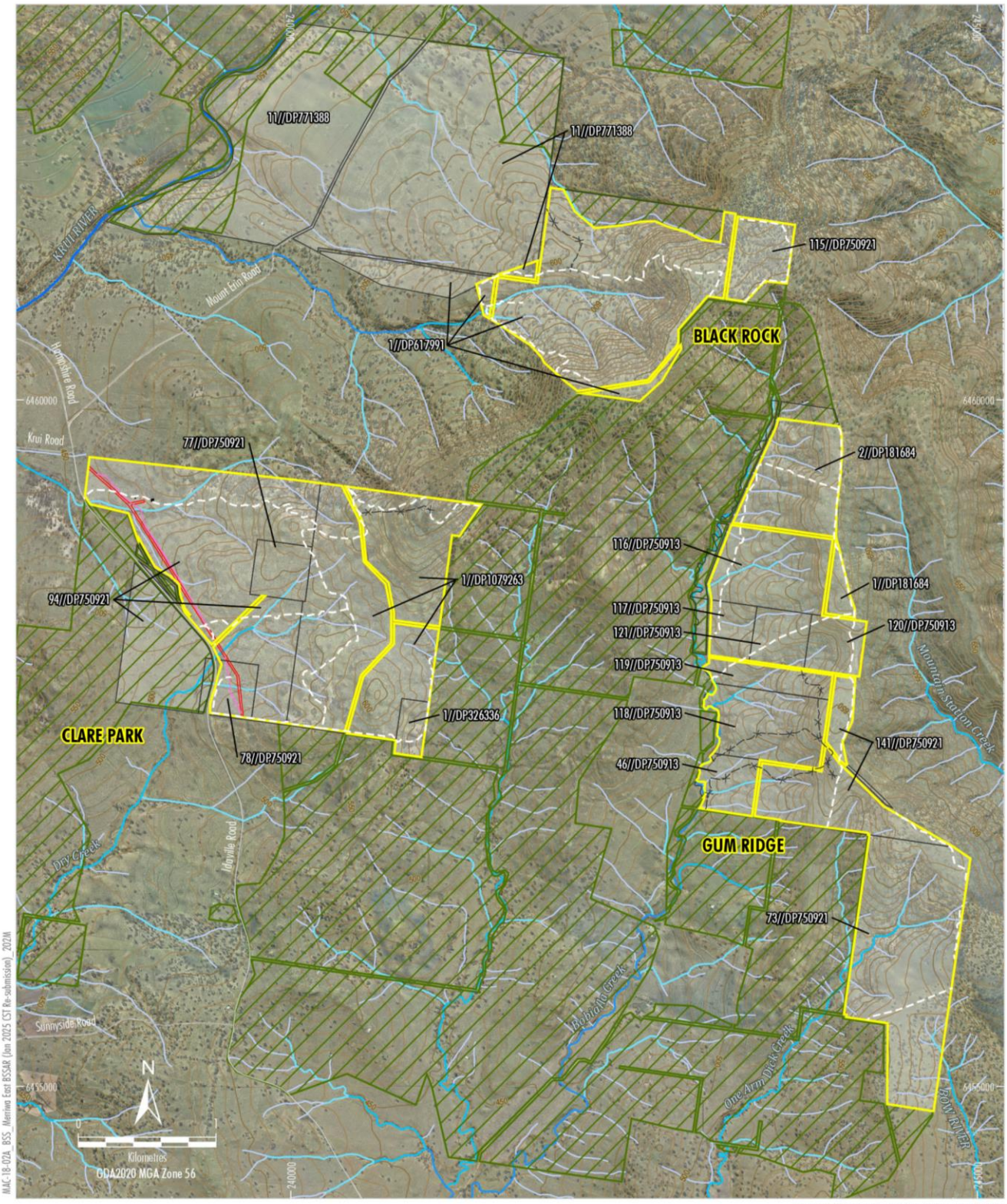
Attachment 3: Biodiversity Stewardship Site Map



LEGEND

- Existing Offset Area (EPBC 2011/5795)
- Biodiversity Stewardship Site Boundary
- Subject Land Cadastral Boundary
- Existing Track to be Closed
- Existing Track to be Maintained
- Electricity Transmission Line Easement
- Fibre Optic Corridor
- Infrastructure
- Major Contour (50 m Interval)
- Minor Contour (10 m Interval)

Strahler Stream Order

- 1st Order (Riparian Corridor Width 10 m)
- 2nd Order (Riparian Corridor Width 20 m)
- 3rd Order (Riparian Corridor Width 30 m)
- 4th Order (Riparian Corridor Width 40 m)
- 5th Order (Riparian Corridor Width 40 m)

Source: MACH (2025); NSW Spatial Services (2025); Crown Lands and Water (2013)
Orthophoto: MACH (April 2024)

MACHEnergy

MERRIWA EAST BIODIVERSITY STEWARDSHIP SITE

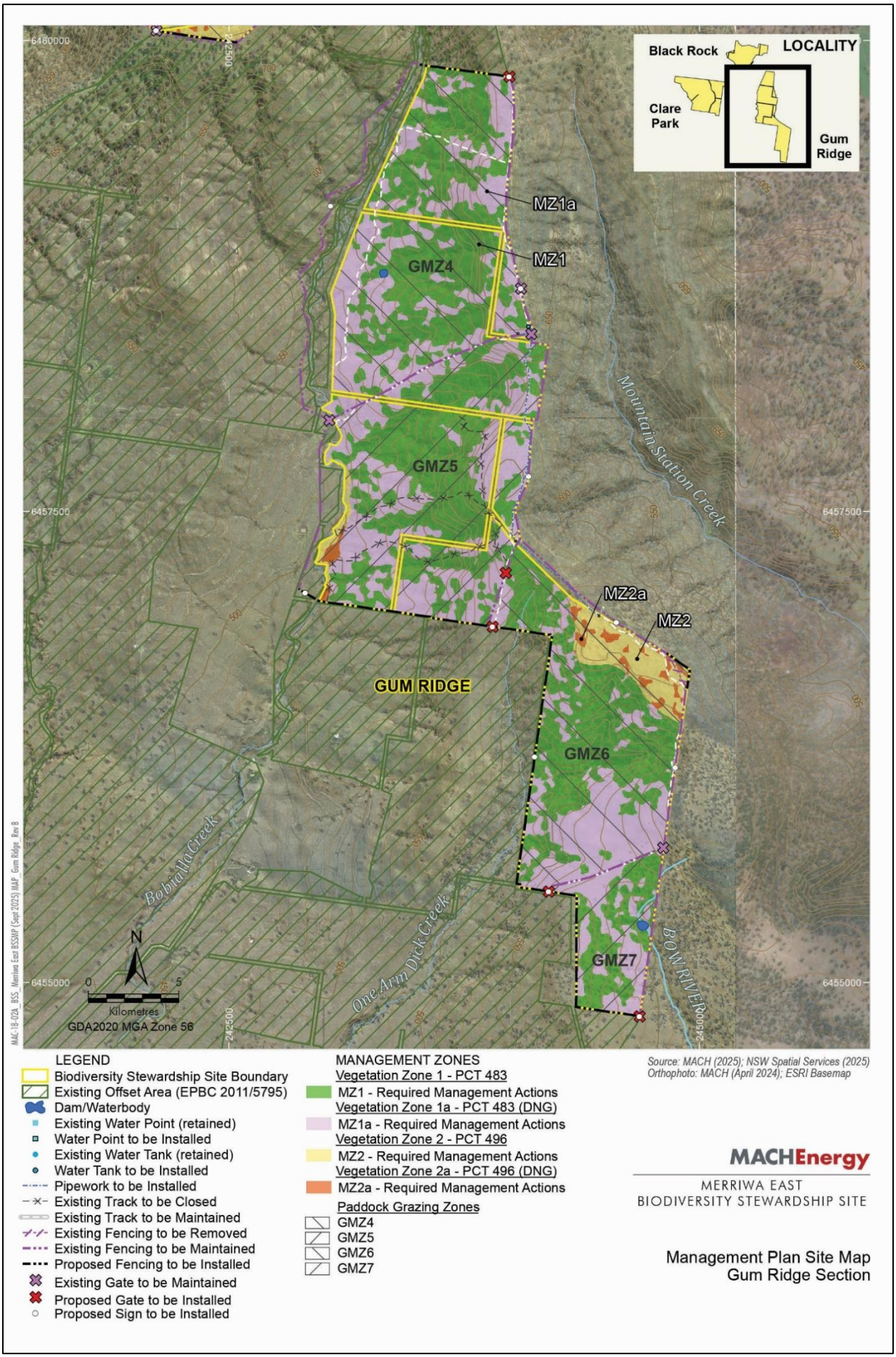
Site Map

Attachment 4: Management Plan

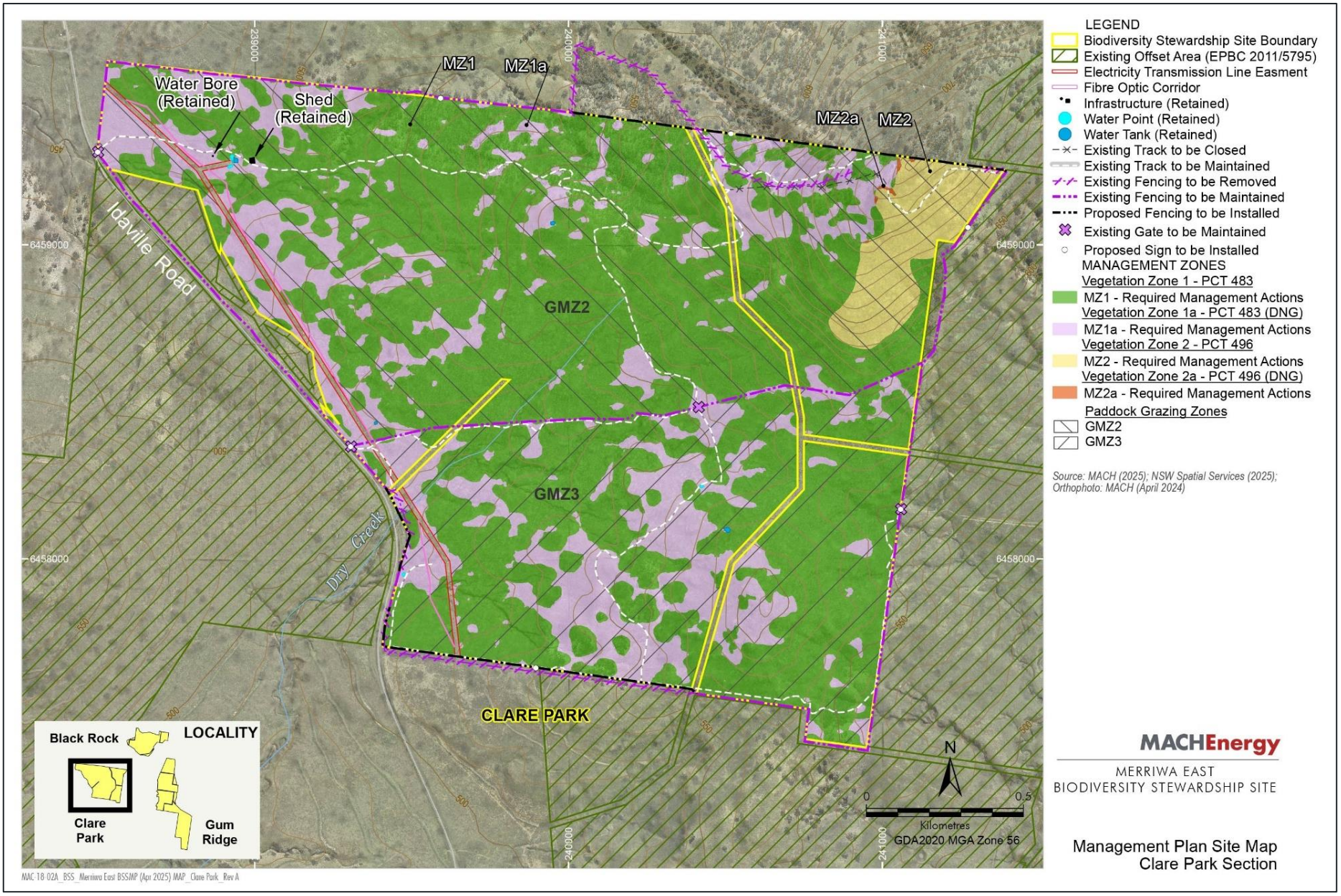
Section 1: General requirements

1. This Management Plan sets out the Management Actions that the Landowner must comply with as set out under Part D of the Biodiversity Stewardship Agreement (BSA).
2. The objectives of this Management Plan and its implementation are to:
   a) manage, protect and restore Plant Community Types (PCTs) and Threatened Ecological Communities (TECs) for which ecosystem credits have been created under the BSA
   b) manage, protect, restore habitat for Threatened Species including protection of breeding habitat features for which species credits have been created under the BSA.
3. All Management Actions apply to the entire Biodiversity Stewardship Site from the Agreement Date unless otherwise stated.
4. Implementation of the Management Plan does not authorise the Landowner to harm, damage or desecrate an Aboriginal Object or Aboriginal Place.
5. An Annual Report must be prepared in accordance with the template published by the Biodiversity Conservation Trust (BCT) including the information as set out within this Management Plan.
6. Ecological monitoring must be undertaken by a suitably qualified person in accordance with the requirements set out in Section 9 of the Management Plan and consistent with any guidance from the BCT.
7. A review of the Management Plan, including evaluation of progress in the objectives of the Management Plan and each of the operations schedules is to be undertaken every five years in accordance with Biodiversity Stewardship Agreement. The review of the Management Plan must be provided to the Biodiversity Conservation Trust (BCT).
8. The Management Plan may be amended to ensure the conservation of Biodiversity and Biodiversity Values through a variation to the Biodiversity Stewardship Agreement.

