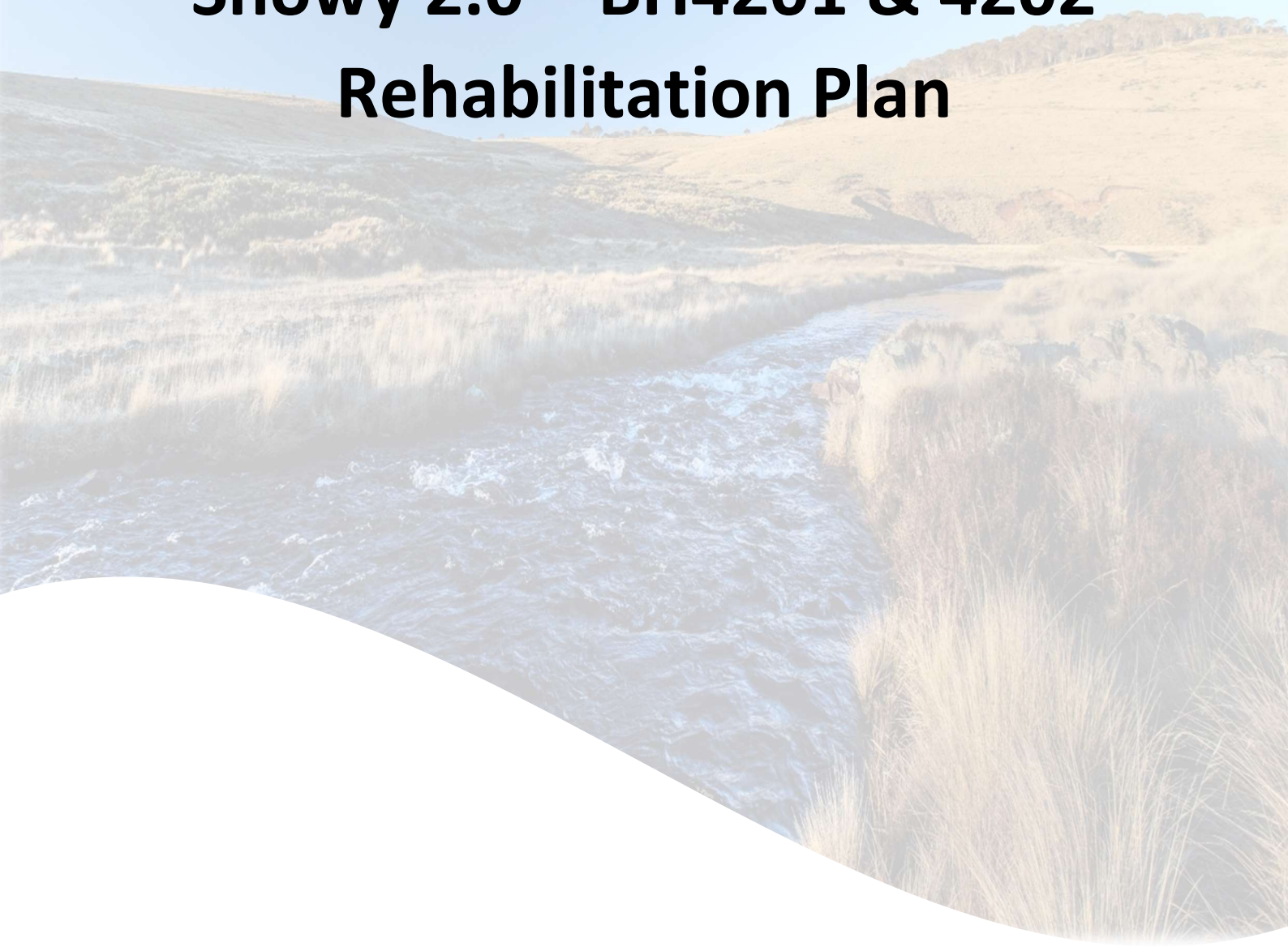
Snowy 2.0 – BH4201 & 4202 Rehabilitation Plan



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Title	Snowy 2.0 - BH4201 & 4202- Rehabilitation Plan	
Document Number	S2-SHL-ENV-PLN-0008 Rev 4	
	Name	**Title**
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Document Revision Table

Revision	Date	Description
1	17/08/2023	Draft plan – Including format update
2	03/10/2023	Address initial NPWS comments
3	27/05/2024	Updated for consistency with other recently review site specific plan
4	24/09/2024	Updated to close out final comments with NPWS (NS) during meeting

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1. Background

Schedule 3, Condition 10 (G) of the Snow y2.0 Main Works Conditions of Approval (COA) requires a detailed plan for the rehabilitation of the disturbance area of Marica. A separate plan provides details for the broader Marica area whilst this plan addresses Bore Holes (BH) 4201 & 4202, also located in the Marica area. The condition describes the measures to be implemented to comply with the rehabilitation objectives in Table 3 of the COA.

BH4201 & BH4202 are located between Tantangara and Talbingo storages in the north-western corner of the plateau. They are west of the Snowy Mountains Highway (SMH) and north of the main Marica site. Original access was via a temporary track installed off the existing NPWS Coppermine Trail. These boreholes were drilled to understand the regional geology following the original GIP works. For project context see Figure 1.

