

PRCP schedule

Environmental Protection Act 1994

PRCP schedule P-PRCP-100869055 New Burton Coal Mine

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-100869055_v1

PRCP schedule holder(s)

Name(s)	Registered address
New Lenton Coal Pty Ltd	Level 4, 167 Eagle Street, Brisbane QLD 4000
MPC Lenton Pty Ltd	

Location details

Location(s)
ML70109, ML70260, MDL315, MDL349, EPC857

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

20 June 2025

Date

Ben Byrd
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 - Post mining land uses
- Section D - Non-use management area
- Section E – Tables and Figures

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 For each rehabilitation area the holder must achieve the rehabilitation milestone criteria (milestone reference):

- (a) For the cumulative area available specified in this schedule; and
- (b) By the milestone completion date specified in this schedule.

PRCP2 Where land becomes 'available for rehabilitation' earlier than the date nominated in this schedule, the holder must:

- (a) Notify the administering authority in writing within 30 business days of the land becoming 'available for rehabilitation'. The written notification must include precise details of the relevant land area and the date when that land became 'available for rehabilitation'; and
- (b) Unless otherwise agreed by the Administering Authority in writing, within 90 business days of the land becoming 'available for rehabilitation', apply to the administering authority to amend this schedule in a way that maximises the progressive rehabilitation of the land to a stable condition.

Note: reference to "earlier than the nominated date in the schedule" means a date that is greater than 1 year prior to the date nominated in the schedule.

PRCP3 Where an area achieves a rehabilitation or management milestone, the holder must continue to achieve the milestone criteria until a surrender is approved.

PRCP4 The holder must maintain a risk register that identifies the risks to not achieving a stable condition for post-mining land uses, and how the risks are being managed or minimised. The risk register must be reviewed annually and include consideration of the outcomes of PRCP monitoring data.

PRCP5 The holder must undertake monitoring and maintenance of the rehabilitation activities in the rehabilitation areas in accordance with:

- (a) the monitoring and maintenance program described in the rehabilitation planning part for the activity version 5-1, dated 12 June 2025; and
- (b) any requirement under this schedule; and
- (c) as necessary to demonstrate achievement of each rehabilitation milestone or management milestone criteria.

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

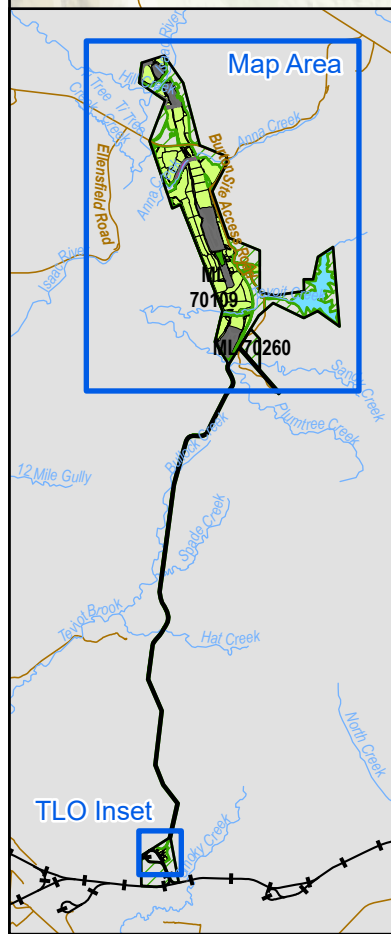
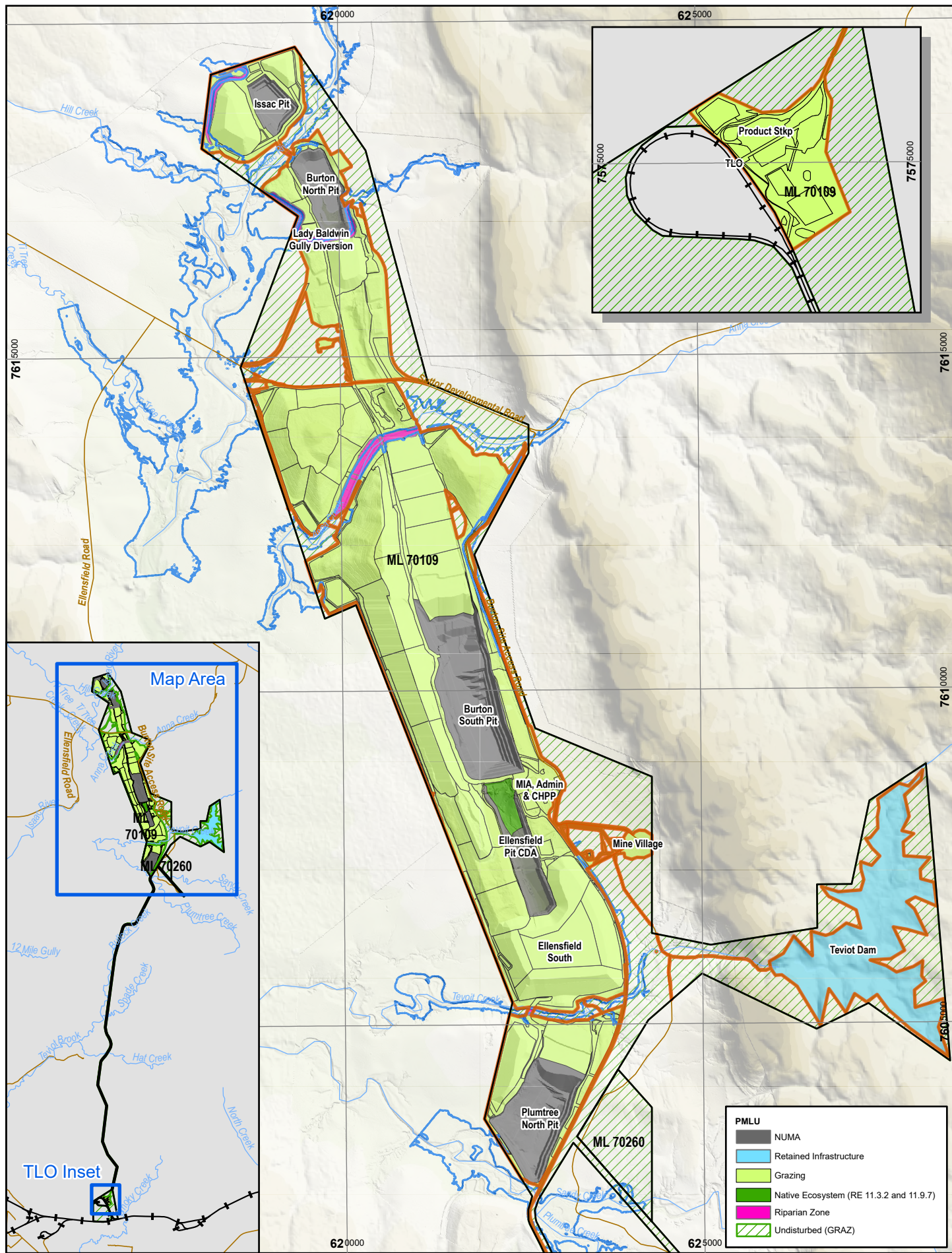
- PRCP6** Disturbance due to exploration and minor ancillary activities in areas not planned to be mined and not within a Rehabilitation Area in this Schedule must be rehabilitated in accordance with the provisions detailed in the '*Eligibility criteria and standard conditions for exploration and mineral development projects*' or its successor.
- PRCP7** The holder must make and keep up to date records on:
- (a) Achievement and maintenance of achievement of each rehabilitation milestone criteria of this schedule.
 - (b) Rehabilitation activities and the results of those activities (including but not limited to, actions taken, date, location, methods, data collected, 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;
 - (i) Details of community consultation in the community consultation register relating to rehabilitation and closure activities.
- PRCP8** Records made under **PRCP7** must be kept until the relevant environmental authority has been surrendered or cancelled.
- PRCP9** Records made under **PRCP7** must be provided to the administering authority in the specified format within 10 business days of a written request.
- PRCP10** All AQP designs, specifications, certifications, assessments and any similar documents developed in accordance with good professional practice must include documented consideration of any relevant guideline or publication material.
- PRCP11** The groundwater model in Appendix B of the PRC Plan and water balance model in Appendix P of the PRC Plan must be recalibrated and predictions rerun at the end of mining operations and at least every five years from the date of approval of the PRCP including any potential inundation of a void from flood events up to and including probable maximum flood.

- PRCP12** Where the groundwater or water balance model, as per **PRCP11**, indicate a risk to achieving stable condition, an amendment application to this PRCP Schedule must be submitted to the administering authority to address the risk within 3 months of the risk being identified.
- PRCP13** By **15 May 2027**, a third party AQP certifies existing, and designs for proposed, permanent Erosion and Sediment Control (ESC) that will be part of the final landform, drainage structures and creek diversion on site are appropriate to the landform, materials and PMLU, with consideration given to their performance, stability, maintenance requirements, and residual risk in a post-closure context.
- PRCP14** Updated landform evolution modelling (LEM) for the report provided in Appendix Q of the PRC plan must be completed, and provided to the administering authority by **15 November 2025**. The updated modelling must:
- (a) be in accordance with the latest version of the Queensland Government's 'Applying erosion and Landscape Evolution Models to assess post-mining landform stability: Technical Paper'
 - (b) Cover a 100-year period, including relevant time steps¹.
 - (c) Identify whether contour banks and engineered structures are required to achieve stable landform
 - (d) Cover all constructed landforms (i.e. involving the movement and placement of overburden and / or rejects and tailings).
- PRCP15** If LEM conducted under **PRCP14** demonstrates landform instability, an amendment application to this PRCP Schedule and Appendix Q of the PRC Plan must be submitted to the administering authority to address the landform instability by **15 February 2026**.

