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**Aboriginal Cultural Heritage Assessment and Management Plan**

**Wadalba Hill, Wyong Shire**

Public version

**Oliver Brown**

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Total Earth Care Pty Ltd

27 February 2009



**Brown, O (Total Earth Care). 2009. Aboriginal Cultural Heritage Assessment and Management Plan, Wadalba Hill, Wyong Shire. Prepared for Wyong Shire Council.**

<b>Quality Control</b>	<b>© Total Earth Care Pty Ltd 2008</b>		
Revision/Version No.	VER 3 (final)	Date of revision	27 February 2009
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TEC Job No.	D1287-WYSC		

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## Aboriginal Cultural Heritage Assessment and Management Plan, Wadalba Hill, Wyong Shire

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## Aboriginal Cultural Heritage Assessment and Management Plan, Wadalba Hill, Wyong Shire

### EXECUTIVE SUMMARY

Wadalba Hill is located 4.5km from the town centre of Wyong in an area of bushland currently subject to proposed urban land release. The area of the current study is approximately 30ha surrounding Wadalba Hill itself. A corridor of land through the area is to be included in the Wadalba Wildlife Corridor to be managed by Wyong Shire Council.

A previous study has been completed of the area by Gorecki and Dallas (2000) and Aboriginal cultural heritage has been subject to much scrutiny over the past few years including surveys and submissions by DECC, Darkinjung Local Aboriginal Land Council, Guringai Tribal Link Aboriginal Corporation and by local resident Boris Branwhite (representing the Wadalba Association). 3 sites have been listed by on the DECC Aboriginal Sites Register (AHIMS) by Roger Mehr from the Department of Environment and Climate Change in Coffs Harbour.

The study involved two surveys of the area by Total Earth Care: on the 30<sup>th</sup> October 2008 with Tracie Howie and Kevin Robinson from Guringai Tribal Link Aboriginal Corporation; and on the 27<sup>th</sup> November 2008 with Craig Foresheaw and Deborah Swan from Darkinjung Local Aboriginal Land Council. All listed and reported sites were inspected and it was considered that:

- Wadalba Grinding Grooves 1 Site is a very significant archaeological and Aboriginal cultural heritage site inclusive of surrounding deposits with the potential to contain subsurface artefactual (stone tool) material.
- Wadalba Grinding Grooves 2 Site may not actually be an archaeological and Aboriginal cultural heritage site. In the event that development impact was planned for this area, further quantitative study would be able to resolve this issue. This would involve microscopic analysis of the grooves or polyvinyl siloxane (PVS) peels taken from them to determine whether they exhibit characteristic abrasion / polish caused by grinding.
- Wadalba Scar Tree is possibly a culturally scarred tree but has characteristics that are in some ways more consistent with natural scarring. The issue of cultural versus natural scarring is difficult to resolve but it is recommended that aging of the tree by an appropriately qualified arborist may determine that the tree is too young for the scarring to represent pre-invasion Aboriginal use and that such a finding could support an application to impact the tree in the event that development in the area is sought.
- All other sites reported by Boris Branwhite and the Wadalba Association are natural features and not archaeological representations of pre-invasion Aboriginal use of the area. Many of these claims are clearly spurious and intended to serve the cause of opposition to development rather than responsible Aboriginal cultural heritage management aims. It is noted that these efforts have been recently marked by poor Aboriginal community consultation according to DECC guidelines.
- The top of Wadalba Hill itself offers a panoramic view over large areas of the surrounding landscape and is likely to have held Aboriginal cultural significance in the past. While this does not support any

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claim for the location to be listed an Aboriginal Site or Aboriginal Place (as defined in the *National Parks and Wildlife Act* (NPW Act)), long term management should recognise this likely past significance and allow for the opportunity for future reconnection to country by Aboriginal groups.

The single most important recommendation of the study is that the Wadalba Grooves 1 site is the only incontrovertible Aboriginal archaeological site and by far the most important issue in the study area from a heritage point of view. It is considered that Aboriginal cultural heritage management provisions should be almost entirely focused on protecting this site and as large an area surrounding it as possible. Open space provisions for the area should aim to encompass this area in preference to the location of other listed sites if **they can be demonstrated to be natural features.**

Current marking of lot boundaries, the possibility that further infrastructure works such as stormwater drainage and the potential for siltation in the creek during future development present potential threats to the integrity of the Wadalba Grooves 1 site. A clearly bounded conservation area for the long term protection of the site should be designated. Management of this area should include measures to prohibit impact on any deposits within 20m of the grinding grooves site and allow for potential future archaeological investigation, education and visitation of the site by Aboriginal stakeholders.

Ongoing consultation with the Darkinjung Local Aboriginal Land Council and traditional owner groups such as Guringai Tribal Link Aboriginal Corporation should be maintained in future management of the Wadalba Wildlife Conservation Corridor, Wadalba Hill and the Wadalba Grooves 1 site. The decision as to whether the location of the Wadalba Grooves 1 site is made public should also be made according to the wishes of Aboriginal stakeholders.

## Aboriginal Cultural Heritage and Management Plan Wadalba Hill, Wyong Shire

### 1 INTRODUCTION

#### 1.1 The study area

Wadalba Hill is located 4.5km from the town centre of Wyong in an area of bushland currently subject to proposed urban land release. The area of the current study is approximately 30ha surrounding Wadalba Hill itself (marked by two trig stations 'Wadalba Reservoir' and 'Wadalba 75'). It is bounded by sporting facilities and other Council land to the north, Louisiana Road to the east, Johns Road to the South and housing developments to the west (Figure 1 and 2).

Figure 1 The study location

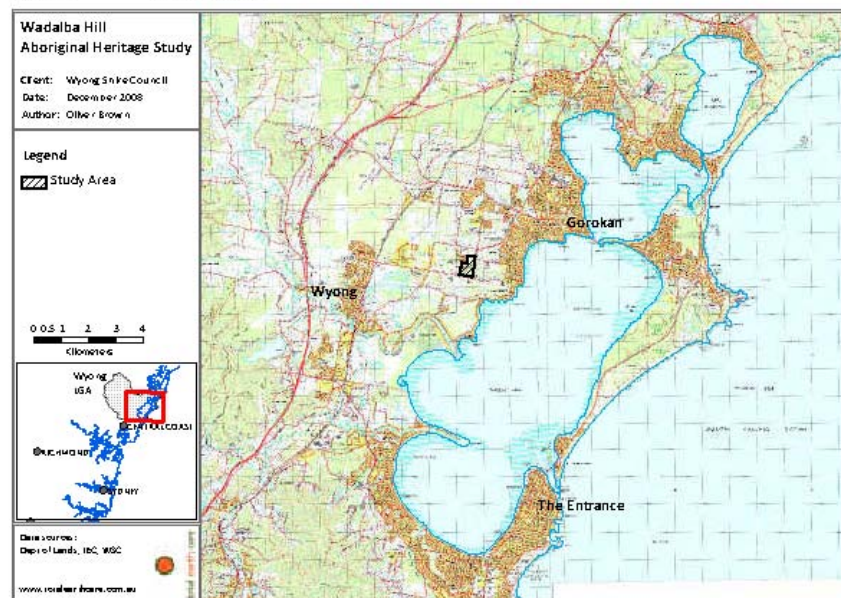
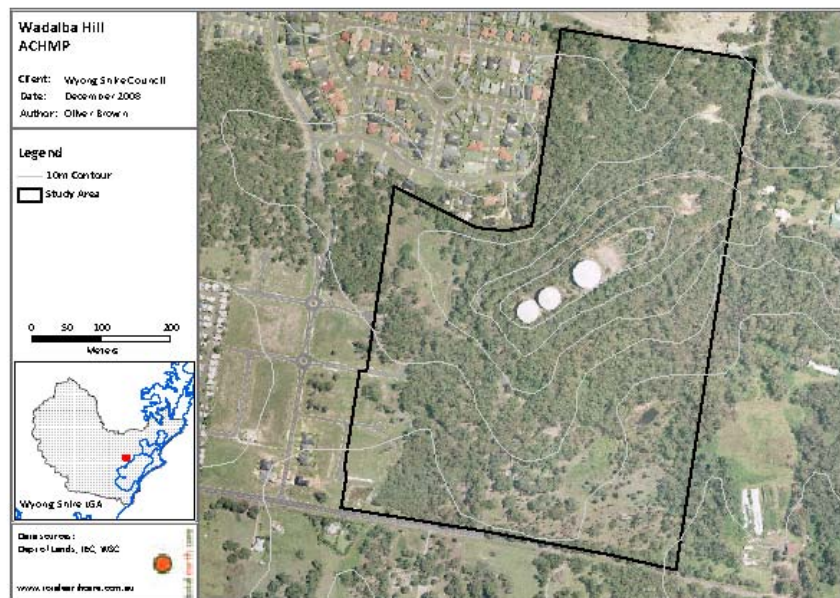


Figure 2 Aerial Image of the Wadalba Hill study area



## 1.2 Background and Management Plan requirements

Wadalba Hill has been subject to 2 Aboriginal cultural heritage assessments (Bonhomme and Koettig 1984; Gorecki & Dallas 2000), inspections by the Darkinjung Local Aboriginal Land Council (Taylor 2007), and an independent assessment by Roger Mehr, an archaeologist from the Coffs Harbour office of the Department of Environment and Climate Change (DECC). Further documentation and submission to Council by the Wadalba Association and Boris Branwhite also include extensive (albeit unqualified and frequently erroneous) information on Aboriginal cultural heritage in the area. The findings and recommendations of these studies are further discussed below in Section 4.

Currently, Wyong Shire Council (WSC) is reviewing 2 separate DAs at Wadalba Hill, has recently rezoned an additional area as Residential (likely to be subject to similar subdivision DAs in future), and assumed responsibility for the management of the Wadalba Wildlife Corridor.

