

Report of Submissions

Review of Environmental Factors

Proposed Lower Thredbo Valley Track

Bullocks Flat to Thredbo River Picnic Area

Report of submissions received during public exhibition

Project name

Lower Thredbo Valley Track, Bullocks Flat to Thredbo River Picnic Area

Proponent

The proponent for the proposal is NSW National Parks & Wildlife Service (NPWS), NSW Office of Environment and Heritage (OEH). Full details of the proponent are provided within Table 1.

Table 1: Proponents details.

Item	Details
Proponent	NSW Office of Environment & Heritage (OEH), NSW National Parks and Wildlife Service, Southern Ranges Region
Contact	Chris Darlington - Project Manager
Address	PO Box 2228, Jindabyne NSW 2627
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Reserve name

Kosciuszko National Park

Region/area

Southern Ranges Region, Alpine-Queanbeyan Area

The exhibition

The Review of Environmental Factors (REF) for the above proposal was placed on public exhibition from 3 September 2015 to 3 October 2015.

The document was available for viewing at the following locations:

- Queanbeyan - Parks & Wildlife
- Snowy Region Visitor Centre (Jindabyne)
- Tumut Visitor Centre
- www.haveyoursay.nsw.gov.au
- Engage.environment.nsw.gov.au.

An advertisement detailing the public exhibition of the final REF was placed in the following local newspapers:

- Cooma Monaro Express – 01/09/2015
- Summit Sun – 03/09/2015.

Additionally, the Summit Sun published a news piece about the REF exhibition on 17/09/2015 and the ABC South East Radio aired an interview with Snowy River Area Manager Pam O'Brien on 04/09/2015 which mentioned the exhibition of the REF.

Letters detailing the location of the REF document and the exhibition period and process for submissions were emailed to the stakeholders listed below.

Landowners adjacent to the proposal:

- John and Patricia Kennedy
- Bruce Marshall and Michelle Macfarlane
- Ben Golby
- Sonja Schatzle – Pender Lea
- Elizabeth Timmins – Representing the Lucas Family
- Mike Kluver
- Greg and Cindy Cawthorn.

Resorts:

- Perisher Blue
- Charlotte Pass
- Kosciuszko Thredbo
- Lake Crackenback Resort & Spa
- Bungarra.

Other key stakeholders:

- Sandie Jones – Environmental Protection Authority
- Jindabyne Trail Stewardship
- Jindabyne Mountain Bike Club
- Geehi Bushwalking Club
- Snowy River Shire Council
- Tourism Snowy Mountains
- National Parks Association of NSW
- NSW Department Primary Industries – Fisheries NSW
- Planning NSW – Alpine Resorts Team.

Methodology for analysis

The following guidelines were adhered to in analysing the submissions:

- All submissions were registered and numbered.
- Identical copies of letters by the same author were treated as one letter.
- Multiple letters from the one address under different names were treated as separate letters.
- Identical letters under different names were classified as 'form letters' if there were more than five in number. *Note that no form letters were received.*
- The schedule of issues below has been separated into issues against proposed safeguards or against the proposal and issues in support of the proposal.
- All issues raised have been identified.
- Issues raised in form letters and any petitions are identified separately. *Note that no form letters or petitions were received*
- Submissions were received and included in the review up to 04/10/2015, with the only exception being that the Snowy River Shire Council requested an extension in advance until 06/10/15 October for their submission. This extension was granted and their submission was received on 06/10/15.
- One late submission was received on 08/10/2015. This was a personal submission which was purely in support of the proposal. Considering that it was late, it has not been included in this report.

Results

The Alpine-Queanbeyan Area Manager, Anthony Evans and Project Manager, Chris Darlington received:

- 18 submissions in total. Of these 18 submissions:
 - two made objections to the proposal,
 - 14* supported the project,
 - *one of the above submissions made it clear that they supported the project but did not support it under the REF and the proposed safeguards, and
 - there were also two submissions that did not obviously state whether they were in support or against the proposal. However these submissions provided comments about the proposed safeguards and other matters relevant to the proposal.

Details of individuals and organisations that made written submission(s)

NPWS has provided OEH with a table that includes the details of each person or organisation that provided a submission. This table also allocates each stakeholder with a submission number, so that when OEH reviews the response to each issue raised, OEH will more efficiently be able to identify which stakeholder raised the issue. Considering that this Report of Submissions will be publically available, out of respect to the privacy and the reputation of each stakeholder that provided a submission, the following has occurred:

- The names of the persons and organisations that have provided a submission have been listed in a random order;
- A copy of every submission has been provided to OEH and each submission has been allocated a submission number; and
- This report does not allow the public to be informed of which stakeholder raised each issue.

Table 2 and 3 below summarises the names of each of the individuals and organisations that have made written submission(s) to OEH in relation to the Lower Thredbo Valley Track (LTVT) proposal. They are listed in a random order and therefore do not correspond to the submission numbers.

Table 2: List of individuals who have made a written submission.

Name	Date received	Acknowledgement letter sent
Elizabeth Timmins	01/10/15	Y
John Kennedy	02/10/15	Y
Bruce Marshall	21/09/15	Y
Michelle Macfarlane	24/09/15	Y
Lynne McDonald	17/09/15	Y
Paul Freeman	05/09/15	Y

Table 3: List of organisations or businesses who have made a written submission

Name	Date received	Acknowledgement letter sent
Snowy River Shire Council	06/10/15	Y
Kosciuszko Thredbo	01/10/15	Y
Jindabyne Trail Stewardship	02/10/15	Y
Bike Snowies	29/09/15	Y
Department of Primary Industries - Fisheries	08/09/15	Y
Tourism Snowy Mountains	02/09/15	Y
Jindabyne Sports	18/09/15	Y
Jindabyne Cycling Club	07/09/15	Y
Sacred Ride	23/09/15	Y
Lake Crackenback Resort & Spa	25/09/15	Y
K7 Adventures	23/09/15	Y
Pender Lea / Sonja Schatzle	30/09/15	Y

Summary of the number of submissions supporting or objecting to the proposal

Table 4 shows the number of submissions supporting or objecting to the proposal.

