



# Snowmaking Unit 1, Friday Flat, Thredbo

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Development Application Assessment  
DA 24/16834

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*Cover image: Main Range, Kosciuszko National Park (Source: Alpine Resorts Team)*

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# Glossary

Abbreviation	Definition
<b>BC Act</b>	<i>Biodiversity Conservation Act 2016</i>
<b>BC Regulation</b>	<i>Biodiversity Conservation Regulation 2017</i>
<b>BDAR</b>	Biodiversity Development Assessment Report
<b>BVM</b>	Biodiversity Values Map
<b>Consent</b>	Development Consent
<b>CPP</b>	Community Participation Plan
<b>Department</b>	Department of Planning Housing and Infrastructure
<b>EP&amp;A Act</b>	<i>Environmental Planning and Assessment Act 1979</i>
<b>EP&amp;A Regulation 2021</b>	<i>Environmental Planning and Assessment Regulation 2021</i>
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
<b>EPI</b>	Environmental Planning Instrument
<b>ESD</b>	Ecologically Sustainable Development
<b>KNP</b>	Kosciuszko National Park
<b>Minister</b>	Minister for Planning
<b>NPWS</b>	National Parks and Wildlife Service
<b>NSW DCCEEW Water Group</b>	NSW Department of Climate Change, Energy, Environment and Water – Water Group
<b>Planning Secretary</b>	Secretary of the Department of Planning Housing and Infrastructure
<b>SEE</b>	Statement of Environmental Effects
<b>SEPP</b>	State Environmental Planning Policy

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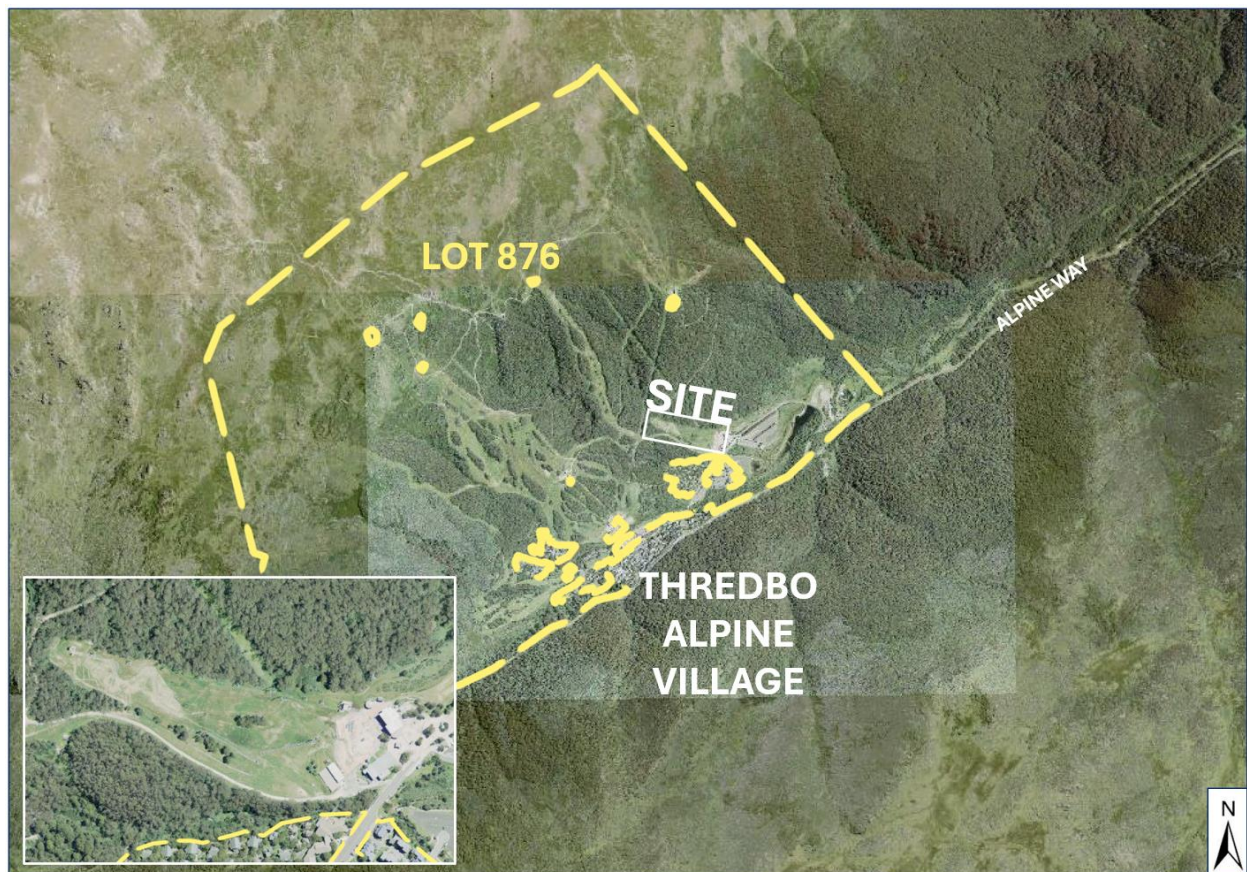


# 1 Introduction

## 1.1 Introduction

This report contains the Department's assessment of the Development Application (DA 24/16834) lodged by Kosciuszko Thredbo Pty Ltd (the Applicant) seeking approval for the development of a new snowmaking unit and associated works within Thredbo Alpine Resort, Kosciuszko National Park (KNP).

The site is located within the Thredbo Head Lease Area of Lot 876 DP1243112 which is situated north of Thredbo Alpine Village and identified as 2 Friday Drive, Thredbo (**Figure 1**).



**Figure 1 |** Location of the site in the context of Lot 876 and Thredbo Alpine Village (Source: NSW Planning Portal Spatial Viewer, with annotations)

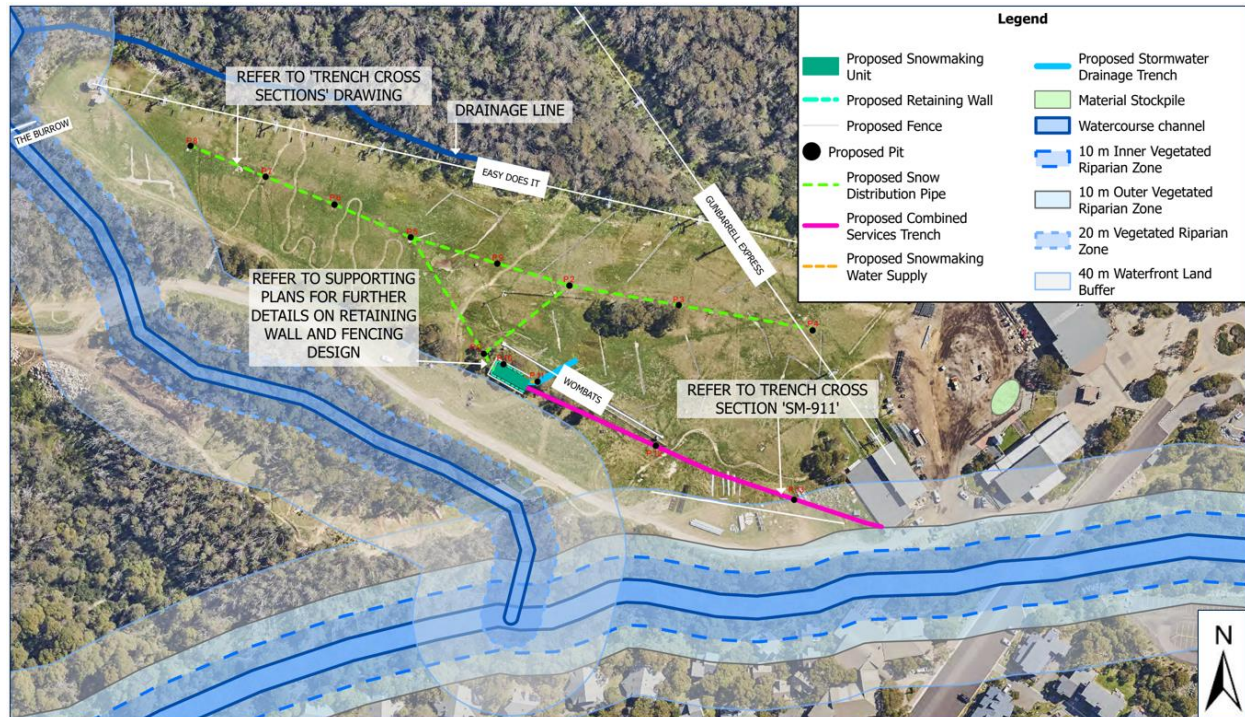
The development is located in the south-east corner of the allotment in an area known as Friday Flat, located to the south-east of the Merritt's Gondola Mid-Station.

During winter operation, Friday Flat is a dedicated beginner ski area and is serviced by two chairlifts (Gunbarrel and Easy Does it) and four conveyors (Wombats, Freddie's, The Burrow and Syds). During summer, the recently determined Beginner Mountain Bike Trail and Skills Park will traverse the site.



