ABORIGINAL HERITAGE OFFICE

Rock Art and Engraving Project, Northern Sydney

Funded by Heritage Near Me

2019

Local Heritage Strategy
REPORT – PART 2 of Coastal Erosion Aboriginal Heritage Strategy

Written and compiled by the Aboriginal Heritage Office
Ku-ring-gai, Lane Cove, North Sydney, Northern Beaches, Strathfield and Willoughby Councils.

www.aboriginalheritage.org
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Executive Summary

This report documents work undertaken during a two year coastal erosion project in northern Sydney under a grant provided by the NSW Government’s Heritage Near Me program. This is Part 2 of the report, covering the rock art and rock engraving component.

There are over 1000 recorded Aboriginal sites within the 6 partner councils, of which there are approximately 120 pigment and 240 engraving sites. A total of 22 rock art sites and 17 rock engraving sites were visited and monitored for this project. Re-recording work included 360 photography, stills and drone photography and video. Many sites have already been vandalised or damaged and all sites are subject to natural deterioration. The risk of irreparable damage and loss of art figures increases every year. Many sites have already been vandalised or damaged and all sites are subject to natural deterioration. The rock art in the northern Sydney region is diverse and extensive and much has survived the pressures of urban and city life.

A number of important issues have been identified that require further examination and thought by those involved with the task of trying to protect the sites into the future:

Detailed Recording
Encroachment
Re-grooving Engravings
New Paintings
Rock Climbing
Interpreting Sites
Streamlining Site Management
1.0 Introduction

This report documents works undertaken during Year 2 of a two year coastal erosion project in northern Sydney under a grant provided by the NSW Government’s (Office of Environment and Heritage) *Heritage Near Me* program (Local Heritage Strategic Projects). The project has been carried out by staff and consultants of the Aboriginal Heritage Office (AHO), in partnership with Ku-ring-gai, Lane Cove, North Sydney, Northern Beaches, Strathfield and Willoughby Councils.

This is Part 2 of the report, providing results on the rock art and rock engraving component only.

1.1 Project Aim

The coastal erosion Aboriginal heritage project aims to better plan for Aboriginal sites in northern Sydney’s foreshore. The Year 2 aims included:

- Building on the management and community engagement work carried out previously, important and vulnerable rock art (pigment and engraved) outside of the foreshore zone will also be included in the project. This will give a broader picture of heritage values in the region that are under increasing threat from human and natural impacts. The community engagement can tap into the greater interest people have for this site type.

1.2 Why is this project necessary?

The primary objective of the Aboriginal Heritage Office (AHO) is to protect irreplaceable Aboriginal heritage sites for future generations. There are over 1000 recorded Aboriginal sites within the 6 partner councils, of which there are approximately 120 pigment and 240 engraving sites. Many sites have already been vandalised or damaged and all sites are subject to natural deterioration. The risk of irreparable damage and loss of art figures increases every year.

The focus of this work is to re-record some of the previously identified rock art and rock engraving sites in Council managed areas and any new sites discovered during fieldwork. They are particularly vulnerable to erosion and human interference. They also provide a means with which to introduce the general public to Aboriginal heritage. New Council walking tracks as well as illegal mountain bike tracks are making areas of bushland more accessible. In many areas there have been 10 or more years of regular bush regeneration as well as hazard reduction burns and access is becoming easier. With the increasing accessibility of urban reserves there is more risk of deliberate or accidental damage to sites from increased visitation, mountain bike use, vandalism and natural processes. Natural processes are also altering in intensity as climate change and other human impacts affect the environment. It is therefore important to re-record and monitor sites and capture as much of the surviving information as possible which can be used for future site conservation, for example, determining where original pigment is near new graffiti, or the original groove of an engraving that has been vandalized.

**GRAFFITI AND RUBBISH IN ROCK SHELTER, NORTH SYDNEY**

Coastal Erosion Project: - 2019 Part 2: Rock Art and Engraving
Aboriginal Heritage Office
2.0 Heritage Research and Review

In order to develop the management plan, a review of previous work was required followed by fieldwork, analysis and report writing. The following work was proposed:

- Review of Aboriginal heritage site management reports, site cards and AHIMS site records (the Aboriginal Heritage Information Management System of the NSW Office of Environment and Heritage1).
- Identify a priority list of 20+ sites for monitoring.
- Visit, record and assess accessible sites using multiple media.
- Final rock art and rock engraving management plan (including individual site recommendation summaries).

2.1 Review

In 2010 the AHO undertook a rock art project (for the current councils plus Armidale Dumaresq Council). The following table shows a summary of results from that time, with 43 sites re-recorded, 16 not able to be relocated, 28 in private/National Park or duplicate cards, 6 sites destroyed and 22 sites either not located or the art not visible. The overall condition was found to vary from that noted than on original recordings.

In 11 sites the total number of motifs observed increased relative to previous recordings. This was quite surprising given the in some cases long period since the original recording. In 18 sites only a proportion of the original motifs were observed. In the latter case this was due to the deterioration of the art through natural or human processes or it could reflect the conditions at the site at the time of observation. Often the digital image gave more detail than could be seen to the naked eye. Only in a small number of cases were the images less clear (AHO, 2010: 10).

<table>
<thead>
<tr>
<th>Site Features</th>
<th>Ku-ring-gai</th>
<th>Lane Cove</th>
<th>Manly</th>
<th>North Sydney</th>
<th>Pittwater</th>
<th>Warringah</th>
<th>Willoughby</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessible</td>
<td>7</td>
<td>0</td>
<td>1</td>
<td>12</td>
<td>7</td>
<td>3</td>
<td>7</td>
<td>43</td>
</tr>
<tr>
<td>Private land</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Destroyed</td>
<td>1</td>
<td>2</td>
<td></td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Duplicate/Not in Council area</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Not located</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>10</td>
<td>1</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Art not visible</td>
<td>2</td>
<td></td>
<td>6*</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Total Sites</td>
<td>15</td>
<td>16</td>
<td>6*</td>
<td>14</td>
<td>14</td>
<td>21</td>
<td>13</td>
<td>99</td>
</tr>
</tbody>
</table>

- Manly does not include North Head sites now under Sydney Harbour Authority

TABLE 1: RESULTS FROM 2010 ROCK ART PROJECT

1 OEH – previously Department of Environment, Climate Change and Water, before that DECC, before that DEC and prior to 2002 it was the NPWS.
Since that report, a number of previously unrecorded rock art sites have been identified and some duplications corrected. The following table shows the total number of sites per Council in 2019.

<table>
<thead>
<tr>
<th>Council Areas</th>
<th>Monitored</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ku-ring-gai</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Lane Cove</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>NorthSyd</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>NthnBeach-central</td>
<td>4</td>
<td>28</td>
</tr>
<tr>
<td>NthnBeach-Nth</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>NthnBeach-Sth</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Willoughby</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

The AHO carried out a project on rock engravings in the region in 2013 (for the current councils plus Ryde City Council). The following table shows a summary of results, with 53 sites recorded, 50 not able to be relocated, 54 in private/National Park, 10 sites destroyed and 58 sites still to be investigated (‘Remaining’). The overall condition was found to be poorer, with more weathering noted than on original recordings.

Recording was done during late autumn through to winter when the lower angle of the sun made conditions optimal for enhancing the shallow grooves. In a number of cases additional motifs were identified at recorded sites including sites recorded in the nineteenth century when weathering of motifs was presumably less advanced. Additional motifs were also found in the general district of recorded sites.

Timing and lighting conditions were important for the success of identification and recording. At one site the difference of less than an hour between initial observation and recording revealed two previously recorded motifs that were not initially seen (AHO, 2013: 13).
TABLE 3: RESULTS FROM 2013 ROCK ENGRAVING PROJECT

<table>
<thead>
<tr>
<th>Council Area</th>
<th>Monitor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ku-ring-gai</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>Lane Cove</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>NorthSyd</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Nthn-Beach-Central</td>
<td>5</td>
<td>141</td>
</tr>
<tr>
<td>Nthn-Beach-Nth</td>
<td>4</td>
<td>39</td>
</tr>
<tr>
<td>Nthn-Beach-Sth</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>Willoughby</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td><strong>242</strong></td>
</tr>
</tbody>
</table>

The following table shows the total number of sites per Council in 2019.
3.0 Monitoring and Recording

As the primary reason for including rock art and rock engraving sites in the Coastal Erosion project was to generate material to assist with the education program, it was decided to select sites that were generally in better condition. A sample of sites from each partner Council was chosen. Other factors determining which sites were considered higher priority were based on the following:

- Site type, size, rarity, threats, condition and time from previous monitor.