Council has commissioned Total Earth Care (TEC) to conduct an independent review of Aboriginal heritage in the Wadalba Release Area and to prepare an Aboriginal cultural heritage management plan (ACHMP) that "ensures the long term protection of sensitive Aboriginal cultural/archaeological values at Wadalba Hill and helps devise a strategic and appropriate management development plan to ensure that all community interest

groups are afforded an equitable outcome". On the basis of the earlier archaeological assessments and comments received from DECC following a review of DA documents it was understood that the main issue of concern was going to relate to the area of grinding grooves identified in the drainage line in the southwest of the study area. In the course of the study it has also become apparent that ongoing erroneous claims of the existence of Aboriginal sites by non-Aboriginal opponents of development, particularly by Mr Boris Branwhite, are placing an unreasonable burden of cost and time on development proponents, Council, DECC and consultants. Dealing with these claims has therefore become an important aspect of the current study.

### 1.3 Proposed developments

Proposed developments will extend the current extent of urban subdivision into the areas subject to current DAs (in green in Figure 3) and presumably into much of the newly rezoned area (in blue in Figure 3). Public infrastructure, engineering works and open space provisions will also be required. These include a proposed small park in the vicinity of listed Aboriginal cultural heritage sites and drainage line corridor intended to preserve natural habitat and protect the area of the grinding grooves (Figure 4). Possible development of lots subject to a previous DA to the west of the Wadalba Grooves 1 Site (see Figure 3) are also noted as a matter of concern.

**Figure 3 Existing developed areas and areas of proposed new developments in relation to listed sites**

[Figures showing locations of Aboriginal sites not included in public version]

**Figure 4 Proposed development in the vicinity of the known Aboriginal sites**

[Figures showing locations of Aboriginal sites not included in public version]

### 1.4 Legislative context.

Cultural heritage is protected and managed under a variety of different state and federal legislation as well as local government regulations and a range of governmental and non governmental guidelines (such as codes of ethics). The most important piece of legislation protecting Aboriginal cultural heritage in NSW is the *National Parks & Wildlife Act 1974* (NPW Act). Most other local and state legislation and some federal legislation also defers to the NPW Act with regard to Aboriginal cultural heritage in NSW, although it can also be overridden by the *Environmental Planning and Assessment Act 1979* (EP&A Act) in the case of 'State Significant Projects'.

In the NPW Act:

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- Section 5 defines an Aboriginal Object as: *“any deposit, object or material evidence (not being a handicraft for sale) relating to indigenous and non-European habitation of the area that comprises New South Wales, being habitation both prior to and concurrent with the occupation of that area by persons of European extraction, and includes Aboriginal remains.”*
- Section 90 states that it is an offence to knowingly destroy, deface, damage or desecrate, or cause or permit the destruction, defacement, damage or desecration of, an Aboriginal object or Aboriginal place, without the prior written consent from the Director-General of the DECC (often also with a research permit issued under Section 87 of the Act); and
- Section 91 requires that the DECC Director-General be notified of the location of an Aboriginal object which is then registered with the NSW DECC on the Aboriginal Heritage Information Management Service (AHIMS) database.

With specific regard to the public version of the ACHMP, Section 36DA of the *Local Government Act 1993* maintains that the location of places and items of Aboriginal significance may be kept confidential:

1. “This section applies to draft and adopted plans of management for areas of community land, all or part of which consist of land to which section 36D applies.
2. A council may resolve (at the request of any Aboriginal person traditionally associated with the land concerned or on the council’s own initiative) to keep confidential such parts of a draft or adopted plan of management to which this section applies as would disclose the nature and location of a place or an item of Aboriginal significance.
3. Despite any other provision of this Act (including sections 38, 39 and 43) or any other law, councillors and council employees are not to disclose that part of a draft or adopted plan of management that is the subject of a resolution of confidentiality under subsection (2), except with the consent of the council.
4. A draft or adopted plan of management that is the subject of a resolution of confidentiality under subsection (2) must contain a note stating that the whole of the plan is affected by the resolution or identifying the parts that are so affected.
5. A council proposing to prepare a draft plan of management to which this section applies must (in accordance with the regulations) consult with the appropriate Aboriginal communities regarding public access to, and use of, information concerning any places or items of Aboriginal significance on the land concerned”.

### 1.5 Authorship and acknowledgements

This report has been compiled by Oliver Brown with the gratefully acknowledged input of Aboriginal stakeholders, Roger Mehr at DECC, landowners and Wyong Shire Council. All information drawn from previous academic and consulting research is fully referenced. The most significant source of information has been the previous study of the area by Gorecki and Dallas (2000).

## 2 ABORIGINAL CONSULTATION

### 2.1 Introduction

Input from the Aboriginal community is an essential part of assessing the significance of those Aboriginal objects likely to be impacted by an activity and is a requirement for the preparation of an application for a permit or consent under Part 6 of the *National Parks and Wildlife Act 1974* (NPW Act). The DECC Interim Community Consultation Requirements for Applicants recognise that:

- Aboriginal heritage has both cultural and scientific/archaeological significance and that both should be the subject of assessment to inform its decision making;
- Aboriginal people are the primary determinants of the significance of their heritage;
- Aboriginal community involvement needs to occur early in the assessment process to ensure that their values and concerns are taken fully into account, and so that their own decision-making structures are able to function;
- Information arising out of consultation allows the consideration of Aboriginal community views about significance and impact, as well as the merits of management or mitigation measures to be considered in an informed way.

Standard practice in NSW Aboriginal cultural heritage management projects involves the provision of field services by representatives of the Aboriginal community. The scale of this involvement needs to be appropriate to the scale of the project and is determined by the proponent of the study.

### 2.2 Outcomes

The Darkinjung Local Aboriginal Land Council (DLALC) was automatically registered for consultation as the study falls within their boundaries. The Guringai Tribal Link Aboriginal Corporation (GTLAC) also registered. Both groups have been extensively involved in previous assessments of the site. Both were engaged to provide advisory services during field survey (see Section 5).

## 3 ENVIRONMENTAL CONTEXT

Wadalba Hill is in the Wyong subregion of the Sydney Bioregion. This is based on an underlying geology of Triassic Narrabeen sandstones with Quaternary estuarine fills and coastal barrier complexes. Soils in the area are typically texture contrast soils on lithic sandstones in areas like Wadalba Hill with other characteristic soils in creeklines, coastal zones, wetlands, etc. Within the study area more specifically, the crest and ridge of

Wadalba Hill is overlain by the Mandalong Soil Landscape, with the surrounding slopes being part of the Woodburys Bridge Soil Landscape.

Typical vegetation within the Wyong sub-Bioregion includes smooth-barked apple, red bloodwood, brown stringybark, Sydney peppermint, spotted gum, bastard mahogany, northern grey ironbark and grey gum on hills and slopes. Parts of nearby swampy creek flats would be expected to have prickly-leaved tea-tree and other shrubs with swamp mahogany, swamp oak, sedges and common reed. Although most of the vegetation on Wadalba Hill represents 20<sup>th</sup> Century regrowth, a self-regenerating floristic community has existed unbroken to some extent since the pre-invasion period.

More extensive accounts of the natural environment around Wadalba Hill can be found in various documents in association with subdivision DAs in the area (see Conacher Travers 2007).

#### 4 ARCHAEOLOGICAL CONTEXT

##### 4.1 Aboriginal People and Archaeology of the Wyong Shire

The study area is within the country variously recognised as being associated with the Darkinjung people and also associated with the linguistic designation of Guringai. Guringai is largely a linguistic rather than a tribal grouping and is based on the term "Kuring-gai" that was first used by Fraser (1892) referring to all groups of people from the Macleay River to Bulli who used this word to mean men. *Kuri* is also recorded as the Awaba word for men and is used by linguists to group all languages that were spoken from Coffs Harbour to Sydney (Attenbrow 2002). It is from this that we get the popular designation Koori for Aboriginal people in southeast Australia generally.

In the late 1960s the linguist Arthur Capell (1970) defined a geographic extent of 'Kurringai' speakers based on a review of vocabularies from various recorders that has been reviewed and refined by subsequent authors (Eades 1976; Ross 1988), and is now widely used as a designation for the saltwater people from Sydney Harbour or Botany Bay north to Tuggerah Lakes and possibly to Lake Macquarie. Attenbrow has however challenged the use of the term Guringai as a language group, preferring a distinction at a dialect level where Guringai is effectively a coastal dialect of Darug in the Sydney area at least (Attenbrow 2002). A similar case may be advanced in surrounding areas for the cultural and linguistic separations involving all people in all areas variously described as Awabakal, Darkinjung, Guringai and Darug. A similar issue occurs with the separation between people described as Gundungurra and Tharawal further to the south.

On the south coast of NSW, Howitt used the specific Yuin language terms for the division between coastal, hinterland and mountain people all sharing the Yuin language – *Katungal* ('people of the sea'), *Paiendra* ('those with hatchets', referring to the importance of that tool in a forest-dwelling persons toolkit) and *Bemeringal* ('people of the mountains') (Howitt 1904; see also Flood 1982). This has been described in the Sydney area as being between 'people of the sea coast' and 'woods tribes' (Collins 1798) or saltwater and sweetwater people (Brown *et al.* 2008; Brown, submitted)

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With the distinction between languages and dialects not in itself straightforward, the issue of geographically specific cultural grouping of pre-invasion Aboriginal people in the area is further complicated by the fact that they were more closely defined by clan groupings whose identity may have been as much determined by their specialised subsistence way of life and the variable connections and rivalries with neighbouring groups regardless of language. For example coastal Sydney people (Guringai or coastal Darug depending on interpretation) and inland (Darug) people had substantially different ways of life and a number of early ethnohistoric accounts are very explicit about mutual rivalries between them (Collins 1798; Howitt 1904). However, it is also understood that intermarriage and ceremonial and linguistic connections were consistently maintained by trade, marriage, etc. This movement of culture by ritualised means was however not necessarily linked to the movement of people themselves, which was documented as also being between clan areas where an individual's foraging skills were most transferable. Captain Phillip for example recorded in the first ethnographic observations of people at Brisbane Water that a number of people had previously been met with in Sydney Harbour. The movement of Bungaree, being from the Central Coast and described as the 'King of Broken Bay', between his traditional country and Sydney and his marriage to Gooseberry (originally from somewhere near Maroubra in Sydney's Eastern Suburbs) in the early colonial period can be seen as a further example of this.

