

# Snowy Mountains Iconic Walk Project, Kosciuszko National Park: Aboriginal cultural heritage assessment.

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By  
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Report to NSW National Parks and Wildlife Service  
Jindabyne

Frontispiece: Photo: Field survey at Porcupine Rocks. S. Feary.

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## Definitions & Acronyms used in report

ACHAR	Aboriginal Cultural Heritage Assessment Report
AHIP	Aboriginal Heritage Impact Permit
asl	above sea level
BP	Before Present
EP&A Act	NSW <i>Environmental Planning and Assessment Act 1979</i>
KNP	Kosciuszko National Park
LGA	Local Government Area
LALC	Local Aboriginal Land Council
NP	National Park
NP&W Act	NSW <i>National Parks and Wildlife Act 1974</i>
NPWS	National Parks and Wildlife Service
OEH	NSW Office of Environment & Heritage
RAP	Registered Aboriginal Party
REF	Review of Environmental Factors
Study area	the area identified by the AHIMS search
Subject area	the area to be directly affected by the proposal. That is, the footprint of the proposal.

## Executive Summary

Southern Ranges Branch of National Parks and Wildlife Service (NPWS) intend to develop a walking track to connect ski resort and other areas in Kosciuszko National Park. This will provide a constructed track of approximately 45 kilometres in length comprising 20-25 kms of new track and upgrading or realigning approximately 20 kilometres of existing tracks. Options for the track alignment are still under consideration with the final route to be determined pending relevant cultural and natural heritage assessments. The proposed development is predominantly in the alpine and subalpine zones, with some sections descending into and along the Snowy and Thredbo river valleys.

No previously recorded Aboriginal sites are on any of the alignment options, but several are located in the general vicinity and areas of cultural significance associated with natural features are also known to occur. Predictive models for the high country indicate that small artefact scatters representing transitory movement may be present in saddles and along ridgelines in the alpine and subalpine zones, associated with summer visits to harvest bogong moths and conduct ceremonies. River valleys may contain larger sites reflecting longer term occupation and/or larger Aboriginal populations.

Aboriginal consultation for the assessment was conducted in accordance with the NSW Office of Environment and Heritage (OEH) requirements for Aboriginal consultation. A total of 16 individuals and groups responded to the initial invitation for consultation, the majority identifying with the Murrin clan from the south coast. Members of the Southern Aboriginal Working Group (SAWG) established under the Kosciuszko National Park Plan of Management were also invited to register an interest in being consulted and two responded. Three groups responded to the draft report, and all endorsed the recommendations. Additionally the Bega LALC requested that any artefacts should be left on country and the Didge Ngunawal Clan requested that artefacts be given back to local tribes and/or used for educational purposes.

Field survey was conducted for all new route options from 15-19 May 2017, with much of the route presenting logistical challenges in regard to very thick ground cover vegetation and steep terrain. Consultant archaeologists Sue Feary and Gerard Niemoeller carried out the field survey, together with representatives from Bega Local Aboriginal Land Council (LALC) and SAWG. Chris Darlington and Graham Weston from NPWS assisted with fieldwork and provided essential logistical support.

The field survey identified one site, a small artefact scatter on Guthrie saddle at 1800 metres a.s.l. The track has been realigned to totally avoid the site, including a 10 metre diameter buffer. Effective survey coverage of new sections of the walking track was almost nil due to very heavy vegetation cover, with the majority of the route assessed as having very low archaeological potential due to steepness, paucity of Aboriginal food resources [ except seasonal bogong moths] and the weather conditions.

The report recommends that an Aboriginal Heritage Impact Permit (AHIP) is not required for the proposed walking track alignments investigated for this assessment, as no known sites will be impacted.

However, because of poor ground visibility during the field survey, it is recommended that locations identified as having potential for sites to be present should be re-surveyed once vegetation has been cleared [only relevant where pavers are to be laid, not where the raised platform is to be installed]. If any objects are found, an OEH authorised person should be present to collect or move the artefacts to the side of the track out of harm's way, if this approach is endorsed by the registered Aboriginal groups. Any such sites would be recorded and put on the AHIMS database. If authorised movement is not possible, works will need to cease at the location and an AHIP will be required.

In situations where the final track alignment is outside of the area that has been assessed, a due diligence process will be conducted for locations with potential to contain Aboriginal objects. If objects are found, they should be avoided by the track or an OEH authorised person should collect or move them. If this is not possible, an AHIP will be required.

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## 1. Introduction

This report describes the Aboriginal cultural heritage assessment undertaken in respect of proposals by the Southern Ranges Branch of National Parks and Wildlife Service of the NSW Office of Environment and Heritage to develop a walking track to connect ski resort and other areas in Kosciuszko National Park, in southern NSW. This will result in a walking track of approximately 45 kilometres in length comprising 20-25 kms of new track and upgrading or realigning approximately 20 kilometres of existing tracks. Options for the track alignment are still under consideration with the final route to be determined pending relevant cultural and natural heritage assessments. The proposed development is predominantly in the alpine and subalpine zones, with some sections descending into and along river valleys.

Several previously recorded Aboriginal sites are located close to the proposed alignment and areas of cultural significance associated with natural features are also known to occur. Predictive models for the high country indicate that small artefact scatters representing transitory movement may be present in saddles and along ridgelines in the alpine and subalpine zones, associated with summer visits to harvest bogong moths and conduct ceremonies. River valleys may contain larger sites reflecting longer term occupation and/or larger Aboriginal populations.

Environmental scoping is being undertaken to assess the potential impact from the development (Biosis, 2017). If NPWS decide to proceed with the project a Review of Environmental Factors (REF) will be prepared to assess all options of the proposed path to meet the requirements of Part 5 of the *Environmental Protection and Assessment Act 1979* and Section 228 of the EPA Regulation 2000. As the proposed activity is occurring in Kosciuszko National Park, REF preparation will be guided also by the requirements of the Kosciuszko National Park Plan of Management (Department of Environment and Conservation (NSW), 2006). Development approval will require an amendment to the Kosciuszko National Park Plan of Management .

The Aboriginal heritage assessment and report preparation have been conducted in accordance with relevant OEH guidelines and codes (DECCW, 2010a; DECCW, 2010b; OEH, 2011) and relevant sections of the Kosciuszko National Park Plan of Management (Department of Environment and Conservation (NSW), 2006).

### 1.1. Description of proposal

The proposal involves development of a 'Snowy Mountains Iconic Walk'; comprising 45 kilometres of constructed walking track from the top of the Thredbo Ski Lift , following the existing Main Range walk to Charlottes Pass, then descending into the Snowy River valley to connect with an existing walking track to Guthega, then ascending to Perisher mountain and then down to Perisher Gap, to link up with existing Porcupine Rocks Walk, followed by a very steep descent into the Thredbo valley to connect with existing walking tracks at Bullocks Flat. The walk will require construction of approximately 20 kilometres of new track and will utilise approximately 25 kilometres of existing tracks, sections of which will be upgraded or

realigned. Currently several options are under consideration for some sections of the track, with the final alignment dependent on heritage, engineering and statutory matters.

## **1.2. Objectives of assessment**

The objective of the archaeological assessment is to establish whether or not construction of the new track sections or realignment/upgrading of existing sections will result in harm to Aboriginal objects or places of cultural significance to Aboriginal people. A major goal of the assessment is to find ways to avoid any recorded sites, by realigning the track where feasible.

The assessment will determine the need or otherwise, for an Aboriginal Heritage Impact Permit (AHIP) and any associated conditions where appropriate. The assessment will involve: field investigation; description, analysis and significance assessment of all objects found and their associated landscapes; synthesis and analysis of relevant archaeological data, historical and anthropological information; Aboriginal consultation; providing recommendations and technical advice; and preparing a report that meets relevant OEH standards and guidelines, to support an AHIP application should one be necessary.

## **1.3. Personnel**

The assessment and report preparation have been conducted by consultant archaeologists Sue Feary and Gerard Niemoeller with valuable assistance and logistical support from Chris Darlington and Graham Weston from NPWS. Ronnie Thomas from Bega Local Aboriginal Land Council and Derek Davison representing the Southern Aboriginal Working Group (SAWG)/Ngarigo, participated in field survey over five days. David Dixon Jnr. assisted with two days of fieldwork, also representing SAWG. Eden LALC was invited to send a representative to participate in fieldwork.

## **1.4. Aboriginal consultation**

The assessment includes an Aboriginal consultation process conducted in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010a). The study area is within the Bega and Eden LALC boundaries. Sixteen Aboriginal parties registered an interest in being consulted and were sent the draft methodology for the field survey and offered the opportunity to share cultural information and to provide recommendations for management of any Aboriginal objects likely to be impacted by the proposed development. There were seven responses to the circulated documentation, supporting the methodology and /or seeking employment opportunities. The draft ACHAR was circulated to registered parties for comment.

Several appendices in the ACHAR include detail relating to the Aboriginal consultation process. At the request of NPWS, Appendices 5 and 8 have been omitted to protect the privacy of Aboriginal people who provided input into the assessment.

## 2. Aboriginal consultation

The consultation process for this project has been in accordance with Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW, 2010a). The consultation process was conducted by Chris Darlington from NPWS with assistance from Sue Feary. Steps taken in the consultation process were as follows:-

### 2.1. Notification

A list of Aboriginal parties to be consulted in regard to proposed activities was compiled from the following sources:-

- Responses to an advertisement seeking expressions of interest for being consulted in regard to the proposed development, placed in the Monaro Express and Bega District News on 29<sup>th</sup> and 28<sup>th</sup> March 2017 respectively (see Appendix 1 for newspaper advertisement).
- The membership list for the Southern Aboriginal Working Group (SAWG). This group was established under the KNP Plan of Management and comprises families of knowledge-holders with cultural connections to KNP country (see Table 1 for list). On 2nd April 2015, a letter was sent to all SAWG members by post or email asking if they wanted to be consulted in regard to the development proposal (see Appendix 2).
- A list of registered Aboriginal groups with a potential interest in being consulted regarding the proposed works was provided by the NSW Office of Environment and Heritage’s Queanbeyan office on 17 March 2017, viz. Aboriginal groups registered in the Snowy-Monaro Local Government Area. The area falls within the boundaries of the Bega and Eden LALCs, who are both registered with OEH for Snowy-Monaro Shire. Forty-six parties were on the list, of which 17 live on the south coast and are affiliated with the Murrin clan whose boundaries were described as extending *‘from the Hawkesbury River to the Snowy River’*. The list includes all current members of the SAWG.
- On 28th March 2017 all OEH registered groups were notified by post or email asking if they wanted to be consulted in regard to the proposed development (see Appendix 3).

**Table 1: Southern Aboriginal Working Group members**

David	Dixon
Iris	White
Doris	Paton
Sharon	Stewart

3. All the organisations listed on page 10, Section 4.1.2, of the OEH consultation requirements (DECCW 2010a) were contacted by email on 31st March 2017 (see Appendix 4 for a sample letter)

## 2.2. Outcome of notification process

- Table 2 lists the 16 groups/individuals who registered an interest in being consulted. Registration was by telephone calls and emails, in response to the newspaper advertisement and/or letters to OEH registered Aboriginal groups and agencies and members of the SAWG. Individual responses are at Appendix 5 [removed from this report]. Additionally, several groups provided information regarding their cultural/family connections to the Snowy Mountains. It should be noted that several parties on the OEH list could not be reached because their email addresses did not function and no alternative contact details were provided.
- NTSCorp, NNTT and LLS acknowledged the request but did not respond further. The Aboriginal Land Rights Registrar advised there were no registered Aboriginal Owners for the subject area (Appendix 6)
- Snowy-Monaro Regional Council advised they would pass the information on to relevant Aboriginal stakeholders for whom they have contact information (Appendix 6).
- A search of the NNTT website revealed no registered native title claims over the subject area.

**Table 2 : Response to invitation to register an interest**

<b>Stakeholder</b>	<b>Date of response to NPWS</b>	<b>Mode of communication</b>
Bega Local Aboriginal Land Council	05/04/2017	Email
Biamanga	12/04/2017	Email
Corroboree Aboriginal Corporation	02/04/2017	Email
Cullendulla	12/04/2017	Email
David Dixon	28/03/2017	Email
Ninde Ngujarn Ngarigo Monero Aboriginal Corporation (Doris Paton)	11/04/2017	Email
Ginninderra Aboriginal Corporation	06/04/2017	Email
Goobah	12/04/2017	Email
Gulaga	12/04/2017	Email
Didge Ngunawal Clan	28/03/2017	Email
Muragadi Heritage Indigenous Corporation	13/04/2017	Email
Murramarang	12/04/2017	Email
Gunjeewong Cultural Aboriginal Corporation	13/04/2017	Email
Murra Bidgee Mullangari Aboriginal Corporation	06/04/2017	Email
Ramsay Freeman – Snowy Mountains Indigenous Elders	12/04/2017	Telephone
Iris White	12/04/2017	Telephone

The following stakeholders were added to the list of registered parties for this project, based on an assumption that they would hold an interest (Table 3).

**Table 3: Additional groups added to register**

<b>Stakeholder</b>	<b>Reason for being added to the list of registered Aboriginal parties</b>
Sharon Stewart	Southern Kosciuszko Aboriginal Working Group member
Eden Local Aboriginal Lands Council (ELALC)	Some of the areas where the tracks would be located are in the boundary area of Eden Local Aboriginal Land Council

### **2.3. Stages 2 and 3: Presentation of information about project, and gathering information about cultural significance**

- Due to the large number of RAPs seeking to be consulted, many who live on the coast, a 4 hour drive from the subject area, and the relatively small-scale of the proposed development, it was not feasible to hold a project meeting. Detailed information was distributed to all registered parties on 12 April by email as per Sections 4.2 and 4.3 of OEH’s Aboriginal consultation requirements, comprising ;
  - more information on the proposed track extension and its potential impacts on Aboriginal heritage
  - a draft methodology for conducting the Aboriginal heritage assessment, including field survey
  - seeking comment on potential management recommendations
  - a list of queries regarding the cultural significance of the area , to assist NPWS in planning and design of the proposed track See Appendix 7 for information sent to registered parties.

Table 4 summarises responses from RAPs in regard to Stages 2 and 3 of the Aboriginal consultation process [Appendix 8 has details of individual responses - removed from this report].).

**Table 4: Responses to Stages 2 and 3 Aboriginal consultation**

<b>Stakeholder</b>	<b>Mode of communication</b>	<b>Date</b>	<b>Summary of communication</b>
Didge Ngunawal Clan	Email	11/5/2017	Requested update on project
Corroboree Aboriginal Corporation	Email	08/05/2017	Supportive of the proposed methodology
Ginninderra Aboriginal Corporation	Email	03/05/2017	All artefacts should be returned to country. Proposed methodology consistent with views. No additional recommendations to be applied.
Gunjeewong	Email	05/05/2017	Agree with the recommendations of Sue Feary and

Cultural Aboriginal Corporation			Gerard Niemoeller
Murra Bidgee Mullangari Aboriginal Corporation	Email	03/05/2017	Satisfied with the comments and recommendations made by Sue Feary, Gerard Niemoeller and Chris Darlington
Muragadi Heritage Indigenous Corporation	Email	05/05/2017	Agree with the recommendations
Iris White	Telephone	12/05/2017	Informed that the name of the rocks above Thredbo Diggings and the creek (Lubra) is an offensive term and that ideally a change of name should be made for these rocks and the creek. Proposed that at the next Working Group meeting, Sue Feary could attend and discuss the project in further detail with the group

Iris White and Sue Feary developed a cultural protocol by telephone on 18 May 2017 regarding Aboriginal men's potential proximity to Lubra Rocks and Porcupine Rocks during field survey.

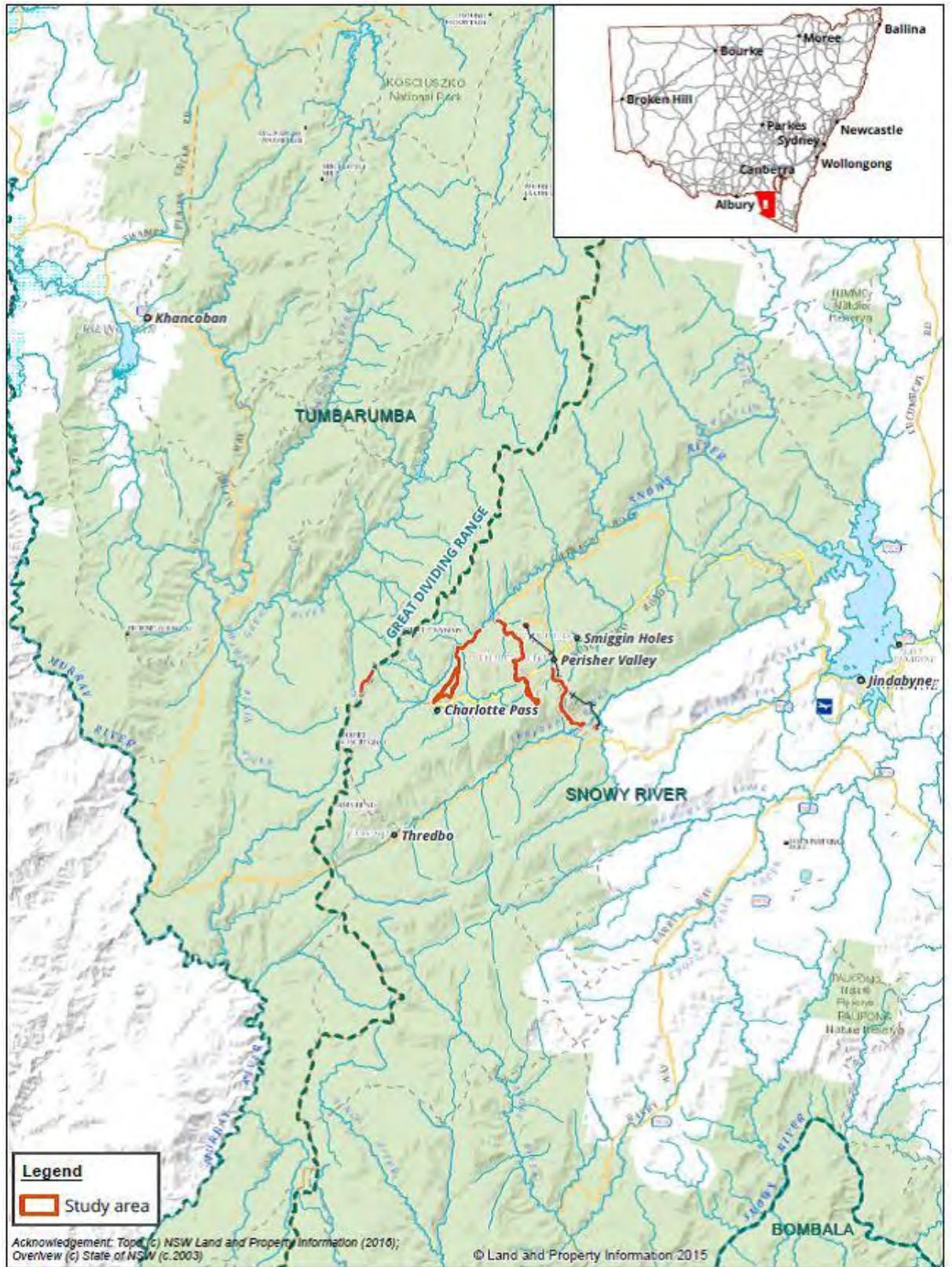
## 2.4. Stage 4: Review of draft ACHAR

A copy of the draft ACHAR was sent to all registered parties for comment and feedback on 10 August 2017, for responses within a 28 day period. Three responses were received, all endorsing the recommendations of the report. Additionally the Bega LALC requested that any artefacts should be left on country and the Didge Ngunawal Clan requested that artefacts be given back to local tribes and/or used for educational purposes. Bega LALC also pointed out that the intangible cultural values of the mountain landscape are always a consideration, even if they not articulated in a written report.

## 3. Description of the area

### 3.1. Location

The subject area is in the South East Highlands alpine and subalpine regions of southern NSW, on the southern and eastern fall of the Snowy Mountains from the Main Range at 2228 metres asl to 900 metres asl in the Thredbo valley. The nearest town is Jindabyne a few kms to the east, with Cooma approximately 70 kms to the northeast (Figure 1). The area is entirely within Kosciuszko National Park. The proposed development is covered by the Perisher Valley 1:25K topographic map.



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Figure 1: Location of the study area  
 Matter: 24791  
 Date: 26 June 2017  
 Checked by: MIAL, Drawn by: LH, Last edited by: Ianley  
 Location: P:\24700s\24791\Mapping\

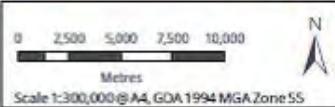


Figure 1: Location of study area. Source Biosis (2017)

## 3.2. Biophysical setting

According to the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010: 8), the purpose of reviewing the landscape context is to assist in the determination or prediction of:

- the potential of the landscape, over time, to have accumulated and preserved objects;
- the ways Aboriginal people have used the landscape in the past, with reference to the presence of resource areas, surfaces for art, other focal points for activities and settlement, and
- the likely distribution of the material traces of Aboriginal land use based on the above.

Consideration of the landscape is essential to the definition and interpretation of Aboriginal land use across a landscape. The landscape will provide clues as to those areas of land that may have been more intensively used by Aboriginal people in the past, and also provide the context within which the material remains of past Aboriginal occupation may be preserved and detectable (DECCW 2010:8).

According to the landscape classification system described by Mitchell (2002) the project traverses across four landscapes within the Australian Alps and South East Highlands Bioregions. The majority of the proposal occurs within the Alpine Meso Ecosystem consisting of the Main Range Sub Alpine and the Alpine Zone landscapes. The remainder occurs within the Main Range Montane and Jindabyne Plains landscapes.

Mitchell (2002a:14) describes a meso-ecosystem as groups of ecosystems representing larger natural entities based on topography and geology. Ecosystems can be described as communities of organisms interacting with one another and with the abiotic parts of the environment in which they live. This definition is independent of scale. Mitchell (2002a:9). A description of the project area after Mitchell (2002) is provided below.

### *Australian Alps Bioregion*

#### **Alpine Zone (Azo) -**

High plateau and block faulted ranges on Silurian-Devonian gneissic granite and granites, with a linear unit of Ordovician greywacke, phyllite and schist above the tree line at 1800m. Mountain peaks, scree slopes and tor covered rounded hills stand above the plateau, local relief 450m. Relic Pleistocene cirque glacier landforms and glacial lakes, block streams and periglacial solifluction lobes. Wet, uniform textured alpine humus soils and peat with abundant organic matter, steep slopes have stonier, shallow profiles. Tussock grasslands, alpine herb field, rare feldmark, snow patch communities, valley and raised bogs, all with high endemism. Common species include; prickly snow grass (*Poa costiniana*), alpine wallaby grass (*Danthonia nudiflora*), ribbon grass (*Chionochoa frigida*), silver snow daisy (*Celmisia asteliifolia*), alpine sunray (*Leuchrysum albicans*), mountain celery (*Aciphylla glacialis*), mountain plum pine (*Podocarpus lawrencei*), mountain gentian (*Gentianella diemensis*), white purslane (*Neopaxia australasica*), coral heath (*Epacris gunnii*), carpet heath (*Pentachondra pumila*), eye-bright (*Euphrasia collina*), sky lily (*Herpolirion*

*novae-zelandiae*), alpine rice-flower (*Pimelea alpina*), yellow kunzea (*Kunzea muelleri*), silver ewartia (*Ewartia nubigena*), felted buttercup (*Ranunculus muelleri*), anemone buttercup (*Ranunculus anemoneus*), sphagnum (*Sphagnum cristatum*), alpine bog-rush (*Schoenus calypttratus*), and sedges (*Carex* spp).