3.1 Monitoring Methodology

Field work was aimed at monitoring a number of sites in better condition to input into the education program. Once the site was confirmed, the monitor would carry out the following:

- checking the grid coordinates
- reviewing the site condition
- new photographs taken of the site
- identify monitoring points for assessing future erosion or impacts
- updated site plans, where necessary

A 360° (Theta S) camera was used to capture images that could provide a fuller context of the sites or, for larger sites, key sections of them. It would also provide material for community engagement online content. Video was taken of some sites and drone (DJI Spark) images and video was also captured.

3.2 Personnel

The project was supervised by AHO Manager, David Watts, and project managed by archaeological consultant Phil Hunt. Fieldwork and report preparation was undertaken by archaeological consultants Dani Mitchell and Phil Hunt.
5.0 Monitoring Results

The initial review estimated around 120 pigment and 240 engraving sites surviving in Council areas. This part of the work proposed:

- additional recording and/or monitoring of art sites (20+ sites)
- an Aboriginal heritage rock art management plan

A total of 22 rock art sites and 17 rock engraving sites were visited and monitored. Re-recording work included 360 photography, stills and drone photography and video.

Rock Art - Pigment

Of the 22 rock art sites monitored, two were actually not previously registered sites that were found during monitoring at nearby sites. The detailed monitoring work also revealed art figures that had not previously been recognized. The overall condition of most sites is considered good. However, this is in the context of sites in the urban area or close to it. Rock shelters that are in National Parks, for example, and away from access tracks are generally in much better condition. In terms of impacts, the project divided them into three: graffiti, other human impacts (such as pedestrian traffic) and natural erosion.

<table>
<thead>
<tr>
<th>Council</th>
<th>Fair</th>
<th>Good</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ku-ring-gai</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Lane Cove</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>N-Beadhes</td>
<td>8</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Nth Sydney</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Willoughby</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Grand Total</td>
<td>4</td>
<td>18</td>
<td>22</td>
</tr>
</tbody>
</table>

TABLE 5. ROCK ART – CONDITION OVERALL

Those sites considered only fair condition were generally close to main roads or had previous impacts associated with post-invasion occupation (e.g., Depression era camping, significant graffiti attack, current picnic or other ongoing visitation).

Looking more closely at graffiti impacts, the table below shows that most sites have minimal graffiti (again this should be considered in terms of urban sites, where no site will be completely devoid of any...
Scratching, charcoaling or painted graffiti). Sites in the Northern Beaches tend to have less impact overall as some bushland reserves are larger and the sites are further from regular visitor access. The three sites considered to have moderate graffiti impacts are larger sites with historic graffiti. One site in North Sydney did have extensive graffiti from an incident in 2016 but this was subject to conservation work and has largely remained graffiti free since.

Other human impacts include tracks, visitation, camping, rock climbing, rubbish and so on. While most have minimal impacts, a third are considered to have moderate impacts and one as having extensive impacts. This particular site has had graffiti impacts in the past and has been a regular place for people to camp and picnic (including late night drinking). It has also been popular for rock climbing, which has peaked in the last few years. The AHO has been working with the OEH and Council to reduce climber impacts and the site has been taken off some climbing websites and signage has also been introduced to education visitors. The other sites with moderate impacts are either close to main roads and tracks or other development related impacts (eg drainage) or are visited for rock climbing, picnicking and camping.

In terms of natural impacts, such as rock decay, water erosion, insect or animal impacts, this is difficult to summarise. A site may be in generally good shape but have some insect activity (eg wasp nest) over one part of the shelter on or near the rock art, or there may be extensive rock decay in the shelter but none immediately endangering the rock art. Those sites considered to have moderate impacts are generally showing areas of water erosion, mineralization or rock decay close to or over rock art and/or erosion to the archaeological deposit (from run off and / or animal activity like brush turkey diggings).
Rock Engravings

A total of 17 rock engraving sites were monitored. The overall condition of most engraving sites is considered good (Table 9). However, like the rock art sites, this should be taken in the context of sites in the urban area or close to it. Rock engraving sites that are in National Parks, for example, and away from access tracks are generally in much better condition. In terms of impacts, the project divided them into three: graffiti, other human impacts (such as pedestrian traffic) and natural erosion.

Those sites considered only fair condition were generally close to public areas, such as picnic grounds and walking tracks. The two sites considered to be poor condition are both adjacent modified landscapes where drainage has changed the conditions, forming a damaging leachate at one and increasing excess siltation and vegetation regrowth at the other.
In terms of graffiti, many sites have experienced some minor scratching from visitors, with more accessible sites having deeply engraved graffiti, such as people’s initials. Scratching over the engraved figures occurs from time to time at publicly accessible sites where people wish to show (illegally) more clearly where the engraving is. This fades and becomes unnoticeable after a relatively short time. In terms of the current monitored sites, the graffiti issues are minor (e.g., very old and unchanged graffiti and/or no additional graffiti or evidence of damage) except for two sites where visitation is ongoing and active (one as a public space, the other as a hidden place known to local youths). One site had significant damage from spray paint a few years ago but this was removed by the AHO and OEH.

<table>
<thead>
<tr>
<th>Council</th>
<th>Moderate</th>
<th>Nil to Minor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ku-ring-gai</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Lane Cove</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>N-Beaches</td>
<td>2</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Nth Sydney</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Willoughby</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2</strong></td>
<td><strong>15</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

**Table 10. Engravings – Graffiti**

As engravings are not enclosed sites like rock shelters, they can more easily be walked on and also may be or have been subject to impact from cars, motorbikes, bicycles and/or skateboards. In this case, other human impacts to these sites is considered minor (any damage evidence being largely an issue from the past). The one site experiencing moderate impacts has a higher rate of pedestrian and bicycle traffic across the platform than other sites. It should be noted that several sites were subject to protection works in the past to help reduce this kind of issue and the barriers and fences have been largely effective at reducing impacts this way.

<table>
<thead>
<tr>
<th>Council</th>
<th>Moderate</th>
<th>Nil to Minor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ku-ring-gai</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Lane Cove</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>N-Beaches</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Nth Sydney</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Willoughby</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1</strong></td>
<td><strong>16</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

**Table 11. Engravings – Other Human Impacts**

Natural impacts are different from rock art sites as engravings are mostly uncovered. The main issues are rock decay (such as exfoliation where the surface layer is undermined from behind and breaking up) and vegetation encroachment (covering the engravings as a thin soil develops or branches growing over and brushing the figures when the wind blows). For this project, most sites again had minor issues and the two sites with moderate impacts were experiencing soil/vegetation encroachment or rock decay, and the site with extensive impacts has siltation issues that has caused extensive vegetation growth.
<table>
<thead>
<tr>
<th>Council</th>
<th>Moderate</th>
<th>Nil to Minor</th>
<th>Extensive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ku-ring-gai</td>
<td>2</td>
<td>2</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Lane Cove</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>N-Beaches</td>
<td>8</td>
<td>1</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Nth Sydney</td>
<td>3</td>
<td>3</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Willoughby</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2</strong></td>
<td><strong>14</strong></td>
<td><strong>1</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

Table 12. Engravings – Natural Erosion

Leaf litter over Echinda engraving, North Sydney
6.0 Management Plan – Rock Art

Information about each site that was monitored is provided below. The location and AHIMS number are not included to ensure location confidentiality.

6.1 Ku-ring-gai Council

6.1.1 KUR-012

Description

The site consists of a large open rock shelter that faces east.

The art panel begins in the central region of the shelter and continues to the north. At the southern end of the shelter is a small black motif in spray paint. No other art can be seen here.

The art consists of four large figures, two fish and an unknown motif, extending 4m along the ceiling or back wall at a height range of 1.5-2.3m. The figures are drawn in red ochre as rough shading or lines.

Beginning from the left or south there is a horizontal figure with distinct radiating lines emerging from the ‘head’ and a pair of small tapering lateral appendages. The rest of the figure is poorly defined as it extends into an area of darker stained sandstone. The whole motif is greater than 1.5m long and up to 0.6m wide. The ‘head’ area intersects the legs of the next motif.
The second motif is vertical and poorly defined. It is a male figure with tapering appendages and an upper ‘head’ area with radiating lines. The motif is approximately 1m tall by 0.7m wide and begins 1.6m above the ground. The upper right appendage extends towards the lower appendages of the third motif.

Motif four is a vertical figure with a poorly defined ‘head’, distinct lateral appendages or ‘arms’ and has no obvious lower appendages ‘legs’. The motif is approximately 1.2m long and wide and begins 1.5m above the ground. The left ‘arm’ intersects the radiating lines emerging from the ‘head’ of the previous motif.

