

Natural Values Report for the Tasmanian Wilderness World Heritage Area, Cradle Mountain – Lake St Clair National Park

**Natural Values Survey – Overland Track,
Proposed Kia Ora Hut Renewal**



Natural Values Science Section

Ecologist – Micah Visoiu

October 2020

Requested by: PWS

Inspected by: Micah Visoiu

Tenure: Cradle Mountain Lake St Clair National Park

Location: ~100m southwest of existing Kia Ora Hut – Overland Track GDA 423725, 5361720

Geology: Glacial moraine ridge composed of dolerite derived till interspersed with ~ deep organic peat deposits in the low areas between moraines

1. Introduction

Natural Values Conservation Branch received a request from Parks and Wildlife, Northwest Region, to undertake a natural values survey for a proposed renewal of the Kia Ora Hut site including construction of a replacement hut and some potential construction of associated infrastructure (toilets, tent platforms). An initial desktop assessment by Natural Values Science Section Staff identified no potential threatened species or communities within the general area of the proposed works. An on-ground survey was conducted to provide a more detailed assessment of values within the site and to provide early input into optimal location for the new hut to be constructed.

2. Activity Description

The general plan for the site redevelopment indicates the following works to take place:

- Construction of a new hut.
- Conversion of existing hut to rangers hut
- Potential construction of new toilets and decommissioning of existing toilets.
- Potential construction of new camping platforms
- Construction of tracks/boardwalks connecting the above as required.

- **Method**

The site was visited jointly by Phil Cook and Rob Lawrence of PWS; Jerry de Gryse and Jordan Davis (landscape architects, Inspiring Place); Justin Cashin (fire management consultant, Ground Proof Mapping) and Micah Visoiu (Ecologist, NVSS) on Friday the 16th of October. After discussion of relevant considerations an optimal site for construction of the new hut was identified on ground (Hut site 1). The area of the proposed works was subsequently surveyed by Micah Visoiu. The survey consisted of an area search of the proposed hut sites and surrounds (Figure 1), recording vegetation communities, vascular plant species, signs of threatened fauna species and other natural values. The survey examined all vegetation communities/habitats in the area. Particular attention was given to the footprints and immediate surrounds of proposed structures. The survey was carried out over approximately two hours.