Table 4: Summary of submissions supporting or objecting to proposal.

Personal submissions		
Quantity supporting	Quantity objecting	Quantity neutral or unspecified
4	2	0

Submissions by organisations or businesses		
Quantity supporting	Quantity objecting	Quantity neutral or unspecified
10	0	2
Totals		
Total supporting	Total objecting	Total of unspecified or neutral submissions
14*	2	2

Notes: No multiple form letters or petitions were received.

* One of the 14 stakeholders who specified that they are in support of the project raised many issues against the proposed safeguards and specified that they are objecting to the proposal if it is in accordance with the REF and the proposed safeguards.

Total quantity of submissions received: 18.

Perisher Blue Pty Limited did not provide a submission to the REF. However the REF on P. 19 discusses that NPWS is still liaising with Perisher Blue regarding safety considerations of utilising the bridge at Bullocks Flat. A solution for these safety issues including signage, fencing upgrades and bridge handrail upgrades have since been identified and formally agreed to by NPWS and Perisher Blue. Additionally, under the current resort lease agreement, public access across the bridge is allowable. Therefore the route of the track would utilise the Skitube Bridge at Bullocks Flat. A copy of the correspondence to confirm this has been provided separately to OEH to confirm this.

Response to submissions

This section provides a summary of how the proposed safeguards in the REF address each issue raised. Any issues that may not be adequately addressed in the REF include a proposed alteration to the proposed safeguards.

Issues in general support of the project or in support of the proposed safeguards have not been addressed. However this document includes a list of the issues in support of the project and the proposed safeguards, refer to Appendix 1 Table A2.

In summary, 10 stakeholders provided submission that included 47 specific issues concerning aspects of the project or the proposed safeguards.

There were 17 stakeholders that raised 21 issues in general support of the project or some of the proposed safeguards. It should however be noted that only 14 of these stakeholders confirmed that they are in support of the project and one of those 14 raised significant issues with the REF and the proposed safeguards and does not support the proposal under the proposed safeguards and in accordance with the REF.

A list of all issues raised, both for and against the proposal is located at Appendix 1 Tables A2 and A2.

Summary of proponent's response to issues raised

Each issue is numbered below. A response has been provided for each and for some issues an adjustment to an existing proposed safeguard has been suggested, or an additional new safeguard has been suggested.

1. Insufficient details provided to one landowner in regards to the location of the track to their property.
Response: Further detailed maps showing the locality of the track to the property have been provided to the landowner after their submission was received. Assistance to safely cross the river and walk the alignment with a representative from the property has been offered.

2. Insufficient details have been provided to a landowner regarding the visual impact created by the track.

Response: Further detailed maps, google earth images and a photo showing the locality of the track to the property have been provided to the landowner. Assistance to safely cross the river and walk the alignment with a representative from the property has been offered.

3. Lack of an existing formal agreement with landowners for the ongoing use of private access trails for construction and maintenance. Including the potential cost to landowners for additional access trail maintenance.

Response: Refer to safeguards page 87 that further consultation should occur with landowners regarding access for emergency and other site access. Failing an agreement, access can be achieved by following the track and flying materials in as required. It is suggested that no alteration is required to safeguards as this is a NPWS Region issue and does not need to be addressed in the REF.

4. Lack of an existing formal agreement with landowners for the ongoing use of private access trails for emergency response. Including the potential cost to landowners for additional access trail maintenance.

Response: Refer to safeguards P. 87 that further consultation should occur with landowners regarding access for emergency and other site access. Additionally:

- Use of these access trails for emergency response is unlikely to be the most efficient option to respond to an incident;
- Emergency access can be achieved by following the track from either end or by helicopter if available and if weather permits;
- The track is proposed to be wide enough for the first and last 3 – 4kms to allow for ATV access;
- The proponent will install signage at both ends of the track to warn users of the challenging emergency access and to ride / walk as safe as possible; and
- An emergency response map will be developed and the Jindabyne Ambulance and Police will be offered a familiarity session prior to the track opening and as required thereafter.

It is suggested that no alteration is required to safeguards as this is a NPWS Region issue and does not need to be addressed in the REF.

5. Environmental safeguards (e.g. silt curtains, sediment fences, booms etc.) are to be installed consistent with “Managing Urban Stormwater: Soils and Construction” (4th Edition Landcom, 2004, aka the Blue Book) to ensure that there is no escape of turbid plumes into the adjacent aquatic environment.

Response: The proposed safeguards in the REF address erosion and sediment control on P. 86 and 87. See the suggested additional safeguard below.

Suggested additional safeguard:

- The installation of sediment controls, including the sediment filters / sediment retention traps are to be consistent with Section 6.3 of “Managing Urban Stormwater: Soils and Construction” (4th Edition Landcom, 2004, aka the Blue Book) to ensure that there is no escape of turbid plumes into the adjacent aquatic environment.
6. A copy of the ESCP should be provided to DPI for comment and approval prior to any works commencing. The ESCP should include plans, work methods and mitigation measures proposed for all waterway crossings.

Response: The contractor will be required to develop the Environmental Management Plan (EMP), part of which is to include the Erosion and Sediment Control Plan (ESCP). The contractor will be required to submit a suitable plan in

advance of construction work commencing. NPWS will provide Fisheries NSW with a copy of the proposed plan for comment prior to works commencing.

Suggested additional safeguard:

- A copy of the ESCP must be provided to Fisheries NSW for comment prior to any construction works commencing. The ESCP should include plans, work methods and mitigation measures proposed for all waterway crossings. The same plans can be used at each crossing so long as it can feasibly be implemented at different crossing points.