As a consequence of the complexity of pre-invasion cultural connections and a paucity of ethnographic recording of them by early colonists, different interpretations of the cultural designation of the study area exist among different contemporary Aboriginal people and archaeologists / linguists. Some consider the area to be Darkinjung (presumably not precluding coastal/hinterland clan or dialect separations). Others consider Guringai to be the correct designation for the saltwater people of the area. Given the involvement of representatives of both views in the study, it is not considered appropriate to attempt to resolve the issue here. The discussion above is however important in establishing that a plurality of views can and should be incorporated in the representation of Aboriginal people in the management of their heritage. This is particularly important in instances where the significance of the heritage is such that the importance of its conservation and long term management should transcend current uncertainties and provide for the inheritance of evolving Aboriginal cultural identities centuries from now.

#### **4.2 Previous Studies in the surrounding area**

A number of studies have been conducted in the 12km x 12km are for which AHIMS data could be obtained. Reports of most of these studies were accessible at the AHIMS library (DECC, Hurstville) and are summarised below. It is also likely that a number of further studies could not be located, so the summary here should be considered indicative rather than fully comprehensive. On a broader scale, a regional study of the Gosford-Wyong region was conducted in 1980 by Patricia Vinnicombe. Very few, if any, archaeological excavations have been conducted in the area (Therin reports that there had been none in Wyong area in 2001).

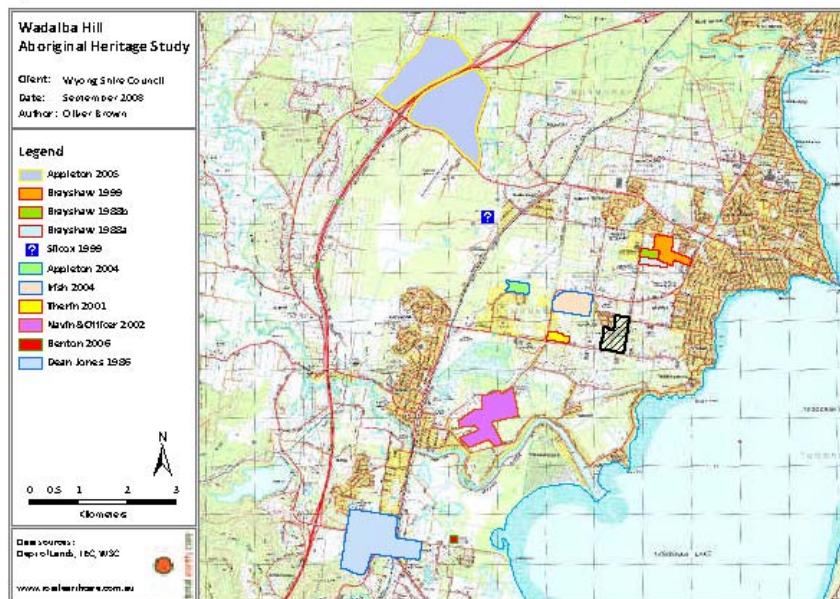
##### **Irish 2004**

Paul Irish conducted a study for Dominic Steel Consulting Archaeology in advance of proposed residential subdivision on the corner of the Pacific Highway approximately half a kilometre NW of the current study area.

The study was intended to update the work in part of the study area considered by Gorecki and Dallas (2000), much as the current study is re-examining a different part of that larger study area.

No Aboriginal sites were located, although one area of potential archaeological sensitivity (PAS) was identified along a drainage line within part of the study area. This confirmed to the area previously identified by Gorecki and Dallas (2000) as a sensitive archaeological area. It was recommended that there were no archaeological constraints to development of the area and that there should be monitoring of works in the PAS area and ongoing consultation with Aboriginal community representatives.

Figure 6 Previous studies in the local area



#### Dean-Jones 1986

A study in advance of a land release at Tuggerah about 6km to the SW of Wadalba Hill in 1986 by Dean-Jones located one Quarry Site and 3 Isolated Finds. The quarry site was a source of "metamorphosed fine-grained quartz sandstone" from which large flakes were struck. It appears that the nature of the material was that it provided expediently used coarse grained material incapable of being flaked to a fine edge and therefore most likely to have been used locally and expediently (1986:8-9). It was considered that this material and its greater durability (lesser erodibility) that the surrounding sandstone is the reason that Kangy Angy Hill stands above the surrounding area.

**Brayshaw 1998a, 1998b, 1999**

A number of studies were conducted in 1998 by Helen Brayshaw in relation to subdivision of 3 adjoining blocks in Hamlyn Terrace about 2km to the NNE of Wadalba Hill (Brayshaw 1998a, 1998b, 1999). None of these studies located any Aboriginal sites.

**Silcox 1999.**

A study for a proposed educational facility at Warnervale, about 3.5km NW of Wadalba Hill by Rex Silcox in 1999 located one Open Camp Site and 2 Isolated Finds. The exact location of this study cannot be determined from the text of Silcox's report and it is therefore mapped as an approximate location only in Figure 4.

**Therin 2001**

Michael Therin surveyed a site on Johns Road less than 1km from Wadalba Hill in 2001. This located one Open Camp Site consisting of two stone tools: A yellow/brown mudstone flake (14x12x3mm) and a grey/brown acid volcanic flake (75x43x41mm). Therin's report also made mention of a birthing site reported to him by Vivian Lindsay of Darkinjung LALC but not recorded on the AHIMS register. This appears to be the same site discussed by Mary Dallas 2007 which Jodi Cameron, also of DLALC, has since considered to be a bogus claim (Dallas 2007).

**Navin & Officer 2002**

A study was conducted in 2002 of area for the proposed Kooindah Managed Resort Facility, some 3km to the WSW of Wadalba Hill. This study located two low density stone artefact scatters. It was considered that the artefacts may have been brought into the site with introduced landfill and that they were of low archaeological significance. Given the size of the study area, its position near to Wyong Creek and the limited testing of the hypothesis relating to the importation of the cultural material, it is considered here that the final conclusion of their being no *in situ* Aboriginal cultural heritage material may not have been adequately cautious.

**Appleton 2004**

A study some 2km to the WNW of Wadalba Hill in 2004 by Appleton located no Aboriginal sites and identified no constraints or heritage management issues for a potential subdivision area.

**Appleton 2005, Silcox 1994**

A study of a large area on either side of the Sydney-Newcastle Freeway in 2005, 6km to the NW of Wadalba Hill by Appleton located a single Isolated Find. Appleton reported that there had been a previous study of this same area in 1994 by Silcox that located 3 Isolated Finds although these were not relocated.

**Benton 2006**

A study 5.5km to the SW at the Tuggerah electricity substation by Benton in 2006 located no Aboriginal sites

#### 4.3 Previous studies at Wadalba Hill

##### Bonhomme & Koettig 1980

The first recorded archaeological survey of Wadalba Hill was conducted in 1984 by Theresa Bonhomme and Margrit Koettig. This was in advance of the construction of the larger and easternmost of the three current reservoirs. No assessment appears to have preceded the construction of the earlier two reservoirs. Survey was recorded as being an inspection of a 2000m<sup>2</sup> area around the proposed reservoir. As an area of under 45m x 45m (not much bigger than that occupied by the reservoir) this area seems peculiarly small and if accurate was limited very specifically to the area impacted by the reservoir construction and not to very much of the surrounding area subject to the current study. Consequently, no assessment or comments were made of direct relevance to the areas subject to DA or rezoning.

It was considered that "the ridge surface consists of exposed sandstone rubble. The steep slopes (30-40 degrees) were not considered suitable locations for open camp sites and no sandstone exposures suitable for art/engravings or shelter occupation occurred on the ridge or slopes" (p. 3). No sites were located and it was recommended "that the NSW National Parks and Wildlife Service raise no objections to the proposed construction of additional reservoirs at Kariong and Kanwal, on the grounds of Aboriginal relics" (p. 4).

In response to the Bonhomme/Koettig survey report, B. Hunter of the Darkinjung Local Aboriginal Land Council responded:

*"After being contacted by your office, Lindsay Bostock and myself inspected one hundred metres around reservoir number two, we then surveyed the area of the proposed new reservoirs. Due to prior excavation for the existing two reservoirs it is difficult to ascertain whether or not any Aboriginal activity took place in the area one hundred metres around the proposed new reservoir site.*

*Therefore in my opinion there is nothing of any interest on the reservoir site to the Darkinjung Local Aboriginal Lands Council."*

##### Gorecki and Dallas 2000

Pawel Gorecki and Mary Dallas conducted a cultural heritage survey of a 2km<sup>2</sup> area of land which included all of the current study area in 2000 for Wyong Shire Council. This study was conducted in relation to potential development impact essentially the same as is now proposed, inclusive of the currently proposed environmental corridors.

Survey was undertaken over three days and identified four locations of archaeological interest. These comprised the Wadalba Grinding Grooves 1 site subsequently listed by Roger Mehr (DECC) and 3 scarred tree sites. It was recommended that all of these sites be preserved. All sites are further discussed below in Section 5.2.

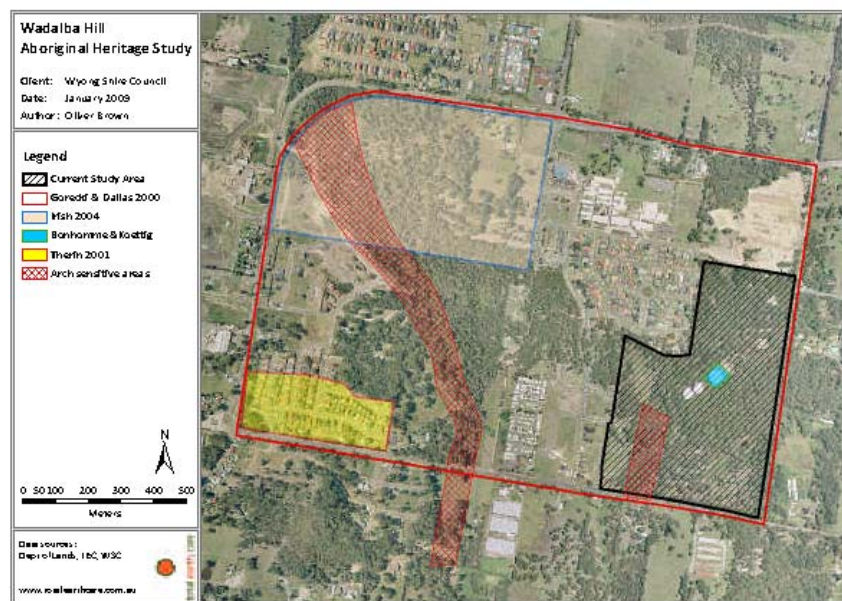
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Two sites identified by Branwhite as 'birthing places' were inspected and considered unlikely to be genuine. An ultimate decision on these sites was deferred to re-inspection of the sites by DECC and female Darkinjung LALC representatives which have not subsequently resulted in site listings.