## 1.2 Proposed development

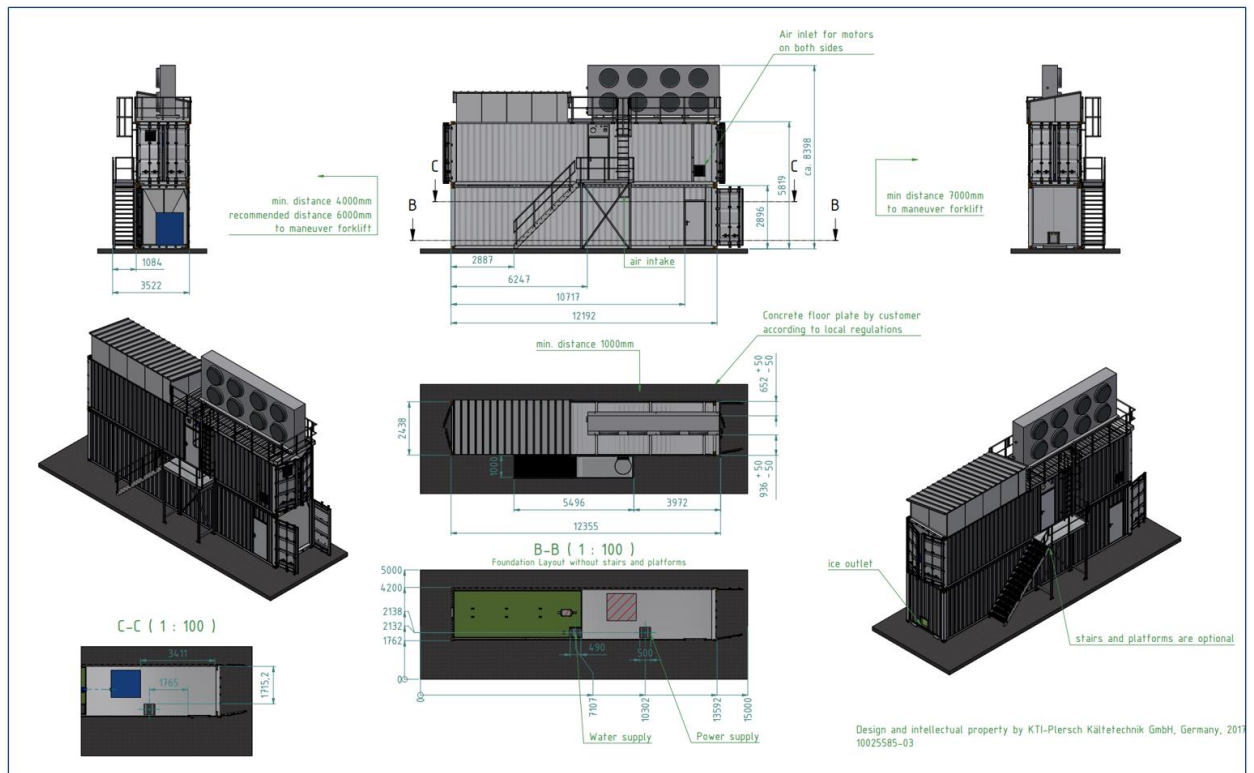
The application seeks approval for the installation of a new snowmaking unit, ancillary structures and associated works (**Figure 2**). The Applicant comments that the snowmaking unit is essential to improve snow cover and snowmaking efficiency within Friday Flat.



**Figure 2 |** Site plan identifying the location of the snowmaking unit and ancillary structures in relation to Friday Flat (Source: Applicant's Request for Additional Information response 2025)

The proposal comprises the following:

- Installation of snowmaking infrastructure, including:
  - Pre-manufactured snowmaking unit (SnowPRO 260) comprising of stacked shipping containers with a roof-top air-cooled refrigerator condenser and ancillary access structures (**Figure 3** and **4**). The snowmaking facility dimensions are 8.4m (h) by 12.2m (l) by 3.5m (w) situated on a 5m by 15m foundation and coloured in RAL 7013 in response to the surrounding environment. The snowmaking unit is supported by rubber drainage around the structure, an Agi line and coarse aggregate to ensure roof runoff does not impact the foundation, and a retaining wall and part-perimeter fence around the unit. The snowmaking unit will be utilised from April and until the level of natural snow is optimal to support the Resort.
  - Thirteen (13) precast concrete pits with a disturbance footprint of approximately 3m by 3m wide and 1.6m deep. The pits will be serviced by 100mm nominal diameter plastic pipe run through underground trenching, with a short section of flexible plastic 100mm bore tubing at the transition point to connect to above-ground plastic pipes for distribution. Distribution pipes will be propped on wooden stakes or short poles (to be confirmed during the detailed design phase) that can be relocated once each snow pile has reached a satisfactory size.



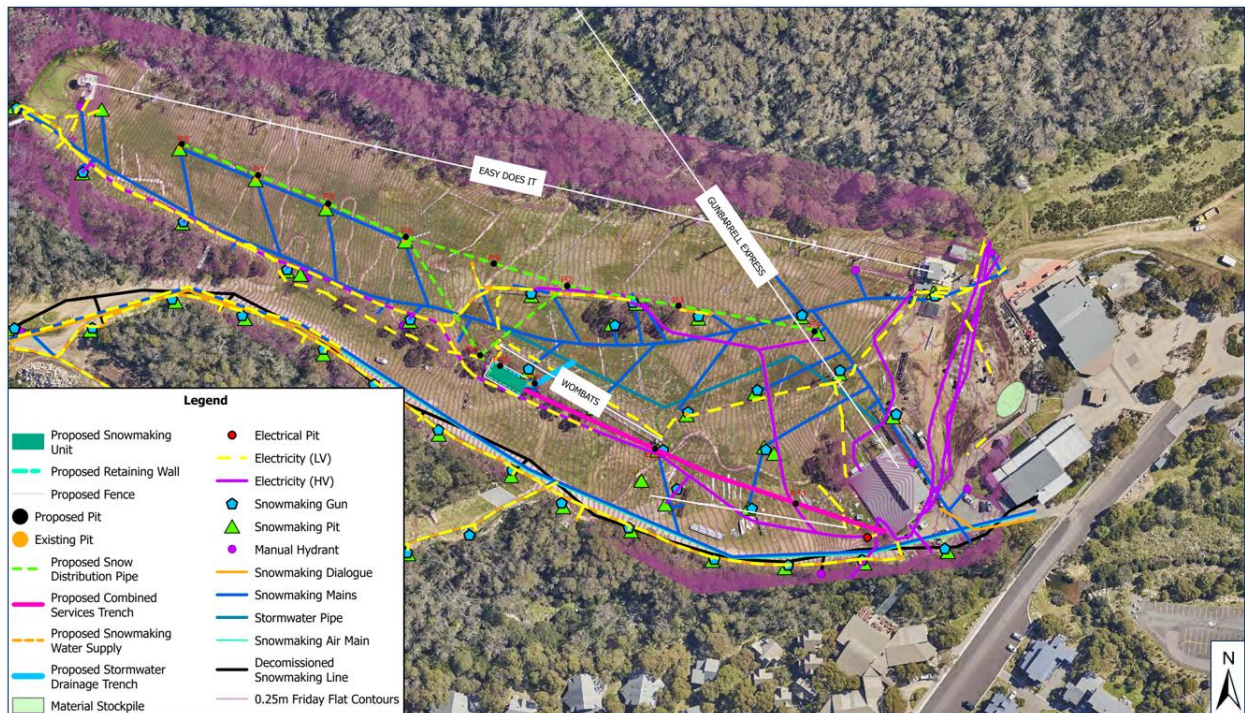
**Figure 3 |** External design and configuration of the proposed SnowPRO 260 snowmaking facility (Source: Applicant's Request for Additional Information response 2025)



**Figure 4 |** Internal design and configuration of the proposed SnowPRO 260 snowmaking facility (Source: Applicant's Request for Additional Information response 2025)