7. Works in or adjacent to waterways should be conducted during periods of no or low stream flow to minimise sedimentation.

Response: See suggested additional safeguard below. Note that the tributaries and creeks that have flow would likely only stop flowing during drought, if at all.

Suggested additional safeguard:

- Works in or directly adjacent to waterways should not be conducted during periods of flooding.

8. Split rock used in reclamation works in or adjacent to the waterway should be clean and free of loose sediment.

Response: See additional proposed safeguard below.

Suggested additional safeguard:

- Split rock used in reclamation works in or adjacent to the waterway should be clean and free of loose sediment.

9. Damage to existing native riparian vegetation should be avoided or minimised and any damage caused must be restored.

Response: Where practical the track will avoid the Thredbo River's riparian vegetation. The track will need to pass through riparian vegetation as it crosses creeks and tributaries and for some sections where the track is located close to the Thredbo River. When the track passes through riparian vegetation, damage will be confined to the direct corridor of the track.

In the event that native riparian vegetation outside of the track's corridor is damaged as a result of an incident or other matter, the damage will be repaired.

Suggested additional safeguard:

- Damage to existing native riparian vegetation must be minimised or avoided and any damage caused must be restored. The only exception where damage to riparian vegetation would not be restored is within the immediate corridor of the track where the track traverses through native riparian vegetation.

10. When machinery is working on site, spill kits suitable for the containment of fuel and oils spills must be available.

Response: Refer to safeguards on P. 85 of the REF that spill kits must be carried and that the work team must be fully conversant in the use of them.

11. There is no reporting process in place for the event that fish kills occur.

Response: See additional proposed safeguard below.

Suggested additional safeguard:

- Fisheries NSW (1800 043 536) is to be immediately notified of any fish kills as a result of the works on the track. In such cases, all works other than emergency response procedures are to cease until the issue is rectified and written approval to proceed is provided by Fisheries NSW.

12. A plan needs to be in place to ensure adequate Sediment and Erosion Controls resulting from ongoing use of the track.

Response: Refer to proposed safeguard on P. 86 that NPWS would implement a Track Management Plan. This plan will include periodic maintenance to reduce erosion. See the additional proposed safeguard below:

Suggested additional safeguard:

- The Track Management Plan must include controls or methods to respond to areas on the track that are eroded. The plan must also include proactive routine maintenance of the track, such as maintaining appropriate drainage so as to minimise erosion. NPWS is to provide Fisheries NSW with the opportunity to comment on the content of the Track Management Plan when it is initially developed.

13. Grade reversals should be installed at stream crossings to drain longitudinal flow away from, rather than towards the stream wherever possible.

Response: Agree. Whilst NPWS will install significant grade reversals in accordance with IMBA standards, see the proposed additional safeguard below.

Suggested additional safeguard: When possible, grade reversals are to be installed at stream crossings to drain longitudinal flow away from, rather than towards the stream.

14. REF does not document how the trail corridor was identified and by what qualified persons, what site analysis process was followed or what design principles were used to determine its location or whether IMBA Design Guidelines were used.

Response: NPWS considered these issues and implemented thorough processes to identify the trail corridor. This was not detailed in the REF because the detailing of this is not required in order for a REF to be assessed under Part 5 of the Environmental Planning and Assessment Act 1979 (EP&A Act). The following processes occurred to identify the trail corridor:

- a) NPWS Ranger for the area was consulted regarding pre-recorded Aboriginal Sites and threatened species in the vicinity of the potential trail alignment.
 - b) Three days of initial scoping was undertaken by NPWS personnel, accompanied by a highly experienced and qualified contractor. The purpose of this assessment was to identify whether a trail could feasibly be built to IMBA standards and whether creek and wet areas could be crossed. During this assessment, potential creek and wet area crossings were identified and marked, based on finding the narrowest feasible crossing points.
 - c) The highly experienced and qualified contractor spent ten days further refining the route and marking a route that could be consistent with IMBA principles for sustainable trails, that links creeks and wet areas at their narrowest feasible points, that aims to avoid bogs and larger wet areas, avoids likely flood zones of the Thredbo River and avoids any pre-recorded Aboriginal sites or threatened species. As part of this process, the track was further refined and altered in response to concerns from stakeholders that reside opposite the track on the other side of the Thredbo River.
 - d) This alignment was then marked with a GPS and tape and became the centre line of the corridor that was assessed during field surveys.
15. Perception that the process avoided a principle of using existing trails where possible.

Response: With the exception of the Pallaibo Track, the section of the Thredbo Valley has no existing maintained trails on the Park side of the River. The alignment follows informal animal and fishermen routes in some short sections however these tracks are not well worn and are not on alignments that will meet IMBA standards for sustainable trail design.

The ideal intention is to not join the Pallaibo and to have the track exit at Gaden as this will provide the optimal link to Jindabyne. However if the option of constructing the track through to the Thredbo River Picnic Area is implemented, the Pallaibo Track would be followed so as to minimise additional impact.

16. Perception that the process avoided a principle of locating trails on previously disturbed areas where possible.

Response: The track is an extension of the Thredbo Valley Track which was built on previously disturbed areas where possible. The proposed alignment traverses the Pallaibo Track and Collins Paddock which are previously disturbed. The Skitube Bridge at Bullocks Flat will be used instead of disturbing areas to build a new bridge. For the remainder of the route, there is no previously disturbed areas that could be used.

17. A claim that the REF does not discuss how a principle of applying IMBA sustainable trail guidelines was implemented.

Response: Refer to safeguard on page 85 of the REF “IMBA standards for sustainable trails will be followed at all times”. In order for the REF to be assessed under Part 5 of the EP&A Act, the REF does not need to document how IMBA sustainable trail guidelines were referred to when identifying the track’s route.