Two areas of archaeological sensitivity were identified in the study of which one (Area B) is within the current study area. This area includes the three currently listed sites. Discussions with Darkinjung LALC members on site lead to a recommendation for monitoring of future works within Area B. It was considered at the time that the scarred tree sites were to be included within the conservation corridor although this is only the case with one of them according to current plans. It was recommended that the conservation corridor be extended to include the creek line containing the grinding grooves.

Figure 7 Previous studies within the Wadalba Hill area and archaeologically sensitive areas identified by Gorecki and Dallas (2000) and confirmed by Irish (2004)



#### Taylor 2007

In 2007 Darkinjung LALC conducted a further inspection of the northern part of the study area and reported findings to Wyong Shire Council in relation to the DA submitted to Council for Proposed Lot 3110. The Land Council's assessment was that:

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*"It is recommended that the subdivision at Louisiana Road, Wadalba be allowed to proceed on cultural heritage grounds as it is unlikely to disturb any Aboriginal artefacts in the Wyong area;*

*It is also recommended that if any Aboriginal artefacts or suspicious [sic] are unearthed during the Development Works at Louisiana Road, Wadalba that all works cease and Darkinjung Aboriginal Land Council be contacted to investigate the find".*

#### 4.4 Submissions made by Wadalba Association and Boris Branwhite

A number of submissions, internet postings and other claims have been made by the Wadalba Association (WA) and Mr Boris Branwhite. Those considered here include:

- Appendices to the Wadalba Association submission in response to DA1733/07 Louisiana Road, Kanwal (Lot 311), 27 Lot subdivision (Wadalba Hill); and
- Wadalba Wildlife Corridor and Cultural Reports 1- 29a prepared by Boris Branwhite, accessed 18<sup>th</sup> Dec 2008 online at [www.whalecall.org](http://www.whalecall.org);
- Wadalba Heritage and Environment Report, May 2006 compiled by Boris Branwhite, Whale Call Inc. for Wadalba Association, 'Aboriginal habitation remnants at Wadalba'.

In these submissions, The WA claimed that the study by Dallas (i.e. Gorecki and Dallas 2000) "fell short of State requirements". On review of the report this is not seen to be the case. A number of purported sites claimed by Boris Branwhite were also supposed to have been omitted from the study. With the exception of the three currently listed sites all images and data presented about these claims have been found to be erroneous in the view of Aboriginal stakeholders, DECC and all three independent archaeologists recently involved with the site including the current author. It appears that these claims are motivated by opposition to the development in principle more than on the basis of genuine Aboriginal cultural heritage concerns. Aboriginal community representatives and archaeologists involved in this study have expressed serious concerns that this represents a misappropriation of the role of Aboriginal people as the principle determinants of the significance of their cultural heritage and a misdirection of Aboriginal cultural heritage legislation and ethical principles.

Branwhite makes a great many claims that natural scarred of trees are the result of cultural activities by Aboriginal people in the past. Scars that are clearly without credible cultural origins are often explained by a range of fanciful hypotheses with little referenced archaeological, ethnohistoric or Aboriginal cultural basis. For example a clearly natural scar 20 feet up an angophora trunk is claimed to be a:

*"message tree, as they told of the nearby presence of (in this instance) a male site, or the boundary of a male site. The removal was done by a boy in training for his manhood ceremony, and always, a tree was chosen that would present great difficulty to the boy, in climbing, and hanging on whilst the bark was removed with a hand held stone tool. After removal, the boy would use the bark as a chest shield, and as a carrying receptacle for food, fire or water (Wadalba Heritage and Environment Report May 2006).*



No reference for this speculative scenario is given. Angophoras are not included in the 13 species commonly scarred in coastal NSW by Long (2005:57) and known in the region in only in a few instances on very large old specimens (Dallas, pers. comm.)

None of the images show typically documented Aboriginal scar forms (see Long 2005:22-29), whereas all have characteristics best explained by natural causes including at least one of the following characteristics identified by Long (2005):

- **Trauma Damage**, including the general effects of bushfire, drought, crown loss and defoliation
- **Storm and Fire Damage**, including wounds directly caused by lightning strikes, burning and branch tears
- **Faunal Damage**, including the wounds caused by insects, birds and livestock
- **Impact and Abrasion Damage**, including the effects of falling trees, branches and accidental collisions
- **Ring-barking**, and other deliberate or negligent human damage

Some trees are too small to have been alive when Aboriginal people would have last used the area for traditional resource use and others that might have been alive would not have been a suitable size at least 180 years ago;

- Scars occur on the trunks of trees widening at the ground – a feature that is almost invariably diagnostic of natural causes such as fire, insect attack and disease (Long 2005: 39, 42);
- Scars are strongly irregular in shape;
- Scars show dry faces with evidence that a branch previously grew from the scar location (meaning that a single piece of bark could not have been obtained and that the loss of the branch is the cause of the scar);
- Scars are too long and narrow to have conceivable cultural uses over and above a range of natural causes;
- Scars are at the wrong height to have been practical for scar removal (speculative initiation rites notwithstanding – see above);

Claims are also made by Branwhite that unusually shaped trees and those with burls are seen to have the energy of Daramulan or Baiame (Aboriginal mythic figures). These and other reported manifestations of ethnohistoric (e.g. Howitt 1904) accounts of traditional Aboriginal ceremony are not supported by the views of local Aboriginal community members. It was also suggested by Aboriginal stakeholders that the claims represent inappropriate speculation on the part of a non-Aboriginal person with no documented validation or support by Aboriginal people.

A number of sandstone pieces are presented in photographs with claims that they are artefacts such as 'skin flaying tools', 'scrapers', 'weapon stone flakes', etc. No evidence of manufacture or use are available nor reference to other known instances where unmodified naturally eroded sandstone pieces without any demonstrable use wear have been purported to be recognised artefact types.



A number of grinding grooves, spear sharpening holes and other features in sandstone are shown with no substantive resemblance to any known equivalents elsewhere. The absence of proximate water, abrasion polish or other plausible contextual or quantitative evidence precludes any reasonable consideration of these examples as archaeological sites. In one instance of a natural feature claimed to be a medicine mixing bowl, surrounding deposits were excavated without a permit by Branwhite. The location is less than 10m from the genuinely cultural grinding groove complex 'Wadalba Grooves 1' and this suggests that the action could be viewed as an offence under Section 90 of the *National parks and Wildlife Act* regardless of the natural origin of the feature investigated.

Clearly modern charcoal and animal bones on the surface of the ground are shown with the implication that they represent pre-invasion Aboriginal camp sites. This is however a taphonomic impossibility on the basis of the material shown.

The claim that waterholes and plants known to have been culturally exploited in the past does have some potential basis for consideration in terms of Aboriginal cultural heritage, however not in the context as presented by Branwhite. The Aboriginal Sites Register does have the facility for recording 'Resource Use Places' but this must be on the basis of known historical use by Aboriginal people rather than simply speculation about potential past use by a non-Aboriginal man who is not considered appropriate to speak on such issues by the Aboriginal community.

As a final note, concern has been expressed about the nature of the Aboriginal community consultation undertaken by Branwhite on behalf of the Wadalba Association by members of DLALC and GTLAC. In none of the documentation provided are direct communications made by any of the Aboriginal people involved in Branwhite's investigation. In normal procedure, both in terms of best practice and the preparation of admissible reports for consideration by DECC, demonstrated inclusive consultation with appropriate Aboriginal community groups is required to be shown. This has not been the case with any WA submissions.

While it is recognised that Branwhite's knowledge of the area and survey effort has been very extensive, this alone does not provide any special insight into the Aboriginal cultural importance of apparently natural features. The basic assumption that Wadalba Hill inevitably has a long pre-invasion history of significance to Aboriginal people is in no way challenged; Aboriginal cultural heritage management assumes this to be the case for the entirety of the Australian continent. Imparting contemporary Aboriginal cultural significance to landscapes is however not the place of non-Aboriginal people as has been the case with much of the work by Branwhite. While the scientific significance of archaeological sites can (and should) be properly assessed by specialist archaeologists, the assessment of contemporary Aboriginal significance remains the preserve of appropriate Aboriginal community groups and individuals. In the current case those parties have been identified as the Darkinjung LALC and Traditional Owner descendants of the Guringai Tribal Link Aboriginal Corporation (see further information in Appendix A).

#### 4.5 Registered Sites in the Study Area

**Table 1 AHIMS registered sites in 6km X 6km area around study area**

Site type	No.
AFT (artefact sites: Open Camp Site or Isolated Find)	16
SHL (Midden site: On Tuggerah Beach; other midden sites on Tuggerah Lake are likely to be present but unlisted)	1
GDG (Grinding Grooves; including the two sites listed at Wadalba Hill)	4
CMR (Ceremonial Site;)	2
TRE (Modified Tree; tree scarred from the removal of bark for making artefacts, included the one listed at Wadalba Hill)	2
OCQ (Ochre Quarry; and additional stone quarry site described above in a study by Dean-Jones (1986) lies just outside the search area)	1
<b>TOTAL</b>	<b>26</b>

There are 26 Aboriginal archaeological sites listed in a 12km x 12km area surrounding Wadalba Hill. These listed sites are highly unlikely to be a full record of all sites in the area and largely biased by the archaeological survey efforts in relation to proposed development (see also Gorecki and Dallas 2000:14). For example, stone tools, as 'Open Camp Sites' and 'Isolated Finds' are certain to be far more ubiquitously distributed across the landscape than the AHIMS records suggest and it is also expected that midden material is far more abundant around lake foreshores than has been recorded to date.

**Figure 8 AHIMS listed site in 6km x 6km area around the Reserve**

[Figures showing locations of Aboriginal sites not included in public version]

#### 4.6 Predictive Assessment of Likelihood of Sites within the Study Area

The predictive assessment made here is advised by:

- The distribution of sites according to landscape type considered above;
- The generalised predictive statements made for the Wyong LGA by Vinnicombe (1980);
- The author's (OB) experience with Aboriginal archaeology in the Pittwater sub-Bioregion (coastal sandstone country); and
- The site inspection presented below.

