



Mr Mark Brown
Senior Planning Officer
Alpine Resorts Team
Department of Planning, Industry and Environment
Jindabyne NSW 2627

Our reference: DOC22/750925
EF22/9798

By email: Mark.Brown@planning.nsw.gov.au

Dear Mark,

DA Referral – Construction of Intermediate Lower All Mountain Trail MTB, Thredbo Alpine Resort – DA 22/9798

We refer to the above development application (DA) forwarded to the National Parks and Wildlife Service (NPWS) for provision of comments in accordance with Chapter 4 of the *State Environmental Planning Policy (Precincts - Regional) 2021* (SEPP). As requested, we have provided our comments for consideration by the Department of Planning and Environment (DPE) in its assessment of the DA below.

In providing these comments, consideration has been had to the *National Parks and Wildlife Act 1974*, the *Kosciuszko National Park Plan of Management 2006* (KNP PoM), the *Biodiversity Conservation Act 2016* (BC Act) and any other applicable legislation.

As a general comment, we note that NPWS is broadly supportive of the proposed development and the associated economic and social benefits it might bring to the Kosciuszko National Park (KNP) and surrounding region. However, we note that the biodiversity development assessment report (BDAR) provided by the proponent is incomplete (see paragraph 2 below) and will require updating in order to fully address the requirements of the BC Act.

We also note that the incremental expansion of the Thredbo mountain bike trail network does come with cumulative impacts for the KNP environment which need to be managed by the proponent in consultation with NPWS including:

- (i) the potential for biodiversity impacts from further removal of remnant vegetation and habitat fragmentation, particularly for small mammals; and
- (ii) erosion of alpine humus soils from the steep slopes of the Thredbo Valley, and slope instability, particularly with limited trail surface hardening proposed.

Our specific comments on the proposed development are set out below:

1. Leasing and KNP PoM

- 1.1 NPWS Visitor Engagement & Revenue Branch (VERB) have advised that the proposed works require consent under the head lease held by the proponent for the Thredbo Alpine Resort. This consent must be obtained prior to the commencement of any work associated with the development if not already granted.
- 1.2 NPWS Visitor Engagement & Revenue Branch (VERB) will consider the referral of this DA an application for the required Lessor's Consent and will draft a letter for Lessor's Consent for this development for Director of VERB's signature.

- 1.3 Subject to our comments below about monitoring and maintenance arrangements (see paragraph 4) and if constructed in accordance with the DA and our suggested conditioning, the works will be consistent with relevant provisions of the KNP PoM. Relevant provisions include section 10.2 (Alpine Resorts Management Units), section 10.4 (Thredbo Management Unit) and chapter 8 (Recreation).

2. BC Act

- 2.1 The proponent has not demonstrated appropriate consideration of the BC Act in the BDAR provided with the DA. We consider that the BDAR omits assessment of threatened species known to inhabit the area and potentially present in the trail corridor and does not accurately apply the biodiversity assessment method for certain species. More specifically, in the BDAR:

- (i) *Liopholis Guthega (Guthega Skink)* - no assessment of potential impacts for the purposes of the BC Act has been demonstrated and the species is omitted from the targeted surveys and species credit list. Given the recent species sighting records from the area, the presence of suitable habitat and potential for occurrence of this species within the proposed trail corridor, the BDAR must consider potential impacts on the species and provide appropriately adjusted offset calculations.
- (ii) *Ranunculus anemoneus* (Anemone Buttercup) - The BDAR report states the species was not detected in the development site despite targeted surveys. *Ranunculus anemoneus* should be assumed present at the site due to presence of potentially suitable habitat and positive identifications by NPWS staff on site visit dated 17/5/22.
- (iii) *Callocephalon fimbriatum* (Gang-gang Cockatoo – incorrectly listed as ‘Vulnerable’ in Table 11 of BDAR. Gang-gang Cockatoo is listed as ‘Endangered’ under the EPBC Act as of March 2022.

- 2.2 We request that the proponent revise the BDAR in line with our comments above and resubmit it to DPE for consideration. We are available to liaise directly with the proponent’s ecologist if that would assist the revision.