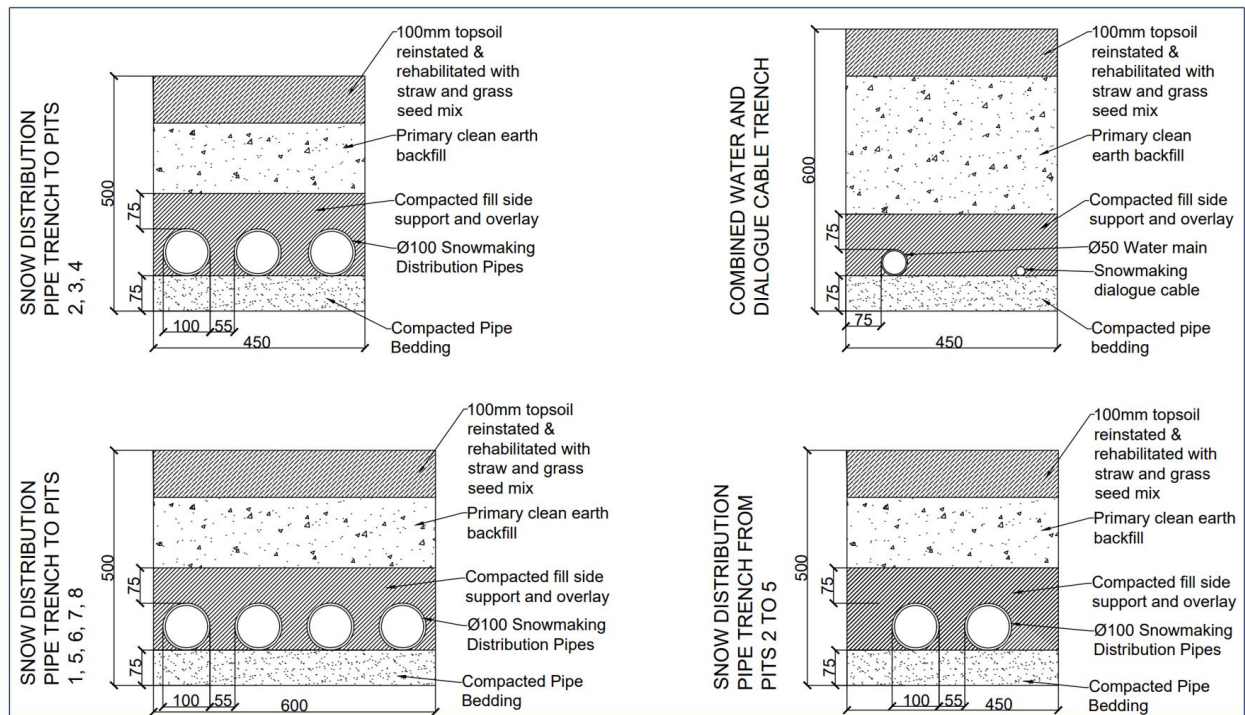


- Service installation to support the development (**Figure 5 to 7**), including:
  - Pipes and cables from the snowmaking unit to existing snowmaking infrastructure within the site.
  - 100mm polyethylene (PE) Snowmaking distribution pipes to distribute snow from the snowmaking facility to each relevant pit along Friday Flat.
  - Low voltage electrical cable installation running from the Gunbarrel Chairlift Carrier shed to the snowmaking facility.
  - Water supply infrastructure connected to existing 50mm snowmaking water laterals along Wombats moving carpet.
  - Dialog cables connecting to an automated snowmaking pit adjacent to Wombats moving carpet
  - Trenching and ancillary pits to support the delivery of service infrastructure throughout the Friday Flat ski area, with a 10m construction corridor to allow for variation of the alignment in the event of unanticipated environmental obstacles such as tree roots and rocks. Stormwater trenching through the tree island will be limited to a 3m construction corridor.

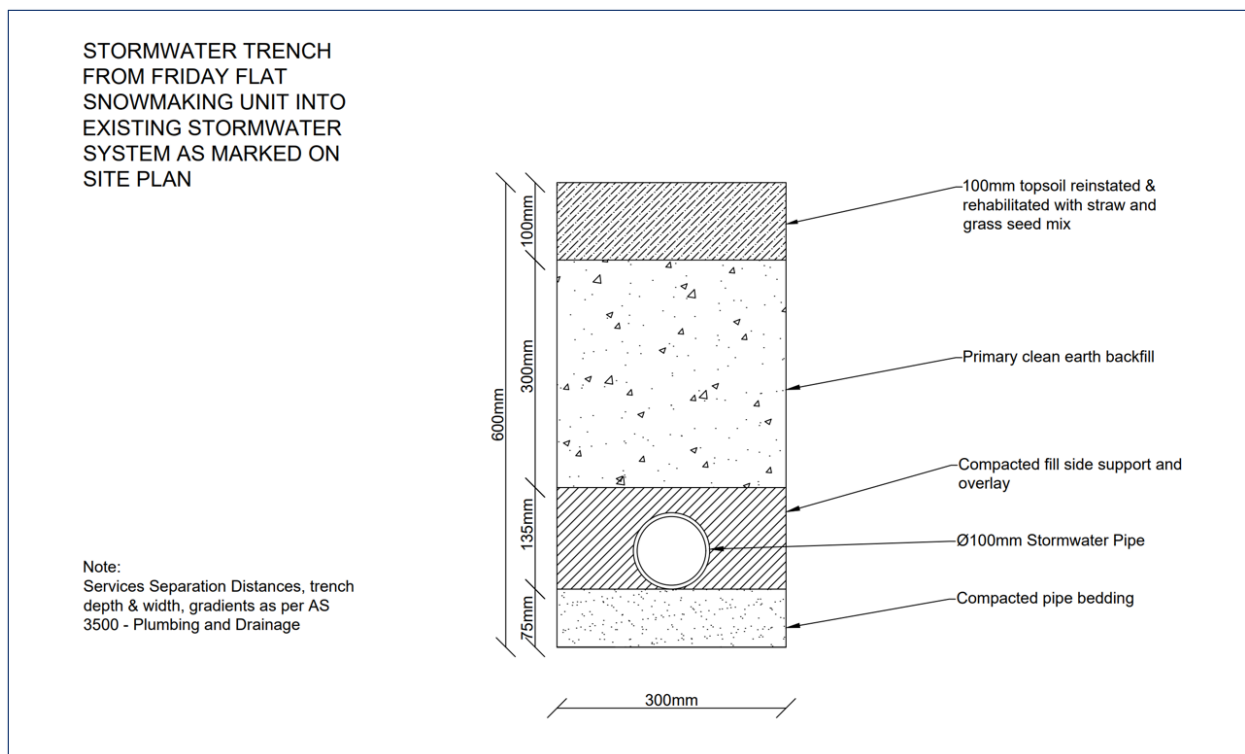


**Figure 5 | Services plan identifying existing and proposed service corridors in Friday Flat (Source: Applicant's Request for Additional Information response 2025)**





**Figure 6 |** Cross section identifying services distribution along Friday Flat (Source: Applicant's Statement of Environmental Effects [SEE] 2024)



**Figure 7 |** Cross section identifying the stormwater trench composition (Source: Applicant's Request for Additional Information response 2025)

- Vegetation management, including:
  - Removal of five (5) trees identified as *Eucalyptus stellulata* and associated vegetation below the trees (**Figure 8**). The trees proposed to be removed vary in condition, with two of the five trees identified as ‘dead’ and requiring removal by a Certified Ecologist.



**Figure 8 |** Site photos identifying the trees proposed to be removed (Source: Applicant’s SEE 2024)

- Remediation works, including:
  - Removal and backfill of existing pits adjacent to proposed pits 5 to 8. The existing laterals to these pits are to be capped and buried as they lie.
  - Site rehabilitation in accordance with the *Rehabilitation Guidelines for the Resort Areas of Kosciuszko National Park* (DECC 2007)

The estimated cost of works for the proposal is \$2,139,225.00.

The supporting documents to this assessment report can be found on the NSW Planning Portal website at:

<https://www.planningportal.nsw.gov.au/development-assessment/state-significant-applications/projects/state-development-applications>

## 2 Matters for Consideration

### 2.1 Strategic Context

#### South East and Tableland Regional Plan 2036

The South East and Tablelands Regional Plan 2036 describes the vision, goals and actions that will deliver greater prosperity for those who live, work and visit the region. The plan provides an overarching framework to guide more detailed land use plans, development proposals and infrastructure funding decisions. In relation to the alpine resorts, the Regional Plan seeks to promote more diverse tourism opportunities in the Snowy Mountains that will strengthen long-term resilience while acknowledging the environmental and cultural significance of the locality.

The Department considers the proposal is consistent with the Regional Plan as it would improve guest facilities through enhancing snowmaking and snow cover within the Friday Flat area of Thredbo Alpine Resort. Snowmaking extends seasonal length and viability of the snow season and is important infrastructure for the operation of the ski resort, particularly in mitigating impacts from adverse seasonal conditions and against potential climate change.

The proposal will allow the Thredbo Alpine Resort to continue to meet the demands of the snow sports community, which leads to continued visitation to the NSW ski fields during the winter period.

#### Snowy Mountains Special Activation Precinct Master Plan

The Snowy Mountains Special Activation Precinct Master Plan outlined the 40-year vision for the Snowy Mountains as a year-round tourist destination with new business opportunities, services and community infrastructure for the people that live, work and visit the region.

Section 9.1 relates to the Thredbo alpine resort. The proposal is consistent with the Master Plan as the proposal relates to supporting new and upgraded infrastructure in an environmentally sensitive way to augment snowmaking and support recreational activities and winter visitation with Thredbo Alpine Resort and KNP.

#### Precincts - Regional SEPP

The proposal is consistent with Chapter 4 of the Precincts - Regional SEPP as the development will be undertaken in an ecologically sustainable way to prevent adverse environmental, social or economic impacts on the natural or cultural environment, ensuring that KNP values are being protected and upheld.

Under the provisions of section 4.27 of the Precincts - Regional SEPP, the National Parks and Wildlife Service (NPWS) have a commenting role as the land manager, which includes administering the Plan of Management framework for KNP that incorporates objectives, principles and policies to guide the long-term management of the KNP. NPWS have recommended standard conditions to prevent adverse environmental, social or economic impacts on the natural or cultural environment.

#### Draft South East and Tableland Regional Plan 2041

The draft plan was publicly exhibited from 8 August 2022 until 23 September 2022. The draft plan underwent extensive consultation with the community and stakeholders with feedback incorporated into an updated version of the draft plan that was re-exhibited from 9 December 2022 to 31 January 2023. The



draft plan identifies the alpine areas as providing important biodiversity to the region and acknowledges the alpine area's contribution to the region's tourism economy.

The proposal is consistent with the draft Regional Plan as it will not result in adverse biodiversity impacts and will enhance the skiable terrain. The additional snowmaking capacity will augment snow coverage and snow season longevity in the Thredbo Alpine Resort. This supports visitor experience and the maintenance of visitation to KNP as a winter destination, along with sustaining the local, regional and state economy.

## 2.2 Permissibility

The proposal includes the installation of a new snowmaking unit and ancillary works, consistent with the definition of 'snow-making infrastructure' as defined in Chapter 4 of *State Environmental Planning Policy (Precincts – Regional) 2021* (the Precincts - Regional SEPP).

Pursuant to clause 4.7 of the Precincts - Regional SEPP, 'snow-making infrastructure' is permissible with consent within Thredbo Alpine Resort.

