

Date: 19 August 2024

Our ref: 24NAR-6258

Vail Resorts Kosciuszko Road Perisher Valley NSW 2624

Attention: Sophie Ballinger

Dear Sophie,

Proposed Additions and Associated Works – Eyre Kiosk - Perisher Ski Resort

As requested, find below an assessment of the potential impacts on flora and fauna of the proposed additions to the Eyre Kiosk and associated works, in the Mount Perisher area of Perisher Ski Resort. The proposed development was inspected on 27 September 2023 and again on 16 April 2024.

Proposal Description

The proposal comprises additions to the Eyre Kiosk including improvements to the existing vehicle access.

Works associated with the proposal include:

- Installation of a concrete wastewater tank (188,000 litres). The tank will require excavation for installation and construction of a 1.2 m high rock retaining wall but will not be fully underground.
- Formulation of existing vehicle access track to the kiosk with 150 mm of compacted gravel.
- Installation of a septic tank and grease trap to the rear of the existing kiosk.
- Construction of a toilet block to the southwest of the existing kiosk minimal excavation will be required as the structure will be on footings with an elevated floor (not slab on ground).
- Associated trenching for pipe connections to the tanks from the kiosk.
- Landscaping to screen the wastewater tank from the Kosciuszko Road.

The proposal is described further in Figure 1 and Photos 1-8.

The development footprint is highly modified in association with the historic construction of the kiosk, Eyre T-bar, Kosciuszko Road and other impacts. The proposal has been designed such that all works will be located in already heavily disturbed areas. No trees are proposed to be removed, although some minor trimming of one eucalypt may be required to facilitate the construction of the toilets. The minor impacts on highly disturbed native vegetation that will be necessary are limited to:

- The proposed septic tank and grease trap at the rear of the existing kiosk.
- Trenching for pipe connections to the tanks from the kiosk.
- The concrete wastewater tank adjacent to the Kosciuszko Road.



Figure 1: The proposal



Figure 2: The proposal in relation to Biodiversity Values mapping.



Photo 1: Looking at the location of the proposed works from the Kosciuszko Road.



Photo 2: The existing vehicle access and the areas immediately surrounding the T-bar bottom station comprise bare earth, exotic grassland and very heavily disturbed bog.



Photo 3: The proposed works have been designed to be entirely in already highly disturbed areas.



Photo 4: The proposed septic tank and grease arrestor will be located at the rear of the kiosk which is already highly disturbed in associated with the existing grease arrestor which will be decommissioned.



Photo 5: The existing vehicle access will be formalised by the addition of 150 mm of gravel over the existing surface which comprises bare ground and exotic grassland.



Photo 6: The addition to the existing kiosk for the proposed toilets will not require the removal of any native vegetation however minor trimming of one tree may be necessary.



Photo 7: Looking at the location of the proposed wastewater collection tank from the Kosciuszko Road showing the heavy disturbance and predominance of exotic grasses.



Photo 8: The proposed wastewater collection tank will be located in an already disturbed area of wet and dry heath, exotic grassland and very heavily disturbed bog.

The proposed works have been designed to avoid the removal of any areas of native vegetation mapped within the Biodiversity Values Map as defined in the NSW *Biodiversity Conservation Regulation 2017* (BC Reg), as shown in Figure 2. Whilst the proposed works will encroach on some areas mapped on the Biodiversity Values Map, as shown in Figure 2, these areas, such as the existing access road, comprise exotic grassland or are already very heavily disturbed, as shown in Photos 1-6.

Impacts on vegetation communities

The development site and immediate surrounds (hereafter referred to as the study area) are heavily modified as a result of historic disturbances, as shown in Photos 1-8. The vegetation immediately surrounding the kiosk comprises exotic grassland and Plant Community Type (PCT) 3381: Kosciuszko Alpine Sally Woodland in various condition states, PCT 3890: Kosciuszko Alpine Wet Health, and PCT 3879: Kosciuszko High Plateau Grassy Open Heath, as shown in Figure 3.

The main impact on native vegetation associated with the proposal is the impact on approximately 140 m² of generally good condition PCT 3879: Kosciuszko High Plateau Grassy Open Heath and 20 m² of heavily disturbed PCT 3890: Kosciuszko Alpine Wet Health in association with the proposed wastewater collection tank. The proposed works will also result in the pruning of one *Eucalyptus niphophila* (Snow Gum) trees, which comprises PCT 3381: Kosciuszko Alpine Sally Woodland (Exotic Groundcover) in association with the construction of the proposed toilets.

