



## Referral of proposed action

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### Proposed action title:

Falls Creek Altitude Training Centre, Falls Creek, Victoria

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## 1 Summary of proposed action

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### 1.1 Short description

The proposed action is to construct an Altitude Training Centre consisting of a multi-use sporting oval and mixed use building at the Nordic Bowl within the Falls Creek Alpine Resort, Victoria. Ancillary works include car parking, vehicle access, widening a section of the Aqueduct Trail, underground piping and roadworks.

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### 1.2 Latitude and longitude

The location of the proposed action is shown in Attachment 1. The project area is less than 5 hectares, therefore the location is provided below as a single pair of latitude and longitude coordinates. A GIS file accompanies this referral as Attachment 2, in accordance with DoEE's GIS data supply guidelines.

location point	Latitude			Longitude		
	degrees	minutes	seconds	degrees	minutes	seconds
Nordic Bowl	36°	52'	14"S	147°	17'	16"E

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### 1.3 Locality and property description

The proposed action is located entirely within the Falls Creek Alpine Resort in north-east Victoria, 130 kilometres south-east of Albury-Wodonga. The Falls Creek Alpine Resort is Crown land reserved for the purpose of alpine recreation in the Victorian Alps bioregion. The resort is within the North East Catchment Management Authority's jurisdiction and the Kiewa River basin. The Altitude Training Centre will be constructed at the Nordic Bowl and land adjacent to the Bogong High Plains Road and Aqueduct (also known as the Frying Pan Raceline) (Attachment 1).

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### 1.4 Size of the development footprint or work area (hectares)

The total construction footprint for the proposed action will be 1.32 hectares.

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### 1.5 Street address of the site

Nordic Bowl, Bogong High Plains Road, Falls Creek, Victoria

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1.6 **Lot description**

The Altitude Training Centre is proposed to be located at the Nordic Bowl, Crown land between the Falls Creek Village and Rocky Valley Dam, adjacent to the Bogong High Plains Road. Falls Creek Resort Management (FCRM) is the public land manager of this Crown land. The construction footprint extends across three land parcels:

Allotment 2011, SPI – 2011\PP2486, Parish of Darbalang

Allotment 2015, SPI – 2015\PP2486, Parish of Darbalang

Allotment 2013, SPI – 2013\PP2486, Parish of Darbalang

1.7 **Local Government Area and Council contact (if known)**

Land use and development in the alpine resort is controlled by the Alpine Resorts Planning Scheme administered by the Victorian Department of Environment, Land, Water & Planning (DELWP) and Minister for Planning.

*Please contact:*

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1.8 **Time frame**

The project will be constructed over two separate summer periods starting from October 2017.

1.9	<b>Alternatives to proposed action</b>		No
		<b>X</b>	Yes, please also complete section 2.2
1.10	<b>Alternative time frames, locations or activities</b>	<b>X</b>	No
			Yes, you must also complete Section 2.3. For each alternative, location, time frame, or activity identified, you must also complete details in Sections 1.2-1.9, 2.4-2.7 and 3 and 5 (where relevant).
1.11	<b>Commonwealth, State or Territory assessment</b>		No
		<b>X</b>	Yes, please also complete section 2.5
1.12	<b>Component of larger action</b>	<b>X</b>	No
			Yes, please also complete section 2.7
1.13	<b>Related actions/proposals</b>	<b>X</b>	No
			Yes, provide details:
1.14	<b>Australian Government funding</b>	<b>X</b>	No
			Yes, please also complete section 2.8
1.15	Great Barrier Reef Marine Park	<b>X</b>	No
			Yes, please also complete section 3.1 (h), 3.2 (e)

## 2 Detailed description of proposed action

### 2.1 Description of proposed action

Falls Creek Resort Management (FCRM) has completed concept designs to construct an Altitude Training Centre at the Nordic Bowl, Falls Creek, Victoria. There are two main features for the Centre – a sports training oval and mixed use building. Car parking areas, vehicle access, widening of the Aqueduct Trail, and widening of Bogong High Plains Road are also proposed to provide safe access to the Centre.

The oval is proposed with dimensions of 101 x 78 metres, scaled to accommodate a standard round football pitch. This oval has been designed to provide for a range of field based sporting activities and training, but has not been designed to accommodate competition matches of any sport. No formal spectator facilities are proposed. The focus is primarily on providing a flat surface for altitude training. The oval will be constructed with a synthetic playing surface.

The mixed use building has been designed over two levels and will contain public facilities, a retail outlet and café. The upper level of the mixed use building will contain a café and associated seating, kitchen, storage, a cross country ski hire outlet, office and first aid space, public toilets and viewing decks. The lower level will contain sports change room facilities, toilets, showers, store rooms and a ski wax room (associated with the cross country ski hire outlet). The mixed use building has been carefully designed with emphasis on achieving a contemporary architectural aesthetic appropriate to a public structure in a sensitive sub-alpine environment. Importantly, the building will replace existing degraded community facilities which support cross country skiing during winter.