## 2.3 Mandatory Matters for Consideration

### Objects of the EP&A Act

**Table 1 | Objects of the EP&A Act**

Objects of the EP&A Act	Consideration
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,	<p>The proposal supports the ongoing use of the skiable terrain at Thredbo Alpine Resort and will provide more reliable snow cover for winter operations.</p> <p>The location of the proposed works in the Friday Flat area comprises ski terrain, lifting facilities, mountain bike trails and a vehicle access track. Vegetation within the proposed corridor comprises a mix of exotic and native species which has been heavily modified and disturbed. The area of works, construction corridor and adjacent areas are not identified as having high biodiversity value.</p> <p>The provision of snowmaking infrastructure within the Friday Flat area is considered to have a positive social and economic impact while considering and minimising adverse impacts on the environment.</p>
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	<p>The proposal would not have an unacceptable impact on the environment thus being compatible ecologically sustainable development. Mitigation measures during construction have been included in the recommended conditions of consent and impacts on biodiversity limited.</p>

(c) to promote the orderly and economic use and development of land,	The development seeks approval for works that provide snowmaking infrastructure within the Friday Flat area. This provides increased longevity of the winter season and an improved skiable experience which contributes to greater visitor amenity and supports Alpine Resort visitation for winter snow sports, thereby promoting the ongoing orderly and economic use of the land.
(d) to promote the delivery and maintenance of affordable housing,	Not applicable to this proposal.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	Impacts upon the environment will be limited to previously disturbed areas, avoiding sensitive areas identified on the Biodiversity Values Map and impacts on threatened species. An Assessment of impacts is provided in <b>Section 4</b> .
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	The development site is located in a highly disturbed area of the Thredbo Alpine Resort. The proposed development is not anticipated to result in any adverse impacts upon built and cultural heritage, including Aboriginal heritage. NPWS raised no concerns in relation to impacts of Aboriginal cultural heritage. The proposal is considered to have low potential to impact on unrecorded objects or sites in the locality. The Department concludes that the proposal has demonstrated due diligence and is satisfactory in relation to avoiding impacts on built and Aboriginal cultural heritage. An expected finds procedure will be applied. No additional assessment is required.
(g) to promote good design and amenity of the built environment,	The Department considers that the proposed works will not detract from any built form. The visual change to the setting is minor, with the proposed snowmaking unit being enveloped by an existing tree island and to be painted in a colour which matches the surrounding setting. The changes are considered minor in the context of Thredbo Alpine Resort and remain compatible with the setting and surrounds.
(h) to promote the proper construction and maintenance of buildings, including the	The Department has recommended conditions of consent to ensure the proposal is undertaken in accordance with legislation, guidelines, policies and

protection of the health and safety of their occupants,	procedures to ensure the health and safety of people and animals who may be present in the area of works (refer to <b>Appendix A</b> ).
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	The Department consulted with relevant government agencies and considered their responses (refer to <b>Section 3</b> and <b>Section 4</b> ).
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The Department publicly exhibited the proposal and displayed the application on the NSW Planning Portal website (refer to <b>Section 3</b> ).

### Considerations under section 4.15 of the EP&A Act

**Table 2 | Section 4.15(1) Matters for Consideration**

Section 4.15(1) Evaluation	Consideration
(a)(i) any environmental planning instrument (EPI)	<p>The Precincts - Regional SEPP is the principal EPI which applies to the site for this type of development. An assessment against the requirements of Chapter 4 of the Precincts - Regional SEPP is provided below.</p> <p>The Department is satisfied that the Application is consistent with the requirements of Chapter 4 of the Precincts - Regional SEPP.</p>
(a)(ii) any proposed instrument	Not applicable to the proposal.
(a)(iii) any development control plan	The Alpine DCP came into effect after the application was lodged, and is not applicable to the proposal.
(a)(iiia) any planning agreement	Not applicable to the proposal.
(a)(iv) the regulations	<p>The application satisfactorily meets the relevant requirements of the EP&amp;A Regulation, particularly the procedures relating to development applications (Part 3 and Part 4) and fees (Part 13 and Schedule 4).</p> <p>The Department has undertaken its assessment in accordance with all relevant matters as prescribed by the regulations, the findings of which are contained within this report.</p>
(a)(v) any coastal zone management plan	Not applicable to the proposal.



(b) the likely impacts of that development	The Department has considered the likely impacts of the development, where the proposal is considered to have positive economic and social impacts while the environmental and cultural values of the site and locality will be maintained. Environmental impacts will be contained where possible and site works can be appropriately managed and mitigated through conditions of consent.
(c) the suitability of the site for the development,	The site is suitable for the development and supports the ongoing operation of the Friday Flat ski area and Thredbo Alpine Resort as a whole.
(d) any submissions made in accordance with this Act or the regulations,	Consideration has been given to submissions received from NPWS. Refer to <b>Section 3</b> and <b>Section 4</b> of this report.
(e) the public interest.	<p>The works are consistent with the aim and objectives of Chapter 4 of the Precincts - Regional SEPP, including the objective to encourage the carrying out a suitable range of development in the Resort areas to support sustainable tourism in the Alpine Region. The development will be compatible with the ongoing operation of the resort.</p> <p>Temporary impacts to the environment have been identified and will be appropriately managed, mitigated and contained. The development is considered to support the economic viability of the Resort while maintaining the health and diversity of the environment, thereby supporting the principles of ESD.</p> <p>The approval of the proposal is considered to be consistent with the public interest.</p>

## Environmental Planning Instruments

*State Environmental Planning Policy (Precincts - Regional) 2021* (Precincts - Regional SEPP) is the principal EPI applicable to the development. Consideration of the relevant provisions to the proposal within Chapter 4 of the Precincts - Regional SEPP is provided in **Table 3**.

No contamination within the site and surrounding area has been identified. There are no further matters under *State Environmental Planning Policy (Resilience and Hazards) 2021* that need to be considered.

**Table 3 | Precincts - Regional SEPP, Chapter 4 considerations**

<b>Chapter 4 - Precincts - Regional SEPP - Kosciusko Alpine Region</b>	
<b>Section 4.9 Demolition</b>	
The demolition of a building or work on land in the Alpine Region	Site reshaping in the form of cut and fill operations will occur, however the proposal does not relate to the demolition of a building.
<b>Section 4.21 Heritage conservation</b>	
European heritage	The proposal would not impact on any European heritage items.
Aboriginal heritage	NPWS raised no concerns with the proposal. A condition has been recommended that should any Aboriginal objects be uncovered during construction, any works impacting the objects must cease immediately and NPWS must be contacted for assessment of the shite.
<b>Section 4.24 Flood planning</b>	
Development on land in the flood planning area	The site is not located in a flood planning area and is not subject to flooding.
<b>Section 4.25 Earthworks</b>	
Impact of earthworks	<p>Earthworks relating to cut, fill and trenching for the installation of pits and service infrastructure is required. The excavated soil will be temporarily stockpiled onsite and then reused to backfill excavations. Measures to avoid and mitigate impacts from the works have been outlined in the documentation accompanying the development application, including the Site Environmental Management Plan.</p> <p>The Department considers that the earthworks proposed are unlikely to cause significant disruption to drainage patterns or soil stability in the locality of the development. Works will be undertaken to avoid impacts on the environment or the amenity of KNP visitors while supporting the current use of the land.</p> <p>A condition of consent will require appropriate sedimentation and erosion control measures to be in place in accordance with NPWS Guidelines.</p>

#### Section 4.27 Consultation with National Parks and Wildlife Service

Consult with, and consider submissions from, the NPWS

The proposal was referred to NPWS and comments were received. Refer to consideration of NPWS referral comments in **Section 3** of this report.

#### Section 4.28(1) – Consideration of master plans and other documents

(a) the aim and objectives of this policy, as set out in section 4.1

The proposal is consistent with the aim and objectives of Chapter 4 of the Precincts – Regional SEPP in that the development will be managed with regard to the principles of ESD. The provision of an adaptive trail and skills park is intended to support the ongoing use of the mountain bike park and support summer sports and tourism in the locality. The proposal is considered appropriate as it relates to works to enhance the mountain bike park while having an acceptable impact on the environment.

(b) *(repealed)*

(c) a conservation agreement under the *Environment Protection and Biodiversity Act 1999* of the Commonwealth that applies to the land,

Not applicable to the development.

(d) the *Geotechnical Policy -Kosciuszko Alpine Resorts* published by the Department in November 2003,

The site is located within the G zone identified on the Department's *Geotechnical Policy – Kosciuszko Alpine Reports*, Thredbo Map.

A Geotechnical Assessment provided commentary stating that the proposed works are considered 'minimal impact' based on the minimal extent and relatively shallow depth required for the development, as well as the relatively low bearing pressure imposed on the ground by the snowmaking unit. A completed Form 4 – Minimal Impact Certificate was provided.

Geotechnical considerations have been adequately assessed by the Applicant and recommendations are provided prior to construction and during works.

(e) for development in the Perisher Range Alpine Resort—

Not applicable, as site is located within Thredbo Alpine Resort.



(i) the Perisher Range Resorts Master Plan, published by the National Parks and Wildlife Service in November 2001 and

(ii) the Perisher Blue Ski Resort Ski Slope Master Plan adopted by the National Parks and Wildlife Service in May 2002.

