

PRCP schedule

Environmental Protection Act 1994

PRCP schedule P_PRCP_100779213_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_100779213_V1

PRCP schedule holder(s)

Name(s)	Registered address
BHP COAL PTY LTD QCT Resources Pty Limited Mitsubishi Development Pty Ltd Umal Consolidated Pty Ltd QCT MINING PTY. LTD QCT INVESTMENT PTY. LTD BHP Queensland Coal Investments Pty Ltd	Level 14, 480 Queen Street Brisbane, QLD 4000

Location details

Location(s)
ML70287 ML70494 ML1763 ML70288 ML70469 ML70421 ML70478 ML70479 ML70468 ML1802 ML70121 ML70493 ML1764 ML70289 ML70194 ML1900 ML700003 ML70193.

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

4 November 2025

Date

Juliana McCosker

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

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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 - Definitions
- Section D - Post mining land uses
- Section E - Non-use management areas
- Section F - Appendix

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

There are no conditions beyond those contained in section 206A of the *Environmental Protection Act 1994* that apply to this PRCP schedule.

General conditions

- PRCP1** Mining disturbance authorised under environmental authority EPML00853413 cannot be undertaken until an associated rehabilitation or improvement outcome has been provided in the PRCP Schedule.
- PRCP2** The holder must, for each rehabilitation and improvement area, achieve the rehabilitation or management 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.
- PRCP3** Where land becomes available for rehabilitation/improvement more than five year 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.

- PRCP4** The holder must maintain a risk register that identifies the risks to not achieving:
- a) a stable condition for post-mining land uses;
 - b) sufficient improvement for non-use management areas; and
 - c) how the risks are being managed or minimised.
- PRCP5** The risk register (**PRCP4**) must be reviewed 5-yearly and include consideration of the outcomes of PRCP monitoring data.
- PRCP6** Where an area achieves a rehabilitation or management 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.

PRCP7 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 'BMA-GRM and BRM-PRCP-v3' 3 November 2025 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 or management 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.

PRCP8 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/improvement milestone criteria of this schedule;
- b) rehabilitation/improvement 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/improvement and the results of maintenance activities;
- d) monitoring of rehabilitation/improvement 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/improvement 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/improvement milestones or milestone criteria;
- h) landholder agreements; and
- i) details of community consultation in the community consultation register relating to rehabilitation/improvement and closure activities.

PRCP9 A summary report of key records under **PRCP8** is maintained until the relevant environmental authority has been surrendered or progressive rehabilitation certification is achieved.

PRCP10 Records made under **PRCP8** 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.

PRCP11 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.

PRCP12 Disturbance due to exploration and minor ancillary activities in areas not planned to be mined and not within a Rehabilitation Area in this schedule must be rehabilitated in accordance with the provisions detailed in the '*Eligibility criteria and standard conditions for exploration and mineral development projects*' or its successor, with the exception that land must be rehabilitated to a stable condition and achieves the pre-disturbance land use as detailed in **Figure 1 – Final Site Design**.

PRCP13 With respect to groundwater:

- a) The monitoring bores listed in **PRCP schedule Appendix 11 and 11.1: Groundwater monitoring locations** must be installed by 2050; and
- b) The holder must develop site-specific groundwater quality limits by 2055 for the bores listed in **PRCP schedule Appendix 11 and 11.1: Groundwater monitoring locations** to update the **PRCP schedule Appendix 12: Interim groundwater quality limits**; and

- c) Following monitoring bore installation as per **PRCP13.a)**, groundwater quality must be monitored six monthly, at a minimum the bores specified in **PRCP schedule Appendix 11 and 11.1: Groundwater monitoring locations** for all quality characteristics listed in the **PRCP schedule Appendix 12: Interim groundwater quality limits** as an interim measure till **PRCP13.b)** is fulfilled; and
- d) The groundwater model and water balance model must be recalibrated, and predictions rerun at least every five years commencing from 2055.

PRCP14 With respect to groundwater:

- a) Groundwater quality results for compliance bores have not exceeded the site-specific groundwater quality limits specified in the **PRCP schedule Appendix 12: Interim groundwater quality limits**, for three (3) consecutive results within the five-year period immediately prior to surrender; and
- b) Predictive groundwater modelling as per the Australian Groundwater Modelling Guidelines (current version), undertaken at the completion of all mining, confirms an inward hydraulic gradient is maintained and prevents environmental harm through the release of contaminants beyond the tenure boundary post-closure.

PRCP15 With respect to surface water:

- a) The holder must install monitoring equipment at the relevant surface water monitoring locations specified in **PRCP schedule Appendix 9 and 9.1: Surface water monitoring locations** by 2050;
- b) The holder must develop site-specific surface water quality limits by 2055 for the watercourses listed in **PRCP schedule Appendix 9 and 9.1: Surface water monitoring locations** to update the **PRCP schedule Appendix 10: Interim surface water quality limits**;
- c) Following completion of **PRCP15.a)**, surface water quality must be monitored at least once per month during flow at downstream locations specified in **PRCP schedule Appendix 9: 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; and
- d) Surface water quality monitoring as per **PRCP15.c)** be carried out for all parameters listed in the **PRCP schedule Appendix 10: Interim surface water quality limits** as an interim measure till **PRCP15.b)** is fulfilled.

PRCP16 With respect to surface water:

- a) Surface water quality monitored as per **PRCP15.c)** must not exceed the site-specific surface water quality limits as per **PRCP schedule Appendix 10: Interim surface water quality limits**, within the five (5) year period immediately prior to surrender; and
- b) If the surface water quality exceeds criteria **PRCP16.a)**, the applicable upstream site must be compared to the downstream site result; and quality result measured at a downstream site must be equal to or less than the quality result measured at the applicable upstream site.

PRCP17 Where the surface water quality at the downstream site exceeds the upstream site result as per **PRCP16.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 low risk to achieving a stable condition from the mining tenure (ML1763, ML1764, ML1802, ML1900, ML700003, ML70121, ML70193, ML70194, ML70287, ML70288, ML70289, ML70421, ML70468, ML70469, ML70478, ML70479, ML70493 and ML70494), then no further action is to be taken; or
- 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 **PRCP16.a)**, if **PRCP17.b)** is triggered more than three (3) times over five (5) consecutive years prior to surrender and **PRCP16.a)** is reset; and
- d) the assessment/s under **PRCP17** must be completed and provided to the administering authority within six (6) months of receiving the relevant sampling results.

- PRCP18** With respect to improvement areas (IA1), the holder must develop Groundwater Level Monitoring Network (GLMN) inclusive of following steps:
- a) Identify by 2055 (or 4-years prior to the planned end of open-cut mining at GRM), relevant regional aquifers (hydrogeological units) likely to be affected/connected individually or collectively by each residual void in (IA1);
 - b) Identify by 2055 (or 4-years prior to the planned end of open-cut mining at GRM), relevant existing groundwater bores (from **PRCP schedule Appendix 11 and 11.1: Groundwater monitoring locations**) and new additional groundwater monitoring bores if determined by an AQP as required to ensure sufficient monitoring coverage for each regional aquifer mapped in accordance with **PRCP18.a**);
 - c) Independent AQP endorse the proposed GLMN as per **PRCP18.a**) and **PRCP18.b**) is fit for purpose that is, to monitor and support predictions of residual voids behaviour as a sink;
 - d) for existing groundwater monitoring bores identified in accordance with **PRCP18.b**) and approved as per **PRCP18.c**), update the **PRCP schedule Appendix 11 and 11.1: Groundwater monitoring locations** before end of 2058 (or within 3 years of completion of **PRCP18.b**) to reflect water level (mAHD) for the relevant bores; and
 - e) depending on outcomes of **PRCP18.b**) and **PRCP18.c**), update the **PRCP schedule Appendix 11 and 11.1: Groundwater monitoring locations** before end of 2058 (or within 3 years of completion of **PRCP18.b**) with new additional groundwater monitoring bores location co-ordinates, hydrogeological unit and water level (mAHD).
- PRCP19** Groundwater level must be monitored annually, at the bores identified under the GLMN (**PRCP18**), starting from 2059 or within 1 year of the end of GRM open-cut mining whichever is earlier.
- PRCP20** The holder may develop site-based criteria with which to assess tunnel erosion within 5 years of the approval of the PRCP schedule. Criteria should be sufficient to quantify where tunnel erosion exists within the landscape which would not pose risk to final landform stability. The criteria should be supported by evidence and reviewed and approved by an AQP.
- PRCP21** When the environmental authority EPML03337715 for Red Hill Mine is amended to reflect rehabilitation commencement timeframes as required by PRCP1 and PRCP2 of P-PRCP-100779248, this Goonyella Riverside and Broadmeadow Mine PRCP schedule must be amended to reflect earlier rehabilitation commencement timeframes in line with Red Hill Mine PRCP schedule (P-PRCP-100779248).
- PRCP22** 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.
- PRCP23** With respect to Broadmeadow Mine (BRM), the groundwater model must be updated and submitted to the administering authority prior to the commencement of mining the Goonyella Lower Seam (GLS) to align it with the revised underground mine layout as per Figure 20 of the PRC plan BMA-GRM and BRM-PRCP-v3 (5 September 2025).