### **Main Range Sub-alpine (Mai) - Alpine Meso-Ecosystem**

High plateau and block faulted ranges on Silurian-Devonian gneissic granite and granites, with a linear unit of Ordovician greywacke, phyllite and schist below the tree line with general elevation from 1500 to 1800m. Mountain peaks and tor covered rounded hills stand above the plateau, extensive plains and valley swamps on a dendritic drainage network, local relief 300m. Limited areas of Pleistocene block streams and slope deposits. Uniform textured alpine humus and transitional alpine humus soils and peat with abundant organic matter, steep slopes have stonier profiles over deeply weathered bedrock. Open to dense sub-alpine woodlands of snow gum (*Eucalyptus pauciflora*) with extensive open grasslands, fen, heath and bogs controlled by cold air drainage and soil moisture. Black sallee (*Eucalyptus stellulata*) marginal to streams on the high plains. Typical shrubs and ground cover species include; snow grasses (*Poa* spp.), wallaby grasses (*Austrodanthonia* and *Danthonia* spp.), silver snow daisy (*Celmisia astelifolia*), alpine orites (*Orites lancifolia*), alpine hovea (*Hovea montana*), mountain shaggy-pea (*Oxylobium alpestre*), alpine rice-flower (*Pimelea alpina*), speedwell (*Veronica serpyllifolia*), scaly everlasting (*Ozothamnus hookeri*), Tasman flax-lily (*Dianella tasmanica*), mountain gentian (*Gentianella diemensis*), variable groundsel (*Senecio lautus*), and native dandelion (*Microseris lanceolata*).

### **Main Range Montane (Mam) – Montane Meso Ecosystem**

Well-drained steep slopes on Silurian-Devonian gneissic granite, granite and granodiorite and Ordovician slate, chert, quartzite and phyllite. General elevation 1000 to 1500m but ecosystem boundaries vary with aspect. Soils are intermediate in character between low elevation texture-contrast profiles and higher elevation organic uniform profiles. Their properties vary with bedrock; gritty clay loams on granites and pedal red to yellow clay subsoils on meta-sediments.

Tall forests in moist, high rainfall environments with; alpine ash (*Eucalyptus delegatensis*), mountain gum (*Eucalyptus dalrympleana*), narrow-leaved peppermint (*Eucalyptus radiata*), manna gum (*Eucalyptus viminalis*), brown barrel (*Eucalyptus fastigata*), snow gum (*Eucalyptus pauciflora*), mountain hickory wattle (*Acacia obliquinervia*) and silver wattle (*Acacia dealbata* ssp. *alpina*). Moist gullies support soft tree fern (*Dicksonia antarctica*), with blackwood (*Acacia melanoxylon*), southern sassafras (*Atherosperma moschatum*) and hazel pomaderris (*Pomaderris aspera*). Sphagnum bogs (*Sphagnum cristatum*) with candle heath (*Richea continentis*) and swamp heath (*Epacris paludosa*) occur at the head of most creeks.

## **South East Highlands Bioregion**

### **Jindabyne Plains (Jbv) – Monaro Meso Ecosystem**

Wide open valleys and plains at a general elevation of 800 to 900m with surrounding low ranges and rounded peaks to 1100m on massive Silurian-Devonian granite and granodiorite. Shallow gravelly loams on slopes, extensive red and yellow texture-contrast soils on slopes, two or three terraces marginal to the main streams with dark coloured gritty uniform loams and clays in alluvium. Dry tussock grassland of rough and variable spear grasses (*Austrostipa variabilis*) with kangaroo grass (*Themeda triandra*) on valley floors, patches of open snow gum (*Eucalyptus pauciflora*) and black sallee (*Eucalyptus stellulata*) woodland on hills, open forest of yellow box (*Eucalyptus melliodora*), Blakely's red gum (*Eucalyptus blakelyi*), with mixed understorey on moister ranges merging with adjacent landscapes.

More detailed environmental data is included within the REF (Biosis 2017) prepared for this proposal.

### *Geology*

A primary reason archaeologists review geological information as part of their assessments is to understand whether the study area contains or is close to sources of stone raw material which may have been suitable for the manufacture of stone tools. Stone tools are the most commonly found trace of Aboriginal activity and occupation and, unlike many other forms of occupation evidence, are an enduring remnant in the archaeological record.

Although most geological maps generally present the underlying bedrock geology of a region, this information provides clues as to whether any surface outcrops or stone raw material deposited in creeks or rivers of suitable stone might be expected. Limited geological data is available for the study area and Kosciuszko National Park. Mapping available from the NSW Resources and Energy website ([www.resourcesandenergy.nsw.gov.au](http://www.resourcesandenergy.nsw.gov.au)) shows that the proposed walking tracks and the surrounding area of Kosciuszko National park occur on the Tallangatta 1:250 000 Geological Map (SJ/55-3, 1966). The map shows very little geological variation for location of the study area and surrounding area of KNP and consists of Silurian trans-type granites of between 419 to 443 million years old. The Silurian formation consists of metamorphorites and parautochthonous granite gneiss and granite (including Bethanga Gneiss and Grey Mare Granite. The granites of this area include quartz feldspar muscovite biotite and cordierite. Some granite may be porphyritic - where larger crystals (typically feldspar) are surrounded by smaller ones.

The map also shows a large north east tending band of Ordovician sedimentary formation occurring some 3.5 kilometres to the north west of Charlottes Pass. This formation is between 443 to 491 million years old and comprised dominantly interbedded quartz-rich sandstone, siltstone and mudstone. These were deposited in turbidity currents along the continental slope and deeper ocean water. Deep water chert is also a common feature, suggesting quiet, deep water conditions during deposition.

### 3.3. History of [Aboriginal] peoples living on the land

The montane and alpine areas of the Australian Alps form the highest part of the Great Dividing Range including its highest peak, Mt Kosciuszko at 2228 metres (Costin 1954). Between the mountain peaks, major rivers such as the Snowy and Mowamba and Thredbo/Crackenback Rivers, have incised deep parallel valleys, arising in the alpine herb fields and descending through montane woodlands to the tablelands. Such valleys would not only have offered shelter to Aboriginal people during cold winter months; they would also have provided travelling routes between the tablelands and high mountain peaks, as well a range of seasonally available resources (Kamminga, 1992; Grinbergs, 2008).

According to ethnographic and ethnohistorical records, the proposed development lies in the traditional country of the Ngarigo people, who occupied the Monaro tablelands and were often referred to as the Monaro tribe, but their territory also included the high mountain peaks of the Snowy Mountains to the west. Ngarigo was the name of both the people and their language. The records of A. W. Howitt, Norman Tindale and R.H. Matthews all place the proposed development within the territory of Ngarigo speaking peoples (see Young 2005).

*The Ngarigo had the Wolgal on the north, the Ya-itmathang on the northwest, the Kurnai on the west and south-west, and the Yuin or Coast Murring to the southeast. The Ngarigo in fact occupied the Monaro tableland. The name of this tribe was that of its language, and the tribespeople called themselves “Murring”, that is “men, indicating that it belong to another nation who used that term in common (Howitt, 1996, pp. 78-79).*



Figure 2: Tribal boundaries southeastern Australia. Source: Young (2005)

As well as 'tribal' boundaries there were also divisions based on location and activity. Howitt called those who lived in the high mountains Bemeringal, from *Bemering*, meaning mountain, which included the Ngarigo people. This distinguished them from people living on the coast, the Katungal and the coastal hinterland, the Paiendra (Flood, 1982).

The alpine and sub-alpine areas were also visited by other groups from the south coast, western slopes and southern tablelands for a range of purposes, including ceremonial activity such as initiation, trade and exchange, or marriage. Ceremonial activity often coincided with harvesting of the bogong moth, which aestivates in crevices in the distinctive massive granite tors found at these altitudes (Flood 1980). Non-Ngarigo speakers would have following cultural protocols for accessing other people's country. The archaeological sites therefore probably represent use and occupation by many different Aboriginal groups, including those from other tribal areas.

Historical records are replete with descriptions of the annual bogong moth feast, almost to the exclusion of descriptions of other aspects of traditional Aboriginal life. Payten (1949) provides a description of the gatherings drawn from the accounts of settlers on the Monaro;

*From Eden, Bega, Braidwood, Tumut, the Upper Murray and Gippsland the tribes wended their way to the tablelands and thence to the foot of the main range. Here a halt was made to observe certain formalities before commencing the feast of several months' duration, usually November, December and January. For these three months the aborigines feasted on the moth, to them a great delicacy and a food which was both plentiful and easily acquired. The excursions of these tribes and groups were contrary to the usual fixed tribal boundaries and knowing the ways of the Aboriginal we would expect that such a migration would be carried out under proper rules and procedures (in Grinbergs 2008:10) .*

Both Young (2005) and Kamminga (1992) give excellent summaries of ethnographic descriptions of large gatherings of Aboriginal people at the foot of the Snowy Mountains conducting ceremonial activities prior to heading to the mountain peaks for the bogong moth feasts. Some granite peaks, such as Dicky Cooper Bogong on the Great Dividing Range north of the ski resorts are named for their association with specific Aboriginal people who had harvesting rights over specific moth locations (Wesson, 2000).

In 1973, archaeologist Josephine Flood set out to establish an overall picture of pre-contact Aboriginal life in the Snowy Mountains, making extensive use of the ethnographic record pertaining to bogong moth feasts (Flood 1980). She concluded that Aboriginal occupation of the high country was largely determined by the weather and the seasonal availability of the bogong moth. Human activity at the highest elevations would have been restricted to the warmer months of the year and during winter months when the peaks are covered with snow, Aboriginal people would have migrated to the more sheltered valleys. Flood (1980) argued that larger occupation sites, possibly the result of repeated and/or extended visitation at

various times of the year, will be found at altitudes up to 1200m. Between 1200m and 1500m, smaller lithic scatters would be the dominant site type, reflecting short term summer camps possibly associated with specialised activities. By and large, subsequent research has supported this model of archaeological site distribution in particular the large numbers of sites in the valleys of Thredbo and Snowy Rivers (Grinbergs 2008).

Subsequent research suggested an overemphasis by Flood and the populist literature, on the influence of bogong moths in interpreting traditional Aboriginal occupation and resource use in the region (Chapman 1978, Grinbergs 1992; Kamminga 1992). Furthermore Sandra Bowdler suggested that the tubers of the daisy yam, *Microseris scapigera* would have been a more reliable staple food, with bogong moth harvesting restricted to special and infrequent ceremonial occasions (Bowdler 1981). However daisy yams do not grow above the montane zone.

Ngarigo people's first encounter with another culture was in 1823, when explorer Captain Mark John Currie who '*passed through a chain of clear downs to some extensive ones, where we met a tribe of natives*' (Hancock, 1972, p. 3). White settlement commenced in the 1830s, disrupting traditional Aboriginal life, although the numerous ethnographic accounts from the 19<sup>th</sup> and early 20<sup>th</sup> of traditional ceremonial activity suggest that cultural integrity remained relatively intact until the advent of the Aborigines Protection Board. Hancock (1972) suggests that the problem pastoralists had with native animals such as kangaroos and possums and dingoes was entirely due to cessation of Aboriginal hunting which kept numbers in control. There is mention of many Aboriginal people in the Jindabyne region dying of starvation during a severe drought between 1824 and 1829 and of a sharp decline in numbers between the 1820s and 1840s.

Aboriginal people worked as stockmen and in domestic employment and there appears to have been considerable movement between the coast and tablelands in relation to whaling, bean and pea picking on the coast in the early 20<sup>th</sup> Century. Once the reserves were set up, Aboriginal people became more dispossessed of their lands and more reliant on government handouts and numbers dwindled from disease, hunger and the gun (Young, 2005). Many Ngarigo people ended up in the reserve at Delegate, set up in 1892 and revoked in 1957.

Although there is a large population of Aboriginal people who identify as Ngarigo in southern NSW today, few live in the Cooma – Jindabyne area, being either at Tumut/Tumbarumba or on the south coast. They continue to have strong connections to country, through participation in management of Kosciuszko National Park by membership of various advisory groups and by employment.

The alpine and subalpine areas of Kosciuszko National Park fall within the jurisdiction of the Bega and Eden Local Aboriginal Land Councils. The Land Council boundaries extend from the coast to the mountain tops in an attempt to reflect traditional movement of Aboriginal between the coast and the mountains.

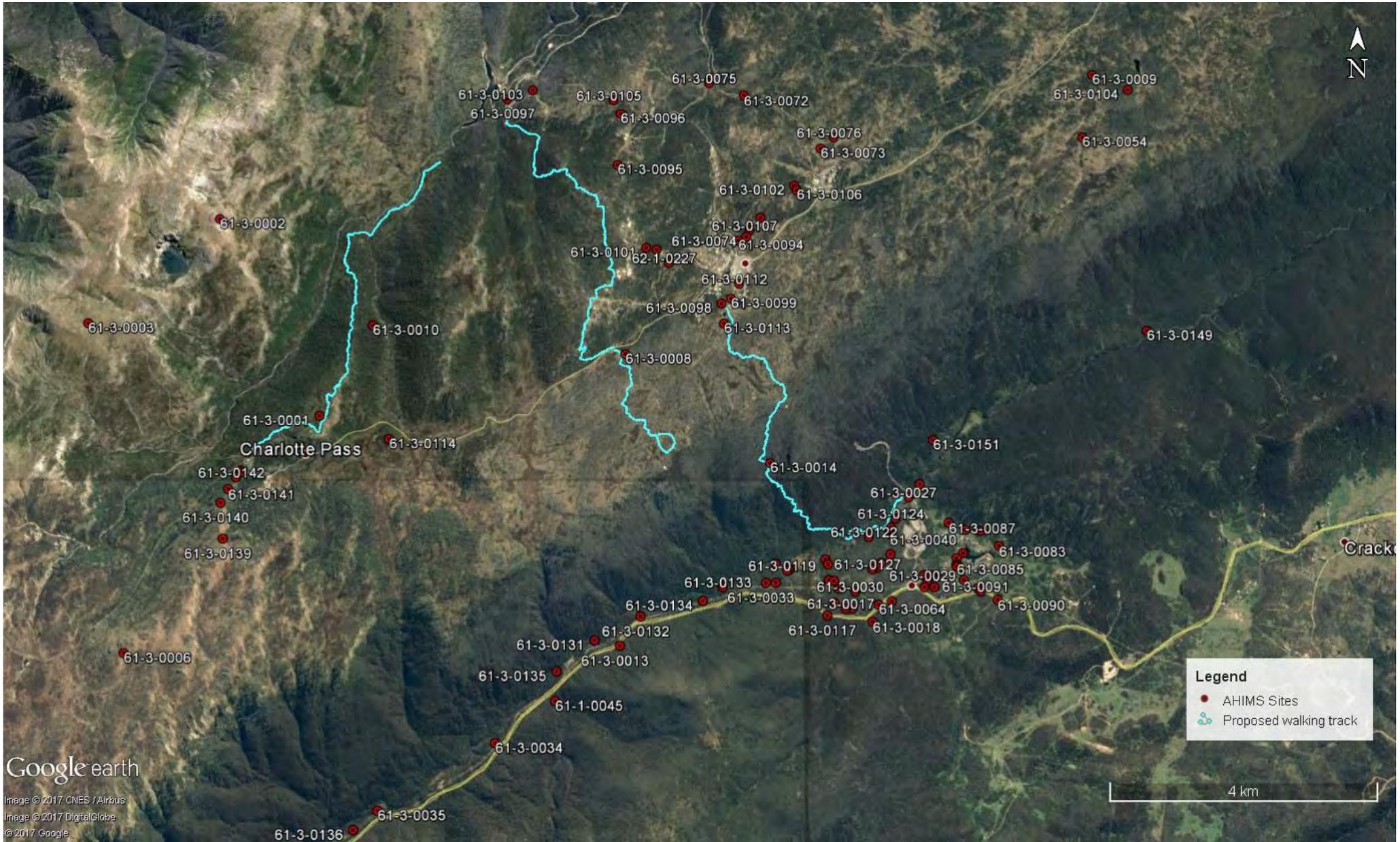
### 3.4 Material evidence

#### 3.4.1. Aboriginal Heritage Information Management System (AHIMS)

A search of the OEH managed AHIMS register was undertaken on 5 April 2017 by Christine Gant-Thompson of OEH. The search listed 118 sites recorded for the area enclosed by grid coordinates shown in Table 5 and the distribution of sites is shown in Figure 3. The image shows clusters of sites in the Thredbo valley and in the Perisher, Charlotte Pass and Smiggins Holes ski resorts, most likely reflecting where surveys have been conducted rather than being a resemblance to a traditional Aboriginal pattern of occupation or use. The full list of sites is at Appendix 9.

Table 5: parameters of AHIMS search [ Z55]

	Minimum	Maximum
Easting	614996	633011
Northing	5958039	5976004



The site features and site types provided by the AHIMS search were analysed to understand what the most commonly recorded site types are in the region and indicate what site types may be expected to occur along the proposed walking track alignment options. Isolated finds have not been distinguished from scatters of more than one artefact.

A review of the AHIMS site data shows that the vast majority of sites are stone artefacts (see Table 6). The numbers of artefacts listed in the AHIMS search can represent either surface scatters or the results of test excavations/salvage which explains the large numbers of artefacts at some sites. The artefact scatter category also includes site 61-3-0145 which is the location of artefacts salvaged from the Bullocks Flat walking track, incorporating widely distributed artefacts from 61-3-0119, listed variously as a single site or six separate sites (Feary, 2008). Site 61-3-0135 is incorrectly listed as containing shell; it comprises a surface scatter of 9 quartz artefacts (Grinbergs, 2008). A rock shelter with deposit has been recorded at Porcupine/Lubra Rocks [which is at Lubra Rocks, not Porcupine Rocks], which is also an important site where, according to the site card, women gathered to collect bogong moths (61-3-0014).

**Table 6:** Frequency of site features extrapolated from AHIMS register search

<i>Site type</i>	<i>Frequency</i>	<i>%</i>
<b><i>Artefacts [ including isolated, surface, subsurface and re-located]</i></b>	102	
<b><i>Stone quarry</i></b>	3	
<b><i>Burials/stone arrangement</i></b>	1	
<b><i>Potential Archaeological Deposit (PAD)</i></b>	9	
<b><i>Rockshelter</i></b>	1	
<b><i>Grinding Groove</i></b>	1	
<b><i>Totals</i></b>	<b>118</b>	

Some of the potential archaeological deposits have been test excavated and found to contain sub-surface artefacts (see Section 3.4.2). However, the site cards have not been updated to reflect these results, which would increase the percentage of recorded artefact assemblages.

The grinding groove recorded on a granite rock in the Thredbo River is in some doubt (Feary 2008).

AHIMS site 61-3-0013 is an historical reference to a burial and stone arrangement above the Thredbo valley but these have never been authenticated. In 1949 R.F. Payten, described ‘three blackfellows graves, of which two are on the Thredbo River , a few miles above the confluence of the Little Thredbo and Thredbo Rivers , comprising mounds of earth covered in stones, about 3 feet high’ (Young 2005 :79), which may refer to the same site. Another example of an historical record is that of a 19<sup>th</sup> Century Aboriginal grave near Jindabyne, recorded by Richard Helms in his article 'Anthropological Notes', in the *Journal of Proceedings of Linnaean Society*, 1895. A newspaper article from 1992 also makes reference to Aboriginal graves in the Thredbo valley (Figure 4).

On the Alpine Way near Thredbo there are five or six Aboriginal graves where the casualties from an inter-tribal fight between the Garigo and the Illamatong are buried. Some of those wounded in the battle sought help from Granny McEvoy at Wollondibby but some of them died there and are buried near the homestead.

Figure 4: letter to the editor of the Cooma Monaro Express 10/3/1992 following discovering of the kangaroo tooth necklace at Bunyan north of Cooma in 1991

No sites are located in the 10 metre wide development corridor of the proposed alignment options.

Nearby sites include;

- site 61-3-0113 a single silcrete flake at the Perisher water reservoir end of the Porcupine Rocks walking track,
- site 63-1-0001 near a saddle on the Guthrie Ridge which has only an approximate location and is described as a moth pestle, collected and now in the Australian Museum,
- Lubra Rocks site below Perisher Valley (61-3-0014). Note this is incorrectly mapped on AHIMS. The correct grid coordinates for this site are 627338/5967228.
- 61-3-0008 is 39 artefacts at Perisher Gap, collected by Jo Flood (Barber, 2015).

### *3.4.2. Regional archaeological context*

The regional archaeological context for the Snowy Iconic Walks proposal is defined here as the Snowy Mountains and tablelands, to distinguish it from its local archaeological context which is defined as the alpine and subalpine region and associated river valleys in Kosciuszko National Park.

Earliest evidence for Aboriginal occupation of the montane region comes from an excavated rockshelter at Birrigai in the ACT whose sparse artefactual evidence indicated fleeting occupation from 21,000 years BP (Flood et al 1987). There is a 3,500 date from an art site at Nursery Swamp, in the montane region of the ACT (Rosenfeld 1983). Excavation in a cave at Yarrangobilly, at the northern end of Kosciuszko National Park gave a date of nearly 10,000 years ago (Aplin, et al., 2010), On the southern tablelands near Cooma, a rare double burial with grave goods including a necklace made from kangaroo teeth gave a date of 7,000 years BP (Feary, 1996). Recent excavations of rockshelters in the ACT suggest an increase

in activity from 2,000 years ago (Theden-Ringl, 2016). Section 3.3 contains further information on the regional archaeological context.

### *3.4.3. Local archaeological context*

#### **Alpine and sub-alpine area – Perisher and other ski resort areas**

Apart from Jo Flood's pioneering work, most knowledge of the archaeological heritage of the alpine/sub alpine area comes from assessments associated with developments in ski resort areas. Previous archaeological investigations of the Perisher Valley and nearby ski resort areas has been ably summarised by Mathew Barber and is reproduced below (Barber, 2015).

Flood (1980) collected 39 artefacts from a site at Perisher Gap at an elevation of 1810m. The gap is a wide saddle that marks a watershed between the head of Perisher Creek and a tributary of Betts Creek. Geering (1983) undertook a survey along the banks of Perisher Creek and a spur of Mount Piper as part of the Skitube assessment. No sites were found but Geering noted that the visibility was poor due to thick grass cover. Surveys of the Blue Cow Ski Resort were carried out by Paton and Hughes (1984). They examined areas that were to be disturbed by development of the resort and associated infrastructure. A section of ridge crest between Back Perisher Mountain and Mount Blue Cow was surveyed as well as areas considered at the time to have potential for containing archaeological sites. These areas were mainly around granodiorite tors and possible Bogong moth aestivation sites. No sites were found but it was noted that visibility was poor.

A survey at a proposed Telecom exchange located on a knoll within the valley floor of Perisher Valley also failed to find archaeological material. The study area was noted as highly disturbed, which limited the possibility of finding sites (Anutech 1988). Navin (1989) examined a proposed ski slope development on the southern spurline of Mount Perisher. The survey was inhibited by light snow and thick vegetation and no archaeological sites were found.

In 1989, Kinhill completed a report on the survey of selected areas for the Perisher Village Master Plan, where a wide range of topographic areas was surveyed. The investigation covered an area of 622 hectares but only a small proportion of this was actually inspected and visibility was low, further reducing the effective coverage and no sites were found.

Grinbergs conducted a survey for the Perisher Valley Sewerage Treatment Plant augmentation works in 1997. Over a study area of 7,200m<sup>2</sup> visibility was only 1% and no sites were located, while the potential for subsurface deposits was considered low due to previous disturbance. Navin Officer Heritage Consultants (NOHC) (1999) carried out a series of small investigations within the Perisher Ski Resort for the proposed development. They recorded an isolated find on a valley slope and another on a spurline shoulder of a knoll (AHIMS #61-3-0102, 61-3-0103). Four artefact scatters were recorded "in locally sheltered, relatively flat spurline topographies in woodland" (NOHC 2000:26) (AHIMS #61-3-0073, 61-3-0227, 61-3-0100, 61-3-0101). The sites were found on vehicle tracks, which provided increased visibility. Two potential archaeological deposits (PADs) were also identified.