#### **Section 4.29 Consideration of environmental, geotechnical and other matters**

Under section 4.29(1) - In deciding whether to grant development consent to development in the Alpine Region, the consent authority must consider the following -

(a) measures proposed to address geotechnical issues relating to the development,	Refer to comments above.
(b) the extent to which the development will achieve an appropriate balance between - (i) the conservation of the natural environment, and (ii) taking measures to mitigate environmental hazards, including geotechnical hazards, bush fires and flooding,	<p>The proposed works are located within a previously disturbed area of the Friday Flat ski area. Measures have been proposed by the Applicant to undertake the works in a way that will help avoid and mitigate impacts on the natural environment. The land is not subject to flooding and no measures to prevent against bushfire are required.</p> <p>Natural hazards have been adequately addressed.</p>
(c) the visual impact of the proposed development, particularly when viewed from the land identified as the Main Range Management Unit in the Kosciuszko National Park Plan of Management,	<p>The proposal relates to the installation of a snowmaking unit, ancillary structures and associated works. The snowmaking unit is to be finished in a colour which responds to the surrounding environment. The structure does not exceed the height of existing built form within the Friday Flat ski area, and therefore would not create a visual impact greater than what already exists.</p>
(d) the cumulative impacts of development and resource use on the environment of the Alpine Subregion in which the development is carried out,	<p>The proposal relates to the installation of a snowmaking unit and associated works. While snowmaking infrastructure will utilise additional water and energy, and contribute to ongoing noise generation in the area, the cumulative impacts are considered minor and appropriate to the context of the site. No significant adverse cumulative impacts are anticipated.</p> <p>The development will not result in any significant changes to resource use or impact the facilities in place</p>

to support visitor patronage of facilities in the Alpine resorts.

- (e) the capacity of existing infrastructure and services for transport to and within the Alpine Region to deal with additional usage generated by the development, including in peak periods,

The usage of the existing infrastructure and service network is predicted to be sufficient to support the additional infrastructure proposed as a result of the project.

- (f) the capacity of existing waste or resource management facilities to deal with additional waste generated by the development, including in peak periods.

The project will not generate ongoing operational waste by the development. The capacity of existing waste facilities to deal with any waste from the project is considered adequate.

Under section 4.29(2) - For development involving earthworks or stormwater draining works, the consent authority must also consider -

Measures to mitigate adverse impacts associated with the works

Sediment and erosion control measures are proposed during works and site rehabilitation following the installation of the snowmaking unit and associated infrastructure.

Stormwater infrastructure is proposed to support the development. The stormwater infrastructure will connect to existing stormwater laterals which run through Friday Flat. No negative impacts from stormwater are anticipated.

Under section 4.29(3) - For development the consent authority considers will significantly alter the character of an Alpine Subregion, the consent authority must also consider -

- (a) the existing character of the site and immediate surroundings, and

The development will not significantly alter the character of an Alpine Subregion, or the character of the site and immediate surroundings.

- (b) how the development will relate to the Alpine Subregion.

As above.

### Section 4.30 Kosciuszko National Park Plan of Management

Consistency between the development and the Kosciuszko National Park Plan of Management

NPWS raised no concern with the consistency of the proposal with the Kosciuszko National Park Plan of Management.

## Ecologically Sustainable Development (ESD)

The EP&A Act adopts the definition of ESD found in the *Protection of the Environment Administration Act 1991*. ESD initiatives and sustainability have been adequately considered by the Applicant and mitigation measures are proposed to be incorporated into the design.

The proposal is consistent with the ESD principles and the Department is satisfied the proposal works have been developed having regard to ESD principles, in accordance with the objects of the EP&A Act as follows:

- the works support the orderly and economic use of the site;
- the proposal is not expected to adversely impact upon the health, diversity, or productivity of the environment for future generations;
- measures taken to avoid, minimise and mitigate impacts to the vegetation and habitats present within the development footprint during the design, construction and operation of the proposal have been incorporated into the proposal; and
- the proposal does not impact upon cultural heritage, including Aboriginal cultural heritage.

## Biodiversity Conservation Act 2016

Section 1.7 of the EP&A Act requires the application of the *Biodiversity Conservation Act 2016* (BC Act) in connection with the terrestrial environment. The BC Act introduced a Biodiversity Offsets Scheme (BOS) that applies when:

- the amount of native vegetation being cleared exceeds a certain threshold area; or
- the impacts occur within an area mapped on the Biodiversity Values Map (BVM) published by the Minister for Environment; or
- the 'test of significance', in section 7.3 of the BC Act, identifies that the development or activity is likely to significantly affect threatened species or ecological communities, or their habitats; or
- the works are carried out in a declared area of outstanding biodiversity value.

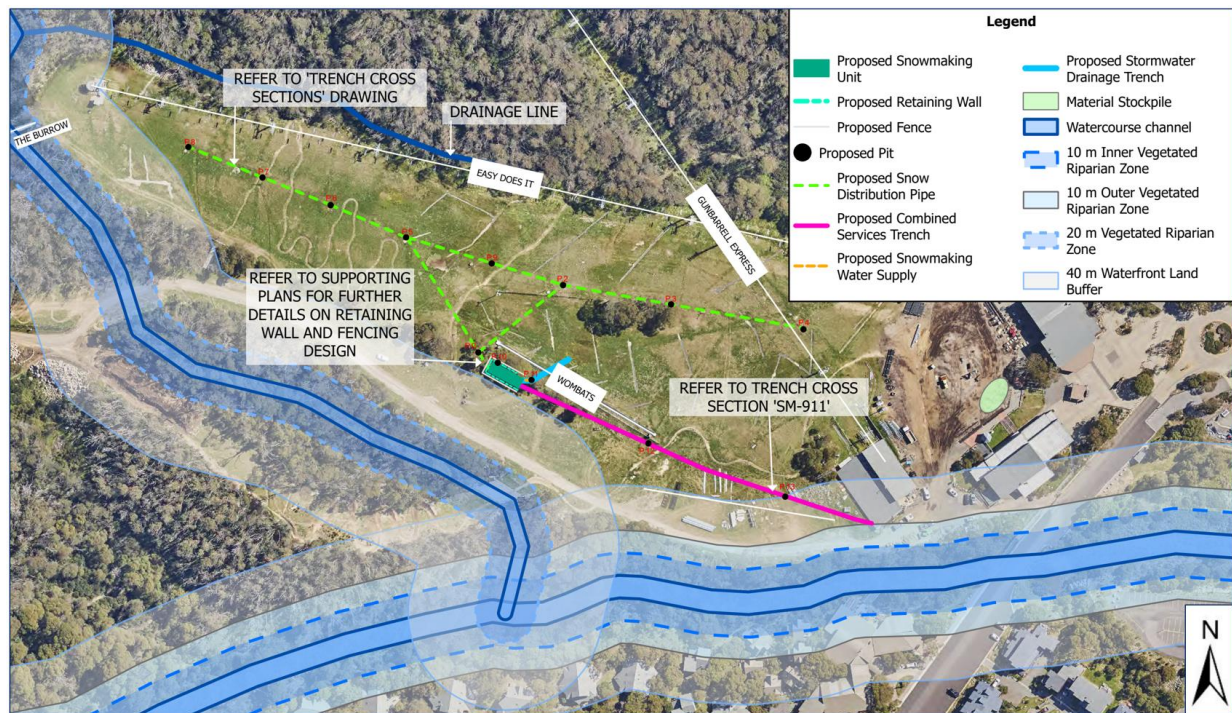
The Department notes that the amount of native vegetation proposed to be cleared does not exceed the relevant threshold for the parcel to trigger the BOS, and the proposed earthworks are not located within an area mapped on the BVM. There is currently no declared area of outstanding biodiversity value within KNP.

Due to the minor impact to vegetation and in consideration of the site context the Applicant did not submit a Flora and Fauna Assessment to support the Application, though noted that a Certified Ecologist conducted a site visit and determined the impacts to native species will be negligible and did not require a detailed assessment.

NPWS reviewed the supporting documentation and raised no concerns in relation to the BC Act.

## Water Management Act 2000

The proposed development was originally classified as integrated development under section 4.46 of the EP&A Act as works are to occur within forty (40) metres of a watercourse (**Figure 9**).



**Figure 9** | Map identifying the location of proposed works within 40 metres of a watercourse (Source: Applicant's SEE 2024)

However, under the *Water Management Act 2000*, a development application can be exempt from requiring a controlled activity approval if the application can demonstrate that a suitable hardstand area exists between the development footprint and a watercourse. The Applicant states that the summer access track identified in **Figure 9** meets the requirements of the exemption, and therefore the application should not be considered integrated development.

During acceptance of the application, the Applicant sought confirmation of the exemption from the NSW Department of Climate Change, Energy, Environment and Water – Water Group (NSW DCCEEW Water Group). Following a review of the request, the NSW DCCEEW Water Group confirmed that the Applicant's interpretation of the exemption is correct and a controlled activity approval under the *Water Management Act 2000* is not required.

The Department acknowledges the Applicant's assessment and correspondence from the NSW DCCEEW Water Group. Consequently, the application is considered general development and no integrated development referral was requested.

Refer to **Section 4** for consideration of the impacts to waterfront land.



## 3 Submissions

### 3.1 Department's engagement

The Department's Community Participation Plan, dated April 2024, prepared in accordance with Schedule 1 of the EP&A Act, generally requires applications to be exhibited for a period of fourteen (14) days. However, applications under Chapter 4 of the Precincts – Regional SEPP are not required to be publicly exhibited if the proposal relates to works that are wholly internal to a building or where the site is located more than fifty (50) metres from a tourist accommodation building.

The Department publicly exhibited the application between 25 November 2024 and 9 December 2024 on the NSW Planning Portal website and notified adjoining lodges bordering Friday Flat ski area and also those within Thredbo Village given the objectives of the Plan to understand community views and if any concerns with this form of development.

The application was also forwarded to NPWS pursuant to section 4.27 of the Precincts - Regional SEPP.

### 3.2 Summary of submissions

#### NPWS

NPWS reviewed the supporting documentation and raised no concerns with the application, and requested the Department recommend standard environmental protection measures in the conditions of consent.

#### Public Submissions

No public submissions were received during the exhibition of the application.

