
Loder Creek Aboriginal Cultural Heritage Conservation Area

Plan of Management 2018-2022

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ABBREVIATIONS

AHIMS	Aboriginal Heritage Information Management System
CHMZP	Cultural Heritage Management Zoning Plan
CHWG	Upper Hunter Aboriginal Cultural Heritage Working Group
EA	Environmental Assessment
LCACHCA	Loder Creek Aboriginal Cultural Heritage Conservation Area
MTW	Mount Thorley Warkworth
OEH	Office of Environment and Heritage
PBC	Prescribed Body Corporate
PMIG	Plan of Management Implementation Group
PoM	Plan of Management
WBACHCA	Wollombi Brook Aboriginal Cultural Heritage Conservation Area

1 Introduction

This Plan of Management for the Loder Creek Aboriginal Cultural Heritage Conservation Area (LCACHCA) has been jointly prepared by the Upper Hunter Valley Aboriginal Cultural Heritage Working Group (CHWG) and Yancoal's Mount Thorley Warkworth (MTW) representatives. This Plan of Management has been developed in compliance with condition 28 of Schedule 3, Mount Thorley Continuation SSD-6465 development approval. Condition 28 and the associated condition 27 are reproduced below.

Loder Creek Aboriginal Heritage Conservation Area

27. *Within 3 years of the commencement of development under this consent, unless the Secretary agrees otherwise, the Applicant shall enter into a conservation agreement or agreements pursuant to section 69B of the National Parks and Wildlife Act 1974 relating to the Loders Creek Aboriginal Cultural Heritage Conservation Area, recording the obligations assumed by the Applicant under the conditions of this consent in relation to the conservation area, and register the agreement/s pursuant to section 69F of the National Parks and Wildlife Act 1974.*

Aboriginal Heritage Management Plan

28. *The Applicant shall prepare an Aboriginal Heritage Management Plan for the development to the satisfaction of the Secretary, and carry out the development in accordance with this plan. The plan must: ...*
(b) include a detailed plan of management for the Loders Creek Aboriginal Cultural Heritage Conservation Area.

All land situated within the LCACHCA is freehold property owned by Yancoal and associated joint venture partners. Yancoal's MTW Operations mine adjoins the western boundary of the LCACHCA. There are a number of other coal mines in the near region, with the Bulga Coal Complex, operated by Glencore, located on the LCACHCA southern boundary – **see Figure 1.**



Figure 1. Location of the Loder Creek Aboriginal Cultural Heritage Conservation Area

1.1 The Loder Creek Aboriginal Cultural Heritage Conservation Area

The LCACHCA encompasses an area of approximately 88 ha. Its eastern boundary adjoins Broke Road and its southern boundary abuts the edge of the Mount Thorley Operations coal lease. The LCACHCA extends north-west from these boundaries generally to the current mining disturbance extent just beyond Loder Creek and incorporating this riparian environment. The proposed boundaries of the LCACHCA and its location are shown in **Figure 2**.

The area was identified by the Aboriginal community during the Mount Thorley Continuation Project consultation process as being of high conservation value for the protection and conservation of significant Aboriginal cultural heritage objects, places and landscapes, such as the extant Loder Creek environment. MTW made a commitment during the Mount Thorley Continuation Project to establish an Aboriginal Cultural Heritage Conservation Area over the area and since 2014 has implemented internal management measures to exclude development disturbance activities in the LCACHA.

Vegetation includes riparian zones, woodland regrowth and areas that have been subject to agricultural use and pasture improvement that represent opportunities for environmental remediation. The area has significant cultural heritage values for Aboriginal people. The general area has a history of significant land use