There are two ‘fish’ shaped motifs towards the northern end of the panel just above the darkened base of the concave surface. Each is approximately 0.4m long and separated by approximately 0.4m. The southern motif is facing left and has two ventral fins. The northernmost motif faces right and has
charcoal graffiti across part of its tail and rear body. It is located on a projecting part of the ceiling so that it is orientated almost at right angles to the previous fish. The two fish have different tail forms.

Below the fish, under a sandstone lip, are four red ochre, oval-like shapes with three connected to each other. It is uncertain what this motif represents.
This site is one of a small number that contain particular motifs drawn rather than made with stencils.

**Plan of rock shelter.**

**Section of rock shelter.**

**Impacts**

During a subsequent visit to the site, a social gathering had taken place in the shelter. A fresh fire pit was present and there was new charcoal graffiti covering some motifs. The AHO contacted the NSW OEH Conservation and Repatriation team and some of the newer graffiti was removed using dry brushing. The site is easily accessible and will always be vulnerable to human impacts. It has been used for rock climbing for some time and climbers chalk is present on areas close to rock art.

**Management Strategy**

Continue to monitor site on a regular basis. Liaise with OEH to continue graffiti removal. Consider signage stating that while you wish for people to enjoy the site, please refrain from graffiti and rock climbing as it is a registered Aboriginal site.
Description

The site consists of a tall north-east facing rock shelter in a narrow valley with thick forest cover. The shelter is very large, 20m long, 5m deep and 6m high, with a creek running adjacent below. The rock shelter floor has large fallen sandstone blocks and little deposit.

There is quite extensive graffiti on the wall of the shelter and an extensive coating of green to white algae or other material covers much of the surface and obscures the art in places.
Coastal Erosion Project: - 2019 Part 2: Rock Art and Engraving

Area I

Area II

Area III

Previous recording of art.
Charcoal Graffiti

Charcoal Motif and Graffiti on Panel 1. D-Stretch enhanced

Charcoal Figures and Graffiti on Panel 2. D-Stretch enhanced
Coastal Erosion Project: 2019 Part 2: Rock Art and Engraving

Aboriginal Heritage Office

Impacts
Water runoff is over some of the art. Graffiti from human visitation has been an issue but no new graffiti was noted.

Management strategy
Monitor on a regular basis. Remove graffiti when possible.
Description

The site is a large rockshelter near the top of the slope above Middle Harbour. The site was first recorded by Taplin in the 1960s noting "Figures, some 25 white hands of adults and children, numerous charcoal fragments including one that is almost certainly a man and a small red ochre oval with a longitudinal bar." The site was resurveyed in more detail by Attenbrow in 1989. A 1993 resurvey recorded "The art is still visible."

The art is located on the middle portion of the back wall and begins on the south side just beyond the large sandstone boulder on an area of pale slightly rough clean sandstone and extends northwards across a smoother sandstone surface which is blackened and on under an area of white precipitate to a mottled section of wall. The art can be found between 1 and 2m high.

Plan of rock shelter.

Section of rock shelter.
During the visit, an estimated 12 white ochre hand stencils were identified by observing at least two fingers at the south end of the shelter. Most stencils are concentrated above modern engraved graffiti, an H in a circle. Stencils are also located within the graffiti. The stencils represented both adult and childrens’ hands.

To the north of the main group of stencils, there is a single hand stencil, which has been placed over red pigment, giving the impression of a red handprint.
Approximately 30cm below the handprint is a red ochre oval, which possibly contains another handprint the same as above. This oval sits immediately on top of a charcoal motif.

The charcoal motif forms a branched or interconnected set of infilled oval bodies covering an area over 50cm high and 30cm wide. It is possible that these represent an animal such as a wallaby facing to the left but the presence of a white precipitate partly covering the charcoal makes it difficult to be certain if this is an accurate assessment.
Impacts

The site is easily accessible from the road but remains relatively undisturbed. Human impact has been an issue in the past. There is graffiti in the form of engraving overlies the art. The shelter may have been lived in in the past as a deep groove has been cut in the ceiling as an artificial dripline, to keep the shelter dry. Currently there appears to be very little disturbance from humans.

Erosion is minimal with some white precipitate in places.

Management strategy

Continue to monitor on a regular basis. A full and comprehensive recording should be made of the site as the stencils are fading over time and a lot less are visible compared to the first recording. Remove or disguise graffiti.

6.2 Lane Cove Council

6.2.1 LCC-008

Description
The site is a large subdivided west facing rock shelter. The shelter is approximately 30m long, 1m to 3m deep and 1.5-5m high.

The site borders a footpath that runs alongside the adjacent Burns Bay Rd although there is a fringe of vegetation that provides a screen for most of the northern part of the shelter. The wall and ceiling of the shelter are quite irregular and heavily stained. The southern part of the shelter is much smaller due to it being cut back for the construction of the road. Only a portion of the original floor and ceiling remain.

The shelter was first recorded by Taplin in 1963. A resurvey described “7 White Hand stencils and numerous charcoal drawings all quite visible to the naked eye although the charcoal figures have weathered considerably. Also red ochre traces are visible but no definite figures remain. 3 small fish 3 wallaby or kangaroo rats and 2 small shields are still clearly visible the other figures are indeterminate due to weathering.”

During the visit, only a single hand stencil was recorded in the larger northern end of the shelter. The stencil is over 2m above the ground and not far from the descending staircase of the pedestrian overpass. A white precipitate can be seen in the area of the stencil.

Charcoal art can be found at the southern end of the shelter. On the day, the site was covered in Lantana making it impossible to climb up to. The only recording done was what was visible from the footpath. The only identifiable art is three fish, located along the back wall. There are no visible hand stencils present at this end of the shelter.
Impacts
Due to the reduction of the shelter for the construction of the road, the art is more exposed to the weather and the large amount of vehicle traffic that passes at the southern end. The site is also accessible to people but appears to go unnoticed. The northern end of the shelter is subjected to natural erosion with white precipitate throughout.

Management strategy
Monitor on a regular basis and conduct a detailed recording of the remaining art. Look at possible dripline to divert water from art panel area.

6.2.2 LCC-009

Description
The site is a large rock shelter facing west just above the main road. It borders a footpath that runs alongside the road, although there is a fringe of vegetation that provides a screen for most of the shelter. The wall and ceiling of the shelter are quite irregular and stained. There is some graffiti and the shelter shows evidence of prolonged usage with old broken glass bottle fragments protruding through the deposit.

It was first recorded by Taplin in 1963. A resurvey described the art present: “Paintings include 17 white ochre hand stencils, two of which are superimposed by a charcoal Boomerang and Deity figure. On the ceiling is a scratched shield and a charcoal shield”. On the wall, a possible white foot stencil and an emu foot stencil in white ochre was also recorded.

The art is located at the northern end of the shelter where the floor of the shelter is mostly covered by a growth of ivy. The ceiling of the shelter is stepped here with a near vertical surface of approximately 30cm providing a good ‘canvas’.
During the visit, six white ochre hand stencils and one charcoal motif were located, with only one stencil being obvious to the naked eye. Wasps have built a nest over the palm of the main stencil. The scratched shield was not seen but has been located in recent monitors.

Impacts

Only six hand stencils were found suggesting the white precipitate that covers the walls of the shelter may now cover other stencils originally recorded. There are houses built above the shelter, making water runoff an ongoing issue for this site.
There is evidence of modern human occupation with rubbish found at the site. Mostly it appears to remain untouched by the public. There are vintage bottles in the northern end of the shelter that were more than likely dumped from the houses above.

Management strategy
Monitor on a regular basis and conduct a detailed recording of the remaining art.

6.2.3 LCC-062

Description
The site is a narrow rock shelter on the upper slope with a northerly aspect. It is located below a public walking track and easy to access. The shelters overhang increases in height and depth from east to west. There are three large sandstone boulders on the western side of the shelter with one projecting inside the overhang. The art is located in the most sheltered western part of this relatively shallow shelter. The west-most panel defined on the east by the presence of a discoloured green band where water occasionally runs down the surface.

The site was first recorded in 1991. The art was described as “mainly red ochre. Lizards, Shield Boomerang and others. Also charcoal figures. … It has amazingly suffered no vandalism in the last 200 years and although faded the art is still clear. This would be the best surviving art site on Lane Cove River.”
The art is still visible today as it was in 1991. Majority of the motifs have been drawn in red ochre as lines and infill. There are two lizards, a shield, boomerang and other unidentifiable motifs. Three vertical lines in charcoal are also found. A previous recording of an additional charcoal motif was missed as it is now covered in termite tracks.
Red ochre boomerang with D-Stretch

Unidentifiable figures with D-Stretch

Red ochre infilled motif

D-Stretch enhanced

Lizard

D-Stretch enhanced
Impacts
With the site being located below a public walking track, there is always the risk of visitation and vandalism. So far, it has remained in good condition. On top of the shelter is a water pipe but it appears to have no impact on the condition of this shelter. Termite tracks are found in close proximity to the art and cutting through some of the motifs.

