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DEVELOPMENT ASSESSMENT AND
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STATEMENT OF ENVIRONMENTAL EFFECTS

UPGRADE OF SNOWMAKING INFRASTRUCTURE 'TOPPA'S DREAM', BLUE COW PERISHER SKI RESORT KOSCIUSZKO NATIONAL PARK



Prepared for:
Perisher Blue Pty Ltd



AUGUST 2018
Project: 24-18

STATEMENT OF ENVIRONMENTAL EFFECTS

UPGRADE OF SNOWMAKING INFRASTRUCTURE 'TOPPA'S DREAM', BLUE COW PERISHER SKI RESORT KOSCIUSZKO NATIONAL PARK

This report has been prepared by:

A handwritten signature in black ink, appearing to read 'I. Pasalich'.

Ivan Pasalich
Principal
Dabyne Planning Pty Ltd

AUGUST 2018
Project: 24-18

Dabyne Planning Pty Ltd
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1. INTRODUCTION

1.1 Executive Summary

Dabyne Planning Pty Ltd has been engaged by Perisher Blue Pty Ltd (Perisher Blue), the operator of the Perisher Ski Resort to prepare a Statement of Environmental Effects (SEE) to accompany a Development Application (DA) to the NSW Department of Planning and Environment (DPE).

The Development Application is for the upgrade of snowmaking infrastructure to provide improved snowmaking coverage on the Toppa's Dream Moguls Course, located adjacent to the Ridge Chair, within the Blue Cow ski area of the Perisher Ski Resort.

The proposal is to replace the existing manually operated snowmaking system with an automated system and to extend the infrastructure to provide additional snowmaking coverage over the moguls course, located to the skiers right of the Showboat ski run and Ridge Chair.

The proposed snowmaking system will include the replacement of manually operated hydrants and use of hoses with an extended underground pipeline servicing four (4) automatically controlled fan guns. The new pipeline is approximately 250m in length in total and will connect to the existing main located at the edge of the ski run at two locations.

Improved snowmaking infrastructure that includes replacing manual hydrants is required to provide more reliable snow cover in marginal conditions, to allow for the moguls course to be able to be used earlier and longer into the season. The installation of automated hydrants will also improve operational safety for the snowmakers and remove above ground hoses which are operational hazards.

The environmental impacts associated with the snowmaking installation upgrades have been largely mitigated by locating the snowmaking pipeline along previously disturbed areas, where the least impact on native vegetation can be achieved.

As the site is wholly located within an area mapped as comprising high biodiversity value, the Biodiversity Offsets Scheme (BOS) is triggered under the Biodiversity Conservation Act, 2016 (BC Act, 2016).

Consequently a Biodiversity Development Assessment Report (BDAR) has been prepared by Ryan Smithers, Senior Ecologist with Eco Logical Australia and an Accredited Person. The BDAR outlines the measures taken to avoid, minimise and mitigate impacts to the vegetation and habitats present within the development site during the design, construction and operation of the development. The residual unavoidable impacts of the proposed development were calculated in accordance with the Biodiversity Assessment Method (BAM) by utilising the Biodiversity Assessment Method Credit Calculator (BAMC). The BAMC calculated that a total of three (3) ecosystem credits and seven (7) species credits are required to offset the unavoidable impacts to the vegetation and habitat present within the development site.

Payment of the offset credits will be made to the Biodiversity Conservation Fund (BCF) prior to works commencing.

A detailed description of the proposal is provided in Section 3 of the report.

The purpose of this SEE is to:

- describe the land to which the DA relates.
- describe the form of the proposed works.
- define the statutory planning framework within which the DA is to be assessed and determined; and
- assess the proposed development against the matters for consideration listed under Section 4.15(1) of the Environmental Planning and Assessment Act, 1979 (EP&A Act, 1979).

The report has been prepared in accordance with the requirements of Schedule 1 of the Environmental Planning and Assessment Regulations 2000.

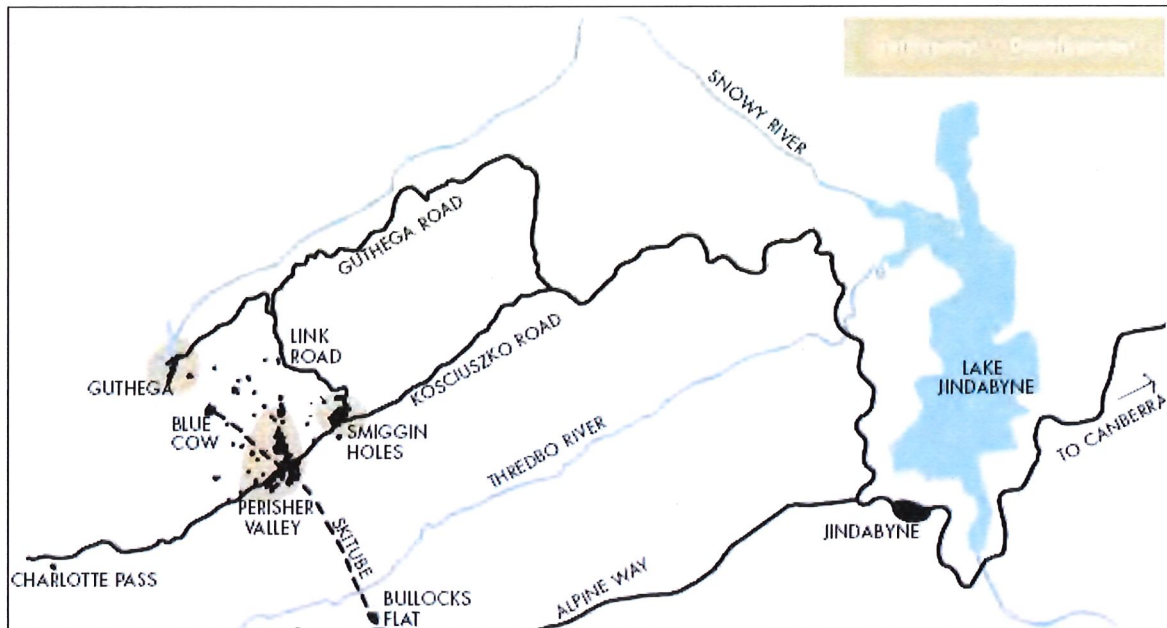
2. THE LOCALITY AND THE SITE

2.1 The Locality

The proposed installation of upgraded snowmaking infrastructure is located within the Blue Cow ski area of the Perisher Ski Resort.

Perisher Ski Resort is located within the Perisher Range Resorts, approximately 35kms from Jindabyne. Access to the resort is via Kosciuszko Road.

The location of the resort is illustrated in context with the regional locality below:



*Figure 1: Location of Perisher Valley in context with the Region
(source: Perisher Range Resorts Master Plan)*

2.2 The Site

The subject site comprises of an FIS standard moguls course, being the premier moguls course in Australia. The course, referred to as 'Toppa's Dream' is located within the Blue Cow ski area of the Perisher Ski Resort, with the proposed upgraded snowmaking installation located skiers right of the Showboat ski run and the lower portion of the Ridge Chair as shown in figure 2 below.

