

# PRCP schedule

*Environmental Protection Act 1994*

## PRCP schedule **P-PRCP-100779248\_V1**

This is the approved form for a PRCP schedule issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

### PRCP schedule: P-PRCP-100779248\_V1

#### PRCP schedule holder(s)


| Name(s)                                 | Registered address  |
|---|---|
| Umal Consolidated Pty Ltd               | Level 14, 480 Queen Street BRISBANE CITY QLD 4000           |
| BHP COAL PTY LTD                        | Level 14, 480 Queen Street BRISBANE CITY QLD 4000 Australia |
| QCT INVESTMENT PTY. LTD                 | Level 16 480 Queen Street BRISBANE CITY QLD 4000 Australia  |
| MITSUBISHI DEVELOPMENT PTY LTD          | Level 16, 480 Queen Street BRISBANE CITY QLD 4000           |
| QCT MINING PTY. LTD                     | Level 16 480 Queen Street BRISBANE CITY QLD 4000 Australia  |
| QCT RESOURCES PTY LIMITED               | Level 16, 480 Queen Street BRISBANE CITY QLD 4000           |
| BHP Queensland Coal Investments Pty Ltd | Level 14, 480 Queen Street BRISBANE CITY QLD 4000           |

#### Location details

| Location(s)                       |
|-----------------------------------|
| Mining Lease (ML) ML1763, ML70421 |

#### Take effect

In accordance with section 202B of the *Environmental Protection Act 1994* (EP Act), the PRCP schedule has effect on the day the environmental authority for carrying out relevant activities on land to which the schedule relates takes effect. Pursuant to section 202C of the EP Act, a PRCP schedule continues in force until the environmental authority for the relevant activities to which the PRCP schedule relates is cancelled or surrendered, even if the resource tenure expires or is cancelled and even if the relevant environmental authority is suspended under Chapter 5, part 11 or 11A of the EP Act.



Signature

22 October 2025

Date

Juliana Mccosker  
Department of the Environment, Tourism, Science and Innovation  
Delegate of the administering authority  
*Environmental Protection Act 1994*

**Enquiries:**  
Business Centre Coal  
PO BOX 3028, Emerald QLD 4720  
(07) 4987 9320  
CRMining@detsi.qld.gov.au

### **Obligations under the *Environmental Protection Act 1994***

Pursuant to section 202E of the EP Act, if there is an inconsistency between an environmental authority and a PRCP schedule, the environmental authority prevails to the extent of the inconsistency.

Pursuant to section 285 of the EP Act:

- the holder of a PRCP schedule must commission an audit of the schedule by a rehabilitation auditor for the following periods (each an audit period) —
  - (a) the 3-year period starting on the day the schedule takes effect
  - (b) each 3-year period starting on the day after the previous audit period ended.
- the holder must, within 4 months after the end of each audit period, give the administering authority -
  - (a) the rehabilitation auditor's report (an audit report) about the audit that complies with section 286 of the EP Act, and
  - (b) a declaration for the audit report that complies with section 285 of the EP Act.

In addition to the requirements found in the conditions of this PRCP schedule, the holder must also meet their obligations under the environmental authority, the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the EP Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443).

### **PRCP schedule**

The PRCP schedule incorporates the following sections:

- Section A - Conditions of PRCP schedule
- Section B - Final site design and reference maps
- Section C - Post mining land uses

## Section A - Conditions of PRCP schedule

Pursuant to section 206A of the EP Act:

- It is a condition of this PRCP schedule that, in carrying out a relevant activity under the schedule, the holder must comply with a requirement stated in the environmental authority relevant to carrying out the activity.
- It is a condition of this PRCP schedule that the holder must comply with the following matters stated in the schedule -
  - (a) each rehabilitation milestone and management milestone;
  - (b) when each rehabilitation milestone and management milestone is to be achieved.

### General conditions

- PRCP1** Prior to commencing longwall development within mining leases ML1763 and ML70421, the holder must nominate in writing to the administering authority a commencement date for the mining activities in the format of a calendar year.
- PRCP2** Once a calendar year is nominated under condition **PRCP1**, that nominated year is to be read in place of XXXX in the PRCP schedule.
- PRCP3** Mining disturbance authorised under environmental authority EPML03337715 cannot be undertaken until an associated rehabilitation outcome has been provided in the PRCP Schedule.
- PRCP4** The holder must for each rehabilitation area, achieve the corresponding rehabilitation milestone criterion (milestone reference):
- a) for the cumulative area available specified in this schedule; and
  - b) by the milestone completion date specified in this schedule.
- PRCP5** Where land becomes available for rehabilitation more than five years earlier than the nominated 'Date area is available' in this schedule, the holder must:
- a) notify the administering authority in writing within 30 days of the land becoming 'available for rehabilitation'; and
  - b) whether or not it considers that it would be reasonable and appropriate to apply to the administering authority to amend this schedule in a way that maximises the progressive rehabilitation to a stable condition.
- Note:
- 1) Reference to "earlier than the nominated date in the schedule" means a date that is greater than 5 year prior to the date nominated in the schedule.
  - 2) Assessment of land becoming available is undertaken on a nominally annual basis.
  - 3) Rehabilitation of land size must be practicable and economical.
  - 4) The dates by which milestones are to be completed is brought forward, to the extent it is reasonably practicable to do so, by the same amount of time as the commencement was brought forward.
- PRCP6** The holder must maintain a risk register that identifies the risks of not achieving:
- a) a stable condition for post-mining land uses; and
  - b) how the risks are being managed or minimised.
- PRCP7** The risk register (**PRCP6**) must be reviewed 5-yearly and include consideration of the outcomes of PRCP monitoring data.
- PRCP8** Where an area achieves a rehabilitation milestone, the holder must continue to achieve the milestone criteria for that area until:

- a) a progressive certification area has satisfied the provisions of section 318ZB (4) of the EP Act; or
- b) a surrender is approved.

**PRCP9** The holder must carry out monitoring in accordance with:

- a) the monitoring and maintenance program described in the rehabilitation planning part for the activity version Red Hill Mine PRCP – Version: 3.0 or more recent version of the PRC plan relating to this schedule;
- b) any requirement under this schedule; and
- c) as necessary to demonstrate achievement of each rehabilitation milestone criteria.

Note: Where there is any inconsistency between this schedule and the rehabilitation planning part the schedule criteria prevail to the extent of the inconsistency.

**PRCP10** The holder must make, and keep until the final milestone criteria has been met or progressive rehabilitation certification has been achieved, up to date records on:

- a) achievement and maintenance of each rehabilitation milestone criteria of this schedule;
- b) rehabilitation activities and the results of these activities (including but not limited to, actions taken, date, location, methods, data collected and additional records where relevant e.g. QA/QC, photos, waste tracking and disposal records, appropriately qualified person details and assumptions);
- c) maintenance of rehabilitation and the results of maintenance activities;
- d) monitoring of rehabilitation and the results of monitoring;
- e) details and results of rehabilitation trials;
- f) designs, drawings, specifications and any similar documents developed in accordance with good professional practice in relation to rehabilitation milestones or milestone criteria;
- g) all documents in relation to the requirements of this schedule, including reports (e.g. site investigation report), statements (e.g. site suitability statement), certifications, assessments, investigations; inspections, audits or any similar documents developed in relation to rehabilitation/ milestones or milestone criteria;
- h) landholder agreements; and
- i) details of community consultation in the community consultation register relating to rehabilitation and closure activities.

**PRCP11** A summary report of key records under **PRCP10** must be maintained until the relevant environmental authority has been surrendered or progressive rehabilitation certification is achieved.

**PRCP12** Records made under **PRCP10** must be provided to the administering authority in the specified format within 10 business days of a written request or a longer duration as agreed by the administering authority.

**PRCP13** All AQP designs, specifications, certifications, assessments and any similar documents, must:

- a) include documented consideration of any relevant guideline or publication material, including material published by the administering authority;
- b) detail the boundary conditions (of any model);
- c) detail any assumptions made, limitations and areas of uncertainty; and
- d) must contain sufficient detail to allow for independent peer review and substantiation.

**PRCP14** With respect to groundwater:

- a) The holder must develop site-specific groundwater quality limits by 2055<sup>1</sup> for the bores listed in **PRCP schedule Appendix 9: Groundwater monitoring locations** to update the **PRCP schedule Appendix 10: Interim groundwater quality limits**;

- b) The monitoring bores listed in **PRCP schedule Appendix 9: Groundwater monitoring locations** must be installed by XXXX + 20 years;
- c) Following monitoring bore installation as per **PRCP14.b)**, groundwater quality and levels must be monitored six monthly at bores specified in **PRCP schedule Appendix 9: Groundwater monitoring locations**, for all quality characteristics listed in **PRCP schedule Appendix 10: Interim groundwater quality limits** as an interim measure till **PRCP14.a)** fulfilled;
- d) The groundwater model must be recalibrated and predictions rerun at least every five years from XXXX + 20 years, and include data from bores identified in the broader Goonyella Riverside groundwater monitoring network.

**PRCP15** With respect to groundwater:

- a) Groundwater quality results for compliance bores have not exceeded the site-specific groundwater quality limits specified in **PRCP schedule Appendix 10: Interim groundwater quality limits**, for 3 consecutive results within the five-year period immediately prior to surrender; and
- b) Groundwater levels - the Red Hill Mine (RHM) groundwater model predictions and the Goonyella Riverside Mine water balance model predictions demonstrate the adjacent Goonyella Riverside residual voids will develop into groundwater sinks for waters hosted within the mined area of the RHM Goonyella Middle Seam.

**PRCP16** With respect to surface water:

- a) The holder must install monitoring equipment at the relevant surface water monitoring locations specified in **PRCP schedule Appendix 11: Surface water monitoring locations** by XXXX + 20 years;
- b) The holder must develop site-specific surface water quality limits by 2055<sup>1</sup>, for the watercourses listed in **PRCP schedule Appendix 11: Surface water monitoring locations** to update the **PRCP schedule Appendix 12: Interim surface water quality limits**;
- c) Following completion of **PRCP16.a)**, surface water quality must be monitored at least once per month during flow at downstream locations specified in **PRCP schedule Appendix 10: Surface water monitoring locations** when flows at the downstream gauging station record  $\geq 5\text{m}^3/\text{second}$  for the Isaac River and  $\geq 1\text{m}^3/\text{second}$  for other monitored watercourses, when safe to collect samples.

**PRCP17** With respect to surface water:

- a) Surface water quality monitored as per **PRCP16.c)** must not exceed the site-specific surface water quality limits as per **PRCP schedule Appendix 12: Interim surface water quality limits**, within the 5-year period immediately prior to surrender; and
- b) If the surface water quality exceeds criteria **PRCP17.a)**, the applicable upstream site must be compared to the downstream site result, and the quality result measured at a downstream site must be equal to or less than the quality result measured at the applicable upstream site.

**PRCP18** Where the surface water quality at the downstream site exceeds the upstream site result as per **PRCP17.b)**, an AQP must complete an assessment of the cause of the exceedance and risk of rehabilitation not achieving a stable condition within the schedule timeframe and:

- a) Where there is a low risk to achieving a stable condition from the mining tenure (ML1763 and ML70421), then no further action is to be taken; or

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<sup>1</sup> This date relates to the Goonyella Riverside Mine surface water monitoring program development.

- b) Where there is a risk greater than low to achieve a stable condition, then an assessment of potential environment harm and any changes or rectification actions to rehabilitation activities must be determined and implemented;
- c) The EA holder will be non-compliant with **PRCP17**, if **PRCP18.b)** is triggered more than three times over 5 consecutive years prior to surrender and **PRCP17.a)** is reset;
- d) The assessment/s under **PRCP18** must be completed and provided to the administering authority within 6 months of receiving the relevant sampling results.

**PRCP19** Disturbance due to minor ancillary activities in areas not planned to be mined and not within a Rehabilitation Area in this schedule must be rehabilitated within six months of the completion of the activity. Land must be rehabilitated to a stable condition and achieve the pre-disturbance land use as detailed in **Figure 1 – Final Site Design**.

**PRCP20** The holder of the PRCP must rehabilitate any disturbance from the Seismic and Drilling Program activities, as shown in **Appendix 14: Exploration Program Areas, Appendix 15: Seismic Program Layout** and **Appendix 16: Drilling Program Layout**, in accordance with the following requirements:

- a) weeds or invasive species must be managed to ensure the protection of the remnant vegetation communities;
- b) for the Seismic Program:
  - i. all materials (including rubbish, survey pegs and geophones) must be removed from the study area; and
  - ii. where topsoil has been removed and compacted, a grader must be used to loosen and scarify the topsoil;
- c) the rehabilitation activities mentioned in PRCP20(b) must occur within the same dry season in which the seismic disturbance was conducted; and
- d) for the Drilling Program:
  - i. all infrastructure must be removed; and
  - ii. sumps must be pumped or dried out, backfilled and compacted with an additional crown to allow for settlement; and
  - iii. drill holes must be grouted (with PVC casings cut to **400mm** below the surface), capped and backfilled; and
- e) stockpiled topsoil must be redistributed over drill pads and access tracks.

**PRCP21** <sup>2</sup>The holder of the PRCP schedule must decommission all non-artesian drill holes, apart from those still required for monitoring purposes as soon as practical, but no later than 6 months after the hole was drilled by undertaking the following actions:

- a) where practical dispose of all unused drill chips to the hole or to a sump pit; and
- b) cap the hole at a depth that is appropriate for the previous land use of the area (unless the landowner stipulates a future use which requires the cap to be placed deeper); and
- c) backfill the hole above the cap with soil or material similar to the surrounding soil or material.

**PRCP22** <sup>2</sup>The holder of the PRCP schedule must isolate non-artesian aquifers where a drill hole intersects more than one water bearing strata by casing or plugging the hole as soon as practical after the hole is no longer required, but no later than **2 months** after the hole was drilled, apart from those holes that are still required for monitoring purposes if:

- a) the flow difference between aquifers exceeds **500 L/hour**; and
- b) the difference in electrical conductivity of water is **greater than 10%** of the lower value.