END OF CONDITIONS

¹ Queensland Government's 'Applying erosion and Landscape Evolution Models to assess post-mining landform stability: Technical Paper' identifies that erosion form and rate can be examined at any time step needed but suggests that for most sites model output should be initially examined at 10 and 100 years

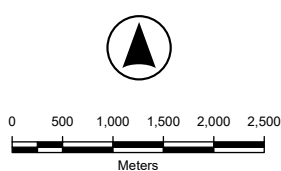
Section B - Final site design and reference maps



TLO Inset

Datum: GDA 2020
 Scale: 1 : 25,000 (A3)
 Date: 16/01/2025 2:31 PM
 Drawn: RA
 Project: 126 PRCP - Post Mining Land Use.aprx

- LEGEND**
- Waterway
 - Road
 - Burton Mine MLs
 - Maximum Disturbance Limit
 - Q1000 Flood Extent



- PMLU**
- NUMA
 - Retained Infrastructure
 - Grazing
 - Native Ecosystem (RE 11.3.2 and 11.9.7)
 - Riparian Zone
 - Undisturbed (GRAZ)

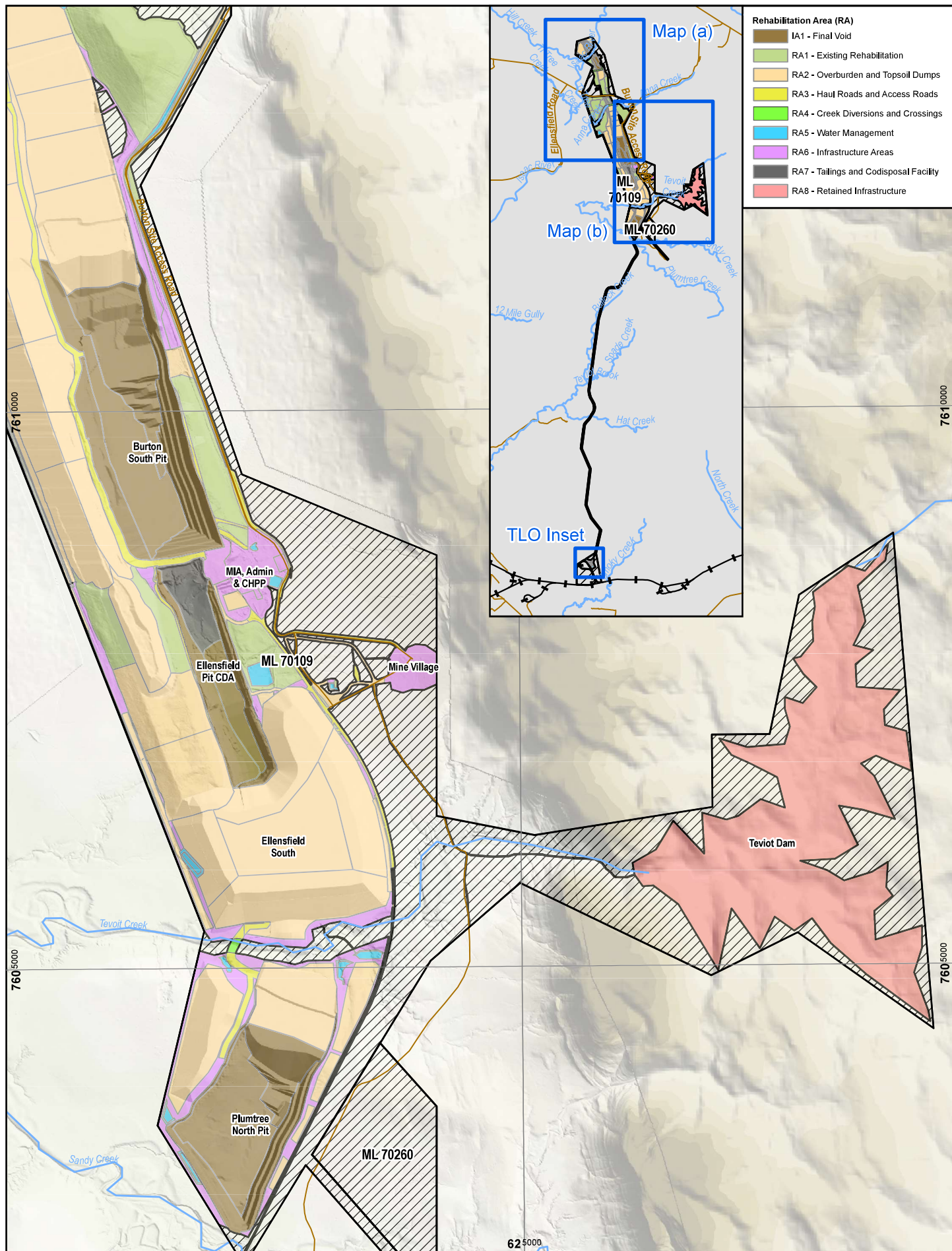
BURTON MINE PRCP  **BOWEN COAL LIMITED**



DISCLAIMER: Third party data sources are used in this map compilation. Minserv makes no warranty regarding this data's accuracy or currency.

Final Site Design

Figure 1



Section C – Post mining land uses**(RA1) Rehabilitation area 1**

Post-mining land uses (PMLU)					
Rehabilitation area	RA1				
Relevant activities	Existing Rehabilitation				
Total rehabilitation area size (ha)	777.79				
Commencement of first milestone: RM9	10/12/2024				
PMLU	Grazing				
Date area is available	10/12/2024	10/12/2028	10/12/2030	10/12/2032	10/12/2054
Cumulative area available (ha)	777.79	777.79	777.79	777.79	777.79
Milestone completed by	10/12/2028	10/12/2030	10/12/2032	10/12/2034	10/12/2059
Milestone Reference	Cumulative area achieved (ha)				
RM9	777.79	777.79	777.79	777.79	777.79
RM10				777.79	777.79
RM14					777.79

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(RA2) Rehabilitation area 2

Post-mining land uses (PMLU)																
Rehabilitation area				RA2												
Relevant activities				Overburden dumps and soil stockpiles												
Total rehabilitation area size (ha)				1046.09												
Commencement of first milestone: RM3				10/12/2024												
PMLU				Grazing												
Date area is available	10/12/2024	10/12/2026	10/12/2028	10/12/2030	10/12/2032	10/12/2034	10/12/2036	10/12/2038	10/12/2040	10/12/2042	10/12/2044	10/12/2046	10/12/2048	10/12/2050	10/12/2052	10/12/2054
Cumulative area available (ha)	43.57	285.34	285.34	541.97	685.10	803.60	988.99	1028.83	1046.09	1046.09	1046.09	1046.09	1046.09	1046.09	1046.09	1046.09
Milestone completed by	10/12/2026	10/12/2028	10/12/2030	10/12/2032	10/12/2034	10/12/2036	10/12/2038	10/12/2040	10/12/2042	10/12/2044	10/12/2046	10/12/2048	10/12/2050	10/12/2052	10/12/2054	12/12/2059
Milestone Reference	Cumulative area achieved (ha)															
RM1	43.57	98.28	285.34	479.35	606.65	726.16	892.54	1023.67	1028.83	1046.09	1046.09	1046.09	1046.09	1046.09	1046.09	1046.09
RM3	43.57	98.28	285.34	479.35	606.65	726.16	892.54	1023.67	1028.83	1046.09	1046.09	1046.09	1046.09	1046.09	1046.09	1046.09
RM5		43.57	167.31	386.51	541.98	685.10	803.60	988.99	1028.83	1046.09	1046.09	1046.09	1046.09	1046.09	1046.09	1046.09
RM6			98.28	285.34	479.35	606.65	726.16	892.54	1023.67	1028.83	1046.09	1046.09	1046.09	1046.09	1046.09	1046.09
RM9					98.28	285.34	479.35	606.65	726.16	892.54	1023.67	1028.83	1046.09	1046.09	1046.09	1046.09
RM10							43.57	167.31	386.51	541.98	685.10	803.60	988.99	1028.83	1046.09	1046.09
RM14																1046.09

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(RA3) Rehabilitation area 3

Post-mining land uses (PMLU)														
Rehabilitation area				RA3										
Relevant activities				Haul roads and access roads										
Total rehabilitation area size (ha)				148.47										
Commencement of first milestone: RM3				10/12/2034										
PMLU				Grazing										
Date area is available	10/12/2034	10/12/2036	10/12/2038	10/12/2040	10/12/2042	10/12/2044	10/12/2046	10/12/2048	10/12/2050	10/12/2052	10/12/2054	10/12/2056	10/12/2058	10/12/2060
Cumulative area available (ha)	21.06	31.91	71.11	73.60	133.54	133.54	148.47	148.47	148.47	148.47	148.47	148.47	148.47	148.47
Milestone completed by	10/12/2036	10/12/2038	10/12/2040	10/12/2042	10/12/2044	10/12/2046	10/12/2048	10/12/2050	10/12/2052	10/12/2054	10/12/2056	10/12/2058	10/12/2060	12/12/2065
Milestone Reference	Cumulative area achieved (ha)													
RM1	9.04	30.03	71.11	73.60	133.54	133.54	133.54	148.47	148.47	148.47	148.47	148.47	148.47	148.47
RM2	9.04	30.03	71.11	73.60	133.54	133.54	133.54	148.47	148.47	148.47	148.47	148.47	148.47	148.47
RM3	9.04	30.03	71.11	73.60	133.54	133.54	133.54	148.47	148.47	148.47	148.47	148.47	148.47	148.47
RM5		21.06	31.91	71.11	133.54	133.54	133.54	148.47	148.47	148.47	148.47	148.47	148.47	148.47
RM6		9.04	30.03	71.11	73.60	133.54	133.54	133.54	148.47	148.47	148.47	148.47	148.47	148.47
RM9				9.04	30.03	71.11	73.60	133.54	133.54	133.54	148.47	148.47	148.47	148.47
RM10						9.04	21.06	31.91	71.11	133.54	133.54	133.54	148.47	148.47
RM14														148.47