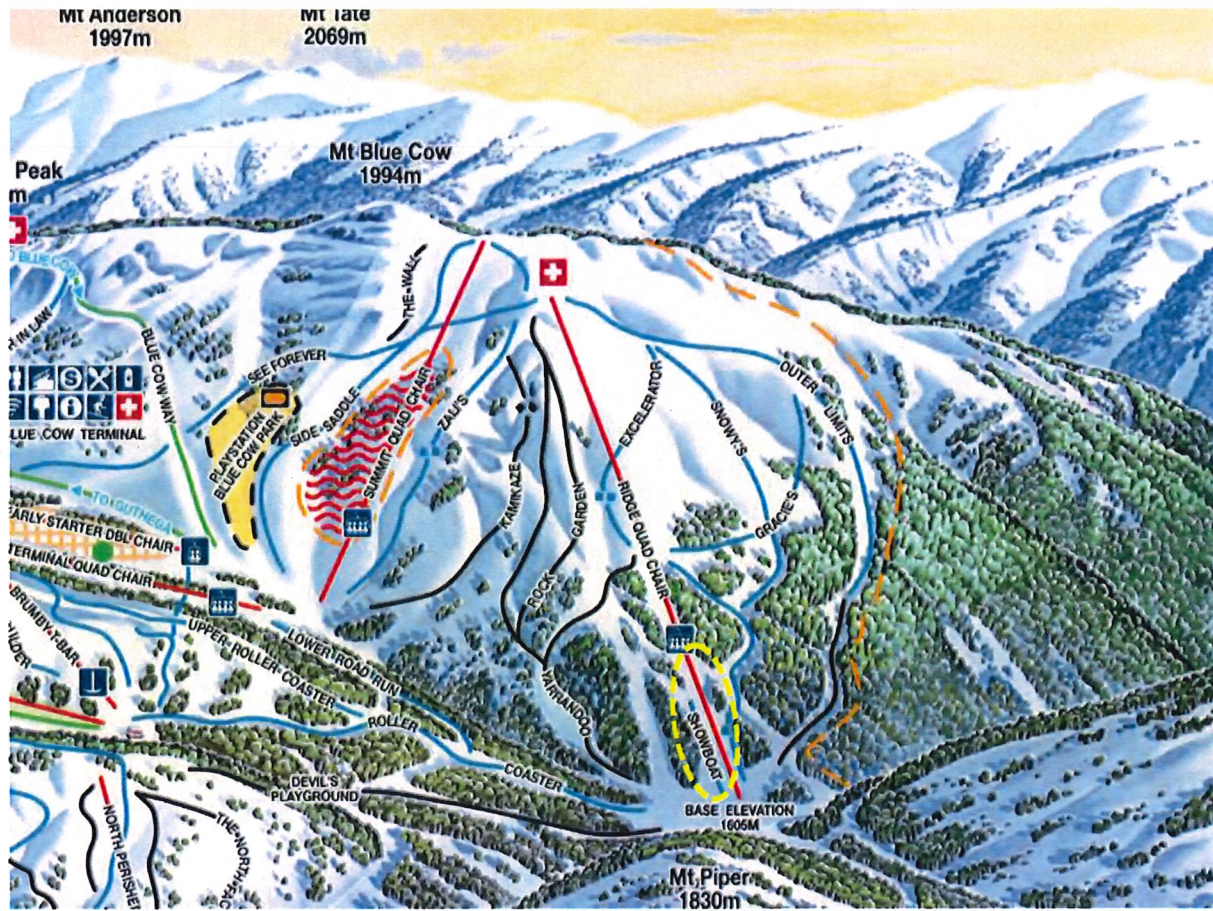


Figure 2: Perisher Ski Trail Map with the subject site area highlighted
(Source: Perisher Blue Pty Ltd)

The Toppa's moguls course was upgraded in 2002/03 with manually operated snowmaking infrastructure installed in 2006/07.

The location of the moguls course is better illustrated in the Ski Patrol maps provided by Perisher in figure 3 below.



Figure 3: Perisher Ski Patrol Map with the subject site area highlighted
(Source: Perisher Blue Pty Ltd)

The subject site has been mostly previously disturbed, comprising of one Plant Community Type (PCT):

- PCT 645 - Alpine Snow Gum shrubby open woodland at high altitudes in Kosciuszko NP, Australian Alps Bioregion

Aerial maps are provided in figures 4 & 5 with the subject site highlighted.



Figure 4: Aerial map of the subject site in context with the locality

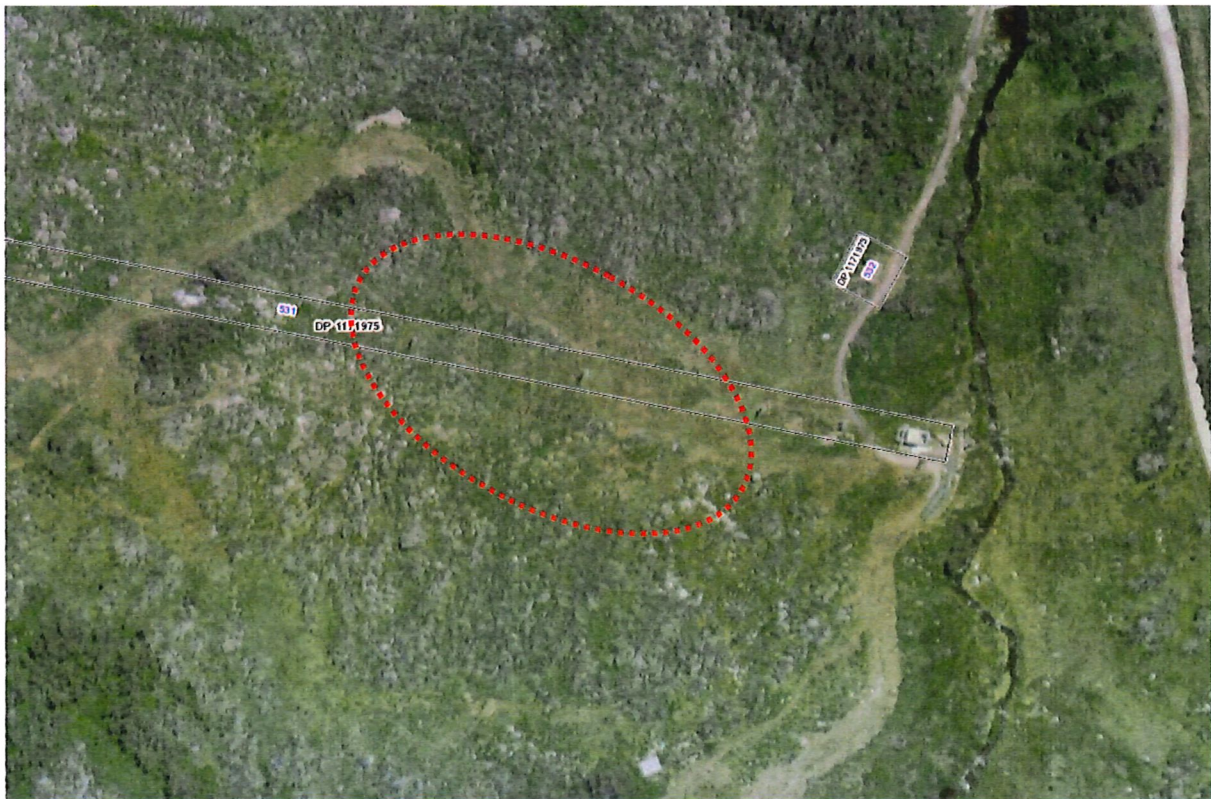


Figure 5: Aerial map of the subject site

The site is located between 1620m and 1720m contour, between 120m above the base of the Ridge Chair and 260m, as illustrated in figure 6 below.