The small amount of native vegetation to be impacted includes a range of native shrubs such as *Prostanthera cuneata* (Alpine Mint Bush), *Nematolepis ovatifolia*, *Ozothamnus alpinus* (Alpine Everlasting), *Olearia phlogopappa* (Dusty Daisy-bush), *Baeckea gunniana* (Alpine Baeckea), *Epacris paludosa* (Swamp Heath), *Grevillea australis* (Alpine Grevillea) and *Hovea montana* (Alpine Hovea). The groundcover is typically a mix of weeds and natives such as *Poa fawcettiae* (Smooth Blue Snowgrass), *Coronidium scorpoides* (Button Everlasting) and *Pimelea alpina*. In the highly disturbed Kosciuszko Alpine Wet Health hardy native species such as *Poa costiniana* (Bog Snowgrass), *Sphagnum* sp., *Carex gaudichaudiana*, *Richea continentis* (Candle Heath), *Oreobolus distichus* and *Senecio gunnii*, are present, as are exotic grasses such as *Agrostis capillaris* (Browntop Bent), exotic Fescues (*Festuca* sp.), and a range of exotic herbs, such as *Hypochaeris radicata* (Flatweed), *Acetosella vulgaris* (Sheep Sorrel), and *Achillea millefolium* (Yarrow).

The extent of native vegetation communities within the study area is identified in Figure 3.

Endangered Ecological Communities

The small highly disturbed wet areas within the study area are considered to comprise:

- the Montane Peatland and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South East Corner, South Eastern Highlands and Australian Alps bioregions EEC (hereafter referred to as the Montane Peatland and Swamps) which is listed under the *NSW Biodiversity Conservation Act 2016* (BC Act); and
- the Alpine Sphagnum Bogs and Associated Fens EEC (hereafter referred to as the Alpine Sphagnum Bogs and Associated Fens) which is listed on the Commonwealth *Environment Protection & Biodiversity Conservation Act 1999* (EPBC Act).

The proposal will impact approximately 20 m² of these EECs, which are extensive in association with Perisher Creek and other low-lying areas in the locality. The potential impacts of the proposed works on the Montane Peatland and Swamps and Alpine Sphagnum Bogs and Associated Fens are assessed further in Appendix A.



Figure 3: Vegetation within the study area.

Flora species of conservation significance

The proposal will not result in any impacts on threatened flora species or other flora species of conservation significance. Two threatened flora species, *Rytidosperma vickeryae* (Perisher Wallaby Grass) and *Ranunculus anemoneus* (Anemone Buttercup), are associated with similar habitats nearby. The development site and immediate surrounds were searched for threatened flora known from the locality, and none were detected.

Fauna habitats

The small amount of vegetation and rock habitats to be affected by the proposal does not support any fauna habitats that aren't widely available in the extensive areas of contiguous vegetation. The habitats to be affected may occasionally be used by species such as *Mastacomys fuscus* (Broad-toothed Rat). However, the Broad-toothed Rat is common in suitable habitats within the locality and the proposed works will not lead to a reduction in the local population of the species.

The study area provides a small area of marginal potential habitat for *Cyclodomorphus praealtus* (Alpine She-oak Skink), which is well known from Mount Perisher. It is considered highly unlikely that the small area of marginal potential habitat to be affected would be important for any Alpine She-oak Skinks, given that it is already disturbed and does not support the dense groundcovers that are typical of the species preferred habitat.

It is considered highly unlikely that the habitats to be affected would provide important habitat for *Liopholis guthega* (Guthega Skink), which is well known from much rockier habitats in the locality including elsewhere on Mount Perisher.

The proposal will not result in substantial modifications to the hydrological environment nor will it create barriers which prevent the movement and dispersal of fauna species. Similar developments have been undertaken over the years within and in areas immediately adjacent to the development footprint, and elsewhere within the NSW Alps, with negligible impacts on the hydrological environment and associated ecosystems.

The potential impacts of the proposed works on the Broad-toothed Rat are assessed pursuant to section 7.3 of the BC Act in Appendix A.

Recommendations

To further mitigate the potential impacts of the proposal, the following recommendations for impact mitigation and amelioration are suggested.

