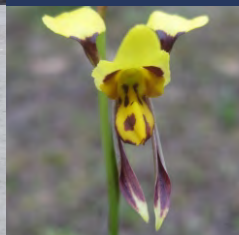
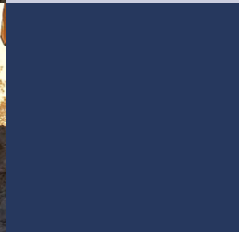
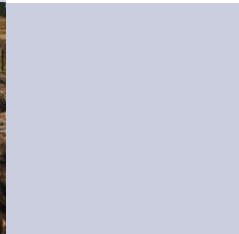
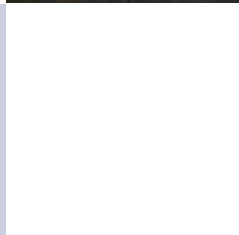
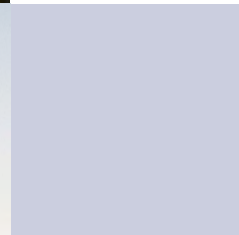
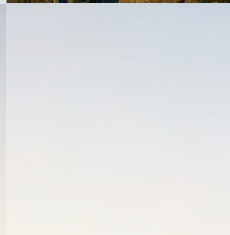
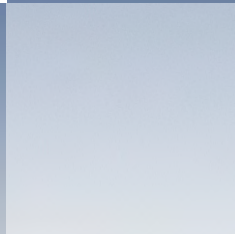
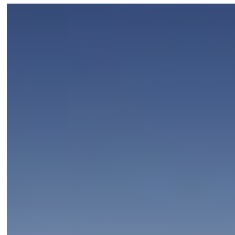
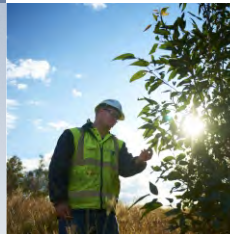


Environmental Impact Statement

BULGA OPTIMISATION PROJECT

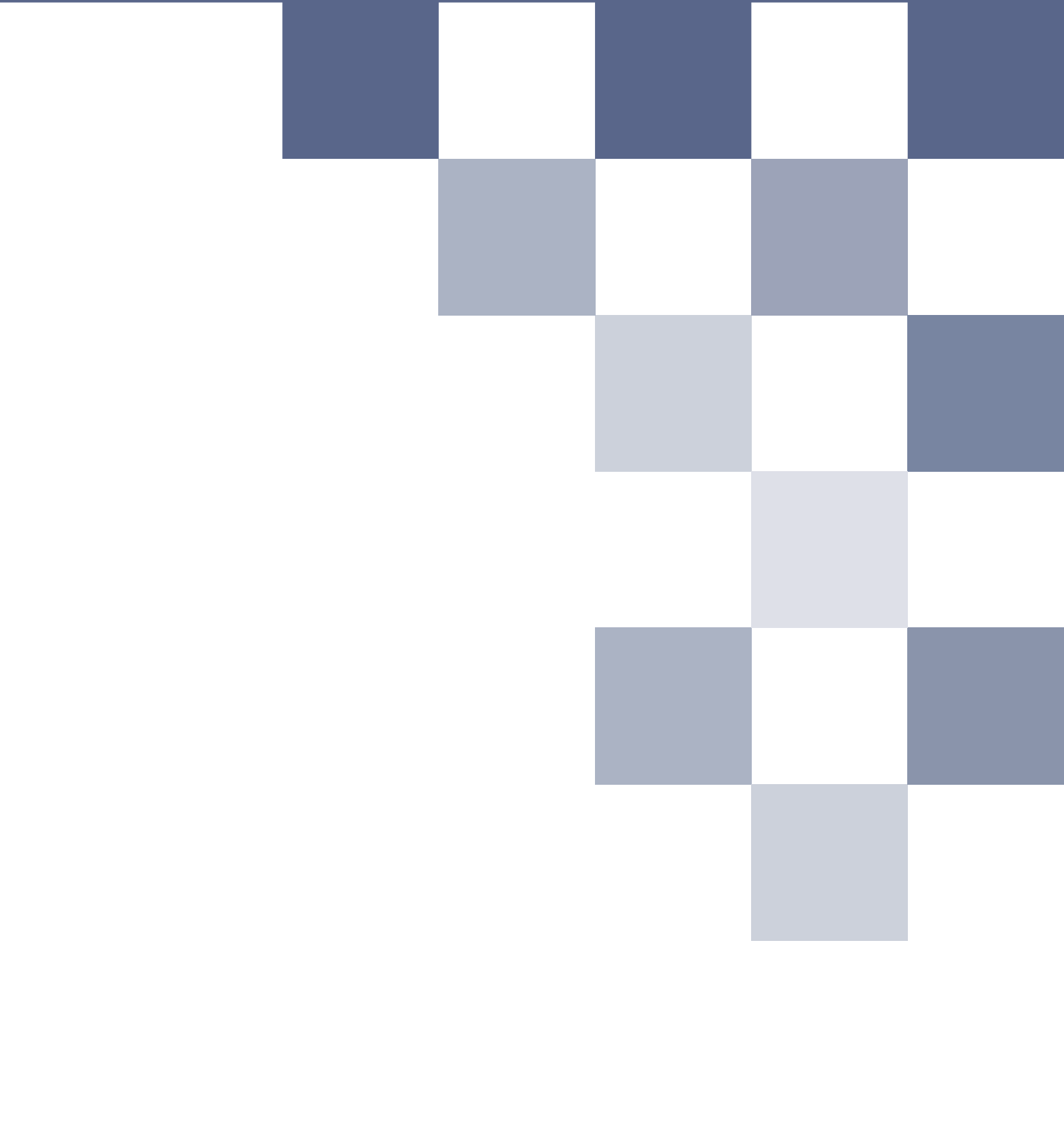
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Volume 6A
APPENDIX 13a
Part 1

Appendix 13a (Part 1)

Aboriginal Cultural Heritage Assessment
- Main Text and Appendix A





Bulga Optimisation Project

Aboriginal Cultural Heritage Assessment

Final Report, April 2013



Prepared by

Connect for Effect Pty Limited

on behalf of

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Document Control

Document: Aboriginal Cultural Heritage Assessment, Bulga Optimisation Project

Ref.: ACHA-Public-01

Date: 18 April 2013

Prepared by: Jane Delaney-John

Reviewed by: Bulga Coal Management, Umwelt Australia, OzArk and all Registered Aboriginal parties

Statement

Connect for Effect provides consultancy services to proponents who are required under law to submit a cultural heritage assessment. Those consultancy services include the gathering and impartial review of cultural knowledge of relevant Aboriginal individuals and communities and groups affected by the proponent's development.

Pro Bono Services

While undertaking this assessment, Connect for Effect has also given pro bono assistance to a number of organisations, individuals and groups who have been consulted with during this assessment. This pro bono assistance is provided to build capacity of people to participate in processes and opportunities afforded to them, to support inclusion and the advancement of Aboriginal people and the healing of communities and families. It is not intended to have any detrimental effect on the rights of any other person or organisation. Connect for Effect does not have any vested interests in any Native Title claims put forward by any individuals in the communities in which it consults.

At no time does Connect for Effect offer legal services as part of the pro bono works. Nor does Connect for Effect have any contractual legal relationship with those parties to which it provides pro bono assistance. Connect for Effect does not receive any commercial benefit, monetary or otherwise, from providing pro bono assistance. More information can be provided to any party interested in the details of the pro bono services offered by Connect for Effect upon request.

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Notice for Historic Records

Some of the information contained within the historic records of this ACHA may be viewed as being offensive to Aboriginal people because of the context in which they were created. Often the language and opinions expressed in the records may be considered as highly offensive.

Notice for Sensitive Cultural and Personal Information

Some of the information contained within this report may be viewed as being offensive to some Aboriginal communities because of the context in which they were created.

Many of the records referenced were created in response to government policies and legislation that had a major impact on Aboriginal families and communities and may be seen as being offensive. Connect for Effect would like to express regret for any pain or distress this may cause persons, family or community members.

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This ACHA report contains photographs which may contain the names or images of people who are now deceased. Some Aboriginal and Torres Strait Islander communities may be distressed by seeing the name, or image of a community member who has passed away.

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Acknowledgement

We would like to acknowledge the Traditional Custodians of the Project area of this assessment – the Wonnarua Peoples – and pay respect to their cultural heritage, beliefs and continuing relationship with the land.

We would also like to acknowledge the post-contact experiences of Aboriginal peoples who have attachment to the Project area and surrounds.

We pay our respect to the Elders – past, present and future – for they hold the memories, traditions, culture and hopes of Aboriginal Peoples in the region.

We recognise the important role of the registered Aboriginal parties in assessing and managing the Aboriginal cultural heritage values of the Project area and support their custodial and legislative rights and obligations to participate in the Aboriginal Cultural Heritage Assessment process.

We thank the registered Aboriginal parties for their partnership in this Project. Their willingness to participate in discussions during field survey and to contribute in a meaningful way during workshops is greatly appreciated.

This Aboriginal Cultural Heritage Assessment has been informed and enriched by the involvement of registered Aboriginal parties and reflects the various levels of attachment to and cultural values of the Project area and more broadly the region.

Attributions

This ACHA report includes culturally sensitive confidential and non-disclosed information available only to the regulator to inform the assessment and may not be used for any other purpose.

Connect for Effect would like to acknowledge the participation of registered Aboriginal parties, including Traditional Owners, cultural Knowledge Holders, Elders and those with historic and contemporary connections to community, in preparing this Aboriginal cultural heritage assessment; and acknowledge the sharing of personal, cultural and historic knowledge which has informed this assessment report.

Some registered Aboriginal parties have chosen to restrict access to some of their cultural values and culturally sensitive information. Protocols to manage sensitive cultural information have been developed and are reflected in this report.

The Plains Clans of the Wonnarua People Native Title claimant group (PCWP) has undertaken their own Aboriginal cultural heritage values assessment through Tocomwall Pty Ltd. The cultural values assessment presented in the PCWP's ACHA report (appended as **Appendix C1**) is restricted because of its cultural sensitivity and has not been referenced or synthesised with other information provided in this ACHA report. Connect for Effect has not been provided with statements of cultural values by PCWP to inform this ACHA. However, management measures, care and control suggestions, intergenerational equity considerations and review of the Draft Aboriginal Cultural Heritage Assessment have been provided by the PCWP to Bulga Coal Management (BCM) and the information is referenced in this report and has informed the assessment. Connect for Effect would like to acknowledge the PCWP for their contributions. BCM would like to thank the PCWP for their contributions to informing the assessment.

The Wonnarua People (WP) Native Title Claimant group has also undertaken their own Aboriginal cultural heritage values assessment through the Wonnarua Nation. The cultural values assessment presented in the WP's ACHA report (appended as **Appendix C2**) is also restricted for cultural reasons and has not been referenced or synthesised with other information provided in this ACHA report. Connect for Effect has not been provided with statements of cultural values to inform this ACHA. . However, management measures, care and control suggestions, intergenerational equity considerations and review of the Draft Aboriginal Cultural Heritage Assessment have been provided by the WP to BCM for the purposes of inclusion in this ACHA. This information is referenced in this report and has informed the assessment. Connect for Effect and BCM would like to acknowledge and thank the Wonnarua People for their contributions.

The Wonnarua Traditional Custodians (WTC Elders, spokespersons, and registered Aboriginal parties who identified as part of this group provided cultural heritage values, documentation and assessment, which have been included within this ACHA report. Connect for Effect would like to acknowledge and thank the WTC for their contributions of cultural values and cultural heritage management, care and control, intergenerational equity suggestions and draft review comments to inform this ACHA.

The Wanaruah Local Aboriginal Land Council (WLALC) board and Chief Executive Officer provided cultural heritage values, documentation, and links to historic records and assessment to inform this ACHA, which have been included in this ACHA report. Connect for Effect would like to acknowledge and thank the WLALC for their contribution.

Registered Aboriginal parties who identify a range of historic and contemporary attachment to the Broke region and the Hunter Valley Aboriginal community also provided cultural values statements and care and control and intergenerational equity suggestions to inform this ACHA, which have been included in this report. Connect for Effect would like to acknowledge and thank all registered Aboriginal parties for their contribution.

OzArk Environmental and Heritage Management Pty Limited (OzArk) provided archaeological assessment information to inform this ACHA, which has been included in this report. Connect for Effect would like to thank and acknowledge Ben Churcher and the OzArk team for their contribution.

Umwelt Australia provided technical and environmental details to inform this ACHA which has been included in this report. Connect for Effect would like to acknowledge and thank Umwelt Australia for their contribution to inform this report.

BCM has actively engaged with and supported registered Aboriginal parties' participation in the ACHA process and provided Project-specific information. BCM has also been committed to the adoption of approaches to respond to registered Aboriginal parties values assessment findings and concerns relating to the Project and preferred consultation approaches. BCM information has been included in this ACHA report. Connect for Effect would like to thank and acknowledge BCM for its contribution to inform this report.

The ACHA process for the Project EIS and this ACHA report was coordinated by Jane Delaney-John (Community Development Manager, Connect for Effect), who also designed and developed the Aboriginal community engagement model's development and consultation approach for the Project ACHA, in consultation with the BCM Project team.

Connect for Effect attributes all copyright relating to cultural sharing to the contributors, and all contributions provided by registered Aboriginal parties are attributed to them and copyright ownership applies. Use of any material provided by registered Aboriginal parties is restricted to this assessment purpose. The cultural values information contained in this ACHA report and related appendices must not be referenced for any other purpose unless permitted by the relevant contributing parties.

Executive Summary

Aboriginal people have occupied the NSW landscape for at least 42,000 years (OEH 2011), and are part of the oldest and continuous living culture in human history. This depth of history and attachment is evidenced in archaeological sites and features, as well as in the memories, stories and cultural associations that link Aboriginal people today to their traditional land or Country. Aboriginal cultural heritage therefore exists throughout all lands and waters in Australia as tangible and intangible heritage, and collectively this heritage forms a unique and irreplaceable part of Australia's national cultural heritage and identity (AHC 2002).

The Bulga Coal Complex (BCC) is located approximately 12 kilometres southwest of Singleton in the NSW Hunter Valley, within the traditional homelands of the Wonnarua¹, whose history extends from the present day back many thousands of years. The Project area is also within the modern day Wanaruah Local Aboriginal Land Council boundary. Through the involvement of registered Aboriginal parties who identify a range of connections to both Country and Community, and through a number of past heritage investigations, the BCC – Bulga Surface Operations (BSO) is understood to contain a range of sites and areas of cultural value, and to contain archaeological sites and features that are of social and scientific value. Mining has been undertaken at the complex for over 30 years through a variety of assessment and approvals processes.

BCM is seeking to continue and expand current operations within the BCC, which would involve the continuation of open cut mining until approximately 2035, and the construction of additional surface facilities and infrastructure including:

- Continued open cut mining;
- New emplacement area to the north of the existing CHPP;
- New surface operations and underground mine infrastructure areas;
- Upgrades to the existing CHPP and coal stockpile areas;
- Development of a new tailings storage facility;
- Relocation of sections of two 330kV transmission lines;
- Realignment of sections of Broke Road and Charlton Road;
- Construction of a new water storage and discharge dam; and
- The development of a noise and visual bund around the western and southern perimeters of the open cut pit.

If approved, the Project would enable the continuation of open cut mining until approximately 2035. A further detailed Project description is included in this ACHA and the EIS.

The Project is a 'State Significant Development' as defined under the *State Environmental Planning Policy (State and Regional Development) 2011* and therefore requires development consent under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

¹ There are numerous spellings of Wonnarua in historical accounts, such as Wanaruah, Wonaruah, Wanarua and Wonnah-Ruah. Note that there is no right or wrong way to spell an Aboriginal word as there was no European form of written expression of Aboriginal language prior to 1788 (Maynard nd). The spelling used throughout this report is generally accepted to refer to the Aboriginal people of the central lowlands of the Hunter Valley at the time of European contact.

As BCM is seeking to continue and expand its current surface mining operations within the BCC, an Environmental Impact Statement (EIS) has been prepared for the Project, to understand the likely impacts of the Project if approved. This ACHA forms part of the EIS for the Project.

Process Overview

This Aboriginal Cultural Heritage Assessment (ACHA) report has been prepared by Connect for Effect in collaboration with registered Aboriginal parties, who participated in the consultation program. It is also informed by the Project's technical archaeological values assessment prepared by OzArk Environmental and Heritage Management Pty Limited (OzArk), which forms **Appendix 13b of the EIS**.

To further inform the assessment process, two independent and non-disclosed ACHA reports have been prepared by the Plains Clans of the Wonnarua People (PCWP) Native Title claimant group and the Wonnarua People (WP) Native Title claimant group (appended as **Appendices C1 and C2**), which incorporate the cultural, historic and aesthetic values of the registered Aboriginal parties associating with these claimant groups that were not captured by the ACHA.

These reports (**Appendices C1 and C2**) are limited to the Department of Planning and Infrastructure and the Office of Environment and Heritage who should consider these reports in conjunction with this ACHA as part of their assessment of the Project.

At the request of these two groups, all parts of these assessment reports, other than the sections related to management measures, are to be kept confidential for cultural reasons. These reports have been developed and appended in line with *Aboriginal cultural heritage consultation requirements for proponents* (DECCW 2010a, Fact Sheet 3 – Cultural Knowledge and its Protection).

The three Aboriginal Cultural Heritage reports have been used by BCM to consider the significance of Aboriginal cultural heritage on and around the Project area. The understanding of significance has also informed BCM in its development of cultural heritage management measures. The publicly disclosed management measures are included in this ACHA. One avoidance measure and one management measure are appended to this ACHA in the confidential, non-disclosed **Appendices C1 and C4**. This ACHA and the approach have been aligned to:

- The Director Generals Requirements (DGR's) for the Project;
- Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (DEC 2005);
- The principles of *The Burra Charter* (Australia ICOMOS 1999);
- Aboriginal cultural heritage consultation requirements for proponents (DECCW 2010a); and
- The key elements of the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011).

The approach taken acknowledges and respects that Aboriginal people have the right to directly participate in matters that may affect their heritage, and have the right to maintain culture, language, knowledge and identity.

Refer to **Sections 1.3 and 2** of this ACHA for further discussion on the Project's Aboriginal cultural heritage assessment approach.

One of the aims of this ACHA report was to identify Knowledge Holders and to document the range of Aboriginal cultural values of the Project area, as identified through consultation with registered Aboriginal parties and through integration of historic and archaeological information relating to the Project area.

This ACHA also incorporates the archaeological management strategy suggested by OzArk (refer **Appendix 13b of the EIS**) and the consolidated management measures, including those received from the PCWP and WP in relation to management and mitigation measures. A summary of this process is shown in **Figure 1**.

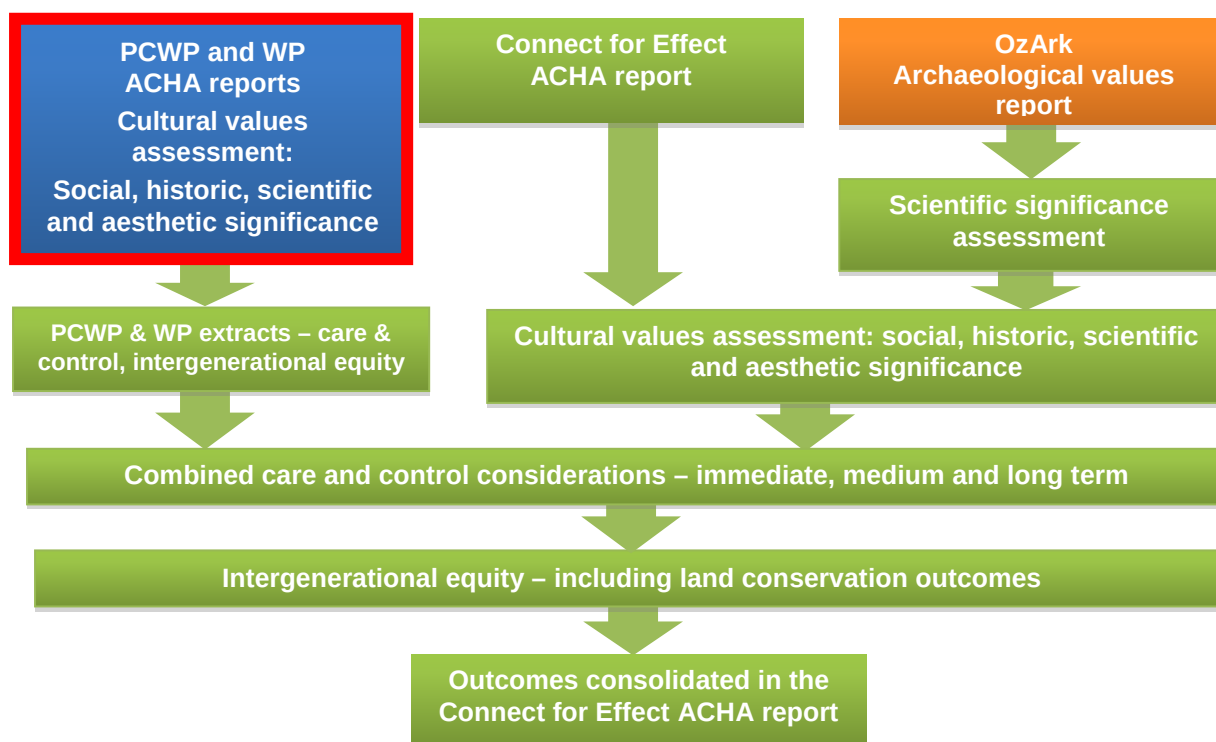


Figure 1: Integrated ACHA Report Approach

Registered Aboriginal Parties Consultation and Involvement

Consultation with registered Aboriginal parties for the Project was undertaken with reference to the relevant DEC (2005) and DECCW (2010a) guidelines and in accordance with the principles of *The Burra Charter* (Australia ICOMOS 1999). Consultation has involved four consultation stages as detailed in the DECCW (2010a) guidelines, as detailed below.

- **Stage 1:** Aboriginal parties with an interest in the Project were identified through formal Agency notifications and public advertising in accordance with DECCW (2010a) guidelines, inviting Aboriginal parties to register an interest in the Project. Registrations of interest were received.
- **Stage 2:** BCM, Connect for Effect, OzArk and Umwelt provided information about the Project to all registered Aboriginal parties who had registered during the formal Stage 1 notification period, including undertaking field visits with registered Aboriginal parties to review the Project area. Further briefing sessions and information were provided to new registrants throughout the consultation program.
- **Stage 3:** BCM, Connect for Effect and OzArk developed a methodology for the assessment of Aboriginal cultural heritage in the Project area that included a consultation framework and consultation protocols. BCM, Connect for Effect and OzArk provided the methodology to the registered Aboriginal parties for review and comment.

During Stage 3 consultation, OzArk and registered Aboriginal parties carried out archaeological surveys of the Project area. BCM, Connect for Effect and OzArk held consultations with registered Aboriginal parties prior to and following the archaeological surveys to discuss cultural significance values and to identify management measures using a scenarios discussion model of “no Project approval” and “Project approval”; care and control arrangements and intergenerational equity suggestions. Additional walks on Country/site/field visits to record cultural values were also provided to interested registered Aboriginal parties.

BCM, Connect for Effect and OzArk also developed the proposed management measures, care and control arrangements and intergenerational equity proposals based on the contributions of registered Aboriginal parties, and proposed management measures provided by the PCWP and WP.

In accordance with relevant guidelines, this Stage also included:

- The collation of multi-faceted information on the Aboriginal cultural heritage of the Project area, spanning the physical setting, the history of peoples living on that land (sourced through historical sources, oral histories and archaeological studies), the material evidence (archaeological and contemporary) of peoples living on that land, and the cultural values associated with the land. The process for collating this information is discussed in **Section 4** and **Appendix A**;
 - The synthesis and integration of information collated, to generate an understanding of the cultural landscape of the Project area and identify the range of heritage values present (being the cultural significance assessment process). The process for understanding and assessing the cultural landscape of the Project area is discussed in **Sections 4** and **Section 5**;
 - The presentation of information regarding the Project, and an analysis of the harm or impact that the Project would have on the range of cultural heritage values identified, including both direct and indirect impacts and harm. The process for assessing impacts or harm of the Project, if approved, is discussed in **Section 6**;
 - A justification for any likely impacts or harm, considering alternatives considered, and measures that would be implemented to avoid, mitigate or offset the likely impact or harm are included in the ACHA. Aboriginal input has been considered in the assessment of impacts or harm, the development of management measures and in making final Aboriginal cultural heritage recommendations. The process for considering management measures is discussed in **Sections 6.3** and **Section 7**; and
 - The presentation of specific management outcomes for Aboriginal cultural heritage, including the nature and location of any offsets, requirements for further work to mitigate impacts such as archaeological salvage, specific on-going cultural heritage protocols and specific Aboriginal community requirements. This process for determining appropriate management outcomes is discussed in **Section 7.4** (Project approval scenario) and **Section 7.5** (no Project approval scenario) and of this report.
- **Stage 4:** BCM and Connect for Effect sought review and comment from registered Aboriginal on the draft ACHA report and draft *Aboriginal Archaeological Values Assessment* report. This ACHA report forms part of the EIS for consideration as part of the development assessment process.

Throughout the course of the Project, 63 Aboriginal parties registered an interest in the Project, including 24 Aboriginal parties registering an interest during the formal **Stage 1** registration period, and 39 Aboriginal parties registering an interest during the course of the **Stage 3** assessment process and two Aboriginal parties registering an interest during the draft review period of **Stage 4** draft review and comment process..

The 65 registered Aboriginal parties included:

- Three Native Title claimant groups (PCWP, WP and the WTC (Note the WTC registered an interest in the Project during **Stage 3** of the consultation process). These Native Title claimant groups have had claims registered within the Singleton LGA but outside of the Project area;
- The WLALC;
- Two Aboriginal community organisations; and
- 59 individual Aboriginal parties.

A full list of all registered Aboriginal parties is contained in **Appendix C5**.

As an important part of the registration process, Aboriginal parties identified their connections, knowledge and interests to the Project area, including their level of their cultural knowledge relating to the Project area and the broader region. Registered Aboriginal parties' connection ranged from traditional connection to the Project area, historical connections, connection to Country, connection to community, and reconnecting attachments. Some registered Aboriginal parties stated that while they did not have traditional knowledge, they had an interest in Aboriginal cultural heritage and wanted to contribute Aboriginal cultural values and suggested mitigation approaches to inform the assessment of the Project (refer to **Figure 2**).

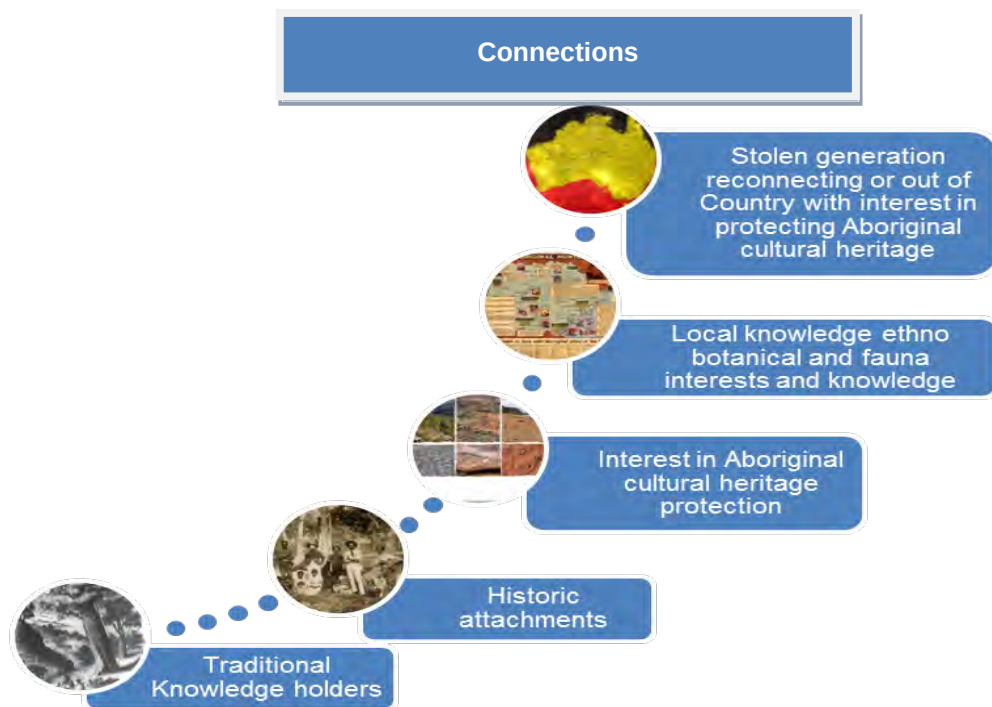


Figure 2: Differing Connections and Attachments

Source: Connect for Effect (2012)

All Aboriginal parties who registered an interest in the Project were invited to participate in the assessment process from the time of their registration, with extensive consultation undertaken over 18 months to inform the ACHA report. Participation opportunities have been provided through:

- Small and large group workshops;
- Individual meetings including site tours;
- Development of two independent cultural heritage values assessments by the PCWP and the WP (refer to **Appendices C1 and C2**);
- Mediation session;
- Archaeological fieldwork including survey and test excavations onsite;
- Walks on Country/site/field visits;
- Phone discussions and interviews; and
- General correspondence via phone and email.

Throughout the ACHA assessment, information has also been provided in formal meetings and presentations, mail outs and newsletters. Full details of the consultation process undertaken are contained in **Section 3** and **Appendix B** encompassing **Appendices B1, B2 and B3**; and **Appendix C** encompassing **Appendices C3, C4 and C5**.

The consultation approach also provided the registered Aboriginal parties with opportunities to decide how they wanted their information shared and to identify any restricted access provisions. It allowed the registered Aboriginal parties to contribute their cultural knowledge through Connect for Effect in either a fully disclosed or restricted access format, or through the preparation of either of the two independent confidential non-disclosed reports of the PCWP or the WP (refer to **Appendices C1 and C2**). It also provided opportunities to identify a range of Aboriginal cultural values of the Project area and levels of attachment. This included social values, historic values, scientific values, aesthetic values and intergenerational values.

The input of registered Aboriginal parties has been included throughout this report, with **Appendices B** and **C** including participating registered Aboriginal parties comments on the history, landscape and archaeology of the Project area, **Section 5.2** including registered Aboriginal parties' comments on the cultural significance of the Project area, **Section 6.2** including registered Aboriginal parties' comments on the impacts of the Project on Aboriginal cultural heritage (ACH) , if approved, and **Section 7.1** including registered Aboriginal parties' input on the ACH management measures (refer to **Section 3** of this ACHA for further discussion on the consultation with and participation of registered Aboriginal parties involved in the Project's ACHA process).

The assessment of cultural values provided by PCWP and WP are contained in their independent confidential ACHA reports (refer to **Appendices C1 and C2**), which have been considered by BCM in determining proposed management measures.

Background Context: the Cultural and Historical Context

The Burra Charter (Australia ICOMOS 1999) framework and OEH guidelines identify that collating and analysing information on natural and cultural history of a place is the first step in understanding its cultural significance; which also requires the development of a historic narrative on the peoples who have and continue to have connection to Country.

In this context, this ACHA has compiled publicly available information on the Project area in a local and regional context, sourced from a range of publicly available archival, historic, ethnohistoric, environmental and archaeological sources. These sources have been synthesised with oral histories and statements from registered Aboriginal parties; with this information used to gain a holistic understanding of the pre-contact and historic Aboriginal histories of the Project area specifically and the region more broadly. Restricted access materials in Federal and State repositories have not been sourced.

This process has considered Wonnarua ways of living at the time of European contact, the depth of Aboriginal history (antiquity), the long term changes in Aboriginal society and culture over time, and the shared experiences of Wonnarua people, other Aboriginal people and settler Australians in historic times. This information is presented in **Appendix A**, with a summary and synthesis presented in **Section 4**.

Social and Cultural Significance Assessment

Cultural significance is dynamic, and reflects the diversity of attachment and experience within any community over time (Australia ICOMOS 1999:1). There is not always consensus about a place's value, because people experience places and view events differently, so expressions of cultural value do vary and in some instances may be in direct conflict (OEH 2011:8). In accordance with OEH guidelines, where values have been provided by the registered Aboriginal parties as an outcome of the consultation process, they have been recorded and presented in this ACHA.

Registered Aboriginal parties also chose to provide comment on the social, historical, aesthetic and scientific values of the Project area as part of their cultural significance assessment, and asserted their traditional custodial rights and Aboriginal rights to do so. The role of this ACHA is to document and not to validate the range of values present.

This ACHA has found that the Project area contains a range of social, historical, scientific and aesthetic cultural significance values, and that these values co-exist in many places. **Section 5** of this ACHA report provides a detailed discussion of these significance values, which are summarised below.

These values should be read in conjunction with the Aboriginal cultural significance assessments contained within two separate and non-disclosed ACHA reports prepared by the PCWP and the WP, appended as **Appendices C1** and **C2**.

Social Significance

Registered Aboriginal parties consulted for this ACHA identified a range of cultural values and attachments to the Project area and the broader region, ranging from traditional connection to the Project area, historical connection, connection to Country, contemporary connection to community, and reconnecting attachments.

In identifying their cultural values of place, the majority of registered Aboriginal parties focused on the significance of the Project area as a whole, rather than the significance of individual places and objects; stating that the Project area and all components within it and external to it can only be understood as part of a larger cultural landscape defined by its cultural, spiritual and social connectivity. While not diminishing the cultural values expressed by registered Aboriginal parties in relation to all cultural and archaeological sites within the Project area; registered Aboriginal parties identified the Loders Creek grinding groove complex as being of high cultural significance and sensitivity (refer to **Appendix C3**).

Registered Aboriginal Parties' Values Assessment – Cultural and Spiritual Values

Statements by registered Aboriginal parties on the social significance of the Project area are detailed below:

- Some registered Aboriginal parties consulted stated that they believe the Broke and Bulga area is sacred as it is surrounded by features linked to spiritual Creation stories;
- Some of the registered Aboriginal parties stated that they identified the Project area and the region more broadly as part of their traditional homelands (Country) and as such retains immeasurable cultural values;
- Registered Aboriginal parties stated that Wonnarua people strongly identified connection to Country, cultural practices and memories relating to the Project area and the region, and as such considered the regional landscape retained immeasurable cultural values;
- Registered Aboriginal parties including Aboriginal people who identified as Traditional Owners and Knowledge Holders stated that the interaction between connections to Country and cultural identity is highly important especially as the traces of the past and their memories contributed to maintaining distinctive Wonnarua and other Aboriginal people's culture, spiritual and cultural interaction with the landscape;
- Most registered Aboriginal parties who attended the November 2011 and May 2012 workshops stated that they identified the pathways and water systems to and from Creation places and places of ceremony as being of high cultural value. While the major waterways outside of the Project area were identified as having very high cultural significance; all waterways, creek lines and tributaries were identified as culturally important as they were believed to be part of the essential spiritual meaning of the place and the people;
- Some registered Aboriginal parties who identified as Traditional Owners and Knowledge Holders shared aspects of the relationship of the Project area to Creation places and areas located outside of the Project area where ceremony and corroborees historically took place: and as such identified the Project area as part of, and integral to, a larger cultural landscape that retains immeasurable values;
- Some registered Aboriginal parties who identified having ethnobotanical knowledge identified indigenous flora and fauna as important cultural resources, and sought to ensure they would be regrown within the Project area as part of the rehabilitation;
- A WTC representative Elder of Broke identified a special men's place within the Project area, which held very high personal, cultural and aesthetic values. The Project design was modified to avoid this sensitive area. Refer confidential non-disclosure "Avoidance Measure" section in **Appendix C4** for mitigation and management redesign details;
- Registered Aboriginal parties stated that the Project area was a place of camping, and place where traditionally small groups would await participation for ceremony by ancestors. Camping areas within the Project area along the northern drainage line, Loders Creek and Nine Mile Creek were identified as significant in terms of their relationship to places of cultural and ceremonial importance external to the Project area;
- Some registered Aboriginal parties who identified as Traditional Owners and Knowledge Holders shared their experiences of following traditional travelling routes via the waterways, gullies and ridges throughout the region and these areas were identified as having high cultural significance;

- Registered Aboriginal parties stated that they identified Nine Mile and Loders Creeks (within the Project area) and Wollombi Brook, Monkey Place Creek (outside of the Project area) and more broadly the Hunter and Goulburn Rivers as forming important parts of the pathways to and from ceremony and to and from sacred Creation places outside of the Project area and as such have immeasurable cultural values;
- Some registered Aboriginal parties identified high cultural values relating to the Loders Creek grinding grooves, the complex and the waterways in the catchment as a whole, describing ancestral use and linkages to ceremony to be of high cultural value. Other registered Aboriginal parties identified the area as important culturally because people they respect have identified the area as culturally important and worthy of protection in previous ACHA assessments of the Project area;
- A WTC representative Elder of Broke stated that there was a specific area within the Loders Creek complex considered to be an area of taboo due to a violent event he believed occurred within the Loders Creek complex and as such is of high cultural sensitivity and significance; and
- Most registered Aboriginal parties expressed high levels of emotion regarding landscape transformation and fragmented cultural and archaeological sites. Feelings of grief and loss were also expressed relating to cumulative impacts and inability to access cultural sites to maintain custodial responsibilities. Feelings of anger and frustration were also expressed relating to approvals to destroy Aboriginal cultural and archaeological sites identified as important to Aboriginal people, including Traditional Owners and Knowledge Holders.

During the consultation process registered Aboriginal parties frequently expressed concern that all cultural artefacts and places are of high cultural significance. However, they also identified some Project areas such as the Loders Creek grinding groove complex and a location within the Project area (not disclosed publicly) (refer **Appendices C3** and **C4**) as having very high cultural values, while identifying pathways and Creation places and other cultural and archaeological sites outside of the Project area as having extremely high social, cultural, historic, scientific and aesthetic traditional, historic and contemporary value.

Registered Aboriginal parties identified the Project area as having high cultural values because all the waterways within Wonnarua Country were identified as being interconnected to spiritual and ceremonial areas including sacred Creation and ceremonial places (located external to the Project area but in close proximity to it). These Creation and ceremonial places located outside of the Project area were identified as having heightened importance as these Creation and ceremonial places were identified as having extremely high value – often described as immeasurable value.

The Project area contains a number of specific archaeological sites of high cultural significance to registered Aboriginal parties including Traditional Owners and Knowledge Holders. The Project area was also identified as a place of continuing traditional and historic association for local Aboriginal families, which has been described as significant, although it is noted that the Project area has been subject to mining activity for the past 30 years.

Historical Significance

The historic narrative identifies that the Project area is associated with a range of historic persons, phases, activities and events, with written records, oral histories and archaeology all contributing to a holistic and multi-faceted understanding of the Aboriginal histories of the region. These are summarised in **Section 4** of this ACHA and discussed in detail in **Appendix A** of this report, which finds that the historic value of the Project area reflects a number of historic themes identified by the Heritage Council of NSW, and include:

- The peopling of Australia (Aboriginal cultures);
- The peopling of Australia (Aboriginal cultures and interactions with other cultures);
- Developing local, regional and national economies (exploration, mining, agriculture);
- Building settlements, towns and cities (land tenure);
- Governing (welfare);
- Developing Australia's cultural life (religion); and
- Marking the phases of life (birth and death).

Registered Aboriginal Parties' Values Assessment – Historic Values

The historical values identified by registered Aboriginal parties are summarised below with further detail contained in **Section 4** and **Appendices B** and **C**:

- Registered Aboriginal parties who identified as having Traditional Owner and Knowledge Holder connections shared direct historical experiences of their attachment to the Project area and throughout the local area of Broke, Bulga, The Vere and Jerry's Plains; which add cultural meaning to the place and was expressed as having high cultural values;
- A WTC representative Elder of Broke, identified by the WTCs' peoples as their main cultural Knowledge Holder of the area, shared knowledge of: hunting with other family members including his father and uncles; native bee tree larder sourcing from both within and outside the Project area; and, a generational connection to the Broke area that had not been broken –expressing high level historic values of both the Project area specifically and the region generally;
- Historic knowledge of continued cultural practices as well as contribution to pastoral life was also shared by the WTC's representative Elder of Broke: sharing his memories of his father's activities in shearing, dingo shooting, hunting for kangaroo pelts, police tracking and farming; and of his own experiences working as a labourer and in the wool sheds. These times with his father were identified as special and were of significant cultural and historic value to him; and
- WTC's representative Elder of Broke also expressed cultural concern in relation to the Loders Creek grinding grooves complex. He stated that while the area still has a significant traditional cultural meaning, he believes it is also the place of a historic violent event which has created coexisting and conflicting meanings and cultural considerations. As such, he believes it has a heightened significance.

Scientific Significance

The assessment of the scientific values of Aboriginal archaeological sites was undertaken by OzArk and is presented in **Appendix 13b of the EIS**. All references to OzArk within this report cite information that is contained within **Appendix 13b of the EIS**.

An extensive history of Aboriginal cultural heritage and archaeological assessments has been conducted within the Project area and immediate surrounds. In recent decades, the Upper Hunter Valley has become one of the most intensively studied regions in NSW with numerous archaeological surveys and excavations conducted in advance of proposed mining activity. This body of research has identified numerous archaeological sites and provides a broad understanding of archaeological site patterning at local and regional levels.

A search of the OEH administered Aboriginal Heritage Information Management System (AHIMS) register by OzArk at the outset of the assessment identified 228 previously recorded Aboriginal archaeological sites within the Project area. Of these, OzArk (**Appendix 13b of the EIS**) reports that 108 have been previously salvaged and or destroyed as the result of past development activities, which included 82 artefact scatters, 25 isolated finds and one hearth.

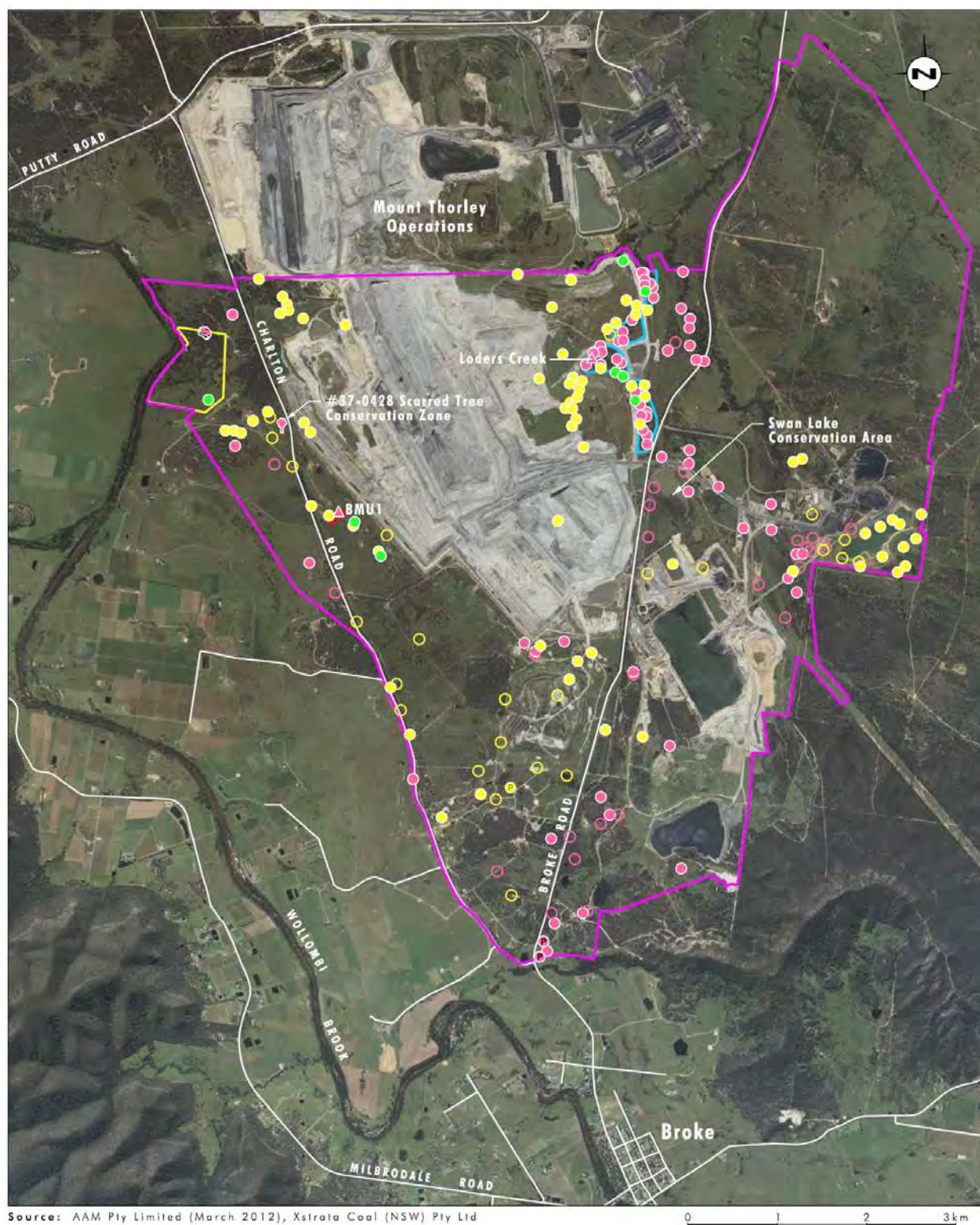
A comprehensive process of checking the location of many of the remaining sites has previously been undertaken by Umwelt and BCM as part of the development of the BCC Aboriginal Cultural Heritage Management Plan (ACHMP). OzArk also visited a number of previously known sites as part of the Project EIS archaeological survey, and consolidated a number of these previously recorded sites as well as newly recorded archaeological sites into large site complexes.

The location of each of these previously recorded sites is shown in **Figure 3**. Of the previously recorded sites in the Project area, two are grinding grooves, one is a scarred tree and the remainder are artefact scatters or isolated finds.

All archaeological sites within the Project area are of scientific significance, being a finite and irreplaceable resource, often being the primary source of information on the thousands of years of pre-contact Aboriginal history. However, the extent of scientific significance of individual sites varies when assessed against criteria such as research potential, rarity, education and representative potential.

The major findings of the archaeological assessment undertaken by OzArk (refer **Appendix 13b of the EIS**) are as follows:

- The survey results agreed with the predictive model and many of the previous archaeological surveys in the Project area in that large sites and /or sites showing complexity are only found along waterways;
- In the majority, only low density artefact scatters or isolated finds are located away from water;
- Site complexity diminishes with the size of the waterway so that artefact exposures on minor waterways exhibit little diversity in raw materials, less well-formed artefacts such as blades and less overall artefact numbers. Artefact exposures on the minor drainage lines tend to have more definite boundaries indicating less blurring of sites from repeated camping episodes;
- Loders Creek has the densest concentration of occupation evidence (i.e. artefacts) with less dense artefact concentrations along Nine Mile Creek and the northern drainage. The least dense artefact distribution is along drainage lines in the northeast of the Project area;
- Very few locations within the Project area had benches of outcropping sandstone in a drainage line. While sandstone is rare, two locations contain grinding grooves (Loders Creek grinding grooves and BMU1); and
- Many artefact scatters recorded during this assessment are in poor condition due to the effects of erosion with either gully erosion completely removing sites, or soil loss from sheet wash, both of which can displace artefacts and remove archaeological deposits.



Legend

 Project Area	● Valid Artefact Scatter
 Destroyed Artefact Scatter	▲ Valid Grinding Groove
 Destroyed Artefact & PAD	○ Valid Isolated Find
 Destroyed Hearth	★ Valid Scarred Tree
 Destroyed Isolated Find	 Loders Creek Conservation Zones
 Partially Destroyed Artefact Scatter	 BMU1 Conservation Zone
● Valid Artefact	 Proposed Wollombi Brook Conservation Agreement Area

Figure 3: Status of All Previously Reported Sites within the Project Area

Source: Umwelt Australia (2013)

The archaeological evidence suggests Aboriginal occupation across all parts of the Project area, with more repeated occupation along the larger waterways and briefer or more sporadic occupation along smaller drainage lines. However, archaeological evidence also suggests that long-term camping was not taking place in the Project area as large occupation camps are currently missing from the archaeological record, and have not been recorded previously. It is likely that more favourable long-term occupation areas existed nearby, outside the Project area. Also lacking from the archaeological record are concentrations of artefacts away from waterways indicating that there was not a feature in the landscape (quarry / ceremonial site) that was regularly visited, or at least, was not associated with camping / stone knapping. Additionally, it does not appear that the Project area contained major pathways away from the waterways because well-used transit camps away from water are also missing from the archaeological record.

The archaeological evidence suggests many sites date to the late Holocene Period. It is suspected, like elsewhere in the region and the State, that this distribution pattern is reflective of hunting and foraging strategies, using the waterways as a focus, over a period of at least several thousand years.

Knapped glass recordings are located primarily in the east of the Project area. The recording of knapped glass artefacts show that Aboriginal use of the Project area continued into the modern period.

The OzArk assessment of scientific significance for archaeological sites within the Project's Disturbance area) identified that BOP SC-8 with PAD and BOP SC-9 with PAD (which includes the Loders Creek grinding groove site) has high scientific values.

The BMU1 grinding groove site is also assessed as having high scientific values, although BMU1 is located in a site complex assessed as having low to moderate scientific values.

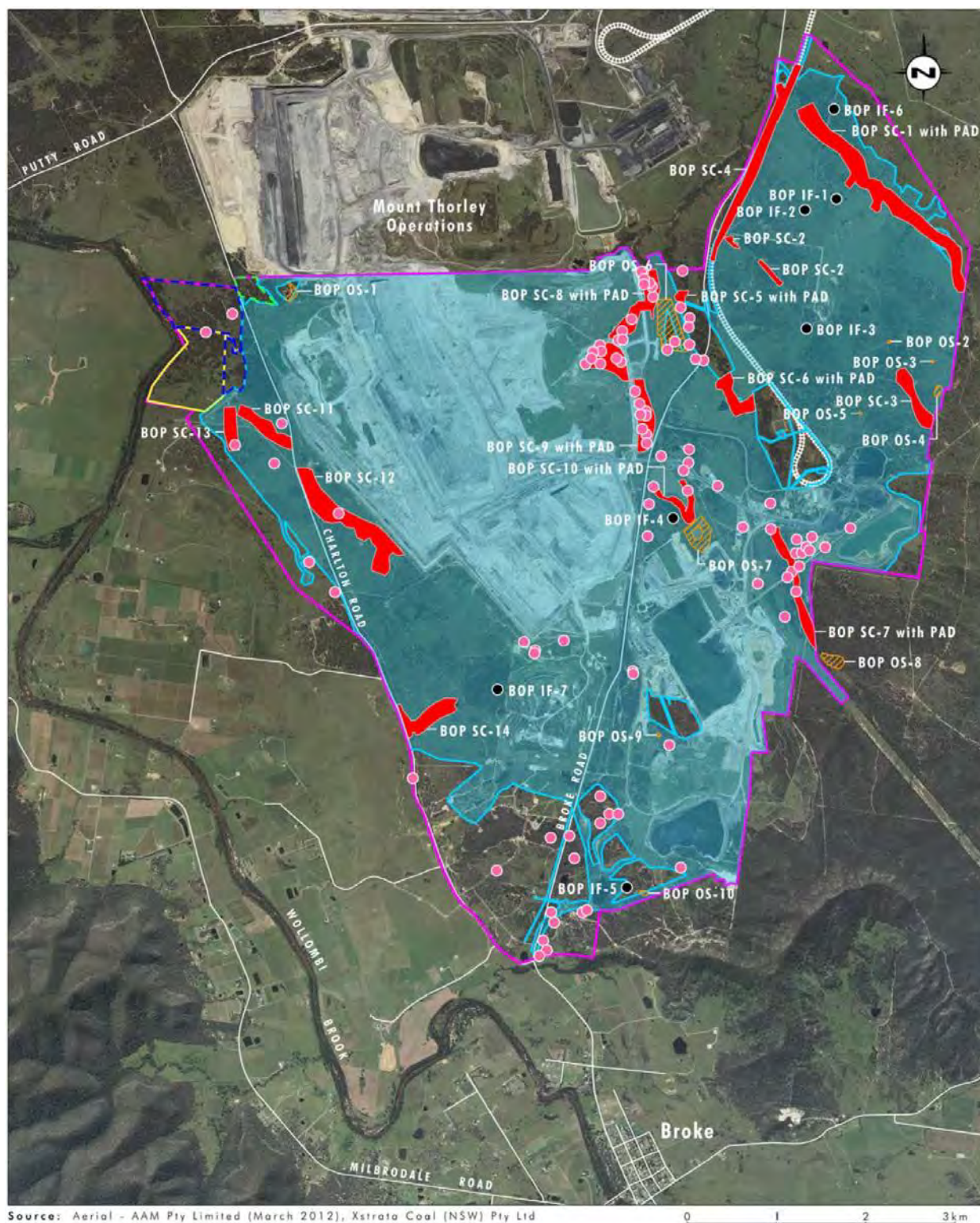
Existing Conservation Agreement Area and Management/Conservation Zones

The Wollombi Brook Conservation Agreement Area is located to the west of Charlton Road (refer to **Figure 4**). BCM proposes to enter into a Conservation Agreement under the *National Parks and Wildlife Act 1974* (the NPW Act) for this area as part of a conservation outcome for the BMU1 grinding grooves which will be impacted as part of the approved longwall operations in Blakefield North and the subsequent mining of lower seams (approved under the Underground Consent, DA 376-8-2003).

The proposed Wollombi Brook Conservation Agreement Area is currently being managed by BCM as a conservation area while the Conservation Agreement is being finalised.

Seven management/conservation zones are located within the Project area (BMU1, Loders Creek zones 1 to 4, Swan Lake and scarred tree (AHIMS #37-6-0428). Of these seven management/conservation zones, two were established to satisfy current development approvals (Swan Lake and Loders Creek Conservation zone 2).

With the exception of the proposed Wollombi Brook Conservation Agreement Area, all of these previously identified management/conservation zones will be directly impacted by the Project.



Legend

- Project Area
- Proposed Disturbance Area (life of mine)
- BOP Open Site
- BOP Isolated Find
- BOP Site Complex
- Existing Valid AHIMS Site Records
- Proposed Wollombi Brook Conservation Agreement Area
- Proposed Extension to Wollombi Brook Conservation Agreement Area (WSW EEC Management Area)
- Proposed Extension to Wollombi Brook Conservation Agreement Area (Joint Cultural Heritage/WSW EEC management Area)

Figure 4: Wollombi Brook Conservation Agreement Area

Source: Umwelt (2013)

Comments by Registered Aboriginal Parties' on Scientific Values

Comments by registered Aboriginal parties on the scientific values of the Project area are detailed below:

- Registered Aboriginal parties stated that the Loders Creek Grinding Groove complex, BMU1 grinding groove complex, scarred tree, knapped glass, and evidence of camping, are important and significant evidence of past cultural activity;
- They stated that there is a possibility that intact Aboriginal cultural sites, artefacts or materials remain in the Project area and are yet to be recorded, particularly in the Loders Creek complex. Registered Aboriginal parties have identified that any cultural deposit is of high cultural significance;
- They expressed concerns about the differences in the significance and research potential between archaeological assessments and their ranking of cultural values significance relating to the archaeological evidence. Registered Aboriginal parties identified past archaeological assessments, protection measures, salvage programs and monitoring programs as an important and valued part of the historic and cultural values of the Project area;
- During the consultation process, registered Aboriginal parties also expressed concerns that six of the seven previously identified management/conservation zones will be directly impacted by the Project because these areas have been identified as having culturally and archaeologically significant artefacts and objects within them; and
- They commented that the current model of conservation does not achieve intergenerational cultural and archaeological certainty because management/conservation zones within active mines are perceived to compromise cultural and archaeological values and results in the creation of isolated 'islands' or fragmented cultural and archaeological sites rather than areas which are accessible by registered Aboriginal parties and have certainty in their meaningful conservation.

Aesthetic Significance

Aesthetic values refer to the sensory, scenic, architectural and creative aspects of the landscape. They are closely linked with social values (ICOMOS 1998).

Registered Aboriginal parties consulted for this ACHA expressed a range of sensory perceptions in relation to the Project area. It was acknowledged that past land use and current mining had contributed to the loss of over 2,000 hectares of land; the loss of connectivity and pathways; disruptions to waterways; and, disruption to the spiritual meanings and symbolism contained in the landscape. However, registered Aboriginal parties identified and retained heightened emotional cultural connection and concern for the Project area and its cultural and archaeological values. These were described by some registered Aboriginal parties as being located within a place where there are the spirits of their ancestors, the memories of ancestors and the footprints (archaeological sites) of their ancestors (family) ceremonial and social ways of life.

Other aesthetic values identified by registered Aboriginal parties are summarised below with further detail contained in **Section 5** of this ACHA.

Registered Aboriginal Parties' Values Assessment – Aesthetic Values

Comments by registered Aboriginal parties on the aesthetic values of the Project area are detailed below:

- Most registered Aboriginal Parties who attended the 30 and 31 May 2012 workshops identified the ability to Walk on Country for the purposes of undertaking archaeological survey or cultural assessment as a positive connective feeling;
- Most registered Aboriginal parties who attended the November 2011, May 2012 and September 2012 workshops expressed high levels of emotion regarding landscape transformation and fragmented connectivity between cultural and archaeological sites;
- Feelings of grief and loss were also expressed relating to cumulative impacts and inability to access and maintain custodial responsibilities because of changes to the landscape and direct and indirect impact to cultural areas within the Project area; and
- Feelings of anger and frustration were expressed relating to approvals to destroy Aboriginal cultural and archaeological sites identified as important to Aboriginal people, including Traditional Owners and Knowledge Holders, and the aesthetic impact of the area as a result of mining activity.

Impact Assessment

This ACHA report has considered the impact of the proposed Project (described in detail in **Section 6.2**) on the known Aboriginal objects of the Project area, the range of cultural significance values associated with the Project area and places external to it on the broader scale.

Impact assessment has included consideration of proposed activity, direct and indirect impact, cumulative impacts to archaeological and cultural objects and sites, and ecologically sustainable development (ESD).

Registered Aboriginal parties consulted for this ACHA identified concern that current and future open cut mining within the BCC and broader region poses a significant threat to areas of Aboriginal cultural significance and archaeological sites, and has continued to cause fragmentation to the cultural, spiritual and historic meaning of the cultural landscape and important waterways.

Registered Aboriginal parties also overwhelmingly stated that Project areas identified as management/conservation zones in the past should be maintained as management/conservation zones in the future. Registered Aboriginal parties identified the Loders Creek complex area as a Conservation Agreement Area and indicated that the area's protection was included as a condition of consent in the 1999 development consent for the Bulga Open Cut Mine. It is important to note that registered Aboriginal parties found it difficult to discern differences between the use of language such as avoidance versus protection, and management and/or conservation zones and their differing definitions. Most registered Aboriginal parties stated that they believed that management/conservation zones were areas protected from current and future mining operations.

Direct Impacts

In considering potential Project impacts on the known archaeological sites of the Project area, OzArk (**Appendix 13b of the EIS**) identifies that the Project would directly impact 62 archaeological sites if approved, consisting of 11 site complexes, 24 open sites (artefact scatters), 26 isolated finds and one scarred tree. Two grinding groove sites (both contained within site complexes) would also be impacted by the proposed works.

A further 25 sites within the Project area will not be impacted by the Project if approved, being 20 artefact scatters and five isolated finds. In addition, BCM also modified the design of the Project to avoid an area of cultural significance, discussed in **Appendix C4**.

Indirect Impacts

The Project may also result in indirect impacts on Aboriginal cultural heritage values. The indirect impacts identified by the registered Aboriginal parties included:

- Continued landform transformation and a resulting inability to 'read the landscape' and 'make sense of the area';
- Disruption to traditional Aboriginal pathways and cultural ways in which areas are entered and exited;
- Historic salvage programs have also create 'gaps' in the cultural landscape and its meaning; and
- Generational cultural loss was also identified as an ongoing impact (registered Aboriginal parties questioned what legacies would be afforded to future generations from trying to salvage, relocate or protect Aboriginal culture within an active mine site.

The predicted impact on cultural heritage values in the Project area will also add to the cumulative impact of development on the Aboriginal cultural heritage of the upper Hunter Valley. It is also acknowledged that the Project will increase disturbance within the Project area from approximately 2,188 to 4,113 hectares.

Management and Mitigation Measures

The management measures proposed for the Project align to the Principles of *The Burra Charter* (Australia ICOMOS 1999) and to the criteria of the *Strengthening Aboriginal Community Wellbeing Toolkit* (OEH 2012). Of the eight key principles of community wellbeing, the proposed management measures address five of these principles considered to be relevant to the Project:

1. Access to Country;
2. Sense of community;
3. Leadership, empowerment and influence;
4. Education and learning; and
5. Cultural identity.

The other principles relate to infrastructure and services, economic strength and development and community health and safety. They are more appropriately being considered by Xstrata Coal New South Wales (XCN) as part of the implementation of its Reconciliation Action Plan (RAP) process, incorporating consultation with a voluntary Aboriginal working group that includes local Aboriginal community representatives.

A series of proposed management measures developed for the Project by BCM are based on the assessment outcomes including recommendations from the PCWP and WP confidential reports (refer to **Appendices C1 and C2**) and the registered Aboriginal parties' views on appropriate management.

They follow the five principles outlined above. Requests have been made for one recommendation to remain confidential and to be considered confidentially by the Department of Planning and Infrastructure and Office of Environment and Heritage (refer **Appendix C1**). As agreed with the registered Aboriginal parties, proposed management measures have been developed considering two scenarios:

- Scenario 1. The Project is not approved; or
- Scenario 2. The Project is approved.

BCM has considered a range of suggested management measures proposed by all registered Aboriginal parties including Traditional Owners and Knowledge Holders – including those in the confidential reports of the PCWP and the WP (**Appendices C1** and **C2**); and the confidential statements contained within this ACHA. A set of criteria was developed by BCM to assist with the review of the suggested management measures.

Project Approval Scenario

As BCM is seeking to proceed with the Project, the following summary of management measures focuses on outlining the management and mitigation measures that would be implemented as part of the Project if approved. Further discussion of the 'Project not approved' scenario is in the ACHA (refer to **Section 7**).

In comments provided, the registered Aboriginal parties' primary position is a non-development scenario in order to 'protect the Loders Creek grinding grooves' and other cultural landscape features and sites within the Project's disturbance area, while recognising the high levels of disturbance already undertaken within the landscape. Most registered Aboriginal parties stated that they were generally supportive of the proposed mitigation management measures and intergenerational equity strategies detailed in the following **Table 1** in the scenario of a Project approval. Some registered Aboriginal parties however, stated that while they are supportive of the suggested management measures, they found it difficult to discuss these measures in the context of an 'offset' or alternative conservation outcome when they wanted the Loders Creek grinding grooves conserved *in situ*.

The following draft management measures in **Table 1** have been developed for registered Aboriginal parties' review in the scenario that the Project is approved.

The proposed management and mitigation measures have also been separated into those located onsite (being within the Project area) and those located offsite (outside the Project area or not requiring physical works within the Project area). The management and mitigation measures have been developed to address intergenerational equity aspects and to respect the regional significance of culturally significant features which surround the Project area. **Table 1** also documents the primary issues identified during the ACHA consultation process that the proposed management and mitigation measures are designed to address. Further information regarding development of and context of these management and mitigation measures, including how they address the principles outlined in the *Strengthening Aboriginal Community Wellbeing Toolkit* (OEH 2012), is included as part of the ACHA. These management measures are currently the subject of discussion between BCM and the registered Aboriginal parties in order to determine measures which should be included in the approved Aboriginal Cultural Heritage Management Plan. Further information regarding development of and context of these management measures is included as part of this ACHA (refer to **Section 7**).

Table 1: ACHA Proposed Management and Mitigation Measures, 'Project Approval' Scenario

Registered Aboriginal Parties ACHA consultation Finding/ Comments	Proposed Management and Mitigation Measures, including Care and Control and Intergenerational Equity Measures
Onsite- Located with the BCC Project Area Registered Aboriginal parties sought ongoing consultation mechanisms in order to remain informed about the implementation of the ACHMP and also sought meaningful opportunities in which they can influence decision making. Registered Aboriginal parties also sought greater understanding of and influence on the healing/rehabilitation of land and sought BCM consideration of management measures which maximised registered Aboriginal parties participation in rehabilitation programs or approaches. The ACHMP is the recognised model for containing detail regarding the implementation of Aboriginal cultural heritage related management measures. Consistent with regulatory and Aboriginal representative expectations, ongoing consultation with the registered Aboriginal parties will be undertaken in the development of the ACHMP. Several registered Aboriginal parties, including the WLALC, have also requested the inclusion of a code of conduct and dispute resolution process in the ACHMP.	
ACHMP Revision BCM currently have an Aboriginal Cultural Heritage Management Plan (ACHMP) for the BCC which details the management and mitigation measures undertaken by BCM in relation to its operations including the protection of existing sites. This ACHMP will be revised to include the management and mitigation measures proposed for the Project. Due to the nature of the management and mitigation measures and the level of further consultation required in relation to different proposed measures, the ACHMP will be varied in stages as the detail regarding these measures is refined in consultation with the registered Aboriginal parties. The revised ACHMP will include specific provisions regarding engagement with the registered Aboriginal parties (including the possible development of a Steering Committee and would include mechanisms for dispute resolution and communications protocols. Annual Site Meeting BCM will hold an annual meeting for engaging with the RAPs to discuss Project status and cultural heritage matters and intergenerational equity outcomes related to the Project. The meeting will include a Walk on Country, presentation on rehabilitation programs being undertaken and information on seed mixes to provide an understanding of the future traditional resources available in the rehabilitated landform. The ACHMP will include provision for an Annual Site Meeting which will include the following Agenda Items: 1. Presentation of previous years ACH management performance; 2. Presentation of next 12 months ACH management; 3. Update of rehabilitation completed during the year and presentation on seed mixes used; and 4. Walk on Country including rehabilitation areas and Conservation Agreement Area.	

Registered Aboriginal Parties ACHA consultation Finding/ Comments	Proposed Management and Mitigation Measures, including Care and Control and Intergenerational Equity Measures
Support for investigations of the potential horticultural use of plant species of known Aboriginal use and or value for cultural landscape rehabilitation as an integrated component of mine site rehabilitation across the Project. This would include pre-emptive retrieval of seed at the time of land/or before vegetation clearance works occur. Registered Aboriginal parties particularly Traditional Owner groups sought commitment for participation in rehabilitation planning and economic opportunities in the area of rehabilitation including flora and fauna management including innovation in fire stick modelling.	Land Rehabilitation and Healing BCM will hold an annual meeting for engaging with the registered Aboriginal parties to discuss Project status and cultural heritage matters and intergenerational equity outcomes related to BCC operations. The meeting will include a Walk on Country, presentation on rehabilitation programs being undertaken and information on seed mixes to provide an understanding of the future traditional resources available in the rehabilitated landform.
Registered Aboriginal Parties including Traditional Owners and Knowledge Holders sought a more positive and informed communication of the Aboriginal cultural heritage values of the site and surrounding areas and sought to have these improvements included in the BCC site training packages to better educate the workforce and contractors on the values of the area.	Recognition of Cultural Values in Site Induction Material BCM will revise its onsite induction program within 12 months of approval being granted to include information on the Aboriginal cultural values of the Project area and Bulga, Broke and Milbrodale areas more generally. The induction material will positively message the Aboriginal cultural heritage values of the area.
Registered Aboriginal Parties including Traditional Owners and Knowledge Holders viewed the current site GIS and acknowledged that this should be kept up to date with the most recent information and included in the ACHMP.	Recording of Sites All Aboriginal sites identified within the Project area will be recorded on the AHIMS database and BCM GIS (Geographical Information System). The ACHMP will initially be revised to include the sites identified in the Bulga Optimisation Project <i>Aboriginal Archaeological Values Assessment</i> report (refer to Appendix 13b of the EIS). The ACHMP will be updated to include details of any new Aboriginal sites identified during the life of the Project or the change of status of sites as salvaged under an approval scenario.

Registered Aboriginal Parties ACHA consultation Finding/ Comments	Proposed Management and Mitigation Measures, including Care and Control and Intergenerational Equity Measures
Registered Aboriginal parties spoke of the limited meaning of signage and lack of respect and recognition of the meaning of cultural heritage sites. Registered Aboriginal parties sought the development of signage with a more positive messaging and meaning of the area.	Aboriginal Heritage Site Signage BCM will review the Aboriginal cultural heritage signage onsite. This will include signage related to the protection or management of areas of Aboriginal cultural significance, including the proposed expanded Wollombi Brook Conservation Agreement Area. Further details on messaging will be developed as part of the ACHMP in consultation with registered Aboriginal parties.
BCC ACHMP protocol for any new archaeological sites and objects found over life of current operations. Registered Aboriginal parties sought to influence the proposed research and salvage program with regard to cultural considerations and the salvage program.	Research and Salvage Program BCM will implement the Aboriginal archaeological research and salvage program for impacted sites as recommended in the <i>Aboriginal Archaeological Values Assessment</i> report for the Project (refer to Appendix 13b of the EIS, Site Categories 1 to 3). The research and salvage methodology will satisfy the scientific research and cultural heritage questions posed in the <i>Aboriginal Archaeological Values Assessment</i> report (Appendix 13b of the EIS) and this ACHA in order to gain information to better understand the scientific and cultural values of the Project area. The research and salvage program will have regard to cultural considerations for access to sites and the research framework identified in the <i>Aboriginal Archaeological Values Assessment</i> report (Appendix 13b of the EIS).
Some registered Aboriginal parties sought the development of a 'back to Country' model for all salvaged artefacts, over the life of the mine. Others sought 'close to Country' options identifying the movement of salvaged artefacts to the Conservation areas. Interim arrangements for storage were suggested- on site shipping container.	Care and Control Measures regarding Aboriginal objects Care and control management measures will be developed and included in the ACHMP for Aboriginal objects recovered through the Archaeological research and salvage program implemented for the Project. The care and control management measures will have regard to cultural considerations. Care and control management measures will include provision for: • Interim storage during research and salvage program; • Artefact analysis as recommended in the <i>Aboriginal Archaeological Values Assessment</i> report for the Project (refer to Appendix 13b of the EIS);

Registered Aboriginal Parties ACHA consultation Finding/ Comments	Proposed Management and Mitigation Measures, including Care and Control and Intergenerational Equity Measures
Land 'offsets' were identified by some registered Aboriginal parties as an appropriate way of providing intergenerational equity outcomes and certainty for the protection of cultural sites identified as important to registered Aboriginal parties. Therefore 'offset sites' were considered potentially appropriate places for care and control.	• Development of a long term care and control strategy – close to Country – with possibilities including (but not necessarily limited to): • Relocating to a storage facility located in the Wollombi Brook Conservation Agreement Area; and/or • Relocated to the Wollombi Brook Conservation Agreement Area in conjunction with other site complex items in the Wollombi Conservation Agreement Area; and/or • Educational cabinet at mine and safe keeping place with repatriation at completion of mining. The ACHMP will initially provide for interim storage of recovered artefacts on site with further detail regarding long term care and control measures to be developed in consultation with the registered Aboriginal parties and included in the revised ACHMP.
Discussions with registered Aboriginal parties have revealed a range of responses to the management of the BMU 1 Grinding Grooves. It has been suggested that in the scenario that mining is approved, the relocation of the grinding groove to the Wollombi Brook Conservation Agreement Area would provide an opportunity for future generations to view the grooves and learn about their origins and cultural significance. It is also acknowledged that it was requested that if this took place that placement in a drainage line should be considered to replicate a similar hydrological regime of wetting and drying which currently exists. Discussions with some registered Aboriginal parties also identified the option to cover the grinding groove site and leave <i>in situ</i> for cultural reasons.	Management of BMU1 Grinding Groove Site BCM will develop management and mitigation options for the BMU1 grinding grooves in consultation with the registered Aboriginal parties including Traditional Owners and Knowledge Holders. The preferred mitigation and management measures will be identified in a revision to the ACHMP. The two options identified during the consultation process that will be considered are: • Relocate the grinding grooves to the proposed Wollombi Brook Conservation Agreement Area for teaching purposes and viewing of future generations. This process would require investigation and salvage of the site surrounds so that any associated artefacts are identified and relocated with the grooves; or • Cover the area with geo-fabric or similar protective material to protect the grooves and leave <i>in situ</i> under the Noise and Visual Bund. Archival recording of the Loders Creek grinding grooves will be undertaken prior to any disturbance of the site.

Registered Aboriginal Parties ACHA consultation Finding/ Comments	Proposed Management and Mitigation Measures, including Care and Control and Intergenerational Equity Measures
Discussions with registered Aboriginal parties have revealed a range of responses to the management of the Loders Creek Grinding Grooves. It has been suggested that in the scenario that mining is approved, the relocation of the grinding groove to the Wollombi Conservation Agreement Area would provide an opportunity for future generations to view the grooves and learn about their origins and cultural significance. It is also acknowledged that it was requested that if this took place that placement in a drainage line should be considered to replicate a similar hydrological regime of wetting and drying which currently exists. Discussions with an Elder and Knowledge Holders identified a belief that the area and its objects were taboo and that an alternate location should be sought which controlled access for cultural reasons.	Management of Loders Creek Grinding Grooves BCM will consult with the registered Aboriginal parties including Traditional Owners and Knowledge Holders regarding the preferred mitigation and management options for the Loders Creek grinding grooves with the final management and mitigation measure to be identified in a revision to the ACHMP. The two options identified during the consultation process that will be considered are: - Relocate the Loders Creek grinding grooves to the Wollombi Brook Conservation Agreement Area for teaching purposes and viewing of future generations. This process would require investigation and salvage of the site surrounds to ensure any associated artefacts are identified and relocated with the grooves; and - Identify an alternative location to the proposed Wollombi Brook Conservation Agreement Area for the purposes of maintaining cultural values associated with the grinding grooves, with the development of protocols and controls for visitation and access to the relocation site. This process would require development of a cultural protocol, and investigation and salvage of the site surrounds so that the any associated with artefacts are identified and relocated with the grooves. Archival recording of the Loders Creek grinding grooves will be undertaken prior to any disturbance of the site.
Some registered Aboriginal parties sought further investigation of the grinding groove sites prior to salvage or impact management measures. Archival recording through 3D digital models were identified as having potential for use in teaching resources for current and future generations.	Management of Significant Sites – 3D Scanning of BMU1 and Loders Creek Grinding Grooves BCM will undertake 3D recording of grinding grooves at BMU1 and Loders Creek prior to any relocation or covering of the sites. The method of 3D recording will be developed in consultation with the registered Aboriginal parties having regard to the nature and extent of the sites, 3D recording technologies and the overarching objective of creating a detailed recording of the grooves for future generations.

Registered Aboriginal Parties ACHA consultation Finding/ Comments	Proposed Management and Mitigation Measures, including Care and Control and Intergenerational Equity Measures
A range of opinions were shared by registered Aboriginal parties in relation to the assessment of the scarred tree (#37-6-0428). This included consideration of whether the scar was of Aboriginal origin and its potential relocation to the Wollombi Brooke Conservation Agreement Area. A request for a scar tree specialist to examine the tree was received in the 30 and 31 May 2012 workshops. This request was met by completion of the Andrew Long report.	Management of Scarred Tree BCM will implement the research and management measures regarding the scarred tree near Charlton Road (#37-6-0428) as recommended by Andrew Long in the report annexed to the <i>Aboriginal Archaeological Values Assessment</i> report.
Some registered Aboriginal parties including Traditional Owners and Knowledge Holders believe that although the Archaeological Survey took place, all sites within the landscape may not have been identified.	Potential Human Skeletal Remains BCM agrees to follow all relevant NSW Government guidelines regarding the location of human skeletal remains. BCM will apply the precautionary principle to the development of management measures for the Project area. This approach will include the development of culturally appropriate management measures for the management of human remains, should this occur during the Project life. Protocols and approach will be developed in consultation with registered Aboriginal parties. In the circumstances that a potential burial site or potential human skeletal material is exposed within the Project area, the following procedure will be followed in accordance with the <i>Policy Directive – Exhumation of Human Remains</i> (NSW Department of Health 2008), <i>Skeletal Remains – Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977</i> (NSW Heritage Office 1998) and the <i>Aboriginal Cultural Heritage Standards and Guidelines Kit</i> (NPWS 1997) (or such other policies or guidelines as may replace these): ● As soon as remains are exposed, work in the vicinity of the remains is to halt immediately to allow assessment and management; ● BCM will contact local Police, OEH and the Heritage Branch; ● If the remains are suspected to be human, a physical or forensic anthropologist should inspect the remains <i>in situ</i>, and make a determination of whether the remains are human and if so, the likely ancestry (Aboriginal or non-Aboriginal) and antiquity (pre-contact, historic or forensic); ● If the remains are identified as forensic the area is deemed as a crime scene; ● If the remains are identified as Aboriginal, the site is to be secured and OEH and all registered Aboriginal parties are to be notified in writing; or

Registered Aboriginal Parties ACHA consultation Finding/ Comments	Proposed Management and Mitigation Measures, including Care and Control and Intergenerational Equity Measures
	If the remains are non-Aboriginal (historical) remains, the site is to be secured and the Heritage Branch is to be contacted. The above process functions only to appropriately identify the remains and secure the site. From this time, the management of any Aboriginal remains is to be determined through liaison with the appropriate stakeholders (Police, forensic anthropologist, OEH, Heritage Branch, registered Aboriginal parties etc.) and in accordance with the <i>Public Health Act 1991</i>.
Registered Aboriginal parties sought protection of sites not to be impacted and also cited concerns regarding the impact and management of erosion to sites not to be impacted within the Project area.	Sites Not To Be Impacted BCM will implement the Aboriginal archaeological management measures program for sites in the Project area that will not be impacted by the Project as recommended in the <i>Aboriginal Archaeological Values Assessment</i> report for the Project (refer to Appendix 13b of the EIS, Site Category 4). These measures will be further outlined in the updated ACHMP.
Registered Aboriginal parties sought the registration of newly discovered sites with the AHIMs register in order to ensure accurate recording and compliance was demonstrated	Newly Recorded Sites BCM will register all newly discovered sites identified during the course of the Project with AHIMs and update the ACHMP to record site details. BCM will develop research and salvage methodologies for all new sites identified within the Project disturbance area during the life of the Project, consistent with the framework recommended in the <i>Aboriginal Archaeological Values Assessment</i> report (Appendix 13b of the EIS).
Information provided by the ACHA has reinforced the significance of the Wollombi Brook Conservation Agreement Area location as it faces Baiame Cave and has other confidential significance. The Wollombi Brook Conservation Agreement Area has access to a permanent water source in the Wollombi Brook and is also home to various flora and fauna which some registered Aboriginal parties have identified as	Wollombi Brook Conservation Agreement Area BCM will enter into a Conservation Agreement (or similar in perpetuity arrangement) regarding the Wollombi Brook Conservation Agreement Area located near Charlton Road. The Conservation Agreement will incorporate the following: Expansion of the currently proposed Conservation Agreement Area from approximately 55 hectares to approximately 120 hectares (refer to Figure 4);

Registered Aboriginal Parties ACHA consultation Finding/ Comments	Proposed Management and Mitigation Measures, including Care and Control and Intergenerational Equity Measures
significant during the development of the ACHA. Registered Aboriginal parties sought meaningful, culturally relevant approaches to the management of the Wollombi Brook Conservation Agreement Area. Registered Aboriginal parties particularly Traditional Owners sought transfer of ownership of lands with appropriate resource provision to manage and conserve the area/s.	- Undertake an Aboriginal Cultural Heritage Assessment of the Wollombi Brook Conservation Agreement Area, including further investigating its features of significance identified by some Knowledge Holders. These components will include non-invasive archaeological investigations, ethno-botanical mapping, cultural values mapping and historical research; - BCM will provide unencumbered access for registered Aboriginal parties to complete cultural practices consistent with the agreed Conservation Agreement Plan of Management; - Conservation and regeneration of the Warkworth Sands Woodland Endangered Ecological Community within the Conservation Agreement Area; - Land management measures will be undertaken through the development of a Plan of Management including fencing the perimeter of the Wollombi Brook Conservation Agreement Area, regeneration of cleared areas including the use of culturally significant plant species (that form part of the Warkworth Sands Woodland community) identified in the ACHA. RAPs including the WP, PCWP and WTC groups will be given opportunity to tender for carrying out these works; - BCM will work with the registered Aboriginal parties to develop appropriate improvements to the Wollombi Brook Conservation Agreement Area. Such improvements may include a formed gravel access road into the Wollombi Brook Conservation Agreement Area, the establishment of a car parking area, an educational teaching shelter comprising decked floor and roof with rainwater tank and toilets, a barbeque and tables and benches, and signage to identify the extent of the Conservation Agreement Area and its purpose. A walking access track could also be established to the Wollombi Brook (if appropriate); - Further land management measures will be undertaken through the development of a Plan of Management including fencing the perimeter of the Wollombi Brook Conservation Agreement Area, regeneration of cleared areas including the use of culturally significant plant species identified in the ACHA. Registered Aboriginal parties including the WP, PCWP and WTC groups will be given opportunity to tender for carrying out these works; and

Registered Aboriginal Parties ACHA consultation Finding/ Comments	Proposed Management and Mitigation Measures, including Care and Control and Intergenerational Equity Measures
	An Aboriginal Cultural Heritage Assessment of the Wollombi Brook Conservation Agreement Area, including further investigating its features of significance identified by some Knowledge Holders, will be undertaken to inform the Plan of Management. This assessment will include non-invasive archaeological investigations, cultural values mapping and historical research. BCM will investigate a program to transition the ownership of the area to the relevant Native Title Holder Group/s prior to the end of the Project. This may include an interim stage of leasing the Wollombi Brook Conservation Agreement Area to the relevant Native Title Holder Group/s for a nominal amount.
All registered Aboriginal parties were supportive of 3D landform modelling of predictive future mine-induced landform modifications; however registered Aboriginal parties cited the need for realistic evaluation in and around all Aboriginal cultural heritage sites.	Digital Model of Project Area BCM will investigate the potential for a 3D digital model of the Project area to be developed to illustrate the cultural sites in the project area landscape for teaching purposes. This will be undertaken in consultation with the registered Aboriginal parties.
Offsite Measures	
Registered Aboriginal parties sought conservation outcomes which recognised the range of traditional, historic and contemporary Aboriginal cultural values and relevance to ACHA values identified as important through the ACHA. Lizard Rock was repeatedly noted by registered Aboriginal parties as being particularly important regionally and culturally. Registered Aboriginal parties sought management measures which would assist in protecting sites such as Lizard Rock.	Formal Recognition of Significant Regional Aboriginal Places BCM will investigate the potential to provide financial and in-kind assistance to the value of up to \$100,000 to document and prepare applications regarding the formal protection status of regional sites of high cultural significance (such as "Lizard Rock" and "Baime Cave") as a registered Aboriginal Place under the NPW Act 1974 (NSW). This will be completed in consultation with Traditional Owners and Knowledge Holders.

Registered Aboriginal Parties ACHA consultation Finding/ Comments	Proposed Management and Mitigation Measures, including Care and Control and Intergenerational Equity Measures
Investigations by members of the BCM team have identified that key features of Lizard Rock are exposed to uncontrolled 4WD vehicle access across the site with a risk of potential damage to the site. Diversary works to protect Lizard Rock was supported by most registered Aboriginal parties. Registered Aboriginal parties also sought the protection of grinding grooves in the region.	Protection of Significant Site- Local BCM will consult with the registered Aboriginal parties including Traditional Owners and Knowledge Holders and Forests NSW regarding the possible erection of protection measures at a set of grinding grooves located on Lizard Rock within Pokolbin State Forest which is at risk of harm from vehicle and foot traffic. BCM will commit up to \$50,000 towards the implementation of conservation measures.
Registered Aboriginal parties sought to develop management measures which would provide a visual and tangible legacy for the next generations. These considerations included the development and distribution of a DVD recording for teaching purposes.	DVD Recording for Teaching Purposes BCM will provide funding for the development of an educational DVD to record the cultural knowledge of the Project area as identified in the ACHA including the cultural context and relationship to significant Creation story sites, and the teaching resources within the Wollombi Brook Conservation Agreement Area. Sections of the recording may be disclosed and non-disclosed as described in <i>Aboriginal cultural heritage consultation requirements for proponents</i> (DECCW 2010a, (Fact Sheet 3 – Cultural Knowledge and its Protection).
Registered Aboriginal parties sought in perpetuity conservation outcomes away from mine site operations, to provide certainty in terms of protection and access to areas. Management measures which provided unencumbered access to Creation story sites and other areas of cultural importance were described as providing more realistic intergenerational equity outcomes. The opportunity to access sites and take children to an area where there could be teaching learning and camping close to accessible water were identified as having	Access to Culturally Significant Areas BCM is investigating opportunities for additional land based conservation outcomes to better provide access to culturally significant areas within the Broke and Bulga region. This may include: • The purchase of land; or • The provision of better access to land currently in conservation.

Registered Aboriginal Parties ACHA consultation Finding/ Comments	Proposed Management and Mitigation Measures, including Care and Control and Intergenerational Equity Measures
advantageous. However registered Aboriginal parties sought these areas to include landscape features which reflected traditional, historic and contemporary cultural values.	BCM will commit funding to help facilitate this outcome in consultation with registered Aboriginal parties. The framework to manage such a process will be included in the revised ACHMP. BCM will provide funding for 5 years of up to \$50,000 per annum towards maintenance and upkeep and operating costs of any purchased property and/or facilities. BCM will investigate a program to transition the ownership of the purchased land following the 5 years of joint management to the relevant Native Title Holder Group/s prior to the end of the project.
Registered Aboriginal parties, particularly the Traditional Owners and Knowledge Holders sought a program to revive Wonnarua language. Teaching and passing down cultural heritage knowledge to the next generation was cited as important.	Research and Recording of Wonnarua Language for Future Generations BCM will contribute funding of up to \$100,000 per annum for two years to assist in the development of digital media for maximising the revival of the Wonnarua language. In consultation with the Traditional Owners and Knowledge Holders a partnership program will be established with a suitable specialist in this field, potentially from a university background. BCM will assist in seeking and evaluating proposals for the development of the program.
Registered Aboriginal parties sought opportunities to access Creation places and sites of cultural importance to Aboriginal people, including Traditional Owners and Knowledge Holders. However they cited transportation and access constraints for Elders and families as impediments to cultural access to these sites. Registered Aboriginal parties sought meaningful opportunities to share cultural heritage and ensure continuation of knowledge transfer for future generations.	Transport to Creation Story Places During the life of the Project, BCM, through the XCN Reconciliation Action Plan, will offer to provide some transport to sites of cultural significance to facilitate a Walk on Country/Teach on Country - site visit during NAIDOC week. The Walk on Country/Teach on Country tour route would be determined by the NAIDOC committees of the Upper Hunter.