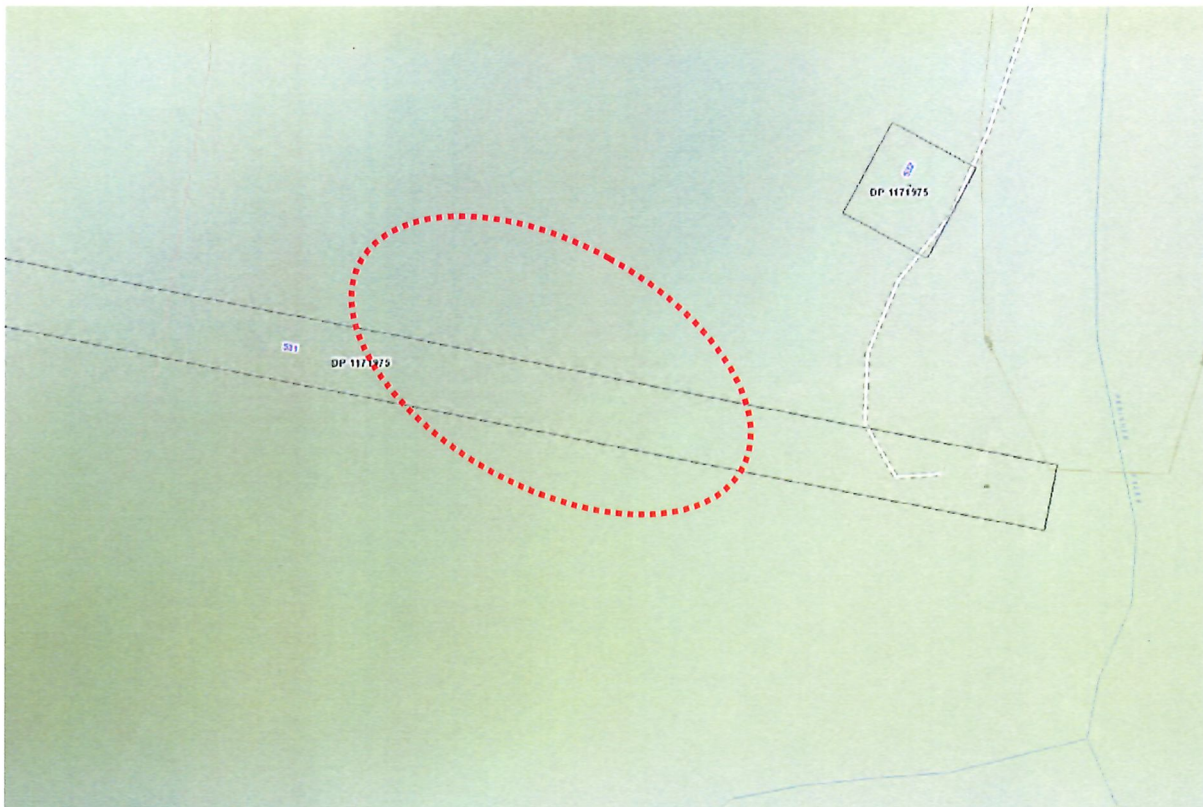


Figure 6: Topographic map of the subject site and its location in context with the locality

3. DESCRIPTION OF THE DEVELOPMENT

3.1 Purpose of the Development

The purpose of the development is to upgrade snowmaking infrastructure to provide improved snowmaking coverage on the Toppa's Dream Moguls Course, an FIS standard course, being the premier moguls course within Australia.

The proposal is to replace the existing manually operated snowmaking system with an automated system and to extend the infrastructure to provide additional snowmaking coverage over the moguls course, located to the skiers right of the Showboat ski run and Ridge Chair.

This is consistent with the Perisher Ski Slope Master Plan (PSSMP), as shown in the extract provided in figure 7 below.

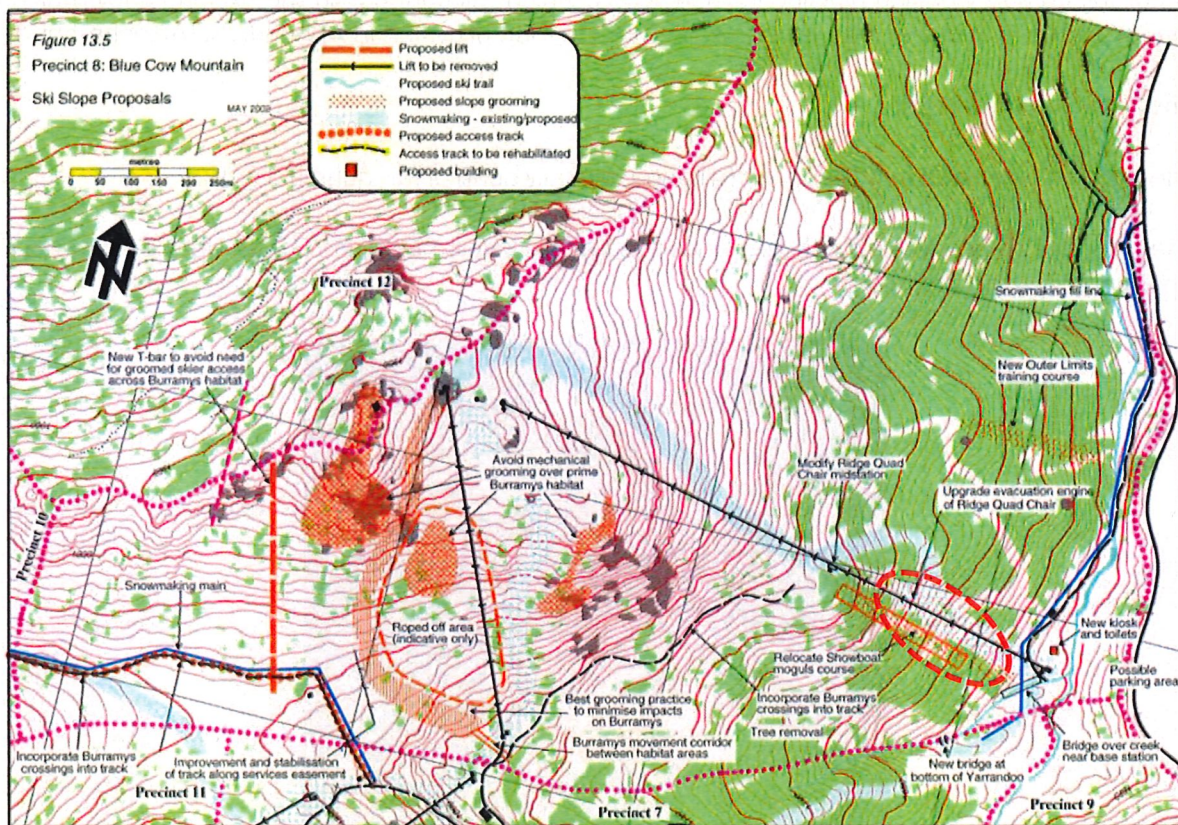


Figure 7: Ski Slope Proposal for the Perisher Valley Precinct (source: PSSMP)

The purpose of upgrading snowmaking infrastructure for the moguls course is to allow for earlier access to the course for training and competition and to improve seasonal length and viability; improve and maintain the quality of the course during the season by topping up natural snow in areas.

The benefits of an automated snowmaking system includes the efficient gains by being able to precisely adjust to varying weather conditions more quickly and accurately to control water flow rates, water temperature, air flow rates and air pressure. Further efficiencies are achieved by significantly reducing the start-up and shut down process associated with the existing manual

snowmaking system which can take anywhere from one to three hours, where an automated system can take as little as 15 minutes.

These efficiencies decrease energy costs related to pumping excess water or compressing excess air with the new technical improvements requiring much less air.

The automation of snowmaking also allows for a reduction in the dependence on manual labour which reduces operating costs as well as achieving improved occupational health and safety benefits in extreme cold conditions. This is particularly relevant as the moguls course has a steep cross-slope which can be hazardous for snowmaking operators when traversing to install manual hydrants and hoses.

