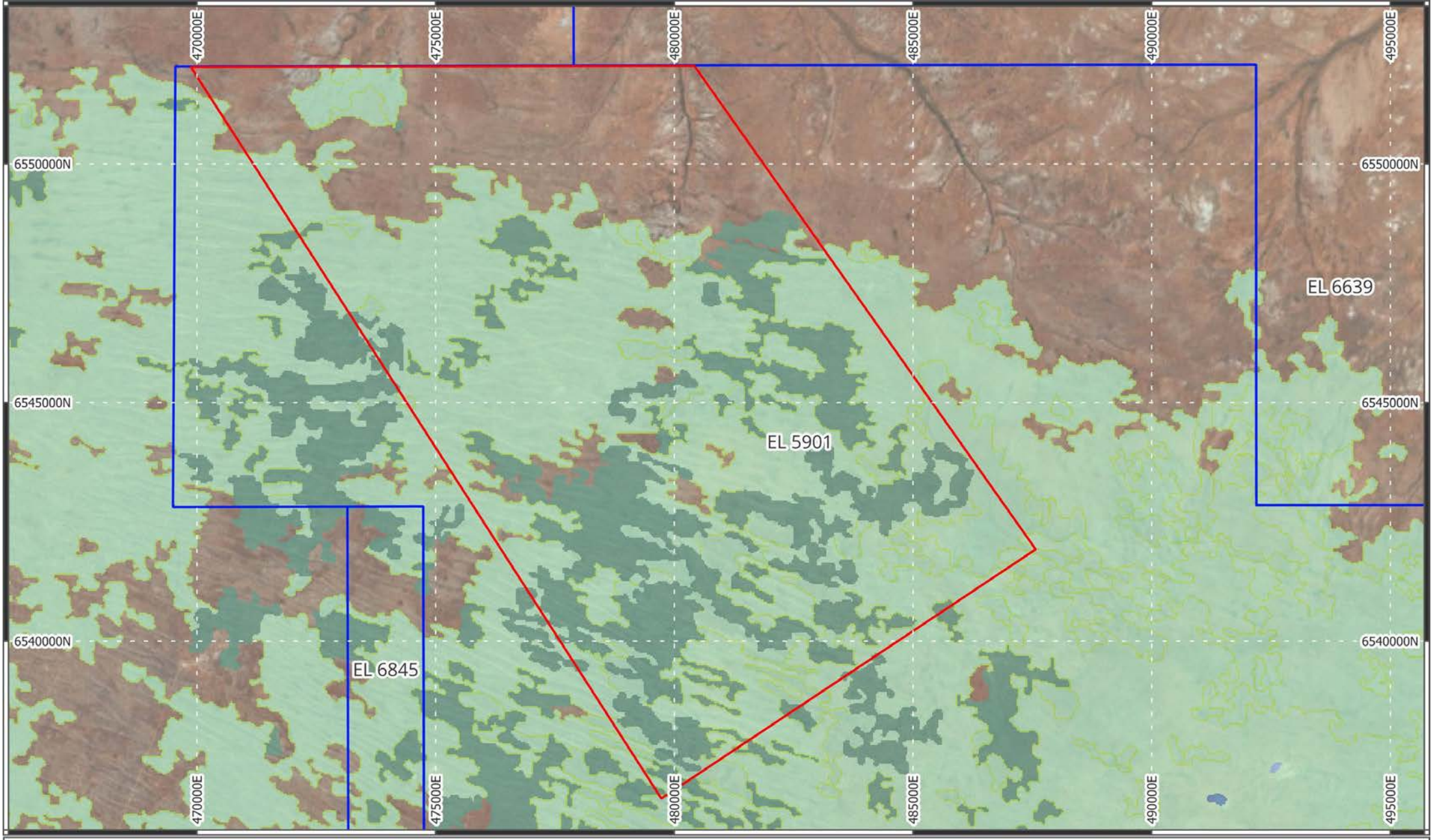
N

0 5 10 km

GDA2020 - MGA Zn53

Legend

- Baton Gold ELs
- 2025 Tunkillia PEPR outline
- Tunkillia Access Tracks
- Tunkillia Camp




# Barton Gold

Tunkillia Project
2025 PEPR - Groundwater Dependent Ecosystems
Drawn A. Oertel 23/7/2025

N

0 5 10 km

GDA2020 - MGA Zn53

Legend

- BGD ELs
- 2025 Tunkillia PEPR outline
- High Potential GDE - from national assessment
- Low Potential GDE - from national assessment

