



Statement of Environmental Effects

Snowmaking Unit 2, Friday Flat

Thredbo Alpine Resort
Kosciuszko National Park, NSW

September 2026

Document Control

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Kosciuszko Thredbo Pty Ltd

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1 Introduction

This Statement of Environmental Effects (SEE) has been prepared to support the Development Application (DA) for the installation of a snowmaking unit and associated works at Friday Flat, Thredbo Alpine Resort, New South Wales (hereinafter referred to as the Development).

1.1 Application details

A summary of the application details is provided in **Table 1**.

Table 1: Application details

Application Details	
Applicant	Kosciuszko Thredbo Pty Ltd (KT)
ABN	95 000 139 015
Applicant Address	1 Friday Drive, Thredbo NSW 2625
Development Address	Friday Flat ski area, Thredbo Alpine Resort, Kosciuszko National Park, 2 Friday Drive, Thredbo NSW 2625
Lot/Plan	876/DP1243112 (Thredbo Head Lease)
Local Government Area	Snowy Monaro Regional Council
Zoning	Zone C1 – National Parks and Nature Reserves
Planning Instrument	State Environmental Planning Policy (Precincts – Regional) 2021 (Precincts – Regional SEPP)
Integrated Development	Not applicable
Consent Authority	Department of Planning, House and Infrastructure
Type of Development	Snowmaking infrastructure
Summary of works	- trenching and services installation - installation of snowmaking unit and associated works - site rehabilitation.

1.2 Supporting documentation

This application is supported by the documentation listed in **Table 2**.

Table 2: Supporting Documents

Document	Title/ Description	Author	Date	Document Reference
SEMP	Site Environmental Management Plan – Snowmaking Unit 2, Friday Flat	Kosciuszko Thredbo Pty Ltd	26/08/2026	Rev 0
Site Plan	Site Plan	Kosciuszko Thredbo Pty Ltd	10/08/2026	25002_001_r1
Plan	Cut and Fill Plan	Kosciuszko Thredbo Pty Ltd	18/08/2026	25002_002_r1
Plan	Cut and Fill Section	Kosciuszko Thredbo Pty Ltd	18/08/2026	25002_002.2_r1
Plan	Photomontages	Kosciuszko Thredbo Pty Ltd	18/08/2026	25002_003_r1

Document	Title/ Description	Author	Date	Document Reference
Plan	Trench Cross Sections	Kosciuszko Thredbo Pty Ltd	18/08/2026	25002_004_r2
Plan	Snow Distribution Map	Kosciuszko Thredbo Pty Ltd	19/08/2026	25002_005_r1
Specification	10067243_20250926	KTI, Stempfle J	26/09/2025	10067243_20250926
Specification	General Description	KTI. snowPRO	ND	02_Description
Geotechnical Assessment	Geotechnical Assessment	Aretas	25/08/2026	7787-4-R1 Rev2
Geotechnical Form 4	Form 4 – Minimal Impact Certification	Aretas	25/08/2026	7787-4-R1 Rev2
Flora and Fauna Assessment	Ecological Assessment – Snowmaking Unit 2 Friday Flat – Thredbo Alpine Resort	Ecological Australia	06/08/2026	10578 Snowmaking Unit Friday Flat ToS v2

2 Site Context

2.1 Location

The Development is located in Thredbo Alpine Resort, within the southern part of Kosciuszko National Park (KNP), approximately 35 km south-west of Jindabyne in the Snowy Monaro Regional Council LGA (**Figure 1**). Within the context of the resort, the site is located on the upper slope of the Friday Flat ski area (**Figure 2**).

2.2 Site analysis and suitability

Friday Flat ski area is serviced by Easy Does It Chairlift and four passenger conveyors (Wombats, Freddie's, The Burrow, and Syds). The Gunbarrel lift bottom station is also located within the precinct. Friday Flat has a snowmaking system comprising of underground pipes and cables and above ground hydrants, fans and lance guns. In May 2025 the first snowmaking unit was installed, approximately 79 m downslope of the proposed second unit.

The site is considered suitable for the Development given Friday Flat is a key snowsports area within the resort. The site is heavily disturbed as a result of previous earthworks and construction associated with establishment of the ski slopes, snowmaking and services infrastructure within the locality. There are no known records of previous site contamination. The snowmaking unit will connect with and complement the existing snowmaking system at Friday Flat.

The infrastructure has been located to first avoid, then minimise and mitigate environmental impacts. Key considerations of the site analysis process included:

- Avoid direct impacts on the Sub-alpine riparian scrub community mapped adjacent to the ski slope.
- Where possible, locate infrastructure at least 10 m from the outer limit of the mapped Sub-alpine riparian scrub community (see further details below).
- Minimise encroachments into the riparian corridor of the watercourse adjacent to the site

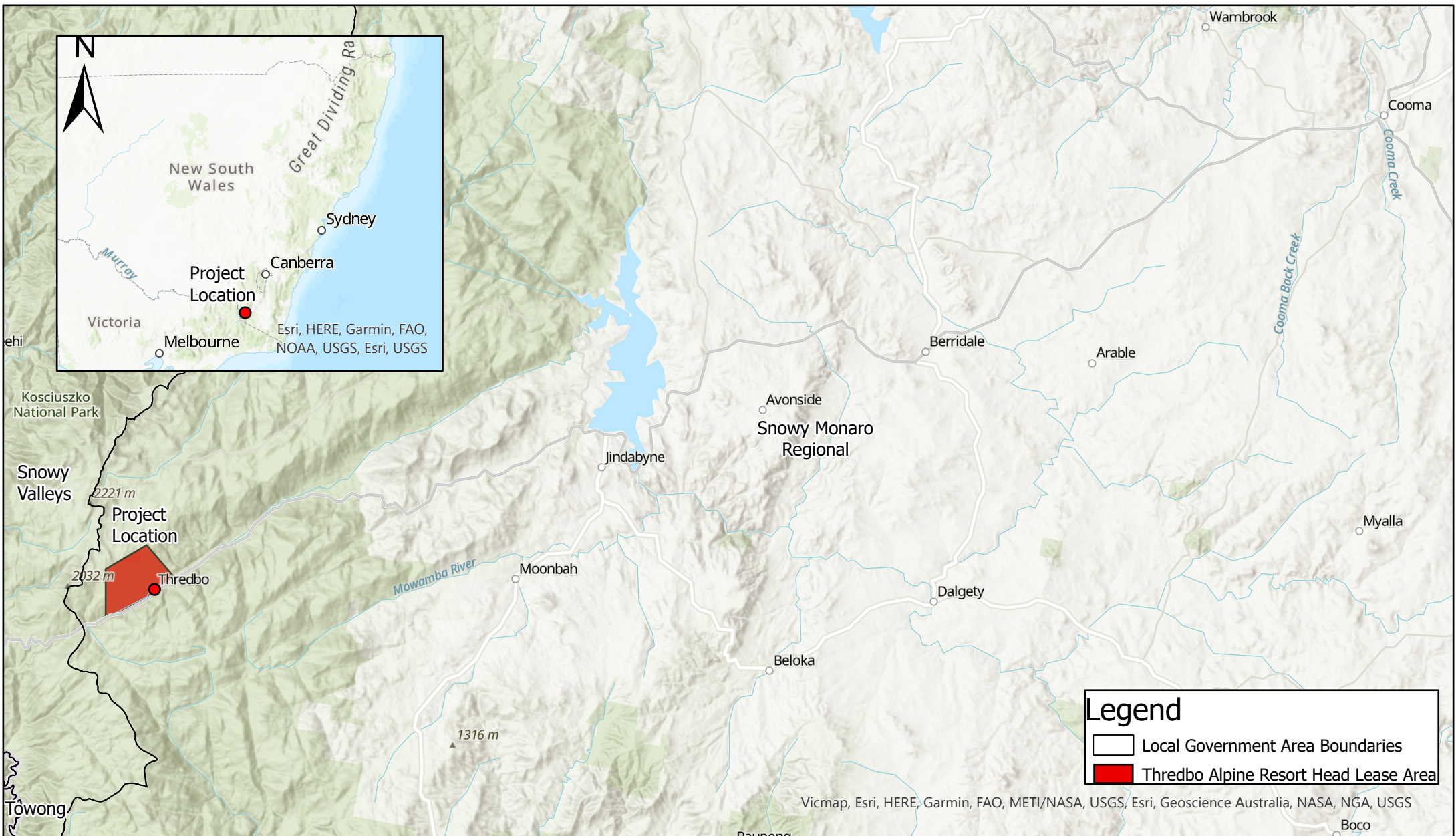
- Avoid removal of native trees and shrubs within the nearby vegetation communities by maximising the use of disturbed ski slope and the road corridor for placement of infrastructure.

Locating Pit 2.6 outside of the 10m buffer was investigated, however constrained by safety considerations, location of existing underground infrastructure and operational requirements as detailed below:

- The pit protrudes above both ground level and seasonal snow levels and therefore cannot be located within the skiable terrain where it may create a hazard for skiers, snowboarders and grooming operations.
- Friday Flat ski run contains a concentration of existing underground services, including high and low voltage electrical infrastructure, snowmaking pipes and cables, and stormwater infrastructure. Relocating the pit further outside the 10 m scrub buffer would require additional services crossings, increasing construction complexity, and additional disturbance extent to create compliant service separation. Additionally, as the pits are required to be exposed in order to distribute snow from them, this would create a hazard to skiers/snowboarders utilising this area.

Where possible, infrastructure has been located more than 10 m from the edge of the mapped Sub-alpine riparian scrub community. In locations where maintaining a 10 m buffer was not achievable due to the location of existing underground services and public safety requirements, the design has sought to minimise the encroachment toward the edge of the native vegetation. In these areas a minimum 2 m setback from the edge of the native vegetation has been maintained (Pit 2.6 and a short section of the connecting trench are located approximately 6.8 m from edge of mapped Sub-alpine riparian scrub).

Following installation of infrastructure, all disturbed areas will be rehabilitated in accordance with the Rehabilitation Guidelines for the Resort Areas of Kosciuszko National Park (DECC 2007) (Rehabilitation Guidelines). The only permanent above-ground infrastructure within the 10 m buffer of the Sub-alpine riparian scrub will be a single snow distribution pit 2.6 which has external dimensions of 900 x 600 x 600 mm.