IMBA standards were used to identify the alignment that was assessed during field surveys (refer to the response to issue no. 14). The contract for construction will detail that the contractor is identify the final route that is consistent with IMBA standards for sustainable trails and to construct the track to these standards. Specifically, the IMBA standards include those listed below.

- The half rule
- The ten percent average guideline
- Maximum sustainable grade
- Grade reversals
- Outslope

18. Perception that the process avoided a principle of undertaking a ground-truthing process to avoid environmentally sensitive areas and cross water courses at their narrowest point.

Response: The alignment avoids sensitive areas and all areas identified in the corridor are being avoided. A process used by the contractor when identifying the route was to avoid bogs, identify the narrowest crossing points of creeks and wet areas and to then link the crossing points together. This does not need to be documented in a REF that is being assessed under Part 5 of the EP&A Act.

19. Perception that the process avoided a principle of undertaking a preliminary site assessment – undertaking site assessments based on the ground-truthed trail, identifying constraints and modifying trail alignments.

Response: Refer to the responses to issues 14 and 17 regarding the thorough process that was undertaken.

Constraints have been identified during the Aboriginal Cultural Heritage assessment and report. Refer to recommendation / safeguard no. 2, page 84 of the Aboriginal Cultural Heritage Assessment. A constraints zone has been identified and marked around the Sites that were recorded upstream from the Pallaibo Track. These will all be avoided.

Refer to safeguard page 86 of the REF that a pre-clearance survey will occur to identify *Pterostylis oreophila*, *Discaria nitida*, *Leucochrysum albicans* var. *tricolor* and

nests of Olive Whistlers and Pink Robbins. The track would be realigned to avoid any findings and would still be well within the corridor that was assessed during previous field surveys.

Refer to safeguard page 86 of the REF that an immediate pre-clearance survey will also occur to minimise potential for harm during vegetation clearing.

20. A claim that the REF provides little evidence of a principle to realign and refine trails as a result of ecological or Aboriginal Heritage value.

Response: Constraints have been identified during the Aboriginal Cultural Heritage assessment and report. Refer to recommendation / safeguard no. 2, P. 84 of the Aboriginal Cultural Heritage Assessment. A constraints zone has been identified and marked around the Sites that were recorded upstream from the Pallaibo Track. These will all be avoided.

Refer to the response to issue no. 19 that identifies the proposed safeguards detailed in the REF that involve the requirement to alter the final track's location as a result of the pre-clearance survey.

21. A claim that the REF ignores environmental offsets.

Response: Refer to the REF page 88 safeguard "Potential offsetting of impacts to biodiversity as a result of the proposal could include vegetation rehabilitation, weed control and feral animal control."

Environmental offsets are not a legislative requirement for this project. The areas impacted are likely to be less than the estimates in the REF. However in order to counterbalance some of the impacts of the project, an alteration to one of the safeguards is detailed below.

Suggested alteration to the safeguard quoted above:

"NPWS would complete the following, at a minimum to compensate for environmental impacts:

- Implement a weed management plan as part of a track management plan;
- Ensure that the Lower Thredbo Valley is considered for inclusion in NPWS feral animal control plans;
- After the project is complete, NPWS will calculate the area of the impacted zone that the track passes through;
- NPWS is to implement rehabilitation at alternative locations within KNP at a ratio of at least 1:1 (area impacted : area to be rehabilitated); and
- The area to be rehabilitated will be additional to the rehabilitation that occurs within the corridor of the track."

An example of one area that may be considered for rehabilitation is Collins Paddock. This area was cleared in the past, likely for grazing and it could be an optimal location to plant *Eucalyptus stellulata* and *E. pauciflora*.

22. A claim that the REF provides insufficient evidence of how a principle of, 'Construction Management' will be undertaken, specifically that IMBA principles will be implemented and a detailed Environmental Management Plan is developed and adhered to.

Response: Refer to the safeguards on P. 85 of the REF:

- "IMBA standards for sustainable trails would be followed at all times.
- The Contractor is to develop and implement an Erosion and Sediment Control Plan (ESCP) that is to form part of the Environmental Management Plan. The ESCP

is to comply with relevant legislation i.e. it is to include appropriate controls to ensure that sediment is appropriately managed and will not pollute any waterways.”

Additionally, there are a number of additional safeguards in the REF that discuss mitigations for construction.

The contract for construction will detail that the contractor is to identify the final route that is consistent with IMBA standards for sustainable trails and to construct the track to these standards. Specifically, the IMBA standards include:

- The half rule
- The ten percent average guideline
- Maximum sustainable grade
- Grade reversals
- Outslope

The contractor will be required to develop and submit a suitable EMP prior to works commencing and NPWS will review and comment on it, with Fisheries NSW commenting on the ESCP. The contractor will not receive permission to commence work until an appropriate EMP has been submitted. NPWS will ensure appropriate supervision during construction.

Suggested additional safeguard: A condition of the contract/s to construct the track will be that the contractor must develop and implement an Environmental Management Plan (EMP) that is consistent with the conditions of approval for the REF. The EMP must address all reasonably foreseeable environmental risks that are not included in the REF and any matters that are raised by NPWS. The contractor must provide a copy of the EMP to NPWS for comment prior to construction commencing and construction must not commence until an appropriate EMP has been submitted to NPWS.

23. A claim that the REF provides little evidence of how a principle of maintenance and monitoring will be undertaken.

Response: Refer to safeguards page 86 of the REF, that “NPWS would implement a Track Management Plan to ensure regular inspections of the track to ensure that no damage has occurred that could result in increased erosion and sedimentation. This is of particular concern in areas with heavy Wombat use and Deer use, both of which would use the track increasing erosion potential and Wombats are likely to excavate into any banks created.”

Suggested alteration to the safeguard above: Add that NPWS would include in the Track Management Plan that monitoring of the general condition of the track will occur and that general maintenance issues will be responded to.