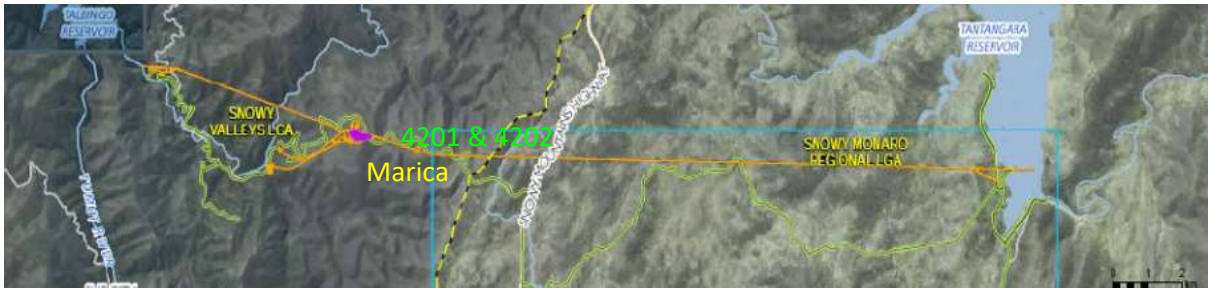


Figure 1: Region location

The area to be rehabilitated is approximately 0.8 Ha of disturbance. Figure 2 details the BH4201 & 4202 layout (purple circles signifying the bore hole locations).

Figure 2: BH4201 & 4202 Layout

Note – Coppermine Trail (red and white), Temporary access track (red)

1.1 Site Description

The site intersects three separate alpine snow gums stands as well as sub alpine grasslands. The rehabilitation area is comprised of two drill pads connected by a temporary track from Coppermine Trail to the boreholes. The track is approximately 5 metres wide and was cleared of vegetation to facilitate initial access. The track and pads have had topsoil, mulch and thatch applied during the

past two years. The temporary access track crosses the Eucumbene River and another unnamed waterway. See Appendix A for aerials of current conditions as of January 2024.

2. Scope of rehabilitation works

- Topsoil/growth medium placement **(complete).** See Section 3.4 and 5.1.
- Mulch application and thatching of the site with local dead branches **(complete)** refer to Section 3.1 and 5.2. Additional mulch is to be applied to bare patches.
- Primary and secondary revegetation treatment consisting of tube stock planting and direct seeding as advised by the monitoring program. Refer to Section 4.2 and Table 2.
- Weed treatment and ongoing maintenance. (Refer to section 6.2, 6.3 and 6.5)
- Access control. Refer to Section 3.5.

3. Earthworks

3.1 Erosion and sediment control materials

Temporary sediment management has been completed by placing straw bales in any potential discharge areas with the rest of site mulched with rice straw. Any further Erosion and Sediment Control (ESC) will be guided by Section 6.3.1.3 and 6.3.1.5 of the Main Works Rehabilitation Management Plan (RMP), with rice straw and site won mulch the primary materials to be used due to its proven success in the local environment as described in Section 9.1 of the Main Works RMP.