3. Protection of native vegetation, fauna and fauna habitats

- 3.1 In order to assist in minimising impacts of the proposed development on the environmental values of KNP, NPWS recommends that DPE include the measures set out in paragraphs 3.2 to 3.16 (inclusive) in its consent conditions. We note that many of these measures are currently set out in the proponent’s ecologist’s recommendations (Table 22 – Pages 30 & 31 of the BDAR) and draft Site Environmental Management Plan (SEMP). The proponent must implement those recommendations and the draft SEMF measures should be retained and refined in line with the conditions as the SEMF is finalised.

Native vegetation and rock removal

- 3.2 To protect existing trees, potential fauna habitats and surrounding native vegetation, NPWS recommends the following measures:

- (i) To the extent reasonably practicable, trail alignment must be adjusted to avoid the removal of mature trees, large boulders and rock outcrops. Mature trees and rocks required to be removed must be clearly marked.
- (ii) Any trees required to be removed must not be felled in a manner which damages surrounding vegetation. All vegetation (trees and understory) removed must either be cut into smaller pieces to be used for rehabilitation, discreetly dispersed amongst adjoining native vegetation without damaging existing native vegetation or removed from site completely if it contains any exotic vegetation species.

- (iii) All clearing must occur solely within approved development corridors and to be clearly identified with flagging tape to mark no-go/no clearing zones prior to construction.
- (iv) All vegetation must be checked for fauna habitats and fauna by the proponent's Environmental Officer immediately prior to felling/removal. Vegetation with active nests must not be removed until the young have left the nest. If fauna is present, then the proponent must contact NPWS to assist with mitigation actions.
- (v) The proponent's staff and contractors undertaking vegetation clearance for the development must be able to accurately identify *Podocarpus lawrencei* (Mountain Plum Pine) and *Ranunculus anemoneus* (Anemone Buttercup). These species of conservation significance must be avoided when creating the trail corridor, and protected from trampling by foot, equipment, or the placement of construction material.
- (vi) A survey for *Ranunculus anemoneus* (Anemone Buttercup) is to be undertaken during the trail alignment/flagging stage and if identified, realign the trail within the 20m buffer or transplant the affected individuals of the species. The proponent is to seek NPWS advice on transplanting prior to the disturbance of any individuals of this species. The SEMP is to be updated to include this.
- (vii) All rocks removed during the works must be placed in the surrounding landscape without damaging existing native vegetation, used in the trail construction (e.g., rock armouring) or removed from site completely.
- (viii) To the extent reasonably practicable, any live tree roots must be protected (and not removed) within the timbered areas of the trail corridor. This could occur through rock armouring, grade reversals or other construction methods.

Fauna management

3.3 NPWS supports the proponent's ecologist's recommendation that the trail is realigned to avoid any wombat burrows within close proximity to the proposed trail corridor (Table 22 BDAR; Attachment 4 draft SEMP). We note that the BDAR recommends trail realignment but not wombat relocation.

3.4 Active Broad Tooth Rat runways and nests should also be identified and trail realignment to occur if discovered. The BDAR and SEMP is to be updated to include this. Care should be taken during Spring when females carry young in their pouches and works should be timed to avoid their breeding season of late Summer-Autumn.

Exotic species management

3.5 All relevant weed species that occur within the proposed trail corridor and associated staging and stockpile sites must be treated prior to works commencing to ensure these weeds are not spread further at the site or within KNP. In addition, ongoing weed management is essential to ensure relevant weed coverage does not increase in area or number, especially immediately surrounding the trails where weed seed could be easily spread through tyre movement on the trails. Routine assessment of the site must be conducted, including following completion of construction, with relevant weeds identified to be treated or removed.

3.6 For the purposes of our comments in paragraph 3.5, we note that Yarrow (*Achillea millefolium*) and Sweet Vernal Grass (*Anthoxanthum odoratum*) is prone to spread once disturbed and should be regarded as relevant weed species. Other relevant weed species include pest flora species identified in the regional pest management strategy for the NSW Southern Ranges Region most recently published by DPIE, at the date of these comments being the *Regional Pest Management Strategy 2012-17 Southern Ranges Region*, a copy of which is available at:

<https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Pest-management-strategies/regional-pest-management-strategy-southern-ranges-region-120374.pdf>.