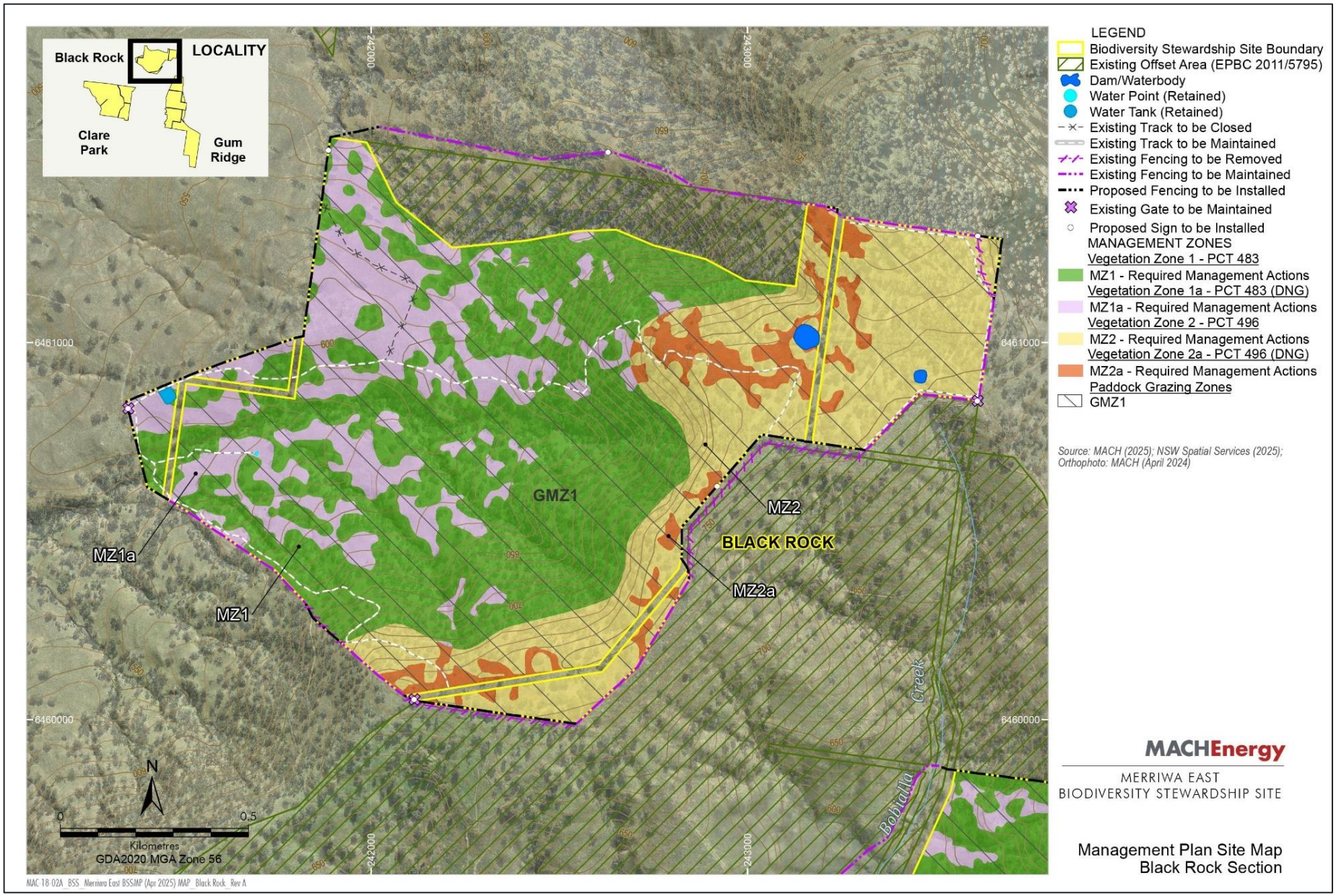
Management Plan Site Map 1 – Gum Ridge



Management Plan Site Map 2 – Clare Park



Management Plan Site Map 3 – Black Rock



Section 2: Management actions – Disturbance and infrastructure

Management actions

9. Management to reduce disturbance is to be undertaken in accordance with Operations Schedule for this section and the Management Plan Site Map.
10. Waste must not be stored, disposed of, or caused, or permitted to be disposed of, on the Biodiversity Stewardship Site, and any new waste must be removed as soon as possible, or according to the timing set out in the Operations Schedule.
11. No structures, dams or access tracks are to be retained or constructed unless shown on the Management Plan Site Map.
12. Fire trails and access tracks shown on the Management Plan Site Map must be maintained in accordance with the Operations Schedule to permit the carrying out of Management Actions, and at an appropriate standard to minimise erosion and run-off.
13. All reasonable steps must be taken to prevent, control and remedy erosion, including obtaining advice from a suitable expert.
14. Sediment traps must be installed in accordance with the Operations Schedule if there is a risk of soil or sediment or runoff entering waterways.
15. The location and type of fencing specified in the Operations Schedule must be of a type that can minimise harm to native fauna and allows for ease of movement for native fauna on and off the Biodiversity Stewardship Site.
16. Natural hydrology must be retained and no artificial structures such as dams, levee banks or other construction or works can be established unless shown on the Management Plan Site Map and constructed in accordance with the Operations Schedule.

Record keeping

17. The Landowner must retain the following diary records and include in the annual report to the BCT:
    a) management actions for disturbance and infrastructure set out in the Operations Schedule that have been implemented during the year
    b) any observations of new disturbance events – such as, erosion or rubbish dumping, illegal access
    c) any minor variations from the Operations Schedule
    d) results of monitoring against performance measures.

Operations Schedule – Disturbance and infrastructure

Table 1: List of actions and timing for addressing disturbance and infrastructure

TFD Item	Activity	Action/treatment/specifications	Frequency/timing	Performance measures
12	Waste removal	Remove rubbish across the Biodiversity Stewardship Site (Site) as it is identified in an appropriate manner.	From Year 1, every year in perpetuity	All identified waste is removed from Site within 4 months of being identified.
1	Fence installation	**Install 10.6 km of fencing** Fencing of the Site boundaries are to be consistent with the Biodiversity Conservation Trust (BCT) fencing equivalent standards (see the current BCT Essential Conservation Fencing guide). At a minimum, no barbed wire is to be installed on the top and bottom wires of the fence.	Within 12 months of the First Payment Date	All new fencing has been installed within 12 months of the First Payment Date.
6	Fence removal	**Removal 4.5 km of boundary fencing** deemed redundant.	Within 12 months of the First Payment Date	All new fencing has been installed within 12 months of the First Payment Date.
2	Fence maintenance	Progressive replacement of the entire fence line (**32.8 km**) is expected to occur at a frequency over 20-year periods.	From Year 5, every 5 years in perpetuity	All fencing maintained to a suitable standard to keep stock and humans out of the Site. All fence maintenance is undertaken in a timely manner.
5	Gate installation	**Installation of 5 gates** both within and on the perimeter of the Site.	Within 12 months of the First Payment Date	All new gates have been installed within 12 months of the First Payment Date.
17	Gate maintenance	Progressive replacement of 16 gates is expected to occur at a frequency over 20-year periods.	From Year 5, every 5 years in perpetuity	All gates maintained to a suitable standard to keep stock and humans out of the Site.

TFD Item	Activity	Action/treatment/specifications	Frequency/timing	Performance measures
4	Installation and maintain Site signs	**Installation of 25 signs** to ensure Site compliance – placed on every km of fence line and on each gate (both existing and to be installed).	Within 12 months of the First Payment Date, each sign to be replaced every 5 years.	All signs to be installed with 12 months of First Payment Date. Each to be replaced within 5 years of the initial installation.
7	Maintenance of track and trails	**Maintenance of 23.2 km of tracks** to ab assessed and maintained every 2 years from initial assessment in Year 1.	From Year 1, every 2 years in perpetuity	Tracks and trails in serviceable condition at all times. No significant erosion or sedimentation associated with access infrastructure.

Section 3: Management actions – Weed management and control

Management actions

18. Management of the Biodiversity Stewardship Site to control and remove weeds is to be undertaken in accordance with the Operations Schedule for this section and the Weed Management Map.
19. Removal and control of weed species is to enable an increase in the abundance, cover and diversity of Native Vegetation and protect and restore Threatened Species habitat through natural regeneration and/or undertaking Supplementary Planting.
20. Measures to reduce the risk of introducing new weed species or spreading existing weed species on the Biodiversity Stewardship Site must be implemented in accordance with the Operations Schedule.
21. Any other weed species not listed in the Operations Schedule that occur on the Biodiversity Stewardship site at any time are to be controlled and removed using methods of control and management consistent with similar species identified in the Operations Schedule.
22. The use of herbicide or other chemicals for weed management and control must be undertaken in accordance with APVMA requirements or current industry standards.

Record keeping

23. The Landowner must retain the following records and include in the annual report to the BCT:
    a) weed management actions set out in the Operations Schedule that have been implemented during the year
    b) any observations of the density and the distribution of weed species present on the Biodiversity Stewardship Site
    c) any minor variations from the Operations Schedule
    d) progress on meeting performance measures for weed management actions set out in the Operations Schedule that have been implemented during the year or require reporting on during the year
    e) Pesticide application records required by the NSW Environmental Protection Authority (EPA).

Operations Schedule – Weed management

Table 2: List of weeds targeted for management and their weed management group

Common name	Scientific name	Weed management group
Sheep Sorrel	*Acetosella vulgaris*	Herbaceous Weeds
Mouse-ear Chickweed	*Cerastium glomeratum*	
Slender Celery	*Cyclospermum leptophyllum*	
Common Crowfoot	*Erodium cicutarium*	
Gomphrena Weed	*Gomphrena celosioides*	
Dead Nettle	*Lamium amplexicaule*	
Scarlet Pimpernel	*Lysimachia arvensis*	
Small-flowered Mallow	*Malva parviflora*	
Burr Medic	*Medicago polymorpha*	
Barrel Medic	*Medicago truncatula*	
Red-flowered Mallow	*Modiola caroliniana*	
Chilean Whitlow Wort, Brazilian Whitlow	*Paronychia brasiliana*	
Proliferous Pink	*Petrorhagia nanteuilii*	
Lamb's Tongues	*Plantago lanceolata*	
Vervain	*Salvia verbenaca*	
Glossy Nightshade	*Solanum americanum*	
Black-berry Nightshade	*Solanum nigrum*	
Stagger Weed	*Stachys arvensis*	

Common name	Scientific name	Weed management group
Common Chickweed	*Stellaria media*	
Hop Clover	*Trifolium campestre*	
Subterraneum Clover	*Trifolium subterraneum*	
Common Prickly Pear	*Opuntia stricta var. stricta*	High threat cactus – Common Prickly Pear
Fireweed	*Senecio madagascariensis*	High Threat Herbaceous Weeds – Fireweed
St. John's Wort	*Hypericum perforatum*	High Threat Herbaceous Weeds – St. John's Wort
Paspalum	*Paspalum dilatatum*	High Threat Perennial grass – Paspalum
Saffron Thistle	*Carthamus lanatus*	High Threat Thistles – Saffron Thistle
Cobbler's Pegs	*Bidens pilosa*	High Threat Woody Weeds – Cobbler's Pegs
Noogoora Burr	*Xanthium occidentale*	High Threat Woody Weeds – *Noogoora Burr*
Oats	*Avena spp.*	Perennial grass
Praire Grass	*Bromus catharticus*	
Perennial Ryegrass	*Lolium perenne*	
Field Bindweed	*Convolvulus arvensis*	Scrambler
Skeleton Weed	*Chondrilla juncea*	Thistles
Spear Thistle	*Cirsium vulgare*	
Catsear	*Hypochaeris radicata*	
Prickly Lettuce	*Lactuca serriola*	
Variegated Thistle	*Silybum marianum*	
Common Sowthistle	*Sonchus oleraceus*	

Common name	Scientific name	Weed management group
Dandelion	*Taraxacum officinale*	
Greater Beggar's Ticks	*Bidens subalternans*	Woody Weeds
Flaxleaf Fleabane	*Conyza bonariensis*	
Narrow-leaved Cotton Bush	*Gomphocarpus fruticosus*	
Common Peppercress	*Lepidium africanum*	
Inkweed	*Phytolacca octandra*	
Wireweed	*Polygonum aviculare*	
Curled Dock	*Rumex crispus*	
Paddy's Lucerne	*Sida rhombifolia*	
Spiny sida	*Sida spinosa*	
Cusmayllo	*Solanum radicans*	
Stinking Roger	*Tagetes minuta*	
Common Verbena	*Verbena africana*	
Purpletop	*Verbena bonariensis*	

Table 3: Methods of weed control and management

TFD Item	Weed management group	Map location	Method of control/management	Frequency/ timing	Performance measures
10, 11, 14	High Threat Herbaceous Weeds – *Fireweed*	All Vegetation Zones (VZ)	Weed control methods may include those on the NSW WeedWise Website (Department of Primary Industries) or the most relevant and up to date method: • Hand weeding - Pull out individual plants in small, isolated patches or sensitive environmental areas. Wear gloves to protect skin from the plant's poisons. Bag and dispose of the pulled out plants. They are still poisonous to livestock and produce viable seeds if they have flowers • Slashing and mulching - Careful slashing or mulching can reduce fireweed seeding when done before late spring, when less than 25% of plants are flowering and at least every 6 weeks if pastures can recover faster than the cut fireweed plants. Wait 2 weeks before grazing slashed areas. Livestock are more likely to eat the cut, wilted fireweed. Avoid slashing or mulching in late spring, or when more than 25% of plants are flowering. • Biological Control -There are no effective biological control agents available for fireweed. • Chemical control - The best time to treat fireweed with herbicide is late autumn. By late winter herbicide treatments are much less effective. Used correctly, selective	**Primary - Years 1-4** • 4 weeks from September to December and 4 weeks between January and May. • 8 weeks a year for Years 1-4, with a team of 2. **Secondary - Years 5-19** • 3 weeks from September to December and 3 weeks between January and May. • 6 weeks a year, each year from Years 5-19, with a team of 2. **Maintenance – Year 20 onwards** • From Year 20, weed maintenance management for 2 week every 3 years, with a team of 2.	**Baseline Cover:** • Low-1-10%, average cover 1.8% (across Management Zone (MZ) 1, MZ1a, MZ2 and MZ2a) **At 5 years**: • <2% foliage cover. • Weed infestations are kept within known boundaries. • Removed weed cover is not being replaced by High Threat Weed (HTW) species. **At 10, 15 and 20 years**: • Weeds maintained at <1% cover. • Removed weed cover is not being replaced by HTW species. • Removed weed cover is being replaced by regenerating native plants species derived from the surrounding local grassland areas.

TFD Item	Weed management group	Map location	Method of control/management	Frequency/ timing	Performance measures
			herbicides don't kill grasses but do slow their growth. They can kill legumes, which are important pasture plants. Blanket applications of selective herbicide are problematic because pasture growth is set back. Wherever possible limit the application areas in paddocks. Bromoxynil herbicides cause the least damage to legumes but only kill young fireweed plants. Protect legumes by applying only when the maximum daily air temperature will be below 20°C. Flowering plants can be spot sprayed with herbicides containing aminopyralid or metsulfuron-methyl. Spraying will be conducted a suitable distance from native species and waterways to ensure no incidental spraying of native species or contamination of waterways occurs.		
10, 11, 14	High Threat Herbaceous Weeds – *St. John's Wort*	All VZs	Weed control methods may include those on the NSW WeedWise Website (Department of Primary Industries) or the most relevant and up to date method: • Hand weeding - Hand-weeding is not an effective way to control St John's wort. The entire root system has to be removed to stop new plants from growing. • Chemical control - Only spray when St John's wort is actively growing. Try to reduce damage to pastures through	**Primary - Years 1-4** • 4 weeks from September to December and 4 weeks between January and May. • 8 weeks a year for Years 1-4. **Secondary - Years 5-19** • 3 weeks from September to December and 3 week between January and May. • 6 weeks a year, each year from Years 5-19.	**Baseline Cover:** • Low-1-10%, average cover 1.1% (across MZ1, MZ1a) **At 5 years**: • <1% foliage cover. • Weed infestations are kept within known boundaries.