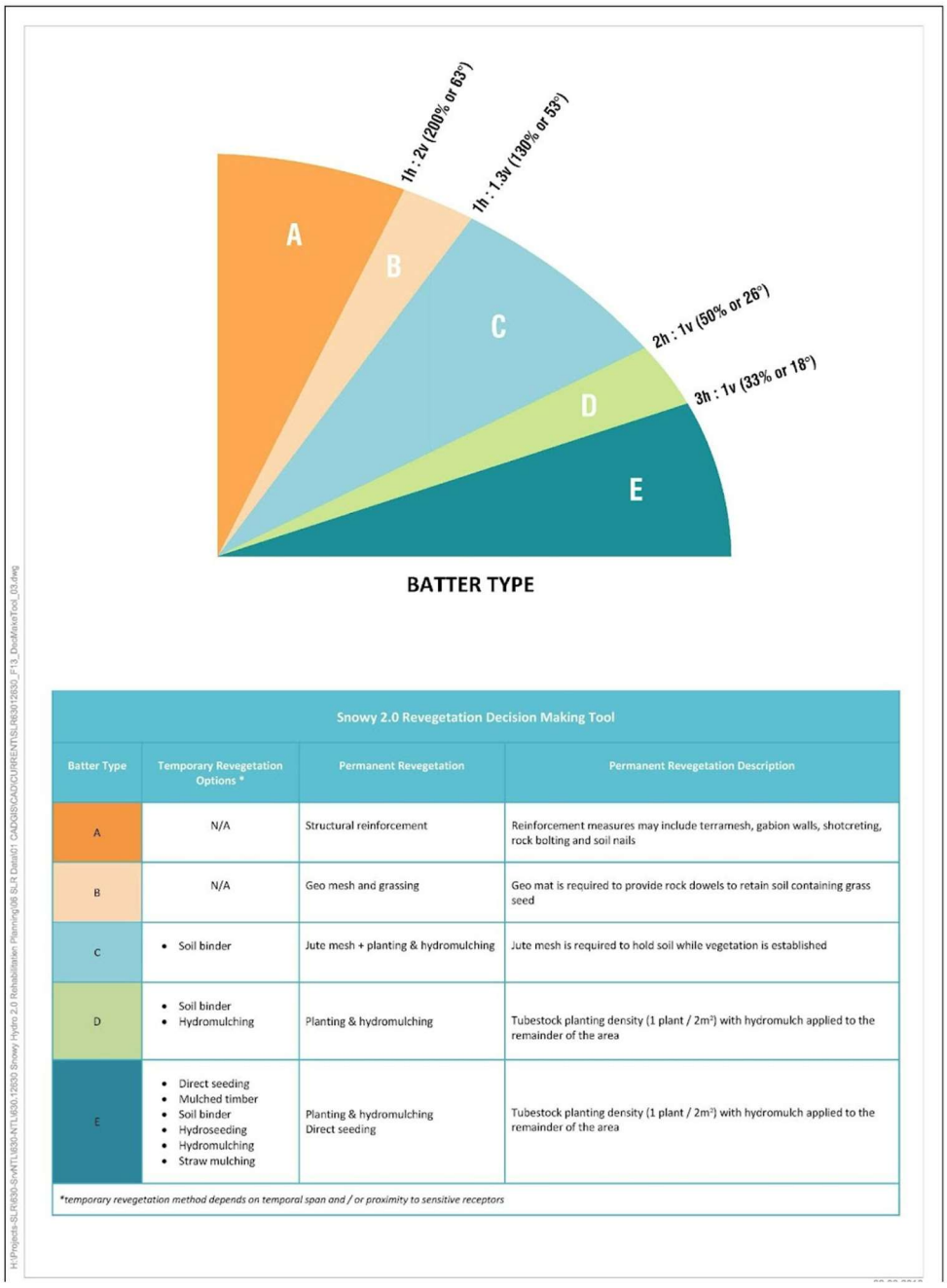
3.2 Waterways

There are two tributaries that intersect the access track between Coppermine Trail and the first borehole (B4201)as shown below in Figure 3. Both waterways are stable however some additional plantings to prevent erosion in the riparian zone will be undertaken. Species to be planted in the riparian zones are outlined in Section 4.2. See Appendix A for current imagery of Eucumbene and the unnamed waterway.

Figure 3: Waterways

3.3 Landform reshaping

No major landform reshaping is required of BH4201 & BH4202 pads and the associated access track with all batters classified as Type E as per Figure 4.



Snowy 2.0 Revegetation Decision Making Tool			
Batter Type	Temporary Revegetation Options *	Permanent Revegetation	Permanent Revegetation Description
A	N/A	Structural reinforcement	Reinforcement measures may include terramesh, gabion walls, shotcreting, rock bolting and soil nails
B	N/A	Geo mesh and grassing	Geo mat is required to provide rock dowels to retain soil containing grass seed
C	• Soil binder	Jute mesh + planting & hydromulching	Jute mesh is required to hold soil while vegetation is established
D	• Soil binder • Hydromulching	Planting & hydromulching	Tubestock planting density (1 plant / 2m²) with hydromulch applied to the remainder of the area
E	• Direct seeding • Mulched timber • Soil binder • Hydroseeding • Hydromulching • Straw mulching	Planting & hydromulching Direct seeding	Tubestock planting density (1 plant / 2m²) with hydromulch applied to the remainder of the area
*temporary revegetation method depends on temporal span and / or proximity to sensitive receptors			

Figure 4: Vegetation Decision making tool

3.4 Topsoil/growth medium amendment and placement

Initial vehicle access was gained by stripping the tracks and pads at a depth between 50 - 100mm. Topsoil was reapplied at the same depth and the surface has been left rough.

3.5 Access control

BH4201 & BH4202 access track will only be accessible to Snowy Hydro Limited (SHL) operations/National Parks and Wildlife Service (NPWS) with a gate at Coppermine / Wallace Creek Fire Trail at the Snowy Mountains Highway (SMH). Currently the track and pads are only accessible by foot from Coppermine Trail and the SMH due to the placement of trees/thatch. If access for all-terrain vehicles to undertake further rehabilitation works or for weed control is necessary, consultation with NPWS will be undertaken and approval sought.

4. Revegetation

The site will be revegetated using a combination of primarily tube stock planting and some direct seeding. Over the past two years the site has seen steady natural recruitment however one of the remaining challenges is competition from weeds, particularly Sheep Sorrell. Natural recruitment, weeds and the need to establish an ecological completion criteria measure has shaped the method outlined in Tables 1-3.

Table 1: Revegetation timing

Sequence	Task	Timing
1	Weed control	2024/2025 (November – April) Annually Ongoing
2	Monitoring BH pad and Riparian zone tubestock	November/December 2024 November 2024
3	Revegetation (direct seeding of BH4201) pending weed load and monitoring results. Additional thatch/mulch added to BH4201	2024/2025 (November – April)
4	Supplementary tube stock (primarily in PCT 644)	2024/2025 (November – April)

Where SHL & NPWS agree operational changes are required; the plan may be updated without DPHI approval.

4.1 Planting design

Tube stock will be randomly planted at a density guided by the local reference sites and monitoring program data for relevant PCTs. Initial planting around drainage lines will be at a density of 4 plants per m2. This section will be updated following completion of monitoring when target stems per ha are determined for each PCT. It is anticipated that the overstorey density will be approximately 1 plant per 4m

4.2 Species use and type

The species to be used are provided in Appendix J PCT Target Species List of the Main Works RMP with the final composition of the planting design prepared following completion of the first round of post fire monitoring of reference sites. Until the interquartile range for each species is established an interim completion criteria using the local reference site data will also be used (see appendix B). Key species and planting densities for key species are nominated below in Table 2. This section will be updated with a full species list following finalisation of the ecological completion criteria indicators with NPWS.

Table 2: Priority tube stock species planting density by PCT

PCT	Priority Species	Number for site
644	Eucalyptus pauciflora	125
644	Carex breviculmis	20
644	Poa Costiniana	40
1224	Eucalyptus stellulata Black Sally	15
1224	Eucalyptus pauciflora White Sally	8
1224	*Carex sp Tall Sedge	150
1224	*Carex breviculmis	45

*Waterway species for riparian zones

This site will be rehabilitated with species consistent with PCTs that make up the disturbed area. See Table 3 for PCTs and associated area, and Figure 5 for PCT composition.