The Aboriginal heritage study of the Perisher Range Resorts Area by NOHC (2000) included survey and subsurface testing programs. The testing program excavated 37 pits across eleven different locations

within the resort area. Four test pits were excavated in each of eight locations and the other three locations had either two or one pit. Seven of the eleven locations, and twelve of the thirty seven test pits contained artefacts. From the twelve test pits, thirty three artefacts were found and all but two artefacts were made from quartz, probably obtained locally. The other two artefacts were made from volcanic material (NOHC 2000). Navin Officer found that the artefact densities within the test pits were generally low with nine of the pits only containing one artefact. There were two pits with two artefacts and two pits with three artefacts. The test pit at location PRTL2 (AHIMS #61-3-0093), situated on a valley floor saddle contained sixteen artefacts. The conclusion drawn from the results was that the sites represented short term occupation by small Aboriginal groups (NOHC 2000:2). Based on this information, Navin Officer produced maps indicating zones of archaeological sensitivity across the resorts. These maps have formed the basis for archaeological investigations for development purposes and found to be a good indicator of the archaeological potential.

Barber (2001) undertook an archaeological investigation at Perisher for proposed domestic water supply augmentation works for the NPWS. The investigation included a surface survey for a rising main, water reservoir and gravity main on the eastern side of the valley, a reservoir and gravity main at Smiggin Holes, a pump station on Pipers Creek and a reservoir and gravity main on the Roller Coaster ski run. The survey encountered difficult survey conditions with snow inhibiting the visibility of the alignments. However, Barber found that most of the areas investigated had low archaeological potential based on environmental and topographic features. Nevertheless, there were two areas that were deemed as having some archaeological potential and so further investigations were warranted. Barber (2001) then undertook subsurface investigations on the crest of a spur line on the eastern side of Perisher valley. Four test probes were excavated but no archaeological material was identified. The second testing area, termed the mid station reservoir, was a locally sheltered position on the crest of the spur line. Vegetation and a ring of large granite boulders protected the flat area, which contained woodland vegetation with a heath understorey. Six test probes were excavated within the flat but no archaeological material was found (Barber 2001).

An investigation of a proposed chairlift upgrade for Front Valley at Perisher was also undertaken by Barber (2002a). The alignment of the chairlift and the location of the top and bottom stations had suffered considerable disturbance and no sites were found and no areas of archaeological potential were identified. Also in 2002, Barber carried out a survey for snowmaking upgrade proposals within the Perisher Ski Resort. They included new snowmaking lines, fill lines, a ski school and new workshop as well as a reservoir. The locations of the projects were spread across Perisher, Blue Cow and Smiggin Holes management units. One new site, an artefact scatter of three artefacts (RC1 – AHIMS #61-3-0075) was located on the Roller Coaster ski run in the Blue Cow unit, and a known site (PB1 – AHIMS#61-3-0073) within the Smiggin Holes unit was extended in area (AHIMS#61-3-0076) (Barber 2002 b). Further investigation of the sites at Roller Coaster and the Smiggin Holes reservoir, as well as two other locations, the Mount Piper ski school and in proposed workshop in a saddle on Mount Piper between Smiggin Holes and Perisher, was undertaken by Barber (2002c, 2003). The ski school area was in the same locality called PRTL3, which NOHC tested as part of their Perisher Range study in 2000 (AHIMS#61-3-0093). The area is a spurline, leading from Mount Piper to Perisher Creek. NOHC recorded six artefacts from two of the four test pits excavated, while Barber recovered 11 artefacts from five of the 17 test pits. It was clear from the excavations that the artefacts were concentrated on the level crest of the spur; no artefacts were found on the side slopes or basal slopes. The test pits

containing artefacts were within grassy vegetation and close to granite boulders that could provide some wind protection. Similar characteristics on the side slopes of spur failed to reveal any artefacts (Barber 2003). The artefact density ranged from 4 to 33 artefacts per sq. metre. On the Roller Coaster ski run, 12 test pits were excavated along the crest and shoulder of a spurline. The testing recovered 29 artefacts from nine of the test pits. It was concluded that the site (AHIMS#61-3-0075) is likely to extend across the crest of the spurline, in an open heath vegetation community, with patches of grass cover. Artefact densities ranged between 4 and 28 artefacts per sq. m (Barber 2002c). The testing programs within the Smiggin Holes precinct also recovered stone artefacts. The proposed workshop was situated on a broad, level saddle, characterised as a level bench on the side slope of Mount Piper. The saddle flat was elevated above Pipers Creek. The area was identified as a site by surface artefacts found in exposures across the saddle and in a vehicle track used for accessing the area (AHIMS#61-3-0106). Twelve test pits were excavated across the saddle, with 41 artefacts recovered from seven test pits. The artefact density ranged from 4 to 44 per sq. m (Barber 2003). Barber also undertook a subsurface testing program for a proposed 2 hectare reservoir to be built to contain water for snowmaking. The proposed location of the reservoir was on the northern side of the broad, flat crest of the same ridgeline that the current investigation is centred on. The area of testing extended across the ridge and included test pits either side of the Captain Cook J–bar lift, within the present investigation area. The project excavated 16 test pits and 23 artefacts were recovered from nine of the test pits (AHIMS#61-3-0073, 61-3-0076). The artefact density of the test pits ranged from 4 to 24 per sq. m.

In 2015, Barber conducted further test excavations in relation to snowmaking proposals at Smiggin Holes, which recovered 51 artefacts from 13 of 25 test pits excavated on a ridge line containing sites 61-3-0073 and 61-3-0076, which had been previously excavated by Navin Officer. Barber concluded the site was extensive across the ridgeline with localised concentrations of artefacts, being primary flakes made from locally obtained quartz. As with Flood, he concluded the site reflected seasonal occupation.

Table 7 provides a summary and overview of the previous archaeological investigation described above. It shows that despite more than 100 test pits being excavated in these ski resorts the antiquity of Aboriginal occupation is still not known. The models developed and tested by NOHC and Barber provide valuable insights into the importance of microtopographic variables at high altitudes and refine and legitimise previous models developed by Flood. However, despite more than 40 years of investigation since Flood’s research, interpretations of Aboriginal occupation of the alpine/subalpine in recent years have not generated new hypotheses or sophisticated research questions. A potential new question could prompt a behavioural interpretation of the quartz assemblages – why do so few people for such short periods require so many quartz artefacts and what were they used for, given the paucity of resources and the apparent use of moth pestles to process bogong moths for food?

**Table 7: Summary of archaeological data from Perisher and surrounding ski resorts**

Report	Results	Subsurface results	landforms	Comments
Flood 1980	39 artefacts , collected		Perisher Gap [ saddle]	Location of artefacts?
Anu Tech 1988	No sites		Knoll on valley floor	Very disturbed

Barber 2001	No sites, 2 PADs <sup>1</sup>	Nothing in PADs when tested	mainly low potential areas	Poor visibility
Barber 2002a	No sites		Low potential [ top and bottom of chairlift}	Disturbed
Barber 2002b	1 new site, 1 re-located 61-3-0075, 61-3-0073 +0076		Various across Blue Cow, Smiggins and Perisher	
Barber 2002c		17 test pits, 11 artefacts 12 test pits 29 artefacts 12 test pits, 41 artefacts 16 test pits, 23 artefacts	Spurline Spurline 61-3-0075 Saddle Broad flat ridgeline 61-73 + 61-3-76	test pits with most artefacts on a level crest, close to granite tors, sheltered positions
Geering 1983	No sites		Creek and spur	Poor visibility
Grinbergs 1997	No sites		creek	Poor visibility
Kinhill 1989	No sites		Various	Poor visibility
NOHC 1999	6 sites, 2 PADs		Slope, spurlines, sheltered	God visibility
NOHC 2000		37 test pits, 33 artefacts	Highest conc. 'valley floor saddle' 61-3-0093	
Paton and Hughes 1984	No sites		Tors, ridge crests	Poor visibility
Navin 1989	No sites		Southern spur of Mt Perisher	Poor visibility
Barber 2015		25 test pits, 51 artefacts	ridgeline 61-3-0073 + 0076	

### Charlottes Pass area

Flood recorded two sites in this area, artefacts on Mount Stillwell (61-3-0006) and a potential 'moth pestle' in the Mt Guthrie saddle (61-3-0001) although the latter is questionable.<sup>2</sup> (see Figure 5).

<sup>1</sup> Site 61-3-0113, a single silcrete flake, was found on the Porcupine Rocks track close to the water reservoir in 2006 (Clarke, 2006)

<sup>2</sup> This is an elongated smooth rock, created naturally by weathering (see Figure 5). Apparently similar shaped rocks glowed under UV due to the presence of protein which Flood interpreted as the result of grinding bogong moths to form a paste (Flood 1982)



Figure 5 smooth stone created by weathering of an inclusion in granite bedrock

A review of Aboriginal heritage in the Charlotte Pass lease area was conducted by DECC (now OEH) in late 2008 (Feary, 2008). In April 2008, Charlotte Pass Pty Ltd commissioned an Environmental Values report of the lease area, which included a section on archaeological sites prepared by archaeologist Julie Dibden (ng environmental 2008). Dibden noted that the three small studies that had been conducted in the area revealed only a single archaeological site, suggesting that either the area is of very low archaeological potential or that other factors such as disturbance and/ or poor visibility hampered site detection.

Dibden was asked to develop and test an archaeological sensitivity model for the Charlotte Pass lease area, during which time six Aboriginal sites were recorded. These comprised stone artefact scatters of mainly quartz, and two quartz outcrops which may have been quarried. All the artefacts and possible quarries were located on the Mount Stillwell walking track which runs from the Charlotte Pass car park to a disused chairlift then along Kangaroo Ridge to Mount Stilwell. Very poor ground visibility excluded site survey beyond areas of existing ground disturbance, such as walking tracks.

Dibden concluded that areas of high sensitivity comprised the ridge crest that encircles the resort area and any benched and flat areas on otherwise steep hillsides. Thus, all the recorded sites fall within the zone of high sensitivity.

Prior to repairs and improvements to the walking track and potential changes to the old chairlift, DECC archaeologists and the Eden LALC carried out a survey along the track. Several artefacts, made from

quartz, silcrete and volcanic stone were noted along the existing track, most associated with previously recorded sites (Feary, 2008). A permit was issued to allow harm to the artefacts during repairs to the walking track.

### **Lower Thredbo valley**

Jo Flood found no archaeological sites in the Thredbo Valley during her doctoral research (Kamminga 1993) but sites have been reported from there since 1973 when NPWS Ranger John Gallard recorded a site along the Rutledge's – Bullocks track as containing 'axes, hammerstones, scrapers and flakes.' Large numbers of Aboriginal sites have since been recorded from the Thredbo valley. Most are artefact scatters recorded during archaeological investigations for developments

In 1983, David Hogg PL was commissioned to prepare an EIS for a proposed ski tube between Bullocks Flat and Perisher Valley and associated infrastructure. Archaeologist Katrina Geering prepared the archaeological report, noting that Gallard had collected all the artefacts he had seen and deposited them in the NPWS office at Sawpit Creek. It is probable that he collected the more obvious artefacts, such as axes and hammerstones, leaving behind more 'mundane' items such as unretouched quartz flakes. A significant bias was introduced into the remaining archaeological evidence as a result of this selective collection.

Geering recorded numerous sites within the area to be impacted by the ski tube car park at Bullocks Flat, including 64 artefacts where Gallard had previously recorded. Geering interpreted the sites as a possible summer base camp and recommended salvage prior to development. As part of the salvage operations, the site was re-mapped and test excavations were conducted by ANU Tech, resulting in the site being interpreted as an almost continuous and relatively dense artefact scatter between Rutledge's and Little Thredbo huts. Part of the site was issued with a 'consent to destroy' to allow construction of the ski tube car park, while the remainder of the site was afforded some protection through remediation works by NPWS (see Feary 2008).

During the 1980s and 1990s, an accelerated rate of development of facilities and services within the ski resorts prompted a number of environmental impact assessments, many of which included archaeological investigations. The Thredbo Valley is the only thoroughfare from Jindabyne to Thredbo Village, and has been the subject of numerous archaeological surveys associated with installation of infrastructure to service the Thredbo ski fields. These include upgrading and maintenance of the Alpine Way (Paton 1985; Navin Officer 1992); upgrading an electricity line (Walkington 1987); laying an optical fibre cable (Paton 1988) and installation of a Telstra cable line (Barber 2003).

Archaeological sites, comprising surface scatters of mostly quartz flakes were recorded along all the routes, including some re-recordings of previously recorded sites. Consents to destroy have been issued for a number of these sites, to allow developments to proceed.

In 1987 extensive archaeological investigations, including test excavations, were undertaken for the proposed Lake Crackenback Tourist Resort, located just outside the national park at the junction of Little Thredbo and Thredbo Rivers. A total of 661 artefacts were recovered from the excavation, being mainly quartz (96%), with

flakes representing nearly 95% of the assemblage and exhibiting little temporal or spatial variation. Radio-carbon dating of charcoal samples obtained from stratified deposits gave dates of 940 +/- 150 BP (ANU-6866), 4390 +/- 80 BP (ANU-6867) and 2460 +/- 120BP (ANU-6868) respectively (Kamminga et al 1989: 35). This provided the first dated cultural sequence within the NSW section of the Australian Alps.

The Lake Crackenback Tourist resort was archaeologically re-visited in 2003 during a survey by Barber (2003), who identified seven artefact locales. Other surveys in the vicinity also found small artefact scatters on spur crests and gentle slopes (Parkes & Barber, 2003). Subsequent subsurface testing revealed very few artefacts despite the high archaeological potential of the landform where excavations were conducted (Barber, 2003).

Further up the Thredbo valley at Friday Flat, in 1992 Navin Officer recorded a quartz artefact scatter [61-3-0062] during a survey for a snow clearing depot. The area, a gently sloping sheltered spurline near stream confluences 20 m above the Thredbo Rive, was investigated again in 2004 by HLA Envirosiences PL (2004), which re-located the previously site. Some of the quartz artefacts were re-assessed as not being artefacts and four new silcrete artefacts were found. The site was subsequently excavated but not dated.

In April 2008, archaeologist Alistair Grinbergs conducted a preliminary investigation of the route of the proposed shared use track between Bullocks Flat and the Thredbo Rangers station in the Thredbo valley. He identified 21 sites, comprising small artefact scatters, isolated finds and a possible axe grinding groove. Some of his recordings were re-interpretations of a previous recording of single, large artefact scatter, as a series of smaller sites strung along the valley, mainly on the eastern side, close to but above the river's flood zone (Grinbergs 2008). Grinbergs identified two areas of potential archaeological deposit (PAD) during his preliminary investigations, both within the riparian zone. He noted that ground visibility was very poor due to a thick cover of alpine grasses and that surface and subsurface artefacts may be present but could not be seen during the survey.

In 2008, further analysis and salvage of site 61-3- 0019, was conducted for Stage 1 of the shared use track, between Bullocks Flat and Thredbo Diggings. Sixty five stone artefacts on the pathway were systematically recorded and collected and subsequently buried together at a location close to the new pathway (see Feary 2009 for a full description of the salvage).

In 2010, as part of Stage 2 of the shared path, subsurface testing was conducted at three bridge crossings over the Thredbo River, within Kosciuszko National Park (Niemoeller, 2011). Three 50x50cm test pits and 5 hand auger holes were excavated at each bridge site, on both sides of the river where practicable. Despite the large numbers of surface artefact scatters recorded in this section of the Thredbo Valley, no evidence for Aboriginal occupation was found during the subsurface investigations. None of the test excavations were done at the PAD sites identified previously by Grinbergs, however, the test pit locations were considered to be of equally high archaeological potential. The absence of any subsurface evidence at these locations may be related to a lack of archaeological evidence on the surface. An alternative explanation is that, with the exception of Bridge Site 1 (south), the test pits were positioned much closer to the river than most of the previously recorded sites, indicating that periodic flooding may have washed sites away, and/or the locations were never actually

used by Aboriginal people because they were flood prone. Although Bridge Site 1 (south) was more elevated, it also had quite a slope, making it less suitable for camping.

Kamminga has postulated that the valley was a major thoroughfare for Aboriginal people moving into the higher mountain peaks from ceremonial grounds at Kalkite and the Wollondibby valley and the base of Mount Crackenback and those sites can be expected to occur all the way up the valley (Kamminga 1993). He interprets the archaeology of the Thredbo valley as a continuous archaeological site, comprising many activity areas and postulates that flaking of quartz pebbles at locations along the valley floor and lower slopes over millennia has produced a high background count of flaking debitage. Kamminga considers that every test excavation conducted at regular intervals along the Thredbo valley will reveal stone artefacts (Kamminga 1992).

The sample size of subsurface deposits was too small to make sound judgements on whether Kamminga's model of continuous subsurface deposits along the entire valley can be challenged. However, these findings may contribute to a refining of the model, by suggesting that rather than an even distribution of archaeological material along the valley, traditional use was concentrated at the lower end of the valley around Bullocks Flat and the Little Thredbo River, where people gathered and/or lived. Transitory movement up and down the valley has left much less evidence, perhaps only a background scatter, some of which has been subject to the impacts of flooding over thousands of years.

In 2014, an Aboriginal heritage assessment was conducted at two locations on the Thredbo River where bank stabilisation activities were proposed. A collapsed gabion wall required urgent attention adjacent to the Fish Trap within Gaden Trout Hatchery grounds and only a few metres upstream of the proposed new bridge across the river. The other location was the southern banks of the river at Paddys Corner, a distinct and very large bend in the river, popular with fishers and a crossing place for cattle going to the high country in historic times. No sites were found at either location (Feary, 2014).

In 2015 an archaeological survey was conducted for an extension to the shared path in the Thredbo Valley, from Bullocks Flat to the Thredbo picnic area (Feary & Niemoeller, 2015). Ten isolated finds or small artefact scatters were recorded on gentle spurs or flat areas above the river, where bare ground was exposed. Numerous artefacts were recorded along the Pallaibo track and one artefact was recorded in the vicinity of the proposed bridge in the Gaden Hatchery grounds. The section along the Pallaibo track is also interesting. Although the majority of these sites (91%) are isolated artefacts and almost entirely comprised of quartz flaked artefacts, the density of sites per kilometre (7.8) calculated through this section is almost 10 times higher than further up the Thredbo Valley where, on average only 0.7 sites were found per kilometre. A number of additional factors may also influence these calculations including the proposed route of the track and the levels of visibility and exposure. The visibility and exposure were considerable lower further up the Thredbo Valley than along the Pallaibo Track.

## 4. Proposed activity

### 4.1. Land use history

Both tangible and intangible evidence of pre-contact Aboriginal occupation is impacted by subsequent layers of human history, which, together with natural processes, affects its survival into the present. The majority of the proposed development is within The Main Range and Rams Head Range in the alpine and subalpine zones, except where the track will descend into the Thredbo and Snowy River valleys. The non-Aboriginal history of this area has been tumultuous for the natural environment and undoubtedly it's embedded Aboriginal history.

Following sporadic Aboriginal occupation of the montane zone in Kosciuszko National Park from nearly 10,000 years ago at Yarrangobilly Caves (Aplin, et al., 2010), white exploration began in 1824 after which the high country was rapidly opened up to grazing of cattle and sheep, initially on a seasonal basis and including for drought relief (Slattery, 2015). The main range was divided into three squatting runs; Agintoothbong Run occupying the Geehi Valley side of the range from Mt Kosciuszko to Dicky Cooper Peak and including Lake Albina, the Murryang Run on the north side of the Snowy River valley between Mt Kosciuszko and the Burrungubugge River, and the Excelsior Run on the south bank of the Snowy extending from Mt Kosciuszko to the Gungarlin and south to the Crackenback River. These were the highest grazing lands in Australia, used on a seasonal basis (Scott, 2010). Grazing had a devastating impact on fragile alpine and subalpine ecosystems, causing major erosion and soil loss (Good, 1992) and damaging any associated Aboriginal sites such as artefact scatters. Gold mining undertaken in creek beds from the 1860s would have severe but localised impacts on sites and timber getting in the early-mid 20<sup>th</sup> century would have affected Aboriginal scarred trees in particular.

Recreational interest in the main range followed the first ascent of Mt Kosciuszko on skis in August 1897 and in 1903 the NSW Government built a shelter hut for summer tourists at (Old) Betts Camp and began to upgrade the dray track from Jindabyne. Demand for improved access and accommodation grew, and in 1907 Kosciuszko Road from Jindabyne to the summit of Mt Kosciuszko was built, together with The Creel accommodation house at the base of the range and the Kosciuszko Hospice (later 'hotel') above the snowline at Diggers Creek and a number of smaller huts and bridle paths (Scott,2010).

Ski-touring and epic journeys into remote areas to access deep snow and steeper slopes became popular between the wars and in response the NSW Government progressively extended the Hotel Kosciusko and developed shelter huts for tourers. Demand continued and in 1930, the Government built the first Chalet at Charlottes Pass and the Smiggin Holes Cafe in 1939 enabling Smiggins to serve as a day-use area for skiers from the Hotel or motoring up from Jindabyne (Scott, 2010).

Private interests begin to feature in the development of recreational facilities with ski clubs and construction of substantial dwellings. Communications facilities were installed and in 1938 the first ski tow was erected near the new Chalet, the original having burnt down. Development of snow related

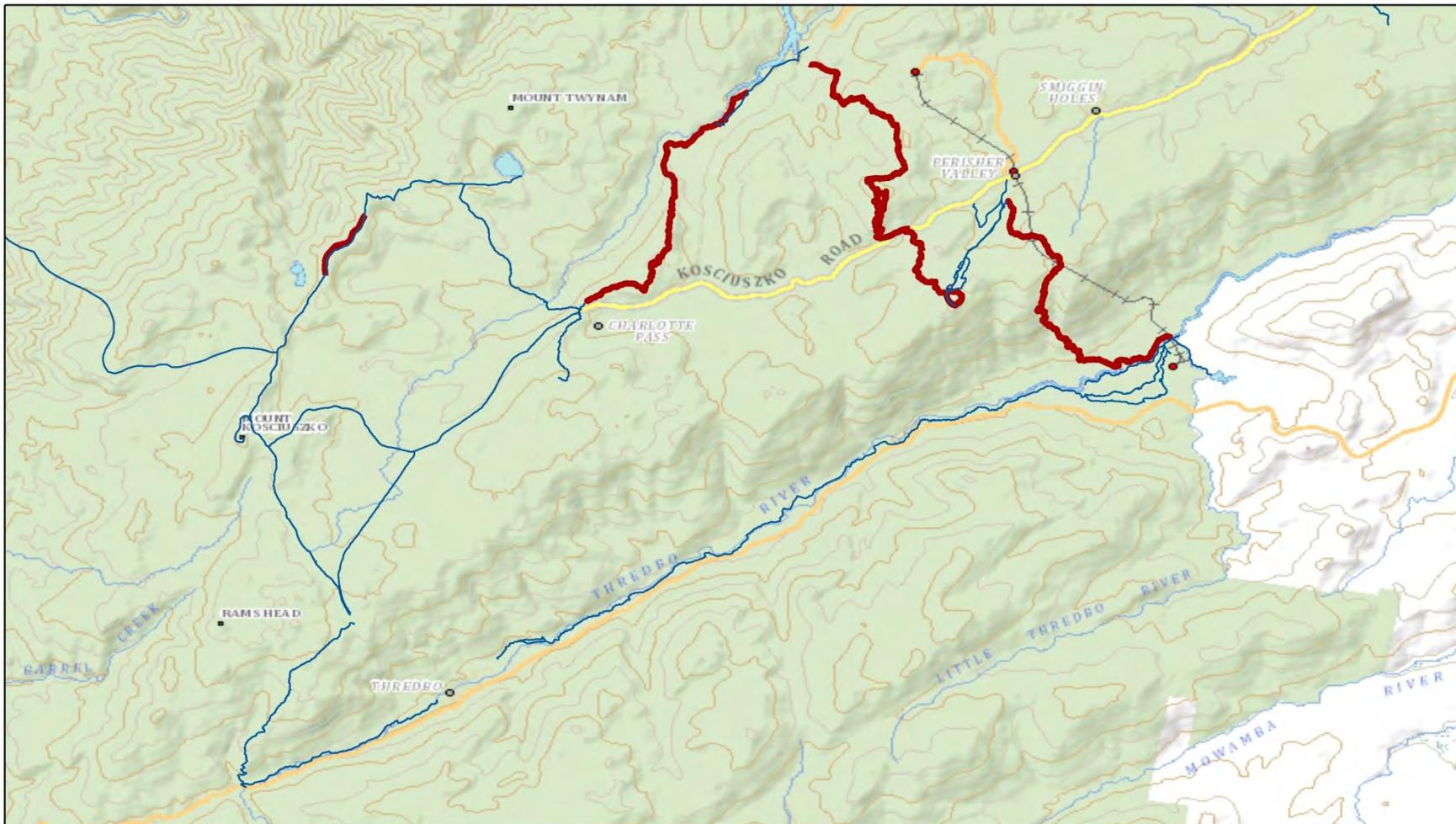
recreational facilities has continued, the most recent major one being the ski tube, built in the late 1980s between Bullocks Flat and Perisher, impacted large artefact scatters at Bullocks Flat.