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<sup>2</sup> This condition relates to Appendix 14: Exploration Program Areas, Appendix 15: Seismic Program Layout and Appendix 16: Drilling Program Layout.

- PRCP23** <sup>2</sup>Conditions PRCP21 and PRCP22 do not apply to a non-artesian exploration drill hole if:
- a) the landowner and the explorer have agreed that it should be left for conversion to a water bore; and
  - b) the landowner gives a written undertaking to accept responsibility for the hole; and
  - c) the details of the agreement and the drill hole (such as its GPS location and the drill logs showing the water bearing strata and flow rates) are provided to the Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development (or its successor) within **30 days** of the landowner giving the undertaking; and
  - d) the hole is temporarily capped so as to prevent possible ingress of surface waters and associated sediments and pollutants.
- PRCP24** <sup>2</sup>The holder of the PRCP schedule must ensure that exploration drill holes that strike artesian flows of water that exceeds 500 L/hour for seven days must be either:
- a) decommissioned as soon as practical, but no later than 1 month after the hole was drilled, apart from holes that are still required for monitoring or evaluation purposes. Refer to Report No. SW4 – “Minimum Construction Requirements for Water Bores in Australia”, (ARMCANZ 1997); or
  - b) capped to allow for future conversion into a controlled artesian bore by a licensed water bore driller; or
  - c) converted into a controlled artesian bore by a licensed water bore driller, provided that:
    - i. the landowner has undertaken in writing to accept responsibility for the drill hole; and
    - ii. the explorer provides details of the agreement and the drill hole to the Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development (or its successor) within **30 days** of obtaining the landowner’s agreement.
- PRCP25** <sup>2</sup>For all other areas on the mining tenement, the holder of the PRCP schedule must complete the rehabilitation processes on all areas disturbed by Seismic and Drilling Program activities, apart from those areas currently being utilised for those activities, as soon as practical and at least within **six months** of the completion of works in those areas.
- PRCP26** <sup>2</sup>The holder of the PRCP schedule must ensure that exploration drill holes that are to be retained for future mineral resource evaluation purposes are cased and capped. Holes to be retained for more than **three years** must be capped with steel casing and appropriately identified.
- PRCP27** The holder of the PRCP schedule must determine any design requirements prior to the installation of the drainage features across the final landform, which:
- a) considers the flood risk and subsidence impacts;
  - b) supports geotechnical stability of these structures;
  - c) is endorsed by an AQP as not posing a risk to final landform function or design, including during flood events;
  - d) is submitted to the administering authority.
- PRCP28** Rehabilitation of subsidence must be undertaken during the operational mine life in accordance with a Subsidence Management Plan, to meet the outcomes of this PRCP schedule.
- PRCP29** Prior to the commencement of mining activities, the holder may undertake an updated Land Suitability Assessment (LSA), endorsed by an AQP and submit the assessment report to the administering authority.

**END OF CONDITIONS**

Section B - Final site design and reference maps

Figure 1 – Final Site Design

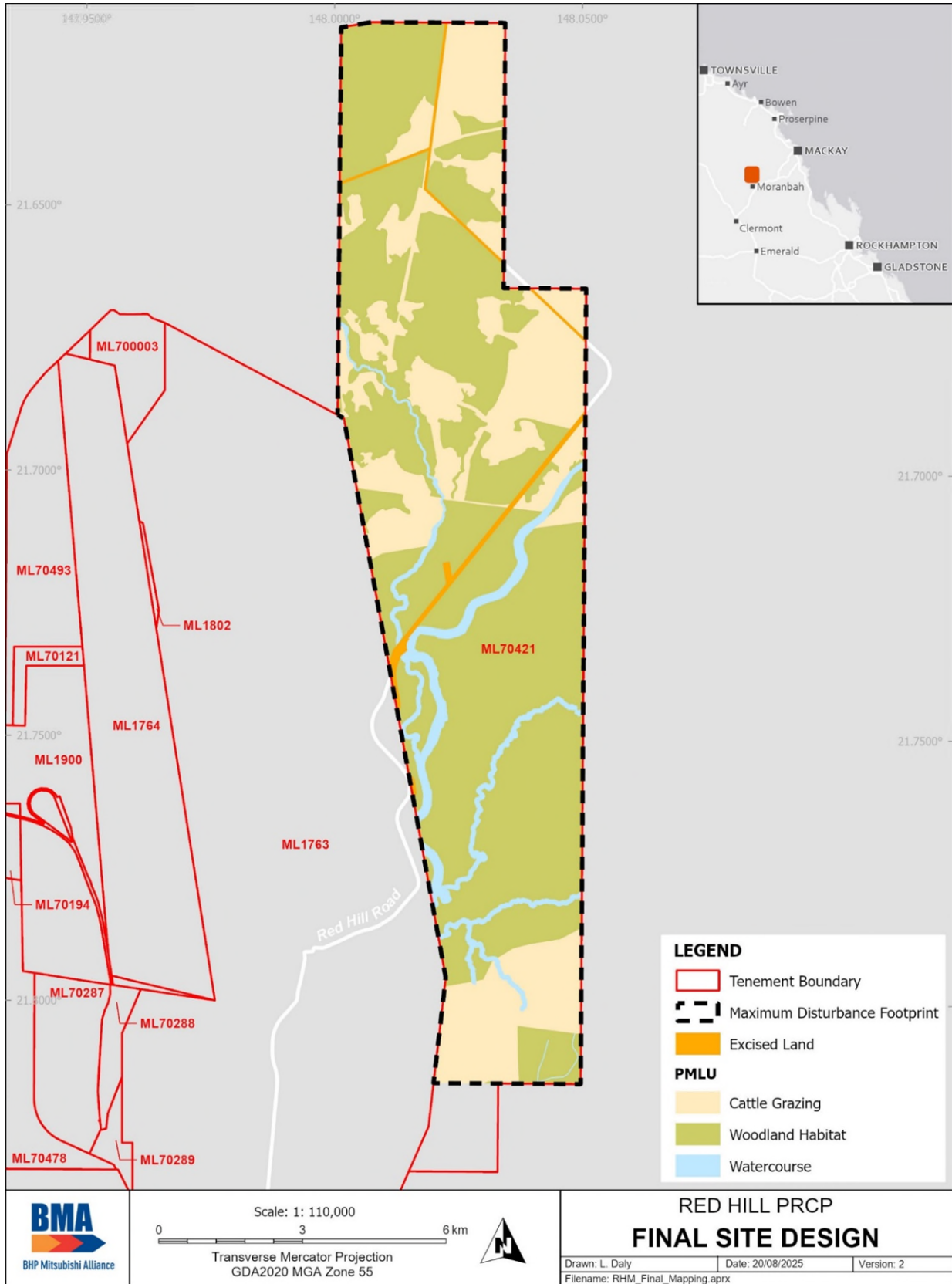
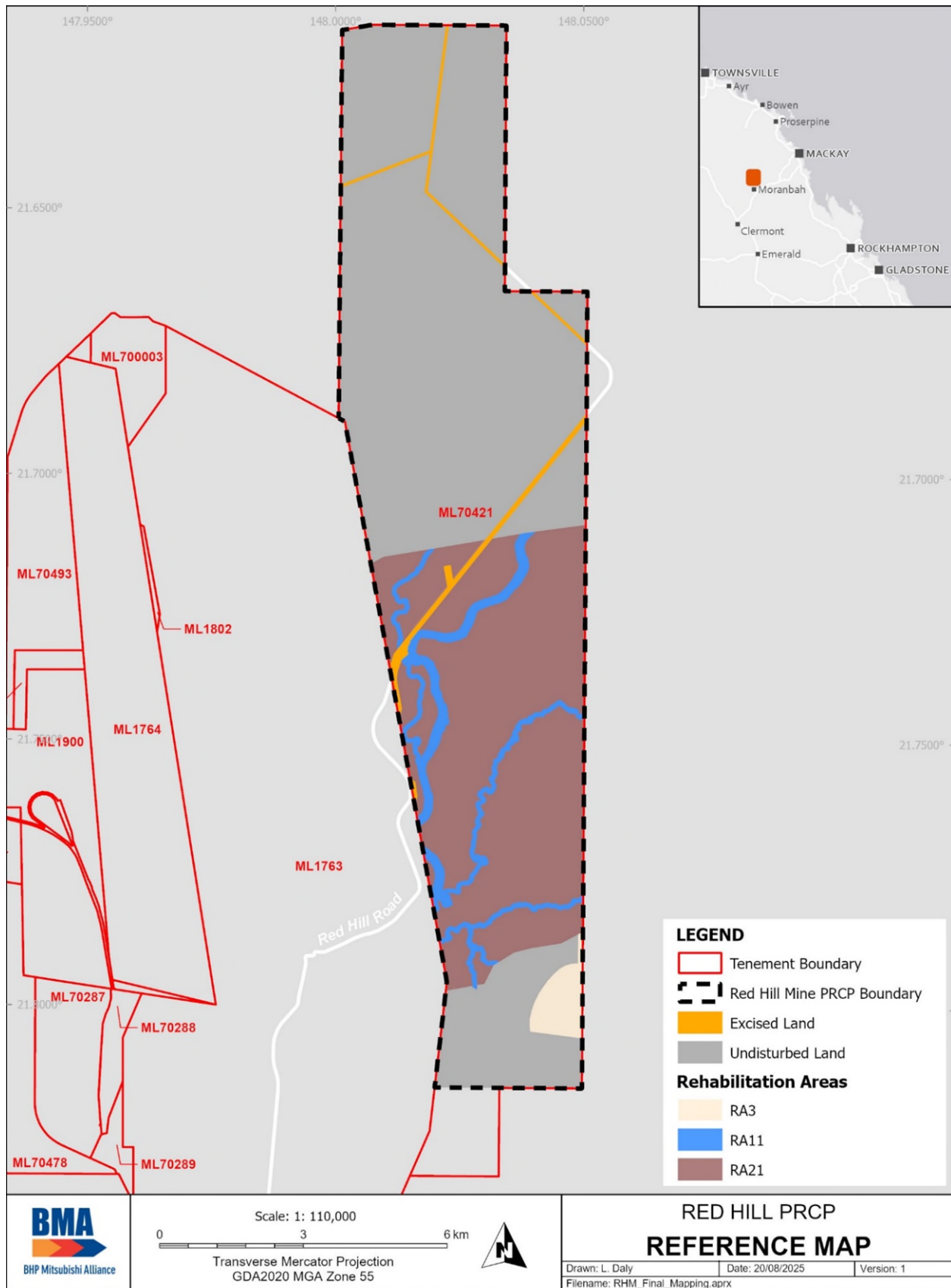


Figure 1.1 – Reference Map



## Section C – Definitions

|   |   |
|---|---|
| <b>3P grasses</b>                                   | Perennial, productive and palatable grasses.  |
| <b>Appropriately qualified person (AQP)</b>         | Means a person who has professional qualifications, training, skills and experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods or literature.   |
| <b>Activity (EP Regulation)</b>                     | Includes that part, if any, of an activity relating to the following—<br>(a) preparing a place for the activity before carrying out the activity;<br>(b) rehabilitating a place after it has been used for carrying out the activity.   |
| <b>BioCondition</b>                                 | Refers to the <i>BioCondition Assessment Manual</i> (Eyre, T.J., Kelly, A.L, Neldner, V.J., Wilson, B.A., Ferguson, D.J., Laidlaw, M.J. and Franks, A.J. (2015)) and <i>BioCondition: A Condition Assessment Framework for Terrestrial Biodiversity in Queensland. Assessment Manual. Version 2.2</i> (Queensland Herbarium, Department of Science, Information Technology, Innovation and Arts, Brisbane) or later versions thereof.             |
| <b>Contaminants</b>                                 | Can be a gas, liquid or solid; or an odour; or an organism (whether alive or dead), including a virus; or energy, including noise, heat, radioactivity and electromagnetic radiation; or a combination of contaminants.   |
| <b>Contaminated Land Investigation Document</b>     | As defined in section 387 of the <i>Environmental Protection Act 1994</i> (Qld) (EP Act).   |
| <b>Growth media</b>                                 | Is defined as all soil and soil-like material that will support the final vegetation cover. This includes the topsoil and subsoil where these materials are applied independently. Where the topsoil is incorporated into the underlying subsoil/spoil, topsoil refers to the depth of incorporation and the remaining depth is regarded as subsoil. The total depth of growth media is nominally considered to be the effective plant root zone. |
| <b>Groundcover</b>                                  | Anything in contact with the soil surface, for example, live cover, standing dry cover, organic litter (including leaves, hay, woody debris) or rocks.  |
| <b>Gully</b>  | A gully is a channel excavated by water, more than 0.3 m deep.  |
| <b>Index of Diversion Condition modified method</b> | For watercourse rehabilitation not within a diversion (i.e. crossings/culverts), a modified IDC method with a reduced number of monitoring points within each reach will be used.   |
| <b>Minor ancillary activities</b>                   | Includes roads, access tracks and culverts, fences, underground services, low-impact telecommunication facilities, electrical sub-stations and switch yards, transmission grid works and supply network works, storage depots, pipelines and pumps, groundwater bores, gas drainage bores, monitoring and investigation works and exploration activities.   |
| <b>Representative</b>                               | Representative means a sample set that covers the variance in monitoring or other data due to either natural changes or operational phases of the mining activities.  |
| <b>Rill</b>   | A rill is a channel excavated by water, less than 0.3 m deep.   |
| <b>Unacceptable risk of environmental harm</b>      | Means as defined in section 14 (1) and (2) of the <i>Environmental Protection Act 1994</i> (Qld).   |
| <b>Stabilised</b>                                   | Means one or both of the following conditions apply: no evidence of sediment movement; sides and/or floors of erosion form are revegetated (Australian Soil and Land Survey Field Handbook Fourth Edition).   |
| <b>Stable condition</b>                             | As defined in section 111A of the <i>Environmental Protection Act 1994</i> :<br>Land is in a stable condition if—   |

|   |  |
|---|--|
|   | <ul style="list-style-type: none"> <li>• the land is safe and structurally stable, and</li> <li>• there is no environmental harm being caused by anything on or in the land, and</li> <li>• the land can sustain a PMLU.</li> </ul>  |
| <p><b>Suitably qualified person (SQP)</b></p> | <p>For performing a regulatory function under chapter 7, part 8 (Contaminated Land) of the EP Act or another function prescribed under a regulation, means a person who—</p> <p style="padding-left: 40px;">(a) has qualifications and experience relevant to performing the function; and</p> <p style="padding-left: 40px;">(b) if a regulation prescribes an organisation for this paragraph—is a member of the organisation.</p> |
| <p><b>Vegetation groundcover</b></p>          | <p>Means plants, plant litter, tree leaf litter, twigs and woody debris capable of protecting the soil surface from erosion</p>  |