Registered Aboriginal Parties ACHA consultation Finding/ Comments	Proposed Management and Mitigation Measures, including Care and Control and Intergenerational Equity Measures
Registered Aboriginal parties particularly Traditional Owner groups sought BCM support and commitment to the leverage of funding from the Upper Hunter Cultural Heritage Trust to enable the development of a regional keeping/healing place and for the consolidated return of Aboriginal cultural heritage objects collected across the BCC and stored at various times through Care and Control arrangements in such diverse places as: - The Australian Museum; - The Wanaruah LALC; - Archaeological consultant firms; and - BCC Mine site Offices;	Repatriation of Historical Items collected from Wonnarua Country BCM will consult with the registered Aboriginal parties including Traditional Owners and Knowledge Holders, other mining companies and the Australian Museum to explore opportunities for repatriation and/or display of regionally significant cultural objects from the Australian Museum's permanent collection. Should this program be realised: - BCM will liaise with the registered Aboriginal parties regarding the voluntary attendance by Knowledge Holders at an information night hosted by the museum curator at the opening of regional displays and to be in attendance on each day as cultural interpreters to assist members of the public and school groups wishing to view the displays; and - BCM will provide up to \$25,000 per annum for the life of the Project to help with associated costs.
BCM understands that TAFE NSW offers relevant training courses in culture related matters, such as Cultural Tourism, Business Administration and land management etc. The training of suitable Aboriginal persons is consistent with the recommendations of registered Aboriginal parties and will aim to contribute towards sustainable use of the Land Based Cultural Conservation areas shown above. Registered Aboriginal parties also sought to address models for greater cultural participation in the rehabilitation and conservation of lands both within the Project area and the Conservation Agreement Area and in the promotion of cultural identity.	Education - Cultural Related Areas During the life of the Project, BCM will offer up to \$30,000 per annum in total towards three trainee scholarships (up to three years in duration) to be undertaken in culture related training areas. The training and education opportunity will include opportunities which may arise from vocational based learning including graduate and postgraduate studies.

No Project Approval Scenario

In comments provided, registered Aboriginal parties primary position is a non-development scenario in order to 'protect the Loders Creek grinding grooves' and other cultural landscape features and sites within the Project's disturbance area, while recognising the high levels of disturbance already undertaken within the landscape.

Should the proposed Project not be approved, further impacts to social, cultural, historic scientific and aesthetic values of the Project area would not occur as the result of continued surface mining operations. However, this ACHA identifies that the cultural values of the Project area are at risk of deterioration from existing pressures, and that new information on the cultural values and archaeological sites of the Project area has been identified. On this basis, the following draft management measures have been developed:

- In place (*in situ*) management of all known Aboriginal archaeological sites within BCM's landholdings;
- Finalisation of the Wollombi Brook Conservation Agreement Area , reflecting prior BCM commitments relating to impacts to the BMU1 grinding groove site; including continued cultural assessment and the preparation of a Conservation Agreement Area Management Plan; and
- Provision of improved opportunities for Aboriginal access to conservation lands and zones.

Refer to **Section 7** of this ACHA for detailed information on the draft management measures proposed for the 'Project approval' and 'no Project approval' scenarios.

Glossary and Abbreviations

Aboriginal Object	A statutory term defined in the NPW Act as meaning: ‘...any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises NSW, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains’.
ACHA	Aboriginal Cultural Heritage Assessment, being a process conducted and report prepared in accordance with the recommendations of the <i>Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW</i> (OEH 2011) or the <i>Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation</i> (DEC 2005).
ACHCRs	<i>Aboriginal cultural heritage consultation requirements for proponents</i> (DECCW 2010a), being the current NSW guidelines for proponents seeking AHIP approval from OEH.
ACHMP	Aboriginal Cultural Heritage Management Plan
Aesthetic significance	Aesthetic significance or value refers to the importance people give to places, objects or practices based on aspects of sensory perception, such as form, scale, colour, texture and material of the fabric, or the smells and sounds associated with a place or object (Australia ICOMOS 1999). Aboriginal aesthetic significance also encompasses the spiritual and emotional connection to Country (OEH 2011).
AHIMS	Aboriginal Heritage Information Management System
AHIP	Aboriginal Heritage Impact Permit, being an approval to harm Aboriginal objects and places, issued by the Chief Executive of the Office of Environment and Heritage under Part 6 of the <i>National Parks and Wildlife Act 1974</i> .
Asl	Above sea level
BCC	Bulga Coal Complex
BCM	Bulga Coal Management Pty Limited
BSO	Bulga Surface Operations – open cut mining operations at the BCC
CA	Conservation Agreement Area
CHPP	Coal Handling Preparation Plant
Cultural anthropology	A branch of anthropology focused on the assessment of cultural variation among humans, collecting data about the impact of global economic and political processes on local cultural realities (Oxford Dictionaries 2012).

Cultural significance	'Cultural significance' is a way to describe the importance people give to places, objects or practices, which <i>The Burra Charter</i> (Australia ICOMOS 1999) defines as 'social, aesthetic, historic or scientific value to past, present or future generations'.
DEC	Department of Environment and Conservation (now OEH)
DECC	Department of Environment and Climate Change (now OEH)
DECCW	Department of Environment, Climate Change and Water (now OEH)
DGRs	Director General Requirements, being the specific environmental assessment requirements to be addressed by an EIS for a Project
DP&I	New South Wales Department of Planning and Infrastructure
EIS	Environmental Impact Statement
EL	Exploration Licence
Elder	The traditional meaning of an Aboriginal Elder is someone who has gained recognition within their community as a custodian of knowledge and lore, and who has permission to disclose cultural knowledge and beliefs. Recognised Elders are highly respected people within Aboriginal communities. In some instances, Aboriginal people above a certain age will refer to themselves as Elders. However, it is important to understand that in traditional Aboriginal culture, age alone does not necessarily mean that one is a recognised Elder (NSW Health 2004). Where traditional lore and custom is used Eldership is generally universally recognised. . At times Eldership may be self-appointed via age and/or other arbitrary mechanism and not by traditional lore and custom.
Empirical	Evidence based on experience or observation, necessary for a theory to be confirmed
EPIs	Environmental Planning Instruments
EP&A Act	<i>Environmental Planning and Assessment Act 1979 (Cth)</i>
EPBC Act 1999	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
ESD	Ecologically Sustainable Development; which requires integration of economic and environmental considerations (incl. cultural heritage) in the decision making process for developments. As defined by the <i>EP&A Act</i> and OEH (2011), ESD can be achieved by applying principles of intergenerational equity and precautionary principle.

Ethnobotanical mapping	Ethnobotanical mapping aims to document describe and explain complex relationships between cultures and (uses of) plants, focusing primarily on how plants are used, managed and perceived across human societies. This includes use for food, clothing, currency, ritual, medicine, dye, construction, cosmetics and more.
Ethnographic	Ethnography, emerging from anthropology, and adopted by sociologists, is a qualitative methodology that lends itself to the study of the beliefs, social interactions, and behaviours of small societies, involving participation and observation over a period of time, and the interpretation of the data collected (Denzin and Lincoln 2011; Reeves, Kuper and Hodges 2008; Berry 1991). The scientific description of peoples and cultures with their customs, habits, and mutual differences (Oxford Dictionaries 2012).
Ethno-historic	Assessment of especially native or non-Western peoples from a combined historical and anthropological viewpoint, using written documents, oral literature, material culture and ethnographic data (Oxford Dictionaries 2012).
Harm	A statutory term defined in the NPW Act as meaning ‘... any act or omission that destroys, defaces, damages an object or place or, in relation to an object – moves the object from the land on which it had been situated’.
Historical significance	Historical significance or value refers to the importance people give to places, objects or practices based on associations with historic events, figures, phases or activities. Historical significance to a large extent underlies all cultural significance assessment, as it more broadly encompasses the history of aesthetics, science and society (Australia ICOMOS 1999).
Hypothesis	A tentative explanation for an observation, phenomenon, or scientific problem that can be tested by further investigation (Oxford Dictionaries 2012).
Intergenerational Equity	As defined by OEH (2011), the principle of intergenerational equity holds that the present generation should make every effort to ensure the health, diversity and productivity of the environment – which includes cultural heritage – is available for the benefit of future generations. In relation to Aboriginal cultural heritage, intergenerational equity can be considered in terms of the cumulative impacts to Aboriginal objects and places in a region; if few Aboriginal objects and places remain due to impacts by past development, fewer opportunities remain for future generations of Aboriginal people to enjoy the cultural benefits of those Aboriginal objects and places (DECC 2009).
In perpetuity conservation	The permanent protection of land for an endless period of time
<i>In situ</i> management	Protection of Aboriginal objects in their current location and condition

Knowledge Holders	Refers to those persons with cultural knowledge. As discussed by OEH (in DECCW 2010a), cultural knowledge is directly associated with Aboriginal lore. Aboriginal people connect to their land through their lore, and through lore, people acquire knowledge of all aspects of their environment along with responsibilities, obligations and behaviours that are required to sustain their survival. Cultural knowledge has been passed on through the generations in a complex system of stories, language, art, songs, dance, ceremonies and customs that have been practiced since the time of creation (Dreamtime). The lore continues to govern all aspects of life for Aboriginal people on their traditional land/Country and waters. While cultural knowledge can be interpreted to mean something that is 'in the past' or 'fixed' and 'unchanging', in the context of these requirements it is considered as a living, dynamic force that is adaptive and innovative and as belonging to living communities (DECCW 2010a).
LGA	Local Government Area
NPW Act	National Parks and Wildlife Act 1974
NPW Regulation	National Parks and Wildlife Regulation 2009
Non-disclosure	A contract or agreement by which one or more parties agree not to disclose confidential information that they have shared with each other as a necessary part of doing business together (Oxford Dictionaries). In the context of this ACHA the non-disclosed section of the report recognises registered Aboriginal parties rights to maintain control of their own knowledge in accordance with the <i>Aboriginal cultural heritage consultation requirements for proponents</i> (DECCW 2010a) (<i>Fact Sheet 3 – Cultural Knowledge and its Protection</i>); with all information identified as restricted by registered Aboriginal parties only included in non-disclosed sections and appendices of this ACHA report. Details of any consent given in accordance with customary law (OEH 2010 sheet 3 <i>Cultural Knowledge and its Protection</i>). All consultation and non-disclosure is undertaken in accordance with Clause 80C of the <i>NPW Regulation 2009</i> . Refer Appendix C4
MIA	Mining Infrastructure Area
ML	Mining Lease
MNES	Matters of National Environmental Significance
Mt/a	Million tonnes per annum
NNTT	National Native Title Tribunal
OEH	Office of Environment and Heritage, in the Department of Premier and Cabinet NSW

Oral History	The collection and study of historical information using recordings of interviews with people having personal knowledge of past events (Oxford Dictionaries 2012). Today oral history is an accepted part of much heritage work. It plays an important part in many OEH cultural heritage projects involving both Aboriginal and non-Aboriginal people. OEH is a major player in 'telling the stories' about our landscape and the places people value across it. (OEH 2010).
PAD	'Potential Archaeological Deposit', which is a term used by OzArk (Appendix 13b of the EIS) to refer to locations that are known to or could contain undisturbed archaeological deposits of features that could add significantly to our knowledge concerning Aboriginal archaeology in the region.
PCWP	'PCWP means the Plains Clans of the Wonnarua People who were the Native Title claimant group for the Native Title claim filed on 5 October 2012 in response to a s.29 notice—NS10/3 White Mining (NSW) Pty Ltd, ICRA Ashton Pty Ltd and Austral-Asia Coal Holdings Pty Ltd (Mining Lease Application (MLA). On 2 August 2012 a second claim in the name of Plains Clans of the Wonnarua People #2 claim was filed in response to an s. 29 notice in relation to Assessment Lease Application No 49 (ALA49). This claim was formally registered on 14 September 2012. At the time of commencement of Stage 1 of the consultation process NTSCorp provided information on the existence of two Registered Native Title Claimants the PCWP and the WP. The PCWP has undertaken a separate Confidential non-disclosed Aboriginal Cultural Heritage Assessment report - <i>Our Country. Our Culture. Our Values. The Traditional, Historical and contemporary landscape of the Bulga Optimisation Project Area</i> (refer Appendix C1).
Project area	Defined area within which a proposed development would occur, although portions of the Project area may not be within the Project's disturbance footprint. The Project area normally is the subject of the Environmental Impact Statement, which considers both the development area and surrounding lands.
Project disturbance area	Defined area that would be disturbed if a proposed developed was approved. Project disturbance area occurs within the broader Project area or assessment area.
RAP#1, RAP#2, RAP#3	RAP# refers to registered Aboriginal parties who have requested that their name and contact details remain confidential (non-disclosed), however have sought to provide cultural values statements and recommendations to inform the ACHA. Refer Appendices C3, C4 and C5 .

Registered Aboriginal Parties, or RAPs	'Registered Aboriginal parties', a term used by OEH (in DECCW 2010a) to refer to those Aboriginal people or organisations (or their representatives) who have registered an interest in being consulted over the Project in accordance with Stage 1 of the <i>Aboriginal cultural heritage consultation requirements for proponents</i> (DECCW 2010a). Registered Aboriginal parties include all parties who registered during the entire consultation process, including Stage 1, Stage 2, Stage 3 and Stage 4 .
ROM Coal	Run of Mine coal
SIOA	Social Impact and Opportunities Assessment
Social significance	Social significance or value refers to the importance people give to places, objects or practices based on the qualities for which a place has become a focus of spiritual, political, national or other cultural sentiment to a majority or minority group (Australia ICOMOS 1999).
SoE	State of the Environment
Songline	Australian belief, a route through the landscape which is believed to have been travelled during the Dreamtime (or Alcheringa) and which features a series of landmarks thought to relate to events that happened during this time. A traditional song or story recording a journey made during the Dreamtime (Oxford Dictionary).
Scientific significance	Scientific significance or value refers to the importance people give to places, objects or practices based on the research potential of a locality – encompassing its rarity, quality or representativeness – and the degree to which it may contribute further substantial information to an understanding of its history (Australia ICOMOS 1999). Understanding the scientific significance of cultural heritage is informed by technical archaeological assessments, but it is also informed by the value that communities place on places, objects and practices that can reveal information about their past. This reflects, as stated in NPWS (1997), that 'Aboriginal communities have a key role to play in identifying research and conservation issues'.
Spatial ethnography	Use of ethnographic information from written record or material culture to identify and map physical locations with cultural associations or cultural meaning
SSD	State Significant Development
Synthesising	The combining of separate elements or substances to form a coherent whole
WLALC	Wanaruah Local Aboriginal Land Council

WP	'WP means the Wonnarua People that are the descendants of Sara Madoo and that are the Native Title claim group for the Native Title claim filed on 24 October in response to a s.29 notice— NC10/2-2 White Mining (NSW) Pty Ltd, ICRA Ashton Pty Ltd and Austral-Asia Coal Holdings Pty Ltd (Mining Lease Application (MLA). The Wonnarua People have undertaken a separate confidential and non-disclosed Aboriginal Cultural Heritage Assessment report- <i>Wonnarua Cultural Heritage Assessment for the Bulga Optimisation Project</i> (refer Appendix C2).
Walk on Country	Walk on Country also refers to site visits and field visits. It is noted some registered Aboriginal parties preferred to identify visits to the Project area as a site or field visit while others chose to call this assessment approach as a walk on Country.
WTC	WTC means the Wonnarua Traditional Custodians that are a Native Title claim group for the Native Title claim NC12/5-1, filed in the 14 September 2012 in response to a s. 29 notice in relation to Assessment Lease Application No 49 (ALA49). Over the time of consultation to inform this ACHA, registered Aboriginal parties who identified as being part of the WTC during Stages 1 and 2 , formed and sought to be consulted together during Stage 3 of the consultation process. Consultation included registered Aboriginal parties and nominated Elders from WTC membership. A WTC representative was identified by the WTC as an Elder of Broke was identified as the WTC's primary Knowledge Holder for the Project area, together with other Elders and Knowledge Holders with more regional cultural knowledge.

1 Introduction

Aboriginal cultural heritage consists of any places and objects of significance to Aboriginal people because of their traditions, observances, lore, customs, beliefs and history. It provides evidence of the lives and existence of Aboriginal people before European settlement through to the present (OEH 2011).

Aboriginal cultural heritage is dynamic and may comprise physical (tangible) or non-physical (intangible) elements. It includes things made and used in traditional societies, such as stone tools, art sites and ceremonial or burial grounds. It also includes more contemporary and/or historical elements such as old mission buildings, massacre sites and cemeteries. Tangible heritage is situated in a broader cultural landscape, so it needs to be considered within that context and in a holistic manner (OEH 2011).

Aboriginal cultural heritage also relates to the connection and sense of belonging that people have with the landscape and each other. For Aboriginal people, cultural heritage and cultural practices are part of both the past and the present and that cultural heritage is kept alive and strong by being part of everyday life.

Aboriginal cultural heritage is not confined to sites. It also includes peoples' memories, storylines, ceremonies, language and 'ways of doing things' that continue to enrich local knowledge about the cultural landscape. It involves teaching and educating younger generations. It is also about learning and looking after cultural traditions and places, and passing on knowledge. It is enduring but also changing. It is ancient but also new (OEH 2011).

Aboriginal cultural heritage provides essential links between the past and present – it is an essential part of Aboriginal people's cultural identity, connection and sense of belonging to Country. The effective protection and conservation of this heritage is important in maintaining the identity, health and wellbeing of Aboriginal people (OEH 2011).

"Places of cultural significance enrich people's lives, often providing a deep and inspirational sense of connection to community and landscape, to the past and to lived experiences. They are historical records that are important as tangible expressions of Australian identity and experience. Places of cultural significance reflect the diversity of our communities, telling us about whom we are and the past that has formed us and the Australian landscape. They are irreplaceable and precious.

These places of cultural significance must be conserved for present and future generations" (Australia ICOMOS 1999).

"The Burra Charter advocates a cautious approach to change: do as much as necessary to care for the place and to make it useable, but otherwise change it as little as possible so that its cultural significance is retained" (Australia ICOMOS 1999).

Aboriginal people have occupied the NSW landscape for at least 42,000 years (OEH 2011), and are part of the oldest and continuous living culture in human history. This depth of history and attachment is evidenced in archaeological sites and features, as well as in the memories, stories and cultural associations that link Aboriginal people today to their traditional land or Country. Aboriginal cultural heritage therefore exists throughout all lands and waters in Australia as tangible and intangible heritage. Collectively this heritage forms a unique and irreplaceable part of Australia's national cultural heritage and identity (AHC 2002).

The Bulga Coal Complex (BCC) is located approximately 12 kilometres southwest of Singleton in the NSW Hunter Valley (refer to **Figure 5**), within the traditional homelands of the Wonnarua² people, whose history extends from the present day back many thousands of years. Through the involvement of registered Aboriginal parties who identify a range of connections to both Country and community, and through a number of past heritage investigations, the BCC is understood to contain a range of sites of cultural value, and to contain archaeological sites and features that are of social and scientific value. Mining has been undertaken within the Project area since 1982.

This ACHA forms part of an Environmental Impact Statement (EIS) prepared for the Bulga Optimisation Project ('the Project'). If approved, the Project would enable the continuation of open cut mining until approximately 2035, primarily within the existing and previously approved mining footprint. It will include the construction of associated surface facilities and infrastructure. These activities would occur within an approximately 4,113 hectare disturbance footprint of which approximately 2,188 hectares have been previously disturbed.

The Project has been defined as a 'State Significant Development' under the Environmental Planning and Assessment Act 1979 (EP&A Act), and as such, BCM is seeking Part 4 development consent for the Project.

To inform this approval process, this Aboriginal Cultural Heritage Assessment (ACHA) report has been prepared by Connect for Effect in collaboration with registered Aboriginal parties, and is also informed by the Project's technical archaeological assessment prepared by OzArk (**Appendix 13b of the EIS**). To inform the approval process, two independent and non-disclosed ACHA reports have been prepared by the Plains Clans of the Wonnarua People (PCWP) Native Title claimant group and the Wonnarua People (WP) Native Title claimant group (**Appendices C1 and C2**).

Collectively, these reports demonstrate compliance with the Director General's Requirements (DGRs) and current standards of practice outlined in guidelines prepared by the Office of Environment and Heritage (OEH), as discussed in detail in **Section 2.2**.

The following sections provide an overview of the Project, the purpose and structure of this document, report limitations, the Project team and associated studies.

² There are numerous spellings of Wonnarua in historical accounts, such as Wanaruah, Wonaruah, Wanarua and Wonnah-Ruah. Note that there is no right or wrong way to spell an Aboriginal word as there was no European form of written expression of Aboriginal language prior to 1788 (Maynard nd). The spelling used throughout this report is generally accepted to refer to the Aboriginal people of the central lowlands of the Hunter Valley at the time of European contact.



Figure 5: Bulga Coal Complex Location Map

Source: Umwelt (2013)

1.1 The Project

The BCC includes an open cut coal mine, an underground coal mine, a coal handling and preparation plant and associated facilities. The Project, if approved, will extract approximately 230 million tonnes (Mt) of run-of-mine (ROM) coal by open cut mining methods during the life of the Project (of which approximately 30 Mt is already approved for extraction). The current open cut operations are approved to operate until 2025, however, the coal resource approved to be extracted is expected to be exhausted by 2018. Underground mining operations are currently approved to 2031 and, other than the relocation of certain surface facilities, these operations are largely unaffected by the Project.

As noted previously, BCM is seeking to continue and expand current operations within the Bulga Coal Complex, which would involve the continuation of open cut mining until approximately 2035, and the construction of additional surface facilities and infrastructure including:

- Continued open cut mining;
- New emplacement area to the north of the existing CHPP;
- New surface operations and underground mine infrastructure areas;
- Upgrades to the existing CHPP and coal stockpile areas;
- Development of a new tailings storage facility;
- Relocation of sections of two 330kV transmission lines;
- Realignment of sections of Broke Road and Charlton Road;
- Construction of a new water storage and discharge dam; and
- The development of a noise and visual bund around the western and southern perimeters of the open cut pit.

Detailed Project information and mapping is contained within **Section 6.1**, and information on the DGRs for the Project EIS is discussed in **Section 2.2**.

1.2 Document Purpose and Structure

This ACHA report aims to provide an understanding of the range of cultural values of the Project area (spanning places and objects of social, historical, scientific and aesthetic significance) through consultation with registered Aboriginal parties, review of historical sources, and the integration of the Project's archaeological assessment conducted by OzArk (**Appendix 13b of the EIS**).

It further aims to assess the potential impact of the Project, if approved, on these cultural values. These aims are consistent with the DGRs and provide cultural heritage management measures for a '**Project approval**' scenario and a '**no Project approval**' scenario. This approach has been influenced by registered Aboriginal parties' assertions that the ACHA should be undertaken considering conservation outcomes regardless of the ultimate determination made by the consent authority. Registered Aboriginal parties were invited during the development of the assessment methodology to provide advice on whether considerations of cultural protocols were required in order to undertake survey work (i.e. consideration of men's areas or women's areas). Please refer to non-disclosure avoidance measure discussed in **Appendix C4** for responses that have been identified as culturally sensitive.

Information on cultural values contained within these documents has not been integrated into this ACHA because it has been identified as confidential and culturally sensitive and is therefore non-disclosed publicly. However, so that the Project EIS presents an integrated Aboriginal cultural heritage management framework, proposed management measures from both reports have been allowed to be disclosed and have been integrated into this ACHA. However, it is noted that one management measure suggested by the PCWP is included in **Appendix C1** due to its associated cultural values.

Collectively, the reports described satisfy the DGRs and current standards of practice outlined in guidelines prepared by the Office of Environment and Heritage (OEH), as discussed in detail in **Section 2.2**.

In adopting this approach, this ACHA report was structured as follows:

- **Section 1** provides a general introduction to the Project, Aboriginal cultural heritage assessment process and this ACHA report;
- **Section 2** details the approach of this Aboriginal cultural heritage assessment process and report, spanning the requirements of relevant legislation, the DGRs and OEH guidelines. This section also presents the guiding principles adopted for the assessment approach as derived from the above sources, and presents an overview of assessment process conducted;
- **Section 3** identifies those Aboriginal parties with a registered interest in the Project, and how they have been consulted and have had the opportunity to participate in all stages of the ACHA assessment process. This section also identifies how cultural protocols and Aboriginal intellectual property rights informed a culturally appropriate consultation approach, which also included preparation of the two non-disclosed reports prepared by the PCWP and WP (refer to **Appendices C1** and **C2**);
- **Section 4** provides the background to the assessment of Aboriginal cultural significance of the Project area. This includes information on the landscape setting and its cultural resources; the range of past and present Aboriginal associations with the Project area that have been drawn from; and, historical accounts, oral history accounts and archaeological studies. This information is also synthesised to provide a broad understanding of the Aboriginal cultural landscape of the Project area;
- **Section 5** provides a summary of assessment of the social, historic, scientific and aesthetic values of the Project area, as informed by registered Aboriginal parties input, the Project's technical archaeological assessment and historical research;
- **Section 6** presents further information on the proposed Project, and provides an assessment of the impact of the Project if approved. This section includes a cultural impact assessment identified by registered Aboriginal parties, a summary of the archaeological impact assessment prepared by OzArk (**Appendix 13b of the EIS**) and a cumulative impact assessment, which considers the local and regional influences of the Project, if approved, on the natural and cultural landscape of the Hunter Valley. This section also discusses the opportunities to avoid impacts identified during the assessment process, and whether ecologically sustainable development (ESD), including intergenerational equity, objectives are being achieved;

- **Section 7** presents information on the Project's Aboriginal cultural heritage management framework, and the ongoing registered Aboriginal parties' involvement in the assessment of Project impacts and selection of appropriate management measures. A series of management measures are also presented, including a summary of the OzArk (**Appendix 13b of the EIS**) management strategy, and additional measures developed by BCM in consultation with registered Aboriginal parties during the draft report comment period. These measures relate to the management of areas of cultural heritage value, but also provide a framework for Aboriginal wellbeing in acknowledgement of the intrinsic links between cultural heritage and Aboriginal community wellbeing (refer to DEC 2006);
- **Section 8** lists the references utilised in the compilation of this report; and
- **Appendices** include, in full, all registered Aboriginal parties correspondence, assessment and review documents, including non-disclosed documents subject to access conditions where confidentiality was requested by registered Aboriginal parties.

1.3 Report Limitations

As discussed in further detail in **Section 3**, the Project's Aboriginal cultural heritage assessment process has been undertaken in accordance with the DGRs and Clause 80C of the NPW Regulation 2009, which affords all registered Aboriginal parties with the opportunity to be consulted to inform this ACHA. The function of the ACHA is to consult inclusively with all registered Aboriginal parties and to document the range of views on cultural significance values, Project impacts and management measures and outcomes. It is recognised there may be differences in the cultural values and opinions asserted, and that consensus is not always possible regarding the social or cultural value of a place because people experience places or events differently, and in some instances may be in direct conflict. This ACHA report only includes cultural values information provided by registered Aboriginal parties who chose to provide it through Connect for Effect for inclusion in this ACHA report. In accordance with OEH guidelines the registered Aboriginal parties stated cultural values have not been validated.

As mentioned, during early consultation for the Project EIS, as part of the consultation phase identifying Cultural Knowledge Holders, a number of registered Aboriginal parties identified as being part of Wonnarua Traditional Owner and kin groups, and sought the opportunity to undertake their own Aboriginal Cultural Heritage Assessment in order to manage sensitive cultural knowledge. In response to and in respect of this request, and reflecting the principles of OEH consultation guidelines (Sheet 3 of the *Aboriginal cultural heritage consultation requirements for proponents*, DECCW 2010a), BCM offered three different ways in which registered Aboriginal parties could be consulted to share their cultural values as part of developing the assessment approach. These were:

- Through Connect for Effect for inclusion in this ACHA report, with the option to restrict access to cultural knowledge (refer **Appendices C3, C4 and C5**);
- Through the PCWP for inclusion in a separate and non-disclosed ACHA report (facilitated by Tocomwall Pty Ltd on behalf of the PCWP) (refer **Appendix C1**); and
- Through the WP for inclusion in a separate and non-disclosed ACHA report (facilitated by the Wonnarua Nation on behalf of the WP) (refer **Appendix C2**).

Preparation of this ACHA report has also been constrained by factors discussed below.

The consultation identified that the Project area contains a range of cultural, historical, scientific and aesthetic cultural significance values, and that these values co-exist in many places. Where values have been provided by the registered Aboriginal parties as an outcome of the consultation process, they have been recorded and presented in this ACHA.

As noted, two registered Native Title claimant groups, (the PCWP and the WP) undertook their own Aboriginal cultural heritage values assessment reports which incorporate the cultural, historic and aesthetic values of the registered Aboriginal parties associating with these claimant groups which were not captured by this ACHA. At the request of these two registered Aboriginal parties, all parts of their assessment reports, other than the sections related to management measures, are to be kept confidential for cultural reasons.

This ACHA therefore does not include any cultural values assessments detailed in the separate PCWP and WP ACHA reports. The cultural values information which is contained within this ACHA report may not reflect the values that may be contained in the PCWP and WP ACHA reports.

These three Aboriginal Cultural Heritage reports have been used by BCM to identify the significance of Aboriginal cultural heritage on and around the Project area. The understanding of significance has also informed BCM in its development of cultural heritage management measures. The publicly disclosed management recommendations are included in this ACHA.

However, the PCWP and WP ACHA values reports have been provided to BCM and will be provided to OEH and the consent authority as part of the assessment of the Project. The undisclosed sections of the PCWP and WP ACHA reports have not been disclosed to Connect for Effect, OzArk or Umwelt.

It is noted some aspects of archival records relating to historic Aboriginal experiences in the upper Hunter Valley are limited, because of an absence of research on the Aboriginal history of the Project area and surrounds, and the biases reflected in early European accounts of the region. It is also noted that those persons creating records often had a limited understanding of the complexity of Aboriginal social relationships; and records were often being produced at a time when significant social and cultural change was already occurring as the result of European contact. There are however, the records of Miller (1985) which have made a significant contribution towards recording Wonnarua cultural and historic experiences.

This report attempts to address this absence through inclusion of broader historical and anthropological literature, and through inclusion of statements by registered Aboriginal parties involved in this assessment process consistent with Section 2.2.2 of *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH 2011).

This approach also responds to the specific limitations of the historical accounts of Aboriginal lifeways, traditional and historic, in the upper Hunter Valley, for which there are few observations of Aboriginal experiences, activities and material culture in contrast with other parts of the Hunter River such as its estuary downstream.

1.3.1 Exclusion of Values Detailed in Previous Archaeological Reports

This assessment does not include cultural values statements and cultural knowledge and information detailed by Aboriginal persons contained in previously compiled archaeological reports which relate to the Project assessment area. Connect for Effect confirms that it has reviewed these reports for the purposes of preparing this cultural heritage assessment, but that it has elected not to include any cultural values statements found in these reports in this assessment. This is due to concerns over whether the original contributors to the archaeological reports would have consented to the sharing of their knowledge in the assessment. This decision by Connect for Effect is done to respect the cultural values of the Aboriginal parties and Connect for Effect's own protocol on information sharing.

1.3.2 Exclusion of Ethno Botanical Knowledge

This assessment contains no specific information relating to ethnobotanical knowledge of the Aboriginal contributors. Connect for Effect and its agents are not Traditional Owners of this knowledge and are not authorised to make this knowledge public. Most of the consultation undertaken by Connect for Effect relates to cultural values of a spiritual, community and historic nature. Connect for Effect supports the rights of Aboriginal people to protect their knowledge and their rights to negotiate a formal agreement for commercial use of resources and knowledge from their land in the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

In addition to the above, it is noted that all registered Aboriginal parties, including PCWP and WP, have had the opportunity to contribute to this ACHA through the draft report review process.

1.4 Project Team

BCM was an active partner and leader in the ACHA process and registered Aboriginal parties provided significant contributions to the preparation of this report, as outlined in the Attributions section, and discussed throughout this report.

The ACHA process for the Project EIS and this report was coordinated by Jane Delaney-John (Community Development Manager, Connect for Effect) in consultation with BCM. This report was prepared with the support of Meaghan Russell (Senior Archaeologist and Cultural Heritage Adviser, Connect for Effect), who undertook regional historical research and assistance with reporting, and Lauren Davie (Administrative Support, Connect for Effect). Sharon Veal (Godden Mackay Logan) provided support to the ACHA process by co-facilitating with Jane Delaney-John a session on techniques and processes of undertaking oral history recording and reporting to build capacity within registered Aboriginal parties to record their own family's cultural values and histories. Terri Janke (Terri Janke and Company Pty Ltd) provided professional support to Connect for Effect in the legal review of consultation and intellectual property protocols.

An *Aboriginal Archaeological Values Assessment* report was prepared by OzArk Environmental and Heritage Management to assess the archaeological value of sites and artefacts identified within the Project Area and this report is included as **Appendix 13b of the EIS**.

1.5 Associated EIS Studies

This ACHA report should be read in conjunction with the EIS and the following reports, to provide a comprehensive understanding of cultural significance values, potential Project impacts and management measures:

- The *Aboriginal Cultural Heritage Assessment* report - *Our Country. Our Culture. Our Values The Traditional, Historical and contemporary landscape of the Bulga Optimisation Project Area* (non-disclosed) prepared by PCWP (2012) (refer to **Appendix C1**);
- The *Aboriginal Cultural Heritage Assessment* report - *Wonnarua Cultural Heritage Assessment for the Bulga Optimisation Project* (non-disclosed) prepared by the WP (2012) (refer to **Appendix C2**);
- The *Aboriginal Archaeological Values Assessment* report prepared by OzArk (**Appendix 13b of the EIS**); and
- The *Historic Heritage Assessment* report prepared by Umwelt (**Appendix 14 of the EIS**).

2 Aboriginal Cultural Heritage Assessment Approach

This section presents the Aboriginal cultural heritage assessment approach for the Project EIS, which has guided the preparation of this report based on:

- State legislation, which provides protection to Aboriginal cultural heritage in NSW and identifies the approval processes for proponents seeking to impact Aboriginal cultural heritage through development actions; Part 4 EP&A Act requirements, including compliance with *The Burra Charter* (Australia ICOMOS 1999) and *Guidelines For Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (DEC 2005); and
- Current Office of Environment and Heritage (OEH) guidelines for the assessment of Aboriginal cultural heritage in NSW, including standards outlined in the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011), the *Aboriginal cultural heritage consultation requirements for proponents* (DECCW 2010a), and the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010b).

The approach taken acknowledges and respects that Aboriginal people have the right to directly participate in matters that may affect their heritage, and have the right to maintain culture, language, knowledge and identity.

One of the aims of the ACHA was to consult with all registered Aboriginal parties including Traditional Owners and Knowledge Holders, and to document the range of Aboriginal cultural values of the Project area as identified through consultation with registered Aboriginal parties and through integration of historic and archaeological information relating to the Project area.

This ACHA also incorporates the suggested archaeological management strategy suggested by OzArk (refer to **Appendix 13b of the EIS**) and the management recommendations received from the WP and PCWP in relation to management and mitigation measures. A summary of the process implemented for the Project is shown in **Figure 6**.

2.1 Legislative Requirements

The following sections present the Commonwealth and State statutory controls that provide legal protection for Aboriginal cultural heritage in NSW, and that identify the approval processes for any proposed Project that seeks to impact Aboriginal cultural heritage places and objects.

2.1.1 Commonwealth Legislation

2.1.1.1 *Environmental Protection and Biodiversity Conservation Act 1999*

The *Environmental Protection and Biodiversity Conservation Act 1999* (the EPBC Act) protects matters of national environmental significance. The EPBC Act lists eight matters of National Environmental Significance (MNES), which include world heritage sites and national heritage places, and provides for the establishment and maintenance of the National Heritage List (a list of Australia's most valued natural, Indigenous and historic heritage sites) and the Commonwealth Heritage List (a list of places of natural and cultural significance located on lands owned or controlled by the Australian Government). The EPBC Act is not directly relevant to this report.

2.1.1.2 Aboriginal and Torres Strait Islander Heritage Protection Act 1984

The *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (the ATSIHP Act) provides for the declaration by the Minister for the protection of Aboriginal cultural heritage of particular significance to Indigenous Australians, generally in circumstances where State or Territory laws fail to do so. The power to make declarations is meant to be used as a last resort, after the relevant processes of the state or territory have been exhausted; no declarations have been made under the ATSIHP Act in relation to the Project area.

2.1.1.3 Native Title Act 1993

The *Native Title Act 1993* provides for the recognition and determination of Native Title in Australia, processes for how future activity can proceed on Native Title land, and to provide compensation where Native Title is impaired or extinguished.

NT Act processes for the purposes of the Project are not dealt with in this report, although some registered Native Title claimants were involved in the Aboriginal cultural heritage assessment process.

2.1.1.4 Protection of Movable Cultural Heritage Act 1986

The *Protection of Movable Cultural Heritage Act 1986* (the PMCH Act) implements Australia's obligations under the *UNESCO Convention on the Means of Prohibiting the Illicit Import, Export and Transfer of Ownership of Cultural Property*. Under the PMCH Act it is unlawful to export a 'protected object' from Australia without a certificate or permit from the Environment Minister. The PMCH Act is not directly relevant to this report.

2.1.2 State Legislation

2.1.2.1 Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) is the main piece of legislation regulating land use in NSW.

The Act is administered by the Department of Planning and Infrastructure (DP&I) and guides the process of land development, including the assessment and management of cultural heritage impacts.

The Act allows for the preparation of Environmental Planning Instruments (EPIs) to guide the process of land development, including the assessment and management of cultural heritage impacts. EPIs consist of:

- Local Environment Plans (LEPs), which delineate local government areas into zones where certain types of development are permissible, and identify whether development consent from the Council is required for proposed activities
- State Environmental Planning Policies (SEPPs), which address planning issues within the State, and for prescribed types of development, make the NSW Planning Minister the consent authority for development approvals instead of local Councils.

Under the provisions of the EP&A Act, the *SEPP (State and Regional Development) 2011* was established, which defined the Planning Minister as the approval authority for State Significant Development and State Significant Infrastructure. Types of development defined as State Significant by the SEPP include: mining; petroleum; intensive livestock agriculture; hospitals; waste management facilities; rail and road infrastructure; and pipelines.

Coal mining is State Significant Development, and the Minister for Planning and Infrastructure is the consent authority for it. Applications for approval of State Significant Development are made under Part 4 of the EP&A Act. As the Project is State Significant Development, BCM is seeking Part 4 development consent for the Project.

This Aboriginal Cultural Heritage Assessment, including the Aboriginal Archaeological Values Assessment, has been prepared in accordance with DGR's identified by the DP&I.

2.1.2.2 National Parks & Wildlife Act 1974

The *National Parks & Wildlife Act 1974* (NP&W Act) is the primary law in NSW that provides protection for Aboriginal cultural heritage. The Act is administered by the Office of Environment and Heritage (OEH), within the Department of Premier and Cabinet NSW.

Under section 86(1) and 86(4) of the Act, it is an offence to harm an Aboriginal object or an Aboriginal place. The NP&W Act provides for a number of defences to prosecution for harming Aboriginal objects or places including that the person harmed the object or place in accordance with an Aboriginal Heritage Impact Permit or that the person exercised due diligence.

Under section 89J of the EP&A Act, an AHIP is not required, and the NP&W Act provisions prohibiting harm to Aboriginal objects and places are not applicable, to State Significant Development that is authorised by development consent.

2.1.2.3 Heritage Act 1977

The *Heritage Act 1977* provides for the protection of natural, cultural and built heritage that are of State or local heritage significance in NSW, through the register of heritage places or items on the State Heritage Register and the making of interim heritage orders and emergency orders to protect heritage items or places at risk.

The registration on the State Heritage Register or the making of interim register order places limits on what can be done to the heritage, although interim heritage orders do not apply to State Significant Development under the EP&A Act.

Archaeological relics are protected under Division 9 of the Act, which also prescribes the requirement for permits issued under sections 140 and 141 of the Act for the disturbance of relics, or under sections 60 and 63 of the Act, in cases where 'relics' are situated within sites or places listed on the State Heritage Register. Permits are issued in accordance with Heritage Council policies which ensure that disturbance of sites and 'relics' occurs in accordance with appropriate professional assessment, standards and procedures.

2.2 Environmental Assessment Requirements

The Project is defined as a State Significant Development under SEPP (State and Regional Development) 2011, and as such, BCM is seeking development consent under the EP&A Act.

Specific to the assessment of Aboriginal cultural heritage impacts the DGRs state that the EIS must include:

“....an Aboriginal cultural heritage assessment (including both cultural and archaeological significance) which must:

- Demonstrate effective consultation with Aboriginal communities in determining and assessing impacts, and developing and selecting mitigation measures*

- *Outline any proposed impact mitigation and management measures (including an evaluation of the effectiveness and reliability of the measures)".*

The DGRs also state that the Aboriginal cultural heritage assessment is to be prepared taking into account the *Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (DEC 2005) and *The Burra Charter* (Australia ICOMOS 1999).

The ACHA addresses the current guidelines Aboriginal cultural heritage consultation requirements for proponents (DECCW 2010a), *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011) to inform consultation and assessment.

2.3 ACHA Guiding Principles

In accordance with the above, a series of relevant guiding principles were adopted based on *The Burra Charter* and OEH guidelines in relation to the role of Aboriginal people in all stages of the process. These include:

- Aboriginal people, as the first peoples of Australia, have unique cultural relationships to the lands and waters of Australia;
- Aboriginal people have a unique status as the original owners and custodians of their traditional lands. The traditional rights and knowledge of Aboriginal people are recognised and respected. The relationship of Aboriginal people to their land is the essence of their cultural heritage, and therefore, of their survival;
- Aboriginal people have the right to well-informed participation in the Aboriginal cultural heritage assessment and management process;
- Aboriginal people must have an active role in any Aboriginal cultural heritage planning process, and all Aboriginal parties with relevant interest should be consulted;
- Effective consultation requires a commitment by all parties to work in the spirit of cooperation, mutual understanding and respect;
- Aboriginal people are the primary source of information about the significance of their heritage, and are the sole source of information on the social significance of places and objects to Aboriginal people;
- Aboriginal people are the primary source of information about how Aboriginal cultural heritage is best protected and conserved;
- Aboriginal people must have early input into the assessment of the cultural significance of their heritage and its management so they can continue to fulfil their obligations towards their heritage;
- Aboriginal people must be effectively involved in decisions affecting their heritage, and in managing places significant to them. Land managers must respect the rights of Aboriginal people to make decisions about their own heritage;
- Aboriginal people must control the way in which cultural knowledge and other information relating specifically to their heritage is used, as this may be an integral aspect of its heritage value; and
- Conservation, interpretation and management of a place should provide for the participation of people for whom the place has special associations and meanings, or who have social, spiritual or other cultural responsibilities for the place.

2.3.1 Assessment of Cultural Significance

The following principles were also adopted in relation to the assessment of the cultural significance of Aboriginal places and objects, reflecting OEH (2011) principles:

- Cultural significance refers to the range of social, historical, scientific and aesthetic values that may be associated with a place or object;
- Aboriginal cultural heritage is dynamic and it includes tangible and intangible expressions of culture that link generations of Aboriginal people over time, and can refer to landscapes, sites and areas that are particularly important to Aboriginal people as part of their customary law, developing traditions, history and current practices;
- Aboriginal cultural heritage is a fundamental and inseparable part of the cultural heritage of all Australians;
- Aboriginal cultural perspectives require an integrated view of heritage which includes social significance and natural features and landscapes, which are given meaning through culture;
- Social, historical, scientific and aesthetic values are often intrinsically linked and interrelated;
- Co-existence of cultural values should be recognised, respected and encouraged, especially in cases where they conflict;
- The contributions of all aspects of cultural significance of a place should be respected, such as the range of uses, associations or meanings a place may have to different people over different periods of time. Emphasising or interpreting one meaning at the expense of another can only be justified when one is of much greater cultural significance than the other; and
- Assessing cultural significance requires a degree of subjective analysis, so it is important that values are assessed against commonly accepted criteria, that values are graded in some way to express relative value, and that final assessments are clearly justified.

2.3.2 Identifying Proposed Management Measures

The following principles were also adopted in relation to identifying management measures for Aboriginal cultural heritage places and objects (OEH 2011):

- Management of cultural heritage places and objects must be based on an understanding of cultural significance;
- Relative degrees of cultural significance may lead to different conservation or impact mitigation management actions;
- Places of cultural significance should be conserved to provide a cultural and environmental legacy for current and future generations, as conservation is an integral part of good management of places of cultural significance;
- Protection and conservation of Aboriginal cultural heritage is important in maintaining the cultural identity and wellbeing of Aboriginal people;
- Conservation outcomes should be based on a respect for the existing fabric, use, associations and meanings. Conservation requires a cautious approach of changing as much as necessary but as little as possible;

- Management of a place should identify and take into consideration all aspects of cultural and natural significance without unwarranted emphasis on any one value at the expense of others;
- A precautionary approach should be taken when an activity involves significant or irreversible damage to a place;
- Cumulative impacts to the Aboriginal cultural heritage of a region should influence management approaches, reflecting the responsibility of the current generation to provide an environmental and cultural legacy for future generations (the intergenerational equity principle);
- Uncertainty about the cultural significance of a place or object should not be used to justify activities that might impact the place or object;
- Continuing, modifying or reinstating a culturally significant use may be appropriate and preferred forms of conservation;
- Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented;
- Opportunities for the continuation or revival of culturally significance uses or meaning of a place should be investigated and implemented;
- Aboriginal cultural heritage outcomes should consider a continuing role for Aboriginal people in caring for Country; and
- Involvement of Aboriginal people in environmental management and conservation activities, especially those that protect and restore Country, facilitate the practice of culture and support their wellbeing.

2.4 The Process Undertaken

The preparation of a preliminary assessment, primarily a desktop exercise, was undertaken to identify whether there are Aboriginal cultural heritage values associated with the Project area. For the Project, the Preliminary Environmental Assessment prepared in 2011 identified the presence of Aboriginal cultural heritage values and need for an Aboriginal Cultural Heritage Assessment as part of the Project EIS.

Consultation with registered Aboriginal parties for the Project was undertaken with reference to the relevant DEC (2005) and DECCW (2010a) guidelines and in accordance with the principles of *The Burra Charter* (Australia ICOMOS 1999). Consultation has involved four consultation stages as detailed in the DECCW (2010a) guidelines, as detailed below.

- **Stage 1:** Aboriginal parties with an interest in the Project were identified through Agency contact and public advertising inviting Aboriginal parties to register an interest in the Project. Registrations of interest were received.
- **Stage 2:** BCM, Connect for Effect, OzArk and Umwelt provided information about the Project to all registered Aboriginal parties who had registered during the formal Stage 1 notification period, including undertaking field visits with registered Aboriginal parties to review the Project area. Further briefing sessions and information were provided to new registrants throughout the consultation program.

- **Stage 3:** BCM, Connect for Effect and OzArk developed a methodology for the assessment of Aboriginal cultural heritage in the Project area that included a consultation framework and consultation protocols. BCM, Connect for Effect and OzArk provided the methodology to the registered Aboriginal parties for review and comment.

In accordance with relevant guidelines, this Stage also included:

- The collation of multi-faceted information on the Aboriginal cultural heritage of the Project area, spanning the physical setting, the history of peoples living on that land (sourced through historical sources, oral histories and archaeological studies), the material evidence (archaeological and contemporary) of peoples living on that land, and the cultural values associated with the land. The process for collating this information is discussed in **Section 4** and **Appendix A**;
 - The synthesis and integration of information collated, to generate an understanding of the cultural landscape of the Project area and identify the range of heritage values present (being the cultural significance assessment process). The process for understanding and assessing the cultural landscape of the Project area is discussed in **Sections 4** and **Section 5**;
 - The presentation of information regarding the Project, and an analysis of the harm or impact that the Project would have on the range of cultural heritage values identified, including both direct and indirect impacts and harm. The process for assessing impacts or harm of the Project, if approved, is discussed in **Section 6**;
 - A justification for any likely impacts or harm, considering alternatives considered, and measures that would be implemented to avoid, mitigate or offset the likely impact or harm are included in the ACHA. Aboriginal input has been considered in the assessment of impacts or harm, the development of management measures and in making final Aboriginal cultural heritage recommendations. The process for considering management measures is discussed in **Sections 6.3** and **Section 7**; and
 - The presentation of specific management outcomes for Aboriginal cultural heritage, including the nature and location of any offsets, requirements for further work to mitigate impacts such as archaeological salvage, specific on-going cultural heritage protocols and specific Aboriginal community requirements. This process for determining appropriate management outcomes is discussed in **Section 7.4** (Project approval scenario) and **Section 7.5** (no Project approval scenario) and of this report.
- **Stage 4:** BCM and Connect for Effect sought review and comment from registered Aboriginal on the draft ACHA report and draft *Aboriginal Archaeological Values Assessment* report. This ACHA report forms part of the EIS for consideration as part of the development assessment process.

The overall process for assessing Aboriginal cultural heritage in NSW is reflected in current OEH guidelines for those proponents seeking Part 6 cultural heritage approvals, with **Figure 6** illustrating the key stages of the assessment process, derived from the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011). However it is noted that while the key stages of assessment have been applied to inform the ACHA, the final stage shown in **Figure 6** relating to filing an Aboriginal Heritage Impact Permit (AHIP) application does not apply to this Project.

As previously discussed, the PCWP and the WP have prepared separate and non-disclosed ACHA reports (refer to **Appendices C1** and **C2**), to document their own cultural values of the Project area and maintain control of their intellectual property.

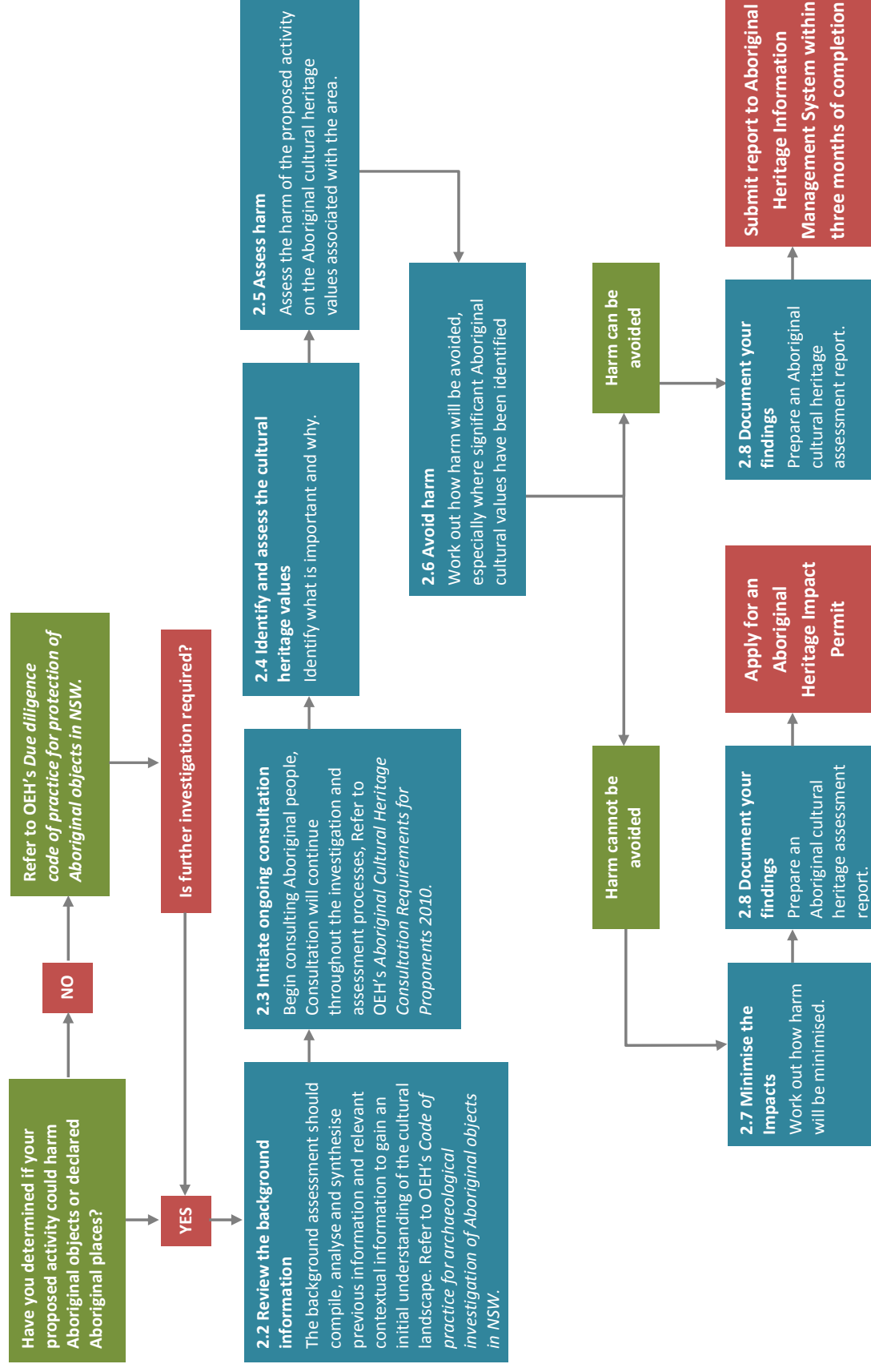


Figure 6: OEHS (2011) Aboriginal Cultural Heritage Assessment Process

These reports were prepared in accordance with a consultancy agreement between the authors and the proponent. The agreements included the requirement to complete the assessment reports in accordance with the Project's DGRs. Refer to **Table 2** compliance table.

These reports are in addition to the technical archaeological assessment for the Project EIS prepared by OzArk (**Appendix 13b of the EIS**), and this ACHA.

Figure 7 illustrates how all four documents have been prepared to provide a comprehensive assessment of cultural significance values of the Project area, and to provide a consolidated management framework for the Project based on intergenerational equity and Care and Control considerations.

This management framework has been informed by all four documents, as PCWP and WP have disclosed extracts of their ACHAs relating to management measures and a copy of these have been provided to Connect for Effect by BCM.

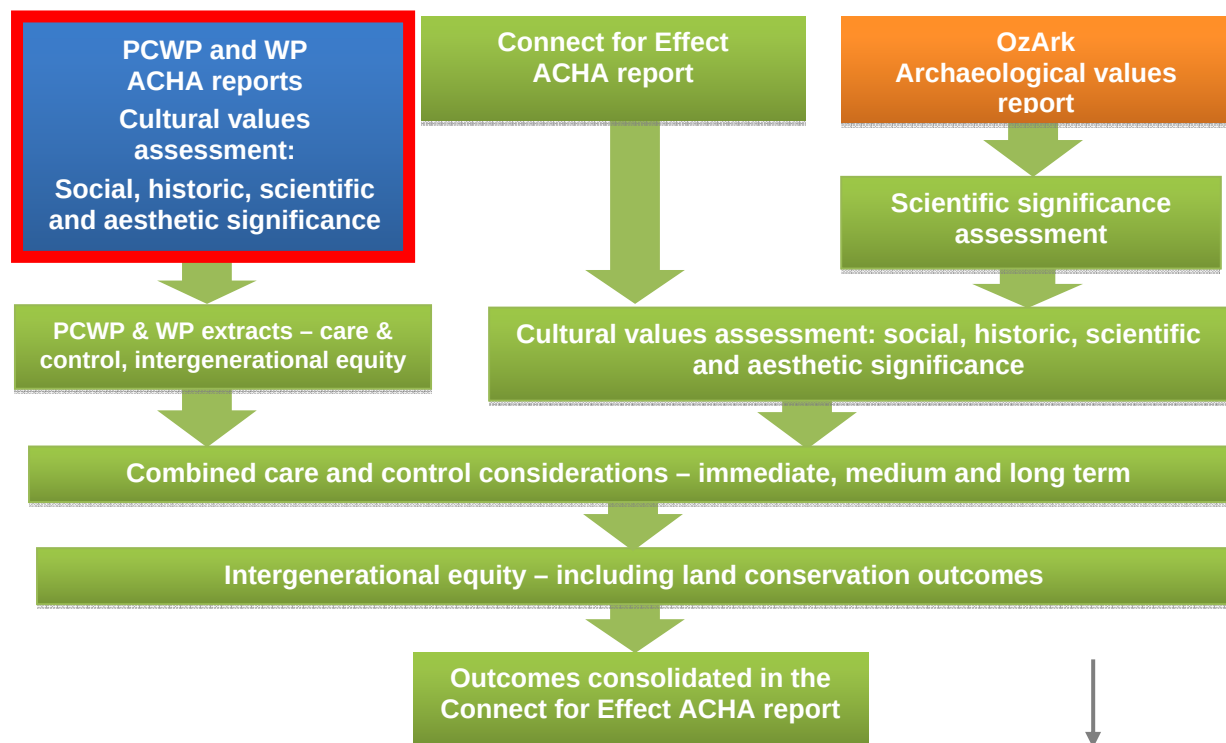


Figure 7: Integrated ACHA Report Approach

Fundamental to the consultation process was discussion on the Aboriginal cultural values of the Project area with registered Aboriginal parties. The following values were discussed to inform the ACHA:

- **Social values**, which embrace the qualities for which a place has become a focus of spiritual, political, national or other cultural sentiment to a majority or minority group;
- **Historical values**, which broadly encompass the history of aesthetics, science and society, and therefore to a large extent underlies all significance assessment. A place may have historic value because it has influenced, or, has been influenced by an historic figure, event, phase or activity, or, has been the site of an important event. For any given place the significance should be greater where evidence of the association or event survives *in situ*, or where the settings are substantially intact; however, some events or associations may be so important that the place retains significance regardless of subsequent treatment;

- **Scientific values**, which refers to the research potential of a locality, being the importance of the data contained within a locality (its rarity, quality or representativeness), and the degree which it may contribute further substantial information to an understanding of its history; and
- **Aesthetic values**, which include aspects of sensory perception such as form, scale, colour, texture and material of the fabric, the smells and sounds associated with the place and its use.

2.4.1 Statement of Compliance

This ACHA has been prepared in accordance with DGRs and in accordance with current NSW guideline standards, as detailed in **Table 2**.

As discussed previously, this ACHA has also adopted an approach that respects and responds to registered Aboriginal parties' guidance on culturally appropriate assessment approaches, and as a result, the Project EIS is informed by this ACHA, two separate and non-disclosed ACHAs prepared by the PCWP and the WP (**Appendices C1 and C2**), and the OzArk (**Appendix 13b of the EIS**) technical archaeological assessment.

In recognition that all four reports contribute to the overall compliance of the Project EIS in relation to Aboriginal cultural heritage assessment, the following table provides section references for all four documents; although it should be noted that section references for the non-disclosed PCWP and WP ACHA reports were provided by BCM due to the restricted status of the two documents.

Table 2: Project ACHA Assessment Compliance against Project EIS Requirements

Aboriginal Cultural Heritage Assessment		ACHA (Connect for Effect 2012)	ACHA (PCWP Appendix C1)	ACHA (WP Appendix C2)	Archaeological Assessment (OzArk Appendix 13b of the EIS)
Project Director General Requirements	Effective consultation with Aboriginal communities in determining and assessing impacts	Sections 2, 3 Section 6	Section 4.5.4	Section 3.0	Section 5.10.4
	Effective consultation with Aboriginal communities in developing and selecting mitigation measures	Sections 2, 3 Section 7	Section 4.5.4	Section 2-3	Section 3.2
	Outline any proposed impact mitigation and management measures (including an evaluation of effectiveness and reliability of measures)	Section 6 Section 7	Section 6.4	Section 5.6-5.7	Section 13
	Compliance with Burra Charter (Australia ICOMOS 1999)	Sections 2 to 7	Section 1.1	Executive Summary	Section 1.3
	Compliance with <i>Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation</i> (DEC 2005), including:	Sections 2 to 7	Section 1.1	Executive Summary	Section 2
DEC (2005) Guidelines	Step 1: preparation of a Preliminary Assessment	Refer to Project's Preliminary Environmental Assessment report (Umwelt 2011a)			
	Step 2: collation of multi-faceted information on the Aboriginal cultural heritage of the development area	Section 4 Appendix A	Section 5.0 - 7.0	Section 5	Section 5
	Step 3: synthesis and integration of information collated, to generate an understanding of the cultural landscape of the development area	Section 4	Section 6.2	Section 5	Section 8

Aboriginal Cultural Heritage Assessment		ACHA (Connect for Effect 2012)	ACHA (PCWP Appendix C1)	ACHA (WP Appendix C2)	Archaeological Assessment (OzArk Appendix 13b of the EIS)
DEC (2005) Guidelines	Step 4: presentation of Project information and analysis of likely impacts (direct and indirect) the on the range of cultural heritage values identified	Section 6	Section 6.0	Section 5	Section 13.1
	Step 5: integration of cultural heritage assessment, including justification for any likely impacts, alternatives considered & mitigation measures	Section 6.3, 6.4	Section 5.0-6.0	Section 5	Section 11
	Step 6: the presentation of specific management outcomes for Aboriginal cultural heritage, including the nature and location of any offsets, requirements for further work to mitigate impacts such as archaeological salvage, specific on-going cultural heritage protocols and specific Aboriginal community requirements	Section 7	Section 6.4	Section 5	Section 13
DECCW (2010a) Guidelines	Consultation with Aboriginal parties as outlined in Clause 80C of the NPW Regulation 2009, and as further explained in the <i>Aboriginal cultural heritage consultation requirements for proponents</i> (DECCW 2010a), including:	Section 3 (overview of approach)	Section 4.5.4	Section 2-3	Section 3.2
	Stage 1 notification of proposed Project and registration of interest	Section 3.1	Section 4.5.4	Section 2-3	n/a
	Stage 2 presentation of information about the proposed Project	Section 3.3	Section 4.5.4	Section 2-3	n/a
	Stage 3 development of assessment methodology, and gathering information about cultural significance	Section 3.3	Section 4.0-6.0	Section 4	Section 7
	Stage 4 review of draft ACHA report	Section 3.3	Page ii	Section 2-4	

Aboriginal Cultural Heritage Assessment				
OEH (2011) Guidelines	ACHA (Connect for Effect 2012)	ACHA (PCWP Appendix C1)	ACHA (WP Appendix C2)	Archaeological Assessment (OzArk Appendix 13b of the EIS)
	Preparation of an ACHA assessment and report in accordance with the requirements of the <i>Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW</i> (OEH 2011), including:	Section 1.1	Section 1-6	NA
	<i>Review of background information, including physical setting, history, material evidence of Aboriginal land use</i>	Section 2	Section 4	Sections 4 and 5
	<i>Consultation with Aboriginal people as set out in Clause 80C of NPW Regulation 2010</i>	Section 2.0-4.0	Section 4.2	Section 3.2
	<i>Identification and assessment of cultural significance, identifying and assessing social, historic, scientific and aesthetic values</i>	Section 3	Section 4.5.4	Section 3-4
	<i>Assessing harm, both direct and indirect, to Aboriginal objects and declared Aboriginal places, and their associated heritage values</i>	Section 5	Section 5.0-6.0	Section 5
	<i>Assessing harm, both direct and indirect, to Aboriginal objects and declared Aboriginal places, and their associated heritage values</i>	Section 6	Section 5-6	Section 13.1
	<i>Developing practical measures to avoid harm in consultation with Aboriginal people</i>	Section 6	Section 6.4	Section 5
	<i>Developing practical measures to avoid harm in consultation with Aboriginal people</i>	Section 7	Section 7	Section 13.2
	<i>Development management strategies to minimise harm in consultation with Aboriginal people</i>	Section 7	Section 6.4	Section 5
				Section 13.4

Aboriginal Cultural Heritage Assessment				
DECCW (2010b) Guidelines	Preparation of a technical archaeological assessment in accordance with the requirements of the <i>Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales</i> (DECCW 2010b)	ACHA (Connect for Effect 2012)	ACHA (PCWP Appendix C1)	ACHA (WP Appendix C2)
		NA	NA	NA
				Refer to OzArk assessment report (Appendix 13b of EIS)

3 Registered Aboriginal Parties Consultation and Involvement

“Consultation with Aboriginal people is an integral part of the process of investigating and assessing Aboriginal cultural heritage. Aboriginal people who hold cultural knowledge about the area, objects and places that may be directly or indirectly affected by the proposed activity must be given the opportunity to be consulted. This is done through the process of investigating, assessing and working out how to manage the harm from the proposed activity. Consultation must adhere to the requirements set out in Clause 80C of the NPW Regulation” (OEH 2011:2).

“Conservation, interpretation and management of a place should provide for the participation of people for whom the place has special associations and meanings, or who have social, spiritual or other cultural responsibilities for the place” (Australia ICOMOS 1999).

Consultation was collectively undertaken by BCM, Connect for Effect, OzArk and Umwelt, and undertaken in accordance with clause 80C of the NPW Regulation 2009, as further detailed in the *Aboriginal cultural heritage consultation requirements for proponents* (DECCW 2010a). The roles of each party throughout the four main stages of consultation as defined by DECCW (2010a) guidelines and modified for the purposes of this Part 4 ACHA (refer to **Figure 8**) and have been summarised below:

- BCM and Umwelt conducted consultation for **Stage 1** of the DECCW (2010a) consultation process, which included the formal notification of the proposed Project and the ACHA process, and the opportunity for Aboriginal parties to formally register their interest in the Project;
- BCM, OzArk, Umwelt and Connect for Effect conducted **Stage 2** of the DECCW (2010a) consultation process, which included presenting information on the proposed Project to all Aboriginal parties who registered an interest in **Stage 1**. This included details of the Project area, proposed disturbance boundary, history of Aboriginal cultural and archaeological management of the site. Copies of this information were shared with all Aboriginal parties who registered an interest in later stages of the assessment process. Registered Aboriginal parties information was provided via one to one and small group briefing sessions, phone discussions and release of Project materials available at time of registration; and
- BCM, OzArk and Connect for Effect conducted **Stage 3** of the DECCW (2010a) consultation process, which included 18 months of extensive consultation that aimed to develop a culturally appropriate assessment approach, and then to actively involve registered Aboriginal parties in the assessment of cultural values, the likely Project impacts, if approved, and the development of management measures.

As part of this stage, Connect for Effect undertook extensive consultation with those registered Aboriginal parties who identified they wanted to have their cultural values included in this ACHA report, which included but was not limited to; a series of large group, small group and family workshops, site visits, face to face discussions, oral recording, and telephone discussions. Elders also provided comment on site specific and cultural, social, historic and aesthetic values, which included the value of archaeological and cultural sites, flora and fauna and landscape features to inform the assessment and management measures.

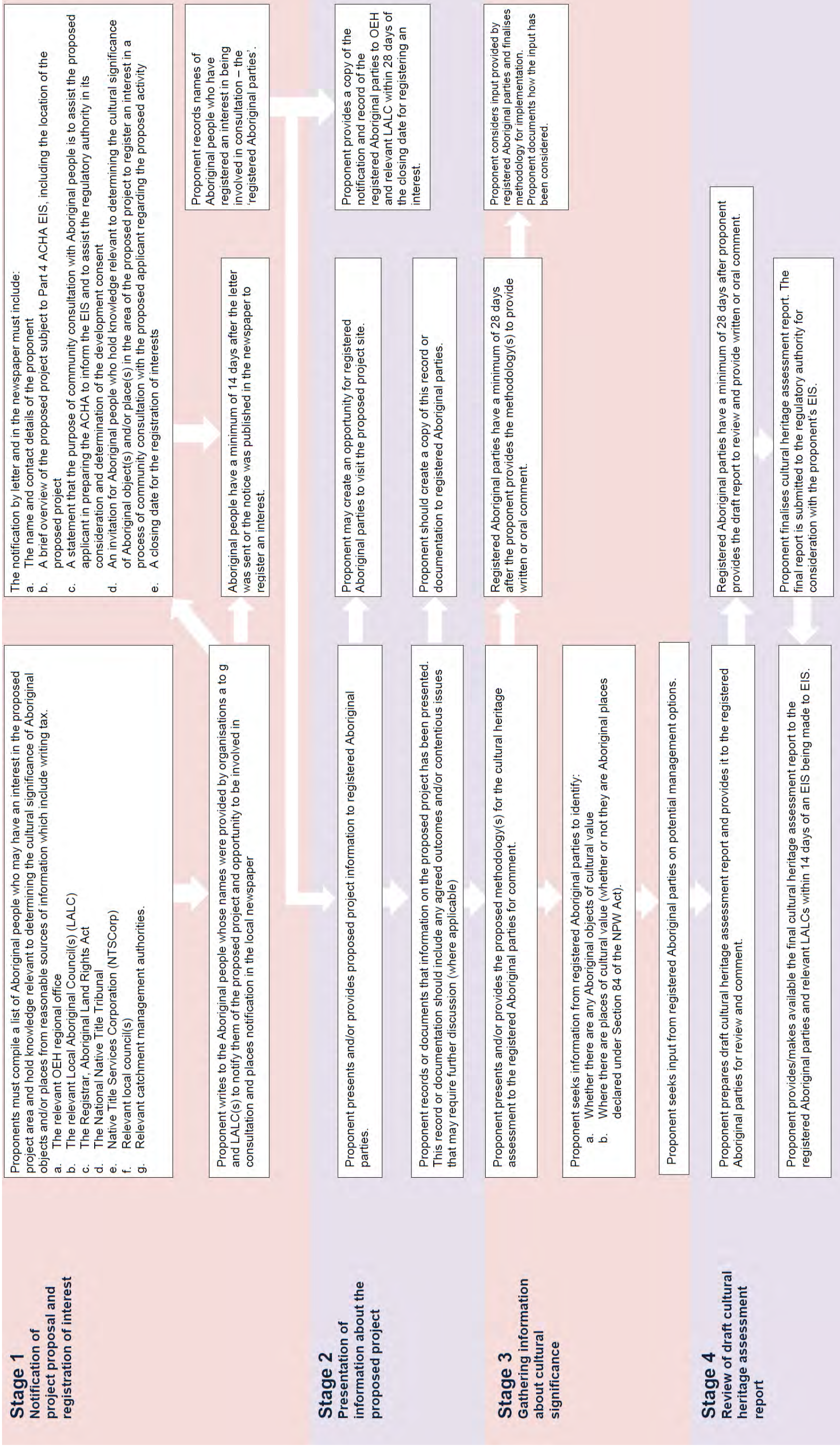


Figure 8: Summary of the ACHA Consultation Process, Reflecting OEH Guideline Requirements

Source: adapted from DECCW (2010a)

As part of the assessment approach developed in **Stage 3**, BCM conducted consultation with the PCWP in relation to the Project, and specifically in relation to the preparation of the separate and non-disclosed PCWP ACHA report (refer to **Appendix C1**). As part of developing the ACHA methodology and approach in **Stage 3**, Connect for Effect developed the consultation model for the Project and participated in early discussions with the PCWP on ACHA participation opportunities by providing two briefing sessions and one telephone discussion.

As part of the assessment approach developed in **Stage 3**, BCM conducted consultation with the WP in relation to the Project EIS, and specifically in relation to the preparation of the separate and non-disclosed PCWP ACHA (refer to **Appendix C1**). During **Stages 2** and **3**, Connect for Effect also consulted directly with the WP, by providing information on the ACHA process, including values assessment approaches and attendance at two workshops on cultural values assessment. Discussion also included possible approaches on how the WP ACHA report (refer to **Appendix C2**) would inform the overall ACHA report to be prepared by Connect for Effect. At a separate session, Connect for Effect provided a presentation on the interim findings of ethnohistoric research conducted by Connect for Effect. WP also provided an interim draft of their ACHA report to Connect for Effect for review and discussion. Connect for Effect participated in a further five discussion sessions to assist WP in drafting their ACHA report and two other sessions to discuss the assessment process and approach, care and control, intergenerational equity principles and criteria development.

Connect for Effect and BCM conducted consultation for **Stage 3** of the assessment program with all other registered Aboriginal parties, including the WTC Native Title claimant group, in conjunction, with ongoing consultation by OzArk from October 2011 following the archaeological survey. This phase included consultation regarding Aboriginal cultural values, and the opportunity for registered Aboriginal parties to identify, consider and provide comments on impacts. Management measures were also explored using 'No Development Approval' and 'Development Approval' scenario modelling to identify potential Management Measures, including cultural considerations in ongoing consultation, care and control and intergenerational equity considerations to inform this ACHA report.

Stage 3 consultation included registered Aboriginal parties consultation and participation in the Project's archaeological assessment (**Appendix 13b of the EIS**).

BCM, OzArk and Connect for Effect conducted consultation for **Stage 4** of the DECCW (2010a) consultation process, which included review of the Projects draft cultural heritage assessment reports and incorporation of all additional input into the finalised ACHA.

BCM conducted consultations during **Stage 4** as part of a draft comment period and this approach provided opportunity for registered Aboriginal parties to discuss draft reports and recommendations; and provide further comment on Aboriginal cultural heritage values and management measures.

The following section provides a discussion of consultation objectives and the consultation approaches adopted, with subsequent sections identifying those Aboriginal parties who formally registered an interest in the Project and how those Aboriginal parties were consulted to actively participate in the all stages of the Aboriginal cultural heritage assessment and management process.

3.1 Consultation Objectives and Approaches

Reflecting the requirements of the DGRs and OEH guidelines for Aboriginal cultural heritage assessment in NSW, Aboriginal participation and involvement in all stages of cultural heritage assessment and management was fundamental to the Project ACHA. This approach also reflects a key principle of *The Burra Charter* framework, being that cultural heritage assessment and management should provide for the participation of people for whom the place has special association and meanings, or who have social, spiritual or cultural responsibilities for that place (Article 12).

As discussed in **Section 2**, Aboriginal parties identified a range of connections to Country and community at the time of registration, including Traditional connection to the area, historical connections, connection to Country, connection to community and reconnecting attachments; as well as interest in Aboriginal cultural heritage assessment and management.

Throughout all stages of the assessment process, registered Aboriginal parties were also invited to self-identify how they would like to participate in the Project's Aboriginal cultural heritage assessment process, including the addition of and access to any cultural information that they wanted to share to inform the assessment process, and what information (if any) should remain non-disclosed in the assessment and reporting process. A set of protocols and a flowchart was provided to inform the consultation assessment approach, as illustrated in **Figure 9**. Where this was identified, cultural protocols were respected and private discussions held in response to registered Aboriginal parties requests, and all non-disclosed information is therefore attached separately in **Appendices C1, C2, C3 and C4**.

During the initial **Stage 1** registration phase and into **Stage 2** of the consultation process, BCM was approached by the PCWP who requested to undertake separate consultation and sought to prepare their own ACHA values report for the Project area (refer to **Appendix C1**). Consultation methodology was reviewed by Connect for Effect and BCM and in recognition of the request by a Native Title claimant group in the region; a scope of works was developed by BCM for the commissioning of the PCWP to undertake their own ACHA.

At the time of the **Stage 2** consultation, another registered Native Title claimant group with a claim in the region (also over lands external to the Project area), registered an interest in the Project being the WP-representing the Sara Madoo descendants. BCM met with the WP claimants and discussed opportunity for the WP to provide their own Aboriginal Cultural Heritage Assessment and undertake a separate values assessment (refer to **Appendix C2**). The PCWP and WP were concurrently afforded the same opportunities to manage their own Aboriginal cultural heritage. Both claimant groups provided a response to a scope of works and formal contracts were developed and signed between BCM and the claimant group parties. These agreements included compliance requirements against the Project's DGRs.

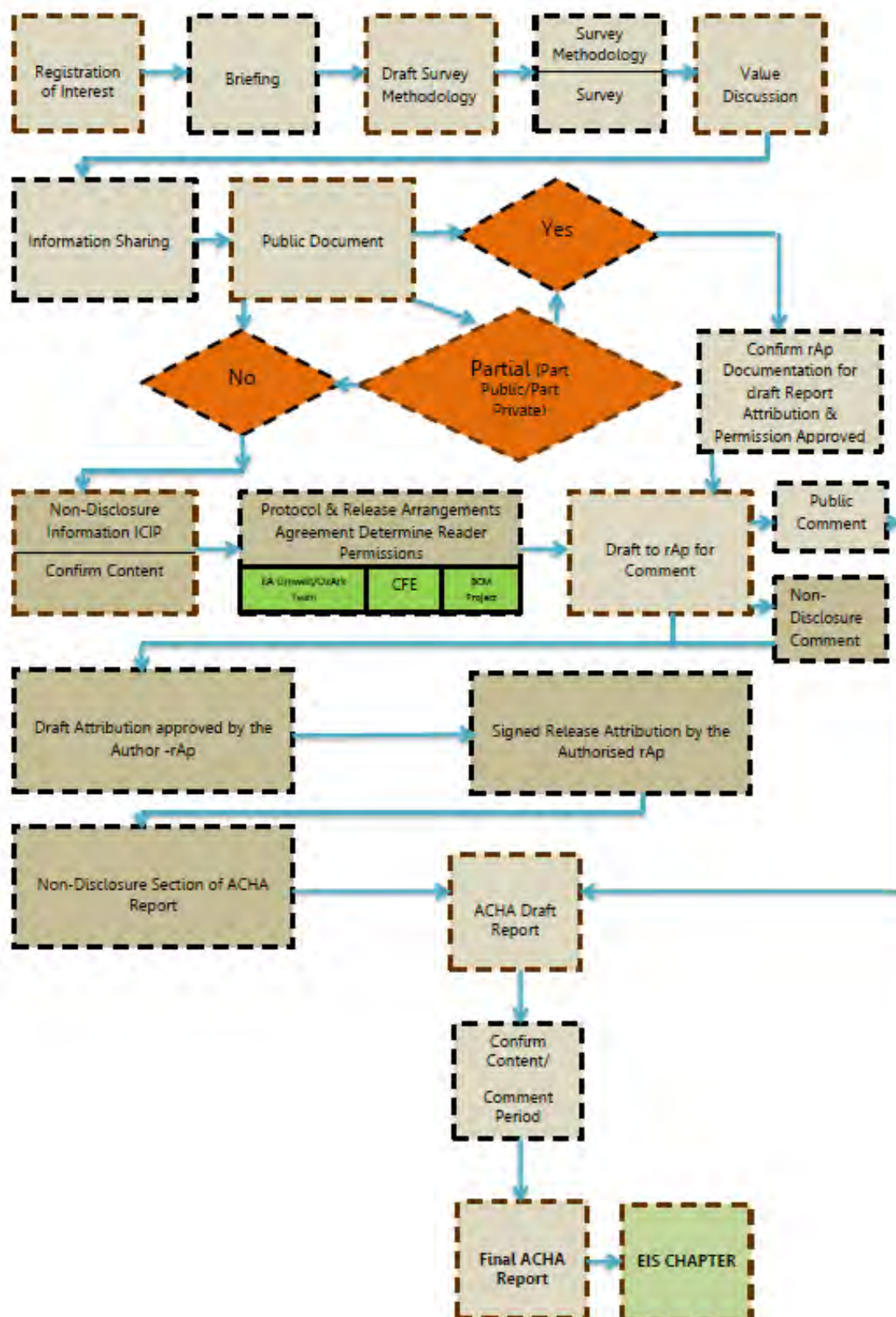


Figure 9: Consultation Protocol³

Source: Connect for Effect (2012)

³ Note that in the above table, the term 'rAp' refers to 'registered Aboriginal parties'

During consultation on the cultural values of the Project, registered Aboriginal parties identified a range of ways in which they were assessing the Project area and its regional context, which included (but were not limited to):

- Boundaries defined and mapped by language; and/or;
- Boundaries which include historic segregation areas and areas which evoke memory and lived experiences; and/or
- Boundaries defined and mapped through pathways; and/or
- Boundaries mapped through archaeology; and or
- Boundaries mapped through Creation stories; and/or
- Project site specific boundaries; and/or
- As Aboriginal people seeking to protect Aboriginal cultural heritage or undertaking assessment field work.

These approaches are reflected throughout this ACHA report, which recognised the complex interrelationships of social, cultural and historic attachment associated with the Project area and its regional context.

Based on its understanding of the registered Aboriginal parties social, historical, scientific and aesthetic values, Connect for Effect (in consultation with the parties adopted the following OEH (2011) research questions to guide the cultural values assessment approach:

1. Does the Project area have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons?
2. Is the Project area important to the cultural or natural history of the local area and/or region and/or state?
3. Does the Project area have potential to yield information that should contribute to an understanding of the cultural or natural history of the local area and/or region and/or state?
4. Is the Project area important in demonstrating aesthetic characteristics in the local area and/or region and/or state?

Fundamental to the consultation process was the active participation of registered Aboriginal parties in the assessment of Project impacts, and the development of management recommendations and measures relevant to the Aboriginal cultural significance values statements and assessment concerns.

Eight approaches were developed to further consider Aboriginal cultural heritage values and build on the overall archaeological and cultural heritage assessment:

- The registered Aboriginal parties' consultation program;
- Workshop discussions and archival investigation;
- Registered Aboriginal parties' statements of cultural values, survey methodology comments and sharing of historic information including Project area land use context statements;
- Reference to OzArk (**Appendix 13b of the EIS**) heritage register searches, archaeological survey and research where available, to gain an understanding of other components of the Aboriginal cultural heritage assessment;

- Facilitation of Aboriginal community consultation on the cultural values of the Project area, and where required, walks on Country⁴ to identify and record Aboriginal cultural heritage values as they relate to the Project area;
- Consultation with the Office of Environment and Heritage (OEH) Department of Premier and Cabinet as required; and
- Assessment of the key cultural heritage issues for the Project, taking into account relevant guidelines, policies and plans and input from registered Aboriginal parties including Traditional Owners and Knowledge Holders.

As an outcome of this above process, this ACHA report presents a combined understanding of Aboriginal cultural heritage values of the Project area, as identified by registered Aboriginal parties, historical research and archaeological investigation (**Appendix 13b of the EIS**).

This ACHA report also presents an impact assessment that incorporates the views of registered Aboriginal parties, and presents a series of management measures and recommendations that have been prepared in consultation with registered Aboriginal parties.

The following sections provide a summary of the key stages of consultation with and involvement of registered Aboriginal parties in the preparation of the ACHA process, excluding a description of the consultation undertaken for the separate and non-disclosed reports prepared by the PCWP and WP (refer to **Appendices C1 and C2**).

At the outset of the process, BCM provided all registered Aboriginal parties with a range of consultation opportunities and formally sent correspondence to all on the 7 April 2012 in order to be informed by the parties as to how they wanted to participate.

The need to understand their choices was an important part of the consultation approach to ensure that all registered Aboriginal parties were consulted during the process.

BCM formally requested written confirmation by registered Aboriginal parties in relation to their:

1. Preferred consultation approach and participation; and
2. Approval release of contact details and information to parties such as:
 - Government agencies;
 - The Local Aboriginal Land Council;
 - The PCWP or WP native title claimant parties;
 - Connect for Effect ; and
 - The BCM Project team, including consultants.

Any new registrants after 7 April 2012 were also provided with the confirmation of consultation approach document.

⁴ Some registered Aboriginal Parties preferred to describe a site visit as a walk on Country, while others used the term site visit to describe project field visits and cultural values discussion. The ACHA includes both references.

3.2 Stage 1 Consultation – Notification and Registration of Interest

Stage 1 of the DECCW (2010a) consultation process aims to '*Identify, notify and register Aboriginal people who hold cultural knowledge relevant to determining the cultural significance of Aboriginal objects and/or places in the area of the proposed project*'.

3.2.1 Agency Notifications

In accordance with Section 4.1.2 of DECCW (2010a), BCM notified the following organisations on 7 June 2011 about the Project and sought information about Aboriginal people/ organisations that might hold knowledge relevant to determining the cultural significance associated with the Project area:

- Office of Environment and Heritage, which responded on 20 June 2011 with a list of 34 Aboriginal parties;
- Wanaruah Local Aboriginal Land Council, which responded on 17 June 2011 with a list of 31 Aboriginal Parties;
- Office of the Registrar of Aboriginal Owners, which responded on 20 June 2011 identifying that there were no Registered Aboriginal Owners for the Bulga Coal Complex area;
- National Native Title Tribunal which responded on 16 June 2011, identifying that there was one registered Native Title claim (PCWP) and one unregistered active Native Title claim (WP) within the Singleton LGA at the time of notification. It is noted that the second claim (WP) was subsequently registered on 24 October 2011. During Stage 3 of the ACHA consultation period, another claimant group the WTC also successfully registered a claim for Native Title under section 29 in the Singleton LGA (however outside the Project area) on the 19 September 2012;
- NTSCorp (formerly New South Wales Native Title Services), which did not respond;
- Singleton Shire Council, which did not respond; and
- Hunter Central Rivers Catchment Management Authority, which did not respond.

3.2.2 Public Notices

Public notification of the Project was provided in the Singleton Argus, Koori Mail, Newcastle Herald and Hunter Valley News on 24 May 2011, inviting registrations of interest for three projects associated with the Bulga Coal Complex, including the current Project, by 17 June 2011. A copy of these public notice advertisements is provided in **Appendix B1**.

The notifications were undertaken in order to identify Aboriginal parties who wished to be consulted with regard to the Project's Aboriginal cultural heritage assessment process.

3.2.3 Written Notifications to Aboriginal Parties to Invite their Participation in the ACHA Process

Following the newspaper advertisements and personalised expressions of interest letters sent, a comprehensive list was developed containing the contact details of 38 Aboriginal parties who might wish to be consulted. A written notification was posted to each Aboriginal party on 2 June 2012 to provide the opportunity to register an interest and participate.

In accordance with Section 4.1.6 of DECCW (2010a) guidelines, a copy of the following documentation was provided to OEH and WLALC at the end of the formal **Stage 1** registration period:

- Public notices of assessment in the Singleton Argus, Koori Mail, Newcastle Herald and Hunter Valley News on the 24 May 2011;
- Copies of original letters sent to Aboriginal parties notifying them of the Project's Aboriginal cultural heritage assessment process; and
- A record of those Aboriginal parties who registered an expression of interest in the Projects Aboriginal cultural heritage assessment.

As specified in Section 4.1.5 of DECCW (2010a) guidelines, all registered Aboriginal parties were afforded the opportunity to withhold their information being provided to OEH and the Wanaruah Local Aboriginal Lands Council (WLALC).

Three registered Aboriginal parties over the ACHA consultation period expressed their opposition to providing their details to OEH and the WLALC.

3.2.4 Initial Stage One Aboriginal Parties Registration

As a result of the process, 24 Aboriginal parties formally registered an interest in the Project at its outset of Stage 1:

1. Bullen Bullen Heritage Consultants;
2. Cacatua Culture Consultants;
3. Carrawonga Consultants;
4. Culturally Aware;
5. Gidawaa Walang Cultural Heritage Consultancy;
6. Hunter Traditional Owner Management Services;
7. Hunter Valley Natural and Cultural Resources Management;
8. Hunter Valley Aboriginal Corporation;
9. Hunter Valley Cultural Surveying;
10. Kauweul TA / Wonn1 Contracting Corporation;
11. Lower Hunter Wonnarua Council Incorporated;
12. Muswellbrook Cultural Consultants;
13. Tocomwall Pty Ltd on behalf of the Plains Clan of the Wonnarua People Native Title Group (PCWP);
14. Non-disclosed Registered Aboriginal Party #1 (refer to **Appendix C3**);
15. Ungooroo Aboriginal Corporation;
16. Ungooroo Cultural and Community Services;
17. Wanaruah Local Aboriginal Land Council;
18. Wattaka Wonnarua Cultural Consultant Services;
19. Widescope;
20. Wonnarua Cultural Heritage;

21. Wonnarua Nation Aboriginal Corporation;
22. Wonnarua Elders Corporation/Upper Hunter Wonnarua Council;
23. Yarrawalk as a Division of Tocomwall; and
24. Yinarr Cultural Services.