Scale: 1:305,832

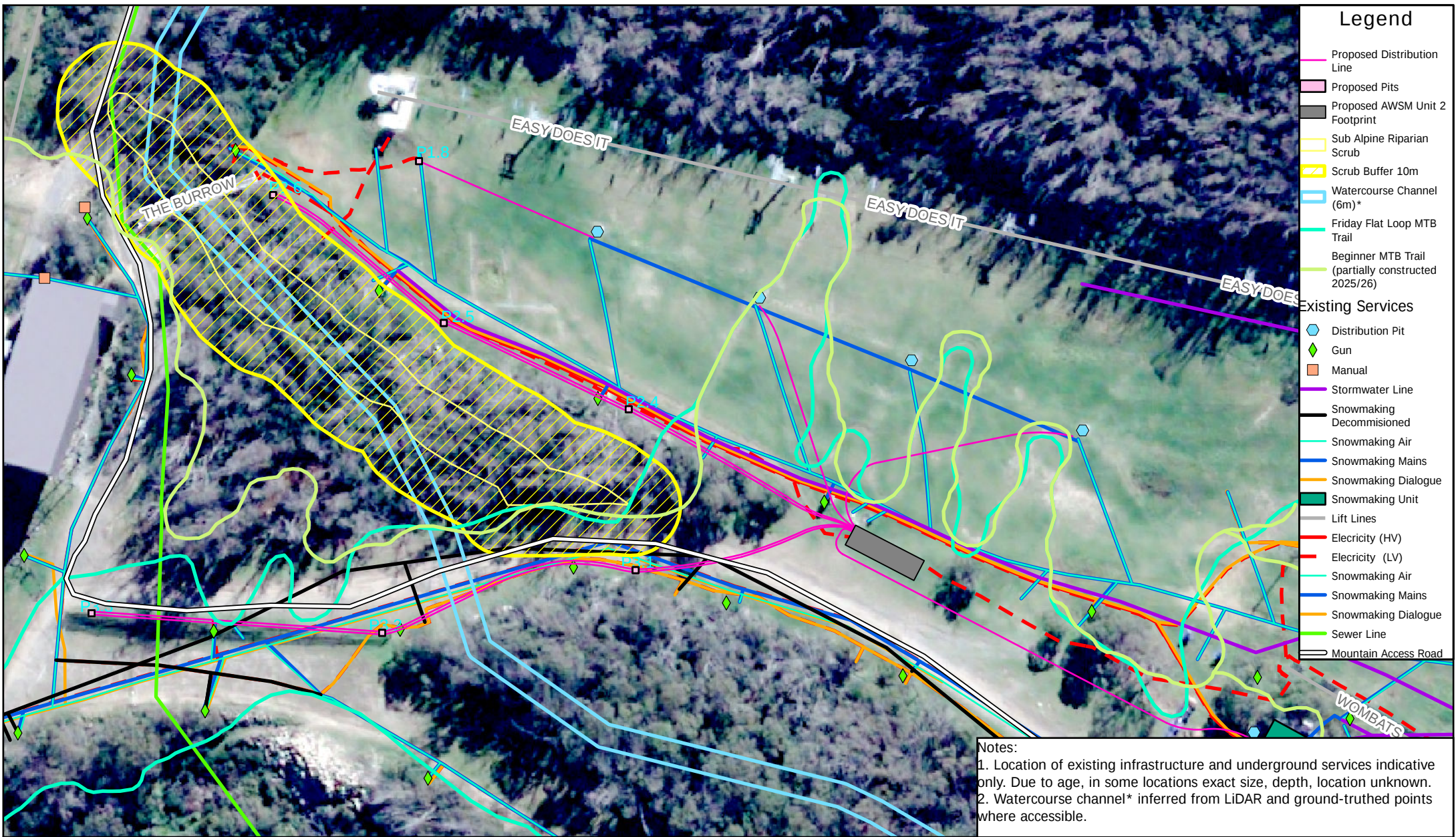
3 1.5 0 3 6 9 12 Kilometers

Map Projection: Universal Transverse Mercator
Horizontal Datum: GDA 2020
Grid: GDA 2020 MGA Zone 55



FIGURE 1: REGIONAL SITE CONTEXT

Revision: A
Date: 7/06/2022
Produced By: KO



Scale: 1:1,000 0 5 10 20 30 40 50 Meters Map Projection: Universal Transverse Mercator Horizontal Datum: GDA 2020 Grid: GDA 2020 MGA Zone 55	N	Locality Plan Project: GIS2530 Snowmaking Unit 2	Revision: A Date: 24/08/2026 Produced By: CC
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Figure 3: Proposed location (looking uphill)



Figure 4: Proposed location of unit (side on view)

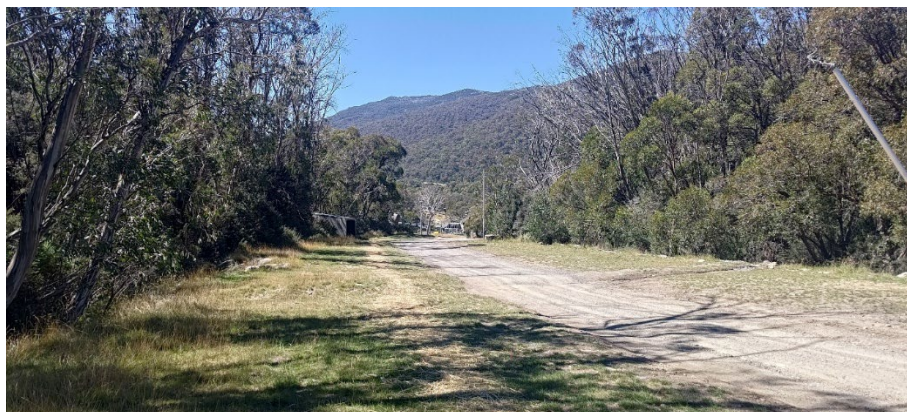


Figure 5: Distribution pipe to follow road corridor

3 Project Description

3.1 Project justification

The Development is for the installation of a snowmaking unit which will allow KT to improve the efficiency of its snowmaking operations, and reliability of snow cover at Friday Flat. The location of snow deposition areas can be controlled using either above ground snowmaking pipes and hoses, or by pumping via underground pipes to designated pits.

In response to variable and shortening snow seasons in the Australian Alps and the relatively low elevation of Friday Flat, artificial snowmaking technologies assist in providing both an early season and more reliable snow cover. Most snowmaking technology requires specific weather conditions (-2° to -3°celsius) to begin the process of artificial snowmaking and with weather variabilities, this is not always guaranteed. The addition of this snowmaking unit will enable KT to make snow at higher temperatures compared to conventional snowmaking. Snowmaking units have been installed around the world, assisting resorts in providing more reliable snow cover regardless of air temperature. The snowmaking unit will complement the existing snowmaking network.

3.2 Development components

3.2.1 Earthworks

Earthworks will include cut/fill, trenching, excavation, and retaining wall. Temporary environmental controls will be installed in accordance with the Site Environmental Management Plan, Snowmaking Unit 2, Friday Flat (KT 2026) (SEMP) during construction to mitigate potential impacts on the surrounding environment.

3.2.2 Snowmaking unit

A summary of the snowmaking unit specifications is provided in **Table 3**. The final configuration will be confirmed at detailed design at the construction certificate stage. The prefabricated snowmaking unit will be transported to site and placed on concrete foundation / slab.

Table 3: Snowmaking unit details

Element	KTI Unit
Material	Steel shipping container
Colour	Suppliers provide snowmaking unit in RAL 7013 colour to blend with the trees both in the foreground and background and match the existing snowmaking unit. Demac Lenko Branding.
Size	Length: 13.6 m; Width: 4.02 m; Height: 8.65 m
External stairs	The external stairs are prefabricated as part of the unit. These will have a gate and signage to prevent public access to the unit. Fencing will be erected around the unit as required.
Drainage	Standard rubble drainage detail around the structure- Agi line and coarse aggregate to direct roof runoff away from foundations.
Footings	Proposed reinforced concrete strip footings / slab supporting the width of the unit. Footing specifications to be confirmed at detailed design by a structural engineer.

An example of the unit is provided in **Figure 6**.



Figure 6: Example of snowmaking unit – SnowPro 360

3.2.3 Services installation

The snowmaking unit will be connected to the existing snowmaking network through a series of pits, underground pipes and cables. Trench cross sections – 25002_004_r2 are provided separately with this application.

3.2.3.1 Water

The Development will include trenching for water supply. The snowmaking unit will be connected to the existing 50 mm snowmaking water laterals and extend underground pipework to the snowmaking unit via a water pressure reduction valve pit.

3.2.3.2 Electricity

The Development will include trenching for a low voltage electrical cable to connect the snowmaking unit to the existing power supply at Gunbarrell Bottom Station.

3.2.3.3 Dialog

The Development will include trenching for the installation of a dialog communication cable.

3.2.3.4 Snowmaking distribution pipes and pits

The Development will include trenching and excavation for the installation of an underground snow feeder pipe arrangement. This will distribute snow from the snowmaking unit to a fixed underground pit system where flexible above ground pipes can be attached to the rigid pipe within each pit. Snow will be distributed over Friday Flat ski area as required; refer Snow Distribution Map - 25002_005_r1 provided separately with this application.

Independent 100 mm PE snow distribution pipes will be routed underground from a manifold located at the snowmaking unit to each distribution pit to allow for efficient delivery of snow within Friday Flat with minimal exposed infrastructure routed across the surface.

The snowmaking distribution pits will also be interconnected so that if any underground pipe becomes frozen or choked, an alternative delivery pipe can be used to deliver snow to the same area.

Discharge of ice product from the snowmaking unit will be via 100 mm nominal diameter pipe (PE/PVC etc.) The majority of the distribution piping will be buried in the ground with access pits located near to where the piles of snow are to be made whilst remaining off the skiable area so as they do not get covered once the snowpack is established. At the desired access pit, a short section of flexible plastic 100 mm bore tubing is used to transition from the underground pipe to a limited run of above-ground plastic pipe. The last length of pipe is typically propped up (on a portable adjustable stand) so the discharged ice forms a pile. Once the pile reaches the optimum size, the pipe is shifted slightly to form the next adjacent pile. The 6 m lengths of PVC pipe are quite light, hence are easily moved and setup by hand.

A pipe rack located on the side of the unit will be used to store a limited number of 6 m lengths of 100 mm PVC pipe used to distribute snow above ground. Most of the distribution piping is permanently buried below the ground surface.

3.3 Disturbance

The proposed disturbance footprint for trenching and pit installation is summarised below:

- combined services trench (power, communications, potable water, ice distribution) – 600mm wide x 600mm deep
- water connection trench (snowmaking water feed, stormwater and control cable) from pressure reduction valve pit) – 450mm wide x 600mm deep
- distribution pipe trench (to pits 1.4 and 1.6) – 300mm wide x 500 mm deep
- distribution pipes trench (to pits 2.4-2.6 and 3.1-3.3) – 450mm wide x 500mm deep
- pit disturbance – ranging from 900 mm x 600 mm x 600 mm deep, and up to approx. 1200 x 1200 mm wide x 1200 mm deep. For assessment purposes, technical studies have assumed max disturbance.