## Section D – Post mining land uses

## (RA3) Rehabilitation area 3

| Post-mining land uses (PMLU)         |                                    |                                    |                                    |                                    |                                    |
|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Rehabilitation area                  |                                    | RA3                                |                                    |                                    |                                    |
| Relevant activities                  |                                    | Accommodation Area and Roads       |                                    |                                    |                                    |
| Total rehabilitation area size (ha)  |                                    | 138                                |                                    |                                    |                                    |
| Commencement of first milestone: RM1 |                                    | 10/12/XXXX <sup>1</sup> + 45 Years |                                    |                                    |                                    |
| PMLU                                 |                                    | Cattle Grazing                     |                                    |                                    |                                    |
| Date area is available               | 10/12/XXXX <sup>1</sup> + 45 Years |                                    |                                    |                                    |                                    |
| Cumulative area available (ha)       | 138                                |                                    |                                    |                                    |                                    |
| Milestone completed by               | 10/12/XXXX <sup>1</sup> + 47 Years | 10/12/XXXX <sup>1</sup> + 52 Years | 10/12/XXXX <sup>1</sup> + 54 Years | 10/12/XXXX <sup>1</sup> + 64 Years | 10/12/XXXX <sup>1</sup> + 69 Years |
| Milestone Reference                  | Cumulative area achieved (ha)      |                                    |                                    |                                    |                                    |
| RM1                                  | 138                                |                                    |                                    |                                    |                                    |
| RM2                                  |                                    | 138                                |                                    |                                    |                                    |
| RM3                                  |                                    |                                    | 138                                |                                    |                                    |
| RM4                                  |                                    |                                    | 138                                |                                    |                                    |
| RM7                                  |                                    |                                    | 138                                |                                    |                                    |
| RM10                                 |                                    |                                    |                                    | 138                                |                                    |
| RM13                                 |                                    |                                    |                                    |                                    | 138                                |

## Note:

<sup>1</sup> XXXX is the year of commencement of longwall mining as per conditions PRCP1 to PRCP3 inclusive.

## (RA11) Rehabilitation area 11

| Post-mining land uses (PMLU)         |   |                                    |                                    |
|--------------------------------------|---|------------------------------------|------------------------------------|
| Rehabilitation area                  | RA11  |                                    |                                    |
| Relevant activities                  | Watercourses and crossing within underground mining/subsidence area |                                    |                                    |
| Total rehabilitation area size (ha)  | 388   |                                    |                                    |
| Commencement of first milestone: RM1 | 10/12/XXXX <sup>1</sup> + 34 Years                                  |                                    |                                    |
| PMLU                                 | Watercourse   |                                    |                                    |
| Date area is available               | 10/12/XXXX <sup>1</sup> + 34 Years                                  |                                    |                                    |
| Cumulative area available (ha)       | 388   |                                    |                                    |
| Milestone completed by               | 10/12/XXXX <sup>1</sup> + 37 Years                                  | 10/12/XXXX <sup>1</sup> + 47 Years | 10/12/XXXX <sup>1</sup> + 57 Years |
| Milestone Reference                  | Cumulative area achieved (ha)                                       |                                    |                                    |
| RM1                                  | 388   |                                    |                                    |
| RM3                                  | 388   |                                    |                                    |
| RM6                                  | 388   |                                    |                                    |
| RM9                                  | 388   |                                    |                                    |
| RM12                                 |   | 388                                |                                    |
| RM15                                 |   |                                    | 388                                |

**Note:**

<sup>1</sup> XXXX is the year of commencement of longwall mining as per conditions PRCP1 to PRCP3 inclusive.

(RA21) Rehabilitation area 21

| Post-mining land uses (PMLU)         |  |                                    |                                    |                                    |                                    |
|--------------------------------------|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Rehabilitation area                  | RA21   |                                    |                                    |                                    |                                    |
| Relevant activities                  | Subsidence, underground mining infrastructure, general infrastructure and disturbance within underground mining area |                                    |                                    |                                    |                                    |
| Total rehabilitation area size (ha)  | 2818   |                                    |                                    |                                    |                                    |
| Commencement of first milestone: RM1 | 10/12/XXXX <sup>1</sup> + 34 Years   |                                    |                                    |                                    |                                    |
| PMLU                                 | Woodland Habitat   |                                    |                                    |                                    |                                    |
| Date area is available               | 10/12/XXXX <sup>1</sup> + 34 Years   |                                    |                                    |                                    |                                    |
| Cumulative area available (ha)       | 2818   |                                    |                                    |                                    |                                    |
| Milestone completed by               | 10/12/XXXX <sup>1</sup> + 37 Years   | 10/12/XXXX <sup>1</sup> + 42 Years | 10/12/XXXX <sup>1</sup> + 45 Years | 10/12/XXXX <sup>1</sup> + 55 Years | 10/12/XXXX <sup>1</sup> + 65 Years |
| Milestone Reference                  | Cumulative area achieved (ha)  |                                    |                                    |                                    |                                    |
| RM1                                  | 2818   |                                    |                                    |                                    |                                    |
| RM2                                  |  | 2818                               |                                    |                                    |                                    |
| RM3                                  |  |                                    | 2818                               |                                    |                                    |
| RM5                                  |  |                                    | 2818                               |                                    |                                    |
| RM8                                  |  |                                    | 2818                               |                                    |                                    |
| RM11                                 |  |                                    |                                    | 2818                               |                                    |
| RM14                                 |  |                                    |                                    |                                    | 2818                               |

Note:

<sup>1</sup> XXXX is the year of commencement of longwall mining as per conditions PRCP1 to PRCP3 inclusive.

Rehabilitation area milestones

| Milestone reference | Rehabilitation milestone                   | Milestone criteria  |
|---------------------|--|---|
| RM1                 | Infrastructure decommissioning and removal | <p>1.1 All infrastructure to be retained onsite must be safe, stable and not cause environmental harm.</p> <p>1.2 All infrastructure and services to be retained onsite must have a signed landholder statement, declaring that they will accept responsibility for the infrastructure (except for those items in RM1.3 and RM1.4).</p> <p>1.3 Underground shafts are closed according to appropriately qualified person (AQP) design (RA21).</p> <p>1.4 Except for RM1.3, below-ground infrastructure, services and waste (as per the Environmental Authority (EPML03337715) waste schedule) deeper than 0.5m in relation to the final landform surface can be retained provided it can meet the following:</p> <ul style="list-style-type: none"> <li>(a) All pipelines have been drained;</li> <li>(b) All below-ground infrastructure (installed after the approval date of this transitional PRCP) to be retained must be mapped; and</li> <li>(c) The intended PMLU is not compromised.</li> </ul> <p>1.5 With the exception of RM1.2, RM1.3 and RM1.4 above, the following are complete:</p> <ul style="list-style-type: none"> <li>(a) All services disconnected, terminated and removed;</li> <li>(b) All buildings and associated infrastructure dismantled and removed;</li> <li>(c) All hardstand, concrete areas and roads (bitumen, blue metal, aggregate) removed;</li> <li>(d) All pipelines drained and removed;</li> <li>(e) All waste, not authorised under the Environmental Authority (EPML03337715) waste schedule, removed;</li> <li>(f) All surface water drainage infrastructure removed;</li> <li>(g) All drillholes, bores, sediment ponds and sumps decommissioned;</li> <li>(h) All machinery and equipment not required for rehabilitation works removed from site;</li> <li>(i) Mine water dams are decommissioned;</li> <li>(j) Watercourse crossings and culverts removed.</li> </ul> <p>1.6 Assessment of mine water dams to be retained post closure is completed by an AQP and identified sediment and water management actions to ensure the dams are safe and stable for post mine use are completed.</p> |

|                   |   |   |
|-------------------|---|---|
| <p><b>RM2</b></p> | <p>Remediation and/or management of contaminated land</p> | <p>2.1 Contaminated Land Investigation Document completed in accordance with the <i>Environmental Protection Act 1994</i>, including a site investigation report, and, where required, a Validation Report and/or a draft Site Management Plan.</p> <p>2.2 The Contaminated Land Investigation Document confirms the area within the mining leases (ML1763, ML70421) does not present an unacceptable risk to the post-mining land use.</p>   |
| <p><b>RM3</b></p> | <p>Landform development and reshaping</p>                 | <p><b><u>All rehabilitation areas</u></b></p> <p>3.1 Erosion and sediment control systems are designed by an AQP, installed, and fit for purpose.</p> <p><b><u>Cattle grazing (RA3)</u></b></p> <p>3.2 RA3 landforms maintain pre-mining contours <math>\pm 8m</math>.</p> <p><b><u>Watercourse (RA11)</u></b></p> <p>3.3 Reshape watercourse crossings to a profile similar to the pre-disturbance condition.</p> <p><b><u>Woodland Habitat (RA21)</u></b></p> <p>3.4 Backfill and/or install drainage to limit subsidence inundation:</p> <ul style="list-style-type: none"> <li>(a) To maximum 1m depth in a 2% AEP rainfall event demonstrated by modelling completed by an AQP; or</li> <li>(b) Does not adversely impact achieving the PMLU as assessed by an AQP.</li> </ul> <p><b><u>Retained water structure</u></b></p> <p>3.5 Water storages are safe for stock access and have vegetated banks.</p> |
| <p><b>RM4</b></p> | <p>Surface preparation (cattle grazing)</p>               | <p>4.1 Topsoil placed at minimum depth of 150mm in areas where topsoil has previously been removed.</p> <p>4.2 Assessment of growth media characteristics is completed by an AQP to target land suitability class <math>\leq 3</math> as per <b>PRCP schedule Appendix 1 – Regional land suitability framework for beef cattle grazing PMLU rehabilitation in the Bowen Basin</b> (Short, 2025).</p> <p>4.3 Ameliorant and physical treatments are applied as identified in criteria RM4.2.</p> <p>4.4 Rip at least 300mm into soil/subsoil profile along contour of slopes.</p>  |
| <p><b>RM5</b></p> | <p>Surface preparation (woodland habitat)</p>             | <p>5.1 Topsoil placed at minimum depth of 100mm, or alternative growth media at minimum depth of 300mm, in areas where topsoil has previously been removed.</p>   |

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|      |  | <p>5.2 Assessment of growth media characteristics is completed by an AQP for target vegetation establishment suitable for designated PMLU.</p> <p>5.3 Ameliorant and physical treatments are applied as identified in criteria RM5.2.</p> <p>5.4 Rip at least 300mm into soil/subsoil profile along contour of slopes.</p>   |
| RM6  | Surface preparation (watercourse)                    | <p>6.1 Topsoil placed at minimum depth of 150mm in areas where topsoil has previously been removed.</p> <p>6.2 Assessment of growth media characteristics is completed by an AQP for target vegetation establishment suitable for designated PMLU.</p> <p>6.3 Ameliorant and physical treatments are applied as identified in criteria RM6.2.</p> <p>6.4 Rip at least 300mm into soil/subsoil profile along contour of slopes.</p> |
| RM7  | Revegetation (cattle grazing)                        | <p>7.1 Completed seeding in accordance with PRCP schedule <b>Appendix 2 – Recommended species list and seeding rates for cattle grazing PMLU.</b></p> <p>7.2 At least four species of 3P grasses and two species of legumes from PRCP schedule <b>Appendix 2 – Recommended species list and seeding rates for cattle grazing PMLU.</b></p>   |
| RM8  | Revegetation (woodland habitat)                      | <p>8.1 Completed seeding in accordance with PRCP schedule <b>Appendix 3 – Recommended species list and seeding rates for woodland habitat PMLU<sup>3</sup></b> or PRCP schedule <b>Appendix 4 – Recommended species list and seeding rates for woodland habitat PMLU – ponded areas<sup>3</sup>.</b></p>   |
| RM9  | Revegetation (watercourse)                           | <p>9.1 Completed seeding in accordance with PRCP schedule <b>Appendix 5 – Recommended species list and seeding rates for watercourse PMLU – upper and mid banks</b> and PRCP schedule <b>Appendix 6 – Recommended species list and seeding rates for watercourse PMLU – lower banks.</b></p>   |
| RM10 | Achievement of surface requirements (cattle grazing) | <p>10.1 &gt;50% vegetation groundcover, of which at least 50% of dry matter yield is 3P pasture species as listed in PRCP schedule <b>Appendix 2 – Recommended species list and seeding rates for cattle grazing PMLU.</b></p> <p>10.2 With respect to erosion in rehabilitated landforms:</p>   |

<sup>3</sup> Seed application may not be required in all areas.