Access to the Centre will be by car or bus along Bogong High Plains Road or by ski, foot or bicycle along existing trails that lead to Nordic Bowl, including the Aqueduct Trail. Car parking will be established north of the Centre, adjacent to Bogong High Plains Road. The car park allows for 13 parking spaces and is designed for the safe movement of buses. It is anticipated that most users and visitors to the Centre will attend by shuttle bus or other means. The Aqueduct Trail (to the north of Nordic Bowl, Attachment 1) is proposed to be widened to provide safer skier and snow groomer access in winter and the adjacent section of Aqueduct is proposed to be piped (Plate 1). Piping of the Aqueduct will allow for necessary track widening for improved access.

The Bogong High Plains Road is proposed to be widened to safely cater for bus movements. The proposed widened road will have a width of 8 metres including a 0.5 metre shoulder as well as improved drainage and extended batters. This design is intended to cater for 23 seater minibuses and resort snow clearing vehicles. This road will be closed to the general public during winter and only used by shuttle buses. The road will be open to the public outside the winter season (as per current operations) and road widening will improve general road safety. VicRoads has previously identified the Bogong High Plains Road as requiring widening due to safety concerns. A design report for the project completed by GHD (2016) also notes there has been one serious road accident recorded in the past five years. This accident occurred as two buses attempted to pass each other on the narrow road, resulting in one bus rolling down the hill injuring 10 passengers. Road widening will also reduce rock-fall hazards caused by current inadequate batters.

It is proposed to open the Bogong High Plains Road during winter which will remove the current principle winter ski trail access to the Nordic Bowl from Windy Corner Carpark. This will provide benefits to the users of these trails by providing a dedicated trail head and safer trail access. Use of Bogong High Plains Road as a ski trail has a number of shortcomings primarily due to problematic snow retention. As indicated above, this project includes a proposal to widen the Aqueduct Trail from Windy Corner to the Nordic Bowl in order to replace Bogong High Plains Road as a ski trail and to provide more suitable cross country skier access.

The widening of Aqueduct Trail provides for:

- Safe grooming of the trail with the FCRM's high capacity grooming equipment. This is not currently possible due to the narrow nature of the trail. Use of this groomer will greatly increase the frequency and quality of grooming on this link.
- Flat, wide access trail to assist beginner skiers access the Centre directly from the Windy Corner carpark area.
- Initial staged implementation of the integrated trail widening program that aims to improve trail quality and consistency through to the Falls Creek Village, in accordance with the Falls Creek Masterplan.

In summary the proposed action includes the following components:

- Construction of a sports oval with a synthetic surface at the existing Nordic Bowl.
- Construction of a mixed use building adjacent to the proposed sports oval with 13 car spaces.
- Upgrade of the Bogong High Plains Road from Windy Corner to the Nordic Bowl (proposed oval location).
- Widening of the existing Aqueduct Trail and piping of the adjacent aqueduct to provide improved skier access from Windy Corner to the Nordic Bowl (Plate 1).



**Plate 1: Aqueduct Trail adjacent to the Aqueduct (Frying Pan Raceline), looking north back towards the Falls Creek Village. The raceline was built in the early 1960's.**

## **2.2 Feasible alternatives to taking the proposed action**

Maintaining the success of Falls Creek Alpine Resort's recreation and tourism enterprises requires constant reinvention, investment and long term strategic planning. Falls Creek Resort Management collaborates with other alpine resorts and the Victorian State Government to develop and deliver state-wide alpine resorts strategic planning. The Alpine Resorts Strategic Plan 2012 (Alpine Resorts Coordinating Council 2012) sets the directions for the resorts and shows State Government support for their development. The proposed Altitude Training Centre meets the strategic objectives listed in the Alpine Resorts Strategic Plan, specifically responding to the drive for 'all seasons activation'. Falls Creek Resort Management in partnership with the community, commercial stakeholders, Victorian Government and other alpine resorts, has also successfully established a long term policy and planning framework based on consultation and market research. The Falls Creek Village Masterplan 2016 (Falls Creek RMB 2014) is the FCRM's central forward planning resource. It sets out the Falls Creek community's vision as 'big ideas' articulated across distinct precincts, including the Nordic Bowl.

The proposed Altitude Training Centre is a foundational component of the Nordic Bowl Precinct. A key objective of the Falls Creek Village Masterplan for the Nordic Bowl is to increase facilities and services during the green (summer) season and to expand opportunities for cross country skiing, such as securing international recognition for the Falls Creek Kangaroo Hoppet cross country ski event.

Altitude training has been occurring at Falls Creek on an informal basis for many years, and the resort has received many requests from athletes and sporting organisations seeking to train in the area (Biruu 2015). While some altitude training activity is possible, the lack of a dedicated sports oval has restricted training options. Often athletes have been forced to train overseas at considerable expense.

A business case was developed by Biruu (2015) on behalf of FCRM to investigate the costs, benefits and risk of a project to create a field at Falls Creek village by levelling and expanding the existing Nordic Bowl area to create a surface suitable for summer sports training and improved winter snow use. Three options were assessed in the analysis:

- Do nothing.
- A smaller oval field (Design Option A approx. 110 x 85 metres)
- A full game-size AFL oval field (Design Option B approx. 160 x 130 metres)

The business case described Option A (the small oval option) as the preferred option based on the following reasons:

- It has significantly less environmental impact.
- It is of sufficient size for training (Australian Football League elite level games are not anticipated or required).
- Benefits are the same for Option A and B.
- Do nothing option does not help to achieve the vision and objectives of the Falls Creek Village Masterplan or the Alpine Resorts Strategic Plan (Alpine Resorts Coordinating Council 2012).
- It is substantially cheaper.