The predictive assessment for the site is that:

- **Open Lithic Sites** may occur in level areas near to water, particularly where other evidence (e.g. grinding grooves) of cultural activity exists;
- **Grinding Groove Sites** may occur on exposed panels of sandstone adjacent to water;

## 5 FIELD SURVEY

### 5.1 Methods

Survey was conducted on two separate days due to the different availability of Aboriginal stakeholders involved in the study: 30<sup>th</sup> October 2008 with Tracie Howie and Kevin Robinson from Guringai Tribal Link Aboriginal Corporation; and 27<sup>th</sup> November 2008 with Craig Foreshew and Deborah Swan from Darkinjung Local Aboriginal Land Council. All of the Aboriginal stakeholder representatives involved had previously been involved in surveys of the area and were aware of the location of key Aboriginal cultural heritage sites. Information from the earlier assessment by Gorecki and Dallas (2000), submissions by Boris Branwhite, conversations with Roger Mehr (DECC) and various landowners were used in addition to stakeholders knowledge to assess the study area and locate previously identified sites. Boris Branwhite approached the survey team on the 27<sup>th</sup> November visit; his confrontational approach towards LALC staff and the author precluded much cooperative survey although he was offered the opportunity to identify sites of concern.

### 5.2 Results

The sites identified by Gorecki and Dallas and the three sites listed by Roger Mehr were relocated and inspected during the surveys. Many of the items purported to be Aboriginal cultural heritage sites by Branwhite were also inspected although all were assessed as not being pre-invasion Aboriginal cultural sites.

- The Wadalba Grooves 1 site was identified to be of considerable extent and high significance; this study also identified the adjoining deposits as having a high likelihood to contain subsurface archaeological material associated with the grooves and an area of 20m around the grinding grooves is to be listed as a Potential Archaeological Deposit (PAD). This will be added as a feature to the existing site listing for the grinding grooves. Further recommendations about this site are made below.
- The Wadalba Grooves 2 site was identified as being *possibly* cultural; the site remains listed and recommendations are made below with regard to further investigation required to quantitatively demonstrate whether the grooves are cultural or not in the event that any impact in the area is proposed.
- The listed Wadalba Scar Tree site was identified as being only *possibly* a scarred tree, having some characteristics more consistent with natural scarring. This is thought to be one of the scarred trees identified by Gorecki and Dallas. Further recommendations are made below.

- The 'canoe tree' identified by Gorecki and Dallas is thought to be a tree that has since fallen over and partly decayed (or at least was identified as such by Branwhite during survey on 27<sup>th</sup> November) (Appendix B, Plates 11, 12).
- A further screed tree identified but not listed by Gorecki and Dallas is within the proposed Wadalba Conservation Corridor and will, like all trees large enough to have been scarred more than 180 years ago, be presumably subject to protection.

While basic field assessment was unable to determine whether the Wadalba Grooves 2 site or the Wadalba Scar Tree site were of cultural or natural origin it is considered that further study of each site would be able to make a final determination. This would involve: aging of the scar tree by an appropriately qualified arborist; and a microscopic assessment of the Wadalba Grooves 2 site to determine whether there is abrasion or polishing evident from grinding (either in the field or by examining the negative impressions from an epoxy or resin peel taken off the surface). This is further discussed below in Section 7.

### 5.3 On-site management meeting with Aboriginal stakeholders

At the conclusion of each of the two days of fieldwork, on-site meetings were held to discuss the Aboriginal cultural heritage values for the Reserve and management recommendations for the future. It was agreed that the single highest Aboriginal cultural heritage management priority is the conservation of the Wadalba Grooves 1 site, inclusive of the surrounding deposit though likely to contain subsurface material. Concern was expressed that the attempted controversy based on spurious claims by Branwhite might work to the detriment of the conservation of the grinding grooves site by focusing attention away from the genuine site. Uncertainties about the cultural origin of the other two listed sites were shared, although it was thought that in the absence of specific quantitative assessments, precautionary recommendations to conserve them should be applied.

## 6 SIGNIFICANCE ASSESSMENT

### 6.1 The Aboriginal cultural heritage resource and its significance

The *Burra Charter*, which provides a best practice guide for heritage management in Australia, recommends that the assessment of heritage significance should necessarily precede the subsequent stages of the development of conservation policy and strategy and the implantation of that conservation strategy (ICOMOS 1999).

Four categories are used to assess the significance of Aboriginal sites: Significance to contemporary Aboriginal people; scientific or archaeological significance and representativeness; aesthetic value; and value as an educational and/or recreational resource. Aesthetic significance is not considered in this type of report.

### 6.1.1 Significance to contemporary Aboriginal people

All items and places of Aboriginal heritage have value to contemporary Aboriginal people. The basis for this value is complex and may not be the same as scientific or archaeological values. The values may relate to the continuity of traditions, use or historical association in ways that can be concretely demonstrated, or may relate more abstractly to the potential loss of the material than its initial presence.

The outcomes of the on-site meeting with Aboriginal stakeholders involved in the fieldwork for the preparation of this Plan have provided some indication of the Aboriginal significance values of the study area. Further comment is included in Appendix A.

To date, stakeholders have indicated that the Wadalba Grooves 1 site is of high significance.

### 6.1.2 Scientific or archaeological significance

Scientific or archaeological significance of sites is assessed according to two criteria: The potential of a place to provide information that is of value in scientific analysis and the resolution of potential research questions; or that it is unusually rare or representative of a place.

In the case of the Wadalba Grooves 1 site, it is considered that archaeological significance is high. Grinding grooves of such extent are unusual in the area. On the basis of rarity within the context of the Guringai cultural area, Pittwater sub-Bioregion and the coastal zone more widely, the Wadalba Grooves 1 site should be considered to have high significance.

The surrounding deposits are also considered to have excellent research potential. Deposits may include evidence of knapping to shape pieces of stone prior to grinding of hatchet heads in the event that the site was used for manufacturing of ground edge implements. Research value would even apply in the event that such deposits did not occur as it would imply that site use was focused on maintenance (re-sharpening) rather than manufacture.

Any ground edge tool material recovered would also be valuable if geological sources could be established – giving an indication of the extent of cultural connections. This stems from the fact that local rock itself is not suitable for the manufacture of ground edge implements and transport and trading of such tools is known to be cover large distances in many instances (e.g. Corkill 1999, 2005)

Given the extent of cultural activity at the site implied by the amount of grinding that has taken place, it is also expected that some stone tool knapping of flaked edge tools will also have occurred nearby. The characteristics of any assemblage that could be investigated would be able to determine whether such knapping represented manufacture, maintenance or a mix of tool working tasks. The absence of artefactual material would also have research value.

It is quite possible that the largely permanent water present in the waterhole at the grinding grooves site also lead to the use of the surrounding area as a camp site, either 'residentially' (overnight) or for casual daytime use. Potential excavation of surrounding deposits would be able to resolve this question – for example, a relatively large proportion of broken or entire functioning tools compared to manufacture or maintenance debitage might suggest an amount of general use of the site compared to tool working.

Finally, as the area considered to have the highest potential to contain artefactual material, deposits around the grinding grooves site offer some potential to date some of the usage of the area by Aboriginal people. Deposits in the wider area (e.g. Upper Mangrove Creek and Pittwater) have been shown to vary in proportions of different raw material and tool types over time and assemblages can be dated on these characteristics even in the absence of radiometric (e.g. carbon) dating (Attenbrow 2003, Brown, submitted)

The archaeological significance of the Wadalba Grooves 2 site and the Wadalba Scar Tree is considered to be moderate or none depending on whether they are established to be genuine sites or not. Because doubt remains, while precautionary measures recommend conservation, other precautionary measures also mean that scientific/archaeological significance cannot be properly assessed.

### 6.1.3 Value as an education and/or recreational resource

The educational potential of Aboriginal cultural heritage and archaeological sites is generally taken to refer to potential in informing the general public (including school students) about the Aboriginal past. It is recognised that this potential relies not only on aspects of the site(s), but also on the existence of a demand for the provision of such education in the wider community. The existence of such a demand has not been assessed, but is considered that potential for it can assumed given the nature of the heritage resource and its likely position within a Reserve.

The existence of value as an educational resource does not however account for the suitability of public access to sites. This should be judged by Aboriginal stakeholders involved in the study and will hopefully be the subject of comments on draft report.

**Table 2** Aboriginal cultural heritage significance assessment (subjective values)

	Significance to contemporary Aboriginal people (pending comment from Aboriginal stakeholders)	Scientific or archaeological significance	Value as an educational and/or recreational resource
Wadalba Grooves 1	Known to be high	High	High
Wadalba Grooves 2	?	Moderate or none	None
Wadalba Scar Tree	?	Moderate or none	Low

## **7 ABORIGINAL CULTURAL HERITAGE MANAGEMENT RECOMMENDATIONS**

### **7.1 The purposes and requirements of the plan**

The purposes of the Aboriginal cultural heritage management plan for Wadalba Hill are to review and refine the recommendations for the known sites at Wadalba Hill and provide for the ongoing long term management of the Wadalba Wildlife Corridor. The need for long term management recommendations for the Wadalba Grooves 1 site is also recognised. The urban development of much of the area in future will result in significant impacts and it is important: a) to ensure that this avoids Aboriginal cultural heritage items as far as is possible; and b) to ensure that any proposed impact occurs within a legal framework, especially the *National Parks and Wildlife Act*.

### **7.2 Planned impacts**

Planned impacts as far as they are known at the time of writing are indicated in Figure 4. This will involve significant impact to many areas for the construction of houses and associated urban infrastructure. It needs to be assumed that any items within development areas may be destroyed as the specific location of houses, roads, pipelines, etc cannot be concretely determined for the initial stages of development, let alone contingency for future centuries (as is an appropriate time scale to consider potential impact in archaeological terms). Any areas for which long term conservation is intended therefore need to be protected within firmly bounded areas under Council management.