|      |  |   |
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|      |  | <p>(a) All erosion as per PRCP schedule <b>Appendix 7 – Erosion classification framework</b> is assessed by an AQP and repaired if assessed as requiring intervention to ensure a stable PMLU is achieved, and evidence that it is repaired as per AQP advice; and</p> <p>(b) Mass movement and tunnel erosion are absent.</p> <p>10.3 Surface water runoff has been collected across representative areas of rehabilitation when surface flows occur and it is safe to do so, and the results are not significantly different to upstream values for pH, EC, turbidity.</p>  |
| RM11 | Achievement of surface requirements (woodland habitat) | <p>11.1 Groundcover must achieve <math>\geq 50\%</math> groundcover.</p> <p>11.2 Vegetation meets the following:</p> <p>(a) BioCondition score of <math>\geq 18/60</math> based on the benchmarks for the representative regional ecosystems as listed in PRCP schedule <b>Appendix 8 – BioCondition benchmarks and scoring of site-based attributes for representative regional ecosystems</b> and as assessed by an AQP using the modified 'BioCondition Assessment Manual' (version 2.2) methodology (RA21 - free draining areas), or</p> <p>(b) Species richness (RA21 – ponded areas):</p> <ol style="list-style-type: none"> <li>i. <math>\geq 2</math> native trees;</li> <li>ii. <math>\geq 3</math> native shrubs; and</li> <li>iii. <math>\geq 4</math> ground species (native or exotic).</li> </ol> <p>11.3 With respect to erosion in rehabilitated landforms:</p> <p>(a) All erosion as per PRCP schedule <b>Appendix 7 – Erosion classification framework</b> is assessed by an AQP and repaired if assessed as requiring intervention to ensure a stable PMLU is achieved, and evidence that it is repaired as per AQP advice; and</p> <p>(b) Mass movement and tunnel erosion are absent.</p> <p>11.4 Surface water runoff has been collected across representative areas of rehabilitation when surface flows occur and it is safe to do so, and the results are not significantly different to upstream values for pH, EC, turbidity.</p> <p>11.5 Subsidence cracks are repaired if the cracks will not self-heal and they adversely impact achieving the PMLU as assessed by an AQP.</p> <p>11.6 Bed and banks of subsidence drainage structures are geotechnically stable.</p> |

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| <p><b>RM12</b></p> | <p>Achievement of surface requirements (watercourse)</p>                                | <p>12.1 Groundcover must achieve <math>\geq 50\%</math> groundcover.</p> <p>12.2 Geomorphic index score: greater than or equal to upstream or downstream values (Index of Diversion Condition method).</p> <p>12.3 Vegetation meets the following:</p> <p>(a) Species richness:</p> <ul style="list-style-type: none"> <li>i. <math>\geq 2</math> native trees</li> <li>ii. <math>\geq 2</math> native shrubs representative of riparian vegetation RE 11.3.25; and</li> <li>iii. <math>\geq 2</math> grasses (exotic or native).</li> </ul> <p>12.4 With respect to erosion in rehabilitated landforms:</p> <p>(a) All erosion as per PRCP schedule <b>Appendix 7 – Erosion classification framework</b> is assessed by an AQP and repaired if assessed as requiring intervention to ensure a stable PMLU is achieved, and evidence that it is repaired as per AQP advice; and</p> <p>(b) Mass movement and tunnel erosion are absent.</p> <p>12.5 Subsidence cracks are repaired if the cracks will not self-heal and they adversely impact achieving the PMLU as assessed by an AQP.</p>   |
| <p><b>RM13</b></p> | <p>Achievement of post-mining land use to a stable condition (cattle grazing – RA3)</p> | <p>13.1 Hazard assessment completed by an AQP to confirm safety hazards in rehabilitation are not significantly different to surrounding unmined landscapes subject to the same land use.</p> <p>13.2 With respect to erosion in rehabilitated landforms:</p> <p>(a) No evidence of erosion classified as moderate or severe as defined by PRCP schedule <b>Appendix 7 – Erosion classification framework</b>;</p> <p>(b) Mass movement and tunnel erosion are absent; and</p> <p>(c) An AQP determines that any erosion present will not compromise the achievement of a PMLU to a stable condition.</p> <p>13.3 Groundcover: <math>&gt; 50\%</math> vegetation groundcover, with <math>\geq 50\%</math> of pasture dry matter yield consisting of 3P grasses as listed in PRCP schedule <b>Appendix 2 – Recommended species list and seeding rates for cattle grazing PMLU</b>.</p> <p>13.4 Surface water runoff has been collected across representative areas of rehabilitation when surface flows occur and it is safe to do so, and the results are not significantly different to upstream values for pH, EC, turbidity.</p> |

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|                    |  | <p>13.5 Achievement of land suitability class <math>\leq 3</math> as per PRCP schedule <b>Appendix 1 – Regional land suitability framework for beef cattle grazing PMLU rehabilitation in the Bowen Basin</b> (Short, 2025), or the pre-mining land suitability as per PRCP schedule <b>Appendix 13 – Land suitability – Grazing</b> or a more recent assessment as required under condition PRCP29.</p> <p>13.6 Restricted invasive plants (as defined in the <i>Biosecurity Act 2014</i>) comprise <math>\leq 5\%</math> of vegetation groundcover, with the exception of <i>Parthenium hysterophorus</i> which must not exceed 10% vegetation groundcover and assessed by an AQP as appropriately managed.</p> <p>13.7 Final landform survey confirms no built infrastructure remains other than those that form part of landholder agreement and meets exception as per RM1.4.</p> <p><b><u>Retained infrastructure/ Water storage</u></b></p> <p>13.8 Infrastructure to be transitioned to a future landholder is deemed fit for purpose, safe and stable by AQP and accepted, by signed agreement with the future landholder.</p> <p>13.9 All retained dams are safe, stable for native animals and stock access and have vegetated banks.</p> <p>13.10 Water storages monitored for water quality annually must meet ANZECC 2000 stock water guideline values, for a minimum of 5 consecutive years.</p> |
| <p><b>RM14</b></p> | <p>Achievement of post-mining land use to a stable condition (woodland habitat – RA21)</p> | <p>14.1 Hazard assessment completed by an AQP to confirm safety hazards in rehabilitation are not significantly different to surrounding unmined landscapes subject to the same land use.</p> <p>14.2 With respect to erosion in rehabilitated landforms:</p> <p>(a) No evidence of erosion classified as moderate or severe as defined by PRCP schedule <b>Appendix 7 – Erosion classification framework</b>;</p> <p>(b) Mass movement and tunnel erosion are absent; and</p> <p>(c) An AQP determines that any erosion present will not compromise the achievement of a PMLU to a stable condition.</p> <p>14.3 Groundcover must achieve <math>\geq 50\%</math> groundcover.</p> <p>14.4 Surface water runoff has been collected across representative areas of rehabilitation when surface flows occur and it is safe to do so, and the results are not significantly different to upstream values for pH, EC, turbidity.</p> <p>14.5 Vegetation meets the following:</p>  |

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|                    |   | <p>(a) BioCondition score of <math>\geq 35/60</math> based on the benchmarks for the representative regional ecosystems as listed in PRCP schedule <b>Appendix 8 – BioCondition benchmarks and scoring of site-based attributes for representative regional ecosystems</b> and as assessed by an AQP using the modified ‘BioCondition Assessment Manual’ (version 2.2) methodology (RA21 - free draining areas), or</p> <p>(b) RA21 – ponded areas:</p> <ul style="list-style-type: none"> <li>i. Species richness of <math>\geq 2</math> native trees, <math>\geq 3</math> native shrubs and <math>\geq 4</math> ground species (native or exotic).</li> <li>ii. Tree canopy cover: <math>\geq 16</math>.</li> </ul> <p>14.6 Restricted invasive plants (as defined in the <i>Biosecurity Act 2014</i>) comprise <math>\leq 5\%</math> of vegetation groundcover, with the exception of <i>Parthenium hysterophorus</i> which must not exceed 10% vegetation groundcover and assessed by an AQP as appropriately managed.</p> <p>14.7 Subsidence cracks are repaired if the cracks will not self-heal and they adversely impact achieving the PMLU as assessed by an AQP.</p> <p>14.8 Final landform survey confirms no built infrastructure remains other than those that form part of landholder agreement and meets exception as per RM1.4.</p> |
| <p><b>RM15</b></p> | <p>Achievement of post-mining land use to a stable condition (watercourse – RA11)</p> | <p>15.1 Hazard assessment completed by an AQP to confirm safety hazards in rehabilitation are not significantly different to surrounding unmined landscapes subject to the same land use.</p> <p>15.2 With respect to erosion in rehabilitated landforms:</p> <ul style="list-style-type: none"> <li>(a) No evidence of erosion classified as moderate or severe as defined by PRCP schedule <b>Appendix 7 – Erosion classification framework</b>;</li> <li>(b) Mass movement and tunnel erosion are absent; and</li> <li>(c) An AQP determines that any erosion present will not compromise the achievement of a PMLU to a stable condition.</li> </ul> <p>15.3 Geomorphic index score: greater than or equal to upstream or downstream values (Index of Diversion Condition method).</p> <p>15.4 Watercourse vegetation meets the following:</p> <ul style="list-style-type: none"> <li>(a) Riparian vegetation index score: greater than or equal to upstream or downstream values (Index of Diversion Condition method)</li> <li>(b) Species richness:</li> </ul>   |

|  |  |   |
|--|--|---|
|  |  | <ul style="list-style-type: none"><li>i. ≥2 native trees;</li><li>ii. ≥2 native shrubs; and</li><li>iii. ≥2 grass species (native or exotic).</li></ul> <p>(c) Tree canopy cover: ≥13%.</p> <p>15.5 Restricted invasive plants (as defined in the <i>Biosecurity Act 2014</i>) comprise ≤5% of vegetation groundcover, with the exception of <i>Parthenium hysterophorus</i> which must not exceed 10% vegetation groundcover and assessed by an AQP as appropriately managed.</p> <p>15.6 Subsidence cracks are repaired if the cracks will not self-heal and they adversely impact achieving the PMLU as assessed by an AQP.</p> <p>15.7 Watercourse bank stability is not adversely impacted by subsidence as assessed by an AQP.</p> <p>15.8 Final landform survey confirms no built infrastructure remains other than those that form part of landholder agreement and meets exception as per RM1.4.</p> |
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## List of Appendices

- Appendix 1:** Regional land suitability framework for beef cattle grazing PMLU rehabilitation in the Bowen Basin (Short, 2025)
- Appendix 2:** Recommended species list and seeding rates for cattle grazing PMLU
- Appendix 3:** Recommended species list and seeding rates for woodland habitat PMLU
- Appendix 4:** Recommended species list and seeding rates for woodland habitat PMLU – ponded areas
- Appendix 5:** Recommended species list and seeding rates for watercourse PMLU – upper and mid banks
- Appendix 6:** Recommended species list and seeding rates for watercourse PMLU – lower banks
- Appendix 7:** Erosion classification framework
- Appendix 8:** BioCondition benchmarks and scoring of site-based attributes for representative regional ecosystems
- Appendix 9:** Groundwater monitoring locations
- Appendix 9.1:** Groundwater monitoring locations
- Appendix 10:** Interim groundwater quality limits
- Appendix 11:** Surface water monitoring locations
- Appendix 11.1:** Surface water monitoring locations
- Appendix 12:** Interim surface water quality limits
- Appendix 13:** Land Suitability – Grazing
- Appendix 14:** Exploration Program Areas
- Appendix 15:** Seismic Program Layout
- Appendix 16:** Drilling Program Layout

**Appendix 1: Regional land suitability framework for beef cattle grazing PMLU rehabilitation in the Bowen Basin (Short, 2025)**

| Limitation                         | Indicator  | Suitable          |                        |                       | Unsuitable            |           |
|------------------------------------|--|-------------------|------------------------|-----------------------|-----------------------|-----------|
|                                    |  | Class 1           | Class 2                | Class 3               | Class 4               | Class 5   |
| Water availability                 | Soil water storage (mm)  | >75               | 75 - 60                | <60 - 40              | <40 - 30              | <30       |
| Nutrient deficiency                | Available-P (mg/kg) in 0-0.1m depth increment                  | >20               | 20 - 14                | <14 - 8               | <8 - 4                | <4        |
| Nutrient availability and toxicity | pH in 0-0.1m depth increment                                   | 7.3 - 6.6         | < 6.6 - 6.0 >7.3 - 7.9 | <6.0 - 5.6 >7.9 - 8.4 | <5.6 - 5.0 >8.4 - 9.0 | <5.0 >9.0 |
| Surface condition                  | Surface condition  | Fine (peds <10mm) | Coarse (peds >10mm)    | Surface crust         | Very hard setting     | Massive   |
| Salinity                           | ECe (dS/m) in Effective rooting depth (0-0.6m depth increment) | <2                | 2 - 4                  | >4 - 10               | >10 - 16              | >16       |
| Rockiness                          | Gravel, 20 - 60mm (%)  | <20               | 20 - 50                | >50 - 70              | >70 - 85              | >85       |
|                                    | Cobble, 60 - 200mm (%)   | <10               | 10 - 20                | >20 - 50              | >50 - 75              | >75       |
|                                    | Stone, 200 - 600mm (%)   | <2                | 2 - 10                 | >10 - 20              | >20 - 50              | >50       |
|                                    | Boulders, >600mm (%)   | 0                 | <2                     | 2 - 10                | >10 - 20              | >20       |
| Slope gradient                     | Slope gradient (%)   | <5                | 5 - 10                 | >10 - 15              | >15 - 20              | >20       |
| Microrelief                        | Vertical (m)   | 0                 | <0.2                   | 0.2 - 0.4             | >0.4 - 0.6            | >0.6      |
| Water erosion                      | Slope (%), ESP <6 (%) in 0-0.1m soil depth increment           | <5                | 5 - 8                  | >8 - 12               | >12 - 18              | >18       |
|                                    | Slope (%), ESP >6-14 (%) in 0-0.1m soil depth increment        | <3                | 3 - 6                  | >6 - 10               | >10 - 12              | >12       |
|                                    | Slope (%), ESP >14 (%) in 0-0.1m soil depth increment          | <1                | 1 - 2                  | >2 - 4                | >4 - 6                | >6        |
| Sub-soil erosion                   | ESP (%) at 0.5m depth  | <6                | 6 - 14                 | >14 - 23              | >23 - 34              | >34       |
| Potentially acid forming materials | Strongly acid conditions (pH < 4.5) within (x) m depth         | >3                | 3 - 2                  | <2 - 0.9              | <0.9 - 0.6            | <0.6      |

Short. (2025). *Rehabilitated mined land suitability for beef cattle grazing in the Bowen Basin: Technical Paper*. Office of the Queensland Mine Rehabilitation Commissioner, Queensland Government, Brisbane.