Table 3: PCT Composition

PCT		HA
1224	PCT 1224 - Sub-alpine dry grasslands and heathlands of valley slopes, southern South Eastern Highlands Bioregion and Australian Alps Bioregion	0.3
644	PCT 644 - Alpine Snow Gum - Snow Gum shrubby woodland at intermediate altitudes in northern Kosciuszko NP, South Eastern Highlands Bioregion and Australian Alps Bioregion	0.5

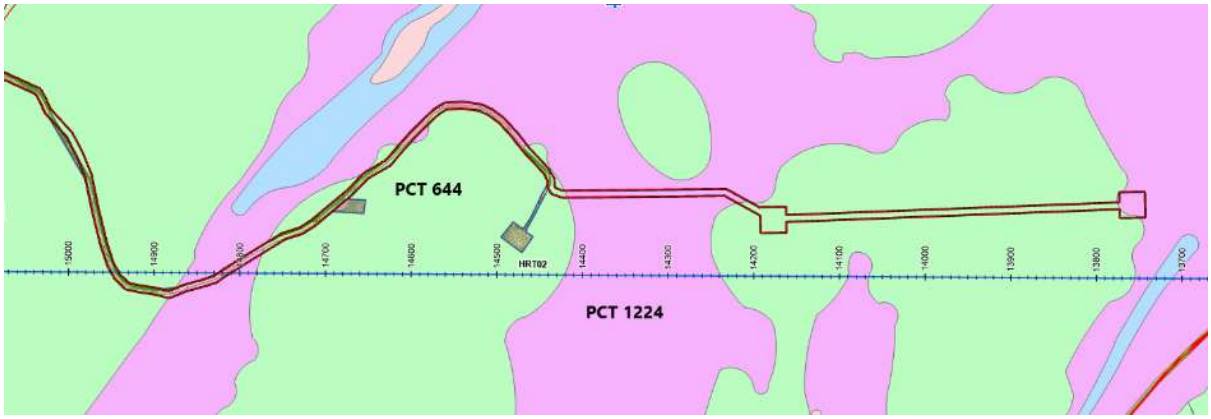


Figure 5: PCT Mapping

4.3 Water requirements

Planting will occur during times where soil moisture content is present with the utilisation of water crystals during planting. Due to access constraints watering will be limited to watering in during planting and if drought conditions occur (no rainfall in 2 months).

5. Resource specification

5.1 Compost/topsoil

Compost will only be used in planting holes for tube stock. One litre of compost per planting hole will be used.

Site won topsoil has already been respread over any areas where it was stripped.

5.2 Mulch

Site won mulch and straw has already been spread on both the access track and borehole sites. Rice straw or other surplus organic matter within the footprint (thatch from shrubs and poa) will be used if further mulch is identified as being required during monitoring.

5.3 Tube stock

Tubestock will be supplied by SHL as part of the tubestock propagation program grown from seed collected as part of the Snowy 2.0 seed collection program or from local nurseries that support revegetation in KNP.

5.4 Seed

Native seed may be sown after treatment of weeds and tubestock planting of shrubs and trees where monitoring identifies a need. Seed will be sourced from the Snowy 2.0 seed picking program.

5.5 Fencing/tree guards

No fencing will be used unless monitoring indicates grazing species are having an impact. Tree guards will be used.

5.6 Fertilisers

A small handful of slow-release organic fertiliser will be added to all planting holes in the planting process. Once native species have germinated and begun to grow, additional slow-release organic fertiliser may be used in the maintenance process to augment the growth of the sown species. No fertiliser will be used for direct seeding or around waterways

5.7 Signage and safety

Rehabilitation signage with a Snowy 2.0 logo will be erected with relevant site-specific information provided and requesting people remain off the area.

6. Post rehabilitation

Short term maintenance will be done 3 weeks to 2 months after the rehabilitation work has been completed.

6.1 Final land use

This will be returned to native vegetation in accordance with Appendix C – Final Land of the Main Works RMP

6.2 Short term maintenance

Short-term maintenance activities such as sediment and erosion control are no longer required given the time since initial stabilisation.

If a prolonged dry period occurs after planting occurs, additional watering will be required 4 to 6 weeks after sowing or 8 weeks after planting. Watering will be limited due to access constraints but undertaken as required.

6.3 Long term maintenance

It is envisaged maintenance activities (6+ months) such as erosion control and replanting may be required to be undertaken particularly around the Eucumbene River crossing. These activities will be guided by the inspection and monitoring program described in section 7 of this plan and the trigger action response plan outlined in Table 10.2 of the Main Works RMP.

6.5 Weed control

All weed species will be sprayed at the appropriate time with the appropriate herbicide. Weeds that are close to newly germinated seedlings will be weeded by hand. Annual weed monitoring will be scheduled with weed control programs occurring on a biannual basis as per the Biodiversity

Management Plan Appendix F (Weed, Pest, and Pathogen Management Plan section 5.1.2.1 – Chemical Weed Control. Weeds identified at the site and in the surrounding area include:

- Anthoxanthum_odoratum(sweet vernal grass)
- Dactylis glomerata (cocksfoot)
- Hypochaeris radicata (cats' ear)
- Acetosella vulgaris (sheeps sorrel)
- Agrostis capillaris (common bent grass

6.6 Fertiliser augmentation

Additional slow-release fertiliser (N, P, K) may be applied to established seedlings if seedlings show any signs of nutrient deficiencies.

6.7 Re-mulching

To be undertaken if required for seedlings planted in the revegetation process until they are sufficiently grown to provide their own biomass.

7. Rehabilitation Monitoring

Monitoring will be undertaken to provide information on the success of the rehabilitation regarding tubestock growth and mortality, seed germination and establishment, weed invasion, erosion, natural recruitment, and disturbance from grazing animals.

Monitoring will be carried out in accordance with Section 8.2 of the Main Works RMP. This will include observational monitoring (quarterly), unmanned aerial vehicle (UAV) (annually) and ecological monitoring (three yearly).

Observational monitoring of rehabilitation sites to be done quarterly (4 times per year). A checklist will be used and will generate maintenance programs and further rehabilitation works (if required). This checklist includes the measures linked to the TARPs outlined in Section 10.2 of the Main Works RMP. See Appendix C or the below link to a digital checklist that will form the basis for the quarterly observational monitoring:

Appendix C - Quarterly Observational Monitoring Form

Annual **(UAV)** and 3 yearly **ecological monitoring** (by appropriately qualified person) will occur as described in Tables 4 and 5 below.