All parties listed above were invited to participate in all stages of the consultation and assessment process. Refer to consultation records attached in **Appendix B3** for further detail.

Following the formal **Stage 1** registration period, an additional 39 Aboriginal parties registered an interest during the course of the assessment process, with registered Aboriginal parties' numbers rising to 30 parties by November 2011 commencement of **Stage 3**, and then to 63 parties by December 2012 during **Stage 3** (refer to **Appendices B2, B3 and Appendix C5**).

Of the additional Aboriginal parties, 11 registered an interest during the development of the Project's assessment methodology:

1. Aboriginal Native Title Consultants;
2. Bigundi Biame Gunnedarr Traditional People;
3. Deslee Talbott Consultants;
4. Jarban & Macrabea;
5. Kawal Cultural Services;
6. Kayaway Eco Cultural and Heritage Services;
7. Roger Noel Matthews Consultancy;
8. T & G Cultural Consultants;
9. Myland Cultural and Heritage Groups;
10. Registered Aboriginal party #2- non disclosed (refer to **Appendix C3**); and
11. Upper Hunter Heritage Consultants.

An additional six Aboriginal parties registered an interest following the development of the Project assessment methodology and initial workshops, but prior to the Project's archaeological survey:

1. Giwirr Consultants;
2. Gomery Cultural Consultants;
3. Hunter Valley Cultural Consultants;
4. Minggu Consultants;
5. Kevin Taggart, WTC representative Elder of Broke; and
6. Wonnarua People Native Title claimant group.

An additional 21 Aboriginal Parties registered an interest following the initial stages of consultation and investigation, after the Project's archaeological survey but during the course of workshops to discuss Project impacts and suggested management measures, including the development of care and control strategies and intergenerational equity options:

1. Alieria French Trading;
2. Bawurra Consultants;
3. Breeza Plains Culture & Heritage Consultants;
4. Bunda Consultants;
5. Cheryl Moodie Consulting;
6. DRM Cultural Management;
7. EMT Culture & Heritage;
8. Galamaay Consultant;
9. Hielamon Cultural Consultants;
10. I & E Aboriginal Culture and Heritage;
11. Jeffrey Matthews;
12. KL.KG Saunders Trading Services;
13. Ngarramang- Kuri Aboriginal Cultural Heritage Group;
14. Smith Dhagaans Cultural Group;
15. Waabi Gabinya Cultural Consultancy;
16. Warragil Cultural Services;
17. WTC Native Title Claimant group;
18. Wunda Cultural Consultants;
19. Kauma Pondee Consultants;
20. Non-disclosed Registered Aboriginal Party #3 (refer to **Appendix C3**); and
21. Cyril Sampson Sole Trader.

An additional Aboriginal party Amanda Hickey Cultural Consultant registered an interest in the Project on the 11 January 2013 just prior to Stage 4 of the consultation process. The registered Aboriginal party has been included in the Project correspondence distribution list and was provided a copy of the draft ACHA and draft *Aboriginal Archaeological Values Assessment* report and invited to provide comment.

All registered Aboriginal parties listed above were invited to participate in the Project's Aboriginal cultural heritage consultation and assessment process from the time of their registration. Refer to consultation records attached in **Appendices B3 and C5** for further detail.

As noted above, registrations have also included a number of organisations that are representative of much larger groups of Aboriginal people with an interest in the Project:

- Plains Clans of the Wonnarua People;
- Wonnarua People;
- Wonnarua Traditional Custodians;
- Wanaruah Local Aboriginal Land Council; and
- Two Aboriginal Corporations – the Ungooroo Aboriginal Corporation and Hunter Valley Aboriginal Corporation.

The remaining 57 registrations comprised individual Aboriginal parties, a number of whom also identified themselves as members of Native Title claimant groups. Some decided to be consulted through Native Title claimant groups, and some via Connect for Effect by attending workshops, participating in group discussions and attending individual interviews on cultural values assessments, impact assessment and management recommendations and measures.

Some registered Aboriginal parties decided to participate in the independent PCWP and WP ACHA processes, while others chose to participate in more than one consultation approach.

Both the PCWP and WP also represented a number of Elders, individuals and families that did not seek individual or company registration, but still participated in the assessment process and contributed to the PCWP and WP ACHA reports (refer to **Appendices C1 and C2**).

Thirty four registered Aboriginal parties identified as members of the WTC and sought to contribute to a single consolidated WTC statement of values, included in **Section 5** of this ACHA.

The WTC also represented a number of Elders, individuals and families that did not seek individual or company registration, but still participated in the assessment process. This included one Elder of Broke identified by the WTC as one of their primary cultural Knowledge Holders, stating that he had intimate cultural and historic knowledge of the Project area and surrounds and unbroken connections across all generations. This report has identified the Elder as the WTC's representative Elder of Broke.

3.2.5 The Challenges of Consulting 65 Registered Aboriginal Parties

Strong Aboriginal community interest in the Project was evidenced by the high number of registrations throughout the course of the assessment which related to a number of factors, comprising but not limited to:

- Gathering of Aboriginal people for the purposes of a regional Native Title claim resulting in sharing of projects and proposed projects in the region by Aboriginal registrants; and
- Distribution of Project information through the Project's community newsletters and Project information provided to registered Aboriginal parties.

It is noted that the Aboriginal parties represent a broad cross sectoral representation of Aboriginal community representatives who identify a range of connections to Country and community. Among the body of registered Aboriginal parties are included representatives and Knowledge Holders who are:

- Individuals registering an interest in the Project due to uncertainty about the potential direct and indirect impacts of the Project on traditional lands of the Wonnarua people;
- Traditional Owners who assert traditional lores and customs over Wonnarua country;
- Families and individuals with attachment to the Creation places within the locality of the Project but external to its boundaries, who also identified traditional and contemporary attachments;
- Families and individuals who reside in Broke or have had an association with Broke and Bulga at some time in their life (who also identify as traditional people with attachment to the Project area);
- Workers (or previous employees) on the various landholdings of BCM properties over time and who have memory and attachment to the Project area;
- Individuals strongly attached to the region generationally and through regular cultural practices such as hunting and food and medicinal gathering and kin relations;

- Currently undertaking Native Title registration for areas within Wonnarua Country with the aspirations of negotiating Native Title outcomes for lands where Native Title has not been extinguished;
- Wonnarua people with ambitions of negotiating a Voluntary Indigenous Land Use Agreement with mining companies in the region;
- Aboriginal people interested in undertaking Aboriginal cultural heritage survey or salvage programs;
- Opponents to open cut and underground coal operations both in the region and the Project area, particularly in relation to the Loders Creek grinding groove complex; and
- Individuals supportive of mining operations both in the region and in Broke; perceiving them to offer social and economic benefits to the region and opportunities to address some of the disparities experienced by Aboriginal people in the region provided that they address cultural values and concerns.

Challenges existed in the process to consult with all registered Aboriginal parties especially as a significant number of these registrations occurred during the course of the assessment (i.e. during **Stage 3** archaeological survey methodology, during **Stage 3** values assessment; or during **Stage 3** management and mitigation option development), meaning that some aspects of the consultation program needed to be repeated, to provide an understanding of the proposed Project and the EIS assessment and ACHA process to those participating in latter stages of assessment only.

Challenges in designing effective communication mechanisms were important in terms of reducing possible limited involvement by parties due to language, literacy and numeracy barriers. The development of workshop based consultation approaches and oral and visual information sharing in order to maximise participation was an important consideration.

Although more than half of the registered Aboriginal parties were not involved in early stages of assessment, a number of opportunities were provided for all registered Aboriginal parties to participate in the assessment process from the time of their registration. These were conducted in order to maximise involvement and encourage the sharing of knowledge and cultural values to inform the Project ACHA and archaeological reports and included the opportunity to attend Project workshops and small group discussions.

These sessions also specifically aimed to build capacity in the understanding of the cultural heritage assessment process, so registered Aboriginal parties could participate in an informed way. The list of resources and information included:

- Copies of PowerPoint Presentations detailing key process and consultation elements;
- Copies of the Burra Charter;
- Copies of the OEH guidelines for Aboriginal cultural heritage consultation and investigation, including the Due Diligence and Archaeological Code of Practice guidelines;
- Copies of the NSW NPW Act (requested by some registered Aboriginal parties);
- Copies of the *Ask First Principles*;
- *Talking Histories* (DEC 2004a) and *Talk to Print* (DEC 2004b) documentation;
- Copies of wellbeing assessment models for Aboriginal and Torres Strait Islander people;
- Compilation of all consultation documentation;
- Compilation of project design and specific mapping;

- Copies of the draft materials that were distributed to related to the Aboriginal and archaeological assessment;
- Historic Parish maps;
- Copies of minutes of meetings and workshops;
- Copies of materials; and
- Copies of non-disclosure protocols and release forms (for all registered Aboriginal parties).



Figure 10: Suite of Materials Distributed to Registered Aboriginal Parties

Source: Connect for Effect November 2011-May 2012 presentations

Another critical element to the Aboriginal consultation approach was the encouragement of registered Aboriginal parties to contact their Elders and Knowledge Holders to discuss the Project and seek their guidance and knowledge of the Project area. As a result of recommendations made, consultation and site visits were arranged with Elders nominated by the registered Aboriginal parties and others who had initially registered an interest in the Project.

It is also noted that during the course of the consultation program, there were a number of registered Aboriginal parties who were concentrating on 'who could speak for Country' and some sought to reduce other registered Aboriginal parties' representation. Other registered Aboriginal parties sought to ensure as many representatives as possible in the community participated in the process.

In this context, it is acknowledged that while the Project's Aboriginal cultural heritage consultation process aimed to be inclusive in accordance with clause 80C of the NPW Regulation 2009 and DGRs, it also had an impact on some individuals and families, which was compounded due to confusion over concurrent Native Title registrations (although these registrations were external to the Project area); Project EIS assessment processes, and related Aboriginal Cultural Heritage Impact Permit (AHIP) applications associated with the Bulga Coal Complex.

The inter-relationship between exiting approvals and impacts to the BMU1 grinding grooves and consideration of remedial works to the Loders Creek grinding grooves, and understanding of management/conservation zones added further complexity to the consultation and assessment process.

3.3 Stage 2 Consultation – Project Briefings

Stage 2 of the DECCW (2010a) consultation process relates to the presentation of Project information about the planned development activities and the upcoming assessment impact assessment process.

3.3.1 Stage 2 Project Planning Briefing Meeting

In accordance with Section 4.2.1 of DECCW (2010a), all 24 registered Aboriginal parties who had registered an interest in the Project during **Stage 1** were sent a letter on 2 June 2011 inviting their attendance at a Project Planning Briefing Meeting to discuss the various aspects of the Project including the consultation program, draft archaeological methodology and survey assessment involvement.

The formal **Stage 2** Briefing session and planning Meeting was held at the Blakefield South Mine, Broke, on 27 July 2011.

In total, 21 registered Aboriginal parties' representatives attended, representing 19 registered Aboriginal parties:

1. Aboriginal Native Title Elders Consultants;
2. Bullen Bullen Heritage Consultants;
3. Cacatua Cultural Consultants;
4. Carrawonga Consultant;
5. Gidawaa Walang Cultural Heritage Consultancy;
6. Giwirr Consultants;
7. Hunter Valley Aboriginal Corporation;
8. Hunter Valley Cultural Consultants;
9. Kauweul TA⁵;
10. Muswellbrook Cultural Consultants;
11. Wanaruah Local Aboriginal Council;
12. Widescope;
13. Wonn 1 Contracting;
14. Wonnarua Cultural Heritage;
15. Wonnarua Elders Corporation/Upper Hunter Wonnarua Council;
16. Wonnarua Nation Aboriginal Corporation;
17. Ungooroo Aboriginal Corporation;
18. Upper Hunter Heritage Consultants; and
19. Yinarr Cultural Services.

⁵ While initial registration of Wonn 1 Contracting is recorded. During Stage 3 of the consultation process Kauweul TA and Wonn1 Contracting became one entity Kauweul TA Wonn1 Contracting Corporation.

The meeting was also attended by Nicola Roche, David Holmes and Jacquie Davidson from Umwelt; Ben Churcher from OzArk; Jane Delaney-John from Connect for Effect; Ned Stephenson and Nathan Lane from Beltana; Nigel Charnock from Xstrata Coal New South Wales; and Ralph Northey, Bret Jenkins and Paul Amidy from BCM.

Appendices B1 and B2 contain detailed information on the Project's inception meeting, including materials distributed. In summary, items discussed included:

- Introduction to the EIS process and the ACHA process;
- Background to the Bulga Optimisation Project;
- A discussion of the Project including critical timelines and milestones;
- The registered Aboriginal parties consultation process, including:
 - Consultation and history of archaeological work conducted to date through existing and overlapping complex approval;
 - Proposed timing for consultation workshops and field assessment;
 - Timing for completion and review of the draft report;
 - An overview of the draft methodology for archaeological assessment was briefly discussed and plans to workshop the proposed methodology proposed for November 2011;
 - An overview of the draft consultation approach and Project areas of cultural significance to be assessed;
 - A suggested application for an Aboriginal Cultural Heritage Impact Permit (AHIP) to undertake remedial works on the Loders Creek Grinding grooves was also raised; with agreement that this approach would be further discussed during the proposed November 2011 workshops;
 - The presentation also included the broader EIS consultation program and discussed opportunities for registered Aboriginal parties to participate in the Social needs analysis being undertaken by Coakes Consulting; and
 - Open discussion relating to Xstrata Coal New South Wales Upper Hunter, Reconciliation Action Plan (XCN RAP).

Registered Aboriginal parties expressed concern that further Project activity may impact identified Project areas of cultural significance. These areas included Loders Creek grinding grooves, BMU1 grinding grooves and other artefacts identified as important.

Information provided at the meeting included (but was not limited to) presentation of Project details, environmental and other impacts, copies of OEH guidelines and Burra Charter. A sample of materials handed out at the meeting is illustrated in **Figure 11** and **Figure 12**.



Figure 11: Project Meeting Materials, Heritage Guidelines



Figure 12: Project Meeting Materials, Stage 2 Consultation

The briefing meeting included a site visit to familiarise the registered Aboriginal parties with the Project area. All attendees at the meeting were provided with the opportunity to visit the Loders Creek grinding grooves, BMU 1 and vantage points to gain an understanding of the current status of the Project site.

During the meeting, registered Aboriginal parties provided general feedback that the briefing session was comprehensive and the field visit assisted in orientating them to the Project area. They indicated appreciation of the opportunity to undertake an assessment of the Project area which captured cultural, historic, scientific and aesthetic values. They also commented that the history of ACHA's being

undertaken across the Hunter region, were almost exclusively based on archaeology. This aspect was identified as frustrating and concerning. The WLALC representative raised concerns stating that “registered Aboriginal parties should be provided with the opportunity to veto the proposed Project”.

Concerns were also raised about the long-term conservation and cultural heritage benefits arising from Aboriginal cultural heritage assessments and salvage programs and attending registered Aboriginal parties were critical of the delivery of Aboriginal cultural heritage outcomes.

The Chief Executive Officer and representative from the WLALC apologised that he was unable to attend the site visit. However, he attended the Project Inception meeting information briefing relating to the ACHA and the broader EIS assessment process.

The briefing session provided registered Aboriginal parties with opportunities to comment on the suggested consultation opportunities and approach, timing and milestones; roles and responsibilities, and on any cultural concerns or requirements.

During the consultation process, registered Aboriginal parties were encouraged to provide continued critique and suggestions to improve the consultation approach.

As a result of their input, a comprehensive ACHA consultation approach was developed, including the development of consultation protocols and consultation formats so that registered Aboriginal parties could maximise their participation, while establishing clearly defined and agreed roles, functions and responsibilities between all parties. This approach also encouraged registered Aboriginal parties to identify and discuss their cultural concerns, perspectives and assessment requirements (if any).

It was agreed to schedule a further meeting before commencement of the archaeological field work to view the revised survey methodologies for both the ACHA field survey so as to ensure everyone was provided opportunity to inform the archaeological investigation approach and to also review a proposed draft Loders Creek AHIP methodology. The consultation to finalise the archaeological field survey is discussed in **Stage 3** of the process.

A copy of the briefing session presentation was provided during the July 2011 meeting.

In response to requests from the WLALC, hard copies of all previous assessments, ACHA documents and AHIMS site cards were provided to the WLALC.

Registered Aboriginal parties who were unable to attend the **Stage 2** briefing meeting on 27 July 2011, but had registered during the **Stage 1** public comment period (and up unto the initial **Stage 2** briefing session) were provided with individual and small group consultation briefing sessions. These sessions were facilitated by Jane Delaney-John of Connect for Effect and Bret Jenkins of BCM.

Seven registered Aboriginal parties, comprising registrants who had not attended the initial briefing session and those who registered after the July 2011 briefing session were provided with opportunities to attend further Project briefing meetings. These registered Aboriginal parties included:

1. Hunter Traditional Owner Management Services (28.05.2011);
2. Hunter Valley Cultural Surveying (28.05.2011);
3. Kevin Taggart (05.07.2011);
4. Non-disclosed registered Aboriginal party #2 (05.07.2011);
5. Plains Clans of the Wonnarua People (10.08.2011);
6. Upper Hunter Heritage Consultants (22.08.2011); and
7. Wattaka Wonnarua Cultural Consulting Services (25.08.2011).

Small group Project briefings, one-to-one discussions, telephone discussions and workshop consultation opportunities were provided to all newly registered Aboriginal parties.

For those registered Aboriginal parties not able to attend Project briefing meetings, briefing materials were posted; such as to the Lower Hunter Wonnarua Council Incorporated representative, who was contacted several times to arrange a briefing session, however was not available to attend because of ill-health.

In accordance with consultation guidelines (2010), all registered Aboriginal parties were asked to identify in what way they were interested in the Project and if they identified as Knowledge Holders, Traditional Owners, parties with historic attachments or with contemporary attachments and interests in the Project. All registered Aboriginal parties were provided opportunity to discuss the Project brief and ACHA consultation approach and assessment (refer to **Appendix B3** for the Project's consultation log).

All registered Aboriginal parties detailed in **Stage 1** and above during **Stage 2** were invited to participate in the Project's Aboriginal cultural heritage consultation and assessment process from the time of their registration. Refer to consultation records attached in **Appendices B1, B2 and B3** for further detail, and **Appendix C5** for a record of confidential consultation.

3.4 Stage 3 Consultation – Cultural Values Assessment, Impact Assessment and Development of Management Measures

Stage 3 of the DECCW (2010a) consultation process relates to gathering information about the cultural significance values of an assessment area, with OEH identifying that the intent of this consultation is to develop a culturally appropriate assessment approach, to seek Aboriginal registrant information that will enable the cultural significance of the place to be determined, and to provide Aboriginal registrants with the opportunity to provide input on cultural heritage management options.

Registered Aboriginal parties were provided with numerous opportunities to participate in the **Stage 3** consultation program, which spanned 18 months of discussions about the cultural values of the Project area and the likely impacts of the Project, if approved.

During **Stage 3** discussion included:

1. Briefings and identification of connection to Country; draft methodology preparation;
2. Site Visits and Walks on Country;
3. Values assessment;
4. Participation in Archaeological Investigation;
5. Loders Creek grinding grooves possible AHIP application;
6. Mediation;
7. Draft test excavation methodology;
8. Impact assessment including direct and indirect and cumulative impact assessment;
9. The identification of management recommendations and measures to respond to the 'No Project approval' and 'Project approval' scenarios; and
10. Intergenerational equity options.

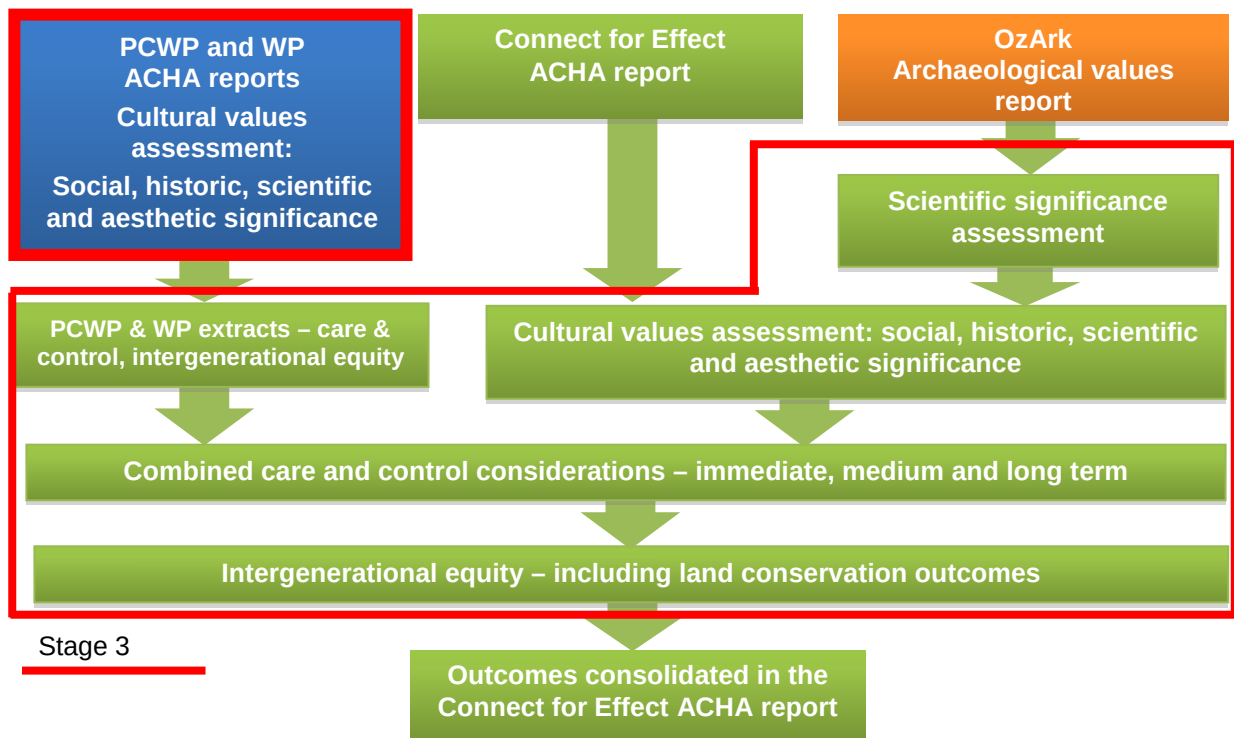


Figure 13: Stage 3 ACHA Consultation; Care and Control and Intergenerational Equity

3.4.1 Additional Project Briefings for Registrations of Interest during Stage 3

As previously discussed, 44 Aboriginal parties registered an interest during **Stage 3** of the DECCW (2010a) consultation process, and were invited to participate in the assessment process from the time of their registration.

To provide each newly registered Aboriginal party with information about the Project and the ongoing Aboriginal cultural heritage assessment process, each registered Aboriginal party was provided with information following their registration, as discussed below.

3.4.2 Draft Methodology Preparation and Review

As noted previously, assessment approaches were discussed at the **Stage 2** Briefing meeting held on 27 July 2011, with registered Aboriginal parties providing input and guidance on the upcoming ACHA assessment process.

All registered Aboriginal parties that provided an expression of interest in the Project prior to December 2011 were sent a hard copy of the proposed survey methodology developed by OzArk (refer to **Appendix 13b of the EIS**).

The letter accompanying the methodology provided an introduction to the consultation process, a description of the Project and details of anticipated field work. Further it was noted that opportunity existed for registered Aboriginal parties to make comment on the proposed survey methodology. Two opportunities to workshop the draft methodology during the 28 day review period with all registered Aboriginal parties were also provided on 16 November 2011 (initial methodology discussions) and in Broken on 22 November 2011 (line by line discussions).

At these workshops, registered Aboriginal parties representatives were encouraged to provide comments and raise any concerns they may have in relation to the Project regarding cultural heritage or the draft survey methodology.

This approach also assisted to address potential barriers to providing feedback due to language literacy or numeracy issues experienced by some registered Aboriginal parties.

Several registered Aboriginal parties who attended the meeting expressed a desire for the field survey to be as comprehensive as possible indicating perceptions of historic, general poor surveying practices in the Hunter Valley.

Some registered Aboriginal parties who attended the workshops expressed the view that a “100% survey” should be undertaken for the Project area. Discussion ensued in relation to technical and practical aspects of the survey approach. It was explained that survey has limitations and discussions also related to the intent of a survey and that 100% coverage was rarely possible in the field due to a number of contributing disturbance and vegetation constraints.

Through consultation and clarification of the proposed methodology, the registered Aboriginal parties reasons for wanting 100% coverage were further explored (i.e. to capture the archaeological record as fully as possible) and these comments were incorporated into the assessment process—and where practicable to have the capacity and flexibility to make decisions ‘on the day’ in the field (refer to OzArk **Appendix 13b of the EIS**).

Registered Aboriginal parties also sought to include cultural considerations as part of the survey methodology.

It was agreed by registered Aboriginal parties during the workshops that Project areas where surveys had never been previously conducted warranted a more intensive survey approach than those areas which were highly disturbed and had a history of extensive survey.

The workshop discussions influenced the approach to the survey methodology and the way in which information relating to the Project was received. Registered Aboriginal parties comments on the draft methodology were addressed during the consultation process of finalising the survey methodology.

Examples of modified methodology approach included- the attendance of all registered Aboriginal parties during the first week of intensive survey and the development of weekly survey updates to inform them of the outcomes of each week of survey (refer to OzArk **Appendix 13b of the EIS**).

3.4.3 Site Visits and Walks on Country

Following the initial Briefing session and site visit on the 27 July 2011, there were subsequent and repeated site visits during **Stage 3**, facilitated by BCM for registered Aboriginal parties. These included representatives of the PCWP, representatives of the WP and other registered Aboriginal parties who identified cultural and historic knowledge.

The outcomes of the site visits and walks on Country undertaken by the PCWP and the WP were detailed in their respective ACHA reports.

Connect for Effect and BCM accompanied registered Aboriginal parties who also sought to share their cultural knowledge of the Project area through this ACHA, and to identify if there were any Project areas of specific cultural significance requiring assessment and consideration in relation to possible avoidance and protection. In total, an additional four walks on Country were undertaken.

Some of the registered Aboriginal parties consulted by Connect for Effect requested that their cultural values assessment information be fully or partially restricted to BCM, DP&I and OEH personnel, with non-restricted information included in **Appendices B1, B2 and B3** and restricted information included in **Appendices C3,C4 and C5**.

These visits and consultations commenced at the outset (**Stage 2**) of the Project and continued throughout the course of the consultation and assessment process (**Stage 3**). One of the key components of the Walks on Country was to identify Project areas of cultural sensitivity and to document their meaning and identify whether there was possibilities to redesign aspects of the Project to avoid impact. The BCM team was highly supportive and sensitive to the needs and concerns raised by registered Aboriginal parties, and approved components of disclosed information were shared with specific Project team members in order that the impacts could be avoided through Project redesign. As a result, avoidance of a cultural site within the Project area of extremely high cultural value to one WTC representative Elder of Broke was made possible (refer to Confidential non-disclosed **Appendix C4**).

One to one meetings with registered Aboriginal parties were also provided during **Stage 3** including phone discussions and face to face meetings. These meetings and discussions included cultural values, impact assessment processes and general enquiries in terms of participation in field survey and test excavations are documented in this ACHA (refer to **Appendices B1-B3, C3, C4 and C5**).

3.4.4 Cultural Values Assessment

Throughout all stages of the ACHA, all registered Aboriginal parties were encouraged to participate in the consultation process and share their cultural values, assisting in the identification of the various levels of attachment and connection to the Project area.

For some registered Aboriginal parties, discussion of cultural values was painful as they expressed that they were on a journey of reconnection having a generational experience of the effects of the stolen generation; while others expressed that they identified historic and traditional attachments to the region.

Some stated that while they did not have knowledge of the Project area from either a traditional or historic basis; they identified cultural and aesthetic values in terms of wanting to see care taken with Aboriginal cultural heritage, particularly Project areas identified as having impending impacts.

To provide opportunity for these discussions, BCM hosted a series of Cultural Values workshops, meetings and site visits for registered Aboriginal parties to participate in the ACHA assessment process, facilitated by Connect for Effect. These included the following consultation methods:

3.4.4.1 Briefing session and site visit, 27 July 2011

As previously discussed in **Stage 2** consultation, a briefing and site visit was held following the formal Stage 1 registration period. The consultation on cultural values (a series of workshops from July 27 2011 to November 2012, included whole of registered Aboriginal parties and small group sessions and individual interviews. They also included briefing sessions for the PCWP and WP in relation to the development of a model for them to undertake their own Aboriginal cultural heritage assessment as well as integration options to inform this ACHA.

3.4.4.2 Xstrata Ravensworth Tool Box meeting 12 September 2011

Connect for Effect attended a meeting at the Xstrata Ravensworth North Operations during a fieldwork toolbox meeting to discuss the Project ACHA consultation process; to share opportunities for participation in it and the upcoming November 2011 workshops.

3.4.4.3 Four Days of Workshops, November 2011

A series of four workshops were held from 16 November to 22 November 2011, with all registered Aboriginal parties invited to attend. Some registered Aboriginal parties sought separate meetings in order to independently share their cultural values.

A key element of these workshops was to discuss the cultural values of the Project area and the surrounding region. During discussions, registered Aboriginal parties identified a number of regional and site specific cultural heritage values; and also identified a number of concerns relating to potential impacts from the proposed mining expansion within the BCC to cultural heritage sites including the BMU1 grinding grooves, a scarred tree, Loders Creek grinding grooves, the larger Loders Creek conservation zones and undiscovered Aboriginal cultural heritage sites and artefacts. Concerns regarding flora and fauna and impacts to landform change as a result of open cut mining were also raised as cultural values requiring consideration.

Detailed information on the discussions held over all four workshop days is attached in **Appendix B2**. In summary the workshop days included:

Day One

The first workshop held on the 16 November 2011 provided further detailed briefing on the Project, including mapping of proposed disturbance areas, the history of the cultural heritage assessment and management within the Project area, and the identification of cultural values as part of the upcoming EIS process (for example through utilising the research questions described in **Section 3.1** of this ACHA). The draft methodology for the archaeological survey was also discussed. A number of cultural values statements and Project concerns were shared by registered Aboriginal parties:

- The proposed impact to the grinding grooves at BMU1 was identified as a concern, especially by those who had been involved in past conservation work on the site. However, some registered Aboriginal parties stated that they were willing to see the BMU1 grinding grooves impacted, provided that there was a greater conservation outcome;
- The proposed dam was also of cultural interest because this was a Project area where little to no archaeological survey had been undertaken in the past;
- Registered Aboriginal parties also described the creek lines and tributaries as associated with songline connectivity, including connectivity to Wollombi Brook;
- Registered Aboriginal parties stated that the rationale for impact needs to be clearly defined; mitigation strategies are required; intergenerational equity planning is essential; and, cumulative impacts will need to be considered and weighted accordingly;
- A number of linkages between the Project area to dreaming landscapes and stories were identified and defended by those asserting custodial/cultural knowledge and rights to Speak on Country;
- The Project area and the region more broadly were identified as part of the registered Aboriginal parties traditional homelands (Country) and as such retained immeasurable cultural values;
- Some traditional and other Aboriginal people asserted that the Broke region was a shared tribal area associated with movement for ceremony, and was within a landscape of significant creation features;

- The Project area and the region more broadly were viewed as being part of contact experience – a place where Aboriginal people were pushed from their custodial lands because of the invasion of non-Aboriginal peoples onto their lands; adapting to change. For some registered Aboriginal parties continuing to use the Project area for hunting and camping in the 1800's – 1900's was also a factor (refer to **Appendix C3**);
- Several registered Aboriginal parties, particularly Traditional Owners including Knowledge Holders, expressed anger and frustration relating to BMU1 Grinding Grooves perceived to have been impacted through remedial works;
- One registered Aboriginal party expressed upset over proposed damage and destruction to the BMU 1 grinding grooves from approved underground mining and the proposed Project bund development;
- One registered Aboriginal party wanted significant offset arrangements due to cultural impact and cultural loss;
- One registered Aboriginal party was particularly agitated about the covering of sediment on the Loders Creek grinding grooves, citing historic connections;
- One registered Aboriginal party was particularly agitated and stated that he was angry 'over historic damage to the BMU1 grinding grooves and the proposed future damage 'to both the BMU 1 and Loders Creek grinding grooves; and
- Frustration and anger were also expressed by registered Aboriginal parties over potential impact to the Loders Creek grinding grooves and questioned why the grinding grooves were covered in sediment.

Day Two

The second workshop held on the 17 November 2011 included oral history recording and reporting training for registered Aboriginal parties, facilitated by Sharon Veal (Godden Mackay Logan) and Jane Delaney-John. The session included the development of interview questions, ethics techniques and aims of recording and reporting. The session was intended to build the capacity of registered Aboriginal parties to undertake discussion with Elders and Knowledge Holders within their families and groups to inform the ACHA report.

Day Three

The third workshop held on 18 November 2011, while not directly related to the Aboriginal cultural heritage assessment process, included the opportunity for registered Aboriginal parties to identify social impacts and needs relating to the proposed Project so as to inform the EIS.

Specific social impacts relating to the Bulga Optimisation Project were not identified by registered Aboriginal parties. The participants discussed and identified more regional impacts. The intense co-location of mining operations was identified as having a cumulative negative impact on mental health and cultural loss for registered Aboriginal parties.

Some of the social impact assessment discussion related to intergenerational equity options and improved ways of working and consulting effectively with registered Aboriginal parties. Some of the findings are discussed in this ACHA **Section 3.5** because the feedback influenced both the consultation approach and the development of mitigation and management measures.

Day Four

The fourth workshop held on the 22 November 2011 was dedicated to discussions of the Loders Creek grinding groove complex and the proposed methodology of the Project area archaeological survey. In respect of the Loders Creek grinding grooves, Nicola Roche, Senior Archaeologist from Umwelt Australia, presented and discussed a draft methodology for proposed remediation works to uncover and assess the site, and whether an Aboriginal Heritage Impact Permit should be sought from OEH for this purpose.

On the same day, a more detailed discussion occurred between OzArk and registered Aboriginal parties regarding the survey methodology for the Project archaeological investigation.

This workshop also included a presentation by Xstrata Coal New South Wales' representative, Craig Strudwick, who presented the proposed Reconciliation Action Plan (RAP) being developed for the Upper Hunter, and encouraged registered Aboriginal parties to nominate themselves or others within the community to join the RAP working group.

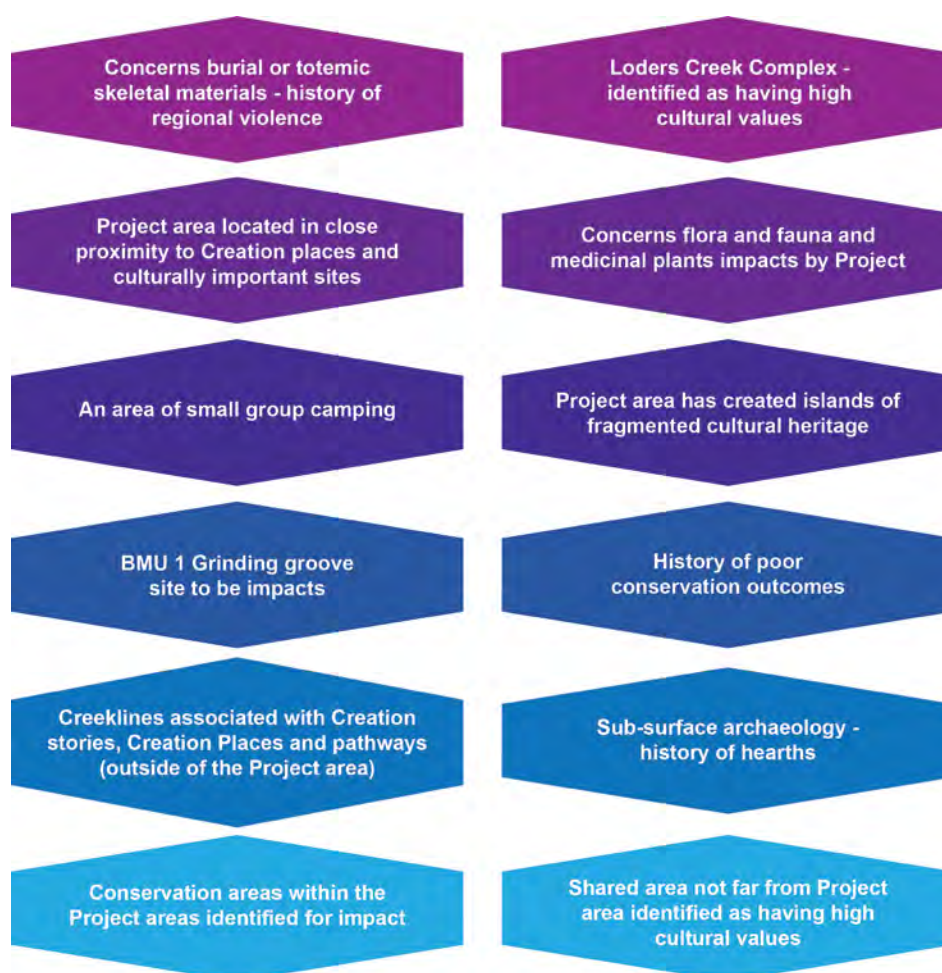


Figure 14: Values and Concerns Raised by Registered Aboriginal Parties

Source: Registered Aboriginal parties' ACHA comments as at December 2011.

3.4.5 Participation in Archaeological Investigation

Aboriginal parties with a registered interest in the Project prior to December 2011 were invited to participate directly in the archaeological investigation conducted by OzArk, as reported in **Appendix 13b of the Project EIS**. This included participation in the archaeological survey held over seven weeks between December 2011 and May 2012 and in the archaeological test excavation program held over two weeks: 4 to 8 June 2012; and 18 to 22 June 2012 (refer to further details below).

Prior to archaeological fieldwork, an induction session was held on 12 December 2011 in preparation for the following weeks of survey. At this session, the registered Aboriginal parties were provided with a detailed briefing of the Project and an overview of the ACHA consultation approach which included the opportunities for registered Aboriginal parties who were Traditional Owners to participate in the PWCP and WP ACHAs and their consultation processes. At the meeting the range of opportunities for consultation was presented as well as the intent of the ACHA.

Following registered Aboriginal parties' discussion and approval of the draft survey methodology, the archaeological survey was initiated on 12 December 2011 with OzArk undertaking archaeological assessment and recording in collaboration with registered Aboriginal parties. 25.5 days of survey occurred over seven weeks, namely:

- Week 1: 12 to 16 December 2011;
- Week 2: 16 to 20 January 2012;
- Week 3: 30 January to 4 February 2012;
- Week 4: 13 to 17 February 2012;
- Week 5: 29 February to 2 March 2012;
- Week 6: 12 to 16 March 2012; and
- Week 7: 14 to 15 May 2012.

The *Aboriginal Archaeological Values Assessment* report (**Appendix 13b of the Project EIS**) describes how some weeks of fieldwork were affected by wet weather and Sorry Business, and how most fieldwork was conducted by OzArk personnel and at least seven representatives of registered Aboriginal parties, although survey in Week 1 included on average 40 registered Aboriginal party representatives. To provide opportunity for all registered Aboriginal parties to participate, BCM engaged parties on a roster system, with five positions per day made available. Each day of fieldwork also included representation of the PCWP and the WP in order that the field work also informed their separate ACHA reports.

During the course of archaeological fieldwork, a weekly summary of archaeological field results was distributed in order to ensure that all registered Aboriginal parties were informed of the outcomes of each week. Opportunity was also provided for registered Aboriginal parties to visit any of the Project areas identified as requiring further discussion during the alternate weeks that survey was not being conducted.

The *Aboriginal Archaeological Values Assessment* report (**Appendix 13b of the Project EIS**) provides a detailed description of survey coverage, effective survey coverage considering ground surface visibility, new sites located and recorded, known sites re-inspected and re-recorded, and the field assessments of subsurface archaeological potential for sites.

The survey began in the previously non-assessed Project areas in the northeast of the Project Area. A representative from each of the registered Aboriginal parties (at the time of survey) was invited to attend during the first week in order to acquaint them with the Project and to provide the opportunity to participate in the field survey of a previously non-assessed Project area of land.

The *Aboriginal Archaeological Values Assessment (Appendix 13b of the EIS)* noted that during the first week of survey, registered Aboriginal parties initially thought they had found a potential Bora site.

As the survey progressed, variations to the survey methodology were required in order to successfully complete the heritage assessment (refer to **Appendix 13b of the EIS**).

3.4.6 Loders Creek Grinding Grooves – Potential AHIP Application & ACHA Assessment Approach

During planning for the Project consultation and assessment process, the potential for applying for an Aboriginal Cultural Heritage Impact Permit (AHIP) to undertake remedial works to remove the sediment covering the site for assessment purposes, was identified by BCM and discussed with registered Aboriginal parties. This was based on advice from OEH, which confirmed that an AHIP would be required if there were to be any remedial works undertaken on the Loders Creek grinding grooves.

During the four November 2011 workshops, BCM, Umwelt and Connect for Effect facilitated discussions with the participating registered Aboriginal parties to consider assessment requirements relating to the Loders Creek grinding groove complex, including the capacity to assess the site in its current state. Registered Aboriginal parties who attended the four days of workshops indicated that they were unable to do so. Consequently, the proposed methodology for undertaking remedial works to 'clean' the Loders Creek grinding grooves was reviewed.

During the **Stage 3** Project consultation process, ongoing discussions with registered Aboriginal parties ensued about the need to clean the grinding grooves under an AHIP so as to properly inform the assessment process.

During the field survey assessments, non-disclosed registered Aboriginal party #1 and the WTC representative Elder of Broke also came on site on three separate occasions and raised concerns related specifically to the current state of the grinding grooves. While on site the parties identified two Project areas of cultural significance, one within the Loders Creek grinding groove complex and another external to the complex but within the Project area.

In January 2012, a draft methodology to accompany a proposed AHIP application to remove silt from the Loders Creek grinding grooves was distributed to all registered Aboriginal parties for comment. Comment was received from PCWP, the WP, RAP #1, WTC's representative Elder of Broke and other registered Aboriginal parties. All responses had merit.

Three options were contained in the AHIP application:

- Option 1: No works are done; or
- Option 2: Undertake works in the immediate vicinity of the recorded location; or
- Option 3: Undertake works along the extent of the former channel of Loders Creek.

Feedback on the draft AHIP application demonstrated that no registered Aboriginal parties supported Option 2 while some registered Aboriginal parties supported Option 1 and others, Option 3.

A meeting was organised by BCM to discuss the options with members of the PCWP to identify concerns and seek resolution. PCWP requested mediation as per the *Aboriginal cultural heritage consultation requirements for proponents* (DECCW 2010a, Questions and Answers 1).

In response to this request, an independent mediator was chosen - Nathan Jarro; an Aboriginal Barrister from Brisbane - unfamiliar with any of the registered Aboriginal parties involved in the Project ACHA.

A mediation session was hosted by BCM for all registered Aboriginal parties to discuss the proposed AHIP application with the session being held at the Quest Apartments, Singleton on 24 May 2012.

The merits of two approaches detailed in the draft AHIP report were discussed with the attending registered Aboriginal parties, which were:

- Option 1: Leave in current state; or
- Option 3: Clean immediately as per AHIP methodology.

At the end of the session, the majority of registered Aboriginal parties were undecided between Option 1 and Option 3. Those registered Aboriginal parties which supported Option 1, including the WLALC, felt that any potential impact to the site should be avoided until such time as the Project had been determined.

It was felt that while there was no immediate danger to the site (although there was discussion as to the effect of inundation on the sandstone) that it should be untouched until such time as impacts to the site have been approved. These parties also stated that the 1981 photographs of the site and the AHIMS site card should provide enough evidence for the assessment of archaeological significance to inform the ACHA.

Those registered Aboriginal parties that supported Option 3 stated that without seeing the site they would be unable to assess its cultural significance, particularly the exact placement of the site within the immediate landscape. An agreed approach was not reached.

Following the unresolved mediation session, a meeting was held with OEH (Newcastle Office) on 19 June 2012 to discuss the approach for the ACHA and whether an assessment of the Loders Creek grinding grooves based on previous archaeological records would be appropriate and adequate. OEH confirmed this approach would be accepted (refer to **Appendix 13b of the EIS**).

A meeting was also held with RAP #1 and the WTC's representative Elder of Broke on 15 July 2012 in Broke to discuss the outcomes of the meeting with OEH. The meeting was attended by Nathan Lane of BCM, Ralph Northey of BCC and Jane Delaney-John from Connect for Effect.

On 26 July 2012, a letter was sent to all registered Aboriginal parties advising of the current in-situ management of the Loders Creek grinding grooves site and the assessment approach at this stage of the ACHA process.

A commitment was made to registered Aboriginal parties that:

"During the EIS investigation an independent hydro geochemist will be engaged to assess the whether the water and sediment could have an adverse impact on the Loders Creek grinding grooves. If the assessment concludes that the grinding grooves may be impacted by the water and sediment, an AHIP will be lodged to remove the sediment as per Option 3 of previous correspondence."

BCC has since undertaken water and sediment studies through an independent consultant, William Milne Holme, of the University of Technology Sydney to ensure that the Loders Creek grinding grooves will not be damaged by remaining submerged while the Project is being assessed through the EIS process.

3.4.7 Test Excavation Methodology Consultation

The test excavation methodology developed by OzArk in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010b) (refer to **Appendix 13b of the EIS**); was sent to all registered Aboriginal parties on 3 May 2012 for a 28-day comment period.

The draft methodology was explained to all registered Aboriginal parties at the registered Aboriginal parties consultation workshops held on 30 and 31 May 2012. Comments from the registered Aboriginal parties' representatives present were sought.

Some registered Aboriginal parties raised concerns and sought clarity regarding the proposed methodology with the major points being:

- That the community should have some say in where to place test excavation squares in the field; and
- That excavation should not take place in the conservation zones along Loders Creek (WLALC's expressed view).

In response to the first suggestion about the Aboriginal community deciding where to place excavation squares, the meeting was reminded by OzArk that strict guidelines (Codes of practice for archaeologists; OEH 201) have to be adhered to and that, as much as possible, registered Aboriginal parties would be consulted about the placement of additional excavation squares.

The draft methodology was amended to reflect registered Aboriginal parties suggestions. This strategy was carried successfully into the field (refer to the *Aboriginal Archaeological Values Assessment* report, **Appendix 13b of the EIS**).

In response to the second concern regarding excavation in the Loders Creek conservation zones, the belief was that until Project impact was certain no further impact ought to be made in these areas of cultural significance, with impacts including archaeological excavation.

The omission of these areas from the test excavation program meant that the Project could not investigate the present nature and integrity of archaeological deposits in areas where these deposits are likely to display high archaeological values (refer **Appendix 13b of the EIS**). However, in the case of the Loders Creek conservation zones, there is previous archaeological research (e.g. Koettig 1994), including test excavation, which has taken place in these areas.

In response to the WLALC's objection to test excavation in these areas, OzArk felt that study of previous archaeological data, supplemented by the findings of the current assessment, would enable an accurate determination of archaeological values to be made for the Loders Creek conservation zones, albeit with a more precautionary management program should the Project be approved (refer **Appendix 13b of the EIS**).

Following registered Aboriginal parties approval of the revised methodology (to exclude the Loders Creek conservation zones) during the 30 to 31 May 2012 registered Aboriginal parties' consultation session, the test excavation commenced over two weeks using a roster arrangement for registered Aboriginal parties participation on:

- 4 to 8 June 2012; and
- 18 to 22 June 2012.

During the excavation program, weekly updates were produced and sent to all registered Aboriginal parties to inform them of the progress of the excavations. These weekly summaries are provided in the OzArk archaeological report (**Appendix 13b of the EIS**).

A copy of the test excavation methodology was supplied to OEH 14 days prior to the commencement of excavation.

At a meeting with OEH (Newcastle) on Tuesday 19 June 2012 it was agreed that the lack of test excavation in these areas would be unlikely to diminish the adequacy of the overall archaeological assessment. As a result, in response to the registered Aboriginal party's concerns, no excavation took place in the Loders Creek conservation zones to inform the OzArk archaeological report.

Three other areas within the Project area were investigated during the test excavation program, all outside of the Loders Creek conservation zones: BOP SC-1 with PAD, BOP SC-6 with PAD and BOP SC-10 with PAD (refer **Appendix 13b of the EIS**).

3.4.8 Two-Day Workshops, May 2012

At the conclusion of the archaeological field survey, a two-day workshop was held on 30 and 31 May 2012 at the Quest Apartments in Singleton, to discuss the Aboriginal cultural values of the Project area, key findings of the archaeological field survey and the assessment process moving forward. All registered Aboriginal parties were invited to attend. These workshops provided opportunity to discuss survey findings and cultural values relating to the specific archaeological and cultural sites identified.

The meeting on 30 May 2012 provided a briefing on the Project and its likely impacts, the consultation and assessment process, a detailed presentation of the archaeological results of the survey and some preliminary findings by OzArk from the seven-week field survey assessment. Included on the day was a detailed briefing of the draft archaeological test excavation methodology. During discussions, some comments indicated that not all the registered Aboriginal parties attending agreed with the archaeological/scientific values interpretation of the Project area. The main points of contention were:

- A disagreement on scientific assessments of low archaeological values for sites; and
- Differing interpretations of what the distribution of artefact scatters is.

In brief, it is the belief of many registered Aboriginal parties at the workshop, that all artefacts have a high value and that an assessment of low archaeological value demeans the value of the artefact or site.

The site distribution within the Project area was interpreted by some registered Aboriginal parties as indicating an area of camping and hunting, and a series of pathways, possibly connected to ceremonial use. These differences of interpretations were view as being valid. The registered Aboriginal parties were invited to discuss these differences and detail their cultural values relating to the Project area.

The draft test excavation methodology was also workshopped with registered Aboriginal parties on 31 May 2012.

Cultural values were workshopped and shared by registered Aboriginal parties over both days and the values statements provided were integrated into this ACHA report to inform the assessment.

While the Project area was acknowledged by registered Aboriginal parties to be highly disturbed (in parts) they also stated that there remains archaeological evidence of significant Aboriginal cultural heritage sites or materials discovered during the AHIMS search, cultural survey and site inspection of the Project area.

Registered Aboriginal parties also reflected on previous survey and assessment findings undertaken over the life of the mine to inform development consents and AHIP approvals. Some registered Aboriginal parties who had participated in previous surveys stated that they had identified cultural and archaeological sites such as Loders Creek grinding grooves and complex, BMU1 grinding grooves and other conservation zones within the Project area as having high cultural significance and that these areas were set aside for avoidance or protection and should continue to be protected.

The workshops provided opportunity for small group discussions and to document cultural values. Research questions developed as an integral part of the consultation process were used to explore cultural values relating to the Project area, and its cultural regional context, and to identify cultural values relating to specific sites or artefacts. These values have been included in this ACHA to inform assessment.

Representatives of the PCWP attended both workshop days and participated in the sharing of values for the Project area. At the close of the 31 May 2012 workshop, the PCWP requested that the values statements and management measures notated on butcher's paper and read out to all attending be collected and only included in its non-disclosed ACHA. Connect for Effect provided the originals to PWCP and out of respect to this request, no further reference is included in this ACHA in relation to the contents or the PWCP representatives' comments.

Representatives of the WP claimants and Wonnarua Nation Aboriginal Corporation also attended the May 2012 workshops. Their comments and values statements have been included in this ACHA. These representatives worked in small groups with other non-WP representatives and the comments and cultural values of registered Aboriginal parties participants were documented as a consolidated set of values.

At this workshop, Coakes Consulting also shared preliminary social impact assessment findings and recorded registered Aboriginal parties responses to them.

3.4.9 Mid Consultation Review and Modification of Approach

A mid consultation review was undertaken by BCM and Connect for Effect in June 2012 in response to registered Aboriginal parties feedback after the 30 and 31 May 2012 workshops and improvements to the consultation approach were developed. These improvements included the cessation of large group meetings for the mitigation and management measures and intergenerational equity assessment steps of the ACHA, with a move to a series of smaller group discussion sessions for the remainder of **Stage 3**.

Further improvements and clarity relating to meeting and consultation protocols were also developed and key elements of the consultation guidelines shared with all registered Aboriginal parties.

The following process was adopted to capture any remaining cultural values information and to discuss the Project's impact assessment and management measures:

- Smaller workshops and interviews to be held with families, or small groups- settings, the WLALC or individuals to complete cultural significance tables, assessing Project impacts, and developing management measures for and care and control and mitigation aspects as required;
- A nomination form to be provided to all registered Aboriginal parties so as to nominate their preferences for consultation including who they would prefer to have consulting with them;
- Test excavation required to further define archaeological sites to be completed as per the previous surveys roster approach during the January 2012 archaeological survey, and all personnel involved in test excavation to be subject to BCM Health and Safety Policies and disciplinary code;
- Results of outcomes of the meetings and the test excavation to be distributed to all registered Aboriginal parties to enable them to comment and the Project team to give due consideration to all comments;
- Follow-up consultation to discuss mitigation care and control and intergenerational equity options to be conducted via small group workshop settings and face to face consultations; and

- Following this process, registered Aboriginal parties to be advised when the Aboriginal Cultural Heritage Assessment is to be submitted to the Department of Planning and Infrastructure for consideration and for regulator consent determination.

All registered Aboriginal parties actively contributed their cultural values and provided mitigation options. The comments have been integrated into this ACHA report.

It is important to note that registered Aboriginal parties identified all cultural and archaeological artefacts and sites as having high cultural significance. They specifically identified concerns and heightened cultural values when discussing the Loders Creek grinding groove complex. The Project area however was identified as highly disturbed and the cultural landscape currently compromised by current mining activity.

It is also important to note that cultural and archaeological sites including Creation places and waterways outside of the Project boundary were identified by registered Aboriginal parties as having extremely high cultural values. Registered Aboriginal parties identified a number of Creation places and cultural sites located close to but outside of the Project area and highlighted these as having extremely high cultural values and expressed aspirations to protect and access these areas.

3.4.10 September and October 2012 Workshops and Discussion Sessions

A series of small group discussion sessions were provided from September 2012 to the end of November 2012 to finalise cultural values considerations, document impact concerns and recommendations and explore potential mitigation measures including intergenerational equity against the cultural values identified. These sessions were facilitated by BCM and Connect for Effect. Sessions during September 2012 and October 2012, and included:

- Registered Aboriginal parties sessions – 2 group sessions held at the WLALC premises - Project brief, cultural values assessment, historic narrative values and impact management measures development – scenario modelling “no Project development and “project development;
- WTC discussion sessions – Project brief, cultural values assessment, historic narrative values and impact management measures development – scenario modelling “no Project development approval ‘ and “project development approval” held at Ungooroo Aboriginal Corporation and a meeting with the WTC and registered Aboriginal parties representation- Quest Apartments, Singleton;
- WP discussion session – general discussion relating to historic narrative, sharing of the OEH wellbeing model and application of the OEH wellbeing criteria to assist the development of management measures, care and control and intergenerational equity strategies. The WP undertook the development of its own management and mitigation measures; and
- Registered Aboriginal parties sought intergenerational conservation and cultural outcomes which were relevant to the ACHA impact assessment findings and aligned the cultural values identified as important during the consultation process.

Long term cultural heritage management and access to cultural places and sites of importance that related to the Creation places and associated pathways were highlighted as approaches to be considered. Registered Aboriginal parties also sought cultural outcomes which provided opportunity for cultural sharing and unencumbered access to cultural areas that were accessible for Elders, families and children.

The ability to share cultural heritage with the next generation and opportunities to access sacred places and Creation places were identified as important. Similarly, initiatives which also provided opportunity to regenerate lands were perceived as highly desirable.

Other discussion sessions were held between BCM and the PCWP Native Title claimant group to discuss PCWP's cultural values findings, impact assessment and the development of management measures.

Discussion sessions were also held between BCM and the WP Native Title claimant group to discuss WP's cultural values findings, impact assessment and development of management measures.

BCM considered the feedback and suggestions and actively sought to develop a range of mitigation and management measures, including intergenerational equity options which responded to the cultural values and considered the Project's predicted impacts on cultural, historic, scientific and aesthetic values.

BCM considered the range of suggested management measures proposed by all registered Aboriginal parties including Traditional Owners and Knowledge Holders, including those proposed in confidential reports from the PCWP and the WP and confidential statements contained within this ACHA. A set of criteria were developed by BCM to assist with the review of suggested management measures.

3.4.11 November 2012 Workshops and Discussion Sessions - Intergenerational Equity and Management Measures Sessions

During November 2012, a series of six workshops and discussion sessions were provided for the participation of all registered Aboriginal parties including the PCWP and WP and a meeting was held with the WLALC and its board, to discuss management measures.

BCM presented its Project constraints and identified cultural sites where impact avoidance was possible and those where avoidance would not be possible if the Project was approved. The information was presented using scenario modelling depicting mitigation measures for both 'Project approval' and 'no Project approval' outcomes.

Registered Aboriginal parties were encouraged to comment on the recommendations and share any other suggestions they may have to respond to the impact and intergenerational equity criteria.

Copies of presentation materials were provided to all registered Aboriginal parties.

These half-day sessions included:

- A meeting with the WLALC board and Chief Executive Officer- presentation of management measures and scenario planning;
- A meeting with the WTC representatives – Singleton Information Centre;
- Two sessions for registered Aboriginal parties held at the WLALC in Muswellbrook Meetings with WP representatives (facilitated by BCM only); and
- Meetings with PCWP representatives (facilitated by BCM only), overview of consultation.
-

3.4.12 Summary of ACHA Consultation Undertaken

A detailed schedule of the extensive consultation undertaken is provided in **Tables 3, 4 and 5**. In relation to these tables, note that:

- Aboriginal parties registered an interest in the Bulga Optimisation Project throughout the course of the Project, with some parties formally registering in Stage 1 and others registering during the course of Stages 2 and 3 consultation. Registrations are indicated by either the date of registration, or for those who registered in the formal Stage 1 public notice period, a tick;
- Where Aboriginal parties registered an interest in the Project after the formal Stage 1 registration period, the code 'NR' is used to identify individual registrants as 'not registered' for a specific stage of consultation prior to their involvement;
- Where consultation was undertaken with registered Aboriginal parties, this is identified by either the date of consultation, or where a meeting was held or materials provided to multiple registered Aboriginal parties on a single date, a tick has been used. At times, Aboriginal parties attended an ACHA information session or workshop prior to formally registering an interest individually, independently or representing another registered party, and subsequently decided to formally register an interest in the Project after their attendance. This is reflected by participating in the Project prior to the formal date of registration;
- Other factors affecting formal registrations included:
 - At times, Aboriginal parties perceived that they had registered an interest in the Project by attending a consultation session without identifying their registration and this resulted in the need to develop a process of follow-up and confirmation which resulted in delayed formal registrations; and
 - Other Aboriginal parties, who had participated in a range of consultation opportunities representing a registrant group, decided mid consultation to form their own registered Aboriginal party and independently register an interest in the Project. Confirming the formal registration of parties also created some delays in formal registration;
- All registered Aboriginal parties were provided with the opportunity to Walk on Country, and some requested to visit the Project area on more than one occasion. Other registered Aboriginal parties stated that they were familiar with the Project area through their active participation in survey and test excavation activities and did not require additional Walks on Country to provide values assessment of the Project area;
- Some registered Aboriginal parties who identified as having intimate cultural knowledge of the Project area requested additional meetings in order to document their cultural values. Opportunities for individual and/or small group meetings were afforded to all registered Aboriginal parties; and

Regular correspondence and Project assessment and information updates were sent to all registered Aboriginal parties following their registration.

Table 3: Summary of ACHA Consultation (Part 1)

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Consultation Process	Outputs	REGISTERED ABORIGINAL PARTY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Values assessment, Project briefs, archaeological methodology approach	November Workshops 22.11.2011 ✓ - attendance Induction- field survey discussion- consultation approach Project brief 12.12.2011 ✓ - attendance Survey week one 12.12.201 1-17.12.2011 OzArk, BCM ✓ - attendance Survey Week 2 30.01.2012- 03.02.2012 OzArk, BCM - attendance Survey Week 3 13.02.2012- 17.02.2012 OzArk, BCM ✓ - attendance Survey Week 4 29.02.2012- 02.03.2012 OzArk, BCM ✓ - attendance Survey Week 5 12.03.2012- 16.03.2012 OzArk, BCM Survey Week 6 OzArk, BCM ✓ - attendance Survey Week 7 14.05.2012- 15.05.2012 OzArk, BCM ✓ - attendance Distribution of each survey weeks 1-7 findings ✓ - attendance Workshop Brief/ACHA Process	apology	✓	✓	✓	✓	✓		✓		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR</

Consultation Process	Outputs	REGISTERED ABORIGINAL PARTY	Aboriginal Native Title Consultants	Aleira French Trading	Amanda Hickey Cultural Consultants	Bawurra Consultants	Bigundl Biamne Gunnedarr Traditional people	Breeza Plains Culture & Heritage Consultants	Bullen Bullen Consulting	Bunda Consultants	Cacatua Cultural Consultants	Carrawonga Consultants	Cheryl Moodie Consulting	Culturally Aware	Cyrl Sampson Sole Trader	Deslee Talbott Consultants	DRM Cultural Management	EMT Cultural & Heritage	Galamaay Consultant-Karen Matthews	Gidawaa Walang Cultural Heritage Consultancy	Giwirr Consultants	Gomey Cultural Consultants	Hielamon Cultural Consultants	Hunter Traditional Owner Management Services	Hunter Valley Aboriginal Corporation	Hunter Valley Cultural Consultants
	26.07.2012 Correspondence outcome of mediation- assessment moving forward ✓ - attendance		✓	✓	NR	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	NR	NR	✓	✓	✓	✓	✓	✓
Values assessment, test excavation methodology, survey findings, distribution of Project materials, impact areas identified	Workshops 30.05.2012 ✓ - attendance		✓	✓	NR	✓	✓	✓		✓	✓	✓			NR	✓	✓	NR	NR	NR	✓	✓	✓	✓		✓
	Workshops 31.05.2012 ✓ - attendance		✓	✓	NR	✓	✓	✓	✓	✓	✓	✓		a	NR	✓	✓	✓	NR	NR	✓	✓	✓	✓		✓
	Test excavation methodology (draft) 28 day comment period - distributed to All registered Aboriginal parties 03.05.2012 ✓ - attendance		✓	✓	NR	✓	✓	✓	✓	✓	✓	✓		✓	NR	✓	✓	✓	NR	NR	✓	✓	✓	✓	✓	✓
Assessment scientific values	Week 1 Test excavation 04.06.2012-08.06.2012 OzArk BCM ✓ - attendance		✓	✓	NR		✓		✓	✓	✓	✓	✓	✓	NR	✓	✓		NR	NR	✓	✓	✓			✓
	Week 2 Test excavation 18.06.2012-22.06.2012 OzArk BCM ✓ - attendance		✓	✓	NR	✓	✓	✓	✓			✓	✓	✓	NR	✓	✓			NR	✓	✓	✓	✓	✓	✓
	26.07.2012 Correspondence outcome of mediation- assessment moving forward ✓ - attendance		✓	✓	NR	✓	✓	✓	✓	✓	✓	✓	✓	✓	NR	✓	✓	✓	NR	NR	✓	✓	✓	✓	✓	✓
Values assessment and mitigation management discussions	Small group values session 13.09.2012 ✓ - attendance				NR										NR				NR	NR						
	Workshop 13.09.2012 ✓ - attendance		✓	✓	NR			✓	✓			✓	✓		NR	✓	✓	✓	NR	✓	✓	✓	✓		✓	✓
	Small group values session 20.09.2012 ✓ - attendance				NR										NR				NR							
Mitigation and Management measures/ intergenerational equity	Workshop 18.10.2012 ✓ - attendance		✓		NR	✓				✓	✓ (2)				✓	✓	✓	✓							✓	
	workshop 19.10.2012 ✓ - attendance				NR			✓							NR						✓					
	workshop 30.10.2012 ✓ - attendance				NR				✓ (2)			✓	✓		NR						✓	✓				✓

Consultation Process	Outputs	REGISTERED ABORIGINAL PARTY		Aboriginal Native Title	Aleira French Trading	Amanda Hickey Cultural Consultants	Bawurra Consultants	Bigundi Biame Gunnedarr Traditional people	Breeza Plains Culture & Heritage Consultants	Bullen Bullen Consulting	Bunda Consultants	Cacatua Cultural Consultants	Carrawonga Consultants	Cheryl Moodie Consulting	Culturally Aware	Cyril Sampson Sole Trader	Deslee Talbott Consultants	DRM Cultural Management	EMT Cultural & Heritage	Galamaay Consultant-Karen Matthews	Gidawaa Walang Cultural Heritage Consultancy	Giwirr Consultants	Gomey Cultural Consultants	Hielamon Cultural Consultants	Hunter Traditional Owner Management Services	Hunter Valley Aboriginal Corporation	Hunter Valley Cultural Consultants
Values assessment, Project briefs, archaeological methodology approach; mitigation management and intergenerational equity	workshop 31.10.2012 ✓ - attendance Briefing sessions mitigation measures Care and Control intergenerational equity session- various refer table detail Individual consultations			12.11.12; 15.11.12, 19.11.12	19.11.12	NR			19.11.12	19.11.12	19.11.12	15.11.12	19.11.12	19.11.12							19.11.12				19.11.12		
				05.01.12; 12.01.12; 06.02.12; 18.05.12																							

Table 4: Summary of ACHA Consultation (Part 2)

Consultation Process	Outputs	REGISTERED ABORIGINAL PARTY														
Stage One	Invitation to parties identified by OEH and NGOs															
	Registration of Interest															
	Formal Stage 2 Briefing session and information distribution 27 July 2011 ✓ - attendance															
Stage Two	Individual and small group Briefing session/information distribution															
	Follow-up briefing Ravensworth North Operations ACHMP salvage program 12.09.2011 ✓ - attendance															
	Site visit 27.07.2011 ✓ - attendance															
Stage Three	Site tour-Loders Creek 15.12.2011 OzArk, BCM ✓ - attendance															
	Postage of draft Archaeological Survey Methodology - October 2011															
Values assessment, Project briefs, archaeological methodology approach	November Workshops 16.11.2011 ✓ - attendance															
	November Workshops 17.11.2011- values assessment and includes survey methodology review ✓ - attendance															
November Workshops 18.11.2011 ✓ - attendance																
Distribution of draft survey methodology 28 days																
Kauweil TA: refer to Wonn 1 initial registration/ Wonn 1 Contracting																
Kayaway Eco Cultural and Heritage Services																
Lower Hunter Wonnarua Council Incorporated																
Mingga Consultants																
Muswellbrook Cultural Consultants																
Myland Cultural and Heritage Groups																
Ngarramang-Kuri Aboriginal Cultural Heritage Groups																
Aboriginal registrant 1 (refer to Appendix C3)																
Aboriginal registrant 2 (refer to Appendix C3)																
Aboriginal registrant 3 (refer to Appendix C3)																
Kevin Taggart Wonnarua Traditional Custodians Elder of Broke (refer also to Appendix C3)																
Roger Noel Matthews Consultancy																
Smith Dhagaans Cultural Group																

Consultation Process	Outputs	REGISTERED ABORIGINAL PARTY																		
	November Workshops 22.11.2011 ✓ - attendance	Hunter Valley Cultural Surveying	Hunter Valley Natural and Cultural Resources Management	I & E Aboriginal Culture and Heritage	Jarban & Mugrebea	Kawal Cultural Services	KL KG Saunders Trading Services	Kauweul TA; refer to Wonn 1 initial registration/ Wonn 1 Contracting	Kayaway Eco Cultural and Heritage Services	Lower Hunter Wonnarua Council Incorporated	Mingga Consultants	Muswellbrook Cultural Consultants	Myland Cultural and Heritage Groups	Ngarramang-Kuri Aboriginal Cultural Heritage Groups	Aboriginal registrant 1 (refer to Appendix C3)	Aboriginal registrant 2 (refer to Appendix C3)	Aboriginal registrant 3 (refer to Appendix C3)	Kevin Taggart Wonnarua Traditional Custodians Elder of Broke (refer also to Appendix C3)	Roger Noel Matthews Consultancy	Smith Dhagaans Cultural Group
Field survey scientific values assessment	Induction- field survey discussion-consultation approach Project brief 12.12.2011 ✓ - attendance	✓	✓	NR	✓	✓	NR	✓	✓	✓		✓	NR	NR					✓	NR
Scientific values assessment	Survey week one 12.12.2011-17.12.2011 OzArk, BCM ✓ - attendance	✓	✓	NR	✓	✓	NR	✓	✓	✓		✓	NR	NR					✓	NR
	Survey Week 2 30.01.2012-03.02.2012 OzArk, BCM ✓ - attendance			NR			NR		✓		✓									NR
	Survey Week 3 13.02.2012-17.02.2012 OzArk, BCM ✓ - attendance	✓		NR		✓	NR		✓			✓								NR
	Survey Week 4 29.02.2012-02.03.2012 OzArk, BCM ✓ - attendance			NR			NR			✓										NR
	Survey Week 5 12.03.2012-16.03.2012 OzArk, BCM ✓ - attendance			NR	✓		NR			✓		✓							✓	NR
	Survey Week 6 OzArk, BCM ✓ - attendance	✓	✓	NR	✓	✓	NR	✓				✓								NR
	Survey Week 7 14.05.2012-15.05.2012 OzArk, BCM ✓ - attendance			NR			NR	✓	✓	✓				✓						NR
	Distribution of each survey weeks 1-7 findings ✓ - attendance	✓	✓	NR	✓	✓	30.05.12	✓	✓	✓	30.05.12	30.05.12	30.05.12	30.05.12	✓	✓	✓	✓	✓	20.09.12
	Workshop Brief/ACHA Process																			
Values assessment and mitigation management discussions	Walks on Country														30.09.11; 05.11.11; 02.12.11; 21012012					NR
Loders Creek methodology AHIP draft 28 days notification	BCM call to all RAPs reminder of closing date 23.02.2012 closing date 03.04.2012 ✓ - notified	✓	✓	NR	✓	✓	NR	✓	✓	✓		✓	✓	✓	30.09.11; 05.11.11; 02.12.11; 21012012	✓	✓	✓	✓	NR
Assessment discussion scientific and cultural values	Briefing sessions- Project, consultation & Loders Creek AHIP 11.05.2012 BCM ✓ - attendance	✓		NR			NR	✓											✓	NR
	Loders Creek Mediation 24.05.2012 ✓ - attendance	✓		NR			NR	✓												NR

Consultation Process	Outputs	REGISTERED ABORIGINAL PARTY															Hunter Valley Cultural Surveying	Hunter Valley Natural and Cultural Resources Management	I & E Aboriginal Culture and Heritage	Jarban & Mugrebea	Kawal Cultural Services	KL KG Saunders Trading Services	Kauweul TA; refer to Wonn 1 initial registration/ Wonn 1 Contracting	Kayaway Eco Cultural and Heritage Services	Lower Hunter Wonnarua Council Incorporated	Mingga Consultants	Muswellbrook Cultural Consultants	Myland Cultural and Heritage Groups	Ngarramang-Kuri Aboriginal Cultural Heritage Groups	Aboriginal registrant 1 (refer to Appendix C3)	Aboriginal registrant 2 (refer to Appendix C3)	Aboriginal registrant 3 (refer to Appendix C3)	Kevin Taggart Wonnarua Traditional Custodians Elder of Broke (refer also to Appendix C3)	Roger Noel Matthews Consultancy	Smith Dhagaans Cultural Group																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	26.07.2012 Correspondence outcome of mediation- assessment moving forward ✓ - attendance		✓	NR	✓		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

Consultation Process	Values assessment, Project briefs, archaeological methodology approach; mitigation management and intergenerational equity	
Outputs	Individual consultations	REGISTERED ABORIGINAL PARTY
		Hunter Valley Cultural Surveying
		Hunter Valley Natural and Cultural Resources Management
		I & E Aboriginal Culture and Heritage
		Jarban & Mugrebea
		Kawal Cultural Services
		KL KG Saunders Trading Services
		Kauweul TA; refer to Won 1 initial registration/ Wonn 1 Contracting
		Kayaway Eco Cultural and Heritage Services
		Lower Hunter Wonnarua Council Incorporated
		Mingga Consultants
		Muswellbrook Cultural Consultants
		Myland Cultural and Heritage Groups
		Ngarramang-Kuri Aboriginal Cultural Heritage Groups
		Aboriginal registrant 1 05.09.11;17.09.11; 30.09.11; 11.12.11; 06.09.12, 12.11.12
		Aboriginal registrant 2 15.09.11;
		Aboriginal registrant 3 15.11.12; 24.12.12
		Kevin Taggart Wonnarua Traditional Custodians Elder of Broke (refer also to Appendix C3)
		Roger Noel Matthews Consultancy
		Smith Dhagaans Cultural Group
		15.07.2012; 05.09.2011; 22.09.11; 18.11.11; 20.01.12; 01.03.12; 04.08.12; 13.11.12; 30.11.12; 26.12.12. correspondence 20.11.12 mitigation management BCM

Table 5: Summary of ACHA Consultation (Part 3)

Consultation Process	Outputs	REGISTERED ABORIGINAL PARTY							
		Invitation to parties identified by OEH and NGOs –	Registration of Interest	Formal Stage 2 Briefing session and information distribution 27 July 2011 ✓ - attendance	Individual and small group Briefing session/information distribution	Follow-up briefing Ravensworth North Operations ACHMP salvage program 12.09.2011 ✓ - attendance	Site visit 27.07.11 ✓ - attendance	Site tour-Loders Creek 15.12.2011 OzArk, BCM ✓ - attendance	Postage of draft Archaeological Survey Methodology - October 2011
Stage One									
Stage Two									
Stage Three									
Distribution of draft survey methodology 28 days									

Consultation Process	Outputs	REGISTERED ABORIGINAL PARTY									
		November Workshops 16.11.2011 ✓ - attendance	November Workshops 17.11.2011- values assessment and includes survey methodology review ✓ - attendance	November Workshops 18.11.2011 ✓ - attendance	November Workshops 22.11.2011 ✓ - attendance	Induction- field survey discussion- consultation approach Project brief 12.12.2011 ✓ - attendance	Survey week one 12.12.2011 1-17.12.2011 OzArk, BCM ✓ - attendance	Site tour-Loders Creek 15.12.2011 OzArk, BCM ✓ - attendance	Survey Week 2 30.01.2012- 03.02.2012 OzArk, BCM ✓ - attendance	Survey Week 3 13.02.2012- 17.02.2012 OzArk, BCM ✓ - attendance	
Values assessment, Project briefs, archaeological methodology approach	Ungooroo Aboriginal Corporation	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	T&G Culture Consultants			✓		✓	✓	✓			
	Ungooroo Cultural and Community Services										
	Upper Hunter Wonnarua Council/ Wonnarua Elders Corporation	✓		✓	✓	✓	✓	✓			
	Upper Hunter Heritage Consultants					✓	✓	✓			
	Waabi Gabinya Cultural Consultancy	NR	NR	NR	NR	✓	✓	✓			
	Warragil Cultural Services	NR	NR	NR	NR	NR	NR	NR	NR	NR	
	Wanaruah Local Aboriginal Land Council	✓	✓ (2)	✓	✓	✓	✓	✓		✓	
	Wonnarua People Native Title Claimant group	NR	NR	NR	NR		✓	✓	✓	✓	
	Wonnarua Nation Aboriginal Corporation	✓	✓	✓	✓	✓	✓	✓	✓		
	Wattaka Wonnarua CC Services					✓	✓	✓	✓		
	Widescope					✓	✓	✓			
	Wonnarua Cultural Heritage		✓	✓	✓	✓	✓	✓	✓		
	Wonnarua Traditional Custodians Native Title Group	NR	NR	NR	NR	NR	NR	NR	NR	NR	
	Wunda Cultural Consultants	NR	NR	NR	NR	NR	NR	NR	NR	NR	
	Yarrawalk (as a division of Tocomwall)										
	Tocomwall Pty Ltd on behalf of the Plains Clans of the Wonnarua People Native Title Group					✓	✓	✓	✓	✓	
Yinarr Cultural Services	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Jeffery Matthews	NR	NR	NR	NR	NR	NR	NR	NR	NR		
Gail Beale Kauma Pondee Consultants	NR	NR	NR	NR	NR	NR	NR	NR	NR		
NAIDOC Week Consultation Groups	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

Consultation Process	Outputs	REGISTERED ABORIGINAL PARTY																	
		Survey Week 4 29.02.2012-02.03.2012 OzArk, BCM ✓ - attendance	Survey Week 5 12.03.2012-16.03.2012 OzArk, BCM ✓ - attendance	Survey Week 6 OzArk, BCM ✓ - attendance	Survey Week 7 14.05.2012-15.05.2012 OzArk, BCM ✓ - attendance	Distribution of each survey weeks 1-7 findings ✓ - attendance	Workshop Brief/ACHA Process	Walks on Country	BCM call to all RAPs reminder of closing date 23.02.2012 closing date 03.04.2012 ✓ - attendance	Briefing sessions-Project, consultation & Loders Creek AHIP 11.05.2012 BCM 28 day notice period ✓ - attendance									
		✓		✓		✓			✓	✓									
		✓																	

Consultation Process	Outputs	REGISTERED ABORIGINAL PARTY							
		Loders Creek Mediation 24.05.2012 ✓ - attendance	26.07.2012 Correspondence outcome of mediation- assessment moving forward ✓ - attendance	Workshops 30.05.2012 ✓ - attendance	Workshops 31.05.2012 ✓ - attendance	Test excavation methodology (draft) 28 day comment period - distributed to All registered Aboriginal parties 03.05.2012 ✓ - notified	Week 1 Test excavation 04.06.2012- 08.06.2012 OzArk BCM ✓ - attendance	Week 2 Test excavation 18.06.2012- 22.06.2012 OzArk BCM ✓ - attendance	26.07.2012 Correspondence outcome of mediation- assessment moving forward ✓ - attendance
NAIDOC Week Consultation Groups	T&G Culture Consultants		✓	✓	✓	✓		✓	✓
	Ungooroo Aboriginal Corporation	✓	✓		✓	✓	✓	✓	✓
	Ungooroo Cultural and Community Services		✓			✓	✓	✓	✓
	Upper Hunter Wonnarua Council/ Wonnarua Elders Corporation	✓	✓			✓	✓	✓	✓
	Upper Hunter Heritage Consultants		✓					✓	✓
	Waabi Gabinya Cultural Consultancy		✓	✓	✓	✓	✓	✓	✓
	Warragil Cultural Services	NR	✓	✓	✓	✓	✓		✓
	Wanaruah Local Aboriginal Land Council	✓	✓		✓	✓	✓	✓	✓
	Wonnarua People Native Title Claimant group	✓	✓			✓	✓	✓	✓
	Wonnarua Nation Aboriginal Corporation	✓	✓			✓			✓
	Wattaka Wonnarua CC Services	✓	✓					✓	✓
	Widescope		✓	✓	✓	✓	✓	✓	✓
	Wonnarua Cultural Heritage		✓	✓	✓	✓		✓	✓
	Wonnarua Traditional Custodians Native Title Group	NR	NR	NR	NR	NR	NR	NR	NR
	Wunda Cultural Consultants	NR		NR	NR	NR	NR	NR	NR
	Yarrawalk (as a division of Tocomwall)		✓			✓			✓
	Tocomwall Pty Ltd on behalf of the Plains Clans of the Wonnarua People Native Title Group	✓ (2)	✓	✓ (2)	✓ (4)	✓	✓	✓	✓
	Yinarr Cultural Services		✓	✓	✓	✓		✓	✓
	Jeffery Matthews	NR	NR	NR	NR	NR	NR	NR	NR
	Gail Beale Kauma Pondee Consultants	NR	NR	NR	NR	NR	NR	NR	NR
	NAIDOC Week Consultation Groups	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Consultation Process	Outputs	REGISTERED ABORIGINAL PARTY							
Values assessment and mitigation management discussions	Small group values session 13.09.2012 ✓ - attendance								
	Workshop 13.09.2012 ✓ - attendance								
	Small group values session 20.09.2012 ✓ - attendance			✓ (2)	✓		✓	✓ (10)	✓
Mitigation and Management measures/ intergenerational equity	Workshop 18.10.2012 ✓ - attendance			✓					
	Workshop 19.10.2012 ✓ - attendance								
	Workshop 30.10.2012 ✓ - attendance						✓		
	Workshop 31.10.2012 including presentation material ✓ - attendance								
NAIDOC Week Consultation Groups	Briefing sessions mitigation measures Care and Control intergenerational equity session- various refer table detail								

Consultation Process	Values assessment, Project briefs, archaeological methodology approach; mitigation management and intergenerational equity	Individual consultations	Outputs	REGISTERED ABORIGINAL PARTY		T&G Culture Consultants	Ungooroo Aboriginal Corporation	Ungooroo Cultural and Community Services	Upper Hunter Wonnarua Council/ Wonnarua Elders Corporation	Upper Hunter Heritage Consultants	Wabbi Gabinya Cultural Consultancy	Warragil Cultural Services	Wanaruah Local Aboriginal Land Council	Wonnarua People Native Title Claimant group	Wonnarua Nation Aboriginal Corporation	Wattaka Wonnarua CC Services	Widescope	Wonnarua Cultural Heritage	Wonnarua Traditional Custodians Native Title Group	Wunda Cultural Consultants	Yarrawalk (as a division of Tocomwall)	Tocomwall Pty Ltd on behalf of the Plains Clans of the Wonnarua People Native Title Group	Yinarr Cultural Services	Jeffery Matthews	Gail Beale Kauma Pondee Consultants	NAIDOC Week Consultation Groups
				15.10.12																						

3.5 Additional Social Impacts Identified during Stage 3 Consultation

While not directly related to Aboriginal cultural heritage assessment process, a workshop was held on 18 November 2011 which provided opportunity for registered Aboriginal parties to identify social impacts and needs relating to the proposed Project.

Specific social impact relating to the Bulga Optimisation Project were not identified by registered Aboriginal parties as participants discussed and identified more regional impacts affecting social and community wellbeing. The intense co-location of mining operations was identified as having a cumulative negative impact on mental health and cultural loss for registered Aboriginal parties.

One of the notable social impacts identified during this consultation was the perception that the direct and indirect impacts of mining created co-dependency on Aboriginal cultural heritage assessment as a singular stream of income. The following is a consolidation of the responses of the registered Aboriginal parties who perceive that the current model of participating in Aboriginal cultural heritage assessment result⁶ in:

- Contributing to a false economy;
- An unsustainable economy within the Aboriginal community;
- Disincentive for the next generation to complete secondary education and go on to University or skills trades, for example registered Aboriginal parties stated that during 2010 and 2011 there had been an increase in setting up ACHA companies, largely attracting young Aboriginal people (the next generation);
- Registered Aboriginal parties identified a complete lack of career planning in an unstable and unsustainable business;
- A singular flat level of payment structure, adversely impacting on family structures and values of cultural norms within families and the due recognition of cultural Knowledge Holders;
- A complete lack of 'life of mine strategy' – transitional arrangements; The casual nature of ACHA work impacts on ability to gain home loans, ensure superannuation payments are made for the future and stability is maintained within the community;
- Lateral discrimination (discrimination, bullying and harassment between registered Aboriginal parties and their families); and
- Recent changes to ACHA approaches within NSW have increased this vulnerability and lands rights struggle.

Registered Aboriginal parties stated concern about mental health, lateral discrimination and feelings of being overwhelmed at the rapid and ongoing destruction of Aboriginal cultural heritage in the Hunter region. They commented that conversations generally centre around destruction or salvage not conservation, access and preservation.

They they are also experiencing the loss of areas previously fought for and negotiated as conserved-increasing belief that mining is reaching the turning point of too much cultural impact and social and environmental impacts for Aboriginal communities.

⁶ Note that comments presented in this section were scribed in a range of individual and small group meetings, and were consolidated and presented back to registered Aboriginal parties for endorsement and use in the ACHA report

They identified broad areas that define the sustainability of their community as being:

- Environmental sustainability – healing of land and future land use and access;
- Economic sustainability – diversity of employment choice and business development opportunity;
- Community sustainability – maintaining positive social fabric and normative opportunities and standard of living;
- Employment sustainability – demonstrate targeted and achievable job opportunities – strategic economic planning and delivery; and
- Cultural sustainability – (identified and ranked first) protection access and regeneration intergeneration equity, cultural celebration.

Registered Aboriginal parties sought the support of BCM in its consideration of the social and community wellbeing issues they raised.

They recommended improvements in approach to the development, review and implementation of Aboriginal cultural heritage assessment and management plans and development of intergenerational equity management measures which considered these concerns.

The WLALC also provided recommendations relating to social impacts and Aboriginal disadvantage which are included in **Section 7.2 Table 13**.

While the social mitigation recommendations described in **Table 13** have merit in terms of closing the gap on social disadvantage; they relate specifically to socio-economic impacts, and are beyond the scope of the ACHA management framework.

However, the recommendations have been provided to BCM to inform the socio-economic studies which form part of the EIS. They have also been provided to Xstrata Coal New South Wales to inform its Upper Hunter Reconciliation Action Plan which has a number of pillars and priorities that are well aligned to the employment and education, health services and residential housing strategy detailed in the WLALC-suggested management measures table.

3.6 Stage 4 Consultation – Draft ACHA Review

Stage 4 of the DECCW (2010a) consultation process relates to Registered Aboriginal parties 'review of the draft cultural heritage report.

Registered Aboriginal parties' review of the draft report is an important stage in the ACHA process, to 'ground truth' information previously discussed for inclusion and to identify any additional views on cultural significance, impact and management not already incorporated. Review of the draft provided all registered Aboriginal parties with an additional opportunity to influence the assessment findings and ACHA management outcomes prior to submission of the Part 4 Approval application to the Department of Planning and Infrastructure.

Draft copies of this ACHA report, and the OzArk archaeological assessment were distributed to Aboriginal registrants for 28 days provided for review and return of comments. Draft copies of the ACHA and AAVA reports were issued in hardcopy (appendices were on an accompanying USB) and sent to all registered Aboriginal parties. Contact was made with all parties either via phone call or email in order to ensure receipt of copies. The reissuing and resending of drafts to alternative addresses were also arranged where required (refer **Appendix B3** Consultation log)

Following registered Aboriginal parties review of this draft ACHA report, amendments were made to the ACHA and AAVA report to include (where possible) and respond to comments and input provided.

Comments were invited from all registered Aboriginal parties who made the choice to provide information as disclosed or non-disclosed statements, in writing or through discussions with BCM and Connect for Effect. At all times, registered Aboriginal parties were able to identify any restrictions on the inclusion and use of information provided, and whether they would like their statements to be disclosed or non-disclosed.

Submissions were received from six registered Aboriginal parties (five submissions were from parties representing a group of people, including Traditional knowledge holders and one submission from an individual registered Aboriginal party).

The following registered Aboriginal parties submitted a response:

1. Hunter Valley Aboriginal Corporation (HVAC),
2. Kawal Cultural Services,
3. Lower Hunter Aboriginal Incorporated (LHAI),
4. The Plains Clans of the Wonnarua People (PCWP),
5. The Wonnarua Traditional Custodians (WTC); and
6. Wonnarua Nation (WN) representing the Wonnarua People

The Wonnarua Local Aboriginal Land Council was also contacted and BCM advised that a submission may be made during the EIS public comment period. Further correspondence has been received post comment period. A copy of all correspondence and responses are included in **Appendix B4**.