## Appendix 2: Recommended species list and seeding rates for cattle grazing PMLU

| Scientific name   | Common name                                | Clay topsoil | Sand/loam topsoil | Seeding rate (kg/ha)            |
|---|--|--------------|-------------------|---------------------------------|
| <b>Grass species</b>  |  |              |                   |                                 |
| <i>Astrebla lappulacea</i> , <i>A. squarrosa</i> ,<br><i>A. elymoides</i> | Mitchell grasses (curly, bull<br>and hoop) | ✓            | -                 | 2 <sup>c</sup> (per<br>species) |
| <i>Bothriochloa bladhii</i>   | forest blue grass                          | -            | ✓                 | 4 <sup>c</sup>                  |
| <i>Bothriochloa insculpta</i> cvv. Bisset*                                | Bisset creeping blue grass                 | ✓            | ✓                 | 4 <sup>c</sup>                  |
| <i>Bothriochloa ewartiana</i>   | desert bluegrass                           | ✓            | ✓                 | 2 <sup>c</sup>                  |
| <i>Chloris gayana</i> cvv. Callide*                                       | Callide Rhodes grass                       | ✓            | ✓                 | 4 <sup>c</sup>                  |
| <i>Chloris gayana</i> cvv. Katambora*                                     | Katambora Rhodes grass                     | ✓            | ✓                 | 4 <sup>c</sup>                  |
| <i>Dichanthium sericeum</i> subsp.<br><i>sericeum</i>                     | Queensland blue grass                      | ✓            | -                 | 4 <sup>c</sup>                  |
| <i>Dichanthium aristatum</i>  | Angleton grass                             | ✓            | -                 | 2 <sup>c</sup>                  |
| <i>Heteropogon contortus</i>  | black spear grass                          | ✓            | ✓                 | 2 <sup>c</sup>                  |
| <i>Leersia hexandra</i>   | swamp rice grass                           | ✓            | ✓                 | 4 <sup>c</sup>                  |
| <i>Leptochloa digitata</i>  | umbrella cane grass                        | ✓            | ✓                 | 4 <sup>c</sup>                  |
| <i>Megathyrsus maximus</i> var.<br><i>pubiglumis</i> *                    | green panic                                | -            | ✓                 | 4 <sup>c</sup>                  |
| <i>Panicum coloratum</i> var.<br><i>makarikariense</i> *                  | bambatsi Panic                             | ✓            | -                 | 4 <sup>c</sup>                  |
| <i>Panicum decompositum</i>   | native millet                              | ✓            | ✓                 | 4 <sup>c</sup>                  |
| <i>Setaria incrassata</i> *   | purple pigeon                              | ✓            | -                 | 4 <sup>c</sup>                  |
| <i>Urochloa mosambicensis</i> *   | Sabi grass                                 | -            | ✓                 | 4 <sup>c</sup>                  |
| <b>Grass species - Total seed weight (coated)</b>                         |  |              |                   | <b>16<sup>c</sup></b>           |
| <b>Legume species</b>   |  |              |                   |                                 |
| <i>Macroptilium bracteatum</i> *  | burgundy bean                              | ✓            | -                 | 2                               |
| <i>Rhynchosia minima</i> var. <i>australis</i>                            | rhynchosia                                 | ✓            | ✓                 | 2                               |
| <i>Rhynchosia minima</i> var. <i>minima</i>                               | rhynchosia                                 | ✓            | ✓                 | 2                               |
| <i>Stylosanthes seabrana</i> *  | stylo                                      | ✓            | -                 | 2                               |
| <b>Legume species - Total seed weight (uncoated)</b>                      |  |              |                   | <b>4</b>                        |
| <b>Cover Crop</b>   |  |              |                   |                                 |
| <i>Echinochloa esculenta</i>  | Japanese millet                            | ✓            | ✓                 | 5 <sup>c</sup>                  |

<sup>c</sup> Seeding rate for coated seed. If not coated, use half the prescribed rate; \* Naturalised exotic pasture species

## Appendix 3: Recommended species list and seeding rates for woodland habitat PMLU

| Species name*   | Common name            | Life form and functional group code | Seed rates (kg/ha - uncoated weight) |
|---|------------------------|-------------------------------------|--------------------------------------|
| Framework tree species  |                        |                                     |                                      |
| <i>Acacia rhodoxylon</i>  | rosewood               | LLA                                 | 0.3 - 1                              |
| <i>Alphitonia excelsa</i>   | red ash                | NE/NA                               | 0.3 - 0.5                            |
| <i>Angophora leiocarpa</i>  | smooth barked apple    | E/C                                 | 0.3 - 0.5                            |
| <i>Atalaya hemiglauca</i>   | whitewood              | NE/NA                               | 0.3 - 0.5                            |
| <i>Corymbia clarksoniana</i>  | Clarkson's bloodwood   | E/C                                 | 0.3 - 1                              |
| <i>Corymbia dallachiana</i>   | Dallachy's gum         | E/C                                 | 0.3 - 0.5                            |
| <i>Corymbia erythrophloia</i>   | red bloodwood          | E/C                                 | 0.3 - 1                              |
| <i>Eucalyptus crebra</i>  | narrow leafed ironbark | E/C                                 | 0.6 - 2                              |
| <i>Eucalyptus melanophloia</i>  | silver leafed ironbark | E/C                                 | 0.3 - 1                              |
| <i>Eucalyptus populnea</i>  | poplar box             | E/C                                 | 0.3 - 0.5                            |
| <i>Lysiphyllum carronii</i>   | red bauhinia           | NE/NA                               | 0.3 - 0.5                            |
| <i>Lysiphyllum hookeri</i>  | white bauhinia         | NE/NA                               | 0.2 - 0.5                            |
| <i>Terminalia oblongata</i>   | yellowwood             | NE/NA                               | 0.2 - 0.5                            |
| Framework tree species - Total seed weight (uncoated)                       |                        |                                     | 6                                    |
| Woody understory species  |                        |                                     |                                      |
| <i>Acacia conferta</i>  | crowded-leaf wattle    | ILA                                 | 0.3 - 0.5                            |
| <i>Acacia excelsa</i>   | ironwood wattle        | LLA                                 | 0.3 - 0.5                            |
| <i>Acacia sericophylla</i>  | desert oak             | ILA                                 | 0.3 - 0.5                            |
| <i>Alstonia constricta</i>  | bitterbark             | SU                                  | 0.3 - 0.5                            |
| <i>Capparis lasiantha</i> , <i>C. canescens</i> , <i>C. loranthifolia</i> . | wait-a-while           | V/C                                 | 0.2 - 0.5                            |
| <i>Carissa ovata</i>  | currant bush           | GCS                                 | 0.3 - 1                              |
| <i>Cassia brewsteri</i> **  | Leichhardt bean        | SU                                  | 0.3 - 0.5                            |
| <i>Dodonaea viscosa</i> **  | sticky hop bush        | SU                                  | 0.3 - 0.5                            |
| <i>Eremophila mitchellii</i>  | false sandalwood       | SU/NE/NA                            | 0.3 - 0.5                            |
| <i>Erythroxylon australe</i>  | cocaine tree           | SU                                  | 0.2 - 0.5                            |
| <i>Geijera parvifolia</i>   | wilga                  | SU                                  | 0.2 - 0.5                            |
| <i>Grevillea striata</i>  | beefwood               | SU/NE/NA                            | 0.3 - 0.5                            |
| <i>Grewia latifolia</i>   | dogs balls             | SU                                  | 0.3 - 0.5                            |
| <i>Hakea lorea</i>  | bootlace oak           | SU/NE/NA                            | 0.3 - 0.5                            |
| <i>Jasminum didymum</i>   | native jasmine         | V/C                                 | 0.3 - 0.5                            |
| <i>Owenia acidula</i>   | emu apple              | SU                                  | 0.3 - 0.5                            |
| <i>Petalostigma pubescens</i>   | quinine                | SU/NE/NA                            | 0.3 - 0.5                            |

| Species name*   | Common name             | Life form and functional group code | Seed rates (kg/ha - uncoated weight) |
|---|-------------------------|-------------------------------------|--------------------------------------|
| <i>Senna artemisioides</i>  | silver cassia           | SU                                  | 0.3 - 0.5                            |
| Woody understory species - Total seed weight (uncoated)   |                         |                                     | 4                                    |
| Grass species   |                         |                                     |                                      |
| <i>Aristida</i> spp (i.e. <i>A. calycina</i> , <i>A. latifolia</i> , <i>A. ramosa</i> , <i>A. caput-medusae</i> , <i>A. jerichoensis</i> , <i>A. personata</i> , <i>A. calycina</i> ) | three awned spear grass | NG                                  | 1 - 2                                |
| <i>Bothriochloa decipiens</i> var. <i>decipiens</i>   | pitted blue grass       | NG                                  | 1 - 2                                |
| <i>Bothriochloa ewartiana</i>   | desert bluegrass        | NG                                  | 1 - 2                                |
| <i>Chrysopogon fallax</i>   | golden beard grass      | NG                                  | 1 - 2                                |
| <i>Cymbopogon refractus</i>   | barbwire grass          | NG                                  | 1 - 2                                |
| <i>Cynodon dactylon</i> var. <i>dactylon</i> **   | couch                   | IG                                  | 2                                    |
| <i>Dichanthium sericeum</i>   | Qld bluegrass           | NG                                  | 1 - 2                                |
| <i>Panicum effusum</i>  | hairy panic             | NG                                  | 1 - 2                                |
| <i>Panicum queenslandicum</i>   | Yabila grass            | NG                                  | 1 - 2                                |
| <i>Themeda triandra</i>   | kangaroo grass          | NG                                  | 1 - 2                                |
| Grass species - Total seed weight (uncoated)  |                         |                                     | 10                                   |
| Cover Crop  |                         |                                     |                                      |
| <i>Echinochloa esculenta</i>  | Japanese millet         | Cover crop                          | 5                                    |

\* If recommended species are not available, substitute species from RE 11.4.2 and 11.5.3

\*\*Species adapted to moderate to high salinity tolerance (DERM, 2011)

**Appendix 4: Recommended species list and seeding rates for woodland habitat PMLU – ponded areas**

| Species name  | Common name         | Life form    | Seed rate (kg/ha - uncoated weight) |
|---|---------------------|--------------|-------------------------------------|
| <b>Framework tree species</b>   |                     |              |                                     |
| <i>Casuarina cristata</i> *   | belah               | E/C          | 1 - 2                               |
| <i>Eucalyptus camaldulensis</i> *   | river red gum       | E/C          | 1 - 2                               |
| <i>Eucalyptus coolabah</i>  | Coolabah            | E/C          | 1 - 2                               |
| <i>Eucalyptus populnea</i>  | poplar box          | E/C          | 0.5 - 1                             |
| <i>Eucalyptus tereticornis</i> *  | Queensland blue gum | E/C          | 1 - 2                               |
| <i>Melaleuca bracteata</i> *  | black tea tree      | NE/NA        | 0.5 - 1                             |
| <i>Terminalia oblongata</i>   | yellowwood          | NE/NA        | 0.5 - 1                             |
| <b>Framework tree species - total seed weight (uncoated)</b>  |                     |              | <b>6</b>                            |
| <b>Woody understorey species</b>  |                     |              |                                     |
| <i>Cassia brewsteri</i> *   | Leichardt bean      | SU           | 0.5 - 1                             |
| <i>Dodonaea viscosa</i>   | sticky hop bush     | SU           | 0.5 - 1                             |
| <i>Eremophila bignoniiflora</i>   | emu bush            | SU           | 0.5 - 1                             |
| <i>Eremophila mitchellii</i>  | false sandalwood    | SU           | 0.5 - 1                             |
| <i>Ficus opposita</i>   | sandpaper fig       | SU           | 0.5 - 1                             |
| <i>Geijera parvifolia</i>   | wilga               | SU           | 0.5 - 1                             |
| <i>Lysiphyllum carronii</i>   | red bauhinia        | NE/NA        | 0.5 - 1                             |
| <i>Psydrax oleifolia</i>  |                     | SU           | 0.5 - 1                             |
| <b>Woody understorey species - total seed weight (uncoated)</b>   |                     |              | <b>4</b>                            |
| <b>Ground species</b>   |                     |              |                                     |
| <i>Bothriochloa bladhii</i>   | Forest blue grass   | NG           | 0.5 - 1                             |
| <i>Bothriochloa decipiens</i> var. <i>decipiens</i>   | pitted blue grass   | NG           | 0.5 - 1                             |
| <i>Chrysopogon fallax</i>   | golden beard grass  | NG           | 0.5 - 1                             |
| <i>Cyperus</i> spp. ( <i>C. gracilis</i> , <i>C. polystachyos</i> , <i>C. fulvus</i> , <i>C. exaltatus</i> )* | sedges              | Native other | 0.5 - 1                             |
| <i>Eleocharis</i> spp. ( <i>E. sphacelata</i> , <i>E. pallens</i> , <i>E. plana</i> )                         | spike like sedges   | Native other | 0.5 - 1                             |
| <i>Iseilema</i> sp. ( <i>I. vaginiflorum</i> , <i>I. membranaceum</i> )                                       | Flinders grass      | NG           | 0.5 - 1                             |
| <i>Leersia hexandra</i>   | swamp rice grass    | NG           | 0.5 - 1                             |
| <i>Leptochloa digitata</i>  | umbrella cane grass | NG           | 0.5 - 1                             |
| <i>Panicum decompositum</i> var. <i>decompositum</i>  | native millet       | NG           | 0.5 - 1                             |
| <i>Paspalidium caespitosum</i>  | brigalow grass      | NG           | 0.5 - 1                             |

| Species name   | Common name          | Life form | Seed rate (kg/ha - uncoated weight) |
|--|----------------------|-----------|-------------------------------------|
| <i>Paspalidium distans</i>                           | Shot grass           | NG        | 0.5 - 1                             |
| <i>Paspalidium jubiflorum</i>                        | Warrego summer grass | NG        | 0.5 - 1                             |
| <b>Ground species - total seed weight (uncoated)</b> |                      |           | <b>8</b>                            |