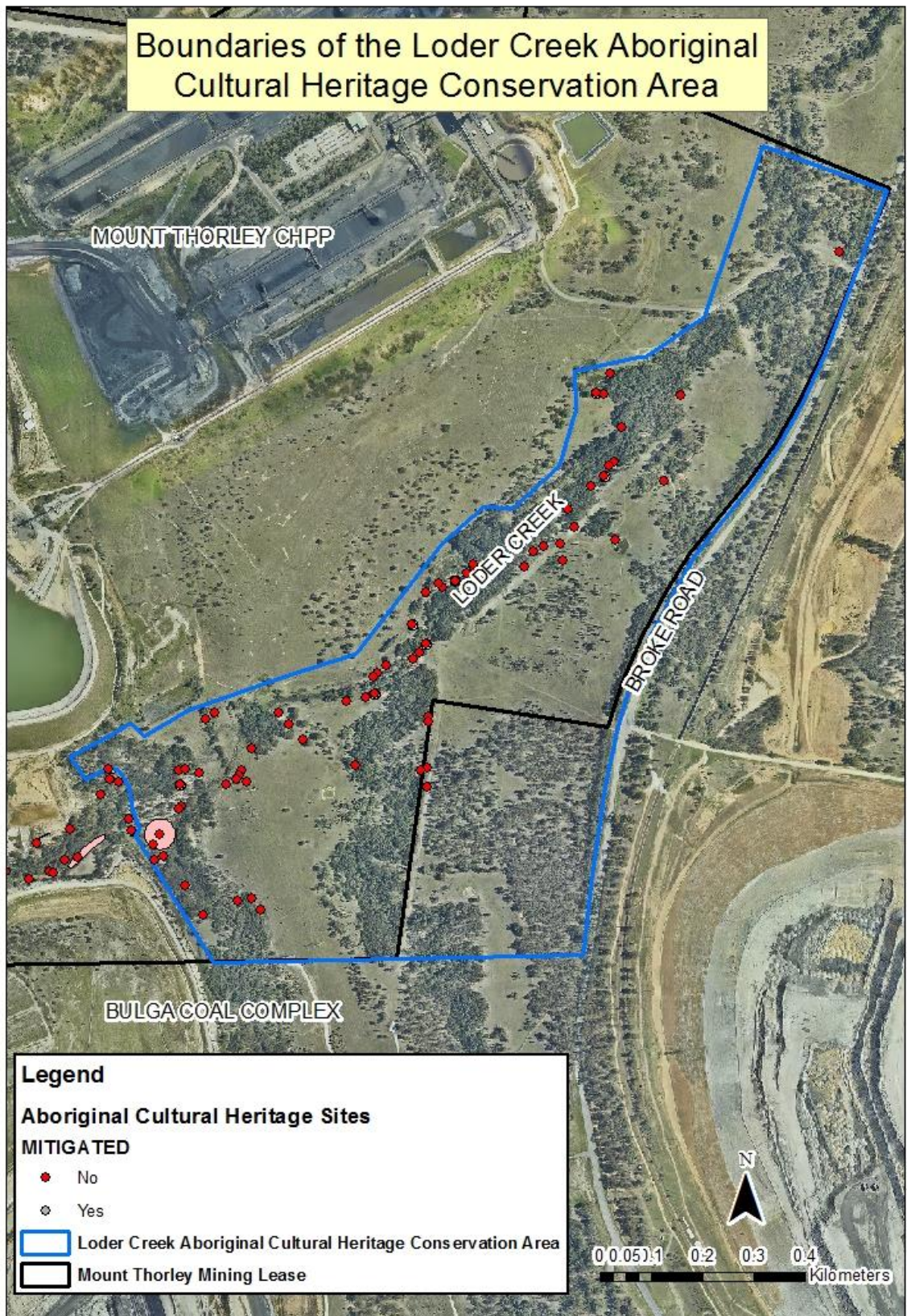


Figure 2. Boundaries of the LCACHCA

disturbance and incorporates informal roadways and tracks, and sites of former farm and other built infrastructure.

Table 1 lists the real property descriptions (lot on plan) and approximate area in hectares within each lot incorporated within the LCACHCA boundary.

Lot/DP:	Area (Ha)	All/Partial
22//263943	44.3	Partial
271//260663	27.6	Partial
21//263943	16.1	All

Table 1. LCACHCA real property descriptions and lot areas

The westerly extents of the LCACHCA encompass a large section of Loder Creek and also includes a substantial portion of the existing Mount Thorley mining lease. The adequacy of the area proposed as a conservation area for the in perpetuity protection of Aboriginal cultural heritage has been widely discussed and accepted among the Aboriginal community and has been endorsed by government, including OEH and approved by the Department of Planning & Environment in development consent SSD-6465.