Responses to the archaeological comments can be found in the AAVA (**Appendix 13b of this EIS**).

Responses to the Aboriginal cultural heritage assessment comments can be found in full detail **Appendix B4 of this ACHA**.

4 Background: The Cultural and Historical Context

4.1 Understanding the Project Cultural Landscape

This section provides a synthesis of presented available information on the Aboriginal history of the Project area, in a local and regional context, and sourced from a range of historical, oral and archaeological sources. The information has been integrated to provide a multi-faceted and holistic understanding of the past historic information to identify known Aboriginal associations with the area over time, and provide a broad understanding of the Aboriginal cultural landscape of the Project area. A more detailed historic narrative is presented **Appendix A** of this ACHA.

In relation to Aboriginal cultural landscapes in NSW, OEH refers to the following definition by Buggy (1999) to guide the preparation of ACHA reports:

“An Aboriginal cultural landscape is ‘a place or area valued by an Aboriginal group (or groups) because of their long and complex relationship with that land. It expresses their unity with the natural and spiritual environment. It embodies their traditional knowledge of spirits, places, land uses, and ecology. Material remains of the association may be prominent, but will often be minimal or absent”.

OEH also identifies that for Aboriginal people, the significance of individual landscape features and archaeological sites is derived from their interrelatedness within the cultural landscape. This means features cannot be assessed in isolation and any assessment must consider the feature and its associations in a holistic manner (DECCW 2010a, Sheet 2).

In taking a cultural landscape approach to understanding the landscape, the significant differences between Aboriginal and non-Aboriginal perspectives of the land often become evident, with one researcher (McIntyre-Tamwoy 2008) observing:

“...for scientists however the landscape, while a place to marvel over, is essentially inanimate and the processes which shaped it, while intriguing, can be described in dispassionate and objective terms once they are studied, broken into their mechanical, chemical and physical components and thereby understood...”

“...for Aboriginal custodians landscape is sentient and therefore requires, in fact demands, an intimate relationship with people and it has the ability to effect change in the everyday lives of the people who interact with it”.

The understanding of place developed in this section is fundamental to the Aboriginal cultural values assessment presented within this report, to provide context to registered Aboriginal parties' input on cultural values and to provide required context to the significance assessment presented in **Section 5**.

Table 6 provides a collation of the known Aboriginal associations with the Project area and surrounds, and relates this known the NSW historic themes identified by the Heritage Council (2001) and their regional relevancy to this assessment.

Table 6: Aboriginal Associations with the Project Area and Surrounds

Themes	Regional Context	Local Context
Peopling Australia – Aboriginal cultures (nations and clans)	Upper Hunter Valley lowlands identified as the traditional lands of the Wonnarua people, being one of the approximately 600 known language groups or 'nations' known in Australia at the time of European contact. At contact, the Wonnarua language group was also composed of a number of smaller clans, possibly 12, being groups of approximately 40 to 50 people who shared a clan name, a kinship system, totems and who had responsibilities for a particular area (McKiernan 1911:88; WNAC 2012). Historic accounts demonstrate that the Wonnarua had close connections with the Gomerioi people, as they did have with all surrounding language groups, with a network of social links connecting coastal and inland peoples (Brayshaw 1987:51).	The traditional people of the central lowlands of the Hunter Valley, which includes the Project area of this assessment, identify as Wonnarua people. The Project area formed part of the Wonnarua territory- Wonnarua tribal area was 2000 square miles and included “<i>all the country drained by the Hunter River and its tributaries</i>”. Fawcett (1898).
		A detailed understanding of Wonnarua clans at the time of contact is not provided by historical records, but blanket distribution accounts from the late 1830s and early 1840s blankets show members of the 'Wollombi' tribe still living at Wollombi, which until the mid-19th century was the name applied to the region also containing Broke Fordwich; and was also distinct from the 'Lower Wollombi' Tribe living at 'Lower Wollombi' (State Records of NSW 4/1133.3).
		The location of the Project area close to the southern boundary of the Wonnarua language group, with some sources suggesting an area of shared attachment, such as in a 1975 interview with Mr Eric Taggart in the <i>Newcastle Morning Herald & Miners' Advocate</i>.
		Although historic accounts of clan divisions are few, McKiernan (1911:886) identified that the Wonnarua were historically divided into a number of separate groups living at different locations within the same tribal territory. Oral histories further describe Wonnarua clan structure, with the Wonnarua Nation Aboriginal Corporation (2012) reporting that Mr Eric Taggart, born in Broke in 1910, indicated that prior to detribalisation, the Wonnarua was comprised of 12 clans. Archaeological evidence provides tangible evidence of Aboriginal use of the Project area.

Themes	Regional Context	Local Context
Peopling Australia – Aboriginal cultures (Dreaming and Creation)	South of Singleton, Broke is located within a regional constellation of significant sites including Mount Yengo, Milbrodale, Burragurra, Howe's Valley, Bulga, Appletree Aboriginal Area⁷ and Wollombi. Landscape features – such as Wollombi Brook and Lizard Rock known also as Yellow Rock – also situate Broke as an important point in this network of culturally potent sites (Umwelt 2013). The Wonnarua Dreaming holds that the Hunter Valley was created by the great spirit, Baiame, and before this, there was no life (Australian Museum 2012). Wonnarua Dreamtime stories explain how the region came into being, and identify Creation Places and Dreaming tracks (paths of Ancestor beings, or songlines) within the landscape (Miller 1985).	The Project area is close to a significant Wonnarua Creation site, being the escarpment of Yellow Rock at Broke (Needham 1981); whose formation is explained in the Wonnarua Creation Story of the Giant Lizard at Yellow Rock.
		The Project area is located in regional proximity to another significant Wonnarua Creation site, being the Tiddalik stone formation in Slacks Creek upstream of its flow into Wollombi Brook; whose formation is explained in the Wonnarua Creation story of Tiddalik the frog. The same ridge is also known to contain two other rock formations resembling frogs (NPWS 1980).
		A number of Aboriginal registered parties made comment on the proximity of the Project area to Creation sites of the Wonnarua Dreaming.
		The Project area is directly adjacent the Wollombi Brook, which believed to be a pathway to Creation places (Elkin 1949).
Peopling Australia – Aboriginal cultures (ceremonial life)	Ceremonies continue to be the core of Aboriginal spiritual life, with the cycle of rituals performed at Dreaming places maintaining the land and its people. Traditionally, ceremonies could be held for hunting, initiation and burial, with the more elaborate the ceremony held at times of seasonal abundance and in places that could sustain the attending people (Parbury 1986:18). Historical accounts of Wonnarua people gathering for ceremony describe several large gatherings in the region, in which multiple family and tribal groups, as described by Goddard (1937:9). Broke is connected to the Creation story of Burning	The Project area is located in regional proximity to a number of significant ceremonial places, including at the Dreaming sites mentioned above, and also including a Teaching Cave, a Menstruation Cave and a Birthing Cave on the same ridge as the Tiddalik stone formation (NPWS 1980).
		The Project area may have been used in the past for camping, as part of travel to and access to places of ceremony in the nearby region.
		The Project area is located in close proximity to the historic Bora ceremony said to be held at Bulga in 1852, on lands near the Mount Thorley/Warkworth Mine.
		The Project area is located in close vicinity to a ceremonial place of

⁷ Aboriginal areas are places which have been identified as having special significance to Aboriginal people, or which contain objects of Aboriginal culture. Aboriginal areas allow for the use of the area by Aboriginal people for cultural purposes. They are also intended to promote public understanding and appreciation of their natural and cultural values and significance to Aboriginal people, and provide opportunities for appropriate research in accordance with Aboriginal cultural values.

Themes	Regional Context	Local Context
	Mountain at Wingen, which describes Broke as a site of conflict between Wonnarua and Kamilaroi people (Stirling and, WLALC). Needham (1981) has identified a number of sites of interest in the Broke/Bulga area including: • Last reported Bora ceremony was held in 1852 at Bulga⁸; • Three burial grounds in Wollombi region including one at Broke, known to be under a tree or trees; • A salt quarry at Broke, which was a source of rock salt; • Hunting grounds located five kilometres from the township of Broke, which was a natural game trap; and • Potholes – a series of axe-grooves are associated with some potholes. Two sets of potholes including one at Broke are deeper than others and contain stone lids. References to people gathering in the Wollombi area to the south of Bulga for ceremony have lead by authors such as Mathews (1897), and Fawcett (1898) and Goddard (1937) have led current researchers to understand that the Wollombi was a significant and focal area for Aboriginal spiritual life, as stated by Needham (1979:8).	importance on Oakley's property/Oakley's Creek at Broke (refer Appendix A3). The Project area is located in close vicinity to the Eather property at Bulga, a known ceremonial location. The Project area may have been used by Aboriginal parties camping on the Wollombi Brook immediately west of the Project area, as part of preparation and waiting areas for ceremony (oral statements made by some registered Aboriginal parties).

⁸ In 2010, Coal & Allied announced protection of the culturally significant Bulga Bora Ground and adjoining cultural landscape. A 500 ha *Wollombi Brook Aboriginal Cultural Heritage Conservation Area* will permanently protect Aboriginal heritage and biodiversity values, as part of an application to extend the operation of the Warkworth mine near Singleton by ten years. Media Release: Bulga Bora Ground to be protected. 19 May 2010 http://www.coalandallied.com.au/media/38_media_releases_2442.asp

Themes	Regional Context	Local Context
	Other reports of ceremonial or corroboree grounds in the local region include a recollection by a settler Australian named Keith Standing (cited in Bodiam 1988:5-6), who recalled an Aboriginal corroboree ground on the Oakley's property at Broke, which still contained a large mound when he was a child. Mann in the summer of 1840, who observed that 'inland Aborigines from Wollombi' participated in a corroboree near the mouth of Wyong Creek on Tuggerah Lake (cited in Brayshaw 1987:82).	
Peopling Australia – Aboriginal cultures (pathways and trade)	At the time of European contact, NSW was covered with a network of Aboriginal pathways, which is often underestimated in historic literature (Kabaila 2005:7). These pathways allowed for the major and minor movements that formed part of the daily and spiritual life of Aboriginal people, and included songlines existing alongside preferred travel routes for daily movements. Topographic features also played an important role in the demarcation of territories and boundaries, with the efforts by Tindale between the 1920s and 1940s and Clark (1990) finding that boundaries were cultural, ecological and geographical constructs, where a "close correspondence exists between <i>many tribal boundaries and physiographic, geographic and ecological boundaries</i>". On a trip from Wollombi to the Hunter, Breton reported that he travelled with a group of 60 Aboriginal people who he described as being 'one from Illarong, the other	The 3000 kilometre east coast trading route from the Torres Strait to Victoria extended through the Hunter Region. The route was used for trade, including long distance movement of bunya nuts, and a number of major Bora grounds used for the Daramulan initiation rite occurred along its length (Kerwin 2010). A number of known Hunter Valley pathways may have formed part of its overall alignment, especially given the significant Bora grounds known in the Broke area and in the Wollemi National Park to its south. People of the 'Wollombi' and 'Illalong' tribes were described travelling along the track together in 1834. The Project area is located adjacent the Wollombi Brook, which McCarthy (1939:407) recorded as being used as a pathway linking the Hunter Valley and Brisbane Waters. This Boree Track also led as far north as Singleton. The Project area is located approximately six kilometres from the Hunter River, which research (such as Kerwin 2006) has suggested was the route used for the trade of possum skins from Wonnarua Country to coastal Hunter Region peoples (Awabakal and Worimi).

Themes	Regional Context	Local Context
	belonging to the Wollombi' (1834, pp. 81-82). It is possible that an Aboriginal trade route stretched from the Sydney area to the Hawkesbury and along what is now known as the Boree Track passing through Yengo National Park and on to Milbrodale (Brayshaw 1987:41). There were a number of known Aboriginal pathways in the Hunter Region used for trade as well as ceremonial purposes, including the Boree track, pathways later used by explorers and surveyors and now known as the Putty Road and the Great North Road, and the Cassilis Gap; which may have individually or collectively formed part of the great eastern coast trading route extending from the Torres Strait to Victoria. Because the Broke/Bulga area is located within a constellation of significant sites and because of the seasonal movement of the original inhabitants, pathways were an important part of the cultural landscape that make the relationships between clans and sites explicit (Taçon 2005). Very large gatherings, involving members of several tribes, were also observed. Large gatherings were rotated between a number of sites to allow the local environment to fully recover from periods of extensive exploitation. Gatherings provided an opportunity for trade such as ceremonial songs and dances; possum skin cloaks, spears, axes and native tobacco (Mulvaney 1986). Other accounts include the sighting of as many as 200-300 Aboriginal people camping 'on the hill in Mr Eather's	

Themes	Regional Context	Local Context
	paddock' at Bulga (Collins 1914). It is apparent that Aboriginal people moved and mixed beyond territories and that, in order to do so, pathways across territories were required. Records indicate that the Wonnarua were closely affiliated with the Kamilaroi. <i>Conflict between Kamilaroi and Wonnarua has also been observed and Needham (1981) notes fatalities in "one instanced skirmish between the Wollombi natives [Darkinung] and a group of Kamilaroi tribesman in the Wollombi Valley"</i>. Moore (1970:28) states that encounters between the Wonnarua and Kamilaroi were both conflictual and friendly and that "contact seems to have been made chiefly through what is known as the 'Cassilis Gap', an easy way through the otherwise rugged ranges along the line Cassilis-Merriwa-Sandy Hollow" as well as via the heads of the Hunter to Nunmurra and gorges of the upper Goulburn. This pathway provided a link across Jerry's Plains and then to the Wollombi and coastal regions with a seeming convergence in the vicinity of Mount Thorley where the Golden Highway, Putty Road and Payne's Crossing meet. While there is some recognition that Kamilaroi used these routes, this does not discount use by other local groups given the extent of sacred and significant sites and known intertribal interaction. In 1817, William Parr and Ben Singleton's expedition almost reached the Hunter Valley, travelling along the eastern edge of the Wollemi Range, despite Aboriginal	

Themes	Regional Context	Local Context
	people lighting bushfires in front of them to try to turn them back. MacQueen asserts that Parr was probably not repelled by those fires lit by Aboriginal people, but by a huge lightning-ignited bushfire - more extensive than any encountered in recent times. He notes that when Parr travelled to the Putty area he met Darkinung (MacQueen 2004:18).	
Peopling Australia – Aboriginal cultures (subsistence lifeways)	At the time of contact, Wonnarua clan territories occupied all parts of the Hunter Valley, and the resources of the natural landscape sustained the physical needs of Wonnarua people. Wonnarua people also actively managed their lands to create the resources they used, through activities such as firestick farming that attracted game and provided grass seeds, an important food source. A 1975 <i>Newcastle Morning Herald & Miners' Advocate</i> report by P.A. Haslam featuring an interview with Mr Eric Taggart, who led a small party on a tour around Broke and surrounds. During this tour, Mr Taggart spoke of the abundance of game, demonstrated trapping methods and identified rock salt sources. He identified a burial ground, as a sacred spot, on Putty-Broke Road that is surrounded by acacia trees and had been overtaken by farming. He also noted the existence of a tribal camp not far from trees and caves. Although there is little direct evidence in historical accounts of Wonnarua people positioned their campsites	The Project area may have formed part of a Wonnarua territory at the time of European contact, with people moving within their lands in a complex pattern according to spiritual and physical needs. All parts of the territory were known and all parts of the territory were used. The river valleys of the Hunter Region at the time of contact were characterised by rich grasslands at the time of contact (Howe 1819, Dangar 1828, Mitchell 1838), which were created and maintained by Wonnarua people through a strict cycle of low-intensity fires (firestick farming), which were observed by early recorders such as Fawcett (1898). Although historic accounts of the Wollombi Brook landscape at the time of contact are limited, it is understood that grasslands may have extended from the Wollombi Brook floodplain into the slopes of the Project area, and would have attracted game animals for hunting. Grasses also provided seeds that may have been ground locally, with possible evidence of this at the BMU1 grinding groove site, and made into seed cakes. Grasslands were a key source of seed bearing plants such as Kangaroo Grass (<i>Themeda australis</i>), which was a staple food throughout southeast Australia. Seeds from this grass were separated and ground to produce flour, which when mixed with water was cooked to make damper (Nash 2004). The literature on the Hunter Valley makes no reference to Kangaroo Grass, but it may be the "kind of oat-grass" seen by Cunningham

Themes	Regional Context	Local Context
	in the Hunter Valley lowlands, there are references to camping along Wollombi Brook, such as Felton Mathew's observation as late as 1830 of Aboriginal people camped "<i>in a romantic spot</i>" on the bank of Wollombi Brook, near Broke (cited in Brayshaw 1987:42). There are also later references to Bulga being an 'old tribal camping ground', as described in a 27 June 1951 article. Given the reliability of Wollombi Brook as a freshwater source, the Brook is likely to have been a focus of repeated and intensive camping in the Bulga and Broke region, especially in times when smaller creek lines contained little or no water. Brayshaw's (1987) review of historical records in the Hunter Region also include identified references to Aboriginal hunting of echidna (Fitzpatrick 1914:43).	in 1823 in the upper Goulburn Valley (cited Brayshaw 1987:75). The Project area contains two creek lines – Loders Creek and Nine Mile Creek – that would have provided sufficient drinking water to allow for seasonal camping in the surrounding area, particularly during times of higher rainfall (OzArk, Appendix 13b of the EIS). However EIS investigations have also identified that the current water supply of Loders Creek is brackish (Milne-Home 2012), and there are also historic references to tributaries of the Hunter River being 'brackish' (Mitchell 1838). The numerous small streams of the Project area, which flow into Nine Mile and Loders Creek in the east and into Wollombi Brook in the west, would only contain water infrequently, and would not have been frequently used for camping. Archaeological studies have found that large stone artefact scatters are mainly concentrated on watercourses such as Wollombi Brook and the associated drainage lines, particularly where one or more watercourses intersect (ERM 2004). Archaeological findings from sites along a major drainage line leading to Wollombi Brook in the Broke area suggests that Aboriginal people generally camped in small family groups in separate but often overlapping areas and undertook such activities as making and repairing stone tools, grinding sharp edges on adzes, hatchets and axes on sandstone outcrops within creeks. These tools were used for woodworking, preparing and eating foods hunted and gathered within the local area and processing food plants using portable grindstones and possibly on sandstone outcrops. The reported presence of hearths (fireplaces) along creek lines within the local area and the presence of heat treated artefacts indicate that Aboriginal people were not only using fires for warmth, protection and preparing food but also for heating stone in order to improve its potential to be used to make stone tools (Umwelt 2007).

Themes	Regional Context	Local Context
		The Project area is likely to have been used by parties camping on the Wollombi Brook immediately west of the Project area, as part of hunting and gathering grounds. Over 200 archaeological sites have been recorded within the Project area, most of which are small surface scatters and individual stone artefacts, suggest stone tools being maintained and made as needed, and discarded once used or left for another visit. Vegetation of the Project area would have provided food for game such as kangaroos, opossums, wallaroos, wallabies, and echidna, all of which were hunted for food and to collect skins, fur and sinew for use. Fish and other aquatic resources would also have been available in the Wollombi Brook immediately west of the Project area. Oral history records also refer to fishing along the banks of the Wollombi Brook and Hunter River. Historic records also refer to a specific area near Broke identified as a hunting place, where a spring at the head of a gully in the western range attracted game and was often used for hunting (Needham 1981). Oral records also refer to the Project area (the Vere) as a 'good area for hunting' and cites frequent hunting in the area. Continuation of hunting occurred in the Project area into historic times, with Wonnarua people identifying movement through the area and hunting in specific places such as along Loders Creek. Adaptations with use of introduced resources were also used.
Peopling Australia – Aboriginal	At the time of contact, Wonnarua material cultural was rich and diverse, with range of objects made and used from	Within the Project area, stone may have ground to make axes and adzes, using the sandstone outcrops in Loders Creek and the northern drainage line.

Themes	Regional Context	Local Context
cultures (material culture)	materials such as wood, bark, bones, shells, skins, fur, animal sinew and stone; which were sourced both locally and through trade from more distant areas (Brayshaw 1987). However, as organic materials decay over time, only material cultural made of material such as stone is likely to survive any significant time, although the archaeology of more recent times might be more varied (Mays 1998). Aboriginal huts of the Hunter Region, which are also frequently referred to as "gunyers" in historic literature, usually involved the use of bark; such as in the following account by Eyre, who spent part of 1833-34 in the "Comleroi" district above the junction of Wollombi Brook with the Hunter River (1859:51 cited in Brayshaw 1987:59): <i>"The bark was cut from Box or stringy bark trees by the Blacks who are very skilful and expeditious in doing it...[it was] stripped off in one unbroken piece forming when stretched out flat a sheet from six to twelve feet square according to the size of the tree. To prevent the bark from cracking when being thus stretched out it is heated inside with fire just as a cooper heats a cask to make the staves bend as he wishes. When dry these sheets of bark retain their flat shape - are from an inch to an inch and a half thick - quite impervious to rain and of course most useful in the construction of temporary dwellings".</i>	The archaeological sites of the Project area also demonstrate a long term connection with the Project area, with over 250 known archaeological sites found in the Project area during past and present surveys, which provide evidence for a range of activities. Past excavation along Loders Creek has also demonstrated that this occupation dates back 3,000 to 1,700 BP (Koettig 1994). Within the Project area, trees were culturally modified for the purposes of tree larder extraction in recent historic times by Wonnarua people, who were continuing hunting practices in the area, including the collection of honey from the trees. Box trees were identified as the most frequently modified trees and that larder extraction practices were also seasonal. The use of metal axes to undertake the extraction was also described. The archaeological record of the Project area may have been compromised by the collection of Aboriginal objects from the Broke and Bulga area, with individuals such as Mr Eather of Broke known to have collected numerous objects from the Broke and Bulga area in the 20th century, with a particular bias for large and distinctive Aboriginal objects (such as reported in the Singleton Argus on 27 August 1952). A historic account of Aboriginal clothing in the Hunter Region indicates that materials from possums and kangaroos provided almost everything that was worn (Brayshaw 1987:67).

Themes	Regional Context	Local Context
Peopling Australia – Aboriginal cultures (change over time)	Australian Aboriginal cultures are the oldest continuous cultures in the world, and are known for their continuity of cultural practice and lifestyle over long periods of time. However, their ability to adapt to change is recognised that one of the reasons that they have maintained cultural practice over time, despite significant environmental and social change (Flood 2006, Australian Museum 2012). The cultural resilience of Wonnarua and other Aboriginal people is demonstrated through the ability to respond to significant change to all aspects of life following European contact; with interrupted and undermined traditional cultural beliefs and practices. Despite this, Wonnarua people have retained a cultural connection to the lands of the Broke area. In 1834, Breton (p. 83) observed, in an area adjoining Wollombi Brook, "While here I went out after kangaroos, and to my surprise was only sixteen, at a place where formerly a hundred might have been seen together; but within the last two or three years they have almost disappeared."	The lands of the Project area have sustained Aboriginal use and activity for thousands of years. This has been demonstrated by excavation of a hearth along Loders Creek which contained evidence of camping 3,000 to 1,700 years before present (Koettig 1994); but the area would have been occupied for much longer as archaeological sites in the region demonstrate Aboriginal occupation into the last Glacial Maximum, approximately 27,000–17,000 years ago, and even older sites may yet be found (OzArk, Appendix 13b of the EIS). Over this time, Australia's inland lakes and rivers dried up and the sea level dropped 120 metres below current level, with the coastline moving 15 to 20 kilometres east of its current position. This would have left the Project area 80 kilometres from the coast and well inland. However, the seas rose again and by 6,500 years ago, the coast line and the Hunter River estuary took its current form (Roy et al 1995). In the most recent period, from 3,500 years ago to modern times, frequent severe floods and droughts began to occur adding to environmental stress, with each occurring on a regular cycle once every three to seven years (Flood 2006:199).
Peopling Australia – Aboriginal cultures and interactions with other cultures (first contact)	First known British exploration of the Hunter Valley dates to 1817 to 1820 (Umwelt 2013), and illegal and informal British movements also occurred prior to formal European settlement of the valley, with convicts moving stock into the Hunter Valley from the Hawkesbury, and escaped convicts travelled overland from Newcastle to the Hawkesbury (Elkin 1937, Wood 1972).	The first British explorers entering the Hunter Valley did so using Aboriginal pathways from the Hawkesbury to the Hunter Valley, which exit the Wollombi National Park at Milbrodale and at Wollombi/Broke (Umwelt 2013, Wood 1972). The Project area was therefore near an important British entry point into the Hunter Valley, although historic records do not indicate that first contact between British and Wonnarua people occurred in the Broke area. Unrecorded first contacts between Wonnarua people and those British

Themes	Regional Context	Local Context
	The earliest known Europeans to enter the upper Hunter Valley were William Parr and Benjamin Singleton, who travelled from the Hawkesbury to the Hunter Valley in 1817, journeying to what was most likely the headwaters of Doyles Creek at Warkworth (Umwelt 2013). Parr and Singleton returned to the area in 1818, and Singleton also was a member of the John Howe survey parties which entered the Valley from the Hawkesbury in October 1819 and March 1820 looking for a route for an overland road. On both journeys, Howe was guided by Aboriginal guides such as 'Miles' from the Hawkesbury district (Wood 1972:12) and others referred to in historical accounts as Woolaboy, Lazy Jack and Lemoroy. The overland route surveyed by Howe became known as the Bulga Track (Umwelt 2013), which is today known as the Putty Road.	convicts also occurred, and as British access again occurred overland to the Hawkesbury, convict stock keepers and escaped convicts from Newcastle may have travelled through the Broke area (Mudie 1822, cited in Wood 1972; Green 1975:8).
Peopling Australia – Aboriginal cultures and interactions with other cultures (dispossession from traditional lands)	From the formal free opening of the Hunter Valley in 1822, free settlers and convicts flowed into the region, with nearly 1000 colonists arriving by 1826, which increased to over 8,000 by 1833. Colonists brought with them over 100,000 cattle and sheep by 1827 (Hartley 1995). Land was rapidly selected, first along the Hunter River then along its major tributaries and into the surrounding hills.	European settlers did not recognise the custodial rights and responsibilities of Wonnarua people over the lands of the Project area, with lands along Wollombi Brook and extending into the Project area selected in 1825, and becoming part of one of the major estates of the area (Blaxland's 'Fordwich' estate) (Dangar 1828). As land was selected, Aboriginal access to Wollombi Brook was limited as Aboriginal people were seen as a threat to stock and to the security of Europeans, following recent conflict in other districts (Parbury 1986). European settlers also did not recognise the existing knowledge and naming of the Wollombi area, renaming the main river as 'Cockfighters Creek' after the name of one of the European exploration party horses. In the 1830s, the stream was renamed Wollombi Brook (refer to The Colonist, 29 October 1835 edition).

Themes	Regional Context	Local Context
		As throughout the region, limited access had a direct impact on the spiritual and physical needs of Wonnarua people, who were in places denied access to their Creation sites, their Dreaming tracks or song lines, their ceremonial places and their hunting and gathering grounds. The European selection of lands along Wollombi Brook and extending into the Project area would have interrupted access to Wollombi Brook (and several ceremonial places known in the local area. European settlement of the Wollombi region – which included Broke Fordwich until the mid-19th century – was slowed slightly until the 1830s by the difficulty of travel along the Bulga Road/Putty Road (Wood 1972:16). This may have allowed for a greater continuation of Aboriginal presence in the Wollombi region than in other regions, such as reflected in the continued camping of Aboriginal people at Bulga in the late 19th century (referred to as a ‘very big camp’ in a 1952 Singleton Argus article); when camping at other places in the region was limited to only five known places, being St Clair, Redbourneberry, Dunolly, Gowrie and Bulga. Dispossession occurred alongside loss of food security as the traditional hunting grounds were cleared for cattle, native game shot en masse for the settler’s use or to remove competition for grasslands, and the best water sources taken by Europeans. Descriptions from Broke in the 1830s describe this occurring locally, with a rapid reduction in kangaroos noted (Breton 1834). The Wollombi area, which until the mid-19th century was the name for an area including Broke-Fordwich, was the location of a conflict event in 1830, which included (a) an Aboriginal attack on a Wollombi farm, in which 100 sheep were killed and a convict watchman was tied up and left on an ant nest (but later rescued without harm), and (b) a punitive expedition of mounted police following the group responsible and causing ‘several casualties’ (Breton 1833).
Peopling Australia – Aboriginal cultures and interactions with other cultures	Dispossession and the treatment of Wonnarua people led to the ‘Wonnarua uprising’ of 1826 (Miller 1985), a three month period with eight known conflict events. However, a total of 17 conflict events are known between 1825 and 1834, which resulted in at least 35 Aboriginal deaths and six European deaths (collated from magistrate records,	

Themes	Regional Context	Local Context
(territorial defence and frontier conflict)	historical accounts and newspaper reports), although the true number of Aboriginal deaths was much higher with 'several casualties' reported for varying conflicts. In <i>Dawn in the Valley</i> , Wood (1972, p. 114) makes reference to the 'Wollombi Blacks' who had "committed acts of aggression on Wollombi Brook, where food and clothing had been taken by force from a number of farms".	
Peopling Australia – Aboriginal cultures and interactions with other cultures (significant loss of life)	The cumulative impacts of disease, dispossession and violence led to significance loss of life among Wonnarua peoples in the 19 th century, and continuing into the 20 th century; until advances in life saving medicines (Brayshaw 1987, Flood 2006).	Blanket return data for the Wollombi area between 1838 and 1842, which at the included Broke-Fordwich, also shows that amongst the 39 people recorded collecting blankets, 29 were men and 10 were women, which may reflect both a diminished female population as well as a preference for distributing blankets to Aboriginal men (State Records of NSW 4/1133.3). Noted that reports from mid 1820s referred to an Aboriginal population of the upper Hunter Valley as exceeding 500 people (1826 magistrate report, NSW State Records #13696), and this is not expected to refer to the number of Wonnarua people at the time of contact, as these records would have been taken after the immediate impacts of contact. A Maitland Mercury and Hunter River Advertiser article from 1846 describes the sufferings of the 'helpless and wretched aborigines' at Wollombi, which was 'compounded by the lack of government blankets that year'. Noted that until the mid-19 th , Wollombi was the name of a broader area that also included Broke-Fordwich. A historical account from 1846 describes the Aboriginal population of Falbrook, Jerry's Plains and Wollombi as totalling about 105 people (Cooper 1846).

Themes	Regional Context	Local Context
Peopling Australia – Aboriginal cultures and interactions with other cultures (displacement)	As European settlement claimed the lands of the upper Hunter Valley, interrupting the millennia old spiritual and physical sustenance provided by territorial lands, many Wonnarua people were displaced and dispossessed. Fringe camping became commonplace, often on vacant land away from the newly formed European settlements, or even on lands claimed by settlers who had 'compassionate' views towards Aboriginal people.	Archaeological evidence of historic Aboriginal activity within the Project area is directly evidenced by the six knapped glass objects found. Further analysis of each is needed to better understand whether any of these were used and for what purpose, although OzArk (Appendix 13b of the EIS) notes that the artefacts include a glass scraper; and these may have been used for activities such as wood working and hide working. A historical account from 1830 refers to a party of Aboriginal people camped "in a romantic spot" on the bank of Wollombi Brook, near Broke (Mathew 1830, cited in Brayshaw 1987); which may have been within close proximity to the Project area. Oral accounts of registered Aboriginal parties including WTC's representative Elder of Broke also reference continued use of an area of 'good feelings' and a 'terrific place' citing the Groves property- Wollombi Brook -Charlton Road CA area on the Bank of Wollombi Brook. Blanket returns from the 1838, 1841, 1842 and 1843 (State Records of NSW 4/1133.3) describe a number of people of the 'Wollombi', 'Wollumbi' and 'Lower Wollombi' as continuing to live in the area, with at least 39 distinct people recorded collecting blankets on four different dates. These included 26 men, 10 women and three boys under the age of 12. The ages of those collecting blankets is recorded as ranging from eight to 50; although most people – 22 – being between 15 and 26 in age. Those collecting blankets also listed to their number of wives and children, with blanket records referring to an additional seven women as wives and an additional four children (three boys and one girl). It is possible that the people described in blanket records at this time where those continuing to live in the Broke area. A historic account describes people of the Wollombi, Millfield and Ellalong 'tribes' as camping on the ridges around Wollombi in the late 19th century, which may have included the high country to the south and southwest of Broke (Lumby, cited in D'Ombra 1965).

Themes	Regional Context	Local Context
		Aboriginal people are recorded as regularly coming into the property settled by the Clark family in the 1840s-1850, and camping nearby and performing 'odd jobs for food' (Clark 1850, cited in Mitchell 2004).
Peopling Australia – Aboriginal cultures and interactions with other cultures (bushranging tradition)	Bushrangers and horse thieves are known in the history of the Hunter Valley, including a number of Aboriginal bushrangers – those who continued to live on the land and beyond the physical and social boundaries imposed by European settlers. 'Yellow Billy' (William), the best known Aboriginal bushranger associated with the Bulga area, who was described in local reports of the day as coming from the Big River. Yellow Billy was known to camp in the caves near Wollombi, before he was captured in 1867 and deported to America.	The area around Bulga was recorded as being a particular focus for Aboriginal bushrangers (such as described in a 4 December 1852 article in the Maitland Mercury and Hunter River Advertiser), with bushrangers known to camp in the hills; foray into the main valley from the high country.
		Registered Aboriginal parties also recounted stories which included Aboriginal families in the Wollombi Brook area offering refuge to "Yellow Billy". A newspaper article in August of 1863 references assistance by early settlers in the Wollombi Brook area noting that he evaded arrest because of the support.
Peopling Australia – Aboriginal cultures and interactions with other cultures (ingenuity and innovation)	Following European contact, new materials and new technologies were imported into Australia, and the ingenuity of Wonnarua people in the Hunter Valley is demonstrated through the incorporation of these into lifeways and material culture.	The Project area is known to contain knapped glass artefacts (OzArk, Appendix 13b of the EIS), which demonstrate the ingenuity of Aboriginal people following British contact in incorporating new materials into their material culture.
		The Project area was used for hunting in historic times, with Wonnarua people continuing to move through land around Broke, Bulga, Vere and Jerrys Plains for this purpose, using both guns and spears.

Themes	Regional Context	Local Context
Peopling Australia – Aboriginal cultures and interactions with other cultures (maintenance of cultural practice)	During the decades that following European contact in the upper Hunter Valley, Aboriginal people are known to have maintained traditional cultural practices and lifeways, although the adaptability and resilience of Aboriginal people is also demonstrated in the cultural and social change occurring at this time.	The Project area is in close proximity to the 1852 Bora ceremony held at Bulga (Eather nd, Brayshaw 2003), which demonstrated continuing spiritual and ceremonial practice several decades after European settlement in the upper Hunter Valley.
		The Project area continued to be used by Aboriginal people following European contact, with oral history accounts describing continued hunting and camping in the 20th century, and archaeological investigating identifying knapped glass artefacts indicating continued camping in the 19th century (OzArk, Appendix 13b of the EIS).
		Blanket returns from the 1830s and 1840s show that Wonnarua people of the 'Wollombi' and 'Wollumbi' tribe continue to identify by traditional name, while also adopting an English name (State Records of NSW 4/1133.3).
		The Project area is in proximity to the Eather property at Bulga, where a historical account described 200-300 Aboriginal people camping 'on the hill in Mr Eather's paddock' at Bulga.
Peopling Australia – Aboriginal cultures and interactions with other cultures (cultural resilience and renaissance)	Since the 1970s, there has been a continuous period of what has been described as 'cultural intensification' in NSW Aboriginal communities, resulting from the renewed interest in Aboriginality and Aboriginal heritage, and which has led Aboriginal people across the State to re-establish cultural links with kin and places of cultural significance (Beckett et al 2003). A regional example of this includes the NAIDOC week celebrations organised by an active NAIDOC Week committee in both Singleton and	The Project area is located in close proximity to the Wollombi camping grounds, a 100 acre rural property nestled between Wollombi village and the Broke / Pokolbin vineyards owned by Yarnteen; who provides accommodation and cultural education tours to educational institutions, government and non-government organisations and personal interest groups.
		62 Aboriginal parties have registered an interest in the Project and have participated in the cultural assessment of the Project area. Registered Aboriginal parties including Traditional Owners and Knowledge Holders expressed ongoing interest in the Project area and the region.

Themes	Regional Context	Local Context
	Muswellbrook area.	The registration of Native Title claimants in the region is also demonstrating the pursuit for recognition and land rights- with the most recent Section 29 Native Title claims being in the areas of Jerry's Plains/Apple Tree Creek.
Developing local, regional and national economies – Exploration	Aboriginal guides are known to have led some of the earliest European exploration parties into the Upper Hunter Valley, along traditional Aboriginal pathways which in many instances have become part of the modern day road network.	The Project area is located near the Aboriginal pathway used by the Howe survey party to enter the Hunter Valley, as guided by four Aboriginal men (Wood 1972). The Project area is in proximity of the route of the Old Great North Road, and although there is no documented evidence that Mitchell used Aboriginal guides in locating the path, the road deviates around important ceremonial sites, suggesting that Aboriginal people were guiding surveyors around these areas (Edwards 1996). Mitchell was also known to have used Aboriginal guides as common practice.
Developing local, regional and national economies – Agriculture	Before traditional land practices were interrupted, Wonnarua people managed their lands, as evident through firestick farming and agriculture, such as observed by Fawcett (1898).	The river valleys of the Upper Hunter were recorded as having rich grasslands at the time of European contact, which was found throughout NSW, were created and maintained by Aboriginal people using a low intensity fire regime. This created grasslands that attracted game for hunting, and also provided grass seeds for food (which may have been ground at the BMU1 grinding groove site). Although historical accounts of the landscape of the Wollombi Brook valley at the time of contact are limited, it is likely that such grasslands extended from the river and along associated flats and hills. Oral histories identify a continuing practice of burning in the Bulga area to maintain and manage the land.

Themes	Regional Context	Local Context
Developing local, regional and national economies – Agriculture	In the early years of European settlement of the upper Hunter Valley, Wonnarua people contributed to the emerging agricultural industry by seasonal labour, enabling successful harvests, such as reported in 1847 and 1848 in the Maitland Mercury and Hunter River Advertiser. Aboriginal people of the upper Hunter Valley also contributed to the emerging pastoral industry, working as stockmen.	1847 and 1848 historic accounts described the involvement of Aboriginal people in the Wollombi crop harvest, and state that there would have been 'considerable losses' of crops if Aboriginal labour had not been available. Oral history and registered Aboriginal parties values statements refer to working on the local properties including the Project area undertaking seasonal work such as shearing, kangaroo and dingo shooting.
Developing local, regional and national economies – Environment – cultural landscape	Aboriginal cultural landscapes occur in the upper Hunter Valley, being layers of cultural and historical association between people and place, spanning traditional Wonnarua connections and shared connections between Wonnarua people, other Aboriginal people and settler Australians in historic times.	The Project area is identified to be of cultural significance as part of a larger cultural landscape encompassing Creation places, song lines, ceremonial places and places of past and present lifeways. The Project area continues to be of cultural significance for these associations, as well as for the specific attributes of lands within its boundaries, including the associations between people and place represented physically in the form of archaeological sites.
Developing local, regional and national economies – Events	Continuing Aboriginal cultural practice in the upper Hunter Valley has continued historically and in modern times, and involves a number of significant cultural events.	The Project area is located in close vicinity to the historical Bora ceremony held at Bulga in 1852.
Building settlements, towns and cities – land tenure	From the earliest days of European exploration and settlement, the lands and waters of the upper Hunter Valley were viewed as unmanaged by Aboriginal people, a view consolidated in the 1835 declaration of 'Terra Nullius' by Governor Burke. This effectively denied Aboriginal land tenure and imposed a European land tenure, disrupting traditional lore and custom.	Lands within the Project area were selected as early as 1824, and they formed part of the Fordwich Estate established by John Blaxland (Dunne 2012), who rapidly imposed a European settlement pattern on Wonnarua lands, denying and disrupting Wonnarua forms of land tenure, and interrupting the spiritual and subsistence patterns of Wonnarua lifeways.

Themes	Regional Context	Local Context
Governing – Welfare	19 th century government welfare to Wonnarua and other Aboriginal people in the Hunter Valley consisted of distribution of blankets, which began as a European 'goodwill' gesture and was intended to 'encourage civilised habits' and cooperation with the settlers.	Blanket return data for the Hunter Valley (State Records of NSW 4/1133.3) shows that blankets were distributed to Aboriginal people of the 'Wollombi', 'Wollumbi' and 'Lower Wollombi' tribes between 1838 and 1843, sourced from records dated 26 September 1838, 1 May 1841, 27 June 1842 and May 1843. During this time, the Wollombi area was defined as also including Broke-Fordwich (Dunne 2012).
Developing Australia's cultural life – Religion	The spiritual life of Wonnarua of the upper Hunter Valley is known through oral and written histories, which demonstrate a rich religious and ceremonial life that was integrate to Wonnarua lifeways at the time of contact (Miller 1985).	The Project area is linked to a number of Wonnarua Creation sites in the local Broke area, such as Yellow Rock (linked to the Legend of the Giant Lizard), Tiddalik Rock (linked to the story of Tiddalik) and other stone formations that resemble frogs, and the story of Burning Mountain at Wingen (which refers to Broke by name). The Project area is also adjacent Wollombi Brook, a Dreaming track or song line.
Marking the phases of life – Birth and death	Burial was an important form of ceremony in traditional Wonnarua cultural life, with this ceremony repeated countless times over the thousands of years of Aboriginal history of the upper Hunter Valley. Although burial sites are rarely found today, burial in the earth was the most commonly recorded form at the time of contact, such as along larger river systems with deep soils.	The Project area is believed to contain a location of historic violence along Loders Creek, which changed the cultural meaning of place and created a place of taboo.
		Historic accounts describe historic Aboriginal burials along Wollombi Brook, which passes the Project area on its western boundary, such as that of four men and two women of the Kamilaroi tribe killed in the Bulga area, and then covered with mounds of earth (Breton 1833).
		Historic accounts describe a historic burial of an Aboriginal woman in about 1850 near the junction of the Bulga and Parson's Creek, which was covered with an earth mound and then logs (Eather nd).
		The Project area is in close proximity to a known Birthing Cave located on the same ridge as Tiddalik rock (NPWS 1980), in the Broke area.

4.2 The Archaeological Landscape

All archaeological sites are of cultural and scientific significance, being a finite and irreplaceable resource, and often being the only source of information on Australia's prehistoric past. They are also the physical footprint of past Aboriginal culture and history, and as such, are of great significance to Aboriginal people today, as reflected in the following statement by registered Aboriginal parties involved in this ACHA.

"Objects tell us about past activities and technology, of the people who walked this area. They tell use the links between Countries and travels" (Registered Aboriginal party comment November 2011 Values Assessment workshop).

"Artefacts are the evidence of our ancestors and part of their survival in living off the land. They are also educational for use today" (Registered Aboriginal party comment November 2011 Values Assessment Workshop).

"The archaeology also tells us of repeated use of the area" (Registered Aboriginal party comment Values workshop 16 November 2012).

4.2.1 Preservation of Aboriginal Material Culture

The Project area has been subject to a number of archaeological investigations, which have recorded over 200 archaeological sites within the area. Of these, a number have been previously salvaged in advance of past development, with OzArk identifying that 108 known archaeological sites have been previously salvaged and or destroyed as the result of past development activities, which included 82 artefact scatters, 25 isolated finds and one hearth (**Appendix 13b of the EIS**). Another important influence on the current archaeological record of the Project area includes the likely survival of Aboriginal material culture.

It should be noted that preservation of many cultural materials in open landscapes such as the Project area is limited by factors such as soil pH, the activity of soil dwelling micro-organisms and the movement of water across the site; all of which can accelerate the decay of organic materials (Mays 1998).

Another key factor in the preservation of archaeological materials is whether the landscape context is aggrading or eroding, that is, whether soil is building up over a site or whether the soil of the site is being stripped by erosion.

In the Hunter Valley lowlands, aggrading landscapes are most commonly found along major creek lines, where former land surfaces are covered by soil deposited by later floods, creating a stratified site. Conversely, eroding landforms are not likely to contain buried archaeological deposits, which would be exposed and possibly moved by the erosion stripping the soil.

Of all materials made and used by Aboriginal people at the time of contact, stone is the most durable- all other materials used are organic and therefore subject to higher rates of decay.

European materials such as glass knapped by Aboriginal people to form implements may also survive in the historical record, and although rare, artefact types are found throughout the Hunter Valley, including five sites within the Project area.

In this context, cultural objects made of stone and glass are those most likely to survive, while objects made of organic materials are not expected in the archaeological record, unless they were to occur in a buried context where soils were not highly acidic or alkaline⁹. However, the historical record identifies objects made of wood and other materials were being made by St Clair residents into the 20th century.

4.2.2 Known Archaeological Sites

The archaeology of the Hunter Valley is understood through more than 100 years of research, with the last 30 years characterised by a series of intensive series of surveys and excavations in advance of development, which has predominantly been mining activity.

Such investigations have identified thousands of archaeological sites containing material evidence of past Aboriginal activity and land use. These sites have been found in all areas, although ERM (2004) identify that 73% of registered sites at that time occurred on the valley floor of the Central Lowlands, perhaps reflecting an intensity of past use as well as a modern development and archaeological investigation focus.

The vast majority of all known archaeological sites are scatters of stone tools and the waste stone ('debitage') created through manufacture and use. Such stone was usually sourced locally, with the Hunter River and other locations providing cobbles of indurated mudstone/ tuff and silcrete commonly used for tool manufacture.

The range of other archaeological sites and features found in the region include scarred trees, carved trees, grinding grooves, quarries, ceremonial sites, stone arrangements, rock shelters, mounds and burials (ERM 2004).

These investigations have demonstrated Aboriginal occupation of the broader region extending back to the last Glacial Maximum, approximately 27,000–17,000 years before present (HLA-Envirosciences 2005); and have demonstrated occupation of the Project area dating back to 3,000 to 1,700 years BP, based on the excavation of a hearth along Loders Creek (Koettig 1994).

However, as previously noted, Aboriginal occupation of NSW has been demonstrated to extend back over 40,000 years in other areas, and occupation of the Hunter Valley region is hypothesised to also date back to this period, although archaeological sites of this antiquity are rare in open landscapes like the Hunter Valley (refer **Appendix 13b of the EIS**).

A number of the previous surveys of the Project area had identified discrete sites, predominately located along drainage lines within the Project area.

The survey results are summarised below:

- Many artefact scatters recorded during this assessment are in poor condition due to the effects of erosion: either gully erosion completely removing sites, or soil loss from sheet wash, both of which can displace artefacts and remove archaeological deposits;
- Large sites and/or sites showing complexity are only found along waterways;

⁹ The survival of larger cultural features such as Bora grounds, where cultural activity may be evidenced by the presence of low circular earthen mounds linked by a path, or a circular area of compressed earth devoid of vegetation; are also dependant on the nature of activity within a landscape since the time of its use. Given the recorded location of some Bora grounds along creek lines, such site types are particularly vulnerable to farming activities such as ploughing, but could also be impacted by natural events such as floods.

- In the majority, only low density artefact scatters or isolated finds are located away from water;
- Loders Creek has the densest concentration of occupation evidence (i.e. artefacts) with less dense artefact concentrations along Nine Mile Creek and the northern drainage. The least dense artefact distribution is along drainage lines in the northeast of the Project area;
- Very few locations within the Project area had benches of outcropping sandstone in a drainage line. While sandstone is rare, two locations contain grinding grooves (Loders Creek grinding grooves and BMU1);
- Sites along Loders Creek demonstrated greater diversity and complexity than sites elsewhere within the Project area. Artefact exposures were distributed along both banks of Loders Creek and site boundaries have become blurred from repeated camping episodes;
- Site complexity diminishes with the size of the waterway so that artefact exposures on minor waterways exhibit little diversity in raw materials, less well-formed artefacts such as blades and less overall artefact numbers. Artefact exposures on the minor drainage lines tend to have more definite boundaries indicating less blurring of sites from repeated camping episodes. Artefact concentrations on the minor drainage lines, such as the northeast drainage, appear to increase towards the headwaters of the creek;
- The artefact assemblage across the Project area shows that mudstone (IMT) was the most commonly used stone type for knapping, followed by silcrete. In much smaller quantities, quartz, quartzite, chert, volcanics, chalcedony and petrified wood were also recorded as raw materials used in artefact manufacture;
- Most recorded artefacts tended to be small to moderate non-retouched flakes. The lack of artefacts at a primary stage of reduction indicates that this step in the manufacturing process was largely happening outside the Project area;
- Backed blades were recorded at several locations, as were scrapers (mostly small end scrapers). A ground-edge axe was recorded, as well as an axe blank, a hammerstone and some large scrapers. Large artefacts were rare in the assemblage; and
- Knapped glass artefacts were recorded at six locations in the Project disturbance footprint.

In recording and assessing the archaeological sites of the Project area, the approach taken by OzArk was similar to that undertaken at BCC by Umwelt (2003) in that individual sites considered to be linked by geographical proximity were grouped into a broader site complex. Some of these site complexes included sites which had been previously recorded as individual sites. As a result of this process, the Project area is known to contain 96 recorded archaeological sites, being:

- 12 site complexes as defined by OzArk (**Appendix 13b of the EIS**) each of which contain multiple surface archaeological features such as artefact scatters and isolated finds, and represent both previously registered individual sites and newly identified sites;
- Two site complexes as defined by OzArk (**Appendix 13b of the EIS**) each of which contains a single grinding groove site and multiple surface archaeological features such as artefact scatters and isolated finds;
- One culturally modified scarred tree;
- 51 open camp sites, being locations identified to contain multiple surface objects (artefact scatters); and

- 30 isolated finds, being surface locations identified to contain a single object.

In addition, one archaeological site (BOP OS-8: an artefact scatter) is located just beyond the Project area boundary. The locations of all sites recorded within the Project area are shown on **Figure 15**, with site complexes illustrated on **Figure 16**.

Of all sites recorded during past and present archaeological investigations, OzArk (**Appendix 13b of the EIS**) reports that 108 have been previously salvaged and or destroyed as the result of past development activities, which included 82 artefact scatters, 25 isolated finds and one hearth (refer to **Figure 15**). A further two sites have been partially salvaged in advance of development, being two artefact scatters.

In reviewing known archaeology of the Project area, OzArk (**Appendix 13b of the EIS**) identifies that stone artefacts, including tools and waste material from their manufacture and use, dominate the record.

The most common stone artefacts recorded are small to medium size unmodified flakes made from indurated mudstone/tuff and silcrete, although other artefact types are also present, including cores, backed blades, scrapers, a ground edge axe, an axe blank and a hammer stone. Other stone materials present include quartz, quartzite, chert, volcanics, chalcedony and petrified wood, but all occur in much lower densities than indurated mudstone/ tuff and silcrete.

Larger artefact scatter sites – or sites showing complexity within their stone tool assemblages – are generally restricted to waterways; and beyond this, most sites are small, low density artefact scatters or isolated finds.

Loders Creek was found to contain the highest density of occupation evidence, with sites along both banks providing evidence of repeated camping episodes with greater diversity and complexity than elsewhere within the Project Area.

Aboriginal occupation along Loders Creek has been documented through past excavations by Koettig (1994).

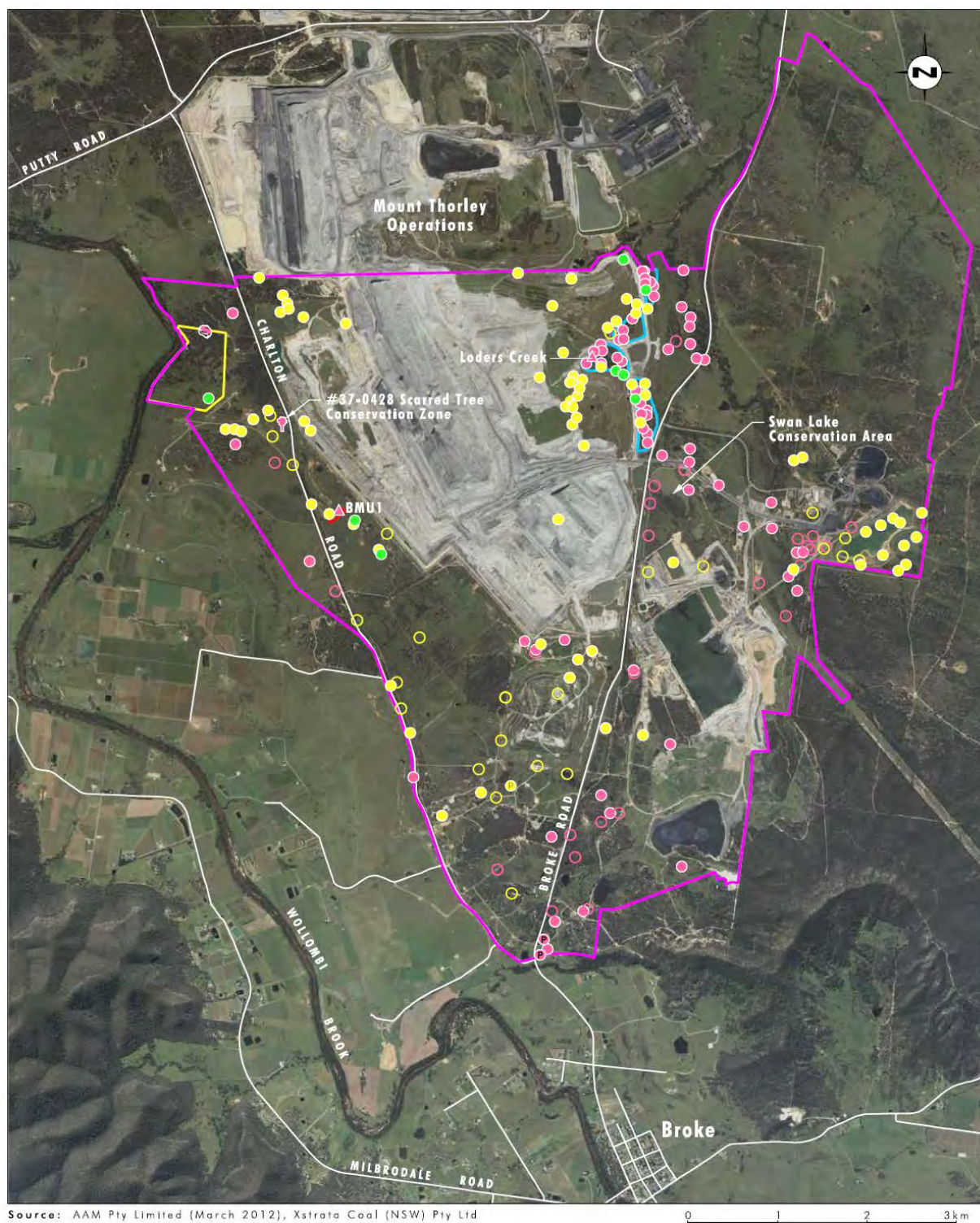
Sites along other waterways within the Project area – including Nine Mile Creek and the northern drainage line – were found to contain lower density concentrations of artefacts and less complexity within their assemblages; although it was also noted that on some minor drainage lines, such as the northeast drainage, artefact densities seemed to increase towards creek headwaters although OzArk notes that this could be due to a sampling bias.

Artefact exposures on the minor drainage lines were found to have more definite boundaries, indicating less blurring of sites from repeated camping in single places.

OzArk (**Appendix 13b of the EIS**) identifies that stone artefact sites recorded within the Project area provide evidence of occupation across of the Project area, but with more repeated occupation limited to larger waterways and smaller drainage lines characterised by briefer or more sporadic occupation.

OzArk (**Appendix 13b of the EIS**) identifies that although a range of stone materials were being worked within the Project area; there is no evidence for quarrying. The general lack of artefacts from the primary stage of reduction suggests that stone was being brought into the area for further reduction and use.

Significantly, six glass artefacts were also identified in five sites located mainly in the eastern part of the Project area; identifying a continued Aboriginal presence following European contact and the rapid evolution of Aboriginal material culture in the nineteenth century.



Legend

 Project Area	● Valid Artefact Scatter
● Destroyed Artefact Scatter	▲ Valid Grinding Groove
■ Destroyed Artefact & PAD	○ Valid Isolated Find
⬮ Destroyed Hearth	🌳 Valid Scarred Tree
□ Destroyed Isolated Find	 Loders Creek Conservation Zones
● Partially Destroyed Artefact Scatter	 BMU1 Conservation Zone
● Valid Artefact	 Proposed Wollombi Brook Conservation Agreement Area
■ Valid Artefact & PAD	

Figure 15: Previously Recorded Archaeological Sites within the Project Area

Source: Umwelt (2013)

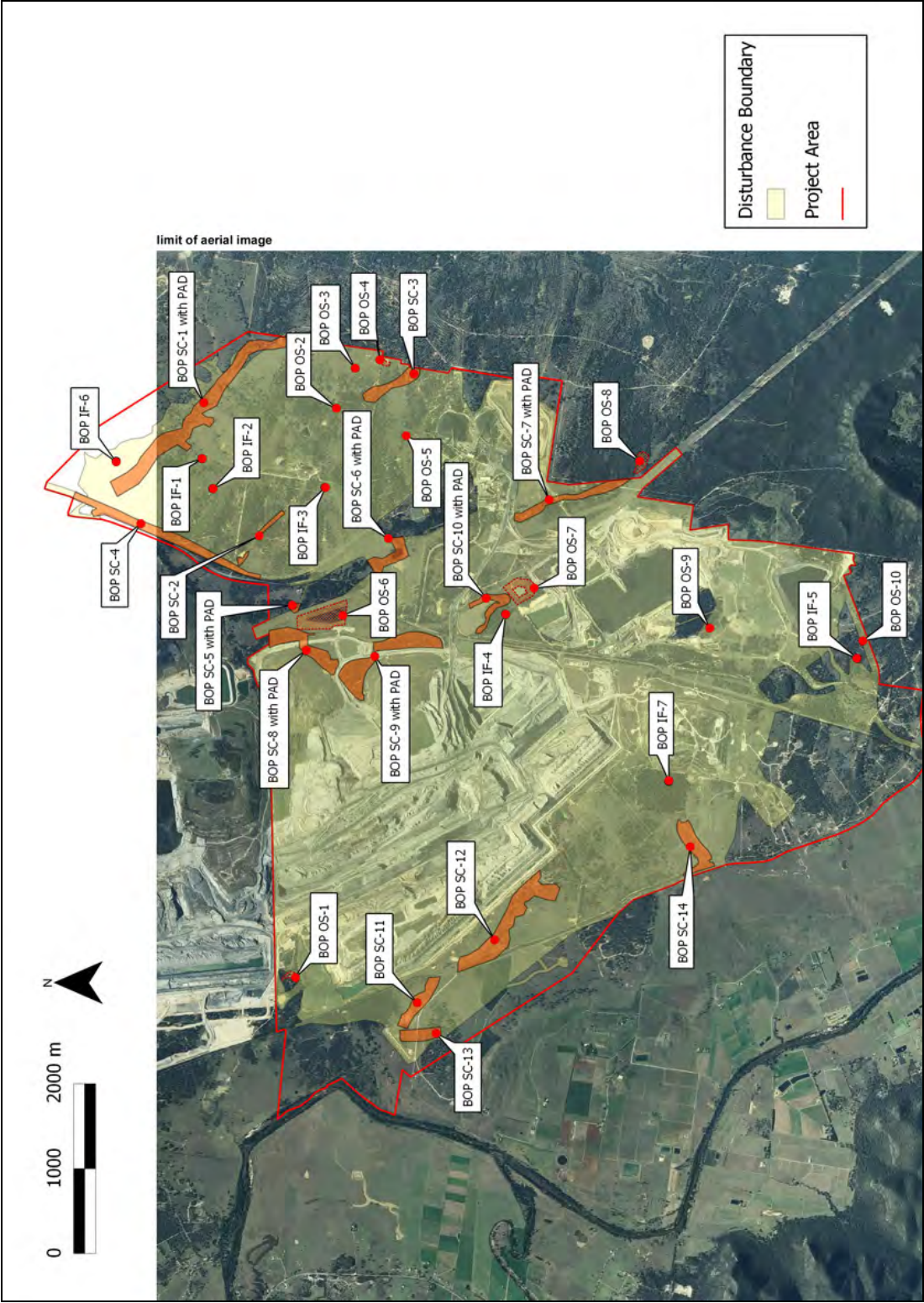


Figure 16: OzArk Archaeological Sites with Project Area

Source: OzArk (Appendix 13b of the EIS)

Although few sandstone outcrops occur along the major creeks, the Project area contains two grinding groove sites - Loders Creek grinding grooves and BMU1. Both sites have been previously recorded, but have been incorporated into the newly defined site complexes BOP SC-9 with PAD and BOP SC-12.

OzArk refers to a past assessment by Umwelt (2010), which found that the BMU1 grinding site could represent the production of 51 implements that were either ground or reground, and that this could have included adzes and axes. Umwelt (2010) also noted that shallow depressions near the BMU1 grooves could also represent grinding use for food preparation.

The Project area contains one scarred tree (AHIMS #37-6-0428) recorded in the 1980s (Brayshaw 1988) and re-inspected by a specialist who recommended further investigation of the age of the tree should the decision be made to remove the site. The specialist's findings are attached to the *Aboriginal Archaeological Values Assessment* report attached as **Appendix 13b of the EIS**.

Given the open nature of the Project area, OzArk found most archaeological sites had been affected by erosion and more recent use of the land. Most surface artefact sites are described as being of poor condition with loss of topsoil limiting the potential for buried archaeological deposit.

The major findings of the archaeological assessment undertaken by OzArk (refer **Appendix 13b of the EIS**) in consultation with registered Aboriginal parties, are as follows:

- The survey results agreed with the predictive model and many of the previous archaeological surveys in the Project area in that large sites and /or sites showing complexity are only found along waterways;
- In the majority, only low density artefact scatters or isolated finds are located away from water;
- Site complexity diminishes with the size of the waterway so that artefact exposures on minor waterways exhibit little diversity in raw materials, less well-formed artefacts such as blades and less overall artefact numbers. Artefact exposures on the minor drainage lines tend to have more definite boundaries indicating less blurring of sites from repeated camping episodes;
- Loders Creek has the densest concentration of occupation evidence (i.e. artefacts) with less dense artefact concentrations along Nine Mile Creek and the northern drainage. The least dense artefact distribution is along drainage lines in the northeast of the Project area;
- Very few locations within the Project area had benches of outcropping sandstone in a drainage line. While sandstone is rare, two locations contain grinding grooves (Loders Creek grinding grooves and BMU1);
- Many artefact scatters recorded during this assessment are in poor condition due to the effects of erosion with either gully erosion completely removing sites, or soil loss from sheet wash, both of which can displace artefacts and remove archaeological deposits;
- The archaeological evidence suggests that long-term camping was not taking place in the Project area as large occupation camps are currently missing from the archaeological record, and have not been recorded previously. It is likely that more favourable long-term occupation areas existed nearby, outside the Project area. Also lacking from the archaeological record are concentrations of artefacts away from waterways indicating that there was not a feature in the landscape (quarry / ceremonial site) that was regularly visited, or at least, was not associated with camping / stone knapping. Additionally, it does not appear that the Project area contained major pathways away from the waterways because well-used transit camps away from water are also missing from the archaeological record;

- The archaeological evidence suggests many sites date to the late Holocene Period and show Aboriginal occupation across all parts of the Project area with more repeated occupation along the larger waterways and briefer or more sporadic occupation along smaller drainage lines. It is suspected, like elsewhere in the region and the state, that this distribution pattern is reflective of hunting and foraging strategies, using the waterways as a focus, over a period of at least several thousand years; and
- Knapped glass recordings are located primarily in the east of the Project area. The recording of knapped glass artefacts show that Aboriginal use of the Project area continued into the modern period.

The OzArk assessment of scientific significance for archaeological sites within the Project area) identified that BOP SC-8 with PAD and BOP SC-9 with PAD (which includes the Loders Creek grinding groove site) have high scientific values.

The BMU1 grinding groove site is also assessed as having high scientific values, although BMU1 is located in a site complex assessed as having low to moderate scientific values.

5 Cultural Significance Assessment

Cultural significance is a way to describe the importance people give to places, objects or practices, which *The Burra Charter* (Australia ICOMOS 1999) defines as ‘social, aesthetic, historic or scientific value to past, present or future generations’.

Culturally significant places, objects or practices enrich people’s lives, provide a deep sense of connection between community and landscape and are the tangible and intangible expressions of cultural experience and identity (Australia ICOMOS 1999:1). Cultural significance may be ascribed to a range of physical features, such as mountains, rivers, buildings and moveable objects, or it may be ascribed to cultural practices and knowledge such as stories, songs and art.

Cultural significance is also dynamic, and reflects the diversity of attachment and experience within any community over time (Australia ICOMOS 1999:1). There is not always consensus about a place’s value, as people experience places and events differently, so expressions of cultural value do vary and in some instances may be in direct conflict (OEH 2011:8). In these scenarios, it is not necessary to have agreement on the validity of cultural values, but instead to document and discuss the broad range of values evident.

Assessing the cultural significance of a place – its social, aesthetic, historic and scientific value – is an essential part of the heritage assessment process, to inform decision making about the future of a place (Australia ICOMOS 1999:11, OEH 2011). In order to establish cultural significance, it is necessary to first assess all the information relevant to an understanding of the place and its fabric, and then to develop the final statement of succinct cultural significance supported by the information collated (Australia ICOMOS 1999:12).

The Projects DGRs state that the assessment of the significance of an Aboriginal cultural heritage place or object is to take into account the principles of *The Burra Charter* (Australia ICOMOS 1999), to gain an understanding of social, aesthetic, historic or scientific values (DEC 2005, OEH 2011).

5.1 The Co-Existence of Cultural Values

As noted, cultural significance is essentially the importance that people give a place or object, and as such, it can take a range of forms as the experience of different groups of people which can result in a single place or object having a co-existence of multiple social, historical, scientific and aesthetic values.

The Burra Charter (Australia ICOMOS 1999) framework for assessing cultural significance identifies that each cultural group has a right to identify the cultural significance of places or objects to them (Ethical Principle 4), and that in assessing cultural significance, a co-ordinated and multi-disciplinary approach is required to ensure an open attitude to cultural diversity (Ethical Practice 8). *The Burra Charter* also states that the co-existence of cultural values should be recognised, respected and encouraged, especially in cases where they are in conflict (Article 13).

This approach has been reflected in OEH practice, with OEH (2011) requiring that cultural significance assessment be undertaken in accordance with *The Burra Charter* framework. OEH (2011:8) also provides further guidance, stating that there is not always consensus about a place’s value, as people experience places and events differently, so expressions of cultural value do vary and in some instances may be in direct conflict; and that in these scenarios, it is not necessary to have agreement on the validity of cultural values, but instead to document and discuss the broad range of values evident.

In presenting the understanding of cultural significance, OEH (2011) also states that:

"Given that Aboriginal cultural heritage has social/cultural, historic, aesthetic and scientific (archaeological) significance; all aspects should be given the same weight and assessed equally by the proponent in the Aboriginal cultural heritage assessment report".

The following assessment of cultural significance has been undertaken to seek understanding of the range of cultural values associated with places and objects within the Project area, and acknowledge the co-existence of cultural attachments associated with the area, as illustrated below.



Figure 17: Understanding the Multiple Faceted Aboriginal Cultural Heritage Assessment

Source: Connect for Effect 2012

5.2 Range of Values Identified

The following sections present an understanding of the range of cultural values identified by this ACHA process, reflecting the collation of information from Aboriginal registrants on social, historical, scientific and aesthetic values; historical information on the Project area in a local and regional context and, archaeological information on the scientific value of the Project area and places of aesthetic value it contains.

5.2.1 Social/Cultural Significance Values

Social value embraces the qualities for which a place has become a focus of spiritual, political, national or other cultural sentiment to a majority or minority group (Australia ICOMOS 1999:12).

In NSW, OEH (2011) defines social value as:

“...the spiritual, traditional, historical or contemporary associations and attachments the place or area has for Aboriginal people. Social or cultural value is how people express their connection with a place and the meaning that place has for them. Places of social or cultural value have associations with contemporary community identity. These places can have associations with tragic or warmly remembered experiences, periods or events”.

Social or cultural value can therefore only be identified through consultation with Aboriginal people (OEH 2011:8), through use of oral history recording, cultural mapping, archival documentation and other methods.

During ACHA preparation, all registered Aboriginal parties were provided with opportunity to participate in the cultural values assessment process and were able to determine how this process occurred. This approach reflects the DGRs discussed in **Section 2.4.1**. Through consultation to inform this ACHA, registered Aboriginal parties identified a range of cultural values and attachments to the Project area and the broader region. These ranged from traditional connection to the area, historical attachments, connection to Country and connection to community, in addition to reconnecting attachments for registered Aboriginal parties who have experienced generational removal from their families.

Cultural values were also expressed in relation to how Aboriginal parties identified themselves, their family and their relationship to the Project area and the surrounding region – traditionally and historically – as well as in relation to facets of Aboriginal cultural heritage such as:

- The spiritual and social association with the Broke /Bulga region;
- Historical associations and information passed down through their families;
- Flora and fauna and ecosystem considerations;
- Spatial ethnography¹⁰ and use of the land and ecosystems over time; and
- Shared land use and unique contributions of Aboriginal people in shaping the current rural context of the region today.

Registered Aboriginal parties consulted provided comment on the significance of the Project area through a range of forms, including independent written statements, during meetings and discussions, and contributing at workshops. Various statements made on cultural significance are provided below, with original correspondence provided in **Appendices B1 and B2**:

- “Creeks are the most important resource for our people; we can’t survive without water” (Cultural values workshop 16 November 2011);
- “No amount of written language can adequately describe or replace the value and meaning of being in touch with the living remnants of our dreamtime” (Cultural values workshop 22 November 2011);
- “The sheer number cultural objects found in the area speaks volumes of the importance of the food sources gathered in and around this area. Yes the area around here is very significant” (22 November 2011 values workshop);
- “Like all areas in the Hunter Valley the land, vegetation and water ways hold cultural significance to the Aboriginal community” (22 November 2011);

¹⁰ Refers to the use of ethnographic information from the written record or material culture to identify and map physical locations with cultural associations or cultural meaning.

- “Artefacts are tools of survival for our people, and a constant reminder of who we are; our culture, our history, and education for future generations. They are very spiritual to us” (*Cultural Values workshop 22 November 2011*);
- “Sites, land forms places vegetation animals are significant to tell stories and because this is all that’s left linking the dreamtime for our children” (22 November 2011 values workshop);
- “The area is of cultural value as it is near significant sites and transit ways (30 May 2012 values workshop). We are concerned about the proximity to areas of significance, including Baiame, Bora and the entry/exit to the Sydney songline” (Cultural values workshop 30 May 2012);
- “The area is of cultural value as it is near significant sites and transit ways” (30 May 2012 values workshop);
- “Movement to creation places is steeped in our cultural lores areas need to be protected so that their purpose is valued” (Impact and management measures workshop September 2012 workshop);
- “To me sacred sites encompass all of the land. All of our Country is sacred” (Care and control, management measures workshop 13 November 2012);
- “The Project area is of high cultural significance because of its proximity to highly sensitive and spiritual places of significance. It is a fringe area visited and at times occupied by several tribes including Awabakal and Kamilaroi people. We need to have areas that are accessible and areas protected which are important to us. We need to continue and regenerate our cultural practices not just spend all our energy of discussing loss and destruction” (Care and control management measures workshop 30 November 2012); and
- “Warkworth Sands is very spiritual -very sacred- a very special place. All them inlets were Aboriginal- places out of the wind and cold and generally there was water- see if there’s water there’s food” (Interview WTC’s representative Elder of Broke. (13 November 2012).

Creation places, cultural sites and pathways outside of the Project area were identified by registered Aboriginal parties including Traditional Owners and Knowledge Holders as having high to extremely high cultural values.

5.2.1.1 Registered Aboriginal Parties’ Values Assessment – Cultural and Spiritual Values

Project specific cultural values were also shared and are detailed below:

- Some registered Aboriginal parties consulted stated that they believe the Broke and Bulga area is sacred as it is surrounded by features linked to spiritual Creation stories;
- Some of the registered Aboriginal parties identified the Project area and the region more broadly as part of their traditional homelands (Country) and as such retains immeasurable cultural values;
- Registered Aboriginal parties identified that Wonnarua people strongly identified connection to Country, cultural practices and memories relating to the Project area and the region, and as such considered the regional landscape retained immeasurable cultural values;

- Registered Aboriginal parties including Aboriginal people who identified as Traditional Owners and Knowledge Holders stated that the interaction between connections to Country and cultural identity is highly important especially as the traces of the past and their memories contributed to maintaining distinctive Wonnarua and other Aboriginal people's culture, spirituality and cultural interaction with the landscape;
- Most registered Aboriginal parties who attended the November 2011 and May 2012 workshops identified the pathways and water systems to and from Creation places and places of ceremony as being of high cultural value. While the major waterways outside of the Project area were identified as having very high cultural significance; all waterways, creek lines and tributaries were identified as culturally important as they were believed to be part of the essential spiritual meaning of the place and the people;
- Some registered Aboriginal parties who identified as Traditional Owners and Knowledge Holders shared aspects of the relationship of the Project area to Creation places and areas located outside of the Project area where ceremony and corroborees historically took place: and as such identified the Project area as part of, and integral to, a larger cultural landscape that retains immeasurable values;
- Some registered Aboriginal parties who identified having ethnobotanical knowledge identified indigenous flora and fauna as important cultural resources, and sought to ensure they would be regrown within the Project area as part of the rehabilitation;
- A WTC's representative Elder of Broke identified a special men's place within the Project area, which held very high personal, cultural and aesthetic values. The Project design was modified to avoid this sensitive area. Refer confidential non-disclosure section mitigation and management redesign **Appendix C4**;
- Registered Aboriginal parties stated that the Project area was a place of camping, and place where traditionally small groups would await participation for ceremony by ancestors. Camping areas within the Project area along the northern drainage line, Loders Creek and Nine Mile Creek were identified as significant in terms of their relationship to places of cultural and ceremonial importance external to the Project area;
- Some registered Aboriginal parties who identified as Traditional Owners and Knowledge Holders shared their experiences of following traditional travelling routes via the waterways, gullies and ridges throughout the region and these areas were identified as having high cultural significance;
- Registered Aboriginal parties identified Nine Mile and Loders Creeks (within the Project area) and Wollombi Brook, Monkey Place Creek (outside of the Project area) and more broadly the Hunter and Goulburn Rivers as forming important parts of the pathways to and from ceremony and to and from sacred Creation places outside of the Project area and as such have immeasurable cultural values;
- Some registered Aboriginal parties identified high cultural values relating to the Loders Creek grinding grooves, the complex and the waterways in the catchment as a whole, describing ancestral use and linkages to ceremony to be of high cultural value. Other registered Aboriginal parties identified the area as important culturally because people they respect have identified the area as culturally important and worthy of protection in previous ACHA assessments of the Project area;
- A WTC representative Elder of Broke stated that there was a specific area within the Loders Creek complex considered to be an area of taboo due to a violent event he believed occurred within the Loders Creek complex and as such is of high cultural sensitivity and significance; and

- Most registered Aboriginal parties expressed high levels of emotion regarding landscape transformation and fragmented cultural and archaeological sites. Feelings of grief and loss were also expressed relating to cumulative impacts and inability to access cultural sites to maintain custodial responsibilities. Feelings of anger and frustration were also expressed relating to approvals to destroy Aboriginal cultural and archaeological sites identified as important to Aboriginal people, including Traditional Owners and Knowledge Holders.

During the consultation process registered Aboriginal parties frequently expressed concern that all cultural artefacts and places are of high cultural significance. However, they also identified some Project areas such as the Loders Creek grinding groove complex and a location within the Project area (not disclosed publicly) (refer **Appendix C3**) as having very high cultural values, while identifying pathways and Creation places and other cultural and archaeological sites outside of the Project area as having extremely high social, cultural, historic, scientific and aesthetic traditional, historic and contemporary value.

The Project area is identified as having high cultural values because of its spiritual and ceremonial associations to sacred Creation and ceremonial places located within proximity to it. The Creation and ceremonial places located outside of the Project area were identified as having heightened importance as these Creation and ceremonial places were identified as having extremely high value – often described as immeasurable value.

The Project area contains a number of specific archaeological sites of high cultural significance to registered Aboriginal parties including Traditional Owners and Knowledge Holders. The Project area was also identified as a place of continuing traditional and historic association for local Aboriginal families, which has been described as significant, although it is noted that the Project area has been subject to mining activity for the past 30 years.

5.2.2 Historical Significance Values

'Historic significance' is a broad concept that encompasses the history of aesthetics, science and society (ICOMOS 1999:12). A place may have historic value because it has influenced, or has been influenced by, an historic figure, event, phase or activity, or it may have been the site of an important event.

For any given place, the significance will be greater where evidence of the association or event survives *in situ*, or where the settings are substantially intact; however, some events or associations may be so important that the place retains significance regardless of subsequent treatment (ICOMOS 1999:12).

5.2.2.1 Registered Aboriginal Parties' Values Assessment – Historic Values

The historical values identified by registered Aboriginal parties have been integrated into **Section 4** and **Appendix A** of this of this ACHA. These are summarised below:

- Registered Aboriginal parties who identified as having Traditional Owner and Knowledge Holder connections shared direct historical experiences of their attachment to the Project area and throughout the local area of Broke, Bulga, The Vere and Jerry's Plains; which add cultural meaning to the place and was expressed as having high cultural values.

- A WTC representative Elder of Broke - identified by the WTCs' peoples as their main cultural Knowledge Holder of the area - shared knowledge of: hunting with other family members including his father and uncles; native bee tree larder sourcing from both within and outside the Project area; and, a generational connection to the Broke area that had not been broken –expressing high level historic values of both the Project area specifically and the region generally.
- Historic knowledge of continued cultural practices as well as contribution to pastoral life was also shared by the WTC's representative Elder of Broke: sharing his memories of his father's activities in shearing, dingo shooting, hunting for kangaroo pelts, police tracking and farming; and of his own experiences working as a labourer and in the wool sheds. These times with his father were identified as special and were of significant cultural and historic value to him.]
- WTC's representative Elder of Broke also expressed cultural concern in relation to the Loders Creek grinding grooves complex. He stated that while the area still has a significant traditional cultural meaning, he believes it is also the place of a historic violent event which has created coexisting and conflicting meanings and cultural considerations. As such, he believes it has a heightened significance.
- Wollombi Brook and associated tributaries have a history of camping, ceremony and social importance; and connection.
- The region is associated with the history of 'frontier' movement guided by Aboriginal people resulting in the opening up of stock routes/trade routes, the development of the Great North Road, Putty Road and pastoralism in the region.
- Historically the region is also associated with long-term, at times difficult, relationships between Aboriginal people and pastoralists (conflicts and segregation areas), while also associated with inter-cultural-marriage and family ties to the area.
- Historically the region is also associated with long term relationships between Aboriginal people and land.

5.2.3 Scientific Significance Values

All archaeological sites within the Project area are of scientific significance, being a finite and irreplaceable resource, and often being the only source of information on Australia's prehistoric past. However, the extent to which individual sites are scientifically significant varies when assessed against criteria such as research potential, rarity, representativeness and education potential. When grading significance against these criteria, sites are commonly assessed as being of low, moderate or high scientific significance.

The assessment of the scientific values of Aboriginal archaeological sites was undertaken by OzArk and presented in **Appendix 13b of the EIS**. Through this process, all known sites have been classified as being of high, moderate or low scientific significance, as defined in **Table 7**.

Table 7: OzArk Scientific Significance Rating Definition

Rating	Definition
High	Locations displaying these values would include one or more of the following features: • The location would contain known areas of undisturbed archaeological deposits that are likely to add significantly to our knowledge concerning Aboriginal archaeology in the region; • Would contain archaeological information to address complex research questions about the region; • The site contains outstanding features that could be appreciated by the layperson; and • The site type is rare in the region and/or in danger of becoming unrepresented in the region.
Moderate	Locations displaying these values would include one or more of the following features: • The location would contain areas of archaeological deposits, sometimes disturbed, that are likely to add to our knowledge about the Aboriginal archaeology of the local area only; • Would contain archaeological information to address general research questions about the region; • The site contains features that would be appreciated by a specialist/enthusiast; and • Portions of the site have been lost due to erosion or the landscape context of the site has been impacted.
Low	Locations displaying these values would include one or more of the following features: • The location may contain areas of archaeological deposits but they are likely to be disturbed and any information gained would only address limited research questions; • The site is largely displaced by erosion; • The landscape context of the site has been heavily modified; • The site exists in areas where topsoil loss has resulted in little soil depth; and • The site contains features that would be difficult to preserve and interpret in a meaningful way.

Registered Aboriginal parties shared a number of comments on the scientific values of the Project area. The following details publically available comments:

- The Loders Creek Grinding Groove complex, BMU1 grinding groove complex, the culturally modified (scarred) tree in Charlton Road, knapped glass, and evidence of camping, are important and significant evidence of past cultural activity;
- There is a possibility that intact Aboriginal cultural sites, artefacts or materials remain in the Project area and are yet to be recorded, particularly in the Loders Creek complex. Registered Aboriginal parties have identified that any cultural deposit is of high cultural significance;
- Registered Aboriginal parties have concerns about the differences in the significance and research potential between the archaeological assessments and their significance ranking of cultural values relating to archaeological evidence;
- The history of archaeological assessments, protection measures, salvage programs and monitoring programs is an important and valued part of the historic and cultural values of the Project area;
- Registered Aboriginal parties have concerns that six of the seven previously identified management/conservation zones will be directly impacted by the Project as these areas have been identified as having culturally and archaeologically significant artefacts and objects within them; and
- The current model of conservation does not achieve intergenerational cultural and archaeological certainty because management/conservation zones within active mines are perceived to compromise cultural and archaeological values and results in the creation of isolated 'islands' or fragmented cultural and archaeological sites rather than areas which are accessible by registered Aboriginal parties and have certainty in their meaningful conservation.

It is important to note that the archaeological significance assessment does not necessarily reflect the views of registered Aboriginal parties and in some instances, registered Aboriginal parties were opposed to the values ranking assessment provided by OzArk citing all Aboriginal cultural heritage is of high cultural values and at times archaeological assessment do not reflect the values.

The long Aboriginal occupation and use of the Bulga and Broke area including the Project area, has been asserted by Aboriginal oral tradition, and is supported by archaeological evidence. While definitive dates for human antiquity within the broader assessment area remain elusive, what is certain is that Aboriginal people have lived in, travelled around, conducted ceremony and made use of the Bulga/Broke region for many thousands of years. Archaeological evidence also provides tangible evidence of the continued and enduring cultural connection to the area by Aboriginal people, including those registered Aboriginal parties with traditional and historic attachments to the area.

An extensive history of Aboriginal cultural heritage and archaeological assessments has been conducted within the Project area and its immediate surrounds. In recent decades, the upper Hunter Valley has become one of the most intensively studied regions in NSW with numerous archaeological surveys and excavations conducted in advance of proposed mining activity. This body of research has identified numerous archaeological sites, and provides a broad understanding of archaeological site patterning at local and regional levels.

All newly recorded Aboriginal archaeological sites were assessed by OzArk for their archaeological (scientific) significance. Of the previously recorded sites, only the sites within the proposed impact areas were assessed by OzArk for their archaeological significance. Where the sites could be located during the survey period they were reassessed based on their current state of preservation and contents. Where previously recorded sites could not be reassessed due to difficulties in finding the site (due to factors such as thick vegetation cover or loss of artefacts due to ongoing erosion) the significance assessment contained in the initial assessment or on the AHIMS site card, were used.

In total, 96 archaeological sites within the Project area were assessed for their scientific significance by OzArk. One additional site located beyond the Project area boundary (BOP OS-8) was also assessed, but as it is located within the Singleton Military Training Area this site will not be managed by the Project. Of the 96 sites within the Project area, 71 sites are liable for partial or total impact if Project proceeds and 25 are located outside of Project impacts. The 25 known sites located beyond the Project's Disturbance boundary will not be impacted and were not assessed for their scientific significance. The scientific significance of the 71 sites that could potentially be impacted by the Project were assessed against established research criteria including the ability of a site to answer current research questions, as well as the integrity, content and representativeness of a site. As BOP OS-8 was newly recorded, it was also assessed for its scientific significance although it is beyond Project impacts.

Of the newly recorded sites and site complexes (which encompass some previously recorded sites), OzArk made the following assessment of scientific significance):

- Two site complexes (BOP SC-8 with PAD and BOP SC-9 with PAD: including the Loders Creek grinding groove site) are assessed as having high archaeological significance. The BMU1 grinding groove site (within BOP SC-12) is also assessed as having high archaeological significance;
- Five locations are assessed as having moderate archaeological significance: BOP SC-1 with PAD, BOP SC-5 with PAD, BOP OS-8 (located beyond Project area boundary), BOP IF-6 and BOP IF-7;
- Five locations are assessed as having low-moderate archaeological significance: BOP SC-6 with PAD, BOP SC-7 with PAD, BOP SC-10 with PAD, BOP SC-12 and BOP SC-14; and
- the remaining 19 site locations were assessed as having low archaeological significance, being nine artefact scatters, six site complexes and five isolated finds.

Of the 42 additional previously recorded sites assessed, OzArk made the following evaluation of scientific significance:

- Two sites (#37-6-0428 [scarred tree] and #37-6-0146 [artefact scatter] were assessed as having moderate archaeological significance;
- Four artefact scatter sites (#37-6-1414, NM:11, #37-6-1415 and #37-6-1418) were assessed as having low to moderate archaeological significance; and
- The remaining 36 sites were assessed as having low archaeological significance being 19 isolated finds and 17 artefact scatters.

Table 8 summarises the number of sites in each significance category that will be impacted by the Project.