With the realisation of the extensive damage caused by grazing, and following serious lobbying by scientists and conservation groups, in 1943 alpine grazing was stopped and in 1944 the government declared Kosciuszko State Park. Kosciuszko National Park was declared in 1965 and all grazing was removed.

The Snowy Mountains region experienced profound social and environmental change with the commencement of the Snowy Hydro Scheme in 1949. This, the biggest engineering feat in Australia's history changed the rivers of the Snowy Mountains [except the Thredbo River] for ever.

## **4.2. Description of development**

The proposed development is a new walking track – the Snowies Iconic Walk – that will utilise a combination of new and existing tracks to interlink some of the resorts or other areas within KNP. The track will be approximately 45 km in length. At the time of writing this description, NPWS is still in the process of determining exactly where the track would be located. To determine where the track should be located, NPWS will need to complete further consultations with stakeholders, track development specialists and experts regarding alpine and sub-alpine ecology.



<p><b>Legend</b></p> <p> Proposed new track</p> <p> Existing track</p>	<p><b>SNOWIES ICONIC WALK</b></p> <p><small>Copyright NSW Office of Environment and Heritage (OEH). This map is not guaranteed to be free from error or omission. OEH and its employees disclaim liability for any act done on the information in the map and any consequences of such acts or omissions.</small></p>	<p style="text-align: center;">N</p> <p style="text-align: center;">   Datum/Projection: GCS GDA 1994         </p> <p style="text-align: center;">  <b>Office of Environment &amp; Heritage</b> </p>
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Figure 6: Map showing location of proposed walking track, new [red line] and existing [blue line] sections

Figure 6 is a topographic map of the study area showing the alignments of the proposed walking track, including new sections of track and existing tracks to be incorporated into the walking track. The new sections of track are described below;

- **A realignment of the existing Main Range Walk** for approximately 1.6km in length near Mt Lee, to enable the track to go further west to avoid the threatened Windswept Feldmark plant community. This will remove the track from the ridgeline. The new track will be at a width that varies between 80cm and 1.2m. The surface of this section will likely be a combination of elevated platform (steel frame with a fibreglass or steel mesh top) and excavated sections to create a bench where rocks will be pitched into the ground to create rock paving.
- **A new track that connects Charlotte Pass to Guthega**, generally following the Guthrie Ridge, crossing Spencers Creek near Illawong Hut where it would join the existing Illawong Walk to Guthega. Approximately 900m of the Illawong Walk may be realigned to enable more views of the Snowy River. The new tracks constructed in this area would be at an average width of approximately 60cm and will be primarily a combination of an excavated track with rock paving and non-excavated track with elevated platforms. The elevated platforms will enable the track to cross wet areas or other sensitive areas with minimal impact. The elevated platforms will require piers to be driven into the ground. It is anticipated that no bridge will need to be constructed to cross Spencers Creek near Illawong, however boulders may be placed to create stepping stones.
- **A new track that connects Guthega to Perisher**, potentially via Porcupine Rocks. The track will likely pass by Perisher Gap and may follow an existing footpad in some locations from Perisher Gap to Porcupine Rocks. This footpad is currently classified as a winter cross country ski trail, although it is used by walkers outside of the winter season. This section would likely be developed with a combination of pitched rock, elevated platforms and some short areas may be left as a natural surface if they are assessed as being stable and at a low risk of eroding. The route will need to be diverted away from the footpad in some areas to avoid threatened species and impacts to the safety of skiers or potential damage to snow grooming machinery. The route will join the existing Porcupine Walking Track near the Porcupine Rocks and will follow this track to Perisher Valley. The majority of the surface of the track between Guthega and Porcupine Rocks will be elevated platforms and rock paving. The average width will be approximately 60cm.
- **A new track that connects Perisher Valley to Bullocks Flat**. All of the development for this section would occur on the northern (Perisher side) of the Thredbo River, as there are existing tracks on the southern side of the river to enable the route to connect to Lake Crackenback. The section of the track between Perisher and the top of the descent to the Thredbo Valley would likely be a combination of pitched rock, potentially some gravel or drainage rock and some elevated platforms. The section that descends from the Rams Head Range to the Thredbo River would include a combination of bare earth (likely lower, montane sections only), elevated platforms, steel-framed staircases and pitched rock and some gravels or drainage rock.

## Summary:

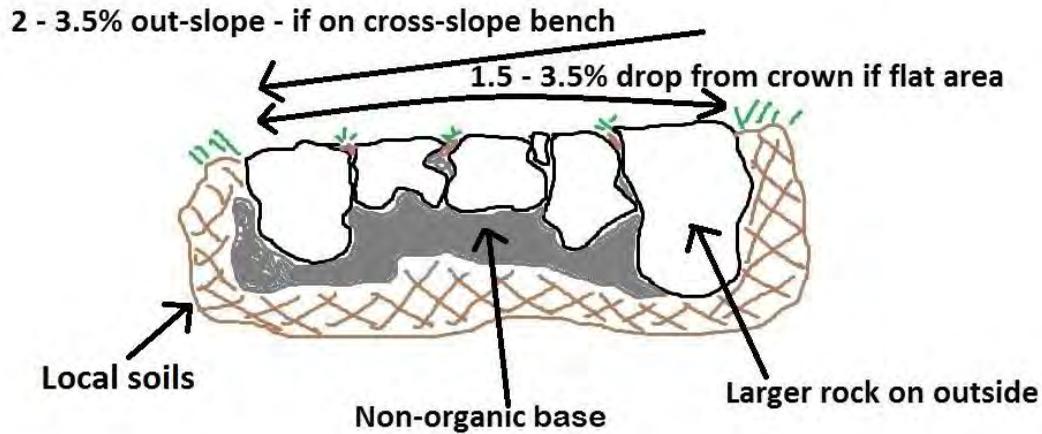
- Track length: Approximately 25km of new track development, interlinking approximately 20km of existing track, to create a route of approximately 45km interlinking resorts
- Track width: Mt Lee area to be between 80cm and 1.2m. All other new tracks to have an average width of approximately 60cm
- Track surface: The majority of new tracks will be a combination of rock paving (mostly granitic rocks), elevated platforms (steel frame with fibreglass or steel mesh top), some natural dirt surface if the soils and terrain will create a low risk scenario for erosion and some sections with gravels
- Facilities: A single toilet is proposed to be developed beside Seamans Hut, located on the Summit Trail, 3km from the summit of Mt Kosciuszko
- Excavations: Some excavations will be completed by hand tools and other with machine. The depth of disturbance will mostly be approximately 0.3m but will be deeper in some areas such as steep cross-slopes, where required to create a flat and wide enough walking surface. Where elevated platforms are constructed, there will be very minimal excavations, as the piers will mostly be driven into the ground. In situations where a pier hits a rock at a shallow depth, hand excavations may be required to enable the pier to be bolted to the rock that it has hit.
- Signage: Some interpretive and directional signs will be required
- Material stockpile and logistics: Materials will mostly be airlifted to the site with helicopters to minimise impacts. Some materials may transported along the track via power-carriers. Materials will be stockpiled within the corridor that was assessed during site surveys and will not be placed on any known sites.

## Technical specifications

### Rock paving example when in flat terrain



### Technical design for rock paving in flat area



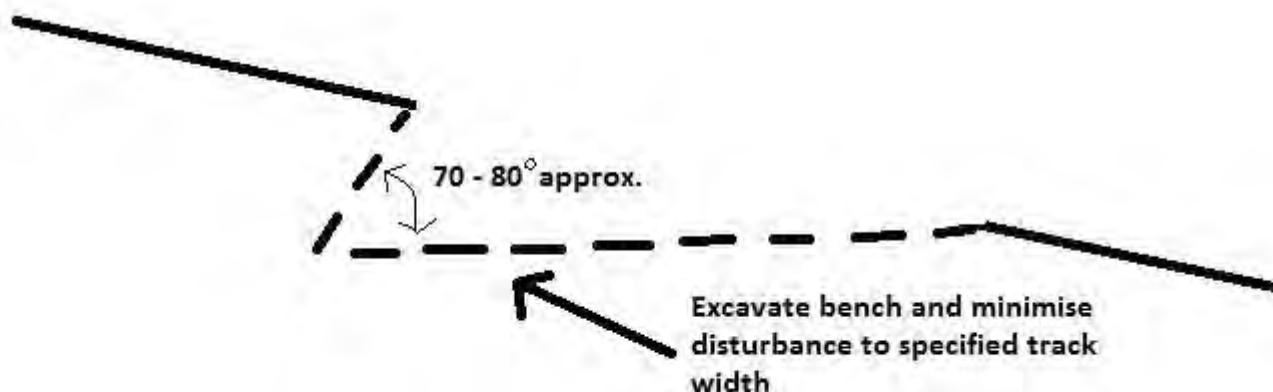
The non-organic base will usually be the local soil. In some places crushed granite materials may be imported. No concrete will be used.

### Rock paving technical design on cross-slope

The following method is to be implemented:

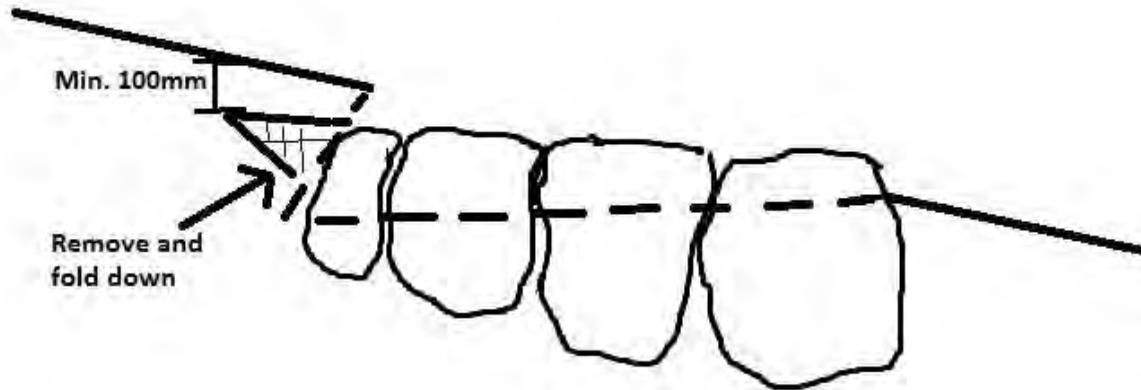
1. Flag the track's alignment
2. Excavate the bench and restrict disturbance to the minimal amount required to achieve the specified width and slightly undercut the batter;

Image - Excavate the bench



3. Install rock paving to specified width
4. Further undercut the batter and taper the layer of vegetation to meet the track edge. Rehabilitate the batter or construct a retaining wall if there is bare soil remaining at more than 200mm height above the track

Image - Undercut the batter and install the rock paving



5. If required, dig a trench of at least 150mm deep above the batter and minimise the width of trench to 100mm;
6. Wrap jute soil-saver mesh around tomato stakes and bury the stake to anchor the jute;
7. Sow locally-collected *Poa* seed at the rate of at least 20g / m<sup>2</sup> over all bare soils and amongst all sods
8. Place jute soil-saver mesh over the batter and firmly pin into place and bury the low edge under the paving rock if on an exposed slope so that gale-force winds will not remove it; and
9. Install occasional corraling rocks where required on both edges of the track to ensure that pedestrians will stay on the rock-paved surface.

Image – Completed section

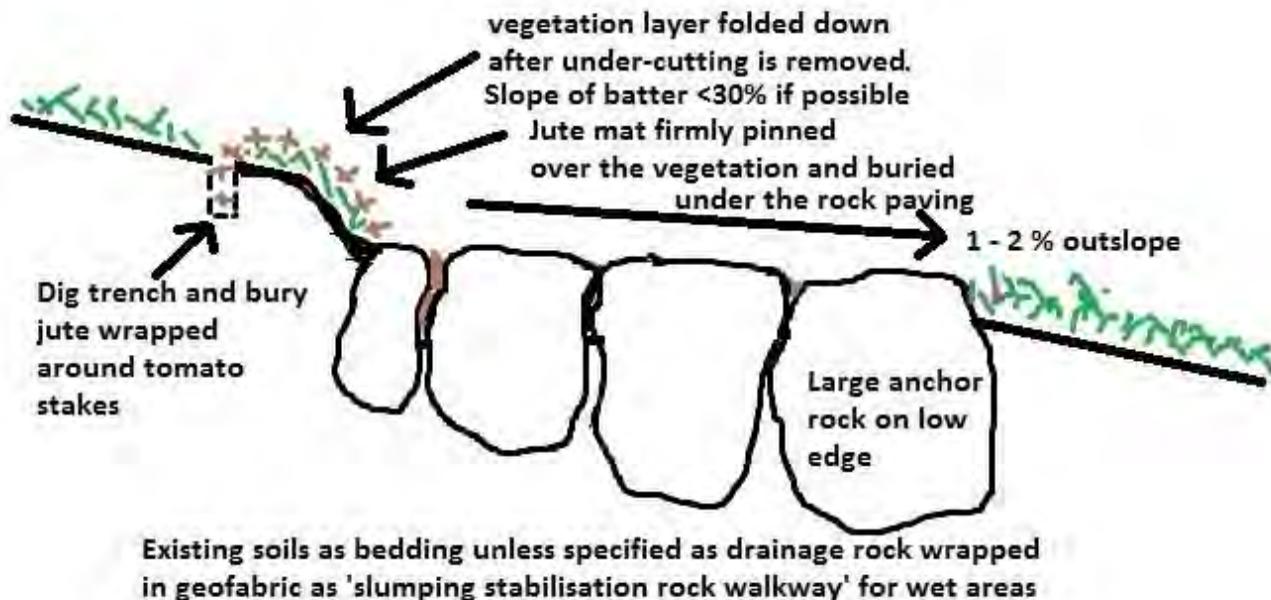
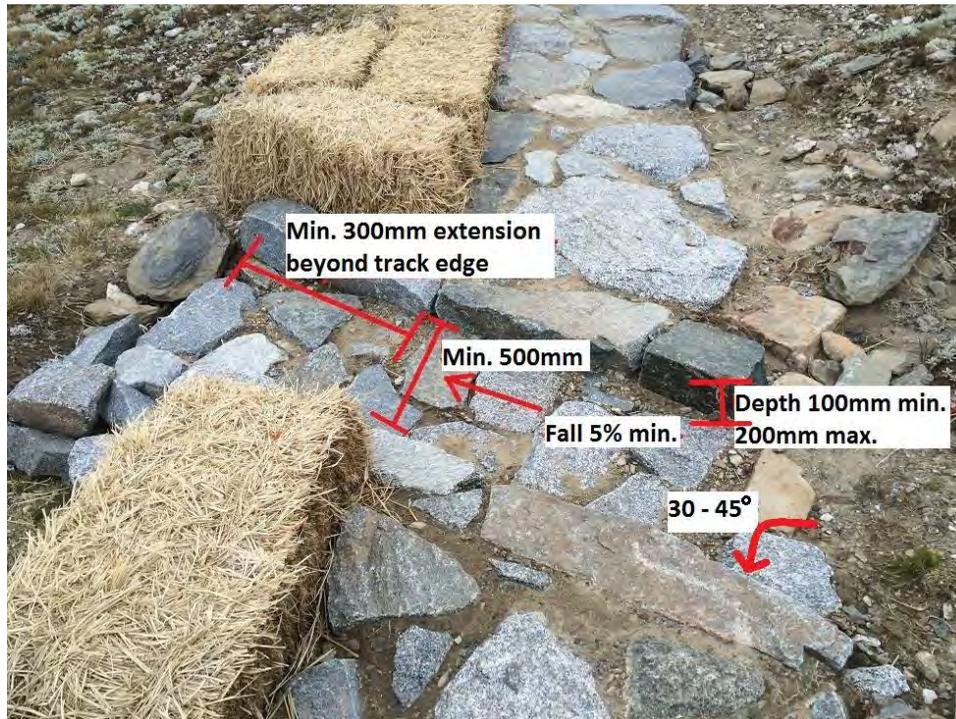
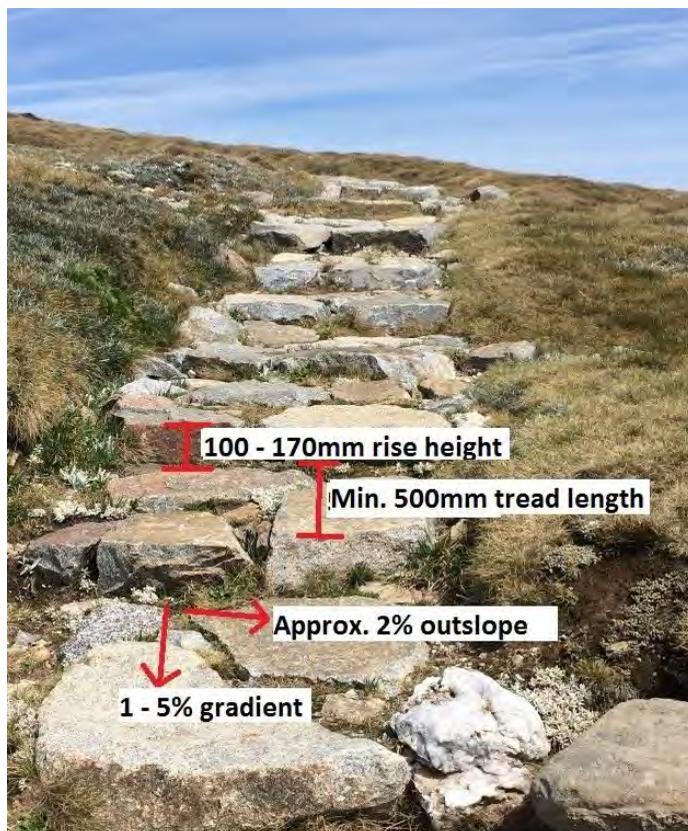


Image based on Davies et al. 1996 P. 74

## Rock drain technical design



## Rock steps technical design



The above example is approximately 30cm wider than the proposed development.

## Elevated Platforms

Platform cross-section example - the proposed platforms would be approximately 1/3 of the width of the below



## Elevated typical design example

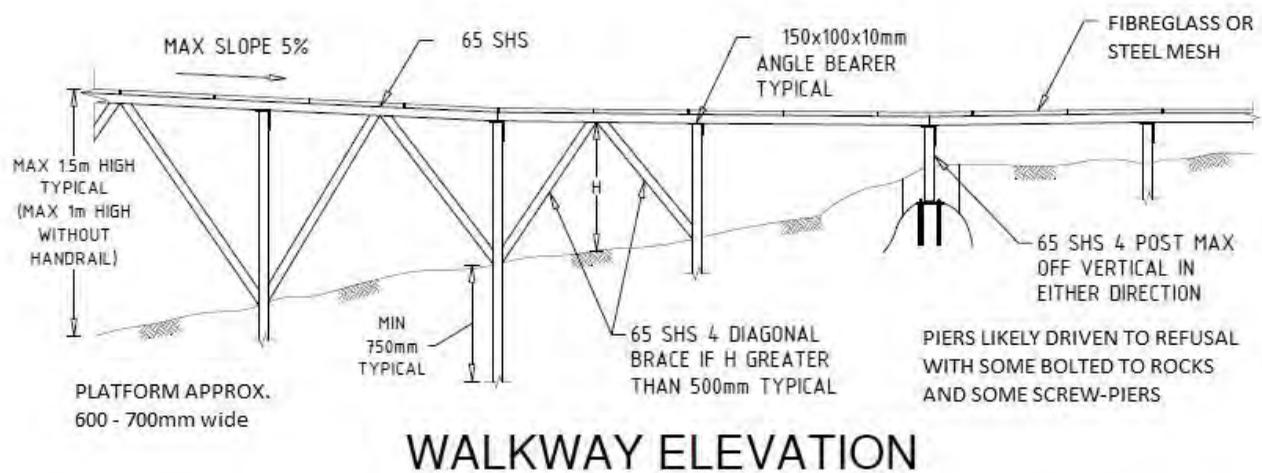


Image is based on the engineering design by John Skurr used in construction of the Thredbo valley track. The actual design used for this project will be altered slightly as required to suit the needs of the track.

## Gravel track



### 4.3. Potential harm to Aboriginal objects

Where necessary, the intention is to realign the new sections of track to avoid harm to all Aboriginal objects. However, where this proves impossible, the proposed development may cause harm to Aboriginal objects located on or close to the alignment of the track, through disturbance to the upper soil layers. The extent of this disturbance is variable, depending on the method and materials used; disturbance would be approximately 60 cm width by 50 cms deep to prepare the ground for laying pavers [see previous section for description]. Where elevated metal platforms are to be used, disturbance will be confined to 6.5 cm square metal posts driven into the ground, at around 2 metre intervals. Where the track has to be benched to keep it horizontal on a slope, there will be some removal of sediments to form the bench. All materials and equipment will be brought in by helicopter. No materials will be stockpiled where sites are located.

The metal walkway will cause almost no impacts and it is planned to use this on the flatter areas which are also those areas with the highest potential [within an overall low potential landscape] to contain Aboriginal artefacts. Paving will tend to be used on sloping sections, which is also where potential is very much lower for Aboriginal objects.

Cultural deposits if present may also be compacted/compressed by the stone pavers, potentially exacerbated by increasing use by walkers. Harm is likely to continue as a result of increased use of the area once the track is constructed.

## 5. Archaeological investigations

### 5.1. Predictions

Factors to consider when developing a predictive model are: - landforms, disturbance history, resource availability, distribution patterns of known sites, ethnographic and ethnohistoric records, and existing predictive models derived from previous investigations in the region. In the case of the alpine and subalpine regions, the weather is also an important factor. Behavioural models of pre-contact Aboriginal life are also important for understand reasons why a particular area/landform was being occupied. Research conducted by Jo Flood for her PhD (Flood, 1980) provides such a model and although it has been debated and modified as a result of subsequent research (Grinbergs, 1992, Kamminga, 1992, Bowdler, 1981). However, Flood's claims that bogong moth harvesting and ceremonial activities were a principal reason for an Aboriginal presence at the highest altitudes have not been disproved. The lack of food and non-food resources, the weather and generally rugged and inhospitable terrain makes it likely that occupation of the subalpine/alpine zone was always transitory, and probably non-existent in the winter with the possible exception of valleys such as those of the Snowy and Thredbo Rivers. The archaeological footprint is therefore expected to be very light.

Taking these factors into consideration and combining them with generalised models of pre-contact Aboriginal occupation, viz on flat, elevated sheltered ground close to water, the Aboriginal objects most likely to be present are **stone artefacts**, associated with large granite tors harbouring aestivating bogong moths, natural routes of movement such as along wide river valleys and ridgelines/spurs, and on saddles with some level of protection. Artefacts are most likely to occur as isolated finds or low density scatters of flaked stone artefacts made from good quality quartz and occasionally silcrete or porphyry rock types. All other archaeological site types are predicted to be not present.