3.2 General Description

The proposed installation of snowmaking infrastructure includes installing approximately 250m of combined snowmaking pipeline infrastructure which will connect to the existing snowmaking mains adjacent to the ski run, as shown in the Site Plan provided in Appendix A (Attachment 1).

Snowmaking Hydrants:

The proposal includes installing four (4) automatically control fan guns (F1 – F4).

The fan guns to be installed are similar to the type as shown in figure 8 with details provided in Appendix A (Attachment 2).



Figure 8: Typical fan gun to be used

The proposed fan guns require a concrete pit, measuring 1.9m x 1.9m and 1.4m in depth. The fan guns are mounted on a tower and stand about 3.5m above ground level.

Snowmaking Pipeline and Laterals:

The new snowmaking main servicing the hydrants will comprise of a water pipe (100mm in diameter), 415V Electricity cable within a 125mm conduit and two 50mm conduits to house new optic fibre and data cables. A new main extension will services proposed fan guns F1 to F3, while fan gun F4 will be serviced by a lateral from the new mains.

The laterals will include a water pipe (50mm in diameter), Electricity, optical fibre and data cables.

Details of the trench are provided in Appendix A (Attachment 2).

The disturbance width corridor required for the trenching of the main pipelines is 8m due to the temporary bench required with the lateral requiring 4.5m.

3.3 Construction Timing

The proposed construction timing of the project has been scheduled to start during the summer of 2018/19 and be completed and ready for the 2019 winter season.

3.4 Access & Machinery

Access to the site can be achieved from two directions. To access the site from below, the access road that connects with the Link Road and crosses the Perisher Creek can be used to achieve access to the Showboat ski slope and bottom of the Ridge Chair, as shown in yellow in figure 9 below.

To access the site from above, the access track that connects with the Blue Cow access road that extends across the bottom of Zalis ski run can be used to achieve access to the Excelerator ski run and Ridge Chair, as shown in purple in figure 9 below.



Figure 9: Existing access tracks and ski slopes to be used to access the subject site

The machinery proposed to be used for the snowmaking will include a 30 tonne excavator as a temporary bench across the slope will need to be formed to provide a safe operating platform to enable the trench to be dug across the relatively steep cross slope. A smaller excavator (i.e. 13 tonne) will be used for the installation of hydrants plus transporting and holding steel pipe for it to be welded into position.

In addition, HD carriers will be used where required.

Stockpiling and material storage will occur within the already disturbed ski slope areas and at the bottom the Ridge Chairlift.

3.5 Rehabilitation Works

Once the excavation works are completed, the trenches will be backfilled with top soil will be laid on top to match existing surface levels. The temporary bench will also be removed and also levelled to match existing surface levels.

This process will include preparing the soil and reseeding with native Poa seed. Mulching of exposed areas will be undertaken following seeding with weed free straw.

In previously undisturbed areas, revegetation will be undertaken immediately following completion of works to provide stabilisation of cleared areas prior to winter. This will include sod replacement techniques employed where possible, recognising the slope is relatively dry.

General rehabilitation techniques, access and timing are also covered in the SEMP provided in Appendix D, with further technical details to be provided prior to construction, based on the

current best practice initiatives based in both the PSSMP and DECCW (OEH) Rehabilitation Guidelines, and where they are not inconsistent with the BDAR in accordance with the BOS under the BC Act, 2016.

This rehabilitation work will be undertaken notwithstanding the obligations as set out in the BDAR and specifically Table 29.

4. KEY MATTERS FOR CONSIDERATION

4.1 Biodiversity

In accordance with the Biodiversity Values Map under the BC Act, 2016, the subject site is wholly located within an area currently mapped as comprising high biodiversity value as per the extract of the map provided below in figure 10.

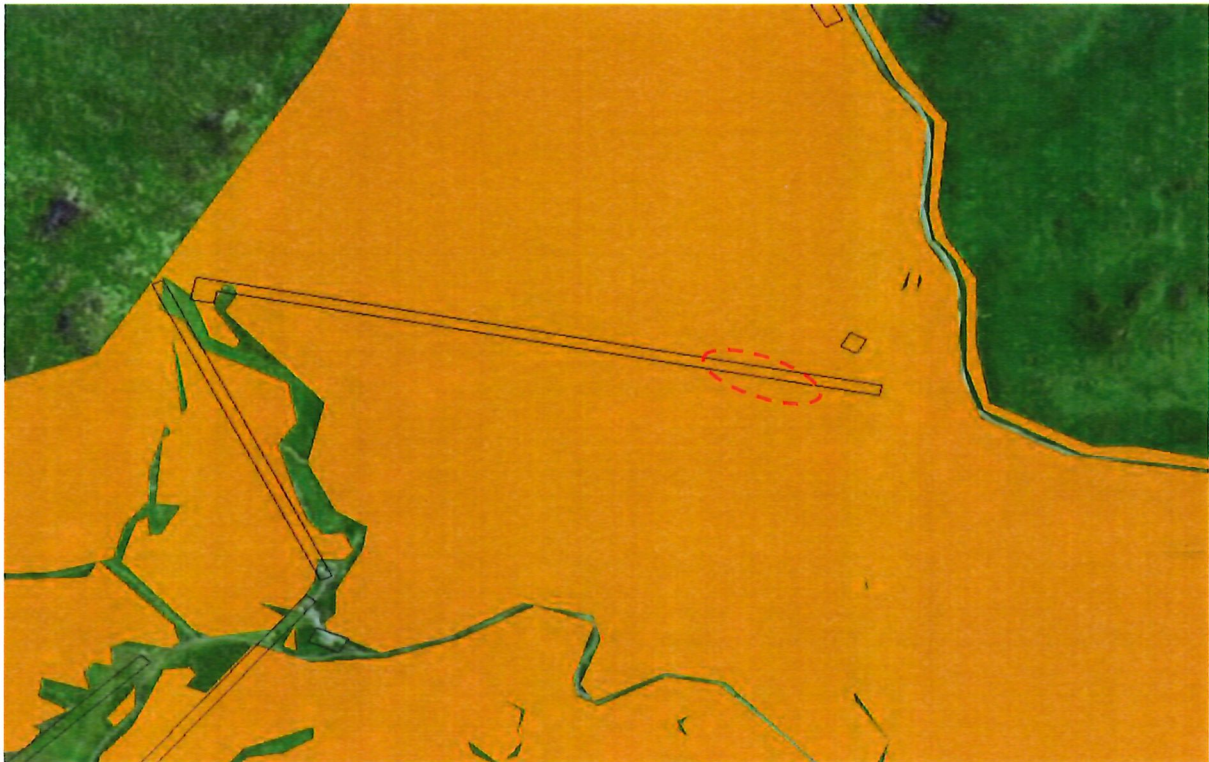


Figure 10: Biodiversity Values Map with the subject site highlighted (Source: OEH)

Consequently, the BOS is triggered and a BDAR has been prepared by Ryan Smithers, Senior Ecologist with Eco Logical Australia and an Accredited Person.

The BDAR outlines the measures taken to avoid, minimise and mitigate impacts to the vegetation and habitats present within the development site during the design, construction and operation of the development. The residual unavoidable impacts of the proposed development were calculated in accordance with the BAM by utilising the BAMC. The BAMC calculated that a total of three (3) ecosystem credits and seven (7) species credits are required to offset the unavoidable impacts to the vegetation and habitat present within the development site.

As a result of payment to the BCF for these offset credits, the physical implementation of offsets within the resort is not required. Furthermore, payment of these offset credits is an alternative to the retirement of biodiversity credits in accordance with Division 6 of the BC Act, 2016.

Serious and irreversible impacts values were also considered as part of the assessment under the BDAR and the report concluded that the proposal will not result in any serious and irreversible impacts.