The construction corridor is detailed below:

- up to 10 m wide for trenching (refer to drawings: 25002_006_r1 and 25002_006.2_r1 provided separately with this application).
- the area immediately surrounding the snowmaking unit and distribution pits.

3.4 Site access

During construction, the Development site is accessible off Friday Drive, via the summer mountain access road. During operation, staff will access the snowmaking unit via oversnow vehicles.

3.5 Building Code of Australia (BCA) considerations

The building is classified as a 10a.

3.6 Construction management details

Construction is proposed in February – April 2027 and estimated to take approximately 2-3 months subject to development approval being issued. Construction management details are provided in the SEMP.

3.7 Operational details

3.7.1 Snowmaking unit and associated infrastructure

3.7.1.1 Operational hours

The hours of operation will vary depending on operational requirements, the accumulation of any natural snow and the prevailing nighttime temperatures suited to traditional snowmaking.

Operation is expected to start from the last week of April and run 24 hours per day until the slope has enough snow cover for skiing on the winter season opening weekend. When conditions permit, the use of traditional (weather-dependent) snowmaking is the preferred snowmaking method, so this facility will be shutdown. Hence this development supplements the existing snowmaking system, the latter to be used in preference due to the lower associated operating costs and the quality of snow made.

3.7.1.2 Snowmaking process

The snowmaking unit makes plate-ice which is used as snowmaking for ski slopes such as Friday Flat. The process works as follows; water trickles across a number of hollow vertical steel plates that are chilled by refrigerant flowing through them. During this process, the water freezes on the external face of the plates in a thin layer then the refrigeration cycle is briefly reversed causing the ice to drop off the plates. This ice collects in a hopper, is chopped to size (4 – 7mm particles) and then metered into a low-pressure air distribution system. Hence the product is blown out of the unit and distributed to the ski slope in 100 mm nominal diameter buried PE piping. The cycle is started again, repeating the whole cooling/freezing/thawing process. Because the process of making plate-ice is quite simple and involves few moving parts, no additives are required.

The process is slow but continuous, the production rate of the snowmaking unit is up to 152 - 178 t/24 hr period. Snow discharged onto the slope is made in piles in order to minimise the losses due to effects of sun, wind and the relatively warm ground. Once enough snow has been made in a series of piles, it is spread onto the slope and allowed to sit for approximately 3 days prior to skiing.

There will be a minimal quantity of excess water wasted during the defrost cycle only – required only before a major service. No waste products are expected during normal operation of the snowmaking unit. The process of cooling water from the inlet temperature (e.g. at approx. 10°C) to form ice naturally involves the rejection of some “waste” heat. Such heat is emitted at the roof-top cooling condenser fan unit. The refrigeration process is a closed loop ammonia (NH₃)-based system and as such remains the most energy efficient and environmentally benign means of producing ice commercially.

3.7.1.3 Maintenance requirements

The snowmaking unit and its individual components require routine inspections, tests and maintenance at intervals varying from daily (during operation) through to annual and 5-yearly.

The manufacturer outlines comprehensive maintenance requirements for all the components, including:

- room ventilation and heating
- water pumps
- discharge screw conveyors
- rotary valves
- water tank
- plate ice maker
- liquid separator
- condenser fan unit
- blowers
- gas warning system
- oil cooler
- safety valves.

For example:

- daily, weekly and monthly operational inspections
- 3-monthly inspections, replacement of filters if required
- periodic servicing of compressors
- replacement of bearings as required
- lubrication of motor and screw conveyor bearings
- cleaning and maintenance will occur out of winter season.

During operation, when excessive ice build-up is noticed, the defrost cycle will be run. The manufacturer advises such defrost cycles (lasting a few hours) can be expected to be required once every 1 to 2 weeks during operation. KT's experience thus far with the existing all weather snowmaking unit is that these defrost cycle requirements are far fewer than advised by the manufacturer and are more accurately defined as once per month.

3.7.1.4 Operational emissions

There are no emissions from the facility during normal operation (other than noise and heat). Kosciuszko Thredbo purchases 100% renewable energy sourced electricity which will be used to power the Snowpro400. Hence the additional carbon-equivalent emissions attributable to this development is minimised.

3.7.1.5 Lighting

There will be an external LED lighting installed on the external southern face of the snowmaking unit (facing Gunbarrel highway) so that adequate lighting is available to gain access to the ground level entry door and safe access to the stairway and upper gantry landing and the wind sock that is installed on the rooftop to display the prevailing wind direction. An additional LED light will be installed on the upper western face of the snowmaking unit (uphill side) to provide sufficient lighting to the snow distribution pipe delivery manifold and upper gantry level access platform.

3.7.1.6 Water licence provisions and maximum water usage

3.7.1.6.1 Maximum water usage

Water demand for ice production is up to 6.65 Cubic Meter Per Hour (m³/h).

The existing water extraction licence details are available on the Water NSW website, available to the public. The extraction licence provisions are summarised below:

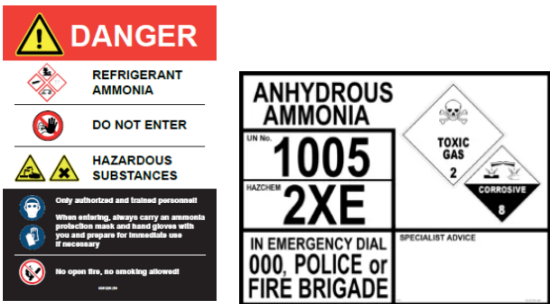
- WAL reference: WAL43959
- Work Approval Number: 10WA119676 + 10WAL121849
- Licence Number: 10AL124233 + 10AL121848
- Purpose of Use: Snowmaking
- Water source: Thredbo River snowmaking diversion pond
- Extraction type: as required
- Annual allocation (volume entitlement): 605 ML

3.7.1.7 Public health considerations

The unit will be secured with locked doors, partially fenced to prevent fall from retaining wall, and will clearly sign posted. The fencing will consist of 100UC Galvanised posts and timber sleeper stacked horizontally with 200mm spacing between sleepers. 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 that will be placed on the unit are provided in **Table 4**. A complete list of signage will be prepared at the construction certificate stage.

Table 4: Examples of signage to be installed on unit

Location and description	Sign example
Access door (outside) Danger: refrigerant ammonia	
Fans or air-cooled condenser (next to fan grills) Warning: rotating fan blades	
Ice blower outlet Danger: risk of injury	

3.7.1.8 Safe work considerations

The unit will be installed as per the manufacturer's specification. A Thredbo specific operating manual will be developed prior to operation of the unit. The plan will cover matters such as emergency and safety equipment, protective measures for operating materials and substances (refrigerant), storage and handling systems (e.g. material safety data sheets), servicing requirements, personal protective equipment etc. A copy of the operating manual will be provided to all operational staff. All staff responsible for operating, testing or maintaining the unit will be trained appropriately.

Fire protection measures will be installed as per industry codes. Informative and warning signage will be installed on the unit as per the manufacturer's recommendations.

An emergency management plan will be prepared in consultation with the local emergency services organisation (Fire & Rescue NSW). The plan will address matters such as: types of emergencies, response actions, raising alarm, terminating emergency, compatibility with incident management plans, administration of plan, hazardous material manifest, key personnel and contact details, site layout plan.

SafeWork NSW (and others) were consulted during the concept phase with the following requirements being identified:

- Code of practice for hazardous chemicals and AS/NZS 2022 Anhydrous ammonia - Storage and handling
- The placarding and manifest requirements according to WHS Regulation 2017
- Anhydrous ammonia safety information prepared by WHSQ
- Guidance material on emergency planning for ammonia refrigeration systems, also provided by WHSQ
- Safe Work Australia exposure standards for ammonia
- Code of Practice, Victoria – Ammonia Refrigeration
- Pressure vessel registration (AS4343) and inspection requirements (AS3788)
- Platforms, walkways, stairs and ladders to comply with AS1657
- Hazardous area classification according to AS/NZS IEC 60079.10
- Electrical installation according to the wiring rules (AS/NZS 3000).

A connection to potable water will be installed within the combined services trench, refer Site Plan 25002_001_r1 and Trench Cross Sections 25002_004_r2 provided separately with this application. The potable water service will be supplied via 40 mm PE100 pipe, PN 12.5.

4 Planning framework and matters for consideration

4.1 Commonwealth legislation

4.1.1 Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

The EPBC Act provides a legal framework to protect and manage nationally and internationally important aspects of the Australian environment. The EPBC Act is administered by the Department of Climate Change, Energy, the Environment and Water (DCCEEW). Under Part 3 of the EPBC Act, a person must not undertake an action (e.g. a development) that will have, or is likely to have, a significant impact on a protected matter (MNES), without approval from the Australian Government Minister for the Environment.

MNES that may occur, or relate to the search area (within a 5 km buffer) are provided in the EPBC Act Protected Matters Report (**Appendix A**). A summary of the PMR and potential impacts is provided below.

Table 5: EPBC Act considerations

Matters of National Environmental Significance	Comment
MNES – World Heritage Properties	Not applicable.
MNES – National Heritage Places	No impacts proposed.
MNES – Wetlands of International Importance	No impacts proposed.
MNES – Great Barrier Reef Marine Park	Not applicable.
MNES – Commonwealth Marine Area	Not applicable.
MNES – Listed Threatened Ecological Communities	No impacts proposed.
MNES – Listed Threatened Species	No impacts proposed.
MNES – Listed Migratory Species	No impacts proposed.
Commonwealth Land	No impacts proposed.

An EPBC Act referral to the Commonwealth Environment Minister is not recommended as the Development is unlikely to have a significant impact on any MNES or Commonwealth land.

4.2 State legislation

4.2.1 Environmental Planning and Assessment Act 1979

A review of the Development against the relevant provisions of the State Environmental Planning Policy (Precincts – Regional) 2021 (Precincts – Regional SEPP) is provided in **Table 6**.