Management strategy
The site should be visited on a regular basis for monitoring and/or maintenance for preservation, as it contains some of the best-preserved artwork in the Lane Cove area. Consider the removal of the termite tracks obscuring the art.
6.3 North Sydney Council

6.3.1 NSC-041

Description

The site is a large rock shelter on the mid slope with a sediment floor. It is located below apartment building and runs alongside a footpath that has frequent pedestrian traffic. The site was mentioned by Campbell in 1899: “The face of the rock has been too much blackened by smoke to admit of any markings being observable.” The recording by Power in 1977 defined the site as a shelter with midden. A resurvey in 1990 identified the presence of “7 red hand stencils are situated here in niches on the ceiling and walls. When it is wet they become difficult if not impossible to see. I could see only four but I have seen all seven after a prolonged dry spell, they are all very faint however.” An additional comment stated “One new white stencil was found at the northern end in a niche.”

A visit to the site in 2010 noted that there were at least 14 stencils to be found on the ceiling and in an alcove on the back wall, which includes a yellow hand stencil and one foot stencil.

During the current visit, a similar number of red ochre hand stencils were observed including the yellow ochre stencil and foot stencil. There are a mix of adult and children hands located on a very low lying ceiling at the back of the shelter.
RED ochre hand stencils with D-Stretch
FOOT STENCIL

YELLOW OCHRE HAND STENCIL

HAND STENCIL WITH FOREARM

LOCATION OF STENCILS
Impacts

The shelter is located below a number of apartment buildings and has a constant supply of water running off the front, making the shelter very damp and muddy in places. When comparing the visible stencils to Campbell’s observations in 1899, it seems to have had very little impact on the condition. Over 100 years later we are able to see more stencils than first noted.

Pedestrian traffic seems to be of no issue, perhaps due to the fact that the shelter is so damp and muddy in places. The stencils are in a low and dark location which may help in their preservation.

Management strategy

Monitor on a regular basis and conduct a detailed recording of the art. With the help of software like D-Stretch it is possible to identify more art figures.

6.3.2 NSC-048

Description

The shelter is located on the upper slope and contains midden and art. The shelter is north facing and has a walking track below. The site is difficult to access and cannot be seen from the track. The site was subject to archaeological excavation by Museum staff in 1960s and Sandra Bowdler (‘Balls Head: The Excavation of a Port Jackson Rock Shelter’; Records of the Australian Museum, Vol.28, No.7 1971). A burial was discovered and removed during this excavation along with many stone tools.

In 1977, eight white ochre hand stencils were recorded. It was stated that they were very faint and best seen at night with artificial illumination. During this visit, six stencils were observed. Most are very faded and only obvious with the help of the software D-Stretch.
Stencil above graffiti

Looking south east

Most obvious stencils at the site

D-stretch enhanced

White ochre stencil

D-stretch enhanced
Impacts
The shelter is relatively protected from people. There was some digging in the floor from brush turkeys but this has no impact on the shelter art. Natural erosion of the sandstone may be an issue in the future. The shelter was subject to heavy graffiti in 2016, including spray paint and house paint. No rock art was impacted and the AHO, OEH and Council removed the graffiti with a specialist team using high pressure crushed garnet spray.

Management strategy
Monitor on a regular basis.

6.3.3 NSC-050

Description
The site is a small north facing rock shelter on the mid slope, which has been known about since 1840. The site was first described by WD Campbell in 1899 and he recorded “three hand-stencilled hands and five or more fish”. Campbell recorded that his informant who had known the site for thirty years had observed that someone had removed a flake of rock an inch thick from the left hand side of the shelter but that “the fish and hand are still visible, although that thickness of rock has been removed from them”. The accompanying sketch shows seven fish and three hands – two left hands and one right. The site was resurveyed in 1978 and a further three hand stencils were recorded on the ceiling of the shelter close to the back wall.

The art is located near the top of the back wall along most of the length of a continuous rock surface that descends perpendicularly from the ceiling without a significant break between them. The art is faded but clear particularly on the right or western side of the back wall. The stencils where applied with white ochre that coats most of the rock surface between the individual stencils. On inspection of the ceiling, no stencils were located. The three fish to the left were also not located.
Impacts
There is a track in front of this shelter but it is very low and passers-by are not aware that it is a site. It is well covered and protected from the elements. Rock climbers were using the front of the shelter in the recent past for ‘bouldering’ but this does not appear to be active.

Management strategy
Continue to monitor on a regular basis.
Description

Rock shelter with red ochre hand stencils, now overlooking a golf lake. The stencils are in a medium-large overhang accessed from the north side (with a high fence and locked gate to restrict access). A much larger overhang continues towards the SW on the other side of a small waterfall. The south west section was looked at but no art was noted. The shelter is in good condition with slight flaking of sandstone and a white precipitate on the walls. Most of the stencils were not visible to the naked eye. With the use of D-Stretch to enhance the images, over a dozen hand stencils were present.
Impacts
A white precipitate is covering the art panel. Golf balls could potentially hit the panel.

Management strategy
Monitor on a regular basis. Review option for dripline for any run off over art panel.
Description

This is an east facing shelter is located in a golf course in close proximity to the green. The site is hidden from the golfers and well protected with vegetation. The shelter is 16.5m long, up to 4.5m wide and 2m high. There are red ochre hand stencils, red ochre and charcoal drawings and a grinding groove at this site. On a boulder at the front of the shelter is a modern white ochre hand stencil with an engraving either side. The engravings are of a figure on the right and the sun on the left. Just south of here is a couple of boulders that have an axe grinding groove and some grooves that resemble a K with white ochre present. We were informed by the staff of the golf course that they are aware of who is responsible for the modern grooves and art. The person responsible was apparently an ex-employee of the golf course.

There are several hand stencils located on the ceiling at the north end of the shelter. They are in good condition with a few of them obvious. The southern end of the shelter has charcoal and red ochre drawings.

The southernmost drawing is of a wallaby and is still visible to the naked eye. Just north of this, is a red ochre infill figure. Over the figure is some unidentifiable charcoal.
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Aboriginal Heritage Office

Red ochre hand stencils on ceiling

Red ochre wallaby

Charcoal and red ochre figure

D-Stretch enhanced
Impacts
The site has been tampered with by a former golf course staff member. The original art is in good condition.

Management strategy
Regular monitoring of site is recommended. Remove modern hand stencil. Signage similar to that at NBCC-213 should be considered.

6.4.3 NBCC-281

Description
Medium to large NE facing shelter with 10+ red hand stencils on lower wall of northern shelter section. Entire shelter is about 11m long, 3m high and 3-3.5m deep. Little graffiti (a bit of charcoal, some white lettering probably using Liquid Paper). Floor of northern end has been extended using timber crates/pallets. An area in northern part of shelter has slight depression and is damp from seepage from recent rain. This area has boulders and rocks and may have been a recent fireplace. There is a decent amount of rubbish in front of the site including a complete wheelie bin.

Local resident grew up in the area and said local youths used to use the shelter to hang out (1980s etc).
Impacts
The site has been used for social gatherings, but there has been little damage done to the art (ie. Very little graffiti).

Management strategy
Monitor on a regular basis. Schedule the area for a clean-up on occasion.
Description

The shelter is west facing and located just below a medium density home and garden. It is approximately 9m long, 1.4m high and 1.8m deep. A sewer pipeline runs over the shelter roof and a few metres away at roof level is a park bench. There is some charcoal graffiti and some linear ‘scribble’ red ochre coloured graffiti. Many hand stencils are quite faint. Most are vertical although at least 2 are horizontal. The stencils visible at monitoring were on the upper wall/ lower ceiling of the central part of the shelter. A number of stencils are missing part of the pinkie finger, suggesting they are women who had their digits removed as described by First Fleet era commentators. Considering its accessibility, it is in remarkable condition.
Impacts
The site is accessible to the public but the proximity to the housing may deter people. The sewer pipe seems to have no negative impact on the condition of the site.

Management strategy
Monitor regularly. The site should be fully recorded as it is unique site that clearly shows the stencils of women with the missing pinkie finger.

6.4.5 NBCN-170
Description

This site is one of a series of shelters on the east side of a fire trail. The shelter faces north-east, with views to the NE. The site is below a walking trail and not easily accessible or obvious to the public keeping it well protected. The artwork is located along the entirety of the shelter. At the east end of the shelter there are red ochre hand stencils. Moving west along the shelter there are numerous white ochre hand stencils of adults and children. They are primarily located on the bottom half of the back wall. The top section of the back wall contains more white ochre stencils. There are two children’s foot stencils, digging stick stencils, hand stencils and one hand with forearm.