Table 4: Annual rehabilitation monitoring - UAV

Monitoring parameter	Description
PCT variation	**(1 digital 20m x 20 quadrat per Ha)** 5 PCT characteristic species and weeds with species added over time
Weeds	Weed abundance and species
Native species	Species composition, cover, structure, and health
Bare ground	% Area and location
Erosion	Depth, width, length, change over time
Habitat features	Logs and rock
Pest species	Track and individual at time of survey
Human Disturbance	Wheel tracks, waste
Legacy Items	Infrastructure for removal

Conducted using UAV and ecologist for species ground truthing.

Ecological recovery will be measured every three years during the same monitoring period as the reference sites. See Table 5 below for details.

Table 5: PCT Ecological Monitoring – Field work

Method number	Monitoring method
1	Permanent, full floristic plots (i.e., 20x20m; cover and abundance estimate for all species present). Sites will have a GPS point recorded and 2 permanent corner posts for plots. Data to be collected is: full scientific name, estimated % foliage cover. If less than 1% cover then decimals to be used (0.1, 0.2, 0.3…). Estimated abundance of each species to be recorded from 1 to 10, 10 to 100 with intervals of 10 and 100 to 1000 in intervals of 100 and so on. Species type, i.e., native, exotic, or high threat exotic to be recorded. Threatened species will be recorded per plot.
2	Permanent 50m midline transect located through the middle of the 20m x20m plot. A way point recorded at 0m and 50m and posts used to mark the points.
3	Measurement of all trees for Diameter at Breast Height (DBH) per plot.
4	Recording of all hollow bearing trees per plot.
5	Habitat resources (coarse woody debris, ponds, rocks) per plot. Type and size of coarse woody debris to be recorded.
6	Evidence of vertebrate pests and native species (scats, digging, chewing) per plot to be recorded.

7	Soil surface characteristics will be recorded along the 50m line transect at 5m intervals. Characteristics recorded will be: Native vascular plant (living), Exotic vascular plant (living), Litter (type, depth, and origin), Cryptograms, Logs (standing or dead), Rock, Water, Bare ground
8	Soil characteristics - field tests - pH, EC, texture (Samples taken in accordance with steps 1-6 of Section 5.4.1 of Biodiversity Conservation Trust Ecological Monitoring Module Operational Manual | February 2022)
9	Soil characteristics - Laboratory tests - Nitrogen, Total Carbon, Available Phosphorus, pH, EC (Samples taken in accordance with steps 1-6 of Section 5.4.1 of Biodiversity Conservation Trust Ecological Monitoring Module Operational Manual | February 2022)

Conducted using appropriately qualified personnel.

7.1 Local reference sites

Until set metrics are confirmed following implementation of the monitoring program the following sites shown in Table 6 will be used to track progress vegetation cover and abundance. See Table 6 below for local reference site.

Table 6: Local reference site

PCT	BDAR Plot – Reference site	PCT condition
1224	3036	High
644	102	High

Reference site map locations are detailed in Appendix B - Mapped PCT's in Construction Enveloped, and Appendix I - Rehabilitation Monitoring and Reference Sites of the Main Works RMP.

Appendix A – BH4201 & 4202 Current Conditions

Waterways

Eucumbene River - January 2024

Eucumbene River - May 2024 (greater context)

Unnamed Tributary – January 2024

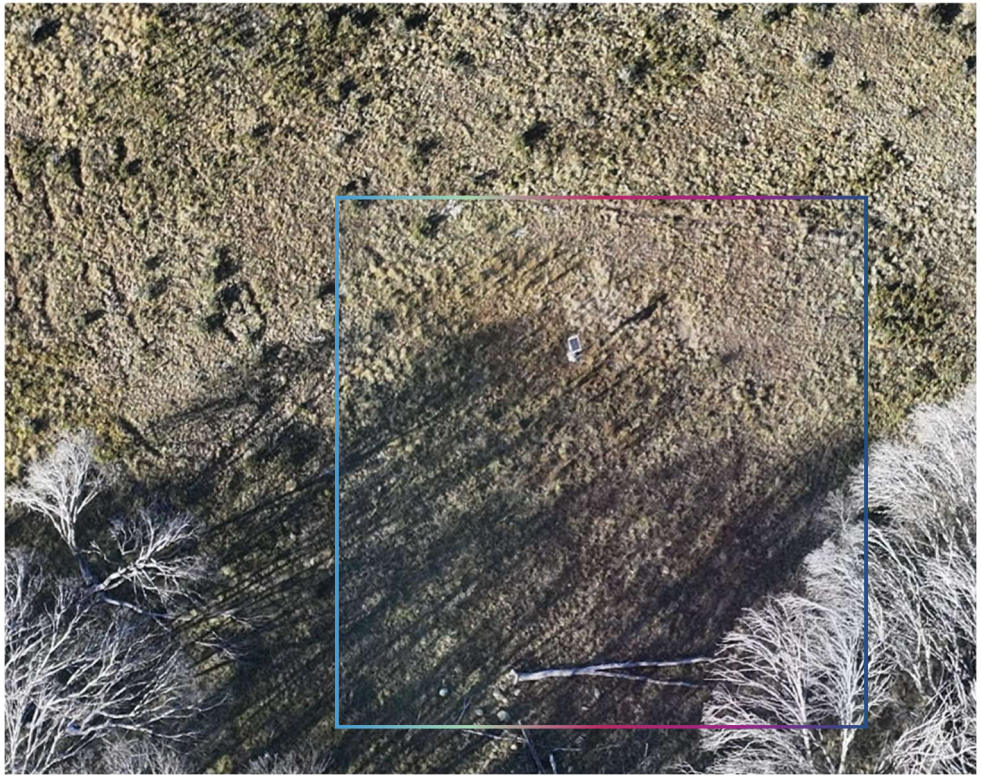
Unnamed Tributary – May 2024 (greater context)