Table 6: EP&A Act Matters for consideration

Environmental Planning and Assessment Act 1979	
Section 4.15 – matters for consideration	
(i) any environmental planning instrument	The Precincts – Regional SEPP is the only environmental planning instrument which applies to the site for this proposal. Refer to assessment in the next section.
(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved)	Not applicable. There are no draft Environmental Planning Instruments that are applicable to the Development.
(iii) any development control plan	The NSW Alpine Region Development Control Plan 2025 (Alpine DCP) applies to the site, refer Section 4.3.3 for details.
(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4	Not applicable. There are no planning agreements applicable to Thredbo under the Precincts – Regional SEPP.
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph)	This application has been prepared in accordance with the relevant requirements of the EP&A Regulation.
(a) the likely impacts of that development, including environmental impacts on both the natural and	The likely impacts of the Development on the natural and built environment, and social and

Environmental Planning and Assessment Act 1979	
built environments, and social and economic impacts in the locality	economic impacts in the locality have been assessed in Section 5 .
(b) the suitability of the site for the development	The suitability of the site is detailed in Section 2.2 .
(c) any submissions made in accordance with this Act or the regulations	Consideration will be given to submissions made.
(d) the public interest.	The Development will improve the efficiency and reliability of artificial snowmaking within the area. Achieving good snow cover on Friday Flat early in the season, as well as reliable snow cover through the season will enhance the guest experience. As such, the Development is considered within the public interest.

4.2.2 Biodiversity Conservation Act 2016

The purpose of the BC Act is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ESD.

The *Biodiversity Conservation Regulation 2017* (BC Regulation) sets out threshold levels for when the Biodiversity Offset Scheme (BOS) will be triggered, refer **Table 7**. The Development will not trigger the BOS.

Table 7: BC Regulation BOS Triggers

BOS Trigger	Comment
Whether the amount of native vegetation being cleared exceeds the area threshold	Given the site is zoned C1 – National Park under the Snowy River Local Environmental Plan 2013, there is no minimum lot size. Therefore, the lot size allows for clearing up to 1 ha. The proposed clearing is below 1 ha, therefore area clearing threshold is not triggered.
Whether the impacts occur on an area mapped on the Biodiversity Values Map (BVM) published by the Minister for Environment	The Development will not impact on an area mapped on the BVM, refer Section 5.1 .
The ‘test of significance’ in section 7.3 of the BC Act identifies that the development or activity is likely to significantly effect threatened species or ecological communities, or their habitats	The Development is unlikely to significantly impact on threatened species or ecological communities, or their habitats, refer Section 5.1 .
The works are carried out on a declared area of outstanding biodiversity value	Not applicable.

4.2.3 State Environmental Planning Policy (Precincts – Regional) 2021

Development in the NSW alpine resort areas are subject to the provisions in Chapter 4 of the *Statement Environmental Planning Policy (Precincts -Regional) 2021* (Precincts – Regional SEPP). Consideration of the relevant provisions to the Development is provided in **Table 8**.

Table 8: SEPP (Precincts – Regional) Considerations

Section	Comment
Section 4.2 Land to which Chapter applies	Thredbo Alpine Resort is listed as one of the Alpine Subregions on the <i>State Environmental</i>

Section	Comment
	<i>Planning Policy (Precincts – Regional 2021 Thredbo Alpine Resort Map</i> referenced in Section 4.2.
Section 4.7 Land Use Table	‘Snowmaking Infrastructure’ is permissible development with consent within the Thredbo Alpine Resort.
Section 4.21 Heritage Conservation	The Development will not impact upon any heritage items or Aboriginal heritage items or places.
Section 4.24 Flood Planning	The Development site is not located within a flood planning area.
Section 4.25 Earthworks (3) In deciding whether to grant development consent for earthworks, or for development involving ancillary earthworks, the consent authority must consider the following matters— (a) the likely disruption of, or adverse impact on, drainage patterns and soil stability in the locality of the development,	Appropriate controls will be incorporated during construction to mitigate impacts. The Development will be carried out in accordance with the geotechnical recommendations provided by Aretas (2026).
(b) the effect of the development on the likely future use or redevelopment of the land,	The Development is unlikely to impact on the future use or redevelopment of the land. If required, all infrastructure can be removed from site.
(c) the quality of the fill or the soil to be excavated, or both,	All excavated material will be re-used onsite where possible, therefore the quality of the material is not expected to change.
(d) the effect of the development on the existing and likely amenity of adjoining properties,	The nearest property is located ~174 m from the site. The adjoining land comprises ski slopes, snowmaking infrastructure and recreational infrastructure and therefore the proposal is not anticipated to result in any significant impacts to amenity of adjoining properties.
(e) the source of any fill material and the destination of any excavated material,	In the event fill material is required, it will be sourced from NPWS approved stockpile sites. Any excess excavated material will be transported offsite to a NPWS approved site or licenced facility.
(f) the likelihood of disturbing relics	Unlikely, refer Section 5.4 .
(g) the proximity to, and potential for adverse impacts on, a waterway, drinking water catchment or environmentally sensitive area,	The Development is located within waterfront land, refer Section 5.2.2 for impact assessment.
(h) appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.	The snowmaking unit has been specifically designed for operation in the alpine resort. Appropriate measures have been proposed to avoid, minimise or mitigate the impacts of the Development during construction. Once operational, the unit undergoes monitoring and maintenance to ensure it is operating in accordance with the manufacturer’s specifications.

Section	Comment
Section 4.28 Consideration of master plans and other documents	-
(a) the aim and objectives of this Chapter set out in section 4.1,	The Development is consistent with the aim and objectives of Chapter 4. The snowmaking unit has the ability to improve reliability of snowcover and allow KT to extend the snow season by supplementing natural snow fall. This then enables more confidence for resort operators providing snow-based products, and for guests planning trips. The Development will result in direct investment into the resort, and indirect economic impacts in the locality e.g. spending on accommodation, rental gear, retail and dining.
(d) the Geotechnical Policy —Kosciuszko Alpine Resorts published by the Department in November 2003,	A Form 4 has been prepared to support this application, prepared by Aretas (2026).
(2) In deciding whether to grant development consent to development in the Alpine Region, the consent authority must consider— (a) a master plan approved by the Minister under section 4.26 that applies to the land, or	The Snowy SAP Master Plan applies to the site.
Section 4.29 Consideration of environmental, geotechnical and other matters	-
(1) (a) measures proposed to address geotechnical issues relating to the development,	Measures are proposed in the report supporting the Form 4 prepared by Aretas (2026).
(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,	The Development is located within a heavily modified environment. The unit will be installed and maintained in accordance with the approved plans and manufacturers specifications, and therefore it is not expected the Development will result in any significant impacts on the conservation of the natural environment.
(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,	Refer Section 5.1 .
(d) the cumulative impacts of development and resource use on the environment of the Alpine Subregion in which the development is carried out,	The impacts of the Development have been assessed in Section 5 .
(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,	No impact.
(f) the capacity of existing waste or resource management facilities to deal with additional waste generated by the development, including in peak periods.	No impact.
(2) For development involving earthworks or stormwater draining works, the consent authority must also consider measures to mitigate adverse impacts associated with the works	Earthworks are proposed, refer Section 3.2.1 .
(3) For development the consent authority considers will significantly alter the character of an Alpine	The Development will not significantly alter the character of the Alpine Subregion. The adjoining

Section	Comment
Subregion, the consent authority must also consider— (a) the existing character of the site and immediate surroundings, and (b) how the development will relate to the Alpine Subregion	land contains ski slopes, snowmaking and recreational infrastructure, and therefore the proposal is consistent with existing land uses in the locality.
Section 4.30 Kosciuszko National Park Plan of Management	The Development is not inconsistent with the Kosciuszko National Park Plan of Management.

4.2.4 Integrated development

Integrated development requires development consent and one or more of the approvals outlined in Section 4.46 of the EP&A Act. A review of the *State Referral Provisions, Version 1.0* (DPHI 2026) has been undertaken to inform this application. The Development is integrated development requiring assessment under the *Water Management Act 2000* as construction works are proposed on waterfront land (within 40 m of a watercourse). An assessment against the provisions listed in Section 2.10.9 of the State Referral Provisions is provided in **Table 9**.

Table 9: State Referral Provisions, Section 2.10.9

No.	Considerations	Comments
1	The objects and principles of the <i>Water Management Act 2000</i>	Refer Section 4.2.4.1 for details
2	The consistency of the development with any relevant management plan	Not applicable, no relevant management plans.
3	Such other matters as DCA considerations to be relevant	-
4	For water use approvals	Not applicable
5	For water management work approvals	Not applicable
6	For controlled activity approvals: - The extent of works on waterfront land. - The impact of the development on any waterfront land. - Any riparian corridor protection, establishment, encroachments, or offsets proposed by the development. - All applicable requirements in the controlled activity on waterfront land guidelines.	Refer to Section 5.2.2 for the waterfront land assessment.

4.2.4.1 Objects and principles of the Water Management Act 2020

Consideration of the objects and principles of the WM Act is provided in **Table 10**.

Table 10: Objects and principles of the WM Act

Objects and principles of the WM Act	Comments
3 Objects The objects of this Act are to provide for the sustainable and integrated management of the water sources of the State for the benefit of both present and future generations and, in particular—	The Development has been designed with consideration of the principles of ecologically sustainable development.

Objects and principles of the WM Act	Comments
(a) to apply the principles of ecologically sustainable development, and	
(b) to protect, enhance and restore water sources, their associated ecosystems, ecological processes and biological diversity and their water quality, and	The Development has been designed to minimise disturbance within the riparian corridor. Temporary control measures are proposed during construction to avoid, mitigate and manage potential impacts to the nearby watercourse. The majority of infrastructure is located within a highly disturbed area.
(c) to recognise and foster the significant social and economic benefits to the State that result from the sustainable and efficient use of water, including— (i) benefits to the environment, and (ii) benefits to urban communities, agriculture, fisheries, industry and recreation, and (iii) benefits to culture and heritage, and (iv) benefits to the Aboriginal people in relation to their spiritual, social, customary and economic use of land and water,	Water required during operation is obtained via an approved extraction licence.
(d) to recognise the role of the community, as a partner with government, in resolving issues relating to the management of water sources,	Water required during operation is obtained via an approved extraction licence. KT work with the relevant authority to ensure ongoing compliance with the licence.
(e) to provide for the orderly, efficient and equitable sharing of water from water sources,	Water required during operation is obtained via an approved extraction licence.
(f) to integrate the management of water sources with the management of other aspects of the environment, including the land, its soil, its native vegetation and its native fauna,	Temporary control measures will be installed during construction to manage soil disturbance and erosion.
(g) to encourage the sharing of responsibility for the sustainable and efficient use of water between the Government and water users,	Water required during operation is obtained via an approved extraction licence.
(h) to encourage best practice in the management and use of water.	Water required during operation is obtained via an approved extraction licence. KT will continue to comply with the conditions of the extraction licence.
5 Water management principles (1) The principles set out in this section are the water management principles of this Act.	-
(2) Generally— (a) water sources, floodplains and dependent ecosystems (including groundwater and wetlands) should be protected and restored and, where possible, land should not be degraded, and (b) habitats, animals and plants that benefit from water or are potentially affected by managed activities should be protected and (in the case of habitats) restored, and (c) the water quality of all water sources should be protected and, wherever possible, enhanced, and (d) the cumulative impacts of water management licences and approvals and other activities on water sources and their dependent ecosystems, should be considered and minimised, and (e) geographical and other features of Aboriginal significance should be protected, and	(a) No impacts to the nearby watercourse are proposed. Water required during operation is obtained via an approved extraction licence. (b) The Development will not impact on habitats, animals or plants that benefit from the nearby watercourse. All land disturbed during construction will be progressively rehabilitated. (c) The water quality of the nearby watercourse will not be impacted by the Development. (d) The Development will not result in KT's existing water extraction licence to be exceeded. (e/f) The Development will not impact on any geographical or other features of cultural, heritage