END OF CONDITIONS

Section B - Final site design and reference maps

Figure 1 – Final Site Design

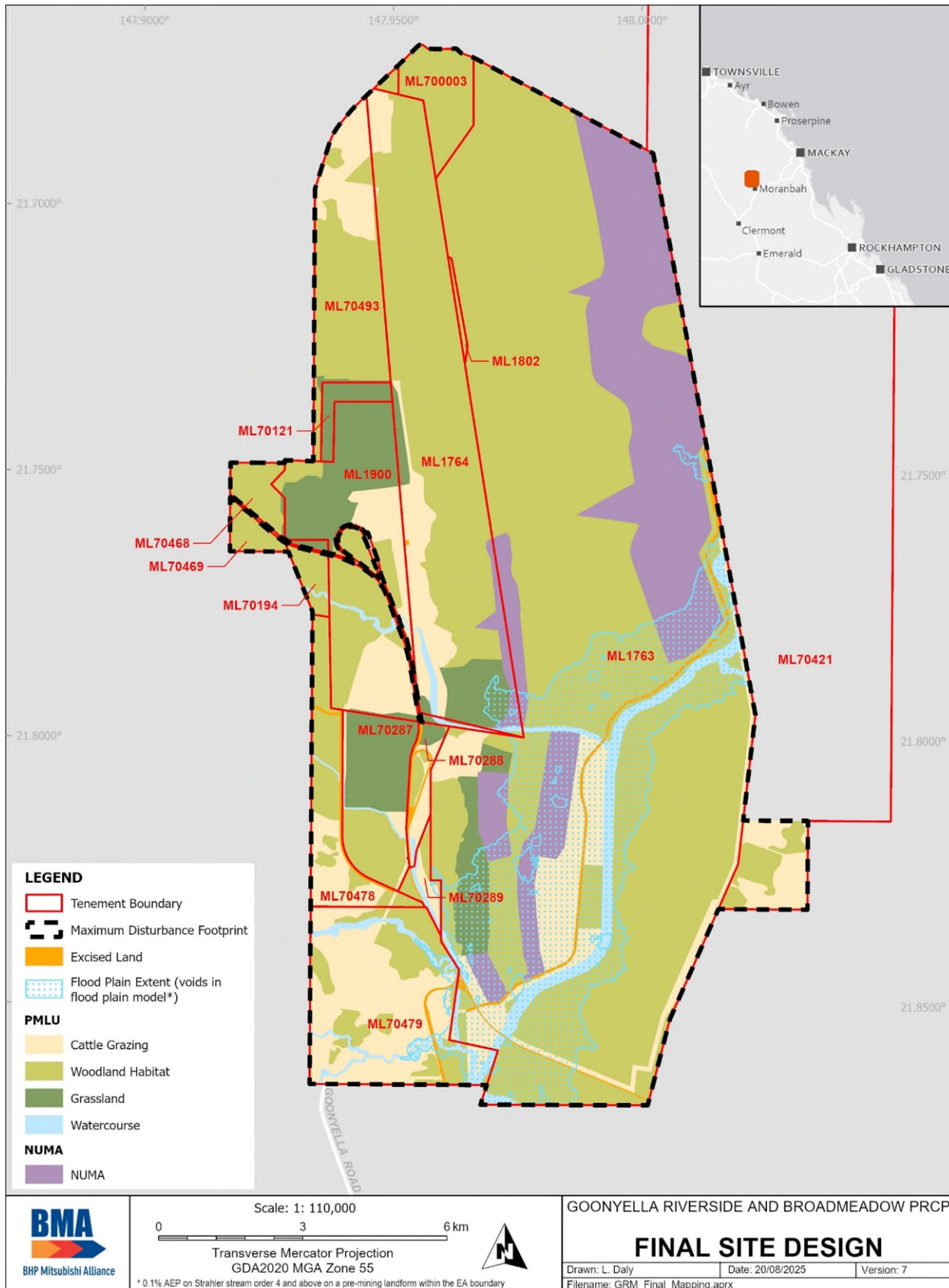
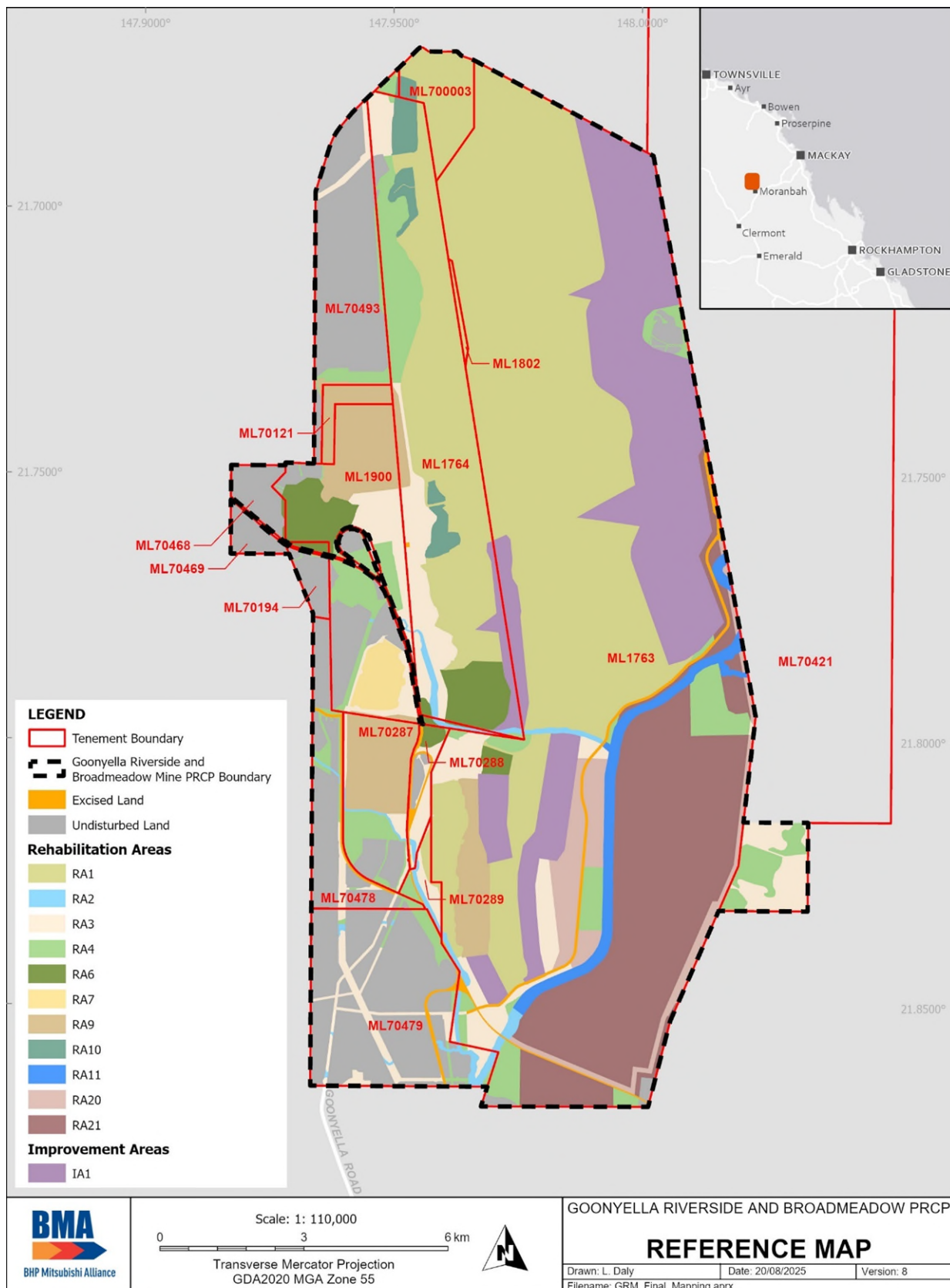


Figure 2 – Rehabilitation Areas (PMLU) and Improvement Areas (NUMA)



Section C – Definitions

3P grasses	Perennial, productive and palatable grasses.
Appropriately qualified person (AQP)	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.
Activity (EP Regulation)	includes that part, if any, of an activity relating to the following— (a) preparing a place for the activity before carrying out the activity; (b) rehabilitating a place after it has been used for carrying out the activity.
BioCondition	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.
Contaminants	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.
Contaminated Land Investigation Document	as defined in section 387 of the <i>Environmental Protection Act 1994</i> (Qld) (EP Act).
Growth media	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.
Groundcover	anything in contact with the soil surface, for example, live cover, standing dry cover, organic litter (including leaves, hay, woody debris) or rocks.
Gully	a gully is a channel excavated by water, more than 0.3 m deep.
Independent AQP	is an AQP who is a third party, and has not previously provided advice on the matter the subject of the review.
Index of Diversion Condition modified method	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.
Minor ancillary activities	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.
Representative	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.

Unacceptable risk of environmental harm	means as defined in section 14 (1) and (2) of the <i>Environmental Protection Act 1994</i> (Qld).
Stabilised	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).
Stable condition	As defined in section 111A of the <i>Environmental Protection Act 1994</i> : Land is in a stable condition if— • the land is safe and structurally stable, and • there is no environmental harm being caused by anything on or in the land, and • the land can sustain a PMLU.
Suitably qualified person (SQP)	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— (a) has qualifications and experience relevant to performing the function; and (b) if a regulation prescribes an organisation for this paragraph—is a member of the organisation.
Vegetation groundcover	means plants, plant litter, tree leaf litter, twigs and woody debris capable of protecting the soil surface from erosion.