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(RA4) Rehabilitation area 4

Post-mining land uses (PMLU)																
Rehabilitation area				RA4												
Relevant activities				Creek diversions and crossings												
Total rehabilitation area size (ha)				61.16												
Commencement of first milestone: RM3				10/12/2025												
PMLU				Riparian Vegetation												
Date area is available	10/12/2025	10/12/2028	10/12/2030	10/12/2032	10/12/2034	10/12/2036	10/12/2038	10/12/2040	10/12/2042	10/12/2044	10/12/2046	10/12/2048	10/12/2050	10/12/2052	10/12/2054	10/12/2056
Cumulative area available (ha)	31.84	31.84	31.84	31.84	32.15	32.15	61.16	61.16	61.16	61.16	61.16	61.16	61.16	61.16	61.16	61.16
Milestone completed by	10/12/2028	10/12/2030	10/12/2032	10/12/2034	10/12/2036	10/12/2038	10/12/2040	10/12/2042	10/12/2044	10/12/2046	10/12/2048	10/12/2050	10/12/2052	10/12/2054	10/12/2056	10/12/2061
Milestone Reference	Cumulative area achieved (ha)															
RM1	20.26	31.84	31.84	31.84	32.15	32.15	61.16	61.16	61.16	61.16	61.16	61.16	61.16	61.16	61.16	61.16
RM3	20.26	31.84	31.84	31.84	32.15	32.15	61.16	61.16	61.16	61.16	61.16	61.16	61.16	61.16	61.16	61.16
RM5		31.84	31.84	31.84	31.84	32.15	33.22	61.16	61.16	61.16	61.16	61.16	61.16	61.16	61.16	61.16
RM7		20.26	31.84	31.84	31.84	32.15	32.15	61.16	61.16	61.16	61.16	61.16	61.16	61.16	61.16	61.16
RM9				20.26	31.84	31.84	31.84	32.15	32.15	61.16	61.16	61.16	61.16	61.16	61.16	61.16
RM13									20.26	31.84	31.84	31.84	32.15	32.15	61.16	61.16
RM14																61.16

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(RA5) Rehabilitation area 5

Post-mining land uses (PMLU)														
Rehabilitation area			RA5											
Relevant activities			Water Management											
Total rehabilitation area size (ha)			63.12											
Commencement of first milestone: RM1			10/12/2029											
PMLU			Grazing											
Date area is available	10/12/2029	10/12/2030	10/12/2032	10/12/2034	10/12/2036	10/12/2038	10/12/2040	10/12/2042	10/12/2044	10/12/2046	10/12/2048	10/12/2050	10/12/2052	10/12/2054
Cumulative area available (ha)	0.80	0.80	4.24	6.50	37.88	58.68	63.12	63.12	63.12	63.12	63.12	63.12	63.12	63.12
Milestone completed by	10/12/2030	10/12/2032	10/12/2034	10/12/2036	10/12/2038	10/12/2040	10/12/2042	10/12/2044	10/12/2046	10/12/2048	10/12/2050	10/12/2052	10/12/2054	10/12/2060
Milestone Reference	Cumulative area achieved (ha)													
RM1	0.80	0.80	6.50	29.92	46.80	58.68	63.12	63.12	63.12	63.12	63.12	63.12	63.12	63.12
RM3		0.80	0.80	6.50	29.92	46.80	58.68	63.12	63.12	63.12	63.12	63.12	63.12	63.12
RM5			0.80	4.24	6.50	37.89	58.68	63.12	63.12	63.12	63.12	63.12	63.12	63.12
RM6			0.80	0.80	6.50	29.92	46.80	58.68	63.12	63.12	63.12	63.12	63.12	63.12
RM9					0.80	0.80	6.50	29.92	46.80	58.68	63.12	63.12	63.12	63.12
RM10								0.80	4.24	6.50	37.89	58.68	63.12	63.12
RM14														63.12

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(RA6) Rehabilitation area 6

Post-mining land uses (PMLU)																	
Rehabilitation area				RA6													
Relevant activities				Infrastructure Areas													
Total rehabilitation area size (ha)				206.79													
Commencement of first milestone: RM1				10/12/2029													
PMLU				Grazing													
Date area is available	10/12/2029	10/12/2030	10/12/2032	10/12/2034	10/12/2036	10/12/2038	10/12/2040	10/12/2042	10/12/2044	10/12/2046	10/12/2048	10/12/2050	10/12/2052	10/12/2054	10/12/2056	10/12/2058	10/12/2060
Cumulative area available (ha)	40.35	40.35	40.35	107.00	119.83	183.58	183.58	205.48	205.48	206.79	206.79	206.79	206.79	206.79	206.79	206.79	206.79
Milestone completed by	10/12/2030	10/12/2032	10/12/2034	10/12/2036	10/12/2038	10/12/2040	10/12/2042	10/12/2044	10/12/2046	10/12/2048	10/12/2050	10/12/2052	10/12/2054	10/12/2056	10/12/2058	10/12/2060	10/12/2065
Milestone Reference	Cumulative area achieved (ha)																
RM1	40.35	40.35	61.24	108.88	132.74	183.58	205.48	205.48	205.48	206.79	206.79	206.79	206.79	206.79	206.79	206.79	206.79
RM2		40.35	40.35	107.01	119.83	183.58	205.48	205.48	205.48	206.79	206.79	206.79	206.79	206.79	206.79	206.79	206.79
RM3		40.35	40.35	61.24	108.88	132.74	183.58	205.48	205.48	205.48	206.79	206.79	206.79	206.79	206.79	206.79	206.79
RM5			40.35	40.35	107.01	119.83	183.58	205.48	205.48	205.48	206.79	206.79	206.79	206.79	206.79	206.79	206.79
RM6			40.35	40.35	61.24	108.88	132.74	183.58	205.48	205.48	205.48	206.79	206.79	206.79	206.79	206.79	206.79
RM9					40.35	40.35	61.24	108.88	132.74	183.58	205.48	205.48	205.48	206.79	206.79	206.79	206.79
RM10								40.35	40.35	107.01	119.83	183.58	205.48	205.48	205.48	206.79	206.79
RM14																	206.79

(RA7) Rehabilitation area 7

Post-mining land uses (PMLU)										
Rehabilitation area			RA7							
Relevant activities			Tailings and co-disposal facility							
Total rehabilitation area size (ha)			22.39							
Commencement of first milestone: RM3			10/12/2038							
PMLU			Bushland							
Date area is available	10/12/2038	10/12/2040	10/12/2042	10/12/2044	10/12/2046	10/12/2048	10/12/2050	10/12/2052	10/12/2054	10/12/2056
Cumulative area available (ha)	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39
Milestone completed by	10/12/2040	10/12/2042	10/12/2044	10/12/2046	10/12/2048	10/12/2050	10/12/2052	10/12/2054	10/12/2056	10/12/2061
Milestone Reference	Cumulative area achieved (ha)									
RM1	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39
RM3	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39
RM4	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39
RM5		22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39
RM8		22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39	22.39
RM9				22.39	22.39	22.39	22.39	22.39	22.39	22.39
RM12									22.39	22.39
RM14										22.39

(RA8) Rehabilitation area 8

Post-mining land uses (PMLU)		
Rehabilitation area	RA8	
Relevant activities	Retained Infrastructure (Teviot Dam)	
Total rehabilitation area size (ha)	358.42	
Commencement of first milestone: RM1	10/12/2044	
PMLU	Retained Infrastructure	
Date area is available	10/12/2044	10/12/2046
Cumulative area available (ha)	358.42	358.42
Milestone completed by	10/12/2046	10/12/2051
Milestone Reference	Cumulative area achieved (ha)	
RM11	358.42	358.42
RM14		358.42

Rehabilitation area milestones

Milestone reference	Rehabilitation milestone	Milestone criteria
RM1	Infrastructure decommissioning and removal	1.1 With the exception of any infrastructure to remain as part of the post-mining land use (PMLU) or required for rehabilitation the following are complete: (a) All site services are disconnected, terminated and removed. (b) All hardstand, concrete and road materials (bitumen and gravel) removed. (c) All above ground pipelines are drained and removed in accordance with the latest version of the Australian Pipelines and Gas Association Limited Code of Environmental Practice: Onshore Pipelines (APGA CoEP). (d) All fencing that is not part of PMLU requirements removed. (e) All buildings and infrastructure dismantled and removed. (f) All drillholes, bores, sumps, exploration tracks and gridlines are decommissioned. (g) All waste is disposed of at an appropriately licensed facility or as per EA conditions. (h) All demolition and hazardous waste has been treated and disposed of at an appropriately licensed facility. (i) Machinery and equipment removed from site. (j) All surface water drainage infrastructure removed. (k) All dams dewatered and desilted. (l) Watercourse crossings and culverts removed. 1.2 Assessment of mine water dams is completed by an Appropriately Qualified Person (AQP) and identified sediment and water management actions are completed.

Milestone reference	Rehabilitation milestone	Milestone criteria
RM2	Remediation of contaminated land	2.1 Preliminary site investigation and, if required by preliminary site investigation, a detailed site investigation, are done by a suitably qualified person (SQP²). 2.2 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. 2.3 Contaminated and hazardous material either remediated in-situ or removed/transported to an approved landfill for disposal and waste tracking information recorded and submitted. 2.4 Validation testing confirms that contaminated and hazardous materials have been removed or remediated successfully. 2.5 Contaminated land assessment is completed by a suitably qualified person (SQP) indicates that no contamination unsuitable for the post-mining land use remains or is occurring. 2.6 A site suitability statement from a SQP confirms the uses or activities for which the land is suitable, align to the approved PMLUs for the site.

² **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.

Milestone reference	Rehabilitation milestone	Milestone criteria
RM3	Landform development (re-profiling / re shaping)	All RAs 3.1 All earthworks completed to final landform design and certified by a third-party AQP as appropriate to the materials and PMLU, with consideration given to long term performance and stability in a post-closure context. Diversions (RA4) 3.2 AQP certifies that the Lady Baldwin Gully Diversion and the Isaac Pit drainage diversion (IPDD) are constructed as per the requirements of the certified design, and in accordance with DNRME's Guideline: Works that interfere with water in a watercourse for a resource activity — watercourse diversions under the Water Act 2000 (OSW/2019/4599). Overburden dumps (RA2) 3.3 Bulk earthworks and reshaping are done to achieve required landform and slopes. 3.4 General reshaping and pushing / trimming is done to achieve final landform. 3.5 Overburden dump slopes are < 20 % on outer margins and < 12 % on plateaus. 3.6 The final consolidated landform is water-shedding. 3.7 Final landform is designed and built to remain stable and function effectively for flood events up to and including 0.1 % annual exceedance probability (AEP) at a minimum. 3.8 AQP certifies that as constructed landform achieves design criteria for geotechnical stability with a Factor of Safety (FOS) ≥ 1.5, which includes consideration of flood stress³. All other areas 3.9 Co-disposal Area (CDA) slopes are < 10% 3.10 Industrial area slopes are < 12 %. 3.11 Sediment and mine water dams not required for sediment control or by a subsequent landholder are desilted and backfilled using their embankments or other suitable soil. 3.12 AQP certifies that as constructed landform achieves design criteria for geotechnical stability with a Factor of Safety (FOS) ≥ 1.5, which includes consideration of flood stress³.