At the western end of the shelter is a large boomerang stencils with hands at each end. There is also red ochre stencils at this end. The shelter and art is in very good condition.
Area of back wall where red hand stencils are located.

Area of back wall where white hand stencils are located.
Impacts
Aside from natural erosion, there are no negative impacts on the preservation of this site.

Management strategy
Monitor on a regular basis. Further detailed comprehensive recording should be done while the site is in good condition.
**Description**

This site is one of a series of shelters on the east side of a fire trail. The shelter faces north-east, with views to the NE. The site is below a lookout and not easily accessible or obvious to the public keeping it well protected. The shelter has onion skin and honeycomb weathering. The east end of the shelter has sand on the floor from weathering.

The stencils are very faded and not easy to see. They are in red ochre and located very high on the shelter wall. The majority of stencils are located at the western end of the shelter with one observed stencil a bit further to the east.

**Single yellow ochre hand stencil**
YELLOW OCHRE HAND STENCIL

RED OCHRE STENCILS AROUND YELLOW STENCIL

LOCATION OF WESTERN STENCILS

WESTERN STENCILS

D-STRETCH ENHANCED

D-STRETCH ENHANCED
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Aboriginal Heritage Office
Impacts
Natural erosion. The sandstone below the stencils has onion skin weathering but the stencil areas appear stable.

Management strategy
Monitor on a regular basis.

6.4.7 NBCN-178

Description
This site is one of a series of shelters on the east side of a fire trail. This site was discovered opportunistically while trying to locate NBCN-170. As such the site a thorough recording has not been done due to time constraints and no detailed information is available.

The stencils are very faded and all that remains are the fingers. They are all done in red ochre.
Impacts
The shelter is very shallow, more a leaning sandstone than shelter, leaving the stencils vulnerable to the elements.

Management strategy
Monitor on a regular basis. A thorough recording of the site is needed.
6.4.8 NBCN-179

Description

This site is one of a series of shelters on the east side of a fire trail. The shelter is slightly west of NBCN-171, which can be seen from this location. The art was an accidental find while locating NBCN-171. No detailed recording has been carried out yet. The shelter is in good condition. There is some honeycomb weathering of the sandstone and the hollows have been used as a canvas. There are several red ochre stencils in the shelter. Most are faded with one remaining dark and obvious which is located on the ceiling.

The shelter is more accessible than the others as it is not too far below the track.
Impacts
Natural weathering. There is no evidence of people visiting this site.

Management strategy
Monitor on a regular basis. A comprehensive recording should be carried out.
6.5 Willoughby Council

6.5.1 WILL-036

**Description**

The north facing shelter is located on the upper slope just below housing. It is approximately 7m long x 5m high. A swimming pool is built on top of the shelter. As a result, the overflow of water from the pool has created a 10-20cm band of discoloration with flaking. Access to the site is through private property. This offers some protection from the general public. During one visit, there was a large amount of tree clippings dumped near the site. No deposit can be seen, only building debris.

The rear wall has red ochre hand stencils spanning the entire length of the shelter. The hand stencils at the western end are in excellent condition. They end are very dark and well preserved.

In centre and eastern side the red ochre stencils are quite faded. There are some graffiti marks, which are noted on the original site card sketch: a large (approx. 20-30cm high) yellow ‘BM’ drawn above the triangular survey point and nail in western side. There is some faded blue coloured chalk (?) on east and west “DMS” or similar, quite small. On eastern side is another trig/survey mark cut in the wall and painted white. The initials LC have been engraved in the centre of the shelter.

At the west end of the shelter, beyond the art panel, there are two metal bolts screwed into the wall.
Impacts
The swimming pool above the shelter is causing runoff into the shelter but at this stage it is not affecting the art.

Management strategy
Monitor on a regular basis. Review options to change runoff.
Description

This site is a large shelter that is accessible from a public walking track. The north facing shelter is approximately 27m long, 3m high and 10m deep. It is located below private housing. The site has become very popular with climbers. On the day of visiting the site, a climber was inside the shelter. There is climbers chalk covering large areas of the roof of the shelter and in very close proximity to the art. The shelter is also a popular place for socialising with a permanent campfire just in front of the shelter.

On a return visit to the site, two chairs were left at the fire pit. Despite the high frequency of visitors to the site, it is relatively free of rubbish. There is a large amount of charcoal graffiti which covers some of the art. Graffiti is also scratched on the surface in places. There are a number of modern handprints at the rear of the shelter.
The art in the shelter consists of three charcoal fish, seven hand stencils and one unidentifiable charcoal drawing. One new stencil was observed this visit. It is located with the main group of stencils, now five in total, at the east end of the shelter towards the front. This area is coated in climbers chalk. The other two stencils are located at the rear of the shelter near the centre. It is a flat section of sandstone has been drawn on with charcoal graffiti, covering the stencils.

There are three charcoal fish at the rear of the shelter towards the centre. They are above a sandstone platform. One drawing is covered in black staining of the sandstone. It is difficult to spot but when found obvious. The other two fish are on a flat circular sandstone canvas, and are heavily covered in multiple layers of graffiti. One fish is located under an ‘S’, with a smaller fish next to it on the right. There is charcoal graffiti, random red ochre lines and engraved graffiti.

The unidentifiable charcoal drawing is towards the front of the shelter where the main group of stencils are. It is a thick lined ‘U’ shape.
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6. Charcoal drawing

Hand stencils at rear of shelter

Fish
Impacts

Human visitation has the potential to create more destruction of this site. Climbers are the biggest threat to the site, chalk is thick in many places.

Management strategy

Monitor on a regular basis. The AHO has been working with OEH and Council to limit damage from rock climbers, who have used bolts in the cliff face previously and where there is a lot of chalk. Several years ago the site was removed from a climber website. In 2019 signage was placed at the site to state that it is a protected site and climbing is illegal in Council reserves. The sign was left at the fire pit and on return, it was clear a fire had been lit and the visitors placed the sign back when finished. In 2019 a visit coincided with a climber present. The issue was explained to the climber and he said he would pass on the information to other climbers and association.

It is recommended that graffiti is removed in stages and chalk, where possible.

6.5.3 WILL-055
Description

This site is a small, north facing, low shelter near a public walking track. It is not an easy site to locate if you are not aware of it. It is close to a small creek that runs from uphill down to the shore. The shelter is damp and has green moss growing on the walls. So far, this has not affected the art.

A recording in 1989 observed at least seven (possibly nine) hand stencils that are creamy white, at the upper part of the back wall of the western end of the shelter. White ochre hand stencils are still visible although very faded. During the visit, six stencils were counted.

There is a bit of charcoal drawn in the shelter, but it is difficult to interpret.
Impacts

Dampness is allowing a moss to grow inside the shelter. The moss is partially covering one stencil and stretches across to the eastern end of the shelter. The base of the rear wall of the shelter show evidence of ‘rock cancer’ destroying the rock surface and in the longer term potentially endangering the art.

Management strategy

Monitor on a regular basis. Clean the moss off the panel if possible.

6.5.4 WILL-059

Description

The site is north facing, large elongate rock shelter located just below the break of slope on the ridge crest. The shelter is approximately 1.5 to 2m high, 3m deep and 23m long. It is close to a walking track but there is no evidence that anybody has visited the site recently.

The site was first recorded by the NPWS in 1988 in association with an illegal excavation which had revealed a burial. “at least 3 white hand stencils and 6 charcoal drawings (lines in niches)” were observed. A second survey by Val Attenbrow with Ken Cutmore and Geoff Barratt in 1989 recorded “stencils + drawings on back wall – not recorded: includes 3 white hand stencils plus other charcoal + red ochre drawings”.

The back wall was quite damp with seepage and fern growth at certain points particularly on the eastern and western ends of the shelter. During the visit over thirty motifs were noted. They span the length of the shelter. Only four hand stencils were recorded, the rest of the art is charcoal and red ochre drawings.
The drawings vary with shields, human figures and unidentifiable motifs. Some drawings are in the water runoff and difficult to detect.
Impacts

Water seepage at the rear of the shelter is covering some of the motifs.

Management strategy

Monitor on a regular basis. Review options for dripline if water is running over art panel.

6.5.5 WILL-200

Description

Large north facing shelter that sits 8m above the tidal platform. Adjoining to the east end of the shelter is a dilapidated boat shed. A pile of rubbish, old computer monitors and other electrical appliances, was also found at the eastern end of the shelter.

The site is not easily accessible, unless you come by boat. To access by land, you need to pass through private property and do a little scrub bashing. The difficulty in accessing it, protects it from the general public.