Vegetation and habitat management

- All disturbance should be kept to the minimum required to achieve the proposal.
- The proposed works should be constructed and implemented in accordance with best practice design standards to ensure that there are no adverse modifications to the hydrological environment that may impact on surrounding vegetation and associated habitats.
- Appropriate safeguards should be in place during the proposed works to limit the potential for invasive plants or pathogens, chemicals or any other pollutants to enter the environment in association with the proposed development.

Sediment control

- Appropriate sediment control measures should be implemented prior to any construction work for the proposal and retained in place until exposed areas of soil or vegetation are stabilised and/or revegetated.
- Sediment control measures are to have particular regard to the prevention of any sedimentation of watercourses or vegetation communities adjoining the study area.

Rehabilitation

- Rehabilitation activities should be consistent with the resort areas rehabilitation guidelines (NGH Environmental 2007).
- Only weed-free straw or natural thatch/litter should be used in sediment control activities.

Conclusion

The proposal will affect only a very small area, estimated to be approximately 160 m² in total, of already heavily modified native vegetation and associated fauna habitats. The proposal will not affect any potentially important fauna habitat resources and will affect only a very small amount of habitat in the context of the extent of similar habitats in the extensive areas of vegetation in the locality. The proposal will not result in any adverse impacts on habitat connectivity.

Under these circumstances, it is unlikely that the proposal will result in any substantial adverse impacts on the environment or have any significant effects on threatened species, endangered populations, ecological communities, or their habitats, listed under the NSW *Biodiversity Conservation Act 2016* or the Commonwealth *Environment Protection & Biodiversity Conservation Act 1999*.

Should you require any further information please contact me on 0422 802 447.

Regards,

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Ryan Smithers Principal Ecologist

Appendix A: Test of Significance

Test of significance pursuant to section 7.3 of the BC Act: Five-part test

An assessment of the effects of the proposal on threatened species, populations and ecological communities which may be directly or indirectly affected by the proposal may be carried out by applying the five factors from Section 7.3 of the BC Act.

This test of significance is presented below for *Cyclodomorphus praealtus* (Alpine She-oak Skink), *Mastacomys fuscus* (Broad-toothed Rat) and the Montane Peatland and Swamps EEC.

(a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,

Endangered Species

Alpine She-oak Skink Cyclodomorphus praealtus (potential occurrence)

The Alpine She-oak Skink is a slender lizard reaching a maximum length of 350 mm. It is largely carnivorous mostly eating invertebrates but also small lizards and snakes. In NSW, the species is known from alpine and subalpine open heath and tussock grassland within the Kosciuszko region, preferring treeless or lightly treed areas. Within NSW the species is known to occur from the South Ramshead area to Kiandra. It is rarely encountered, appearing to mostly lie partially hidden amongst groundcovers.

The habitats within the study area are potentially suitable for the species, and it is possible that the species occurs within the study area. However, given that there are only small areas of dense grass, with most of the study area comprising bog or heath, the bulk of the habitat within the study area is considered to be marginal for the species.

The impacts associated with the action proposed will be limited to the removal of a very small area, approximately 160 m² of marginal potential habitat for the species. The noise and vibration associated with the rock reduction / removal is likely to temporarily deter any Alpine She-oak Skink individuals that may be near the affected areas. As such, it is unlikely that any individuals would be unintentionally killed during the implementation of the action proposed.

The action proposed will not create any barriers that would prevent Alpine She-oak Skinks from accessing habitat within or surrounding the study area.

Under these circumstances, it considered unlikely that the action proposed will have an adverse effect on the life cycle of the Alpine She-oak Skink such that a viable local population of the species is likely to be placed at risk of extinction.

Broad-toothed Rat Mastacomys fuscus (potential occurrence).

The Broad-toothed Rat generally occurs in two widely separated areas in NSW, the Barrington Tops area and the wet alpine and subalpine heaths and woodlands of the Kosciuszko NP and adjacent areas. The species lives in a complex of runways through dense vegetation of wet grass, sedge or heath and under the snow in winter. Home range size is thought to range between approximately 0.1 ha and 0.27 ha. Individuals nest alone over summer but congregate in communal nests during winter. The species is thought to be locally common in the alpine and high subalpine tracts of the Snowy Mountains area, where suitable habitats are present.