\*Medium salinity tolerance (DERM 2011)

**Appendix 5: Recommended species list and seeding rates for watercourse PMLU – upper and mid banks**

| Species name   | Common name            | Life form and functional group code | Seed rate (kg/ha - uncoated weight) |
|--|------------------------|-------------------------------------|-------------------------------------|
| <b>Framework tree species</b>                                |                        |                                     |                                     |
| <i>Acacia stenophylla</i> *                                  | river myall            | LLA                                 | 0.5 - 1                             |
| <i>Alphitonia excelsa</i>                                    | red ash                | NE/NA                               | 0.5 - 1                             |
| <i>Angophora floribunda</i>                                  | rough barked apple     | E/C                                 | 0.5 - 1                             |
| <i>Angophora leiocarpa</i>                                   | smooth barked apple    | E/C                                 | 0.5 - 1                             |
| <i>Angophora subvelutina</i>                                 | broadleaf apple        | E/C                                 | 0.5 - 1                             |
| <i>Casuarina cristata</i> *                                  | belah                  | E/C                                 | 0.5 - 1                             |
| <i>Casuarina cunninghamiana</i> *                            | river she oak          | NE/NA                               | 0.5 - 1                             |
| <i>Corymbia tessellaris</i> *                                | Moreton Bay ash        | NE/NA                               | 0.5 - 1                             |
| <i>Eucalyptus camaldulensis</i> subsp. <i>obtusa</i> *       | river red gum          | E/C                                 | 1 - 2                               |
| <i>Eucalyptus coolabah</i> subsp. <i>coolabah</i>            | Coolabah               | E/C                                 | 1 - 2                               |
| <i>Eucalyptus melanophloia</i>                               | silver leaved ironbark | E/C                                 | 0.5 - 1                             |
| <i>Eucalyptus populnea</i>                                   | poplar box             | E/C                                 | 0.5 - 1                             |
| <i>Eucalyptus tereticornis</i> subsp. <i>tereticornis</i> *  | Queensland blue gum    | E/C                                 | 0.5 - 1                             |
| <i>Lysiphyllum hookeri</i>                                   | white bauhinia         | NE/NA                               | 0.5 - 1                             |
| <i>Melaleuca bracteata</i> *                                 | black tea tree         | NE/NA                               | 0.5 - 1                             |
| <i>Terminalia oblongata</i>                                  | yellowwood             | NE/NA                               | 0.5 - 1                             |
| <b>Framework tree species - total seed weight (uncoated)</b> |                        |                                     | <b>6</b>                            |
| <b>Woody understorey species</b>                             |                        |                                     |                                     |
| <i>Acacia excelsa</i>  | ironwood wattle        | ILA                                 | 0.5 - 1                             |
| <i>Acacia fasciculifera</i>                                  | scaly bark             | ILA                                 | 0.5 - 1                             |
| <i>Carissa ovata</i>   | current bush           | GCS                                 | 0.5 - 1                             |
| <i>Cassia brewsteri</i> *                                    | Leichardt bean         | SU                                  | 0.5 - 1                             |
| <i>Dodonaea viscosa</i>                                      | sticky hop bush        | SU                                  | 0.5 - 1                             |
| <i>Eremophila mitchellii</i>                                 | false sandalwood       | SU                                  | 0.5 - 1                             |
| <i>Erythroxylum australe</i>                                 | cocaine tree           | SU                                  | 0.5 - 1                             |
| <i>Ficus coronata</i>  | creek sandpaper fig    | SU                                  | 0.5 - 1                             |
| <i>Ficus fraseri</i>   | white sandpaper fig    | SU                                  | 0.5 - 1                             |
| <i>Ficus opposita</i>  | sandpaper fig          | SU                                  | 0.5 - 1                             |
| <i>Grevillea striata</i>                                     | beefwood               | SU                                  | 0.5 - 1                             |
| <i>Grewia latifolia</i>                                      | dogs balls             | SU                                  | 0.5 - 1                             |
| <i>Hakea lorea</i>   | bootlace oak           | SU                                  | 0.5 - 1                             |

| Species name  | Common name          | Life form and functional group code | Seed rate (kg/ha - uncoated weight) |
|---|----------------------|-------------------------------------|-------------------------------------|
| <i>Mallotus philippensis</i>                                    | red kamala           | SU                                  | 0.5 - 1                             |
| <i>Petalostigma pubescens</i>                                   | quinine              | SU                                  | 0.5 - 1                             |
| <b>Woody understorey species - total seed weight (uncoated)</b> |                      |                                     | <b>4</b>                            |
| <b>Ground species</b>   |                      |                                     |                                     |
| <i>Bothriochloa bladhii</i>                                     | forest blue grass    | NG                                  | 1 - 2                               |
| <i>Capillipedium spicigerum</i>                                 | scented top          | NG                                  | 1 - 2                               |
| <i>Cymbopogon refractus</i>                                     | barbwire grass       | NG                                  | 1 - 2                               |
| <i>Cynodon dactylon</i> *                                       | couch                | IG                                  | 2                                   |
| <i>Dichanthium sericeum</i> subsp. <i>sericeum</i>              | Queensland bluegrass | NG                                  | 1 - 2                               |
| <i>Digitaria brownii</i>  | cotton panic         | NG                                  | 1 - 2                               |
| <i>Eulalia aurea</i>  | silky brown top      | NG                                  | 1 - 2                               |
| <i>Eustrephus latifolius</i>                                    | wombat vine          | V/C                                 | 1 - 2                               |
| <i>Heteropogon contortus</i>                                    | bunched speargrass   | NG                                  | 1 - 2                               |
| <i>Jasminum simplicifolium</i> subsp. <i>australiense</i>       | stiff jasmine        | V/C                                 | 0.2 - 0.5                           |
| <i>Lomandra longifolia</i>                                      | mat rush             | NG                                  | 0.2 - 0.5                           |
| <i>Panicum effusum</i>  | hairy panic          | NG                                  | 1 - 2                               |
| <i>Paspalidium distans</i>                                      | shot grass           | NG                                  | 1 - 2                               |
| <i>Rhynchosia minima</i>  | Rhynchosia           | V/C                                 | 1 - 2                               |
| <i>Themeda triandra</i>   | kangaroo grass       | NG                                  | 1 - 2                               |
| <b>Ground species - total seed (uncoated)</b>                   |                      |                                     | <b>10</b>                           |
| <b>Cover Crop</b>   |                      |                                     |                                     |
| <i>Echinochloa esculenta</i>                                    | Japanese millet      | Cover crop                          | 5                                   |

\* Species adapted to moderate to high salinity tolerance (DERM, 2011)

## Appendix 6: Recommended species list and seeding rates for watercourse PMLU – lower banks

| Species name  | Common name           | Life form and functional group code | Seed rate (kg/ha - uncoated weight) |
|---|-----------------------|-------------------------------------|-------------------------------------|
| <b>Framework tree species</b>   |                       |                                     |                                     |
| <i>Casuarina cunninghamiana</i> *                                     | river she oak         | NE/NA                               | 0.5 - 1                             |
| <i>Lophostemon suaveolens</i>   | swamp box             | NE/NA                               | 0.5 - 1                             |
| <i>Melaleuca bracteata</i> *  | black tea tree        | NE/NA                               | 0.5 - 1                             |
| <i>Melaleuca fluviatilis</i>  | weeping tea-tree      | NE/NA                               | 0.5 - 1                             |
| <i>Melaleuca leucadendra</i> *  | broad-leaved tea tree | NE/NA                               | 0.5 - 1                             |
| <i>Melaleuca linariifolia</i> *                                       | snow in summer        | NE/NA                               | 0.5 - 1                             |
| <i>Melaleuca trichostachya</i>  | flax-leaf paperbark   | NE/NA                               | 0.5 - 1                             |
| <i>Melaleuca viminalis</i> *  | red bottlebrush       | NE/NA                               | 0.5 - 1                             |
| <b>Framework tree species - total seed weight (uncoated)</b>          |                       |                                     | <b>5</b>                            |
| <b>Ground species</b>   |                       |                                     |                                     |
| <i>Bothriochloa bladhii</i> subsp. <i>bladhii</i>                     | forest blue grass     | NG                                  | 1 - 2                               |
| <i>Cymbopogon refractus</i>   | barbwire grass        | NG                                  | 1 - 2                               |
| <i>Cynodon dactylon</i> *   | couch                 | IG                                  | 2 - 3                               |
| <i>Cyperus</i> spp. ( <i>C. gracilis</i> , <i>C. polystachyos</i> )** | sedge                 | NG                                  | 2 - 3                               |
| <i>Dichanthium sericeum</i> subsp. <i>sericeum</i>                    | Queensland bluegrass  | NG                                  | 1 - 2                               |
| <i>Eleocharis</i> spp.  | spike-rush            | NG                                  | 0.5 - 1                             |
| <i>Eustrephus latifolius</i>  | wombat vine           | V/C                                 | 0.5 - 1                             |
| <i>Leptochloa digitata</i>  | Umbrella cane grass   | NG                                  | 0.5 - 1                             |
| <b>Ground species - total seed weight (uncoated)</b>                  |                       |                                     | <b>10</b>                           |
| <b>Cover Crop</b>   |                       |                                     |                                     |
| <i>Echinochloa esculenta</i>  | Japanese millet       | Cover crop                          | 5                                   |

\* Species adapted to moderate to high salinity tolerance (DERM, 2011); \*\* Bank toe area only

**Appendix 7: Erosion classification framework**

| <b>Erosion classification<sup>4</sup></b> | <b>Minor</b>  | <b>Moderate</b>  | <b>Severe</b>  |
|---|---|--|--|
| Sheet erosion                             | Shallow soil deposits downslope   | Partial exposure of roots; moderate soil deposits downslope, etc   | Loss of surface horizon; root exposure; moderate substantial soil deposits downslope   |
| Rill erosion (≤0.3m deep)                 | <15 rills pre transect* or Occasional rills   | 15-30 rills per transect* or Common rills  | >30 rills per transect* or Numerous rills forming corrugated ground surface.   |
| Gully erosion (>0.3m deep)                | Gullies are isolated, linear, discontinuous and restricted to primary or minor drainage lines; less than 1.5m maximum depth | Gullies are linear, continuous, and restricted to primary and minor draining lines; maximum depth of 1.5m-3m | Gullies are continuous or discontinuous and either tend to branch away from primary drainage lines and on to foot slopes, or have multiple branches within primary drainage features; greater than 3m maximum depth. |

Source: NCST (2024) *Australian Soil and Land Survey Field Handbook, 4th edition. The National Committee on Soil and Terrain. CSIRO Publishing, Collingwood, Australia.*

\*Transect linear 100 m across the contour (Source: Tongway, D. J. and Hindley, N. L. 2005. *Landscape Function Analysis: Procedures for Monitoring and Assessing Landscapes. CSIRO Publishing, Canberra, Australia.*)

<sup>4</sup> Erosion classification definitions (CSIRO, 2009).

### Appendix 8: BioCondition benchmarks and scoring of site-based attributes for representative regional ecosystems

| Site-based attributes                           | Maximum score for attributes | Benchmarks* for representative REs |           | Averaged benchmarks |
|---|------------------------------|------------------------------------|-----------|---------------------|
|   |                              | RE 11.4.2                          | RE 11.5.3 | Combined REs        |
| Recruitment of dominate canopy species          | 5                            | 100                                | 100       | 100                 |
| Native plant species richness - trees (#)       | 5                            | 4                                  | 6         | 5                   |
| Native plant species richness - shrubs (#)      | 5                            | 5                                  | 6         | 6                   |
| Native plant species richness - grasses (#)     | 5                            | 8                                  | 6         | 7                   |
| Native plant species richness – forbs/other (#) | 5                            | 7                                  | 10        | 9                   |
| Tree canopy height (m)                          | 5                            | 20                                 | 16        | 18                  |
| Tree canopy cover (%)                           | 5                            | 25                                 | 20        | 20 <sup>#</sup>     |
| Shrub layer cover (%)                           | 5                            | 13                                 | 3         | 8                   |
| Native perennial grass cover (%)                | 5                            | 16                                 | 19        | 18                  |
| Litter cover (%)                                | 5                            | 30                                 | 20        | 25                  |
| Non-native plant cover (%)                      | 10                           | 0                                  | 0         | 0                   |
| <b>Maximum Site Score</b>                       | <b>60</b>                    |                                    |           |                     |