### 3.3 Request for additional information

The Department issued a request for additional information to the Applicant stating that the information provided only considered the installation of the snowmaking unit and failed to address operational requirements and ongoing use. The Department additionally noted that internal plans for the snowmaking unit and cross section diagrams for cut and fill operations had not been provided for assessment.

Consequently, the Department requested the Applicant provided additional information, including but not limited to:

- operational requirements of the snowmaking unit, including the snowmaking process and Water Extraction Licence conditions.
- updated plans, specifications and reports identifying all construction and operation requirements.
- consideration of dangerous goods storage, including refrigerant ammonia, by an appropriately qualified and practicing dangerous goods consultant.

The Applicant responded to the Department's request for additional information. Refer to **Section 4** for additional information.

### 3.4 Department's engagement on additional information

Following receipt of the additional information provided by the Applicant, the Department engaged the NSW DCCEE Water Group, Department of Primary Industries and Regional Development – Fisheries and NSW Health in response to the distribution of snow occurring immediately adjacent to existing watercourses including Merritt's Creek (**Figure 10**) and the impact of snowmaking and snow distribution on human health.

The Department requested advice on the matter, noting that exemptions under the *Water Management Act 2000* did not require an integrated development referral to NSW DCCEE Water for a controlled activity approval.

### 3.5 Summary of submission to additional information

#### NSW DCCEE Water Group

The NSW DCCEE Water Group reviewed the additional information and raised no concerns with the proposal, noting that the snow distribution would present minimal disturbances to the ground surface within the Friday Flat ski area. Additionally, the NSW DCCEE Water Group reiterated that the exemption under the *Water Management Act 2000* applies, and no further assessment is required.

#### Department of Primary Industries and Regional Development - Fisheries

The Department of Primary Industries and Regional Development – Fisheries reviewed the additional information and raised no concerns with the proposal, noting that the works would not trigger the requirement for a permit or integrated development referral under the *Fisheries Management Act 1994*.

Refer to **Section 4** for the Department's consideration of the additional information and agency responses.

#### NSW Health

The Department referred the application to NSW Health seeking advice in terms of:

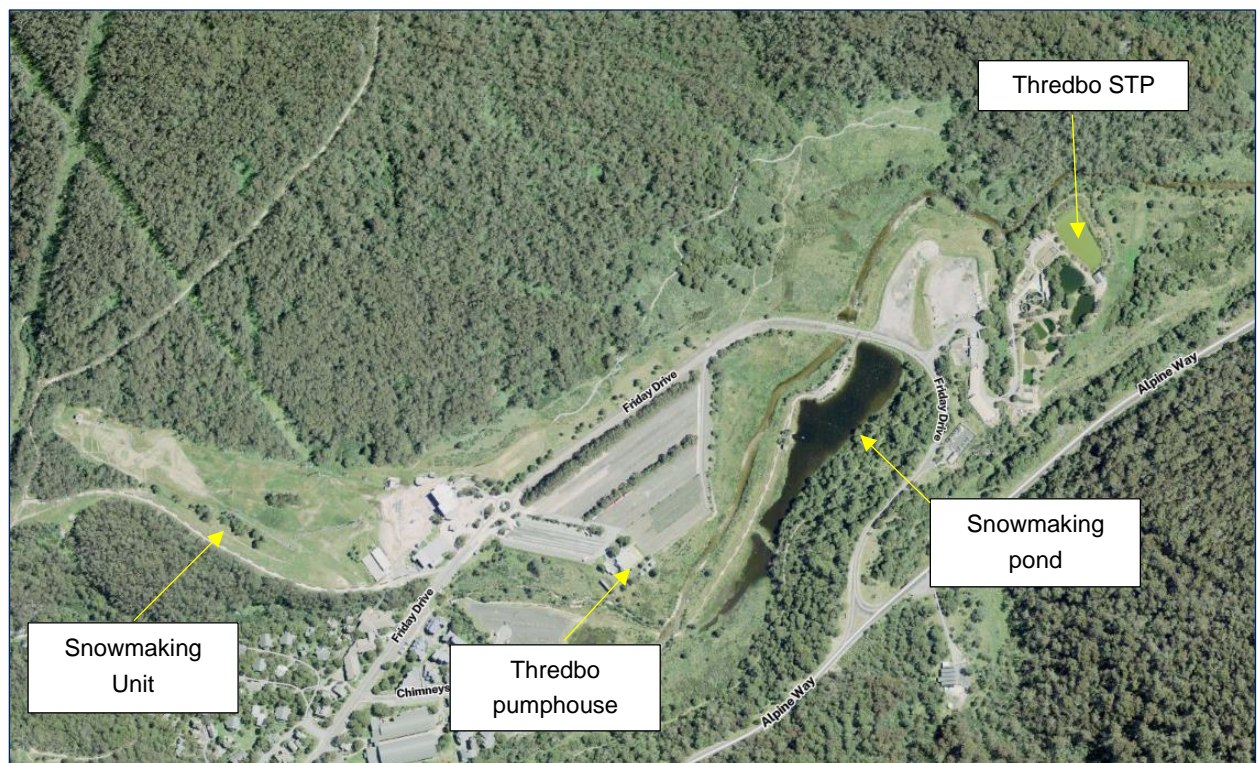
- whether these types of facilities (that include air conditioning / cooling components) are exempt from any Legionella considerations
- any public health considerations for this type of snow making technology (i.e. mass produced shaved ice that gets spread along the ground)
- any additional considerations from NSW Health including the applicability of relevant guidelines and legislation including 'Managing cooling water systems throughout their lifecycle' and 'NSW Guidelines for Legionella Control in Cooling Water Systems', and also the *Public Health Act 2010* and *Public Health Regulation 2022*.

NSW Health reviewed the supporting documentation and initially questioned the location of the water extraction point in relation to the Thredbo Sewerage Treatment Plant and if the proposed process was to involve a water cooling / cooling water (cooling tower) it would be exempt from the requirements of the NSW Health Public Health Act and Regulations. The Department forwarded additional information to NSW Health from the application.

NSW Health subsequently raised no objections to the proposal, though noted that precautionary advice may apply to snow making / snow storages if ground water quality testing indicated a high level of bacteria presence, and if an adverse sewage effluent even occurs which impacts water quality within the extraction basin.

The Department notes that the water utilised during the snowmaking process is extracted from the snowmaking pond (upstream from the Thredbo Sewerage Treatment Plant site – **Figure 10**) which is the same point as the existing extraction point for the remainder of the water utilised by the snowmaking for the resort. The Department will undertake further consultation with NSW Health (separate to the subject DA) in relation to a strategic approach for water quality within existing snowmaking water storages as this would apply broadly to all Alpine Resorts rather than just Thredbo.

Noting the above, no additional conditions are recommended.



**Figure 10 |** Snowmaking pond and Thredbo Sewerage Treatment Plan location (Source: SIX Maps 2025)

## 4 Assessment

The Department has considered the relevant matters for consideration under section 4.15 of the EP&A Act, the SEE and supporting information, and the submission from NPWS in its assessment of the proposal. The key issues in the Department's assessment of the proposal are:

- Impacts on biodiversity
- Operation and management impacts
- Impacts on water supply and watercourses
- Impacts on existing infrastructure
- Visual impacts
- Construction impacts and access

### 4.1 Impacts on biodiversity

The Department has carefully considered the potential biodiversity impacts associated with the proposal in consultation with NPWS, given sensitive nature of the flora and fauna within KNP. The Department's assessment of the potential environmental impacts of the proposal along with appropriate mitigation and management measures are considered below:

#### Vegetation impacts

As discussed in **Section 2**, the proposed site is primarily disturbed land which does not contain, and is not adjacent to, high biodiversity values identified listed on the Biodiversity Values (BV) map. The proposed disturbance is limited to the removal of five (5) trees identified as *Eucalyptus Stellulata* and associated vegetation below the trees. Exotic Grassland will also be impacted by the proposal.

The Applicant states that two of the five trees were identified as 'dead' by a Certified Ecologist, who attended the site to determine the level of impact from the development.

NPWS raised no concerns with the Applicant's assessment of vegetation impacts.

The Department is satisfied that the works are mainly confined to a highly modified environment and there has been appropriate consideration of vegetation impacts. The development as proposed does not trigger the Biodiversity Offset Scheme.

The Department has recommended conditions to ensure that activities are contained within the approved construction corridor and rehabilitation of the site is in accordance with NPWS Guidelines.

#### Species impacts

The application did not identify any impacts to known threatened species within the site, noting that works are to occur to a heavily modified area of Thredbo Alpine Resort.

Given the minor amount of native vegetation to be impacted, the Department is satisfied that the development is unlikely to impact any threatened flora or fauna species. NPWS raised no concerns with the assessment of species impacts identified in the supporting documentation.



## Conclusion

The Department is satisfied the Applicant has taken the appropriate steps to avoid, minimise and mitigate the proposal's biodiversity impacts consistent with the principles of the BC Act and Regulation.

Conditions are recommended to ensure areas impacted by construction be rehabilitated in accordance with the "*Rehabilitation Guidelines for the Resort Areas of Kosciuszko National Park (DECC 2007)*". Appointment of an Environmental Officer, engaged by the Applicant, will be required to review the works prior and during construction to ensure that the proposal meets the identified outcomes.

The Department considers that impacts to the environment have been sufficiently avoided and mitigated. Consequently, the impacts are considered to be acceptable.

## 4.2 Operation and management

### Snowmaking process

Operation of the snowmaking unit is to begin in the last week of April and continue until the level of natural snow is optimal to support the Resort.