### **7.3 Potential unplanned impacts**

Areas to be managed within the Wadalba Wildlife Corridor and any riparian conservation area inclusive of the Wadalba Grooves 1 site, should not be considered as automatically secure from future impact. Walking tracks, access roads, stormwater drainage, water supply pipelines and other works either will or could still be required in this area.

Potential unplanned impact may also result from unauthorised impacts whether by vandalism or accident. These include things like bushfire (or controlled burning), illegal trail bike use, and innumerable other consequences of people using the area. The Aboriginal cultural heritage management challenge is to try to secure the resource against impacts without being certain what they may be. The most reliable way to do this is for management of the open space to discourage access to the area of the Wadalba Grooves 1 site – being at least the 20m radius around the main panel of grinding grooves.

### **7.4 Wadalba Grooves 1**

The conservation of the Wadalba Grooves site is the main Aboriginal cultural heritage management priority at Wadalba Hill. The new feature of a potential archaeological deposit (PAD) is to be added to the existing site

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listing and this will mean that the site (as protected under provisions of Section 90 of the *National Parks and Wildlife Act*) will extent to a 20m radius around the main panel of grinding grooves. It is recommended that this area be included within a securely protected area with management measures to include prevention of impact to soil deposits.

Management should aim to prevent planned impacts such as Council works (such as stormwater drainage). Necessary management activities such as bush regeneration should also aim to minimise impact – such as planting only tube stock and not undertaking any ripping or other high impact weed removal methods.

Consideration should be given to changes in the hydrology of the drainage line that may result from development upstream. This may result from higher runoff from increased hard surfaces or increased sediment load during development. Increased nutrient may also result from the establishment of domestic gardens and runoff from road base and this may also have a secondary effect on the site through changed ecology in the drainage line. Increased weed seed from plants colonising disturbed ground may also occur in the drainage line. While weed infestation of the creekline is unlikely to directly affect the grinding grooves, subsequent control methods may have follow on effects. Infestation with weeds like lantana may also diminish access to the site or visitor amenity, which may or may not be a negative effect depending on the view of Aboriginal stakeholders on the suitability of public or controlled access.

Some stormwater and/or sediment detention or the redirection of some peak natural flows may be considered if it is thought that this would minimise negative changes on the hydrology and ecology of the drainage line. However it is also likely that the removal of all natural flows would be detrimental as they are integral to the natural context of the site. Overall it is considered that a riparian corridor that is kept in as natural a state is possible (weed free and with natural hydrology), with connectivity to the Wildlife Corridor and with as large a restored and maintained bushland buffer as possible would be the most desired outcome.

## 7.5 Wadalba Grooves 2

Impact on the Wadalba Grooves 2 site should be avoided under the provisions of the NPW Act unless quantitative grounds can be established to show that it is not a cultural site. Field assessment of the site suggest that the grooves are not evenly enough formed and do not have sufficient evidence of abrasion or polish to indicate that they are definitely cultural. In listing the site Mehr recognised that the grooves may represent some kind of geographic marker rather than in the usual sense of grinding grooves for sharpening ground edge implements or preparing food. As such it may not exhibit a high degree of grinding abrasion or polish, however some indication of human modification is required for it to be considered a site. It is considered that microscopic analysis of the grooves would be able to determine whether the surface is any more or less modified than rock that is: a) known not to be subject to grinding immediately adjacent to the grooves; and b) known to have been ground as is the case at the Wadalba Grooves 1 site. Dr Richard Fullagar of Scarp Archaeology has been recording grinding stone usewear with polyvinyl siloxane (PVS), a commonly used dental compound which provides high resolution peels suitable for reflected light microscopy, especially when stones are in remote locations, cannot be transported or are too big to fit on a microscope stage (e.g. Fullagar 2006: 198-9).

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In the event that no evidence for grinding can be established it is recommended the site listing be altered to being 'not a site' (items cannot be taken of the register altogether) and therefore not subject to NPW Act provisions. Alternatively in the event that development impact is sought, the results could be used to justify an application for an Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the NPW Act.

#### **7.6 Wadalba Scar Tree**

Impact on the Wadalba Scar Tree site should be avoided unless it can be established that the tree is not culturally scarred. While the scar characteristics alone suggest that the tree may be naturally scarred, particularly when put in the context of the very similar and definitely natural scarring of the similar tree to the NE of it (Plate 8), the decision to list the tree by Roger Mehr of DECC means that a change to listing the tree as 'not a site' on the AHIMS register cannot be made as an outcome of this study due to a precautionary principle. However, further assessment of the age of the tree by an appropriately qualified arborist would provide a more robust quantitative way of assessing whether the tree is actually scarred. The tree appears to be too young to have been used for bark removal by Aboriginal people at least 180 years ago (i.e. 1829 or before), bearing in mind that the tree has to have been not just in existence at this time but large enough to have had useable bark then. In the event that impact on the tree is sought, establishing that the tree is too young to be a site would lead to either a change in the AHIMS listing to 'not a site' or in support of an AHIP under Section 90 of the NPW Act.

#### **7.7 Placement and management of small park areas**

The placement and design of parks in the area has been specifically designed to date to allow for protection the Wadalba Scar Tree and Wadalba Grooves 2 sites (Figure 4). It has been noted that design of the park(s) will contain urban amenities like park benches and play equipment and therefore have some impact in these areas. Council have expressed a desire to ensure that Aboriginal cultural values and recreational uses are not in conflict. If these possible sites are to remain protected as a precautionary measure, it is considered that they are unlikely to be associated with surrounding potential archaeological deposits and so protection of the specific items themselves is all that should be required (in contrast to the Wadalba Grooves 1 site with its 20m buffer).

It has been noted that further quantitative investigation of these sites may demonstrate that they are not in fact cultural and would therefore not require such design considerations. In the event that this is established (see Sections 7.5 and 7.6), it is considered that the design of open space provisions could be revised to provide a greater buffer area around the Wadalba Grooves 1 site and to provide connectivity between this area the current Wildlife Corridor and potential open space / wildlife reserve areas further downstream in future.

### 7.8 Contingency for the discovery of new Aboriginal sites or objects

In the event that new Aboriginal cultural heritage sites are located in the area in future, all the standard protections of the NPW Act will apply. If such sites (including any isolated artefacts) are encountered during development work, work should stop and the find inspected by an archaeologist and representative(s) of the Aboriginal community. The cultural Heritage Branch of DECC in Coffs Harbour should also be informed (Roger Mehr is the current contact).

It is considered highly unlikely that any further genuine scarred trees exist at the site and any further spurious claims by Branwhite should only be acted on in the event that a qualified and appropriately experienced archaeologist and appropriate representatives of the Aboriginal community are prepared to support a listing on the DECC Site Register (AHIMS).

It is possible that further grinding grooves may be present underneath deposits from siltation and the shifting of creek banks since they were last in use. If these are present they are most likely to be within the 20m radius of the known grooves and therefore already included within a listed site, but updated information should be submitted to AHIMS should any be located. Any grooves further than 20m from Wadalba Grooves 1 would need to be subject to further listing. Such a site will be within the riparian area of the creek line and unlikely to be subject to proposed impact.

Flaked or ground stone artefacts may be located in the area in future and if outside of the 20m radius of the Wadalba Grooves 1 site would need to be subject to AHIMS listing or alteration of the current one.

### 7.9 Contingency for further submissions by the Wadalba Association and Boris Branwhite

Following a conversation with Boris Branwhite during one of the survey visits it was suggested that he would be making further claims (although not prepared to substantiate them at the time) and objections to this study despite not yet knowing the outcomes. While the opportunity of the Wadalba Association to comment during the planning process should be respected, Council are advised that DECC recognise that Aboriginal people are the primary determinants of the significance of their cultural heritage and are represented by the registered Aboriginal consultation parties in this study (DLALC and GTLAC). Any further claims or objections should be discussed with these stakeholder parties.

Council are also advised that given the consistent refutation of claims other than the three listed sites and a possible additional scarred tree within the Conservation Corridor identified by Gorecki and Dallas (2000), the issues raised by Branwhite are probably best no longer considered by archaeologists but by planners and possibly legal advisors within Council. Full archaeological documentation of further any claimed sites should be required before being considered, including:

- Evidence for Aboriginal community consultation in accordance with DECC guidelines<sup>1</sup>;

<sup>1</sup> See: <http://www.environment.nsw.gov.au/resources/parks/interimConsultationGuidelines.pdf>

- Photographic and descriptive documentation of the site suitable for filling in an AHIMS site card, including accurate locational information specific to each described site<sup>2</sup>;
- Written statement(s) in support of the site being genuine by a qualified archaeologist.

If Branwhite is found to do any further investigation or modification of sites as reported in his submissions (see Section 4.4), Aboriginal stakeholders and DECC should be informed as such impact is prohibited under Section 90 of the NPW Act.

#### 7.10 Role of Aboriginal community groups

The Aboriginal community groups involved in this study are established as being the principle determinants of the significance of Aboriginal cultural heritage at Wadalba. Consistent recent involvement in many site inspections have also provided them with detailed specific knowledge of the archaeological aspects of this heritage in relation to individual sites such as Wadalba Grooves 1. Onsite discussions have also indicated an interest in recognising probable past significance of the crest of Wadalba Hill itself and the management of the area in a way that allows for future development of attachments to the hill – this is related to a wider recognition of the importance of Aboriginal reconnection to country in many parts of Australia.

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<sup>2</sup> See: <http://www.environment.nsw.gov.au/licences/DECCAHIIMSSiteRecordingForm.htm>

## 8 REFERENCES

Appleton, J. 2004. Archaeological investigation: Pt 30, DP 765246 Lucca Road North Wyong. Report to Bitova P/L.

Appleton, J. 2005. The archaeological investigation of sites of indigenous cultural sensitivity in Precincts 11, 13 & 14, Wyong Employment Zone, Halloran/Warnervale, Central Coast, NSW. Report to Wyong Shire Council.

Attenbrow, V. 2002. *Sydney's Aboriginal past: investigating the archaeological and historical records*. Sydney: UNSW Press.

Attenbrow, V. 2003. Habitation and Land Use Patterns in the Upper Mangrove Catchment, New South Wales Central Coast, Australia. *Australian Archaeology* 57:20–31.

Benton, J. (OzArk Environmental and Heritage Management). 2006. Indigenous heritage assessment, proposed bench extension, Tuggerah Substation, Tuggerah, NSW. Report to Transgrid.