Borehole Pads

BH4201 – January 2024

BH4201 – May 2024 (additional context)

BH4202 – January 2024



BH4202 – May 2024 (additional context)

Appendix B – BH4201 & 4202 Interim Completion Criteria

Table 1: Interim Completion Criteria

Rehab Objective/ Characteristic	Indicator	Benchmark for Indicator	Measure (note interim measures taken from BDAR plot 2145 field sheets)
The vegetation composition of the rehabilitation is recognisable as the target vegetation community contained within the BioNet Vegetation Classification and which was present on site prior to the project's temporary disturbance.	All native vascular plant species are monitored to species level from fixed 0.04 ha monitoring plots in accordance with Section 7, Table 4	(a) Native plant species composition is characteristic of the target PCT based on suitable analysis against a reference data set. (b) The target PCT composition score is within or greater than the interquartile range of local reference site values for the assigned PCT.	Rehabilitation monitoring reports. Final Independent ecological reports that validate rehabilitation completion criteria have been met. See Table 2 below for species composition from BDAR floristics for specific measures.
The vegetation structure of the rehabilitation is recognisable as, or shows a substantial trend towards, a PCT contained within the BioNet Vegetation Classification, and which was present on site prior to the project's temporary disturbance.	The cover, abundance and height range of all native vascular plant species are monitored from fixed 0.04 ha monitoring plots in accordance with Section 7, Table 4.	Cover, abundance, and height range of native plant growth forms are characteristic of the target PCTs and within or greater than the inter-quartile range of local reference site values for the assigned PCT.	Rehabilitation monitoring reports. Final Independent ecological reports that validate rehabilitation completion criteria have been met. See table 3 below for species cover and abundance of growth forms data from BDAR floristics. Height range to be included after first round of monitoring as described in Section 7, Table 4 in the main body of this plan.

Rehab Objective/ Characteristic	Indicator	Benchmark for Indicator	Measure (note interim measures taken from BDAR plot 2145 field sheets)
Levels of ecosystem function have been established that demonstrate the rehabilitation is self-sustainable or shows a substantial trend towards a self-sustaining state.	Growth medium, covering both subsoil and topsoil properties, and soil processes are monitored using methods specified in Section 7, Table 4.	Growth medium, including topsoil, is suitable for target PCTs establishment, and indicators of nutrient cycling are suitable for sustaining the target PCTs. All priority attributes of nutrient cycling, soil processes and both subsoil and topsoil properties should be within or greater than the interquartile range of local reference site values for the assigned PCT. Attributes include depth of leaf litter, cryptograms Total Carbon and total Nitrogen.	See table 4 below for ecosystem function measure where available from BDAR field sheets. Measure to be updated after first round of monitoring as majority of nutrient cycling processes not were not captured at time of BDAR. Rehabilitation monitoring reports. Final Independent ecological reports that validate rehabilitation completion criteria have been met.
	All species are monitored for establishment of second-generation juveniles /immatures and capacity for recruitment from fixed 0.04 ha monitoring plots in accordance with Section 7, Table 4.	Rehabilitation vegetation communities are maturing, and natural recruitment is occurring for species within each growth form at rates within or greater than the interquartile range of local reference site values for the assigned PCT.	Measure to be updated after first round of monitoring as it was not captured at time of BDAR.
	Number and ground cover of weed species are monitored from fixed 0.04 ha monitoring plots in accordance with Table 8 and input from annual UAV monitoring outlined in Section 7, Table 3.	The number and ground cover of weed species is comparable to, or less than, the interquartile range of local reference site values for the assigned PCT. Monitoring program to feed into annual weed control program.	See Tables 5 & 6 below for cover and abundance of individual species for different PCTs / reference sites from initial BDAR floristics. Measure to be updated after first round of monitoring described in Section 7, Table 4 in the main body of this plan.

Rehab Objective/ Characteristic	Indicator	Benchmark for Indicator	Measure (note interim measures taken from BDAR plot 2145 field sheets)
	Presence/absence of some fauna habitat features (e.g. flowering plant, decorticating bark, stags with hollows and/or nest boxes) and quantitative assessment of other features (e.g. leaf litter cover, bare ground, wood debris) are monitored from fixed 0.04 ha monitoring plots in accordance with Section 7, Table 4.	Fauna habitat features and resources (food and shelter characteristics) within the rehabilitation vegetation communities are present and within or greater than the interquartile range of local reference site values for the assigned PCT.	Rehabilitation monitoring reports. Final Independent ecological reports that validate rehabilitation completion criteria have been met. Measure to be updated after first round of monitoring described in Section 7, Table 4 of this plan.

Table 2: Native richness by growth form

PCT	BAM Plot	Trees	Shrubs	Grasses	Forbs	Ferns	Other
1224	3036	2	3	12	19	0	1
644	102	1	5	3	12	0	0

Table 3: Sum of cover of native vascular plants by growth form

PCT	BAM Plot	Trees	Shrubs	Grasses	Forbs	Ferns	Other
1224	3036	0.3	17.1	75.4	9.5	0	0.1
644	102	45	25.6	70.2	1.7	0	0

Table 4: Ecosystem function - BDAR

PCT	Litter cover %	Bare ground cover %	Cryptogram cover %	Rock cover %	Stems with Hollows
1224	NA	NA	NA	NA	NA
644	NA	NA	NA	NA	NA