Aboriginal community representatives, through the auspices of the CHWG, participated fully in the comprehensive and systematic cultural heritage assessment of the LCACHCA. A total of 74 places containing Aboriginal cultural heritage have been identified and recorded as a result of these surveys and are summarised below.

Although the archaeological record is heavily dominated by isolated stone artefact sites, there are several large artefact scatter sites, including one site that contains many hundreds of stone artefacts.

Place Type	Number	%
Isolated Stone Artefacts	64	94
Stone Artefact Scatter/Knapping Floor	4	6
Total	68	

1.2 The Purpose of this Plan

This Plan of Management:

- sets out the proposed governance and management arrangements for the area;
- briefly describes the characteristics and values of the area; and
- identifies important management issues, objectives and priorities.

This Plan of Management is intended to incorporate and implement the management principles and commitments made by MTW in consultation with the CHWG. These principles and commitments include:

-
- the establishment of the LCACHCA in perpetuity for the conservation and management of Aboriginal cultural heritage places, landscapes and values;
 - the LCACHCA will be protected permanently from all mining (open cut, underground, highwall), exploration drilling and associated development disturbance;
 - the establishment of strictly controlled non-access zones and access protocols around culturally sensitive areas as determined in consultation with the CHWG;
 - the identification of areas for potential use by the Aboriginal community for cultural and community purposes;
 - the identification of areas for potential active Aboriginal cultural heritage and landscape management, including vegetation rehabilitation;
 - the processes and protocols by which ongoing Aboriginal community access to the LCACHCA can be facilitated;
 - procedures for access and works for maintenance of existing infrastructure, land management, environmental compliance, land management and safety requirements;
 - the Aboriginal community, through a LCACHCA management committee, will advise on the implementation of the management plan; and
 - provision for an active Aboriginal community role in both Aboriginal cultural heritage and environmental management activities for the LCACHCA.

The Plan of Management will guide work in the initial stages (years 1-5) of establishing the LCACHCA. The Plan of Management addresses a number of complex tasks and expectations and therefore needs to be flexible and to be responsive to changes as the process evolves over time. The Plan of Management will be jointly reviewed by MTW and the CHWG on an annual basis.

2 Governance

2.1 Background

It is important that the governance framework for managing the LCACHCA is well considered and appropriately structured. The current forum for decision making about general cultural heritage management on Yancoal's MTW owned lands is the Cultural Heritage Working Group (CHWG). The CHWG was established in 2005 by agreement between the company and stakeholders of the Upper Hunter Valley Aboriginal community. Membership of the CHWG is open to Aboriginal people who have registered their interest in the management of cultural heritage on lands on which the company conducts operations in the Upper Hunter Valley as Registered Aboriginal Parties in conformance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (OEH).

More specifically, however, a Wollombi Brook Aboriginal Cultural Heritage Conservation Area (WBACHCA) Plan of Management Implementation Group (PMIG) has been established as a decision making group for that area, comprised of members of the CHWG and company personnel. It is intended that this group would initially be authorised to make decisions on behalf of the CHWG regarding the LCACHCA.

2.2 Governance Matters

2.2.1 Land Tenure and Protection Arrangements

It is noted that under condition 27 of development approval SSD-6465 MTW is required to enter into a conservation agreement pursuant to section 69B of the *National Parks and Wildlife Act 1974* (NPW Act) relating to the LCACHCA. The Conservation Agreement will protect the LCACHCA from any future development disturbance in perpetuity. The Conservation Agreement references this Plan of Management. The Conservation Agreement must also be registered pursuant to section 69F of the NPW Act.

This Plan of Management details the activities and management measures that are permissible under the Conservation Agreement and also the enduring obligations assumed by MTW under the conditions of the SSD-6465 consent in relation to the conservation area. The management measures prescribed in this plan are permitted under the terms of the Conservation Agreement and conform with section 87A (d) under Division 12 of Part 4 of the NPW Act.