A copy of the BDAR is provided in Appendix C.

4.2 Aboriginal Cultural Heritage

The identification and mapping of known and potential area of Aboriginal cultural heritage values was undertaken by Navin Officer Heritage Consultants as part of the Perisher Range Resorts Environmental Study, undertaken in 2000 by Connell Wagner.

The study included a predictive model that mapped the zones of Archeological Sensitivity as provided below in figure 11.

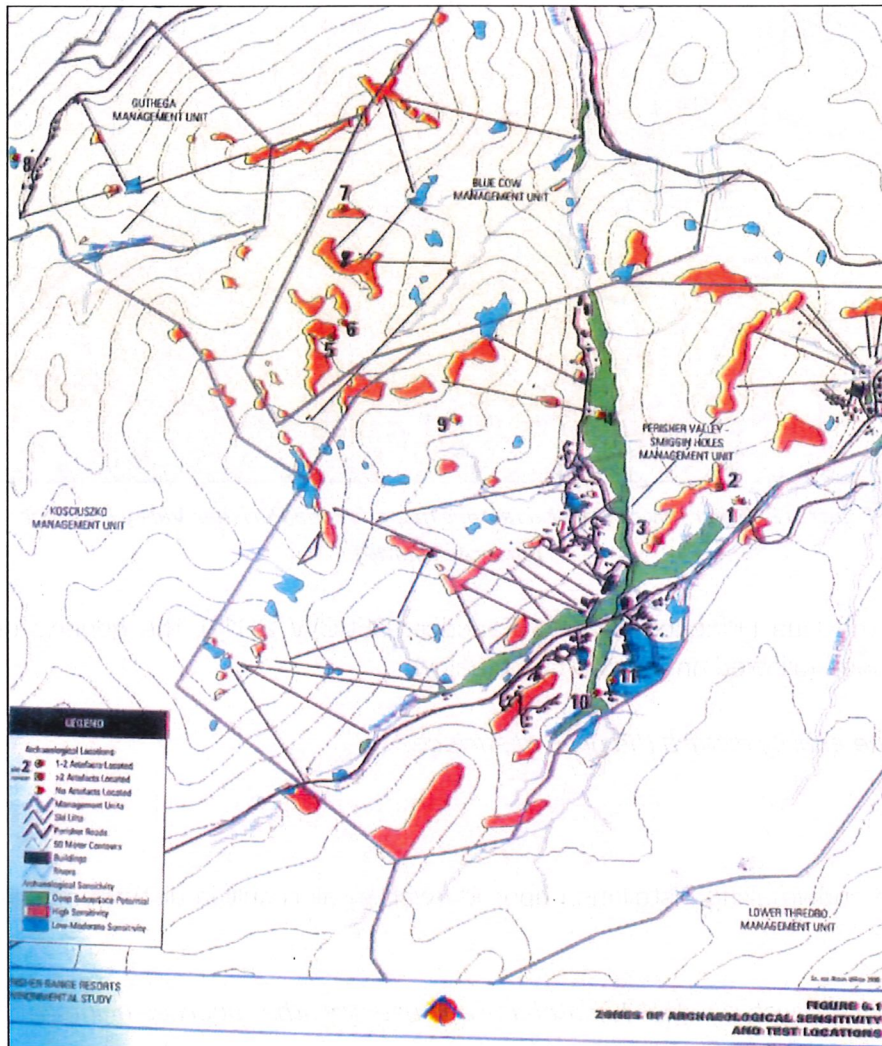


Figure 11: Zones of Archeological Sensitivity

(source: Perisher Range Resorts Environmental Study, Connell Wagner, 2000)

Based on the above map, the proposed works are not located within any identified areas of low-moderate sensitivity, high sensitivity or deep subsurface potential as shown above. The below extract of the 'Other Environmental Factors Map' for the Perisher Valley Precinct as identified in the PSSMP provides a better scale and resolution. This map is based on the predictive model undertaken by Navin Officer for Connell Wagner.

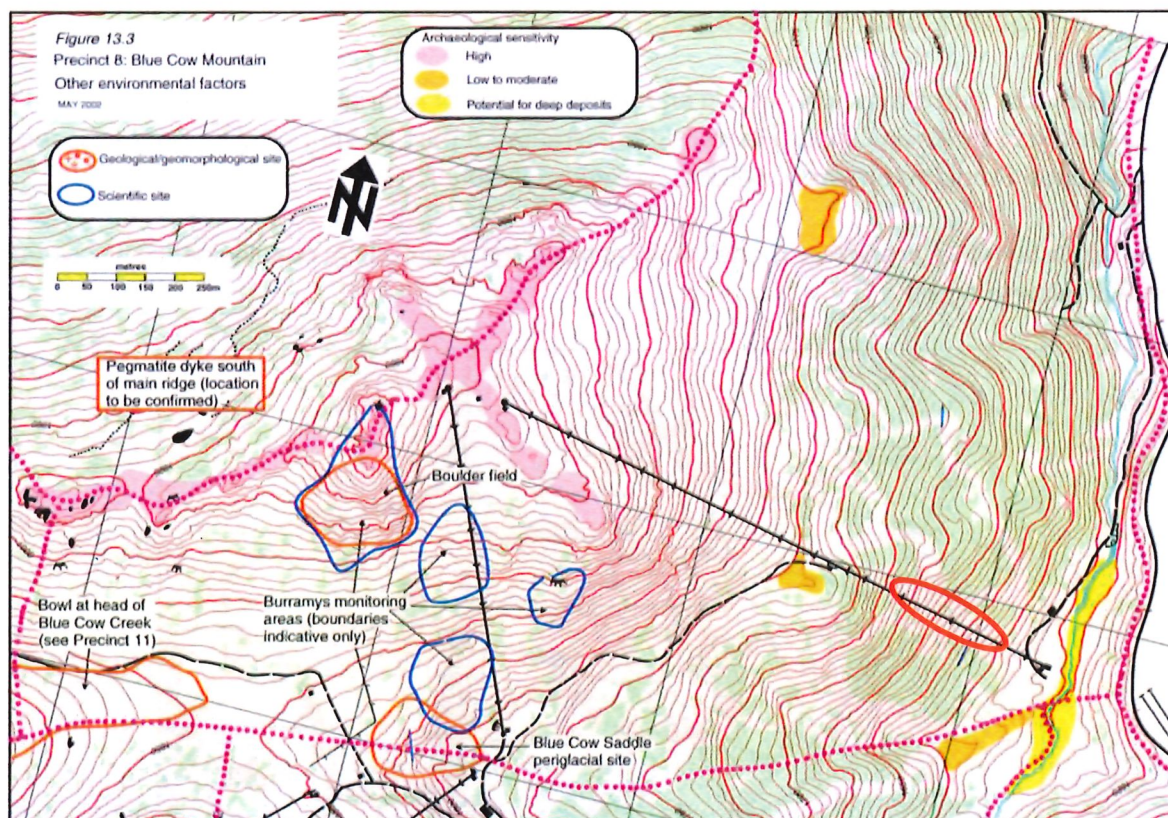


Figure 12: Other environmental factors maps for the Perisher Valley Precinct
(source: PSSMP)

In regard to the Due Diligence Code of Practice, DECCW 2010, the generic due diligence process has been followed and documented below.

Step 1. Will the activity disturb the ground surface?

Comment:

The proposed snowmaking installation upgrade works will result in disturbance of the ground surface.

Step 2. Step 2a. Search the AHIMS database and use any other sources of information of which you are already aware.

Comment:

This search has been undertaken and provided in Appendix E. The search has identified that no Aboriginal sites or places have been recorded within the subject site and buffer area.