TFD Item	Weed management group	Map location	Method of control/management	Frequency/ timing	Performance measures
			herbicide selection and timing. Two consecutive years of spraying is often required to kill plants. The deep, extensive root system can survive the first treatment, and the plant can regrow. • Spot-spraying - Spot-spray isolated infestations when St John's wort is in flower (November to January). It's too late once the flowers have turned brown. Cover all the foliage with herbicide. Spraying will be conducted a suitable distance from native species and waterways to ensure no incidental spraying of native species or contamination of waterways occurs.	**Maintenance – Year 20 onwards** • From Year 20, weed maintenance management for 2 week every 3 years. • 1 week from September to December and 1 week between January and May. • 2 weeks a year, every 3 years, for Year 20 onwards.	• Removed weed cover is not being replaced by HTW species. **At 10, 15 and 20 years**: • Weeds maintained at <1% cover. • Removed weed cover is not being replaced by HTW species. • Removed weed cover is being replaced by regenerating native plants species derived from the surrounding local grassland areas.
10, 11, 14	High Threat Thistles – *Saffron Thistle*	All VZs	Spraying is a suitable control method for this species. Spraying will be conducted a suitable distance from native species and waterways to ensure no incidental spraying of native species or contamination of waterways occurs. Crash grazing would be undertaken in order to reduce cover of exotic weed species and maintain native vegetation in 'Healthy Condition' as per the BCT livestock grazing guidelines.	**Primary - Years 1 -4** • 4 weeks from September to December and 4 week between January and May. • 8 weeks a year for Years 1-4. **Secondary - Years 5-19** • 3 weeks from September to December and 3 weeks between January and May. • 6 weeks a year, each year from Years 5-19. **Maintenance – Year 20 onwards** • From Year 20, weed maintenance management for 2 week every 3 years.	**Baseline Cover:** • Low-1-10%, average cover 0.6% (across MZ1, MZ1a, and MZ2a) **At 5 years**: • <% foliage cover. • Weed infestations are kept within known boundaries. • Removed weed cover is not being replaced by HTW species. **At 10, 15 and 20 years**: • Weeds maintained at <1% cover.

TFD Item	Weed management group	Map location	Method of control/management	Frequency/ timing	Performance measures
				• 1 week from September to December and 1 week between January and May. • 2 weeks a year, every 3 years, for Year 20 onwards.	• Removed weed cover is not being replaced by HTW species. • Removed weed cover is being replaced by regenerating native plants species derived from the surrounding local grassland areas.
10, 11, 14	High Threat Woody Weeds – *Cobblers Pegs*	All VZs	Spraying is a suitable control method for this species. Spraying will be conducted a suitable distance from native species and waterways to ensure no incidental spraying of native species or contamination of waterways occurs. Crash grazing would be undertaken in order to reduce cover of exotic weed species and maintain native vegetation in 'Healthy Condition' as per the BCT livestock grazing guidelines.	**Primary - Years 1-4** • 4 weeks from September to December and 4 weeks between January and May. • 8 weeks a year for Years 1-4. **Secondary - Years 5-19** • 3 weeks from September to December and 3 weeks between January and May. • 6 weeks a year, each year from Years 5-19. **Maintenance – Year 20 onwards** • From Year 20, weed maintenance management for 2 weeks every 3 years. • 1 week from September to December and 1 week between January and May. • 2 weeks a year, every 3 years, for Year 20 onwards.	**Baseline Cover:** • Low-1-10%, average cover 0.8% (across MZ1, MZ1a, MZ2 and MZ2a) **At 5 years**: • <1% foliage cover. • Weed infestations are kept within known boundaries. • Removed weed cover is not being replaced by HTW species. **At 10, 15 and 20 years**: • Weeds maintained at <1% cover. • Removed weed cover is not being replaced by HTW species. • Removed weed cover is being replaced by regenerating native plants species derived from the

TFD Item	Weed management group	Map location	Method of control/management	Frequency/ timing	Performance measures
					surrounding local grassland areas.
10, 11, 14	High Threat Perennial grass – *Paspalum*	All VZs	Spraying is a suitable control method for this species. Spraying will be conducted a suitable distance from native species and waterways to ensure no incidental spraying of native species or contamination of waterways occurs. Crash grazing would be undertaken in order to reduce cover of exotic weed species and maintain native vegetation in 'Healthy Condition' as per the BCT livestock grazing guidelines.	**Primary - Years 1-4** • 4 weeks from September to December and 4 weeks between January and May. • 8 weeks a year for Years 1-4. **Secondary - Year 5-19** • 3 weeks from September to December and 3 weeks between January and May. • 6 weeks a year, each year from Years 5-19. **Maintenance – Year 20 onwards** • From Year 20, weed maintenance management for 2 weeks every 3 years. • 1 week from September to December and 1 week between January and May. • 2 weeks a year, every 3 years, for Year 20 onwards.	**Baseline Cover:** • Low-1-10%, average cover 0.1% (MZ1a) **At 5 years**: • <1% foliage cover. • Weed infestations are kept within known boundaries. • Removed weed cover is not being replaced by HTW species. **At 10, 15 and 20 years**: • Weeds maintained at <1% cover. • Removed weed cover is not being replaced by HTW species. • Removed weed cover is being replaced by regenerating native plants species derived from the surrounding local grassland areas.
10, 11, 14	High Threat Woody Weeds – *Noogoora Burr*	All VZs	Weed control methods may include those on the NSW WeedWise Website (Department of Primary Industries) or the most relevant and up to date method:	**Primary - Years 1 -4** • 4 weeks from September to December and 4 weeks between January and May. • 8 weeks a year for Years 1-4.	**Baseline Cover:** • Low-1-10%, average cover 0.1% (across MZ1a, MZ2 and MZ2a)

TFD Item	Weed management group	Map location	Method of control/management	Frequency/ timing	Performance measures
			• Hand weeding - Chipping or hand hoeing is only economical for small areas, individual plants or isolated populations. It is an effective follow up control method for plants not controlled by other methods to prevent seed set. • Slashing and mulching - Slashing or mowing are useful in clean-up operations after spraying with herbicide or if infestations are small and scattered. Any burrs from the plant should be removed from the equipment to prevent spread. • Chemical control - These plants are susceptible to a range of foliar and residual herbicides. Foliar herbicides are most effective if the plants are young and actively growing. Plants suffering from moisture stress are difficult to kill. Older plants may require repeat applications. Late control with some herbicides, when the burrs are green, can result in seed sterility – however this is not recommended as the primary form of control. Spraying will be conducted a suitable distance from native species and waterways to ensure no incidental spraying of native species or contamination of waterways occurs. Crash grazing would be undertaken in order to reduce cover of exotic weed species and	**Secondary - Year 5-19** • 3 weeks from September to December and 3 weeks between January and May. • 6 weeks a year, each year from Years 5-19. **Maintenance – Year 20 onwards** • From Year 20, weed maintenance management for 2 weeks every 3 years. • 1 week from September to December and 1 week between January and May. • 2 weeks a year, every 3 years, for Year 20 onwards.	**At 5 years**: • <1% foliage cover. • Weed infestations are kept within known boundaries. • Removed weed cover is not being replaced by HTW species. **At 10, 15 and 20 years**: • Weeds maintained at <1% cover. • Removed weed cover is not being replaced by HTW species. • Removed weed cover is being replaced by regenerating native plants species derived from the surrounding local grassland areas.

TFD Item	Weed management group	Map location	Method of control/management	Frequency/ timing	Performance measures
			maintain native vegetation in 'Healthy Condition' as per the BCT Livestock Grazing Guidelines.		
10, 11, 14	High threat cactus – Common Prickly Pear	All VZs	Weed control methods may include those on the NSW WeedWise Website (Department of Primary Industries) or the most relevant and up to date method: • Hand weeding - Dig up small or isolated plants using a mattock or other tools. • Slashing and mulching - Dense infestations or large isolated plants can be removed with machinery where there is good access to the site, the site is not environmentally sensitive and plant parts can be safely disposed of. Ensure the roots are dug out and that all plant parts are disposed of. • Biological control - There are 2 successful biological control agents for common pear. The Cactoblastis moth is now widespread and does not need to be redistributed. To help attract the moths to a site, cut and stack the pads in a pile about 2 m x 2 m and 1 m high in spring or summer. The cochineal bug is suitable for redistribution and in many areas control can be faster if cochineal bugs are used as well as moths. • Chemical control/spot spraying - Herbicides are especially useful for sparse, scattered infestations. Spray	**Primary - Years 1-4** • 4 weeks from September to December and 4 weeks between January and May. • 8 weeks a year for Years 1-4. **Secondary - Years 5-19** • 3 weeks from September to December and 3 weeks between January and May. • 6 weeks a year, each year from Years 5-19. **Maintenance – Year 20 onwards** • From Year 20, weed maintenance management for 2 weeks every 3 years. • 1 week from September to December and 1 week between January and May. • 2 weeks a year, every 3 years, for Year 20 onwards.	**Baseline Cover:** • Low-1-10%, average cover 0.1% (across MZ1, MZ1a) **At 5 years**: • <1% foliage cover. • Weed infestations are kept within known boundaries. • Removed weed cover is not being replaced by HTW species. **At 10, 15 and 20 years**: • Weeds maintained at <1% cover. • Removed weed cover is not being replaced by HTW species. • Removed weed cover is being replaced by regenerating native plants species derived from the surrounding local grassland areas.

TFD Item	Weed management group	Map location	Method of control/management	Frequency/ timing	Performance measures
			actively growing plants. Cover all parts of the plant with herbicide to the point of visible wetness. Spraying will be conducted a suitable distance from native species and waterways to ensure no incidental spraying of native species or contamination of waterways occurs. Crash grazing would be undertaken in order to reduce cover of exotic weed species and maintain native vegetation in 'Healthy Condition' as per the BCT livestock grazing guidelines.		
10, 11, 14	Annual and Perennial Grass	All VZs	Spraying is a suitable control method for this species. Spraying will be conducted a suitable distance from native species and waterways to ensure no incidental spraying o native species or contamination of waterways occurs. Crash grazing would be undertaken in order to reduce cover of exotic weed species and maintain native vegetation in 'Healthy Condition' as per the BCT livestock grazing guidelines.	**Primary - Years 1-4** • 4 weeks from September to December and 4 weeks between January and May. • 8 weeks a year for Years 1-4. **Secondary - Years 5-19** • 3 weeks from September to December and 3 weeks between January and May. • 6 weeks a year, each year from Years 5-19. **Maintenance – Year 20 onwards** • From Year 20, weed maintenance management for 2 weeks every 3 years. • 1 week from September to December and 1 week between January and May.	**Baseline Cover:** • Low-1-10%, average cover 12% (across MZ1, MZ1a, MZ2 and MZ2a) **At 5 years**: • <1% foliage cover. • Weed infestations are kept within known boundaries. • Removed weed cover is not being replaced by HTW species. **At 10, 15 and 20 years**: • Weeds maintained at <1% cover.

TFD Item	Weed management group	Map location	Method of control/management	Frequency/ timing	Performance measures
				• 2 weeks a year, every 3 years, for Year 20 onwards.	• Removed weed cover is not being replaced by HTW species. • Removed weed cover is being replaced by regenerating native plants species derived from the surrounding local grassland areas.
10, 11, 14	Thistles	All VZs	Weed control methods may include those on the NSW WeedWise Website (Department of Primary Industries) or the most relevant and up to date method: • Hand weeding - It is best to dig out plants when they are young because they develop deep taproots. • Biological control -Three biological control agents have been released in Australia for spear thistle. • Chemical control - Apply herbicides to actively growing plants. See label for the best stage of the plant to apply the herbicide. Spraying will be conducted a suitable distance from native species and waterways to ensure no incidental spraying of native species or contamination of waterways occurs.	**Primary - Years 1-4** • 4 weeks from September to December and 4 weeks between January and May. • 8 weeks a year for Years 1-4. **Secondary - Years 5-19** • 3 weeks from September to December and 3 weeks between January and May. • 6 weeks a year, each year from Years 5-19. **Maintenance – Year 20 onward** • From Year 20, weed maintenance management for 2 weeks every 3 years. • 1 week from September to December and 1 week between January and May. • 2 weeks a year, every 3 years, for Year 20 onwards.	**Baseline Cover:** • Low-1-10%, average cover 0.8% (across MZ1, MZ1a, MZ2 and MZ2a) **At 5 years**: • <1% foliage cover. • Weed infestations are kept within known boundaries. • Removed weed cover is not being replaced by HTW species. **At 10, 15 and 20 years**: • Weeds maintained at <1% cover. • Removed weed cover is not being replaced by HTW species. • Removed weed cover is being replaced by regenerating native plants species derived from the