The subject site provides a small amount of foraging and sheltering habitat for the Broad-toothed Rat. The proposed development will affect only a very small amount of the potential habitat for the species in the locality and will not affect any key resources for the species, such as extensive areas of rocks, wet heath and bog. It will predominately affect a small area (0.016 ha) of disturbed wet heath and bog and a few rocks. As such, the proposed development is unlikely to adversely affect a significant proportion of the home range of one or more Broad-toothed Rat individuals.

Under these circumstances, the proposed development is considered unlikely to disrupt the life cycle of the Broad-toothed Rat such that a viable local population is likely to be placed at risk of extinction.

(b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:

(i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or

(ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,

Montane Peatlands and Swamps

i. Extent of Local Occurrence

The action proposed will result in only a very minor reduction, estimated to be approximately 20 m², in the extent of the Montane Peatlands and Swamps EEC which occurs within the study area and surrounds. The action proposed has been designed to minimise impacts on the community, by limiting impacts to a small area of already highly modified Montane Peatlands and Swamps which is on the margins of a very large patch of the community, estimated to be more than 100 ha in extent. The community within and surrounding the study area is typically in good condition and has persisted despite previous activities of the nature of those proposed.

Under these circumstances, it is considered unlikely that the community would be adversely affected by the action proposed.

ii. Composition of Local Occurrence

The composition of the Montane Peatlands and Swamps EEC which occurs in the study area is unlikely to be significantly different to the composition in similar habitats within the locality. That is, it is unlikely that it supports a unique assemblage of the characteristic species of the community that does not occur elsewhere. In any case, the action proposed will not adversely modify the composition of the community or otherwise adversely affect it such that its local occurrence is likely to be placed at risk of extinction.

(c) in relation to the habitat of a threatened species or ecological community:

(i) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and

The proposed development will impact on only a very small area (0.016 ha) of habitat for the Broadtoothed Rat or Alpine She-oak Skink and 0.002 ha of habitat for the Montane Peatlands and Swamps EEC.

(ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and

The proposed development will not result in habitat fragmentation which could isolate individuals or a population of the Broad-toothed Rat or Alpine She-oak Skink. The vegetation to be affected by the proposed works is too small to provide all the required resources for a Broad-toothed Rat or Alpine She-oak Skink individual.

Impacts on the Montane Peatlands and Swamps EEC will be limited to a small area on the margins of a very large local occurrence of the community.

(iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality,

The potential Broad-toothed Rat and Alpine She-oak Skink habitats to be affected comprise a small area of marginal habitat relative to the extensive areas of similar and superior habitats provided by surrounding vegetation. Similarly, the small area of the Montane Peatlands and Swamps EEC to be affected is already highly modified and not important to the long-term survival of the very large local occurrence of the community.

Under these circumstances, the habitats to be affected are not considered to be particularly important for the Broad-toothed Rat, Alpine She-oak Skink or Montane Peatlands and Swamps EEC.

d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly),

The proposed development will not affect any area of outstanding biodiversity value.

(e) whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.

The proposed development will remove 0.016 ha of remnant native vegetation. Whilst this constitutes the Key Threatening Process 'Clearing of native vegetation', the contribution to this key threatening process is relatively minor considering the extent of remnant forest in the locality and the extant extent of the vegetation communities that will be affected.

EPBC Act Significant Impact Criteria

The EPBC Act Administrative Guidelines on Significance set out 'Significant Impact Criteria' that are to be used to assist in determining whether a proposed action is likely to have a significant impact on matters of national environmental significance. Matters listed under the EPBC Act as being of national environmental significance include:

- Listed threatened species and ecological communities;
- Listed migratory species;
- Wetlands of International Importance;
- The Commonwealth marine environment;

- World Heritage properties;
- National Heritage places;
- Nuclear actions; and
- Great Barrier Reef.

Specific 'Significant Impact Criteria' are provided for each matter of national environmental significance except for threatened species and ecological communities in which case separate criteria are provided for species listed as endangered and vulnerable under the EPBC Act.

The Commonwealth listed entities which are known or considered to have the potential to occur within the study area are the:

- Alpine She-oak Skink
- Broad-toothed Rat
- Alpine Sphagnum Bogs and Associated Fens.

The relevant Significant Impact Criteria have been applied to determine the significance of impacts associated with the proposal.