Whilst MTW retains ownership of the LCACHCA lands, MTW will continue to manage the lands in accordance with the terms of the Conservation Agreement and provisions of this Plan of Management and in consultation with the CHWG

and other relevant stakeholders including any registered or determined native title parties with direct interests in these lands.

2.2.2 Decision Making – Plan of Management Implementation Group

The Plan of Management Implementation Group (PMIG) initially established for the WBACHCA will also guide implementation of this Plan of Management. The group consists of representatives of the aboriginal community and MTW.

3 Aboriginal Cultural Heritage

3.1 Description and Values

Archaeological and Aboriginal cultural heritage assessments have identified a range of Aboriginal cultural heritage sites within the LCACHCA, dominated by stone artefact assemblages. A total of 68 places containing Aboriginal cultural heritage have been identified and recorded within 88 hectares of the LCACHCA lands.

3.2 Cultural Heritage Site Protection

The fundamental purpose of the LCACHCA is for the conservation and protection, in perpetuity, of significant Aboriginal cultural heritage landscapes and sites, by and for the Aboriginal people of the Upper Hunter. This is safeguarded by the LCACHCA Conservation Agreement.

The ongoing conservation and protection of the Aboriginal cultural heritage landscapes and sites will require a combination of passive and active management measures. Passive management includes the recording and monitoring of existing or newly identified Aboriginal Places, objects or artefacts. Active management includes the implementation of management measures for conservation, soil erosion and vegetation control, mitigation, monitoring and cultural use and maintenance activities.

As the majority of identified Aboriginal Cultural Heritage sites lie within the MTW Development Consent area any necessary site management will be carried out in accordance with the MTW Aboriginal Heritage Management Plan. Management of sites outside of the Development Consent boundary will be carried out in accordance with the National Parks and Wildlife Act 1974 (NPW Act).

3.3 Key Management Issues

3.3.1 Community Access

One of the core community aspirations for the LCACHCA is for the provision of community access to visit the area for cultural, community, educational, training, recreational and other purposes. Community access protocols and arrangements will be developed and overseen by the PMIG and include the following provisions.

- a. The identification of areas for use by the Aboriginal community for cultural and community purposes;

-
- b. The identification of areas for active Aboriginal cultural heritage and landscape management, including vegetation rehabilitation; and
 - c. The development and ongoing oversight of the processes and protocols by which ongoing Aboriginal community access to the LCACHCA can be facilitated.

4 Natural heritage

Since European settlement, the native forests and woodlands of the Hunter Valley catchment have been extensively cleared and used for agriculture. Much of this clearing took place over 100 years ago as some of the earliest farming ventures within NSW occurred there. The result has been that much of the original native vegetation has been either removed or heavily modified. While this is also the history of the LCACHCA, the area offers the opportunity for rehabilitation which is an important value for the Aboriginal community.

The natural environment of the LCACHCA can be best described as former open grazing land that is currently regenerating naturally. The riparian areas along the banks of Loder Creek are more heavily vegetated than the surrounding plains, with Central Hunter Swamp Oak Forest the predominant vegetation community.

Over 200 native vertebrates have been recorded within the MTW area. This includes 13 amphibian, 144 bird, 34 mammal and 19 reptile species. A total of 17 threatened fauna species including 10 bird and seven mammal species have been recorded within the MTW area. Additionally, four bird species that have been assigned preliminary determinations for listing as threatened under the TSC Act have also been recorded. There is a high potential for the LCACHCA to act as habitat for endangered fauna species as its ecological systems are re-established and actively managed.

4.1 Biodiversity Management

The management of the natural values of the area will primarily be the responsibility of MTW's environmental management staff. Environmental management activities within the LCACHCA are likely to consist of:

- The removal of redundant fencing and other rural infrastructure
- Closure, maintenance, upgrade or instatement of vehicle tracks
- Weed management
- Feral animal control
- Vegetation management & re-establishment
- Threatened species management
- Erosion & sediment control
- Vegetation removal
- Fire management

5 Infrastructure and Facilities

5.1 Description

The LCACHCA lands include a variety of infrastructure associated with previous land uses including:

- unsealed roads and tracks; and
- fencing, gates and yards.