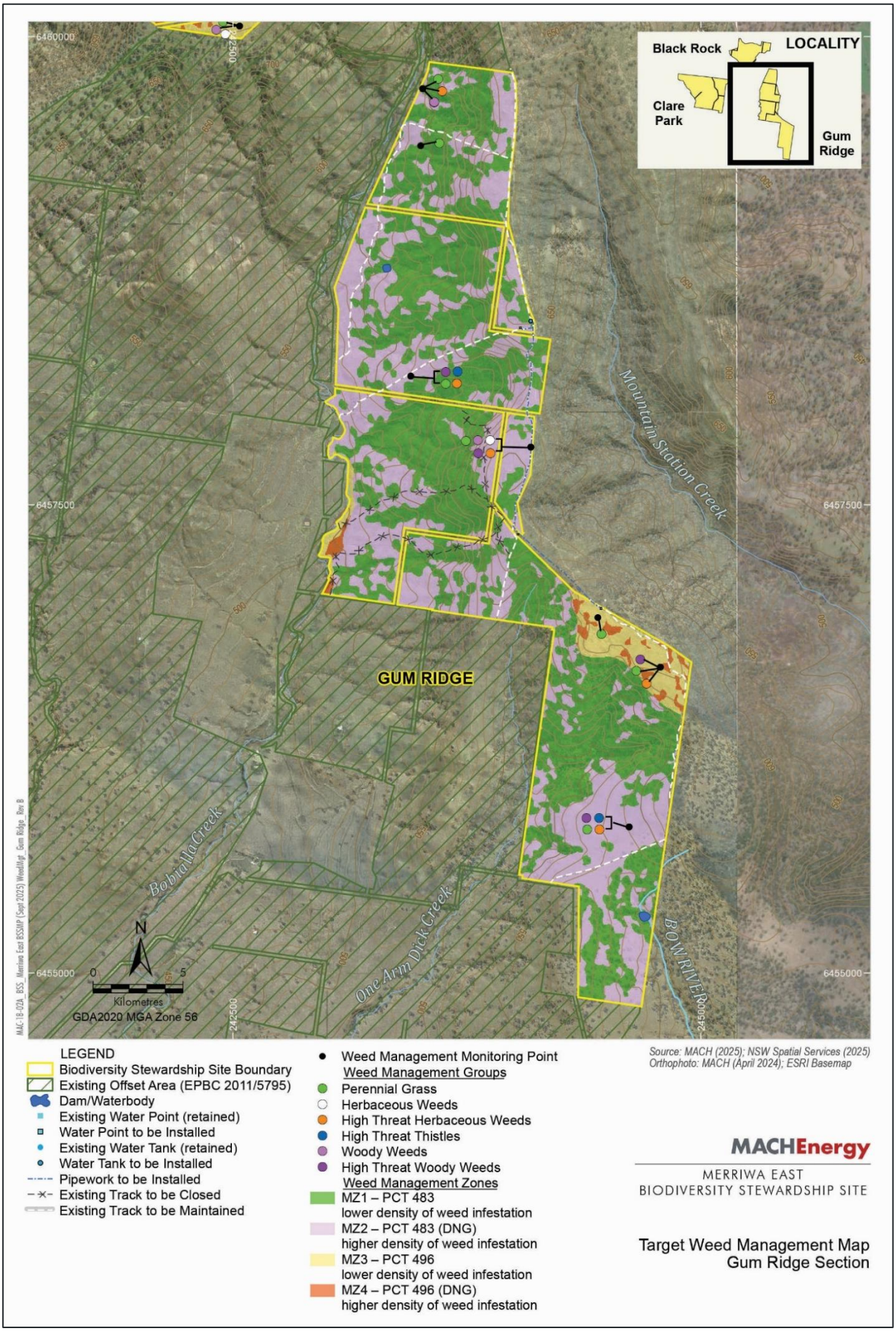
TFD Item	Weed management group	Map location	Method of control/management	Frequency/ timing	Performance measures
					surrounding local grassland areas.
10, 11, 14	Woody Weeds	All VZs	Use of herbicides is a suitable control method for this group. Spraying will be conducted a suitable distance from native species and waterways to ensure no incidental spraying of native species or contamination of waterways occurs.	**Primary - Years 1-4** • 4 weeks from September to December and 4 weeks between January and May. • 8 weeks a year for Years 1-4. **Secondary - Years 5-19** • 3 weeks from September to December and 3 weeks between January and May. • 6 weeks a year, each year from Years 5-19. **Maintenance – Year 20 onwards** • From Year 20, weed maintenance management for 2 weeks every 3 years. • 1 week from September to December and 1 week between January and May. • 2 weeks a year, every 3 years, for Year 20 onwards.	**Baseline Cover:** • Low-1-10%, average cover 1.7% (across MZ1, MZ1a, MZ2 and MZ2a) **At 5 years**: • <1% foliage cover. • Weed infestations are kept within known boundaries. • Removed weed cover is not being replaced by HTW species. **At 10, 15 and 20 years**: • Weeds maintained at <1% cover. • Removed weed cover is not being replaced by HTW species. • Removed weed cover is being replaced by regenerating native plants species derived from the surrounding local grassland areas.

TFD Item	Weed management group	Map location	Method of control/management	Frequency/ timing	Performance measures
10, 11, 14	Scramblers	All VZs	Use of herbicides is a suitable control method for this group. Spraying will be conducted a suitable distance from native species and waterways to ensure no incidental spraying of native species or contamination of waterways occurs.	**Primary - Years 1 -4** • 4 weeks from September to December and 4 weeks between January and May. • 8 weeks a year for Years 1-4. **Secondary - Years 5-19** • 3 weeks from September to December and 3 weeks between January and May. • 6 weeks a year, each year from Years 5-19. **Maintenance – Year 20 onwards** • From Year 20, weed maintenance management for 2 week every 3 years. • 1 week from September to December and 1 week between January and May. • 2 weeks a year, every 3 years, for Year 20 onwards.	**Baseline Cover:** • Low-1-10%, average cover <0.1% **At 5 years**: • <1% foliage cover. • Weed infestations are kept within known boundaries. • Removed weed cover is not being replaced by HTW species. **At 10, 15 and 20 years**: • Weeds maintained at <1% cover. • Removed weed cover is not being replaced by HTW species. • Removed weed cover is being replaced by regenerating native plants species derived from the surrounding local grassland areas.
10, 11, 14	Herbaceous Weeds	All VZs	Use of herbicides is a suitable control method for this group. Spraying will be conducted a suitable distance from native species and waterways to ensure no incidental spraying of native species or contamination of waterways occurs.	**Primary - Years 1 -4** • 4 weeks from September to December and 4 weeks between January and May. • 8 weeks a year for Years 1-4. **Secondary - Years 5-19** • 3 weeks from September to December and 3 weeks between January and May.	**Baseline Cover:** • Low-1-10%, average cover 3.4% (across MZ1, MZ1a, MZ2 and MZ2a) **At 5 years**: • <1% foliage cover.

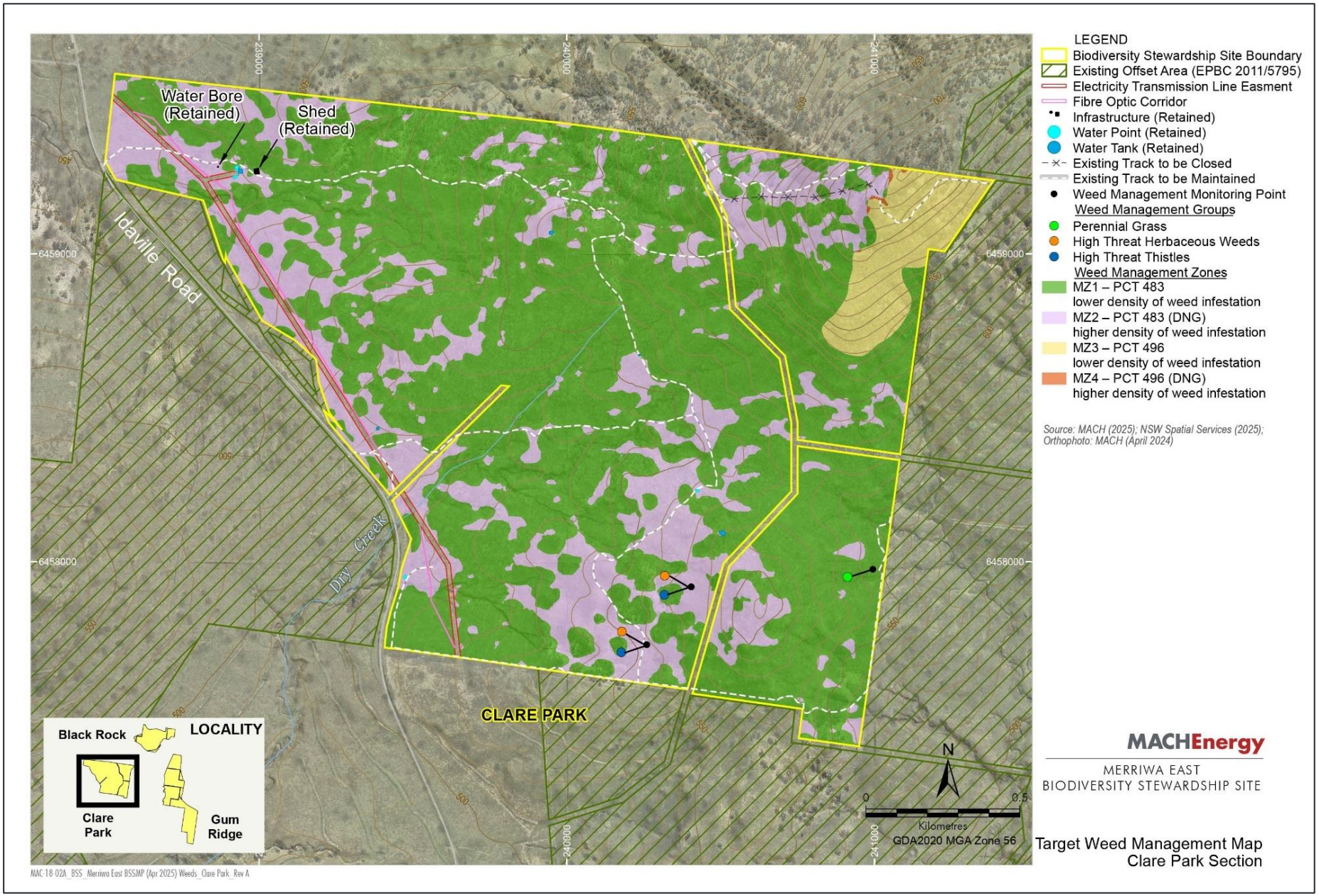
TFD Item	Weed management group	Map location	Method of control/management	Frequency/ timing	Performance measures
				• 6 weeks a year, each year from Years 5-19. **<u>Maintenance – Year 20 onwards</u>** • From Year 20, weed maintenance management for 2 weeks every 3 years. • 1 week from September to December and 1 week between January and May. • 2 weeks a year, every 3 years, for Year 20 onwards.	• Weed infestations are kept within known boundaries. • Removed weed cover is not being replaced by HTW species. **<u>At 10, 15 and 20 years</u>**: • Weeds maintained at <1% cover. • Removed weed cover is not being replaced by HTW species. • Removed weed cover is being replaced by regenerating native plants species derived from the surrounding local grassland areas.
10, 11, 14	General unidentified weeds	All VZs	Weed control methods may include those on the NSW WeedWise Website (Department of Primary Industries) or the most relevant and up to date method.	**<u>Primary - Years 1 -4</u>** • 4 weeks from September to December and 4 weeks between January and May. • 8 weeks a year for Years 1-4. **<u>Secondary - Years 5-19</u>** • 3 weeks from September to December and 3 weeks between January and May. • 6 weeks a year, each year from Years 5-19. **<u>Maintenance – Year 20 onwards</u>** • From Year 20, weed maintenance management for 2 weeks every 3 years.	• All newly identified manageable weed infestations: Removed within 18 months of identification. • For significant broadscale non-manageable infestation: Limit weed spread onsite.

TFD Item	Weed management group	Map location	Method of control/management	Frequency/ timing	Performance measures
				• 1 week from September to December and 1 week between January and May. • 2 weeks a year, every 3 years, for Year 20 onwards.	

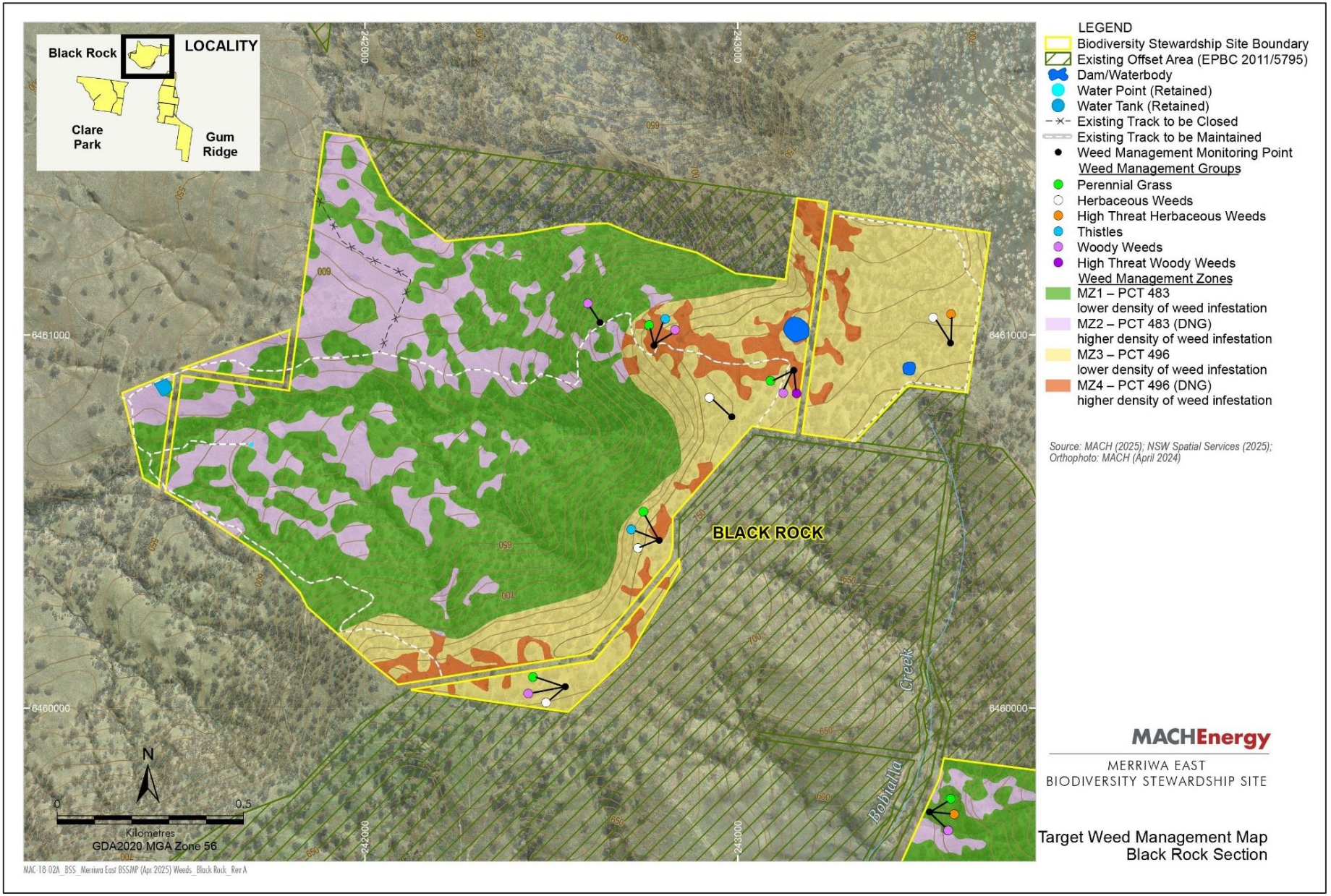
Weed Management Map 1 – Gum Ridge



Weed Management Map 2 – Clare Park



Weed Management Map 3 – Black Rock



Section 4: Pest animal controls

Management actions

24. Management of the Biodiversity Stewardship Site to control and remove pests is to be undertaken in accordance with Operations Schedule Pest Animal controls for this section and the Management Plan Site Map.
25. Removal and control of pest species is to enable increased recovery of native fauna and flora by reducing predation, grazing pressure, and competition.
26. The Landowner must obtain advice from Local Land Services on legal requirements and effective control methods prior to commencing any control activities. Advice from Local Land Services is to be obtained prior to the 5-yearly review of the Management Plan).
27. If any methods advised or recommended by Local Land Services differ from those identified in this Management Plan, the Landowner must advise BCT in writing prior to commencing control activities.
28. Any other pest animals not listed in the Operations Schedule are to be controlled and managed using methods of control and management that are consistent with similar species identified in the Operations Schedule, or methods recommended by Local Land Services.
29. Where possible, the Landowner will seek to coordinate implementation of pest animal control activities with neighbouring landowners.