At the base of the shelter there is rock decay that is causing a deep undercutting erosion area. So far it has had no effect on the art but it may do in the future. The walls are covered in a white precipitate of which none covers the art. Graffiti is minimal.
During the visit, three white ochre hand stencils were observed. One of the stencils is at the base of a charcoal drawing. There is other locations with charcoal but nothing identifiable as art.

Impacts
Rock decay is potentially an issue although it is not affecting the art at this stage. The precipitate could eventually cover the art.

Management strategy
Monitor on a regular basis.
7.0 Management Plan – Engravings

Information about each site that was monitored is provided below. The location and AHIMS number is not included to ensure location confidentiality.

7.1 Ku-ring-gai Council

7.1.1 KUR-051

Description
A large rock platform that is easy to access. It is only a few metres off a public walking track. The platform forms the roof for an underlying shelter in the south west corner. The platform has a series of engravings that have all been interpreted as ‘animal’ tracks. Previous recordings have stated that there are 18 kangaroo and 2 emu tracks that are deeply punctured or abraded.

During the visit a total of 17 engravings were relocated. They are very difficult to see, depending on the sunlight.
Impacts
During the visit, a mountain bike rode out on to the platform. This is a regular occurrence. Hikers walking on the platform is also an issue.

Management strategy
Entrance to the platform needs to be blocked to restrict pedestrian traffic and minimise wear on the engravings. Regular monitoring should be carried out.
7.1.2 KUR-099

Description

The site is a large waterhole in the bed of a small rocky creek which crosses the walking track. The waterhole is partially covered by ferns but is noticeable from the track. It was recorded in 1993 as a large rock pool with four grinding grooves and three narrow channels that have been cut by metals tools, probably European origin.

During the visit two obvious grooves were observed. The other two grooves are less obvious but present.
Impacts
Pedestrian traffic.

Management strategy
Monitor on a regular basis.

7.2 Lane Cove Council

7.2.1 LCC-001

Description
Exposed sandstone platform located in the south east corner of the park. A single wood rail fence has been put up around the site to protect it from pedestrian traffic. A plaque has also been placed explaining the significance of the site.
The site was first recorded in 1899 by W.D. Campbell who observed a lightly cut emu, circle and a single mundoe. The site today is very difficult to define. The engravings are covered with lichen and the grooves are very shallow. During the visit, the emu was located but the circle was only partly noticeable.

**Impacts**

Pedestrian traffic, erosion and lichen.

**Management strategy**

Monitor on a regular basis. Clean the lichen off the sandstone. Consider changing the plaque as it uses terminologies deemed inappropriate today and may cause offense.
Description

This figure is located on a large flat outcrop of sandstone near the cliff edge of the park. It is not too far from the previous site. Vegetation has grown over the engraving concealing the upper body. The figure was recorded by W.D. Campbell in 1899. It is believed that it has been heavily vandalised. The figure is not an engraved outline but that whole inner part of the figure is etched out.

Impacts

Pedestrian traffic and vegetation.

Management strategy

Monitor on a regular basis. Consider cleaning vegetation back.
Description

Sandstone platform found on the western side of a reserve. It is located along a commonly used walking track. There is a boardwalk over the site with a viewing point and signage. Despite these measures, it is still very easy to leave the boardwalk and enter the site. A small trail suggests people leave the track frequently.

During the visit, the site was covered with leaf litter. There are signs of weathering with sandstone exfoliating in places.

The engravings are very visible as they were illegally regrooved (pecked) in the early 2000s. The large engraving is a circular /oblong shape, approximately 12m long and 3m wide. It was originally believed to be a whale but the shape is unusual and not typical of a whale engraving. There is a small waterhole with a boomerang engraving on the south side and two grinding grooves on the north. There is a third grinding groove just to the east of the waterhole.
Impacts
Occasional pedestrian traffic. Weathering and organic debris will contribute to the erosion of the engravings.

Management strategy
Monitor on a regular basis. Look at improving fencing at the entrance to the platform at the side of the boardwalk. Schedule regular cleaning of the site from leaf litter.
Description

A large sandstone platform on the west side of Balls Head. It is located in a very public place and has a boardwalk that passes by above. There are two sections of the site. One large section with a smaller platform just to the north. The site is covered in lichen making the engravings difficult to see. There is graffiti engraved on the platform.

There is a large whale with two figures inside. One figure near the tail is noticeable while the other is difficult to pinpoint. The lichen thickly covers half of the whale engraving. Just south of the whale, a deity figure was observed. The condition is very poor and it is difficult to see. Other figures previously recorded were very hard to find and only small parts of the engravings visible.

At the north section, there is an echidna and eel. Both engravings are in fair condition. They can be difficult to spot in the wrong light. On arrival to site, the echidna was covered with leaf litter.
Impacts
Occasional pedestrian traffic. Weathering and organic debris will contribute to the erosion of the engravings.

Management strategy
Monitor on a regular basis. Clean up the lichen. Carry out regular highlighting.

7.3.3 NSC-049

Description
The site is located on the eastern side of a reserve. It is not easily accessible to public. It was previously described as “two adjoining rock surfaces with five engravings, consisting of an emu, echidna and three fish”.

On the day of visitation, the site was heavily covered with leaf litter. A leaf blower was used to clear the area to search for the engravings. On the day, only two fish were found on a tessellated rock surface. The sandstone platforms each side of this one were searched but no other engravings were located. It is possible that they have been covered by bush growth.

Two fish located
Impacts
Natural weathering and bush growth.

Management strategy
Monitor on a regular basis. Try and locate the other engravings. Keep access restricted from pedestrian traffic.

7.4 Northern Beaches Council

7.4.1 NBCC-174

Description
A small outcrop of rock located in a golf course. The surface is approximately 6m x 4m. The area has been sectioned off with semicircular sandstone wall on one side and a chain on the opposite side. There is signage in place to request golfers remove their spiked shoes if needing to retrieve a ball. The site is covered with a layer of silt and has lichen growing in sections. Grass is growing over in places and there is a cover of casuarina needles on the site.

There are two figures engraved, a fish and a whale, at the edge of a small waterhole. They are in reasonable condition and can be difficult to find in the wrong conditions.

Impacts
Vegetation and golfers spikes.

Management strategy
Monitor on a regular basis. Clean up the site. Remove leaf litter and regularly maintain.
7.4.2 NBCC-175

Description
The site is located in a golf course, on a flat rock that has been fenced off and signposted to keep golfers out. It was previously recorded as being in good condition with engravings consisting of a man spearing a fish, two large fish figures, one small fish figure and a number of grooves.

When arriving at the site it was inundated with vegetation and moisture. Visibility of the sandstone platform was nil.

Impacts
Vegetation and water.

Management strategy
A large scale clean-up is necessary to uncover the site. Monitor on a regular basis. Follow up with ongoing maintenance.
Description

A large sandstone platform located within a golf course. The site is fenced off and sign posted. The sandstone is in very poor condition. Large amounts of sandstone are exfoliating from the surface. The surface is covered in a thick layer of sediment with small roots growing through it.

The site was relocated and recorded by Mary Dallas. At this time, two kangaroos, a fish, a whale and an indeterminate object were observed.

During the visit, only one kangaroo could be located. It was partially covered by ground growth. It is uncertain which kangaroo figure it is.

Impacts

Vegetation and erosion.

Management strategy

Clean location to locate the other figures. Monitor on a regular basis.
Description

This is a series of engravings on a large series of sandstone platforms. The site has been recorded previously as three groups. Group one is the northern most, located at the end of a cul-de-sac. The area has been sectioned off with timber and chains to prevent people from walking on the engravings. There is signage in place that describes the significance of the site.

Many of the engravings in group one are in good condition. There is a large whale, a shield, wallaby...
LARGE WHALE ENGRAVING

SHEL IN WATERHOLE

GRAFFITI AND MOTIFS IN WATERHOLE
**Human Figure**

**Wallaby in Waterhole**

**Group 2**
GROUP 2 HUMAN FIGURE 1

GROUP 2 HUMAN FIGURE 2

GROUP 2 HUMAN FIGURE 3
Impacts
Pedestrian traffic and bicycles. Wear from old barrier chain.

Management strategy
Continue to monitor on a regular basis. Upgrade interpretive signage and barrier protection.
Description

This is a large fairly level outcrop on a high point with a very large engraving of a whale as well as human figures. Access to visitation is limited. The main impacts have been from surveyor markings.
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Aboriginal Heritage Office

HUMAN FIGURE
WHALE

LOWER HALF OF ANOTHER HUMAN FIGURE AT MOUTH OF WHALE

Motif 2 (top of figure visible inside red oval in figure above)

Motif 3

Tracing of motif 4 and edge of motif 1

Oblique of motif 1 and 4 from south
Impacts
No real impacts apart from natural weathering and past surveyor marks.