5.2 Management Issues

Access Roads and Tracks

Some of the unmaintained roads and vehicle tracks are subject to erosion which in some cases may impact cultural heritage sites. There is a need to determine which roads are required for access and management and to close and remediate those that are surplus to requirements or intersect with Aboriginal cultural heritage sites.

Fencing and Gates

The majority of the internal fencing is in poor condition and redundant. Some existing boundary fencing will require upgrading, including installation or upgrading of lockable gates, or fencing off redundant gates in boundary fence-lines. New fencing will be required in some areas for cultural and natural heritage management purposes.

Where vehicle access roads or tracks traverse into the LCACHCA at locations without gates and/fencing then lockable gates, adequate fencing and restricted access signage will be installed and maintained.

6 Interim Zoning Plan

MTW and the CHWG have developed an interim Cultural Heritage Management Zoning Plan (CHMZP) for the LCACHCA based on the resource information gathered and the planned uses for the area. There are two CHMZP zone classifications as follows:

- Zone A - resource conservation and management zone; and
- Zone B – general community use and infrastructure zone.

It is intended that the PMIG will review and revise the management zone plan in consultation with the CHWG to reflect changes in access and use as they are developed over time to guide the implementation of zoning management requirements.

It should be noted that areas containing recorded Aboriginal cultural heritage sites are located within the LCACHCA where no ground disturbance is permitted. Typically these areas will be delineated with either fencing and/or signage with no vehicle access permitted. There is also a powerline easement running through the south-west portion of the LCACHCA where utilities access will need to remain permissible, while avoiding Aboriginal cultural heritage sites.

An outline of the uses and management regime for each zone follows and an interim zone plan is in **Figure 3**.

6.1 Zone A - Resource Conservation and Management Zone

Areas zoned for cultural and natural resource conservation and management activities such as ecosystem restoration and rehabilitation where limited access and ground disturbance would be permitted in compliance with agreed management protocols.

6.2 Zone B – General Community Use and Infrastructure Zone

Areas zoned for general community access and use such as day visit areas and approved access tracks. Access to these areas will be subject to oversight by the PMIG to comply with approved community access protocols and conditions.