³ **Flood stress** is the pressure on structures from rapid water rise, erosion, and saturation during extreme floods, risking instability.

Milestone reference	Rehabilitation milestone	Milestone criteria
RM4	Installation of a cover system (RA7)	4.1 Engineering and design plans are finalised and include specifications to achieve the following: (a) an infiltration storage layer (ISL) consisting of > 1 m of non-acid forming (NAF) overburden; (b) cover materials have no potential for acid mine drainage (AMD) and / or neutral mine drainage (NMD); and (c) capping layer surface is water shedding and does not display surface ponding. (d) Cover installed to minimise erosion and reduce rainfall infiltration. 4.2 Source, cart, spread and compact suitable capping material to a depth of 2 m. 4.3 CDA slopes are < 10% 4.4 Certification from an AQP that: (a) the cover system has been installed as per design. (b) the cover system displays erosional stability, is geotechnically stable and supports the PMLU. (c) the installed cover is effective in mitigating the potential for migration of contaminants from co-disposal areas to the receiving environment.

Milestone reference	Rehabilitation milestone	Milestone criteria
RM5	Surface preparation (topdressing, contour ripping, soil amelioration)	All RAs 5.1 Assessment of growth media⁴ characteristics and the development of an amelioration and physical treatment plan is completed by an AQP. 5.2 Ameliorant and physical treatments such as fertiliser, lime, gypsum and/or organic matter are applied as identified in criteria 5.1. 5.3 Growth media health and suitability is assessed and documented by an AQP as suitable for the PMLU and target vegetation establishment. 5.4 Following amelioration as per criteria 5.1 and 5.2, an AQP certifies that the relevant depths within the effective root zone (0–300mm) meet the suitability targets outlined in Table 7 – Soil Quality Criteria 5.5 Erosion monitoring has been completed and the average erosion rate is < 5 t/ha/yr. 5.6 No evidence of erosion classified as ‘moderate’ or ‘severe’ in accordance with Table 6 - Erosion Classification Framework. 5.7 A health and suitability assessment report has been completed by an AQP to confirm soil is suitable for target vegetation establishment. 5.8 Placement of 0.15 m of suitable soil (excluding diversions). 5.9 Deep ripping of compacted surfaces, at least 300 mm into soil/subsoil profile along contour of slopes. 5.10 The surface and groundwater monitoring network is installed and monitoring underway (one year of sampling undertaken). Cover system (RA7) 5.11 No tilling beyond 100 mm depth. 5.12 Hay mulch is applied at a rate of 5 t/ha to growth medium used in the Ellensfield CDA cover.

⁴ **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

Milestone reference	Rehabilitation milestone	Milestone criteria
RM6	Revegetation (grazing)	6.1 Compost has been applied at 300 kilograms per hectare (kg/ha) and mixed to the depth of soil placement through light tillage. 6.2 For stockpiled soil only, elemental sulfur has been applied at 500kg/ha and mixed to the depth of soil placement through light tillage. 6.3 For Brown Kandosol (subsoil) only, gypsum has been applied at 12 t/ha and mixed to the depth of soil placement through light tillage. 6.4 Completed seeding based on the species and seeding rates listed in Table 1 – Species list and seeding rates for grazing PMLU. 6.5 At least four species of 3P pasture species, two legumes and two shade tree species established, including at least two native pasture species, from Table 1 – Species list and seeding rates for grazing PMLU. 6.6 No seeding of deep-rooted vegetation species. 6.7 Livestock are excluded from freshly seeded areas via installation of stock fencing
RM7	Revegetation (riparian vegetation)	7.1 Compost has been applied at 300 kg/ha and mixed to the depth of soil placement through light tillage. 7.2 For stockpiled soil only, elemental sulfur has been applied at 500 kg/ha and mixed to the depth of soil placement through light tillage. 7.3 For Brown Kandosol (subsoil) only, gypsum has been applied at 12 t/ha and mixed to the depth of soil placement through light tillage. 7.4 Completed seeding based on the species and seeding rates listed in Table 2 - Species list and seeding rates for riparian PMLU RE 11.3.25. 7.5 If insufficient seed is available, seed density supplemented by planting tubestock. 7.6 Non-native seed must not be used for the revegetation. 7.7 Livestock are excluded from freshly seeded areas via installation of stock fencing.

Milestone reference	Rehabilitation milestone	Milestone criteria
RM8	Revegetation (bushland)	8.1 Compost has been applied at 300 kg/ha and mixed to the depth of soil placement through light tillage. 8.2 For stockpiled soil only, elemental sulfur has been applied at 500 kg/ha and mixed to the depth of soil placement through light tillage. 8.3 For Brown Kandosol (subsoil) only, gypsum has been applied at 12 t/ha and mixed to the depth of soil placement through light tillage. 8.4 Completed seeding in accordance with species and seeding rates listed in Table 3 - Species list and seeding rates for modified Bushland PMLU (RE 11.9.7). 8.5 Non-native seed must not be used for the revegetation. 8.6 No seeding of deep-rooted vegetation species. 8.7 Livestock are excluded from freshly seeded areas via installation of stock fencing.
RM9	Achievement surface requirements	All RAs 9.1 An AQP certifies that: (a) landform has achieved a FoS of ≥ 1.5. (b) Erosion monitoring has been completed and the average erosion rate is < 5 t/ha/yr. (c) No evidence of erosion classified as 'moderate' or 'severe' in accordance with Table 1 - Erosion Classification Framework. (d) There are no saline seepage areas, other than those reporting to the residual voids directly from the void walls (including from low walls). (e) Any erosion present will not compromise the achievement of a PMLU to a stable condition. (f) All other erosion requiring intervention has been remediated and does not impact achieving the PMLU. (g) No evidence of scouring, overtopping, sedimentation or destabilisation in or associated with erosion and sediment control and engineered drainage structures. (h) Any ESC and drainage structures to be retained as permanent features in the final landform are certified by an AQP to maintain long term performance and stability in a post-closure context and not increase risk of gully erosion at surrender. 9.2 Invasive plants (including, but not limited to, those defined under the <i>Biosecurity Act 2014</i>) comprise ≤ 25 % of vegetative groundcover as assessed by an AQP.

Milestone reference	Rehabilitation milestone	Milestone criteria
		9.3 Species used in revegetation remain present and show evidence of natural recruitment. Evidence of flora recruitment from rehabilitation monitoring data. 9.4 Drainage follows appropriate drainage paths. 9.5 Surface water runoff has been collected across representative areas of rehabilitation when surface flows occur. 9.6 Surface water runoff quality does not indicate a risk to achieving stable condition with reference to RM14 and Table 7 – Surface water quality limits. 9.7 Results of soil testing of the growth media comply with Table 7 – Soil Quality Criteria: Grazing 9.8 > 70 % vegetation groundcover. Riparian 9.9 A BioCondition assessment has been undertaken by an AQP, consistent with the methodology described in the latest version of the Queensland Herbarium's BioCondition Assessment Manual. 9.10 A BioCondition assessment has achieved a score of $\geq 20 / 60$, based on the benchmark criteria in Table 4 - Progressive and final benchmark values for riparian area (RE 11.3.25). Bushland 9.11 A BioCondition assessment has been undertaken by an AQP, consistent with the methodology described in the latest version of the Queensland Herbarium's BioCondition Assessment Manual. 9.12 A BioCondition Assessment has achieved a score of $\geq 20 / 50$, based on the benchmark criteria in Table 5 - Progressive and final benchmark values for bushland (modified RE 11.9.7). 9.13 > 60 % vegetation groundcover. Cover system (RA7) 9.14 Quarterly monitoring demonstrates that the infiltration rate does not exceed 5% of cumulative rainfall. 9.15 No evidence of seepage. 9.16 No evidence of water ponding. 9.17 No surface expression, such as salt crusts or pans. 9.18 No deep-rooted species present.

RM10	Achievement of PMLU to stable condition (grazing)	10.1 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 10.2 AQP certifies that: (a) No evidence of erosion classified as 'moderate' or 'severe' as defined by Table 6 – Erosion Classification Framework. (b) All other erosion requiring intervention has been remediated and does not compromise achievement of the PMLU. (c) Average erosion rate of <5 t/ha/y with a maximum erosion rate of <10 t/ha/y (d) any erosion present will not compromise the achievement of a PMLU to a stable condition. (e) No evidence of scouring, overtopping, sedimentation or destabilisation in or associated with erosion and sediment control and engineered drainage structures. 10.3 Certification from an AQP that the landform is geotechnically stable and achieved a factor of safety ≥ 1.5. 10.4 Water control structures are either removed or are certified by an AQP to maintain long term performance and stability in a post-closure context with no increased risk of gully erosion at surrender. 10.5 Invasive plants (including, but not limited to, those defined under the <i>Biosecurity Act 2014</i>) comprise < 10 % of vegetative groundcover as assessed by an AQP during annual monitoring. 10.6 Vegetation groundcover > 70% 10.7 Land suitability assessment by an AQP certifies that land has achieved a post-mine land suitability class of 3 or better as defined in the 'Guidelines for Agricultural Land Evaluation in Queensland' (State Department of Queensland 2013). Where a land assessment demonstrates that limiting factors prevent the achievement of a post-mine land suitability class of 3 or better, land must be rehabilitated to achieve at least a class 3 for all soil properties with the exception of those identified as limiting factors preventing achievement of class 3. 10.8 Minimum composition of: (a) four species of 3P pasture species, (b) two legumes, (c) two shade tree species, and (d) at least two native pasture species, present per hectare (averaged). 10.9 All remaining infrastructure removed as per the criteria of RM1, unless the infrastructure is to remain as part of the post-mining land use.
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Milestone reference	Rehabilitation milestone	Milestone criteria
RM11	Achievement of PMLU to a stable condition (retained infrastructure)	Teviot Dam 11.1 Certification from an AQP that Teviot Dam is: (a) structurally stable; (b) safe access for native animals and stock (c) have a written agreement from the landholder to take responsibility for the infrastructure.