Bonhomme, T. & M. Koettig. 1980. Archaeological survey of two proposed reservoir sites at Kariong, near Gosford and at Kanwal, near Wyong. Report to the Public Works Department, Gosford.

Brayshaw, H. 1998a. Lot 65 DP7091 Louisiana Road, Warnervale, archaeological survey for Aboriginal sites. Report to Long Homes through Johnson Partners P/L.

Brayshaw, H. 1998b. Lot 64 DP7091 Louisiana Road, Warnervale, archaeological survey for Aboriginal sites. Report to Long Homes through Johnson Partners P/L.

Brown, O.J.F. (submitted). Saltwater/sweetwater, sandstone/shale: Mapping bioregions, Aboriginal cultural boundaries and archaeological site distribution in the Sydney Basin. In, Proceedings of the ACCAI Session, 2008 AAA Conference, Noosa, Qld. *Archaeological Heritage*.

Brown, O., J. Wheeler, S. Player, C. Wilby, L. Farquharson and M. Hincks (Total Earth Care). 2008. Aboriginal Archaeology Test Excavation, Currawong Beach, Pittwater, NSW. Report prepared for AHMS on behalf of Eco Villages Australia

Capell, A. 1970. Aboriginal languages in the south central coast, New South Wales: Fresh discoveries. *Oceania* 41:20-7

Collins, D. 1798. *An Account of the English Colony in New South Wales With Remarks on the Dispositions, Customs, Manners, etc of the Native Inhabitants of that Country*. London: T Cadell Jun. and W. Davies.

Conacher Travers P/L. 2007. Flora and fauna assessment, Louisiana Road Wadalba. Report prepared for submission to Wyong Shire Council.

Corkill T. 1999. Here and There: Links between Stone Sources and Aboriginal Archaeological Sites in Sydney, Australia. Unpublished MPhil thesis, University of Sydney.

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- Corkill T. 2005. Sourcing stone from the Sydney region: A hatchet job. *Australian Archaeology* 60: 41-50.
- Dallas, M. 2007. Letter to Tim Shelley, Johnson Partners 11/07/07, Re: Westminster Subdivision – Johns Road Wadalba.
- Dean-Jones, P. 1986. Wyong Draft LEP, Tuggerah Land Release. Archaeological survey.
- Eades, D.K. 1976. *The Dhararwal and Dhurga languages of the New South Wales South Coast*. Australian Aboriginal Studies Research and Regional Studies No. 8. Canberra: AIAS.
- Flood, J. 1982. Katungal, Paiendra and Bemeringal. In S. Bowdler (ed), *Coastal Archaeology in Eastern Australia: Proceedings of the 1980 Valla Conference on Australian Prehistory*, pp 29-31. Canberra: ANU.
- Fraser, J. 1892. *The Aborigines of New South Wales*. Sydney: Commissioners for the World's Coolumbian Exposition, Chicago, 1893: Government Printer.
- Fullagar, R. 2006. Starch on artifacts. In R. Torrence and H. Barton (eds.) *Ancient Starch Research*. California: Left Coast Press. Chapter 9. Pp. 177-204.
- Howitt, A.W. 1904 [1996]. *The Native Tribes of South-East Australia*. London: Macmillan & Co. [Canberra: Aboriginal Studies Press for AITSIS].
- Hunter, J. 1793 [1968]. *An Historical Journal of the Transactions at Port Jackson and Norfolk Island, ... including the journals of Governors Phillip and King, and Lieut. Ball, and the voyages from the first sailing of the Sirius in 1787 to the return of that Ship's company to England in 1792*. London: John Stockdale [Australiana Facsimile Editions No. 148, Libraries Board of South Australia, Adelaide].
- ICOMOS Australia. 1999. *The Australia ICOMOS Charter for Places of Cultural Significance (Burra Charter)*. Canberra: ICOMOS Australia.
- Irish, P. (Dominic Steele Consulting Archaeology). 2004. Aboriginal Archaeological Heritage Impact Assessment Report For a Proposed Residential Subdivision of Lot 102 D.P. 1019019, Pacific Highway, Wadalba NSW. Report to Conacher Travers Environmental Consultants
- Long, A. 2005. *Aboriginal scarred trees in New South Wales: A field manual*. Hurstville: Department of Environment and Conservation.
- Mathews, R.H. 1897. The Burbung of the Darkinung tribes. *Proceedings of the Royal Society of Victoria* 10:1-12.
- McDonald, J. 2008. *Dreamtime Superhighway: Sydney Basin Rock Art and Prehistoric Information Exchange*. Canberra: ANU E Press (Terra Australis Series, Vol. 27).
- Navin, K. and K. Officer (Navin Officer Heritage Consultants). 2002. Proposed Kooindah Managed Resort Facility, Pollock Avenue, Wyong, NSW Aboriginal Archaeological Assessment. Report to Clarendon Apartments.

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Ross, A. 1988. Tribal and Linguistic Boundaries: A Reassessment of the Evidence IN Aplin, G (ed.) Sydney Before Macquarie: A Difficult Infant. Sydney: NSW University Press.

Silcox, R. 1999. Archaeological assessment for a proposed educational facility, Warnervale, Central Coast, NSW. Report to Wyong Shire Council.

Therin, M (Therin Archaeological Consulting). 2001. Archaeological surface survey of Lot 3, DP 345932 Corner of Johns Road and Pacific Highway, Wadalba. Report to Andrews Neil.

Taylor, J. 2007. Letter from Darkinjung Local Aboriginal Land Council to Wyong Shire Council, 8/02/07, Re: Subdivision at Louisiana Road, Wadalba.

Tench, W. 1789, 1793 [1979]. *Sydney's First Four Years, being a reprint of A Narrative of the Expedition to Botany Bay, and A Complete Account of the Settlement at Port Jackson*. Fitzhardinge, LF (ed.). Sydney: Library of Australian History in association with Royal Australian Historical Society.

Tindale, N.B. 1974. *Aboriginal tribes of Australia*. Canberra: ANU Press.

Vinnicombe, P. 1980. Predilection and prediction: a study of Aboriginal sites in the Gosford-Wyong region. Report to NPWS.

Wyong Shire Council (WSC). 2008. Warnervale East and Wadalba North West Urban Release Area, DCP No. 49.

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Aboriginal Cultural Heritage Assessment and Management Plan, Wadalba Hill, Wyong Shire



**APPENDIX A      ABORIGINAL COMMUNITY  
CONSULTATION**

**Aboriginal Cultural Heritage Assessment and Management Plan, Wadalba Hill**

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**Response from Guringai Tribal Link Aboriginal Corporation**

**ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT**  
**and CULTURAL HERITAGE MANAGEMENT PLAN**  
**for**  
**WADALBA HILL, WADALBA.**  
**Prepared by Guringai Tribal Link Aboriginal Corporation**  
**for**  
**WYONG SHIRE COUNCIL**

**INTRODUCTION:**

Guringai Tribal Link Aboriginal Corporation (GTLAC) was contacted by Total Earth Care, P/L (TEC) in regards to an Aboriginal Cultural Heritage Assessment and consultation for an Aboriginal Cultural Heritage Management Plan for the Wadalba Hill area, including the Wadalba Wildlife Corridor. This assessment was to establish the presence or absence of Aboriginal materials/artefacts, scarred trees, rock engravings/grooves, camping/hunting areas and identify potential impacts to native flora and fauna.

**STUDY AREA:**

The study area is within the Wyong Shire Council Area and lies between Johns Road, Wadalba to the south and Louissianna Road, Kanwal, to the north and harbours the eastern end of the Wadalba Wildlife Corridor. The area consists of new growth through to aged vegetation. Lantana and other weed species are also present. Native orchids have been previously recorded in this area but were not sighted at the time of this survey. The Powerful Owl has also been previously recorded in this area but signs of their presence was not sighted at the time of this survey.

**METHODOLOGY:**

The visual inspection (survey) was conducted on foot by myself (Tracey Howie) and Kevin Robinson, GTLAC and Archaeologist, Oliver Brown, TEC.

**PROPOSED DEVELOPMENT:**

At the time of this survey, it was unclear what the exact proposed impacts would be and where they are proposed to be situated. eg. lay out and number of houses, roads and paths, parks and associated infrastructure. (water/ sewer pipes and cabling.)

Two areas within the survey zone are currently subject to Development Approval Applications with Wyong Shire Council. These areas are, east of Raintree Drive, north of the Wadalba Wildlife Corridor (Louissianna Rd end of survey area), and south of Wadalba Wildlife Corridor and east of Kattabul Drive, Wadalba. (Johns Rd end of survey area).

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Aboriginal Cultural Heritage Assessment and Management Plan, Wadalba Hill, Wyong Shire

**HISTORICAL INFORMATION:**

The study area for the proposed development has been and still is, home to the Guringai speaking Mob for generations and seasonally occupied in various locations by the Darginyung people. Pre and post European settlement.

These areas were once rich in etable vegetation and animals. The Guringai Mob hunted and gathered on these Lands for centuries and lived as one with the Land in harmony. Only taking what was required and caring for the land with practices such as Fire Stick Farming to replenish the vegetation, and dispose of leaf litter.

Well known and documented members of the Guringai mob were; Boongaree, Matora, Mosquito, Jewfish, Cora(Gooseberry), Flathead, Long Dick (Boio), Sophy (Booratora) and Charlotte Ashby.(nee.Webb).

Thier presence in this area was initially recorded pre 1790. References to these Guringai speaking people are located on Government Blanket list and Court Bench records taken in the Gosford/Wyong areas and Colonial Secretary minutes, which are held at Gosford City Library and early recordings from surveyors John Fraser,Chappell, journals written by Lt. Charles Dawes, Rev.L.E.Threlkeld, Rev. Glennie, Matthew Flinders, Augustus Earl, R.H Mathews and current AIATSIS maps.

The traditional areas occupied by the Guringai speaking comprises of; All of Port Jackson catchment, including the tributaries of Middle Harbour and Lane Cove River, the Broken Bay catchment, including tributaries of Brisbane Water, Cowan Creek and Pitt Water,the water shed along Peats Ridge, following along the range through to Kulmura, as well as the Lakes of the Central Coast to lower Lake Macquarie.