Objects and principles of the WM Act	Comments
(f) geographical and other features of major cultural, heritage or spiritual significance should be protected, and (g) the social and economic benefits to the community should be maximised, and (h) the principles of adaptive management should be applied, which should be responsive to monitoring and improvements in understanding of ecological water requirements.	or spiritual significance. Refer Table 12 for the Aboriginal Cultural Heritage due diligence assessment. (g) The Development will result in social and economic benefits to the community
(3) In relation to water sharing— (a) sharing of water from a water source must protect the water source and its dependent ecosystems, and (b) sharing of water from a water source must protect basic landholder rights, and (c) sharing or extraction of water under any other right must not prejudice the principles set out in paragraphs (a) and (b).	Water required during operation is obtained via an approved extraction licence. KT work with the relevant authority to ensure ongoing compliance with the licence.
(4) In relation to water use— (a) water use should avoid or minimise land degradation, including soil erosion, compaction, geomorphic instability, contamination, acidity, waterlogging, decline of native vegetation or, where appropriate, salinity and, where possible, land should be rehabilitated, and (b) water use should be consistent with the maintenance of productivity of land in the long term and should maximise the social and economic benefits to the community, and (c) the impacts of water use on other water users should be avoided or minimised.	During operation, the Development will require the use of water. All water use is carried out in accordance with relevant licences and approvals. The Development will be installed in accordance with the manufacturer's specifications, including environmental management controls.
(5) In relation to drainage management— (a) drainage activities should avoid or minimise land degradation, including soil erosion, compaction, geomorphic instability, contamination, acidity, waterlogging, decline of native vegetation or, where appropriate, salinity and, where possible, land should be rehabilitated, and (b) the impacts of drainage activities on other water users should be avoided or minimised.	The Development incorporates stormwater infrastructure. The infrastructure will be installed in accordance with relevant standards. Following installation, all disturbed land will be rehabilitated.
(6) In relation to floodplain management— (a) floodplain management must avoid or minimise land degradation, including soil erosion, compaction, geomorphic instability, contamination, acidity, waterlogging, decline of native vegetation or, where appropriate, salinity and, where possible, land must be rehabilitated, and (b) the impacts of flood works on other water users should be avoided or minimised, and (c) the existing and future risk to human life and property arising from occupation of floodplains must be minimised.	Not applicable.

Objects and principles of the WM Act	Comments
(7) In relation to controlled activities— (a) the carrying out of controlled activities must avoid or minimise land degradation, including soil erosion, compaction, geomorphic instability, contamination, acidity, waterlogging, decline of native vegetation or, where appropriate, salinity and, where possible, land must be rehabilitated, and (b) the impacts of the carrying out of controlled activities on other water users must be avoided or minimised.	The Development is a controlled activity. The infrastructure has been designed and located to minimise impacts to waterfront land. Temporary environmental controls will be implemented during construction to mitigate potential soil erosion or water quality impacts in the surrounding environment, refer SEMP for details. No impacts to native vegetation are proposed. All disturbed areas will be rehabilitated and monitored following completion of the works until an erosion resistant state has been established. No impacts to other water uses are proposed.
(8) In relation to aquifer interference activities— (a) the carrying out of aquifer interference activities must avoid or minimise land degradation, including soil erosion, compaction, geomorphic instability, contamination, acidity, waterlogging, decline of native vegetation or, where appropriate, salinity and, where possible, land must be rehabilitated, and (b) the impacts of the carrying out of aquifer interference activities on other water users must be avoided or minimised.	Not applicable

4.3 Plans

4.3.1 South East and Tablelands Regional Plan 2036

The *South East and Tablelands Regional Plan 2036* (Regional Plan) describes the vision, goals and actions that will deliver greater prosperity for those who live, work and visit the region. The Regional Plan promotes well planned, efficient and sustainable development that complements the area's natural and cultural values. In relation to the NSW Alpine Resorts, the Regional Plan seeks to promote year-round alpine tourism opportunities that will strengthen long-term resilience.

The Development is consistent with the Regional Plan as it will increase the efficiency and reliability of snowmaking within Friday Flat. Achieving good snow cover on Friday Flat in May / early June will greatly enhances early season visitation, as well as KT's ability to still be skiing and snowboarding in late September / early October.

4.3.2 Snowy Mountains Special Activation Precinct Master Plan 2022

The Snowy Mountains Special Activation Precinct Master Plan 2022 (Master Plan) applies to the NSW Alpine Resort Areas, including Thredbo. The Development is for the installation of a snowmaking unit which will allow KT to improve the efficiency of its snowmaking operation, as well as the quality and reliability of snow cover within Friday Flat.

In response to the challenges posed by the sustainability of natural snow fall within a changing climate, artificial snowmaking improves seasonal length and viability, which may allow the winter visitation period to be maintained or potentially extended. It is anticipated improved snow cover in the area will contribute to a greater guest experience.

4.3.3 NSW Alpine Region Development Control Plan 2025

The NSW Alpine Region Development Control Plan 2025 (Alpine DCP) came into effect on 14 January 2025. The Alpine DCP applies to all land to which Precincts-Regional SEPP, Chapter 4 applies.

Chapter 2.4 of the Alpine DCP describes the relevant development controls applicable to on-mountain infrastructure (refer **Table 11**).

Table 11: Alpine DCP, Chapter 2.4 On-mountain development and infrastructure provisions

Objectives and Controls	Comments
The objectives and controls in this part apply to development for the purposes of lifting facilities, monitoring stations, ski-slope huts, snow-making infrastructure, infrastructure facilities and recreation infrastructure.	The Development is for the purposes of snowmaking infrastructure.
Objectives O1. Allow for a mix of summer and winter recreational opportunities for a range of visitor skill levels and types that enhances the particular Alpine Sub-region character. O2. Allow for on-mountain development and infrastructure that is environmentally sustainable and meets visitor needs. O3. Ensure ease and efficiency of circulation, adequacy of public facilities, lift and trail capacity and public safety to enhance amenity in all seasons.	Complies: ☒ Yes ☐ No ☐ NA The Development will contribute to improved snowcover on Friday Flat, therefore contributing to the winter guest experience.
Controls C1. Upgrades to lifting infrastructure and snowmaking infrastructure prioritise development that limits disturbance to existing alignments. Where this is not practical or will result in adverse impact on amenity or efficiency, development may occur outside of existing alignments. C2. Aerial lifts are to be used in place of surface lifts, unless it can be demonstrated that a surface lift is necessary for operational reasons and that the surface lift will result in minimal environmental impacts. Consideration will be given to environmental impacts and operational outcomes in consideration of the most appropriate form of lifting infrastructure and any associated cabling. C3. Walking trails and infrastructure are designed along existing disturbed areas such as ski slopes. Where this is not practical, development may occur outside of existing disturbed areas. C4. All summer and winter on-mountain developments and infrastructure make efficient use of the natural terrain by limiting terrain modification to where it is essential for safety, to resolve environmental issues or to improve visitor experience.	Complies: ☒ Yes ☐ No ☐ NA C.1 & C.2 – not applicable, the Development is not for lift infrastructure. C.3 – The Development has been sited within the highly disturbed ski slope. C.4 – The Development has been designed to tie in with the existing topography of the site. Minor earthworks are required to create a suitable pad for the unit and for installation of pits and underground services.

5 Impact Assessment

The assessment for the development consisted of a desktop review of publicly available data sources. A preliminary site assessment was undertaken by KT Project personnel and various technical consultants to validate the desktop assessment results, inform the design process and ensure appropriate environmental controls are implemented to avoid, mitigate and/or management potential impacts on environmental and cultural values.

5.1 Geotechnical considerations

A review of the Geotechnical Policy Kosciuszko Alpine Resorts (DIPNR 2003) (Geotechnical Policy) was undertaken to inform this application. The Development is located within the designated 'G' area of the accompanying maps (**Figure 7**). In accordance with Section 3.0 of the Geotechnical Policy, the Development is for minor construction works which present minimal or no geotechnical impact, therefore a geotechnical report is not required. A Form 4 and supporting report has been provided separately with this application.



Figure 7: Thredbo Geotechnical Policy Map Layer (NSW Planning Portal Spatial Viewer 2026)

5.1 Biodiversity

The ecological assessment prepared by Eco Logical Australia (2026) conclude the Development will not result in any adverse impacts on threatened species, populations or ecological communities and will not have a significant impact on these entities pursuant to the BC Act or EPBC Act.

Further, the assessment concluded the Development will not result in any adverse impacts on native vegetation communities or associated fauna habitats, nor will there be any impacts on flora species of conservation significance, important fauna habitats, habitat connectivity or any other biodiversity values of conservation significance.

A copy of the ecological assessment is provided separately with this application.

5.1 Socio-economic

The additional snowmaking unit will enable KT to make snow at higher temperatures compared to conventional snowmaking, which will assist in providing both an early season and more reliable snow cover throughout the season with the Friday Flat ski area.

The economic impacts generated by the Development will be positive in terms of direct investment into the resort and the generation of short-term construction jobs, however these are anticipated to be nominal given the scale of the Development and construction timing. The Development is considered critical infrastructure for the operation of the resort.

5.2 Water

5.2.1 Mapped watercourses

The Water Management (General) Regulation Hydro Line spatial data shows a mapped watercourse that traverses through the middle of the Friday Flat ski area (**Figure 8**). The mapped watercourse does not exhibit the features of a defined channel with bed and banks. This drainage line was diverted in the 1980s when Friday Flat was first developed. The diversion resulted in the drainage line being diverted around the ski slope area (approximately halfway down the slope), below the Easy Does It Quad lift (to the north-north-east) into a network of underground pipes, including several inlets/drains. The watercourse uphill of the ski area/Gunbarrel top station was also diverted to the other side of the ski slope area. Site photos of this area are provided in **Figure 9** and **Figure 10**. As such, it is determined the mapped drainage line is not within waterfront land for the purposes of the WM Act. Therefore, no further assessment of the drainage line is required.