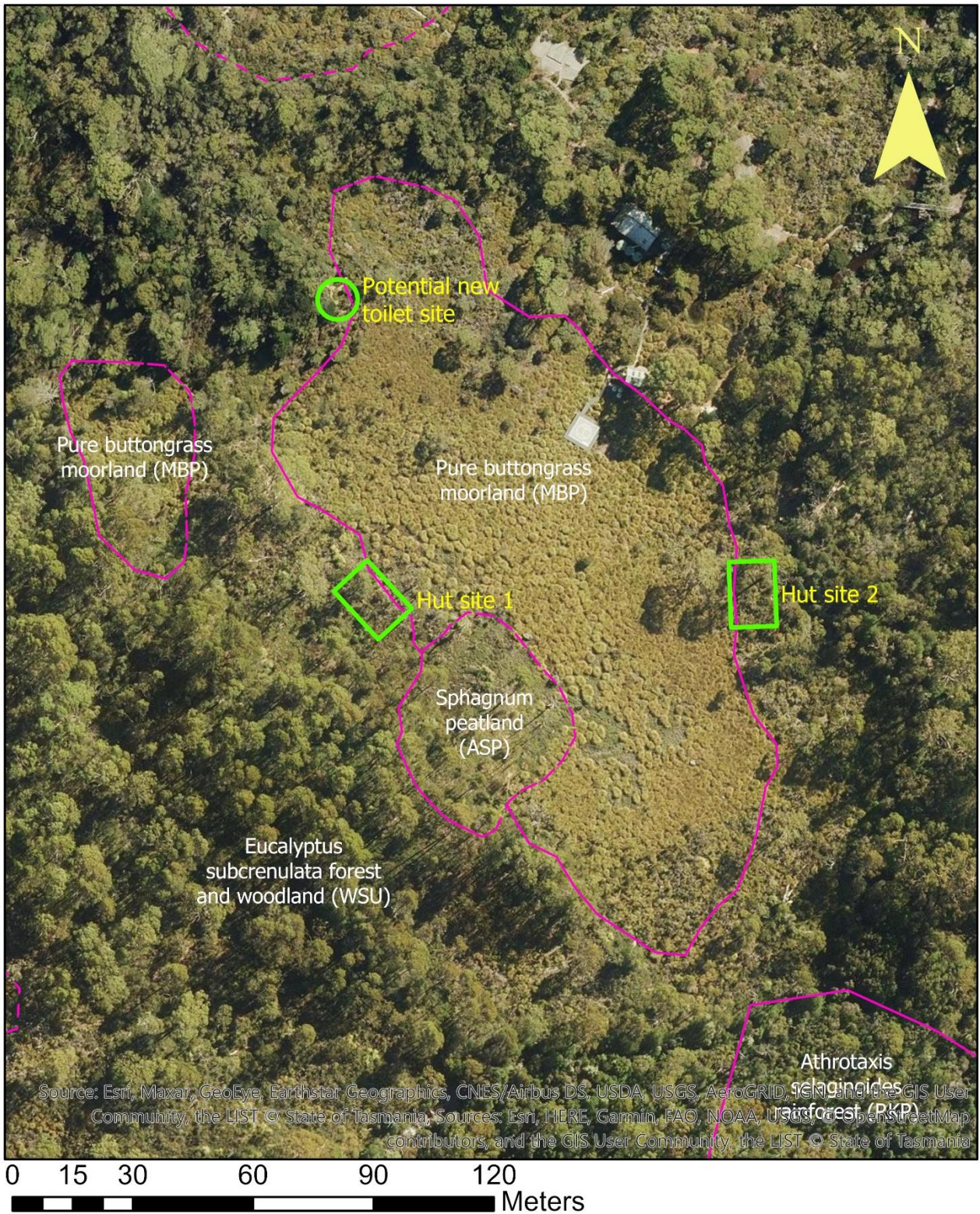


Figure 1. Kia Ora hut node with potential sites for new hut and new toilet shown.

3. Results

Hut placement

Initial assessment suggested that Hut site 1 (Fig. 1) was acceptable in terms of fire planning, natural values impacts and landscape architecture considerations. Initial intent to have the hut situated 30 meters to the southeast of this site was found to be unsuitable due to the vegetation in that area being sphagnum bog which at this site may be considered part of the ecological community – *Alpine Sphagnum bog and associated fen*, which is a nationally threatened ecological community listed under the *Environmental Protection and Biodiversity Conservation Act 1999*.

Hut site 2 which lies on the eastern edge of the buttongrass moorland was also assessed for natural values and is also potentially suitable.

Values hut site 1

In total 26 species of vascular plant were recorded during the survey (listed in Appendix 1). No listed threatened plant species or plant communities were found within the survey area.

The vegetation within the footprint and general vicinity of hut site 1 is composed of dry heathy eucalypt woodland which has developed on a moraine ridge (Fig. 2). This moraine is in itself also part of a significant natural value which provides evidence of recent glaciation and contributes to the outstanding universal values of the TWWHA. Although it has not been properly surveyed, the context in the area appears to be that Kia Ora hut is situated near the eastern edge of a large moraine field covering several square kilometres. The vegetation overstorey is snow peppermints (*Eucalyptus coccifera*) on the ridge top with alpine yellowgum (*E. subcrenulata*) in the wetter positions. Alpine yellowgum is the dominant in the surrounding area with the vegetation mapping community being *Eucalyptus subcrenulata* forest and woodland (WSU).



Figure 2 – hut site 1 looking towards Falling Mountain.

To the east of the moraine ridge is an area of pure buttongrass moorland (MBP) which has developed on peat which has likely infilled the low areas between moraine ridges. This community has not been burnt for an extended period. There is no recorded fire events, and the fire age is likely to be > 30 years and potentially much older. This facies of buttongrass moorland is more stable than some other types and is maintained by edaphic factors more so than regular fire disturbance. More regular fire management would however clear out the woody species which have become established on the boundaries of the moorland and reduce the overall fuel load without degrading the community.