Milestone reference	Rehabilitation milestone	Milestone criteria
RM12	Achievement of PMLU to stable condition (bushland/cover system)	12.1 All corrective actions recommended by an AQP in response to erosion or insufficient vegetation cover have been implemented. 12.2 Certification from an AQP that the area has achieved stable condition. 12.3 Certification from an AQP that the landform has achieved a FoS ≥ 1.5 12.4 AQP certifies that: (a) No evidence of erosion classified as 'moderate' or 'severe' in accordance with Table 6 – Erosion Classification Framework. (b) any erosion present will not compromise the achievement of a PMLU to a stable condition. (c) all other erosion requiring intervention has been remediated and does not impact achieving the PMLU. 12.5 Erosion monitoring has been completed and the average erosion rate is < 5 t/ha/yr with a maximum erosion rate of < 10 t/ha/yr. 12.6 A BioCondition assessment has been undertaken by an AQP, consistent with the methodology described in the latest version of the Queensland Herbarium's BioCondition Assessment Manual. 12.7 A BioCondition assessment has achieved a score of $\geq 30 / 50$ based on the benchmark criteria in Table 5 - Progressive and final benchmark values for bushland (modified RE 11.9.7). 12.8 Invasive plants (including, but not limited to, those defined under the <i>Biosecurity Act 2014</i>) comprise ≤ 10 % of vegetative groundcover in accordance with Table 5 - Progressive and final benchmark values for bushland (modified RE 11.9.7). 12.9 > 60 % vegetation groundcover. 12.10 Vegetation species are consistent with Table 3 - Species list and seeding rates for modified Bushland PMLU (RE 11.9.7) and include a mixture of native shrubs and grasses. 12.11 A minimum 20 % of established target species show natural recruitment as assessed by an AQP. 12.12 No evidence of seepage. 12.13 No evidence of water ponding. 12.14 No surface expression, such as salt crusts or pans. 12.15 No deep-rooted species present. 12.16 All remaining infrastructure removed as per the criteria of RM1, unless the infrastructure is to remain as part of the post-mining land use.

Milestone reference	Rehabilitation milestone	Milestone criteria
RM13	Achievement of PMLU to stable condition (riparian vegetation)	13.1 Prepare assessment report by an AQP certifying that the diversion is operating in accordance with the latest version of, DNRME Guideline: Works that interfere with water in a watercourse for a resource activity — watercourse diversions under the Water Act 2000 (OSW/2019/4599) criteria and is in a stable condition. 13.2 A BioCondition assessment has been undertaken by an AQP, consistent with the methodology described in the latest version of the Queensland Herbarium's BioCondition Assessment Manual. 13.3 The BioCondition assessment must achieve a score of $\geq 35 / 60$, based on the benchmark criteria in Table 4 - Progressive and final benchmark values for riparian area (RE 11.3.25). 13.4 A minimum 20 % of canopy species show natural recruitment as assessed by an AQP. 13.4 No evidence of erosion classified as 'moderate' or 'severe' in accordance with Table 6 – Erosion Classification Framework. 13.5 any erosion present will not compromise the achievement of a PMLU to a stable condition. 13.6 all other erosion requiring intervention has been remediated and does not impact achieving the PMLU. 13.7 Erosion monitoring has been completed and the average erosion rate is < 5 t/ha/yr with a maximum erosion rate of < 10 t/ha/yr. 13.8 Invasive plants (including, but not limited to, those defined under the <i>Biosecurity Act 2014</i>) comprise $\leq 10\%$ of vegetative groundcover in accordance with Table 4 - Progressive and final benchmark values for riparian area (RE 11.3.25). 13.9 Vegetation species are consistent with Table 2 - Species list and seeding rates for riparian PMLU RE 11.3.25 and include a mixture of native shrubs and grasses. All remaining infrastructure removed as per the criteria of RM1, unless the infrastructure is to remain as part of the post-mining land use.

Milestone reference	Rehabilitation milestone	Milestone criteria
RM14	Achievement of post-mining land use water quality and level	14.1 Surface water quality results monitored monthly during flow at downstream locations specified in Table 8 – Receiving waters downstream and upstream (background) monitoring points, must not exceed the limits in Table 9 – Surface Water Quality Limits, for a minimum of 5 consecutive years. 14.2 If the surface water quality exceeds criteria 14.1, 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 site⁵. 14.3 Where the surface water quality at the downstream site exceeds the upstream site results as per PRCP criteria RM14.2, 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 stable condition, no further action is to be taken; or (b) Where there is a risk greater than low to achieving stable condition, an assessment of potential environmental harm by the AQP and their recommended rectification actions to rehabilitation activities must be determined and implemented. 14.4 The assessment/s under RM14.3 must be completed and provided to the administering authority within 3 months of receiving the relevant sampling results. 14.5 The 5-year timeframe under RM14.1 is reset by 4 occurrences of RM14.3(a) or by a single occurrence of RM14.3(b). 14.6 For a minimum of five consecutive years groundwater quality must be monitored quarterly at compliance bores specified in Table 10 – Groundwater monitoring locations, for all quality characteristics listed in Table 11 – Groundwater quality limits. 14.7 Groundwater quality results must not exceed the limits in Table 11 – Groundwater quality limits, for 3 consecutive results. 14.8 The results of groundwater monitoring for compliance bores (which are not dry) (Table 10 – Groundwater monitoring locations) must not exceed any of the groundwater level thresholds (Table 12 - Groundwater level thresholds). 14.9 A breach of the groundwater level thresholds is confirmed where a comparison of the measured groundwater for a compliance bore at any point in time with the reference level for that bore results in a groundwater level drawdown greater than the groundwater level threshold over a five-year period, and for any subsequent investigation to have determined that environmental harm has occurred.

Section D – Non-use management areas**(IA1) Improvement area 1**

Non-use management area (NUMA)								
Improvement area	IA1							
Relevant activities	Final void being pit lake, low wall spoil, end wall, fence and bund and highwall							
Total size (ha)	488.89							
Commencement of first milestone: MM1	10/12/2028							
NUMA	Non-use management area							
Date area is available	10/12/2028	10/12/2030	10/12/2032	10/12/2034	10/12/2036	10/12/2038	10/12/2040	10/12/2042
Cumulative area available (ha)	96.35	96.35	96.35	226.83	226.83	488.89	488.89	488.89
Milestone completed by	10/12/2030	10/12/2032	10/12/2034	10/12/2036	10/12/2038	10/12/2040	10/12/2042	10/12/2044
Milestone Reference	Cumulative area achieved (ha)							
MM1	96.35	96.35	96.35	226.83	226.83	488.89	488.89	488.89
MM2		96.35	96.35	226.83	226.83	286.20	488.89	488.89
MM3			96.35	96.35	226.83	226.83	286.20	488.89

Improvement area milestones

Milestone reference	Management milestone	Milestone criteria
MM1	Wall treatments	1.1 Final residual voids exempting Burton North Pit and exempting any pits containing processing waste (e.g. waste from the coal handling and processing plant) (e.g. Ellensfield Pit) are not subject to inundation from floodwaters up to and including the 0.1% AEP. 1.2 Final residual voids for Burton North Pit and any pits containing processing waste (e.g. waste from the coal handling and processing plant) (e.g. Ellensfield Pit) are not subject to inundation from floodwaters up to and including a PMF event. 1.3 Void walls / slopes are assessed as stable by an AQP (geotechnical engineer) as geotechnically stable with a $FoS \geq 1.5$. 1.4 The location of the voids and associated safety bunds does not cause instability or degradation to the land outside the NUMA. 1.5 Residual voids must not overtop. 1.6 $FoS \geq 1.5$ is achieved as assessed by an AQP (geotechnical engineer).
MM2	Achievement of surface requirements / access controls	2.1 Safety bund setback distance aligns with calculated geotechnical factor of safety ≥ 1.5. 2.2 Safety bund is constructed with (a) a height of at least 2 m, (b) base width of 5-6 m and (c) average batter slopes of 1 vertical (V) : 2.5 horizontal (H). 2.3 Safety bund is approved by an AQP. 2.4 Safety bunds are capable of maintaining stability under a 0.1 % AEP flood event. 2.5 Fencing is installed at nominated offset (25 m) from safety bund (nominally a four-strand barbed stock fence). 2.6 Safety signage (design in accordance with Australian Standards) is erected at specified intervals along the fence. 2.7 Highwall safety bund must: (a) prevent surface flow of floodwater into the void (b) Be geotechnically stable when floodwater is against the creek-side batter (c) Not be constructed with dispersive material (d) Have maximum 30% slopes with rock for scour protection.

Milestone reference	Management milestone	Milestone criteria
MM3	Achievement of sufficient improvement	3.1 An AQP demonstrates with water quality, water level and modelling data, that the residual void/s act as groundwater sinks post-closure. 3.2 Certification from an AQP that the residual void will not cause environmental harm outside of the relevant tenure boundary. 3.3 Certification from an AQP that the residual void is safe to humans and livestock. 3.4 Certification from an AQP that the water level and quality in the void will not cause environmental harm to the surrounding environment, as demonstrated by groundwater level, quality monitoring and modelling. 3.5 Erosion of the landform within the NUMA area, including from inundation, will not negatively impact on the stability of any adjacent rehabilitation areas, or their ability to sustain their PMLU. 3.6 Fencing installed at nominated offset (25 m) from safety bund (nominally a four-strand barbed stock fence). 3.7 Safety signage (design in accordance with Australian Standard) is erected at 100 m intervals along the fence. 3.8 Landforms are assessed by an AQP (geotechnical engineer) as geotechnically stable with a FoS ≥ 1.5.