- 3.7 If an area of vegetation proposed for removal includes any relevant weed species then the vegetation must be removed completely from site, not spread out within the existing vegetation or used in rehabilitation and stabilisation works.

Machinery, equipment and materials

- 3.8 To minimise weed vectors and other biosecurity issues, all machinery and equipment used during construction must be cleaned prior to entry into KNP and prior to site mobilisation to ensure the machinery is free of mud, vegetative propagules, and pathogens. This includes machinery that may have been working in an area of the Thredbo Alpine Resort that contains weeds and is preparing to be redeployed in the trail construction corridor and associated stockpile and staging areas. Contrary to the DA, this condition should not differentiate between machinery and equipment which is owned by the proponent directly rather than contracted to perform work (*cf* Table 22 BDAR; Table 5.4 draft SEMP).
- 3.9 Any and all machinery and equipment must be stored on existing disturbed areas (i.e. at the stockpile and staging areas proposed on the ski slopes) and should not be stored on native vegetation.

Stockpile sites, and soil and waste management

- 3.10 To minimise impacts to native vegetation, the following conditions are recommended:

- (i) All stockpiling is to be in accordance with the *Soil Stockpile Guidelines for the Resort Areas of Kosciuszko National Park* (OEH, 2017), a copy of which can be provided by the NPWS Assessment Coordinator.
- (ii) Proposed stockpile sites, including materials storage areas, parking and waste management receptors (e.g. skip bins) and storage of soils and sods must not impact on native vegetation. Materials removed during construction must be stockpiled within the designated stockpile areas or areas of cleared vegetation only.
- (iii) All waste management receptors must be able to be covered to ensure waste cannot blow away or be disturbed by scavenging fauna or must be emptied or removed from site each day.
- (iv) Erosion and sediment control measures must be regularly checked and maintained, particularly immediately following precipitation events.
- (v) All straw bales used for sediment and erosion control or rehabilitation must be weed free.

Imported materials and stabilising agents

- 3.11 NPWS requests that its authorisation is sought where the proponent intends to utilise either of the following in construction or maintenance of the trail:
- (i) Imported gravel or fill material; or
 - (ii) soil stabilising or adhesive agents.
- 3.12 Despite paragraph 3.11, the proponent may obtain imported gravel or fill material from sources already assessed by NPWS as appropriate for use in KNP, being gravel or fill material from:
- (i) the McMahons Earthmoving quarry, located on Alpine Way, Crackenback NSW; or
 - (ii) the Kraft Earthmoving / Snowy Mountains Sand and Gravel quarry located on Kosciuszko Road, Jindabyne NSW.

Signs

- 3.13 New decision point signs and way-markers required for the trail must be located in the existing disturbed areas or areas disturbed for construction of the trail.
- 3.14 Copper, chromium and arsenic treated timber must not be used as part of signage or otherwise for the purposes of the development.

Construction period

- 3.15 The trail construction works must cease by 30 April, with rehabilitation and stabilisation works able to continue until 30 May. Construction must not commence when snow is located on the trail corridor and machinery must not be used to remove snow from areas containing native vegetation.

Hardening period

- 3.16 NPWS recommends that the trail is allowed to harden (with no public traffic) for at least one month (30 days) following completion of construction, prior to the opening of the trail. This is to reduce erosion potential and ensure the trail is appropriately stabilised prior to opening. NPWS understands this might also occur through preventing public use of the trail until the subsequent spring (as has occurred with the recently constructed Lower N4 - Sidewinder trail).