Record keeping

30. The Landowner must retain the following records and include in the annual report to the BCT:
    a) feral pest control actions set out in the Operations Schedule Pest animal controls that have been implemented during the year
    b) results of feral pest control actions implemented during the year including list of target species, estimated number of target species culled or removed from the Biodiversity Stewardship Site
    c) any observations of the density and the distribution of feral pests present on the Biodiversity Stewardship Site
    d) any minor variations from the Operations Schedule Pest Animal Controls
    e) results of monitoring against performance measures
    f) chemical application records required by the EPA
    g) records of any new pest animals that are sighted within the Biodiversity Stewardship Site.

Operations Schedule – Pest animal controls

Table 4: List of pest animals, control methods and timing for actions

TFD item	Common name	Map location	Method of control/management	Frequency/ timing	Performance measures
8, 9	Feral Cat – *Felis catus*	All MZ	**Trapping** Trapping would be via cage traps. A variety of olfactory, visual or auditory stimuli may be used to lure cats into the trap. Suitability qualified and licenced persons would implement this control method. Trapping is to be undertaken in accordance with the NSW Codes of Practice and Standard Operating Procedures for the effective and humane management of pest animals (NSW Department of Primary Industries [2025] *https://www.dpi.nsw.gov.au/biosecurity/vertebrate-pests/publications/standard-operating-procedures*) or the most relevant and up to date Standard Operating Procedure. **Shooting** Suitability qualified and licenced persons would implement this control method. Shooting would be undertaken on foot or via vehicle. Shooting is to be undertaken in accordance with the NSW Codes of Practice and Standard Operating Procedures for the effective and humane management of pest animals (NSW Department of Primary Industries [2025] *https://www.dpi.nsw.gov.au/biosecurity/vertebrate-pests/publications/standard-operating-procedures*) or the most relevant and up to date Standard Operating Procedure.	**Trapping** Annual monitoring and deployment of traps as required. Neighbours will be informed on timing. **Shooting** Annual monitoring and shooting as required. Recommended time of the year to undertake pest management is early Autumn/end of Summer and end of Spring.	• Incidence of Feral Cats to be minimal at Year 5. • Incidence of Feral Cats to be maintained at minimal from Year 5 onwards.

TFD item	Common name	Map location	Method of control/management	Frequency/ timing	Performance measures
8, 9	European Wild Rabbit – *Oryctolagus cuniculus*	All MZ	**Ground baiting** Sodium monofluoroacetate (1080) bait locations will be established within the site. Suitability qualified and licenced persons would implement this control method. Local Land Services (LLS) will be consulted to confirm if any regional programs are occurring so that timing can be adapted to suit wider programs if applicable. Locations to be a minimum of 150 m away from neighbouring properties. Ground baiting is to be undertaken in accordance with the NSW Codes of Practice and Standard Operating Procedures for the effective and humane management of pest animals (NSW Department of Primary Industries [2025] *https://www.dpi.nsw.gov.au/biosecurity/vertebrate-pests/publications/standard-operating-procedures*) or the most relevant and up to date Standard Operating Procedure. **Fumigation/manual collapsing of entrances** Fumigation is a supplementary technique. Suitability qualified and licenced persons would implement this control method. It is to be undertaken in accordance with the NSW Codes of Practice and Standard Operating Procedures for the effective and humane management of pest animals (NSW Department of Primary Industries [2025] *https://www.dpi.nsw.gov.au/biosecurity/vertebrate-pests/publications/standard-operating-procedures*) or the most relevant and up to date Standard Operating Procedure. **Trapping**	**Ground baiting/fumigation/ manual collapsing of entrances shooting** Rabbit control will be undertaken in accordance with the densities recorded during monitoring as follows: • Medium to high: baiting program (only during the nonbreeding season). • Low: fumigation of burrows and manual collapsing of entrances. Shooting when numbers become very low. • LLS will be consulted regarding participation in any wider local or regional programs. **Trapping** Annual monitoring and deployment of traps as required. Neighbours will be informed on timing.	• Incidence of European Wild Rabbits to be minimal at Year 5. • Incidence of European Wild Rabbits to be maintained at minimal from Year 5 onwards.

TFD item	Common name	Map location	Method of control/management	Frequency/ timing	Performance measures
			Trapping would be via cage traps. Diced carrot is the preferred bait for attracting rabbits into traps. Suitability qualified and licenced persons would implement this control method. **Shooting** Suitability qualified and licenced persons would implement this control method. Shooting would be undertaken on foot or via vehicle. Shooting is to be undertaken in accordance with the NSW Codes of Practice and Standard Operating Procedures for the effective and humane management of pest animals (NSW Department of Primary Industries [2025] *https://www.dpi.nsw.gov.au/biosecurity/vertebrate-pests/publications/standard-operating-procedures*) or the most relevant and up to date Standard Operating Procedure.		
8, 9	Feral Pigs – *Sus scrofa*	All MZ	**Trapping** Trapping is a labour-intensive method of control as the traps require regular checking. Trapping can be effective for individuals which cannot be shot or baited. Trapping may be incorporated into the control program if baiting is not effective. **Shooting** Suitability qualified and licenced persons would implement this control method. Shooting would be undertaken on foot or via vehicle. Shooting is to be undertaken in accordance with the NSW Codes of Practice and Standard Operating Procedures for the effective and humane management of pest animals (NSW Department of Primary Industries [2025] *https://www.dpi.nsw.gov.au/biosecurity/vertebrate-pests/publications/standard-operating-procedures*) or	**Trapping** Annual monitoring and deployment of traps as required. Neighbours will be informed on timing. **Shooting** Annual monitoring and shooting as required. Recommended time of the year to undertake pest management is early Autumn/end of Summer and end of Spring.	• Incidence of European Feral Pigs to be minimal at Year 5. • Incidence of European Feral Pigs to be maintained at minimal from Year 5 onwards.

TFD item	Common name	Map location	Method of control/management	Frequency/ timing	Performance measures
			the most relevant and up to date Standard Operating Procedure.		
8, 9	European Red Fox – *Vulpes vulpes*	All MZ	**1080 Fox/Dog poison baiting** Suitable and effective measure in accordance with the relevant legislation and guidelines. Implementation would seek to cooperate with broader regional LLS or DPIE programs. This control method could effectively be implemented on site and is the preferred method of control. **Canid pest ejectors** Suitable and effective measure in accordance with the relevant legislation and guidelines. Implementation would seek to cooperate with broader regional LLS or DPIE programs. This control method could effectively be implemented on site and may be used in addition to or in place of 1080 baits. **Shooting** Suitability qualified and licenced persons would implement this control method. Shooting would be undertaken on foot or via vehicle. Shooting is to be undertaken in accordance with the NSW Codes of Practice and Standard Operating Procedures for the effective and humane management of pest animals (NSW Department of Primary Industries [2025] *https://www.dpi.nsw.gov.au/biosecurity/vertebrate-pests/publications/standard-operating-procedures*) or the most relevant and up to date Standard Operating Procedure.	**1080 Fox/Dog poison baiting and Canid pest ejectors** • 1080 bait locations will be established within the site. LLS will be consulted to confirm if any regional programs are occurring so that timing can be adapted to suit wider programs if applicable. • Locations to be a minimum of 150 m away from neighbouring properties. **Shooting** Annual monitoring and shooting as required. Recommended time of the year to undertake pest management is early Autumn/end of Summer and end of Spring.	• Incidence of European Red Fox to be minimal at Year 5. • Incidence of European Red Fox to be maintained at minimal from Year 5 onwards.
8, 9	Feral Deer – *Dama dama*	All MZ	**Shooting** Suitability qualified and licenced persons would implement this control method. Shooting would be	**Shooting** Annual monitoring and shooting as required. Recommended time of the	• Incidence of Feral Deer to be minimal at Year 5. • Incidence of Feral Deer to be maintained at

TFD item	Common name	Map location	Method of control/management	Frequency/ timing	Performance measures
			undertaken on foot or via vehicle. Shooting is to be undertaken in accordance with the NSW Codes of Practice and Standard Operating Procedures for the effective and humane management of pest animals (NSW Department of Primary Industries [2025] *https://www.dpi.nsw.gov.au/biosecurity/vertebrate-pests/publications/standard-operating-procedures*) or the most relevant and up to date Standard Operating Procedure.	year to undertake pest management is early Autumn/end of Summer and end of Spring.	minimal from Year 5 onwards.

Section 5: Plant Community Types and Threatened Ecological Communities (Native Vegetation)

Management actions

31. Management of the Biodiversity Stewardship Site to protect, restore and enhance native vegetation is to be undertaken in accordance with the Operations Schedules for this section and the Management Plan Site Map.
32. Native Vegetation must not be cut down, felled, thinned, logged, killed, destroyed, poisoned, ringbarked, uprooted, burnt or otherwise removed, except in accordance with the Operations Schedule.
33. Dead timber (whether standing or fallen and including branches and leaf litter) must not be removed from or moved, except for the personal (non-commercial) use by the Landowner for firewood for one dwelling only or for repair of fences (not for construction of fences).
34. The Landowner must prevent Fertilisers and other sources of nutrients – for example, manure – other than those that would occur as a result of natural ecosystem function, or from approved stock grazing activities from entering or being used except in accordance with the Operations Schedule.
35. Pesticides must not be applied except in accordance with the Operations Schedules.
36. Replanting and other activities to enhance Plant Community Types (PCT) and/or Threatened Ecological Communities (TEC) must occur in accordance with the Operations Schedules.
37. If replanting or seeding, the Operations Schedule must set out measures as required to assist survival and establishment of native species such as watering, weed control, replacement planting.

Record keeping

38. The Landowner must retain the following diary records and include in the Annual Report:
    a) dates of planting/seeding
    b) source of seed/seedlings
    c) survival rates of planting/seeding
    d) dates and results of monitoring against performance measures
    e) activities related to the collection of firewood or the repair of fences.

Operations Schedule – PCTs and TECs (Native Vegetation)

Table 5: Management action method s for PCTs and TECs

TFD item	Map location	Methods (including site preparation and maintenance methods)	Timing/frequency	Performance measures
Not applicable				

Section 6: Threatened species habitat

Management actions

39. Management of the Biodiversity Stewardship Site to protect, restore and enhance Threatened Species habitat (for ecosystem credits and species credits) is to be undertaken in accordance with the Operations Schedule for this section and the Threatened Species Habitat Map.
40. Breeding habitat features – for example, hollow-bearing trees – and other habitat features for Threatened Species, including any breeding sites and other habitat features are to be retained and not removed or impacted by any activities shown on the Threatened Species Habitat Map.
41. Threatened Species habitat elements such as bush rocks, termite mounds and fallen logs, must not be moved or removed except in accordance with the Threatened Species Operations Schedule.

Record keeping

42. The Landowner must retain the following diary records and include in the annual report to the BCT:
    a) management actions set out in the Threatened Species habitat Operations Schedule that have been implemented during the year
    b) any observations of changes in the number or area of Threatened Species and their habitat
    c) any minor variations from the Threatened Species habitat Operations Schedule
    d) records of any new Threatened Species recorded on the Biodiversity Stewardship Site
    e) results of monitoring against performance measures.

Operations Schedule – Threatened species habitat

Table 7: List of methods and timing for threatened species habitat management actions

TFD Item	Common name (Scientific name)	Map location	Method/action	Timing/frequency	Performance measure
Not applicable					

Section 7: Grazing management

Management actions

43. Stock grazing on the Biodiversity Stewardship Site is only to be carried out in accordance with the Operations Schedule for this section and in the areas identified on the Management Actions Map.
44. The Operations Schedule Grazing management is to identify Healthy Condition thresholds for ground cover taking into account seasonal, climatic and Site conditions. Thresholds for Healthy Condition are based on regional rainfall (annual averages) and the dominant grass species present. Thresholds for Healthy Condition must include grazing pressure from native herbivores and any pest herbivores.
45. Stock grazing regime is to:
    a) assist enhancing the diversity and cover of native flora species, enhance habitat for native fauna species, control weeds and promote natural regeneration rather than be for the purpose of agricultural productivity
    b) be confined to appropriate grassy ecosystems on the Biodiversity Stewardship site
    c) be excluded from riparian and other sensitive areas shown on the Management Actions Map using appropriate fencing
    d) ensure ground cover is maintained above Healthy Condition thresholds.
    e) be put on hold during periods when the Healthy Condition thresholds are not met within a grazing location listed in the Operations Schedule for this section
    f) be undertaken during defined times to allow native species to flower, set seed and germinate in order encourage future recruitment of native plants.
46. Stock must be removed immediately (grazing must cease) in any area of the Biodiversity Stewardship Site where the groundcover or sward height is below the Performance Measures in the Operations Schedule.
47. Grazing must not occur in map locations that contain replanted areas, and/or areas where natural regeneration of tree cover is occurring until tree stems are at height (metres) or diameter breast height (centimetres) that is set out in the Healthy Condition performance measures listed in the Operations Schedule.
48. The Landowner must take all reasonable precautions to minimise the risk of introducing new weed species, or the spread of known weed species when stock enter onto or within the Biodiversity Stewardship Site.

Record keeping

49. The Landowner must retain the following diary records and include in the annual report to the BCT:
    a) Dates, duration and intensity of grazing for each grazing area
    b) Other management actions implemented set out in the Operations Schedule Grazing Management that have been implemented during the year, including records of any quarantine measures
    c) Details of any unauthorised grazing and action taken
    d) any minor variations to the Operations Schedule Grazing Management
    e) observations of the management objectives and results of monitoring against healthy condition performance measures.