Section E – Attachments

Table 1 – Species list and seeding rates for grazing PMLU

Species	Minimum Seeding rate (kilograms per hectare (kg/ha))
Kangaroo Grass (<i>Themeda triandra</i>)	3
Queensland Blue Grass (<i>Dicanthium sericeum</i>)	3
Perennial tufted grass (<i>chrysopogon fallax</i>)	3
Creeping Blue Grass (<i>Bothriochloa pertusa</i>)	2
Sabi Grass	3
Japanese Millet (<i>Echinochloa esculenta</i>)	3
Butterfly Pea	3
Narrow Leaved Ironbark	0.05
Poplar Box	0.05
Spotted Gum	0.05

Table 2 – Species list and seeding rates for riparian PMLU RE 11.3.25

Species type	Species	Minimum Seeding rate (kg/ha)
Overstorey trees and large shrubs (8 - 20 m)	Rough-barked Apple (<i>Angophora floribunda</i>)	2
	Narrow-leaved Bottle Tree (<i>Brachychiton rupestris</i>)	
	River Oak (<i>Casuarina cunninghamiana</i>)	
	River Red Gum (<i>Eucalyptus camaldulensis</i>)	
	Coolabah (<i>Eucalyptus coolabah</i>)	
	Queensland Blue Gum (<i>Eucalyptus tereticornis</i>)	
	Black Ironbox (<i>Eucalyptus raveretiana</i>)	
	Clarkson's bloodwood (<i>Corymbia clarksoniana</i>)	
	silver-leaved Ironbark (<i>Eucalyptus melanophloia</i>)	
	Poplar Gum (<i>Eucalyptus platyphylla</i>)	
	Poplar Box (<i>Eucalyptus populnea</i>)	
	Moreton Bay ash (<i>Corymbia tessellaris</i>)	
	Blue gum (<i>Eucalyptus tereticornis</i>)	
Mid-storey shrubs (1 - 8 m)	Sally Wattle (<i>Acacia salicina</i>)	2
	River Cooba (<i>Acacia stenophylla</i>)	
	Bush Caper (<i>Capriis lasiantha</i>)	
	Currant Bush (<i>Carissa ovata</i>)	
	Red Bauhinia (<i>Lysiphyllum carronii</i>)	
	Black Tea-tree (<i>Melaleuca bracteata</i>)	
	Weeping Bottlebrush (<i>Melaleuca viminalis</i>)	
	Yellow-wood (<i>Terminalia oblongata</i>)	

Species type	Species	Minimum Seeding rate (kg/ha)
Ground-storey grasses and tussocks (0.2 - 2 m)	Forest Bluegrass (<i>Bothriochloa bladhii</i>)	6
	Desert Bluegrass (<i>Bothriochloa ewartiana</i>)	
	Golden Beard Grass (<i>Chrysopogon fallax</i>)	
	Flat-sedge (<i>Cyperus dactyloides</i>)	
	Variable Flat-sedge (<i>Cyperus difformis</i>)	
	Giant Sedge (<i>Cyperus exaltatus</i>)	
	Slender Flat-sedge (<i>Cyperus gracilis</i>)	
	Rice Flat-sedge (<i>Cyperus iria</i>)	
	Whisker Flat-sedge (<i>Cyperus rigidellus</i>)	
	Yelka Flat-sedge (<i>Cyperus victoriensis</i>)	
	Queensland Bluegrass (<i>Dichanthium sericeum</i>)	
	Blady Grass (<i>Imperata cylindrica</i>)	
	Whorled Cane Grass (<i>Leptochloa digitata</i>)	
	Spiny-head Mat-rush (<i>Lomandra longifolia</i>)	
	Native Millet (<i>Panicum decompositum</i>)	
	Kangaroo Grass (<i>Themeda triandra</i>)	
	Speargrass (<i>Heteropogon contortus</i>)	
	Barbed Wiregrass (<i>Cymbopogon refractus</i>)	
	Nepalensis Grass (<i>Arundinella nepalensis</i>)	
	Shotgrass/Warrego Grass (<i>Paspalidium distans; jubiflorum</i>)	
	Purple Wiregrass (<i>Aristida personata</i>)	
	Spring Grass/Slender Cupgrass (<i>Eriochloa crebra; procera</i>)	
	Panic Grass (<i>Panicum effusum; laevinode</i>)	
	Rat's Tail Couch/Creeping Dropseed (<i>Sporobolus mitchellii; creber</i>)	

Table 3 – Species list and seeding rates for modified Bushland PMLU (RE 11.9.7)

	Scientific name	Common name	Minimum Seeding rate (kg/ha)
Shrubs	<i>Eremophila mitchellii</i>	False Sandalwood	3
	<i>Geijera parviflora</i>	Wilga	
	<i>Alectryon oleifolius</i>	Boonaree	
	<i>Atalaya hemiglauca</i>	Whitewood	
	<i>Psychodra oleifolia</i>	Bush myrtle	
	<i>Dodonea viscosa</i>	Hop bush	
	<i>Grevillea striata</i>	Silver Honeysuckle	
Ground Layer	<i>Paspalidium criniforme</i>	Fine Panic	7
	<i>Eragrostis spartanoides</i>	Love Grass	
	<i>Aristida leptopoda</i>	White Speargrass	
	<i>Bothriochloa decipiens</i>	Pitted Bluegrass	
	<i>Enteropogon acicularis</i>	Curly Windmill Grass	
	<i>Aristida jerichoensis</i>	Wire Grass	
	<i>Chloris divaricata</i>	Slender Chloris	

Table 4 – Progressive and final benchmark values for riparian area (RE 11.3.25)

BioCondition Assessable Attributes	BioCondition Assessable Attribute Weighting	BioCondition benchmark	Indicative ¹ measure at RM9	BioCondition Score	Indicative ¹ measure at RM13	BioCondition Score
Recruitment	5	100%	0	0	20%	3
Non-native plant cover (%)	10	0%	<25%	5	<25%	5
Tree species richness	5	4	≥1	2.5	4	5
Native shrub species richness	5	4	≥1	2.5	≥1	2.5
Native grass species richness	5	8	≥2	2.5	≥2	2.5
Native forb other species richness	5	13	≥3	2.5	≥3	2.5
Tree canopy height (m)	5	23m	0	0	≥5.75m	3
Tree canopy cover (%)	5	34%	≥3.4%	2	≥17- 68%	5
Shrub canopy cover (%)	5	7%	≥0.7%	3	≥0.7%	3
Native perennial grass (%)	5	35%	≥17.5 – 31.5%	3	≥17.5 – 31.5%	3
Litter ground cover (%)	5	21%	0	0	≥2.1%	3
Total BioCondition Assessable Score	60			>20 Total above = 23		>35 Total above = 37.5

Notes:

¹Excludes landscape, large tree and coarse woody debris BioCondition attributes²Species richness is based on species that occur in RE 11.3.25 consistent with the RE technical description.

Table 5 – Progressive and final benchmark values for bushland (modified RE 11.9.7)

BioCondition Assessable Attributes	BioCondition Assessable Attribute Weighting	Modified BioCondition benchmark	Indicative ² measure at RM9	BioCondition Score	Indicative ² measure at RM12	BioCondition Score
Recruitment of dominant shrub layer species ¹	5	100	0	0	20%	3
Non-native plant cover (%)	10	0	<25%	5	<25%	5
Shrub (native) species richness	5	5	5	5	5	5
Grass (native) species richness	5	9	≥2	2.5	≥2	2.5
Forb / other (native) species richness	5	28	≥7	2.5	≥7	2.5
Canopy cover (%) ¹	10	40%	>4 – 20%	6	>20%	10
Native perennial grass cover (%)	5	26%	>13 – 23%	3	>13 – 23%	3
Organic litter cover (dead material only) (%)	5	15%	0	0	>1.5%	3
Total	50			>20 Total above = 24		>30 Total above = 34

Notes:

¹Excludes landscapes, large tree and coarse woody debris BioCondition attributes.²Species richness is based on species that occur in the relevant RE consistent with the RE technical description.

Table 6 – Erosion Classification Framework

Erosion classification	Minor	Moderate	Severe
Sheet erosion	Shallow soil deposits downslope	Partial exposure of roots; moderate soil deposits downslope etc	Loss of surface horizon; subsoil exposure; root exposure; substantial soil deposits downslope
Rill / gully erosion	<15 rills/transect* and <0.3m deep	15-30 rills per transect* and <0.3m deep	>30 rills per transect* and/or any >0.3m deep.
Tunnel erosion	Absent	Absent	Present
Mass movement	Absent	Absent	Present

Source: NCST (2009) *Australian Soil and Land Survey Field Handbook, 3rd edition*. The National Committee on Soil and Terrain. CSIRO Publishing, Collingwood, Australia.

*Transect 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.

Table 7 – Soil Quality Criteria

Parameter	Criteria			Comments
	Grazing	Bushland	Riparian	
pH (1:5) 0cm – 15cm	5.6-8.4	5.6-8.4 ⁶	5.6-8.4 ⁸	For grazing, derived from <i>Rehabilitated mine land suitability for cattle grazing in the Bowen Basin</i> (QMRC guidelines) (Short 2023).
pH (1:5) 15cm – 30cm	5.6 – 9.3	5.6 – 9.3	5.6 – 8.4 ⁸	Median pH upper limit from overburden samples
Saturate paste extract EC (EC _e) (deciSiemens per metre (dS/m)) 0cm – 15cm	Less than or equal to ($\leq$) 2	$\leq 2^8$	$\leq 2^8$	For grazing, derived from the QMRC guidelines.
Saturate paste extract EC (EC _e) (deciSiemens per metre (dS/m)) 15cm – 30cm	Less than or equal to ($\leq$) 10	≤ 10	≤ 2	For grazing, derived from the QMRC guidelines.
Available P (milligrams per kilogram (mg/kg)) ⁷ 0cm – 15cm	Greater than or equal to ($\geq$) 8	-	-	For grazing, derived from the QMRC guidelines. Criteria have not been proposed for bushland or riparian PMLUs, which contain native vegetation that can tolerate low fertility.
ESP (%) 0cm – 15cm	≤ 6	< 6	< 6	For grazing, derived from the QMRC guidelines. QMRC guidelines separate the critical sodicity range for topsoil and subsoil. Therefore, it is considered appropriate to do the same here. These criteria have been kept for bushland and riparian PMLUs.
ESP (%) 15cm – 30cm	$>6-10$	$>6-10$	>6	
Soil organic matter (SOM) (%) 0cm – 15cm	3-10	-	-	For grazing, agricultural industry benchmark sufficiency criteria ⁸ were used. Criteria have not been proposed for bushland or riparian PMLUs, which contain native vegetation that can tolerate low fertility.
Emerson aggregate class 0cm – 15cm	> 3	> 3	> 3	Emerson aggregate class measures the stability of the soil aggregate. An Emerson class value of ≤ 2 is indicative of unstable soil. DETSI has recommended an acceptable Emerson class of ≥ 3 in the draft PRCP schedule. This recommendation has been adopted for both bushland and riparian PMLUs.