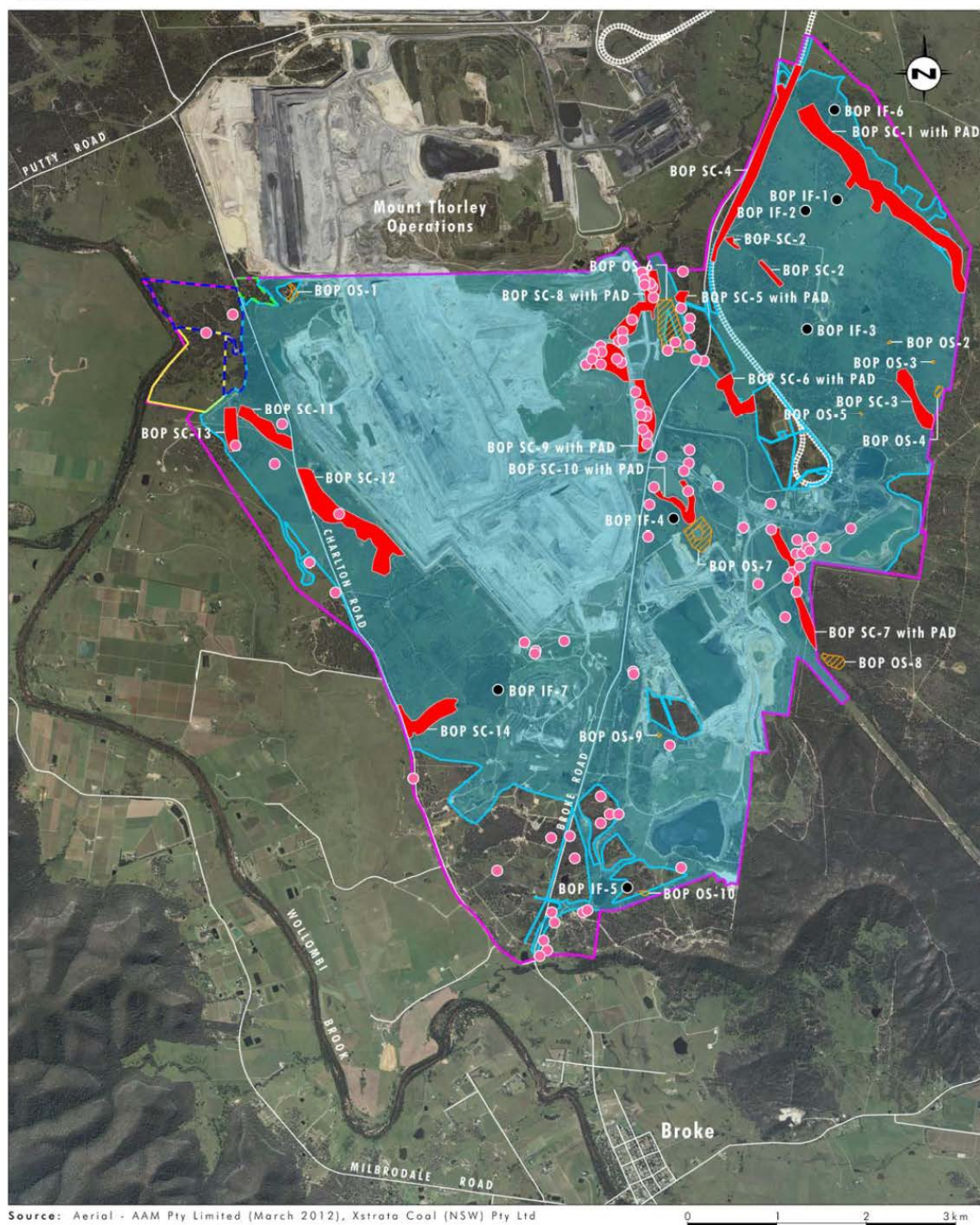
Table 8: Archaeological Significance of Sites within Project Disturbance Area

Archaeological Significance	Number of Sites Impacted
High	2
Moderate-High	0
Moderate	6
Low-Moderate	9
Low	54
Totals	71

Sites which mainly consist of low density artefact scatters or isolated finds, located on landforms with thin soils and little potential for subsurface deposits are often considered as having low scientific significance. OzArk (in **Appendix 13b of the EIS**) identify that the high levels of disturbance and erosion within the Project area account for the large percentage of sites being recorded as having a low scientific significance.

5.2.4 Existing Conservation Area and Management/Conservation Zones

There is currently one conservation area within the Project area being the proposed Wollombi Brook Conservation Agreement Area to the west of Charlton Road (refer to **Figure 18**). This area is proposed to be registered as a formalised Conservation Agreement Area defined under the National Parks and Wildlife Act 1974 (NPW Act) as part of a conservation outcome for the BMU1 grinding grooves which will be impacted as part of the approved longwall operations in Blakefield North and the subsequent mining of lower seams (under the Underground Consent, DA 376-8-2003).



Legend

- Project Area
- Proposed Disturbance Area (life of mine)
- BOP Open Site
- BOP Isolated Find
- BOP Site Complex
- Existing Valid AHIMS Site Records
- Proposed Wollombi Brook Conservation Agreement Area
- Proposed Extension to Wollombi Brook Conservation Agreement Area (WSW EEC Management Area)
- Proposed Extension to Wollombi Brook Conservation Agreement Area (Joint Cultural Heritage/WSW EEC management Area)

Figure 18: Wollombi Brook Conservation Agreement Area

Source: Umwelt (2013)

It is noted the final Conservation Agreement covering this area has not yet been executed. The proposed Wollombi Brook Conservation Agreement Area is currently being managed by BCM as a conservation area while the Conservation Agreement is being finalised.

There are also seven management/conservation zones within the Project area (BMU1, Loders Creek zones 1 to 4, Swan Lake and site 37-6-0428 (scarred tree). Of these seven management/conservation zones, two were established to satisfy current development approvals (Swan Lake and Loders Creek Conservation zone 2).

With the exception of the proposed Wollombi Brook Conservation Agreement Area, all of these previously identified management/conservation zones will be directly impacted by the Project.

5.2.5 Aesthetic Significance Values

Aesthetic values refer to the sensory, scenic, architectural and creative aspects of the landscape and are closely linked with social values (ICOMOS 1998).

Registered Aboriginal parties expressed a range of sensory perceptions in relation to the Project area. It was acknowledged that past land use and current mining has contributed to the loss of over 2,000 hectares of land; the loss of connectivity and pathways; disruptions to waterways; and, disruption to the spiritual meanings and symbolism contained in the landscape. However, registered Aboriginal parties identified and retained heightened emotional cultural connection and concern for the Project area and its cultural and archaeological values. Some registered Aboriginal parties described the Project area as being located within a place where there are the spirits of their ancestors, the memories of ancestors and the footprints (archaeological sites) of their ancestors (family) ceremonial and societal ways of life.

Most registered Aboriginal parties acknowledged that the landscape of the Project area is highly compromised by historic land use, including mining – which has disturbed over 2,000 hectares of the Project area – and the history of tree clearance, agriculture, grazing and land divisions. Together, these have caused significant change in the cultural and aesthetic landscape.

Registered Aboriginal parties commented that the nature and integrity of the remnant archaeological and cultural landscape of the Project area is deteriorating, through continued mining operations and through erosion. Concerns were expressed in relation to conservation management, particularly the management of erosion (17 November 2011, Loders Creek grinding groove discussions and September 2012 small group workshops).

5.2.5.1 Registered Aboriginal Parties' Values Assessment – Aesthetic Values

The aesthetic values identified by registered Aboriginal parties have been integrated into **Section 4** and **Appendix A** of this of this ACHA. These are summarised below:

- Most registered Aboriginal Parties who attended the 30 and 31 May 2012 workshops identified the ability to Walk on Country for the purposes of undertaking archaeological survey or cultural assessment as a positive connective feeling;
- Most registered Aboriginal parties who attended the November 2011, May 2012 and September 2012 workshops expressed high levels of emotion regarding landscape transformation and fragmented connectivity between cultural and archaeological sites;
- Feelings of grief and loss were also expressed relating to cumulative impacts and inability to access and maintain custodial responsibilities because of changes to the landscape and direct and indirect impact to cultural areas within the Project area; and

- Feelings of anger and frustration were expressed relating to approvals to destroy Aboriginal cultural and archaeological sites identified as important to Aboriginal people, including Traditional Owners and Knowledge Holders, and the aesthetic impact of the area as a result of mining activity.

These values should be read in conjunction with the Aboriginal cultural significance assessments contained within two separate and non-disclosed ACHA reports prepared by the PCWP and the WP (refer to **Appendices C1** and **C2**).

5.3 Summary Statement of Cultural Significance

The above sections have identified and discussed the significance of the range of Aboriginal cultural, historic, scientific and aesthetic heritage values relating to the Project area in accordance with OEH guidelines (refer to **Figure 19**). The information is used within this ACHA to provide an overall summary statement of cultural significance for the Project area.

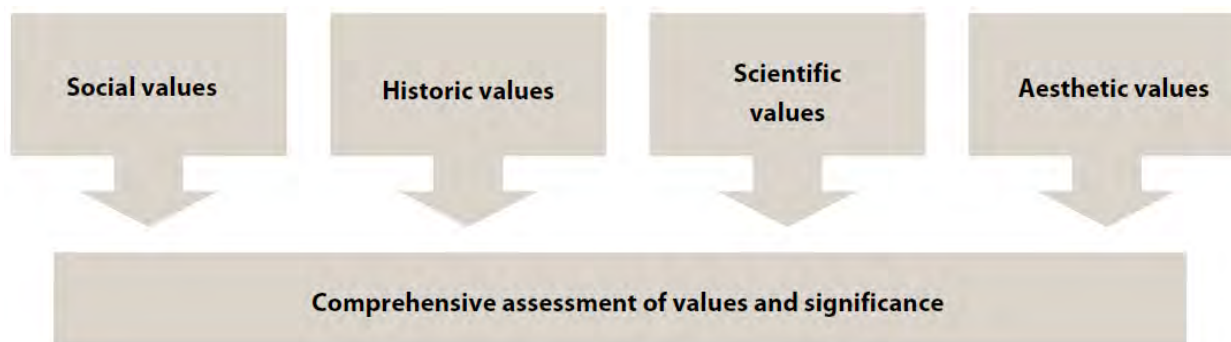


Figure 19: 'Assessing Values and Significance' (OEH 2011)

This reflects a key principle also outlined in OEH guidelines for Aboriginal cultural heritage assessment and management in NSW, as stated within DECCW (2010a):

“Aboriginal people are the primary determinants of the cultural significance of their heritage”.

In documenting the following range of cultural values, Registered Aboriginal parties focused primarily on the understanding of the Project area in the context of its surrounds as a whole, rather than the specific cultural values of individual places and objects. The stated that the Project area and all components within and external to it make up the landscape of cultural heritage values, which can only be described in terms of their cultural, spiritual and social connectivity. Registered Aboriginal parties however, did make comment regarding the cultural and historic values of the Loders Creek grinding grooves and the complex that they are located in, as well as discussed their values relating to the BMU1 grinding grooves and a scarred tree.

While they stated that all cultural heritage artefacts and cultural sites within the Project area are considered to be of high cultural significance to them - because the cultural features and known cultural artefacts are evidence of ancestors' use of and activity within the Project area.

Some registered Aboriginal parties adversely responded to the predicted impacts arising from the proposed Project to the Loders Creek grinding groove conservation zone. The conservation zone was considered by the parties to be of more concern and heightened cultural value than other areas within the Project area.

The conservation zone was identified as having more prominent cultural and historic values and cultural meanings- with registered Aboriginal parties either stating that through their own participation in previous cultural heritage assessments within BCC or through their Elders involvement in previous cultural heritage assessments within the BCC, parties had previously advocated for the protection of the Loders Creek conservation zone (including the grinding grooves) and these efforts had previously been documented. Registered Aboriginal parties stated that the high cultural and archaeological value they had stated previously had not changed during the values assessment to inform this ACHA.

Registered Aboriginal parties also stated that the Loders Creek complex is a conservation/management /avoidance area because of its cultural values and as such should remain protected and conservation works put into place to manage the site and not approved for impact by the regulators; but managed to achieve greater conservation outcomes.

Registered Aboriginal parties stated that the thought of having the Loders Creek Grinding Grooves impacted,¹¹ as a result of Project consent determination, was upsetting, with most registered Aboriginal parties stating the ideal conservation outcome would be for avoidance of impact and management *in situ*.

They also sought to provide management measures for all cultural sites and areas identified as predicted to be impacted so as to influence the management and conservation approach if the Project is approved.

Some registered Aboriginal parties sought to have their values statements and comments included in the main cultural values assessment section of this ACHA, rather than as a consultation appendix to it. This opportunity was extended to all registered Aboriginal parties. Confidential non-disclosed statements are included in **Appendices C1 to C5** of this ACHA.

Publicly released statements provided by the Wanaruah Local Aboriginal Land Council, the Wonnarua Traditional Custodians and Kevin Taggart (WTC representative Elder of Broke) are included below, in the main body of the report as requested by each party.

¹¹ The Loders Creek Grinding Grooves were primarily discussed, However, values were not only limited to this cultural site within the Project area– Refer also to values comments regarding BMU1 grinding grooves, Scarred tree (#37-6-0428) and survey sites predicted for impact (refer **Appendix B1**)

5.3.1 Wanaruah Local Aboriginal Land Council Statement



Nathan Lane
Environment and Community Coordinator
Xstrata Coal NSW
Bulga Optimisation Project

Re: Management recommendations for mitigation of social impacts created by the destruction of culture by Xstrata Bulga Optimisation Project.

Thank you for this opportunity to submit our management recommendations for mitigation of social impacts created by the destruction of culture by the Xstrata Bulga Optimisation Project. Like all areas in the Hunter Valley the land, vegetation and water ways hold cultural significance to the Aboriginal community. Both oral and European written history tells us that the area was resource rich, the land being very fertile, the flats open and grassy the hills well treed.

This area is in close proximity to the song line. The song lines are the transit ways used by Aboriginal people Australia wide, the one here links the coast, the Sydney basin, Western Plains, the Northern Tablelands and possibly the Lithgow region. The area is also in easy walking distance to a number of known ceremonial areas. Fishing was one of the many practiced activities, the number of micro blades found tells this story as oral history, around and along the many permanent and semi-permanent waterways. Waterways no more than drains now because of poor European land management practices. There were at one time many of the traditional food sources and resources to be found here, some remnants still visible even after the destructive impact of European development and farming. The sheer number cultural objects found in the area speaks volumes of the importance of the food sources gathered in and around this area. Yes the area around here is very significant. This area is closely linked to the Doughboy Hollow area as one of the major transitional camping and hunting/gathering area, used by the local Aboriginal community in their nomadic way of life.

There are a number of dream time stories recited from oral history that are housed in the landscape around the Broke/ Wollombi/ Broken Back area, these include around Yellow Rock, Goanna Dreaming (there are two slightly different stories relating to how and why the hill is shaped like a goanna), Tidilik the frog, and the Wingen Maid/Burning Mountain history. This last is included in

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because it specifically mentions the Broke area, demonstrating a link between the two areas and a history of telling for around 6000 years. Like the Goanna dreaming story, there are two versions of the Wingen Maid story, one told by Kamilaroi people the other by Wonnarua people, there is a long tradition of shared stories of bitter battles, slayings and kidnappings, between these two, who in the story of the maid each share a friendship with the Wiradjuri and Darkinjung. A history that tells us of shared country, shared ceremony and shared dreamtime, and finally saw them join forces to fight and die side by side combating white invaders in a frontier war which ended in a massacre by white settlers, near Mount Arthur. Sentinel Rock is another place of significance. There are many others I am not privy to especially concerning the area around the Broken Back.

We spend much of our time learning about our past, trying to reconnect with our culture. Yet as quickly as we begin to understand something about how our people lived, (the activities they partook in and the time lines showing when, "history" that was not passed on because of the savage impact of European settlement), it is lost because of development. Many of the people still living in this area cannot speak the language of their tribe, we cannot sing the songs, we cannot tell our children the stories of all creation. This was lost because these things were considered "Evil" by the missionaries. What little is still known is closely guarded by those entrusted with it who pass it on as "need to know" on those occasions when something vital to the dreamtime is endangered. All that is left is to the majority is the few markers that remain of a once full and harmonious society and culture. These markers along with the snippets allowed to us by those entrusted, is all we have to link us to our mother the earth. Culturally, these places give us an insight to our forbearers. The level of occupation and the length of occupation give us insight to what the landscape was like and the activities the conducted. With no culture of writing, history has been passed by word of mouth. To aid the telling, many of the creation stories incorporated the land forms. This included how they came to be. No amount of written language can adequately describe or replace the value and meaning of being in touch with the living remnants of our dreamtime. On a social level these remnants and markers give hope to a displaced people. No longer is it "Shame" to be Aboriginal. We have for many years been told that our culture was "Bad, Heathen, Satanical, Backward, Uncivilised and generally unacceptable". Employment, education, and health issues can be directly linked to ones vision of ones self and community. We still suffer from stereotyping and bigotry. We need something that is ours to take pride in. All we have is tied to the land in the remnants and markers.

Loss and destruction of these areas by all forms of development means there are fewer and fewer teaching places remaining for Aboriginal people to pass on their knowledge and culture to the newer generations, as Koettig and Thorp (1990) identified, "There are no reserves or National Parks in the Central Lowlands within which some sites would be preserved, there is urgent need to address the problem of site destruction and preservation before more of the resource is eroded." At the time of writing in 1990, 77% of all known sites had already been destroyed in the Central Lowlands area.

Wanaruah Local Aboriginal Land Council's support for this development is conditional to the acceptance and implementation of the below recommendations.

To that end we make the following recommendations to be included in the EIS and ACHMP for Xstrata Bulga Optimisation Project area for mitigation and offsets for Cultural and Social impacts caused by destruction of Cultural Sites and impacts to the VCA offset areas by the Xstrata Bulga Optimisation Project:

1. That the “Management recommendations” in the draft report be correctly titled “Consultant’s Management Recommendations” to define the difference between those measures the consultant and mining company wish to see implemented and those of the Aboriginal Community.
2. That the recommendations here in are included in the EIS and ACHMP for Xstrata Bulga Optimisation Project under Aboriginal Community Recommendations and not as part of an annex to be ignored,
3. An Aboriginal Cultural surface and subsurface investigation be conducted by the Aboriginal community and that the Aboriginal community be consulted over the scope of the Cultural sub surface investigation,
4. The artefact analysis, of salvaged objects, include participation from the Aboriginal community, and it be expedited to be completed in such a way as to help inform the Cultural investigation.
5. That any research and salvage works be rostered equally among the stakeholders so all get a fair go at being involved if they choose to be.
6. That there be a code of conduct and dispute resolution process that applies to Stake holders, consultants and mine staff,
7. That the Aboriginal Community be given employment opportunities in all areas of the mining process through Aboriginal specific traineeships and employment programs. The target numbers and time frames to be agreed mutually between mining company and stakeholders before they start the destruction of cultural sites and areas.
8. That proponent assist building capacity in Aboriginal Companies to meet the compliance needs to become contractors to the proponent in areas other than Culture and Heritage.
9. That the proponent funds the building of a Keeping Place and learning centre for the Aboriginal Community in the Upper Hunter.
10. That all existing offset areas for Bulga Optimisation Project be protected in perpetuity and a management plan which includes access and management by the Aboriginal Community be implemented,
11. That an area of land not less than 50 Ha be set aside in perpetuity as a cultural offset for the Aboriginal Community. The offset land is to be in an area freely accessible to

the Aboriginal community and preferably with access directly to the Hunter River or other permanent water source. This will enable Elders to conduct cultural activities in a culturally appropriate manner.

12. That the offset land is not part of any other offset (e.g. part of a biodiversity offset) without the support of the Aboriginal Stakeholders or the support of Wanaruah LALC.
13. That the proponent gives \$500,000.00 per year for the life of the mine to a Trust for Aboriginal Employment and education programs in the Upper Hunter, and that Wanaruah LALC be on the board of said trust/s with the power to veto projects they deem not worthy.
14. That the proponent gives \$200,000.00 per year for the life of the mine to a Trust for Delivery of Aboriginal Health Services in the Upper Hunter, and that Wanaruah LALC be on the board of said trust/s with the power to veto projects they deem not worthy.
15. That any residential houses needing to be vacated due to mining activities, be relocated in a project to enable an increase in the availability of Aboriginal Social housing in the upper hunter.

Thank you for this opportunity to input

Yours Truly



21 NOV 2012

Noel Downs
CEO

Refer to **Appendices B1 and B2** for further correspondence and BCM's response.

5.3.2 WTC Representative Elder of Broke's Statement

Statement from Kevin Taggart

Please include this statement in the report not as an Appendix. I provide full approval to be consulted and to have these cultural values shared as is my right as a Wonnarua person and surviving Elder who lives in Broke. I represent my family and my ancestors before me. No one else speaks for me I speak for myself as is my right

Sacred sites.

To me sacred sites encompass all of the land. All of our country is sacred. In relation to Loders Creek and the area where Bulga Coal wants to mine and is mining the area is very special to my family. The Taggarts are the only Aboriginal family who have never left the area and continue to live here. I know all these parts like the back of my hand as a kid when I was about 7 to 8 years of age until my twenties I walked all over this Country with my father.

Health.

Our people are inundated with smog, dust and pollution. Our ancestors were shot, poisoned and disgraced by the early settlers. Today our people are now being poisoned by industrial emissions from the coal industry.

Public Relations

Bulga Coal and other mines don't care about the Aboriginal community. They create an impression that they do care but this is only a front, a spin, a public relations exercise to keep the operations going and expanding to generate money for investors.

The mine has environmental staff who are really acting as public relations people in the right places to bullshit and lies to us black fellas and the white community as well.

Grinding grooves

The mines have already destroyed one lot of grinding grooves- they aren't there anymore. These grooves (in Loders Creek) must be recovered. If we give up without a fight we are not protecting our heritage for future generations

Dad always went around the Loders Creek area-it was taboo- its spooky (spooked) - (they (the mines) might not believe me but there is a history of bad things there. (refer to nondisclosure) When I was with my Dad, my dad would not go through the area he would go around it-he wouldn't go near that area. The first couple of times I went there I got real crook- because the mines have bugged up the land it took me a while to work out where I was. I could not get my bearings. There's something wrong in that Loders creek area- a killing – something- it's a taboo area. I am worried if I talk about the taboo area and the fact we needed to keep away from the area that the government will just dismiss Loders Creek importance and let it get harmed. It's wrong – simply just wrong and should never be disturbed.

My Dad would walk all around that area- even if he saw a good kangaroo he would go around the area and catch up with it at another area rather than go through the area even if this meant he'd miss a good hunt. I used to follow him. He was the same way in another area – a place at Wombo.

It took me some time to work it all out "I had a job to work things out because the mining surrounds the area- but it's the area all right the area we should not disturb. Dad wouldn't go to this area.

We practically lived in this area where the mine is- we did more shooting and tracking in that area than anywhere- we used to catch peach faced wallaby (we used to call them this) and bronze winged pigeon – the odd ducks too.

We spent most of our time there. We'd get honey from the trees- box trees they were. We would take our axes- Dad and my Uncles would take their metal axes and hit and cut the trees with the axe and we did this over in that area for years and years. Dad and my Uncles would scar the trees with the blade. See the bees would go up in the tree and some down to the lower part and that's where their honey would be and that where Dad would get the honey. Uncle Bill and Uncle Henry and Dad- I bet if there's a scarred tree out there it's probably one done by my Dad or Uncle. Dad would go there every few weeks and collect the honey when the time was right.

Uncle Ronnie was Mum's brother – he was a white fella but would go out with dad and my Uncle – he was real good with an axe and lots of times he would collect the honey and scarred the trees--- Up to the left of the mine – for sure Dad or one of my Uncles would have been the ones who scarred those trees. I went with them- I might have even done a few trees myself. - I went around with Dad from about 7/8 years of age till my twenties. Dad was keen on the native Bee honey from the Box trees.

Dad went around with an axe – he also used a rifle and had spears- I've still got the spears Dad used. I have a lot of things.

The area which is now the compost heap isn't an area we really went to – we had all we needed closer to home.- we never really went there- we would go to the area near the Vere and right to the Hunter River- along Saddleback, Yengo, Brocken back (is real important) over to Warkworth.

Warkworth Sands is very spiritual = very sacred- a very special place. All them inlets were Aboriginal- places out of the wind and cold and generally there was water- see if there's water there's food.

Years ago was very little scrub where Bulga is now- there were trees everywhere and we used to keep it all clean- we used to burn. – The ecologists and greenies bugger up the bush- because they don't burn- kangaroos, bandicoots don't like thick scrub that why we kept it clean- We worked the Country and burnt to keep it clean. People think I just burn but I burn to keep the bush good- I still believe in burning- I believe that we should still burn It has to be managed of course- the way Aboriginal people use the land and manage it- now people who burn are called a crook- it's ridiculous – especially if you know what you're doing.

All the animals don't like pure scrub- greenies have got it wrong. Aboriginal know this country and what it needs.

Willy wag tails- dad didn't like a willywag tail too near the house or near the windows- he didn't mind them in the bush but not near the house.

Our family have lived in Broke all our life just up the road- this place is converted from a shed.
Even when mining starting taking over we would still go to the vere for hunting and to go to an area important to my family- even if we sneaked in- I still do.
In relation to the country to be fixed properly after mining – it would cost more than the money they took getting the coal. I don't think they can really fix it.
We used to go to Saddleback Ridge – there's a lookout- if you go there now the country is bugged- all the mines.

Open cut mining is an evil concept. Everything on top is destroyed. Gone forever.
There should never be another open cut mine approved in the Hunter Valley.

Who granted these approvals? Who set the conditions of consent?. Why have those conditions failed to protect us. The people who made those decisions don't live next door to hell. Tell me what they have really saved of our cultural heritage over the years- every time I turn around they are destroying more- the land is unrecognisable the areas we used to hunt barely recognisable. The mines show these little patches of rehab- what about the rest it's a disgrace an eyesore. I've seen picture from the air and it's as far as the eye (or almost) as far as the eye can see. It's not just one mine its all of them! There's so much of it. Where is the government protecting our culture- Loders creek was supposed to be protected now they want to bugger this too, where is the government protection there is no protection. It's a farce. They just want the royalties and say it's for the jobs. My question is when will culture be protected?

It's terrific for work –it's alright if mining was just a little bit of the Country but's it's just too much of the country- In the Hunter it's been more and more and more mining – its greed and complete farce in terms of protecting Aboriginal cultural heritage.
It's just too much and change is needed.

The land will be so different –changed forever- the land want really be useable-We used the area for tucker- we all still go to eat- this stirs me up more than anything- it needs to be put back as soon as possible- What's the cost of difference between open cut and underground mining? No more open cut mining should be approved in the Valley – they have gone too far.
The need to also keep away from the water- our streams and out sacred areas- our sacred sites. The Loders Creek is A SACRED SITE A; the country is sacred – I hate open cut mining I hate the way it disturbs the land and our culture. It's just a filthy open cut- why do we have to look at it the dirty filthy mine. It's an eyesore- looking at dirty filthy site – it breaks my heart to see that
I want this statement to be public people need to know the truth they need to stop approving the destruction of my culture. I need for government to listen I need other Aboriginal people to work together to save our culture- especially the sites what's left of them. I need other Aboriginal people to understand –they haven't been in the bush like me they have been in the towns and might not really appreciate the impact but together we need to work together to save our culture.

Villages

Mining companies seem to be able to takeover villages. We see advertisements on television of mine rehabilitation. Small portions of the whole of mine footprint. The remainder are dusty spoil piles.

Donations to schools influence parents to accept open cut operations while the students play in dusty, polluted environments.

Black fellas,

Mining has turned our own people against each other. At a recent meeting concerning the grinding grooves an Aboriginal person stood up and said "How much do we get and when do we get it?" I suspect there have been similar negotiations in the past.

I stress that cannot replace our culture. That is the way we are, yet we hear this from one of our own. Money without trying to save our culture is nothing.

I have never considered that money can compensate for the loss of land but the further I become involved the more I realize that the traditional owners should be compensated through a small royalties scheme shared equally among all of our people, not just a select few to try and help our people- we should have choice for land to practice culture. This needs to be shared . I stress though that this compensation will never replace the damage they have done to my country –they are bugging up the country. I am talking about my culture and I want to stress that I am not wanting any money or anything I am wanting what's left saved. I want to save our culture- the mines are wrecking the place.

The way our culture has been managed in the past and the way people have not been given the opportunity to speak is disgraceful. It doesn't matter who they are or how old they are- we should all have the right to voice our concerns and to describe our cultural values- even if a person is fourteen years of age they need to be listened to. No one is greater than another though we should respect our elders we need to work together and discuss our culture openly with each other. If there are to be any resources or benefits for our people it needs to be shared and access to offsets and programs shared. The Wonnarua Traditional Custodians is a claimant group with a broad families representation and we want everyone to be part of discussing and managing our cultural heritage. Wonnarua people have lost much.....this should not continue nor should approaches be supported which allow the few to benefit or access our culture. As a people we need to share and we need to work together to protect what is important to us and our children in the future.

We must stick together, be harmonious and win this fight.
We only have one chance.

God bless us.
We will need it.

Kevin Taggart
Wonnarua Traditional Custodian and Elder of Bulga/Broke area
13/11/2012 modified 24.12.2012 refer also to non disclosed comments Appendix A4

5.3.3 WTC Statement

Wonnarua Traditional Custodians Statement

"Our identity as human beings remains tied to our land, to our cultural practices, our systems of authority and social control, our intellectual traditions, our concepts of spirituality, and to our systems of resource ownership and exchange. Destroy this relationship and you damage – sometimes irrevocably – our culture, our families, our identities and our wellbeing."

We, the representatives of the Wonnarua Traditional Custodians have a custodial responsibility, right for the Country in which the Bulga Optimisation Project is proposed. We assert that it should be recognised the Wonnarua Traditional custodians have custodial obligations to our Country and to the continuation of the protection of our spiritual connections and to the spirits of our Ancestors.

The area holds our Aboriginality, our culture, our spirituality, our traditions, our pathways and song lines. The area includes camping areas and evidence of our ancestors repeatedly returning to the area on the way to highly significant ceremonial and lore practices. It is also held in our language and in the lands and waters around us. We need to mines to Respect our ways, our traditions and our rights and we also expect recognition as a unique peoples.

As custodians with the responsibility for our culture we say **NO** to impact to the Loders Creek grinding groove complex, BMU1, BMU2, our ancestors scarred tree near Charlton Road and the camping areas identified as complex's and PADS..

We particularly do not want to see the Loders Creek grinding grooves and the complex destroyed. They should be respected and protected. Mining activity has already impacted many sites.

Of increasing concern is the apparent 'carte blanche' approvals rate for permits to destroy or damage areas identified as having high cultural heritage value by the Aboriginal community and that there is limited application of intergenerational equity is a measurable and tangible reporting regime.

The Bulga mining area surveyed has a rich evidence of our ancestors movements spanning thousands and thousands of years. We as a people also support our Elder – who continues to live on country and is distressed that the area may be impacted by mining. He describes it as living in hell.-

The Wonnarua Traditional Custodians Native Title Claimant Group with consideration for the other Aboriginal Respondent Groups make the following assessment conservation recommendations as we want to see the protection of our cultural heritage. The following statement describes our cultural historic spiritual and aesthetic values.

"The cumulative and continuing damage and relocation or salvage of our ancestors cultural footprints is highly disturbing with a seemingly never ending cycle of discussions and negotiations about our culture being 'in the way' of progress and needing to be moved on- a contemporary form of dispossession in occurring with yet again government approvals. Mines cause a great deal of destruction- not only to the artefacts of our

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ancestors and the evidence of our rich traditions but the destruction of our ability to fulfil our custodial obligations.

When we go to an area particularly being impacted by mining many of the landscape features are highly impacted- it's hard to read the land and use the landscape as a compass connecting the stories and walks of country which have been shared to us by our ancestors. "its like walking into hell."

BOP mining activity is within the traditional lands of the Wonnarua people- an area visited by our neighbours the Awabakal Dharkinjung Gomeroi (Kamilaroi) and is an area where there was movement to and from highly significant sites and ceremonials which make our Aboriginality and lores unique, our culture distinctive and established an understanding of the difference between peoples of different nations. Aboriginal people are not a homogenous group- the rules and ways of life are uniquely different, the way in which we interpret our landscape, pay respect to our ancestors and care about the unique places which hold or act as the glue to our spiritual creations are important- to our ancestors- to us as a people now and important for our children.

We state our position in relation to mining applications and this position is simple we will not approve nor agree to the destruction of our cultural heritage- there has already been so much encroachment and damage from the historic and contemporary use of traditional lands.

We express a high level of alarm and distress regarding the probability of risk to our cultural heritage values through the proposed activity seeking Development Consent. In the scenario of disturbance to our cultural heritage we state that we find this highly disturbing and that mining activity may be given greater weighting than conservation to the Loders Creek grinding grooves the voluntary conservation area which was set aside in recognition of the high cultural value of the area and the areas within the Bulga mine which has subsurface deposits telling us of our pathways and camping in the area- all which are a legacy from our ancestors.

These cultural heritage objects and places have survived despite the area having a historic disregard of our cultural heritage through historic agriculture, provision of exploration permits and cumulative impacts arising from multiple mining and resource interests i.e. saturation of exploration approval activity and operational activity.

The impact of agriculture followed by mining has had a devastating effect on our cultural heritage landscape and features and our cultural heritage is coming under increasing and continuing pressure and risk because of the volume and level of mining activity. While it is acknowledged that the Bulga Optimisation Project is aiming to utilise already highly disturbed mining footprint- the proposed project increases the impact and if approved will destroy the areas which were set aside as part of a previous approval. These areas have already been subject to assessment and were identified and continue to be confirmed by registered Aboriginal parties as highly significant as they leave the remanent footprint of our ancestors. It is noted that the potential impact areas are currently identified as voluntary Aboriginal conservation areas and these areas or complex host a set of Grinding grooves campsite and areas of sensitivity. BMU1 grinding groove site is already at risk because of approved underground mining and the BMU2 voluntary conservation area is also now at risk. The survey also enabled us to identify other areas containing subsurface and surface deposits which add to the understanding of the area.

The BOP proposal will again -if approved - impact adversely on our cultural heritage values and cultural heritage within the mining complex.

While one benefit of mining is that Wonnarua people are able to record and report on our cultural heritage- constant approvals to destroy or relocate Aboriginal cultural heritage constantly changes and marginalises the meaning of the place and cumulative impact assessment integrated into a weighting for intergenerational legacy is poorly applied in many of the Aboriginal cultural heritage assessments being undertaken within Wonnarua country.

However, continued multiple adverse impacts place increasing environmental and cultural heritage values stress on our landscape and specifically to our features and objects which provide a rich evidence of our social function (which extended beyond pre-settlement into and continuing through post settlement) is a constant concern. The way our ancestors used and made tools, ceremony and spiritual understandings and the way our ancestors lived and respected the land are under constant threat in the region.

1. **WE WANT XSTRATA TO GO AROUND OUR CULTURAL HERITAGE AND CONTINUE TO PROTECT THESE AREAS- THE STATE OF THE LODERS CREEK GRINDING GROOVES AND THE CONSERVATION AREAS IS A DISGRACE. BROKEN PROMISES- OUR CULTURE IS NOT TAKEN SERIOUSLY NOR RESPECTED. IT'S ALL ABOUT GETTING ON WITH DESTROYING THE COUNTRY TO GET ON THE COAL. CONDITIONS OF APPROVAL ARE RENIGED AND CONDITIONS NEVER FULFILLED- THE TIMING OF COAL EXTRACTION TAKES PLACE AS PRIORITY BUT NOT THE PROTECTION AND DELIVERY OF CONSENT CONDITIONS.(DELIBERATELY BOLD DELIBERATELY CAPITALISED)**

We also realise that we -as Wonnarua people (again) as with the experience of history -do not have the legal right to veto projects nor the safeguarding of our cultural heritage. Again this is put into the hands of government to decide the fate of our culture.

If the Bulga Optimisation Project is approved by the Department of Planning and Infrastructure we state the following: The Wonnarua Traditional Custodians need to have an active cultural role in the relocation and ongoing protection of our cultural heritage. We need long term certainty not broken promises and adhoc poorly developed management measures which do not support intergenerational equity -what really do we have for the kids. What is the legacy-when is mining just too much of an impact?

The following mitigation recommendations are made:

1. The Wonnarua Traditional Custodians assert that the voluntary conservation zones within the BCC should be protected and cultural sites and associated artefacts remain in situ.
2. The proposed Voluntary Conservation area (VCA) Charlton Road is identified as having extremely high cultural value and the WTC seek the in perpetuity conservation of these areas with the land to be vested in the name of the Wonnarua people (regardless of entity/groups i.e. WTC, PCWP, WN or WP)
3. Arrangements/agreements need to include all traditional owner parties this may be one way of bringing everyone together. The VCA areas are a cultural gathering place- Wonnarua people need to come together and look after each other and look after the UH Aboriginal community.
4. This area has a rich cultural history and remains an area of good energy. The CVA area is part of the cultural areas and sites Wonnarua Traditional Custodians Elder of Broke has custodial obligations to care for. The proposed area needs to be culturally assessed and mapped within a regional context.
5. Partnership between BCC and traditional people and the Wonnarua Local Aboriginal Land

Council is required in order to ensure access is unimpeded while the obligations of BCM to manage the lands appropriately are demonstrated.

6. The Aboriginal community need to have certainty over our cultural and heritage and this includes security of tenure and management so that the cultural values and the oral traditions of Wonnarua people are maintained and handed down to the next generation of Wonnarua people.
7. A land management trust is required to ensure that appropriate management arrangements may be made
8. Further cultural assessment is required before any further mining occurs in the Project area. a 3D digital model of the existing cultural landscape is needed in order to retain a permanent record of the attributions of the place.
9. Ground penetrating radar may be required to examine an area within Loders Creek complex given its taboo and conflict history. Protocols need to be established between all traditional people in order that the Wonnarua people work together to care for our cultural heritage. Recording needs to be provided to Traditional Owners and the WLALC and needs to be archived in the State Library and IATSI for future generations.

Why the area is important"

The area is of high cultural significance because of its proximity to highly sensitive and spiritual places of significance. It is a fringe area visited and at times occupied by several tribes including Awabakal and Kamilaroi people. We need to have areas that are accessible and areas protected which are important to us. We need to continue and regenerate our cultural practices not just spend all our energy of discussing loss and destruction.

We need serious commitment with set timeframes-with project mining contingent on Xstrata fulfilling promises (consent conditions) priorities need to put culture and protection first –not mining –Included in recommendation

Xstrata needs to change the way it works –there needs to be a culture of respect recognition and consideration of our rights-mines need to demonstrate their legal obligations to protect its not about relocating everything and salvaging removal of our ancestors footprints

10. We need to film and record the topography and recreate the creek bed and water systems which keep our ancestors grinding grooves protected. We do not want to have them covered in silt and mud inaccessible nor in an active do mine site area.

The area is taboo and needs to be protected. We are only providing statements regarding mitigation if the mine is approved, because in our experience Governments have a history of approving mining in the Hunter which results in the destruction rather than protection of our cultural heritage.

If approved - The Loders Creek grinding grooves and all the associated artefacts in the complex needs to go together. We do not want the Loders Creek grinding grooves placed in the VCA Charlton Road area –as Kevin Taggart has stated that area is a special place a positive place and we

don't want bad things to be placed in good places...we don't know what would happen.

If possible the Loders Creek grinding grooves need to be moved to another part of Loders Creek or in an area where protocols can be maintained.

Protocols needs to be developed. This is a men's area and this needs to be respected and planned for.

We need to be able to develop and fulfil our cultural obligations and lore of enacting regeneration/removal and healing (the creation of other spiritual areas in which we can place our cultural heritage In order to do this we do not want to see the placement of grinding grooves and scarred trees in an artificial way. We need to recreate the setting and make the new location of our cultural heritage as culturally relevant and spiritual as possible

11. The BMU 1 Grinding grooves should not be moved. They are best left in situ protected with geofabric and buried. Appropriate signage and story is required so that the significance and the meaning of the place is not forgotten or misunderstood. All traditional people need to be involved.
12. There is no story and real meaning of a place. Meaningless numbers and jargon is used to describe our cultural heritage places- BMU1, Mushroom compost. This does nothing to pass down tradition or story or share the meaning of our culture with non-Aboriginal people
13. Interpretive initiatives should be developed and shared. The destruction of our places and the remnant cultural fabric within and external to these places are at risk of being lost. The interaction between our ancestors and the land and waters needs to be visible in the landscape.
14. The impact to our cultural heritage and the landscape by mining is highly destructive and the land changes profoundly change the cultural meanings and cultural compass of our people. We need to be active agents in the design management and control of our traditional lands especially in the phase of recovery.
15. We have bush skills and fire management skills we have insights and obligations to our animals and birds. We need to be part of the decision making. We need to also work on country and create Aboriginal footprints in an area which is so changed.
16. The land is 'buggered' by mining – open cut mining has a devastating effect on our cultural herniate and cultural values.
17. We need tangible and commercial ways in which we can once again be part of the management and influence the future land use opportunities which arise.
18. A pilot for regeneration programs which concentrate on normalizing the bush and creating a balanced ecosystem is urgently required. The skills and insight our elders have is a wasted resource. The need to innovatively correct this imbalance is needed.
19. While the WTC obviously seeks to increase the opportunities for Wonnarua people (all Wonnarua people) to participate in work on Country programs we do not regard ourselves to be the (only) people to participate in these opportunities. It is important that we as

Wonnarua Traditional Custodians are afforded opportunities to work our lands, pass down our histories and our culture, we also believe that other Aboriginal people need to be part of this journey. We need to fulfil our traditional rights and obligations, and community registered Aboriginal parties for overall community wellbeing

20. Traditional people need to work on Country we need to try and protect and revitalise it. We need to be part of seed collection and flora and fauna auditing and recovery. We need to be able to practice our traditional skills and share these wisdoms with the convergence of western and new sciences. Opportunities to provide our children with the skills of the western sciences in order to influence old and new understandings is required
21. The WTC is progressing to become a Prescribed body corporate to formalize our entity. The core function of this body is to realize the full extent of our native title obligations and rights. We seek policy implements within XCN in order that there may be discretionary funding and tendering opportunities afforded to all Wonnarua people (i.e. the groups PCWP, WP, WN and WTC.) we represent the descendants of 6 apical ancestors including the descendants of Emily mother of Henry Harry Taggart- with Kevin Taggart a Wonnarua Traditional Custodians Elder of Broke with an intimate cultural and historic knowledge of the Broke and Bulga area.
22. The WTC believe that the management plan development and its implementation should be guided by Traditional Owners and the Wonnarua Local Aboriginal Land Council and other community representative who are able to contribute positively to the protection and conservation of our cultural places and cultural sites important to Wonnarua people -as a community representative with statutory rights and obligations.
23. We want active participation and the right to be part of strategic decision making we do not want to be passive in the protection and advocacy of our cultural heritage and our cultural landscapes of importance
24. So many of our creation places are not protected as a place. There is latent opportunity to undertake regional mapping in order to put forward a case for sites to be protected. Lizard Rock and Biaime are important places'
25. The WTC has included a list of sacred places which could be considered as an important part of this program.
26. Access to the trust fund which is supposed to be managed by the Minerals council needs to be addressed. XCN is well placed to advocate for this matter to be addressed. All Wonnarua people need to be part of the ongoing dialogue and decision making regarding this
27. WTC seek active participate and role in managing salvage programs. This role needs to be shared with other Traditional Owners.
28. Salvage programs need to be meaningful and purposeful- research design questions should be developed right at the start of developing an ACHMP
29. XCN needs to make the successful implementation of the ACHMP a performance based requirement of its personnel. WTC members (as would other Wonnarua people seek to have an active role in developing delivering and creating a highly interactive training programs for

Xstrata personal to build their confidence and confidence in maintaining monitoring and measuring positive Aboriginal cultural heritage outcomes. XCN should set aside a lessons learnt and improved planning policy culminating in an annual conference between Traditional Owners, the WLALC knowledge holders and XCN staff at both an executive and project operations level. XCN should report back to Traditional Owners and other registered Aboriginal parties an overview of their implementation and challenges over all their mining sites within the Wonnarua Boundary in order to develop an ongoing improvement to performance and understanding

27. The WTC would like serious consideration of a teaching and cultural camping and sharing space – we would welcome discussion regarding the Wollombi Camping grounds currently owned by Yarnteen.

We however, restate our position – that the Loders Creek Grinding Grooves should remain protected and that the care arrangements for this special place is developed seriously.

Statement developed in consultation with Wonnarua Traditional Custodians registered Aboriginal parties at workshops held with all parties.

Spokespersons

Warren Taggart, Gordon Griffiths, Warren Schillings, Margaret Matthews, Allen Paget, George Sampson, Luke Hickey, Des Hickey and Tim Smith.

6 Impact Assessment

This ACHA report has considered the impact of the proposed Project on the known Aboriginal objects of the Project area, the range of cultural significance values associated with it and places external to it.

Impact assessment has included consideration of proposed activity and direct impacts, indirect impacts and cumulative impacts to archaeological objects and cultural sites and ecologically sustainable development (ESD).

Registered Aboriginal parties consulted for this report are concerned that current surface operations and future surface operations within the BCC and broader region poses a significant threat to Aboriginal cultural places and archaeological sites, and has caused and will continue to cause fragmentation of the cultural, spiritual and historic meaning to the cultural landscape and important waterways.

Registered Aboriginal parties also stated that Project areas identified as management/conservation zones in the past should be maintained as such in the future. They identified the Loders Creek complex area as a conservation area and stated their perception that the area's protection was included as a condition in the 1999 development consent for the Bulga Surface Operations.

It is important to note that registered Aboriginal parties found it difficult to discern differences between the use of language such as avoidance versus protection, and management/conservation zones and their differing definitions. Most believed that management/conservation zones were areas protected from current and future mining operations.

The following sections provide a description of the proposed expansion of mining within the Bulga Coal Complex being assessed by this ACHA, and the likely range of direct and indirect impacts to Aboriginal cultural heritage places and objects within the Project area. This section also discusses measures investigated to avoid impacts and reasons for Project design where direct impact has been identified.

The impacts on Aboriginal cultural significance values of the Project area are also discussed, and the cumulative impact of the proposed expansion within the Hunter Valley area is also considered.

Throughout ACHA preparation, opportunities to achieve land conservation outcomes based on cultural significance have been identified, which have been considered in the context of ecologically sustainable development and intergenerational equity outcomes.

6.1 The Proposed Activity

Section 1.1 provided a broad description of the proposed Bulga Optimisation Project, which consists of continued open cut mining largely within the existing mining footprint and the construction of additional surface infrastructure and facilities to support continued mining operations. An outline of the major Project components is provided in **Table 9** and illustrated in **Figure 20** (refer to the EIS for full details).

Table 9: Proposed Project Description

Major Project Components/ Aspects	Proposed Operations
Total Production	Approximately 230 Mt ROM Coal over the life of the Project including approximately 30 Mt of existing approved ROM coal reserves.
Annual Production Limit	No changes from current approved annual limits. Up to 12.2 Mt/a ROM coal from the Bulga Surface Operations and up to 20 Mt/a ROM coal through the CHPP.
Mine Life (Production)	Approximately 22 years with further rehabilitation and closure works being carried out after this date.
Operating Hours	24 hours per day, 7 days per week.
Number of Employees	Continued employment of approximately 700 full time employees, decreasing towards the end of the Project. Approximately 300 construction employees, predominately during the first 3 to 4 years of the Project.
Mining Methods	Open cut mining using dragline, truck and shovel and highwall or auger mining in exposed highwall areas.
Mining Areas	Mining in three contiguous pit areas: • A western extension of the existing Bulga Pit and extraction of coal to the base of the Woodlands Hill seam (the Main Pit area); • An eastern extension of the Bulga Pit to mine the deeply dipping seams in the Wittingham Coal Measures (The East Pit area); and • Deeper mining down to and including the Broonie seam series (South Pit area). A new pit area, known as the Bayswater Pit, mining shallow coal reserves will also be developed to the northeast of the former Deep Pit. This pit will ultimately be used for tailings storage. The Project will also develop a new box cut in the highwall for accessing existing approved underground mining areas.
Mine Infrastructure	• A new open cut mine infrastructure area (MIA); • A new underground MIA (as its currently approved location will be affected by the proposed open cut mining); • Upgrades to the existing CHPP to improve throughput efficiency and increase product yield; • Changes to some Bulga Underground Operations infrastructure, including conveyor location, where it will be affected by the proposed open cut mining; • Development of new haul roads to out-of-pit emplacement areas including 2 new bridges over the realigned section of Broke Road; • Enlargement of ROM and product coal stockpile areas; • Construction and use of new approximately 3000 ML water storage dam (Northern Dam) as part of the mine water system;

Major Project Components/ Aspects	Proposed Operations
	- Changes to mine water, management system; and - Changes to ancillary infrastructure, including access roads and the development of construction laydown areas.
Emplacement Areas	Construction of two out-of-pit emplacement areas. The proposed Noise and Visual Bund has been designed to minimise the noise and visual impacts of the ongoing mining operations while the proposed Eastern Emplacement Area enables overburden from the eastern side of the open cut operations to be handled in a manner that minimises noise and air quality impacts to the majority of residents around the Project area. Overburden will also be emplaced in-pit.
Tailings and Rejects Strategy	Tailings will be disposed of in the Deep Pit and Bayswater Pits with tailings also potentially disposed of in the underground workings. Coarse rejects and paste thickened tailings will be co- disposed with overburden.
External Coal Transport Infrastructure	No change to approved annual maximum product transported by train. Continued use of Saxonvale Rail Spur. Construction and use of a rail siding adjacent to the existing rail easement capable of parking two coal trains.
Electricity Infrastructure	Realignment of sections of two 330kV transmissions lines and other 66kV and 11kV powerlines and other changes to associated electricity infrastructure.
Public Roads	Realignment of sections of Broke Road and Charlton Road and the construction of haul road bridges over the realigned section of Broke Road.
Pipelines and Other Services Infrastructure	The relocation of the Broke Fordwich Private Irrigation District (PID) water pipeline, Singleton Council Broke potable water supply pipeline and other services (such as telecommunications infrastructure) which are associated with the existing public road alignments.
Resource Definition Exploration	Ongoing borehole drilling and sampling in and adjacent to mining areas to better understand the coal resource, coal quality, geological conditions and geotechnical constraints.
Rehabilitation	Rehabilitation of areas disturbed by BCC operations, infrastructure and construction.



Figure 20: Location of Proposed Mining and Project Infrastructure

Source: Umwelt (2013)

All of the above Project components are to be fully contained within the Project's disturbance footprint, which is illustrated on **Figure 21**.

Most activity associated with the construction or operation of the Project involves some degree of surface disturbance and direct impact to the landscape. Where possible, activities will be undertaken in a manner that limits the amount of physical ground disturbance; however, this is not always possible, nor is it possible to accurately identify every area within the Project area that will remain intact or will be disturbed.

Consequently, not all of the area identified as being within the disturbance footprint will be disturbed as a result of the Project. The difficulty is in accurately defining the precise location of access tracks, infrastructure alignments, water management infrastructure, and impact areas associated with the development of components over the life of the Project. To overcome this, buffers have been applied around areas that are known to be, or are likely to be disturbed. In this way, the maximum potential footprint of the Project has been identified and assessed.

As previously noted, should the Project be approved, the total Project disturbance area would increase to 4,113 hectares, of which just over half (2,188 hectares) has been previously disturbed, is in the process of being rehabilitated or has previously been planted with non-indigenous tree species.

A further approximately 1,077 hectares of the Project's total disturbance footprint is also located over the approved underground operations and will be subject to some level of disturbance over the life of the existing approved Bulga Underground Operations through subsidence and subsidence mitigation works.

Areas of the Project disturbance footprint have also been subject to various forms of salvage and mitigation works over the past 30 years in consultation with registered Aboriginal parties.

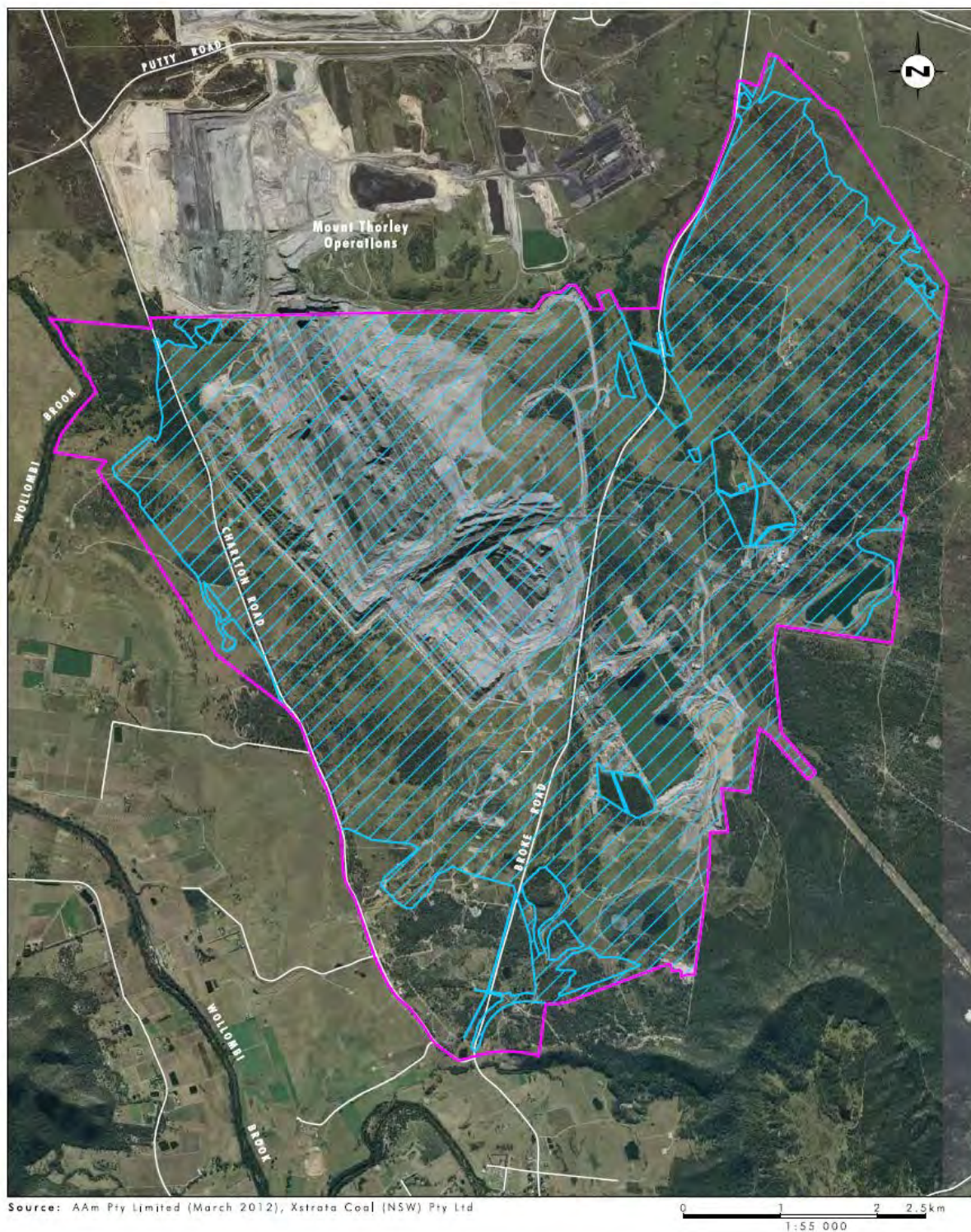


Figure 21: Project's Disturbance Area

Source: Umwelt (2013)

6.2 Opportunities to Avoid Impact

In developing the footprint of the Project, BCM has undertaken detailed concept, pre-feasibility and feasibility studies. These have considered many mining options, layouts, overburden emplacements and infrastructure arrangements to optimise the Project's final design.

The impacts and issues identified through engagement with stakeholders, including registered Aboriginal parties, in relation to the Project and the existing mining operations at the BCC, have been considered in the Project's concept and preliminary designs.

The options and alternatives developed in the Project design process were assessed through a risk-based management approach that aimed to maximise resource extraction efficiency and optimise the use of existing mining infrastructure, whilst minimising impacts on the environment and community.

The key issues considered in assessing the viability and feasibility of various alternatives and developing the final Project design were:

- Minimising noise, dust and visual impacts on the surrounding community over the life of the project, and seeking to reduce impacts below the impacts of the current operations where possible;
- Financial viability of the BCC including optimising the interface between the Bulga Underground Operations and Bulga Surface Operations;
- Potential impacts to Aboriginal cultural heritage and historic heritage;
- Minimising impacts on biodiversity and water resources;
- Minimising social impacts, including the potential loss of agricultural land; and
- The future landform and potential land uses following closure of the BCC.

To address the key impacts on noise, dust and visual amenity on the local communities of Broke, Bulga and Milbrodale, the Project includes a Noise and Visual Bund along the southern and western perimeters of the open cut pit which will be developed in the first approximately three years of the Project.

Aspects of Aboriginal cultural heritage were considered in the Noise and Visual Bund design, which was designed to avoid the planned 55 hectare Wollombi Brook Conservation Agreement (CA) Area near Charlton Road and to minimise impacts on the significant Warkworth Sands Woodland Endangered Ecological Community (refer to **Figure 18**). The altered design will result in the protection of an area identified by some registered Aboriginal parties including Traditional Owners and Knowledge Holders as having high cultural values (refer to non-disclosed **Appendix C4** for details). The combined conservation area proposed by BCM, being the existing Wollombi Brook Conservation Agreement Area combined with the proposed extended Conservation Agreement Area (totalling approximately 120 ha, refer **Section 5**) hold various cultural and historic aesthetic values for some registered Aboriginal parties.

BCM also reviewed the Project design and undertook an examination of mitigating impact to an area identified as having very high cultural values (refer to non-disclosed **Appendix C4**). Through an extensive review, BCM has modified the bund design to avoid impact, as discussed in **Section 6.7**.

6.3 Assessing Impacts

6.3.1 Registered Aboriginal Parties Views on Impacts

In seeking registered Aboriginal parties views on the impact of the proposed Project, a range of comments were provided on impact to the cultural values of the area; to the connectivity of the Project area to other significance places in the cultural landscape; and, to the wellbeing of the Hunter Valley Aboriginal community.

All comments from those consulted have been documented and included in this ACHA report, and are attached in **Appendices A3 and A5**. A number of these comments are presented below:

- We spend much of our time learning about our past, trying to reconnect with our culture. Yet as quickly as we begin to understand something about how our people lived, it is lost because of development (WLALC comment 22 November 2011).
- The WLALC say No to impact in the current VCAs. Every destruction is tearing a page out of the history of Aboriginal people (Management and mitigation and cultural values workshops 18 November 2011 workshop, 31 May 2012).
- Xstrata went around Loders Creek grinding grooves last time do it again (Registered aboriginal parties comments April 2012, September 2012).
- We are not against mining, but want mines to avoid harm to our cultural heritage (Registered Aboriginal party comment September 2012).
- So much is already lost – our culture is surrounded by mines (Impact and measures workshop September 2012).
- Our Elders saved areas before. We need to respect that these areas were protected and should continue to be (Registered Aboriginal parties' workshop September 2012).
- This place is important because it is part of our culture, it was a place to live, and linked to creeks, wildlife and plants. For our people, it is important to preserve our story and our places, this is our main goal (November 2011 registered Aboriginal parties workshop).
- We cannot access and visit sites which are important to us – we need an area where we can take our children and show some of the sites Registered Aboriginal parties comments (Management and mitigation and cultural values workshops September 2012).
- We are constantly being asked to relocate or move our ancestors' footprints. It gets to a point of move to where? (Registered Aboriginal party's comment 18 September 2012).
- The mines have already destroyed one lot of grinding grooves – they aren't there anymore. These grooves (in Loders Creek) must be recovered. If we give up without a fight we are not protecting our heritage for future generations (Registered Aboriginal party comment 13 November 2012).
- Where is the government protecting our culture- Loders Creek was supposed to be protected - now they want to bugger this too. It's a farce. They just want the royalties and say it's for jobs. My question is when will our culture be protected? (WTC representative Elder of Broke 13 November 2012).
- We are always having to talk about impacts not protection we need some certainty for our culture (Registered Aboriginal parties workshop 15 November 2012).

As outlined above, registered Aboriginal parties raised concern that current and future mining activity poses a significant threat to the Aboriginal cultural places and archaeology within the Project area, and that if the Project was approved, desired conservation outcomes would be poorly realised. They sought certainty in conservation outcomes.

They repeatedly stated that areas identified as management/conservation zones in the past should be maintained as such, specifically the zone containing the Loders Creek complex area whose conservation they perceived as being included as a consent condition of the 1999 development consent for the Bulga Surface Operations.

In addition to providing views on the impacts of the Project, registered Aboriginal parties provided comment on desired management outcomes and provided a number of management recommendations if approved.

Most registered Aboriginal parties stated that the impacts of the Project on Aboriginal heritage would be high within both local and regional contexts because of the highly intrusive and irreparable impact causing further fragmentation to the cultural spiritual and historic meaning to the cultural landscape and important waterways

In comments provided, they sought a non-development scenario in order to 'protect the Loders Creek grinding grooves' and other cultural landscape features and sites within the proposed disturbance area of the Project, while recognising the high levels of disturbance already undertaken within the landscape.

A repeated comment made by registered Aboriginal parties was that any management/conservation zones within the Project area required careful monitoring. Monitoring of disturbances including the deterioration of cultural sites arising from environmental erosion was identified as required.

Registered Aboriginal parties stated that they required realistic and measurable management measures in order to be certain that the intended protection or management of cultural heritage measures can be realised.

Registered Aboriginal parties sought impact avoidance of the Loders Creek grinding grooves and the conservation area.

6.3.2 Direct Impacts

In accordance with OEH (2011) guideline requirements, this section considers the potential impact on Aboriginal objects (archaeological sites), and provides comment on the potential impact on the range of cultural values associated with the Project area and specific places within it if the Project is approved.

OzArk (**Appendix 13b of the EIS**) has conducted an assessment of the likely impact of the Project, if approved, on known archaeological sites. As discussed in further detail in the OzArk report (**Appendix 13b of the EIS**), the Project would directly impact 61 of the 96 identified archaeological sites within the Project area if approved, consisting of 11 site complexes, 24 artefact scatters, 25 isolated finds and one Aboriginal scarred tree. Two grinding groove sites (both contained within site complexes) would also be impacted by the proposed works.

An additional ten sites (three site complexes and seven artefact scatters) will be partially impacted by the proposed works.

The remaining 25 known Aboriginal archaeological sites within the Project area would not be directly impacted by the Project, if approved and as discussed earlier BCM modified the design of the Project to avoid an area of cultural significance. BOP OS-8, located outside the Project area, will also not be impacted by the Project.

6.3.3 Indirect Impacts

The Project may also result in indirect impacts on Aboriginal cultural heritage values. The indirect impacts identified by the registered Aboriginal parties included:

- Continued landform transformation and the inability to '*read the landscape*' and '*make sense of the area*';
- Disruption to traditional Aboriginal pathways and cultural ways in which areas were entered and exited;
- Historic salvage programs have created '*gaps*' in the cultural landscape and its meaning; and
- Generational cultural loss as an ongoing impact. Registered Aboriginal parties questioned what legacies would really be afforded to the next generation from trying to salvage, relocate or protect heritage within an active mine site.

The opportunities to undertake cultural historic and aesthetic values assessment provided greater opportunity to provide meaning to a place and to document its relationship and associated role in a broader (regional) cultural context.

The predicted impact on the Aboriginal cultural heritage values of the Project area would also add to the cumulative impact of development on the Aboriginal cultural heritage of the upper Hunter Valley.

Registered Aboriginal parties stated that the opportunity to undertake cultural heritage assessment, survey and walks on Country was supportive of their cultural heritage retention and reconnection to areas commonly excluded from their access. However the Walks on Country also had an adverse impact because the focus of walking on Country was in relation to assessing the Project's intended impacts rather than Walks on Country focussing on protection and opportunities to teach children. This was stated by registered Aboriginal parties as concerning with registered Aboriginal parties seeking improved access to areas such as the Wollombi Brook Conservation Agreement (CA) area in order to provide generational cultural opportunities.

6.3.4 Cumulative Impacts

Cumulative impacts are the successive, incremental and combined impacts, both positive and negative, of an activity on society, the economy and the environment. They can arise from the compounding activities of a single activity, or the interaction of an activity with other past, current and future activities that also affect society, the economy and the environment (Franks et al 2010).

In relation to Aboriginal cultural heritage, cumulative impact assessment needs to consider both the loss of any material culture – the archaeological sites that provide a unique and irreplaceable source of information on the past – as well as effects on the cultural significance of both tangible and intangible cultural heritage to modern day communities.

A Department of Mineral Resources (DMR) study in 1998 found that all mine holdings of that time totalled 61,045 hectares, and that disturbance of these holdings was predicted to increase to 41% by 2020. However, the study also identifies that a significantly larger proportion of the Central Lowlands contains accessible coal reserves and could be disturbed by mining in the long term.

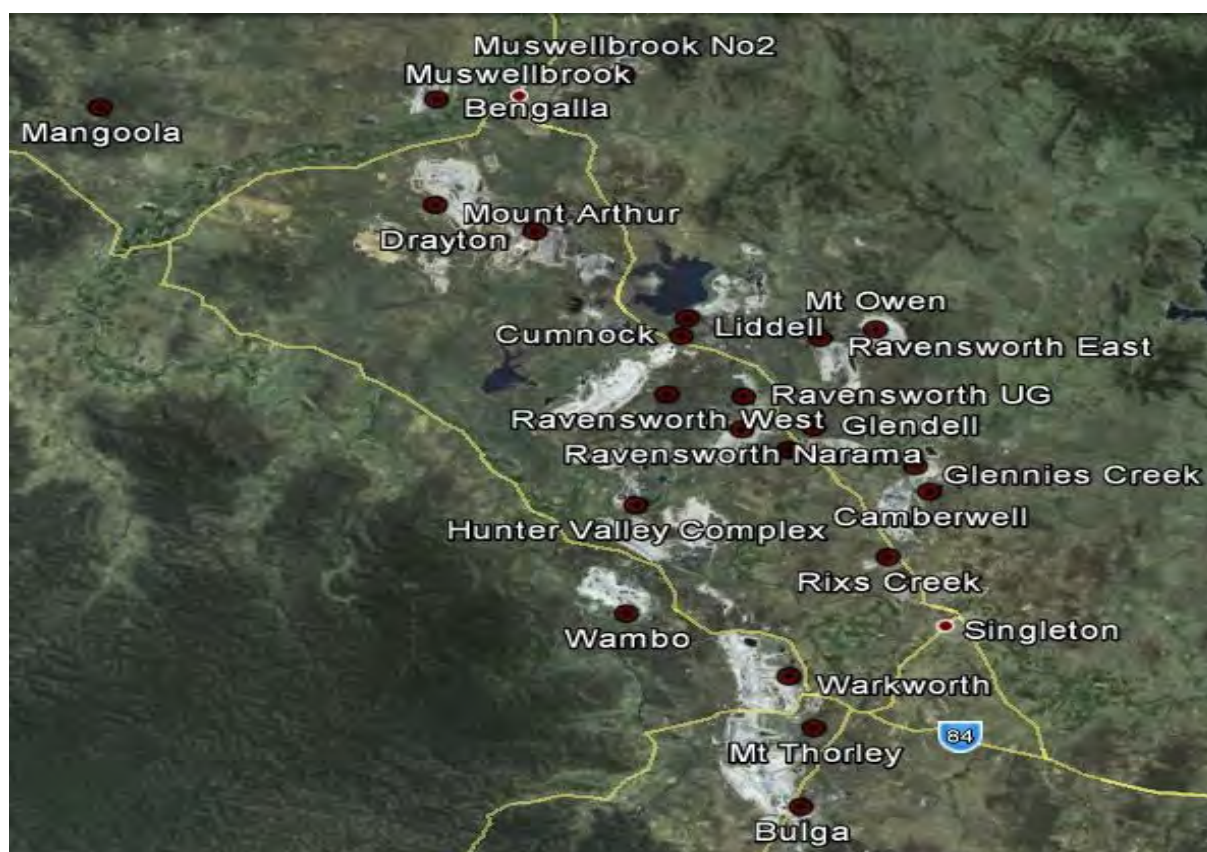


Figure 22: Mining Operations of the Hunter Coalfield

Source: Google Earth & Geosciences Australia (2011)

Given that the vast majority of all known Aboriginal archaeological sites of the Hunter Region are found on the Valley floor itself – with ERM (2004:60) identifying that 73.6% of all known sites occur in the lowlands – this high level of cumulative impact poses a significant challenge to a sustainable development approach.

There is an absence of a cohesive national or state picture for cumulative impacts to Aboriginal cultural heritage.

At a local level, registered Aboriginal parties including Traditional Owners and Knowledge Holders involved in the Project stated that the cumulative impacts of mining are having an adverse impact on their culture and history, with the loss of land, cultural places, archaeological sites and cultural access described as deeply concerning.

Registered Aboriginal parties are seeking an active role in influencing current and future land use and caring for Country through land management works, in areas such as flora, fauna and fire management programs. They are also seeking intergenerational equity outcomes which consider conservation measures for Aboriginal cultural heritage and respond to their concerns about current predicted Project specific impacts and regionally cumulative impacts.

It was also acknowledged by most registered Aboriginal parties that in proposing to expand existing operations within the Project area, BCC primarily intends to extract coal from deeper levels (largely within the existing disturbance footprint) which minimises the overall impact of the Project.

However, the proposed Project does require construction of surface infrastructure and facilities to service the expansion of the mine, such as a noise and visual bund, a new emplacement area, new surface

operations and underground mine infrastructure areas, upgrades to the existing CHPP, development of a new tailings storage facility, relocation of sections of two 330kV transmission lines, the realignment of sections of Broke and Charlton Roads, and the construction of a new water storage and discharge dam. In this context, it is acknowledged that would increase disturbance within the Project area from approximately 2,188 to 4,113 hectares. This would also add to the cumulative impact of development on the Aboriginal cultural heritage of the upper Hunter Valley. In response to these findings, and the impact assessment overall; BCM has considered all registered Aboriginal parties values including those proposed in confidential reports from the PCWP and the WP and confidential statements contained within this ACHA, and assessed the Project design to identify possible redesign within cultural, environmental, technical and operational constraints to avoid Aboriginal cultural heritage impact where possible.

Intergenerational equity recommendations which maximise conservation management outcomes and respond to Aboriginal cultural heritage pressures have been also been considered by BCM and discussed in **Section 7**.

6.4 Sustainable Development Principles

OEH (2011) requires that proposed development activities be discussed in the context of Ecologically Sustainable Development (ESD), in particular the principles of precautionary approach and intergenerational equity. As stated by OEH (2011):

“The precautionary principle states that full scientific certainty about the threat of harm should never be used as a reason for not taking measures to prevent harm from occurring. The principle of inter-generational equity holds that the present generation should make every effort to ensure the health, diversity and productivity of the environment – which includes cultural heritage – is available for the benefit of future generations”.

The threat of serious or irreversible environmental damage is one of the essential preconditions to the engagement of the precautionary principle, as stated by in the Rio Declaration on Environment and Development (Principle 15): “where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation” (Nations, 1992).

Intergenerational equity has been described in many ways, however, for this Aboriginal Cultural Heritage Assessment; the following definition from Beder (1996) has been used as it most closely relates to the views put forward by Registered Aboriginal Party representatives when discussing the landforms sites, archaeological and cultural sites and tangible and intangible cultural values relating to and within the Project Area:

“Intergenerational equity is a concept that says that humans 'hold the natural and cultural environment of the Earth in common both with other members of the present generation and with other generations, past and future' (Weiss, 1990, p. 8). It means that we inherit the Earth from previous generations and have an obligation to pass it on in reasonable condition to future generations”.

The idea behind not reducing the ability of future generations to meet their needs is that, although future generations might gain from economic progress, those gains might be more than offset by environmental deterioration. Most people would acknowledge a moral obligation to future generations, particularly as people who are not yet born can have no say in decisions taken today that may affect them.

In terms of impact on Aboriginal cultural values the registered Aboriginal parties have participated in a process of considering:

- The Project constraints;
- Project objectives and requirements;
- Project Impacts both direct and indirect;
- Cumulative impact;
- Management measures – *in situ* and relocated;
- The need for conservation of landforms and sites of extremely high cultural value;
- Care and control considerations; and
- Intergenerational equity.

Issues of cultural sensitivity relating to one area within the Loders Creek complex and consideration of the general violence which has occurred throughout the Hunter region over time generally, were also discussed, with precautionary principle management measures developed. These included:

- Protocols for managing Aboriginal burial sites should they be found during salvage and mining activities;
- Protocols for managing impacts to totemic animal habitats should they be found to occur;
- Protection of Category 4 archaeological sites located beyond the Project's disturbance footprint, including 19 surface artefact sites, and 7 isolated finds; and
- Development of an intergenerational equity strategy which supports access to Country, with conservation areas provided beyond active mine or exploration leases.

They also sought strengthening of cultural practices programs including but not limited to:

- Protection of sites within the Project area, including Loders Creek grinding grooves;
- Provision of a land based conservation outcome to better provide access to Creation Story Places and cultural significant areas within close proximity of the Project area -in the Broke and Bulga Region;
- Purchase of culturally historically and scientifically significant land with associations to Creation places and the Project area;
- Adequate contribution towards CA area land management;
- Aboriginal ownership of Conservation Agreement (CA) area;
- Provision of assistance with the development of registration applications and supporting information for these highly significant regional sites to be nominated as "Aboriginal Places" cultural landscape features of importance especially as they relate to Creation stories- examples of places of very high cultural values included Lizard Rock and Baiame cave;
- Development of an educational DVD to record the cultural knowledge of the area including the cultural context and relationship to significant Dreaming sites, and the teaching resources within the proposed Wollombi Brook Conservation Agreement (CA) area;
- Development of digital media for maximising the revival of the Wonnarua Language; and
- Assistance with logistical access (transport) to Creation places of significance within in the Broke Bulga region (external to the Project area).

6.5 Project Rationale

OEH (2011) guidelines state that an ACHA report includes the following:

“Justification for any likely harm, including a discussion of any alternatives considered for the proposal. This must demonstrate how all feasible options to avoid or minimise harm were considered”.

Cultural impacts and issues identified from registered Aboriginal parties' engagement in relation to both the Project, and the existing mining operations past assessments at the BCC, have been considered in the Project's design. BCM presented information on Project rationale and constraints to the registered Aboriginal parties during Stage 3 of the ACHA consultation process (refer to **Appendices B1 and B2**).

The options and alternatives developed in the Project design process were developed through a risk-based management approach that aimed to maximise resource extraction efficiency and optimise the use of existing mining infrastructure, whilst minimising impacts on the environment and community. Further detail on the project design and alternatives are detailed in **Section 2.12** of the EIS.

The key issues considered in assessing the viability and feasibility of various alternatives and developing the final Project design was:

- Minimising noise, dust and visual impacts on the surrounding community over the life of the Project;
- Financial viability of the BCC including optimising the interface between the Bulga Underground Operations and Bulga Surface Operations;
- Potential impacts to Aboriginal cultural heritage and historic heritage;
- Minimising impacts on biodiversity and water resources;
- Minimising social impacts, including the potential loss of agricultural land; and
- Future landform and potential land uses following closure of the BCC.

Though the project design aspects minimises the impacts of noise, dust and visual amenity, there have been some existing Aboriginal cultural heritage sites which could be avoided and others which could not be avoided. Direct impacts proposed in the full approval scenario include those sites identified in the disturbance area of the Project. This includes various site complexes including artefacts sites, one scarred tree and two sites with associated grinding grooves.

Below is a short explanation of why there will be likely harm to these sites.

6.5.1 Mining of the East Pit – Proposed Direct Impact on Loders Creek Grinding Grooves Site Complex

The proposed mine design is based around limiting noise, dust and visual impacts on the communities of Bulga, Broke and Milbrodale which are located to the south of the BCC. In order to minimise these important health and amenity impacts, the mine has been designed to mine deeper largely within the existing disturbed area and not mine further west towards these communities. In order to have a viable Project, an additional resource of approximately 200 Mt ROM coal was required that could be extracted at a similar production rate to the existing approved surface operation (i.e. between 9 and 12.2 Mt/a ROM coal).

Various mine plans and mining methods were considered by BCM in the Project design phase including different mining domains (pit shells), emplacement area options and infrastructure locations. In assessing

these designs, the underlying constraints were limiting mining to the existing western extent of the open cut pit to manage amenity issues and the extraction of sufficient resources at an acceptable production rate to maintain a viable Project. The assessment of the various options available identified that mining of the Loders Creek area was unavoidable in order to maintain the viability of the Project. While this conclusion was based on a number of factors, the key issues were associated with the inability to develop a mine plan (despite numerous investigations) that would allow the extraction of the deeper coal resources which were critical to the viability of the Project, without mining the East Pit area which impacts on the Loders Creek grinding grooves. In order to access the deeper seams, a large section of overburden above these seams needs to be removed. The mining of the East Pit area (refer to **Figure 20**) is therefore required to maintain production, equipment and staffing levels throughout the life of the Project while this overburden is removed; not doing so would affect the financial viability of the Project. The East Pit area therefore needs to extend into the Loders Creek area to implement the Project.

6.5.2 Building of the Noise and Visual Bund – Direct Impact on the BMU1 Grinding Grooves Complex, B6 Potential Scar Tree & Associated Artefact Complexes

A set of grinding grooves (BMU1) are located between Charlton Road and the Whybrow Highwall. Bund designs were considered to minimise impacts on BMU1. However, significant water management issues would arise as a result of the development of any revised bund. Additionally, subsidence from the approved Bulga Underground Operations will eventually destroy this set of grinding grooves, even if avoided by the bund. Considering the already approved level of impact and the requirement to develop a noise bund to the south of the operation in a limited amount of area, the decision was made to place overburden over the area currently containing the BMU1 Grinding Groove site.

6.5.3 Benefit of the Current Project Design

Whilst it is acknowledged that the Project will have environmental and social impacts, including impacts on features of aboriginal cultural heritage, BCM has endeavoured to minimise these negative impacts through project design and proposed mitigation and management measures which will be implemented if the Project is approved. The Project will provide significant benefits at a local, regional, State and national level including:

- Allowing the extraction of additional 200Mt of ROM coal through mining deeper and largely within the existing footprint, with resulting royalty revenue to the State Government;
- BCC noise impacts are predicted to significantly reduce over the life of the Project;
- The mine is able to create a better final landform for closure with a smaller final void surface area than the existing approved mine, hence creating a larger area to be used post mining for activities such as biodiversity enhancement or agriculture;
- The Project will be offsetting ecological impacts, resulting in expansion of existing conservation areas;
- Continued direct employment of approximately 700 full time employees and indirect employment of an additional approximately 1750 people;
- Creation of approximately 300 additional construction jobs (peak) over the 3 to 4 year construction phase of the Project with a total employment generation during the construction phase (both direct and indirect) of approximately 800 jobs;

- An estimated \$410 million per annum of economic activity in the regional economy from the Project; and
- A total increase in the undiscounted taxation and royalty revenue stream flowing to the NSW government estimated to be \$1.76 billion over the life of the Project

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7 Aboriginal Cultural Heritage Management Strategies

On the basis of the Aboriginal cultural significance values identified within the Project area by registered Aboriginal parties and through historic research and archaeological investigation, and the understanding of likely impacts to these values if the Project is approved, an Aboriginal cultural heritage management strategy is developed and detailed in this ACHA report. Reflecting registered Aboriginal parties input, this strategy includes two scenarios: a 'no Project approval' scenario, and a 'Project approval' scenario.

Management options and recommendations for both scenarios have been informed by registered Aboriginal parties views on appropriate management of places and specific sites given their cultural significance, and where these values related to traditional knowledge and attachment, the recommendations of Traditional Owners and Knowledge Holders has been have been considered in accordance with the *Aboriginal cultural heritage consultation requirements for proponents* (DECCW 2010a) guidelines. This approach not only demonstrates compliance with the DGRs, but also ensures that informed decisions are made regarding cultural heritage management outcomes in the context of cumulative impacts and the obligation to address the principle of intergenerational equity. This reflects a fundamental aim of the NP&W Act (Section 2A), which identifies the following objective:

"...conservation of objects, places or features...of cultural value within the landscape, including, but not limited to...places, objects and features of significance to Aboriginal people ..."

An important part of the process in developing management options and recommendations was also consideration of their influence on achieving long term conservation outcomes which support the protection of tangible and intangible Aboriginal cultural heritage values, providing an environmental and cultural legacy for future generations. Conservation and management options were considered for their overall ability to demonstrate intergenerational outcomes.

7.1 Intergenerational Equity Outcomes

In considering the influence of management measures on long term conservation and intergeneration equity outcomes, which considers both direct and indirect impacts and pressures on Aboriginal cultural heritage, the *Australian State of the Environment Report* (SoE Report) (Australian Department of Sustainability, Environment, Water, Population and Communities 2011), was reviewed. The SoE Report includes reference materials relating to Indigenous heritage in Australia. In considering 'Pressures on Indigenous Heritage in Australia', the report identifies that Aboriginal heritage faces the following two main pressures, both of which result from European settlement:

- One is a direct pressure on the Aboriginal community, being the disruption to Aboriginal knowledge and culture; and
- The other is a pressure on Aboriginal cultural heritage areas and Country, being the disturbance or destruction of sites due to urban or industrial development, including resource extraction.

The SoE Report also identifies the pressures on cultural heritage conservation outcomes nationally. These pressures include climate change; population growth and economic growth which create a range of general pressures on Australia's heritage and some specific pressures on natural, Indigenous and historic heritage.

Review of some of the national drivers which are reported to be causing conservation pressures on Indigenous cultural heritage further informed development of this ACHA's Project conservation

management measures; with BCM considering the findings of the ACHA and management measures suggested by all registered Aboriginal parties including the PCWP and the WP, especially in relation to the development of intergenerational equity management options and the context of external current and future conservation pressures such as climate change factors affecting erosion.

The second government agency model considered and applied to inform this ACHA was the Office of Environment and Heritage cultural and wellbeing tool- *Strengthening Aboriginal Community Wellbeing Toolkit* released in June 2012, which identifies eight characteristics of Aboriginal cultural wellbeing. **Figure 23** identifies the eight principles of Aboriginal Community wellbeing.



Figure 23: Principles of Aboriginal Community Wellbeing

Source: *Strengthening Aboriginal Community Wellbeing Toolkit* (OEH 2012)

All eight principles include a set of criteria. BCM and Connect for Effect reviewed the criteria and analysed these against the findings of the consultation values assessment and predictive impacts to Aboriginal cultural heritage if the Project is approved.

As a result of this assessment process, five of the eight wellbeing principles have been identified as priority areas most aligned to the context of the Project, the social, historic, aesthetic and scientific values and understanding of direct and indirect values. The five principles most aligned are described as the following:

1. Access to Country;
2. Sense of Community;
3. Cultural and Identity;
4. Leadership, empowerment and influence; and
5. Education and learning.

Combined, these reference materials in conjunction with the consultation outcomes with registered Aboriginal parties and Project specific information, have informed the development and evaluation of management measures considered for the Project, for both a 'no Project approval' development scenario and a 'Project approval' development scenario; with particular focus on intergenerational equity.

Adoption of these government agency models also resulted in the identification of the following principles to guide the Project's management outcomes:

- a) Align to the principles of the *Strengthening Aboriginal Community Wellbeing Toolkit* (OEH 2012);
- b) Align with findings from this ACHA;
- c) Acknowledge and include weighting of values weighted to Traditional Owners and Knowledge Holders management options;
- d) Achievable for practical implementation;
- e) Includes a mixture of short term and long term implementation;
- f) Acceptable to both regulatory authority and registered Aboriginal parties;
- g) Land based intergenerational equity conservation area outcomes preferably be off lease with non-restricted access;
- h) Land based intergenerational conservation areas are permanent and include provision for management; and
- i) Show merit on value for money.

The following principles were also identified to guide the Project's land based intergenerational equity conservation management outcomes, reflecting (but not limited to) the following considerations:

- a) Access to Country with opportunity for cultural knowledge sharing, access for the Aboriginal community generally however, underpinned by protocol;
- b) Cultural values linked to the Project area values findings;
- c) Cultural land access certainty and generational certainty of land tenure and access;
- d) Land provides opportunity for registered Aboriginal parties including Traditional Owners and Knowledge Holders to share cultural knowledge to the next generation; and
- e) Location to Project area and Creation places identified as important in the region.

The following section identifies suggested management measure options.

7.2 Registered Aboriginal Parties Management Measures

An integral and important part of the Aboriginal cultural heritage management process is consultation with registered Aboriginal parties to seek input into the development of management options and recommendations. For the Project, all Aboriginal registrants were afforded opportunities to identify mitigation and management options, care and control considerations and intergenerational equity (cultural legacy) options to inform the consolidated management options presented in this ACHA report.

The PCWP provided to BCM their set of management measures for consideration, an extract of which was provided from BCM to Connect for Effect for inclusion in this ACHA report. These recommendations are the only component of information drawn from their ACHA report and included to inform the consolidated set of recommendations detailed in this ACHA.

The WP also provided to BCM their set of management measures for consideration, an extract of which was provided from BCM to Connect for Effect for inclusion in this ACHA report. These recommendations are the only component of information drawn from their ACHA report and included to inform the consolidated set of recommendations detailed in this ACHA, as all other content is non-disclosed.

Connect for Effect has also included the management recommendations and statements provided by registered Aboriginal parties participating in this ACHA process, provided by the WLALC Wanaruah Local Aboriginal Land Council, the WTC (whose statement includes those registered Aboriginal parties who chose to provide a consolidated set of recommendations via the WTC) and recommendations provided through workshop discussions with registered Aboriginal parties who identified historic and contemporary attachments to the area in the ACHA consultation process.

Reflecting the input of Aboriginal registrants, specifically concerns raised by the WLALC that report recommendations would not reflect the recommendations of registered Aboriginal parties, Registered Aboriginal parties comments on management have been included and integrated into this section in full, in the following tables:

- **Table 10** lists the management statements and recommendations made by the PCWP, provided by BCM as a disclosed extract from their separate and non-disclosed ACHA report;
- **Table 11** lists the management statements and recommendations made by the WP, provided by BCM as a disclosed extract from their separate and non-disclosed ACHA report;
- **Table 12** lists the management statements and recommendations made by the WTC, disclosed for inclusion in this ACHA report;
- **Table 13** lists the management statements and recommendations made by the Wanaruah Local Aboriginal Land Council, disclosed for inclusion in this ACHA report; and
- **Table 14** lists the management statements and recommendations made by registered Aboriginal parties who identified attachment through historic and contemporary connections, disclosed for inclusion in this ACHA report.

A range of registered Aboriginal parties' statements on the impact of the Project, if approved, are provided below.

All additional registered Aboriginal parties' comments on management options and outcomes provided in the draft ACHA review period will also be incorporated and considered in the final report.