Places of cultural significance to Aboriginal people with or without physical expression may also be present but their location cannot be predicted.

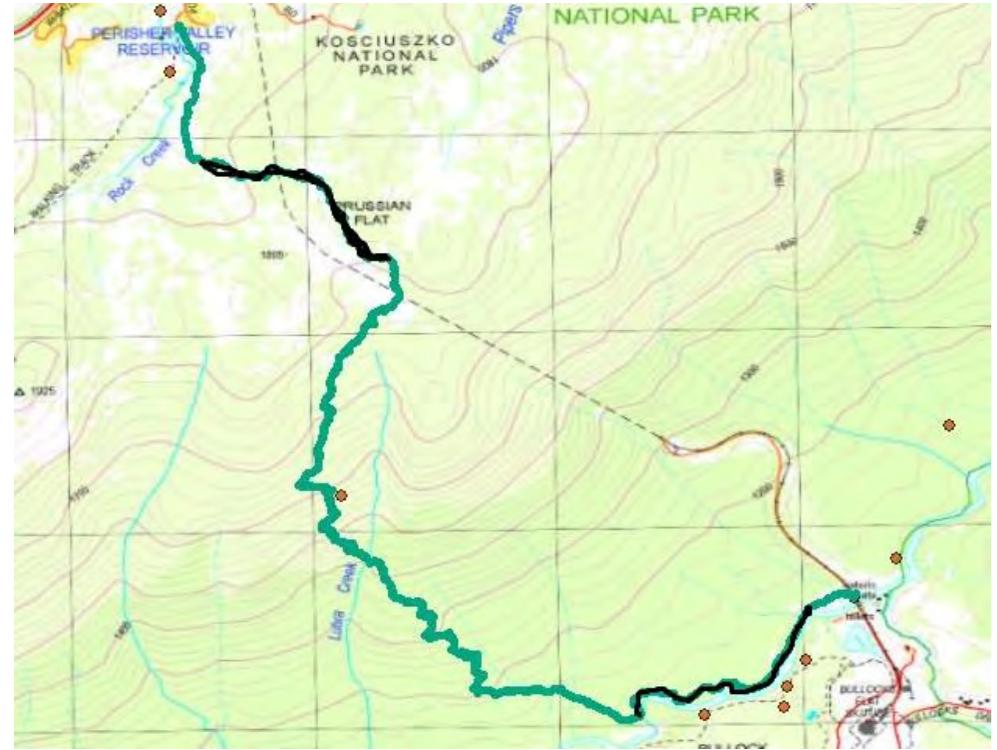
Sections of the proposed track are on very steep terrain (> 25 degrees), e.g. between Perisher Valley and Bullocks flat with no potential for containing sites. Lower slopes below the summer melt water level for the Snowy and Thredbo Rivers are also unlikely to contain sites.

Overall, the alpine/subalpine landscape has very low potential for containing Aboriginal sites, although some locations have a greater potential than others to contain artefact scatters, due primarily to slope and specific landform type. Figure 7 shows four maps containing areas assessed as having the most

potential to contain Aboriginal objects, being small artefact scatters. The potential varies within each of the areas identified in Figure 7, depending on microtopographic features such as width of ridge, presence of granite tors, or small flat spurs in otherwise sloping ground. Note that Porcupine Rocks is identified as an area of potential cultural value, due to the presence of groups of large granite tors, but has low potential for objects.

Note that the saddle on the Porcupine Rocks track immediately south of Kosciuszko Road has not been identified as having potential because this area was used for dumping fill from construction of the ski tube in the mid-late 1980s (Chris Darlington, pers. comm.).

Within the areas identified as having potential [albeit low], to contain artefacts the likelihood of subsurface deposits is assessed as being very low. Due to the skeletal and erodible nature of the soils, especially those derived from granite, the potential for cultural deposits to be buried in the first place is extremely low. Frost heave and bioturbation may move artefacts down [and up] the soil profile but this does not necessarily reflect any depth of cultural material.



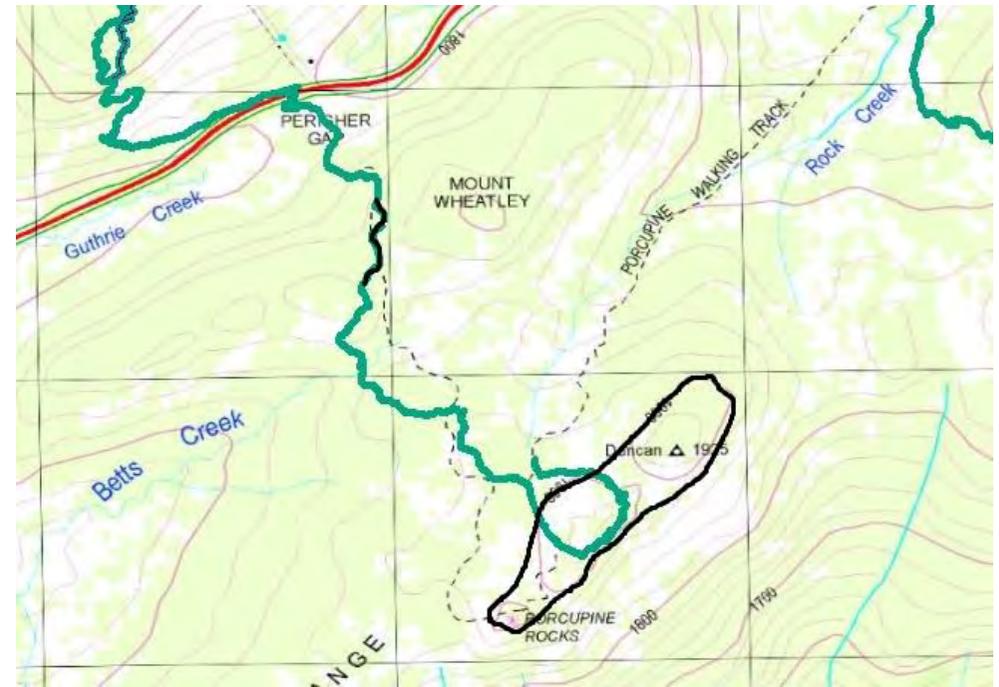
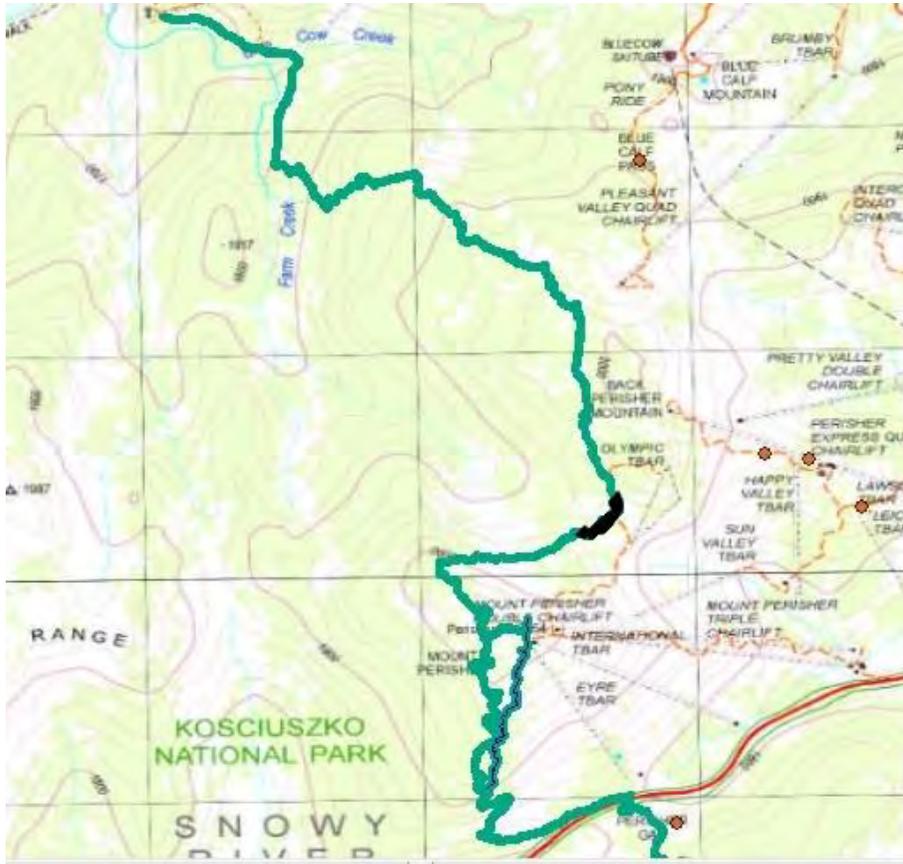


Figure 7: topographic map (Perisher 1:25K showing the route and locations with potential for containing Aboriginal objects due to landform characteristics [black line]. Note: Porcupine Rocks is identified for its potential cultural value only.

## 5.2. Field survey

### 5.2.1. Methodology

The methodology adopted for the field survey was determined by the nature of the terrain, the weather and the small scale of the development. All new sections of the proposed walking track were walked over five days from 15<sup>th</sup> – 19<sup>th</sup> May 2017 by at least four people and included all the route options still under consideration. The route[s] had been previously marked with flagging tape but was not always discernible given the vegetation cover. Chris Darlington and Graham Weston accompanied the field crew to point out the alignment where it was not obvious. The new sections of the walking track were examined for the presence of Aboriginal objects, together with proposed realignments on the Main Range walking track, the Illawong Track and the Porcupine Rocks track

Owing to the rugged nature of the terrain and presence of very thick vegetation it was not always possible to stay on the alignment, instead the transect was kept as close as possible to the alignment. Where feasible, people fanned out to cover the 50 metre wide development corridor. The understorey not only almost totally obscured the ground, it made walking quite difficult (Figure 8). Trampling and flattening the vegetation during walking further reduced ground visibility.



Figure 8: example of ground vegetation on track route

Any areas of bare ground, including on existing walking tracks, were inspected for artefacts and all mature trees were checked for any scarring. Particular attention was paid to flat ground on ridges and saddles and around granite outcrops, with less attention given to very steep slopes (Figure 9).



**Figure 9: Proposed track above Perisher Gap showing steep terrain**

Overall, visibility was so limited by ground vegetation that field survey can only be described as ineffective for the vast majority of the route. Where bare ground was exposed, naturally shattered quartz or quartz gravels also hampered archaeological visibility (Figure 10).



**Figure 10: quartz gravels Guthries saddle**

### 5.2.2. Field descriptions

#### **Realignment of a section of the Main Range walking track between just south of Carruthers Point and Northcote Pass**

Survey units/relevant landforms: alpine zone; ridgeline, spurs, saddles, rocky crags [potential bogong moth habitat]. Due to altitude and absence of granite tors, and the fact that the realignment will cut into the top of a steep slope, the realignment has no potential for containing Aboriginal sites.

The realignment is for the purpose of avoiding sensitive fieldmark vegetation communities and is 1.6 kms long, located just west of the existing track at the top of a NW facing slope varying from a few to approximately 20 degrees (Figure 11). The existing track is in the alpine region above 2000 m asl is on a prominent narrow ridge line above the glacial lakes, that skirts Mount Lee and crosses a wide flat saddle above Club Lake before ascending towards the slopes of Carruthers Peak. A prominent spur leads out to the west just north of Northcote Pass.

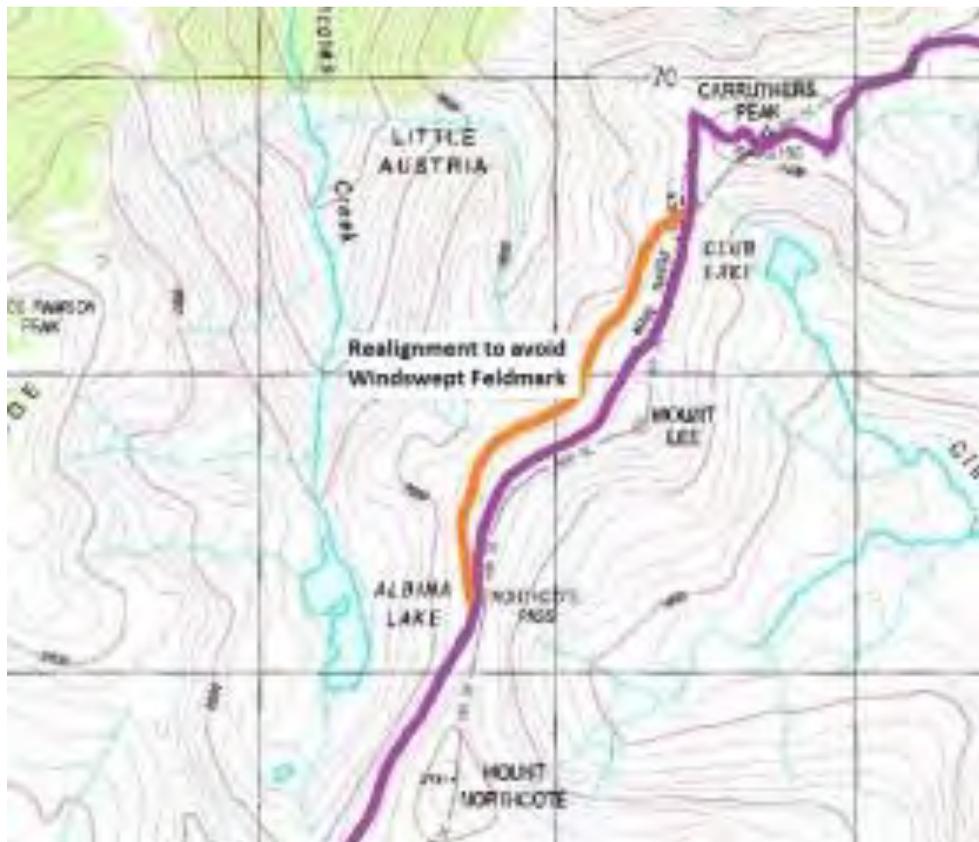


Figure 11: Main Range realignment detail

The alpine vegetation comprises fieldmark communities of low shrubs which almost completely cover the ground. Occasional exposures, varying in size from <1 sq. metre to several square metres of shale/slate bedrock and quartz veins/shattered quartz were visible among the thick vegetation (Figure 12).



Figure 12: Survey of the realignment, below ridgeline. Mt Lee in background

Quartz, appearing as veins in the bedrock was very abundant and showed extensive shattering from frost heave effects (Figure 13). The combination of thick ground cover and natural quartz limited the capacity to detect stone artefacts with overall visibility less than 5%. However, visibility on the existing track was greater than 50% for most of the subject area except where dense accumulations of shattered quartz covered the ground.



Figure 13: shattered natural quartz, alpine zone

The field survey took place on 15 May 2017 conducted by Sue Feary, accompanied by NPWS officers Chris Darlington and Graham Weston. The entire route was walked in a north-south direction and the existing track was then walked in a south-north direction. All exposed ground, including areas of shattered quartz were carefully examined for the presence of stone artefacts. Figure 14 shows the survey transect. The numbers below coincide with numbers on the aerial photograph.

1. 0615402/5969409 – realignment commences. Below a prominent saddle, gentle upper slope, thick feldmark vegetation, occasional exposures of bedrock including quartz gravels, showing effects of frost heave.
2. 615258/5969149 - coming up over a small spur, slope c. 20 degrees. Slope gradually reduces going south
3. 614683/5968116 end of realignment above Lake Albina
4. 615034/5968763 top of rise, strewn with frost shattered quartz.



Figure 14: Main Range realignment

### Charlotte Pass to Guthega (connecting the existing Illawong Track)

A total of 7.6 kilometres was surveyed between 1620m (Guthega) and 1940m (Charlottes Pass) above sea level (Figure 15). Located entirely within the Main Range Sub-Alpine landscape, the track broadly follows a major spurline (Guthrie Ridge) down to the Snowy River (Figures 16 and 17) and crosses Spencers Creek, a tributary of the Snowy River. Traverses undulating variable sub-alpine landscape and vegetation consisting of slopes, cross slopes, gullies and saddles of generally between 0-15 degrees. Flat even ground, either atop hills or in gullies and saddles (Figure 18) represents a small percentage of the proposed track length (approximately <5%). Exposure and visibility was very low (<1%). Included a short realignment of the Illawong track.

The existing Illawong track was walked by some members of the field crew, which provided an effective transect, with excellent ground visibility, of the undulating lower slopes of the Snowy River valley. Presence or absence of artefacts along the existing Illawong track is considered to be a reliable indicator of the archaeological footprint of the lower slopes of the Snowy River valley within this section of the proposed walk.

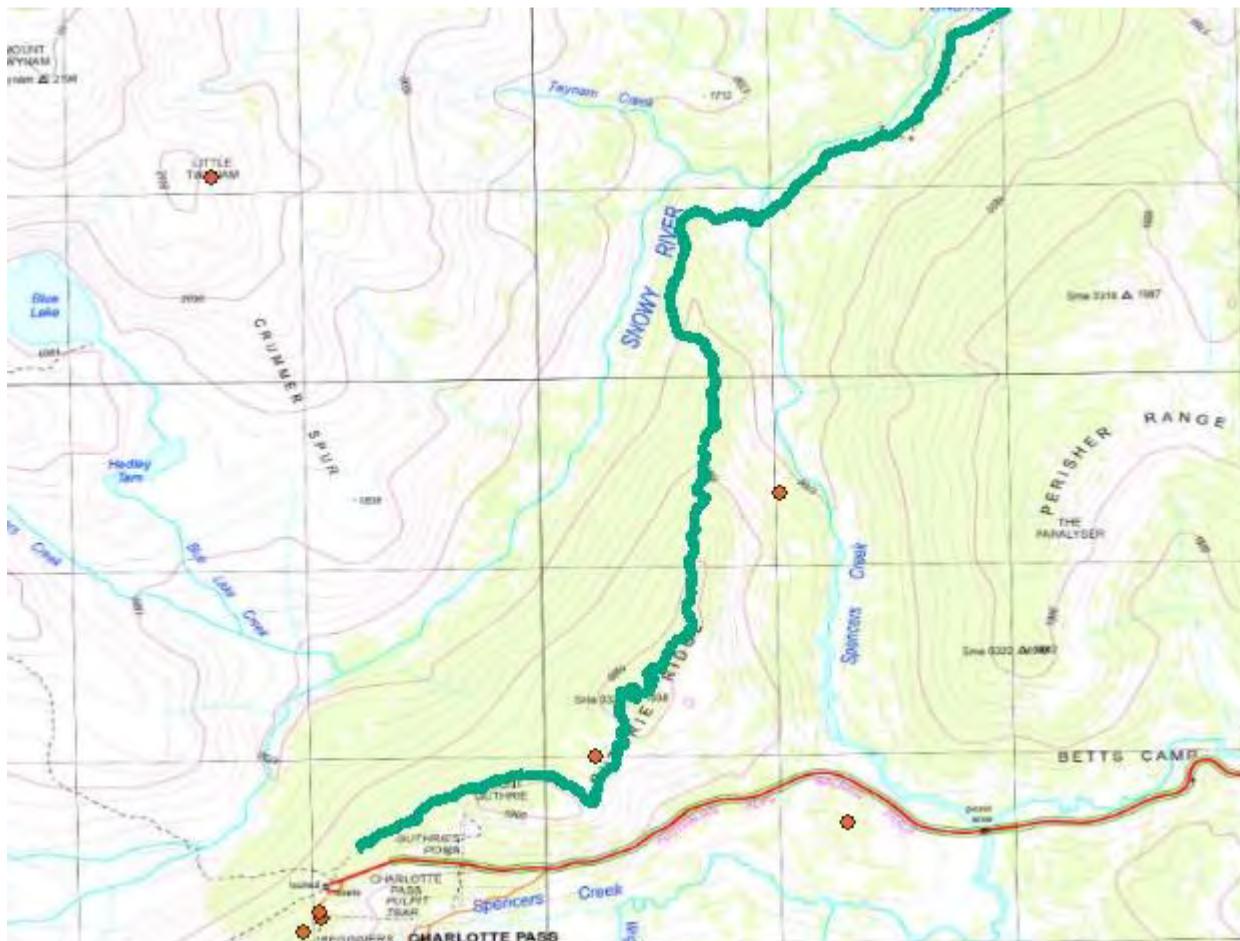


Figure 15: Charlottes Pass to Guthega section



Figure 16: snow gum woodland on Mt Guthrie spurline



Figure 17: thick ground cover on lower slopes of Snowy River valley



Figure 18: large saddle below Mount Guthrie

### Perisher Valley to Bullocks Flat

A total of 7.6 kilometres was surveyed between 1120m and 1820m above sea level (Figure 19). Approximately 50% of the new proposed track is located within the Main Range Sub-Alpine landscape between Perisher and top of the Thredbo Valley, before descending steeply through the Main Range Montane landscape and levelling out along the Thredbo River within the Jindabyne Plains landscapes. The track atop the range traverses undulating variable sub-alpine and landscapes and vegetation consisting of slopes, cross slopes, gullies and saddles of generally between 0-15 degrees. Flat even ground, within this section either atop hills or in gullies and saddles along this section represented approximately 5%. The descent along the track into the Thredbo Valley consisted of steep angles (generally >20%), cross slopes and gullies, with only very minor flat even ground (<1%). Within the Thredbo Valley closer to the River, the track traverses the less steep foot slopes and cross slopes of spurs and gullies. The proposed track flattens out near the river terraces near Bullocks Flat. Again exposure and visibility along this section of the track was also very low (<1%).

The track runs west of previously recorded site 61-3-0014 [Lubra Rocks], a group of granite rocks where, according to the site card, Aboriginal women gathered to collect bogong moths. Lubra Creek is close to Lubra creek, but is incorrectly plotted on AHIMS. The track will not affect this site.