⁶ pH and EC_e criteria from the grazing PMLU have been applied to the bushland and riparian PMLUs.

⁷ Relevant to surface soils (0-0.2 m depth), consistent with QMRC guidelines.

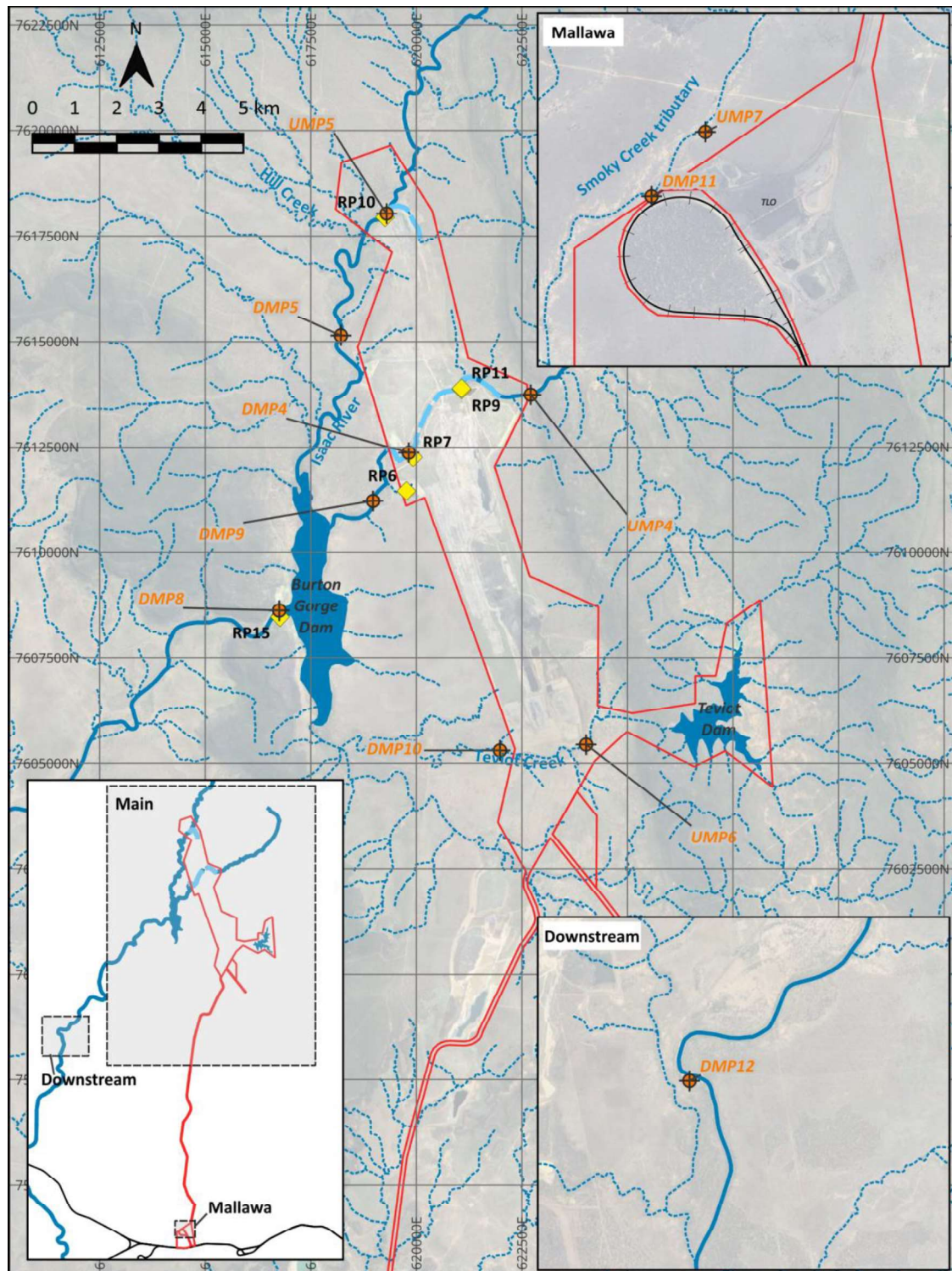
⁸ Sourced from Raymont and Bruce (1984), Baker and Eldershaw (1993), the Department of Environment, Science and Resource Management (DERM) (2011) and Peverill et al. (1999).

⁸ Sourced from Raymont and Bruce (1984), Baker and Eldershaw (1993), the Department of Environment, Science and Resource Management (DERM) (2011) and Peverill et al. (1999).

Table 8 – Receiving waters downstream and upstream (background) monitoring points

Monitoring point	Receiving water location description	Latitude (GDA2020)	Longitude (GDA2020)
<i>Downstream monitoring points</i>			
DMP 4 ¹	Anna Creek downstream	-21.587676799	148.157409103
DMP 5 ¹	Isaac River downstream	-21.562707803	148.141682012
DMP 8 ¹	Lower Anna Creek (Burton Gorge Dam).	-21.621709588	148.128049141
DMP 9	Downstream on Anna Creek.	-21.598121502	148.149329824
DMP 10	Downstream of new disturbance areas and associated water management infrastructure.	-21.651321742	148.178817040
DMP 11	Downstream of sediment dam at rail load-out facility.	-21.923546958	148.145079118
<i>Upstream (background) monitoring points</i>			
UBMP 4 ¹	Anna Creek upstream	-21.575132252	148.185211329
UBMP 5 ¹	Isaac River upstream	-21.536556838	148.151943954
UBMP 6	Background monitoring site on Teviot Creek.	-21.649907092	148.198508206
UBMP 7	Background monitoring site on unnamed tributary of Smoky Creek.	-21.920501994	148.147775175

¹ Existing EA monitoring locations



Title: Local monitoring and discharge locations
Project: Burton Mine
 Water quality assessment

Legend

- Diversions
- Mine Lease
- Minor waterway
- Non-minor waterway
- ⊗ Water quality monitoring site (REMP)
- ◆ Release points

HydroBalance

— **Figure 3. Surface water monitoring locations**

Table 9 – Surface water quality limits

Quality characteristic	Contaminant limit	Comment
pH (pH units)	6.5-8.5	Upper Isaac River WQO
Electrical conductivity (µs/cm)	220	Site-specific, 95 th percentile of upstream sites
Total Suspended Solids (mg/L)	373	Site-specific
Sulfate (mg/L)	25	Upper Isaac River WQO, 95 th percentile of upstream <10 mg/L
Turbidity (NTU)	280	Site-specific, 95 th percentile of upstream sites
Aluminium - dissolved (µg/L)	904	Site-specific
Arsenic - dissolved (µg/L)	13	ANZG 2018
Boron - dissolved (µg/L)	80	Site-specific, 95 th percentile of upstream sites
Barium - dissolved (µg/L)	64	Site-specific, 95 th percentile of upstream sites
Cadmium - dissolved (µg/L)	0.2	ANZG 2018
Cobalt - dissolved (µg/L)	1.4	ANZG 2018
Chromium - dissolved (µg/L)	1	ANZG 2018
Copper - dissolved (µg/L)	1.4	ANZG 2018
Iron - dissolved (µg/L)	300	
Lead – dissolved (µg/L)	3.4	ANZG 2018
Mercury - dissolved (µg/L)	0.06	ANZG 2018
Manganese - dissolved (µg/L)	100	Site-specific, 95 th percentile of upstream sites
Molybdenum - dissolved (µg/L)	34	ANZG 2018
Nickel - dissolved (µg/L)	11	ANZG 2018
Selenium - dissolved (µg/L)	5	ANZG 2018
Silver – dissolved (µg/L)	0.05	ANZG 2018
Uranium - dissolved (µg/L)	0.5	ANZG 2018
Vanadium - dissolved (µg/L)	6	ANZG 2018
Zinc - dissolved (µg/L)	8	ANZG 2018
Ammonia (µg/L)	900	ANZG 2018
Nitrate (µg/L)	1,100	ANZG 2018
Petroleum hydrocarbons (C6-C9) (µg/L)	20	
Petroleum hydrocarbons (C10-C36) (µg/L)	100	
Major ions (mg/L) Calcium, chloride, potassium, magnesium, sodium, bicarbonate, carbonate	For interpretation purposes only	
Hardness (mg/L)	For interpretation purposes only	

All metals and metalloids must be measured as total (unfiltered) and dissolved (filtered).

ANZG (2018) Aquatic ecosystem protection for moderately disturbed system (95% protection)