The Department raised concerns during assessment that the snowmaking process had not been detailed, including whether the snow contained additives that could potentially cause harm to guests and the environment. The Applicant responded to the Department's concerns, stating that the produced snow does not contain any additives and that the process for producing snow involves the following:

- 1) water is trickled down vertical hollow steel plates chilled by refrigerant that flows through them.
- 2) once the water freezes, the refrigeration cycle is reversed and the ice falls off the plates into a collection hopper
- 3) the ice is then chopped to an appropriate size (4mm – 7mm) and enters a low-pressure air system
- 4) the system blows the ice through 100mm nominal diameter piping to the adjoining pits throughout the Friday Flat ski area and formed into piles
- 5) Once the snow pile has reached an adequate volume, the snow is spread through the Friday Flat ski area to sit for three (3) days prior to guest use.

The application and additional information were referred the NSW Health for comment, noting that the production and distribution of snow could have impacts on human health. NSW Health reviewed the application and were satisfied that the snowmaking process, including the operation of roof-mounted air conditioning, would not result in adverse impacts to human health.

The Department is satisfied that the snow distributed from the snowmaking unit would not have an adverse impact on guests and the environment. NPWS and raised no concerns with the snowmaking process.

### Health and work safety

The Department is required to consider health and safety impacts of a proposed development when determining a development application.

During the assessment of the proposal, the Department raised concerns that the application had not considered health and work safety of the snowmaking unit, including how operational staff are appropriately protected within the snowmaking unit and subject site.

The Applicant, in their response to the Departments request for information, confirmed that fire protection measures in line with industry codes are to be implemented, including appropriate signage and an emergency management plan in consultation with Fire and Rescue NSW to address site-specific emergency matters.

Additionally, the Applicant stated that the following measures are to be implemented prior to and during operation:

- Access to the snowmaking unit will be secured with locked doors and partial perimeter fencing.
- Implementation of standards and guidelines in consultation with SafeWork NSW and relevant government agencies. Early engagement was undertaken prior to lodgement of the application to determine the appropriate measures that are required.
- Staff training prior to operation of the unit for all relevant operation staff.
- Creation and implementation of a site-specific operating manual, which will be provided to all operational staff prior to the operation of the unit. The manual will outline all risks and hazards associated with operating the unit, including working with refrigerant ammonia, and servicing and maintaining the snowmaking unit.
- Signage to identify hazards and risks of the snowmaking unit will be appropriately located on the external of the unit and the perimeter fencing.
- Additional fencing along the retaining wall will be constructed to minimise the risk of falls.

With the refrigerant process this includes a closed loop ammonia (NH<sub>3</sub>)-based system within the facility as part of the ice making process. The Applicant comments that all operational staff will be trained prior to operation of the unit and made aware of the risks and hazards associated with operating the unit – e.g. working with refrigerant ammonia. A Thredbo specific operating manual will be developed outlining management measures in relation to operating materials and substances. The unit will be routinely maintained and serviced in accordance with the manufacture's recommendations to ensure safe operation. Examples of signage have been provided with the application that will be placed on the unit. A complete list of signage will be prepared at the construction certificate stage.

Following discussions with the Applicant, the Department has recommended a condition of consent that requires consideration by an appropriately qualified and practicing dangerous goods consultant be provided to the Certifier prior to the issue of the construction certificate.

## Conclusion

The Department considers that the Applicant has taken appropriate steps to mitigate health and work safety impacts in accordance with relevant standards and guidelines and in consultation with relevant regulatory authorities.

Conditions of consent have been recommended to ensure that health and safety measures have been adopted prior to operation and extend through the lifetime of the snowmaking unit's use, including compliance with SafeWork NSW guidelines and dangerous goods storage requirements.

Additional consideration of impacts related to fire safety are subject to building classification under the NCC – BCA which is to be determined at the construction certificate stage.

### 4.3 Impacts on water supply and watercourses

As discussed in **Section 2**, installation of the snowmaking unit and associated structures includes works within forty (40) metres of a known watercourse. Exemptions for a controlled activity approval under the *Water Management Act 2000* apply to the development as a suitable hardstand (the summer access track) intersects the site between the development footprint and the watercourse.

Snow distribution is proposed for the extent of Friday Flat, including areas adjacent to the Merritt's Gondola Mid-Station and along the summer access track (**Figure 11**). The Department notes that snow distribution is proposed along an area which traverses Merritt's Creek and consequently requested the NSW DCCEEW Water Group and the Department of Primary Industries and Regional Development - Fisheries provide advice on waterway and hydrological impacts associated with snow runoff.



**Figure 11** | Map identifying the extent of snow distribution throughout the Friday Flat ski area (Source: Applicant's Request for Additional Information response 2025)

In response to the Department's request, the Applicant identified:

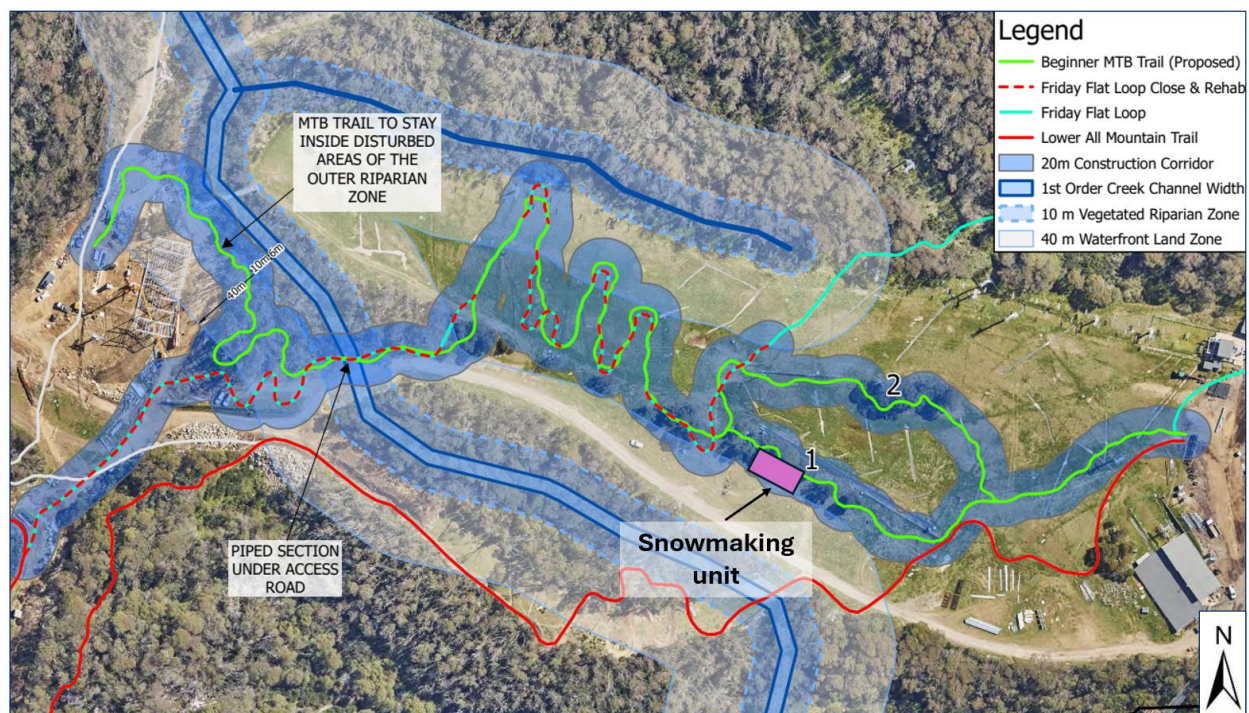
- the production of ice would require up to 5.0 Cubic Meter Per Hour ( $\text{m}^3/\text{h}$ )
- the Water Extraction License, publicly available on the Water NSW website, allows:
  - water extraction from Thredbo River snowmaking diversion pond
  - an annual allocation of 605 megalitres (ML)
- the Resort only extracted 268ML of water during the 2024 winter season, which equates to 44.3% of their annual allocation



The Department, in consultation with the NSW DCCEW Water Group and the Department of Primary Industries and Regional Development – Fishers, considers the impacts to water supply and watercourses would be minor and have been adequately addressed. Conditions of consent have been recommended for the control of surface water and water extraction limitations in accordance with the existing Water Extraction Licence.

#### 4.4 Impacts on existing infrastructure

As discussed in **Section 1**, the development footprint of the snowmaking unit is located within the development corridor of the recently determined Beginner Mountain Bike Trail and Skills Park, Friday Flat, Thredbo (DA 24/15069) (**Figure 12**).



**Figure 12** | DA 24/15069 site plan identifying the approved Beginner Mountain Bike Trail with a rough markup of the snowmaking unit footprint (Source: Department's DA 24/15069 Assessment Report with annotations)

The Department notes that the application for the Beginner Mountain Bike Trail and Skills Park (DA 24/15069) was lodged prior to the submission of this application (being DA 24/16834). During the assessment of DA 24/15069, the Applicant identified that the snowmaking unit would encroach into the construction corridor of the Trail, and stated that the trail alignment would be amended under the provisions of the consent for DA 24/15069 which allow for alterations to the trail alignment within the approved construction corridor without further development consent.

The Department considers that the impacts of the snowmaking unit on existing infrastructure have been appropriately addressed under a separate application, and mitigation measures to support the development of the Trail with consideration to human health are adequate.



## 4.5 Visual impacts

The Department is required to take into consideration any visual impact of a proposed development when determining a development application.