Table 5: Species cover and abundance PCT 644 - Plot 102 - BDAR

Species	Growth form	Cover%	Abundance
Eucalyptus_pauciflora	Tree	45	10
Bossiaea_foliosa	Shrub	25	100
Poa_sieberiana_var_sieberiana	Tussock Grass	70	1000
Tasmannia_lanceolata	Shrub	0.1	1
Senecio_gunnii	Forb	0.2	50
Geranium_retrorsum	Forb	0.2	50
Trifolium_repens	Introduced	0.1	20
Asperula_scoparia	Forb	0.2	100
Arthropodium_milleflorum	Forb	0.2	50
Viola_betonicifolia	Forb	0.1	20
Brachyscome_decipiens	Forb	0.1	5
Pimelea_biflora	Shrub	0.2	50
Stellaria_pungens	Forb	0.1	50
Carex_breviculmis	Sedge	0.1	20
Hypochaeris_radicata	Introduced	0.1	20
Luzula_flaccida	Rush	0.1	10
Acetosella_vulgaris	Introduced	0.1	20
Caladenia_alpina	Forb	0.1	20
Ranunculus_lappaceus	Forb	0.2	20
Microseris_lanceolata	Forb	0.1	100
Pimelea_pauciflora	Shrub	0.2	3
Poranthera_microphylla	Forb	0.1	20
Cerastium_glomeratum	Introduced	0.1	10
Acaena_novae-zelandiae	Forb	0.1	10
Pimelea_ligustrina_subsp_ligustrina	Shrub	0.1	5

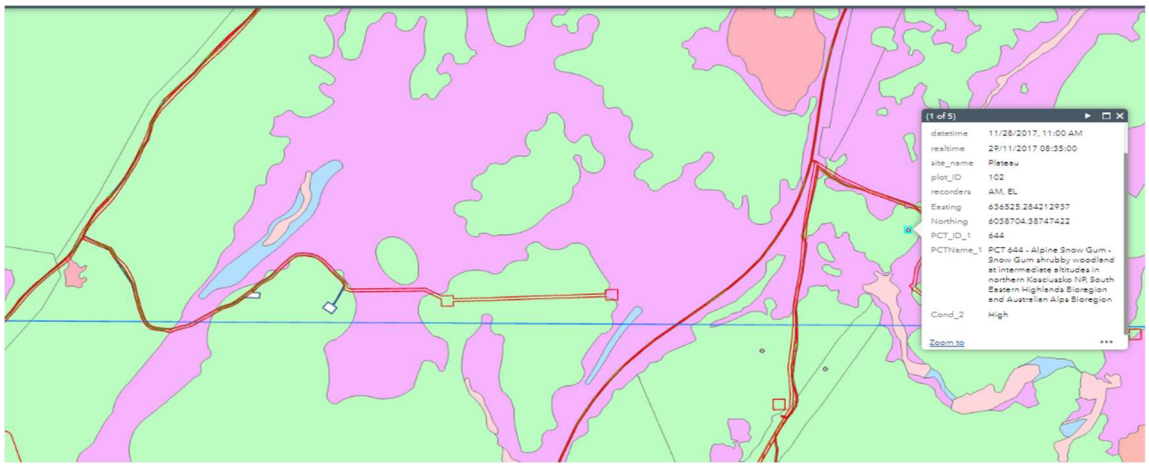
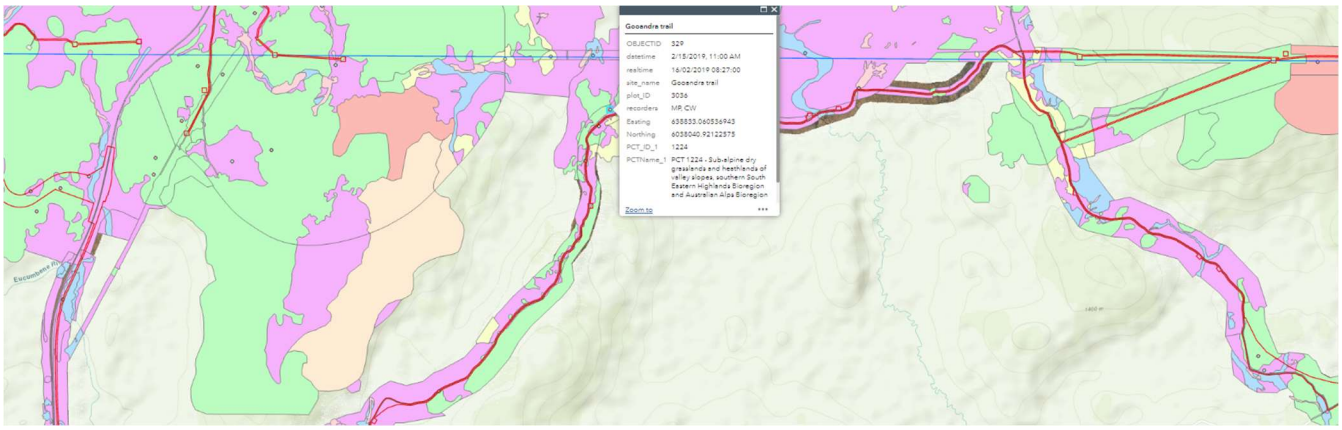