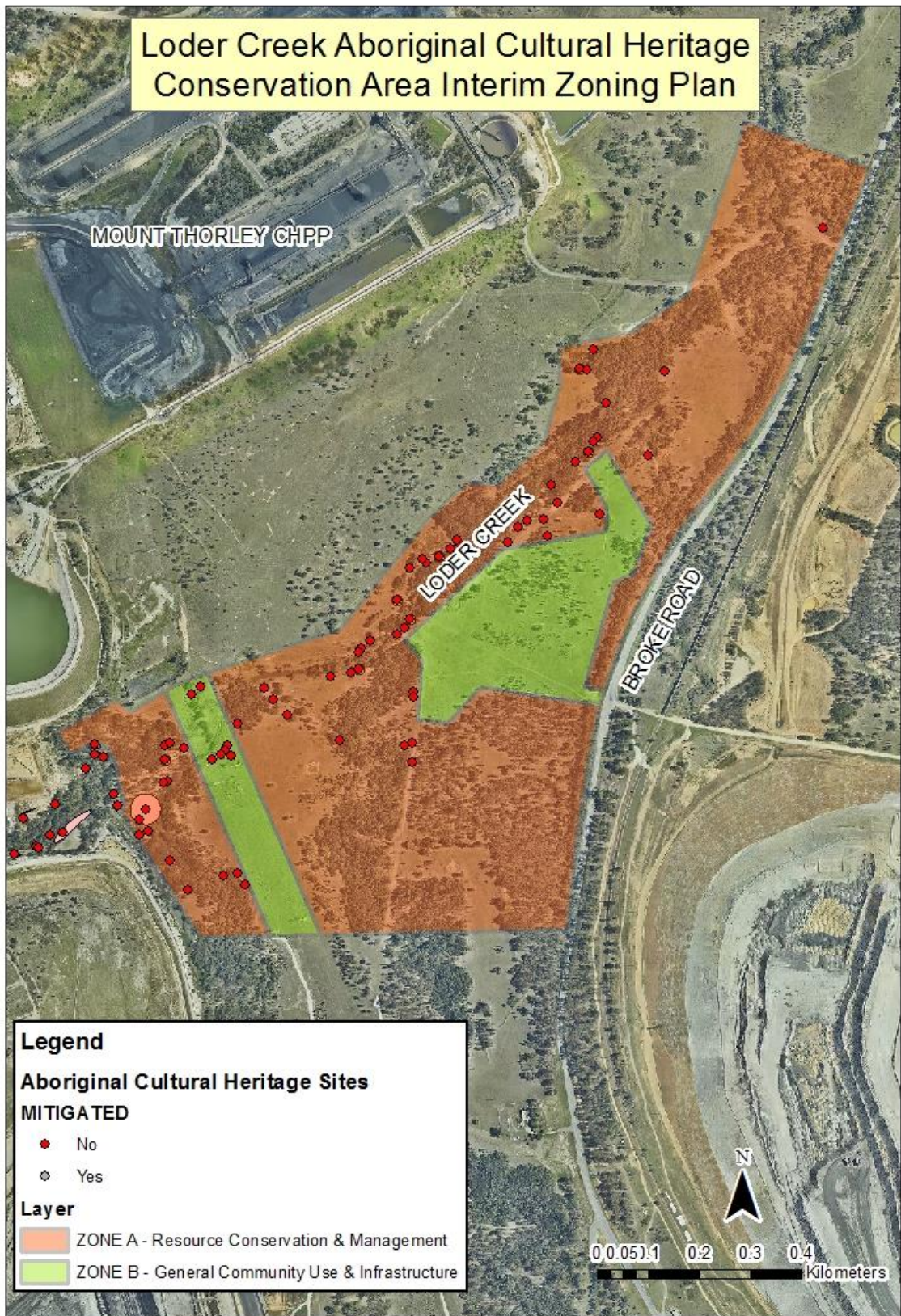


Figure 3. Figure 3. LCACHCA Interim Zoning Plan

7 Management Priorities

Table 5 below sets out the initial priorities for management that have been identified by MTW and the CHWG. These priorities will be revised as management arrangements are implemented for the LCACHCA.

Governance and decision making			
Objectives	Actions	Priority	Target Date
Establish LCACHCA governance arrangements	Plan of Management Group (PMIG) established	High	Q2 2019
Cultural Heritage			
Objectives	Actions	Priority	Target Date
In perpetuity protection of Cultural Heritage	Execution of LCACHCA Conservation Agreement	High	Q1 2020
	Implement this Management Plan	High	Q2 2019
Natural Heritage			
Objectives	Actions	Priority	Target Date
Establish environmental management arrangements with MTW Environmental Services	MTW Environmental Services team to develop integrated environmental management arrangements in consultation with the PMIG.	Medium	Q2 2019
Infrastructure			
Objectives	Actions	Priority	Target Date
Identify status of current infrastructure	Infrastructure audit conducted	Medium	Q2 2019
Management of Infrastructure	Upgrade and maintain infrastructure as described in this plan	Medium	Q4 2019

Table 2. LCACHCA management priorities

8 Appendices

8.1 Cultural Heritage Site Data

The following table lists the cultural heritage sites located in the LCACHCA, extracted from the MTW cultural heritage sites database.