Operations Schedule – Grazing management

Table 8: Grazing management methods, timing and performance measures

TFD Item	Map location	Stock type	Method (cell/rotational/crash)	Timing/Frequency	Healthy Condition performance measures
3	Grazing Zones 4, 5, 6	Cattle – *Bos taurus*	Establish additional stock water points (3 watering points, one tank and 1.8 km of pipework)	Install Year 1	• Water points and pipework installed and operational.
19	When found Map Locations will be updated	Cattle	Identify and protect exclusion zones with temporary fencing.	Ongoing	• Temporary fencing installed and operational. • No adverse impacts on sensitive areas.
13	All Grazing Zones	Cattle – *Bos taurus*	A Grazing Management Plan has been prepared and is provided as a stand-alone document and must be referred to. Apply the targeted grazing strategy as set out in the Merriwa East Biodiversity Stewardship Agreement (BSA) Grazing Plan.	Consistent with management triggers, regime details and grazing windows identified in the Merriwa East BSA - Grazing Plan - Methodology.	**General performance measures** • Auditing and monitoring reports demonstrate compliance with healthy condition performance measures (below). • Documented application of quarantine requirements. • Livestock not meant to be on-site are removed within one week of detection, and the BCT is notified. • Stock excluded during adverse weather. **Healthy condition performance measures** • Stock are to be immediately removed from the Site if the following trigger points are met. **Late Summer/Autumn** • Ground cover ≤90%, sward height ≤5 cm and/or when there is evidence of native tree seedlings. **Autumn/Winter** • Evidence of native tree seedlings/regeneration, identify paddock(s) and rest for 6 months, monitor growth/ recruitment and rest paddock biannually until native regeneration extends beyond stock grazing impacts. Then

TFD Item	Map location	Stock type	Method (cell/rotational/crash)	Timing/Frequency	Healthy Condition performance measures
					implement removal of stock when ground cover ≤90% and sward height ≤10 cm. **Spring/Early Summer** • Ground cover ≤90%, sward height ≤5-10 cm and/or when there is evidence of native tree seedlings.
13	All Grazing Zones	Cattle	Ongoing monitoring of paddock condition.	Monthly paddock assessments Quarterly agricultural audits	• Assessments are documented and made available to BCT.
30	All Grazing Zones	Cattle	The Grazing Plan to be reviewed on the basis of performance against operational performance measures (Table 8) and Ecological Targets (Table 11) of the Management Plan and (Table 3) in Merriwa East BSA Grazing Plan.	5 yearly	• Grazing plan reviewed in consultation with and to the satisfaction of the BCT.

Section 8: Management actions – Fire management

Management actions

50. Ecological burns of Native Vegetation may be undertaken to help stimulate Native Plant regeneration, control weeds and enhance Biodiversity in accordance with the Operations Schedule for this section (including performance measures) and the Fire Management Map.
51. Burns are to be undertaken at a frequency and intensity suitable for the PCTs and Threatened Species.
52. Burning should only be undertaken when and where it is safe to do so without major risk to property, infrastructure or Biodiversity that is sensitive to fire. The Fire Management Map must identify these areas as fire exclusion zones.
53. Ecological Burns are to be carried out in a mosaic-pattern of different burn intervals to ensure refuge areas for native fauna are available at all times. Reasonable measures are to be taken prior to the burn event to flush out native animals.
54. Prior to each instance of an ecological burn being undertaken, an operational burn plan must be prepared by a suitably qualified and/or experienced person. Each operational burn plan should have regard to the other management actions in this Management Plan, and must:
    a) identify site access and notification requirements
    b) specify the ignition pattern (consider planning the burn path to allow for safe corridors of retained vegetation for fauna to retreat away from the fire to nearby bushland)
    c) identify containment lines that will restrict the spread of fire to within the planned burn unit and maintain the fire exclusion zones
    d) describe desirable weather conditions for when to conduct the burn
    e) conduct a work safety and risk assessment
    f) identify the permits and approvals required for conducting the burn
    g) specify communication procedures and protocols.
55. Following a wildfire event or a hazard reduction burn undertaken by Rural Fire Service, an Ecological Burn must only be carried out on any area of the Biodiversity Stewardship Site according to the frequency specified in the Operations Schedule to stimulate Native Plant regeneration, control weeds and enhance Biodiversity.
56. Ecological Burns should be carried out in accordance with the Bush Fire Environmental Assessment Code including the Threatened Species Hazard Reduction List for Plants, Animals and Threatened Ecological Communities (NSW Rural Fire Service), except for an ecological burn that is being undertaken in accordance with the Operations Schedule Fire management and the Biodiversity Stewardship Agreement.

Record keeping

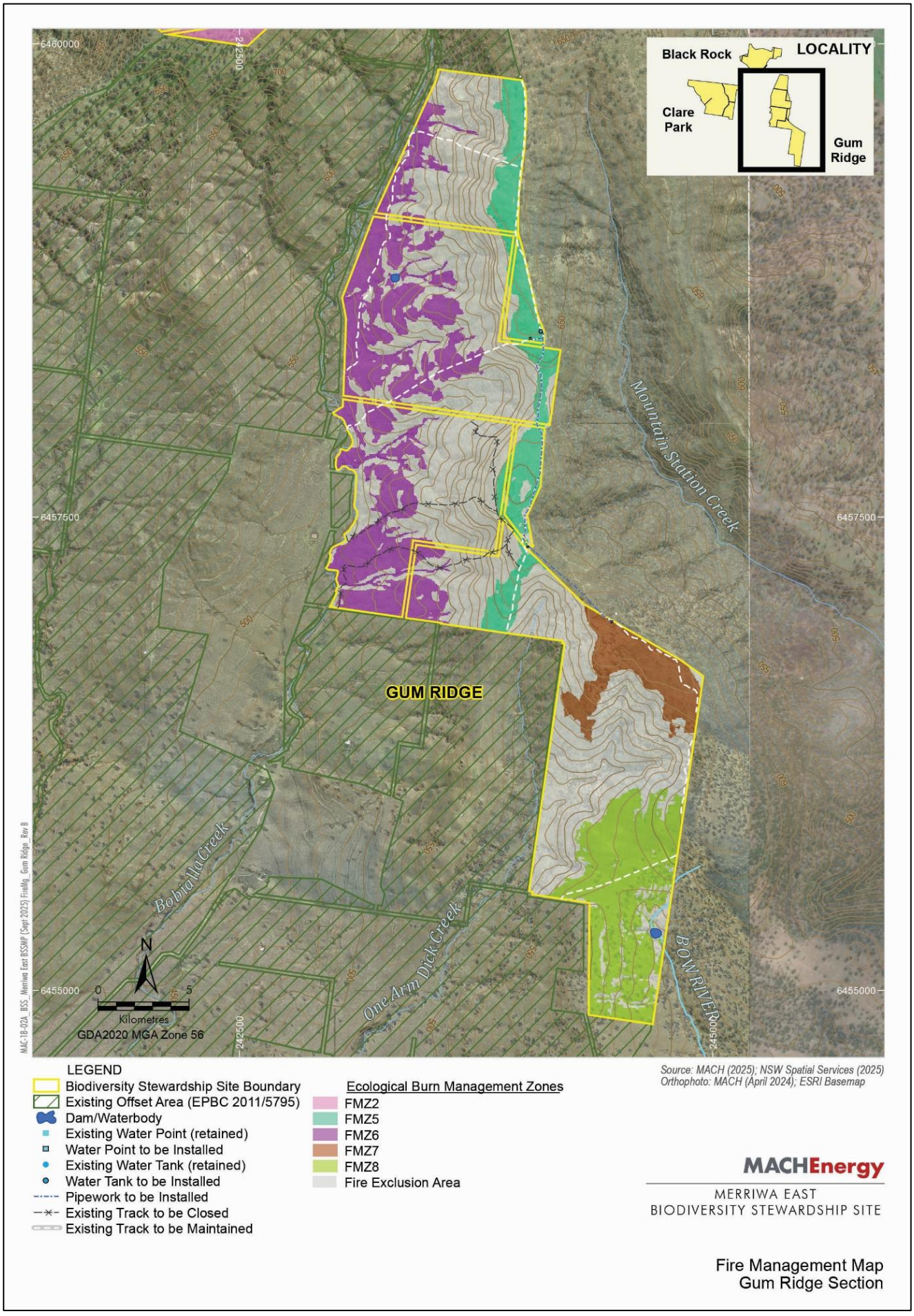
57. The Landowner must retain the following diary records and provide the following in the annual report to the BCT:
    a) date, cause, area (hectares), and relative intensity of any fire event that occurred within the Biodiversity Stewardship Site
    b) weather conditions and observations such as the scorch height on tree species and any impacts on threatened species
    c) contractors involved in management of any burns – for example, RFS or a cultural burn practitioner.
    d) response of PCTs and native plants to any fire events.

Operations Schedule – Fire management

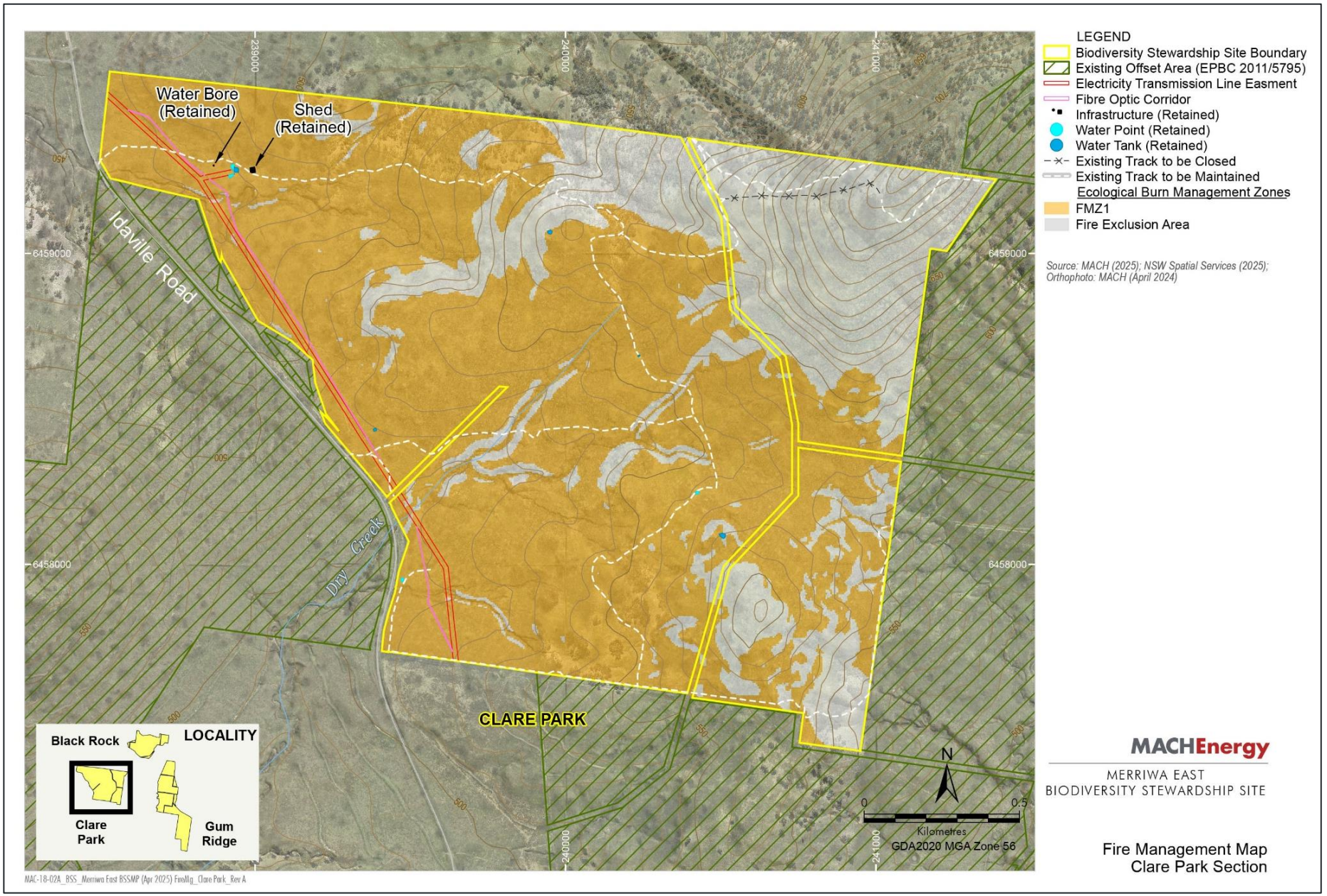
Table 9: Fire management methods, timing and performance measures

TFD Item	Ecological burn unit	Timing of burn	Fire frequency	Fire intensity	Other methods	Performance measures
15	N/A	N/A	N/A	N/A	**Fire Management Strategy Development** A Fire Management Strategy will be developed to consider when and where an ecological burning can be undertaken to achieve biodiversity outcomes. The plan will be developed by a suitably qualified person with experience in fire management planning for biodiversity conservation. Upon completion of this plan, ecological burns may be implemented at appropriate intervals for the Plant Community Types (PCT) and Threatened Ecological Communities (TEC) on site. The below Burn Map will be revised following the generation of a Fire Management Plan, this figure is to illustrate potential zones.	A fire management strategy for the Site is developed within 12 months of the First Payment Date in consultation with the BCT.
16	N/A	N/A	N/A	N/A	**Implementation of Fire Management Plan** Ecological burns undertaken in accordance with Fire Management Strategy (to be developed).	Ecological burns undertaken at appropriate intervals in the Fire Management Strategy (to be developed). An Operational Burn Plan is developed and implemented in accordance with point 54 above before each burn.