**Table 10: Plains Clans of the Wonnarua People, Management Statements and Recommendations
(Extract provided from PCWP to BCM for inclusion)**

Plains Clans of the Wonnarua People Statement
Replacement/substitution of the variously compromised voluntary Aboriginal cultural heritage conservation zones within the BCC with off-site purchase and/or dedication of suitable land for the traditional use of the PCWP including the oral transmission of traditional ecological and ceremonial knowledge. Any off-site land purchased or leased for such purpose should: - Be systematically assessed for its PCWP specific cultural values; - Be supported by the employment of an environment/habitation officer, preferably obtained from the PCWP to facilitate the ongoing management of the land; - Have contingencies to ensure adequate funding of all necessary land management; and - Have security of tenure and management so that the cultural values of the selected area can be conserved and maintained in perpetuity.
Further systematic assessment and/or recording of cultural resource values within the Project area prior to mine clearance works. This should be conducted with the view of establishing 3D digital models of the existing cultural landscape as an archival record; and future resource for possible use in the development of interactive teaching materials for young Wonnarua without past, current or likely future access to the mine site.
Realistic evaluation of the current and future landscape contexts of in-situ Aboriginal cultural resources including dynamic 3D landform modelling of all likely future mine-induced landform modifications in and around all sites of Aboriginal cultural value. Fundamentally active mining is perceived by the PCWP to have a wholly negative and intrusive effect on the Aboriginal cultural landscape of the Project area. To date conservation of rare site types within the active mine area (such as the grinding grooves on Loders Creek and those grinding grooves adjacent to Charlton Road referred to as BMU1) has: compromised their aesthetic and/or amenity values. fragmented and isolated these sites both from each other and also from their wider cultural landscape contexts; made access to them problematic and in both cases subject to the vagaries of mine site activities; in the case of BMU 1 resulted in the physical modification and harm to the sandstone surface upon which the site has been formed (albeit under legitimate AHIP arrangements). It is not clear therefore that the <i>in situ</i> conservation of such sites has to date and/or will in the future achieve intergenerational equity outcomes. Consequently the PCWP considers it imperative that the conservation of Aboriginal archaeological and cultural sites within this mining landscape should be considered in the context of any current and likely future intrusions.
Commitment in all current and future mine plans to positive communication of Aboriginal cultural values across the Project area. To date Aboriginal archaeological sites that have remained <i>in situ</i> have been fenced and signed "Do Not Enter." so as to enforce avoidance and thereby mitigate harm to Aboriginal objects. It is the view of the PCWP that to date this negative signage has: Failed to actively communicate any positive message regarding the value of this heritage to anyone; and provided no explanation as to why each particular fenced area requires protection (including no explanation of the nature and extent of the material culture and any of its archaeological rarity, representativeness and/or research values, nor of its inherent cultural

Plains Clans of the Wonnarua People Statement

values to Wonnarua People);

- b. Embedded an operational strategy of cultural heritage site avoidance that has led to the development of "an out of sight, out of mind" approach to *in situ* archaeological site management and consequently resulted in the deterioration of these sites;
- c. Provided no indication of the positive commitment of Xstrata Bulga Coal to the recognition and protection of Aboriginal cultural heritage. In this the PCWP means that the fencing and signage has been erected to meet regulatory requirements for Aboriginal cultural heritage protection and neither enhances or communicates any message that Xstrata Bulga Coal has fundamental respect and concern for the heritage of the Wonnarua people (and we note that an effective change in message would/could/should be in accord with any Reconciliation Action Plan (RAP) being development for the Project; and
- d. Allowed for the fragmentation of the Aboriginal cultural landscape of the Project and the compartmentalisation and /or isolation of its component parts particularly through the arbitrary placement of fencing and signage around sites.

Irrespective of the prior, current and ongoing status of any and all Aboriginal material culture within the mine site a priority commitment should be made to the development and implementation of a strategic interpretative signage program across the BCC. This signage strategy should aim to actively recognise the full range of traditional, historic and contemporary Aboriginal cultural values in this landscape. The strategy should be iterative and able to accommodate both the active mine area for the life of the mine; as well as those areas to be sequentially subject to rehabilitation.

Financial and logistic support for the development of education materials and extension programs using PCWP cultural knowledge including;

- a. The production and development of a primary school reader series aimed at the NSW Schools K-6 Human Society and Its Environment (HSIE) syllabus that introduces primary school children within the Upper Hunter (and beyond) to the concepts, contents and values of Wonnarua cultural and ecological knowledge. A targeted focus would be on the use of these materials to enhance the relevance of literacy aids for Aboriginal schools within the Hunter region;
- b. The development of novel Aboriginal cultural awareness training packages that allow for the focused use of materials and knowledge provided by the PCWP. A key component of this training would be their development, implementation and delivery by Tocomwall (as support for the PCWP). The employment of an Aboriginal cultural awareness officer as part of the HR management system across the mine is a warranted component of any ongoing support for this type of training; and
- c. The development of horticultural extension programs that enable Aboriginal people to be trained and actively participate in mine rehabilitation and revegetation works.

Support for investigations of the potential horticultural use of plant species of known Aboriginal use and or value for cultural landscape rehabilitation as an integrated component of mine site rehabilitation across the Project. This would include pre-emptive retrieval of seed at the time of land/or before vegetation clearance works occur.

Plains Clans of the Wonnarua People Statement

The development of contractual arrangements for employment of PCWP members in on-ground works such as erection of signage, fencing, tree planting, management of revegetation, feral animal and weed control, fire mitigation and hazard reduction management. The PCWP recognises that Tocomwall has the capacity to manage such contractual arrangements and has the support of the PCWP to do so within the Hunter Valley.

Commitment to and support for the leverage of funding from the NSW Minerals Council (from the apparently largely inactive Upper Hunter Cultural Heritage Trust) to enable the consolidated return of Aboriginal cultural heritage objects collected across the BCC and stored at various times through Care and Control arrangements in such diverse places as:

- a. The Australian Museum;
- b. The Wonnarua LALC;
- c. The offices of archaeological consultant firm Umwelt Australia; and
- d. BCC Mine site Offices.

Commitment to and support for the use of some of the previously agreed funding (i.e. for the establishment of a Keeping Place or Wonnarua Cultural Teaching and Learning Centre) by XCN to investigate and implement culturally appropriate and in perpetuity arrangements for the repatriation of Aboriginal objects to the Wonnarua People. The PCWP do not want objects returned to Wonnarua Country if they are not going to be properly curated and/or protected and/or conserved in a place that will not be subject to any development pressures into the future.

These do not nullify the PCWPs wish to see a fully funded and operational Wonnarua Keeping Place and Teaching and Learning Centre established within the Singleton LGA. In fact the PCWP see this as being vital to any strategy developed to address the cumulative impact of mining on their heritage. Consequently the PCWP believe that firm commitments not just to the funding of such a building but to all necessary actioning to get such a structure built is now required. Strategic support from Bulga Coal Management and/or XCN to access suitable funding from other of the mines in the Valley via the NSW Minerals Council, would be seen as appropriate to help achieve recompense for the loss of the cultural landscape of the PCWP and would be one measure that would afford appropriate redress of cumulative impact and allow for some achievement of intergenerational equity.

If located and repatriated to the Wonnarua People the extensive amount of stone artefacts that have been collected and removed from the Project should be analysed to achieve a synthesis of data across the Project. This analysis should be funded by Bulga Coal and directed as a research program by the PCWP. The research should be collaborative and designed to answer specific questions that the PCWP have with respect to our heritage. Likewise with the advent of improved 'non-invasive' geochemical technologies and better understandings of the requirements for 'Destruction' versus 'Salvage' by the PCWP, there are opportunities to conduct research into the nature and source of stone artefacts found within the BCC, which would also be innovative at a purely technical level and hence able to contribute to the pursuit and practice of archaeological science.

*Refer also to non-disclosed recommendations **Appendix C1**.*

Table 11: Wonnarua People Management Statements and Recommendations (Extract provided from WP to BCM for inclusion)

Wonnarua People Statement

Our consultation with Wonnarua Stakeholders, through this process has made it clear the grinding grooves that are impacted by this development are of extremely high significance to our people.

The Wonnarua people who are connected to Sarah Madoo deem the axe grinding grooves within the Bulga mine site as being of very high significance there are no other recorded sets of Axe Grinding Places left in the Bulga or Broke Village area. There are several past Archaeologist reports that include Aboriginal peoples input and they demonstrate that these areas have been previously identified as having high importance. The sites within the Bulga mine site belong to the region as a whole and tell the story of Aboriginal occupation over past generations. Therefore until the whereabouts of other Axe grinding grooves are disclosed and registered, the Bulga axe grinding grooves are regarded as irreplaceable.

We cannot, under any circumstances agree with this important area being destroyed by the construction of a bund over the top which is site BMU1 Grinding Grooves. We view the protection of the grinding grooves as being non-negotiable, in terms of their cultural importance to the Madoo Wonnarua people. We believe that the axe grinding sites need to be conserved because they are examples of places where men sat down and carried out tool making and Axe Grinding which helped them during their daily hunting and gathering activities.

This is a draft assessment and we understand that further discussion needs to happen in relation to the proposed Project and we also understand that the visual bund needs to will affect the axe groove area as per the development plan.

We would welcome a meeting with the Bulga Coal management to workshop what we can do to protect this area from impact.

There was also discussion about a better way to approach archaeology. Our group would like to see an Aboriginal dig, where we salvage our heritage sites, our way, by collecting artefacts in a cultural manner and controlled by Wonnarua Aboriginal people. What we mean is that if a site has to be destroyed then we should be in control of the excavations, test pits and salvage work as well as the analysis. This means that the destruction will be done under Traditional Wonnarua Practices and not by an Archaeologist or scientific approach. We also recommend that all of the other Aboriginal stakeholders should be employed through the WNAC or Wonnarua people so the integrity of Traditional people speaking or working in our country is maintained.

Any areas inside of this development that will be affected by the proposed new infrastructure will need to be fully retrieved by archaeological hand excavation methods. We need to have further input into what size the excavations are so that we feel that we have given justice to the sites by trying to retrieve all of the objects.

The Wonnarua People wish to do their own Aboriginal Salvage of the sites that are inside of this development and therefore would submit a proposal to Bulga Coal for all of our Wonnarua People stakeholders (Sarah Madoo Descendants) to be involved in an Aboriginal salvage of our heritage. We would like further discussion on this issue.

Our Wonnarua stakeholders also agreed that we should be involved in the artefact analysis of all retrieved material from the archaeological excavations to gain more experience in terms of the archaeological process, after the sites have been collected or salvaged, as per the current Office of Environment Guidelines.

Wonnarua People Statement

We believe that all of the sites recorded and excavated need to be returned back to the land that they came from and buried back on country by what we call the Back to Country model. This can happen as an on-going process over the life of the mine as the landscape is under rehabilitated.

In the interim, our preference is for the artefacts from all of the sites to remain on the mine site in a shipping container. This will allow for easy access to the cultural material when the time comes to return them to the landscape.

There is opportunity for ongoing support for a Wonnarua heritage unit and for Wonnarua cultural rangers inside of this proposal.

What we mean is a funded Wonnarua heritage unit that can employ two to three people to work for the Wonnarua Nation Aboriginal Corporation, whose duties were to work for the Wonnarua people in the field during field assessments and to provide informed reports back to the WNAC governing committee regarding cultural heritage matters in the region. Also this group would gain training on the job and through the TAFE system and OEH in the proper recording skills that are needed to provide cultural heritage assessments.

The term cultural rangers is used to describe a team of people who are trained in multi tasks so that they can be called on to do a whole range of different tasks for the Wonnarua people through the WNAC.

Some of the skills would include land management, fencing , tree planting , Aboriginal site identification, site management, cultural site interpretation tours, cultural mapping, report writing. Again this would be open to discussion with the developer.

Land offset has traditionally been set aside by mining companies as offsets required for planning approval but this land is not suitable as a cultural offset. Land within a mine lease does not create suitable value. It is not accessible and too frequently has itself succumbed to a mining purpose. It is not owned or managed by Wonnarua People.

Wonnarua People place a great value on land especially in its natural state. It is through the natural landscape that Wonnarua People find connection to country. Mining destroys land and through the destruction of land, so connection is lost. Land offsets therefore are a most appropriate way of providing generational equity.

Land offset needs to be done in a way that suits not only past generations but future generations. It should be owned by Wonnarua people and used for, but not restricted to, cultural purposes. Land provided by offset may also be used for social or commercial purposes. Indigenous business promotes culture by bringing Wonnarua families together and providing economic opportunity in a way that recognises the role of traditional culture and the evolving culture of Wonnarua People living in an urban society.

Can Xstrata Coal or the Government provide us with a cultural off-set to allow our people to recreate or provide for the loss of this area? This will preserve areas of natural landscape and tracts of natural ecosystem containing native flora and fauna. It will serve as a teaching place and be an adjacent area where traditional connection is maintained. It will serve these purposes only if the off-set land is outside of the lease area, and able to be accessed and managed by the Wonnarua.

Wonnarua People Statement

The mine rehabilitation industry is a huge industry but to this point Wonnarua People and Upper Hunter Aboriginal people have benefited little from this work. The opportunity arises now because of the positioning achieved by the Wonnarua People and their demonstrated management abilities. Through this avenue Wonnarua People can achieve the economic advancement that has eluded mining companies in the past. This is a no cost option for Xstrata as rehabilitation is a planning requirement that has to be funded anyway.

Connection that is lost through mining, can be partially recovered by a new generation creating a new connection in their own way- by rehabilitating the country with native vegetation and particularly plants used in food and medicine by their ancestors.

Many of the species and their traditional uses have been recorded in this document. The study serves as a pre cursor to revegetation of the land. Moreover, this approach provides a significant economic for Wonnarua and all Aboriginal people living in the Upper Hunter Community. The Wonnarua People are in the process of establishing a business that will perform rehabilitation on mined land and this is expected to be operational from January 2013. Wonnarua People will provide opportunities for the broader Upper Hunter Aboriginal community to work in this enterprise. Wonnarua People should have the priority opportunity to revegetate and remediate their country which has been destroyed against their wishes and to create economic benefit from that process as well as employment for the whole community.

If our people were fundamentally involved in rehabilitation, however, new connection is created. While this is not traditional connection, it is a form of reconnection that will be valued in time, both for its traditional and economic value. Mining companies are required to rehabilitate the land anyway, why not do that in a culturally sensitive way through the strategic intent to have Wonnarua people fundamentally involved.

The WNAC has developed a plan for a cultural park on land owned by it at St Clair Mission. Separate funding was anticipated for Stage 1, but this funding has not yet been approved and is not certain. Stages 2- 5 remain unfunded.

The St Clair property is the original site of the Aboriginal inland mission at Mount Olive and is culturally significant to Wonnarua people. A master plan provides for a hall, corroboree ground, cultural walk, rebuilding of a replica church and community gardens (on the site where Wonnarua worked in productive gardens nearly a century ago).

The preliminary work on the park has not been commenced due to funding not being approved for the major item of infrastructure. Funding would enable implementation work to proceed.

Concept plan can be provided separately.

The Wonnarua Nation Aboriginal Corporation exists to represent the cultural and other interests of Wonnarua People and manages a number of agreements on their behalf. The WNAC has workshopped a cultural heritage strategy in cooperation with the Bulga Optimisation process. This strategy provides a set of implementation priorities around cultural issues that have been discussed but not strategised over many years. There is a limited budget to advance these issues and consequently much of the program remains unfunded. Key implementation priorities are indicated opposite - major projects are shown separately.

Wonnarua People Statement

1. Establish working arrangements and operating budget for WNAC Cultural Heritage Committee.
2. Complete Wonnarua family tree.
3. Record oral histories of Elders using modern media.
4. Form boundary committee to review and agree traditional boundaries.
5. Complete cultural baseline study.
6. Create possum skin cloaks with traditional stories on them.
7. Maximise revival of Wonnarua Language and develop educational products for modern media.
8. Maximise potential for management of cultural consultancy business.

These are been an annual event for many years but are a major use of existing resource. The reunion of Wonnarua People is a fundamental event in the protection of Wonnarua culture as it brings the mob together. Traditional culture, dancing and ceremonies are features of this event and the cultural content is growing. It is a great opportunity to teach cultural practices to younger generations. The event typically costs \$20,000 to hold as the expenses of Wonnarua People returning to country are paid each year. This uses up a significant portion of the WNAC operational budget.

The Wonnarua People have no way of coming together to address the loss of culture in a focused way. A healing centre would provide an avenue to deal with cultural healing required as a loss of culture as well as dealing with traditional men's and women's issues required by traditional lore and custom.

The healing required for loss of culture can incorporate a range of activities including recording by video, country to be destroyed, and recording stories for future generations. These stories should be housed in a central location to assist with healing, along with activities that promote that healing e.g. rehabilitation activities. This process will reinforce our identity, and provide spiritual healing and growth. It opens opportunities like the repatriation of the Morrison Collection and the preservation of a time capsule containing stories of current Elders and prominent Wonnarua People and events. Storage and retrieval of history using modern media. Creation of a suitable building or centralisation of activities at a suitable building. This may work hand in hand with the land offset opportunity.

Table 12: Wonnarua Traditional Custodians Management Statements and Recommendations.

Wonnarua Traditional Custodians Statement

The WTCs assert that the voluntary conservation zones within the BCC should be protected and cultural sites and associated artefacts remain *in situ*.

The proposed Voluntary Conservation area (VCA) Charlton Road is identified as having extremely high cultural value and the WTC seek the in perpetuity conservation of these areas with the land to be vested in the name of the Wonnarua people (regardless of entity/groups i.e. WTC, PCWP, WN or WP).

Arrangements/agreements need to include all Traditional Owner parties this may be one way of bringing everyone together. The VCA areas are a cultural gathering place- Wonnarua people need to come together and look after each other and look after the UH Aboriginal community.

This area has a rich cultural history and remains an area of good energy. The CVA area is part of the cultural areas and sites The WTC's representative Elder of Broke has custodial obligations to care for. The proposed area needs to be culturally assessed and mapped within a regional context.

Partnership between BCC and traditional people and the Wonnarua Local Aboriginal Land Council is required in order to ensure access is unimpeded while the obligations of BCM to manage the lands appropriately are demonstrated.

The Aboriginal community need to have certainty over our cultural and heritage and this includes security of tenure and management so that the cultural values and the oral traditions of Wonnarua people are maintained and handed down to the next generation of Wonnarua people.

A land management trust is required to ensure that appropriate management arrangements may be made.

Further cultural assessment is required before any further mining occurs in the Project area. A 3D digital model of the existing cultural landscape is needed in order to retain a permanent record of the attributions of the place.

Ground penetrating radar may be required to examine an area within Loders Creek complex given its taboo and conflict history. Protocols need to be established between all traditional people in order that the Wonnarua people work together to care for our cultural heritage. Recording needs to be provided to Traditional Owners and the WLALC and needs to be archived in the State Library and IATSIS for future generations.

The Project area is of high cultural significance because of its proximity to highly sensitive and spiritual places of significance. It is a fringe area visited and at times occupied by several tribes including Awabakal and Kamilaroi people. We need to have areas that are accessible and areas protected which are important to us. We need to continue and regenerate our cultural practices not just spend all our energy of discussing loss and destruction.

We need serious commitment with set timeframes-with project mining contingent on Xstrata fulfilling promises (consent conditions) priorities need to put culture and protection first –not mining –Included in recommendation.

Xstrata needs to change the way it works –there needs to be a culture of respect recognition and consideration of our rights-mines need to demonstrate their legal obligations to protect. It's not about relocating everything and salvaging removal of our ancestors' footprints.

Wonnarua Traditional Custodians Statement

We need to film and record the topography and recreate the creek bed and water systems which keep our ancestors grinding grooves protected. We do not want to have them covered in silt and mud inaccessible nor in an active do mine site area.

The area is taboo and needs to be protected if the mine is approved then the Loders creek grinding grooves and all the associated artefacts in that complex needs to go together. We do not want the Loders Creek grinding grooves places in the VCA Charlton Road area – that area is a special place a positive place and we don't want bad things to be placed in good places...we don't know what would happen.

If possible the Loders Creek grinding grooves need to be moved to another part of Loders Creek.

Protocols needs to be developed This is a men's area and this needs to be respected and planned for.

We need to be able to develop and fulfil our cultural obligations and lore of enacting regeneration/removal and healing (the creation of other spiritual areas in which we can place our cultural heritage In order to do this we do not want to see the placement of grinding grooves and scarred trees in an artificial way. We need to recreate the setting and make the new location of our cultural heritage as culturally relevant and spiritual as possible.

The BMU 1 Grinding grooves should not be moved. They are best left *in situ* protected with geofabric and buried. Appropriate signage and story is required so that the significance and the meaning of the place is not forgotten or misunderstood. All traditional people need to be involved.

There is no story and real meaning of a place. Meaningless numbers and jargon is used to describe our cultural heritage places- BMU1, Mushroom compost. This does nothing to pass down tradition or story or share the meaning of our culture with non-Aboriginal people.

Interpretive initiatives should be developed and shared. The destruction of our places and the remnant cultural fabric within and external to these places are at risk of being lost. The interaction between our ancestors and the land and waters needs to be visible in the landscape.

The impact to our cultural heritage and the landscape by mining is highly destructive and the land changes profoundly change the cultural meanings and cultural compass of our people. We need to be active agents in the design management and control of our traditional lands especially in the phase of recovery.

We have bush skills and fire management skills we have insights and obligations to our animals and birds. We need to be part of the decision making. We need to also work on country and create Aboriginal footprints in an area which is so changed.

The land is 'buggered' by mining – open cut mining has a devastating effect on our cultural herniate and cultural values.

We need tangible and commercial ways in which we can once again be part of the management and influence the future land use opportunities which arise.

A pilot for regeneration programs which concentrate on normalizing the bush and creating a balanced

Wonnarua Traditional Custodians Statement

ecosystem is urgently required. The skills and insight our elders have is a wasted resource. The need to innovatively correct this imbalance is needed.

While the WTC obviously seeks to increase the opportunities for Wonnarua people (all Wonnarua people) to participate in work on Country programs we do not regard ourselves to be the (only) people to participate in these opportunities. It is important that we as Wonnarua Traditional Custodians are afforded opportunities to work our lands, pass down our histories and our culture, we also believe that other Aboriginal people need to be part of this journey. We need to fulfil our traditional rights and obligations, and community registered Aboriginal parties for overall community wellbeing.

Traditional people need to work on Country we need to try and protect and revitalise it. We need to be part of seed collection and flora and fauna auditing and recovery. We need to be able to practice our traditional skills and share these wisdoms with the convergence of western and new sciences. Opportunities to provide our children with the skills of the western sciences in order to influence old and new understandings is required.

The WTC is progressing to become a Prescribed body corporate to formalize our entity. The core function of this body is to realize the full extent of our Native Title obligations and rights. We seek policy implements within XCN in order that there may be discretionary funding and tendering opportunities afforded to all Wonnarua people (i.e. the groups PCWP, WP, WN and WTC). We represent the descendants of 6 apical ancestors including the descendants of Emily mother of Henry Harry Taggart - with Kevin Taggart a Wonnarua Traditional Custodians Elder of Broke with an intimate cultural and historic knowledge of the Broke and Bulga area.

The WTC believe that the management plan development and its implementation should be guided by Traditional Owners and the Wanaruah Local Aboriginal Land Council and other community representative who are able to contribute positively to the protection and conservation of our cultural places and cultural sites important to Wonnarua people -as a community representative with statutory rights and obligations.

We want active participation and the right to be part of strategic decision making we do not want to be passive in the protection and advocacy of our cultural heritage and our cultural landscapes of importance.

So many of our creation places are not protected as a place. There is latent opportunity to undertake regional mapping in order to put forward a case for sites to be protected. Lizard Rock and Baiame are important places'.

The WTC has included a list of sacred places which could be considered as an important part of this program.

Access to the trust fund which is supposed to be managed by the Minerals Council needs to be addressed. XCN is well placed to advocate for this matter to be addressed. All Wonnarua people need to be part of the ongoing dialogue and decision making regarding this.

Wonnarua Traditional Custodians Statement

WTC seek active participation and a role in managing salvage programs. This role needs to be shared with other Traditional Owners.

Salvage programs need to be meaningful and purposeful- research design questions should be developed right at the start of developing an ACHMP.

XCN needs to make the successful implementation of the ACHMP a performance based requirement of its personnel. WTC members (as would other Wonnarua people seek to have an active role in developing delivering and creating highly interactive training programs for Xstrata personal to build their confidence and confidence in maintaining monitoring and measuring positive Aboriginal cultural heritage outcomes. XCN should set aside a lessons learnt and improved planning policy culminating in an annual conference between Traditional Owners, the WLALC Knowledge Holders and XCN staff at both an executive and project operations level. XCN should report back to Traditional Owners and other registered Aboriginal parties an overview of their implementation and challenges over all their mining sites within the Wonnarua Boundary in order to develop an ongoing improvement to performance and understanding.

The WTC would like serious consideration of a teaching and cultural camping and sharing space – we recommend Wollombi Camping grounds currently owned by Yarnteen.

Refer also to non-disclosure management measures **Appendices C3 and C4.**

Table 13: Wanaruah Local Aboriginal Land Council Management Statements and Recommendations

Wanaruah Local Aboriginal Land Council Statement
An Aboriginal Cultural surface and subsurface investigation be conducted by the Aboriginal community and that the Aboriginal community be consulted over the scope of the Cultural sub surface investigation.
The artefact analysis, of salvaged objects, include participation from the Aboriginal community, and it be expedited to be completed in such a way as to help inform the Cultural investigation.
That any research and salvage works be rostered equally among the stakeholders so all get a fair go at being involved if they choose to be.
That there be a code of conduct and dispute resolution process that applies to Stake holders, consultants and mine staff.
That the Aboriginal Community be given employment opportunities in all areas of the mining process through Aboriginal specific traineeships and employment programs. The target numbers and time frames to be agreed mutually between mining company and stakeholders before they start the destruction of cultural sites and areas.
That proponent assist building capacity in Aboriginal Companies to meet the compliance needs to become contractors to the proponent in areas other than Culture and Heritage.
That the proponent funds the building of a Keeping Place and learning centre for the Aboriginal Community in the Upper Hunter.
That all existing offset areas for Bulga Coal Management Project be protected in perpetuity and a management plan which includes access and management by the Aboriginal Community be implemented.
That an area of land not less than 50 Ha be set aside in perpetuity as a cultural offset for the Aboriginal Community. The offset land is to be in an area freely accessible to the Aboriginal community and preferably with access directly to the Hunter River or other permanent water source. This will enable Elders to conduct cultural activities in a culturally appropriate manner.
That the offset land is not part of any other offset (e.g. part of a biodiversity offset) without the support of the Aboriginal Stakeholders or the support of Wanaruah LALC.
That the proponent gives \$500,000.00 per year for the life of the mine to a Trust for Aboriginal Employment and education programs in the Upper Hunter, and that Wanaruah LALC be on the board of said trust/s with the power to veto projects they deem not worthy.
That the proponent gives \$200,000.00 per year for the life of the mine to a Trust for Delivery of Aboriginal Health Services in the Upper Hunter, and that Wanaruah LALC be on the board of said trust/s with the power to veto projects they deem not worthy.
That any residential houses needing to be vacated due to mining activities, be relocated in a project to enable an increase in the availability of Aboriginal Social housing in the Upper Hunter.

Table 14: Community Registered Aboriginal Parties Management Statements and Recommendations

Community Registered Aboriginal Parties Statements ¹²
Community registered Aboriginal parties repeatedly sought a non-development scenario in order to 'protect the Loders Creek grinding grooves' complex and other cultural landscape features and sites within the proposed disturbance area of the Project, while recognising the high levels of disturbance already undertaken within the landscape. (Comments providing during workshops held on 16.11.2011; 31.05.2012, 18.10.2012; 15.11.2012).
However if the Project was to be approved, Community registered Aboriginal parties sought to make comment to influence the approach to managing site specific impacts and to identify a range of intergenerational equity outcomes.
Community registered Aboriginal parties asserted that the voluntary conservation zones within the BCC should be protected and cultural sites and associated artefacts remain <i>in situ</i>. Community registered Aboriginal parties cited cumulative impact and the rate of impact to destroy approvals were perceived to be 'too much' and 'too frequent' and 'mines are never knocked back.'
Community registered Aboriginal parties identified the proposed VCA area Charlton Road¹³ as an area which has high cultural values, however registered Aboriginal parties seek certainty in tenure and unencumbered access.
Community registered Aboriginal parties identified land offsets as important, however also identified that offsets need to meet the following criteria: • Unencumbered access; • Available for a range of cultural experiences; • In perpetuity agreement in place; • Need to be confirmed as having high cultural values; • Need to be managed by Aboriginal people; and • Needed to be areas where children and families could go.
Recommendations included that a bond be paid by BCM to ensure that all ACHMP recommendations are implemented not forgotten.

¹² 'Community registered Aboriginal parties' are described in this ACHA report as registrants who identified as having historic and contemporary attachment. Comments in this table were provided during workshops held on 15.11.2011; 31.05.2012, 18.10.2012; 15.11.2012.

¹³ Registered Aboriginal parties identify the Wollombi Brook CA area as the VCA area Charlton Road the feedback from registered Aboriginal parties has not been amended to reflect their statements.

Community Registered Aboriginal Parties Statements¹²

Recommendations included 3D digital model of the existing cultural landscape is needed in order to retain a permanent record of the attributions of the place. (We) need to film and record the topography and recreate the creek bed and water systems which keep our ancestors grinding grooves protected. We do not want to have them covered in silt and mud inaccessible nor in an active mine site area.

Recommendations were made to improve the relationship and understandings between registered Aboriginal parties and XCN generally – citing that a coordinated and integrated approach should be applied to all their mines so that the cumulative impacts cultural values of the region as a whole could be understood.

There needs to be programs to look after the animals there is so much road kill-we need to look after our animals some are our totems- we are excluded from programs where we could really make a difference.

Comments included improved research questions and opportunities for learning in the field - Field learning should be an option for all.

The rejuvenation of the area using local Indigenous flora and seeds was identified as needed – comments included- Plants are resources and medicines. Bush tucker needs to be rejuvenated in these areas; and We need to be able to develop and fulfil our cultural obligations and lore of enacting regeneration/removal and healing (the creation of other spiritual areas in which we can place our cultural heritage In order to do this we do not want to see the placement of grinding grooves and scarred trees in an artificial way. And We need to assist in rehabilitation, this is a major role.

Recommendations for improved and workable management plans are needed. Management plans need to be easy to read and used as a guide there needs to be dispute resolution in the guides and Xstrata needs to be consistent across all its mines.

There must be a signed contract for the conservation of management zones, and that makes Aboriginal people the paid managers.

Community registered Aboriginal parties identified healing of land programs to be a way in which Aboriginal people could be involved actively in caring for Country instead of constantly being consulted to destroy artefacts and objects important to Aboriginal people. Wouldn't it be good if we spent just some of our time working with a mine to heal the land rather than salvaging artefacts before they destroy the Country.

Aboriginal parties need to be part of analysis of artefacts not just have them taken away and sitting for years at an archaeologists office.

We need protocols included in the ACHMPs- there is too much tension and conflict at times.

Community Registered Aboriginal Parties Statements¹²

Most Community registered Aboriginal parties also sought to protect Creation Places such as Baiame and Lizard Rock and other cultural features identified as having extremely high cultural values to the Community RAPs – statements included - I wish I could take my kids out there (Creation Places). It's hard to get young ones and the Elders out on country we need more opportunities to come together.

Loders Creek grinding grooves should be protected, it shouldn't be touched. It needs to be cleaned and looked after.

There needs to be sites officers employed for the ACHMP salvage program.

We should be able to have information about the artefacts salvaged to inform further excavation and works-there are always work done after we have left and area and who knows what has been damaged. Community registered Aboriginal parties sought mid salvage program assessment of artefacts to inform decisions relating to Aboriginal cultural heritage salvage works.

Management of scenarios to manage concerns regarding possible burials was identified as needing to be included in the ACHMP.

Scarred tree #37-6-0428 was identified as being impacted by the proposed bund. Community registered Aboriginal parties suggested the relocation of the scarred tree to the Charlton Road VCA.

Community registered Aboriginal parties identified erosion and conservation management is needed to be improved in the Loders Creek conservation area, with erosion damaging artefacts raised as a concern.

Community registered Aboriginal parties sought tighter controls in the way in which ACHMP plans are implemented reviewed and monitored.

Community registered Aboriginal parties also identified that young registered Aboriginal parties should be provided with guidance and training by Elder registered Aboriginal parties in artefact analysis and identification. Information nights should be provided so that Aboriginal people who work can come and see what has been collected and the stories shared.

Community registered Aboriginal parties stated that they wanted to have a voice in the location of salvage programs and test pitting stating that it is important to collect as many artefacts as possible before the area is impacted and changed forever.

Community registered Aboriginal parties stated that they need an area like Wollemi camping grounds – stating that “Everyone needs a Wollemi”. The Wollemi camping ground was identified as having cultural values which support family involvement, proximity to other Creation places, a place for gathering, a place for teaching, and a place for gathering.

In addition to the recommendations detailed in this table, Community registered Aboriginal parties were highly supportive of the care and control and intergenerational equity recommendation options workshopped in November 2012 citing that they needed tangible experiences and evidence that their cultural heritage is taken seriously and is respected and that they have played a role in trying to save Aboriginal culture and heritage in the Valley.

In providing the above Management options and statements for the Project, registered Aboriginal parties discussed the current management and mitigation measures employed locally and regionally throughout the Hunter Valley, and those consulted could not cite experiences of positive conservation and protection or salvage of cultural heritage materials important to them.

It is important to note that registered Aboriginal parties identified concern that current and future mining activity poses a significant threat to the conservation of Aboriginal archaeological and cultural sites within the Project area and the broader region, and that the desired conservation outcomes would be poorly realised.

Registered Aboriginal parties also perceived most salvage as programs of destruction, and described how development approvals and salvage programs have created isolated 'islands' of sites within their cultural landscape; adversely transforming the cultural values inherent in cultural places and resulting in poor cultural heritage conservation outcomes.

Many registered Aboriginal parties strongly asserted that it is not just a matter of relocating archaeological and cultural sites 'out of the way', stating that this approach compromises the integrity of cultural value of the cultural sites and fundamentally fails to recognise the unique cultural significance of individual places and their meaning to Aboriginal people, and the ability of those places to provide information on Wonnarua ancestors in the Wonnarua cultural landscape. This was expressed as a frustration and point of conflict in the interpretation and cultural and archaeological values of a place.

It was instead emphasised that conservation planning should be based on the special and unique values of individual places within the Wonnarua cultural landscape, as the meaning of a site is embedded in its place and not simply whether similar 'site types' were found in other areas, or whether the physical parts of a site could be moved to another place.

In a cultural context, such an approach limits the ability to achieve the principles of ecologically sustainable development as it fails to appreciate the cultural and spiritual meaning of a place to a specific peoples and the connection between ancestors and current generations in relation to how the place was created, what happened in a place over time and the attachments and memories and obligations to care for a place over time; or all of the elements that form a cultural landscape. This is an important factor when considering or promoting management outcomes including care and control arrangements, to ensure that the people-place relationships and cultural significance values form the basis and the of intergenerational equity initiatives.

Registered Aboriginal parties also expressed frustration that the cultural heritage assessment processes being applied in the Hunter Valley New South Wales has predominantly been based on archaeological evidence assessments and the traditional, historic and contemporary intangible cultural heritage has been largely ignored, resulting in little understanding of the meaning of places from a traditional and historic context.

Registered Aboriginal parties have asserted that a cultural value does not only represent inherited traditions from the past but also contemporary rural and urban practices in which Wonnarua and other Aboriginal people have played and continue to play an important part.

Registered Aboriginal parties consulted during the ACHA process actively sought to develop demonstrable conservation outcomes and positive management measures for current and future mining impacts, should mining be approved.

7.3 Archaeological Management Strategy

As discussed in **Section 5.2.3**, OzArk (**Appendix 13b of the EIS**) has conducted a scientific significance assessment of the known Aboriginal archaeological sites of the Project area, considering attributes such as rarity, representativeness and archaeological research potential. On the basis of this assessment, OzArk (**Appendix 13b of the EIS**) has suggested a series of management strategies that would be appropriate given the scientific significance of individual archaeological sites and site complexes.

These recommendations are outlined in detail in the technical archaeological assessment, and are also included in this ACHA for registered Aboriginal parties' review, to ensure that the final management strategies proposed for archaeological sites also reflect the social, historic and aesthetic values of known sites, and also reflects Aboriginal registrants views on appropriate cultural heritage outcomes.

In presenting a management approach for archaeological sites, OzArk (**Appendix 13b of the EIS**) included discussion on the archaeological implications of Project approval scenarios, which included:

- Should the Project not be approved (Option A);
- Should the Project be approved but with a modified design to minimise Aboriginal cultural heritage impacts (Option B); and
- Should the current Project design be approved (Option C).

Following a discussion of these options, OzArk (**Appendix 13b of the EIS**) identified that Option B would have desirable archaeological outcomes as it would allow in-place conservation of those archaeological sites of high scientific significance, such as the Loders Creek grinding groove complex. However, it was also noted that continuing threats to these archaeological sites from erosion would continue under this scenario and that the conserved sites have also largely lost their broader landscape setting.

In this context, OzArk (**Appendix 13b of the EIS**) also provided a number of Management options should the Project be approved in its present form (Option C). These recommendations were grouped into four main site management categories, being:

- **Category 1:** known archaeological sites of high scientific significance, which are located within the Project's disturbance footprint and would be directly/indirectly impacted should the Project be approved;
- **Category 2:** known archaeological sites of moderate and low-moderate scientific significance, which are located within the Project's disturbance footprint and would be directly/indirectly impacted should the Project be approved;
- **Category 3:** known archaeological sites of low scientific significance, which are located within the Project's disturbance footprint and would be directly/indirectly impacted should the Project be approved; and
- **Category 4:** known archaeological sites beyond the Project's disturbance footprint that would not be directly or indirectly impacted if the Project is approved.

Table 15 summarises the management strategies presented for each category, and the known archaeological sites that they apply to.

Table 15: Management Strategy, Known Archaeological Sites

Management Category	Management Strategy	Known Archaeological Sites
Category 1	Investigation and recording of grinding groove sites.	BOP SC-9 with PAD (Loders Creek grinding groove site); BOP SC-12 (BMU1 grinding groove site)
Category 1	Salvage (removal) of grinding groove site	BOP SC-9 with PAD (Loders Creek grinding groove site)
Category 1	Further consideration of salvage (removal) of grinding groove site, with site possibly managed <i>in situ</i> within the Disturbance footprint.	BOP SC-12 (BMU1 grinding groove site)
Category 1	Open area archaeological excavation (minimum of 4m ² within at least a 5m by 5m grid).	BOP SC-8 with PAD (Exposures 4, 9 and 10); BOP SC-9 with PAD (Exposures 2, 4, 8 and 9)
Category 2	Limited archaeological salvage excavations adjacent to selected artefact exposures (maximum of 10 50cm by 50cm test pits unless expansion is warranted).	BOP SC-8 with PAD (Exposures 1, 5, 7, 8 and 12 ¹⁴); BOP SC-9 with PAD (Exposures 1, 6, 7 and 10 ¹⁵); BOP SC-12 (Exposures 4 to 7, 9); NM11; 37-6-0146; 37-6-1414; 37-6-1415; 37-6-1418; BOP SC-1 with PAD (Exposures 18, 19, 32, 33, 38, 39, 40); BOP SC-10 with PAD (Exposures 3 and 4); BOP SC-14; BOP SC-5 with PAD; BOP SC-6 with PAD; BOP SC-7 with PAD (Exposures 1 to 4)
Category 2	Salvage of scarred tree panel	37-6-0428
Category 3	Site recording and surface artefact collection	BOP OS-1; BOP OS-2; BOP OS-3; BOP OS-4; BOP OS-5; BOP OS-6; BOP OS-7; BOP OS-9; BOP OS-10; G5; G10; G11; 37-6-0872; 37-6-0898; 37-6-0900; 37-6-0907; 37-6-0931; 37-6-1408; 37-6-1409; 37-6-1410; 37-6-1411; 37-6-1412; 37-6-1975; 37-6-1977; 37-6-0871; BOP SC-11; BOP SC-13; BOP SC-2; BOP SC-3; BOP SC-4; BOP SC-8 with PAD; BOP SC-9 with PAD; 37-6-0757; 37-6-0887; 37-6-0894; 37-6-0901; 37-6-0906; 37-6-1397; 37-6-1413; 37-6-1660; 37-6-1933; 37-6-1936; 37-6-1969; 37-6-1970; 37-6-1971; 37-6-1972; 37-6-1973; 37-6-1974; 37-6-1976; GIF-IF5; 37-6-0869; 37-6-1845; BOP IF-1; BOP IF-2; BOP IF-3; BOP IF-4; BOP IF-6; BOP IF-7
Category 4	Site to be located and marked in the field	BOP IF-5

¹⁴ BOP SC-8 with PAD to be inspected at the time of archaeological salvage to determine whether to conduct Category 2 or Category 3 excavation at Exposures 2, 3, 6 and 11.

¹⁵ BOP SC-9 with PAD to be inspected at the time of archaeological salvage to determine whether to conduct Category 2 or Category 3 excavation at Exposures 3 and 5

Management Category	Management Strategy	Known Archaeological Sites
Category 4	Information to be provided to the SMTA to ensure that the site's location is known	BOP OS-8
Category 4	Sites to be located and fenced during construction	37-6-0950; 37-6-0951; 37-6-1661; 37-6-1662; 37-6-1402; 37-6-0424; 37-6-0533
Category 4	Sites to be located and reassessed during ACHMP preparation to develop management strategies	37-6-0902; 37-6-0908; 37-6-0903; 37-6-1659; 37-6-1396; 37-6-0425; 37-6-0423; 37-6-1663; 37-6-0904; 37-6-0301; 37-6-1604; 37-6-1401; 37-6-0144; 37-6-0977; 37-6-1740; 37-6-2229

Refer to the Project's archaeological assessment report (OzArk **Appendix 13b of the EIS**) for further detail.

7.4 Project Approval Scenario Management Measures

Proposed Management and Mitigation, Care and Control, and Intergenerational Equity Recommendations to address potential impacts on Aboriginal cultural heritage

The recommendations identified have been developed in consultation with WP, PCWP, WTC, WLALC and other registered Aboriginal parties. The recommendations have been developed based on the scenario of full Project approval and no approval scenarios. The management measures relating to both scenarios are detailed in this section of the ACHA. The recommendations for the full Project approval have also been separated in **Table 17** into those located onsite (being within the Project Area) and those intergenerational equity programs located offsite (outside the Project area). Offsite recommendations were considered for the Project recommendations to address intergenerational equity aspects and to respect the regional significance of culturally significant features which surround the Project area.

BCM currently have an Aboriginal Cultural Heritage Management Plan (ACHMP) for the BCC which details the management and mitigation measures undertaken by BCM in relation to its operations. This ACHMP will be revised to include the management and mitigation measures proposed for the Project. Due to the nature and scale of the management and mitigation measures and the level of further consultation required in relation to different proposed measures, the ACHMP will be varied in stages as the detail regarding these measures is refined in consultation with the registered Aboriginal parties.

As discussed in **Section 3**, there are a number of challenges associated with consulting with large numbers of Aboriginal parties. While these challenges are not insurmountable, the consultation process undertaken for the Project identified that the provision of opportunity for all registered Aboriginal parties to choose their preferred consultation and cultural values sharing approach has been both effective and reflective of the intent of the consultation guidelines. This approach to consultation (which resulted in the development of the separate WP and PCWP ACHA reports, attached in **Appendices C1** and **C2**) has identified that the internal mechanisms within groups is effective in eliciting the views of the knowledge holders whom they represent.

BCM remains committed to ongoing consultation with registered Aboriginal parties, however has identified that there is an opportunity for direct and ongoing engagement with a smaller working group of Elders, Knowledge Holders and leaders to guide the development and implementation of management measures to achieve positive cultural heritage management outcomes by the possible development of a steering committee. The steering committee will be further investigated during the development of the ACHMP and details considered for inclusion in the ACHMP.

Until the Steering Committee is possibly established (or possibly not established), BCM will continue to engage with the registered Aboriginal parties for the Project in relation to the implementation of the management measures provided below.

It is also important to note that the revised ACHMP will include specific provisions regarding engagement with registered Aboriginal parties which would include mechanisms for dispute resolution and communications protocols. This is in response to feedback documented in **Section 3**.

Table 16 outlines the proposed management and mitigation, care and control, and intergenerational equity recommendations for the Project approval scenario.

Table 16: Proposed Management and Mitigation, Care and Control, and Intergenerational Equity Recommendations to Address Potential Impacts on Aboriginal Cultural Heritage for a Full Project Approval Scenario

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
Onsite- Located with the BCC Project Area		
Registered Aboriginal parties sought ongoing consultation mechanisms in order to remain informed about the implementation of the ACHMP and also sought meaningful opportunities in which they can influence decision making. Registered Aboriginal parties also sought greater understanding of and influence on the healing/rehabilitation of land and sought BCM consideration of management measures which maximised registered Aboriginal parties participation in rehabilitation programs or approaches. The ACHMP is the recognised model for containing detail regarding the implementation of Aboriginal cultural heritage related management measures. Consistent with regulatory and Aboriginal representative expectations, ongoing consultation with the registered Aboriginal parties will be undertaken in the development of the ACHMP.	ACHMP BCM currently have an Aboriginal Cultural Heritage Management Plan (ACHMP) for the BCC which details the management and mitigation measures undertaken by BCM in relation to its operations including the protection of existing sites. This ACHMP will be revised to include the management and mitigation measures proposed for the Project. Due to the nature of the management and mitigation measures and the level of further consultation required in relation to different proposed measures, the ACHMP will be varied in stages as the detail regarding these measures is refined in consultation with the registered Aboriginal parties. The revised ACHMP will include specific provisions regarding engagement with the registered Aboriginal parties (including the possible development of a Steering Committee and would include mechanisms for dispute resolution and communications protocols. Annual Site Meeting BCM will hold an annual meeting for engaging with the RAPs to discuss Project status and cultural heritage matters and intergenerational equity outcomes related to the Project.	Involvement of Aboriginal people in environmental management and conservation activities, especially those that protect and restore Country, facilitate the practice of culture and support their wellbeing. Cumulative impacts to the Aboriginal cultural heritage of a region should influence management approaches, reflecting the responsibility of the current generation to provide an environmental and cultural legacy for future generations (the intergenerational equity principle). Aboriginal cultural heritage outcomes should consider a continuing role for Aboriginal people in caring for country. <u>OEH Wellbeing Framework Criteria</u> Culture and Identity Access to Country Education and learning Leadership, empowerment and influence

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
Several registered Aboriginal parties, including the WLALC, have also requested the inclusion of a code of conduct and dispute resolution process in the ACHMP.	The meeting will include a Walk on Country, presentation on rehabilitation programs being undertaken and information on seed mixes to provide an understanding of the future traditional resources available in the rehabilitated landform. The ACHMP will include provision for an Annual Site Meeting which will include the following Agenda Items: 1. Presentation of previous years ACH management performance; 2. Presentation of next 12 months ACH management; 3. Update of rehabilitation completed during the year and presentation on seed mixes used; and 4. Walk on Country including rehabilitation areas and Conservation Agreement Area.	
Support for investigations of the potential horticultural use of plant species of known Aboriginal use and or value for cultural landscape rehabilitation as an integrated component of mine site rehabilitation across the Project. This would include pre-emptive retrieval of seed at the time of land/or before vegetation clearance works occur. Registered Aboriginal parties particularly Traditional Owner groups sought commitment for participation in rehabilitation planning and economic opportunities in the area of rehabilitation including flora and fauna	Land Rehabilitation and Healing BCM will hold an annual meeting for engaging with the registered Aboriginal parties to discuss Project status and cultural heritage matters and intergenerational equity outcomes related to BCC operations. The meeting will include a Walk on Country, presentation on rehabilitation programs being undertaken and information on seed mixes to provide an understanding of the future traditional resources available in the rehabilitated landform.	Involvement of Aboriginal people in environmental management and conservation activities, especially those that protect and restore Country, facilitate the practice of culture and support their wellbeing. Cumulative impacts to the Aboriginal cultural heritage of a region should influence management approaches, reflecting the responsibility of the current generation to provide an environmental and cultural legacy for future generations (the intergenerational equity principle). Aboriginal cultural heritage outcomes should

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
management including innovation in fire stick modelling.		consider a continuing role for Aboriginal people in caring for country. <u>OEH Wellbeing Framework Criteria</u> Culture and Identity Access to Country Education and learning Leadership, empowerment and influence Sense of Community
Registered Aboriginal Parties including Traditional Owners and Knowledge Holders sought a more positive and informed communication of the Aboriginal cultural heritage values of the site and surrounding areas and sought to have these improvements included in the BCC site training packages to better educate the workforce and contractors on the values of the area.	Recognition of Cultural Values in Site Induction Material BCM will revise its onsite induction program within 12 months of approval being granted to include information on the Aboriginal cultural values of the Project area and Bulga, Broke and Milbrodale areas more generally. The induction material will positively message the Aboriginal Cultural Heritage Values of the area.	Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented. <u>OEH Wellbeing Framework Criteria</u> Leadership, empowerment and influence Culture and Identity

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
Registered Aboriginal Parties including Traditional Owners and Knowledge Holders viewed the current site GIS and acknowledged that this should be kept up to date with the most recent information and included in the ACHMP.	Recording of Sites All Aboriginal sites identified within the Project area will be recorded on the AHIMS database and BCM GIS (Geographical Information System). The ACHMP will initially be revised to include the sites identified in the Bulga Optimisation Project <i>Aboriginal Archaeological Values Assessment</i> report (refer to Appendix 13b of the EIS). The ACHMP will be updated to include details of any new Aboriginal sites identified during the life of the Project or the change of status of sites as salvaged under an approval scenario.	Management of a place should identify and take into consideration all aspects of cultural and natural significance without unwarranted emphasis on any one value at the expense of others. <u>OEH Wellbeing Framework criteria</u> Culture and Identity Access to Country Education and learning Leadership, empowerment and influence
Registered Aboriginal parties spoke of the limited meaning of signage and lack of respect and recognition of the meaning of cultural heritage sites. Registered Aboriginal parties sought the development of signage with a more positive messaging and meaning of the area.	Aboriginal Heritage Site Signage BCM will review the Aboriginal cultural heritage signage onsite. This will include signage related to the protection or management of areas of Aboriginal cultural significance, including the proposed expanded Wollombi Brook Conservation Agreement Area. Further details on messaging will be developed as part of the ACHMP in consultation with registered Aboriginal parties.	Management of a place should identify and take into consideration all aspects of cultural and natural significance without unwarranted emphasis on any one value at the expense of others. Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented. <u>OEH Wellbeing Framework criteria</u> Culture and Identity Access to Country Education and learning Leadership, empowerment and influence

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
BCC ACHMP protocol for any new archaeological sites and objects found over life of current operations. Registered Aboriginal parties sought to influence the proposed research and salvage program with regard to cultural considerations and the salvage program.	Research and Salvage Program BCM will implement the Aboriginal archaeological research and salvage program for impacted sites as recommended in the <i>Aboriginal Archaeological Values Assessment</i> report for the Project (refer to Appendix 13b of the EIS, Site Categories 1 to 3). The research and salvage methodology will satisfy the scientific research and cultural heritage questions posed in the <i>Aboriginal Archaeological Values Assessment</i> report (Appendix 13b of the EIS) and this ACHA in order to gain information to better understand the scientific and cultural values of the Project area. The research and salvage program will have regard to cultural considerations for access to sites and the research framework identified in the <i>Aboriginal Archaeological Values Assessment</i> report (Appendix 13b of the EIS).	Opportunities for the continuation or revival of culturally significance uses or meaning of a place should be investigated and implemented. Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented. Uncertainty about the cultural significance of a place or object should not be used to justify activities that might impact the place or object. A precautionary approach should be taken when an activity involves significant or irreversible damage to a place. Management of cultural heritage places and objects must be based on an understanding of cultural significance. <u>OEH Wellbeing Framework Criteria</u> Culture and Identity Leadership, empowerment and influence Access to Country Education and learning

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
Some registered Aboriginal parties sought the development of a 'back to Country' model for all salvaged artefacts, over the life of the mine. Others sought 'close to Country' options identifying the movement of salvaged artefacts to the Conservation areas. Interim arrangements for storage were suggested- on site shipping container. Land 'offsets' were identified by some registered Aboriginal parties as an appropriate way of providing intergenerational equity outcomes and certainty for the protection of cultural sites identified as important to registered Aboriginal parties. Therefore 'offset sites' were considered potentially appropriate places for care and control.	Care and Control Measures regarding Aboriginal Objects Care and control management measures will be developed and included in the ACHMP for Aboriginal objects recovered through the Archaeological research and salvage program implemented for the Project. The care and control management measures will have regard to cultural considerations. Care and control management measures will include provision for: • Interim storage during research and salvage program; • Artefact analysis as recommended in the <i>Aboriginal Archaeological Values Assessment</i> report for the Project (refer to Appendix 13b of the EIS); • Development of a long term care and control strategy – close to Country- with possibilities including (but not necessarily limited to): • Relocating to a storage facility located in the Wollombi Brook Conservation Agreement Area; and/or • Relocated to the Wollombi Brook Conservation Agreement Area in conjunction with other site complex items in the Wollombi Conservation Agreement Area; and/or • Educational cabinet at mine and safe keeping place with repatriation at completion of mining. The ACHMP will initially provide for interim storage of recovered artefacts on site with further detail regarding long term care and control measures to be developed in consultation with the registered Aboriginal parties and included in the revised ACHMP.	Relative degrees of cultural significance may lead to different conservation or impact mitigation management actions. <u>OEH Wellbeing Framework Criteria</u> Culture and Identity Access to Country Leadership, empowerment and influence

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
Discussions with registered Aboriginal parties have revealed a range of responses to the management of the BMU 1Grinding Grooves. It has been suggested that in the scenario that mining is approved, the relocation of the grinding groove to the Wollombi Brook Conservation Agreement Area would provide an opportunity for future generations to view the grooves and learn about their origins and cultural significance. It is also acknowledged that it was requested that if this took place that placement in a drainage line should be considered to replicate a similar hydrological regime of wetting and drying which currently exists. Discussions with some registered Aboriginal parties also identified the option to cover the grinding groove site and leave <i>in situ</i> for cultural reasons.	Management of BMU1 Grinding Groove Site BCM will develop management and mitigation options for the BMU1 grinding grooves in consultation with the registered Aboriginal parties including Traditional Owners and Knowledge Holders. The preferred mitigation and management measures will be identified in a revision to the ACHMP. The two options identified during the consultation process that will be considered are: - Relocate the grinding grooves to the proposed Wollombi Brook Conservation Agreement Area for teaching purposes and viewing of future generations. This process would require investigation and salvage of the site surrounds so that any associated artefacts are identified and relocated with the grooves; and - Cover the area with geo-fabric or similar protective material to protect the grooves and leave <i>in situ</i> under the Noise and Visual Bund. Archival recording of the Loders Creek grinding grooves will be undertaken prior to any disturbance of the site.	Cumulative impacts to the Aboriginal cultural heritage of a region should influence management approaches, reflecting the responsibility of the current generation to provide an environmental and cultural legacy for future generations (the intergenerational equity principle). <u>OEI Wellbeing Framework Criteria</u> Culture and Identity Access to Country Education and learning
Discussions with registered Aboriginal parties have revealed a range of responses to the management of the Loders Creek Grinding Grooves. It has been suggested that in the scenario that mining is approved, the relocation of the grinding groove to the	Management of Loders Creek Grinding Grooves BCM will consult with the registered Aboriginal parties including Traditional Owners and Knowledge Holders regarding the preferred mitigation and management options for the Loders Creek grinding grooves with the final management and mitigation measure to be identified in a	Cumulative impacts to the Aboriginal cultural heritage of a region should influence management approaches, reflecting the responsibility of the current generation to provide an environmental and cultural legacy for future generations (the intergenerational equity

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
Wollombi Conservation Agreement Area would provide an opportunity for future generations to view the grooves and learn about their origins and cultural significance. It is also acknowledged that it was requested that if this took place that placement in a drainage line should be considered to replicate a similar hydrological regime of wetting and drying which currently exists. Discussions with an Elder and Knowledge Holders identified a belief that the area and its objects were taboo and that an alternate location should be sought which controlled access for cultural reasons.	revision to the ACHMP. The two options identified during the consultation process that will be considered are: - Relocate the Loders Creek grinding grooves to the Wollombi Brook Conservation Agreement Area for teaching purposes and viewing of future generations. This process would require investigation and salvage of the site surrounds to ensure any associated artefacts are identified and relocated with the grooves; and - Identify an alternative location to the proposed Wollombi Brook Conservation Agreement Area for the purposes of maintaining cultural values associated with the grinding grooves, with the development of protocols and controls for visitation and access to the relocation site. This process would require development of a cultural protocol, and investigation and salvage of the site surrounds so that the any associated with artefacts are identified and relocated with the grooves. Archival recording of the Loders Creek grinding grooves will be undertaken prior to any disturbance of the site.	principle). <u>OEH Wellbeing Framework Criteria</u> Culture and Identity Access to Country Education and learning
Some registered Aboriginal parties sought further investigation of the grinding groove sites prior to salvage or impact management measures. Archival recording through 3D digital models were identified as having potential for use in teaching resources for	Management of Significant Sites – 3D Scanning of BMU1 and Loders Creek Grinding Grooves BCM will undertake 3D recording of grinding grooves at BMU1 and Loders Creek prior to any relocation or covering of the sites. The method of 3D recording will be developed in consultation with the registered Aboriginal parties having	A precautionary approach should be taken when an activity involves significant or irreversible damage to a place. Cumulative impacts to the Aboriginal cultural heritage of a region should influence management approaches, reflecting the

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
current and future generations.	regard to the nature and extent of the sites, 3D recording technologies and the overarching objective of creating a detailed recording of the grooves for future generations.	responsibility of the current generation to provide an environmental and cultural legacy for future generations (the intergenerational equity principle).
A range of opinions were shared by registered Aboriginal parties in relation to the assessment of the scarred tree (#37-6-0428). This included consideration of whether the scar was of Aboriginal origin and its potential relocation to the Wollombi Brooke Conservation Agreement Area. A request for a scar tree specialist to examine the tree was received in the 30 and 31 May 2012 workshops. This request was met by completion of the Andrew Long report.	Management of Scarred Tree BCM will implement the research and management measures regarding the scarred tree near Charlton Road (#37-6-0428) as recommended by Andrew Long in the report annexed to the <i>Aboriginal Archaeological Values Assessment</i> report.	Management of cultural heritage places and objects must be based on an understanding of cultural significance. <u>OEH Wellbeing Framework Criteria</u> Access to Country Education and learning
Some registered Aboriginal parties including Traditional Owners and Knowledge Holders believe that although the Archaeological Survey took place, all sites within the landscape may not have been identified.	Potential Human Skeletal Remains BCM agrees to follow all relevant NSW Government guidelines regarding the location of human skeletal remains. BCM will apply the precautionary principle to the development of management measures for the Project area. This approach will include the development of culturally appropriate management measures for the management of human remains, should this occur during the Project life. Protocols and approach will be developed in consultation with registered Aboriginal parties. In the circumstances that a potential burial site or potential	Uncertainty about the cultural significance of a place or object should not be used to justify activities that might impact the place or object. A precautionary approach should be taken when an activity involves significant or irreversible damage to a place. <u>OEH Wellbeing Framework Criteria</u> Culture and Identity Access to Country

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
	human skeletal material is exposed within the Project area, the following procedure will be followed in accordance with the <i>Policy Directive – Exhumation of Human Remains</i> (NSW Department of Health 2008), <i>Skeletal Remains – Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977</i> (NSW Heritage Office 1998) and the <i>Aboriginal Cultural Heritage Standards and Guidelines Kit</i> (NPWS 1997) (or such other policies or guidelines as may replace these): • As soon as remains are exposed, work in the vicinity of the remains is to halt immediately to allow assessment and management; • BCM will contact local Police, OEH and the Heritage Branch; and • If the remains are suspected to be human, a physical or forensic anthropologist should inspect the remains <i>in situ</i>, and make a determination of whether the remains are human and if so, the likely ancestry (Aboriginal or non-Aboriginal) and antiquity (pre-contact, historic or forensic); or • If the remains are identified as forensic the area is deemed as a crime scene; or • If the remains are identified as Aboriginal, the site is to be secured and OEH and all registered Aboriginal parties are to be notified in writing; or	Education and learning

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
Registered Aboriginal parties sought protection of sites not to be impacted and also cited concerns regarding the impact and management of erosion to sites not to be impacted within the Project area.	If the remains are non-Aboriginal (historical) remains, the site is to be secured and the Heritage Branch is to be contacted. The above process functions only to appropriately identify the remains and secure the site. From this time, the management of any Aboriginal remains is to be determined through liaison with the appropriate stakeholders (Police, forensic anthropologist, OEH, Heritage Branch, registered Aboriginal parties etc.) and in accordance with the <i>Public Health Act 1991</i>.	
Registered Aboriginal parties sought protection of sites not to be impacted and also cited concerns regarding the impact and management of erosion to sites not to be impacted within the Project area.	Sites Not To Be Impacted BCM will implement the Aboriginal archaeological recommendations program for sites in the Project area that will not be impacted by the Project as recommended in the <i>Aboriginal Archaeological Values Assessment</i> report for the Project (refer to Appendix 13b of the EIS, Site Category 4). These measures will be further outlined in the updated ACHMP.	Management of cultural heritage places and objects must be based on an understanding of cultural significance. Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented. <u>OEH Wellbeing Framework Criteria</u> Culture and Identity Access to Country Education and learning

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
Registered Aboriginal parties sought the registration of newly discovered sites with the AHIMs register in order to ensure accurate recording and compliance was demonstrated	Newly Recorded Sites BCM will register all newly discovered sites identified during the course of the Project with AHIMs and update the ACHMP to record site details. BCM will develop research and salvage methodologies for all new sites identified within the Project disturbance area during the life of the Project, consistent with the framework recommended in the <i>Aboriginal Archaeological Values Assessment</i> report (Appendix 13b of the EIS).	Management of cultural heritage places and objects must be based on an understanding of cultural significance. Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented. <u>OEH Wellbeing Framework Criteria</u> Culture and Identity Access to Country Education and learning
Information provided by the ACHA has reinforced the significance of the Wollombi Brook Conservation Agreement Area location as it faces Baiame Cave and has other confidential significance. The Wollombi Brook Conservation Agreement Area has access to a permanent water source in the Wollombi Brook and is also home to various flora and fauna which some registered Aboriginal parties have identified as significant during the development of the ACHA.	Wollombi Brook Conservation Agreement Area BCM will enter into a Conservation Agreement (or similar in perpetuity arrangement) regarding the Wollombi Brook Conservation Agreement Area located near Charlton Road. The Conservation Agreement will incorporate the following: • Expansion of the currently proposed Conservation Agreement Area from approximately 55 hectares to approximately 120 hectares; • Undertake an Aboriginal Cultural Heritage Assessment of the Wollombi Brook Conservation Agreement Area, including further investigating its features of significance	Management of cultural heritage places and objects must be based on an understanding of cultural significance. <u>OEH Wellbeing Framework Criteria</u> Access to Country Education and learning

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
Registered Aboriginal parties sought meaningful, culturally relevant approaches to the management of the Wollombi Brook Conservation Agreement Area. Registered Aboriginal parties particularly Traditional Owners sought transfer of ownership of lands with appropriate resource provision to manage and conserve the area/s.	identified by some Knowledge Holders. These components will include non-invasive archaeological investigations, ethno-botanical mapping, cultural values mapping and historical research; • BCM will provide unencumbered access for registered Aboriginal parties to complete cultural practices consistent with the agreed Conservation Agreement Plan of Management; • Conservation and regeneration of the Warkworth Sands Woodland Endangered Ecological Community within the Conservation Agreement Area; • Land management measures will be undertaken through the development of a Plan of Management including fencing the perimeter of the Wollombi Brook Conservation Agreement Area, regeneration of cleared areas including the use of culturally significant plant species (that form part of the Warkworth Sands Woodland community) identified in the ACHA. RAPs including the WP, PCWP and WTC groups will be given opportunity to tender for carrying out these works; • BCM will work with the registered Aboriginal parties to develop appropriate improvements to the Wollombi Brook Conservation Agreement Area. Such improvements may include a formed gravel access road into the Wollombi Brook Conservation Agreement Area, the establishment of a car parking area, an educational teaching shelter comprising decked floor and roof with rainwater tank and toilets, a barbeque and tables and	

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
	benches, and signage to identify the extent of the conservation area and its purpose. A walking access track could also be established to the Wollombi Brook (if appropriate); - Further land management measures will be undertaken through the development of a Plan of Management including fencing the perimeter of the Wollombi Brook Conservation Agreement Area, regeneration of cleared areas including the use of culturally significant plant species identified in the ACHA. Registered Aboriginal parties including the WP, PCWP and WTC groups will be given opportunity to tender for carrying out these works; - An Aboriginal Cultural Heritage Assessment of the Wollombi Brook Conservation Agreement Area, including further investigating its features of significance identified by some Knowledge Holders, will be undertaken to inform the Plan of Management. This assessment will include non-invasive archaeological investigations, cultural values mapping and historical research; and - BCM will investigate a program to transition the ownership of the area to the relevant Native Title Holder Group/s prior to the end of the Project. This may include an interim stage of leasing the Wollombi Brook Conservation Agreement Area to the relevant Native Title Holder Group/s for a nominal amount.	

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
All registered Aboriginal parties were supportive of 3D landform modelling of predictive future mine-induced landform modifications; however registered Aboriginal parties cited the need for realistic evaluation in and around all Aboriginal cultural heritage sites.	Digital Model of Project Area BCM will investigate the potential for a 3D digital model of the Project area to be developed to illustrate the cultural sites in the project area landscape for teaching purposes. This will be undertaken in consultation with the registered Aboriginal parties.	Cumulative impacts to the Aboriginal cultural heritage of a region should influence management approaches, reflecting the responsibility of the current generation to provide an environmental and cultural legacy for future generations (the intergenerational equity principle). Relative degrees of cultural significance may lead to different conservation or impact mitigation management actions. <u>OEH Wellbeing Framework Criteria</u> Culture and Identity Access to Country Education and learning
Offsite Measures Registered Aboriginal parties sought conservation outcomes which recognised the range of traditional, historic and contemporary Aboriginal cultural values and relevance to ACHA values identified as important through the ACHA. Lizard Rock was repeatedly noted by registered Aboriginal parties as being particularly important regionally and culturally.	Formal Recognition of Significant Regional Aboriginal Places BCM will provide financial and in-kind assistance to the value of up to \$100,000 to document and prepare applications regarding the formal protection status of regional sites of high cultural significance (such as “Lizard Rock” and “Baime Cave”) as a registered Aboriginal Place under the NPW Act 1974 (NSW). This will be completed in consultation with	Cumulative impacts to the Aboriginal cultural heritage of a region should influence management approaches, reflecting the responsibility of the current generation to provide an environmental and cultural legacy for future generations (the intergenerational equity principle). Opportunities for the continuation or revival of culturally significance uses or meaning of a place

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
Registered Aboriginal parties sought management measures which would assist in protecting sites such as Lizard Rock.	Traditional Owners and Knowledge Holders.	should be investigated and implemented. <u>OEH Wellbeing Framework Criteria</u> Culture and Identity Access to Country Education and learning Leadership, empowerment and influence
Investigations by members of the BCM team have identified that key features of Lizard Rock are exposed to uncontrolled 4WD vehicle access across the site with a risk of potential damage to the site. Diversions works to protect Lizard Rock was supported by most registered Aboriginal parties. Registered Aboriginal parties also sought the protection of grinding grooves in the region.	Protection of Significant Site- Local BCM will consult with the registered Aboriginal parties including Traditional Owners and Knowledge Holders and Forests NSW regarding the possible erection of protection measures at a set of grinding grooves located on Lizard Rock within Pokolbin State Forest which are at risk of harm from vehicle and foot traffic. BCM will commit up to \$50,000 towards the implementation of conservation measures.	Cumulative impacts to the Aboriginal cultural heritage of a region should influence management approaches, reflecting the responsibility of the current generation to provide an environmental and cultural legacy for future generations (the intergenerational equity principle). Opportunities for the continuation or revival of culturally significance uses or meaning of a place should be investigated and implemented. <u>OEH Wellbeing Framework Criteria</u> Culture and Identity Access to Country Education and learning Leadership, empowerment and influence

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
Registered Aboriginal parties sought to develop management measures which would provide a visual and tangible legacy for the next generations. These considerations included the development and distribution of a DVD recording for teaching purposes.	DVD Recording for Teaching Purposes BCM will provide funding for the development of an educational DVD to record the cultural knowledge of the Project area as identified in the ACHA including the cultural context and relationship to significant Creation story sites, and the teaching resources within the Wollombi Brook Conservation Agreement Area. Sections of the recording may be disclosed and non-disclosed as described in <i>Aboriginal cultural heritage consultation requirements for proponents</i> (DECCW 2010a) (<i>Fact Sheet 3 – Cultural Knowledge and its Protection</i>).	Management of cultural heritage places and objects must be based on an understanding of cultural significance. Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented. <u>OEH Wellbeing Framework Criteria</u> Culture and Identity Access to Country Education and learning
Registered Aboriginal parties sought in perpetuity conservation outcomes away from mine site operations, to provide certainty in terms of protection and access to areas. Management measures which provided unencumbered access to Creation story sites and other areas of cultural importance were described as providing more realistic intergenerational equity outcomes. The opportunity to access sites and take children to an area where there could be teaching learning and camping close to accessible water were identified as having	Access to Culturally Significant Areas BCM is investigating opportunities for additional land based conservation outcomes to better provide access to culturally significant areas within the Broke and Bulga region. This may include: • The purchase of land; or • The provision of better access to land currently in conservation. BCM will commit funding to help facilitate this outcome in consultation with registered Aboriginal parties. The	Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented. Cumulative impacts to the Aboriginal cultural heritage of a region should influence management approaches, reflecting the responsibility of the current generation to provide an environmental and cultural legacy for future generations (the intergenerational equity

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
advantageous. However registered Aboriginal parties sought these areas to include landscape features which reflected traditional, historic and contemporary cultural values.	framework to manage such a process will be included in the revised ACHMP. BCM will provide funding for 5 years of up to \$50,000 per annum towards maintenance and upkeep and operating costs of any purchased property and/or facilities. BCM will investigate a program to transition the ownership of the purchased land following the 5 years of joint management to the relevant Native Title Holder Group/s prior to the end of the project.	principle). Opportunities for the continuation or revival of culturally significance uses or meaning of a place should be investigated and implemented. <u>OEH Wellbeing Framework Criteria</u> Culture and Identity Access to Country Education and learning
Registered Aboriginal parties, particularly the Traditional Owners and Knowledge Holders sought a program to revive Wonnarua language. Teaching and passing down cultural heritage knowledge to the next generation was cited as important.	Research and Recording of Wonnarua Language for Future Generations BCM will contribute funding of up to \$100,000 per annum for two years to assist in the development of digital media for maximising the revival of the Wonnarua Language. In consultation with the Traditional Owners and Knowledge Holders a partnership program will be established with a suitable specialist in this field, potentially from a university background. BCM will assist in seeking and evaluating proposals for the development of the program.	Cumulative impacts to the Aboriginal cultural heritage of a region should influence management approaches, reflecting the responsibility of the current generation to provide an environmental and cultural legacy for future generations (the intergenerational equity principle). Opportunities for the continuation or revival of culturally significance uses or meaning of a place should be investigated and implemented. <u>OEH Wellbeing Framework Criteria</u> Culture and Identity Access to Country Education and learning Leadership, empowerment and influence Sense of Community

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
Registered Aboriginal parties sought opportunities to access Creation places and sites of cultural importance to Aboriginal people, including Traditional Owners and Knowledge Holders. However they cited transportation and access constraints for Elders and families as impediments to cultural access to these sites. Registered Aboriginal parties sought meaningful opportunities to share cultural heritage and ensure continuation of knowledge transfer for future generations.	Transport to Creation Story Places During the life of the Project, BCM, through the XCN Reconciliation Action Plan, will offer to provide some transport to sites of cultural significance to facilitate a Walk on Country/Teach on Country - site visit during NAIDOC week. The Walk on Country/Teach on Country tour route would be determined by the NAIDOC committees of the Upper Hunter.	Cumulative impacts to the Aboriginal cultural heritage of a region should influence management approaches, reflecting the responsibility of the current generation to provide an environmental and cultural legacy for future generations (the intergenerational equity principle). Opportunities for the continuation or revival of culturally significance uses or meaning of a place should be investigated and implemented. Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented. Continuing, modifying or reinstating a culturally significant use may be appropriate and preferred forms of conservation. <u>OEH Wellbeing Framework Criteria</u> Culture and Identity Access to Country Education and learning Leadership, empowerment and influence Sense of Community

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
Registered Aboriginal parties particularly Traditional Owner groups sought BCM support and commitment to the leverage of funding from the Upper Hunter Cultural Heritage Trust to enable the development of a regional keeping/healing place and for the consolidated return of Aboriginal cultural heritage objects collected across the BCC and stored at various times through Care and Control arrangements in such diverse places as: - The Australian Museum; - The Wanaruah LALC; - Archaeological consultant firms; and - BCC Mine site Offices.	Repatriation of Historical Items collected from Wonnarua Country BCM will consult with the registered Aboriginal parties including Traditional Owners and Knowledge Holders, other mining companies and the Australian Museum to explore opportunities for repatriation and/or display of regionally significant cultural objects from the Australian Museum's permanent collection. Should this program be realised: - BCM will liaise with the registered Aboriginal parties regarding the voluntary attendance by Knowledge Holders at an information night hosted by the museum curator at the opening of regional displays and to be in attendance on each day as cultural interpreters to assist members of the public and school groups wishing to view the displays; and - BCM will provide up to \$25,000 per annum for the life of the Project to help with associated costs.	Cumulative impacts to the Aboriginal cultural heritage of a region should influence management approaches, reflecting the responsibility of the current generation to provide an environmental and cultural legacy for future generations (the intergenerational equity principle). Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented. <u>OEH Wellbeing Framework Criteria</u> Culture and Identity Access to Country Education and learning Leadership, empowerment and influence Sense of Community

Registered Aboriginal Parties ACHA consultation Finding/Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
BCM understands that TAFE NSW offers relevant training courses in culture related matters, such as Cultural Tourism, Business Administration and land management etc. The training of suitable Aboriginal persons is consistent with the recommendations of registered Aboriginal parties and will aim to contribute towards sustainable use of the Land Based Cultural Conservation areas shown above. Registered Aboriginal parties also sought to address models for greater cultural participation in the rehabilitation and conservation of lands both within the Project area and the Conservation Agreement Area and in the promotion of cultural identity.	Education - Cultural Related Areas During the life of the Project, BCM will offer up to \$30,000 per annum in total towards three trainee scholarships (up to three years in duration) to be undertaken in culture related training areas. The training and education opportunity will include opportunities which may arise from vocational based learning including graduate and postgraduate studies.	Cumulative impacts to the Aboriginal cultural heritage of a region should influence management approaches, reflecting the responsibility of the current generation to provide an environmental and cultural legacy for future generations (the intergenerational equity principle). Aboriginal cultural heritage outcomes should consider a continuing role for Aboriginal people in caring for country. Involvement of Aboriginal people in environmental management and conservation activities, especially those that protect and restore Country, facilitate the practice of culture and support their wellbeing. <u>OEH Wellbeing Framework Criteria</u> Culture and Identity Education and learning

BCM is seeking development consent to continue and expand current surface mining operations within the BCC to 2025.

The following draft management options and recommendations have been developed for Aboriginal registrant review in the scenario that the Project is not approved.

7.5 'No Project Approval' Scenario Management Options

This section presents management options for the scenario that the Project is not approved.

Should the proposed Project described throughout this report not be approved, it is identified that the potential impacts will not occur, and there would be no risk to the cultural places and archaeological sites identified in this ACHA as the result of expanded open cut mining.

However, it is also acknowledged that there a number of existing and concurrent mining approvals for development activities within the BCC, and that these activities as well as processes such as erosion, will continue to alter the Aboriginal cultural landscape of the BCC, resulting in a continued deterioration and isolation of the cultural places and archaeological sites of cultural significance detailed in this ACHA report.

As BCM remains the owner and operator of active mining operations within the BCC, a number of management options and recommendations have been developed for this scenario, in response to the following:

- The identification of previously unknown Aboriginal archaeological sites identified within the Project area, and Bulga Coal Management's legal obligations towards the management of these archaeological sites;
- The identification of previously unknown Aboriginal cultural heritage values of the BCC landscape, and specific places within that landscape, as identified by Aboriginal registrants;
- The existing BCM commitment to create the Wollombi Brook Conservation Agreement (CA) area ., being an area 55 hectares in size identified as being of high cultural significance;
- The identification of the current risks to known archaeological sites and landforms of cultural value within the BCC, with OzArk (**Appendix 13b of the EIS**) identifying widespread erosion of archaeological sites and some landscapes, and the associated loss of cultural objects and archaeological integrity; and
- The targeted management of environmental pressures– improve natural and cultural landscape understanding of challenges and changes including climate change; erosion and landform impact; waterways impacts, flora and fauna to maintain avoidance areas including the Loders Creek complex.

In this context, **Table 17** uses the ACHA management principles outlined in **Section 7.1** to identify appropriate management options and outcomes for the places of cultural significance, including archaeological sites, identified by this ACHA report.

Table 17: ACHA Management Options 'No Project Approval' Scenario

Registered Aboriginal Parties ACHA consultation Finding/ Comments		Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
Onsite- Located with the BCC Project Area			
Registered Aboriginal Parties including Traditional Owners and Knowledge Holders sought a more positive and informed communication of the Aboriginal cultural heritage values of the site and surrounding areas and sought to have these improvements included in the BCC site training packages to better educate the workforce and contractors on the values of the area.	Recognition of Cultural Values in Site Induction Material BCM will revise its onsite induction program to include information on the Aboriginal cultural values of the Project area and Bulga, Broke and Milbrodale areas more generally. The induction material will positively message the Aboriginal Cultural Heritage Values of the area.		Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented <u>OEH Wellbeing Framework criteria</u> Leadership, empowerment and influence Culture and Identity
Registered Aboriginal parties sought the registration of newly discovered sites with the AHIMs register in order to ensure accurate recording and compliance was demonstrated.	Newly Recorded Sites BCM will register all newly discovered sites identified at the BCC with AHIMs and update the ACHMP to record site details.		Management of a place should identify and take into consideration all aspects of cultural and natural significance without unwarranted emphasis on any one value at the expense of others <u>OEH Wellbeing Framework criteria</u> Culture and Identity Access to Country Education and learning Leadership, empowerment and influence

Registered Aboriginal Parties ACHA consultation Finding/ Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
Registered Aboriginal parties spoke of the limited meaning of signage and lack of respect and recognition of the meaning of cultural heritage sites. Registered Aboriginal parties sought the development of signage with a more positive messaging and meaning of the area.	Aboriginal Heritage Site Signage BCM will review the Aboriginal cultural heritage signage onsite. This will include signage related to the protection or management of areas of Aboriginal cultural significance, including the proposed Wollombi Brook Conservation Agreement Area. Further details on messaging will be developed as part of the ACHMP in consultation with registered Aboriginal parties.	Management of a place should identify and take into consideration all aspects of cultural and natural significance without unwarranted emphasis on any one value at the expense of others. Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented. <u>OEH Wellbeing Framework criteria</u> Culture and Identity Access to Country Education and learning Leadership, empowerment and influence
Discussions with registered Aboriginal parties have revealed a range of responses to the management of the BMU 1 Grinding Grooves. These suggestions included the ongoing conservation of the	Management of BMU1 Grinding Groove Site BCM will develop management options for the BMU1 grinding grooves in consultation with the registered Aboriginal parties including Traditional Owners and Knowledge Holders. BCC will apply for s90 AHIP for BMU1 for the remaining approved underground mining that will impact on BMU1, as per the current approved Bulga Underground Development Consent. BCM will also formalise the Wollombi Brook Conservation Agreement as a condition of this grant	Cumulative impacts to the Aboriginal cultural heritage of a region should influence management approaches, reflecting the responsibility of the current generation to provide an environmental and cultural legacy for future generations (the intergenerational equity principle). <u>OEH Wellbeing Framework criteria</u>

Registered Aboriginal Parties ACHA consultation Finding/ Comments		Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
Loders Creek grinding grooves and remedial works to address sediment cover.	of this AHIP.		Culture and Identity Access to Country Education and learning
Some registered Aboriginal parties sought further investigation of the grinding groove sites. Archival recording through 3D digital models were identified as having potential for use in teaching resources for current and future generations.	Management of Significant Sites – 3D Scanning of BMU1 and Lodgers Creek Grinding Grooves BCM will consult with the registered Aboriginal Parties regarding the ongoing management of the Lodgers Creek Grinding Grooves.		A precautionary approach should be taken when an activity involves significant or irreversible damage to a place. Cumulative impacts to the Aboriginal cultural heritage of a region should influence management approaches, reflecting the responsibility of the current generation to provide an environmental and cultural legacy for future generations (the intergenerational equity principle).
Registered Aboriginal parties sought protection of sites not to be impacted and also cited concerns regarding the impact and management of erosion to sites not to be impacted within the Project area.	Sites Not To Be Impacted BCM will implement the Aboriginal archaeological recommendations program for sites in the Project area relevant to this 'No Approval' scenario. These measures will be further outlined in the updated ACHMP.		Management of cultural heritage places and objects must be based on an understanding of cultural significance. Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented <u>OEH Wellbeing Framework criteria</u> Culture and Identity Access to Country Education and learning

Registered Aboriginal Parties ACHA consultation Finding/ Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
Registered Aboriginal parties sought the <i>in situ</i> protection of the Loders Creek grinding grooves and the conservation area complex	Loders Creek Grinding Grooves BCM will consult with registered Aboriginal parties to discuss possible submission of an AHIP to undertake remedial works	
Information provided by the ACHA has reinforced the significance of the Wollombi Brook Conservation Agreement Area location as it faces Balame Cave and has other confidential significance. The Wollombi Brook Conservation Agreement Area has access to a permanent water source in the Wollombi Brook and is also home to various flora and fauna which some registered Aboriginal parties have identified as significant during the development of the ACHA. Registered Aboriginal parties	Wollombi Brook Conservation Agreement Area BCM will enter into a Conservation Agreement (or similar in perpetuity arrangement) regarding the Wollombi Brook Conservation Agreement Area located near Charlton Road. The Conservation Agreement will incorporate the following: • Formalise agreement for the Wollombi Brook Conservation Agreement Area approximately 55 hectares; • Undertake an Aboriginal Cultural Heritage Assessment of the Wollombi Brook Conservation Agreement Area, including further investigating its features of significance identified by some Knowledge Holders. These components will include non-invasive archaeological investigations, ethno-botanical mapping, cultural values mapping and historical research; • BCM will provide unencumbered access for registered Aboriginal parties to complete cultural practices consistent with the agreed Management Plan; and • Further land management measures will be undertaken through the development of a Plan of Management including fencing the	Management of cultural heritage places and objects must be based on an understanding of cultural significance. <u>OEH Wellbeing Framework criteria</u> Access to Country Education and learning

Registered Aboriginal Parties ACHA consultation Finding/ Comments	Proposed Management and Mitigation Measure, Care and Control, and Intergenerational Equity Recommendation	ACHA Principles
sought meaningful, culturally relevant approaches to the management of the Wollombi Brook Conservation Agreement Area. Registered Aboriginal parties particularly Traditional Owners sought transfer of ownership of lands with appropriate resource provision to manage and conserve the area/s.	perimeter of the Wollombi Brook Conservation Agreement Area, regeneration of cleared areas including the use of culturally significant plant species identified in the ACHA. Registered Aboriginal parties including the WP, PCWP and WTC groups will be given priority to tender for carrying out these works. BCM will investigate a program to transition the ownership of the area to the relevant determined Native Title Group/s prior to the end of the Project. This may include an interim stage of leasing the Wollombi Brook Conservation Agreement Area to the relevant determined Native Title Group/s for a nominal amount.	

7.6 Conclusion

Bulga Coal Management is seeking Part 4 development consent under the *Environmental Planning and Assessment Act 1979* to continue and expand current operations within the Bulga Coal Complex to 2035, and expand the Project's disturbance footprint by an additional 1,924 hectares.

The Project's Aboriginal cultural heritage assessment process has been undertaken to inform the consent authority's decision making, and has provided all registered Aboriginal parties with the opportunity to actively participate in the assessment process and the development of management measures. As discussed previously, the Project's consultation approach provided registered Aboriginal parties with the opportunity to decide how they wanted their information to be shared, and to identify any restricted access provisions. As a result, this ACHA report has been prepared by Connect for Effect in collaboration with some registered Aboriginal parties; and it should be read in conjunction with the two separate and non-disclosed ACHA reports prepared by the PCWP or the WP, appended as **Appendices C1 and C2**.

This approach demonstrates compliance with the DGRs and current OEH guidelines; while also acknowledging and respecting that Aboriginal people have the right to directly participate in matters that may affect their heritage, and have the right to maintain culture, language, knowledge and identity.

This ACHA report provides an understanding of the Aboriginal cultural heritage values of the Project area, by documenting registered Aboriginal parties views on the cultural significance of the Project area; with integration of historical research and archaeological investigation providing a holistic approach to understanding the Aboriginal cultural landscape. This ACHA also evaluates the likely impacts of the Project if approved, spanning direct impacts, indirect impacts and cumulative impacts; and presented management options and recommendations with a focus on intergenerational equity and land conservation outcomes.

During consultation on impact assessment and management options, most registered Aboriginal parties consulted by Connect for Effect identified a primary position of 'No Development – No impact to Aboriginal cultural heritage', particularly in relation to the Loders Creek grindings groove complex.

Registered Aboriginal parties stated that they are not against mining but are against impacts to their cultural and heritage – the registered Aboriginal parties wanted BCM to modify their Project design to minimise Aboriginal cultural heritage impacts.

Registered Aboriginal parties stated that they are against any mining activity which will adversely impact on their Aboriginal cultural heritage – stating that mining activity which is likely to impact on Aboriginal cultural heritage is fundamentally not supported.

However, registered Aboriginal parties also identified a range of management measures for implementation in the scenario that the Project is approved.

There is active debate relating to long-term Aboriginal cultural heritage conservation and management outcomes for cultural and archaeological sites located within active mine sites. All registered Aboriginal parties consulted sought conservation and cultural outcomes including land based and non-land based, which would provide for current and future experiences and the protection of cultural and archaeological sites where there will be no impact from mining either open cut or underground. Registered Aboriginal parties sought land based offsets to be set aside beyond current and future mining activity areas.

Careful consideration of both *in situ* conservation and relocation conservation options have been discussed with registered Aboriginal parties. Registered Aboriginal parties stated that material fabric may be able to be conserved elsewhere, but that forms only part of the site so this approach can at best be described as a partial conservation outcome – perhaps removal and relocation options (or mitigation options) would be more appropriate.

The ACHA and consultation process developed to inform the Project has provided the proponent with greater understandings of the inherent cultural, historic, scientific and aesthetic values of registered Aboriginal parties in relation the area and cultural archaeological sites to be found within the Project area.

These understandings have been instrumental in the assessment process particularly in modifying the Project design where possible and in informing the development of management options which include intergenerational equity recommendations which aim to address registered Aboriginal parties responses and are directly associated with the values and ACHA findings.

During the EIS assessment process; BCM modified the design of the proposed Project in order to avoid some areas identified as having high Aboriginal cultural heritage value, such as the Wollombi Brook Conservation Agreement (CA) area.

In the process of identifying cultural heritage and other environmental constraints, BCM undertook further modification to the Project design to avoid an identified cultural site within the Project area; with management arrangements to be developed to monitor the management of the site (refer **Appendices C3 and C4**).

As an outcome of this process, management options and recommendations have been suggested for both 'Project approval' and 'No Project Approval' scenarios. These are detailed in **Sections 7.5 and 7.5**, and also listed in the Executive Summary of this ACHA report.

Connect for Effect and BCM would like to thank the registered Aboriginal parties for their participation and contribution to this assessment process, and remain committed to continued consultation with Aboriginal parties.

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Final

Bulga Optimisation Project

Aboriginal Cultural Heritage
Assessment

Historic Narrative

Appendix A

April 2013

Connect for Effect Pty Ltd

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1 The Physical Setting

The Project area is located on the southern margins of the Central Lowlands of the Hunter Valley, approximately 12 kilometres southwest of Singleton and approximately 2.5 kilometres east of the Wollemi National Park that forms the foothills to the Great Dividing Range.