Step 2b. Activities in areas where landscape features indicate the presence of Aboriginal objects?

Comment:

As discussed above, Navin Officer Heritage Consultants undertook an Aboriginal Cultural Heritage Study for the Perisher Range Resorts Area in 2000 that formed part of the Perisher Range Resorts Environmental Study (undertaken in 2000 by Connell Wagner).

This study included a predictive model based on the results from a program of subsurface testing across selected landform variables.

Based on this work, four zones of archeological sensitivity were identified, including areas of high archeological sensitivity, areas of low to moderate archeological sensitivity, areas with potential for deep subsurface archeological deposits and areas of no or negligible potential.

The requirement for further surface archeological survey was therefore determined to be low within landscape features that comprised of moderate to high slope gradients and areas of poorly drainage ground, as well as grassland and herbfields on treeless frost hollow floor or areas with predominant or closed heath vegetation.

In accordance with Step 2a of the Code, the Navin Officer 2000 study is a form of 'other sources of information', which is to be considered.

This study provides a much greater level of detail and certainty with regard to identifying specific landscape features within the Perisher Range Resorts that indicate the likely presence of Aboriginal objects (and includes mapping) than what is offered under the generic features listed under the code.

Accordingly, this study has been used to determine the appropriate site specific landscape features that indicate the likely existence of Aboriginal objects.

As the proposed works will be located outside of the areas identified as potential for either low to moderate archaeological sensitivity or high archaeological sensitivity, further archaeological assessment is therefore not warranted.

Therefore after completing steps 2a and 2b, it is reasonable to conclude that there are no known Aboriginal objects or a low probability of objects occurring in the area of the proposed activity, the development can therefore proceed with caution without applying for an AHIP.

This fulfils all reasonable steps in undertaking a due diligence assessment.

In the unlikely event that Aboriginal items are uncovered during excavation, all work shall cease at that location and the NSW Office of Environment and Heritage (OEH) shall be notified.

5. ENVIRONMENTAL AND PLANNING LEGISLATION

5.1 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

5.1.1 SECTION 4.15(1)(a)(i) - ENVIRONMENTAL PLANNING INSTRUMENTS

The only applicable Environmental Planning Instrument to the proposed development and site is State Environmental Planning Policy (Kosciuszko National Park - Alpine Resorts) 2007 (SEPP Alpine Resorts). The relevant clauses contained within SEPP Alpine Resorts are addressed below:

Clause 11 - Land Use Table:

The land use table for the Perisher Range Alpine Resort specifies that 'Snow-making infrastructure' is permitted with consent.

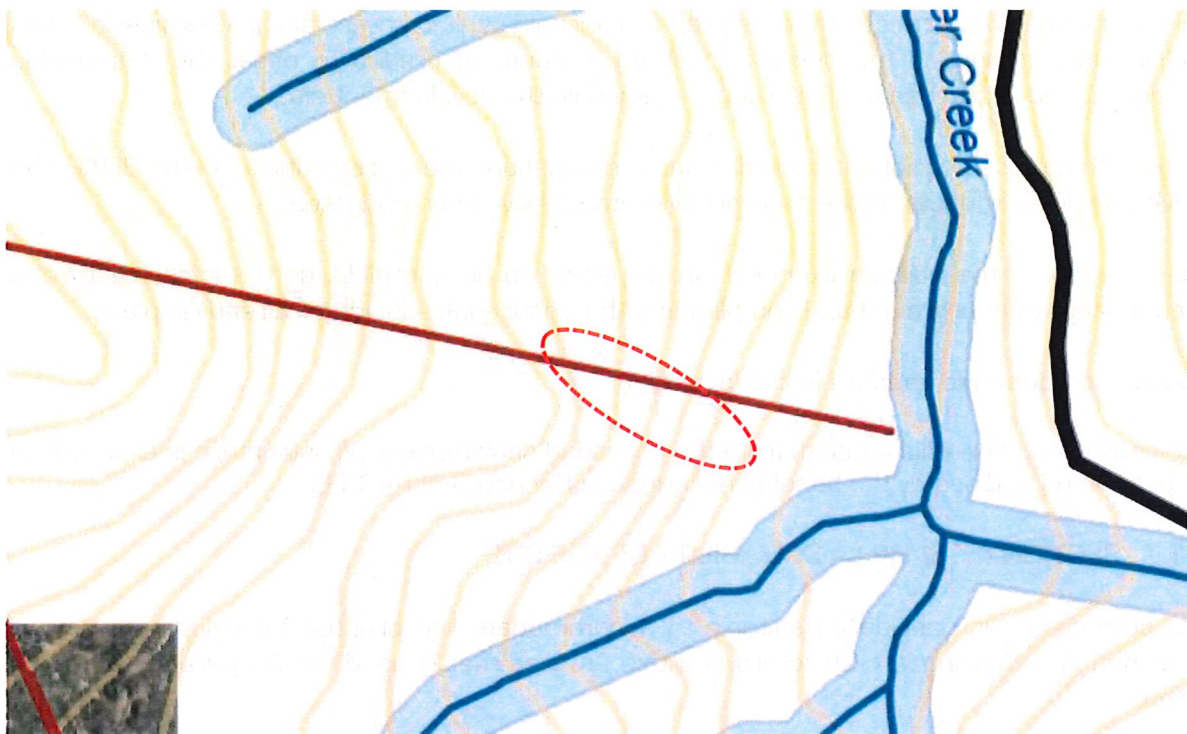
Clause 14 - Matters for consideration:

Matter for Consideration	Response
Cl. 14 (1) In determining a development application that relates to land to which this Policy applies, the consent authority must take into consideration any of the following matters that are of relevance to the proposed development:	
(a) the aim and objectives of this Policy, as set out in clause 2,	<i>The proposed installation of upgraded snowmaking infrastructure is considered to be consistent with the aims and objectives of the Policy.</i>
(b) the extent to which the development will achieve an appropriate balance between the conservation of the natural environment and any measures to mitigate environmental hazards (including geotechnical hazards, bush fires and flooding),	<i>The proposed development does not require any measures to mitigate environmental hazards (eg geotechnical, bush fires or flooding) that would impact on the conservation of the natural environment.</i>

<p>c) having regard to the nature and scale of the development proposed, the impacts of the development (including the cumulative impacts of development) on the following:</p> <p>(i) the capacity of existing transport to cater for peak days and the suitability of access to the alpine resorts to accommodate the development,</p> <p>(ii) the capacity of the reticulated effluent management system of the land to which this Policy applies to cater for peak loads generated by the development,</p> <p>(iii) the capacity of existing waste disposal facilities or transfer facilities to cater for peak loads generated by the development,</p> <p>(iv) the capacity of any existing water supply to cater for peak loads generated by the development,</p>	<p><i>The proposed installation of upgraded snowmaking infrastructure is not expected to generate any additional demand on the capacity of the existing transport, reticulated effluent management system, existing waste disposal facility or existing water supply system at the resort.</i></p>
<p>(d) any statement of environmental effects required to accompany the development application for the development,</p>	<p><i>This Statement of Environmental Effects satisfies this sub-clause.</i></p>
<p>(e) if the consent authority is of the opinion that the development would significantly alter the character of the alpine resort—an analysis of the existing character of the site and immediate surroundings to assist in understanding how the development will relate to the alpine resort,</p>	<p><i>The proposed installation of upgraded snowmaking infrastructure will not significantly alter the character of the alpine resort.</i></p>
<p>(f) the Geotechnical Policy—Kosciuszko Alpine Resorts (2003, Department of Infrastructure, Planning and Natural Resources) and any measures proposed to address any geotechnical issues arising in relation to the development</p>	<p><i>The proposed works are located within the 'G' line.</i></p> <p><i>To cover any potential Geotechnical issues, a Geotechnical Assessment and Form 4 Certificate has been prepared and provided separately with the DA.</i></p>
<p>(g) if earthworks or excavation works are proposed—any sedimentation and erosion control measures proposed to mitigate any adverse impacts associated with those works,</p>	<p><i>Excavation works are required for the trenching of the installation of the snowmaking infrastructure. Sedimentation and erosion controls are outlined in the SEMP provided in Appendix D and these will mitigate any adverse impacts associated with such works.</i></p>
<p>(h) if stormwater drainage works are proposed—any measures proposed to mitigate any adverse impacts associated with those works,</p>	<p><i>The proposal does not require any stormwater drainage works.</i></p>