Section D – Post mining land uses

(RA1) Rehabilitation area 1

Post-mining land uses (PMLU)											
Rehabilitation area				RA1							
Relevant activities				Spoil Dumps							
Total rehabilitation area size (ha)				5557							
Commencement of first milestone: RM2				10/12/2025							
PMLU				Woodland Habitat							
Date area is available	10/12/2025	10/12/2033	10/12/2038	10/12/2043	10/12/2048	10/12/2053	10/12/2058	10/12/2063	10/12/2068	10/12/2073	10/12/2078
Cumulative area available (ha)	186	479	750	1264	1884	2729	3771	4611	4611	4611	4611
Milestone completed by	10/12/2033	10/12/2038	10/12/2043	10/12/2048	10/12/2053	10/12/2058	10/12/2063	10/12/2068	10/12/2073	10/12/2078	10/12/2083
Milestone Reference	Cumulative area achieved (ha)										
RM2	186	479	750	1264	1884	2729	3771	4234	4611		
RM3	186	479	750	1264	1884	2729	3771	4234	4611		
RM5	186	479	750	1264	1884	2729	3771	4234	4611		
RM8	186	479	750	1264	1884	2729	3771	4234	4611		
RM11			186	479	750	1264	1884	2729	3771	4234	4611
RM14					186	479	750	1264	1884	2729	3771
Date area is available	10/12/2083	10/12/2088	10/12/2093	10/12/2098							
Cumulative area available (ha)	4611	4611	5557								

Milestone completed by	10/12/2088	10/12/2093	10/12/2098	10/12/2103	10/12/2108	10/12/2113	10/12/2118	10/12/2123			
Milestone Reference	Cumulative area achieved (ha)										
RM2			5011	5557							
RM3			5011	5557							
RM5			5011	5557							
RM8			5011	5557							
RM11					5011	5557					
RM14	4324	4611					5011	5557			

(RA2) Rehabilitation area 2

Post-mining land uses (PMLU)						
Rehabilitation area	RA2					
Relevant activities	Watercourse Diversions and Crossings					
Total rehabilitation area size (ha)	173					
Commencement of first milestone: RM1	10/12/2061					
PMLU	Watercourse					
Date area is available	11/12/2061	11/12/2064	11/12/2074	11/12/2097		
Cumulative area available (ha)	113	113	113	173		
Milestone completed by	10/12/2064	10/12/2074	10/12/2084	10/12/2100	10/12/2110	10/12/2120
Milestone Reference	Cumulative area achieved (ha)					
RM1	113			173		
RM3	113			173		
RM6	113			173		
RM9	113			173		
RM12		113			173	
RM15			113			173

(RA3) Rehabilitation area 3

Post-mining land uses (PMLU)											
Rehabilitation area				RA3							
Relevant activities				CHPP, workshops, fuel/oil/chemical storage, buildings, train load outs, dams, coal stockpiles, roads, general infrastructure and disturbance							
Total rehabilitation area size (ha)				1286							
Commencement of first milestone: RM1				10/12/2061							
PMLU				Cattle Grazing							
Date area is available	10/12/2061	10/12/2067	10/12/2070	10/12/2074	10/12/2076	10/12/2080	10/12/2082	10/12/2086	10/12/2091	10/12/2092	10/12/2097
Cumulative area available (ha)	492	852	852	852	852	852	852	852	852	852	1286
Milestone completed by	10/12/2064	10/12/2070	10/12/2074	10/12/2076	10/12/2080	10/12/2082	10/12/2086	10/12/2091	10/12/2092	10/12/2097	10/12/2100
Milestone Reference	Cumulative area achieved (ha)										
RM1	492	852									1286
RM2			492		852						
RM3				492		852					
RM4				492		852					
RM7				492		852					
RM10							492		852		
RM13								492		852	

Date area is available											
Cumulative area available (ha)											
Milestone completed by	10/12/2120	10/12/2122	10/12/2132	10/12/2137							
Milestone Reference	Cumulative area achieved (ha)										
RM1											
RM2	1286										
RM3		1286									
RM4		1286									
RM7		1286									
RM10			1286								
RM13				1286							

(RA4) Rehabilitation area 4

Post-mining land uses (PMLU)											
Rehabilitation area	RA4										
Relevant activities	Roads, laydown areas, conveyors, general infrastructure and disturbance, Area 4										
Total rehabilitation area size (ha)	1165										
Commencement of first milestone: RM1	10/12/2061										
PMLU	Woodland Habitat										
Date area is available	10/12/2061	10/12/2067	10/12/2069	10/12/2073	10/12/2076	10/12/2079	10/12/2082	10/12/2086	10/12/2092	10/12/2097	
Cumulative area available (ha)	644	1111	1111	1111	1111	1111	1111	1111	1111	1165	
Milestone completed by	10/12/2063	10/12/2069	10/12/2073	10/12/2076	10/12/2079	10/12/2082	10/12/2086	10/12/2092	10/12/2096	10/12/2099	10/12/2102
Milestone Reference	Cumulative area achieved (ha)										
RM1	644	1111								1165	
RM2			644		1111						
RM3				644		1111					
RM5				644		1111					
RM8				644		1111					
RM11							644	1111			
RM14									644		1111
Date area is available											
Cumulative area available (ha)											
Milestone completed by	10/12/2109	10/12/2112	10/12/2122	10/12/2132							

Milestone Reference	Cumulative area achieved (ha)										
RM1											
RM2	1165										
RM3		1165									
RM4		1165									
RM8		1165									
RM10			1165								
RM13				1165							

(RA6) Rehabilitation area 6

Post-mining land uses (PMLU)														
Rehabilitation area				RA6										
Relevant activities				Reject dumps										
Total rehabilitation area size (ha)				400										
Commencement of first milestone: RM1				10/12/2031										
PMLU				Grassland										
Date area is available	10/12/2025	10/12/2034	10/12/2044	10/12/2049	10/12/2059	10/12/2062	10/12/2071	10/12/2081	10/12/2092	10/12/2096				
Cumulative area available (ha)	170	170	170	170	170	233	233	233	233	400				
Milestone completed by	10/12/2034	10/12/2044	10/12/2049	10/12/2059	10/12/2064	10/12/2071	10/12/2081	10/12/2086	10/12/2096	10/12/2101	10/12/2111	10/12/2116	10/12/2126	10/12/2131
Milestone Reference	Cumulative area achieved (ha)													
RM1	170					233				400				
RM2		170					233				400			
RM3			170					233				400		
RM4			170					233				400		
RM7			170					233				400		
RM19				170					233				400	
RM20					170					233				400

(RA7) Rehabilitation area 7

Post-mining land uses (PMLU)						
Rehabilitation area	RA7					
Relevant activities	Existing Rehabilitation					
Total rehabilitation area size (ha)	118					
Commencement of first milestone: RM10	10/12/2024					
PMLU	Cattle Grazing					
Date area is available	10/12/2024					
Cumulative area available (ha)	118					
Milestone completed by	10/12/2034	10/12/2039				
Milestone Reference	Cumulative area achieved (ha)					
RM10	118					
RM13		118				

(RA9) Rehabilitation area 9

Post-mining land uses (PMLU)													
Rehabilitation area				RA9									
Relevant activities				Tailings Storage Facilities									
Total rehabilitation area size (ha)				872									
Commencement of first milestone: RM1				10/12/2033									
PMLU				Grassland									
Date area is available	10/12/2025	10/12/2036	10/12/2056	10/12/2062	10/12/2073	10/12/2076	10/12/2091						
Cumulative area available (ha)	197	197	197	537	537	537	872						
Milestone completed by	10/12/2036	10/12/2056	10/12/2066	10/12/2073	10/12/2076	10/12/2081	10/12/2093	10/12/2103	10/12/2113	10/12/2118	10/12/2123	10/12/2133	10/12/2138
Milestone Reference	Cumulative area achieved (ha)												
RM1	197			537			677	872					
RM2		197					537		677		872		
RM3			197					537			677	872	
RM4			197					537			677	872	
RM7			197					537			677	872	
RM19					197				537			677	
RM20						197				537			677

Date area is available													
Cumulative area available (ha)													
Milestone completed by	10/12/2143	10/12/2148											
Milestone Reference	Cumulative area achieved (ha)												
RM1													
RM2													
RM3													
RM4													
RM7													
RM19	872												
RM20		872											

(RA10) Rehabilitation area 10

Post-mining land uses (PMLU)										
Rehabilitation area				RA10						
Relevant activities				Existing Rehabilitation						
Total rehabilitation area size (ha)				175						
Commencement of first milestone: RM5				10/12/2024						
PMLU				Woodland Habitat						
Date area is available	10/12/2024	10/12/2024								
Cumulative area available (ha)	155	175								
Milestone completed by	10/12/2024	10/12/2026	10/12/2028	10/12/2034	10/12/2036	10/12/2038	10/12/2044	10/12/2046	10/12/2048	
Milestone Reference	Cumulative area achieved (ha)									
RM5	155	175								
RM8	33	155	175							
RM11	21			33	155	175				
RM18				21			33	155	175	

(RA11) Rehabilitation area 11

Post-mining land uses (PMLU)						
Rehabilitation area	RA11					
Relevant activities	Watercourses, watercourse diversions and crossings within underground mining/subsidence area					
Total rehabilitation area size (ha)	249					
Commencement of first milestone: RM1	10/12/2057					
PMLU	Watercourse					
Date area is available	10/12/2057	10/12/2060	10/12/2070	10/12/2097		
Cumulative area available (ha)	206	206	206	249		
Milestone completed by	10/12/2060	10/12/2070	10/12/2080	10/12/2100	10/12/2110	10/12/2120
Milestone Reference	Cumulative area achieved (ha)					
RM1	206			249		
RM3	206			249		
RM6	206			249		
RM9	206			249		
RM12		206			249	
RM15			206			249

(RA20) Rehabilitation area 20

Post-mining land uses (PMLU)						
Rehabilitation area	RA20					
Relevant activities	Subsidence, underground mining infrastructure, general infrastructure and disturbance within underground mining area					
Total rehabilitation area size (ha)	434					
Commencement of first milestone: RM1	10/12/2057					
PMLU	Cattle Grazing					
Date area is available	10/12/2057	10/12/2062	10/12/2072	10/12/2097		
Cumulative area available (ha)	406	406	406	434		
Milestone completed by	10/12/2062	10/12/2072	10/12/2077	10/12/2102	10/12/2112	10/12/2117
Milestone Reference	Cumulative area achieved (ha)					
RM1	406			434		
RM3	406			434		
RM4	406			434		
RM7	406			434		
RM10		406			434	
RM13			406			434

(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)	2079					
Commencement of first milestone: RM1	10/12/2057					
PMLU	Woodland Habitat					
Date area is available	10/12/2057	10/12/2062	10/12/2072	10/12/2097		
Cumulative area available (ha)	1963	1963	1963	2079		
Milestone completed by	10/12/2062	10/12/2072	10/12/2082	10/12/2102	10/12/2112	10/12/2122
Milestone Reference	Cumulative area achieved (ha)					
RM1	1963			2079		
RM3	1963			2079		
RM5	1963			2079		
RM8	1963			2079		
RM11		1963			2079	
RM14			1963			2079