24. A claim that the only re-alignments made were due to Aboriginal heritage matters and an assumption that the ecological field work did not assess the proposed re-aligned corridor as required by the Aboriginal Heritage Assessment.

Response: The proposed re-alignments around Aboriginal sites remain within the corridor that was assessed during the ecological field work that was carried out prior to the Aboriginal Heritage Assessment. Additionally, refer to the safeguards on P. 86 of the REF that confirm that the proponent will complete a further pre-clearance survey and an immediate pre-clearance survey prior to vegetation clearance and construction and the final alignment will be micro-sited to avoid threatened flora and fauna.

25. Little evidence in the REF of any market demand analysis to support ‘Option 3 IMBA Blue grade trail’ over ‘Option 2 IMBA green trail’ and the project being determined prior to the KNP Mountain Bike Strategy being complete.

Response:

- The extension of the TVT is part of a broader strategy and is an extension of the existing Thredbo Valley Track. A feasibility study was completed in 2007 for the Thredbo Valley Track which included a discussion of various options. The level of use of the track has far exceeded the expectations of NPWS.
- Significant research including consultations with the NPWS Customer Experience Division and subject matter experts and a risk assessment has been completed by NPWS to confirm that an IMBA Blue grade trail will not only be more likely to attract additional visitation, but will also be safer than a smoother IMBA Green grade trail as the technical features in a Blue trail could be more effective in forcing users to cycle slower, therefore reducing the risk of collisions and potentially making incidents more likely to occur at lower speeds.
- Whilst the KNP Mountain Bike Strategy is not yet complete, the stakeholder consultations through the process of creating the draft strategy clearly showed that the Lower TVT project should be a priority project for Mountain Biking in KNP. The strategy will go to public comment in due course and considering that the majority of submissions to the REF were in support of the project, one could make a sound judgement that the public consultation about the KNP Mountain Bike Strategy would likely further demonstrate the community's support for the project.

26. A concern that because the project will impact more than 3.5 Ha of EECs, the project will have a significant impact if no offsets are implemented.

Response: Although the track could result in the clearing of up to approximately 3.5 Ha of vegetation within EEC's, the majority of vegetation being cleared will be shrubs, with Eucalypts being avoided where possible. Refer to P. 67 of the REF. A detailed explanation of the impact to the EEC's is included at Appendix 6 of the REF, P. xlvi. Additionally, threatened flora will be avoided, refer to safeguard on P. 86 of the REF regarding the pre-clearance survey.

Although environmental offsets are not a legislative requirement for this project, NPWS is recommending an adjustment to the safeguards as outlined in the response to issue no. 21. I.e. rehabilitation should occur to counterbalance some of the impact created by clearing flora within EEC's.

27. The desktop analysis was completed at 1:190,000 and 1:250,000 which is a too large scale.

Response: As outlined on page 33 of the REF, these scales are permissible under the OEH data licence agreement. Field surveys were carried out by suitably qualified professionals to ensure a thorough assessment. Additional pre-clearance surveys will be carried out when threatened flora would be in flower and is therefore easier to identify.

28. The calculations for disturbance are based on approximations of trail length, trail corridor widths, trail corridor disturbance widths, and the number of platforms.

It was not feasible to define the exact trail length and width of the trail prior to the project taking place. This is for the following reasons:

- The exact trail location will be confirmed after the pre-clearance surveys, so that the trail can avoid threatened flora and nests of the Olive Whistler and Pink Robin.
- Unknown natural features such as rocks currently hidden under the earth will influence excavation and therefore the width of the track at certain locations.
- Exact platform locations and therefore platform lengths are subject to change as a result of the track being altered after the pre-clearance survey.

- A condition of the contract for construction will be that the contractor must design the final alignment so as to include IMBA's five principles for sustainable trail design. The contractor must also design the track to be sufficiently technical so as to force users to slow down and therefore reduce erosion from skidding and safety risks. Providing the contractor with some flexibility as to the exact final alignment will create the optimal outcome of a sustainable trail that is enjoyable and adequately safe. In order to achieve these principles, the track will require significant curves and corners and this creates a situation where the exact final length of the trail is unknown.
- The estimation of the total area to be cleared, 4.016 Ha (Refer to P. 68 of the REF) is unlikely to be exceeded. This is because the track is unlikely to be any longer than 17 kms from Bullocks Flat to Gaden. Even at 2 metres in width, this would create a trail corridor of 3.4 Ha, with minimal additional vegetation-clearance to occur if the option to upgrade the existing Pallaibo Track is implemented.

Suggested additional safeguards:

- The proponent is to seek to utilise the shortest feasible crossing points for each platform so as to minimise the lengths of platforms. In identifying feasible crossing points, some of the factors that the proponent may need to consider are; flooding implications, additional disturbance required to route the track to the shortest crossing point; safe and sustainable trail alignments between each crossing point will need to be achievable, impacts to Aboriginal or heritage values, natural features restricting the use of the narrowest point such as endangered flora, canopy or hollow bearing trees, rocks and boulders.

29. The locations, lengths and widths of each platform has not been defined in the REF.

Response: Such details do not need to be included in a REF that is being assessed under Part 5 of the EP&A Act. Refer to the response to issue 28 regarding the reasons that the exact location and length of each platform has not been identified.

30. The REF makes reference to utilising rocks outside of the trail's immediate corridor with limited discussion on stockpiles and how materials would be transported and stored before installation and the impact that this will have on edge effects and cumulative impacts that were not addressed.

Response: A suggested alteration to address this issue is included below.