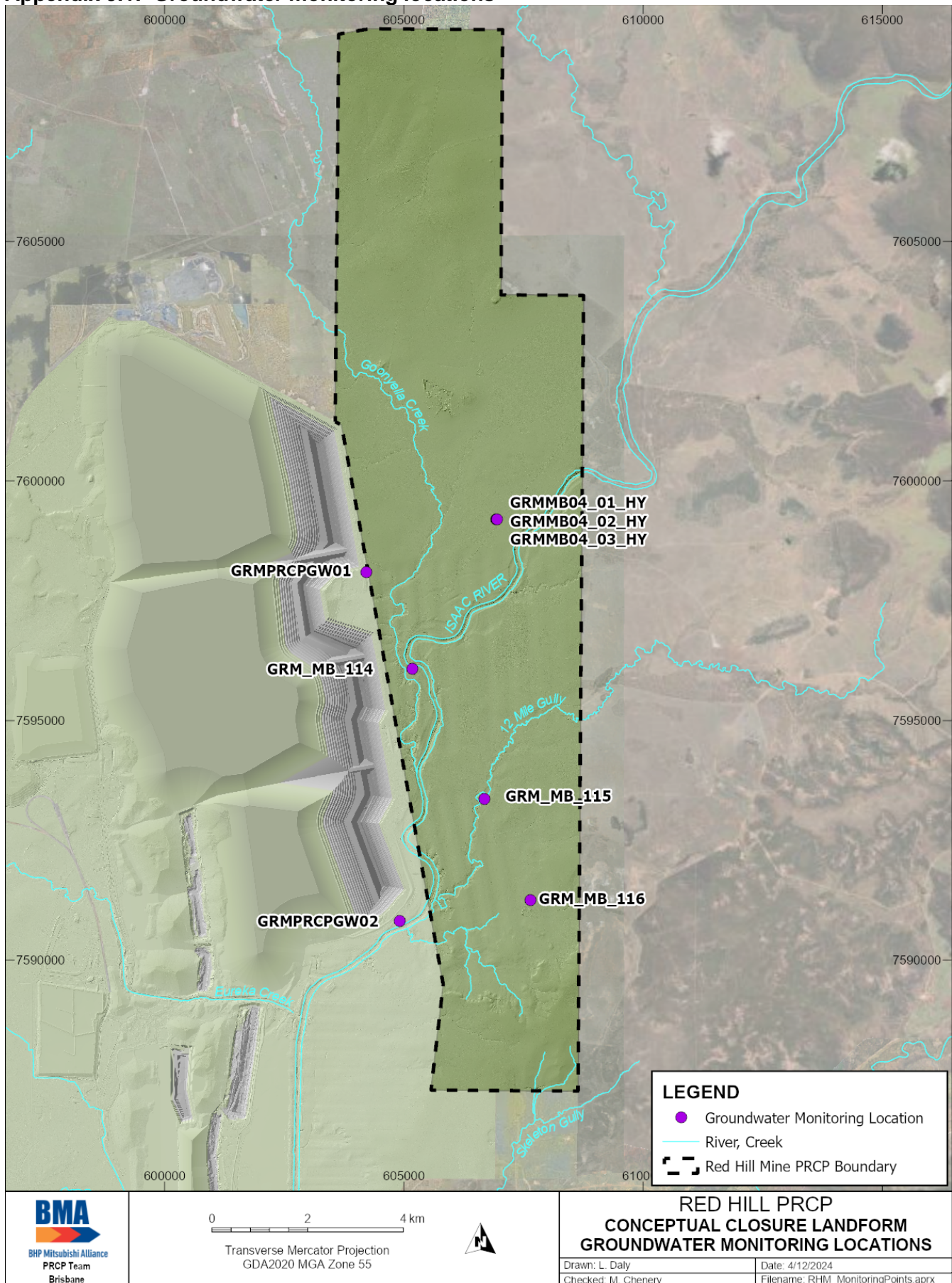
\* Benchmarks for each applicable site-based attribute for each RE (State of Queensland, 2024)

# Tree canopy cover reduced to 20% as agreed with the administering authority.

**Appendix 9: Groundwater monitoring locations**

| Monitoring Bore | Hydrogeological Unit             | Description   | Approximate Location |                     |
|-----------------|----------------------------------|---|----------------------|---------------------|
|                 |                                  |   | Latitude (GDA2020)   | Longitude (GDA2020) |
| GRM_MB_114      | Alluvial/Tertiary                | Adjacent to Isaac River and Goonyella Creek on easter side of lease.                    | -21.735783           | 148.016990          |
| GRM_MB_115      | Alluvial/Tertiary                | Adjacent to Twelve Mile Gully. Planned new bore.  | -21.760118           | 148.031841          |
| GRM_MB_116      | Tertiary                         | Southern end of subsidence area. Planned new bore.                                      | - 21.779121          | 148.041156          |
| GRMMB04_01_HY   | Alluvial/Tertiary                | Central portion of tenement. Planned new bore.  | -21.707365           | 148.034007          |
| GRMMB04_02_HY   | Alluvial/Tertiary                | Central portion of tenement. Planned new bore   | - 21.707411          | 148.0339405         |
| GRMMB04_03_HY   | Fort Cooper Measures - Coal Seam | Central portion of tenement. Planned new bore   | -21.707466           | 148.033863          |
| GRMPRCPGW01     | GLS                              | Western tenement boundary adjacent to the Goonyella residual void. New bore.            | -21.717474           | 148.007628          |
| GRMPRCPGW02     | GLS                              | West of tenement boundary immediately to the south of Goonyella residual void. New bore | -21.783233           | 148.014752          |

Appendix 9.1: Groundwater monitoring locations



**Appendix 10: Interim groundwater quality limits**

| Quality characteristic (units)  | Monitoring Bore | Limit   | Source                      |
|---|-----------------|---------|-----------------------------|
| pH (pH units)   | All bores       | 6.5-8.5 |                             |
| Electrical Conductivity ( $\mu\text{S}/\text{cm}$ )   | All bores       | 8910    | Zone 34 Shallow             |
| Sulphate (mg/L)   | All bores       | 318     | Zone 34 Shallow             |
| Aluminium - dissolved ( $\mu\text{g}/\text{L}$ )  | All bores       | 55      | ANZG 2018                   |
| Antimony - dissolved ( $\mu\text{g}/\text{L}$ )   | All bores       | 9       | ANZG 2018                   |
| Arsenic - dissolved ( $\mu\text{g}/\text{L}$ )  | All bores       | 13      | ANZG 2018                   |
| Cadmium - dissolved ( $\mu\text{g}/\text{L}$ )  | All bores       | 0.2     | ANZG 2018                   |
| Cobalt - dissolved ( $\mu\text{g}/\text{L}$ )   | All bores       | 1.4     | ANZG 2018                   |
| Chromium - dissolved ( $\mu\text{g}/\text{L}$ )   | All bores       | 1       | ANZG 2018                   |
| Copper - dissolved ( $\mu\text{g}/\text{L}$ )   | All bores       | 30      | Zone 34 Shallow             |
| Iron - dissolved ( $\mu\text{g}/\text{L}$ )   | All bores       | 140     | Zone 34 Shallow             |
| Manganese - dissolved ( $\mu\text{g}/\text{L}$ )  | All bores       | 160     | Zone 34 Shallow             |
| Mercury - dissolved ( $\mu\text{g}/\text{L}$ )  | All bores       | 0.06    | ANZG 2018                   |
| Molybdenum - dissolved ( $\mu\text{g}/\text{L}$ )   | All bores       | 34      | ANZG 2018                   |
| Nickel - dissolved ( $\mu\text{g}/\text{L}$ )   | All bores       | 11      | ANZG 2018                   |
| Selenium - dissolved ( $\mu\text{g}/\text{L}$ )   | All bores       | 5       | ANZG 2018                   |
| Zinc - dissolved ( $\mu\text{g}/\text{L}$ )   | All bores       | 60      | Zone 34 Shallow             |
| Major ions (mg/L) - calcium, chloride, potassium, magnesium, sodium, bicarbonate, carbonate | All bores       |         | For interpretation purposes |
| Hardness (mg/L)   |                 |         |                             |
| Water level (mAHD)  | All bores       |         | For interpretation purposes |

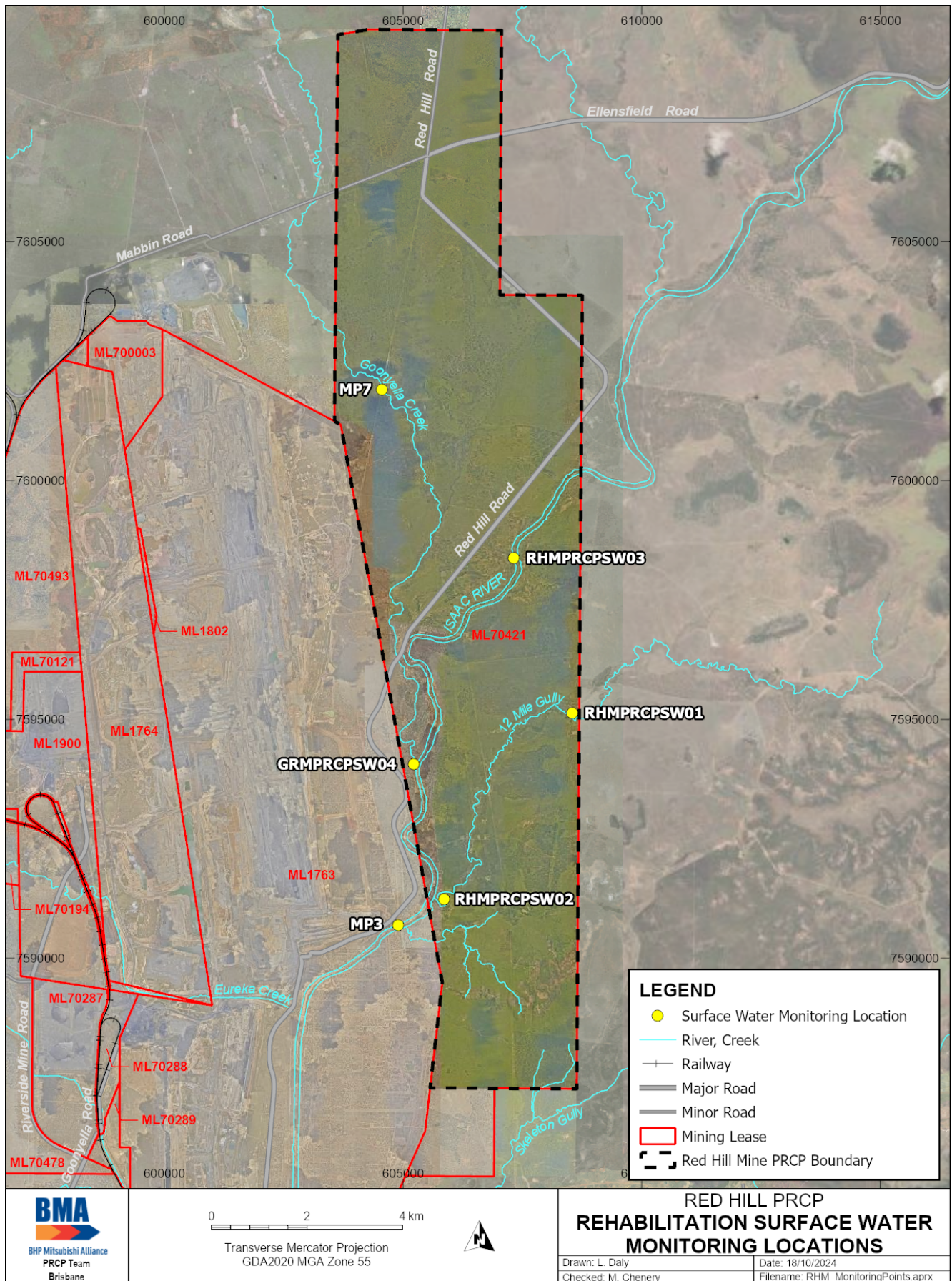
**Notes:**

- All metals and metalloids must be measured as 'dissolved' (from analysis of a field filtered sample) and total (unfiltered).
- Limits for metals and metalloids apply to dissolved results.
- ANZG (2018) Aquatic ecosystem protection for moderately disturbed system (95% protection).
- WQO Fitzroy groundwater Zone 34 80<sup>th</sup> percentile.

**Appendix 11: Surface water monitoring locations**

| <b>Monitoring Locations</b>                   | <b>Receiving waters location description</b> | <b>Approximate Latitude (GDA2020)</b> | <b>Approximate Longitude (GDA2020)</b> |
|---|--|---------------------------------------|--|
| <b><i>Upstream monitoring locations</i></b>   |  |                                       |  |
| RHMPCPSW03                                    | Isaac River Upstream                         | -21.714851                            | 148.037571                             |
| MP7   | Goonyella Creek Upstream                     | -21.683109                            | 148.010666                             |
| RHMPCPSW01                                    | Twelve Mile Gully Creek Upstream             | -21.744043                            | 148.049654                             |
| <b><i>Downstream monitoring locations</i></b> |  |                                       |  |
| MP3   | Isaac River Downstream                       | -21.784453                            | 148.014691                             |
| GRMPCPSW04                                    | Goonyella Creek Downstream                   | -21.753919                            | 148.017601                             |
| RHMPCPSW02                                    | Twelve Mile Gully Creek Downstream           | -21.779436                            | 148.023904                             |

Appendix 11.1: Surface water monitoring locations



0 2 4 km  
 Transverse Mercator Projection  
 GDA2020 MGA Zone 55



RED HILL PRCP  
 REHABILITATION SURFACE WATER  
 MONITORING LOCATIONS

|                     |                                     |
|---------------------|-------------------------------------|
| Drawn: L. Daly      | Date: 18/10/2024                    |
| Checked: M. Chenery | Filename: RHM_MonitoringPoints.aprx |