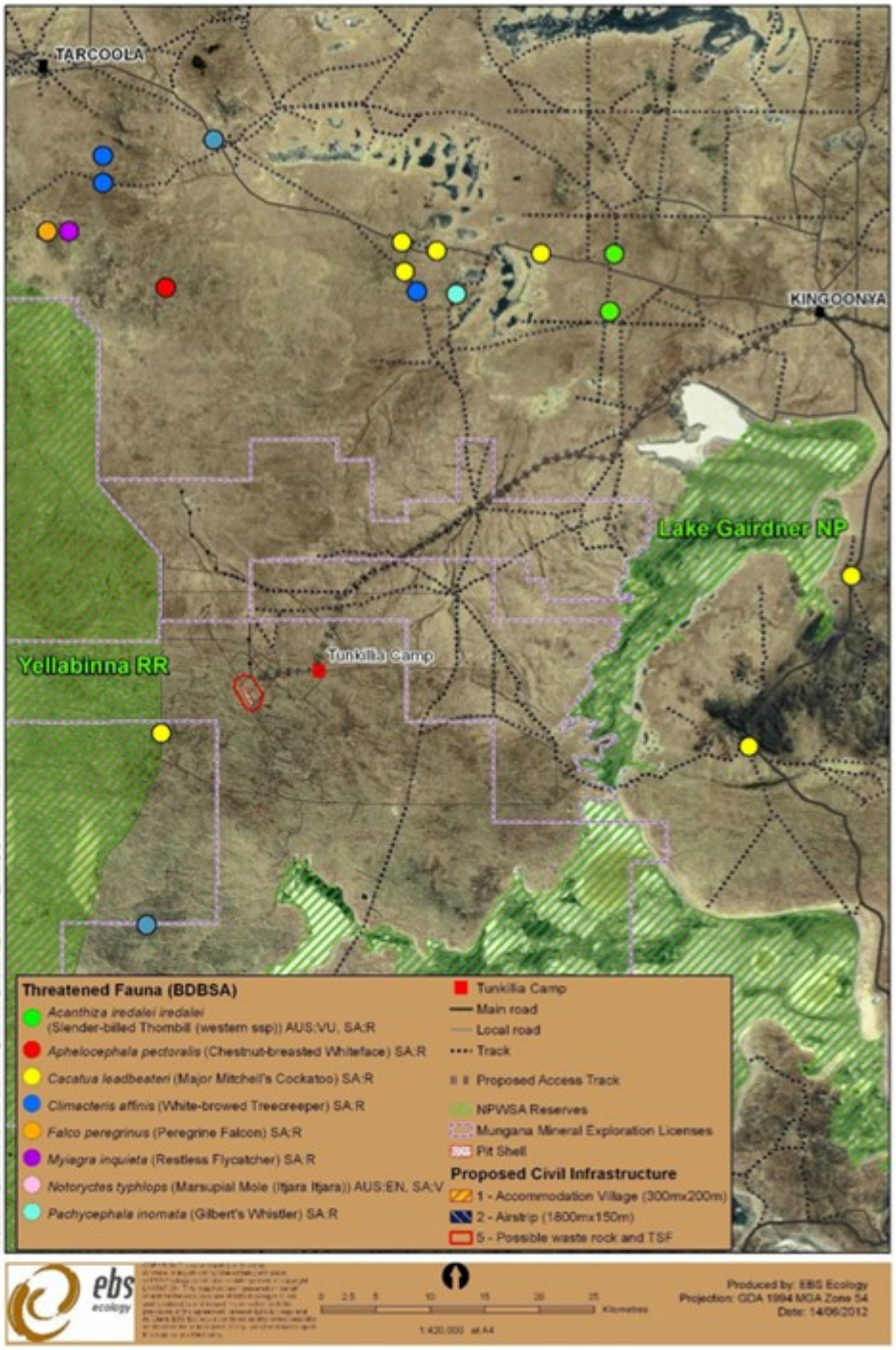



**Figure 4. Threatened fauna records from the BDBSA search (50km buffer).**

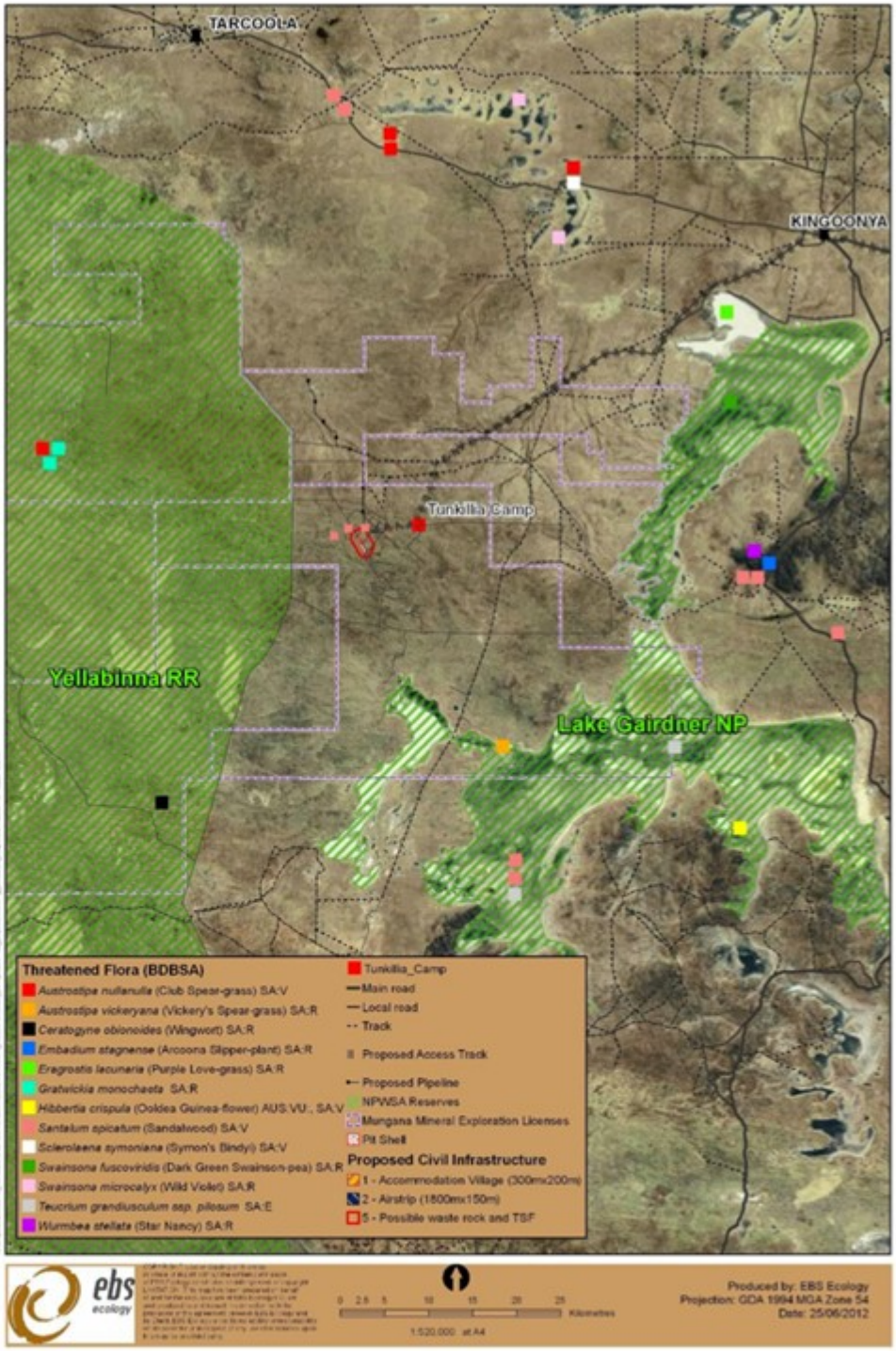


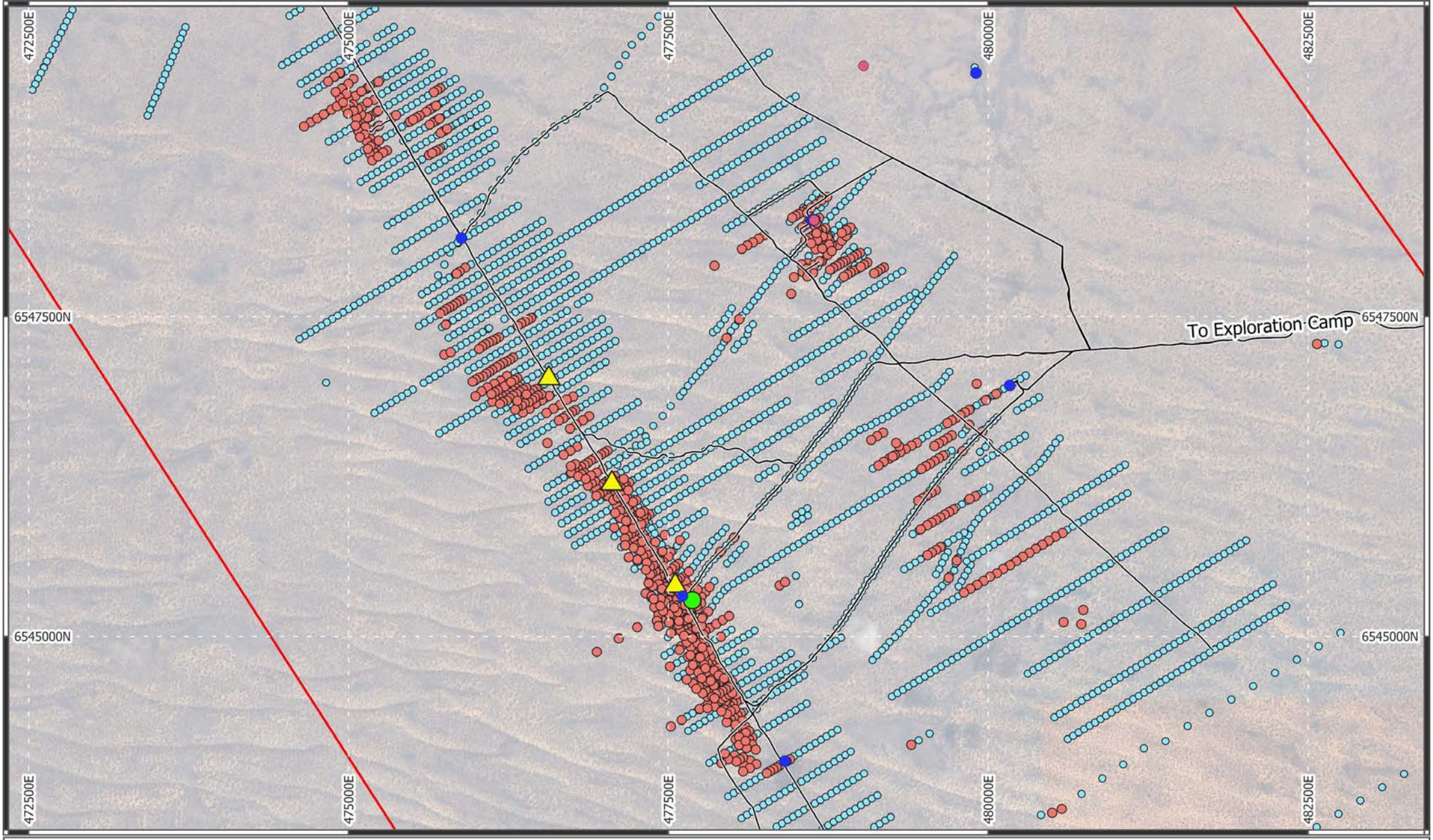

**Figure 3. Threatened flora records from the BDBSA search (50km buffer).**

| Species | Common name | NPW Act rating | EPBC Act rating |
|---|---|---|---|
| Pachycephala inornata | Gilbert's Whistler | Rare | - |
| Cacatua leadbeateri | Major Mitchell Cockatoo | Rare | - |
| Climacteris affinis | White-browed Treecreeper | Rare | - |
| Calidris ferruginea | Cerlew Sandpiper | Endangered | *Critically endangered* |