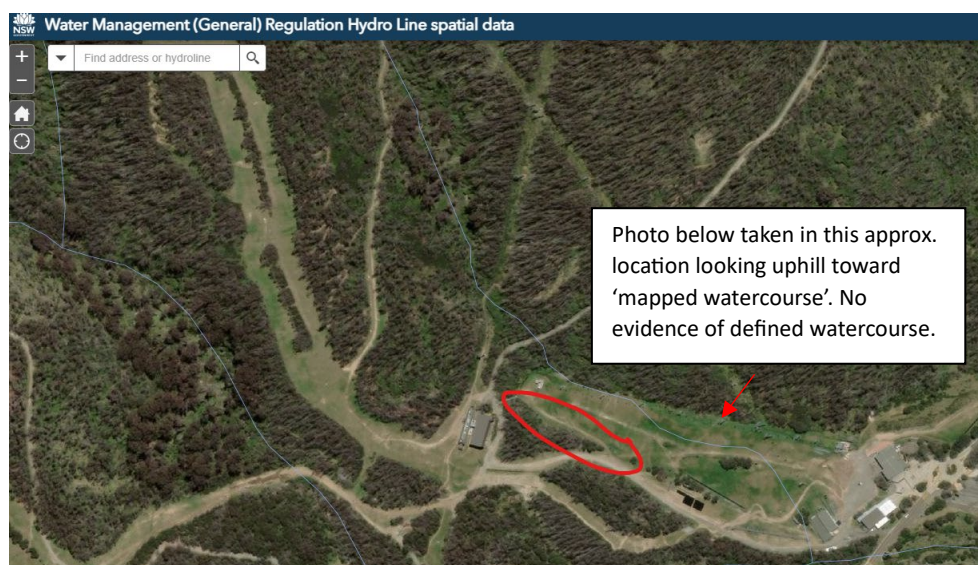


Figure 8: Hydro line Spatial Data (NSW Government 2026d)



Figure 9: Drainage line on edge of ski slope area. No mapped watercourse within ski slope area



Figure 10: Photo looking downslope, no evidence of watercourse with ski slope

The Thredbo Alpine SEPP Map (DoP 2006) is a superseded map (**Figure 11**), however used for contextual purposes. The map shows a watercourse south of the site. Ground-truthing confirms this watercourse is present in the locality and comprises defined bed and banks. It was diverted in this location in the 1960s with the creation of Friday Flat ski area. The watercourse is a tributary of the watercourse mapped upstream of the Merritts Gondola mid station on the Water Management (General) Regulation Hydro Line spatial data map. Therefore, further assessment of this watercourse is provided in **Section 5.2.2**.

The watercourse mapped north of the site (skiers left of ski slope/below Easy Does It Chair) in **Figure 11** is not a defined watercourse for the purposes of the WM Act. Therefore, no further assessment has been undertaken for the drainage line. The Development will not impact this drainage line.

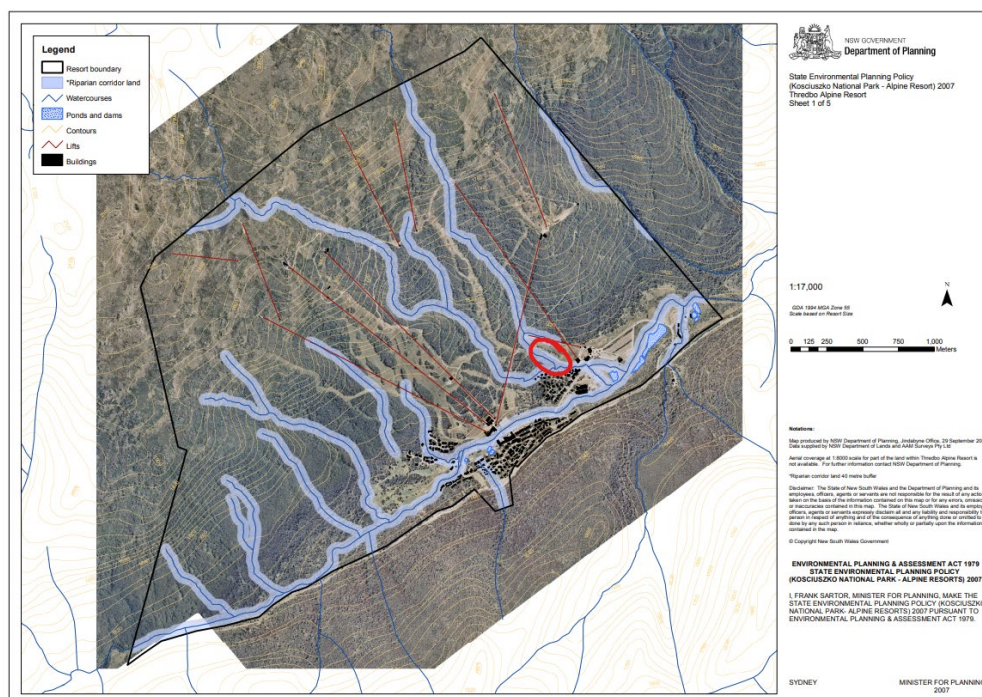


Figure 11: Thredbo Alpine Resort Map (DoP 2007)

5.2.2 Waterfront Land Assessment

An assessment in accordance with the *Controlled activities – Guideline for riparian corridors on waterfront land* (NSW Government DCCEW 2025) has been undertaken for the nearby watercourse shown in **Figure 13**.

5.2.3 Riparian corridor width

The watercourse nearby the Development site is classified as a first order watercourse under the Strahler System (**Figure 16**). The channel width varies between approximately 4-6m within proximity of the Development site. For assessment purposes 6 m has been used. The Vegetation Riparian Zone (VRZ) for a first order watercourse is 10 m (either side of watercourse). Therefore, the total riparian corridor is 26 m (20 m + channel width).

5.2.4 Objectives for riparian corridor management

As shown on **Figure 16**, the majority of infrastructure does not impede into the VRZ which highlights the proposal has been designed to avoid the VRZ where possible. The only infrastructure that is located within the riparian corridor is between P3.1 and P3.2. The short section of underground distribution pipe in this location follows the existing road/services corridor and utilises the existing road crossing. The road/services corridor is heavily disturbed and devoid of native vegetation. During earthworks/trenching, temporary erosion and sediment controls will be erected downslope of the disturbance area to avoid/mitigate any potential impacts on the watercourse downslope of the works area. Once the pipe is installed and trench backfilled, the disturbed land will be rehabilitated in accordance with the Rehabilitation Guidelines until an erosion-resistant state has been established. The Development is therefore considered consistent with the objectives for riparian corridor management.

5.2.5 Impact assessment

The extent of disturbance within the riparian corridor is approximately 11.7 m² (26 m long x 450mm wide trench) (**Figure 12**). Photos in this locality are provided in **Figure 13** to **Figure 15**.

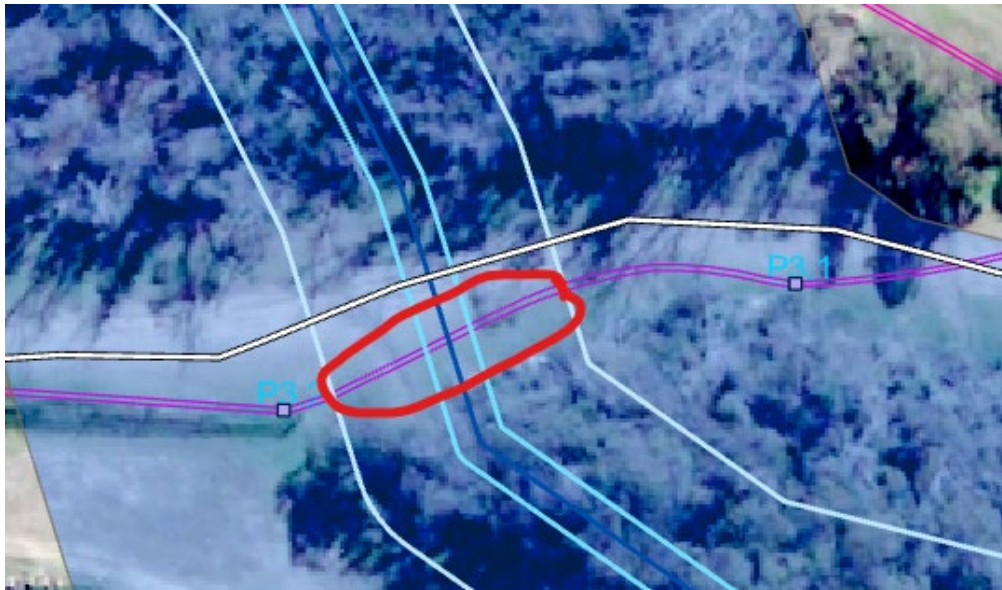


Figure 12: Trench within riparian corridor

The extent of disturbance within waterfront land is approximately:

- 45 m² – 100 m x 450 mm wide trench (trench around P3.1 and P3.2)
- 18 m² – 40 m x 450mm wide trench (trench around P2.5 and P2.6)
- 5.76 m² – pit disturbance (P2.6, P2.5, P3.1, P3.2, each pit up to a max. of 1.2 x 1.2m¹ = 1.44 m²)
- Total: 68.76 m²

No significant impacts to waterfront land are proposed given the following:

- No clearing of native trees or shrubs is required within the riparian corridor (only minor grass clearing/excavation of gravel road surface is required).
- Development utilises existing disturbed areas/infrastructure locations, therefore minimising new disturbance (refer **Figure 13** and **Figure 14**). The trench will traverse the existing road crossing.
- The Development requires minimal ground disturbance within waterfront land.
- The Development will not impact on fauna habitat connectivity.
- Appropriate environmental controls will be implemented during construction in accordance with the SEMP to manage soil and surface water runoff around the construction site.
- All disturbed areas will be progressively rehabilitated to ensure the land establishes an erosion resistant state following completion of the works.

¹ pit disturbance – ranging from 900 mm x 600 mm x 600 mm deep, and up to approx. 1200 x 1200 mm wide x 1200 mm deep. For assessment purposes have assumed max disturbance in all locations.