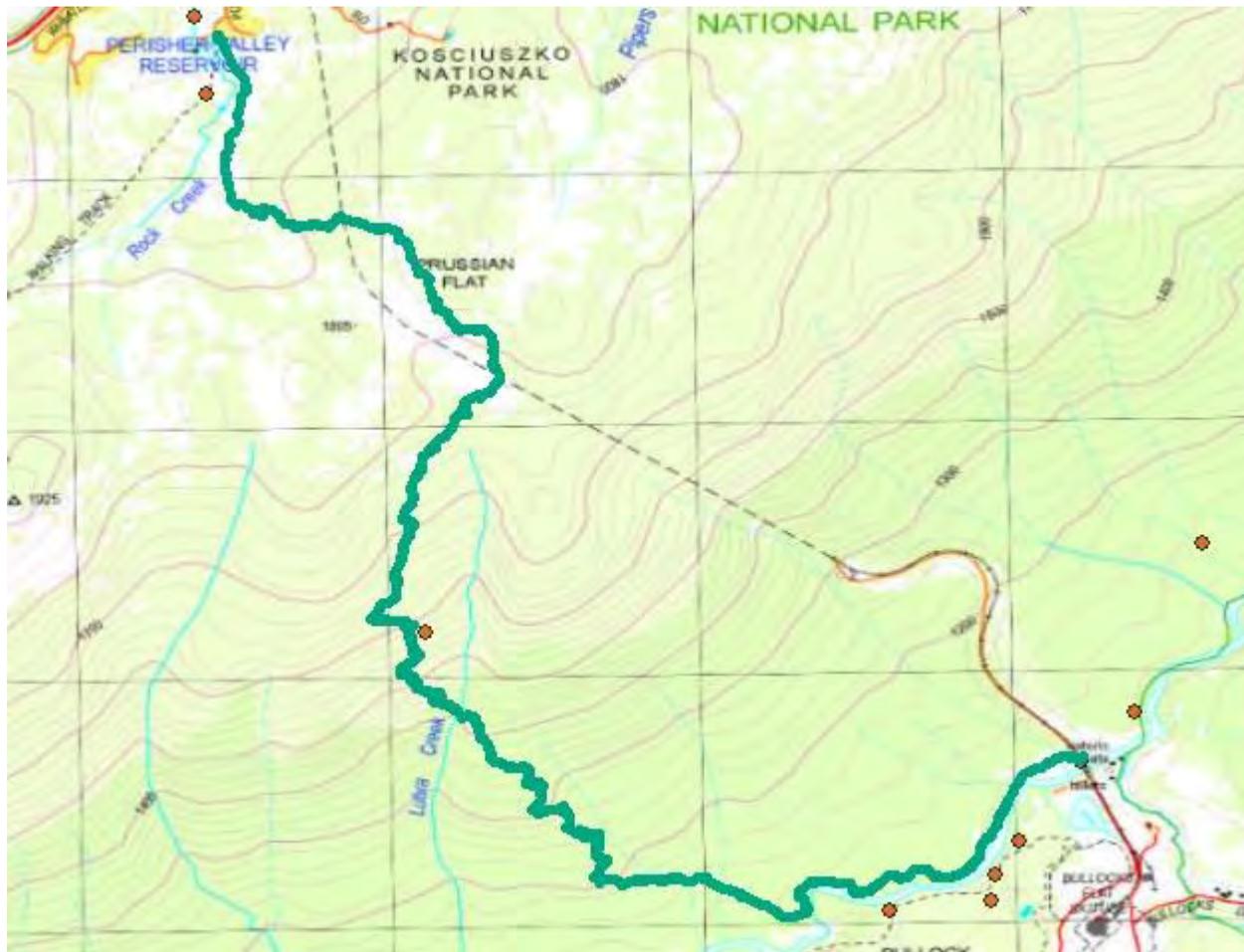


Figure 19: Perisher to Crackenback Section

**Guthega to Perisher (via Porcupine Rocks and connecting Porcupine Walking Track)**

A total of 10.1 kilometres was surveyed between 1660m and 2040m above sea level. The majority (approximately 60%) of the new proposed track is located within the Main Range Sub-Alpine landscape with the remainder located in Alpine Zone landscape. Traverses undulating variable sub-alpine and alpine landscapes and vegetation consisting of slopes, cross slopes, gullies and saddles of generally between 0-15 degrees. Flat even ground, either atop hills or in gullies and saddles represents a small percentage of the proposed track length (approximately <5%). Exposure and visibility was also very low (<1%).

This section was surveyed in two separate sections – Perisher Gap to Guthega (Figure 20) and the proposed extension of the existing Porcupine Rocks walking track (Figure 21).

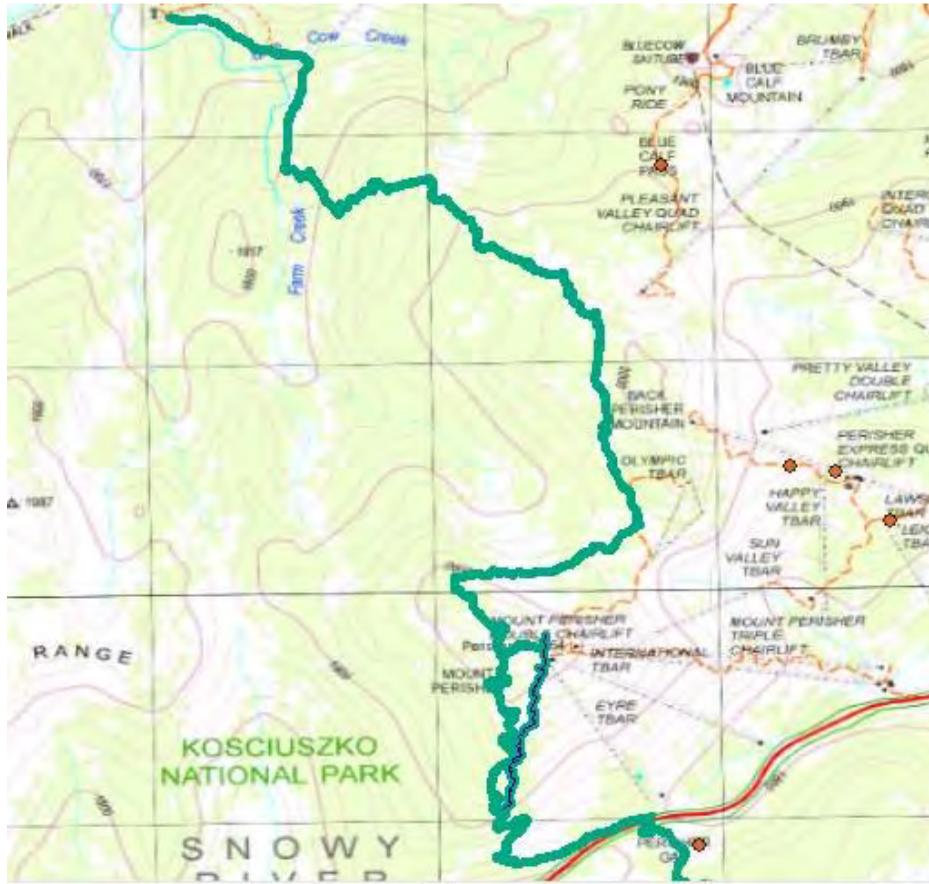


Figure 20: Guthega to Perisher

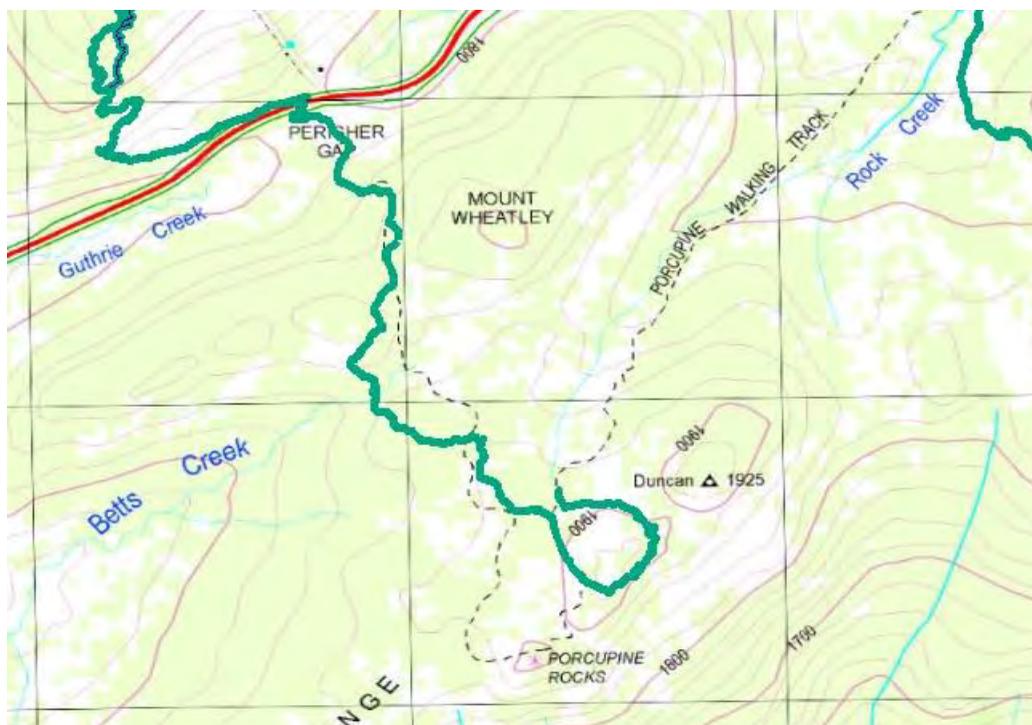


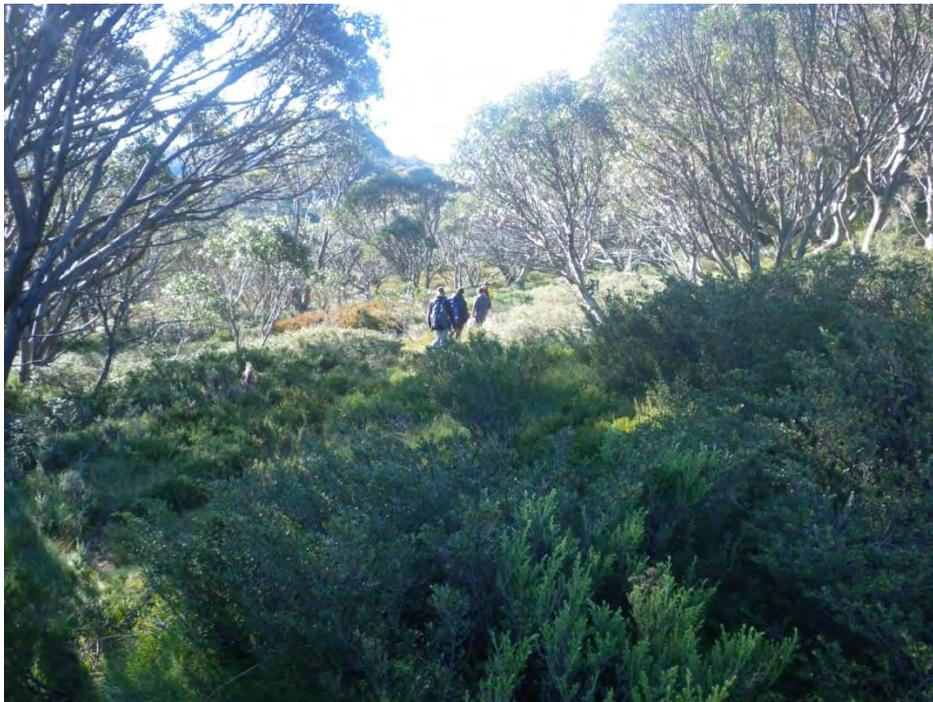
Figure 21: Perisher Gap to Porcupine Rocks

Perisher Gap to Guthega included a steep section to the top of Perisher Mountain, containing large granite tors but also heavily disturbed from ski lift infrastructure. The route descended into a broad saddle before ascending around Back Perisher Mountain, also with large granite tors (Figure 22).



**Figure 22: saddle between Perisher and Back Perisher mountains**

The remainder of the route crossed side slopes and followed sloping spurs containing low wet heath, snow gum woodland and numerous tors (Figure 23), to meet up with an existing track to Guthega. The existing track provided good visibility.



**Figure 23: Perisher to Guthega, northern section**

The Porcupine Rocks section includes a new track ascending gently from Perisher Gap, following in part of an old access route which afforded good ground visibility (Figure 24) and situated in an area of fill, resulting from construction of the Skitube tunnel in the mid-late 1980s. It passes around Porcupine Rocks (Figure 25) and then joins up with the existing track with some minor deviations back to Perisher Valley.



Figure 24: walking track route over Mount Wheatley ridge



Figure 25: Porcupine Rocks

### 5.3. Results

The field investigation identified one site, a small artefact scatter on a large flat saddle below Guthrie Mountain (Figures 26-28).

**Site Name:** Guthrie Saddle 1 (GS-1)

**Grid Reference:** 55 620284E, 5967954N

**Site Type:** Stone artefact scatter

This site is a small artefact scatter 2 x 2 m consisting of 4 flakes of a grey volcanic rock with small phenocrysts, possibly basalt or porphy. The larger pieces have some cortex and none exhibited any secondary working. The site occurs in a broad saddle on a small exposure of outcropping granite gravels. Several pieces also appear to be of natural breakage. Vegetation at the site consists of low heath and is not boggy. Abundant quartz gravels occur in surrounding areas. The rock is likely sourced from an inclusion in the granite.



Figure 26: Exposure, granite outcrop and site area at Guthrie Saddle 1



Figure 27: Stone artefacts at Guthrie Saddle 1

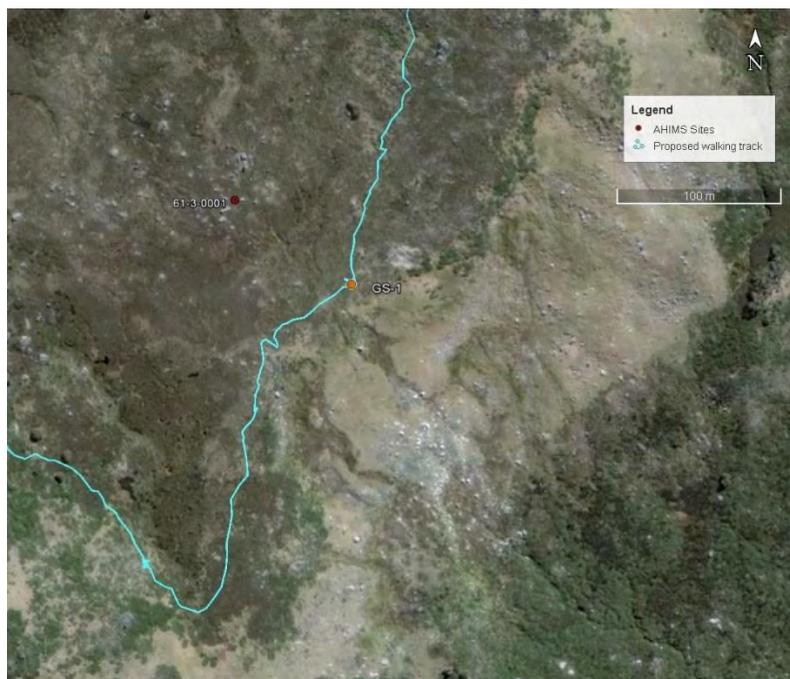


Figure 28: Location of site

The recorded site is located in an area with archaeological potential [see Figure 7] and also where visibility was somewhat better than other sections of the route, due to low vegetation and large exposures of bare rock. There is no potential for subsurface deposits due to the thin or absent soils.

The absence of archaeological sites at higher altitudes is to be expected based on the predictions discussed previously. Previously recorded sites in the alpine/subalpine have been either small artefact scatters of quartz or ‘moth pestles’. The single site recorded during the survey is unusual in that it does not comprise quartz artefacts, although artefacts made on similar material were recorded in the lower Thredbo valley (Feary & Niemoeller, 2015) .

Abundant quartz pieces and gravels were noted at various locations during the survey and a substantial amount showed fracturing consistent with frost shattering, due to changes in soil temperature. These natural fracture processes are characterised by an *absence* of typical conchoidal fracture features. Inadequate stone artefact identification skills may lead archaeologists to identify exfoliated or shattered rock as artefactual. The best way to work out whether artefacts have been misidentified is to reanalyse an assemblage (or a random sample of an assemblage), as was done for the Friday Flat assemblage (see Section 3.4.3). Additionally, the ethnohistoric evidence suggests that harvesting Bogong moths was a primary purpose for Aboriginal people to ascend into the alpine areas, but how this relates to use of manufactured quartz artefacts has never been critically evaluated.

In summary the absence of sites for most of the route can be attributed to the low potential for them to be present. Poor ground visibility may have a role to play in areas shown in Figure 7 where artefacts may be more likely to be present.

It was felt that Porcupine Rocks may have cultural significance to Aboriginal people due to its distinctive natural formations.

## 6. Significance assessment

### 6.1. Criteria

The ICOMOS Burra Charter provides the framework for cultural significance assessment using the key criteria of **social**, **aesthetic**, **scientific** and **historic** values (ICOMOS 2000). The OEH assessment guidelines also provide some direction on how to apply these criteria in the context of an ACHAR report (OEH, 2011).

Significance assessment relates to physical objects, places, and features of the natural/cultural environment associated with intangible values.

**Social value:** generally, all evidence of pre-contact Aboriginal presence is significant to Aboriginal people even it is not visible at the time of a particular field inspection.

Many coastal and tablelands Aboriginal groups particularly Ngarigo people have a strong and renewed interest in their history of the use and occupation of the high country, hence the formation of the Southern Aboriginal Working Group for input into management of the Aboriginal heritage of Kosciuszko National Park. Any sites recorded in the high country, affirming presence of the ancestors, are likely to have very high social value. Several of the registered Aboriginal parties referred to their historic family connections with the Snowy Mountains. Narratives of bogong moth feasts have also generated considerable interest in the non-Aboriginal population.

**Scientific (archaeological) value:** this refers to the capacity of the evidence to contribute to current understanding of Aboriginal pre-contact history of the region, - *'the timely and specific research questions'* of the time, expressed in terms of rarity, representativeness or educational value (Sullivan & Bowdler, 1984). Sites generally need to be undisturbed with high levels of stratigraphic integrity. Several excavated sites in the Perisher Valley area were considered to have high archaeological significance (Barber, 2015).

The single site found in Mount Guthrie saddle is at 1880 metres asl and is therefore one of a small suite of sites recorded in the alpine zone. It is also found in the same area where a possible moth pestle was found in 1970, which enhances its scientific value. Models of Aboriginal occupation and use of the high country are still fluid and changing and any new archaeological evidence has the capacity to contribute to refining these models. Furthermore, the Mount Guthrie Aboriginal site does not comprise quartz artefacts, which is unusual in itself. It is concluded that the site has moderate-high scientific/archaeological significance, hence the track was re-routed to avoid it.

**Historic:** the ethnohistoric records indicate that Aboriginal people continued to access the high country to gather bogong moths after white settlement. It is also possible that Aboriginal men worked as stockmen on grazing leases and on farms in the high country. Some Aboriginal people who expressed interest in this project wrote about their family ties and cultural connections to the high country generally which suggests there is historic significance associated with the high country by people who currently live far away. Aboriginal people who lived on Aboriginal reserves at Delegate and Brungle [Tumut] may have information of historic associations.

**Aesthetic:** NA

## 6.2. Statement of cultural significance

Aboriginal objects recorded during this assessment are associated with the saddle below Guthrie Peak in the alpine zone. They have high social value and medium-high scientific value. The presence of the objects supports existing models of Aboriginal occupation of the region and although they may not contribute substantively to the existing knowledge of the area, the fact that the artefacts are not made from quartz makes them different from nearly all other artefacts at this altitude.

## 7. Assessing harm

### 7.1. Avoiding harm

The narrowness of the path, the low-key nature of the development, paucity of Aboriginal objects, and consideration of heritage issues in the early stage of planning have enabled some flexibility in the track alignment in order to avoid Aboriginal sites. As stated previously, the intention is to avoid harming all Aboriginal sites

When the site was discovered during this survey, avoidance strategies were discussed on site and the track was realigned to avoid it. This meant realigning and reflagging the track, flagging the site in a different colour and recording the site location for later entry and capture into the relevant spatial management system (GIS). A buffer based on size of the exposure and the extent of the site was able to be assumed from landform elements. Figure 29 shows the realignment (yellow line), to totally avoid the site.

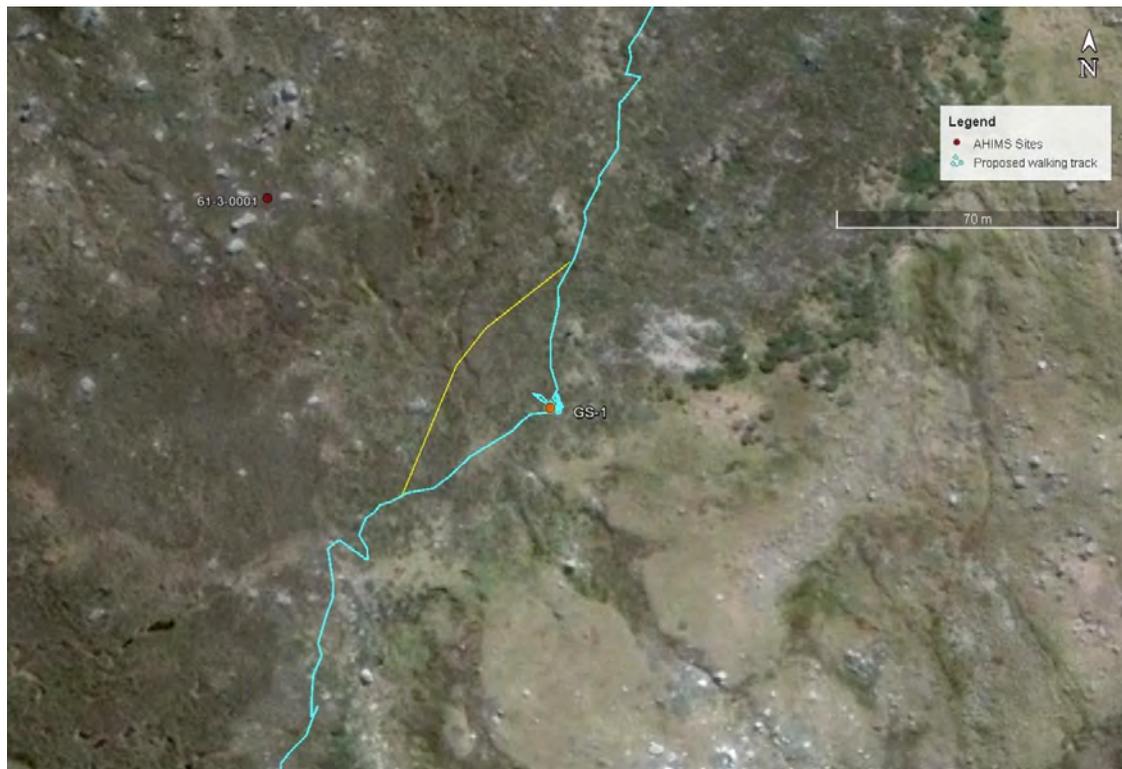


Figure 29: Map showing realignment to avoid site Guthrie Saddle 1

## 7.2. Mitigating harm

Recent experience from an archaeological assessment of the lower Thredbo valley shared path has demonstrated that low ground visibility during the time of survey means that stone artefacts may not be detected but become exposed due to ground disturbance once works commence (Feary & Niemoeller, 2015). Although the vast majority of the new sections of the Snowies iconic walking track have low potential, previous test excavations in the Perisher Valley demonstrate that there is some likelihood for objects to be present on spurlines and ridges at high altitude, albeit in low densities (Barber, 2015) and see Section 5.1.

1. Figure 7 [pages 45-46] shows areas with the greatest likelihood for containing objects, even though this is still low. One option is for these areas should be brushcut/cleared of vegetation and then resurveyed for archaeological sites. If artefacts are found, the track should be re-aligned to avoid the site, with a suitable buffer. The re-alignment should be cleared and surveyed for sites. If re-alignment is not possible, the following must be determined: the **degree of harm**, i.e. whether a raised walkway or stone pavers are to be used and the **potential of the location** to contain undisturbed cultural deposits likely to provide new information, as per the OEH Code of archaeological practice. If the degree of harm is high and the potential is assessed as high, a small amount of test excavation could be considered. Permits from OEH would be required to allow harm to recorded objects if they cannot be avoided, and also to conduct test excavations.

2. Another option is for track construction to commence in these areas. Activities involving clearing vegetation and/or disturbing the ground surface should be monitored by a suitably qualified or experienced person. If Aboriginal objects are encountered, the following process should be followed:-
  - Stop work at the location.
  - Record site and determine boundaries as far as possible, with most sites likely to be less than 10 artefacts at the most.
  - Identify a buffer around the site, at least 10 metres in diameter and if feasible, realign the track to **avoid** the site as defined.
  - If avoidance is not feasible an authorised person under the NPW Act shall **move** the artefacts to a suitable undisturbed place nearby and complete an AHIMS site card to record the new location. Alternatively the artefacts could be **collected** and given to the relevant RAP pursuant to a Care Agreement.
  - If movement/collection is not feasible works must cease at the location of the site until an **AHIP** is obtained.

NOTE: These mitigation procedures would need endorsement from RAPs.

3. Consideration could be given to providing training in Aboriginal site identification to relevant personnel working on track construction. However, this may prove to be ineffective given the complexities around recognising quartz pieces as artefacts.
4. Since the final alignment of the walking track has not been determined, there is a possibility that some sections may fall outside the assessed 10 metre wide development corridor. In these instances, the OEH due diligence process, including a field inspection, will be used to assess those sections situated in landforms with the greatest potential to contain Aboriginal objects, *viz.* spurlines, ridges, around granite tors and saddles. If objects are found the track will be re-aligned if possible otherwise the procedure described in 1 above will be followed.