Site Name	AHIMS ID	Site Type
MTW-601	37-6-3209	Isolated Stone Artefact/s
MTW-602	37-6-3208	Isolated Stone Artefact/s
MTW-603	37-6-3207	Isolated Stone Artefact/s
MTW-604	37-6-3214	Isolated Stone Artefact/s
MTW-605	37-6-3215	Isolated Stone Artefact/s
MTW-606	37-6-3206	Isolated Stone Artefact/s
MTW-607	37-6-3205	Isolated Stone Artefact/s
MTW-608	37-6-3216	Isolated Stone Artefact/s
MTW-609	37-6-3211	Isolated Stone Artefact/s
MTW-610	37-6-3217	Isolated Stone Artefact/s
MTW-611	37-6-3204	Isolated Stone Artefact/s
MTW-614	37-6-3203	Isolated Stone Artefact/s
MTW-615	37-6-3202	Isolated Stone Artefact/s
MTW-618	37-6-0312	Isolated Stone Artefact/s
MTW-619	37-6-0314	Isolated Stone Artefact/s
MTW-620	37-6-0315	Isolated Stone Artefact/s
MTW-625	37-6-0317	Isolated Stone Artefact/s
MTW-626	37-6-3201	Isolated Stone Artefact/s
MTW-627	37-6-3200	Isolated Stone Artefact/s
MTW-628	37-6-3199	Isolated Stone Artefact/s
MTW-629	37-6-3198	Isolated Stone Artefact/s
MTW-630	37-6-3212	Isolated Stone Artefact/s
MTW-631	37-6-3213	Isolated Stone Artefact/s
MTW-632	37-6-3197	Isolated Stone Artefact/s
MTW-633	37-6-3196	Isolated Stone Artefact/s
MTW-634	37-6-3195	Isolated Stone Artefact/s
MTW-635	37-6-3194	Isolated Stone Artefact/s
MTW-636	37-6-3193	Isolated Stone Artefact/s
MTW-637	37-6-3192	Isolated Stone Artefact/s
MTW-638	37-6-3191	Isolated Stone Artefact/s
MTW-639	37-6-3190	Isolated Stone Artefact/s
MTW-640	37-6-3189	Isolated Stone Artefact/s
MTW-641	37-6-0318	Isolated Stone Artefact/s
MTW-642	37-6-3188	Isolated Stone Artefact/s

MTW-643	37-6-3187	Isolated Stone Artefact/s
MTW-644	37-6-3186	Isolated Stone Artefact/s
MTW-649	37-6-3210	Isolated Stone Artefact/s
MTW-650	37-6-3185	Isolated Stone Artefact/s
MTW-651	37-6-3184	Isolated Stone Artefact/s
MTW-653	37-6-3183	Isolated Stone Artefact/s
MTW-654	37-6-3182	Isolated Stone Artefact/s
MTW-657	37-6-0657	Isolated Stone Artefact/s
MTW-662	37-6-0656	Isolated Stone Artefact/s
MTW-663	37-6-3180	Isolated Stone Artefact/s
MTW-664	37-6-3179	Isolated Stone Artefact/s
MTW-665	37-6-3178	Isolated Stone Artefact/s
MTW-666	37-6-3177	Isolated Stone Artefact/s
MTW-612	37-6-0317	Isolated Stone Artefact/s
MTW-613	37-6-0317	Isolated Stone Artefact/s
MTW-616	37-6-0314	Isolated Stone Artefact/s
MTW-617	37-6-0314	Isolated Stone Artefact/s
MTW-621	37-6-0316	Isolated Stone Artefact/s
MTW-622	37-6-0316	Isolated Stone Artefact/s
MTW-623	37-6-0317	Isolated Stone Artefact/s
MTW-624	37-6-0317	Isolated Stone Artefact/s
MTW-645	37-6-0318	Isolated Stone Artefact/s
MTW-646	37-6-0318	Isolated Stone Artefact/s
MTW-647	37-6-0318	Isolated Stone Artefact/s
MTW-648	37-6-0318	Isolated Stone Artefact/s
MTW-652	37-6-0660	Isolated Stone Artefact/s
MTW-655	37-6-0658	Stone Artefact Scatter / Knapping Floor
MTW-656	37-6-3181	Isolated Stone Artefact/s
MTW-658	37-6-0657	Isolated Stone Artefact/s
MTW-659	37-6-0319	Stone Artefact Scatter / Knapping Floor
MTW-660	37-6-0319	Isolated Stone Artefact/s
MTW-661	37-6-0319	Isolated Stone Artefact/s
MT 27	37-6-0313	Stone Artefact Scatter
B76	37-6-0659	Stone Artefact Scatter