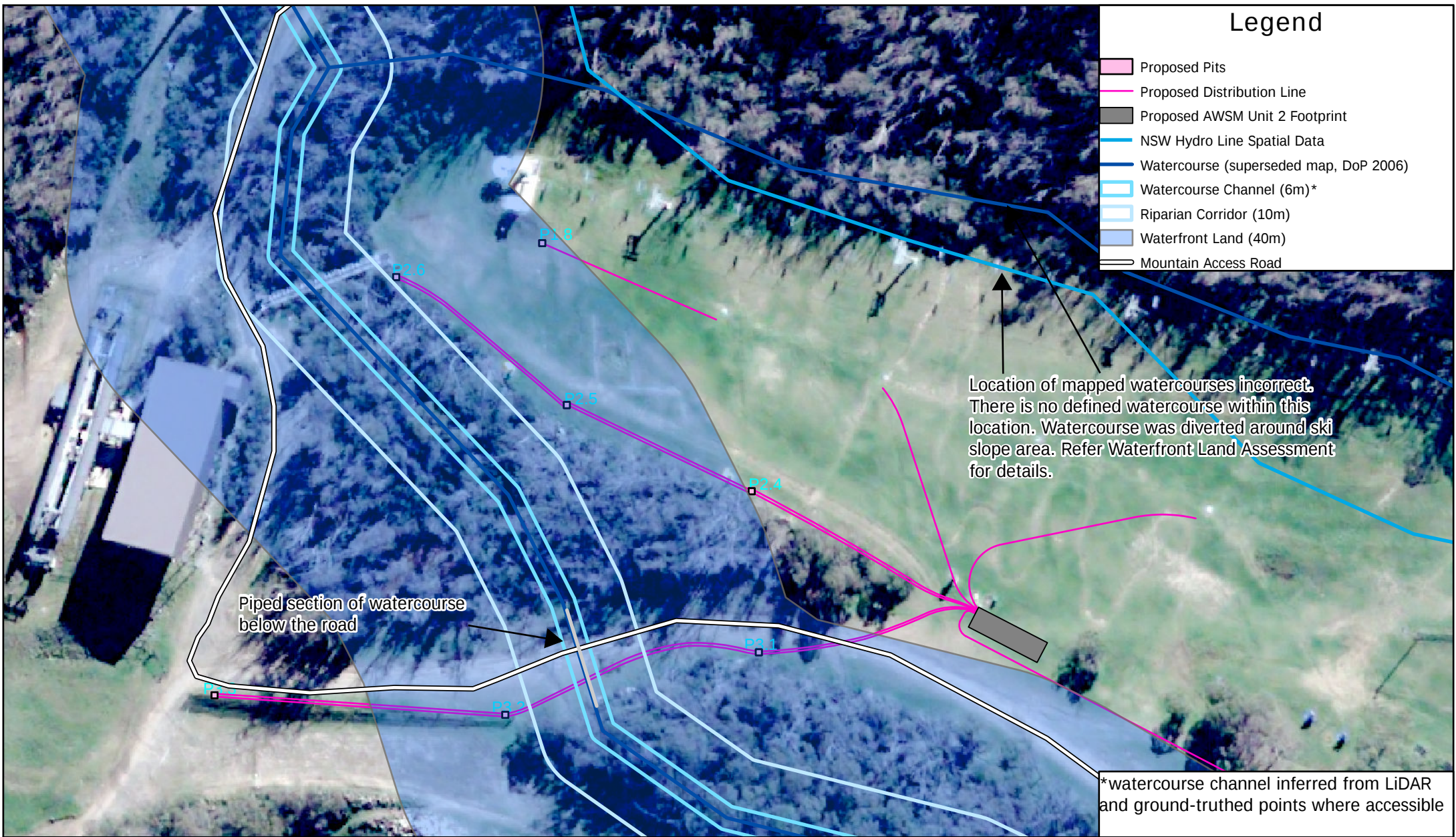
Figure 13: Distribution pipe to be installed underground within road corridor (piped section/headwall in forefront of photo)



Figure 14: Distribution pipe to be installed underground within road corridor



Figure 15: Watercourse/head wall of piped section below road surface



Scale: 1:1,000

0 5 10 20 30 40 50

Meters

Map Projection: Universal Transverse Mercator
Horizontal Datum: GDA 2020
Grid: GDA 2020 MGA Zone 55

N

Waterfront Land Analysis

Project: GIS2530 Snowmaking Unit 2

Revision: F

Date: 24/08/2026

Produced By: GL/CC

5.1 Visual amenity

The site and immediate surrounds comprise ski slopes, lifting facilities, operator huts, snowmaking infrastructure, access tracks, mountain bike trails and native vegetation. The colours and materials of the snowmaking unit have been chosen to complement the existing built form within the Friday Flat precinct. The infrastructure is consistent with the existing land uses within the locality.

In winter, the line of segmented trees is situated on the skiers right of Friday Flat slope and skiers left of Giddy Up ski run. The position of the snowmaking unit within this line of trees ensures there is no intrusion of infrastructure within the open ski slope. Given the unit has a relatively small footprint, and the distribution pipes are predominately below the ground surface, the visual impacts are considered acceptable in the context of the ski area and existing snowmaking infrastructure.

5.2 Access and traffic

All construction vehicles will enter and exit the Development site via the summer mountain access road and the ski slope.

The site is located nearby the partially constructed Friday Flat beginner mountain bike trail which is expected to be operational in summer 2026/27. During construction, exclusion fencing and signage will be erected around the active works to ensure the safety of bike riders in the vicinity once the trail is operational.

Fencing and signage forms part of the design to prevent unauthorised access during operation.

The snowmaking unit has been strategically located on the edge of the ski run to minimise disruptions to snow grooming operations, and both summer and winter guests.

5.3 Heritage

The Development will not impact any listed heritage items or places listed in the Precincts – Regional SEPP.

5.4 Aboriginal cultural heritage

To establish due diligence for the Development, an assessment against the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (DECCW 2010) is provided in **Table 12**.

Table 12: Aboriginal Cultural Heritage Due Diligence Process

Due Diligence Process	Comment
1. Will the activity disturb the ground surface or any culturally modified trees?	The Development will result in ground disturbance within a highly disturbed area. There are no culturally modified trees within the site.
2. Are there any: a) relevant confirmed site records or other associated landscape feature information on AHIMS? And/or	There are no confirmed records of Aboriginal objects within the immediate vicinity of the Development site. A copy of the AHIMS search results is provided in Appendix A .
b) any other sources of information of which a person is already aware? And/or	Several historical independent assessments have been undertaken within the resort (Dabyne 2020; NGH Environmental 2017; Past Traces Heritage Consultants 2017; Iron Bark Heritage 2013; URS Australia 2004, 2005). All studies provide an indication that the ski slope areas have low

Due Diligence Process	Comment
	archaeological potential due to the level of disturbance associated with the previous ski slope work. The studies also concluded that given the steepness and exposed aspect/lack of sheltering tors, the ski slopes are unlikely to have been favourable campsite locations.
c) landscape features that are likely to indicate presence of Aboriginal objects?	The Development site is located in a highly disturbed environment, which has been subject to previous disturbance for the construction of the existing ski slope, snowmaking infrastructure and underground services in the locality. Previous disturbance has comprised extensive earthworks, vegetation clearing and removal and disturbance to top soils and soil profiles, thus removing potential for Aboriginal sites to remain within the Development location. There are no landscape features within the Development site that would indicate the presence of Aboriginal objects due to the previous disturbance. As such, it is considered the Development has low potential to impact on unrecorded Aboriginal objects or sites. There is no requirement to move onto Steps 3 and 4.
3. Can harm to Aboriginal objects listed on AHIMS or identified by other sources of information and/or can the carrying out of the activity at the relevant landscape features be avoided?	Not applicable.
4. Does a desktop assessment and visual inspection confirm that there are Aboriginal objects or that they are likely?	

As identified above, all reasonable steps have been undertaken to ensure the Development fulfils the requirements of the Aboriginal Cultural Heritage Due Diligence Process. Potential impacts from the Development on objects or sites of Aboriginal Cultural Heritage significance are considered unlikely. In the unlikely event that Aboriginal objects are discovered, management measures outlined in the SEMP will be implemented.

5.5 Air quality

There is potential for dust emissions to be generated during earthworks and construction activities. With the implementation of controls outlined in the SEMP impacts will be negligible.

5.6 Noise

5.6.1 Sensitive land uses

The following sensitive land uses have been identified within the locality (**Figure 17**):

- Tourist and visitor accommodation (Woodridge subdivision) – approximately 174 m from the site
- Offices (Thredboland) – approximately 310 m from the site
- Offices (Friday Flat base station) – approximately 330 m from the site.

5.6.2 Construction noise impacts

Construction noise impacts (e.g. loading/unloading materials, construction works, movement alarms) are expected to be low given the works will be conducted during standard hours, the duration of works is short-term and appropriate controls will be implemented in accordance with the SEMP.