<p>(i) any visual impact of the proposed development, particularly when viewed from the Main Range,</p>	<p><i>The only visible components of the proposal will be the snowmaking fan guns, which include green covers in summer.</i></p> <p><i>These features are common throughout the resort and part of the character of ski slopes.</i></p> <p><i>The proposed components will not be visible from the main range due to their location.</i></p>
<p>(j) the extent to which the development may be connected with a significant increase in activities, outside of the ski season, in the alpine resort in which the development is proposed to be carried out,</p>	<p><i>The proposed snowmaking infrastructure is only utilised for the ski season and will therefore not increase activities outside of the ski season.</i></p>
<p>(k) if the development involves the installation of ski lifting facilities and a development control plan does not apply to the alpine resort:</p> <p>(i) the capacity of existing infrastructure facilities, and</p> <p>(ii) any adverse impact of the development on access to, from or in the alpine resort,</p>	<p><i>The development does not involve the installation of a ski lift.</i></p>
<p>(l) if the development is proposed to be carried out in Perisher Range Alpine Resort:</p> <p>(i) the document entitled Perisher Range Resorts Master Plan, as current at the commencement of this Policy, that is deposited in the head office of the Department, and</p> <p>(ii) the document entitled Perisher Blue Ski Resort Ski Slope Master Plan, as current at the commencement of this Policy, that is deposited in the head office of the Department,</p>	<p><i>The proposed installation of upgraded snowmaking infrastructure is generally consistent with the PSSMP.</i></p>
<p>(m) if the development is proposed to be carried out on land in a riparian corridor:</p> <p>(i) the long term management goals for riparian land, and</p> <p>(ii) whether measures should be adopted in the carrying out of the development to assist in meeting those goals.</p>	<p><i>The proposed installation of upgraded snowmaking infrastructure is located over 80m to the closest unnamed watercourse, an upper tributary to Perisher Creek and therefore is not located within a riparian corridor as shown in figure 13 below.</i></p>
<p>(2) The long term management goals for riparian land are as follows:</p>	
<p>(a) to maximise the protection of terrestrial and aquatic habitats of native flora and native fauna and ensure the provision of linkages, where possible, between such habitats on that land.</p>	<p><i>Not applicable</i></p>

<p>(b) to ensure that the integrity of areas of conservation value and terrestrial and aquatic habitats of native flora and native fauna is maintained,</p>	
<p>(c) to minimise soil erosion and enhance the stability of the banks of watercourses where the banks have been degraded, the watercourses have been channelised, pipes have been laid and the like has occurred.</p>	
<p>(3) A reference in this clause to land in a riparian corridor is a reference to land identified as being in such a corridor on a map referred to in clause 5.</p>	



*Figure 13: Location of proposed works in relation to the mapped Riparian Corridors
(source: Dept of Planning & Environment)*

5.1.2 SECTION 4.15(1)(a)(ii) – DRAFT ENVIRONMENTAL PLANNING INSTRUMENTS

There are no draft Environmental Planning Instruments that are applicable to the site or proposed development.

5.1.3 SECTION 4.15(1)(a)(iii) – DEVELOPMENT CONTROL PLANS

There are no Development Control Plans applicable to the Kosciuszko Alpine Resorts under State Environmental Planning Policy (Kosciuszko National Park – Alpine Resorts) 2007.

5.1.4 SECTION 4.15(1)(a)(iiia) – PLANNING AGREEMENTS

There are no Planning Agreements applicable to the Kosciuszko Alpine Resorts under State Environmental Planning Policy (Kosciuszko National Park – Alpine Resorts) 2007.

5.1.5 SECTION 4.15(1)(a)(iv) – REGULATIONS

The development application has been made in accordance with the requirements contained in Clause 50(1A) of the Environmental Planning and Assessment Regulation 2000.

5.1.6 SECTION 4.15(1)(b) – LIKELY IMPACTS

Natural and Built Environment:

Impacts on the natural environment and in particular biodiversity have been assessed as part of the BDAR provided in Appendix C.

This assessment determined that the proposal will not result in severe and irreversible impacts and includes mitigation measures as well as payment of credits to offset the unavoidable impacts to the vegetation and habitat present within the development site.

Along with the payment of offset credits and the mitigation measures outlined in the BDAR and SEMP, the likely impacts on the natural environment have been mitigated.

The impacts on the built environment are expected to be negligible, as the infrastructure is predominantly underground and compliments the existing infrastructure already in place.

Social and Economic impacts in the locality:

The social and economic impacts from the upgraded snowmaking infrastructure is expected to be positive as outlined by the benefits described in Section 3 of the SEE.

5.1.7 SECTION 4.15(1)(c) – SUITABILITY OF THE SITE

The subject site is considered suitable to accommodate the proposed development as the upgraded snowmaking infrastructure is within an area that is used for the purpose of mogul skiing.

5.1.8 SECTION 4.15(1)(d) – SUBMISSIONS

Not applicable.

5.1.9 SECTION 4.15(1)(e) – THE PUBLIC INTEREST

The above assessment has demonstrated that the proposal satisfies the objectives and relevant clauses prescribed under State Environmental Planning Policy (Kosciuszko National Park – Alpine Resorts) 2007 and is therefore considered to be within the public interest.

5.2 BIODIVERSITY CONSERVATION ACT, 2016

The subject site is wholly located within an area currently mapped as comprising high biodiversity value and therefore the BOS is triggered under the BC Act, 2016.

Accordingly, a BDAR has been prepared by Ryan Smithers, Senior Ecologist with Eco Logical Australia and an Accredited Person.

The BDAR outlines the measures taken to avoid, minimise and mitigate impacts to the vegetation and habitats present within the development site during the design, construction and operation of the development. The residual unavoidable impacts of the proposed development were calculated in accordance with the BAM by utilising the BAMC. The BAMC calculated that a total of three (3) ecosystem credits and seven (7) species credits are required to offset the unavoidable impacts to the vegetation and habitat present within the development site.

The payment for these credits to the BCF is the only offset obligation available to the Applicant, given that the retiring of credits is not available with no ability to create offset sites under a Biodiversity Stewardship Agreement within a National Park.

As a result of payment to the BCF for these offset credits, the physical implementation of offsets within the resort is not required. Furthermore, payment of these offset credits is an alternative to the retirement of biodiversity credits in accordance with Division 6 of the BC Act, 2016.

The BDAR fulfils the obligations under the BC Act, 2016 and is provided in Appendix C.

5.3 ENVIRONMENT PROTECTION AND BIODIVERSITY ACT, 1999 (COMMONWEALTH)

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act, 1999) provides for the protection of the environment, especially matters of national environmental significance (NES). Under the EPBC Act, a person must not take an action that has, will have, or is likely to have a significant impact on any of the matters of NES without approval from the Australian Government Environment Minister or the Minister's delegate.