Matters to be considered	Impact
Any environmental impact on a World Heritage Property or National Heritage Places	No. The proposed action does not impact on a World Heritage Property or a National Heritage Place - (listed natural: Australian Alpine National Parks and Reserves; nominated historic: Snowy Mountains Scheme NSW).
Any environmental impact on Wetlands of International Importance	No. The proposal will not affect any part of a wetland of international importance.
	Yes. The development site does provide potential habitat for the following Commonwealth listed endangered entities; Alpine She-oak Skink and Broad-toothed Rat
	The significant impact criteria for endangered species are discussed below:
	a. lead to a long-term decrease in the size a population of a species,
	Whilst the proposed action will affect some potential Broad-toothed Rat habitat, it will affect only a very small amount (0.016 ha) of the potential habitat for the species in the immediate area. As such, the proposed works are unlikely to adversely affect a significant proportion of the home range of one or more Broad-toothed Rat individuals and will not result in habitat fragmentation which could isolate individuals or a population of the Broad-toothed Rat. The noise and vibration associated with the proposed works is likely to temporarily deter any Broad- toothed Rat individuals that may be near the affected areas. As such, it is unlikely that any individuals would be killed during the implementation of the proposed action.
	The impacts associated with the proposed action will not result in the removal of any of the dense groundcovers the Alpine She-oak Skink is associated with. It is considered highly unlikely that the proposed works would result in injury or death of any Alpine She-oak Skink individuals as the disturbances associated with the proposed works are likely to temporarily deter any individuals from the locations where works are being undertaken.
	Under these circumstances, it is considered highly unlikely that the proposed action will lead to a long-term decrease in the size of the Broad-toothed Rat or Alpine She-oak Skink populations.
Any impact on	b. reduce the area of occupancy of the species
Any impact on Commonwealth Listed Critically Endangered or Endangered Species;	The proposed action will be limited to the disturbance of 0.016 ha of native vegetation which is a small amount of habitat in the context of the extent of similar habitats in the locality. The proposed works will not affect any key habitat resources for the Alpine She-oak Skink or Broad- toothed Rat; nor affect their ability to access habitats within or beyond the development site.
	Under these circumstances, the proposed action is highly unlikely to reduce the area of occupancy of the local populations of the Alpine She-oak Skink or Broad-toothed Rat.
	c. fragment an existing population into two or more populations
	The proposed action will be limited to the disturbance of 0.016 ha of native vegetation which is a small amount of habitat in the context of the extent of similar habitats in the locality. The proposed works will not affect any key habitat resources for the Alpine She-oak Skink or Broad- toothed Rat; nor affect their ability to access habitats within or beyond the development site.
	Under these circumstances, the proposed action will not fragment an existing population of the Alpine She-oak Skink or Broad-toothed Rat into two or more populations.
	d. adversely affect habitat critical to the survival of a species
	No habitat within the development site is considered likely to be critical to the survival of the Alpine She-oak Skink or Broad-toothed Rat. There are thousands of hectares of similar habitats in the alpine and subalpine zones of the Australian alps, including elsewhere within the Perisher Resort area. The Alpine She-oak Skink and Broad-toothed Rat continue to occur within the Perisher Resort Area despite a long history of similar and more extensive disturbances.