In some instances, leaving the objects *in situ* on the track would be a preferred option, as placing soil, gravel or pavers over the artefacts may cause less harm than moving them from their environmental context. Artefacts **should not** be moved where an elevated walkway is to be installed. Supporting posts should be positioned to avoid any objects.

Test excavations should **only** be considered where the harm they cause is less than the proposed development and there is a real potential to gain useful archaeological data [like a radiocarbon date].

### 7.3. Harm cannot be avoided

If harm cannot be avoided by moving the track or moving the objects, or using an elevated walkway, it will be necessary to apply for an Aboriginal Heritage Impact Permit (AHIP) from OEH.

## 8. Potential conservation outcomes

The walking track has a constrained development footprint and will cause considerably less damage than previous and current activities, for example, installation of ski resort infrastructure and services and activities such as slope grooming. The single artefact scatter identified during this survey will not be harmed and its avoidance is a conservation outcome.

## 9. Principles of ecologically sustainable development and cumulative impact

Ecologically sustainable development (ESD) involves the effective integration of social, economic and environmental considerations in decision-making processes. In 1992, the Commonwealth and all state and territory governments endorsed the *National Strategy for Ecologically Sustainable Development*. In NSW, the concept has been incorporated in legislation such as the EP&A Act and Regulation.

For the purposes of the EP&A Act and other NSW legislation, the Intergovernmental Agreement on the Environment (1992) and the *Protection of the Environment Administration Act 1991* outline the following principles which can be used to achieve ESD.

- (a) The precautionary principle: that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

In the application of the precautionary principle, public and private decisions can be guided by:

- (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
  - (ii) an assessment of the risk-weighted consequences of various options,
- (b) Inter-generational equity: that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,
  - (c) Conservation of archaeological diversity and integrity: that conservation of archaeological diversity and integrity should be a fundamental consideration,

These principles have been considered and followed in respect of this assessment.

The proposed walking track, as currently described and assessed will not cause any damage to Aboriginal objects and certainly less than other developments in the high country. Because of poor ground visibility some scientific uncertainty remains, however appropriate mitigation measures, such as those described in Section 7.2, can be put in place to ensure damage is not serious or irreversible.

In regard to cumulative impact, this has been occurring to Aboriginal sites in the high country since grazing commenced in the early 1800s, seriously exacerbated by ski resort development, construction of roads and other services and sadly, the widespread collection of artefacts in the 1970s. There has also been considerable damage from test excavations of questionable value. The cumulative impact has not ever been evaluated but is likely to be considerable. There is currently no process in place to ensure the long term protection of Aboriginal sites in the high country for future generations to observe and manage.

## 10. Recommendations

1. It is recommended that no further archaeological investigation of the overall project is required as the archaeological footprint has been adequately understood, notwithstanding the limitations of poor ground visibility.
2. Further investigation through a due diligence process is recommended if there are to be significant deviations from the existing 10 metre wide development corridor.
3. It is recommended that the mitigation process proposed in this report [Section 7.2.] is presented to RAPs and relevant OEH personnel for endorsement.

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## Appendix 1: Aboriginal consultation- Stage 1: Notification

The advertisement was placed in Monaro Post and Bega District news on 29<sup>th</sup> and 28<sup>th</sup> March 2017 respectively



The advertisement is a rectangular notice with a black header and a white body. The header contains the NSW Government logo (a white lotus flower) and the text 'NSW GOVERNMENT' on the left, and the 'Office of Environment & Heritage' logo (a circular emblem with a bird) on the right. The main text is in black on a white background, with a dashed line separating the title from the body text. The footer is a grey box with white text.

**NSW GOVERNMENT** | **Office of Environment & Heritage**

**Invitation to Aboriginal persons to be consulted regarding establishment of new walking tracks in Kosciuszko National Park**

The NSW National Parks and Wildlife Service (NPWS) (a Division of the Department of Premier and Cabinet, Office of Environment and Heritage) proposes to establish a series of new walking tracks linking ski resorts areas in Kosciuszko National Park. NPWS is inviting Aboriginal people who hold cultural associations relevant to this area to be consulted regarding the proposed works. The purpose of this consultation is to assist NPWS in conducting a cultural heritage assessment of the proposed routes of the walking tracks and, if required, to assist in preparation of an application for an Aboriginal Heritage Impact Permit (AHIP) to allow Aboriginal objects to be impacted during works. The consultation will also assist the Chief Executive of OEH in determining the application.

**For more information:** Any individuals or groups that wish to be consulted regarding the proposed works should contact Chris Darlington on (02) 6450 5595 or [chris.darlington@environment.nsw.gov.au](mailto:chris.darlington@environment.nsw.gov.au) before C.O.B 12 April 2017.

A06019

## Appendix 2: Letter to Southern Aboriginal Working group members [ example]

On Tue, 28 Mar 2017 at 4:28 pm, Christopher Darlington  
<[Christopher.Darlington@environment.nsw.gov.au](mailto:Christopher.Darlington@environment.nsw.gov.au)> wrote:

Dear David,

**RE: Proposed walking trails, Kosciuszko National Park – Aboriginal cultural heritage assessment**

The NSW National Parks and Wildlife Service (NPWS), Office of Environment and Heritage (OEH) proposes to establish a series of new walking tracks linking ski resort areas in Kosciuszko National Park. The walking route would be comprised of a combination of existing and new tracks.

NPWS is inviting Aboriginal people who have cultural associations with this area to register an interest in being consulted regarding the proposed works. The purpose of this consultation is to assist NPWS in conducting a cultural heritage assessment of the proposed routes of the walking tracks and, if required, to assist in preparation of an application for an Aboriginal Heritage Impact Permit (AHIP) to allow Aboriginal objects to be impacted during works. The consultation will also assist the Chief Executive Officer of OEH to determine the application.

You are being contacted because you are registered with the Office of Environment & Heritage as having an interest in being consulted about Aboriginal cultural heritage matters in the Snowy Monaro Regional local government area and as a member of the Southern Snowy Mountains Aboriginal Working Group. If you wish to register your interest for this project, please do so before April 12<sup>th</sup> 2017 by contacting me via email or telephone through my contact details listed below.

Could you please disseminate this information to members of your family and community who may not be listed on the OEH list of stakeholders? I will be in contact with members of the Working Group to arrange for assistance with the site surveys.

Yours sincerely,

**Chris Darlington**

Project Manager, Alpine

NSW National Parks and Wildlife Service

Southern Ranges Region

## Appendix 3: Letter to OEH registered groups

**From:** [Christopher Darlington](#)

**Sent:** Tuesday, 28 March 2017 4:17 PM

**Subject:** Proposed walking trails, Kosciuszko National Park – Aboriginal cultural heritage assessment

**To:** Registered Aboriginal Party

Dear Sir/Madam

**RE: Proposed walking trails, Kosciuszko National Park – Aboriginal cultural heritage assessment**

The NSW National Parks and Wildlife Service (NPWS), Office of Environment and Heritage (OEH) proposes to establish a series of new walking tracks linking ski resort areas in Kosciuszko National Park. The walking route would be comprised of a combination of existing and new tracks.

NPWS is inviting Aboriginal people who have cultural associations with this area to register an interest in being consulted regarding the proposed works. The purpose of this consultation is to assist NPWS in conducting a cultural heritage assessment of the proposed routes of the walking tracks and, if required, to assist in preparation of an application for an Aboriginal Heritage Impact Permit (AHIP) to allow Aboriginal objects to be impacted during works. The consultation will also assist the Chief Executive Officer of OEH to determine the application.

You are being contacted because you are registered with the Office of Environment & Heritage as having an interest in being consulted about Aboriginal cultural heritage matters in the Snowy Monaro Regional local government area. If you wish to register your interest for this project, please do so before April 12<sup>th</sup> 2017 by contacting me via email or telephone through my contact details listed below.

Yours sincerely,

**Chris Darlington**

Project Manager, Alpine  
NSW National Parks and Wildlife Service  
Southern Ranges Region

Email [Chris.darlington@environment.nsw.gov.au](mailto:Chris.darlington@environment.nsw.gov.au)

Phone 02 64 505 595

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PO Box 2228 Jindabyne NSW 2627

This email is intended for the addressee(s) named and may contain confidential and/or privileged information.

If you are not the intended recipient, please notify the sender and then delete it immediately.

Any views expressed in this email are those of the individual sender except where the sender expressly and with authority states them to be the views of the NSW Office of Environment and Heritage.

PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS EMAIL

## Appendix 4: Letter to agencies (example)



p. +61 2 4441 5996  
m. +61 428 342 758  
e. [suefeary@hotmail.net.au](mailto:suefeary@hotmail.net.au)  
53 Saumarez St, Vincentia NSW 2540  
ABN: 68 866 296 524

National Native Title Tribunal  
GPO Box 9973  
Sydney  
NSW 2001

[NSWenquiries@nntt.gov.au](mailto:NSWenquiries@nntt.gov.au)

31 March 2017

Dear Sir/Madam,

**ABORIGINAL CONSULTATION: PROPOSED ESTABLISHMENT OF NEW WALKING TRACKS LINKING SKI RESORT AREAS IN KOSCIUSZKO NATIONAL PARK.**

The National Parks and Wildlife Service (part of the NSW Office of Environment and Heritage) proposes to establish or upgrade approximately 25 kms of walking tracks linking existing ski resorts in Kosciuszko National Park to create the 'Snowy Iconic Walks' (see attached map). The subject area is west of Jindabyne with an elevation of up to 2000 metres above sea level.

The proposed works may impact Aboriginal objects and an Aboriginal Heritage Impact Permit (AHIP) may be required. In order for an AHIP to be determined, the NSW Office and Environment and Heritage require that you are contacted in regard to Aboriginal people registered with your organisation who may wish to be consulted regarding the proposed works and AHIP.

Could you please advise if there are any Native Title claims registered for the subject area and the contact details of any Native Title claimants at your earliest convenience.

Expressions of interest in being included in the consultation process should be sent in writing to: Sue Feary, 53 Saumarez St, Vincentia, NSW 2540. Expressions of interest can also be made by telephone on 02 44415996/0428342758 or by email [suefeary@hotmail.net.au](mailto:suefeary@hotmail.net.au) within 14 days of receiving this letter.

Thank you for your assistance.

Yours sincerely

Sue Feary  
Director  
Conservation and Heritage Planning and Management  
**Attachment:** map showing area of proposed development

## **Appendix 5: Responses to Stage 1 consultation**

[Removed to protect privacy of respondents]

## **Appendix 6: agency responses**

12 April 2017

Ref: Alannah Dickeson  
Phone: 6451 1559  
ECM: 2999700

Sue Feary  
Conservation and Heritage Planning and Management  
suefeary@hotmail.net.au  
53 Saumarez Street  
Vincentia NSW 2540

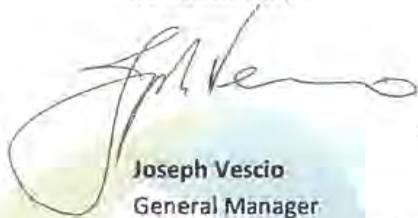
Dear Sue

**Aboriginal Consultation: Proposed Establishment of New Walking Tracks Linking Ski Resort Areas in Kosciuszko National Park.**

Thankyou for your letter regarding the National Parks and Wildlife Service (NPWS) proposal to establish new walking tracks as part of the "snowy Iconic Walks." Council are supportive of the project as it has the potential to increase tourism to the region during the summer months. Council have been working closely with NPWS on a number of projects in the area and have also been included in the Southern Kosciuszko Aboriginal Working Group meetings.

Council do not wish to be included in the consultation process for the Aboriginal Heritage component of the project. However, we will forward the letter to Aboriginal Stakeholders who may have associations with this area.

Yours faithfully



**Joseph Vescio**  
General Manager  
Snowy Monaro Regional Council

**HEAD OFFICE**

**Cooma:**  
81 Commissioner Street  
COOMA NSW 2630

**BRANCH OFFICES**

**Berridale:**  
2 Myack Street  
BERRIDALE NSW 2628

**Bombala:**  
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BOMBALA NSW 2632

**Jindabyne:**  
2/1 Gippsland Street  
JINDABYNE NSW 2627

**MAILING ADDRESS** PO Box 714, COOMA NSW 2630 **PHONE** 1300 345 345 [www.snowymonaro.nsw.gov.au](http://www.snowymonaro.nsw.gov.au)



11-13 Mansfield Street  
Glebe NSW 2037  
PO Box 112, Glebe NSW 2037  
P. 02 9562 6327 F. 02 9562 6350

19 July 2017

Sue Feary  
Sue Feary Conservation & Heritage Planning & Management  
53 Saumarez St  
VINCENTIA NSW 2540

Dear Sue

**Re: Request - Search for Registered Aboriginal Owners**

I refer to your email dated 31 March 2017 regarding Aboriginal Cultural Heritage Assessment within the Kosciuszko National Park area of NSW.

I have searched the Register of Aboriginal Owners and the project area described *does not appear* to have Registered Aboriginal Owners pursuant to Division 3 of the *Aboriginal Land Rights Act 1983 (NSW)*.

I suggest that you contact the Bega Local Aboriginal Land Council on 02 6492 3950. They will be able to assist you in identifying other Aboriginal stakeholders for this project.

Yours sincerely

Bianca Ceissman  
**Administration Officer**  
Office of the Registrar, *Aboriginal Land Rights Act 1983 (NSW)*

## Appendix 7: Stage 2 and 3 Aboriginal consultation - documentation sent to Registered Parties



12/04/2017

Dear Registered Aboriginal Party

**RE: ABORIGINAL CONSULTATION FOR PROPOSED SNOWY ICONIC WALKS PROJECT - STAGES 2 AND 3**

Thank you for registering your interest in being consulted in regard to this proposed development. The purpose of this letter is to comply with the NSW Office of Environment and Heritage's requirements for Stage 2 and Stage 3 Aboriginal consultation.

Firstly, we aim to provide you with sufficient information about the project to ensure you are well informed on what it involves and its potential impacts on Aboriginal heritage values.

The overall objective of the Snowy Iconic Walks Project is to develop opportunities for walks of 4-5 day duration, trekking between the main ski resorts in the high country of Kosciuszko National Park. Existing tracks, such as the Main Range track, will be used, and some sections of existing tracks will be upgraded. Some new sections of tracks will also be constructed to link existing tracks. Maps showing the indicative route and information on track specifications are provided in the attached document **[ATTACHMENT 1]**.

For Stage 3 of the consultation process, we are seeking your advice and input into the proposed methodology for conducting the heritage assessment, prepared by consultant archaeologists Sue Feary and Gerard Niemoeller **[ATTACHMENT 2]**. We also would like to provide you with an opportunity to identify the cultural values [tangible and intangible] that the area holds for you and your family and to recommend how these should be considered in development and ongoing management of the walking tracks **[ATTACHMENT 3]**. For example, do you have any concerns about the track going near Porcupine Rocks – noting that there is already a track leading from Perisher to Porcupine Rocks? If the track's route was to travel on the next spur east of Lubra Rocks, would this provide sufficient space between this site and the track?

Any information you provide will be taken into account when determining the final route of the walking track, with a view to avoiding all sites and places of Aboriginal heritage value where possible.

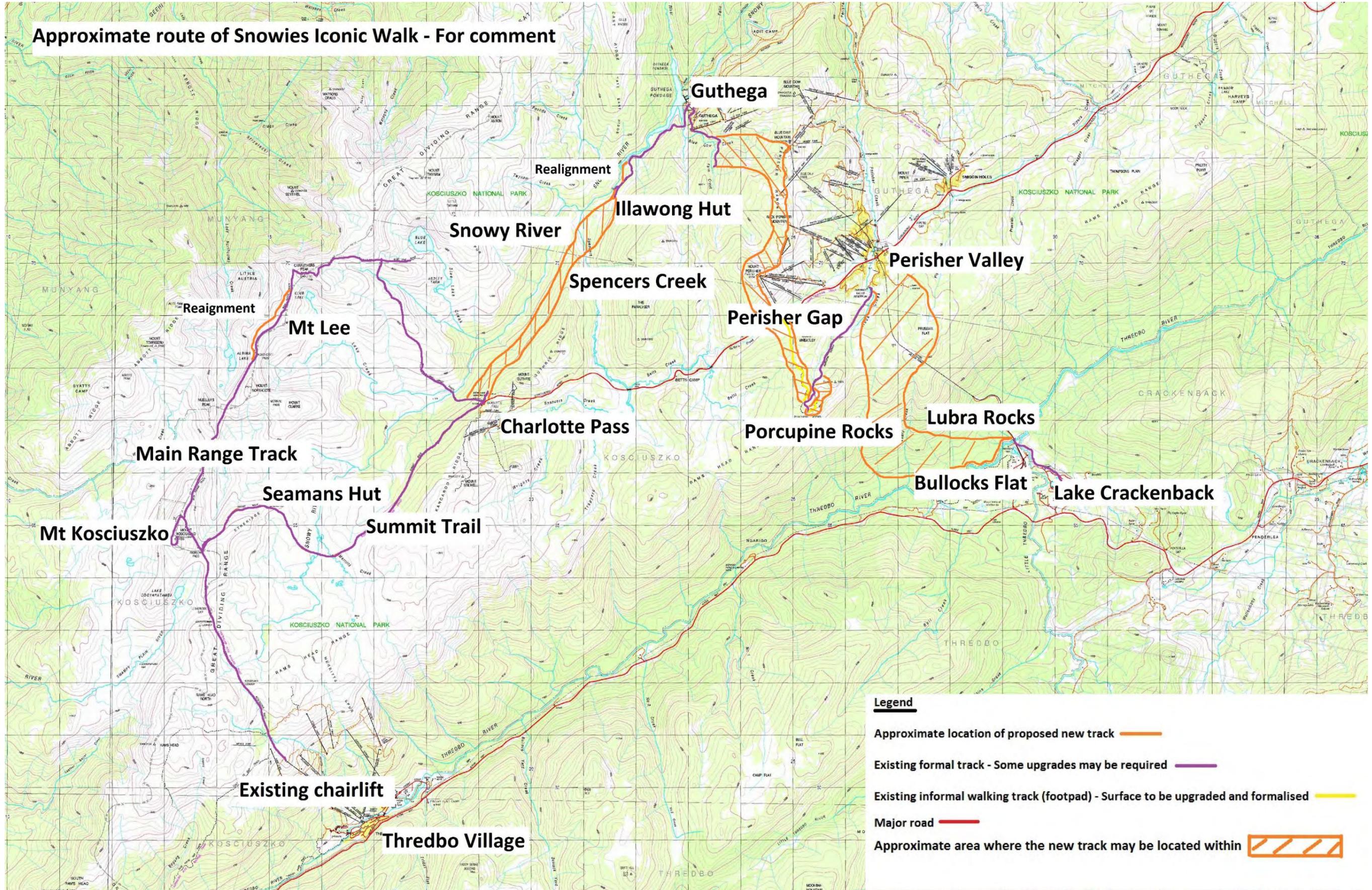
Thank you for your consideration of these matters. If you wish to respond, or you have any queries, could you please contact me via email or letter within 28 days of receiving this information.

Yours sincerely

Chris Darlington  
Project Manager, Alpine  
NSW National Parks & Wildlife Service, Office of Environment & Heritage  
PO Box 2228, Jindabyne, NSW 2627  
Tel: 02 6450 5595 Email: [Chris.darlington@environment.nsw.gov.au](mailto:Chris.darlington@environment.nsw.gov.au)

Attachment 1: proposed development, see Section 4.2 for description

**Approximate route of Snowies Iconic Walk - For comment**



## ATTACHMENT 2

### Draft methodology for Aboriginal cultural heritage assessment

NPWS has engaged experienced archaeologists Dr Sue Feary and Gerard Niemoeller to conduct an Aboriginal cultural heritage assessment of the proposed walking track network and if required, to prepare an AHIP application to allow harm to certain Aboriginal objects.

The research methodology they intend to use is in accordance with relevant OEH guidelines and codes (DECCW, 2010; OEH, 2011). These codes and guidelines clearly outline the process, which is summarised here:-

- Review and evaluate previous archaeological work in the area, primarily through information held on OEH's database (AHIMS). This will determine whether any recorded sites are likely to be impacted by the proposed development.
- Review historical and ethnographic records relating to Aboriginal use and occupation of the area in pre-and post-contact times.
- Consider land use history in relation to its impacts on the archaeological record
- On the basis of all of the above, develop a predictive model for location and types of Aboriginal sites and objects likely to be present
- Develop a field survey design and conduct fieldwork. Field survey will involve surface investigation only and is expected to take up to six (6) days of walking. The track route will be clearly marked with tape and it is the intention to walk the route in its entirety, investigating 5 metres each side of the midline. This will allow flexibility in path alignment, to avoid Aboriginal sites or significant environmental features if present. The route will be walked by both archaeologists, accompanied by agency representatives where appropriate, and one or two appropriately qualified and experienced Aboriginal heritage officers, representing registered Aboriginal parties.
- Careful attention will be paid to bare patches of ground for the presence of stone artefacts. Mature trees will be inspected for scars and rock outcrops will be inspected for evidence of quarrying.
- Logistical issues for fieldwork include the rugged nature of the terrain, presence of thick vegetation, high altitude and sudden changes in the weather. There are also limited opportunities to access the track by vehicle, which means that on some days long distances will need to be covered.
- Where vegetation is thick and ground visibility very limited or non-existent, the archaeological sensitivity of the landform – including the potential for buried or obscured archaeological material, will be assessed, based on landforms, topography and geomorphological processes. The need for any future subsurface investigations will be identified.

- Recording, significance assessment and recommendations regarding further work, will be in accordance with relevant OEH codes.
- The draft report will be reviewed and endorsed by the clients and then sent out to Registered Aboriginal Parties for their comment and feedback.
- Places identified by registered parties as having cultural significance will be marked on maps and on the ground without defining the exact location if appropriate.

Fieldwork is planned for mid-late May 2017. The draft assessment report is due for completion in late June 2017 with a final due in late July 2017.

### ATTACHMENT 3

#### Potential impacts on Aboriginal objects and management options

Any Aboriginal objects located within the final footprint of the walking track may be impacted by the following activities:-

- vegetation removal,
- ground disturbance during shallow excavation for the track,
- benching where slopes are relatively steep,
- digging footings at bridge crossings and raised pathways, or for interpretive signage and other infrastructure associated with the walking track.

Management options for sites potentially impacted by the final route;

1. The primary aim is to avoid all Aboriginal sites by realigning the track [preferred option].
2. Community collection and re-location of stone artefacts if required.
3. Application is made for an Aboriginal Heritage Impact Permit to allow harm to objects due to walking track construction.
4. Consideration of heritage offsets and/or interpretive signs on Aboriginal heritage along the track.