A referral must be made for actions that are likely to have a significant impact on the following matters protected by Part 3 of the EPBC Act:

- World Heritage properties (sections 12 and 15A)
- National Heritage places (sections 15B and 15C)
- Wetlands of international importance (sections 16 and 17B)
- Listed threatened species and communities (sections 18 and 18A)
- Listed migratory species (sections 20 and 20A)
- Protection of the environment from nuclear actions (sections 21 and 22A)
- Commonwealth marine environment (sections 23 and 24A)
- Great Barrier Reef Marine Park (sections 24B and 24C)
- The environment, if the action involves Commonwealth land (sections 26 and 27A), including:
 - actions that are likely to have a significant impact on the environment of Commonwealth land (even if taken outside Commonwealth land);
 - actions taken on Commonwealth land that may have a significant impact on the environment generally;
- The environment, if the action is taken by the Commonwealth (section 28)
- Commonwealth Heritage places outside the Australian jurisdiction (sections 27B and 27C)

A search of the matters of national environmental significance database for Smiggin Holes was undertaken and identified that two of the above matters are relevant to the proposed development as addressed below.

5.3.1 National Heritage Listing

Under the EPBC Act, 1999, the 'Australian Alps National Parks and Reserves – Kosciuszko National Park' was included on the National Heritage List on the 7 November 2008. The Alps were listed for their outstanding natural and cultural heritage significance to the nation.

Under the EPBC Act, a referral must be made for actions that are likely to have a significant impact on a National Heritage Place, such as the Australian Alps.

To determine whether an action is likely to have a significant impact, the significant impact criteria provided in the Commonwealth Department of Environment and Heritage 'EPBC Act Policy Statement 1.1: Significant Impact Guidelines for Matters of National Environmental Significance, May 2006' applies.

The Guidelines state that an action is likely to have a significant impact on the National Heritage values of a National Heritage place if there is a real chance or possibility that it will cause:

- one or more of the National Heritage values to be lost;
- one or more of the National Heritage values to be degraded or damaged; or
- one or more of the National Heritage values to be notably altered, modified, obscured or diminished.

An assessment of impact against the National Heritage List Criteria and the National Heritage values of the Australian Alps has been undertaken and provided in the following table below:

National Heritage Assessment Table

Criterion	Impact on Values
(a) the place has outstanding heritage value to the nation because of the place's importance in the course, or pattern, of Australia's natural or cultural history	<p><i>The Australian Alps National Parks is listed under this criterion for its glacial and periglacial features; fossils; karst areas; biological heritage; moth feasting; transhumant grazing; scientific research; water harvesting; and recreation.</i></p> <p><i>The proposed development within the Perisher Ski Resort would not conflict with any of the above values of the AANP.</i></p>
(b) the place has outstanding heritage value to the nation because of the place's possession of uncommon, rare or endangered aspects of Australia's natural or cultural history	<p><i>The Australian Alps is listed under this criterion for its landscape and topography; glacial and periglacial features; fossils; alpine and sub-alpine systems; and eucalypt flora communities.</i></p> <p><i>The proposed development would generate minimal impacts on the overall landscape of the Australian Alps and would not conflict with any of the above heritage values.</i></p>

<p>(c) the place has outstanding heritage value to the nation because of the place's potential to yield information that will contribute to an understanding of Australia's natural or cultural history</p>	<p><i>Not Applicable.</i></p>
<p>(d) the place has outstanding heritage value to the nation because of the place's importance in demonstrating the principal characteristics of: (i) a class of Australia's natural or cultural places, or (ii) a class of Australia's natural or cultural environments</p>	<p><i>The Australian Alps are listed for the North-East Kosciuszko Landscape values.</i></p> <p><i>The subject site is located within the Perisher Range Resorts and are not located within the North-Eastern area of Kosciuszko National Park.</i></p>
<p>(e) the place has outstanding heritage value to the nation because of the place's importance in exhibiting particular aesthetic characteristics valued by a community or cultural group</p>	<p><i>The Australian Alps are listed under this criterion for their powerful, spectacular and distinctive landscape that is highly valued by the community.</i></p> <p><i>These aesthetic characteristics include the KNP main range for its mountain vistas, panoramas, snow covered crests, slopes and valleys, alpine streams and rivers and lakes.</i></p> <p><i>The proposed development would not impact on any of these heritage values.</i></p>
<p>(f) the place has outstanding heritage value to the nation because of the place's importance in demonstrating a high degree of creative or technical achievement at a particular period</p>	<p><i>Not Applicable.</i></p>
<p>(g) the place has outstanding heritage value to the nation because of the place's strong or special association with a particular community or cultural group for social, cultural or spiritual reasons</p>	<p><i>The Australian Alps have a special association with the Australian community because of their unique landscapes, the possibility of experiencing remoteness and as the only opportunity for broad-scale snow recreation in Australia. The AANP is widely recognised by Australians as the 'high country' and many community groups have a special association with the AANP for social and cultural reasons.</i></p> <p><i>The proposed development would not impact on the above values.</i></p>
<p>(h) the place has outstanding heritage value to the nation because of the place's special association with the life or works of a person, or group of persons; of importance in Australia's natural or cultural history</p>	<p><i>The place is listed under this criterion for its association with the life or works of prominent people such as Baron Ferdinand Von Mueller, Eugen Von Guerard, writers 'Banjo' Patterson, Elyne Mitchell and David Campbell.</i></p> <p><i>The proposed development would not have any impact on the life or works of people with importance to the AANP.</i></p>

(i) the place has outstanding heritage value to the nation because of the place's importance as part of Indigenous tradition.	<i>Not Applicable.</i>
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The above assessment has concluded that the proposed development will not have a significant impact on the values of the Australian Alps National Park and therefore referral and approval under the EPBC, Act 1999 is not required.

5.3.2 Listed threatened species and communities

An assessment of the impact of the proposed development in regards to the EPBC Act, 1999 Administrative Guidelines on Significance as set out in the 'Significant Impact Criteria' has been undertaken and provided in the BDAR provided in Appendix C.

The assessment has concluded that the proposed development is unlikely to have a significant impact on matters of National Environmental Significance or Commonwealth land, following consideration of the administrative guidelines for determining significance under the EPBC Act, 1999 and hence a referral to the Commonwealth Minister is not required.

6. CONCLUSION

The proposed upgraded snowmaking infrastructure will provide additional and improved snowmaking coverage to the Toppa's Dream Moguls Course, an FIS standard moguls course located adjacent to the Showboat ski run and Ridge Chairlift, within the Blue Cow ski area of the resort.

Improved snowmaking infrastructure that includes replacing manual hydrants is required to provide more reliable snow cover in marginal conditions, to allow for the moguls course to be able to be used earlier and longer into the season. The installation of automated hydrants will also improve operational safety for the snowmakers and remove above ground hoses which are operational hazards.

To minimise impacts on the environment, the new pipeline upgrade works have been located within partially disturbed areas with the use of a lateral proposed to further reduce impacts.

Where impacts on native vegetation are unavoidable, payment of offset credits will be made to the BCF.

Any associated impacts with the installation of the snowmaking infrastructure will be further minimised through the application of the measures identified in the Site Environmental Management Plan.

To ensure that all the environmental and associated legislation is complied with and fulfilled, the proposed development has been considered in regard to Section 4.15 of the Environmental Planning and Assessment Act, 1979, Biodiversity Conservation Act, 2016, Environment Protection and Biodiversity Conservation Act, 1999 and State Environmental Planning Policy (Kosciuszko National Park – Alpine Resorts) 2007.

The proposal has been found to be consistent with the above legislation and relevant Environmental Planning Instrument, as detailed in this SEE.

On balance, the proposed development will generate positive social and economic impacts by providing improved snowmaking coverage for an FIS standard moguls course whilst minimising impacts on the natural and built environment.