The landscape of the Project area has been modified by previously approved mining, with 2,188 hectares of the 4,867 hectare Project area – or approximately 45% – classified as disturbed (**Appendix 13b of the EIS**). Previously, the landscape would have been characterised by the gentle slopes and rolling hills of the Central Lowlands, separated by creek catchments ultimately leading to the Hunter River and Wollombi Brook.

Elevated land within the Project area forms the watershed of the Wollombi Brook catchment, with several unnamed tributaries in the Project area flowing west into the Wollombi Brook, which is located just beyond the Project area boundary.

Wollombi Brook flows north from Broke into the Hunter River 10 kilometres west of Singleton.

In the east of the Project area, water flows from south to north, with Nine Mile Creek flowing into Loders Creek within the Project area, and with Loders Creek flowing north and ultimately joining the Hunter River six kilometres downstream. Numerous ephemeral streams drain into these waterways throughout the Project area, surrounded by extensive gently sloping hills.

A detailed description of the Project area landscape is provided by OzArk (**Appendix 13b of the EIS**) as required by the Code of Practice for Archaeological Investigations (DECCW 2010).

Sections covered later in this report consider the landscape at the time of European contact, the resources that sustained past Aboriginal use of the area and the changes to the landscape in historic times.

2 Historic Knowledge Methodology

The Burra Charter (Australia ICOMOS 1999) framework identifies that first step in understanding the cultural significance of a place is the collection and analysis of information on that place, which should take into account all aspects of cultural and natural value.

OEH guidelines (DEC 2005, OEH 2011) reflect this approach, requiring that the Aboriginal cultural heritage assessment process provides an historic narrative of the peoples who have and continue to live in the region, sourced from a range of archival, historic, oral and ethnohistoric sources; and that this narrative encompasses both pre-contact and historic Aboriginal histories.

In this context, this ACHA presents a multi-faceted understanding of the history of the Project area in a local and regional context, with information drawn from a range of historical, oral and archaeological sources in an attempt to present a holistic understanding of place.

This understanding is presented as an historic narrative of the Aboriginal cultural landscape of the Project area in a local and regional context so as to explore the traditional, historical and contemporary Wonnarua associations with the region; the shared experiences of Wonnarua people; other Aboriginal people and settler Australians since contact.

Sources that contributed to the historical narrative for this ACHA include:

- Ethnohistoric sources relating to Aboriginal cultures and societies at the time of European contact to gain an understanding of Aboriginal life at that time, with a particular focus on the Wonnarua people;
- Primary and secondary historic sources relating to the history of the Hunter Valley since European contact, with a particular focus on the Broke region, to gain an understanding of the experiences of Wonnarua people since that time, and the shared experiences of Wonnarua people, other Aboriginal people, European and other settler Australians;
- Input of registered Aboriginal parties on the traditional, historic and contemporary Aboriginal experiences in association with the Hunter Valley, with a particular focus on the Broke region;
- Review of documented oral histories relating to the Project area and the broader region in relation to its influences on the Project area;
- Review of environmental literature on the Hunter Valley, with particular focus on the Bulga region, to gain an understanding of how Aboriginal people shaped the landscape recorded at the time of European contact and how this landscape sustained influenced Aboriginal cultural activity and use of its resources; and
- Review of archaeological sources relating to Broke in a local and regional context to gain an understanding of known past use of the Project area, the depth of Aboriginal history (antiquity) and long term changes in Aboriginal society and culture.

This section presents a historical account of the Broke/Bulga subject area, incorporating Warkworth, Mount Thorley and Loders Creek. It makes references to both documentary and oral records and recognises the documentary record may not generally represent the perspectives, culture and knowledge of Aboriginal people.

This section also contains information sourced from historical records and copies of original historic accounts which may include statements or language that could be considered offensive to Aboriginal people because of the context in which they were created. Connect for Effect would like to express its sincere regrets for any pain or distress this may cause to any person.

As recorded in an extent of texts and testimonies, Aboriginal culture and spirituality is intricately connected to the land and the Wonnarua people, as Traditional Owners of the area, having never relinquished their sovereignty of traditional territories. Local Government authorities and other parties, in broad consensus, recognise that Aboriginal people in the Hunter Region maintain ongoing connections with the land.

South of Singleton, Broke is located within a region of numerous significant sites including Mount Yengo, Milbrodale, Burragurra, Howe's Valley, Bulga, Appletree Aboriginal Area¹ and Wollombi.

Landscape features – such as Wollombi Brook and Lizard Rock (known also as Yellow Rock) – also position Broke as an important point in this network of culturally potent sites, with the waterways acting as a pathway into Mount Yengo. In particular, as a reliable freshwater source, Wollombi Brook would have been an important resource. According to Veale (2001, p. 2), “the Wonnarua knew their country intimately and would frequently use the same hunting grounds, water sources, ceremonial sites and camping places over generations.”

Albrecht states the landscape and the rivers of the region were all named by Aboriginal people but many of the names were lost during surveying and settlement. In 1834, Lang noted:

¹ Aboriginal areas are places which have been identified as having special significance to Aboriginal people, or which contain objects of Aboriginal culture. Aboriginal areas allow for the use of the area by Aboriginal

“Indeed, every remarkable point of land, every hill and valley in the territory, has its native name, given, as far as can be ascertained from particular instances, from some remarkable feature of the particular locality.” (Lang, 1834).

3 Connection to Land, Culture, Spirituality and Ancestry

Key to understanding Aboriginal cultural values and the cultural landscape is the intrinsic link between land and Aboriginal cultural identity. Such an understanding can be achieved through exploration of the relationship between land and the spiritual, cultural, emotional and wellbeing of Aboriginal society.

Wonnarua people today identify themselves through their Country and ongoing connection to the land, and the cultural and spiritual strengths drawn from this connection.

While some of the sites and localities mentioned do not fall within the traditional territories of the Wonnarua, they have an influence as demonstrated by shared Creation or Dreaming stories.

Dreaming stories – which can be expressed through storytelling, song, dance and painting – have long been used to pass on important knowledge, cultural values and belief systems to later generations; and to maintain the link with the Dreaming from ancient times to today (Australian Museum 2012).

Throughout south-eastern Australia there was a belief in an ‘All-Father sky deity who appeared under a variety of names, and is known over a large part of inland New South Wales as Baiame’ (Brayshaw 1987:83).

In the Hunter Valley artistic expressions are found in archaeological record through rock art and engravings such as in the painting of Baiame at Milbrodale and other known engraving sites.

The uniqueness of Wonnarua art work has also been noted in historical records with Brayshaw (1987:64) describing how ochre was often used to paint shields made of bark and wood, with these being used ceremonially. Artistic expression continues in contemporary times. Today, through local Aboriginal artists, including Traditional Owners, cultural expression is being maintained.

Some registered Aboriginal parties identify the historic artwork in the region as important.

“We have a lot of art and rock art features in the area (region external to the Project area)..... They are special.....Very special and need to be looked after” (RAP #1, Cultural values statement 19 September 2012).

About Baiame

Baiame had two wives, Biragnulu and Gunambali, and a son called Daramalan. Daramalan is believed to be a type of Satan or devil, the adversary of Baiame; and he was the Great Master of the Bora. Mooneeburrabeen or Moonaibaraban (his wife or one of his wives) instructed the women in all their duties and domestic art (O’Rourke 1997).

A Wonnarua Dreamtime story explains how Baiame created the hills and rivers of the Hunter Valley in the following account (Australian Museum 2012):

“Wonnarua Dreamtime of the Hunter Valley was created by the great spirit, Baime (Byamee). Before Baime (sic) there was nothing, everything was sleeping. Baime awoke and created everything, the mountains, plains, rivers and every living thing”.

Miller describes the Aboriginal view of occupation as follows:

“The spirits interacted, shaping what was nothing, into something. They gave life to the whole valley ... After further interaction amongst spirits, the valley floor parted and what was to be the keeper of life was formed. The river now flowed. The land was ready. Both man and animal descended from the spirits and moved over the earth” (Miller J., 1985, p. 1).

A Dreamtime story from the Wonnarua explains how the hills and rivers in the Hunter Valley were created by a spirit called Baiame (Australian Museum, 2010). The Wonnarua Nation Aboriginal Corporation also honours this story: “Wonnarua Dreamtime of the Hunter Valley was created by the great spirit, Baime (Byamee). Before Baime (sic) there was nothing, everything was sleeping. Baime awoke and created everything, the mountains, plains, rivers and every living thing.”

A Maitland City Council document acknowledges the Baiame creation story, reproduced with assistance from the Mindaribba Local Aboriginal Land Council, indicating the regional significance of this story:

“Aboriginal tradition tells of Baiame, the ancestral being of the people of the Hunter Valley, the Great Spirit who is keeper of the Valley. Baiame created the earth and sent other spirits to create and live in the natural features of the valley. Baiame created the first laws by which Aboriginal people lived and these remained unchanged through thousands of years of Aboriginal life”.

Baiame is depicted in red ochre in a cave painting at Milbrodale as a large figure: “from the wall of the sandstone overhang south of Singleton, he looks out through the Milbrodale Gap, over what is now the Putty Road, and into the Upper Hunter Valley. His long arms outstretched embracing the Valley and its people” (Muswellbrook Shire Council). “The location of the painting of Biaime (sic) links it with Mount Yengo, approximately 30 kilometres to the south-west, as the place of Biaime’s ascent into the sky at the completion of creation (NSW NPWS 2001).

Numerous sites of high significance are located within the general vicinity of Mount Yengo, including the large engraving site known as Burragurra, about 50 kilometres south-west of Broke, which was associated with male initiation. Based on limited archaeological analysis, it has been suggested that differences in design of rock engravings at different sites within Yengo represents “different Aboriginal groups and patterns of Aboriginal land use” (NSW National Parks & Wildlife Services ((NPWS), 2001, p. 30).

Another Creation story, Legend of the Giant Lizard at Yellow Rock (at Broke), was recounted by Mr Eric Taggart to W.J. Needham, author of Burragurra: Where the Spirit Walked. Aboriginal Relics of the Cessnock-Wollombi Region in the Hunter Valley of NSW (1981).

Described as an iconic landmark in the area, Yellow Rock is an escarpment that towers over Broke.

Di Gravio notes that he heard the story from mineworker/conservationist Mr Brian Laut who received it from Mr Eric Taggart who in turn received it from Mr Tom Dillon²:

“A great lizard (or goanna) wended its way across the land from the coast creating valleys and mountains. As it made its way towards the plains country it was met by the warriors there who commanded it to stop, it resisted, and the warriors killed it and smashed its head. It can be seen to this day petrified as Yellow Rock at Broke. To ensure that it stays that way, to the left of the road at Broke, lies a line of rock formations which are said to be the

² Tom Dillon died in 1923 and is buried in the Sandgate Cemetery. His gravestone acknowledges him as the “last full blood Aboriginal of the Hawkesbury”.

Kamilaroi warriors who stand guard just in case it chooses to revive itself and continue its journey" (Di Gravio, 2009).

The Dreaming story of Tiddalik the frog, which is told in many places throughout south eastern Australia, also relates to the creation of the rivers of the Hunter Valley.

"Tiddalik awoke one morning with an unquenchable thirst, and began to drink until all the fresh water was greedily consumed, not caring for the needs of others. The result was that he was full to the point where his tummy was near bursting and he could only move a short way away from what had now become an empty, dry stream. The other animals quickly became alarmed at the loss of water and realised that they would have to get Tiddalik to bring some of the water back up. If he didn't they knew that all the living creatures would die. They got together and eventually made Tiddalik laugh. In doing so he brought the water back up. All the living creatures could now survive and enjoy life once more. Tiddalik though, was punished for his greed" (NPWS 1980).

In the Hunter Region, the story tells of how Tiddalik was turned into stone, and still exists today in a sandstone formation near Broke, located on Slacks Creek before it joins the Wollombi Brook.

According to National Parks and Wildlife Services (1980), the Tiddalik site is connected to a number of other sites on the same ridge including the Teaching Cave, the Menstruation Cave, the Birthing Cave and two other rock formations resembling frogs. These sites also relate to various sacred sites within nearby Yengo National Park, in particular the rock engravings at Finchley and the mythological mountain sites of Big and Little Yengo (Muswellbrook Shire Council). Dreaming stories are strongly linked to Dreaming tracks and songlines, which are said to cross the territory. Taçon (2005) describes their ongoing relevance to Aboriginal culture, landscape and identity:

"...as these tracks were maintained through ceremony, song, visual art, the transmission of oral history, trade and other forms of exchange. Today, these tracks illustrate ways of conceptualising land other than through the printed maps, roads and hard political boundaries so typical of the modern world ... For most Aborigines, the Dreamtime continues to express itself, albeit in new ways. However, the Dreamtime was never static; change has always been an essential feature. Changing landscapes, seas and climate resulted in transformations of Ancestral Beings, plants, animals and even people".

The Wonnarua Local Aboriginal Land Council (WLALC) Chief Executive Officer also provided reference materials relating to the story of Burning Mountain. According to Ros Stirling, the story of Burning Mountain at Wingen has been handed down through generations of Wonnarua. The story, noting Broke as a site of conflict between Wonnarua and Kamilaroi, is recorded on signage at the site:

"One day, the Gummaroi (or Kamilaroi) people to the north sent a raiding party to Broke to steal Wonnarua women for wives. The Wiradjuri to the west, who were friends of the Wonnarua, told them of the Gummaroi plans. The Wonnarua gathered all of their warriors and sent them to do battle with the Gummaroi. The wives of the Wonnarua warriors waited for their husbands to return. All came back, except one. The wife of that one started to worry. She went up high and sat on top of a rock cliff overlooking the valley to the south to wait for her husband. She waited and waited, but when he did not return she knew that he had died during the battle. She cried until she could cry no more. She could not live without her husband, so she asked Baayami, the great sky god, to kill her. Baayami could not kill her so he turned her to stone. As she was turning to stone she wept tears of fire which rolled down the hillside and set the mountain alight." (Stirling).

A number of Aboriginal registered parties made comment on the proximity of the Project area to Creation sites of the Wonnarua³ Dreaming, such as:

- “Our creation places are so close to BOP. This is important to us” (Cultural values statement 16 November 2011);
- “There are a number of dream time stories recited from oral history that are housed in the landscape around the Broke/Wollombi/Broken Back area, these include around Yellow Rock, Goanna Dreaming (there are two slightly different stories relating to how and why the hill is shaped like a goanna), Tidilik the frog, and the Wingen Maid/Burning Mountain history. Sentinel Rock is another place of significance. There are many others I am not privy to especially concerning the area around the Broken Back” (WLALC Cultural values statement 21 November 2011);
- “We have so many Creation places...they are so close to BOP. The meaning of the area is tied in our spiritual customs and our Aboriginality.” (Cultural values statement November 2011); and
- “Sites, the land, places, vegetation and animals are all significant as they tell the stories linked the Dreamtime to the people” (Cultural values statement November 2011).

Refer also to non-disclosed statements in **Appendix C3**.

Over the years there have been several attempts to record the boundaries of Wonnarua lands and waters at the time of European contact, but this task is complex as it requires a broader understanding of Aboriginal concepts of linguistic and tribal boundaries, and the relationships between land, culture, spirituality and ancestry. The history of European contact also needs to be understood, as archival records of language and tribal boundaries were most often made by European explorers or settlers who had little understanding of complex Aboriginal social relationships. By the time detailed records were produced, significant changes were already occurring within Aboriginal communities as the result of contact.

Topographic features also played an important role in the demarcation of territories and boundaries, with the observations of Tindale between the 1920s and 1940s and Clark (1990) finding that boundaries were cultural, ecological and geographical constructs, where a “close correspondence exists between many tribal boundaries and physiographic, geographic and ecological boundaries”.

In Wonnarua Country, where the mountains meet the plains; there are several important watercourses and landscape features that provide cultural reference points for Aboriginal people. These aspects are discussed in the following sections.

It is broadly understood boundaries of language groups shifted over time. The larger language groups were generally more stable in geographic terms than smaller units. However, even within each of the larger language groups, a variety of shifting territorial and political boundaries occurred in a complex hierarchy that ranged from the family group to the much larger language group (Belshaw 2010).

The location of the Project area close to the southern boundary of the Wonnarua with the Darkinjung is suggestive of an area of shared attachment, which is indicated by a 1975 interview with Mr Eric Taggart in the Newcastle Morning Herald & Miners' Advocate. In this interview, Mr Taggart stated that the Broke and Bulga area may have been a ‘fringe area’ visited by Wonnarua, Darkinjung, Kamilaroi and Awabakal people.

³ There are numerous spellings Wonnarua in historical accounts, such as Wanaruah, Wonaruah, Wanarua and Wonnah-Ruah. Note that there is no right or wrong way to spell an Aboriginal word as there was no European form of written expression of Aboriginal language prior to 1788 (Maynard nd). The spelling used throughout this report is generally accepted to refer to the Aboriginal people of the central lowlands of the Hunter Valley at the time of European contact.

In this context, it is understood that that Wonnarua Country was centred on the upper Hunter Valley and included all of the region around Singleton and Maitland, and was bordered by the Country of the Gomeroi to the north, the Wiradjuri to the west, the Darkinjung to the south, the Worimi and the Awabakal to the east (Fawcett 1898, Miller 1886, Tindale 1974).

Although early historic records on Wonnarua boundaries are limited in both detail and understanding, some make specific reference to the extent of Wonnarua Country, such as Fawcett (1898) who stated that the Wonnarua tribal area was 2000 square miles and included “all the country drained by the Hunter River and its tributaries”.

Recent attempts at mapping this tribal area include those by Tindale (**Figure 1**) and Horton/AIATSIS (**Figure 2**).



Figure 1: Extract from Tribal Boundaries in Aboriginal Australia, Tindale (1974)

Source: <http://nla.gov.au/nla.map-gmod91>



Figure 2: Extract from Aboriginal Australia Wall Map, Horton (1996)

Source: © Aboriginal Studies Press, AIATSIS

Within Wonnarua Country, a number of social groups would have shared common language and territories, with people also identifying by clan name and totem. Although historic accounts of clan divisions are few, McKiernan (1911:886) identified that the Wonnarua were historically divided into a number of separate groups living at different locations within the same tribal territory. Mr Eric Taggart shared that the Wonnarua had 12 clans at the time of European contact (as reported by the Wonnarua Nation Aboriginal Corporation 2012).

Blanket records from the early to mid-19th century also provide some insight on past social organisation. They recorded those collecting blankets by 'designation of tribe' and 'place or district of usual resort'; although it is noted that records were created by Europeans who may have not understood the complexity of Wonnarua social organisation.

The following 'tribes' and living places are recorded, which may reflect continued association with clan areas, although it must also be recognized that they were also taken at a time of significant social and cultural change and the ongoing dispossession of Wonnarua people within their traditional lands:

- The 'Wollombi' or 'Lower Wollombi' tribe, with people recorded as living at Wollombi (which in the 1830s and 1840s was the name for the district also including Broke and Bulga) and lower Wollombi;
- The 'Falbrook' tribe, also referred to as including people of the 'Kingikine' and 'Hungary Hill' tribes, with people recorded as living at Bridgman, St Clair, Carmel, Cedar Brush, Mt Royal and Rooklee;
- The 'Glendon' tribe, with people recorded as living at Glendon;
- The 'Patricks Plains' tribe, also referred to as including people of the 'Plains Tribes' and 'Castle Forbes' tribe, with people recorded as living at Patricks Plains and Castle Forbes; and
- The 'Merton' tribe also referred to as including people of the Crozcoo and Gnainoical tribes, with people recorded as living at Merton.

Some early accounts identify that the Kamilaroi Country of Gomeroi people may have extended as far south as Jerry's Plains (refer to Threlkeld 1892, Matthews 1903, Enright 1937:322-33), and that at the time of European contact, Kamilaroi Country may have been in the process of a southern expansion. This is also reflected by statements made to Howe in his exploration of the Hunter Valley in 1819, when he was told by a party of Aboriginal people while on the Hunter Range above Doyles Creek,

that ahead to the north lay "Coomery Roy" land (Campbell 1928:236). MacDonald (2012) considers this to have been a misinterpretation and it was meant to describe to Howe that the land was near Gomeroi Country.

Historic accounts demonstrate that the Wonnarua had close connections with the Gomeroi people, as they had with all surrounding language groups, with a network of social links connecting coastal and inland peoples (Brayshaw 1987:51).

'Dreaming' or Creation sites are sometimes called natural sacred sites, as they evidence the cosmological forces at work in the creation of the natural landscape and may result from the activities of sentient beings at a time before they altered form to become specific landscape features (McIntyre-Tamwoy 2008). Through continued interaction with creation sites, Aboriginal people can then actively engage with those beings and this can have direct consequences on the maintenance of the world around them such as the increase and proliferation of certain species of animals or the health of particular ecosystems (McIntyre–Tamwoy 2008).

For many Aboriginal people, a Totemic Being represents the original form of an animal, plant or other object as it was in the Creation period.

Historical accounts indicate that amongst the Wonnarua totemic groups existed there were some aligned to particular animals. One account by Fawcett (1898) states that the Wonnarua were divided into four male totemic groups and four female totemic groups. The group that each individual belonged to defined who they could or could not marry.

Fawcett (1898) also identified that in order for a relationship to be deemed suitable, a man must go outside his own totem and that of his mother while McKiernan (1911) and Miller (1886) also referenced the need to marry outside the 'local group'.

Marriage could be organised by the relevant families/clan groupings but due to need to marry outside the relevant totemic groups (often referred to as exogamous marriage), it was often difficult for men to find a correct match; in which case it may have been necessary to take the wife of another man or undertake a raid on a neighbouring tribe (Fawcett 1898, McKiernan 1911) which in turn could result in significant conflict.

As a result of this system, Fawcett (1898) identifies that 'all father's brothers were counted as fathers, and all his sisters as aunts, all a mother's brothers as uncles and her sisters as mothers.' By association, there was an obligation to avoid having contact with particular classes of relatives, such as between son-in-law and mother-in-law. The details of this account are not supported by Miller (1985), who states that 'the mother's brother was also called father and his children were called brother and sister'; with such inconsistencies potentially reflecting limited European understanding of complex social structures'.

From this it is apparent that Wonnarua people had a complicated kinship system at the time of European contact, and that it was critical in determining how people interacted both within and outside their tribe and formed a central component of Aboriginal society (Umwelt 2011b)..

During the ACHA consultation, some registered Aboriginal parties identified the importance of totems.

"Some of our animals are totems and some were our food source" (Cultural values statement May 31 2012).

"Animals are a huge part of our culture; they are our totems, our resources, our Creators" (Cultural values statement May 30 2012).

Refer also to non-disclosed **Appendix C4**.

During consultation for this ACHA, some Aboriginal registrants referred to the whole of the Aboriginal cultural landscape as being sacred, while also identifying particular places of importance as being sacred; such as the following statement by WTC's representative, Elder of Broke, Mr Kevin Taggart:

"To me sacred sites encompass all of the land. All of our country is sacred."

"In relation to Loders Creek and the area where Bulga Coal wants to mine and is mining, the area is very special to my family. The Taggart's are the only Aboriginal family who have never left the area and continue to live here. I know all these parts like the back of my hand - as a kid when I was about 7 to 8 years of age until my twenties I walked all over this Country with my father."

Oral histories further describe Wonnarua clan structure, with the Wonnarua Nation Aboriginal Corporation (WNAC) reporting that Mr Eric Taggart, born in Broke in 1910, indicated that prior to detribalisation, the Wonnarua was comprised of 12 clans. McKiernan (1911, p. 886) also identified that the tribe was further divided into a number of separate groups living at different locations within the same tribal territory, i.e., that both internal and external tribal boundaries existed.

Although early records of Wonnarua territorial rules are limited, Fawcett (1898) did record the following in relation to maintenance of home territories:

"Their tribal boundaries were both well-defined and clearly understood by both themselves and the members of their neighbouring tribes. So strictly were all rights and privileges understood, that for one tribe to enter into the district of another in pursuit of game was considered an offence of great magnitude and a good ground for hostile meeting."

4 Places of Ceremony

Ceremonies continue to be the core of Aboriginal spiritual life, with the cycle of rituals performed at Dreaming places, maintaining the land and its people. Traditionally, ceremonies could be held for hunting.

Historical accounts of Wonnarua people gathering for ceremony describe several large gatherings in the region, in which multiple family and tribal groups participated, as described by Goddard (1937:9):

"Coomilroi, Wolrio, Gunnebal and Giroombul tribes were known to pass up the Namoi; and likewise the Wailalun, the Castlereagh, to the Wollombi and Howe's Valley for certain ceremonies in which the several groups would assemble".

Registered Aboriginal parties also spoke of movements to and from places of ceremony both within Wonnarua Country and external to it.

A 1975 Newcastle Morning Herald & Miners' Advocate report by P.A. Haslam featured an interview with Mr Eric Taggart:

"...who revealed that the area was a 'fringe area' visited or occupied by several tribes including Awabakal and Kamilaroi. What is meant by 'fringe area' is unclear although Broke is located on the Wollombi Brook at the edge of the mountains. Mr Taggart led a small party on a tour around Broke and surrounds. During the tour he spoke of the abundance of game, demonstrated trapping methods and identified rock salt sources. He identified a burial ground, as a sacred spot, on Putty-Broke Road that is surrounded by acacia trees and had been overtaken by farming. He also noted the existence of a tribal camp not far from trees and caves."

Needham has identified a number of sites of interest in the Broke/Bulga area including:

- Last reported Bora ceremony held in 1852 at Bulga⁴ ;
- Three burial grounds in Wollombi region including one at Broke, known to be under a tree or trees;
- A salt quarry at Broke, which was a source of rock salt;
- Hunting grounds located five kilometres from the township of Broke, which were a natural game trap;
- Potholes - a series of axe-grooves are associated with some potholes. Two sets of potholes including one at Broke are deeper than others and contain stone lids;
- With extensive surveys having been undertaken in the region for a range of resources and other projects, the Upper Hunter has been found to "demonstrate a large number of sites which relate to Aboriginal Heritage, especially along creek lines" (Upper Hunter Shire Council cited by Connor, Higginbotham, Freeman, & Albrecht, 2008, p. 85);
- One such site is at Loders Creek near Mount Thorley which has been found to be an area of archaeological significance with large scatters found on tributaries to Loders Creek (Insight Heritage, 30 May 2007, p. 13). This includes a set of axe grinding grooves recorded at Loders Creek (Insight Heritage, 30 May 2007, p. 14). In recognising these and other significant sites, it is important to consider the landscape beyond them and the connections between them; and
- Taçon (2005) explains that one of the problems of current approaches to cultural heritage is *"...the sectioning off of sacred sites from Dreaming Tracks and the larger landscapes they are inextricably linked to"*.

Fawcett (1898) describes Wonnarua as frequently moving around within their tribal boundaries and living in small camps primarily located close to water sources.

Archaeological studies have found that large stone artefact scatters are mainly concentrated on watercourses such as Wollombi Brook and the associated drainage lines, particularly where one or more watercourses intersect. Archaeological findings from sites along a major drainage line leading to Wollombi Brook in the Broke area suggests that Aboriginal people generally camped in small family groups in separate but often overlapping areas and undertook such activities as making and repairing stone tools, grinding sharp edges on adzes, hatchets and axes on sandstone outcrops within creeks.

These tools were used for woodworking, preparing and eating foods hunted and gathered within the local area and processing food plants using portable grindstones and possibly on sandstone outcrops.

The reported presence of hearths (fireplaces) along creek lines within the local area and the presence of heat treated artefacts indicate that Aboriginal people were not only using fires for warmth, protection and preparing food but also for heating stone in order to improve its potential use to make stone tools (Umwelt 2007).

While Wonnarua tended to remain within Traditional territories, there was a range of reasons for movement around a larger region including trade and ceremony. The WNAC (2009) again cites Mr Eric Taggart who indicated that:

"The Wonnarua unquestionably had strong ceremonial and trading ties with both the Awabakal and Darkinoong. The ties with these groups were undoubtedly cemented by the

⁴ In 2010, Coal & Allied announced protection of the culturally significant Bulga Bora Ground and adjoining cultural landscape. A 500 ha Wollombi Brook Aboriginal Cultural Heritage Conservation Area will permanently protect Aboriginal heritage and biodiversity values, as part of an application to extend the operation of the Warkworth mine near Singleton by 10 years. Media Release: Bulga Bora Ground to be protected. 19 May 2010
http://www.coalandallied.com.au/media/38_media_releases_2442.asp

convergence of their tribal boundaries in the spiritually significant Wollombi area. Mountains and creeks separated the three groups; the Wonnarua, of the Valley; the Darkinoong proceeding southwards to Wiseman's Ferry, and slightly inland from the coast; and of course the Awabakal of Lake Macquarie and coastal strip to the Hunter River".

Historic accounts refer to Bora ceremonies occurring within what is now Yengo National Park to the south of Bulga (such as those by Mathews 1897 and Fawcett 1898 and Goddard 1937) referring to an important site known as Burragurra, a large rock engraving site located over 50 kilometres south-west of Broke, as an initiation place for young men.

The importance of mountains and high places in Aboriginal ceremony was also discussed by Ardler (2003) as part of a NPWS sacred sites survey. It found that a key reason Aboriginal people moved into the mountains for ceremonial purposes, and that these ceremonial places often had value to more than one tribal or cultural group.

References to people gathering in the Wollombi area to the south of Bulga for ceremony by authors such as Mathews (1897), and Fawcett (1898) and Goddard (1937) have led current researchers to understand that the Wollombi was a significant and focal area for Aboriginal spiritual life, as stated by Needham (1979:8):

"The mountainous region just west of Wollombi contains many important ceremonial sites which were used by all the aboriginal tribes, for tribal boundaries disappeared when it was time for religious and ceremonial events. The ceremonial path taken appears to have begun at Wollombi, and proceeded up Yango Creek into the mountains. This appears to have been the path forged out by the blacks' ancestral spirits".

The Bulga region was host to a large Bora ceremony in 1852. The Bora ceremony was an initiation ceremony found in much of southeast Australia, and was related to the figure Baiame. The name is derived from the bor or boor, the fur string belt which was worn by initiated men. The Ceremony was carried out in special grounds with earthworks in a circular form called Bora rings or grounds. At times stone arrangements, carved trees and rock art seem to have been associated with the rings (Horton 1994:143-144).

Other reports of ceremonial or corroboree grounds in the local region include a recollection by a settler Australian Keith Standing (cited in Bodiam 1988:5-6) who recalled an Aboriginal corroboree ground on the Oakley's property at Broke, which still contained a large mound when he was a child.

Another report by Mr O'Sullivan White in 1934 recalls a corroboree ground on the banks of the Hunter River near Singleton, based on the following:

"...a distinct remembrance of a large corroboree taking place on the banks of the Hunter in one of Mr How's Paddocks somewhere near where the bridge now stands and Westbrook Road. There must have been close upon 400, if not more present; they were not all Hunter blacks, the Macleay and Manning tribes helped to make up the number."

During discussions with registered Aboriginal parties for this ACHA report, comments on places of ceremony outside of the Project area and their connection with the Project area were made:

Yengo, Broken back (is real important) over to Warkworth. Warkworth Sands is very spiritual, very sacred, a very special place. Yellow Rock means everything to me - so do a couple of special places around the area. The proposed conservation area is also a real special place. You get a lot of energy from the place (WTC's representative Elder of Broke).

The area is in easy walking distance to a number of known ceremonial areas.” (Cultural values statement 21 November 2011)

Historical accounts also identify that inland Aboriginal people of the Hunter River region would move into coastal territories for ceremony, such as the observation by J.F. Mann in the summer of 1840, who reported that ‘inland Aborigines from Wollombi’ participated in a corroboree near the mouth of Wyong Creek on Tuggerah Lake (cited in Brayshaw 1987:82).

4.1 Burial Ceremony

Burial is an important form of ceremony. While burial ceremonies varied widely between Countries, and also according to the importance of the deceased, it was essential to all that the dead were buried in their own Country and their spirits properly sung to rest (Parbury 1986:30). It was a terrible fate in Aboriginal society for one’s corpse to be left for animals to consume. Internments were often protected by large stone cairns. Enemies were left unburied but never kinsfolk, except in extreme circumstances (Flood 2006:155).

Burial methods varied significantly between Countries. They could include placement in hollow trees, log coffins or bark cylinders, cremation, internment or mummification on freestanding platforms with the skull and long bones then placed in a rock shelter. When the body was interred, an aperture was left in the earth mound to allow the soul to escape and sometimes fires were lit to keep the body warm until the spirit departed (Flood 2006:155).

Funerals of tribal Elders could continue for weeks. Burial grounds and spirits of the dead were held in great fear. The possessions of the dead were often destroyed, their shelters burned and the whole camp moved away.

In Wonnarua Country, there were several traditional forms of disposal of the dead. While burials in the earth were most commonly recorded, others were in caves and trees. The position of the interred body was varied and could be extended or flexed, face down, placed on the side or face up. The use of bark as a burial shroud was widespread (Brayshaw 1987:86). Cremation is limited in historic accounts, but archaeological investigation at Swansea Heads south of Newcastle found 12 cremated burials which date to approximately 2,000 years before present (Dyall and Bentley 1973, 1975).

A number of historic accounts refer to Aboriginal burials in the vicinity of Bulga. Breton (1833:203-04) described the burial of four men and two women of the Kamilaroi tribe killed near Wollombi Brook, who instead of being interred, were covered with mounds of earth, the men together in the shape of a cross, and the women in cones. A circle was cleared around the site, about thirty feet in diameter, and another made around that, with pieces of bark being laid end to end in the space between. Breton (1833) reports that four waddies were stuck in the centre of the cross, and the trees for some distance around were carved with figures representing kangaroos, emus, possums and weapons. The carvings sometimes extended twenty feet above the ground (Brayshaw 1987:88).

Eather also provides an undated description of a burial in about 1850 of a woman at "a sandy spot between the junction of the Bulga and Parson's Creek", which he reports had been used for burials over the years. He provides the following account of how the woman was prepared for burial by her people (cited in Brayshaw 1987:87):

“.....arms were bound with strips of kurrajong bark to the sides with the hands folded across the breast. The legs were doubled up with the knees drawn in a sitting position, also bound with strips of bark, and the body was lying on a sheet of bark. Men dug up the loose sandy

soil with their boomerangs while the remainder of the funeral party made a mound over the body with their hands. The mound was then covered with logs and sticks”.

Another account by Miller (1886) describes the Wonnarua interring their dead in a sitting position and then covering the grave with logs to prevent later disturbance.

The Importance of Red Ochre

The use of red ochre for ceremony was documented by some early authors, such as Threlkeld (in Gunson 1974:63-66) who referred to the Wonnarua sourcing red ochre from a volcano “up the River Hunter”, where they obtained:

“...a reddish earth which they wet, mould up into balls, and then burn them in a strong fire, in which the balls change into a brilliant red pigment”.

Throughout Australia, red ochre was one of the most important minerals mined by Aboriginal people as it had a particular association with ceremony although it was also used for a variety of artistic and decorative purposes (Peterson and Lampert 1985).

5 Trade Ties

While Wonnarua moved beyond their territory for ceremony, they also moved into other regions for trade. Times of ceremony also provided opportunity for trade (Mulvaney 1986).

Coastal records also indicate a level of trade with inland, likely Wonnarua, people; Dawson (1830:16) and Scott (1929) describe the manufacture of spears for trade to ‘inland Aborigines’ and Threlkeld (cited in Brayshaw 1987:65) describes Biraban of the Awabakal heading ‘to the mountains with upwards of 60 spears to exchange for opossum cord made of the fur’.

Moore also identifies evidence of “trade between the predominantly coastal Gaddhang and the riverine Wonnarua, and of contact between the valley tribes and those to the south, the Awabagal of Lake Macquarie and the Darginung of the Hawkesbury Valley” (Moore 1970:29).

On a trip from Wollombi to the Hunter, Breton reported that he travelled with a group of 60 Aboriginal people who he described as being ‘one from Illarong, the other belonging to the Wollombi’ (1834:81-82). It is possible that an Aboriginal trade route stretched from the Sydney area to the Hawkesbury and along what is now known as the Boree Track passing through Yengo National Park and on to Milbrodale (Brayshaw 1987:41).

There were a number of known Aboriginal pathways in the Hunter Region used for trade as well as ceremonial purposes, including the Boree track - pathways later used by explorers and surveyors and now known as the Putty Road and the Great North Road, and the Cassilis Gap; which may have individually or collectively formed part of the great eastern coast trading route extending from the Torres Strait to Victoria.

Very large gatherings, involving members of several tribes, were also observed. Large gatherings were rotated between sites to allow the local environment to fully recover from periods of extensive exploitation. Gatherings provided an opportunity for trade such as ceremonial songs and dances; possum skin cloaks, spears, axes and native tobacco (Mulvaney D, 1986). Ceremonial gatherings formed a major component of Aboriginal society.

Other accounts include the sighting of as many as 200-300 Aboriginal people camping 'on the hill in Mr Eather's paddock' at Bulga. This ceremonial ground was described by Eather:

"...here also is to be seen the remains of an ancient Bora ground with its sacred circles still defined by small mounds of earth and a being of carved trees still bearing the curious emblematical devices which marked this strange and mystical ceremony of initiation of the young men of the tribe to tribal rites. This Bora ceremony was held in 1852. On reliable authority of residents of the locality, it was attended by between 500 and 600 Aboriginal people from the various tribes from as far as Mudgee and Goulburn. It is also interesting to note that during the months this Bora was being held no record is in existence of a single crime or outrage being perpetrated on any of the white settlers, though they must have been completely at their mercy had the blacks [sic] proved hostile. The white settlers were rigidly excluded from the Bora, nor would a single Aboriginal [sic] divulge what transpired. In later years however, considerable scientific light has been thrown on the matter and it is thought to have been the last muster of the tribes who attended this particular ceremony before the advance of the white man."

References to broader regional connections between groups and sites are made in other historic accounts of ceremonies (such as Mathews 1897 and Fawcett 1898), with Goddard (1937) referencing the importance of Burrigurra. Needham (1979) notes that while Wollombi was in Darkinung territory, the area was a focal point for all Aborigines:

"The mountainous region just west of Wollombi contains many important ceremonial sites which were used by all the aboriginal tribes, for tribal boundaries disappeared when it was time for religious and ceremonial events. The ceremonial path taken appears to have begun at Wollombi, and proceeded up Yango Creek into the mountains. This appears to have been the path forged out by the blacks' ancestral spirits." (1979, p. 8).

As previously indicated there was contact between tribes for a range of reasons. An 1827 account reports a large fight between the tribes of Port Stephens and Hunter's River stating that

"The army ... I met proceeding to the field with all the ferocity that dabs of pipe-clay and smear of red-ochre could produce. They were armed with spears, boomerangs [sic] and waddies, and from their erect and frowning front seemed sensible of the high enterprise in which they were embarked, and impressed the passing stranger with ideas of blood and slaughter ... The next day, instead of hearing long lists of killed and wounded, it turned out that nobody was hurt, but that every precaution had been taken to enable them to 'fight another day'. One old black was plastered nearly all over with pipe-clay and cut a grotesque figure ... It is surprising to see them in such numbers, so strong and healthy." (Grantham 1999:24-25).

It is difficult to establish whether this 'conflict' was for feud or ritual, although feuds between groups are recorded. In 1834, Lang (1834, p. 112) reported a 'deadly feud' between the Wollombi and Illalong Tribes a few years prior: "I was informed by a respectable settler in the valley the last time I travelled over-land to Hunter's River, had a short time before testified their vindictive feelings in a most ferocious manner."

In the 1840s, David Dunlop sought to reconcile enmity between the Wollombi and Ellalong (or Illalong) Tribes, "between whom there has been a deadly feud, and the leaders of the tribe expressed to me their willingness to be reconciled" (de Salis, 1967, p. 92).

It is apparent that Aboriginal people moved and mixed beyond territories and that, in order to do so, pathways across territories were required.

Records indicate that the Wonnarua were closely affiliated with the Kamilaroi. However, conflict between Kamilaroi and Wonnarua has also been observed; Moore (1970, p. 28) states that encounters between the Wonnarua and Kamilaroi were both conflictual and friendly and that “contact seems to have been made chiefly through what is known as the ‘Cassilis Gap’, an easy way through the otherwise rugged ranges along the line Cassilis-Merriwa-Sandy Hollow” as well as via the heads of the Hunter to Nunmurra and gorges of the upper Goulburn.”

This means that the Jerry’s Plains (also known as Cumnaroy⁵) and Merton (now Denman) area was a junction – possibly a melting pot – linked to other significant sites in the greater region. Moore further writes that “these incursions seem to have been chiefly for trading and to obtain wives and the latter was probably the cause of the ‘battles’ which are frequently mentioned.”

Miller (1886, p. 353) also affirms the incidence of conflict with Kamilaroi as a result of trespass and abduction of females.

6 The Landscape at European Contact

Wonnarua people actively managed the landscape of the Hunter Valley lowlands to access and sustainably use the available natural resources. This managed landscape was observed by early European explorers and settlers, but it is no longer the landscape seen today; as the result of interrupted Aboriginal management and the beginning of European land management strategies in the 1820s.

The main rivers of the area have changed significantly since European contact, with increased sheet erosion and gullyng altering the former chain of ponds and the morphology of tributaries (Dean-Jones and Mitchell (1993).

Within the Project area, most streams are incised and eroded, although the chain of ponds morphology is still evident on an unnamed tributary of Nine Mile Creek. Ponds of water also occur in Loders Creek, but this is the direct result of past modification of a section diverted as part of a past mining approval.

Downstream sections of the Hunter River were generally described as containing significant water; but beyond the Hunter River, Mitchell on 28 Nov 1831 (cited in Brayshaw 1987:24) describes its tributaries as follows:

“The waters in the lesser tributaries on the north bank of the river Hunter become brackish when the current ceases”.

The grasslands were described by the Howe survey party of 1819. On 2 November 1819, Howe described the Hunter Range north of Howe’s Valley as follows:

“This day’s journey through a great deal of good land, well watered and mostly thin of timber to what it is in the neighbourhood of the Hawkesbury. The good land being mostly valleys

⁵ The XYZ Letters state that Cumnaroy was also “vulgarly called” Jerry’s Plains. According to Hunter, there are a couple of accounts of the name of Jerry’s Plains. One account has it as the name of a member of Howe’s 1820 expedition who died after receiving burns and was subsequently buried in the area. Another account attributes the naming to the Ogilvie family of Merton (Denman) who called the chief tribal elder of the area ‘Jerry’ and so his territory became known as Jerry’s Plains.

between rocks, with good grass up the sides of the hills, as well as in the flats, and a creek running through them”.

A description of the environment of the Broke and Bulga areas, containing the Project area, was provided by surveyor Matthew, who stated on 12 February 1830 (cited in Brayshaw 1987:26):

“Assisted Mr Macleod in measuring the government reserve of Broke, on the Wollombi – country picturesque, but great part of the land very poor and though flat abounding in Iron Bark -and in some parts with Apple and Gum”.

6.1 Sustaining Resources

The Hunter Valley lowlands are known to contain a range of resources that sustained the physical needs of Wonnarua people including water, food, medicine, animal by-products and stone.

The Project area, located within the catchments of Loders Creek and Wollombi Brook, contains numerous named and unnamed streams which flow into these catchments. Only the main channels of Nine Mile Creek and Loders Creek⁶ would have provided reliable water within the Project area. Given the climate of the Hunter Valley, these creek lines would mostly be used as a water source in summer with most rain in the region falling in short, high intensity summer storms and showers (Umwelt 2010).

The numerous smaller streams of the Project area would rarely support sustained camping as their water supplies would be limited and would quickly turn brackish after times of high rain.

However, the permanency of water immediately west of the Project area within the Wollombi Brook would have provided water security even in the driest times of the year.

The above reflects the historical understanding of rainfall in the Hunter Valley, which is discussed by Garden (2009:60) on the basis of rainfall data going back to the 1860s.

Although the Project area has been repeatedly cleared since European contact, first for grazing and later for other agribusiness such as dairying, it is understood the local area would have contained a range of plant species that would have provided food and medicine as well as materials for cultural objects.

Species still known in the area include grey box, ironbark, bullock, black cypress, redgum, roughbarked apple, redgum, sheoak, banksia, lilly pilly, river red gum, fern-leaf wattle, yellow box and spiny mat rush (**Appendix 13b of the EIS**).

Based on a review of the vegetation of the Project area, Umwelt (2003) suggest that the lower slopes and streams would have provided the majority of the staple carbohydrates in the Wonnarua diet, sourced mainly from aquatic vegetation in tributaries and billabongs and from grasses. In normal years it could also be expected that additional carbohydrates would have been supplied in spring and summer by orchids and lilies (normally located on the slopes).

Umwelt (2003) also indicates that fruits and medicines would have been more abundant in the Vere to the southeast of the Project Area where the stony sandy soils produced from the conglomerate were more suited to their growth.

The vegetation of the Project area would have attracted game such as kangaroos, wallabies, possums, swamp wallabies, wallaroos and wombats in addition to a range of birds and reptiles.

⁶ Identified as 3rd order systems (**Appendix 13b of the EIS**)

It would also have included introduced game such as rabbits. Although the diversity of animals within the Project area has been reduced since European contact, historic accounts describe a range of Wonnarua hunting strategies throughout the region. Oral history accounts identify ongoing hunting of game within the Project area and surrounds into recent decades.

In addition to the use of wood and animal products to produce a range of cultural objects, stone was used to create tools and implements. Indications of stone implement manufacture; maintenance and use dominate the archaeological record of the region.

In the Valley lowlands, the Hunter River is known as the primary source of stone used to create implements. It is the known major source of mudstone (chert) and the primary source of silcrete and other conglomerate stone. The Wollombi Brook meets the Hunter River approximately seven kilometres southwest of Singleton. It could be reached overland from the project area by following Loders Creek for some six kilometres. Conglomerate stone outcrops are also known to occur throughout the ridges and hills of the Hunter Valley and are found within the Project area. They provide a source of stone materials such as quartz and quartzite.

Further, archaeological investigations have identified sources of silcrete within the Project area; occurring as cobbles in the upstream parts of Nine Mile Creek and to the northeast of the then Bulga Lease Authorisation 219 area, which could have been collected and used for tool manufacture in the past.

Inspection of the streams of the Project area has identified outcropping sandstone in Loders Creek and BMU1 creek that was used for grinding to create and maintain stone tools such as axes and adzes. These outcrops are relatively rare, as identified by a survey of Loders Creek between the Project area and the Hunter River, which failed to identify any further sandstone outcrops downstream of the Project area (**Appendix 13b of the EIS**).

7 Landscape Change

Since European contact, the landscape has changed significantly in the Hunter Valley lowlands as a consequence of ceasing Aboriginal land management, introducing European land management; clearing vegetation and introducing many thousands of stock animals and a European built environment.

Landscape change since contact has also been influenced by climate, with severe droughts occurring around every 10 years in the current climate (Umwelt 2008). Sydney colonists experienced their first drought in 1813, then again in 1822-1824 (Flood 2006:99), with all of south eastern Australia experiencing a drought in the 1840s (Critchett 2003:54).

The expansion of industries such as dairying and viticulture from the late 19th century involved further subdivision and an intensification of European land use and development of industrial and residential infrastructure.

The commencement of mining in the 1980s and its subsequent expansion has had a significant impact on the lands of the Project area, with OzArk (**Appendix 13b of the EIS**) identifying that 2,188 hectares of the 4,867 hectare Project area – has been disturbed by mining and other historic activities.

Ozark (**Appendix 13b of the EIS**) documents that the major disturbances within the non-mined portions of the Project Area that have altered the archaeological landscape have been:

- Erosion: outside of the previously mined areas, erosion has had the greatest impact across the Project Area;
- Farm and mine infrastructure: large portions of the Project area have been modified by historical and on-going land uses;
- Altered flow of Loders Creek: has greatly diminished the contextual integrity of Loders Creek; and
- The creation of conservation zones: these have marooned segments of original ground surfaces within the bounds of the active mine.

8 The Archaeological Landscape

All archaeological sites are of cultural and scientific significance, being a finite and irreplaceable resource, and often being the only source of information on Australia's prehistoric past. They are also the physical footprint of past Aboriginal culture and history, and as such, are of great significance to Aboriginal people today, as reflected in the following statement by Aboriginal registrants involved in this ACHA:

"Objects tell us about past activities and technology, of the people who walked this area. They tell use the links between Countries and travels" (Cultural values statement November 2011).

"Artefacts are the evidence of our ancestors and part of their survival in living off the land. They are also educational for use today" (Cultural values statement November 2011).

"The archaeology also tells us of repeated use of the area" (Cultural values statement November 2011).

8.1 Preservation of Aboriginal Material Culture

The Project area has been subject to a number of archaeological investigations which have identified 98 known archaeological sites and a number of areas of subsurface archaeological potential (**Appendix 13b of the EIS**). The following sections discuss influences on the current archaeological record of the Project area such as the likely survival of Aboriginal material culture and the historic collection of Aboriginal objects.

It should be noted that preservation of many cultural materials in open landscapes like the Project area is limited by factors such as soil pH, the activity of soil dwelling micro-organisms and the movement of water across the site; all of which can accelerate the decay of organic materials (Mays 1998).

Another key factor in the preservation of archaeological materials is whether the landscape context is aggrading or eroding, that is, whether soil is building up over a site or whether the soil of the site is being stripped by erosion.

In the Hunter Valley lowlands, aggrading landscapes are most commonly found along major creek lines where former land surfaces are covered by soil deposited by later floods, creating a stratified site.

Conversely, eroding landforms are not likely to contain buried archaeological deposits, which would be exposed and possibly moved by the erosion stripping the soil.

Of all materials made and used by Aboriginal people at the time of contact, stone is the most durable- all other materials used are organic and therefore subject to higher rates of decay.

European materials such as glass knapped by Aboriginal people to form implements may also survive in the historical record, and although rare, artefact types are found throughout the Hunter Valley, including five sites within the Project area.

In this context, cultural objects made of stone and glass are those most likely to survive, while objects made of organic materials are not expected in the archaeological record, unless they were to occur in a buried context where soils were not highly acidic or alkaline⁷. However, the historical record identifies that objects made of wood and other materials were being made by St Clair residents into the 20th century.

8.2 Historic European Collection

Throughout NSW, there are numerous private collections of Aboriginal objects taken from the land in the 19th and 20th centuries; much of which have since made their way into museum and local historical societies' collections. Objects collected were usually large and distinctive pieces such as grinding stones and axes, which could be easily recognised by settler Australians as cultural.

Historical records identify a number of historic collections of Aboriginal objects in the Bulga area, ranging from the accidental discovery of single objects such as the 'flint axe head' collected by a man crossing Wollombi Brook in 1923, to the systematic collection of a number of objects to add to private collections, such as that held by Mr A.N. Eather of Bulga. Mr Eather, a 'well known property owner and collector of Aboriginal antiquities' collected cultural materials from his own property and other parts of the region, and was often called to collect materials found on the properties of others (refer to Figure 3, Figure 4 and Figure 5).

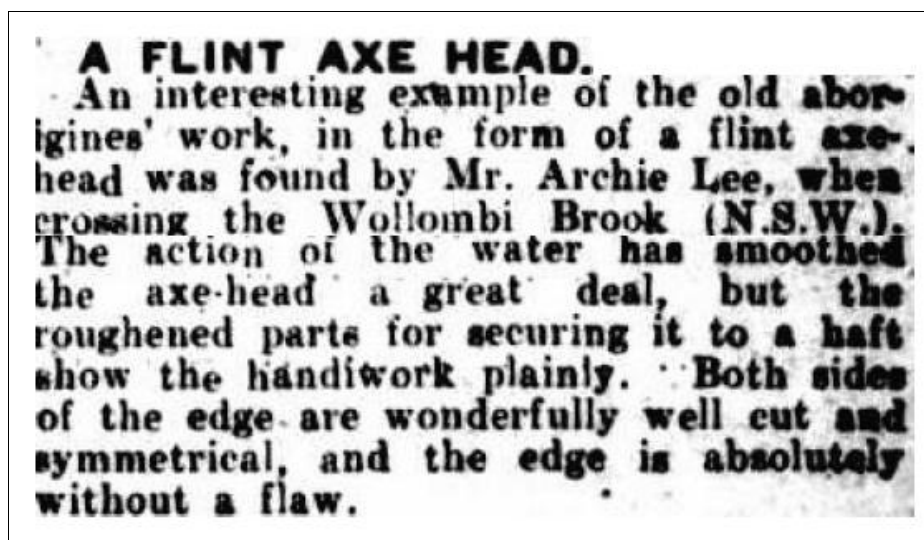


Figure 3: 22 December 1923 The Queenslander Article

Source: <http://trove.nla.gov.au/ndp/del/article/22650468>

⁷ The survival of larger cultural features such as Bora grounds, where cultural activity may be evidenced by the presence of low circular earthen mounds linked by a path, or a circular area of compressed earth devoid of vegetation; are also dependant on the nature of activity within a landscape since the time of its use. Given the recorded location of some Bora grounds along creek lines, such site types are particularly vulnerable to farming activities such as ploughing, but could also be impacted by natural events such as floods.

PREHISTORIC RELIC FOUND

A prehistoric relic of great antiquarian and anthropological interest, was recently found by a survey party near the Cockfighter Creek, at Warkworth. The relic, an axe-chopper, as was used by the earliest aboriginal women in the preparation of food, is believed to be thousands of years old. A wedge-shaped piece of weathered black basalt, the relic is six inches long and 3½ inches wide at the head, one side being flat and smooth, the other in chipped triangular form, with sides and head ground to shape. A find of immense importance to everyone interested in prehistoric native lore, the axe-chopper is now in the possession of Mr. A. N. Eather, of Bulga, who has added it to his growing collection.

Figure 4: 2 May 1951, Singleton Argus Article

Source: <http://trove.nla.gov.au/ndp/del/article/82756818>



Figure 5: Aug 1952, Singleton Argus Article

Source: <http://trove.nla.gov.au/ndp/del/article/82770326>

Given the known history of private collection in the Bulga area, and within the Hunter Valley more broadly, it is possible that some Aboriginal objects that were once found in the Project area of this assessment have been collected, especially if large or distinctive objects were exposed through ploughing or erosion.

9 Management of the Land

From the earliest days of European exploration and settlement, the lands and waters of Australia were viewed as unmanaged by Aboriginal people, a view consolidated in the 1835 declaration of 'Terra Nullius' by Governor Burke.

This document declared that Australian lands and waters belonged to no-one prior to British possession, based on dominant British perceptions that Aboriginal communities had no form of political organisation or land ownership in place (Nettheim 1998).

This is reflected in the following Fawcett (1898) observation of the lifestyle of the Wonnarua people:

"[The Wonnarua]....had no permanent settlements, but roamed about from place to place within their tribal district ... making use periodically of the same camping grounds, generation after generation, unless some special cause operated to induce them to abandon them".

Although this view was convenient for the establishment and expansion of British colonies in Australia, a range of early historical accounts demonstrate the existence of Aboriginal nations that were responsible for clearly defined areas of land, and that Aboriginal people were actively involved in managing their lands.

9.1 Fire Stick Farming

Fire stick farming was first acknowledged by Rhys Jones in 1969, who identified that fire was an important tool to Aboriginal people all across Australia, and that impacts of 'firestick' were observed by the first European settlers (Jones 1969:224). Research since that time has identified that Aboriginal communities in Australia used fire to create and maintain their environment (Gammage 2011).

Recent research on the role of Aboriginal people in managing their traditional lands by Gammage (2011) clearly identifies that Aboriginal people were active agents in creating the 'natural' landscape observed by European explorers and early settlers, primarily through firestick farming. Gammage (2011:2-3) states that:

"Management of the land was active and not passive, alert to season and circumstance, committed to a balance of life. Aboriginal burning was not random or haphazard, but a planned precise and fine grained local caring. People burnt within a planned space, with patterns varying according to terrain and climate. Yet the several purposes for fire often remaining the same – a plant need fire to seed, an animal likes a forest edge, a man wants to make a clearing.

Detailed local knowledge was crucial for land management. Each family cared for its own ground, and knew not merely which species fire or nor fire might affect, but which individual plant and animal, and their totem and Dreaming links. They knew every yard intimately, and knew well the ground of neighbours and clans-men, sharing larger scale management or assuming responsibility for nearby ground if circumstance required".

Registered Aboriginal parties consulted for this ACHA also describe the use of firestick farming in relation to the Broke region, as described in the following statement.

"Years ago was very little scrub where Bulga is now- there were trees everywhere and we used to keep it all clean- we used to burn. – The ecologists and greenies bugger up the bush- because they don't burn- kangaroos, bandicoots don't like thick scrub that why we

kept it clean- We worked the Country and burnt to keep it clean. People think I just burn but I burn to keep the bush good- I believe in burning- now people who burn are called a crook- it's ridiculous – especially if you know what you're doing. All the animals don't like pure scrub- greenies have got it wrong." Aboriginal know this country and what it needs" (Cultural Values Statement 13 November 2012).

The low intensity burning that created the vegetation communities described by early Europeans was not a natural pattern but a cultural one. It required consistent land management over generations as some plants, such as Eucalypts can regenerate from lignotubers or beards, and in order to convert these areas to grasslands, people had to maintain consistently timed burnings over many years (Gammage 2011:13).

The importance of fire in regenerating native vegetation has long been understood, as discussed by Cribb and Cribb (1975), who state:

"Records indicate that many plants were favoured by regular low intensity burning. A burning pattern consisting of frequent, low intensity fires removes the woody understorey, and allows many of the grasses, orchids and lilies to flourish. Orchids and lilies often possess underground storage organs or tubers, which were eaten by the Aboriginal people".

In an example of the change that could result from firestick farming, Roberts (1990) conducted a study of the native burrawong (*Macrozamia communis*), in southern NSW, and found that fire could increase the productivity of cones 2-3 times. The burrawong was an important food source for Aboriginal people, who developed the technology to eradicate the natural toxins of the plant by treatment with heat and running water (Roberts 1990).

It is clear that Aboriginal burning was a primary influence in creating the environment observed by early European explorers, and specifically in creating the extensive grasslands that so excited the interest of prospective agriculturalists and pastoralists. In 1770, Lieutenant Cook observed that along Australia's east coast trees had 'no underwood', and in summing up the character of the east coast he stated (cited in Gammage 2011:5) that the land was:

"....cloathed with woods, long grass, shrubs and plants, the mountains or hills are chequered with woods and lawns. Some of the hills are wholly covered with flourishing trees; others but thinly, and the few that are on them are small and the spots of lawns or Savannahs are rocky and barren".

Across Australia, perennial grasslands were common in 1788, and the European settlers often puzzled over the lack of trees on the most fertile soils (Gammage 2011:14). This is reflected in Howe's (1819) early description of the Hunter Valley in which he stated:

"...a country thinly timbered, and for the last hour many acres without a tree on it. One spot, I think, exceeds 50 acres with not 20 trees on site, and very fine ground.... It is the finest sheep land I have seen since I left England... The land on both sides [of the river] very fine and a great part of it may be cultivated without felling a tree. Even the high land is well clothes with grass and lightly timbered, though mostly thicker than the low ground. The grass on the low ground equals a meadow in England, and will throw a good swathe".

Use of fire for hunting was reflected in early historic records, with Fawcett (1898) reporting that the Wonnarua would plan for future hunts by burning off grasslands:

"The grass in certain districts was first burnt off, and about a month afterwards, when the young grass had sprung again, these animals all congregated there to eat the sweet young pasturage".

Use of fire for the hunt itself was also recorded in the Hunter Region, such as in the painting by Joseph Lycett, a convict artist who spent significant time in the Newcastle and Lower Hunter Region (Figure 6).



Figure 6: 'Aborigines using fire to hunt kangaroos', c.1817, Joseph Lycett

Source: <http://nla.gov.au/nla.pic-an2962715-s20>

Although there is little direct evidence in historical accounts of Wonnarua people positioned their campsites in the Hunter Valley lowlands, there are references to camping along Wollombi Brook, such as Felton Mathew's observation as late as 1830 of Aboriginal people camped "in a romantic spot" on the bank of Wollombi Brook, near Broke (cited in Brayshaw 1987:42). There are also later references to Bulga being an 'old tribal camping ground', as described in the following 27 June 1951 article (Figure 7).



Figure 7: 27 June 1951, Singleton Argus Article

Source: <http://trove.nla.gov.au/ndp/del/article/82758447>

Given the reliability of Wollombi Brook as a freshwater source, the brook is likely to have been a focus of repeated and intensive camping in the Bulga and Broke region, especially in times when smaller creek lines contained little or no water.

Archaeological sites throughout the Hunter Valley lowlands also identify the main creek lines as a focus for camping before European contact, with stone tool deposits – the dominant physical traces of pre-contact Aboriginal activity within the region – intensifying along creek lines and adjacent flats and foothills, with a particular focus along the major creek lines of the region (ERM 2004). Over 250 known archaeological sites found in the Project area provides evidence of a range of activities and a long term connection with the area. Past use of the Project area is specifically described by registered Aboriginal parties consulted for this ACHA in the range of statements which include:

“The area was repeatedly visited by our ancestors” (Cultural Values statement 18 November workshop 2012).

“This area is closely linked to the Doughboy Hollow area as one of the major transitional camping and hunting/gathering areas” (Cultural Values statement 21 November 2011).

“Our family has lived in Broke all our life just up the road- this place is converted from a shed. Even when mining starting taking over we would still go to the Vere for hunting and to go to an area important to my family” (Cultural Values statement, WTC’s representative Elder of Broke).

The traditional seasonal movements of the Aboriginal communities of the Hunter Region are also described in historical accounts, with Brayshaw (1987:82) identifying that the inland people of the region visited the coast line during summer when marine foods were at their most plentiful. In winter, coastal people went inland to participate in ritual kangaroo hunts.

At the time of contact, Aboriginal people throughout the Hunter Region ate a varied diet reflecting local distribution of plants, seasonal influences on plants and animals, as well as totemic preferences among clan groups. In the Hunter Region, there are references to a range of plants being collected and consumed, including the 'roots of a Fern and some sort of root or yam' (Barrallier 1802) – which may have been referring to the *Dioscorea transversa* yams eaten on the coast – the Giant Lily (*Doryanthus excelsa*) (Backhouse 1843), the seeds of *Zamia spiralis* (Threlkeld in Gunson 1974:55) and the Native Cherry (Cunningham 1827). Miller (1886) also described the Wonnarua preparation of the water lily, stating:

"These they roasted in the usual way, or baked in the heaps of cinders and stone (or cinders and lumps of clay) usually called ovens".

With their intimate knowledge of the land and its resources, Aboriginal people had access to a wide range of medicines sourced from plants and herbs. A survey of plants in the 1960s found that at least 124 plants in NSW have natural medicinal qualities, such as the four species of wattle used to cure coughs and colds, wattle bark used to treat burns, Eucalyptus leaves steamed for chest colds, custard apple used for toothache, and the pittosporum leaves used to induce the flow of breast milk in new mothers (Parbury 1986:23). Although historical records from the Hunter Region do not refer to specific medicine plants being used, medicine was often obtained from common plants that are known to occur in the region.

"We need opportunities to record Indigenous plants – we need some opportunities to undertake ethno botanic mapping" (Cultural Values statement 18 November 2012).

Threlkeld (in Gunson 1974:191) provided a rare description of an Aboriginal hunt in the Hunter Region, after accompanying a hunting party of Awabakal men in the Lake Macquarie area. This describes a party deciding to:

"...procure a small species of kangaroo. We mustered about thirty persons armed, with spears. After travelling a few miles, we arrived at the top of a high hill, the party separated, some going to the bottom, while we continued to the top. A deep valley was before us. The men arranged themselves in different parts, on rocks or stumps, or any little eminence waiting the appearance of game, which the party below, women chiefly, alarmed by their shouts. Seven or eight animals were obtained in less than two hours".

Possums were also regarded as both a staple food and were generally captured by chopping holes in the hollow branches of trees to access the animals within (Dawson 1830:68,136; Threlkeld in Gunson 1974:206). Historical accounts suggest that possums were far more numerous inland than on the coast of the Hunter Region (Brayshaw 1987:80).

Brayshaw's (1986) review of historical records in the Hunter Region also include references to Aboriginal hunting of echidna (Fitzpatrick 1914:43), goanna (Dawson 1830:203), bandicoot (Ebsworth 1826:80) and emus (Fawcett 1898:153); although the latter required use of large nets being fixes in semi-circles among trees in wooded areas. Another part of the Aboriginal diet was larvae, with a species recorded by Grant (1803:163) as 'cabra', which was found in grass tree stumps and wood in water soaked areas. Grant described cabra as:

"They are of a glutinous substance, and after being put on the fire, harden to the consistence of the spinal marrow of animals. When fire is not at hand the natives eat them raw...I tasted them on the recommendation of one of my men, and found them not unpalatable".

Animals provided not only food, but products such as bone, skin and sinew were used for a variety of objects made and used by Wonnarua people. Animal by-products were also used, such as the honey taken from native bee colonies to eat and make a drink when mixed with water (Breton 1833:195; Dawson 1830:60; Scott 1929:34-35).

In describing the responsibilities of the Wonnarua in food preparation, Fawcett (1898:153) reported that:

“The daily work of men consisted in hunting kangaroos, wallabies, and other animals, and the manufacture of weapons. The daily life of the women consisted of...digging for roots, in carrying wood and water; and in keeping the fires alight and cooking”.

Fawcett (1898:153) also noted that the women primarily cared for the children who assisted in gathering food whilst also being taught the skills that they would take into adulthood.

10 Material Culture

Historical accounts of the Hunter Region refer to a broad range of Wonnarua material culture, being the physical objects and features created and used by Wonnarua people. These accounts refer to objects made of wood, bark, bones, shells, skins, fur, animal sinew and stone; which were sourced both locally and through trade from more distant areas (Brayshaw 1987:67).

A feature of ethnohistoric accounts in the Hunter Region is the relatively few references to stone objects being manufactured and used, with Sokoloff (1977) identifying that references to stone objects are almost exclusively limited to scarce reports of stone axes or ‘tomahawks’.

This contrasts with the modern archaeological record which consists almost exclusively of stone objects; and which reflects the poor preservation qualities of non-stone objects in the open landscape of the Hunter Valley lowlands, instead of a lack of richness and diversity in Wonnarua material culture at the time of European contact.

The following discussion provides a broad overview of the types of objects made and used by Wonnarua people at the time of contact, sourced from historical accounts, archaeological sources and the collection of Wonnarua objects maintained by the Australian Museum as part of the Morrison Collection.

Most objects in the Morrison Collection were acquired by Alexander Morrison in the Hunter Valley during the late 19th and early 20th centuries, with many objects believed to have been sourced from the St Clair Aboriginal Mission. Many of the objects collected were made in the second half of the 19th century that was a time of significant change for Aboriginal people in the Hunter Valley, which at that time also included people from Awabakal, Worimi and Darkinjung lands (Australian Museum 2012b). This is reflected in the Morrison Collection, which has many objects serving no functional use, such as undersized clubs and boomerangs; and techniques changing with the use of European knives and chisels. However, the presence of the Morrison Collection also demonstrates a continuation of cultural practices at this time. It is also acknowledged that collection includes objects and artwork that are spiritual and ceremonial⁸.

⁸ Images of objects within the Morrison Collection are contained in this section, but these images do not include those objects and artworks that are spiritual and ceremonial.

10.1 Aboriginal Architecture

Aboriginal architecture in Australia at the time of European contact was predominantly domestic; comprising a considerable range of shelter types used in permanent and seasonally rotated residential camps. The occupation of campsites from a single day to several months with largely impermanent shelters was often misread by early colonists as a confirmation of lack of connection or attachment to place; where it really reflected a different approach to architecture. Memmott (2007) identifies that:

“Most tribal or language groups employed a repertoire of up to seven to eight shelter types, each one of which was selected for construction under particular circumstances of prevailing weather, availability of local raw materials planned purpose and length of stay and size and composition of the group to be accommodated”.

The customary settlement patterns were familiar and repetitive and constituted part of the day to day cultural lifestyle. For example in typically larger sized settlements separate shelters were commonly used for daytime and night time activities. As stated by Memmott (2010):

“During the day, men and women congregated apart, while nuclear families resided together at night. Unmarried men and women slept separately in their respective domiciliary groups - nevertheless the clusters were usually within visual and auditory communication. At the same time there were kinship rules which forbade specific relatives from camping in proximity to each other; generating unique types of socio-spatial behaviour. Movement around camps was also restricted by prescribed avoidance behaviours and gender exclusive ceremonial grounds. When people departed such camps and travelled to fresh campsites, shelters were usually left standing- at least their frames if not their cladding”.

In the Hunter Region, most references to Aboriginal camps relate to the coast, but Fawcett (1898) provides a description of Wonnarua people living in camps in relatively simple structures formed with a forked stick frame and bark positioned over the top; such as the type of shelter illustrated by Augustus Earle at Port Stephens (refer to **Figure 8**).



Figure 8: ‘A native camp of Australian savages near Port Stephens, New South Wales’, Augustus Earle, 1826

Source: <http://nla.gov.au/nla.pic-an2818328>

Fawcett (1898:153) further describes that shelters were positioned to take into account wind direction, with fires being placed at the entrance to each shelter and 'seldom allowed to go out.'

Aboriginal huts of the Hunter Region, which are also frequently referred to as "gunyers" in historic literature, usually involved the use of bark; such as in the following account by Eyre, who spent part of 1833-34 in the "Comleroi" district above the junction of Wollombi Brook with the Hunter River (1859:51 cited in Brayshaw 1987:59):

"The bark was cut from Box or stringy bark trees by the Blacks who are very skilful and expeditious in doing it...[it was] stripped off in one unbroken piece forming when stretched out flat a sheet from six to twelve feet square according to the size of the tree. To prevent the bark from cracking when being thus stretched out it is heated inside with fire just as a cooper heats a cask to make the staves bend as he wishes. When dry these sheets of bark retain their flat shape - are from an inch to an inch and a half thick - quite impervious to rain and of course most useful in the construction of temporary dwellings".

Reports of Aboriginal camps throughout the region generally referred to several gunyahs making up each campsite, such as in Dawson's (1830:171) observation of 'eight or ten gunyahs' at a camp on a creek at Port Stephens, or the several huts illustrated in the following painting of the Hunter River estuary at Newcastle. Camps were also commonly described as having a fire in front of each hut (Caswell 1841, Dawson 1830:171).



Figure 9: 'Aborigines resting by camp fire, near the mouth of the Hunter River, Newcastle, New South Wales', Joseph Lycett, c. 1817

Source: <http://nla.gov.au/nla.pic-an2962715-s15>

10.2 Clothing

An historic account of Aboriginal clothing in the Hunter Region indicates that materials from possums and kangaroos provided almost everything that was worn (Brayshaw 1987:67). Miller (1886) described Wonnarua clothing as the following:

“Their clothing used to be’ an opossum-skin cloak, and a girdle of spun opossum hair next the skin, and their principal ornament a nautilus shell cut into an oval shape and suspended from the neck by a string. They also anointed the person on gala occasions with a mixture of red ochre and fat, and lived in bark mia-miams like those in use in all the southern portions of the continent.”

In observing the clothing of men, Mrs Ellen Bundock in April 1826 (cited in Brayshaw 1987:67) observed that the ‘chief of the Aborigines who attacked Merton, near Denman’ wore a possum skin rug, and had strips of fur round his loins. This reflects a more detailed description provided by Dawson (1830:115) of an observation of clothing in the Hunter Valley, which notes:

“The men always wore a belt of opossum fur spun or twisted like coarse yarn into skeins to the length of five or six yards, into which they stuck their waddies and tomahawks. They sometimes bound their hair with possum yam, wearing a small pointed kangaroo bone in the hair above the ear which functioned as a comb.”

An observation of the clothing of women at Gammon Plains, in the Merriwa district, by Breton (1833:19) states that they usually had “kangaroo or opossum skins thrown loosely about them, which is the case also with the men in cold weather; indeed they sometimes make kangaroo cloaks with no little neatness.”

An example of one such skin cloak was collected from the Hunter River in 1830 during an expedition led by Commander Wilkes, and now resides in the Smithsonian Museum in the USA. The rug, illustrated in **Figure 10**, is 148cm long and 127cm wide, and is made of 22 regularly cut pieces of skin taken from the brush-tailed opossum, *Trichosurus vulpecular*. Brayshaw (1987:72) identifies that the patterns incised onto cloaks tended to be unique to the owner, and that sometimes red pigment was applied to the incisions.



Figure 10: Possum skin cloak taken from the Hunter River in 1840, now in the Smithsonian Collection

Historical accounts describe awls made of kangaroo bone to make and repair cloths, with animal sinew used as thread (Boswell 1890:6; Fawcett 1898:153).

An historic portrait of 'New Holland natives' by Augustus Earle in 1825 included an image of a person from the Hunter River (refer to **Figure 11**), which also shows the use of decorative objects and ochre locally.

Note:

The following page includes images of Elders who have passed away, which may distress some readers.



Figure 11: 'Papua races: Natives of New Holland', Augustus Earle, 1825

Source: <http://trove.nla.gov.au/work/8835620>

10.3 Baskets, Bags and Containers

Baskets bags and other containers are usually made by women but are used by both sexes, mainly for food gathering and water storage. Some of these containers and bags are often woven from bark, human hair, palm fronds, grasses and bush twine made from plant fibres; and they could be decorated with dyes, feathers or pieces of cloth (Australian Museum 2012b). Refer to **Figure 12** for an example of a 'dilly bag' as an example of the type of woven bag; which would be similar to Wonnarua bags of "platted swamp grass" described by Miller (1886).



Figure 12: 1893 Dilly Bag

Copyright: <http://trove.nla.gov.au/work/158264378>

In a rare description of Wonnarua bowls, Miller (1886) stated that their 'koolamans' were wooden bowls two or three feet long, which were used for holding water at the camp site. Threlkeld (in Gunson 1974:67) provided a more detailed description of wooden vessels used by Awabakal people, stating that bowls were made from "some large protuberance of a growing tree which they chop round" and take from the tree; and that such bowls are carried about with great care. Threlkeld (in Gunson 1974:67) also described simpler drinking vessels made from "sheets of bark which are tied up at each end, and a bent twig forms the handle".

An account by Dawson (1830) reports that several wooden vessels, amongst other items, were left at a temporarily deserted Aboriginal camp on the Karuah River (Brayshaw 1987:63); suggesting that they may have been left for use on return.

10.4 Digging Sticks

Brayshaw (1987:65) identifies that no observers in the Hunter Valley described or collected digging sticks, which were common tools used to dig out underground foods such as roots, tubers and burrowing animals; as well as being used as a general tool or weapon. Enright (1900) did collect one of the few from the region, (refer to **Figure 13**), and his 1900 report on this describes the object as being the 'favourite weapon' of Aboriginal women, as well as being used for digging. This is evident in a 28 March 1827 deposition by Samuel Owen, an overseer on the Ravensworth Estate, who described the following encounter on his return from Wollombi Brook looking for cattle:

"That on Friday morning last as deponent was returning from Wallumby Brook looking for Cattle – he was fell in with fifteen black natives who immediately surrounded him – Jackass (the man who has done so much mischief about Dr Bowmans) was one of them, who asked if he was the big Constable – Dept said yes – Jackass then drew out his Waddie, flourished

it at Dept, but Dept kept him out of each with a musket – the other natives stood round but did not offer any violence – Jackass did not happen to have a spear - all the others had_ While Jackass was menacing Dept, Cabborn Mary (wife to Bit of Bread) came up & began to chatter in their own language with the greatest violence, walking round & round deponet, & beating the ground with a pointed stick she had in her hands – she fairly frothed at the mouth_ at length the blacks went away & Mary remained behind_ When Jackass hot a little way off he said “never mind he would find another officer to kill deponet”_ Cabborn Mary told deponet that the blacks were going to kill deponet, but that she had prevented them; & then strongly advised deponet never to go into the bush where the blackfellows were for they were determined to kill him.”

Yam sticks such as the one illustrated could be up to two metres long and about four centimetres in diameter, and were usually fire - hardened but not decorated.



Figure 13: Yam stick collected from Port Stephens (Enright 1900)

Source: Enright (1900:117)

10.5 Stone Tools

In the review of historical records from the region, Brayshaw (1987) identifies that there are few accounts of the stone tools and implements made and used in the Hunter Region, which is notable given their dominance of the current archaeological record. Most existing accounts refer to distinctive tool types such as the hatchet, also called axe and tomahawk, which Miller (1886) described as:

“...tomahawks of hard dark-coloured stone, which were first chipped and then ground to an edge; knives made of flint for cutting up meat, and also chips of flint with which they skinned animals.”

Grant (1803:158) described the axe as a composite tool used for various purposes, such as to remove bark, to chop trees to get to honey, possums or other small animals, and to climb trees. Grant's observation of the latter was described as follows, after providing a metal axe to an Aboriginal man from the coast of the Hunter Region:

“... making a notch in the tree with his instrument, placed his foot into it, continuing the same practice; thus he very nimble ascended to the top, though the tree was of great thickness, and without branches that could assist him in the ascent to the height of forty feet.”

A similar scene to this was recorded by convict artist Joseph Lycett in the Hunter Region (refer to **Figure 14**).

Other accounts refer to sharp chips of stone being used to make spears, such as Threlkeld (in Gunson 1974:67) who describes worked quartz being used for the task, as discussed;

The relatively infrequency of historic accounts of stone implements use may reflect the biases of European explorers and recorders, or that at the time of European contact, there may have been a preference for shell, wood or bone in the region (Brayshaw 1987:68).

10.6 Spears and Spear Throwers

Spears were used in hunting and fishing as well as in ceremonial events and as fighting implements (Australian Museum 2012b). Brayshaw's (1986) review of historic records identifies that many of the spears in the Hunter Region were of composite manufacture, with lengths of grass tree (*Xanthorrhoea australis*) affixed points of hard wood, with pieces of stone also attached.

In detailed accounts of Awabakal spears, Threlkeld (in Gunson 1974:67) described three kinds of spears in use: the fishing spear, the hunting spear and the war spear; all of which were manufactured in a similar manner, although the war spear also included:

“...the addition of pieces of sharp quartz stuck along the hard wood joint on one side so as to resemble the teeth of a saw.”

In an account of Wonnarua spears, Miller (1886) described the use of “three-pronged spears” for fishing (refer to **Figure 15**).



Figure 14: 'Aborigine climbing a tree by cutting steps in the trunk', c.1820, Joseph Lycett

Source: <http://nla.gov.au/nla.pic-an2962715-s4>



Figure 15: Wonnarua Spears, Morrison Collection

Copyright: @Australian Museum

Spears were often used in conjunction with spear throwers, which acted as an extension of the thrower's arm allowing the thrower to get more power behind a single throw and achieve a throw of greater distance. An example of a spear thrower from the Australia Museum's Morrison Collection is illustrated in **Figure 16**.



Figure 16: Wonnarua Spear Thrower, Morrison Collection

Copyright: @Australian Museum

10.7 Wooden Clubs

Historical accounts of the Hunter Region contain several references to wooden clubs, which are also called 'waddies'. These have been described as being "like a large kitchen poker, and nearly as heavy, only much shorter in the handle" (Dawson 1830:66), or "a short stick like a constable's staff only tapering from the middle to the end" (Threlkeld in Gunson 1974:54). All were described as being made of a hard wood, generally iron bark (Elsworth 1826:77).

Clubs were used for a range of activities, such as hunting bandicoots at short range, as detailed in the following account from Threlkeld (in Gunson 1974:54):

"....with the weapon of warfare they beat about every high grassy bushy place. The dogs hunting around likewise. The moment an animal appeared they threw their waddies at it and generally killed it at one blow. One man stood on the stump of a tree, and threw a spear with the greatest precision transfixing a Bandicoot to the ground".

Clubs were also used in battle and in single combat. Smaller clubs were generally used when the offence was slight and death of the other party was not intended; but larger clubs – also called "nulla nulla" – were used for more serious warfare and combat, and were described as a mushroom-like club with a flattish circular head (Lang Papers 1815-29:61, cited in Brayshaw 1987:64).

Clubs could also be used as percussive instruments and in ceremony, with large clubs also often regarded as objects of prestige and in some areas were highly valued as exchange items (Australian Museum 2012b).

A number of clubs collected from the Hunter Valley for part of the Australian Museum's Morrison Collection, examples of which are illustrated in **Figure 17**.



Figure 17: Wonnarua Clubs, Morrison Collection

Copyright: @Australian Museum

Club design varied with intended use. Larger clubs with defined heads were rarely thrown as their size made them awkward for use as a hunting tool; instead they were used in close combat. Long straight clubs were used in close combat situations as fighting sticks, and smaller clubs were usually thrown, and were often used as hunting weapons to bring down birds and small mammals (Australian Museum 2012b).

Most of the clubs in the Morrison Collection were carved from a single length of hardwood, with fire being used to dry and harden the wood, and ochre or animal oil was often applied in an effort to protect and lengthen the life of the club (Australian Museum 2012b).

10.8 Boomerangs

Boomerangs were used predominantly for hunting, but were also used for fighting, ceremonial events and as a percussive musical instrument. Thought to have been developed from the club, the boomerang provided a more efficient hunting tool that allowed greater distance and even precision than a club. The aerodynamic shape of the boomerang allows it to fly in a virtually straight line and hit its target in an effort to either kill or maim prey (Australian Museum 2012b). Since European settlement the boomerang has also become significant as an iconic and quintessentially Australian item sought after by tourists and art collectors.

The Morrison Collection maintained by the Australian Museum contains a number of boomerangs from the Hunter Valley, with two examples illustrated in **Figure 18**.



Figure 18: Wonnarua Boomerangs, Morrison Collection

Copyright: @Australian Museum

Historic accounts of boomerangs in the Hunter Region suggest that they were made of hard wood (Breton 1833:237), such as ironbark (McKiernan 191 1892) or myrtle Sokoloff (1973:146). In describing Wonnarua boomerangs, Miller (1886) stated:

“...the boomerang which returns when thrown, which was used partly as a toy and was also thrown into flights of ducks and other birds with very good results. The boomerang used in fights does not return.”

Other accounts describe the boomerang being used to ‘disperse a crowd’ (Browne cited in Brayshaw 1987:65), and Threlkeld (in Gunson 1974:69) implied that the boomerang was used as a source of entertainment.

10.9 Shields

Shields were made by men and used in ceremonies; dances and occasionally in defensive combat (Australian Museum 201b2). The narrowest shields were usually used in hand-to-hand combat while large, broad shields protected the bearer against spears and missiles. Shields in the Hunter Region appear to have been made of both wood and bark, with ochre often being used to paint shields (Brayshaw 1987:64). Ebsworth (1826:75) and Dawson (1830:64,280) both described shield of this type in use at Port Stephens, with Dawson also commenting that the shield was made of thick bark hardened by fire.

A more detailed description of a shield from the Hunter Region comes from Threlkeld (in Gunson 1974:68), who described a shield made from a buttress of the nettle tree or the giant fig tree at Lake Macquarie as being:

“...usually about three feet long by eighteen inches, or so at most; lozenge-shaped, pointed atop and bottom, and pigeon-breasted rather than flat. The thickness in the centre may be an inch, not more, and thins off to about a quarter of an inch to the edge. On the inside of the shield, in the centre, a piece of tough wood is bent and inserted like the handle of a basket, just sufficiently large to hold by, and a soft piece of tea tree-bark is fixed on which to rest the knuckles and preserve them from abrasion.”

The shields in the Morrison Collection from the Hunter Valley region in New South Wales are typical of a style of shield that was only produced in South-Eastern Australia, being long and narrow and tapering to a point at both ends, as illustrated in **Figure 19**.



Figure 19: Wonnarua Shields, Morrison Collection

Copyright: @Australian Museum

10.10 Canoes

The Morrison Collection also contains two canoes collected from the Hunter Valley, as illustrated in **Figure 20**.



Figure 20: Wonnarua Canoes, Morrison Collection

Copyright: @Australian Museum

The canoes are those typical of southeast Australia, which were often made from a single sheet of bark, often stringy bark. The bark was made malleable using fire and then shaped to form the vessel. A rare description of the manufacture of a canoe in the Hunter Valley comes from Eyre (cited in Brayshaw 1987:60) who described the process for building huts and building canoes as similar, in the following account:

"The same means are used to bend the bark into shape when required for a canoe, though for this purpose the bark is cut somewhat differently in the first instance - I have often seen canoes made of a single piece of bark capable of holding from six to eight people. Generally these were cut from large river gum trees."

Miller (1886) also described Wonnarua canoes as follows:

"The canoes were sheets of bark, cut from suitable trees in such a manner as to give a little elevation to the sides and ends."

Often, once the bark was removed it was made malleable using fire and then shaped to form the vessel. Canoes like these were used for navigating relatively quiet inland waters rather than for use in rough ocean conditions, and punting poles were generally used to propel the vessel through the water (Australian Museum 2012b).

10.11 Cord, Resin and Gum

Cord and resin were used commonly in the manufacture and maintenance of many objects.

Historical accounts describe the bark of various trees being used to make cord, which was used for various purposes. Threlkeld (in Gunson 1974:191) describes the bark of the cabbage-tree (*Livistona australis*) formed the thread used repair canoes, and Scott (1929:40,43) described bark the bark of the kurrajong (*Brachychiton populneus*) being used at Maitland to tie the ends of the canoes seen at Maitland, and it was also used for fishing lines, nets, and binding for spear shafts.

Also on the lower Hunter, Paterson observed in 1801 "a new hibiscus, which the natives use as flax for making their nets and for other purposes" (cited in Brayshaw 1987:63).

Gum or resin is commonly described in historical accounts as being used in a range of applications in the Hunter Region. Dawson (1830:203) describes the resin of the "mimosa" (*Acacia* sp) and the grasstree (*Xanthorrhoea* sp) being used to make equipment. Dawson also described the resin being heated by the sun or fire to make it malleable for use.

*"Creeks, animals and plants are linked to culture, and having them intact is important".
(Cultural Values statement November 18 2011)*

"Creeks are a major resource to our people and related to our Dreamtime stories; also define our cultural landscape boundaries". (Cultural Values Statement 30 and 31 May 2012)

11 Aboriginal Knowledge Contribution to the Colony – Post-Contact

11.1 European Exploration of the Upper Hunter Valley

During the 1790s, the Sydney colony spread rapidly with fertile land in Sydney and Parramatta farmed to feed the increasing population, soon followed by fertile land along the Georges and Hawkesbury Rivers (Attenbrow 2002:14). Early exploration officially extended north along the coast to the current site of Newcastle in 1797, with Lieutenant John Shortland entering the Hunter River estuary during a search for escaped convicts (Turner 1997). Shortland's 1797 reports of coal and plentiful timber in the lower reaches of the Hunter River led to a more systematic exploration of the area in 1801, with Lieutenant James Grant leading a survey party of almost 60 men into the Hunter River estuary (Grant 1803). Based on information gathered by the Grant survey party, Governor King decided to establish a penal settlement on the southern sand hills of the Hunter River estuary in 1801 (Stewart 1983).