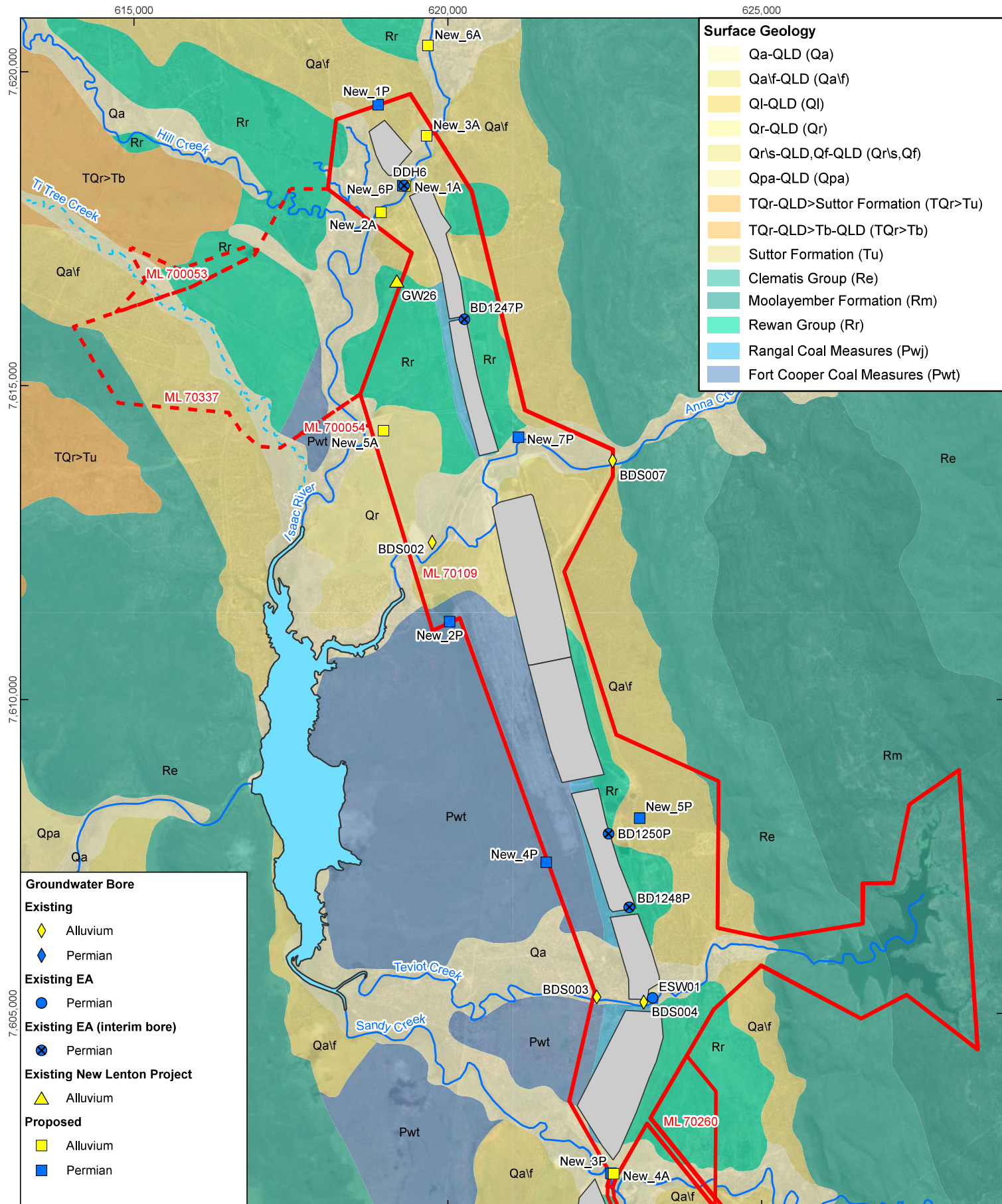
Isaac River Sub-basin Environmental Values and Water Quality Objectives (WQO)

Table 10 – Groundwater monitoring locations

Monitoring point	Hydrogeological unit	Latitude (GDA2020)	Longitude (GDA2020)	Status	Type
New_1A	Alluvium	-21.535182051	148.152184148	Proposed	Compliance
New_2A	Alluvium	-21.539001583	148.148506526	Proposed	Compliance
New_3A	Alluvium	-21.527941525	148.155448311	Proposed	Compliance
New_4A	Alluvium	-21.677092441	148.185434199	Proposed	Compliance
New_5A	Alluvium	-21.570407591	148.149120816	Proposed	Compliance
New_6A	Alluvium	-21.514950450	148.155529016	Proposed	Interpretation
GW26	Alluvium	-21.548749870	148.150997308	Dry	Compliance
BDS004	Alluvium	-21.652363217	148.189851067	Dry	Compliance
BDS007	Alluvium	-21.574496467	148.184423868	Active	Compliance
BDS002	Alluvium	-21.586452786	148.156752238	Active	Compliance
BDS003	Alluvium	-21.651683235	148.182607887	Active	Compliance
BD1248P ¹	Vermont Seam	-21.638730323	148.187507396	Active	Compliance
BD1250P ¹	Vermont Seam	-21.628184434	148.184232919	Active	Compliance
BD1247P ¹	Burton seam	-21.554314330	148.161460715	Active	Compliance
DDH6 ¹	Leichhardt / Vermont Seam	-21.535137886	148.152038969	Active	Compliance
ESW01	Vermont Seam	-21.651748172	148.191218174	Active	Compliance
New_1P	Burton Seam	-21.523537780	148.148220799	Proposed	Compliance
New_2P	Permian	-21.597832065	148.159798462	Proposed	Interpretation
New_3P	Leichhardt Seam	-21.677057414	148.185279277	Proposed	Compliance
New_4P	Permian	-21.632342497	148.174952875	Proposed	Interpretation
New_5P	Permian	-21.625802333	148.188908902	Proposed	Compliance
New_6P	Burton Seam	-21.535164652	148.152087457	Proposed	Compliance
New_7P	Permian	-21.571175966	148.169813758	Proposed	Compliance

Notes:

Existing EA monitoring locations



Coordinate System: GDA2020 MGA Zone 55
 Scale: 1:80,000 at A4
 Project Number: 620.040927.00001
 Date Drawn: 15-Jan-2025
 Drawn by: RB



DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.

Groundwater monitoring locations

FIGURE 4

Table 11 – Groundwater quality limits

Monitoring Bore	Hydrogeological unit	Electrical conductivity (µs/cm) Field	Comment	Sulfate (mg/L)	Comment
BD1247P	Burton seam	16,600	Site specific (95 th percentile)	25	Upper Isaac River WQO
BD1248P	Vermont Seam	28,600	Site specific (95 th percentile)	25	Upper Isaac River WQO
BD1250P	Vermont Seam	10,800	Site specific (median)	372	Site specific (95 th percentile)
DDH6	Leichhardt / Vermont Seam	8,728	Site specific (95 th percentile)	119	Site specific (95 th percentile)
ESW01	Vermont Seam	14,040	Site specific (95 th percentile)	75	Site specific (95 th percentile)
BDS002	Alluvium	4,030	Site specific (95 th percentile)	137	Site specific (95 th percentile)
BDS007	Alluvium	241	Site specific (95 th percentile)	25	Upper Isaac River WQO
BDS003	Alluvium	720	Upper Isaac River WQO	25	Upper Isaac River WQO
BDS004	Alluvium	720	Upper Isaac River WQO	25	Upper Isaac River WQO
GW26	Alluvium	720	Upper Isaac River WQO	25	Upper Isaac River WQO
New_1A	Alluvium	720	Upper Isaac River WQO	25	Upper Isaac River WQO
New_2A	Alluvium	720	Upper Isaac River WQO	25	Upper Isaac River WQO
New_3A	Alluvium	720	Upper Isaac River WQO	25	Upper Isaac River WQO
New_4A	Alluvium	720	Upper Isaac River WQO	25	Upper Isaac River WQO
New_5A	Alluvium	720	Upper Isaac River WQO	25	Upper Isaac River WQO
New_1P	Burton Seam	16000	Upper Isaac River WQO	25	Upper Isaac River WQO
New_3P	Leichhardt Seam	16000	Upper Isaac River WQO	25	Upper Isaac River WQO
New_5P	Permian Interburden (first water)	16000	Upper Isaac River WQO	25	Upper Isaac River WQO
New_6P	Burton Seam	16000	Upper Isaac River WQO	25	Upper Isaac River WQO
New_7P	Leichhardt Seam	16000	Upper Isaac River WQO	25	Upper Isaac River WQO

PRCP schedule P-PRCP-100869055 New Burton Coal Mine

Quality characteristic	Bores	Contaminant limit	Comment
pH (pH units)	All bores	6.5-8.5	Upper Isaac River WQO
Aluminium - dissolved (µg/L)	All bores	55	ANZG 2018
Arsenic - dissolved (µg/L)	All bores	13	ANZG 2018
Boron - dissolved (µg/L)	All bores	940	ANZG 2018
Barium - dissolved (µg/L)	All bores	35	Site-specific, 95 th percentile of all bores
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, except BD1250P and ESW01	1.4	ANZG 2018
Copper - dissolved (µg/L)	BD1250P	2.3	Site specific
Copper - dissolved (µg/L)	ESW01	5.8	Site specific
Iron - dissolved (µg/L)	All bores	300	
Lead – dissolved (µg/L)	All bores	3.4	ANZG 2018
Mercury - dissolved (µg/L)	All bores	0.06	ANZG 2018
Manganese - dissolved (µg/L)	All bores	1,900	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
Silver – dissolved (µg/L)	All bores	0.05	ANZG 2018
Uranium - dissolved (µg/L)	All bores	0.5	ANZG 2018
Vanadium - dissolved (µg/L)	All bores	6	ANZG 2018
Zinc - dissolved (µg/L)	All bores, except BD1250P and ESW01	8	ANZG 2018
Zinc - dissolved (µg/L)	BD1250P	24	Site specific
Zinc - dissolved (µg/L)	ESW01	66	Site specific
Ammonia (µg/L)	All bores	900	ANZG 2018
Nitrate (µg/L)	All bores	1,100	ANZG 2018
Major ions (mg/L) Calcium, chloride, potassium, magnesium, sodium, bicarbonate, carbonate	All bores	For interpretation purposes only	
Hardness (mg/L)	All bores	For interpretation purposes only	

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.

Table 12 – Groundwater level thresholds

Aquifer	Compliance bore	Level trigger elevation threshold (mAHD)
Burton Seam	BD1247P	180.3
Vermont Seam	BD1248P	224.5
Vermont Seam	BD1250P	283.7
Leichhardt / Vermont Seam	DDH6	287.2
Vermont Seam	ESW01	243.3
Alluvium	BDS002	292.2
Alluvium	BDS003	302.6
Alluvium	BDS007	301.1
Alluvium	BDS004	Dry bore, no level threshold proposed
Alluvium	GW26	306
Alluvium	New_1A	299.9
Alluvium	New_2A	299.9
Alluvium	New_3A	302.2
Alluvium	New_4A	300.2
Alluvium	New_5A	293.8
Burton Seam	New_1P	300.9
Leichhardt Seam	New_3P	261.9
Permian Interburden (first water)	New_5P	266.3
Burton Seam	New_6P	283.7
Leichhardt Seam	New_7P	161.8

Definitions

Appropriately qualified person (AQP) means a person who has professional qualifications, training, skills or 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.

Rehabilitation activity means any activity that the holder is required to carry out in relation to this PRCP schedule.

Stable In relation to land, means landform dimensions are or will be stable within tolerable limits now and in the foreseeable future.

Stability includes consideration of geotechnical stability, settlement and consolidation allowances, bearing capacity (trafficability), erosion resistance and geochemical stability with respect to seepage, leachate and related contaminant generation.

Land is in a stable condition if:

- (a) The land is safe and structurally stable, and
- (b) There is no environmental harm being caused by anything on or in the land, and
- (c) The land can sustain a post mining land use (PMLU).

Suitably qualified and experienced person (SQP) means a suitability qualified person 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.

END OF **PRCP** SCHEDULE