Management strategy
Monitor on a regular basis.
Description

Three figures on a 60m x 30m outcrop of sandstone on a gentle wide spur. One figure, a ‘cicada’, was recorded in 1899 by Campbell, the other two were subsequently recorded. The ‘kangaroo’ figure is difficult to see, while the third figure is uncertain.

Impacts

Natural weather is the main issue.

Management strategy

Monitor on a regular basis.
Description

There are four human figures, the largest holding a fish in his left hand, and a boomerang is below the right arm. All the figures are clearly cut, with punctures clearly visible along the grooves.
Fish figure

Boomerang under right arm of human figure

Motifs 1 and 2

Motif 4

Tracing of motif 6

Location (left to right) of motifs 5, 6 and 4

Possible additional groove
Impacts
Vegetation encroachment, accumulation of soil and leaf litter covering several motifs (3 and 4).

Management strategy
Monitor on a regular basis. Regular vegetation and sediment clearing.

7.4.8 NBCN-127

Description
This is a large rock platform out of view from the public. Rock engravings are on an area 15 x 10m. Included are a number different shields, clubs, mundoes, a human figure, an emu and unknown crescent shaped objects.
The emu is in good condition.
Impacts
Vegetation encroachment, accumulation of soil and leaf litter covering. Graffiti scratched through lichen has been recent activity with youths.

Management strategy
Monitor on a regular basis. Regular vegetation and sediment clearing. Remove any new graffiti in surface lichen by soft brushing to remove or disguise content.
Description

Engraving of a whale on a vertical sandstone wall. The site is located in a public park area and is easily accessible to the public. The sandstone is weathering making the engraving very difficult to see. The whale is approximately 5.2m long and 1.2m high.
Impacts

The site has been subjected to heavy graffiti in the past and a reoccurrence is always possible. The AHO, OEH and Council removed spray painted graffiti from the site in 2008. Natural weathering is the biggest threat to destruction, with rock decay occurring at the bottom right (western) side of the rock around the mouth of the figure.

Management strategy

Monitor on a regular basis. Rinse rock decay with clean water to remove salts. Follow up.

8.0 Discussion

There are over 1000 recorded Aboriginal sites within the 6 partner councils, of which there are approximately 120 pigment and 240 engraving sites. A total of 22 rock art sites and 17 rock engraving sites were visited and monitored for this project. Re-recording work included 360 photography, stills and drone photography and video. Many sites have already been vandalised or damaged and all sites are subject to natural deterioration. The risk of irreparable damage and loss of art figures increases every year. Yet the project has shown that the rock art in the northern Sydney region is diverse and extensive and has survived even the extensive development and pressures of the urban and city regions. This rock art is an important part of the cultural heritage of Aboriginal people both in Sydney and across Australia. Its preservation will reflect the commitment of the different levels of government and the wider community to Aboriginal people and their culture and to future generations who will want to experience this heritage themselves.

The condition of the sites monitored was generally more weather-worn than in initial recordings. The sandstone surface will naturally wear away through weathering and erosion but today the rates of weathering and erosion are considered to have increased and there are new processes in operation. This rock art will not last forever and yet some of it still looks in excellent condition indicating that with careful management and protection some of the images we see today will still be present for generations to come.

In the course of the work, both in the field and from reviewing past monitoring and research, a number of important issues have been identified that require further examination and thought by those involved with the task of trying to protect the sites into the future. They are highlighted below.

8.1 Detailed Recording

The project identified two previously unrecorded rock art sites and a number of previously undocumented rock art and rock engraving figures at known sites. This shows that with careful monitoring and re-recording, sites can reveal much more than was previously thought, particularly with the assistance of newer digital technologies. Given that the AHO has recorded several previously unrecorded rock art sites in the region in the last few years (through DA inspections and from council staff identifying sites), there is still urgent need to maintain processes that factor in the presence of Aboriginal sites in both the built and natural landscapes.
8.2 Encroachment

The level of vegetation and siltation on rock platforms is known to change and rock engravings can be covered over and then uncovered. The long term implications of this are poorly understood. There is evidence of the gradual burial of rock beneath leaf litter followed by root mass and soil development. Quite large shrubs, usually heath species, can establish themselves on these exposed surfaces given the potential for humic matter to accumulate. Once established they trap further material. Conversely some sites have easily visible engravings that were not initially recorded, which suggests they were previously covered. Comparing old site plans with the present reveals variation in the distribution, both expansion and contraction, of such vegetation/soil patches.

It is uncertain what the impact of changed fire regimes and land management practices after European invasion and later with urban expansion have had on the engraving sites. Aerial photographs reveal the bushland in northern Sydney is more dense and taller than during the 1940s, which was also when one period of intensive rock engraving research took place. It can be assumed that more frequent fires or hot fires close together in time would expose more sandstone, whereas infrequent fires or cool fires would allow soil and vegetation encroachment. Other factors that could affect outcrops include bush regeneration and hazard reduction/ ecological burns, where scrub and moss encroachment is stopped or on the other hand where a mass of dead brushwood falls and creates the right conditions for sediments to accumulate.

ENCROACHING VEGETATION AT ENGRAVING SITE

In terms of site management, it is not clear whether leaving a site under vegetation and soil leads to greater erosion than being exposed to sun, wind, rain and pedestrian and other traffic. Anecdotal evidence suggests grooves first re-exposed appear deeper and easier to see but within a relatively short period of time lose this clarity. This may simply be because the grooves are covered by lichen and there are other superficial surface effects that make it appear to be more weathered. More research is needed, but in the meantime the AHO will follow the recommendations of site conservator David Lambert, who has suggested:

*Soil cover results in chemical weathering which causes the rock to become friable; however mechanical weathering is generally reduced.*

*The worst scenario is therefore one of repeated cover followed by exposure.*

*Previously uncovered engravings should be kept clear of encroaching soil and vegetation. Engravings which have been covered for long periods resulting in a soft and friable rock fabric should either be left covered or, if exposed, consolidated in some way (DECC, 2007: 39).*

8.3 Re-grooving Engravings

There has been ongoing discussion over whether or not to re-engrave or re-groove existing sites. Sites that are known to the general public in exposed areas are perceived to be fainter and less visible than in the past. There is a feeling of loss that such an integral part of the Sydney bush experience might vanish in the foreseeable future. Aboriginal custodians still feel that without knowing the specific stories and having the specific cultural permissions for each site, it would be culturally inappropriate to re-
groove the figures. However, some have already been illegally re-grooved and there are individuals willing to take the matter in their own hands. In most cases illegal re-engraving leads to irreversible damage to the structure of the groove (the traditional profile of the engraved groove) and also the original shape is not followed correctly, leaving a false image. Metal tools are either too sharp or too narrow and destroy the original shape, and the work is done hastily leading to mistakes, and it seems there is little respect for why the images were done in the first place. Given the strong interest in the wider community to re-groove, it is important to try and get an accurate record of the current state of the figures before future vandalism and illegal re-grooving takes place.

D. Lambert & B. Welsh Highlighting Engraving

One method that heritage managers and the community do support is ‘highlighting’ grooves. This is a process whereby Aboriginal people and conservators work together to ‘highlight’ (clean the lichen from) selected engravings regularly visited by the public. This is not re-grooving but does make the engravings more visible and is done after careful preparation to ensure only visible grooves are highlighted, not natural features or imagined ones. This is done regularly by the NSW State Government heritage staff and Metropolitan Local Aboriginal Land Council in some national parks, such as Kur-ing-gai Chase and Sydney Harbour. The re-recording work carried out by the AHO will assist heritage managers carry out this kind of work in the future.

8.4 New Paintings

There have been a number of sites where new hand stencils have been made in recent years, most notably at a Northern Beaches golf course and nearby reserve where allegedly a former employee made hand stencils at two locations. In Willoughby Council several years ago a youth who claimed to be a descendent of the local Aboriginal people camped in a reserve for a short time and around this time a rock art site was vandalised with charcoal circles over the top of original ochre images. In Lane Cove Council a hand stencil in a reserve not previously recorded was at first thought to be an original rock art figure but further investigation showed it matched another hand stencil in a nearby shelter that was noted in an original site recording from the 1980s as a fake. Both images have a fair degree of aging and weathering. Photos from 2001 from one site show the fresher appearance at that time and this gives a reference point to how the stencil has gained a more weathered and aged appearance.

New Stencil and Drawings

Also in Lane Cove the AHO was called to examine a very low overhang next to a school that was considered by other archaeologists to be traditional rock art by Aboriginal children. From the AHO’s perspective, there was no evidence at all to suggest the rough images were not the result of the local school children and in fact some of the materials used to make the images were still present on a rock within the low overhang.