Rehabilitation area milestones

Milestone reference	Rehabilitation milestone	Milestone criteria
RM1	Infrastructure decommissioning and removal	1.1 All infrastructure to be retained onsite must be safe, stable and not cause environmental harm. 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). 1.3 Underground shafts are closed according to Appropriately Qualified Person (AQP) design (RA20, RA21). 1.4 Except for RM1.3, below-ground infrastructure, services and waste (as per the Environmental Authority (EPML00853413) waste schedule) deeper than 0.5m in relation to the final landform surface can be retained provided it can meet the following: a) All pipelines have been drained. b) All below-ground infrastructure (installed after the approval date of this transitional PRCP) to be retained must be mapped. c) The intended PMLU is not compromised. 1.5 With the exception of RM1.2, RM1.3 and RM1.4 above, the following are complete: a) All services disconnected, terminated and removed; b) All buildings and associated infrastructure dismantled and removed;

		c) All hardstand, concrete areas and roads (bitumen, blue metal, aggregate) removed; d) All pipelines drained and removed; e) All waste, not authorised under the Environmental Authority (EPML00853413) waste schedule, removed; f) All surface water drainage infrastructure removed; g) All drillholes, bores, sediment ponds and sumps decommissioned; h) All machinery and equipment not required for rehabilitation works removed from site; i) Mine water dams are decommissioned; j) Watercourse crossings and culverts removed. 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.
RM2	Remediation and/or management of contaminated land	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. 2.2 The Contaminated Land Investigation Document confirms the area within the mining leases (ML1763, ML1764, ML1802, ML1900, ML700003, ML70121, ML70193, ML70194, ML70287, ML70288, ML70289, ML70421, ML70468, ML70469, ML70478, ML70479, ML70493 and ML70494) does not present an unacceptable risk to the post-mining land use.

		2.3 Despite RM2.1 and RM2.2, where contaminated land investigations are undertaken for individual areas of progressive rehabilitation that do not cover an entire Lot on Plan, the investigations will be undertaken by a Suitably Qualified Person to a standard, that at the time of investigation, would be suitable to form part of a future <i>Environmental Protection Act 1994</i> (Qld) compliant Contaminated Land Investigation Document for that property, and does not need to achieve all requirements for a contaminated land submission to the administering authority.
RM3	Landform development and reshaping	All rehabilitation areas 3.1 Erosion and sediment control systems are designed by an AQP, installed, and fit for purpose. 3.2 Appropriate mitigative measures in place for outer landform slopes that interact with flood waters up to a 0.1% AEP, as modelled on the closure landform, and designed by an AQP to minimise potential instability of the landforms from interaction with floodwaters. 3.3 The reshaped landforms are geotechnically stable with RA1, RA6 and RA9 achieving FoS ≥ 1.5. Woodland Habitat (RA1, RA4) 3.4 Landforms reshaped with: a) RA1: $\leq 30\%$ slopes, with $>15\%$ slopes covered with minimum 0.5m rock. b) RA1: Runoff to be restricted from the top of the landform onto the batter slopes if required using appropriate measures of erosion control as advised and designed by an AQP.

		c) RA4: ≤15% slopes. Watercourses (RA2) 3.5 Disturbed natural watercourse bed and banks returned to a profile similar to the pre-disturbance condition. Cattle grazing (RA3) 3.6 Landforms are reshaped with slopes: ≤12%. Grassland (RA6, RA9) - Installation of cover 3.7 An AQP to determine appropriate detailed cover design for installation based on geochemical and geotechnical characterisation of tailings and rejects, which at minimum achieves the following: a) Tailings and rejects to be capped with at least 2m of competent benign spoil; b) Reduces risk of upward movement of contaminants into the topsoil layer above the cover and reduce risk of environmental harm from contaminated seepage; c) Landforms are reshaped with slopes ≤30%; d) >15% slopes to be covered with minimum 0.5m rock, unless an alternative is justified by an AQP; and e) Landform surface to be free draining. 3.8 An independent AQP to endorse installation of the cover system as per RM3.7. Underground Mining (RA11, RA20, RA21) 3.9 RA20 landforms maintain pre-mining contour ± 8m.
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		3.10 Backfill and/or install drainage to limit subsidence inundation (RA20, RA21): a) To maximum 1m depth in a 2% AEP rainfall event demonstrated by modelling completed by an AQP, or b) Residual ponding does not adversely impact achieving the PMLU as assessed by an AQP. 3.11 Reshape watercourse crossings to a profile similar to the pre-disturbance condition (RA11). Retained water structure 3.12 Water storages are safe for stock access and have vegetated banks.
RM4	Surface preparation (cattle grazing and grassland)	4.1 Topsoil placed at minimum depth of 150mm in areas where topsoil has previously been removed. 4.2 Assessment of growth media characteristics is completed by an AQP: a) To target land suitability class ≤ 3 as per PRCP schedule Appendix 5: Regional land suitability framework for beef cattle grazing PMLU rehabilitation in the Bowen Basin (Short, 2025) (RA3, RA20); and b) For target vegetation establishment suitable for designated PMLU (RA6, RA9). 4.3 Ameliorant and physical treatments are applied as identified in criteria RM4.2. 4.4 Rip at least 300mm into soil/subsoil profile along contour of slopes.

RM5	Surface preparation (woodland habitat)	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. 5.2 Assessment of growth media characteristics is completed by an AQP for target vegetation establishment suitable for designated PMLU. 5.3 Ameliorant and physical treatments are applied as identified in RM5.2. 5.4 Rip at least 300mm into soil/subsoil profile along contour of slopes.
RM6	Surface preparation (watercourse)	6.1 Topsoil placed at minimum depth of 150mm in areas where topsoil has previously been removed. 6.2 Assessment of growth media characteristics is completed by an AQP for target vegetation establishment suitable for designated PMLU. 6.3 Ameliorant and physical treatments are applied as identified in criteria RM6.2. 6.4 Rip at least 300mm into soil/subsoil profile along contour of slopes.
RM7	Revegetation (cattle grazing and grassland)	7.1 Completed seeding in accordance with PRCP schedule Appendix 1: Recommended species list and seeding rates for cattle grazing and grassland PMLUs. 7.2 For cattle grazing PMLU, at least four species of 3P grasses and two species of legumes from PRCP schedule Appendix 1: Recommended species list and seeding rates for cattle grazing and grassland PMLUs.
RM8	Revegetation (woodland habitat)	8.1 Completed seeding in accordance with PRCP schedule Appendix 2: Recommended species list and seeding rates for woodland habitat PMLU (RA1, RA10)*, or PRCP schedule Appendix 2.1: Recommended

		species list and seeding rates for woodland habitat PMLU (RA21- ponded areas), or as recommended by an AQP where vegetation is targeting a specific regional ecosystem (RA4, RA21)¹. <i>*If recommended species are not available, substitute with species from RE 11.5.3, RE 11.5.9, RE 11.7.2.</i>
RM9	Revegetation (watercourse)	9.1 Completed seeding in accordance with PRCP schedule Appendix 3: Recommended species list and seeding rates for watercourse PMLU – upper and mid banks and PRCP schedule Appendix 4: Recommended species list and seeding rates for watercourse revegetation PMLU – lower banks.
RM10	Achievement of surface requirements (cattle grazing – RA3, RA7, RA20)	10.1 >50% vegetation groundcover (RA7), of which ≥50% of dry matter yield is 3P grasses as listed in PRCP schedule Appendix 1: Recommended species list and seeding rates for cattle grazing and grassland PMLUs (RA3, RA20). 10.2 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 (RA3, RA20). 10.3 With respect to erosion in rehabilitated landforms: a) All erosion as per PRCP schedule Appendix 8: Erosion classification framework is assessed by an AQP and repaired if

¹ Seed application may not be required in all RA4 and RA21 areas.

		assessed as requiring intervention to ensure the stable PMLU achieved, and evidence that it is repaired as per AQP advice; and b) Mass movement and tunnel erosion are absent. 10.4 Subsidence cracks are repaired if the cracks will not self-heal and they adversely impact achieving the PMLU as assessed by an AQP (RA20).
RM11	Achievement of surface requirements (woodland habitat – RA1, RA4, RA10, RA21)	11.1 Groundcover: a) >15% slopes must achieve ≥80% groundcover, or b) ≤15% slopes achieve ≥50% groundcover. 11.2 Vegetation meets the following: a) BioCondition score of ≥18/60 based on the averaged benchmarks for the representative regional ecosystems as listed in PRCP schedule Appendix 6: BioCondition benchmarks and scoring of site-based attributes for representative regional ecosystems (RA1, RA4) or PRCP schedule Appendix 7: BioCondition benchmarks and scoring of site-based attributes for representative regional ecosystems (RA21 - free draining areas), and as assessed by an AQP using the modified 'BioCondition Assessment Manual' (version 2.2) methodology, or b) Species richness of ≥2 native trees, ≥3 native shrubs and ≥4 ground species (native or exotic) (RA10, RA21 – ponded areas). 11.3 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 (RA1, RA4, RA21). 11.4 Seepage from rehabilitated landforms does not cause environmental harm to the receiving environment with any required management measures deemed appropriate by an AQP (RA1). 11.5 With respect to erosion in rehabilitated landforms: a) All erosion inclusive of tunnel erosion as per PRCP schedule Appendix 8: Erosion classification framework is assessed by an AQP and repaired if assessed as requiring intervention to ensure the stable PMLU achieved, and evidence that it is repaired as per AQP advice; and b) Mass movement is absent. 11.6 Subsidence cracks are repaired if the cracks will not self-heal and they adversely impact achieving the PMLU as assessed by an AQP (RA21). 11.7 Bed and banks of subsidence drainage structures are geotechnically stable (RA21). 11.8 All areas of subsidence in RA21 which cannot achieve free draining landform, must either not present surface ponding for more than 70 continuous days, or if ponding persists for more than 70 days the water quality must meet ANZECC 2000 stock water guideline values, for a minimum 5 years (RA21).
RM12	Achievement of surface requirements (watercourse – RA2, RA11)	12.1 Groundcover: Landform slopes must achieve ≥50% groundcover.