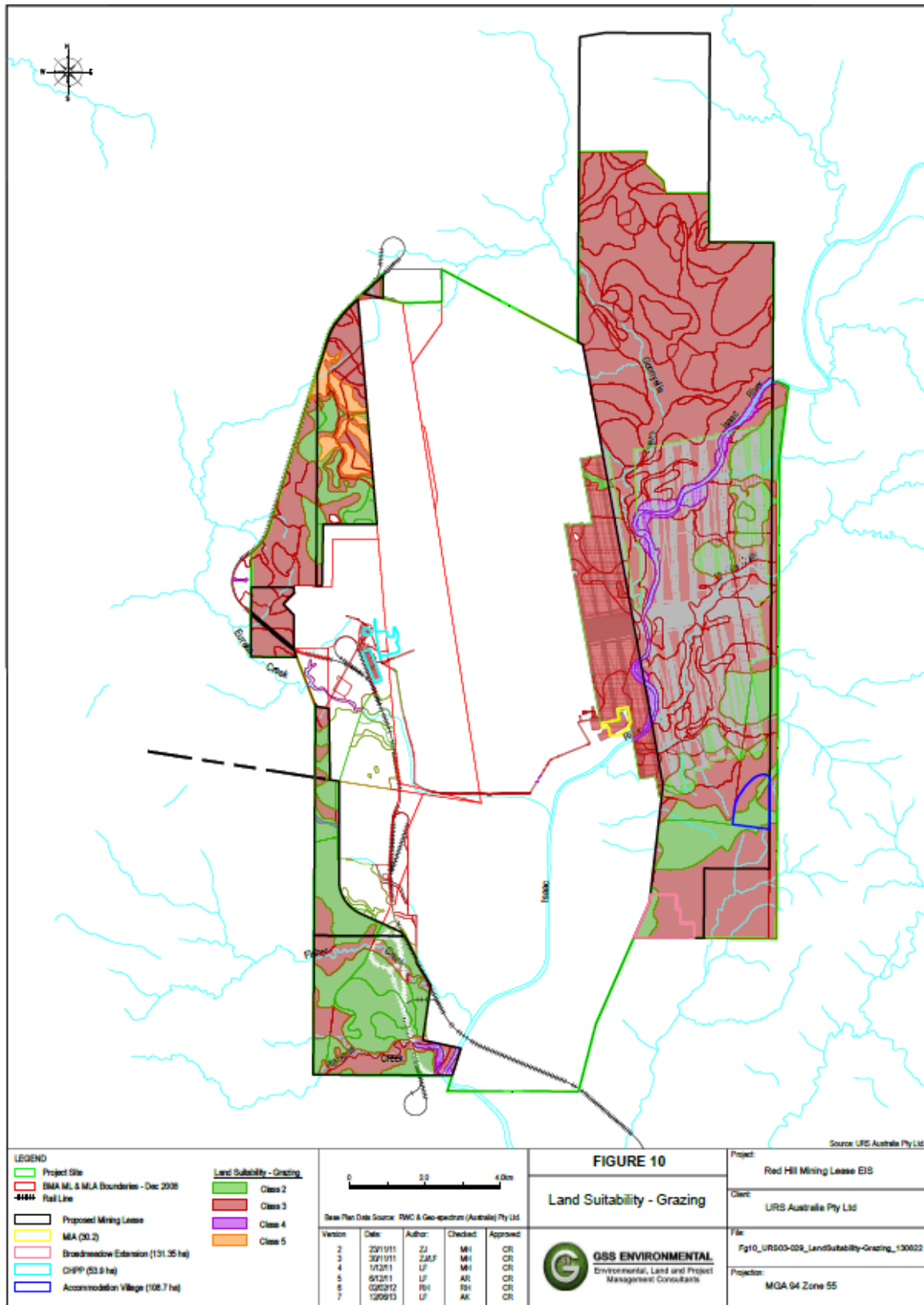
**Appendix 12: Interim surface water quality limits**

| Quality characteristic (units)  | Limit                          | Comment on limit      |
|---|--------------------------------|-----------------------|
| pH  | 6.5-8.5                        | Upper Isaac River WQO |
| Electrical Conductivity ( $\mu\text{S/cm}$ )  | 210                            | PRCP Table 6          |
| Turbidity (NTU)   | 50                             | Upper Isaac River WQO |
| Sulphate (mg/L)   | 25                             | Upper Isaac River WQO |
| Aluminium - dissolved ( $\mu\text{g/L}$ )   | 55                             | ANZG 2018             |
| Antimony - dissolved ( $\mu\text{g/L}$ )  | 9                              | ANZG 2018             |
| Arsenic - dissolved ( $\mu\text{g/L}$ )   | 13                             | ANZG 2018             |
| Cadmium - dissolved ( $\mu\text{g/L}$ )   | 0.2                            | ANZG 2018             |
| Cobalt - dissolved ( $\mu\text{g/L}$ )  | 1.4                            | ANZG 2018             |
| Chromium - dissolved ( $\mu\text{g/L}$ )  | 1                              | ANZG 2018             |
| Copper - dissolved ( $\mu\text{g/L}$ )  | 3                              | PRCP Table 6          |
| Iron - dissolved ( $\mu\text{g/L}$ )  | 800                            | PRCP Table 6          |
| Manganese - dissolved ( $\mu\text{g/L}$ )   | 5                              | PRCP Table 6          |
| Mercury - dissolved ( $\mu\text{g/L}$ )   | 0.06                           | ANZG 2018             |
| Molybdenum - dissolved ( $\mu\text{g/L}$ )  | 2.5                            | PRCP Table 6          |
| Nickel - dissolved ( $\mu\text{g/L}$ )  | 11                             | ANZG 2018             |
| Selenium - dissolved ( $\mu\text{g/L}$ )  | 5                              | ANZG 2018             |
| Zinc - dissolved ( $\mu\text{g/L}$ )  | 8                              | ANZG 2018             |
| Total recoverable hydrocarbons (C6-C9) ( $\mu\text{g/L}$ )                                      | 20                             |                       |
| Total recoverable hydrocarbons (C10-C36) ( $\mu\text{g/L}$ )                                    | 100                            |                       |
| Major ions (mg/L)<br>Calcium, chloride, potassium, magnesium, sodium,<br>bicarbonate, carbonate | For interpretation<br>purposes |                       |
| Hardness (mg/L)   | For interpretation<br>purposes |                       |

**Notes:**

- All metals and metalloids must be measured as 'dissolved' (from analysis of a field filtered sample) and total (unfiltered).
- Limits for metals and metalloids apply to dissolved results.
- ANZG (2018) Aquatic ecosystem protection for moderately disturbed system (95% protection).
- WQO Isaac Western Uplands Tributaries and the Isaac and Lower Connors River Main Channel Subcatchments.  
[https://environment.desi.qld.gov.au/\\_data/assets/pdf\\_file/0032/88817/fitzroy\\_isaac\\_river\\_wqo\\_290911.pdf](https://environment.desi.qld.gov.au/_data/assets/pdf_file/0032/88817/fitzroy_isaac_river_wqo_290911.pdf)

Appendix 13: Land Suitability - Grazing

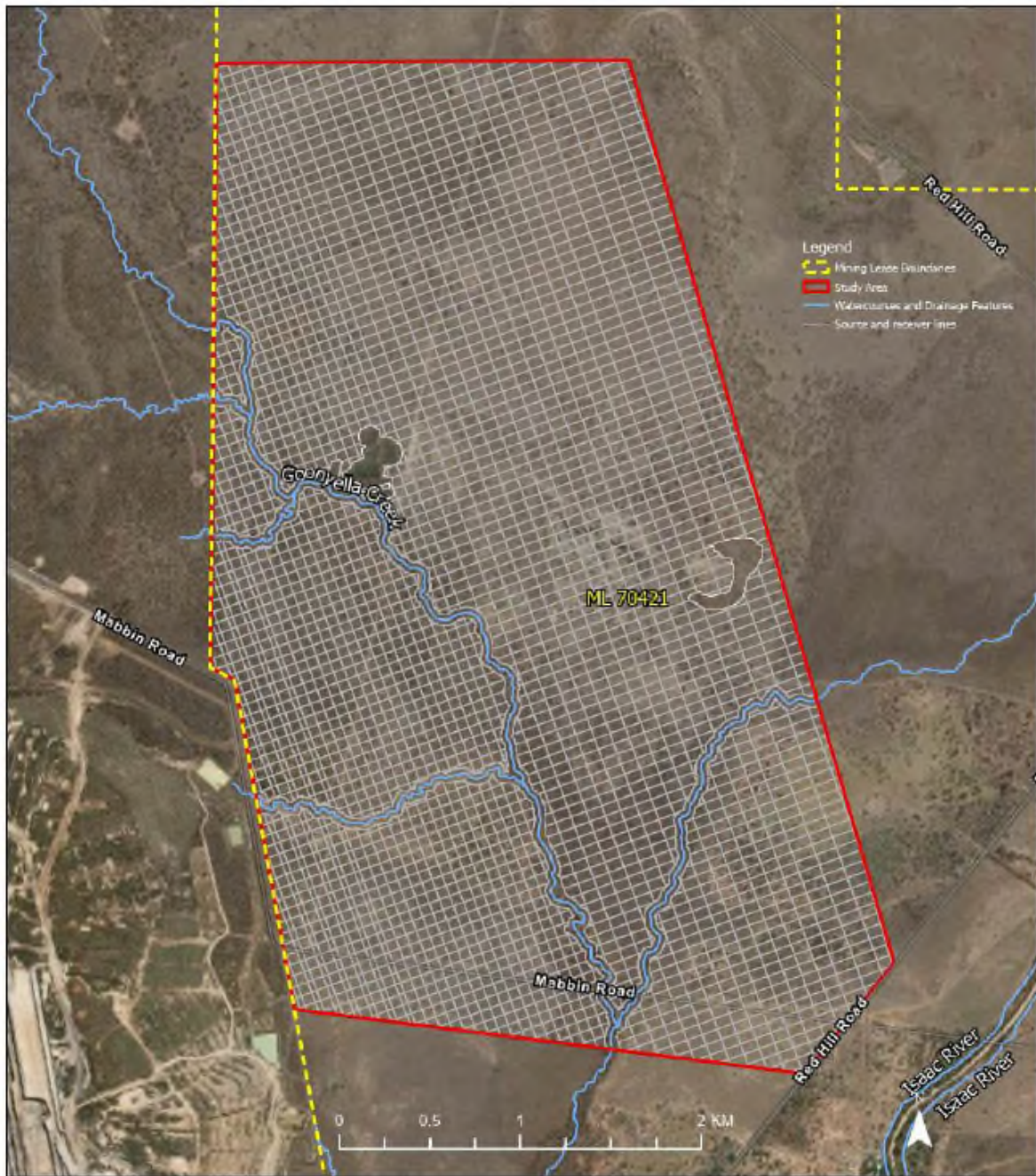


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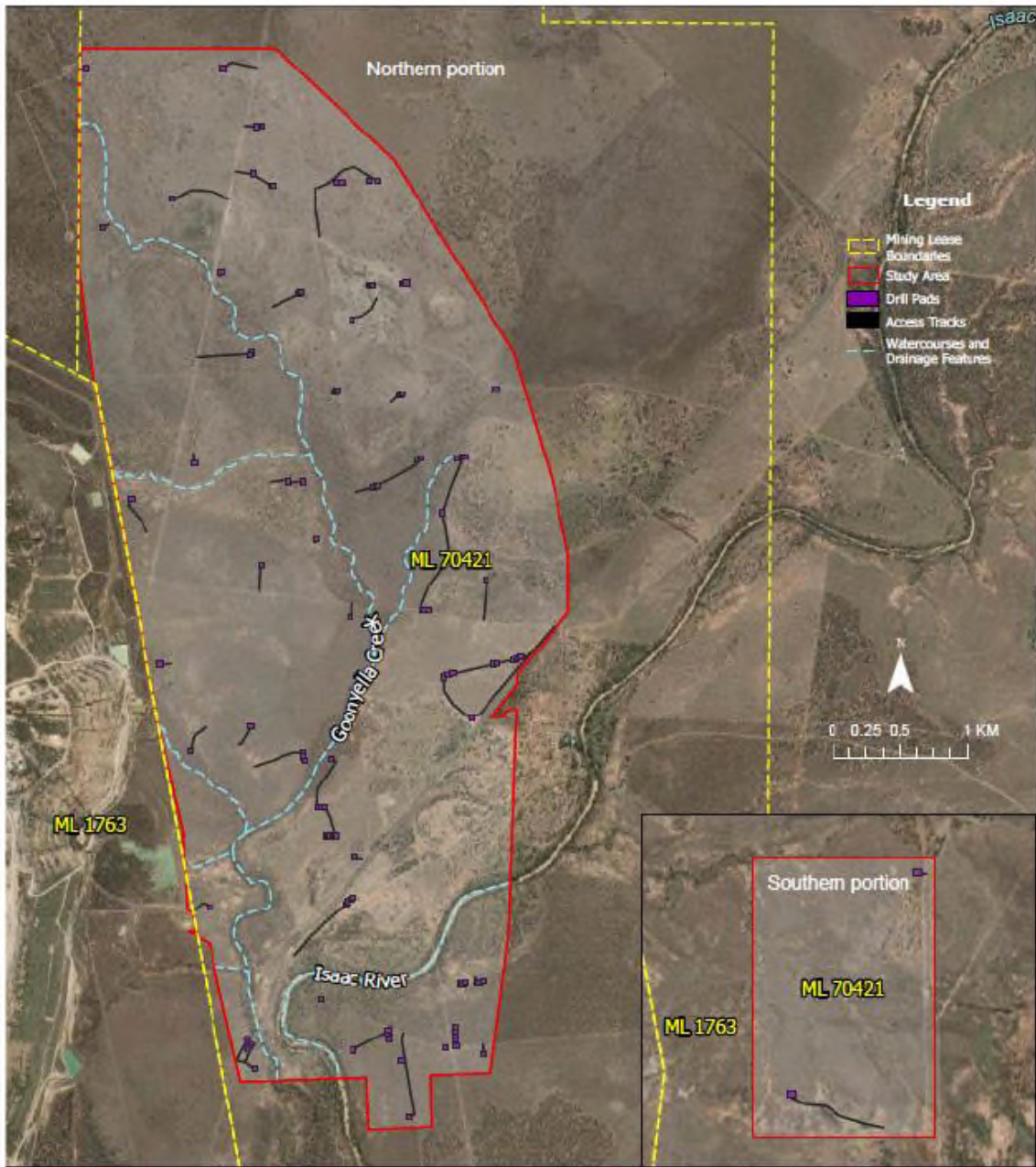
Appendix 14: Exploration Program Areas



Appendix 15: Seismic Program Layout



Appendix 16: Drilling Program Layout



END OF PRCP SCHEDULE