The above information illustrates the need for caution when assessing Aboriginal rock art in the region.
8.5 Rock Climbing

The AHO has anecdotally noticed the increase in repeated use of overhangs by rock climbers. In 2017 an AHO volunteer monitor alerted the AHO to increased climbing activity at one large rock art site in Willoughby. The AHO sought advice from the OEH and consulted a major rock climbing web site to avoid further impacts. Council removed climbing bolts and committed to working with OEH to put up a sign outside the shelter. Climbing activity at a rock art site in North Sydney prompted further action. The AHO did additional investigation at the Willoughby shelter and identified several previously unrecorded art figures, some in the direct climbing route. The AHO consulted with the website about damage at several locations and published an information page on the AHO website, see below, about the damage from climbing and how to avoid impacts to Aboriginal heritage. The climber website subsequently agreed to remove this and several other rock climbs from its website completely. Further climb sites have been identified in the region and are being monitored.

A self-posted photo of a climber in a Sydney overhang – note the potential damage from hand and foot holds.

Similar issues have occurred in The Grampians National Park in Victoria, leading to Parks Victoria in 2019 closing the park to climbers at the behest of the Aboriginal community and Parks staff. With the internet making the exact location of sites easily available to the entire global climbing community for as long as the website remains, it is no longer simply a question of local people and word-of-mouth information that site managers have to contend with. There is an urgent need for heritage managers and reserve managers to develop a strategy with the rock climbing community to ensure fragile rock art sites are not at risk from current and future rock climbing activities.

Sections of AHO Web Page on Rock Climbing (2017)
8.5 Interpreting Sites

In the region of this study the original Aboriginal inhabitants and their culture was severely impacted by the European invasion and the traditional stories associated with the sites are not known (see the AHO’s *Filling a Void* report for more background: AHO, 2015). Yet there is a growing ‘market’ from local residents and national and international visitors to know more about the culture and specifically the meaning of each site and landscape. The demand by some is very intense and the AHO has experienced first-hand the anger of members of the public who feel they are not being told things (“next time please send us a guide who knows something”). There are also individuals who claim to be traditional owners and who claim to have information about some areas that cannot be independently verified and in many cases is not consistent with the historical, archaeological or anthropological record.

It is the AHO view that rock art and rock engraving sites should not be interpreted without explaining that any interpretation is mere speculation as there are no known traditional owners with the traditional knowledge. Even if there were, the non-Indigenous audience should respect traditional knowledge protocols whereby non-initiated or non-authorised individuals would not be given certain information. In the absence of accurate and reliable information sources, the AHO recommends people be given the opportunity to reflect on why this has occurred rather than try to fill the void with inaccurate, fanciful or misleading information.

> It is part of the story of this place that there is no certainty over tribal names, language groups or dreaming stories. To project the opposite is to continue this fiction. There is still need for further research and investigation, both historical and archaeological, to look for new or missed information. However, part of the history of Australia is that Aboriginal people died in the first conflicts between the new and the old, survivors were discouraged or forced to stop speaking their language, practising ceremony and passing on culture to their children, and traditional knowledge was hugely affected (AHO, 2015: 41).

8.6 Streamlining Site Management

It is clear that more direct management is required for many rock art and rock engraving sites to remove graffiti, discourage repeat attacks, deter pedestrian traffic and deal with natural impacts. The current approach requiring direct supervision by a state government officer or an Aboriginal Heritage Impact Permit (which is designed for development rather than site conservation) for certain works is cumbersome and does not provide a process by which important site conservation works can be done in a timely manner in an environment of limited funds.

The AHO would suggest a new approach be taken by which a system of authorised activities can be established for specific organisations and / or individuals that have been trained and have limited
authority to carry out non-harming site conservation tasks. Highlighting rock engravings, removing encroaching vegetation and sediment, and removing graffiti away from the art/engraving sensitivity area could be carried out by such authorised individuals or teams. Other, more technical management works, could be authorised following a more detailed assessment process. The AHO has previously recommended a separate permit category be established for site conservation works. Asking people who are wishing to protect sites to apply for a permit to ‘harm’ a site is insulting and is a discouragement from active site protection works. The current permit system also requires a DA (development assessment) as part of the application, even though a development activity may not be part of the proposal.

Clearly more investment is required in developing improved bureaucratic processes, training and site management. The very low numbers of sites given any particular site management assistance since the commencement of the National Parks and Wildlife Act 1974 suggest that the current system is ill equipped to provide the necessary framework needed to protect Aboriginal heritage into the future.

Next Steps

In terms of site management strategies, the current strategies implemented by Councils through the AHO appear to be working and helping to reduce impacts to rock art and engraving sites. Ongoing monitoring of sites is crucial to ensure any impacts that occur are addressed in a timely manner. Due to the large number of sites in the region and in or close to the urban area, continuing the use of volunteers as casual monitors is very helpful in providing more frequent visits and an ‘early warning’ system. Volunteers should have Aboriginal Sites Awareness Training so that they understand the importance of Aboriginal heritage, the limits of their role and the appropriate reporting channels.

Continuing local initiatives such as the AHO partnership should continue to allow locals and visitors alike to learn more about the rich local Aboriginal heritage of the region. The presence of graffiti in various forms and examples of destruction highlight the need to ensure educating members of the local community, both children and adult, continues as a means to help reduce such human impact.

Training of Council staff is also an important part of successful site protection. The AHO’s Aboriginal sites awareness training programs for outdoor, compliance and planning/project management staff should be continued.

Re-recording and monitoring of all rock art and rock engraving sites should be carried out. The identification of new figures on previously recorded sites and new figures in the vicinity of recorded sites – representing new sites – shows that this process provides valuable new information. Councils’ AHO is able to do monitoring of existing sites, however, proper recording of motifs and relocating poorly described sites would require additional staff and resources and therefore further funding applications should be considered. The NSW Government should provide more support to local government initiatives where data is being corrected and updated. The AHO has made substantial improvements to the site data in the region but does not have the resources to provide all of this material to AHIMS and it is not the role of local government to do this alone.
9.0 Recommendations

These recommendations are based on the results of the work carried out and outlined above and the issues raised in the Discussion section.

9.1 Site Management

In terms of site management, it is recommended that:

- individual recommendations for sites in this report are actioned.
- a conservation management plan be made for each site that includes short and long term issues, such as graffiti removal, erosion/vegetation control and pedestrian/bike management.
- individual sites be given appropriate ongoing management as specified below.
- Discussion topics raised above (Section 8) be investigated further and opportunities sought by all relevant parties to improve the way that heritage is currently managed.

8.2 Monitoring Strategy

In terms of site monitoring, it is recommended that:

- Where no adequate site plan exists, a new plan will be drawn up and include current figures and relevant landmarks.
- Photographs be taken at similar points to current images so that the monitor events can be more easily compared. Photographic points should be noted on the plan.
- Monitoring to be carried out every 2-3 months if possible. Otherwise annually.
- Volunteer monitors to be trained and given appropriate sites to visit to increase the regularity of monitoring, particularly of fragile sites.

8.3 Education and Training

Photographs and video such as those taken for this project will be used in brochures, presentations and other promotions to:

- Reveal the significant and diverse rock art heritage of the Sydney region.
- Provide contrast between the different Aboriginal engraving traditions in regions across Australia.
- Be a resource for Aboriginal people.
- Illustrate existing damage and the detrimental effect of graffiti to encourage greater awareness and the need to protect such sites.

It is recommended that education and training strategies include information about repainting, re-grooving, and rock climbing, that is, that:

- It is illegal to repaint and re-groove figures and heavy penalties apply to perpetrators.
- Repainting and re-grooving is likely to cause permanent damage and defacement to the site and can irreparably disfigure the original figure.
- The Aboriginal custodians currently do not support repainting and re-grooving and it is considered culturally inappropriate.
- Rock climbing can cause permanent damage to sites and great care needs to be exercised when climbing in overhangs (which is actually banned in most Council reserves).
It is recommended that Council staff training be continued and this training should incorporate issues relating to rock art and engraving such as:

- Hazard reduction and ecological burns.
- Bush regeneration.
- Operation of vehicles and mechanical equipment in the area of sandstone outcrops and overhangs.
- Planning and assessing activities that may impact Aboriginal heritage.

8.4 Future Rock Art and Engraving Recording

It is recommended that the program of re-recording sites be continued for those sites that were not located or recorded. New site plans should be carried out as part of the conservation management plans and incorporate old site card information with current information.
REFERENCES


Department of Environment, Climate Change, and Water, 2010. Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW.

Department of Environment, Climate Change, and Water, 2010. Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW.