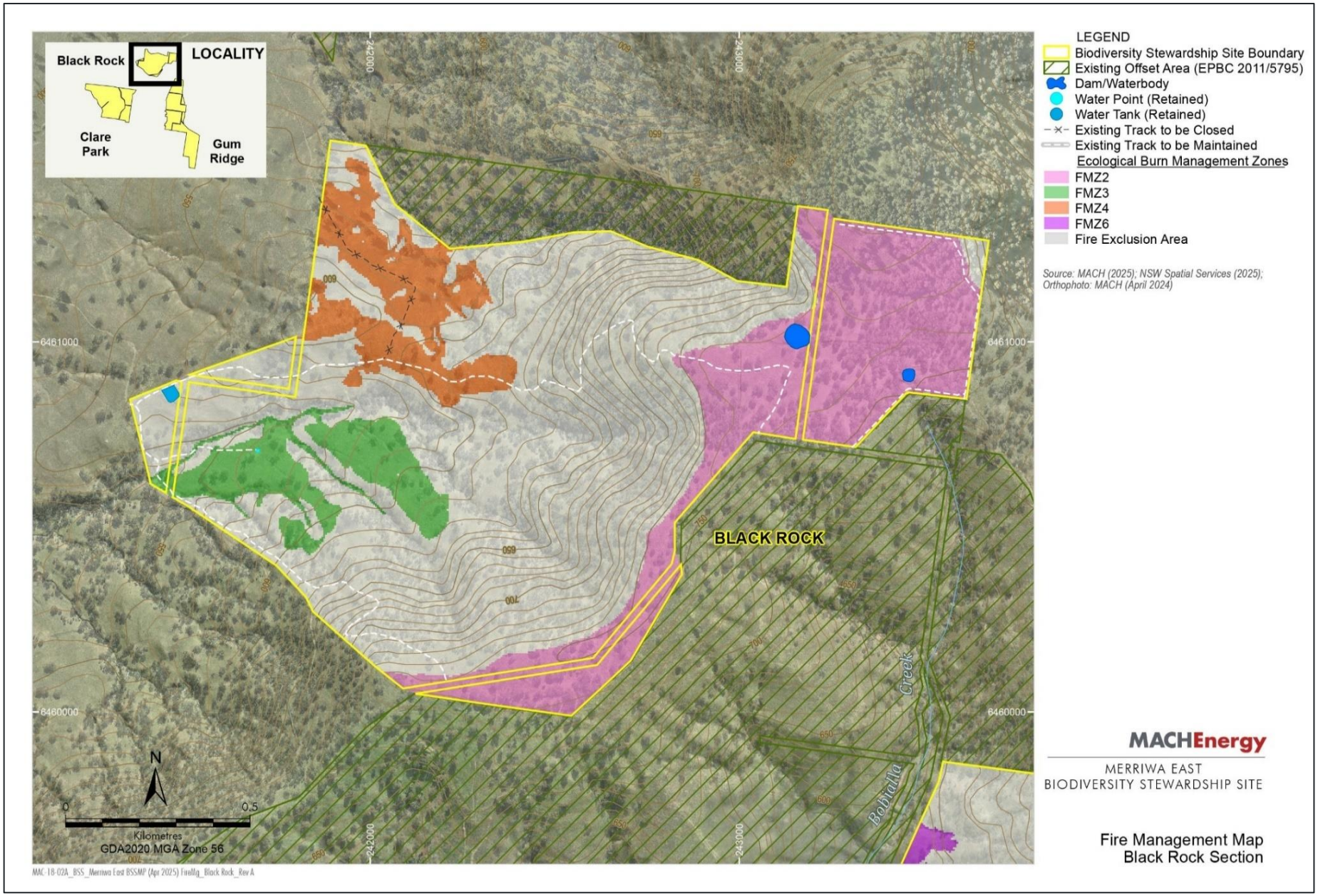
Fire Management Map 1 – Gum Ridge



Fire Management Map 2 – Clare Park



Fire Management Map 3 – Clare Park



Section 9: Management actions – Monitoring and adaptive management

Management actions

58. Monitoring and adaptive management under this Management Plan will be in accordance with the performance measures described in each section and the Operations Schedule for this section and the Monitoring Map.
59. Ecological Monitoring Points are to be established in accordance with the Operations Schedule for Monitoring and adaptive management with the locations of each point shown on the Monitoring Map (a minimum of one Ecological Monitoring Point in each vegetation zone) within 12 months of the Agreement Date).
60. Photographs must be taken at each Ecological Monitoring Point within 12 months of the Agreement Date and then at least every 12 months thereafter showing all 360 degrees and must:
    a) be taken from each end of the transect length at the same location, with the same starting direction for the commencement and direction of the sweep, with the camera held at the same location, height and angle
    b) show exactly the same field of view each monitoring event, to enable comparison across years
    c) be clear and of suitable resolution to show detail and taken at appropriate light conditions to display optimal contrast
    d) be dated and labelled and retained by the Landowner.

Record keeping

61. The Landowner must retain the following diary records and include in the annual report to the BCT:
    a) management actions set out in the Operations Schedule for monitoring and adaptive management that have been implemented during the year
    b) photographs and any observations taken from the photo points
    c) any minor variations from the Operations Schedule Monitoring and adaptive management.

Operations Schedule – Monitoring and adaptive management

Table 10: Monitoring and adaptive management methods, timing and performance measures

TFD Item	Map location	Method	Frequency/timing	Performance measures
Ecological Monitoring				
22	All Management Zones	**Baseline Floristic Plot Monitoring** Establish a permanent ecological response monitoring point at each location listed in Table 11 below, in accordance with the BAM and the EMM. A suitably qualified person conducts a full floristic plot survey and collects photo point data at each ecological response monitoring point Clearly mark the start and end of each plot with a star picket.	Baseline Monitoring to be completed 12 months of the Agreement Date.	• Monitoring is undertaken within the timeframe specified. • Within 10% of target vegetation integrity (VI) scores with management (See Table 11).
23	All Management Zones	**Floristic Plot Monitoring- Years 5-20** A suitably qualified person conducts a full floristic plot survey and collects photo point data at each ecological response monitoring point (Table 11) once every 5 years. All plots are undertaken in accordance with the BAM and the Ecological monitoring module.	To be undertaken in Years 5, 10, 15 and 20. Sampling to be undertaken at the same time each year.	• Monitoring is undertaken within the timeframe specified. • Within 10% of target VI scores with management (See Table 11).
24	All Management Zones	**Ongoing Floristic Plot Monitoring** A suitably qualified person conducts a full floristic plot survey and collects photo point data at half of the ecological response monitoring point (Table 11- monitoring points containing an *) once every 10 years. All plots are undertaken in accordance with the BAM and the Ecological monitoring module.	Ongoing monitoring is to be completed once every 10 years, starting in Year 20, at half the density of plots. Plots to be maintained for ongoing monitoring have been marked with a * in Table 11 below. sampling to be undertaken at the same time each year.	• Monitoring is undertaken within the timeframe specified. • Within 10% of target VI scores with management (See Table 11).

TFD Item	Map location	Method	Frequency/timing	Performance measures
Landholder monitoring, record keeping and site fees				
26	All Management Zones Monitoring locations outlined in the monitoring map	**<u>Annual Site Inspection</u>** **Photo point monitoring:** Photographs are to be taken at the start and end of each ecological monitoring point in accordance with EMM section 5.6. In years when full ecological monitoring is not being undertaken, the landholder can undertake photo monitoring points. **Grazing intensity monitoring (healthy condition thresholds):** Monitoring will be undertaken in accordance with the healthy condition threshold and bulk sward height assessment as described in the BCT Livestock Gazing Guidelines for Private Land Conservation (Nov 2021). Grazing to be delayed by one year in any paddocks where prolific new canopy species regeneration occurs. **Feral pest monitoring:** Population estimates are to be recorded during annual site monitoring and during active removal of pest species. Zero – No sign Low – Some signs observed may not be recent Medium – Recent signs of animals observed High – abundant evidence, individuals easily visible. Opportunistic sightings during other surveys should also be recorded accordingly. **Weed monitoring:** In accordance with BCT requirements logbook/diary completed outlining when weed management has been undertaken, including location notes and/or GPS point locations to ensure the total area has been subject to treatment. **Human disturbance and Infrastructure monitoring:** The Site is regularly surveyed (at least every 6 months) all signs of disturbance or damage to infrastructure are recorded in a logbook/diary.	Annual site inspections are to commence within 12 months of the Agreement Date and then at least once every 12 months thereafter. Grazing monitoring: Conducted before grazing commences and after grazing is finalised in each paddock.	• Annual site inspections and monitoring are undertaken on time and in accordance with the relevant guidelines.

TFD Item	Map location	Method	Frequency/timing	Performance measures
27	N/A	**Annual Report** An annual report is developed each year in consultation with the BCT.	Annually from the First Payment Date	• Annual monitoring is undertaken across the site. All records are kept up to date.
27	N/A	Project management/record keeping	Starting at Year 1 every year	• Ensuring accurate records of each monitoring period.
28	N/A	Council rates	Starting at Year 1 every year	• Ensure Council payments are paid promptly and accurately.
29	N/A	Insurance	Starting at Year 1 every year	• Ensure insurance payments are paid promptly and accurately.
30	N/A	Management plan review and update	Starting Year 5 every 5 years	• In consultation with BCT, review and/or update the Management Plan once every 5 years.
31	N/A	Variation fee	Starting Year 5 every 5 years ending Year 20	• Provide a variation request – should it be required.

Table 11: Ecological response monitoring

Point ID	Zone/Species	Biodiversity Target	Description of the method or the metric	Projected Coordinates GDA2020 MGA Zone 56		Frequency	Baseline	Target
				Easting	Northing			
1	VZ1	PCT 483 Woodland	Full floristic plot, grazing monitoring and photo point	242600	6461096	**Floristic plots** Years 1, 5, 10, 15 and 20, then once every 10 years **Grazing** before and after grazing **Photo points** Annually	VI=85.7	VI=96.2
2				239554	6459123			
3*				240033	6458780			
4*				243563	6459717			
5*				242504	6460504			
15				240976	6458105			
16*				243812	6458272			
6*	VZ1a	PCT 483 DNG		240047	6457881		VI=45.9	VI=49.7
7*				241987	6461169			
8				243994	6457820			
9*				244442	6455497			
10*				243175	6457978			
17				240636	6457834			
18				243331	6458573			
11*	VZ2	PCT 496 Woodland		242913	6460800		VI=61.7	VI=79.7
12				243470	6461075			
13*				244819	6456570			
19*				241314	6459212			
20				242077	6460224			
14*	VZ2a	PCT 496 DNG		244377	6456815		VI=28.6	VI=32.6
21				243027	6460965			
22*				243294	6461237			

Table 12: Ecological recovery targets

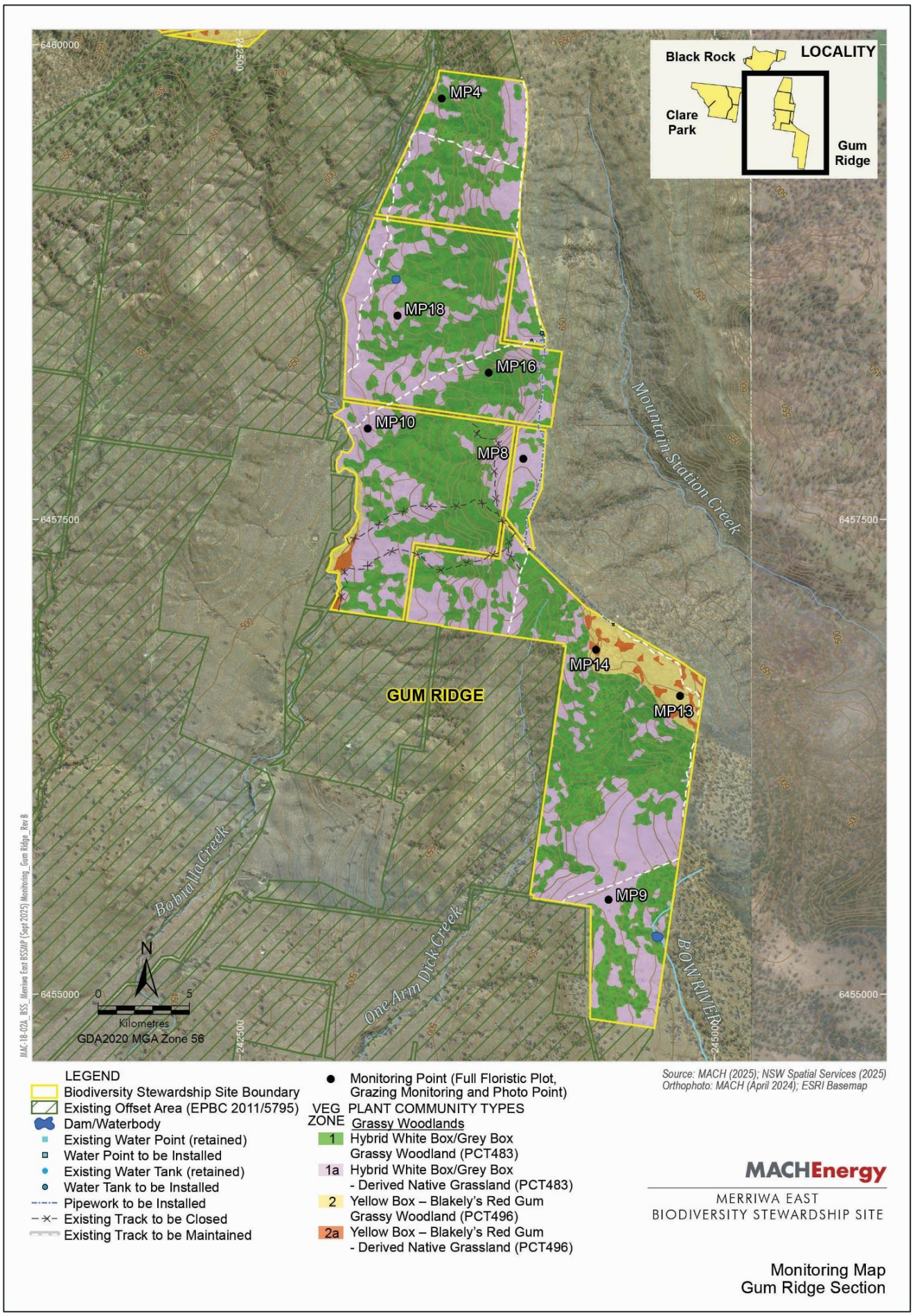
PCT 483 DNG							
Management type	**Attribute type**	**Attribute**	**Current value**	**Year 5 target**	**Year 10 target**	**Year 15 target**	**Year 20 target**
Required management actions	Composition	Tree Richness	0.3	0.36	0.43	0.49	0.55
		Shrub Richness	1.1	1.23	1.35	1.48	1.6
		Grass And Grass-like Richness	7.1	7.43	7.76	8.08	8.41
		Forb Richness	10.9	10.98	11.05	11.13	11.2
		Fern Richness	0.6	0.62	0.65	0.67	0.69
		Other Richness	1.4	1.44	1.49	1.53	1.57
	Structure	Tree Cover	0.7	0.95	1.20	1.45	1.7
		Shrub Cover	0.2	0.33	0.45	0.58	0.7
		Grass And Grass-like Cover	76.8	76.80	76.80	76.80	76.8
		Forb Cover	6.7	6.75	6.80	6.85	6.9
		Fern Cover	0.1	0.08	0.05	0.03	0
		Other Cover	0.1	0.15	0.20	0.25	0.3
	Function	Length of Fallen Logs	2.1	3.11	4.13	5.14	6.15
		Litter Cover	62.9	54.68	46.45	38.23	30
		Regeneration	0.3	0.31	0.33	0.34	0.35