4. Rehabilitation, maintenance and monitoring

- 4.1 A comprehensive and consistent monitoring program, coupled with regular trail maintenance, are critical to meeting the objectives of the KNP PoM around management of mountain biking impacts (see e.g. section 8.11.1(11) KNP PoM) and the sustainability objectives of the associated *Kosciuszko National Park Cycling Strategy* (OEH, 2017). With this in mind, we request the following:
 - (i) that a detailed rehabilitation, monitoring and maintenance plan be prepared by the proponent for the development addressing the issues in paragraph 4.2; and
 - (ii) that the existing monitoring and maintenance arrangements for mountain biking trails in the Thredbo Alpine Resort are expanded to apply to the trail as set out in paragraphs 4.3 to 4.7 (inclusive). NPWS believe they are consistent with the arrangements discussed with the proponent for this DA and similar development on 30 September 2021.

Rehabilitation arrangements

- 4.2 The rehabilitation plan referred to in paragraph 4.1 is to include site specific details for implementation, maintenance, monitoring and reporting on rehabilitation areas including a proposed timeline of inspections. It must be endorsed by NPWS prior to approval by DPE. In order to increase the chances of successful rehabilitation, the rehabilitation plan must address the following points:
 - (i) Information on species, planting ratios, schedule, weed management, rehabilitation methods, monitoring regimes, and maintenance schedules and methods.
 - (ii) Initial establishment of rehabilitation, including all planting, mulching and stabilisation, to commence as soon as sections of trail are completed and be conducted within the same construction season.
 - (iii) Exotic grass species such as Chewings Fescue are not suitable for the rehabilitation of areas containing any native species.
 - (iv) Monitoring, maintenance and replacement planting must occur at least every 12 months for a minimum period of 5 years, with results recorded including photo points.

- (v) Rehabilitation must be in accordance with the document entitled '*Rehabilitation Guidelines for the Resort Areas of Kosciuszko National Park*', a copy of which is available at:

<https://www.environment.nsw.gov.au/research-and-publications/publications-search/rehabilitation-guidelines-for-the-resort-areas-of-kosciuszko-national-park>.

- (vi) All straw bales used for rehabilitation must be weed free.

Monitoring and maintenance arrangements

- 4.3 Baseline trail condition monitoring data must be collected on completion of trail construction and provided for endorsement by NPWS prior to approval by DPE.
- 4.4 Ongoing monitoring of the trail condition, replicating the baseline monitoring data collection methodology as per paragraph 4.3, is to be carried out on an annual basis. An annual report documenting the findings of the ongoing trail condition monitoring is to be submitted to NPWS and DPE. We note that this requirement should be incorporated as part of trail monitoring requirements identified and implemented for previous mountain bike trail development in the Thredbo Alpine Resort.
- 4.5 The existing Thredbo Mountain Bike Trail Management Plan (TMP) and Trail Inspection and Monitoring Plan (TIMP) referred to in the TMP must be updated to encompass the trail and incorporate it in the monitoring and reporting regime under both plans. Both plans are to be submitted to NPWS for endorsement before approval by DPE.
- 4.6 The inspection, monitoring, maintenance, and reporting requirements set out in the updated TMP and TIMP must be implemented for the life of the trail.
- 4.7 The bi-annual mountain bike trail condition assessment currently conducted as a joint monitoring program by NPWS and KT must be expanded to include all gravity focussed mountain bike trails within Thredbo Alpine Resort lease area including the proposed trail. As a joint program, the proponent must provide reasonable assistance to NPWS with the implementation of the program (i.e., facilitating trail access for the NPWS Environmental Monitoring Officer and other relevant staff).

5. Other matters

Aboriginal cultural heritage

- 5.1 The Aboriginal cultural heritage assessment which is part of the DA appears to have followed a suitable process. We believe that appropriate due diligence in determining that the proposed works are unlikely to harm Aboriginal objects has been demonstrated.
- 5.2 Should any Aboriginal objects be uncovered during construction, any works impacting the objects must cease immediately and the NPWS contacted for assessment of the site.

Visual impacts

- 5.3 We do not consider that there will be significant visual impacts resulting from the development. It is unlikely to be visible from the Alpine Way or public areas of the Thredbo Village.

If you have any further enquires please contact the NPWS Assessment Coordinator, Pete Whiting on 02 6450 5543 or at Pete.Whiting@environment.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink that reads "Kyle Williams". The script is cursive and fluid.

Kyle Williams
Director
Southern Ranges Branch
25 August 2022