Table 6: Species cover and abundance PCT 1224 - Plot 3036 - BDAR

Species	Growth form	Cover%	Abundance
Coronidium_monticola	Shrub	0.1	30
Pimelea_axiflora_subsp_axiflora	Shrub	15	20
Bossiaea_foliosa_Leafy_Bossiaea	Shrub	2	10
Eucalyptus_stellulata_Black_Sally	Tree	0.2	2
Galium_gaudichaudii_Rough_Bedstraw	Forb	0.2	200
Asperula_scoparia_Prickly_Woodruff	Forb	1.5	600
Themeda_triandra	Tussock Grass	30	250
Poa_sieberiana_var_sieberiana_Snowgrass	Tussock Grass	20	300
Elymus_scaber_Common_Wheatgrass	Tussock Grass	1	150
Trifolium_repens_White_Clover	Introduced	0.4	100
Rytidosperma_laeve_Wallaby_Grass	Tussock Grass	2	100
Geranium_obtusisepalum	Forb	1	80
Acaena_ovina_Acaena	Forb	1	70
Crepis_capillaris_Smooth_Hawksbeard	Introduced	1	150
Epilobium_sp	Forb	0.2	60
Senecio_sp	Forb	0.8	100
Scleranthus_biflorus_Two_flowered_Knawel	Forb	1	300
Poa phillipsiana	Tussock Grass	10	200
Cymbonotus_preissianus_Austral_Bears_Ear	Forb	0.1	15
Cirsium_vulgare_Spear_Thistle	Introduced	0.5	35
Carex_inversa_Knob_Sedge	Sedge	1	150
Luzula_sp	Rush	0.2	100
Arrhenatherum_elatius_var_bulbosum_Bulbous_Oatgrass	Introduced	5	250
Acaena_novae_zelandiae_Bidgee_widgee	Forb	2	300

Collomia_sp	Introduced	0.6	250
Acetosella_vulgaris_Sheep_Sorrel	Introduced	1	350
Stellaria_pungens_Prickly_Starwort	Forb	0.1	50
Carex_sp_Tall_Sedge	Sedge	3	500
Tragopogon_dubius_Goatsbeard	Introduced	0.5	250
Poa_labillardierei_Tussock_grass	Tussock Grass	2	20
Taraxacum_officinale_Dandelion	Introduced	0.1	10
Holcus_lanatus_Yorkshire_Fog	Introduced	0.3	60
Rytidosperma_penicillatum_Slender_Wallaby_Grass	Tussock Grass	6	500
Viola_arvensis_Field_Pansy	Introduced	0.1	30
Dichelachne_inaequiglumis	Tussock Grass	0.1	15
Geranium_antrorsum	Forb	0.8	150
Viola_betonicifolia_Native_Violet	Forb	0.1	20
Geum_urbanum_Herb_Bennet	Forb	0.1	4
Picris_angustifolia_subsp_merxmuelleri	Forb	0.1	1
Eucalyptus_pauciflora_White_Sally	Tree	0.1	1
Cerastium_vulgare_Mouse_ear_Chickweed	Introduced	0.1	20
Poranthera_microphylla_Small_Poranthera	Forb	0.1	30
Plantago_euryphylla	Forb	0.1	10
Senecio_gunnii	Forb	0.1	10
Oxalis_perennans	Forb	0.1	20
Euchiton_involucratus_Star_Cudweed	Forb	0.1	50
Glycine_clandestina_Twining_glycine	Vine	0.1	4
Dichelachne_crinita_Longhair_Plumegrass	Tussock Grass	0.1	15



Appendix C – Quarterly Observational Monitoring Form

Quarterly Rehabilitation Inspection (June 2024)

Form completed for each rehabilitation area and submitted to rehab manager - Photos required for each question

* Indicates required question

1. Date *

Example: 7 January 2019

2. Person completing inspection

3. Site *

4. Weather conditions

5. Site Access *

Mark only one oval.

- ◯ Site accessible for monitoring
- ◯ Monitoring access requires action
- ◯ Access control not in place - Action required
- ◯ Access control in place
- ◯ Other: _____

6. Comments

_____

7. Action

_____

8. Photo monitoring points established *

Mark only one oval.

- ◯ Yes
- ◯ No - Action required
- ◯ Other: _____

9. Action

_____

10. Landform Stability / Erosion *

Mark only one oval.

- ◯ No erosion present
- ◯ Minor surface erosion less than growth medium depth
- ◯ Minor erosion less than 300 mm - Action required
- ◯ Major erosion more than 300 mm - Immediate action required
- ◯ Sediment not controlled leaving area - Immediate action required

11. Comments

12. Action

13. Bare Ground / Ground Cover (excluding rocks and logs) *

Mark only one oval.

- No bare ground
- Bare ground - less than 5%
- Minimal bare ground - less than 15% - Monitor
- Bare patches - Between 15 and 30% - Action required
- Bare patches - over 30% - Action required

14. Comments

15. Action

16. Vegetation Health *

Mark only one oval.

- Minimal mortality / sickness observed - Less than 5%
- Mortality / sickness 5 - 20% - Action required
- Mortality / sickness more than 20% - Action required
- Minimal germination following direct seeding - Action required

17. Comments

18. Action

19. Weeds *

Mark only one oval.

- ◯ No weeds presents
- ◯ Individuals weeds present - Action required
- ◯ Weed infestation present - Action required
- ◯ Colonising weeds of area present - Action required

20. Comments - Weed species present

_____

21. Action

_____

22. Pests *

Mark only one oval.

- ◯ No evidence of pest species observed
- ◯ Presence observed minimal impact
- ◯ Pest species causing damage to rehabilitation - Action required

23. Comments (What pest, what impact , what species)

24. Action

25. Hydrological Integrity and function of bogs and fens *

Mark only one oval.

- No issue
- Incision forming - Action required
- Drying of bog identified - Action required
- NA

26. Comments

27. Action

28. Waterways and drainage lines *

Mark only one oval.

- ◯ No issue
- ◯ Bank erosion observed - Action required
- ◯ Sedimentation observed - Action required
- ◯ NA

29. Comments

_____

30. Action

_____

31. Human interference *

Mark only one oval.

- ◯ Wheel tracks
- ◯ Litter

32. Action

33. Comments

34. Site Signage *

Tick all that apply.

- [ ] Yes
- [ ] No - Action required

35. Comments

36. Action

37. Other comments