		12.2 Geomorphic index score: greater than or equal to upstream or downstream values (Index of Diversion Condition method). 12.3 Vegetation meets the following: a) Species richness: I. ≥ 2 native trees; II. ≥ 2 native shrubs representative of riparian vegetation RE 11.3.25; and III. ≥ 2 grasses (exotic or native). 12.4 With respect to erosion in rehabilitated landforms: a) All erosion as per PRCP schedule Appendix 8: Erosion classification framework is assessed by an AQP and repaired if assessed as requiring intervention to ensure the stable PMLU achieved and evidence that it is repaired as per AQP advice; and b) Mass movement and tunnel erosion are absent. 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 (RA11).
RM13	Achievement of post-mining land use to a stable condition (cattle grazing - RA3, RA7 and RA20)	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. 13.2 Groundcover: $>50\%$ vegetation groundcover (RA7), of which $\geq 50\%$ of dry matter yield is 3P grasses as listed in PRCP schedule Appendix 1: Recommended species list and seeding rates for cattle grazing and grassland PMLUs (RA3, RA20). 13.3 Achievement of land suitability class ≤ 3 as per PRCP schedule Appendix 5: Regional land suitability framework for beef cattle grazing PMLU

		rehabilitation in the Bowen Basin (Short, 2025), or ≥ 4 if not different to pre-mining land class. 13.4 With respect to erosion in rehabilitated landforms: a) No evidence of erosion classified as moderate or severe as defined by PRCP schedule Appendix 8: Erosion classification framework; and b) Mass movement and tunnel erosion are absent. c) An AQP determines that any erosion present will not compromise the achievement of a PMLU to a stable condition. 13.5 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 (RA3, RA20). 13.6 <i>Leucaena leucocephala</i> plants >2m high do not exceed stem density of 250 stems per hectare (1 per 40m²) mean of total area. 13.7 Restricted invasive plants (as defined in the <i>Biosecurity Act 2014</i>) comprise $\leq 5\%$ 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. 13.8 Final landform survey confirms no built infrastructure remains other than those that form part of landholder agreement and meets exception as per RM1.4. 13.9 Subsidence cracks are repaired if the cracks will not self-heal and they adversely impact achieving the PMLU as assessed by an AQP (RA20).
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		Retained infrastructure/ Water storage 13.10 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. 13.11 All retained dams are safe, stable for native animals and stock access and have vegetated banks. 13.12 Water storages monitored for water quality annually must meet ANZECC 2000 stock water guideline values, for a minimum of 5 consecutive years.
RM14	Achievement of post-mining land use to a stable condition (woodland habitat – RA1, RA4 and RA21)	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. 14.2 Rehabilitation is assessed as geotechnically stable by an AQP with FoS ≥ 1.5 (RA1). 14.3 With respect to erosion in rehabilitated landforms: a) No evidence of erosion classified as moderate or severe as defined by PRCP schedule Appendix 8: Erosion classification framework; b) Mass movement is absent; and c) An AQP determines that any erosion present, including tunnel erosion, will not compromise the achievement of a PMLU to a stable condition. 14.4 Groundcover: a) >15% slopes: $\geq 80\%$ groundcover, or b) $\leq 15\%$ slopes: $\geq 50\%$ groundcover. 14.5 Vegetation meets the following:

		a) BioCondition score of $\geq 35/60$ based on the averaged benchmarks for the representative regional ecosystems as listed in PRCP schedule Appendix 6: BioCondition benchmarks and scoring of site-based attributes for representative regional ecosystems (RA1, RA4) or PRCP schedule Appendix 7: BioCondition benchmarks and scoring of site-based attributes for representative regional ecosystems (RA21 - free draining areas), and as assessed by an AQP using the modified 'BioCondition Assessment Manual' (version 2.2) methodology, or b) RA21 – ponded areas: i. Species richness of : ≥ 2 native trees, ≥ 3 native shrubs and ≥ 4 ground species (native or exotic); and ii. Tree canopy cover: ≥ 16 14.6 Restricted invasive plants (as defined in the <i>Biosecurity Act 2014</i>) comprise $\leq 5\%$ 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. 14.7 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. 14.8 Seepage from the rehabilitated landforms does not cause environmental harm to the receiving environment (RA1).
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		14.9 Subsidence cracks are repaired if the cracks will not self-heal and they adversely impact achieving the PMLU as assessed by an AQP (RA21). 14.10 Final landform survey confirms no built infrastructure remains other than those that form part of landholder agreement and meets exception as per RM1.4.
RM15	Achievement of post-mining land use to a stable condition (watercourse – RA2, RA11)	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. 15.2 With respect to erosion in rehabilitated landforms: a) No evidence of erosion classified as moderate or severe as defined by PRCP schedule Appendix 8: Erosion classification framework; b) Mass movement and tunnel erosion are absent; and c) An AQP determines that any erosion present will not compromise the achievement of a PMLU to a stable condition. 15.3 Geomorphic index score: greater than or equal to upstream or downstream values (Index of Diversion Condition method). 15.4 Watercourse vegetation meets the following: a) Riparian vegetation index score: greater than or equal to upstream or downstream values (Index of Diversion Condition method). b) Species richness: I. ≥2 native trees; II. ≥2 native shrubs; and III. ≥2 grass species (native or exotic). c) Tree canopy cover ≥13%.

		15.5 Restricted invasive plants (as defined in the <i>Biosecurity Act 2014</i>) comprise $\leq 5\%$ 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. 15.6 Diversion has an IDC score >10 as defined in 'Criteria for functioning river landscape units in mining and post-mining landscapes' (ACARP Project number C20017). 15.7 AQP must ensure the following in closure design determination for diversions, and Isaac River in particular, being retained in the landform: a) Incorporate natural features (including geomorphic and vegetation) present at the location of the diversion; b) Maintain the pre-existing hydrologic characteristics of surface water for the area in which the watercourse diversion is located; c) Maintain the hydraulic characteristics of the local watercourses without requiring on-going maintenance; d) Maintain sediment transport and water quality regimes that allow the diversion to be self-sustaining, while minimising any impacts to upstream and downstream water quality, geomorphology, or vegetation; e) Maintain equilibrium and functionality in all substrate conditions at the location of the diversion; and f) Geotechnically and erosionally stable g) Any loss of surface water to groundwater aquifers in the area of Isaac River diversion will not cause environmental harm.
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		15.8 Subsidence cracks are repaired if the cracks will not self-heal and they adversely impact achieving the PMLU as assessed by an AQP (RA11). 15.9 Watercourse bank stability is not adversely impacted by subsidence as assessed by an AQP (RA11). 15.10 Final landform survey confirms no built infrastructure remains other than those that form part of landholder agreement and meets exception as per RM1.4.
RM18	Achievement of post-mining land use to a stable condition (woodland habitat existing rehabilitation – RA10)	18.1 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. 18.2 Rehabilitation is assessed as geotechnically stable by an AQP with FoS ≥ 1.5. 18.3 Groundcover: a) >15% slopes: $\geq 80\%$ groundcover. b) $\leq 15\%$ slopes: $\geq 50\%$ groundcover. 18.4 Vegetation meets the following: a) Species richness: I. ≥ 2 native trees; II. ≥ 3 native shrubs; III. ≥ 4 grasses (native or exotic). b) Tree canopy cover: $\geq 16\%$. 18.5 Restricted invasive plants (as defined in the <i>Biosecurity Act 2014</i>) comprise $\leq 5\%$ of vegetation groundcover, with the exception of <i>Parthenium</i>

		<i>hysterophorus</i> which must not exceed 10% vegetation groundcover and assessed by an AQP as appropriately managed. 18.6 With respect to erosion in rehabilitated landforms: a) No evidence of erosion classified as moderate or severe as defined by PRCP schedule Appendix 8: Erosion classification framework; b) Mass movement is absent; and c) An AQP determines that any erosion present, including tunnel erosion, will not compromise the achievement of a PMLU to a stable condition.
RM19	Achievement of surface requirements (grassland – RA6, RA9)	19.1 Groundcover: a) >15% slopes: ≥80% groundcover. b) ≤15% slopes: ≥50% groundcover. c) ≤5% slopes: ≥50% groundcover, consisting of at least 50% vegetation groundcover. 19.2 With respect to erosion in rehabilitated landforms: a) All erosion as per PRCP schedule Appendix 8: Erosion classification framework is assessed by an AQP and repaired if assessed as requiring intervention to ensure the stable PMLU achieved and evidence that it is repaired as per AQP advice; and b) Mass movement and tunnel erosion are absent. 19.3 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.

RM20	Achievement of post-mining land use to a stable condition (grassland - RA6, RA9)	20.1 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. 20.2 Rehabilitation is assessed as geotechnically stable by an AQP with FoS ≥ 1.5. 20.3 With respect to erosion in rehabilitated landforms: a) No evidence of erosion classified as moderate or severe as defined by PRCP schedule Appendix 8: Erosion classification framework; and b) Mass movement and tunnel erosion are absent; c) An AQP determines that any erosion present will not compromise the achievement of a PMLU to a stable condition. 20.4 Vegetation: ≥ 2 grass species (exotic or native species). 20.5 Groundcover: a) $>15\%$ slopes: $\geq 80\%$ groundcover; b) $\leq 15\%$ slopes: $\geq 50\%$ groundcover; and c) $\leq 5\%$ slopes: $\geq 50\%$ groundcover, consisting of at least 50% vegetation groundcover. 20.6 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. 20.7 Restricted invasive plants (as defined in the <i>Biosecurity Act 2014</i>) comprise $\leq 5\%$ of vegetation groundcover, with the exception of <i>Parthenium</i>
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		<i>hysterophorus</i> which must not exceed 10% vegetation groundcover and assessed by an AQP as appropriately managed.
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Section D – Non-use management areas

(IA1) Improvement area 1

Non-use management area (NUMA)									
Improvement area				IA1					
Relevant activities				Residual Voids					
Total size (ha)				2297					
Commencement of first milestone: MM1				10/12/2032					
NUMA				NUMA					
Date area is available	10/12/2032	10/12/2056	10/12/2060	10/12/2092					
Cumulative area available (ha)	108	380	428	2297					
Milestone completed by	10/12/2034	10/12/2058	10/12/2062	10/12/2094	10/12/2148				
Milestone Reference	Cumulative area achieved (ha)								
MM1	108	380	428	2297					
MM2	108	380	428	2297					
MM3					2297				