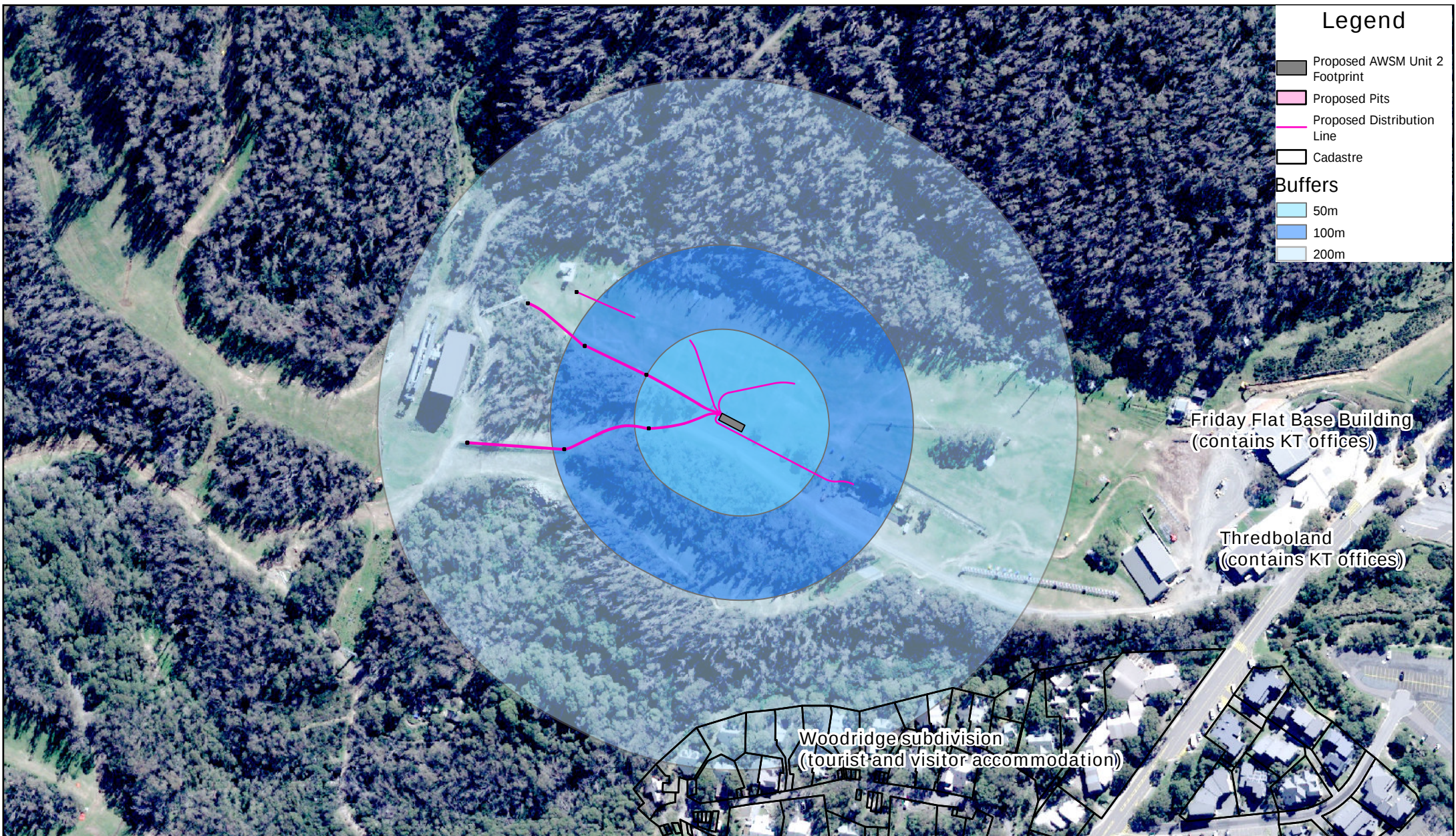
5.6.3 Operational noise impacts

Sensitive receptors are located more than 174 m from the snowmaking unit, refer **Figure 17**. Noise measurements from a similar installation in Winterberg (Germany) operating at full load are indicated in the specification provided separately with this application. It should be noted that background noise levels vary from location to location and vegetation may act as sound attenuation in some instances. For informative purposes, when reviewing the noise levels from the Wintenberg installation, once located approximately 70 m from the snowmaking unit noise levels can be expected around 47 dB(A). This noise level is comparative to a quiet residential area, refrigerator, library, conversation at home (IAC Acoustics 2025, <https://www.iacacoustics.com/blog-full/comparative-examples-of-noise-levels>; Centre for Hearing and Communication n.d. <https://noiseawareness.org/info-center/common-noise-levels/>).

The snowmaking unit will form part of the existing Friday Flat snowmaking network and operate during the winter season as required. The noise is considered acceptable within the context of the alpine resort.

5.7 Waste management

The Development is expected to generate minimal waste. Storage and disposal of construction waste will be managed in accordance with the SEMP.



6 Conclusion

This application is seeking development approval for the installation of a snowmaking unit and associated works at Friday Flat within Thredbo Alpine Resort. In accordance with the relevant legislative requirements, this SEE has assessed the potential impacts of the Development on the human, built and natural environment of the Development site and surrounds. Appropriate environmental controls have been incorporated into the Development to first avoid, then minimise and mitigate impacts on the surrounding environment during construction and operation.

The highly disturbed site is considered suitable to accommodate the Development which will form part of the existing snowmaking system at Friday Flat. The Development will improve the efficiency and reliability of artificial snowmaking within the area. Achieving good snow cover on Friday Flat early in the season, as well as reliable snow cover through the season will enhance the guest experience. As such, the Development is considered within the public interest.

7 References

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URS Australia Pty Ltd, 2004, SEE for the Proposed Vegetation Removal, Ski Slopes Thredbo.

URS Australia Pty Ltd, 2005, SEE for Proposed Works on the Tower 10 Ski Run, Thredbo.

8 Appendices

Appendix A Desktop Search Results

Kosciuszko Thredbo Pty Ltd
Po Box 92
Thredbo New South Wales 2625
Attention: Chloe Chalk
Email: chloe_chalk@evt.com

Date: 24 August 2026

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lat, Long From : -36.5014, 148.3047 - Lat, Long To : -36.4971, 148.3124, conducted by Chloe Chalk on 24 August 2026.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

3	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(https://www.legislation.nsw.gov.au/gazette\)](https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not to be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.



Australian Government

Department of Climate Change, Energy,
the Environment and Water

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 24-Aug-2026

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	2
Wetlands of International Importance (Ramsar	8
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	4
Listed Threatened Species:	46
Listed Migratory Species:	8

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <https://www.dcceew.gov.au/parks-heritage/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	15
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	1
Regional Forest Agreements:	1
Nationally Important Wetlands:	None
EPBC Act Referrals:	4
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

National Heritage Places			[Resource Information]
Name	State	Legal Status	Buffer Status
Historic			
Snowy Mountains Scheme	NSW	Listed place	In feature area
Natural			
Australian Alps National Parks and Reserves	ACT	Listed place	In feature area

Wetlands of International Importance (Ramsar Wetlands)			[Resource Information]
Ramsar Site Name		Proximity	Buffer Status
Banrock station wetland complex		700 - 800km upstream from Ramsar site	In buffer area only
Barmah forest		200 - 300km upstream from Ramsar site	In buffer area only
Blue lake		Within 10km of Ramsar site	In feature area
Gunbower forest		300 - 400km upstream from Ramsar site	In buffer area only
Hattah-kulkyne lakes		500 - 600km upstream from Ramsar site	In buffer area only
Nsw central murray state forests		200 - 300km upstream from Ramsar site	In buffer area only
Riverland		700 - 800km upstream from Ramsar site	In buffer area only
The coorong, and lakes alexandrina and albert wetland		700 - 800km upstream from Ramsar site	In buffer area only

Listed Threatened Ecological Communities			[Resource Information]
For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.			
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.			
Community Name	Threatened Category	Presence Text	Buffer Status

Community Name	Threatened Category	Presence Text	Buffer Status
Alpine Ash forests of mainland Australia	Endangered	Community likely to occur within area	In feature area
Alpine Sphagnum Bogs and Associated Fens	Endangered	Community known to occur within area	In feature area
Natural Temperate Grassland of the South Eastern Highlands	Critically Endangered	Community may occur within area	In feature area
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community may occur within area	In buffer area only

Listed Threatened Species

[[Resource Information](#)]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Callocephalon fimbriatum Gang-gang Cockatoo [768]	Endangered	Species or species habitat likely to occur within area	In feature area
Climacteris picumnus victoriae Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat may occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pycnoptilus floccosus Pilotbird [525]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area	In feature area
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat may occur within area	In feature area
CRUSTACEAN			
Euastacus armatus Murray Crayfish [81537]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Euastacus diversus Orbost Spiny Crayfish [66782]	Endangered	Species or species habitat may occur within area	In buffer area only
Euastacus rieki Riek's Crayfish [83155]	Endangered	Species or species habitat likely to occur within area	In feature area
FISH			
Galaxias supremus Kosciuszko Galaxias [87878]	Critically Endangered	Species or species habitat likely to occur within area	In buffer area only
Galaxias terenasus Roundsnout Galaxias [87175]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Maccullochella peelii Murray Cod [66633]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Macquaria australasica Macquarie Perch [66632]	Endangered	Species or species habitat may occur within area	In buffer area only
Prototroctes maraena Australian Grayling [26179]	Vulnerable	Species or species habitat may occur within area	In feature area
MAMMAL			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Burramys parvus Mountain Pygmy-possum [267]	Endangered	Species or species habitat likely to occur within area	In feature area
Dasyurus maculatus maculatus (SE mainland population) Spotted-tail Quoll, Spot-tailed Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat likely to occur within area	In feature area
Mastacomys fuscus mordicus Broad-toothed Rat (mainland), Tooarrana [87617]	Endangered	Species or species habitat likely to occur within area	In feature area
Petaurus australis australis Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Phascolarctos cinereus (combined populations of Qld, NSW and the ACT) Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Pseudomys fumeus Smoky Mouse, Konoom [88]	Endangered	Species or species habitat likely to occur within area	In feature area
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour may occur within area	In buffer area only
PLANT			
Argyrotegium nitidulum Shining Cudweed [82043]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Calotis glandulosa Mauve Burr-daisy [7842]	Vulnerable	Species or species habitat may occur within area	In feature area
Colobanthus curtisiae Curtis' Colobanth [23961]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Glycine latrobeana Clover Glycine, Purple Clover [13910]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Haloragis exalata subsp. exalata Wingless Raspwort, Square Raspwort [24636]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Leucochrysum albicans subsp. tricolor Hoary Sunray, Grassland Paper-daisy [89104]	Endangered	Species or species habitat may occur within area	In feature area
Pimelea bracteata [8125]	Critically Endangered	Species or species habitat may occur within area	In feature area
Prasophyllum bagoense Bago Leek-orchid [84276]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Prasophyllum petilum Tarengo Leek Orchid [55144]	Endangered	Species or species habitat may occur within area	In feature area
Pterostylis oreophila Blue-tongued Orchid, Kiandra Greenhood [22903]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Ranunculus anemoneus Anemone Buttercup [14889]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Rytidosperma pumilum Feldmark Grass [66716]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Viola improcera Dwarf Violet [3879]	Endangered	Species or species habitat may occur within area	In buffer area only
Xerochrysum palustre Swamp Everlasting, Swamp Paper Daisy [76215]	Vulnerable	Species or species habitat likely to occur within area	In feature area

REPTILE

Scientific Name	Threatened Category	Presence Text	Buffer Status
Cyclodomorphus praealtus Alpine She-oak Skink [64721]	Endangered	Species or species habitat likely to occur within area	In feature area
Eulamprus kosciuskoi Alpine Water Skink [59693]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Liopholis guthega Guthega Skink [83079]	Endangered	Species or species habitat likely to occur within area	In feature area
Liopholis montana Mountain Skink [87162]	Endangered	Species or species habitat likely to occur within area	In feature area
Pseudemoia cryodroma Alpine Bog Skink, Alpine Bog-skink [84408]	Endangered	Species or species habitat likely to occur within area	In feature area
Pseudemoia rawlinsoni Glossy Grass Skink, Swampland Cool-skink, Rawlinson's Window-eyed Skink [59160]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Listed Migratory Species		[Resource Information]	
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Migratory Terrestrial Species			
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Listed Marine Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat may occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat likely to occur within area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat likely to occur within area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area	In feature area

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Kosciuszko	National Park	NSW	In feature area

Regional Forest Agreements	[Resource Information]
Note that all areas with completed RFAs have been included. Please see the associated resource information for specific caveats and use limitations associated with RFA boundary information.	

RFA Name	State	Buffer Status
Southern NSW	New South Wales	In feature area

EPBC Act Referrals			[Resource Information]	
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
Not controlled action (particular manner)				
Aerial baiting for wild dog control	2006/2713	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data is available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on the contents of this report.

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions when time permits.

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded breeding sites; and
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- [-Natural history museums of Australia](#)
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- [-Other groups and individuals](#)

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