### **Appendix 8: Responses to Stages 2 and 3 consultation**

[Removed to protect privacy of respondents]



## Appendix 9: AHIMS search results



List of Sites ( Partial )

Proposed Summit iconic walk

Grid Reference Type = GDA (Geocentric Datum Australia), Zone = 55, Easting From = 614996, Easting to = 633011, Northing From = 5958039, Northing to = 5976004, Feature Search Type = AHIMS Features, Populate AHIMS Map? = Yes

Site ID	Site Name	Datum	Zone	Easting	Northing	Access Restrictions			Context	Site Features	Site Types (recorded prior to June 2001)	Further Info.	Report ID
						Gender	General	Location					
<a href="#">1-3-0112</a>	<a href="#">Perisher View PAD 1</a>	GDA	55	626687	5969952	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Potential Archaeological Deposit (PAD) : -		Permit(s) 2297, 2298	
	Status		Valid										
<a href="#">1-6-0081</a>	<a href="#">Golf Course Extension Site 1:</a>	AGD	55	615900	5958520	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		1417
	Status		Valid									Permit(s)	
<a href="#">1-6-0099</a>	<a href="#">Ramshead Creek 1:</a>	AGD	55	616100	5958960	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		Permit(s) 668, 675, 1769
	Status		Valid										
<a href="#">1-6-0100</a>	<a href="#">Ramshead Creek 2:</a>	AGD	55	616290	5959060	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		Permit(s)
	Status		Valid										
<a href="#">1-3-0065</a>	<a href="#">Friday Flat IF-1:?</a>	AGD	55	617550	5959500	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Isolated Find		Permit(s)
	Status		Valid										
<a href="#">1-3-0114</a>	<a href="#">Spencers Picket - Spencers Creek</a>	AGD	55	621170	5967450	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 3			Permit(s)
	Status		Valid										
<a href="#">1-3-0097</a>	<a href="#">PRTL8 - Guthega Dam</a>	AGD	55	622981	5972741	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Potential Archaeological Deposit (PAD) : -		Permit(s)	
	Status		Valid										
<a href="#">1-3-0131</a>	<a href="#">Thredbo Walking Track 14</a>	AGD	55	624298	5964385	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 2			101126
	Status		Valid									Permit(s)	
<a href="#">1-3-0032</a>	<a href="#">Bullocks Flat to Thredbo 04</a>	AGD	55	627050	5965200	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		1317
	Status		Valid									Permit(s)	
<a href="#">1-3-0127</a>	<a href="#">Thredbo Walking Track 10</a>	AGD	55	628522	5965382	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 2			101126
	Status		Partially Destroyed									Permit(s) 3045	
<a href="#">1-3-0064</a>	<a href="#">Alpine Way 9</a>	AGD	55	628600	5964850	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		2495
	Status		Valid									Permit(s)	



List of Sites ( Partial )

Proposed Summit iconic walk

Grid Reference Type = GDA (Geocentric Datum Australia), Zone = 55, Easting From = 614996, Easting to = 633011, Northing From = 5958039, Northing to = 5976004, Feature Search Type = AHIMS Features, Populate AHIMS Map? = Yes

Site ID	Site Name	Datum	Zone	Easting	Northing	Access Restrictions			Context	Site Features	Site Types <small>(recorded prior to June 2001)</small>	Further Info.	Report ID
						Gender	General	Location					
i1-3-0125	<u>Thredbo Walking Track 8</u>	AGD	55	628657	5965473	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 10		Permit(s) 3045	101126
	Status			Partially Destroyed									
i1-3-0003	<u>Carruthers Spur:</u>	AGD	55	616500	5969300	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site	Permit(s)	321
	Status			Valid								Permit(s)	
i1-3-0137	<u>Thredbo Walking Track 20</u>	AGD	55	618380	5960092	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 4		Permit(s)	101126
	Status			Valid								Permit(s)	
i1-3-0037	<u>Bullocks Flat to Thredbo 09</u>	AGD	55	619050	5960700	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site	Permit(s)	1317
	Status			Valid								Permit(s)	
i1-3-0001	<u>Mt Guthrie:Adams Hut:</u>	AGD	55	620100	5967820	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site	Permit(s)	321
	Status			Valid								Permit(s)	
i1-3-0103	<u>Perisher Blue Isolated Find 2</u>	AGD	55	623380	5972880	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 1		Permit(s)	
	Status			Valid								Permit(s)	
i1-3-0135	<u>Thredbo Walking Track 18</u>	AGD	55	623724	5963937	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Shell : 9		Permit(s)	101126
	Status			Valid								Permit(s)	
i1-3-0105	<u>Mt Blue Cow PAD</u>	AGD	55	624650	5972700	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Potential Archaeological Deposit (PAD) : -		Permit(s) 1823	98805
	Status			Valid								Permit(s)	
i1-3-0100	<u>Perisher Blue 3</u>	AGD	55	625300	5970320	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 3		Permit(s)	
	Status			Valid								Permit(s)	
i1-3-0099	<u>PRTL11 Perisher South</u>	AGD	55	626444	5969537	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Potential Archaeological Deposit (PAD) : -		Permit(s)	
	Status			Valid								Permit(s)	



List of Sites ( Partial )

Proposed Summit iconic walk

Grid Reference Type = GDA (Geocentric Datum Australia), Zone = 55, Easting From = 614996, Easting to = 633011, Northing From = 5958039, Northing to = 5976004, Feature Search Type = AHIMS Features, Populate AHIMS Map? = Yes

Site ID	Site Name	Datum	Zone	Easting	Northing	Access Restrictions			Context	Site Features	Site Types <small>(recorded prior to June 2001)</small>	Further Info.	Report ID
						Gender	General	Location					
61-3-0129	<u>Thredbo Walking Track 12</u>	AGD	55	627857	5965225	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 1			101126
	Status			Partially Destroyed								Permit(s) 3045	
61-3-0116	<u>Alpine Way Culvert Site 2</u>	AGD	55	627932	5964888	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 2			
	Status			Valid								Permit(s)	
61-3-0031	<u>Bullocks Flat to Thredbo 03</u>	AGD	55	628000	5965100	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		1317
	Status			Valid								Permit(s)	
61-3-0017	<u>Bull Creek;Kosciusko N.P.:</u>	AGD	55	628100	5964800	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		468
	Status			Valid								Permit(s)	
61-3-0019	<u>Bull Creek;Rutledges:</u>	AGD	55	628800	5965600	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		
	Status			Partially Destroyed								Permit(s) 3045	
61-3-0027	<u>Crackenback River 2;Tallangatta:</u>	AGD	55	629100	5966450	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		1709
	Status			Valid								Permit(s)	
61-3-0028	<u>Crackenback River 3;Tallangatta:</u>	AGD	55	629450	5965100	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		1709
	Status			Valid								Permit(s)	
61-3-0087	<u>LC 5</u>	AGD	55	629700	5966060	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 2			
	Status			Valid								Permit(s)	
61-3-0041	<u>Little Thredbo Homestead Site 2:</u>	AGD	55	629800	5965400	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		1364
	Status			Valid								Permit(s)	
61-3-0084	<u>LC 2</u>	AGD	55	629825	5965400	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 1			
	Status			Valid								Permit(s)	

List of Sites ( Partial )

Proposed Summit iconic walk

Grid Reference Type = GDA (Geocentric Datum Australia), Zone = 55, Easting From = 614996, Easting to = 633011, Northing From = 5958039, Northing to = 5976004, Feature Search Type = AHIMS Features, Populate AHIMS Map? = Yes

Site ID	Site Name	Datum	Zone	Easting	Northing	Access Restrictions			Context	Site Features	Site Types <small>(recorded prior to June 2001)</small>	Further Info.	Report ID
						Gender	General	Location					
<a href="#">31-3-0042</a>	<a href="#">Little Threbo Homestead Site 3:</a>	AGD	55	629900	5965600	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site	Permit(s)	1364
		Status	Valid										
<a href="#">31-3-0151</a>	<a href="#">Bullocks Flat 2</a>	GDA	55	629615	5967498	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -		Permit(s)	
		Status	Valid										
<a href="#">31-3-0149</a>	<a href="#">Bullocks Flat 3</a>	GDA	55	632972	5969129	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Stone Quarry : -		Permit(s)	
		Status	Valid										
<a href="#">31-3-0049</a>	<a href="#">Crackenback Chairlift 1:</a>	AGD	55	615170	5960500	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site	Permit(s)	1912
		Status	Valid										
<a href="#">31-6-0103</a>	<a href="#">EDI 1</a>	AGD	55	616820	5959600	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site	Permit(s)	
		Status	Valid										
<a href="#">31-3-0136</a>	<a href="#">Thredbo Walking Track 19</a>	AGD	55	620692	5961676	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 3		Permit(s)	101126
		Status	Valid										
<a href="#">31-1-0045</a>	<a href="#">No.1 Creek Alpine:Kosciusko National Park:</a>	AGD	55	623700	5963500	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site	Permit(s)	
		Status	Valid										
<a href="#">31-3-0013</a>	<a href="#">Alpine Way:Kosciusko N.P.:</a>	AGD	55	624680	5964300	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Burial : - Stone Arrangement : -	Burial/s Stone Arrangement	Permit(s)	468
		Status	Valid										
<a href="#">31-3-0133</a>	<a href="#">Thredbo Walking Track 16</a>	AGD	55	626248	5965145	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 7		Permit(s)	101126
		Status	Valid										
<a href="#">31-3-0107</a>	<a href="#">PRTL3</a>	AGD	55	626750	5970600	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 11		Permit(s)	98843
		Status	Valid										

Number of Sites : 118

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List of Sites ( Partial )

Proposed Summit iconic walk

Grid Reference Type = GDA (Geocentric Datum Australia), Zone = 55, Easting From = 614996, Easting to = 633011, Northing From = 5958039, Northing to = 5976004, Feature Search Type = AHIMS Features, Populate AHIMS Map? = Yes

Site ID	Site Name	Datum	Zone	Easting	Northing	Access Restrictions			Context	Site Features	Site Types (recorded prior to June 2001)	Further Info.	Report ID
						Gender	General	Location					
61-3-0119	<u>Thredbo Walking Track 2</u>	AGD	55	627225	5965378	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 10		Contact	101126
	Status		Valid									Permit(s)	
61-3-0118	<u>Thredbo Walking track 1</u>	AGD	55	627259	5965395	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Grinding Groove : 1			101126
	Status		Valid									Permit(s)	
61-3-0145	<u>Relocated site #61-3-0019</u>	AGD	55	627849	5965463	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 65			
	Status		Valid									Permit(s)	
61-3-0016	<u>Bull Creek:Kosciuszko N.P.:</u>	AGD	55	628800	5964900	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		468
	Status		Valid									Permit(s)	
61-3-0040	<u>Site D:</u>	AGD	55	628800	5965900	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		612
	Status		Valid									Permit(s)	
61-3-0080	<u>LTR 2</u>	AGD	55	629475	5965275	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 1			
	Status		Valid									Permit(s)	
61-3-0086	<u>LC 4</u>	AGD	55	629800	5965525	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 10			
	Status		Valid									Permit(s)	
61-3-0054	<u>KNP91-9:Thompson's Plain:</u>	AGD	55	632000	5972000	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		1962
	Status		Valid									Permit(s)	
61-3-0140	<u>Charlotte Pass Site 2</u>	GDA	55	618724	5966707	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 9			
	Status		Valid									Permit(s) 3096	
61-3-0142	<u>Charlottes Pass Site 4</u>	GDA	55	618953	5967089	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 4			
	Status		Valid									Permit(s) 3096	
61-3-0062	<u>Alpine Way 7</u>	AGD	55	617909	5959497	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		2495
	Status		Valid									Permit(s) 2071, 2072, 2291, 2326	

Number of Sites : 118

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List of Sites ( Partial )

Proposed Summit iconic walk

Grid Reference Type = GDA (Geocentric Datum Australia), Zone = 55, Easting From = 614996, Easting to = 633011, Northing From = 5958039, Northing to = 5976004, Feature Search Type = AHIMS Features, Populate AHIMS Map? = Yes

Site ID	Site Name	Datum	Zone	Easting	Northing	Access Restrictions			Context	Site Features	Site Types (recorded prior to June 2001)	Further Info.	Report ID
						Gender	General	Location					
61-3-0038	<u>Bullocks Flat to Thredbo 10</u>	AGD	55	618700	5960300	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site	Contact	1317
	Status		Valid									Permit(s)	
61-3-0036	<u>Bullocks Flat to Thredbo 08</u>	AGD	55	619200	5960650	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		1317
	Status		Valid									Permit(s)	
61-3-0095	<u>PRTL5 Blue Calf Pass</u>	AGD	55	624704	5971666	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Potential Archaeological Deposit (PAD) : -			
	Status		Valid									Permit(s)	
61-3-0113	<u>Porcupine Walking Track</u>	AGD	55	626330	5969150	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -			
	Status		Valid									Permit(s)	
61-3-0094	<u>PRTL3 Mount Pier South Spurline</u>	AGD	55	626574	5970444	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Potential Archaeological Deposit (PAD) : -			
	Status		Valid									Permit(s)	
61-3-0033	<u>Bullocks Flat to Thredbo 05</u>	AGD	55	626900	5965200	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		1317
	Status		Valid									Permit(s)	
61-3-0121	<u>Thredbo Walking Track 4</u>	AGD	55	627808	5965535	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 1			101126
	Status		Valid									Permit(s)	
61-3-0015	<u>Bull Creek;Thredbo Diggings;</u>	AGD	55	628200	5964800	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Isolated Find		468
	Status		Valid									Permit(s)	
61-3-0122	<u>Thredbo Walking Track 5</u>	AGD	55	628478	5965864	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 1			101126
	Status		Valid									Permit(s)	
61-3-0018	<u>Bull Creek;Kosciusko N.P.;</u>	AGD	55	628500	5964600	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		468
	Status		Valid									Permit(s)	



List of Sites ( Partial )

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Site ID	Site Name	Datum	Zone	Easting	Northing	Access Restrictions			Context	Site Features	Site Types (recorded prior to June 2001 )	Further Info.	Report ID
						Gender	General	Location					
61-3-0043	<u>Little Thredbo Homestead Site 1:</u>	AGD	55	629900	5965200	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site	Contact	1364
	Status		Valid									Permit(s)	
61-3-0088	<u>LC 6</u>	AGD	55	629950	5965950	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 1		Permit(s)	
	Status		Valid									Permit(s)	
61-3-0083	<u>LC 1</u>	AGD	55	630450	5965700	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 10		Permit(s)	
	Status		Valid									Permit(s)	
61-3-0009	<u>Daners Gap:Hotel Kosciusko:</u>	AGD	55	632200	5973000	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		321
	Status		Valid									Permit(s)	
61-3-0104	<u>Guthega PAD</u>	AGD	55	632750	5972750	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Potential Archaeological Deposit (PAD) :-			98805
	Status		Valid									Permit(s) 1823	
61-6-0121	<u>Merrits Creek 1</u>	AGD	55	616850	5959500	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -		Permit(s)	
	Status		Valid									Permit(s)	
61-6-0104	<u>Friday Flat 2</u>	AGD	55	617800	5959710	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Isolated Find	Permit(s)	
	Status		Valid									Permit(s)	
61-3-0002	<u>Little Twynam:Mount Twynam:</u>	AGD	55	618500	5970900	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		321
	Status		Valid									Permit(s)	
61-3-0096	<u>PRTL7 Blue Cow Saddle</u>	AGD	55	624759	5972481	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Potential Archaeological Deposit (PAD) :-		Permit(s)	
	Status		Valid									Permit(s)	
61-3-0098	<u>PRTL10 Perisher South, Rock Creek</u>	AGD	55	626296	5969463	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Potential Archaeological Deposit (PAD) :-		Permit(s)	
	Status		Valid									Permit(s)	
61-3-0081	<u>LTR 1</u>	AGD	55	629400	5965275	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 1		Permit(s)	
	Status		Valid									Permit(s)	

Number of Sites : 118

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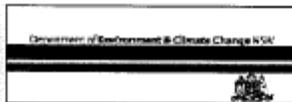


List of Sites ( Partial )

Proposed Summit iconic walk

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Site ID	Site Name	Datum	Zone	Easting	Northing	Access Restrictions			Context	Site Features	Site Types <small>(recorded prior to June 2001)</small>	Further Info. <small>Contact</small>	Report ID
						Gender	General	Location					
61-3-0090	<u>TF 1</u>	AGD	55	630400	5964900	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 2		Permit(s)	
		Status	Valid										
61-3-0143	<u>Charlotte Pass Site 5</u>	GDA	55	619031	5967164	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Stone Quarry : 1		Permit(s)	
		Status	Valid										
61-3-0117	<u>Alpine Way Culvert Site 2a</u>	GDA	55	627932	5964888	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 2		Lloyd, Anne (586)	
		Status	Valid									Permit(s)	
61-3-0150	<u>Bullocks Flat 1</u>	GDA	55	629388	5966833	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -		Permit(s)	
		Status	Valid										
61-3-0138	<u>Thredbo Walking Track 21</u>	AGD	55	618380	5960092	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 1			101126
		Status	Valid									Permit(s)	
61-3-0010	<u>Spencer Creek;</u>	AGD	55	620900	5969200	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site	Permit(s)	
		Status	Valid										
61-3-0132	<u>Thredbo Walking Track 15</u>	AGD	55	624995	5964730	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 1			101126
		Status	Valid									Permit(s)	
61-3-0101	<u>Perisher Blue 4</u>	AGD	55	625140	5970350	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 10		Permit(s)	
		Status	Valid										
61-3-0074	<u>The Perisher Range Test Location No.3</u>	AGD	55	626700	5970500	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 8			
		Status	Valid									Permit(s) 1352, 1353	
61-3-0014	<u>Lubra Rocks:The Porcupine;</u>	AGD	55	627000	5967000	None	<input type="checkbox"/>	<input type="checkbox"/>	Enclosed Site	Artefact : -	Shelter with Deposit		2038
		Status	Valid									Permit(s)	



List of Sites ( Partial )

Proposed Summit Iconic walk

Grid Reference Type = GDA (Geocentric Datum Australia), Zone = 55, Easting From = 614996, Easting to = 633011, Northing From = 5958039, Northing to = 5976004, Feature Search Type = AHIMS Features, Populate AHIMS Map? = Yes

Site ID	Site Name	Datum	Zone	Easting	Northing	Access Restrictions			Context	Site Features	Site Types (recorded prior to June 2001)	Further Info.	Report ID
						Gender	General	Location					
61-3-0102	Perisher Blue Isolated Find 1	AGD	55	627460	5971300	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 1		Contact	
	Status		Valid									Permit(s)	
61-3-0106	Smiggin Holes Saddle	AGD	55	627500	5971225	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 41		Permit(s)	
	Status		Valid									Permit(s)	
61-3-0073	Perisher Blue 1 same site as 61-3-0076	AGD	55	627890	5971880	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 2		Permit(s) 1352, 1353, 3903	
	Status		Valid										
61-3-0076	Perisher Blue (PB) 1 (2) - Smiggin Holes Reservoir 1 same site as 61-3-0073	AGD	55	628100	5972055	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 2		Permit(s) 3903	
	Status		Valid										
61-3-0082	LTR 3	AGD	55	629300	5965280	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 18		Permit(s)	
	Status		Valid									Permit(s)	
61-3-0029	Bullocks Flat to Thredbo 01	AGD	55	629350	5965200	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		1317
	Status		Valid										
61-3-0085	LC 3	AGD	55	629800	5965425	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 2		Permit(s)	
	Status		Valid									Permit(s)	
61-3-0092	TF 3	AGD	55	630100	5965075	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 1		Permit(s)	
	Status		Valid									Permit(s)	
61-3-0139	Charlottes Pass Site 1	GDA	55	618769	5966167	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Stone Quarry : 1		Permit(s) 3096	
	Status		Valid										
61-3-0144	Charlotte Pass Site 6	GDA	55	619025	5967196	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 7		Permit(s) 3096	
	Status		Valid										



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Proposed Summit iconic walk

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Site ID	Site Name	Datum	Zone	Easting	Northing	Access Restrictions			Context	Site Features	Site Types <small>(recorded prior to June 2001)</small>	Further Info.	Report ID
						Gender	General	Location					
61-3-0006	<u>Ramshead</u> <u>Range:Mount Stilwell;</u>	AGD	55	617200	5964300	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site	Contact	321
	Status		Valid									Permit(s)	
61-3-0035	<u>Bullocks Flat to</u> <u>Thredbo 07</u>	AGD	55	621050	5961950	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		1317
	Status		Valid									Permit(s)	
61-3-0008	<u>Perisher Gap;</u>	AGD	55	624800	5968700	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		321
	Status		Valid									Permit(s)	
62-1-0227	<u>Perisher Blue 2</u>	AGD	55	625490	5970110	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 12			
	Status		Valid									Permit(s)	
61-3-0134	<u>Thredbo Walking</u> <u>Track 17</u>	AGD	55	625939	5964946	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 6			101126
	Status		Valid									Permit(s)	
61-3-0120	<u>Thredbo Walking</u> <u>Track 3</u>	AGD	55	627054	5965485	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 7			101126
	Status		Valid									Permit(s)	
61-3-0130	<u>Thredbo Walking</u> <u>Track 13</u>	AGD	55	627857	5965225	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 1			101126
	Status		Partially Destroyed									Permit(s) 3045	
61-3-0128	<u>Thredbo Walking</u> <u>Track 11</u>	AGD	55	627932	5965216	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 1			101126
	Status		Partially Destroyed									Permit(s) 3045	
61-3-0123	<u>Thredbo Walking</u> <u>Track 6</u>	AGD	55	628817	5966000	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 2			101126
	Status		Valid									Permit(s)	
61-3-0124	<u>Thredbo Walking</u> <u>Track 7</u>	AGD	55	628895	5966134	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Shell : 1			101126
	Status		Valid									Permit(s)	



List of Sites ( Partial )

Proposed Summit iconic walk

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Site ID	Site Name	Datum	Zone	Easting	Northing	Access Restrictions			Context	Site Features	Site Types <small>(recorded prior to June 2001)</small>	Further Info.	Report ID
						Gender	General	Location					
61-3-0026	<u>Crackenback River 1;Taliangatta;</u>	AGD	55	629300	5965100	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site	Contact	1709
		Status	Valid									Permit(s)	
61-3-0141	<u>Charlotte Pass Site 3</u>	GDA	55	618833	5966915	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 2		Permit(s) 3096	
		Status	Valid									Permit(s) 3096	
61-6-0082	<u>Merritts Park Nature Trail;Site 1;</u>	AGD	55	616930	5959330	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		1417
		Status	Valid									Permit(s)	
61-6-0083	<u>Merritts Park, Site 1;</u>	AGD	55	617150	5959550	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		1417
		Status	Valid									Permit(s)	
61-3-0063	<u>Alpine Way 8</u>	AGD	55	618350	5960050	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		2495
		Status	Valid									Permit(s)	
61-3-0039	<u>Bullocks Flat to Thredbo 11</u>	AGD	55	618500	5960150	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		1317
		Status	Valid									Permit(s)	
61-3-0044	<u>Bullocks Flat to Thredbo 12</u>	AGD	55	619650	5960890	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		1317
		Status	Valid									Permit(s)	
61-3-0034	<u>Bullocks Flat to Thredbo 06</u>	AGD	55	622800	5962900	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -	Open Camp Site		1317
		Status	Valid									Permit(s)	
61-3-0075	<u>RC 1 (2)</u>	AGD	55	626155	5972955	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 3		Permit(s) 2073, 2074	
		Status	Valid									Permit(s) 2073, 2074	
61-3-0072	<u>RC 1</u>	AGD	55	626702	5972750	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : -		Permit(s) 1352, 1353	
		Status	Valid									Permit(s) 1352, 1353	



List of Sites ( Partial )

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Site ID	Site Name	Datum	Zone	Easting	Northing	Access Restrictions			Context	Site Features	Site Types <small>(recorded prior to June 2001)</small>	Further Info.	Report ID
						Gender	General	Location					
61-3-0093	<u>PRTL2 Pipers Gap Slope</u>	AGD	55	626926	5970796	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Potential Archaeological Deposit (PAD) :-			
		Status	Valid										
61-3-0030	<u>Bullocks Flat to Thredbo 02</u>	AGD	55	628250	5965050	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact :-	Open Camp Site	Permit(s)	1317
		Status	Valid										
61-3-0126	<u>Thredbo Walking Track 9</u>	AGD	55	628593	5965400	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 1		Permit(s)	101126
		Status	Partially Destroyed										
61-3-0091	<u>TF 2</u>	AGD	55	630150	5965025	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 2		Permit(s) 3045	
		Status	Valid										
61-3-0089	<u>LC 7</u>	AGD	55	630175	5965930	None	<input type="checkbox"/>	<input type="checkbox"/>	Open Site	Artefact : 1		Permit(s)	
		Status	Valid										