Improvement area milestones

Milestone reference	Management milestone	Milestone criteria
MM1	Achievement of structural stability	1.1 Highwall landforms must: a) Prevent surface flow of floodwater into the void b) Be geotechnically stable when floodwater is against the watercourse-side batter c) Prevent seepage flow of floodwater into the void d) Not be constructed with dispersive material e) Have maximum 30% slopes with rock for scour protection f) Minimum height to include appropriate freeboard for flood heights and materials. 1.2 The final design for highwall landform must be completed by an AQP based on the latest flood modelling and materials data prior to construction. 1.3 Final residual voids are not subject to inundation from floodwaters up to and including the 0.1% AEP. 1.4 The high-wall, end-wall and low-wall achieve a FoS ≥ 1.5 within the NUMA extents as determined by an AQP. 1.5 A minimum distance of 50m is to be designed between the residual void crest and the toe of the safety bund, where against an external perimeter mining lease (ML1763, ML1764, ML1802, ML1900, ML700003, ML70121, ML70193, ML70194, ML70287, ML70288, ML70289, ML70421, ML70468, ML70469, ML70478, ML70479, ML70493 and ML70494) boundary or a watercourse. 1.6 The location of the voids and associated safety bunds does not cause instability or degradation to the land outside of the mining lease (ML1763, ML1764, ML1802, ML1900, ML700003, ML70121, ML70193, ML70194, ML70287, ML70288, ML70289, ML70421, ML70468, ML70469, ML70478, ML70479, ML70493 and ML70494) boundary. 1.7 Low-walls are free-draining into the void lake with a maximum 37-degree slopes. 1.8 Residual voids must not overtop.

		1.9 Flood mitigation as per MM1.3 have appropriate scour protection to sustain flood velocities. 1.10 Residual voids maintain an inward hydraulic gradient within the relevant mining lease (ML1763, ML1764, ML1802, ML1900, ML700003, ML70121, ML70193, ML70194, ML70287, ML70288, ML70289, ML70421, ML70468, ML70469, ML70478, ML70479, ML70493 and ML70494) boundary post closure as demonstrated by groundwater modelling defined in condition PRCP14. 1.11 Underground entries are closed according to AQP design.
MM2	Achievement of surface requirements	2.1 Competent safety bund or equivalent landform in place around the perimeter of the residual void to prevent access to the residual void, at the geotechnical set-back distance. 2.2 Fencing erected, where required to prevent access to the residual void, around the perimeter of the safety bund. 2.3 Warning signage placed along the fence line (nominally one sign every 100m). 2.4 A minimum distance of 25m is to be designed between the residual void low-wall crest within the NUMA and the safety bund or equivalent landform in MM2.1.
MM3	Achievement of sufficient improvement	3.1 Certification from an AQP that: a) The residual void is safe to humans and livestock. b) Residual voids are monitored for water level annually, in accordance with condition PRCP19 to shown to be on a trajectory to the establishment of a residual void sink, at surrender. c) The water level and quality in the void will not cause environmental harm to the surrounding environment, as demonstrated by residual void water level, groundwater level, quality monitoring and modelling. d) Voids retain flood immunity, supported by flood modelling re-run at end of life and calibrated against the final landform. e) The highwall landform has been constructed in accordance with the final design as per MM1.2. f) Erosion and sediment control measures have been installed and are operating as per design. g) Appropriate safety infrastructure at the geotechnical set-back distance has been installed to prevent access to the NUMA. h) The residual void will not present an unacceptable risk of environmental harm outside of the relevant external

		perimeter mining lease (ML1763, ML1764, ML1802, ML1900, ML700003, ML70121, ML70193, ML70194, ML70287, ML70288, ML70289, ML70421, ML70468, ML70469, ML70478, ML70479, ML70493 and ML70494) boundary. i) Erosion of the landform within the NUMA area will not negatively impact on the stability of any adjacent rehabilitation areas, or their ability to sustain their PMLU. 3.2 Monitoring and maintenance of exclusion fences and bunds to be carried out to ensure they remain effective.
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Section F – Appendix

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Appendix 1: Recommended species list and seeding rates for cattle grazing and grassland PMLUs

Scientific name	Common name	Topsoil suitability		Seeding rate (kg/ha)	
		Clay	Sand /loams	Cattle grazing	Grassland
Grass species					
<i>Astrebla lappulacea</i> , <i>A. squarrosa</i> , <i>A. elymoides</i>	Mitchell grasses (curly, bull and hoop)	✓	-	2 ^c (per species)	5 ^c (per species)
<i>Bothriochloa bladhii</i>	Forest bluegrass	-	✓	4 ^c	5 ^c
<i>Bothriochloa ewartiana</i>	Desert bluegrass	✓	✓	2 ^c	3 ^c
<i>Bothriochloa insculpta</i> cvv. <i>Bisset</i> *	Bisset creeping blue grass	✓	✓	4 ^c	5 ^c
<i>Chloris gayana</i> cvv. <i>Callide</i> *	Callide Rhodes grass	✓	✓	4 ^c	5 ^c
<i>Chloris gayana</i> cvv. <i>Katambora</i> *	Katambora Rhodes grass	✓	✓	4 ^c	5 ^c
<i>Dichanthium aristatum</i>	Angleton grass	✓	-	4 ^c	5 ^c
<i>Dichanthium sericeum</i> subsp. <i>sericeum</i>	Queensland blue grass	✓	-	4 ^c	5 ^c
<i>Heteropogon contortus</i>	black spear grass	✓	✓	2 ^c	3 ^c
<i>Leersia hexandra</i>	swamp rice grass	✓	✓	4 ^c	5 ^c
<i>Leptochloa digitata</i>	umbrella cane grass	✓	✓	4 ^c	5 ^c
<i>Megathyrsus maximus</i> var. <i>pubiglumis</i> *	green panic	-	✓	4 ^c	5 ^c
<i>Panicum coloratum</i> var. <i>makarikariense</i> *	bambatsi panic	✓	-	4 ^c	5 ^c
<i>Panicum decompositum</i>	native millet	✓	✓	4 ^c	5 ^c
<i>Setaria incrassata</i> *	purple pigeon	✓	-	4 ^c	5 ^c
<i>Urochloa mosambicensis</i> *	Sabi grass	-	✓	4 ^c	5 ^c
Grass species - Total seed weight (coated)				16 ^c	25 ^c
Legume species					
<i>Chamaecrista rotundifolia</i>	Wynn cassia	-	✓	2	-
<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 hamata</i> *	shrubby stylo	-	✓	2	-
<i>Stylosanthes seabrana</i> *	stylo	✓	-	2	-
Legume species - Total seed weight (uncoated)				4	0
Cover Crop					
<i>Echinochloa esculenta</i>	Japanese millet	✓	✓	5	10

^c Seeding rate for coated seed. If not coated, use half the prescribed rate; * Naturalised exotic grass species

Appendix 2: Recommended species list and seeding rates for woodland habitat PMLU

Species* name	Common name	Life form and functional group code	Clay topsoil	Sand/loam topsoil, ameliorated spoil	Seed rates (kg/ha - uncoated weight)
Framework tree species					
<i>Acacia catenulata</i>	bendee	LLA	-	✓	0.3 - 1
<i>Acacia rhodoxylon</i>	rosewood	LLA	-	✓	0.3 - 1
<i>Acacia shirleyi</i>	lancewood	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 citriodora</i> subsp. <i>citriodora</i> **	lemon scented gum	E/C	-	✓	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 cambageana</i>	Dawson's gum	E/C	-	✓	0.3 - 0.5
<i>Eucalyptus crebra</i>	narrow leafed ironbark	E/C	✓	✓	0.6 - 2
<i>Eucalyptus exserta</i>	Queensland peppermint	E/C	-	✓	0.3 - 0.5
<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>Eucalyptus thozetiana</i>	Thozet's gum	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>Breynia oblongifolia</i>	coffee bush	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

Species* name	Common name	Life form and functional group code	Clay topsoil	Sand/loam topsoil, ameliorated spoil	Seed rates (kg/ha - uncoated weight)
<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>Petalostigma pubescens</i>	quinine	SU/NE/NA	✓	✓	0.3 - 0.5
<i>Pittosporum angustifolium</i>	Gumby Gumby	SU/NE/NA	✓	✓	0.3 - 0.5
<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>Paspalidium distans</i>	shot 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

Appendix 2.1: Recommended species list and seeding rates for woodland habitat PMLU (RA21 –ponded areas)

Species* name	Common name	Life form	Seed rate (kg/ha - uncoated weight)
Framework tree species			
<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
Framework tree species - total seed weight (uncoated)			6
Woody understorey species			
<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
Woody understorey species - total seed weight (uncoated)			4
Ground species			
<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

Species* name	Common name	Life form	Seed rate (kg/ha - uncoated weight)
<i>Panicum decompositum</i> var. <i>decompositum</i>	native millet	NG	0.5 - 1
<i>Paspalidium caespitosum</i>	brigalow grass	NG	0.5 - 1
<i>Paspalidium distans</i>	Shot grass	NG	0.5 - 1
<i>Paspalidium jubiflorum</i>	Warrego summer grass	NG	0.5 - 1
Ground species - total seed weight (uncoated)			10

* Medium salinity tolerance (DERM 2011)

Appendix 3: 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)
Framework tree species			
<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
Framework tree species - total seed weight (uncoated)			6
Woody understorey species			
<i>Acacia excelsa</i>	ironwood wattle	ILA	0.5 - 1
<i>Acacia fasciculifera</i>	scaly bark	ILA	0.5 - 1
<i>Cassia brewsteri</i> *	Leichardt bean	SU	0.5 - 1
<i>Carissa ovata</i>	current bush	GCS	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