| Falco hypoleucos | Grey Falcon | Rare | *Vulnerable* |
| Leipoa ocellata | Malleefowl | Vulnerable | *Vulnerable* |
| Pezoporus occidentalis | Night Parrot (Extinct in area) | Endangered | *Endangered* |
| Polytelis alexandrae | Pricess Parrot | Vulnerable | *Vulnerable* |
| Pseudomys australis | Plains Rat | Vulnerable | *Vulnerable* |
| Sminthopsis psammophila | Sandhill Dunnart | Vulnerable | *Endangered* |
| Apus pacificus | Fork-tailed Swift | Not Listed | *Threatened* |
| Motacilla cinerea | Grey Wagtail | Not Listed | *Threatened* |
| Motacilla flava | Yellow Wagtail | Not Listed | *Threatened* |
| Actitis hypoleucos | Common Sandpiper | Rare | *Threatened* |
| Calidris acuminata | Sharp-tailed Sandpiper | Not Listed | *Threatened* |
| Calidris melananotos | Pectoral Sandpiper | Not Listed | *Threatened* |
| Charadrius veredus | Oriental Plover | Not Listed | *Threatened* |
| Tringa nebularia | Common Greenshank | Not Listed | *Threatened* |
| Ardea alba | Great Egret | Not Listed | *Threatened* |
| Ardea ibis | Cattle Egret | Not Listed | *Threatened* |
| Chrysococcyx osculans | Black-eared Cuckoo | Not Listed | *Threatened* |
| Haliaeetus leucogaster | White-bellied Sea-Eagle | Endangered | *Threatened* |
| Merops ornatus | Rainbow Bee-Eater | | *Threatened* |