Suggested additional safeguard:

- When rocks are collected from outside of the track's immediate corridor, the following restrictions will apply for stockpiling and transporting rocks;
 - rocks must be transported either by being carried by hand, helicopter or wheelbarrow / cart. If a wheelbarrow or cart is used, it must not be wheeled over any creeks or wet areas without the use of a temporary platform;
 - random and varying routes must be used when collecting or searching for rock so as to reduce the risk of impacts by passing over the same area outside of the track's corridor; and
 - all persons and equipment must remain outside of any bogs.

Collected rocks must be stockpiled within the immediate corridor of the track that will be cleared of vegetation.

31. The REF states that no canopy trees or hollow-bearing trees will be removed without any evidence of how this will be achieved.

Response: Our thorough fieldwork confirms that it is achievable to identify a route that avoids the need to clear canopy and hollow-bearing trees.

32. The REF does not include any reference to the potential impacts of the proposed bridge at Gaden including its dimensions and location.

Response: The bridge is yet to be designed. EnviroKey visited the proposed site of the bridge and assessed the location during their fieldwork. The assessment was based on there being no piers located in the river.

With the exception of the footings on the Northern side of the bridge, the remainder of the bridge will be off Park and will therefore be subject to further approvals and assessments.

Suggested additional safeguard:

- The bridge crossing the Thredbo River at Gaden would be subject to further approvals under a Development Application due to it being located off Park, with the exception of the footings on the Northern side of the river which are on Park.
- The bridge at Gaden must be designed to consider flooding implications and the footings on the Northern (KNP) side of the Thredbo River must be above the flood line.

33. A key consideration for a REF under the Sustainable Mountain Biking Strategy and amended KNP Plan of Management (POM) is visitor safety. This is even more relevant for a two-way trail which includes no emergency access other than at either end. The REF makes no mention of visitor safety, whether a two-way shared use trail is the most appropriate form of trail or how emergency access across the river can be achieved.

Response: Safety issues are considered by the NPWS Southern Ranges Region and are not a requirement of this REF. The NPWS Sustainable Mountain Biking Strategy (2011 P. 7) states that visitor safety is to be considered when developing new trails however it does not state that visitor safety needs to be addressed in a REF. NPWS has undertaken significant research regarding safety and emergency access options and will make appropriately considered decisions. The safeguard on P. 87 of the REF states that further consultation should occur with landholders to ensure that they will be accepting of access through their private property for potential emergencies.

34. The REF makes no reference to the potential impacts on the Thredbo River, its proximity to the river and its embankments or potential impacts on the Snowy River EEC (including no 7 Part Test). In comparison, resorts are subject to the Alpine SEPP Riparian corridor buffer zone of 40 metres and under their lease, cannot develop within 15.24 metres from either bank of the Thredbo River.

Response: Developments by NPWS on Park are to be in accordance with Part 5 of the Environmental Planning and Assessment Act 1979 (EP&A Act). Development by resorts are to be in accordance with Part 4 of the EP&A Act. This project complies with Part 5 of the EP&A Act.

The REF thoroughly addresses the potential impacts on the Snowy River EEC at Appendix 6, P. xlvi. Appendix 6 also includes discussion about the other EEC's to be impacted, justifies the levels of impact and refers to Chapter 7 of the REF which includes proposed safeguards to mitigate these impacts.

35. Concern that NPWS appears to be the proponent and the determinant of the project. An independent assessment of the REF would provide a tangible separation of powers that is transparent to the public.

Response: A transparent assessment of the REF will be completed by the Office of Environment and Heritage (OEH) in accordance with Part 5 of the EP&A Act. Refer to P. 7 of the REF that as the determining authority, OEH must 'examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity' pursuant to Section 111 of the Act.'

The REF states that OEH is the proponent because NSW National Parks & Wildlife Service (NPWS) is in fact the proponent and NPWS is an agency within OEH. NPWS acknowledges that ideally the author of the REF could have stated that NPWS / OEH is the proponent. The determination of the REF will be completed by the Regional Operations Group of OEH which is not part of NPWS. The assessment is transparent and is in accordance with the OEH 'Determination Guidelines for the Review of Environmental Factors'. The determination is consistent with legislation.

36. Different requirements for projects and approvals for reports and NPWS.

Response: Developments by NPWS on Park are to be in accordance with Part 5 of the Environmental Planning and Assessment Act 1979 (EP&A Act). Development by resorts are to be in accordance with Part 4 of the EP&A Act. The requirements for this project are in accordance with the EP&A Act.

37. Elevated platforms with a load rating large enough for a 2.0 tonne operating weight excavator could increase the construction costs of the project.

Response: This is noted however the financial expenses of the project do not need to be addressed in the REF and NPWS considers this load rating to be important for both the construction period and future maintenance.

38. Additional footings and supports may be required to achieve the load ratings for the platforms compared to if the platforms were not engineered to hold an excavator.

Response: These load ratings are considered to be important for construction and maintenance.

39. The moderately wide trail to allow for a one metre wide excavator throughout and for a six-wheeler in some sections would reduce the ability for the track to have natural features that will force users to ride slower and therefore safer.

Response: It is planned that the more remote sections of the track will be constructed to be too narrow for an ATV so that users will be forced to go slower. Six-wheeler / ATV access for some sections of the track is considered important not only for maintenance but also to provide some ATV access for emergency response. A scope that is at least wide enough for a 1 metre wide excavator to pass along the track occasionally for maintenance is considered an important requirement for future maintenance.

40. The existing Upper Thredbo Valley Track (UTVT) does not allow access for wheel chairs as well as cyclists and pedestrians. It is impossible for anyone with a small disability to traverse the existing UTVT. This should be rectified for the extension of the track.

Response: There are some sections of the existing UTVT that allow access for wheelchairs. It is unfortunate that a path that is entirely accessible by wheelchair would unlikely be successful in attracting significant visitation from users that wish to mountain bike. If the proposed Lower TVT was built to allow access by wheelchairs, the resulting smooth track would create high safety risks due to faster speeds and a track that is smooth enough to be accessible by wheelchairs would unlikely appeal to the majority of the mountain biking market or the pedestrian market that seeks an adventurous experience. Additionally, the design required to build the track to a standard that enables wheelchair access would result in a higher environmental impact.