Species name	Common name	Life form and functional group code	Seed rate (kg/ha - uncoated weight)
<i>Grewia latifolia</i>	dogs balls	SU	0.5 - 1
<i>Hakea lorea</i>	bootlace oak	SU	0.5 - 1
<i>Mallotus philippensis</i>	red kamala	SU	0.5 - 1
<i>Petalostigma pubescens</i>	quinine	SU	0.5 - 1
Woody understorey species - total seed weight (uncoated)			4
Ground species			
<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
Ground species - total seed (uncoated)			10
Cover Crop			
<i>Echinochloa esculenta</i>	Japanese millet	Cover crop	5

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

Appendix 4: 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)
Framework tree species			
<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
Framework tree species - total seed weight (uncoated)			5
Ground species			
<i>Bothriochloa bladhii</i> subsp. <i>bladhii</i>	forest blue grass	NG	1 - 2
<i>Cymbopogon refractus</i>	barbwire grass	NG	0.5 - 1
<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
<i>Lomandra longifolia</i>	spiny-headed mat rush	NG	2 - 3
<i>Themeda triandra</i>	kangaroo grass	NG	0.5 - 1
Ground species - total seed weight (uncoated)			10
Cover Crop			
<i>Echinochloa esculenta</i>	Japanese millet	Cover crop	5

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

Appendix 5: 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 (ERD) (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 6: BioCondition benchmarks and scoring of site-based attributes for representative regional ecosystems (RA1, RA4)

Site-based attributes	Maximum Score for attributes	Benchmarks* for representative REs			Averaged benchmarks
		RE 11.5.3	RE 11.5.9	RE 11.7.2	Combined REs
Recruitment of dominate canopy species (%)	5	100	100	100	100
Native plant species richness - trees (#)	5	6	3	3	4
Native plant species richness - shrubs (#)	5	6	6	4	5
Native plant species richness - grasses (#)	5	6	9	5	7
Native plant species richness - forbs/other (#)	5	10	11	5	9
Tree canopy height (m)	5	16	17	15	16
Tree canopy cover (%)	5	20	25	40	20**
Shrub layer cover (%)	5	3	10	4	6
Native perennial grass cover (%)	5	19	26	15	20
Litter cover (%)	5	20	30	20	23
Non-native plant cover (%)	10	0	0	0	0
Maximum Site Score	60				

* Benchmarks for each applicable site-based attribute for the representative RE's (State of Queensland, 2024).

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

Appendix 7: BioCondition benchmarks and scoring of site-based attributes for representative regional ecosystems (RA21 - free draining areas)

Site-based attributes	Maximum score for attributes	Benchmarks* for representative REs			Averaged benchmarks
		RE 11.5.3	RE 11.4.9	RE 11.4.8	Combined REs
Recruitment of dominate canopy species (%)	5	100	100	100	100
Native plant species richness - trees (#)	5	6	2	3	4
Native plant species richness - shrubs (#)	5	6	5	10	7
Native plant species richness - grasses (#)	5	6	5	9	7
Native plant species richness – forbs/other (#)	5	10	10	7	9
Tree canopy height (m)	5	16	10	17	14
Tree canopy cover (%)	5	20	25	40	20**
Shrub layer cover (%)	5	3	5	5	4
Native perennial grass cover (%)	5	19	16	20	18
Litter cover (%)	5	20	45	37	34
Non-native plant cover (%)	10	0	0	0	0
Maximum Site Score	60				

* Benchmarks for each applicable site-based attribute for the representative RE's (State of Queensland, 2024).

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

Appendix 8: Erosion classification framework

Erosion classification²	No erosion	Minor	Moderate	Severe
Sheet erosion	No sheet erosion present	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)	No rill erosion present	<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)	No gully erosion present	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.*

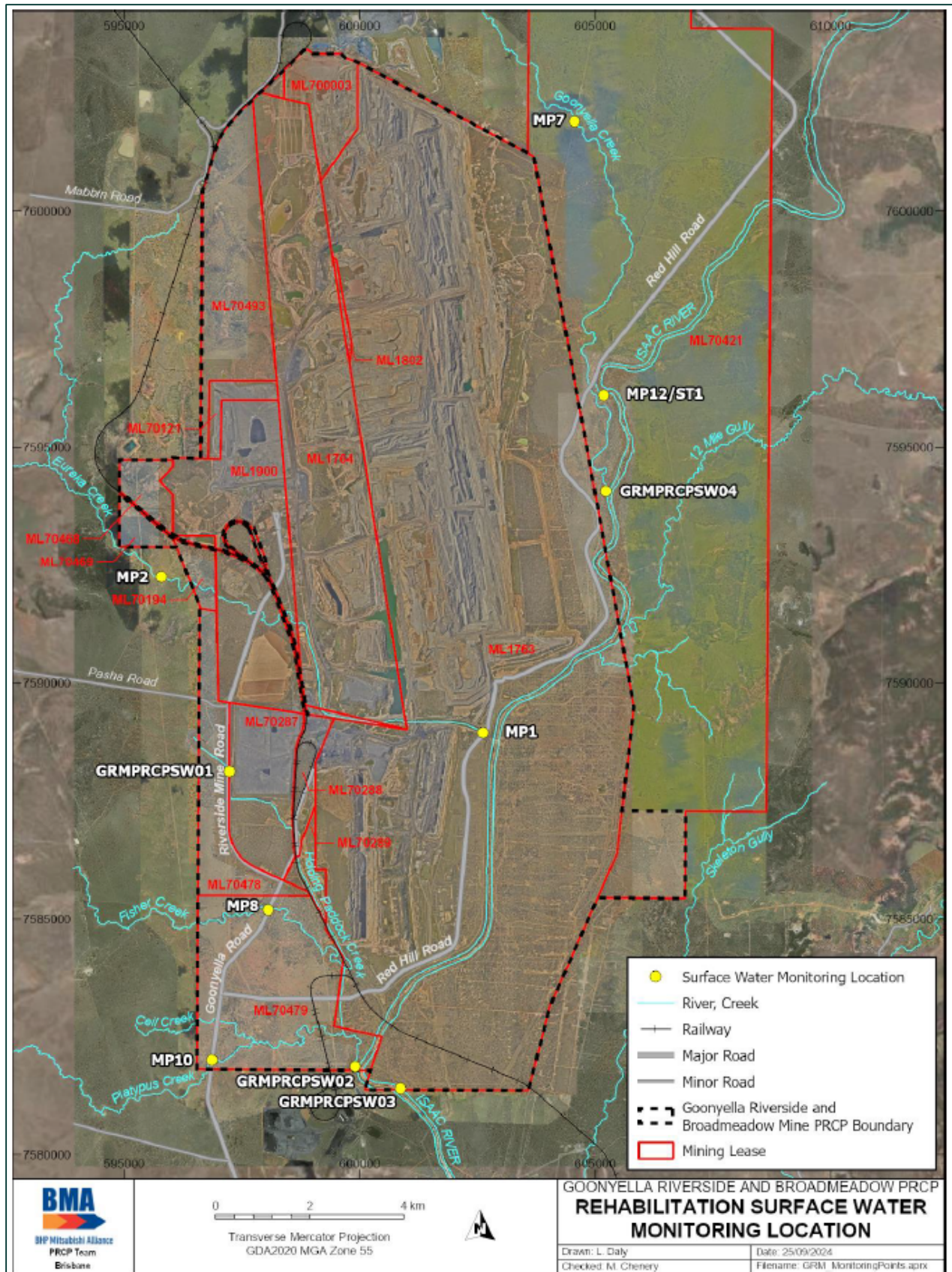
*Transect linear 100 m across the contour (Source: Tongway, D. J. and Hindley, N. L. 2005. *Landscape Function Analysis: Procedures for Monitoring and Assessing Landscapes. CSIRO Publishing, Canberra, Australia*).

² Erosion classification definitions (CSIRO, 2009)

Appendix 9: Surface water monitoring locations

Monitoring Locations	Receiving waters location description	Approximate Latitude (GDA2020)	Approximate Longitude (GDA2020)
<i>Upstream monitoring locations</i>			
MP10	Platypus Creek Upstream	147.937515	-21.863283
MP12/ST1	Isaac River Upstream	148.01711	-21.73547
GRMPCPSW01	Holding Paddock Creek Upstream	147.940741	-21.807969
MP7	Goonyella Creek Upstream	148.010664	-21.683105
MP8	Fisher Creek Upstream	147.948832	-21.834463
MP2	Eureka Creek Upstream	147.926531	-21.77082
<i>Downstream monitoring locations</i>			
GRMPCPSW03	Isaac River Downstream	147.976213	-21.868564
GRMPCPSW02	Holding Paddock/Fisher/Platypus Creeks Downstream	147.966876	-21.864417
GRMPCPSW04	Goonyella Creek Downstream	148.017601	-21.753916
MP1	Eureka Creek Downstream	147.992776	-21.800283

Appendix 9.1: Surface water monitoring locations



Appendix 10: Interim surface water quality limits

Quality characteristic (units)	Limit	Comment on limit
pH	6.5-8.5	Upper Isaac River WQO
Electrical Conductivity (µS/cm)	750	80 th percentile of MP2 data
Turbidity (NTU)	50	Upper Isaac River WQO
Sulphate (mg/L)	7	95 th percentile of MP2 data
Aluminium - dissolved (µg/L)	977	PRCP Table 7
Antimony - dissolved (µg/L)	9	ANZG 2018
Arsenic - dissolved (µg/L)	13	ANZG 2018
Cadmium - dissolved (µg/L)	0.2	ANZG 2018
Cobalt - dissolved (µg/L)	1.4	ANZG 2018
Chromium - dissolved (µg/L)	4	95 th percentile of MP2 data
Copper - dissolved (µg/L)	4	95 th percentile of MP2 data
Iron - dissolved (µg/L)	672	PRCP Table 7
Manganese - dissolved (µg/L)	1,900	ANZG 2018
Mercury - dissolved (µg/L)	0.06	ANZG 2018
Molybdenum - dissolved (µg/L)	4	PRCP Table 7
Nickel - dissolved (µg/L)	11	ANZG 2018
Selenium - dissolved (µg/L)	5	ANZG 2018
Zinc - dissolved (µg/L)	8	ANZG 2018
Total recoverable hydrocarbons (C6-C9) (µg/L)	20	
Total recoverable hydrocarbons (C10-C36) (µg/L)	100	
Major ions (mg/L) Calcium, chloride, potassium, magnesium, sodium, bicarbonate, carbonate	For interpretation purposes	
Hardness (mg/L)	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.
- WQO Isaac Western Uplands Tributaries and the Isaac and Lower Connors River Main Channel Sub-catchments.
- Data used for site-specific values sourced from WaTERS (July 2025) - Water Tracking and Electronic Reporting System (<https://waters.des.qld.gov.au/>)