To the west of the moraine ridge on which hut site 1 is situated there is a ~20 meter-wide low area with another more heavily wooded moraine beyond (Fig. 3). This area, which would require active fuel reduction to be undertaken (woody understorey removal) if hut site 1 is used, is relatively open and sedgy with scattered shrubs. Woody species present include young alpine yellow gum, alpine heathmyrtle (*Baeckea gunniana*) and swamp honeymyrtle (*Melaleuca squamea*).

There were abundant signs (scats) of grazing marsupials (common wombat, Bennett's wallaby, Tasmanian pademelon) throughout the area. No denning sites or potential denning sites for threatened Dasyurids were observed. All other threatened fauna species known from the region are unlikely to be directly impacted by the proposed works.



Figure 3 – swale to the west of hut site.

Values hut site 2

In terms of flora and fauna values, hut site 2 is comparable with hut site one. No additional species were recorded at this location. This site also appears to be located on glacial till although a moraine ridge is not as well defined in this location.

4. Outcomes and recommendations

The proposed works are unlikely to have any significant impact on state or federally listed threatened species or communities, or natural values generally. The location of hut site 1 on a glacial moraine is not ideal and is likely to result in some small incremental loss in glacial values. Despite this the small footprint of the hut site and extensive nature of glacial geomorphic values in this area suggests that overall impacts on these values will only be minor (Jason Bradbury – Geoscientific Officer NCH, pers com. 29/10/2020). Hut site 2 would likewise have impacts on the glacial features although the expression of the features at site 2 are less evident and therefore the impact can be assessed as slightly lower.

Physical excavation of the moraine should be minimised as much as possible. It is also likely that any excavations may be problematic as these till deposits are composed of unsorted rock debris with fragments ranging from rock flour, up to boulders over a meter in diameter.

Impact on the sphagnum bog community to the south of hut site 1 should be avoided.

Appendix A — Vascular plant species recorded

Type	Family	Species	Common Name	
Dicotyledoneae	Asteraceae	<i>Olearia erubescens</i>	moth daisybush	
	Cunoniaceae	<i>Bauera rubioides</i>	wiry bauera	
	Dilleniaceae	<i>Hibbertia procumbens</i>	spreading guineaflower	
	Epacridaceae	<i>Acrothamnus montanus</i>	snow beardheath	
	Epacridaceae	e	<i>Leptecophylla pogonocalyx</i>	bearded pinkberry
			<i>Pentachondra pumila</i>	carpet frillyheath
		e	<i>Richea gunnii</i>	bog candleheath
	Fabaceae	e	<i>Richea scoparia</i>	scoparia
			<i>Almaleea subumbellata</i>	wiry bushpea
	Fagaceae		<i>Oxylobium ellipticum</i>	golden shaggypea
			<i>Nothofagus cunninghamii</i>	myrtle beech
	Myrtaceae		<i>Baeckea gunniana</i>	alpine heathmyrtle
		e	<i>Eucalyptus coccifera</i>	snow peppermint
		e	<i>Eucalyptus subcrenulata</i>	alpine yellow gum
			<i>Melaleuca squamea</i>	swamp honeymyrtle
	Proteaceae	e	<i>Orites revolutus</i>	revolute orites
Gymnospermae	Podocarpaceae	e	<i>Phyllocladus aspleniifolius</i>	celerytop pine
Monocotyledoneae	Cyperaceae		<i>Gahnia grandis</i>	cutting grass
			<i>Gymnoschoenus sphaerocephalus</i>	buttongrass
	Iridaceae		<i>Lepidosperma filiforme</i>	common rapiersedge
		e	<i>Diplarrena latifolia</i>	western flag-iris
			<i>Hierochloe redolens</i>	sweet holygrass
	Poaceae		<i>Poa sp.</i>	
	Restionaceae		<i>Baloskion australe</i>	southern cordrush
		<i>Empodisma minus</i>	spreading roperush	
Pteridophyta	Gleicheniaceae	e	<i>Gleichenia alpina</i>	alpine coralfern