41. The existing UTVT is an excellent path for advanced and experienced cyclists only.

Response: The existing UTVT has sections of International Mountain Bike Association (IMBA) Easy Green grade and IMBA Moderate Blue grade. There are no sections of the existing TVT or the proposed extension that will be graded at the

IMBA Difficult Black grade. The extension will be predominantly IMBA Moderate Blue Grade.

42. Safety risk of walkers and cyclists on the same track.

Response: Safety risk is an issue that is considered by NPWS Southern Ranges Region. Signage will be installed at both ends of the track to warn users of this safety risk and to encourage cyclists to slow down. The signs will also warn users that emergency assistance is limited and potentially difficult. NPWS will ensure that the technical specifications of the track will incorporate safety design features such as moderate graded technical features and corners on descents to attempt to force users to travel at a slower pace.

43. Stakeholder agrees that signage should be installed to ask users to stay off private property, but urges that training is provided to tourist information providers about the importance of highlighting the importance of not crossing the river.

Response: Prior to the track opening, NPWS will inform the staff at the NPWS Visitor Centres about the importance of communicating to people making enquiries about using the track that they should respect adjacent landowners and not cross the Thredbo River into private property. Information about not crossing the river will be included on the NPWS website.

44. Noise pollution from users impacting landowners.

Response: The track's location has been moved away from the river significantly when the track is opposite private residences. This has reduced this impact as much as is possible. The riparian vegetation will assist in minimising noise.

45. Rubbish trespass and fire risk and recommending that camping is therefore prohibited.

Response: Refer to safeguard on P. 87 of the REF that fires are not permitted during periods of high fire danger and that smoking is prohibited in KNP. Camping in the area is allowable under the current KNP Plan of Management and this is unlikely to change. The probability of large numbers of people camping is estimated to be low.

Suggested additional safeguard: NPWS is to include in signage at both ends of the track that users are to carry out all waste.

46. Snowy River Shire Council (SRSC) would not be prepared to take full ownership of the bridge at Gaden considering that the land of the bridge site is not on SRSC owned or managed land (SRSC would consider a shared ownership).

Response: The REF includes an option to have no bridge at Gaden and for the track to extend to the Thredbo River Picnic Area. NPWS will continue to communicate with SRSC to identify a suitable outcome.

47. Snowy River Shire Council recommend that a bridge at Gaden would be preferable than an upgrade of the Pallaibo Track due to impacts to; Aboriginal Heritage, experience of walkers on the Pallaibo, limited parking at the Thredbo River Picnic Area.

Response: An Aboriginal Heritage Impact Permit would be sought if the project would utilise and upgrade the Pallaibo Track. The Pallaibo Track would be slightly widened to minimise the impact on pedestrians. NPWS will seek a solution to the parking issue at the Thredbo River Picnic Area.

Appendix 1 – Schedule of issues

Table A1 Issues raised with proposed safeguards or against the proposal

Issue and issue number	Quantity of submissions that raised the issue
1. Insufficient details provided to one landowner in regards to the location of the track to their property.	1
2. Insufficient details have been provided to one landowner regarding the visual impact created by the track	1
3. Lack of an existing formal agreement with landowners for the ongoing use of private access trails for construction and maintenance. Including the potential cost to landowners for additional access trail maintenance.	1
4. Lack of an existing formal agreement with landowners for the ongoing use of access trails for emergency response. Including the potential cost to landowners for additional access trail maintenance	1
5. Environmental safeguards (e.g. silt curtains, sediment fences, booms etc.) are to be installed consistent with “ <i>Managing Urban Stormwater: Soils and Construction</i> ” (4th Edition Landcom, 2004, aka the Blue Book) to ensure that there is no escape of turbid plumes into the adjacent aquatic environment.	1
6. A copy of the ESCP should be provided to DPI for comment and approval prior to any works commencing. The ESCP should include plans, work methods and mitigation measures proposed for all waterway crossings.	1
7. Works in of adjacent to waterways should be conducted during periods of no or low stream flow to minimise sedimentation	1
8. Split rock used in reclamation works in or adjacent to the waterway should be clean and free of loose sediment.	1
9. Damage to existing native riparian vegetation should be avoided or minimised and any damage caused must be restored.	1
10. When machinery is working on site, spill kits suitable for the containment of fuel and oils spills must be available	1
11. There is no process in place for the event that fish kills occur	1
12. A plan needs to be in place to ensure adequate Sediment and Erosion controls resulting from ongoing use of the track	1
13. Grade reversals should be installed at stream crossings to drain longitudinal flow away from, rather than towards the stream wherever possible	1