PCT 483 Woodland							
Management type	**Attribute type**	**Attribute**	**Current value**	**Year 5 target**	**Year 10 target**	**Year 15 target**	**Year 20 target**
Required management actions	Composition	Tree Richness	1.6	1.76	1.92	2.08	2.24
		Shrub Richness	2.9	3.02	3.15	3.27	3.39
		Grass And Grass-like Richness	7.6	7.94	8.27	8.61	8.94
		Forb Richness	18.7	18.70	18.71	18.71	18.71
		Fern Richness	0.1	0.14	0.19	0.23	0.27
		Other Richness	2.4	2.41	2.42	2.42	2.43
	Structure	Tree Cover	30.2	30.20	30.20	30.20	30.2
		Shrub Cover	0.7	0.90	1.10	1.30	1.5
Required management actions	Structure	Grass And Grass-like Cover	71.3	71.30	71.30	71.30	71.3
		Forb Cover	10.9	10.90	10.90	10.90	10.9
		Fern Cover	0	0.00	0.00	0.00	0
		Other Cover	0.3	0.38	0.45	0.53	0.6
	Function	Length of Fallen Logs	17	20.71	24.42	28.12	31.83
		Litter Cover	78.3	66.23	54.15	42.08	30
		Regeneration	0.7	0.78	0.85	0.93	1

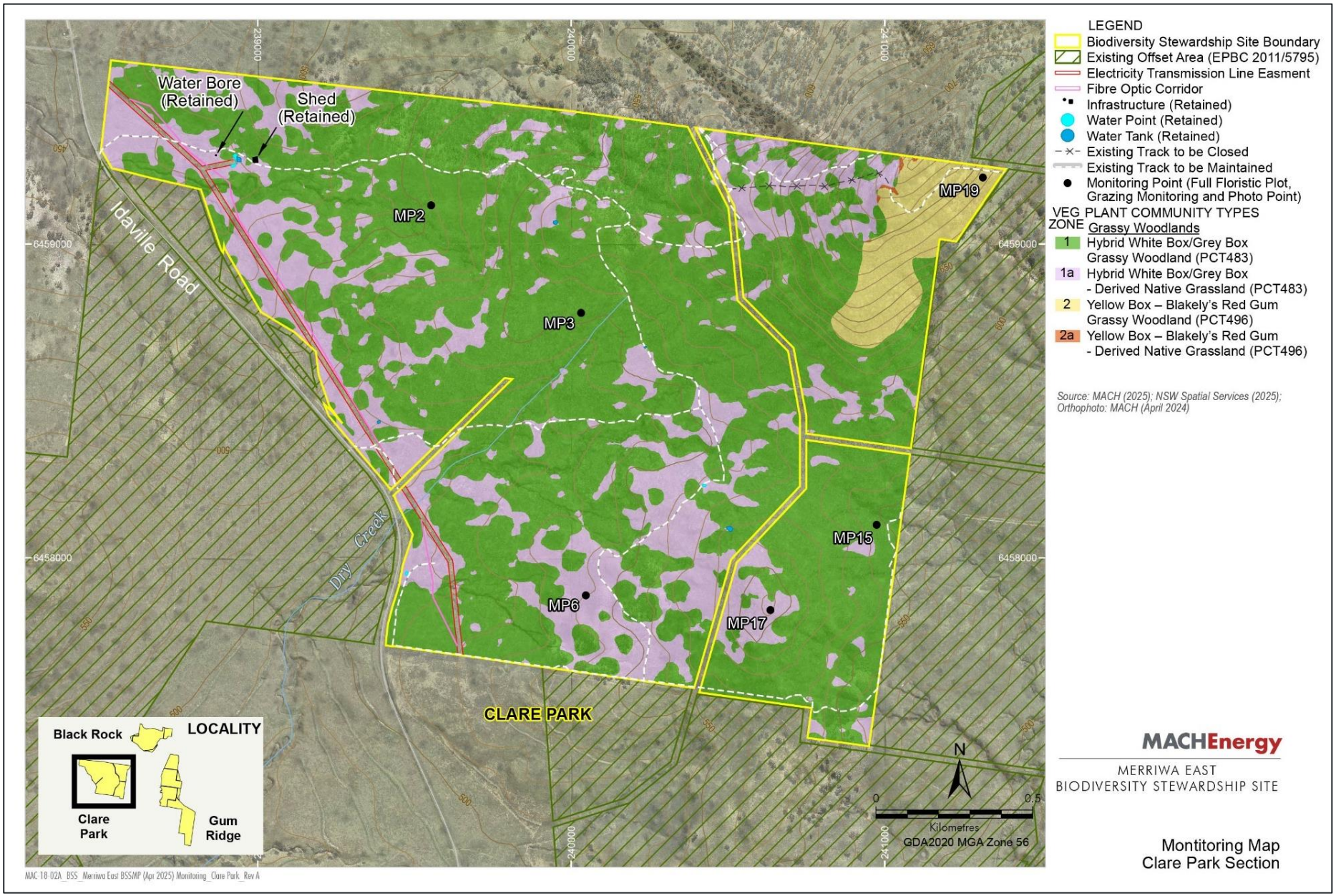
PCT 496 DNG							
Management type	**Attribute type**	**Attribute**	**Current value**	**Year 5 target**	**Year 10 target**	**Year 15 target**	**Year 20 target**
Required management actions	Composition	Tree Richness	0	0.02	0.03	0.05	0.06
		Shrub Richness	0.3	0.33	0.35	0.38	0.4
		Grass And Grass-like Richness	4.7	4.85	5.01	5.16	5.31
		Forb Richness	6.7	6.82	6.94	7.06	7.18
		Fern Richness	0.3	0.32	0.34	0.36	0.38
		Other Richness	0.3	0.32	0.34	0.36	0.38
	Structure	Tree Cover	0.4	0.45	0.50	0.55	0.6
		Shrub Cover	0	0.03	0.05	0.08	0.1
		Grass And Grass-like Cover	28.4	29.50	30.60	31.70	32.8
		Forb Cover	2.9	3.23	3.55	3.88	4.2
		Fern Cover	0	0.00	0.00	0.00	0
		Other Cover	0	0.00	0.00	0.00	0
	Function	Length of Fallen Logs	2.3	2.68	3.05	3.43	3.8
		Litter Cover	84	70.50	57.00	43.50	30
		Regeneration	0	0.06	0.12	0.17	0.23

PCT 496 Woodland							
Management type	**Attribute type**	**Attribute**	**Current value**	**Year 5 target**	**Year 10 target**	**Year 15 target**	**Year 20 target**
Required management actions	Composition	Tree Richness	1.8	2.03	2.25	2.48	2.7
		Shrub Richness	0.6	0.73	0.86	0.98	1.11
		Grass And Grass-like Richness	4.2	4.63	5.05	5.48	5.9
		Forb Richness	8.8	9.20	9.61	10.01	10.41
		Fern Richness	0	0.01	0.01	0.02	0.02
Required management actions	Composition	Other Richness	0.2	0.23	0.26	0.29	0.32
	Structure	Tree Cover	29.6	31.58	33.55	35.53	37.5
		Shrub Cover	0.1	0.15	0.20	0.25	0.3
		Grass And Grass-like Cover	79.3	79.30	79.30	79.30	79.3
		Forb Cover	1.5	2.25	3.00	3.75	4.5
		Fern Cover	0	0.00	0.00	0.00	0
		Other Cover	0	0.03	0.05	0.08	0.1
	Function	Length of Fallen Logs	47.8	42.35	36.90	31.45	26
		Litter Cover	72	61.50	51.00	40.50	30
		Regeneration	0	0.25	0.50	0.74	0.99

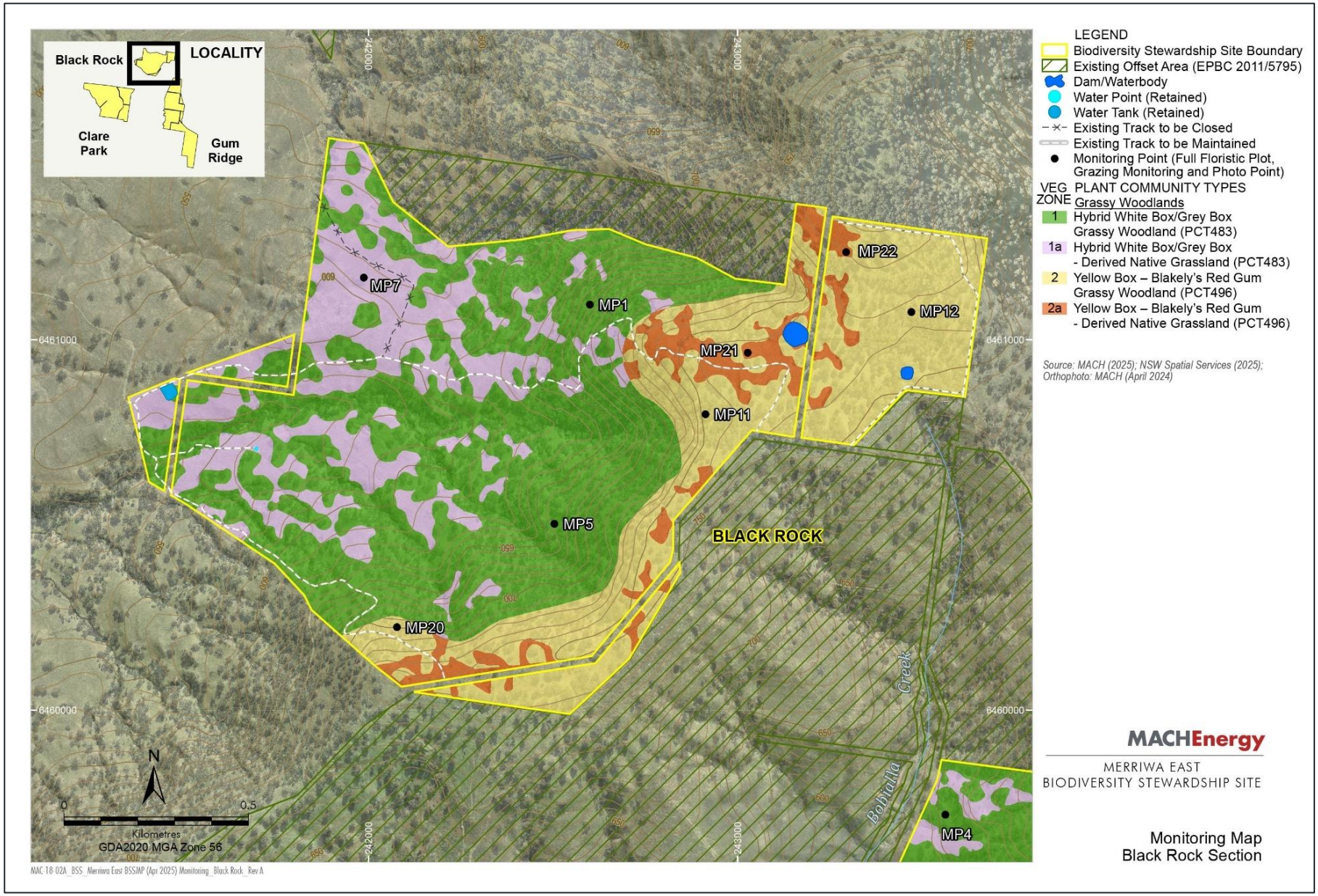
Monitoring Map 1 – Gum Ridge



Monitoring Map 2 – Clare Park



Monitoring Map 3 – Black Rock



Definitions

This Management Plan uses the same definitions from Attachment 1 of the BSA. Additional definitions specific to the Management Plan are:

APVMA means the Australian Pesticides and Veterinary Medicines Authority

Ecological Burn means burning of Native Vegetation undertaken to help stimulate Native Plant regeneration, control weeds and enhance Biodiversity

Ecological Monitoring Point means location identified in Section 9 of this Management Plan at which photographs are to be taken to show the ecological response in all directions (360°) from that point on the land for the purpose of monitoring ecological condition over time

Habitat means an area or areas occupied, or periodically or occasionally occupied, by a species or ecological community, including any biotic or abiotic habitat component used by the species

Healthy Condition means the minimum percent of groundcover and average grass sward height specified in Section 6 that is to be maintained in areas where stock grazing is permitted on the Biodiversity Stewardship Site

Pest means animal species not native to Australia including fox, cat, pig, goat, horse, avian species and any other non-native animal species

Fertiliser means a substance that consists of or contains nitrogen, phosphorus or potassium (or any combination of these) manufactured, represented, sold or used to directly or indirectly supply nutrients to enhance the growth, productivity, quality or reproductive capacity of vegetation

Weed Species means a vascular plant species not native to Australia

Large Woody Debris means fallen dead tree branches and trunks

Living Ground Cover means all living vegetation below 1 metre in height including native and non-native ground cover species

Management Action means the management actions, activities and controls within this Management Plan

Native Vegetation has the same meaning as in section 1.6 of the BC Act and section 60B of the LLS Act

Operations Schedule means the program of management actions, activities and controls that are to be undertaken on the Biodiversity Stewardship Site

Plant Community Type (PCT) means the plant community types which are the subject of biodiversity credits created under the BSA and identified using the NSW PCT classification system

Pesticide means an agricultural chemical product or veterinary chemical product (within the meaning of the Agvet Code) that is represented as being suitable for, or is manufactured, supplied or used for, the external control of ectoparasites of animals, and is not prescribed under the Stock Medicines Act 1989 as a low-risk veterinary chemical product. A pesticide continues to be regarded as a pesticide even when it is mixed with some other substance (whether the other substance is a pesticide)

Sediment Trap means a temporary or permanent structure used to collect, trap and store sediment to prevent entry of sediment to a waterway

Species Polygon means the area or count and location of suitable habitat for a species for which the BSA generates biodiversity credits

Stock means cattle and sheep kept by the Owner. Horses, camels' goats, alpacas, llamas, pigs, deer, ostriches, emus or any other animal kept by the Landowner are prohibited from grazing on the Biodiversity Stewardship Site. NB: This meaning does not restrict wild emus that may freely inhabit and occupy the BSA site.

Supplementary Planting means planting of locally indigenous native plants in one or more areas of the Biodiversity Stewardship Site to:

a) increase Native Plant species richness and foliage cover and/or
b) restore or enhance the native plant species composition and structure of recognisable PCTs and/or
c) improve habitat suitability for specific Threatened Species.

Threatened Ecological Community (TEC) means the threatened ecological community which are the subject of biodiversity credits created under the BSA.

Vegetation Integrity Survey Plot means an area within a vegetation zone in which condition attributes are assessed in accordance with the BAM (composition, structure and function)

Vegetation Zone means an area of similar native vegetation on the Biodiversity Stewardship Site with the same PCT and condition state.

Waste means any substance (whether solid, liquid or gaseous) that is discharged, emitted or deposited in the environment including substance that is discarded, rejected, unwanted, surplus or abandoned substance, including when it is intended for recycling or reuse.

Weed management group means the group of weeds defined in the Operations Schedule that are subject to the same weed control and management actions.