Guringai - People of the Coast.

Darginyung - People of the Ranges

Darug - People of the Plains. (as described by J.Fraser 1892)

Charlotte Webb was the very first recorded Aboriginal birth on the Central Coast. She was born in 1823. Charlotte was the daughter of Sophy (Booratora), daughter of Boongaree and Matora. Sophy was sexually assaulted by Ship-building merchant, James Webb. Charlotte was the result of this rape. Her bodies lies at rest at Brady's Gully, Gosford east.

Darginyung were first recorded in the Wyong area in the early 1800's, when Colonial secretary, William Cape, opened fire on several Guringai Men, Woman and children for stealing corn from his fields. Cape sent out 14 men on horse back to "eradicate the problem with whatever force deemed necessary." To support the Guringai, tribal members from the Wollom and Sugar Loaf areas ascended on Wyong. Several branches of descendants of these tribal groups remained on the Central Coast in the Wyong area, adopting it as home.

Well known and documented Darginyung man was Billy Faulkner. His presence was initially recorded on the Central Coast in the 1860's. Billy Faulkner was found drowned in Tuggerah Lake in 1875.

**FINDINGS:**

Relocation of previously recorded Wadalba grooves site 1. (WGS1)

Relocation of previously recorded Wadalba grooves site 2. (WGS2)

Relocation of previously recorded scarred tree. (WSTS3)

**RECORDED ABORIGINAL SITES:**

Within the survey area are 4 previously recorded Aboriginal sites.

Wadalba grooves site1, Wadalba grooves site 2, 1 potential scarred tree and 1 scarred tree that has possibly fallen over and decayed since it's original recording. (under further investigation by GTLAC)

**DISCUSSION:**

Levels of disturbance varied throughout the study area. Past and present land use such as, urban settlement and their associated activities, could have displaced or removed any Aboriginal artefact materials present on the surface and sub-surface of the survey area.

However, the creek area, particularly in the southern end of the study area around Wadalba grooves site 1, is required to be protected under the National Parks and Wildlife Act and requires a satisfactory buffer to protect it to the best of ability from impacts associated with the earthworks and construction of the estates and human intervention post building.

**RECOMMENDATIONS:****Priority #1:**

GTLAC strongly recommend that a buffer zone of at least 20 meters be established between WGS1 and proposed development. Lot boundary pegs/markers are currently within 7 meters of WGS1 and this is seen to be an unacceptable distance. Revegetation of the western creek bank with native species to hinder access to this area from resident foot traffic and vandalism should also be afforded.

Further investigations will be required for WGS2 and potential scarred tree (WSTS3) by means of Arborist inspection of scarred tree to determine actual age of the tree. Microscopic analysis of WGS2 is recommended to establish a definite determination.

Precautionary conservation of these areas is recommended unless they are proven not to be of Aboriginal origin.

Continued management of WGS1 and WWC is required from GTLAC, DLALC and WSC. This is also required for WGS2 and WSTS3, unless they are determined without a doubt not to be of Aboriginal origin.

Although no additional (un-recorded) Aboriginal sites or objects were identified during this survey, the potential of such objects being located during the initial stages of the proposed developments can not be neglected.

Prior to any earth works, GTLAC recommend that all persons involved in any earth works or associated activities, attend a site induction by a qualified Archaeologist or GTLAC and DLALC Cultural Heritage Officers to alert staff of recorded Aboriginal sites, Wadalba Wildlife Corridor (WWC) and the current legislations protecting Aboriginal sites and areas of significance to Aboriginal people.

Those persons responsible for the management of any works on site for the proposed development will ensure that all staff, contractors and others involved in the development and maintenance related activities are inducted and informed of, and fully understand the Statutory Legislations protecting Aboriginal sites, Aboriginal objects and Places of Significance to the Aboriginal Community.

Section 90(1) of the National Parks and Wildlife Act, 1974 states that it is an offence to knowingly destroy, deface or damage, or cause or permit destruction or defacement of or damage to, an Aboriginal object or Aboriginal place without first obtaining the consent of the Department of Environment and Climate Change.

Should any sites be located during the processes of the proposed works, work must cease in that area and the Department of Environment and Climate Change, GTLAC and DLALC are to be notified immediately.

This report was written and compiled for Total Earth Care P/L and Wyong Shire Council by Tracey Howie, Senior Female Cultural Heritage Officer, Guringai Tribal Link Aboriginal Corporation, PO.Box 4061, Wyongah, NSW, 2259.

Should you have any queries relating this report and the information contained in it, please don't hesitate to contact me on 0404 182 049 or 4392 8743. email: guringai@kooee.com.au.

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**Comment from Darkinjung LALC to be inserted here.**

Craig Foreshew from Darkinjung LALC has indicated that they have reviewed the report and would respond independently to WSC.

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## **APPENDIX B      PHOTOS**

### **Aboriginal Cultural Heritage Assessment and Management Plan, Wadalba Hill**



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Plate 1: The Wadalba Hill Grooves 1 (WHG1) site, with up to 50 grooves according to the site listing, are located next to a deep pool of permanent water in an otherwise usually dry stream

Plate 2: WHG1 includes some grooves that are very deep and clear and others that are very faint. The site was recorded as having 50 scars by Roger Mehr of DECC accounting for some that may be currently buried.



Plate 3: The Wadalba Hill Grooves 2 (WHG2) site consists of only two grooves and a small circular depression away from a water source other than the little that can collect in the grooves themselves. It is uncertain whether the grooves are in fact cultural at all.

Plate 4: A small and unusual feature with a reservoir of water underneath a concave depression near to the grinding grooves has been suggested to be a 'medicine mixing bowl' by Branwhite. This is considered to be based on a fanciful hypothesis with no archaeological or ethnohistorical basis. The eroded surfaces of the depression demonstrate that it was not formed by grinding and is a natural feature.



Plate 5: This rock was reported by Branwhite to be an overturned panel of grinding grooves or other cultural feature. This assertion cannot be supported by any reasonable evidence.


Plate 6: This rock was reported by Branwhite to be a 'birthing chair' but is also considered to be a fanciful and speculative hypothesis with no reasonable basis.

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[image deleted from public version]	
<p>Plate 7: Lot boundary markers were observed to be in place as close as 6m to the grinding grooves area. The addition of a potential archaeological deposit (PAD) as a feature of the site listing and a consequent variation in the mapped extent of the site with a 20m radius around the location of the grooves will put this boundary within the listed area of the site. It is recommended that the riparian corridor in the area of the grinding grooves be protected from all impact by a minimum buffer inclusive of the 20 metre site area.</p>	
	
<p>Plate 8: The tree on the right is the one listed as Wadalba Scar tree (AHIMS # ). On the basis of the contextual evidence of the naturally scarred tree to the left, criteria established by Long (2005) for assessing scarred trees, and the likely date at which the tree is likely to have been scarred throw considerable doubt on the cultural origin of the scarring. Approximate aging of the tree provides the most secure means of making a final determination. It is likely that an arborist would assess the tree as not possibly large enough to have been scarred at least 150 years ago.</p>	<p>Plate 9: The top of the scar on Wadalba Scar Tree.</p>
	
<p>Plate 10: The bottom of the scar on Wadalba Scar Tree.</p>	<p>Plate 11: Branwhite reported that this tree was the one assessed by Dallas as having been culturally scarred. Most of the scarred portion of the has fallen (see Plate X).</p>

**APPENDIX C      GORECKI & DALLAS 2000 EXECUTIVE  
SUMMARY**

**Aboriginal Cultural Heritage Assessment and Management Plan, Wadalba Hill**

**Quoted in full from Gorecki and Dallas 2000:1**

"At the request of the Wyong Shire Council (Lisa Wheeler, Strategic Planner) a cultural heritage survey of approximately 2km<sup>2</sup> of land adjacent to the Pacific Highway and Johns Road, Wadalba, some 3km north-east of Wyong was conducted on the 21, 22 and 24 June 2000. There is a proposal to rezone the land to support urban expansion and which would include an environmental corridor. The archaeological study was commissioned to provide preliminary assessment of the Aboriginal Heritage issues of the land and to identify future archaeological and Aboriginal community requirements.

The archaeological investigation included a review of the NSW National Parks and Wildlife Service Aboriginal Site Register and Catalogue of Archaeological Reports and a fully comprehensive field survey of the accessible land. The Aboriginal Site Register and Archaeological Catalogue searches indicated that no previous archaeological surveys had been conducted within the study area and no Aboriginal sites had been recorded within the study area<sup>3</sup>. Nevertheless, a range of locations were recently found within the proposed development and their locations were given to the Shire Council and the Darkinjung Local Aboriginal Land Council (see attachment 1 [not included here]). All these locations were inspected during the present survey and re-assessed as to their cultural origin and authenticity. Based on regional site location models archaeological studies of nearby areas, and local site recordings, it was anticipated that the most likely site types to be present in the study area were scarred trees, axe grinding grooves, scatters of stone artefacts and isolated artefacts.

Four locations of archaeological interest were found; three of these are scarred trees and the fourth is a sandstone platform with axe grinding grooves. It is recommended that the four site locations be preserved. A possible site linked with women business (a reported birthing site) is still being investigated (see Section 7 [not included here]). No further archaeological field survey is required or recommended for the study area.

It is also recommended that if excavation activities are conducted by the developer along one area identified as having some (albeit low) archaeological potential, these should be monitored by an Aboriginal representative nominated by the Darkinjung Local Aboriginal Land Council (LALC).

The study included consultation with the Darkinjung LALC. Representatives of this organisation participated in the field survey and were commissioned to prepare a report on their interest in the land (see attachment 2 [not included here]). The recommendations contained in these reports about site management requirements and areas of interest to the local community should be considered prior to any final decisions regarding future land use options or alterations. The Darkinjung LALC should continue to be consulted throughout the course of any future archaeological work and to be advised on future land use options".

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<sup>3</sup> Gorecki & Dallas did not locate the previous study of an area at the top of Wadalba Hill conducted prior to construction of a water reservoir by Bonhomme and Koettig (1980). However it should be noted that this study did not locate any sites and the report would therefore not have been returned on the AHIMS GIS-based search. Moreover, the study was described as being "at Kanwal, near Wyong" and was therefore unlikely to be located on the basis of keyword searches.