14. REF does not document how the trail corridor was identified and by what qualified persons, what site analysis process was followed or what design principles were used to determine its location or whether IMBA Design Guidelines were used.	1
15. Perception that the process avoided a principle of using existing trails where possible	1
16. Perception that the process avoided a principle of locating trails on previously disturbed areas where possible	1
17. A claim that the REF does not discuss how a principle of applying IMBA sustainable trail guidelines was implemented	1
18. Perception that the process avoided a principle of undertaking a ground-truthing process to avoid environmentally sensitive areas and cross water courses at their narrowest point	1
19. Perception that the process avoided a principle of undertaking a preliminary site assessment – undertaking site assessments based on the ground-truthed trail, identifying constraints and modifying trail alignments	1
20. A claim that the REF provides little evidence of a principle of, realign and refine trails as a result of ecological or Aboriginal Heritage value.	1
21. A claim that the REF ignores environmental offsets	1
22. A claim that the REF provides insufficient evidence of how a principle of, 'Construction Management' will be undertaken, specifically that IMBA principles will be implemented and a detailed environmental management plan	1
23. A claim that the REF provides little evidence of how a principle, maintenance and monitoring will be undertaken	1
24. A claim that the only re-alignments made were due to Aboriginal heritage matters and an assumption that the ecological field work did not assess the proposed re-aligned corridor as required by the Aboriginal Heritage Assessment.	1
25. Little evidence in the REF of any market demand analysis to support 'Option 3 IMBA Blue grade trail' over 'Option 2 IMBA green trail' and the project being determined prior to the KNP Mountain Bike Strategy being complete.	1
26. A claim that because the project will impact more than 3.5 Ha of EECs, the project will have a significant impact if no offsets are implemented	1
27. The desktop analysis was completed at 1:190,000 and 1:250,000 which is a too large scale	1
28. The calculations for disturbance are based on approximations of trail length, trail corridor widths, trail corridor disturbance widths, and the number of platforms	1
29. The locations, lengths and widths of each platform has not been defined in the REF	1
30. The REF makes reference to utilising rocks outside of the trails immediate corridor with limited discussion on stockpiles and how materials would be transported and stored before installation and the impact that this will have on edge effects and cumulative impacts that were not addressed.	1
31. The REF states that no canopy trees or hollow-bearing trees will be removed without any evidence of how this will be achieved	1

32. The REF does not include any reference to the potential impacts of the proposed bridge at Gaden including its dimensions and location	1
33. A key consideration for an REF under the Sustainable Mountain Biking Strategy and amended POM is visitor safety. This is even more relevant for a two-way trail which includes no emergency access other than at either end. The REF makes no mention of visitor safety, whether a two-way shared use trail is the most appropriate form of trail or how emergency access across the river can be achieved.	2
34. The REF makes no reference to the potential impacts on the Thredbo River, its proximity to the river and its embankments or potential impacts on the Snowy River EEC (including no 7 Part Test). In comparison, resorts are subject to the Alpine SEPP Riparian corridor buffer zone of 40 metres and under their lease, cannot develop within 15.24 metres from either bank of the Thredbo River.	1
35. Concern that NPWS appears to be the proponent and the determinant of the project. An independent assessment of the REF would provide a tangible separation of powers that is transparent to the public.	1
36. Different requirements for projects and approvals for resorts and NPWS	1
37. Elevated platforms with a load rating large enough for a 2.0 tonne operating weight excavator could increase the construction costs of the project	1
38. Additional footings and supports may be required to achieve the load ratings for the platforms than if the platforms were not engineered to hold an excavator	1
39. The moderately wide trail to allow for a 1 metre excavator and for a six wheeler in some sections would reduce the ability for the track to have natural features that will force users to ride slower and therefore safer	1
40. The existing Upper Thredbo Valley Track (UTVT) does not allow access for walkers, cyclists and wheel chairs This should be rectified for the extension of the track.	1
41. The existing UTVT is an excellent path for advanced and experienced cyclists only	1
42. Safety risk of walkers and cyclists on the same track	2
43. Agrees that signage should be installed to ask users to stay off private property, but urges that training is provided to tourist information providers about the importance of highlighting the importance of not crossing the river	1
44. Noise pollution from users impacting landowners	2
45. Rubbish trespass and fire risk and recommending that camping is prohibited	2
46. Snowy River Shire Council would not be prepared to take full ownership of the bridge at Gaden considering that the land of the bridge site is not on Shire owned or managed land. (Council would consider a shared ownership).	1
47. Snowy River Shire Council recommend that a bridge at Gaden would be preferable than an upgrade of the Pallaibo Track due to impacts to; Aboriginal Heritage, experience of walkers on the Pallaibo, limited parking at the Thredbo River Picnic Area.	1

Table A2 Issues raised in support of the project or the proposed safeguards

Issue and issue number	Quantity of submissions that raised the issue
48. General support of the project (some of these stakeholders provided feedback about proposed safeguards)	14
49. Event opportunities	2
50. Regional economic benefits or increased tourism or business	9
51. Social benefits	1
52. Provides a slightly more challenging track than the existing Thredbo Valley Track	1
53. Create a link from Thredbo to Jindabyne	2
54. Create an iconic track or a track that could reach International Mountain Bike Association (IMBA) EPIC status	3
55. Not concerned about the impact on my privacy as a landowner opposite the track	2
56. A low altitude track as an alternative when the weather is too bad for alpine areas	3
57. Supportive that there would be signs at each end to warn people that there are no services and to respect private property owners	2
58. Appreciative that NPWS has aimed to align the trail to minimise impact on privacy of landowners	3
59. A multiuse track will attract a wider demographic than if it was for cycling only or walking only	1
60. Increased revenue to NPWS through Park entry	1
61. Strengthen Summer tourism when climate change may be risk to strong winter tourism	1
62. The extension could make a difference whether cyclists would travel from Sydney to ride the TVT or not	1
63. Supports 'option 3' of a IMBA moderate graded trail with a short wider / easier sections at each end and narrower in the centre	1
64. Supports the realignment of the trail to avoid Aboriginal sites and supports the use of signage or fencing at Collins Hut	1
65. Stakeholder expresses an interest to assist with future maintenance of the trail	1
66. Supports the lower section of the Pallaibo Track to become shared use	1

67. The REF is professional and addresses the environmental impacts with appropriate safeguards	1
68. Supportive of the use of raised platforms constructed with steel and a FRP deck	1

There were a number of issues raised by one stakeholder that are outside of the scope of this project and these issues have therefore not been included within this report.

References

Office of Environment and Heritage, NSW National Parks and Wildlife Service 2011, Sustainable Mountain Biking Strategy <
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Feary S. & Niemoeller G. 2015. Lower Thredbo Valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment. Final Report to NPWS and SRSC.

Landcom 2004 Managing Urban Stormwater : Soils and Construction, 4th Edition, March 2004