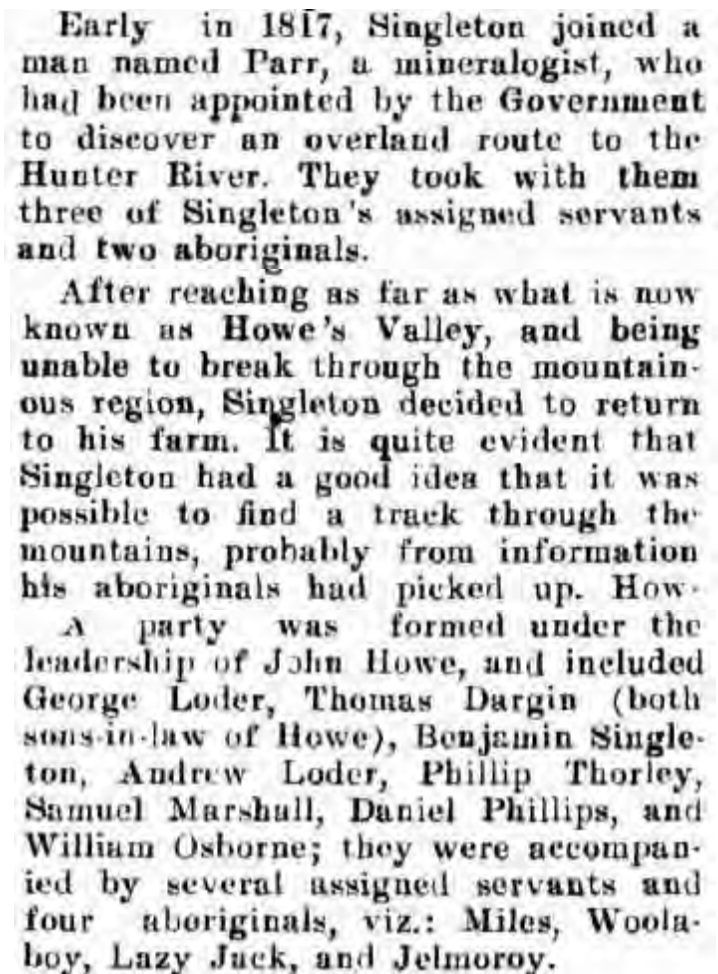
For almost 20 years, European settlement along the Hunter River was limited to this penal settlement, first known as Kings Town and later as Newcastle. However, with the colony rapidly expanding and favourable reports being returned from the earliest European explorers entering the Valley proper, there was increasing pressure on the Government to open the Hunter Valley for free settlement, which it did in 1822 (Turner 1997:11). As part of this process, the penal settlement at Newcastle was relocated to Port Macquarie in 1823.

It is generally accepted that successful survey and exploration expeditions were reliant on Aboriginal knowledge with colonial roads constructed over Aboriginal pathways. Such pathways originally facilitated intertribal and intratribal congress for ceremony, commerce and conflict (recognising that some tribes were comprised of multiple sub-clans, each with discreet territories).

The earliest known Europeans to enter the upper Hunter Valley were William Parr and Benjamin Singleton, who travelled from the Hawkesbury to the Hunter Valley in 1817, journeying to what was most likely the headwaters of Doyles Creek at Warkworth.

Parr and Singleton returned to the area in 1818, and Singleton also was a member of the John Howe survey parties which entered the Valley from the Hawkesbury in October 1819 and March 1820 looking for a route for an overland road. On both journeys, Howe was guided by Aboriginal guides such as 'Miles' from the Hawkesbury district (Wood 1972:12) and others referred to in historical

accounts as Woolaboy, Lazy Jack and Lemoroy. The overland route surveyed by Howe became known as the Bulga Track), which is today known as the Putty Road (refer to **Figure 21**).



Early in 1817, Singleton joined a man named Parr, a mineralogist, who had been appointed by the Government to discover an overland route to the Hunter River. They took with them three of Singleton's assigned servants and two aboriginals.

After reaching as far as what is now known as Howe's Valley, and being unable to break through the mountainous region, Singleton decided to return to his farm. It is quite evident that Singleton had a good idea that it was possible to find a track through the mountains, probably from information his aboriginals had picked up. How-

A party was formed under the leadership of John Howe, and included George Loder, Thomas Dargin (both sons-in-law of Howe), Benjamin Singleton, Andrew Loder, Phillip Thorley, Samuel Marshall, Daniel Phillips, and William Osborne; they were accompanied by several assigned servants and four aboriginals, viz.: Miles, Woolaboy, Lazy Jack, and Jelmoroy.

Figure 21: 24 December 1930 Singleton Argus Article (Extract)

Source: <http://trove.nla.gov.au/ndp/del/article/81184309>

MacQueen (2004:14) has since written that Howe's "Aboriginal friend Myles" was in turn guided by a Darkinjung man names Whirle, whose local knowledge of the area made the expedition a success.

Throughout Australia, Aboriginal guides were used extensively and their knowledge of the land proved invaluable for European survey and exploration parties, as is suggested by the above article.

In acting as guides, Aboriginal people could travel well beyond their traditional lands, such as in the travels of 'Jackey Jackey', whose real name was Galmarra (Blyton et al 2005:34), a Wonnarua man from Muswellbrook who travelled to Cape York as part of the Kennedy expedition, and was famously its sole survivor (Parbury 1986:71). A portrait of Jackey Jackey (refer to **Figure 22**) from 1849 is one of the few early images of Wonnarua people from the 19th century.

Note:

The following page includes images of Elders who have passed away, which may distress some readers.

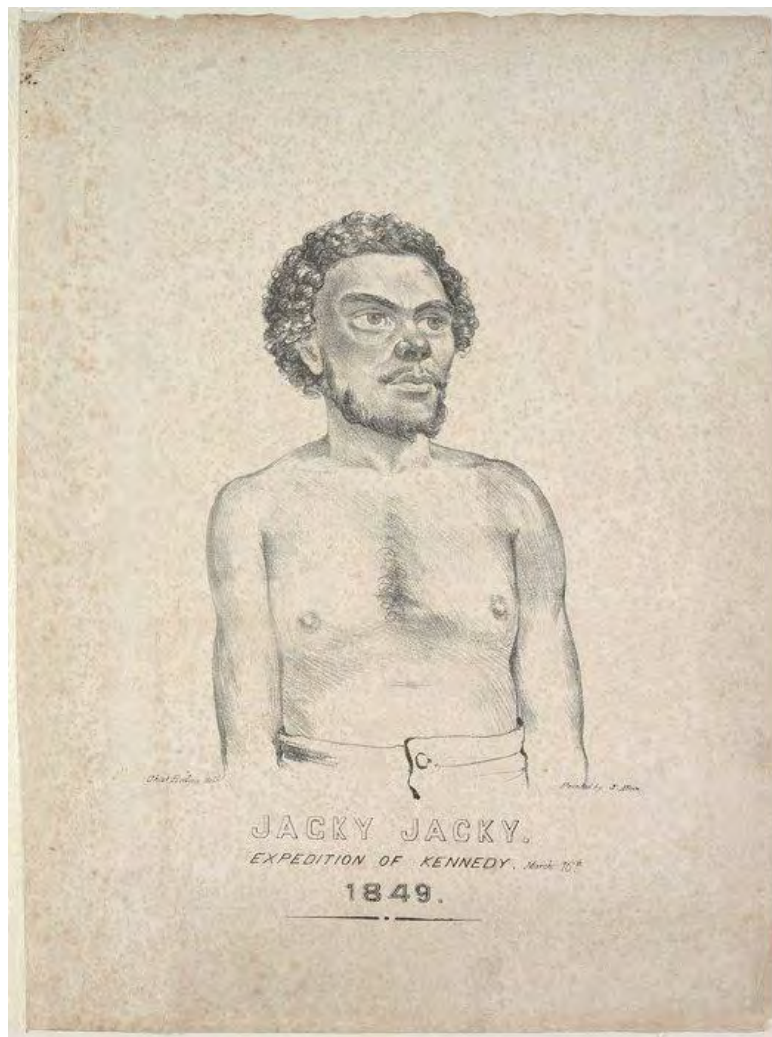


Figure 22: Portrait of 'Jackey Jackey', Mitchell Library Collection

Source: <http://australianmuseum.net.au/Jackey-Jackey-d-1854/>

The first European survey party to enter the upper Hunter Valley had little contact with the Aboriginal residents, who undoubtedly would already have felt the impact of European diseases and who would have learnt about European arrival through their contacts with other nations such as the Awabakal, Worimi and Darkinjung (Miller 1985:31). Although sightings of Aboriginal people in the Hunter Valley were rare, the party would have been closely watched. One early observation by Howe on 5 November 1819 (cited in Campbell 1928:240) included the following at Jerry's Plains:

"Stop for the night and before we could unload the horses we are surprised by a strange native... About half an hour afterwards we saw five cross the river about half a mile below and come nearly opposite to us to watch us, and left about night-fall."

Shortly following this, Howe wrote of reaching a camp of Aboriginal people, 'many of whom had never seen a white man, and more had never seen a horse' (cited in Campbell 1928:236).

The anxiety and fear that the first European explorers entering the Hunter Valley had of Aboriginal people is reflected in the following dairy entry of Benjamin Singleton, who wrote on 5 May 1818 (cited in Blyton et al 2004:15):

“Deep Gully’s to the westward to get Water Halted the Night about 8 o’clock Disturbed by the Voice of Natives Cracking of Sticks an Rolling By the Stones Down towards us every man of us arose an fled from the fire secreting ourselves behind trees with our guns.”

In reviewing the private journals and letters of those who were part of the earliest European expedition, and in the subsequent 1821 journey of John Blaxland and Rev George Middleton via this route, MacQueen (2004:14) concluded that “there was a surprisingly large number of people living in the area, in a relatively traditional manner”, when referring to the area now known as Wollemi National Park.

Following the opening of the Hunter Valley to free settlement in 1822, Government Surveyor Henry Dangar was dispatched to survey and record the region in 1824; and his reports of the quality of the plains of the river valleys lead to a rush of land grants and applications (Gray 1966). However, his 1824 notes also identify that he encountered stock men from the Hawkesbury in Hunter Valley areas not yet officially granted, as described by Elkin (1937:126):

“Here, to his great surprise, he perceived several stockmen at work, who, on seeing the boat advance toward them, instantly threw down their tools and dived into the bush, alarmed at his sudden and unlooked for invasion. They turned out to be the servants of some Hawkesbury settlers who had explored the present route over the Bulga and had brought their cattle to graze upon the rich plains they here discovered. From the distant and circuitous route traversed they did not positively know what river they had built their huts upon, but at all events, never dreamt of being so near Newcastle.”

This is also reflected in a July 1822 account by James Mudie, who is described by Wood (1972:31) as being amazed to find about 1200 head of cattle and 1000 sheep depastured at Patricks Plains after being brought overland from the Hawkesbury; some without Government permission.

Convicts from the Newcastle penal settlement were also known to escape and arrive some time later at the Hawkesbury, using an overland crossing unknown to the Government surveyors of the time (Green 1975:8). Convicts were also dispatched from the Newcastle penal settlement for the purpose of timber cutting, with the trees of the Hunter Valley well known for their value in the early Colony, with some species not found elsewhere (Wood 1972:4).

Although their movements officially did not go beyond Wallis Plains (Maitland) until 1820 (Wood 1972:5), it is possible that they extended beyond the bounds of this and had direct contact with Wonnarua people before the early explorers, as is suggested by the following 1897 reminiscences article from the Newcastle Morning Herald (**Figure 23**).

CONTEST WITH THE UPPER HUNTER BLACKS IN 1804.

In June, 1804, Commandant Menzies was shocked to learn that there had been an affray between the crew of the vessel *George*, then loading timber in the river, and the natives of the Upper Hunter, about 70 miles distant from Newcastle. The seamen had travelled up the river in one of the ship's boats to procure a cargo of 40 logs of the best cedar. The Upper Hunter natives were not used to visits from Europeans, except runaway convicts who corrupted their minds. However, a formidable body of natives opposed the landing of the seamen who began to parley with them and treat them with extreme caution and reserved civility. A peaceful landing was effected and the natives showed signs of amity. At length one of them

seized hold of a musket and tried to wrest it from the seaman, who, after a long struggle got clear with his weapon. Unfortunately a musket was fired at the natives, and this was the signal for a contest. Spears were thrown without doing any damage, and guns were fired with fatal results. Some of the natives were wounded, and one (a chieftain) was seen to fall dead. The natives suddenly disappeared, but only to recruit their ranks to a prodigious number. Re-appearing suddenly, the natives rushed forward in a mass, and the seamen gave them a volley, and precipitously retreated towards the boat. The noise of the musketry appeared to stun the natives, who stood in a heap. The seamen reached the boat safely, and pulled down the river.

Figure 23: Newcastle Morning Herald, January 11 1897

Source:

<http://www.newcastle.edu.au/Resources/Divisions/Academic/Library/Cultural%20Collections/pdf/huntington1804.pdf>

11.2 Rapid Intensification of European Settlement

This section provides a broad understanding of the establishment and rapid expansion of European settlement of the upper Hunter Valley in the early to mid-19th century.

The European population of the Hunter Valley and surrounds boomed in the 1820s following the opening of the region with nearly 1,000 colonists arriving between 1822 and 1826, claiming over half a million acres of land (Blyton 2003). The population of the region grew steadily to the mid-19th century with the population of the broader region (including Port Macquarie) expanding to 3,225 in 1828 to 8,138 in 1833 (Hartley 1995).

Much of this growth was along the fertile lands of the Hunter River south of Singleton (Suters 1997), and along the major creeks of the Hunter Valley catchment.

Describing the rapidity of this process, Dangar (1824) wrote:

"From 1822, when the valley contained no people, save its few [Aboriginal inhabitants, to November, 1825, no less than 372,141 acres were appropriated to 792 persons, 132,164 acres were allotted for church and school purposes, and 100,000 acres reserved in various parts by the Government."

Throughout the Valley, early European settlement revolved around agriculture on the relatively fertile soils along major rivers, but this soon expanded to include dairying, cattle grazing and raising of horses. By 1827, the region contained 25,000 horned cattle and 80,000 sheep (Hartley 1995).

As part of this process, land was taken up along Wollombi Brook as early as 1824, with Alexander MacDonald Ritchie selecting 2000 acres on 4 November that year. Land along the Brook was also selected by John Blaxland Snr in July 1825 and Thomas Walker in August 1825 (Dunne 2012:16-18).

Although land was being taken up along Wollombi Brook as part of this rapid European settlement, the rate was slowed somewhat by access, with travel along the Howes Valley Road proving to be a difficult and lengthy journey, as described by Cunningham (1827, in Wood 1972:16): "...a rugged bridle path over the mountain ridge called the Builgar, quite unfit to take even an empty cart by".

Although the Howes Valley Road, now known as Putty Road was constructed in 1823, it was not until the completion of the Great North Road in 1831 that the journey to the Wollombi Valley enabled easy access (Convict Trail 2012). The original line of the Great North Road ran from Baulkham Hills to Wollombi, where it branched to the upper and middle Hunter Valley, with the section of road from Wollombi to Broke and Warkworth completed in 1836. The main roads surrounding the Project area also dated to this period, with Charlton Road present on 1830s mapping (refer to **Figure 24**).

This is evident in the historical mapping from the 1820s and 1830s. The 1828 'Map of the Hunter River and its Branches' was based on data from the 1824-1825 Dangar survey, and showed that in the Whitfield, Warkworth and Wittingham Parishes in the County of Northumberland – which contain the Project area of this assessment – 39,390 hectares of land had been 'taken up' by mid-1825 (refer to **Figure 25**). This map also shows that at the time, land was primarily being taken up along Wollombi Brook itself, with little selected beyond the main river.

At this time, the lands of the Project area were almost wholly beyond the bounds of European settlements, although the eastern and southern portions of the Project area extended into lands selected by Ritchie and Blaxland respectively. At this time, the 'Blaxland' estate was run as a sheep and cattle station with a large workforce comprised of convicts labouring as assigned servants (Dunne 2012:30). Although most of the Project area was unselected, it is understood that the 'open forest country' backing the Wollombi Brook, as described by Dangar (1828) would have been used by Blaxland and possibly others for grazing from the mid-1820s. **Figure 26** also details Hunter Valley Roads of the 1820s and 1830s.



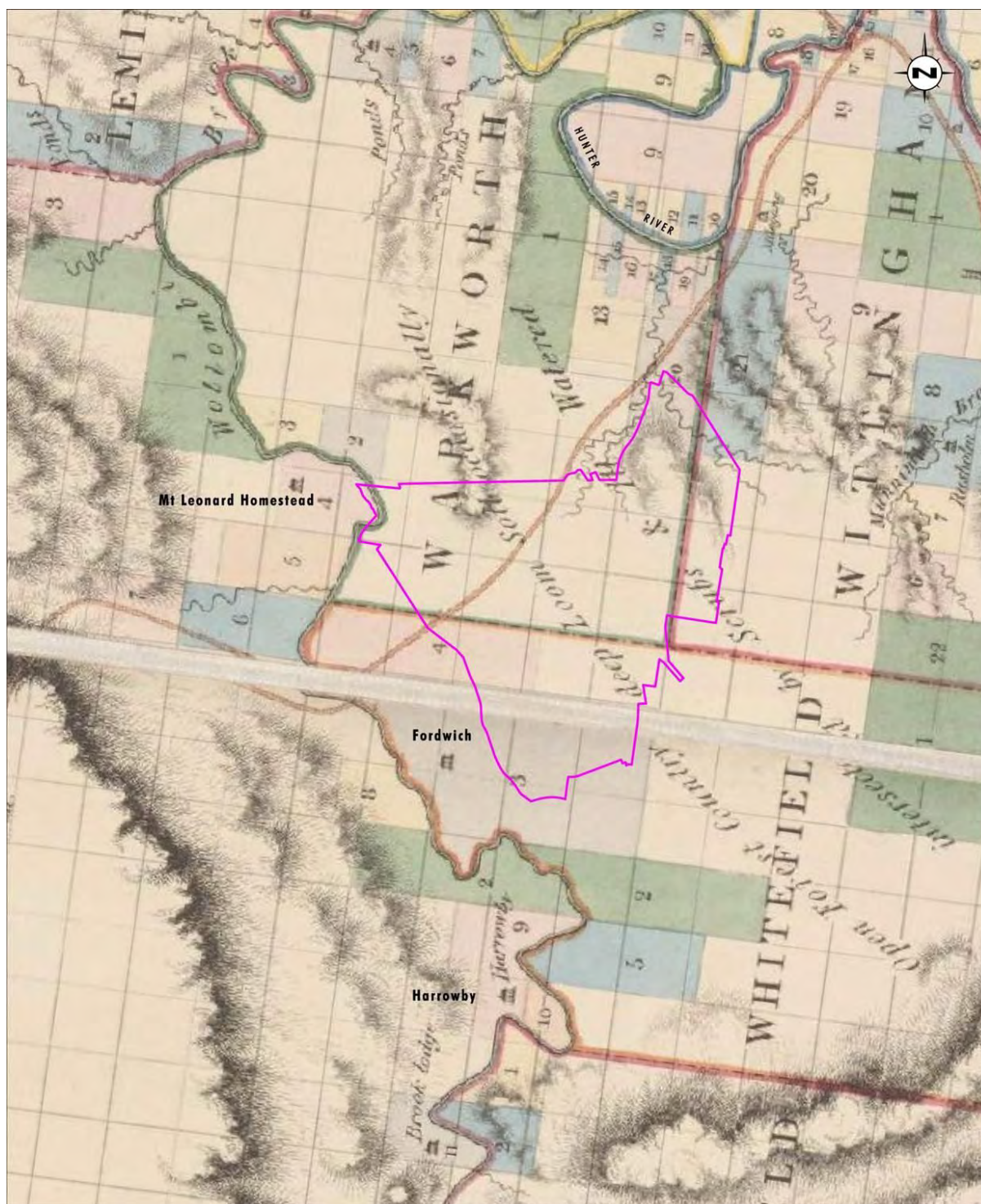


Figure 25: Project Area European Selections, 1828

Source: J. Cross, Map of the Hunter River and its Branches 1828; Umwelt (2013)

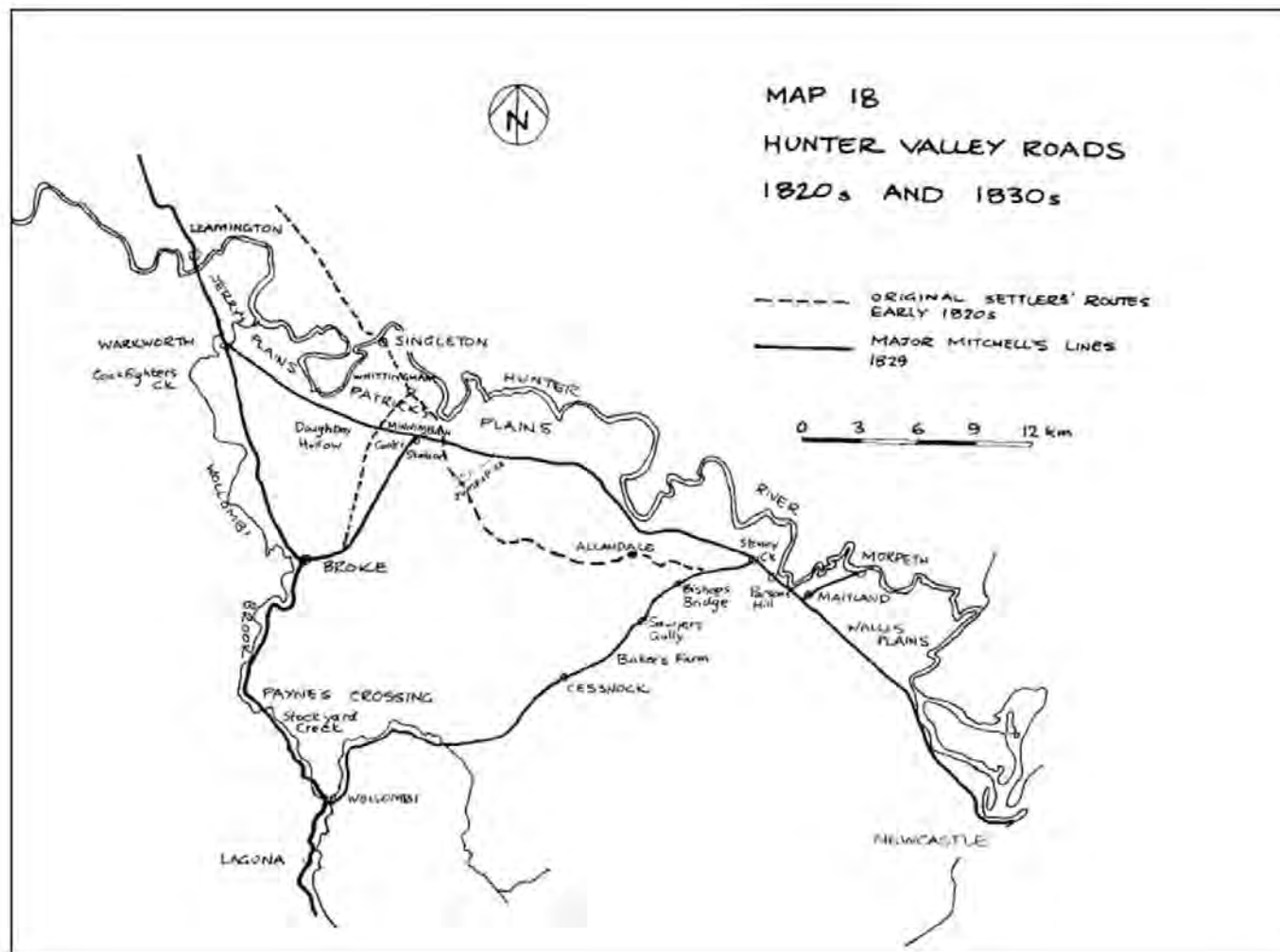


Figure 26: Hunter Valley Roads of the 1820s and 1830s

Source: Umwelt (2013)

As previously noted, the Dangar survey led to a rush of land grants and applications (Gray 1966), based on his reports of the pastoral and agricultural suitability of the region, such as his description of the Whitfield Parish, of which he stated (1828):

“The unappropriated lands of this Parish are of a light and sandy character, excepting about twenty four sections of the eastern side, over which is a productive loam soil, though not well watered. They are, however, worthy the attention of the extensive grazier, as permanently good water on the Wollombi Brook is yet attainable”.

Such reports and the completion of the Great North Road led to an intensification of European settlement in the Wollombi region, including the Project area of this assessment, in the 1830s, with farming communities growing as villages and as stopping places for travellers (Elkin 1946). The Broke Fordwich area became a key stop for travellers and drovers, with the road branching at Broke to the northern and eastern parts of the Hunter Valley (Dunne 2012:20-21).

The 1830s growth within the region is reflected in the 1837 ‘Map of the Colony of New South Wales’ by Robert Dixon (refer to **Figure 27**), which shows an intensification of European settlement along Wollombi Brook itself, as well as an expansion of settlement beyond the main rivers and into adjoining country.

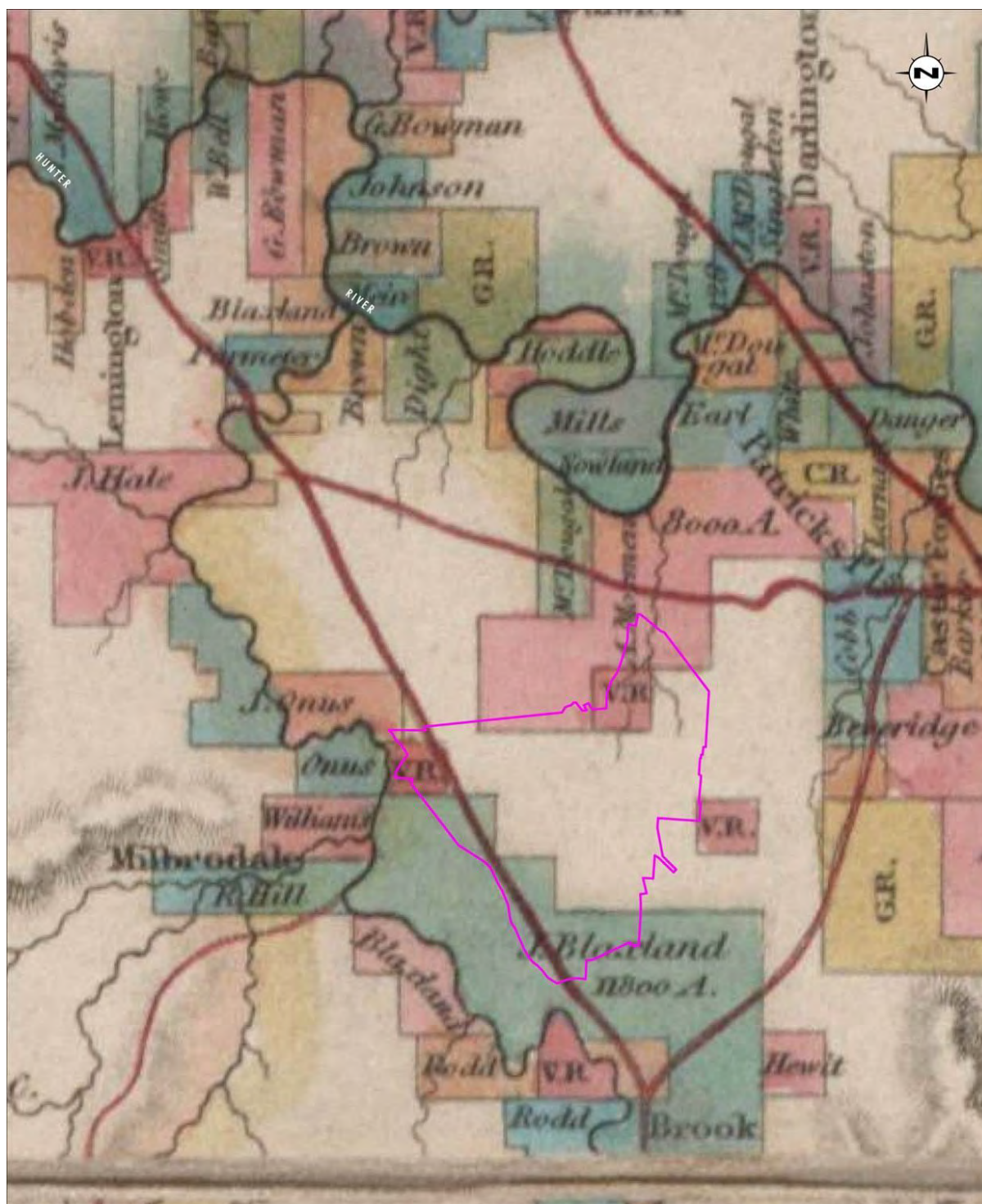
The following map also shows that by the late 1830s, additional lands had been selected by Europeans to the north of the Project area of this assessment, and that a number of small village reserves, shown on the map as ‘VR’ were being planned for the area.

This includes one that spans the northern boundary of the Project area, and another just beyond its eastern boundary.

These planned village reserves led to the later development of the Vere village to the north of Broke.

With the influx of European settlers in the 1830s and 1840s, the former estates of the region also began a process of subdivision.

For example, the Fordwich estate owned by the Blaxland family dominated the early history of the Broke region but following the deaths of John Blaxland in 1845 and John Blaxland Jnr in 1840, some lots were leased to tenant farmers, and by the 1850s, some lots were being advertised locally for auction (Dunne 2012:32).



Source: <http://nla.gov.au/nla.map-rm831>; Umwelt (2013)

11.3 Displacement

In the decades following European contact, the settlement patterns of Wonnarua people were significantly affected, as access to traditional lands – particularly the fertile river valleys taken for agricultural cultivation – was denied or limited. As previously noted, strategies used to respond to this included retreat and the later ‘coming in’ to European estates and settlements, whose foods and goods were quickly replacing traditional hunting and foraging for sustenance.

The use of both strategies is evidenced by historical accounts in the Hunter Valley, such as the following observation by Mitchell in December 1831, who noted while at Segenhoe in the Upper Hunter Valley, that “the natives have almost all disappeared from the valley of the Hunter”, though some who lingered “near their ancient haunts” were occasionally to be met on the larger stations (Brayshaw 1986:48). In his crossing of the Liverpool Plains, Mitchell also came across Wonnarua people displaced entirely from their country, described by him as follows (in Baker 1997:51-52):

“Once over the range, the expedition came across a remnant of a Hunter Valley tribe, probably Geawegal people, encountered a few days earlier ten miles or so south of Scone. They were truly a pathetic group. Not only were they suffering from smallpox, for which Mitchell provided what medicines he could, but they were ‘strangers in the land’. Their meekness, as aliens, and their utter ignorance of the country they were in, aroused Mitchell’s sympathy. Mitchell was observing, though he did not explicitly make the point, the plight of black refugees escaping from the white man’s dominion”.

In a letter by magistrate Robert Scott on 17 May 1827, he also describes how the Aboriginal people of the Hunter Region had retreated in the face of European settlement, stating in relation to the planned arrest of an Aboriginal man for a suspected kidnapping, that “...they never appear near the settlements except in numbers”.

The continued presence of Aboriginal people in the ‘Wollombi’ area, which in the early 19th century still included the Broke and Bulga area, is reflected in historical accounts. Blanket returns from the 1838, 1841, 1842 and 1843 describe a number of people of the ‘Wollombi’, ‘Wollumbi’ and ‘Lower Wollombi’, with at least 39 distinct people recorded as collecting blankets on four different dates.

These included 26 men, 10 women and three boys under the age of 12. The ages of those collecting blankets is recorded as ranging from eight to 50; although most people – 22 – being between 15 and 26 in age. Those collecting blankets also listed to their number of wives and children, with blanket records referring to an additional seven women as wives and an additional four children (three boys and one girl).

Historical accounts of the 1830s also specifically refer to Aboriginal camping along the Wollombi Brook, such as in the February 1830 account by surveyor Felton Mathew who visited a camp of about 60 men, women and children on the bank of Wollombi Brook not far from Broke (Brayshaw 1986:48-49). This is similar to other accounts of the time, such as the 14 Oct 1831 description of continued Aboriginal camping along the Hunter River, concurrently with early European homesteads.

Later accounts, including reminiscences of settlers from the mid-20th century, also refer to the area around Bulga as being an Aboriginal camping ground, such as the 23 April 1948 account (refer to **Figure 28**).

Another account by Walter Lumby of Wollombi in 1965, whose grandmother took out a grant of 100 acres in 1831, recounted his early life when “there were a few mobs of [Aborigines] about. They’d

camp up on the ridges ... There were different tribes ... Wollombi blacks, Millfield blacks and Ellalong blacks" (D'Ombra 1965).

Bulga Was Known at the Same Time as Singleton

Bulga first became known to white men in March, 1820, when the explorers, Howe, Singleton and Thorley crossed the range from the settlement at Richmond and descended on the Milbrodale Estate on or near the present property of Mr L. Dodds. The first intrepid pioneer families (Eathers and McAlpins) made the tortuous journey via Colo. Putty and Howe's Valley to settle there in 1826. Many pioneer families soon followed. The area around Bulga was a blacks' camping ground and names, still in use, have aboriginal meanings—indeed the very name, "Bulga," in the aboriginal, means "mountain."

Figure 28: 23 April 1948, Singleton Argus article

Source: <http://trove.nla.gov.au/ndp/del/article/84607186>

11.4 Loss of Food Security

With the expansion of European estates, traditional hunting and gathering grounds were lost as vegetation was cleared and plant foods lost. The animals that formerly lived in that habitat moved on or were shot for European food and supplies. As stated by Ellis (2001:12), settlers shot kangaroos and other native animals by the hundreds so that grasses would be available for their stock, they cut down hundreds of trees, and in some areas, they stood guard at key watering holes to prevent Aboriginal access to water.

This loss was particularly associated with the establishment of large pastoral estates in the 1820s and 1830s, when large tracts of land were cleared, and as throughout other areas of NSW:

"Aboriginal peoples were denied access to waterholes, hunting and gathering grounds and sacred sites; because it was found that their presence unsettled the stock. Most squatters thought that a squatting license entitled them to exclude Aboriginals from their runs. As well as destroying Aboriginal hunting nets and traps, squatters also killed off most of the native animals on which Aboriginals depended for food. This was mainly to make more mature pasture available for their flocks – most runs were overstocked for quick profits. Native game was also slaughtered for sport". (Parbury 1986:52-53)

In the Broke region of the Hunter Valley, this process began in the 1820s and 1830s with the establishment of agricultural and pastoral estates, and within decades resources that had supported Aboriginal people for thousands of years were greatly reduced.

This is reflected in historic accounts of the loss of animal populations, such as in the following observation by Breton in 1834 about an area adjoining Wollombi Brook:

"While here I went out after kangaroos, and to my surprise was only sixteen, at a place where formerly a hundred might have been seen together; but within the last two or three years they have almost disappeared" (Breton 1984:83).

In 1845, David Dunlop, the magistrate at Wollombi wrote that, "the black swan, the wild duck, the wonga-wonga pigeon and the kangaroo were daily decreasing".

The expansion of pastoral estates also impacted available water supplies, with water vital for human life taken for stock, and swamps often drained to provide productive land (Parbury 1986:52). The placement of European homesteads near the best water holes or creek lines compounded the issue.

11.5 Continued Expansion of European Settlement

Aboriginal and settler Australians have shared the Australian continent for over 200 years, and throughout that time, their histories have been closely interwoven and are inseparable. The following sections discuss the recent shared history of the Hunter Region, with a particular focus on the range of Aboriginal experiences since the mid-19th century.

This section provides a broad understanding of the continued expansion of European settlement of the upper Hunter Valley from the mid-19th century.

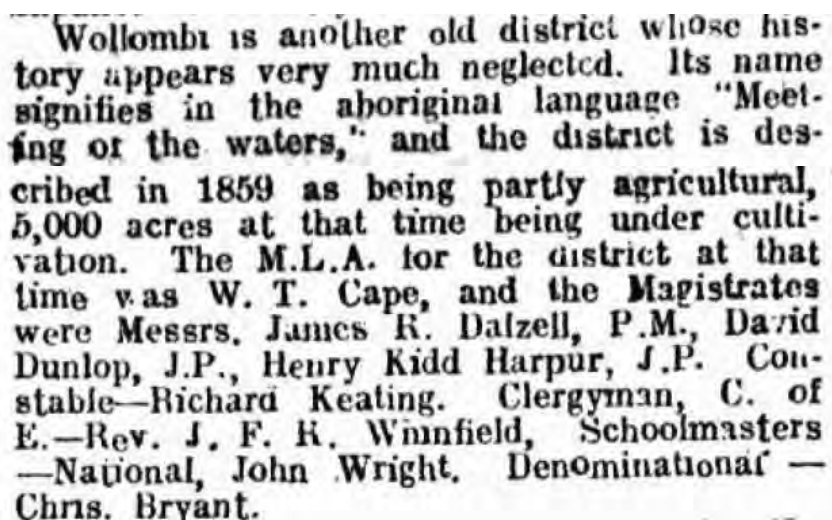
Intensive European settlement of the towns along the Great North Road followed its completion in 1831, as towns became stopover for travellers and were consolidated as farming communities (Elkin 1946). In the 1830s, the main creek of the area was re-named Wollombi Brook, described as its rightful Aboriginal name in the following article (refer to **Figure 29**), after originally being named 'Cockfighters Creek' by European explorers after the name of one of their horses.

tion. As we might, otherwise, give offence in certain quarters, we shall not particularize any of the localities that are now distinguished, on the late Surveyor-General's charts, by the names of *white men*, who, it may be, have never done any other service to the colony than that of dropping their names upon a map; but what, we would ask, have we to do with such names as *Jump-up Creek, Tumble-down Creek, Cock-fighter's Creek, Black Bob's Creek*, if the well-known colonial streams that are thus absurdly named, have had native names from time immemorial? Cockfighter's* Creek, we believe, was the English name given by its discoverers to the beautiful stream that traverses the picturesque valley of the Wollombi. It has at length very properly given way to the native name.

Figure 29: 29 October 1835 The Colonist Article

Source: <http://trove.nla.gov.au/ndp/del/article/31717142>

'Wollombi' also came to be the name adopted for the broader district, including the Project area of this assessment. By 1851, the population of the Wollombi district was 105, which expanded to 1,655 by 1862 and to 1,800 by 1867. The early settlers were primarily agricultural in focus, with 5,000 acres of land being cultivated in 1859 (refer to **Figure 30**).



Wollombi is another old district whose history appears very much neglected. Its name signifies in the aboriginal language "Meeting of the waters," and the district is described in 1859 as being partly agricultural, 5,000 acres at that time being under cultivation. The M.L.A. for the district at that time was W. T. Cape, and the Magistrates were Messrs. James R. Dalzell, P.M., David Dunlop, J.P., Henry Kidd Harpur, J.P. Constable—Richard Keating. Clergyman, C. of E.—Rev. J. F. R. Winnfield, Schoolmasters—National, John Wright. Denominational—Chris. Bryant.

Figure 30: 24 August 1917, Windsor and Richmond Gazette Article Extract

Source: <http://trove.nla.gov.au/ndp/del/article/85880162>

The 1860s were the years of greatest European development of the land within the Broke region (Elkin 1946), following the September 1860 division and sale of the allotments of the current village of Broke.

In the 19th century, Broke became a centre of sheep and cattle grazing interests, although late in that century, the focus shifted from sheep to dairying and cattle grazing.

Dairying commenced in the Hunter Valley in the 1860s, and by the end of the century, this industry was exerting pressure for land, and was a major factor in the subdivision of the once large grazing estates of the Valley (Umwelt 2012).

This is reflected in Parish mapping of the 1890s, refer to Figure 31 and **Figure 32**, which show that the lands of the Project area had been fully taken up by European settlers by this time but that settlement in the region was now characterised by smaller land selections instead of large grazing estates; although some – the Blaxland and Ritchie families, and new property owners Matthew Meares and Archibold Mossman – still owned larger areas of land.

The following mapping also shows the consolidation of the township of Broke, and the development of the Vere village on the very eastern boundary of the Project area in the late 19th century (refer to **Figure 33**).

Vere village lands were later acquired by the Government in the 20th century for the Singleton Military Area, and although this involved removal of the buildings that once formed the village, Umwelt (2012) has identified that a number of archaeological features remain in its place.

After World War I, the Commonwealth Government began acquiring land in the area for Soldier Settlement Schemes, including the purchase of 4080 acres of land that had formerly been part of the Blaxland estate in 1918.

This land was subdivided into the Fordwich Soldiers Settlement Purchase Area, which initially consisted of 12 farming blocks spanning both sides of Wollombi Brook, known as the Soldiers' Group Purchase Area No. 50 (Dunne 2012:77).

The Fordwich Soldier Settlement was considered the most successful of the regions' soldier settlements in relation to servicing debts, however, not all could survive on their holdings and some endured poor living conditions (Dunne 2012:74).

At the time of World War II, land directly east of the Project area was acquired in 1941 for use as the Singleton Military area, which is one of the two major defence facilities in the Hunter Region.

During the war, troops were stationed at the area as part of training, and the area continued to be used for this purpose to this day (Umwelt 2012). At this time, a RAAF landing strip was also constructed within the Project area, designed to act as a secondary airfield to the primary airfield at Bulga.

It appears that the airfield was never used for war related activities, and in the 1950s, the airfield was returned to the original landowners, after briefly being used by the Newcastle Aero Club for practice in forced landings (Umwelt 2012).

The break-up of former estate lands in the early 20th for the soldier settlement schemes sowed the seeds for a future wine growing industry that would develop in its importance in the late 20th century, following a post 1960s decline in dairying (Dunne 2012:71).

In the Broke region, coal mining emerged as the major land use in the 1980s, with the commencement of the 'Saxonvale' open cut mine in 1981 (Dunne 2012:87).

Mining operations within the Bulga Coal Complex commenced in the 1980s, with Xstrata Coal Management currently undertaking both open cut and underground mining operations within the Project area.



Figure 31: 1891 Wollombi Parish Map

Source: Umwelt (2013)





Figure 33: 1952 'The Vere' Parish Map

Source: Land and Property Management Authority (2013)

11.6 Continuing Economic Contribution

From the earliest European settlement in Sydney, Aboriginal people were prepared to negotiate with the newcomers, and often traded goods or did odd jobs to fulfil their immediate needs (Flood 2006:209).

As the physical and social landscape of the Hunter Valley was altered by European activity, the Aboriginal people were forced to participate in the colonial economy for meagre provisions or access to water and game. Bramble (1981:62) describes Aboriginal people undertaking a range of activities in the early European economy:

"Aborigines were employed in a variety of capacities in Newcastle and the Hunter Valley. In common with the first Europeans throughout the continent who received invaluable help from the bush skills and local knowledge of Aborigines, explorers such as Dangar and settlers such as James Mudie were helped to find their way on their land. Aborigines were also employed as messengers, shepherds, stockmen, sawyers, babysitters, deckhands, and in picking and sorting the wool clip, to name but a few of the tasks they performed in the Hunter Valley".

Throughout inland areas of NSW, pastoral estates provided much Aboriginal employment, with men working as stockmen and women working at the homesteads. In early decades, this work was often seasonal and irregular, and supplemented other activities rather than being the whole lifestyle.

Aboriginal contribution to early agricultural estates at Wollombi is reflected in the **Figure 34** which reports on the 1847 involvement of Aboriginal people in the crop harvest.

Considerable loss on this account has been sustained in the wheat crop, and it would have been greater had not the services of the aborigines been available, and many of them reaped quite as well as "white fellow." They bargained for their weekly wages and rations, and strictly attended to their engagements on the respective farms where they were employed.—*Sydney Morning Herald, January 5.*

Figure 34: 9 Jan 1847, The Maitland Mercury and Hunter River Advertiser (Extract)

Source: <http://trove.nla.gov.au/ndp/del/article/687039>

Aboriginal assistance in the crop harvest was also critical the following year, as detailed in **Figure 35**. This article also refers to the payment of Aboriginal workers for the harvest, stating that some in the region deemed cash unnecessary and were only willing to supply a shirt or two, a pair of trousers and a daily supply of 'victuals' for a full 12 months of work; while a European worker would be paid a 'fifteen or twenty pounds in hard cash' for the same work.

of civilization. But, unfortunately, there are few who deem it expedient or proper to give an equivalent for his labour to a *black-fellow*. A check shirt or two, a pair of duck trousers, and a daily supply of broken victuals, are generally deemed satisfaction in full for a twelvemonth's work, although similar services—perhaps less efficiently rendered—by a white man would cost an additional fifteen or twenty pounds in hard cash. And after all we are full of complaints against the sloth and inaptitude of the race. We do not consider that nothing but an adequate return can effectually overcome the natural repugnance to hard and continuous exertions, even in the case of the white man.]

Figure 35: 2 Dec 1848, Maitland Mercury and Hunter River Advertiser (Extract)

Source: <http://trove.nla.gov.au/ndp/del/article/707357>

Payment in kind was a common feature of early Aboriginal employment, with many paid only in food, clothing and tobacco. Cash was rarely used on stations at this time. European stockmen would often draw their cash salary once a year, and Aboriginal workers not at all (Flood 2006:211).

A reliance on Aboriginal labour grew during the 19th century, particularly in the 1850s when gold rushes in NSW and Victoria drew white labour from the land. In the decades that followed, Aboriginal men became consummate horsemen and skilled shepherds but their treatment varied from benign paternalism to shameless exploitation (Elder 2003:254).

By the mid-19th century, historical accounts reflect additional ways in which Aboriginal people were financially rewarded for activities, such as the following 1848 newspaper article which describes a reward for the 'Native Purse', being an Aboriginal canoe race as part of the Morpeth and Hinton regatta on the Hunter River (refer to **Figure 36**).

4th Race.—The NATIVE PURSE, of £1 and a Suit of Slops, for all Aboriginal Canoes, paddled by two Aboriginal Natives: to start from the Hinton Punt, up to the buoy moored off the Government Wharf, rounding it on the Durham side, and down, ending at the buoy moored off Mrs. Cornelious's.

Figure 36: 11 Oct 1848, The Maitland Mercury and Hunter River Advertiser

Source: <http://trove.nla.gov.au/ndp/del/article/676254>

11.7 Cumulative Impact of Disease, Dispossession and Conflict

In the first years of European settlement of the Hunter Valley, there is little evidence of conflict between Wonnarua people and European settlers. However, from late 1825 to 1834, a series of frontier conflicts resulted in at least 36 Aboriginal deaths and at least six settler deaths, although historic accounts also refer to various conflicts resulting in 'several' Aboriginal casualties, so the true number of Aboriginal deaths is understood to be much higher.

Aboriginal loss of life continued at a higher rate than in settler society into the late 19th and 20th centuries with tuberculosis being the leading cause of death. Tuberculosis spread quickly in the close contact of Aboriginal fringe camps and reserves (Flood 2006:132). Other epidemics to impact on the Aboriginal population included the Spanish flu which struck in 1918-1919 and killed more than 20 million people worldwide (Flood 2006:131).

The cumulative impact of disease, dispossession and violence led to a dramatic decrease of Wonnarua people by the late 19th century, with Miller (1985:66) describing the Wonnarua people at this time as numbering less than 80. Well into the 20th century, Aboriginal men continued to outnumber Aboriginal women in the district, reflecting continued impacts from venereal disease and the 19th century contact experience.

This is reflected in the following 1921 Singleton Argus article which lists 21 Aboriginal men and 12 Aboriginal women in the district, from preliminary census results.

In a pattern observed throughout NSW, with their food supply diminished, Aboriginal people turned to the sheep, cattle, crops and supplies of the colonists in order to survive; to assert their custodial rights to the land and its resources under traditional lore; and to respond to the European practices that were causing significant disruption to generational Wonnarua cultural practices.

However, this often brought violent retribution (Blyton et al 2004:26). One of the first newspaper articles on conflict in the NSW Hunter reflects this, with a 17 June 1826 article from The Australian describing an Aboriginal raid on a hut in the Patrick Plains district, with a number of goods taken.

Aboriginal hunting of introduced stock is also commented on in magistrate correspondence from the 1820s, with Benjamin Singleton and James Glennie both providing sworn oaths to magistrate Robert Scott on 28 March 1827, stating that they each had cattle lost to Aboriginal people, and both had removed spears from cattle in the recent weeks.

Despite such strategies, Aboriginal people still suffered hardships throughout the colony due to the loss of the traditional resources of their Countries.

In Dawn in the Valley, Wood (1972, p. 114) makes reference to the 'Wollombi Blacks' who had "committed acts of aggression on Wollombi Brook, where food and clothing had been taken by force from a number of farms". This group was apparently not Kamilaroi and could have been the same tribe as those of Brisbane Water and kindred of the Hawkesbury River tribe.

In the Colong Foundation for Wilderness's Wilderness Red Index listing for Yengo (1999), farming in the lower Macdonald Valley, the upper Wollombi and along the Bulga sparked a war with local Aboriginal people in 1935:

"The confrontation was short-lived, and by the 1840's villages at St Albans and Wollombi had developed as part of the government's policy of consolidating the overland link with the Hunter Valley".

There are accounts of Aboriginal people conducting 'raids' on livestock, which grazed on the rich grasslands having replaced/displaced the large animals that they would previously have hunted for food. In 1827, Dangar reported a count of '25,000 horned cattle' and '80,000 sheep' in the Hunter Valley (Brayshaw, 1987, p. 10).

The early historic accounts do not include much detail regarding any specific clashes between Aboriginal and non-Aboriginal people living in the Broke region. However, Breton (1834, p. 175) provides some evidence that such conflict did occur and resulted in Aboriginal people being killed as 'punishment' for sheep stealing:

"A neighbouring tribe killed, in 1830, more than 100 sheep belonging to a settler who has a farm near Wollombi ... A party of soldiers, or dismounted police, were sent after the offenders, of whom they killed several."

Given the nature of frontier life and war, Aboriginal women and girls were particularly subject to damaging cross-cultural contact during this period. Krisenthal's (2008) account of the female experience of the frontier – both Aboriginal and non-Aboriginal – paints a picture of hardship and violence. She highlights Eliza Hamilton Dunlop (of Wollombi) and Mrs Ogilvie (of Merton) as non-Aboriginal women settlers who developed compassion for and understanding of Aboriginal people.

Threkheld's diaries contain reports of abductions, assaults, rapes and enslavement of women and girls at the hands of colonists, as well as beatings of Aboriginal men who intervened. For Aboriginal women and girls, colonisation had devastating effects with declining numbers of Aboriginal women and girls being "one of the most severe effects of their abuse by European society" (Krisenthal, 2008, p. 33) resulting in erosion of Aboriginal populations and kinship systems. Blanket counts and various clergy reports confirmed decreasing numbers of women in Aboriginal groups.

The relationship between settlers and Aborigines could also be congenial as an 1850 letter from Eliza Clark, a settler at Bulga on Wollombi Brook, indicates:

“We have also had a visit of a tribe of blacks. King Terry and his tribe, in all about 20 they are very quiet, good natured people down here they talk broken English, they are very amusing indeed. They camp close beside us, and I have plenty of their company – the King getting me wood and watter [sic]. All they want for their labour in return is something to eat. They are fond of rambling about in the bush they live chiefly upon opossum which they roast and eat without bread or salt or anything. They sometimes get Kangaroos but not often they are only to be found in the mountain and opossum is everywhere to be found where there is trees and water” (Mitchell, 2004).

Several settlers, such as the Ogilvies and Dunlops, cultivated good relations with Aborigines, with Dunlop noting one of the traits of Aboriginal character being “when a promise is once made it must be scrupulously observed” (de Salis, 1967, p. 92).

Accounts such as Eliza Clark’s indicate that, despite dwindling numbers and resources, Aboriginal people endured. Reports, in the 1870s, of the last Aborigines were much exaggerated. For much of the 19th century, there were reports of corroborees, conflicts and other movements continued, albeit in a highly fragmented and disrupted manner. In 1843, a conflict between an estimated 100 members of the Maitland and Port Stephens Aborigines occurred in Maitland and involved Wollombi Aborigines, possibly indicating shifting and emerging alliances between remaining groups (1843, p. 2).

11.8 Imposing a European Status

In the early and mid-19th century, many inscribed plates identifying Aboriginal men as ‘Kings’ were distributed by European settlers, and some identifying Aboriginal women as ‘Queens’. These plates did not reflect Aboriginal social systems, and Aboriginal people did not generally recognise the authority that Europeans invested in the plates; but they were often worn as evidence of European favour and they may have enhanced the status of the wearer (Horton 1994:551). This enhances status may have also meant more access to food and other European items by European settlers.

In all, more than 200 plates have been identified throughout Australia (Horton 1994:551), and of these, a 1948 Singleton Argus article describes three as being from the Hunter Valley (refer to **Figure 37**) – King Cockey, King Boney and King Jimmy.

With the death of ‘King Cocky’ in January 1888, the Singleton Argus reported that ‘his death practically ended the history of the original inhabitants of Patricks Plains’. The Singleton Argus also reported on 24 May 1950 that the brass plate of ‘King James of Baelpin, Patrick Plains’ was found in 1941 during works to construct a new Aboriginal settlement at Boggabilla in southern Queensland.

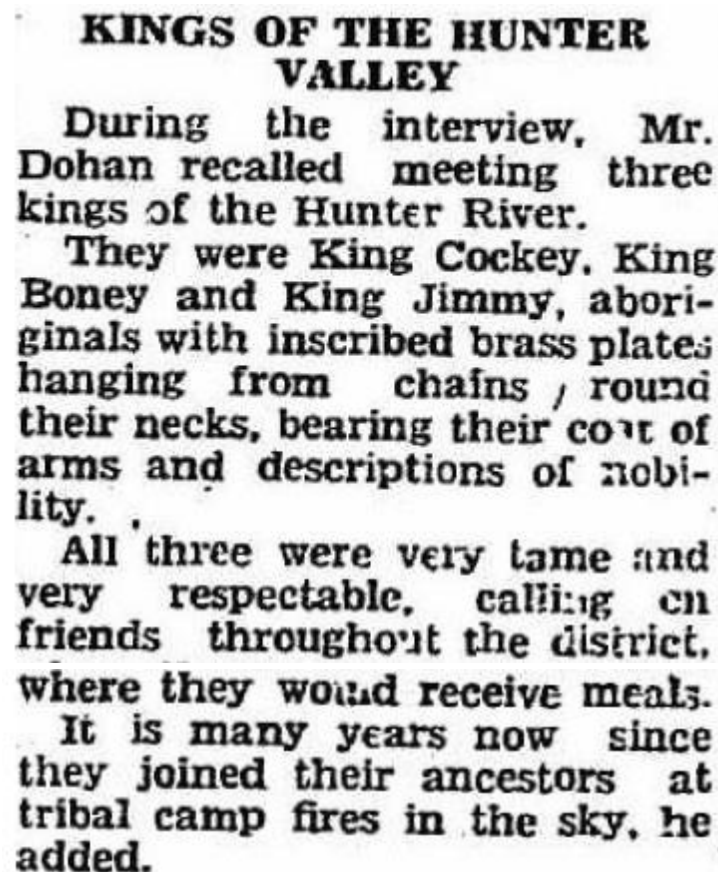


Figure 37: 30 July 1948, Singleton Argus Article

Source: <http://trove.nla.gov.au/ndp/del/article/84610082>

Historical accounts also refer to a number of other 'Kings' in the Hunter Valley, such as 'Yarre, King of Patricks Plains' who had a studio portrait taken in 1875 (refer to **Figure 38**).

Note:

The following page includes images of Elders who have passed away, which may distress some readers.



Figure 38: 'Yarre, King of Patricks Plains' 1875 Studio portrait

Source: <http://trove.nla.gov.au/work/11187515>

The taking of Aboriginal portraits such as that of Yarre was relatively common in the mid-late 19th century, but they were generally all staged, either in a 'traditional' scene such as with Yarre's portrait above, or with Aboriginal people in European dress to demonstrate the success of efforts to 'civilize' local Aboriginal people, such as the following portrait of 'Cumboo Billy Good-Day' from Patricks Plains in 1842 (refer to **Figure 39**), who is also listed Patricks Plains blanket records.

Note:

The following page includes images of Elders who have passed away, which may distress some readers.



Figure 39: Cumboo Billy Good-Day, Patricks Plains, 1842, William Nicholas

Source: <http://nla.gov.au/nla.pic-an22761850>

Evidence of European favour was also provided to Jackey Jackey, who accompanied the Kennedy expedition to northern Queensland and who was its only survivor. Following the expedition, Sir C. Fitzroy gave a medal to Jackey Jackey to commemorate his involvement in the exploration.

11.9 Maintenance of Cultural Practice

During the early decades of European contact, Wonnarua people continued many aspects of traditional kinship and cultural practice, despite significant upheaval in lifeways in the Hunter Region. This included continued camping in Country, although now there was a focus on lands beyond the limits of European settlement, mixed with visits to the European estates and towns to seek food and other valued goods, sometimes in exchange for casual or seasonal labour. This pattern was also used in other areas of NSW when Aboriginal people were in a position to choose, as it allowed

Aboriginal people to preserve as much of their own ways as possible, while still having access to new goods such as tobacco, tea, guns and alcohol (Reynolds 1989:132).

The continuation of camping along Wollombi Brook in the 1830s was noted by surveyor Felton Mathew on 11 February 1830, who stated (cited in Brayshaw 1987:56):

“Visited the first camp of natives I have seen. There were about 60 men, women and children I remained with them about an hour, and saw them retire for the night, each party or family kindling its own separate fire apart from the others. The place they were encamped in was a romantic spot on the bank of the Wollombi”.

Maintenance of the Bora ceremony in the Hunter Valley is also a highly significant cultural practice that continued into the late 19th century, with documented Bora ceremonies held at Bulga in 1852) and a ceremony held at the junction of the Page and Isis Rivers at Gundy, reported in the 1870s (McDonald 1878:255-258).

Historical records also refer to a range of other events in which Aboriginal cultural practice was maintained, such as:

- Continued identification by Aboriginal name and tribal affiliation, as reflected in eight individual blanket returns taken in the upper Hunter Valley between June 1834 and June 1837; in which the vast majority of individuals identify their traditional Aboriginal name in addition to an English name, and all identify a tribal affiliation and connection;
- Continued practice of polygamy in the 1830s and 1840s, with blanket returns from the time showing that some Aboriginal men had two or three wives;
- Burial of an Aboriginal man at Campbell's Hill in the Hunter Valley, after he died in conflict between the 'Maitland, Port Stephens and Paterson tribes'. A Maitland Mercury and Hunter River Advertiser report on 3 June 1843 reports that he was buried, wrapped in a blanket with a sheet of bark laid beneath him and his broken 'waddie' at his side;
- A party of Aboriginal men hunting possums along Foy Brook, as reported in the Maitland Mercury and Hunter River Advertiser on 31 March 1847;
- The occurrence of a Bora ceremony at Bulga recorded in 1852 (Eather nd, Thorpe 1918, Brayshaw 2003);
- The return of an Aboriginal child's body to Singleton to be buried, after she died while off Country on a family visit to Maitland. This was reported in the Maitland Mercury and Hunter River Advertiser on 16 February 1875 as a 'curious funeral' after her parents carried the dead child home on the train in their arms. The continued importance of being buried on Country is reflected by this account; and
- In an undated account, Mrs Collins wrote of a large gathering of 200-300 Aboriginal people 'on the hill in Mr Eather's paddock' at Bulga. This relatively high number of people may have come together for a specific ceremonial event, or it could represent several groups coming together due to the rich resources of the area, or for goods collected through rations or work.

11.10 Ingenuity and Material Culture

With the transformation of Aboriginal lifeways that followed European contact, Aboriginal material culture evolved rapidly. Historical records contain a number of references to an evolving Aboriginal material culture into the 19th century. These include:

- Threlkeld (in Gunson 1974:67) described that the use of quartz fragments in spears was being replaced with bottle glass, which “thus inflicting fearfully lacerated wounds with the deadly weapon, when thrown against their enemy”;
- Threlkeld (in Gunson 1974:67) described that materials such as iron and glass were adopted for other uses, such as fish hooks⁶ May 1848 Maitland Mercury and Hunter River Advertiser report of the death of an Aboriginal man, after which his people buried him ‘in a paddock where a lot of bullocks were running, buried deep and surface smoothed until it was hardly visible to the white man’. This is similar to a description by Threlkeld (cited in Brayshaw 1987:87) of an Aboriginal burial where the group involved took great care to leave little surface indication of the burial. Brayshaw (1987) notes that this was a significant change from traditional practice, and may reflect a deliberate response to the inability to properly conduct the ceremonies required for the dead;
- 17 May 1848 Maitland Mercury and Hunter River Advertiser report of copper boilers, axes and other European items being found at an Aboriginal camp, after the camp of 200 Aboriginal people had been driven away by police;
- 31 Mar 1847 newspaper article referring to a group of Aboriginal men and their dogs hunting possums on Foy Brook; and
- Clubs studded with metal nails became a common feature of those made in the 19th century, including a number collected from the Hunter Valley and now maintained in the Australian Museum’s Morrison Collection (Australian Museum 2012).

11.11 The Bushranging Tradition

Throughout its history, the Hunter Valley has attracted a number of bushrangers and horse thieves, in part due to its standing as Australia’s first and most famous horse breeding district (Blyton et al 2004:36). The early link between Aboriginal people and bushrangers is reflected in a June 1835 report (refer to **Figure 40**) on the ‘depredations of the Aborigines’ of the Hunter’s River area, which states that “the depredations and murders committed by black natives are headed by bushrangers (as we understand)”.

**DEPREDACTIONS OF THE
ABORIGINES.**

IN consequence of the depredations and murders committed by the black natives, headed we understand by bushrangers, at Williams' River, and in the neighbourhood of Mr. McQueen's estate of Segenhoe, Major Croker and four subalterns with upwards of fifty rank and file of the 17th Regt., were dispatched to Hunter's River, on Monday evening last, by order of His Excellency the Governor, to protect the district, and to capture or otherwise punish the offenders. We have been informed that the supposed origin of the aggressions of the blacks is their indiscriminate desire of vengeance excited by the injuries they are constantly experiencing at the hands chiefly of ticket-of-leave and free men, who are allowed to go at large beyond the stations of settlers in the distant parts of the territory. There

Figure 40: 11 Jun 1835, The Colonist

Source: <http://trove.nla.gov.au/ndp/del/article/31716613>

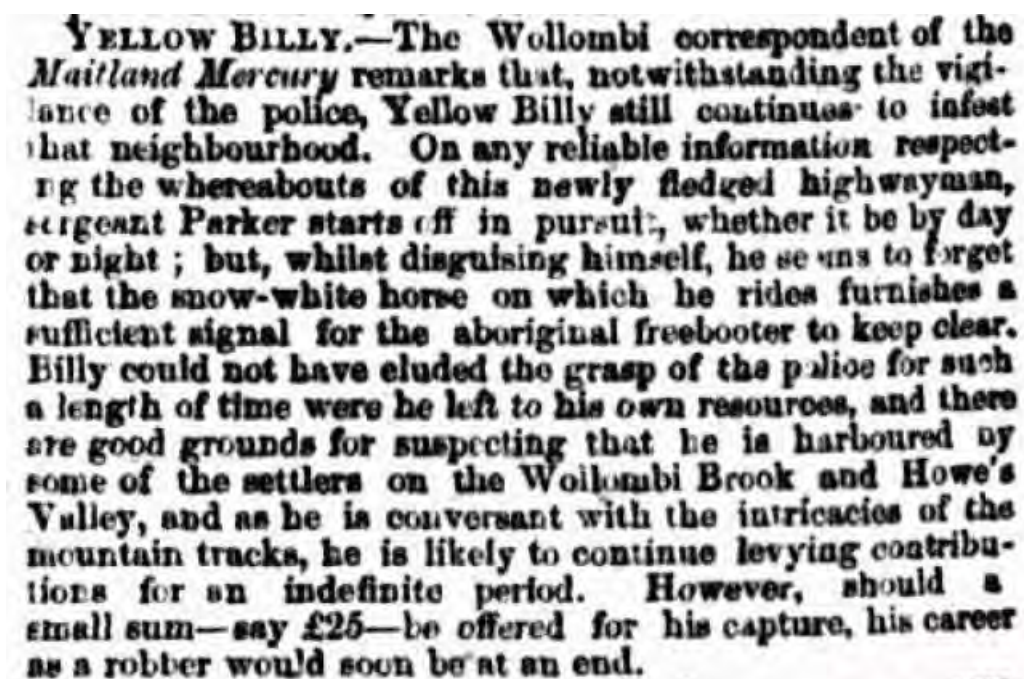
One example of local bushranging this the 'murderous assault' on a settler by three Aboriginal men in December 1852, described in the following article (refer to Figure 41) as occurring along the Bulga Road as the settler was travelling between Richmond and the Namoi River.

**MURDEROUS ASSAULT BY THREE ABORIGIN-
ALS.**—On Monday night, the 22nd of November, a violent assault was committed on the person of J. K. Panton, Esq., of Richmond, by three native blacks, at Howe's Valley, on the Bulga road. Mr. Panton and Thomas Parnell, Esq., were on their way from Richmond to the Namoi, with two stockmen (aboriginals), having their pack horses with them; they encamped for the night, at the usual camping ground at Howe's Valley, and turned in for the night. At about 12 o'clock, hearing a great noise, Mr. Panton got up, and perceived a black fellows' camp above them, and three black-fellows coming toward him; Mr. Panton having put a blanket round him, went to meet them, and after going about 13 yards, met them, when he said "hollo, my lads, what's the matter?" he immediately received a terrific blow across the mouth with a waddy, which felled him to the ground: he was then again struck another blow

Figure 41: 4 December 1852, The Maitland Mercury and Hunter River Advertiser

Source: <http://trove.nla.gov.au/ndp/del/article/660080>

The area around Bulga was a particular focus for Aboriginal bushrangers, a number of whom would camp in the hills of the area and use them as a base for forays into the main valley. One of the best known bushrangers of the area was 'Yellow Billy' (William), who was described in local reports of the day as a 'half caste' Aboriginal who came from the Big River (the Gwydir River). Yellow Billy was known to camp in the caves near Wollombi (Wollombi Progress Association 1979:21), and the following article from August 1863 also suggested that Yellow Billy was being harboured by some of the settlers on the Wollombi Brook and Howe's Valley, as he would otherwise had been captured (refer to **Figure 42**).



YELLOW BILLY.—The Wollombi correspondent of the *Maitland Mercury* remarks that, notwithstanding the vigilance of the police, Yellow Billy still continues to infest that neighbourhood. On any reliable information respecting the whereabouts of this newly fledged highwayman, Sergeant Parker starts off in pursuit, whether it be by day or night ; but, whilst disguising himself, he seems to forget that the snow-white horse on which he rides furnishes a sufficient signal for the aboriginal freebooter to keep clear. Billy could not have eluded the grasp of the police for such a length of time were he left to his own resources, and there are good grounds for suspecting that he is harboured by some of the settlers on the Wollombi Brook and Howe's Valley, and as he is conversant with the intricacies of the mountain tracks, he is likely to continue levying contributions for an indefinite period. However, should a small sum—say £25—be offered for his capture, his career as a robber would soon be at an end.

Figure 42: 13 Aug 1863 Maitland Mercury and Hunter River Advertiser

Source: <http://trove.nla.gov.au/ndp/del/article/13124284>

Yellow Billy was caught in 1867 and sentenced to 30 years, and after serving some years was deported to America (Wollombi Progress Association 1979:21).

However, the most famous Aboriginal bushrangers of the Hunter Valley were Joe and Jimmy Governor, Aboriginal brothers who spent some time living at the St Clair mission in their youth.

In the years leading to their notorious attacks throughout northern NSW, Jimmy Governor was very much in love with his European wife, Ethel Page, and both were ostracised, condemned and subject to taunts for their marriage (Blyton et al 2004:48). The brothers were on the run for over three months and during this time covered more than 3000 kilometres, including a large part of the Hunter Valley.

Their evasion of capture during this time was undoubtedly the result of their bush skills and knowledge of country; although they were eventually captured, with Joe shot in the Hunter Valley (north of St Clair mission) while trying to escape in 1900 and Jimmy hung in Darlinghurst Gaol on 18 Jan 1901 (Blyton et al 2004:50).

11.12 Missions, Camp Reserves and Aboriginal Children's Homes

In 1880, the Association for the Protection of Aborigines (APA) was formed as a private organisation. In 1881 George Thornton MLC, was installed as Protector of Aborigines. The APA and its derivatives resulted in the 'missionisation' of Aboriginal people through the spread of the reserve system during the latter part of the 19th century and early 20th century.

In 1883 the Aborigines Protection Board was established and was associated with the creation of Aboriginal reserves throughout New South Wales, with managed reserves at St Clair (or St Clare, near Singleton) and Singleton declared in 1893 and 1896 respectively. In the Hunter region, there were several missions including:

- Singleton, comprised of the Hunter River Aboriginal Reserve which operated from 1896 and also an unnamed Aboriginal Reserve 1.5 miles from Singleton on 320 acres which operated from 1889;
- St Claire, 24 acres near Bourke's Gully declared 1893; and
- Glennie's Creek, 58 acres declared 1890.

The St Clair mission was originally the site of an Aboriginal fringe camp located 20 miles (32 kilometres) north of Singleton, on the banks of Glennie's Creek (Miller 1985:107).

Aboriginal people were reported to be living at St Clair as early as 1841, with a Patricks Plains blanket return dated 1 May 1841 listing two Aboriginal men of the 'Falbrook Tribe' and a May 1843 Falbrook blanket return referring to five men residing at St Clair, with reference to a further four women and children.

During the late 19th century, Aboriginal society throughout NSW was forced to change. As once access to traditional lands and traditional cultural practices were undermined, Aboriginal people became the 'people in between' – they could not continue to live their old life but did not fit into white society (Flood 2006:202).

Fringe camps were most commonly placed on vacant land away from European settlement, such as on Crown Land, the margins of townships, or on travelling stock routes. Fringe camps were also created on the estates of compassionate settlers, such as the Sydney example illustrated in **Figure 43**, although these were relatively few in comparison. Fringe camps were most commonly used throughout NSW between 1850 to 1870 before the later establishment of reserves and missions (Byrne & Nugent 2004: 56).



Figure 43: 'A native family of New South Wales sitting down on an English settler's farm', Augustus Earle, 1826

Source: <http://nla.gov.au/nla.pic-an2818442>

Several newspaper reports from the 1860s and beyond also refer to an Aboriginal fringe camp at Dunolly, located beyond the Singleton town limits. A range of other references to the camp include: a July 1890 Singleton Argus report on a fight at the camp.

Historical accounts provide several references to continued Aboriginal camping in the Bulga area in the late 19th century, such as in the following 1952 article which includes the recollections of a local man who reported that when he was young, there was a 'very big camp' at Bulga, and that Aboriginal people used to steal some stock and 'worried quite a few local folk'.

Aboriginal people from the Hunter Region were also relocated to missions in other areas and in 1882 The Maitland Mercury & Hunter River General Advertiser reported that "fifteen aborigines from Gresford were induced to join the [Maloga] mission" on the Murray River (The Aborigines Mission, 1882). This was prior to the opening of St Clair mission reserve which was established at Carrowbrook between Muswellbrook and Singleton in the early 1890s. Later known as Mount Olive Station, the reserve consisted of some 60-odd acres, which was farmed by Aborigines who grew a variety of crops including corn, potatoes and cabbages (Blyton, Heitmeyer, & Maynard, 2004, pp. 57-60). While the reserve came under the control of the Aborigines Inland Mission (AIM) founded by Baptist missionary Retta Dixon in 1905, missionary work at Singleton, St Clair and Redbourneberry pre-dates this (Dixon, 1904). AIM managed the mission until 1916 with considerable evangelical religious zeal, heralded in a 1904 address by Dixon: "in the first year or two there were many hardships to encounter, owing to the clearing away of evil habits before a sure foundation could be laid in the service of Jesus Christ" (Dixon, 1904).

An Aboriginal Children's Home was established by Retta Dixon in a large House in George Street, Singleton, known as Glasgow Place. This home and the mission at St Clair were AIM's main initial ventures. AIM Missionaries were also active at Redbourneberry (near Singleton) (Horton, 1994) where services were conducted (Aborigines Inland Mission, 1905).

The residents of Redbourneberry Hill had easy access to town, and many were able to find employment locally (Miller 1985:108).

The proximity of the Redbourneberry camp to Singleton prompted several calls for its removal in the late 19th and 20th centuries, such as in an 1895 article in the Singleton Argus also reported that:

“...a petition is being taken round for signature asking the Government to remove the blacks’ camp from the common to a distance from town”.

The reserves had varying degrees of autonomy and were either ‘managed’ by an overseer with significant Board input, or ‘unmanaged’, where the Board provided rations only (Walden 1995).

Rations were usually substandard, and were generally only provided to the aged, the sick and the children; and the amount distributed was originally calculated to be a supplement to hunting only (Parbury 1986:100); but the ability to hunt was limited by land available and Aboriginal use of guns and other weapons was limited.

To support their families, Aboriginal people were encouraged to work the land of reserves and farming equipment was supplied; as beyond the land itself, little else was provided (Flood 2006:203). However, most reserves were small and would have sustained only one white family, but they were expected to support whole Aboriginal communities (Parbury 1986:86).

Those who lived on reserves generally experienced highly authoritarian controls on their lives, with station managers deciding where people could live, who they married, what they did with their money and whether they could keep their own children.

They also had the right to search their homes, confiscate property, order medical inspections and confine children to dormitories (Parbury 1986:87). People could also be arbitrarily removed from reserves, and from their families, for committing ‘crimes’ such as being considered dangerous or ‘cheeky’ to an official or employer (Reynolds 1989:199).

Traditional cultural practices were generally forbidden on reserves (Parbury 1986:88), to achieve Aboriginal conversion to ‘civilisation’. In practical terms, this that meant imposing all aspects of European culture and at the same time suppressing Aboriginal customs and ceremonies, with marriage and funeral rites often the sharpest points of conflict (Reynolds 1989:160).

On the reserves, Aboriginal men had to work up to two days a week for nothing to qualify their families for the ration, which was worth 35 cents for the week. At the same time, unemployed settler men were able to apply for a dole of 58 cents a week, without having to work for it (Parbury 1986:100). Aboriginal reserve residents could be ordered to work up to 32 hours a week without being paid (Parbury 1986:88).

In 1918 the Aborigines Protection Board adopted a dispersal policy and expelled Aborigines who were not full-blood or half-caste from the reserves, on the grounds that they were not Aboriginal and should be part of the white community. This resulted in the increasing numbers of Aborigines camping on the fringes of country towns as they were not accepted by the townspeople (Marr, 1997).

At St Heliers, on the outskirts of Muswellbrook towards McCullys Gap, a section of the property of around 450 acres was purchased by the government in 1945 and served as a child welfare institution until its closure in 1986. As an orphanage this institution has been identified by members of the Wanaruah Local Aboriginal Land Council as a place where Aboriginal children were taken from their parents and were very much a part of the Stolen Generations.

St Heliers was originally a property occupied by Lieutenant Colonel Henry Dumeresq who was part of the colonial force assigned to the Upper Hunter Valley in the late 1820's (Blyton, Heitmeyer, & Maynard, 2004, p. 65). The Aboriginal Inland Mission also opened a mission at Minimbah Homestead in Singleton in 1946 (Minimbah Aboriginal Mission Opened, 1946). This facility was also used as a training college for young Aboriginal people into the 1960s.

11.13 Changes to Traditional Practice

As noted previously, the late 19th century was characterised by the movement of many Aboriginal people in NSW into reserves and missions, many of which were managed to achieve the 'civilisation' and 'protection' of Aboriginal people. As Aboriginal people came under increasing government control, overt traditional practices diminished as station managers adopted strict regimes to limit traditional practice. This process has been described by some as transition to a 'semi-Anglicised' or 'post-traditional' lifestyle (O'Rourke 1995).

This was no more evident than in the loss of the Bora ceremony, the last of which in the Hunter Valley was in 1852 at Bulga, and the last of which in more distant districts of NSW was in the 1870s. For most Aboriginal nations, the discontinuation of the Bora marked the end of 'high culture' (O'Rourke 1995:79).

However, as with all cultures, cultural adaptation to changing environments, emerging technologies and social influences resulted in unique cultural, spiritual, social values and specific lived experiences. Amongst this, Aboriginal cultural values about land and country have continued to prevail.

In relation to the Project area, continuation of cultural attachments and practices is also evident in the oral historical record, with a WTC's representative Elder of Broke, identifying in a disclosed statement that his family has unbroken connection and cultural attachment to the area, and has continued cultural practices such as hunting in the local area – including the lands of the Project area of this assessment – in historic and contemporary times.

During the shared historic experiences since contact, there have also been a range of accounts that refer to a continuation of some cultural practices, although as with all other aspects of Aboriginal life, these too are subject to change. For example, objects collected from the St Clair mission in the late 19th and early 20th century show the continued manufacture of Aboriginal cultural artefacts such as clubs, boomerangs, spears and shields; although a number of these objects are decorative instead of functional, so they may have been produced specifically for trade.

Other historic accounts referring to some aspects of practice continuing include several references to Aboriginal people, such as the 3 Mar 1887 Maitland Mercury and Hunter River Advertiser report of Aboriginal people seeking the shade of their 'gunyahs' at a local cricket match; and the 25 September 1886 Singleton Argus report of Aboriginal people camping on the property of Dr White at Gowrie, and their activity stripping trees to get bark to make their 'gunyahs'.

A range of hunting and foraging skills were also used by Aboriginal people working on pastoral properties into the 20th century (Reynolds 2000).

Throughout the expanding colony, Aboriginal people 'moving in' to settler society provided a cheap source of labour for a variety of rural industries (Reynolds 1989:124), although in the early decades of settlement, convict labour negated the need for Aboriginal labour in many areas (Bramble 1981:54).

However, by the 1840s, Aboriginal people worked for Europeans throughout the State as shepherds, bullock drovers, stock and hut keepers, messengers, domestics, sheep washers, shearers and harvesters (Robinson 1822-59). The contribution of Aboriginal workers is often overlooked, but they were of crucial important to a range of 19th century frontier industries, and later 20th century economic prosperity.

From an early time, Aboriginal people had a particular association with the pastoral industry, with Aboriginal hunting skills easily adapted for herding (Parbury 1986:58). Aboriginal men worked as shepherds and stockmen, and were often better than their European counterparts given their knowledge of the land and bush skills (Parbury 1986:72).

Some Aboriginal women also worked as shepherds and stockmen, but most were domestic workers on the station. Aboriginal children often assisted their parents with domestic tasks and labouring work (Harrison 2004:32).

Some registered Aboriginal parties shared their memories of helping their parents on various landholdings and spoke of the work of their grandmothers who worked as domestics or what life was like raising families in the region.

"We practically lived in this area where the mine is – we did more shooting and tracking in that area than anywhere – we used to catch peach faced wallaby (we used to call them this) and bronze winged pigeon – the odd ducks too.

The area which is now the compost heap isn't an area we really went to – we had all we needed closer to home. - we never really went there- we would go to the area near the Vere and right to the Hunter River- along Saddleback." Cultural Values statement WTC's representative Elder of Broke".

11.14 Employment

For those who lived in or near the new European towns, other ways to make a living were found, such as described in a 16 February 1884 Singleton Argus article, which notes that an Aboriginal woman Charlotte King and her husband were in 'town that day selling clothes-props'. In a 1888 Maitland Mercury and Hunter River Advertiser article (refer to **Figure 44**), the enterprise of Aboriginal people were also employed in a range of other pursuits in the 19th century, such as acrobatic performers in the Circus, with the Maitland Mercury and Hunter River Advertiser notifying the public in 1853 that 'Massa Sandy, an aboriginal who jumps through hoops and rides a horse at great speed' will be performing; and in 1854 notifying that 'the unrivalled aboriginal Mungo Mungo' will be performing.

ABORIGINALS AS SHOWMEN.—Two gentlemen in black (all over) waited upon your correspondent on Saturday, and after the customary introductory grin one of the deputation pulled out a brick coloured ticket and offered it for sale at the heavy charge of "threepence." On the ticket was printed the following: "Grand corroboree will take place on the triangle opposite the *Argus* office in John-street this evening. Admission, threepence." It is evident that our sable brethren have learned something from their white compeers in the show line, and intend to conduct their corroborees in future on proper business principles. But alas! for poor human nature—white or black alike—we had reckoned "without mine host." Having done some business in the brick paste boards, the jingling coin in the pockets of the treasurer could not withstand the allurements of the "King of Hosts" on this earth—King "Rum"—and forthwith an exchange of commodities took place when the treasurer and his companion entered the first pub. on their line of march to refresh themselves. Their evening's engagement was forgotten by the time when they managed to stumble into camp, minus cash, but plus liquor. The treasurer, his commercial associate, and a few other members of the troupe were unavoidably absent from the corroboree that evening, being "indisposed."

Figure 44: 28 Feb 1888, Maitland Mercury and Hunter River Advertiser

Source: <http://trove.nla.gov.au/ndp/del/article/18961790>

Aboriginal people continued to contribute significantly to the economy of the Hunter Region into the 20th century, with many employed on the railways extending upland to Scone; which were once host to numerous tents containing Aboriginal workers and their extended families. The tents were hired from the Railway Department for around five shillings a week with optional extras such as wooden planks which served as floors and larger two room tents. With no electricity, kerosene lanterns provided light at night, while food was cooked on fires (Blyton et al 2004:72). Dawn Magazine (1956:1) also reported that Aboriginal men from Caroona Station took jobs on the railway, chiefly fettling and permanent way work. Aboriginal women were able to find employment in towns such as Muswellbrook and Singleton, but they were always in positions of servitude such as hotel workers, cleaners and maids (Blyton et al 2004:69).

Other recent Aboriginal contributions to the economy of the Hunter Valley include the involvement in the construction of the rail siding for Liddell Power Station, with an Aboriginal company called Smith's General Contractors employing hundreds of Aboriginal workers from the 1950s to the early 1980s (Scully 2010).

11.15 20th Century

The 20th century, particularly with the closure of missions and since the 1967 Referendum, saw significant social and political changes for Aboriginal people across the nation. With the missions closed, Aboriginal people were expelled into the community under policies of assimilation and integration. Miller states that the shift saw Aboriginal people being “induced to work the local farms rather than the farms on the mission. They looked at Kooris as a cheap form of labour” (Miller J., 1985, p. 125).

During World War I employment was available for Aboriginal workers (particularly on inland stations) as young white men left the country to join the war effort. From the St Clair reserve, 81 Aboriginal people volunteered, of whom three were killed, one was wounded and one returned shell shocked. The death rate of those from St Clair was double the national average, at 3.6 per cent (Parbury 1986:98)

At Singleton, Aboriginal children in the Aboriginal Inland Mission home raised funds for the war effort and Aboriginal farmers donated part of their crops to the Red Cross. Walking sticks for the wounded in France were also collected from the St Clair mission, as described in the following 1915 article. Aboriginal servicemen returning from duty during and after World War I were not eligible for soldier settler land grants (Marr, 1997).

Political agency emerged with organisations such the Australian Aborigines Progressive Association (AAPA, which, while based in Sydney, carried out extensive outreach). Worimi man, Fred Maynard, was a central figure in this organisation and he regularly visited the Hunter region. The AAPA was vocal on a range of issues including the forced removal of children from Aboriginal families. As Miller states:

“The 1920s and 1930s were the decades in which Koori people in New South Wales suffered the greatest oppression at the hands of the Board. Hundreds of children were abducted and transported to Cootamundra, Kinchela and the infants’ home at Bomaderry” (Miller J., 1985, p. 148).

These homes and accounts of the achievements of many of the government wards were the subject of articles in Dawn Magazine, published between 1952-1975 by the New South Wales Aborigines Welfare Board. Wonnarua family names and members were reported by Dawn Magazine at Kinchela, Caroonna, La Perouse and Cootamundra.

While some Aboriginal people were relocated to and from missions and homes, others set up camp in informal settlements such as Platt’s Estate in Waratah in Newcastle. The camp was established during the great depression to ‘house’ the homeless and unemployed. In 1943, Platt’s Estate housed in “rough shacks and humpies more than 200 hundred people” including six Aboriginal families, varying from “twenty to forty in number” (Deacon, 2000).

In 1953, the Singleton Argus reported that many Aboriginal families in New South Wales were living in hovels. The report of the NSW Aborigines Welfare Board for the year ended June 30 found that “the total number of aborigines in NSW at present is 2946 living on aboriginal stations under full-time management and 2155 on reserves that are not supervised or are partly supervised. Many other aborigines are living in unsatisfactory conditions in unofficial camps (Many Aborigines Living in Hovels, 1953).” Aboriginal people lived at Platt’s Estate until the 1960s (Heath, 1998, p. 62).

During the 1970’s Goodsir and Cooper contracted an Aboriginal company called Smith’s General Contractors to lay rail siding at the Liddell Power Station. Founded in the mid-1950s by brothers and

former railway workers Robert and Bill Smith, Smiths General Contracting employed hundreds of Aboriginal workers from the 1950s to the early 1980s (Scully, 2010). Maynard writes that the company was initially focused on small contracts for railway maintenance and were successful bidding for larger projects including the construction of railway lines for the coal industry. At its height the company employed over 130 men: 70 per cent of this workforce was Aboriginal.

At the time, Smith Brothers was thought to be the largest private employer of Aboriginal labour in Australia (Mayard, 2001). While Newcastle is associated with the Awabakal, the city attracted Aboriginal residents and resettlement from diverse groups.

Since the 1960s Aboriginal people have established a network of organisations to support community aspirations and self-determination including the assertion of cultural identity and the reclamation of cultural heritage and rights. Traditional Owner groups, the Wanaruah Local Aboriginal Land Council, Aboriginal Corporations and other organisations– health services, youth services, enterprises, land councils, education services, legal services etc. – have been integral in securing restitution, cultural rights and self-determination. As Heath (1998, p. 71) concludes, reflecting on the struggle of Aboriginal people in the Hunter Region:

“Today, we have several thousand Gooris maintaining their identity and culture, fighting for justice, and trying to attain a standard of living that was theirs inherent in the Dreaming. In all instances, Gooris have contributed to the economic resources of the Hunter Region and will continue to do so as an integral part of the many societies occupying Mother Earth”.

Since the 1970s, there has been a continuous period of what has been described as ‘cultural intensification’ in NSW Aboriginal communities (Beckett et al. 2003:26), resulting from the renewed interest in Aboriginality and Aboriginal heritage, and which has led Aboriginal people across the State to re-establish cultural links with kin and places of cultural significance. Some of the registered Aboriginal parties described their own and their Elders active participation in ‘cultural intensification’ citing the struggle for recognition and the need to fulfil custodial responsibilities relating to Aboriginal cultural heritage and the advancement of Aboriginal people.

In NSW, the dispossession of Aboriginal people from their lands is recognised in the Land Rights Act 1983, which was an important milestone in State legislation. The Wanaruah Local Aboriginal Land Council was established as one of 14 LALCs in Northern New South Wales, as a result of this milestone state legislation.

This appendix has presented available information on the Aboriginal history of the Project area to inform this assessment, in a local and regional context. It is sourced from a range of historical, oral and archaeological sources, integrated to provide a multi-faceted and holistic understanding of the past. The historic narrative materials have been shared with registered Aboriginal parties consulted by Connect for Effect. Some of the information has been provided by registered Aboriginal parties for inclusion in this ACHA. A synthesis of this information to identify known Aboriginal associations with the area over time, and provide a broad understanding of the Aboriginal cultural landscape of the Project area is included in the ACHA.

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