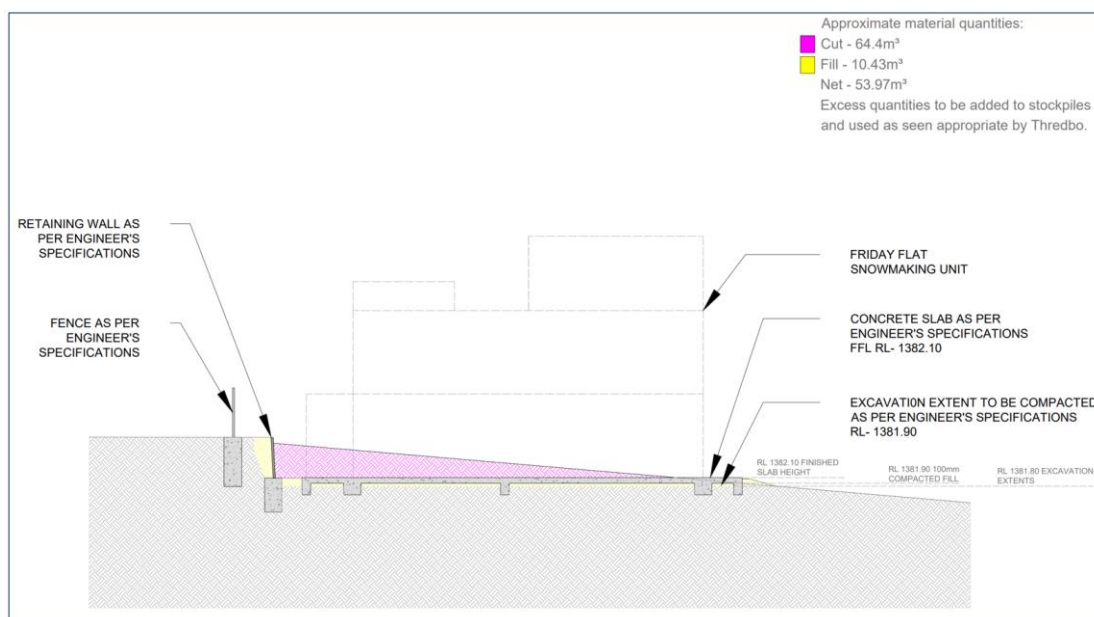
The existing character of the proposed site is that of a developed ski resort, with the existing lifting infrastructure and mountain bike trails on the ski slopes, as well access tracks, top and bottom stations, haul ropes, lift towers and disturbed areas of vegetation.

The proposed works include the installation and operation of a snowmaking unit within a highly disturbed corridor along the perimeter of the existing summer access track. The snowmaking unit, while visually unique within the development footprint and immediate area, is not visually prominent in the context of the Friday Flat ski area due to the surrounding built form including the Gunbarrel Chairlift bottom station and Thredbo Alpine Resort ancillary buildings.

The snowmaking unit has been designed adapt to the surrounding area, with finishes consistent with the associated tree island and overall context of Thredbo Alpine Resort (RAL 7013) and height flanked by the remaining trees and offset by required cut into the ski slope to level the footing (**Figure 13**).

The Department considers that the Applicant has taken the appropriate steps to mitigate adverse impacts and that the visual impact of the snowmaking unit is minor in the context of Thredbo Alpine Resort.

NPWS raised no concerns with the visual impact of the development.

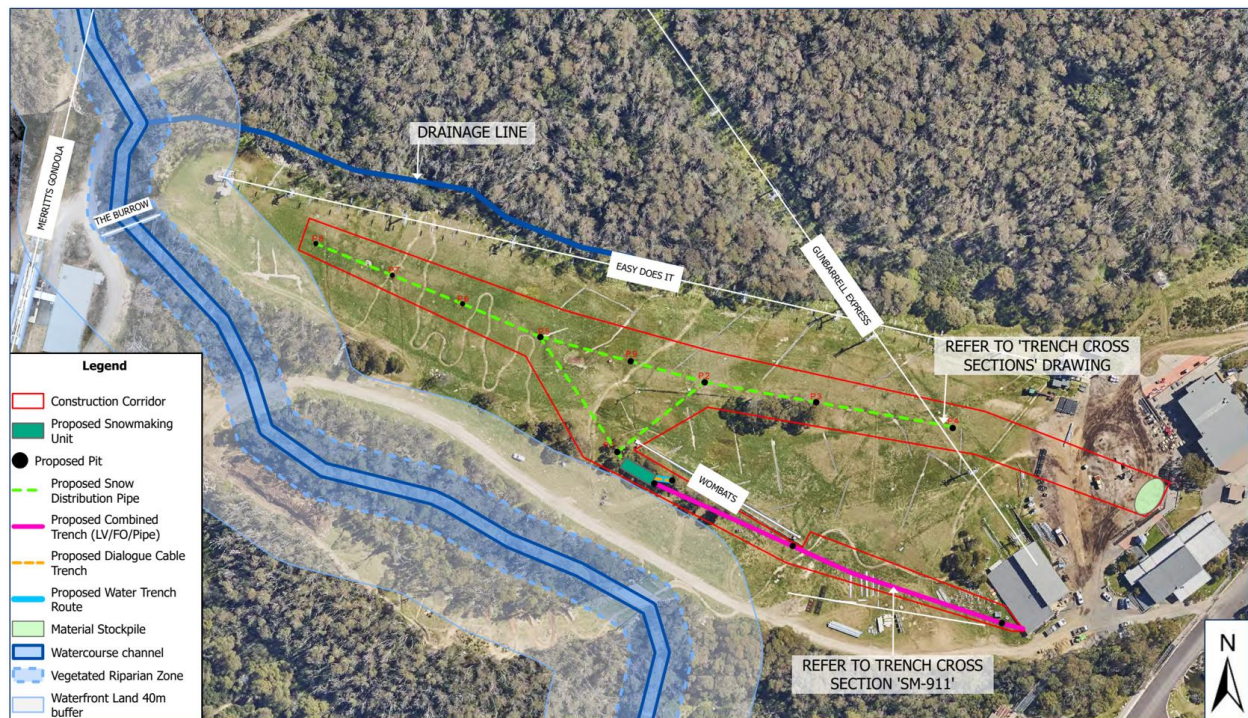


**Figure 13 |** Cut and fill requirements to support the snowmaking unit (Source: Applicant's Request for Additional Information response 2025)

## 4.6 Construction impacts and access

Access to the development site will be via the summer mountain access road. Temporary closure of the Friday Flat Loop or, pending construction timing, the recently determined Beginner Mountain Bike Trail will be required during the construction period. Impacts to the existing trail(s) will be remediated prior to operation.

The proposed construction corridor width of approximately ten (10) metres for services and stormwater trenching and installation, and three (3) metres for stormwater trenching and installation in areas constrained by site restrictions, allows equipment access for excavation and trenching, laying new pipes and cables, removing and relocating infrastructure and backfilling rehabilitation activities. Temporary stockpiling will occur adjacent to excavations where required, with a secondary stockpile available within the Friday Flat base station, as identified in **Figure 14**.



**Figure 14 | Site plan identifying construction corridors required for trenching and services installation**  
(Source: Applicant's SEE 2024)

The proposed corridor location and material storage locations are suitable for the intended purpose and vehicles and equipment can readily access the development site along the existing summer access track without causing disruption to the road network or other resort activities.

Construction management will be in accordance with the approved Site Environmental Management Plan (SEMP) and in consultation with NPWS.

The Department has recommended standard construction conditions applied in the Alpine area. Subject to compliance with the conditions, the Department is of the view that the construction of the proposed works is acceptable and will not unduly impact upon the safety or amenity of visitors in the locality or cause long term adverse impacts to the natural or built environment.

## 5 Recommendation

The Department has assessed the merits of the proposal in accordance with the relevant requirements of the EP&A Act. The Department's assessment concludes the proposal is acceptable as:

- the proposal is permissible with consent under the Precincts - Regional SEPP
- there will not be a significant impact on any threatened species, populations or ecological communities, and the natural environment and cultural values associated with KNP are protected
- the construction of the realigned mountain bike trail will minimise impacts to the environment while allowing for individuals of all skill levels to experience the natural environment within Thredbo Alpine Resort and KNP
- construction impacts are acceptable with impacts minimised, while acknowledging the works are consistent with the regional plan for the locality and supports visitation to the ski resorts
- the proposal is consistent with the requirements under the BC Act and EPBC Act.

Overall, the Department is satisfied that the proposal is suitable for the site and in the public interest.

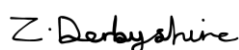
The Department, therefore, recommends that the application be approved, subject to recommended conditions. In accordance with the Minister's delegation of 9 March 2022, a Team Leader within the Alpine Resorts Team may determine the application as:

- no reportable political donation has been disclosed,
- there are less than fifteen (15) public submissions in which objection to the proposal has been raised,
- the application is in relation to land to which Chapter 4 of the Precincts - Regional SEPP applies.

It is recommended that the Team Leader, Alpine Resorts Team, as delegate of the Minister for Planning:

- **considers** the findings and recommendations of this report
- **accepts** and adopts the findings and recommendations in this report as the reasons for making the decision to grant consent to the application
- **agrees** with the key reasons for approval listed in the notice of decision
- **grants** consent for the application in respect of DA 24/16834, subject to the recommended conditions
- **signs** the attached Development Consent (**Appendix A**).

### Recommended by:



**Zac Derbyshire**  
Planning Officer  
Alpine Resorts Team



**Mark Brown**  
Team Leader, Assessments  
Alpine Resorts Team

### Adopted by:



9/4/2025

**Daniel James**  
Team Leader  
Alpine Resorts Team  
as delegate of the Minister for Planning

# Appendices

## Appendix A – Recommended Instrument of Consent