| Species/habitat | Common name | NPW Act rating* | EPBC Act rating† |
|---|---|---|---|
| Santalum spicatum | Sandalwood | Vulnerable | Not Listed |
| Frankenia plicata | | Vulnerable | Endangered |
| Hibbertia crispula | Ooldea Guniea Flower | Vulnerable | Vulnerable |
| Swainsona pyrophila | Yellow Swainson-pea | Rare | Vulnerable |

* *National Parks and Wildlife Act 1972* (NPW Act) conservation status includes extinct, endangered, vulnerable, threatened and rare.

† *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) listings include extinct, extinct in the wild, critically endangered, endangered, vulnerable and conservation dependent.




# Barton Gold

Tunkillia Project
2025 PEPR - Project Drilling Map
Drawn A. Oertel 23/7/2025

N

0 1 2 km

GDA2020 - MGA Zn53

Legend

- 2025 Tunkillia PEPR outline
- Site Access Tracks
- Baseline Dunes
- Drill Cuttings Disposal Pit
- Water & Monitoring Bores
- Historical RC-DD Holes
- Historical RAB-AC Holes


# Barton Gold

Tunkillia Project
2025 PEPR - Exploration Camp
Drawn A. Oertel 23/7/2025

N

0 50 100 m

GDA2020 - MGA Zn53

Legend

- Site Access Tracks
- Laydown Area Outline
- Camp Facilities

# Summary: 5835-1022



| | | | |
|---|---|---|---|
| **Drillhole No.** | 285972 | **Name** | PB 4 |
| **Permit No.** | 211447 | **Network** | |
| **Class** | WW | **Obswell No.** | |
| **Water Point Type** | | **Status** | |
| **Purpose** | | **Aquifer** | |

Previous Next **Data Download**

## Depth

| | | | |
|---|---|---|---|
| **Original Drilled Depth (m)** | 139 | **Date** | 12/09/2012 |
| **Maximum Depth (m)** | 139 | **Date** | 12/09/2012 |
| **Latest Open Depth (m)** | 139 | **Date** | 12/09/2012 |
| **Ref Elev (m AHD)** | | **Date** | 19/09/2023 |
| **Cased To (m)** | 35.5 | **Min Diameter (mm)** | 158 |

## Latest Groundwater Readings

| | | | | | |
|---|---|---|---|---|---|
| **SWL (m)** | 28 | **RSWL (m AHD)** | 156.4 | **Date** | 12/09/2012 |
| **EC (µS/cm)** | 114900 | **TDS (mg/L)** | 97665 | **Date** | 11/09/2012 |
| **Yield (L/sec)** | 10 | **Date** | 12/09/2012 | | |

## Location

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MGA Easting** | 478639.77 | **MGA Northing** | 6548254.46 | **MGA Zone** | 53 | | | | |
| **Latitude** | **Degrees** | 31 | **Minutes** | 11 | **Seconds** | 58.59 | **Decimal** | -31.1996083 | |
| **Longitude** | **Degrees** | 134 | **Minutes** | 46 | **Seconds** | 32.826 | **Decimal** | 134.775785 | |
| **250,000 map sheet** | SH5314 CHILDARA | **100,000 map sheet** | 5835 Meelera | **50,000 map sheet** | 1 | **10,000 map sheet** | 18 | **2,500 map sheet** | n |
| **Hundred** | | **Plan** | F252139 | **Parcel** | Q205 | **Title** | CL6190/393 | | |