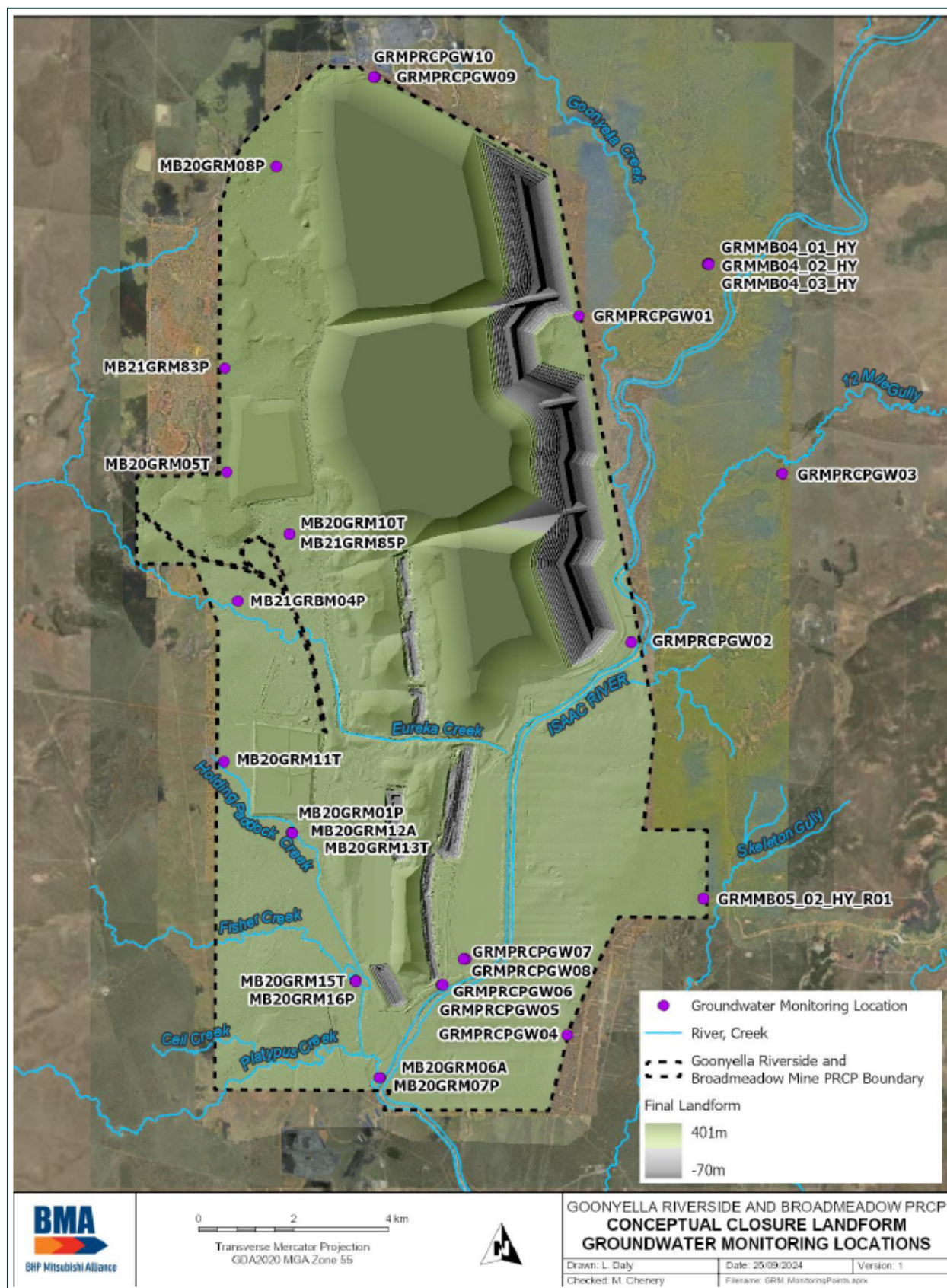
- ANZG (2018) Default guideline values: Aquatic ecosystem protection for slightly to moderately disturbed system (95% protection or best available values)
- ^a CCREM 1987. Canadian water quality guidelines. Canadian Council of Resource and Environment Ministers, Ontario. Listed as an indicative working level in the ANZECC & ARMCANZ (2000) guidelines. [Iron in freshwater and marine water](#)

Appendix 11: Groundwater monitoring locations

Monitoring Bore	Hydrogeological Unit	Description	Approximate Location	
			Latitude (GDA2020)	Longitude (GDA2020)
GRMMB04_01_HY	Alluvial/Tertiary	East of tenement and the northern portion of the Goonyella residual void. Planned new bore	148.034	-21.7074
GRMMB04_02_HY	Alluvial/Tertiary	East of tenement and the northern portion of the Goonyella residual void. Planned new bore	148.0339	-21.7074
GRMMB04_03_HY	Fort Cooper Measures – Coal Seam	East of tenement and the northern portion of the Goonyella residual void	148.0339	-21.7075
GRMMB05_02_HY_R01		Eastern tenement boundary adjacent to the BRM underground workings	148.0338	-21.8282
GRMPRCPGW01	GLS	Eastern tenement boundary adjacent to the Goonyella residual void. New bore.	148.0076	-21.7175
GRMPRCPGW02	GLS	Eastern tenement boundary immediately to the south of Goonyella residual void. New bore.	148.0187	-21.7795
GRMPRCPGW03	Tertiary	East of the tenement and the central portion of the Goonyella residual void. New bore.	148.0493	-21.7473
GRMPRCPGW04	Tertiary	Eastern tenement boundary at the southern end of the tenement and to the east of BRM underground workings. New bore.	148.0062	-21.8543
GRMPRCPGW05	GMS	Southern end of Isaac residual void. New bore.	147.9805	-21.845
GRMPRCPGW06	GLS	Southern end of Isaac residual void. New bore.	147.9807	-21.8449
GRMPRCPGW07	GMS	East of the Isaac residual void and south of the BRM workings on the western side of the Isaac River. New bore.	147.9853	-21.84
GRMPRCPGW08	GLS	East of the Isaac residual void and south of the BRM workings on the western side of the Isaac River. New bore.	147.9849	-21.84

Monitoring Bore	Hydrogeological Unit	Description	Approximate Location	
			Latitude (GDA2020)	Longitude (GDA2020)
GRMPRCPGW09	GMS	Northern end of the tenement. New bore.	147.9658	-21.6723
GRMPRCPGW10	GLS	Northern end of the tenement. New bore.	147.9655	-21.6722
MB20GRM01P	-	South of RS1 TSF	147.9498	-21.8161
MB20GRM05T	Tertiary	West of GS1 TSF	147.9361	-21.7476
MB20GRM06A	Alluvial	Southern tenement boundary	147.968	-21.8627
MB20GRM07P	-	Southern tenement boundary	147.9679	-21.8627
MB20GRM08P	-	Northwestern portion of the tenement and to the west of the Goonyella spoil dumps	147.9457	-21.6894
MB20GRM10T	Tertiary	Within the Goonyella mine industrial area and to the south of GS1	147.949	-21.7593
MB20GRM11T	Tertiary	West of RS1 TSF	147.9359	-21.8027
MB20GRM12A	Alluvial	South of RS1 TSF	147.9497	-21.8161
MB20GRM13T	Tertiary	South of RS1 TSF	147.9499	-21.8163
MB20GRM15T	Tertiary	South of Airstrip pit/R32 TSF	147.963	-21.8442
MB20GRM16P	-	South of Airstrip pit/R32 TSF	147.963	-21.8443
MB21GRBM04P	-	Central western tenement boundary	147.9385	-21.7722
MB21GRM83P	-	North of GS1 TSF	147.9355	-21.7278
MB21GRM85P	-	South of GS1 TSF	147.9489	-21.7593

Appendix 11.1: Groundwater monitoring locations



Appendix 12: Interim groundwater quality limits

Quality characteristic (units)	Monitoring Bore	Limit	Source
pH (pH units)	All bores	6.5-8.5	
Electrical Conductivity (µS/cm)	All bores	8910	Zone 34 Shallow
Sulphate (mg/L)	All bores	318	Zone 34 Shallow
Aluminium - dissolved (µg/L)	All bores	55	ANZG 2018
Antimony - dissolved (µg/L)	All bores	9	ANZG 2018
Arsenic - dissolved (µg/L)	All bores	13	ANZG 2018
Cadmium - dissolved (µg/L)	All bores	0.2	ANZG 2018
Cobalt - dissolved (µg/L)	All bores	1.4	ANZG 2018
Chromium - dissolved (µg/L)	All bores	1	ANZG 2018
Copper - dissolved (µg/L)	All bores	30	Zone 34 Shallow
Iron - dissolved (µg/L)	All bores	140	Zone 34 Shallow
Manganese - dissolved (µg/L)	All bores	160	Zone 34 Shallow
Mercury - dissolved (µg/L)	All bores	0.06	ANZG 2018
Molybdenum - dissolved (µg/L)	All bores	34	ANZG 2018
Nickel - dissolved (µg/L)	All bores	11	ANZG 2018
Selenium - dissolved (µg/L)	All bores	5	ANZG 2018
Zinc - dissolved (µg/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)			

Quality characteristic (units)	Monitoring Bore	Limit	Source
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)*
- *Isaac Connors groundwater management area Zone 34 of the Fitzroy Basin*

END OF PRCP SCHEDULE