Matters to be considered	Impact
	e. disrupt the breeding cycle of a population
	It is possible although unlikely that the Alpine She-oak Skink may breed within the development site. However, any local population of these species is highly unlikely to be limited to the development site, which represents only a very small proportion of the potential habitat available to the species in the locality and so breeding can proceed as normal in the other available areas.
	It is considered highly unlikely that the Broad-toothed Rat would breed within the development site given the generally marginal nature of the potential habitat for the species there.
	Under these circumstances, it is highly unlikely that the proposed action would disrupt the breeding cycle of a population of the Alpine She-oak Skink or Broad-toothed Rat.
	f. modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline
	The proposed action will modify a very small area of marginal potential habitat for the Alpine She-oak Skink and Broad-toothed Rat, but this area is unlikely to be important to these species in the context of the extent of potential habitat in the locality.
	Under these circumstances it is highly unlikely that the proposed action would modify- destroy- remove or isolate or decrease the availability or quality of habitat to the extent that the Alpine She-oak Skink or Broad-toothed Rat is likely to decline.
	g. result in invasive species that are harmful to an endangered species becoming established in the endangered or critically endangered species' habitat
	The proposed action is unlikely to result in invasive species that are harmful becoming established in potential habitat of the Alpine She-oak Skink or Broad-toothed Rat. Species such as cats or foxes are already present in the landscape and are subject to control programs within the resort.
	h. introduce disease that may cause the species to decline
	The proposed action is unlikely to introduce disease that may cause the Alpine She-oak Skink or Broad-toothed Rat to decline.
	i. interfere substantially with the recovery of the species.
	As the proposed action is not considered to decrease or fragment any existing populations the recovery of the Alpine She-oak Skink and Broad-toothed Rat is unlikely to be adversely impacted.
Any impact on Commonwealth Listed Vulnerable Species;	No. The study area does not provide habitat for any Commonwealth listed vulnerable species.
Any impact on a Commonwealth Endangered Ecological Community	Yes: The Alpine Sphagnum Bogs and Associated Fens endangered ecological community occurs within the development site.
	The significant impact criteria in terms of endangered ecological communities are discussed below:
	a. reduce the extent of an ecological community
	The proposal is expected to result in the further modification of approximately 20 m ² of Alpine of already disturbed Sphagnum Bogs and Associated Fens EEC. The local occurrence of the community is estimated to be at least 100 ha in extent in association with Perisher Creek and Rock Creek.
	b. fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines;

The proposal will not fragment the Alpine Sphagnum Bogs and Associated Fens EEC as it will affect a small area on the margins of a very large local occurrence.

c. adversely affect habitat critical to the survival of an ecological community

The local occurrence of the Alpine Sphagnum Bogs and Associated Fens EEC is estimated to be at least 100 ha in extent in association with Perisher Creek and Rock Creek. In this context, the habitat for the community within the development site is not considered to be critical to its survival.

d. modify or destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for an ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns

The proposal has been designed so as to not modify or destroy the abiotic factors necessary for the survival of the Alpine Sphagnum Bogs and Associated Fens EEC. On the contrary, the proposal has been designed to mitigate against any potential impacts on surface or subsurface hydrology, primarily through limiting excavations and subsurface construction.

e. cause a substantial change in the species composition of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting.

The development site does not support a unique assemblage of characteristic flora species of the Alpine Sphagnum Bogs and Associated Fens EEC that does not occur elsewhere within the local occurrence. Similarly, the fauna assemblage inhabiting the development site is likely to be distributed throughout the local occurrence and contiguous vegetation. Fauna species such as invertebrates, amphibians, reptiles, birds, and mammals utilising foraging substrates within the development site would not be restricted to the areas affected by the action proposed and would be highly likely to continue to utilise habitats in the remainder of the local occurrence.

f. cause a substantial reduction in the quality or integrity of an ecological community, including, but not limited to:

-assisting invasive species, that area harmful to the listed ecological community, to become established, or

-causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants in the ecological community which kill or inhibit the growth of species in the ecological community

The proposed action includes appropriate safeguards to limit the potential for invasive plants or pathogens to encroach upon the Alpine Sphagnum Bogs and Associated Fens EEC. It will also include safeguards which limit the potential for any chemicals or pollutants to enter the Alpine Sphagnum Bogs and Associated Fens EEC in association with the action proposed.

g. interfere with the recovery of an ecological community

The Alpine Sphagnum Bogs and Associated Fens EEC has recovered well since the cessation of grazing in the NSW alps and is one of the most common vegetation communities in alpine and subalpine habitats, and one of the best conserved vegetation communities in Australia. It has also recovered well since the 2003 wildfires.

The proposed action will not reduce the extent of the Alpine Sphagnum Bogs and Associated Fens EEC, will not interfere with any wider recovery of the community, which is only potentially threatened by impacts associated with climate change, the re-introduction of grazing, horse and pig impacts or adverse fire regimes.

Any environmental impact on Commonwealth Listed Migratory Species;

No. The proposed action will not have any adverse impacts on any listed migratory species.

Matters to be considered	Impact
Does any part of the Proposal involve a Nuclear Action;	No. The project does not include a Nuclear Action.
Any environmental impact on a Commonwealth Marine Area;	No. There are no Commonwealth Marine Areas within the study area.
In addition- any direct or indirect impact on Commonwealth lands	No. The project does not directly or indirectly affect Commonwealth land.