The FCRM has completed a thorough business case for development of altitude training facilities to investigate if the proposal has a reasonable likelihood of being an economically successful enterprise. This investigation included consultation with potential users to identify their needs and the likely scale of use and demand. Two alternative locations were investigated for the development of the Altitude Training Centre. The alternative locations were:

- Lower Slalom carpark
- Village Bowl

Nordic Bowl was chosen over these other two locations as the preferred site for the proposed Centre in accordance with the Falls Creek Master Plan. The site evaluation process considered factors such as environmental impact, cost, and suitability/context for the proposed purpose.

Nordic Bowl was chosen for the following reasons:

- Relatively flat area
- Low impact on landscape values
- Less impact on native vegetation – largely exotic grasses though some native vegetation removal will be required
- Integrates with the landscape
- Proximity to road transport
- Suitable location for the use
- Ancillary benefit to existing cross country skiing
- The existing run-down facility at Windy Corner will be relocated to the Nordic Bowl
- Proximity to the Cross Country Skiing trail head
- Enable accreditation of the Kangaroo Hoppet as an International event with the International Ski Federation (FIS)

- Reasonable development costs.

The location of the proposed Centre is proximal to the Aqueduct Trail and other trails that are used year round for walking, mountain biking and cross country skiing. This ensures that the Centre is well integrated with the resort's extended trail network; a desirable characteristic for an altitude training facility.

### **2.3 Alternative locations, time frames or activities that form part of the referred action**

No proposed alternative locations are applicable as the Nordic Bowl site has been deemed the most appropriate location for this project based on the reasons described above. Timeframes for construction may be subject to securing project funding and these timelines are unlikely to change the nature or intent of the proposed action.

### **2.4 Context, including any relevant planning framework and state/local government requirements**

The proposal is controlled by a number of local, State and Commonwealth legislative requirements related to planning, biodiversity impact and waterways. These are summarised below.

#### *Planning and Environment Act 1987 (VIC)*

The following Alpine Resorts Planning Scheme controls have been identified and a planning permit application for land use and native vegetation removal was lodged with DELWP in February 2016:

- Comprehensive Development Zone
- Design and Development Overlay
- Erosion Management Overlay
- Bushfire Management Overlay
- Particular Provisions – Clause 52.17 – Native Vegetation.

Other relevant regulations to be addressed or approvals to be obtained for this project include:

- *Water Act 1989 (VIC)*. A Works on waterway permit is required from North East Catchment Management Authority.
- *Flora and Fauna Guarantee Act 1988 (VIC)*. A Protected Flora permit is required from DELWP for the removal of protected flora on public land (the resort is on Crown land).
- *Catchment and Land Protection Act 1994 (VIC)* for management and control of pest plants and animals.
- *Environment Protection Act 1970* State Environmental Protection Policy – Waters of Victoria for maintaining water quality and minimising run-off.
- Consent or approval from VicRoads to widen Bogong High Plains Road
- Consent or approval from AGL to pipe the section of aqueduct adjacent to the Aqueduct trail.

### **2.5 Environmental impact assessments under Commonwealth, State or Territory legislation**

Not applicable.

### **2.6 Public consultation (including with Indigenous stakeholders)**

Extensive Falls Creek community consultation was undertaken during the Masterplan development phase to determine the activation requirements for the Nordic Bowl area of the resort. This identified an Altitude Training Centre as a key component of ongoing resort development activities.

Following this, the concept development process focussed on engagement with the two principal user groups to determine key facility requirements: Cross Country Skiing (via the Kangaroo Hoppet Organising Committee) and the Australian Football League (AFL) via the Collingwood Football Club.

A Cultural Heritage Due Diligence Assessment was undertaken for the proposed action, which concluded that a Cultural Heritage Management Plan was not required as no areas of cultural heritage sensitivity will be impacted (Biosis 2016b). Consultation with indigenous stakeholders has therefore not been

undertaken for the proposed action, however the project area occurs within a larger area that was previously assessed under a Cultural Heritage Management Plan prepared by Biosis in 2014 for a proposed mountain bike trail development (Biosis 2014). This Cultural Heritage Management Plan required consultation with members of the Dhudhoroa and Yaitmathang Aboriginal communities and was approved by the Office of Aboriginal Affairs Victoria.

**2.7 A staged development or component of a larger action**

Not applicable

**2.8 Related actions**

Not applicable

## 3 Description of environment & likely impacts

### 3.1 Matters of national environmental significance

#### 3.1 (a) World Heritage Properties

##### Description

Not Applicable.

##### Nature and extent of likely impact

Not Applicable.

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#### 3.1 (b) National Heritage Places

##### Description

The Australian Alps National Parks and Reserves is a National Heritage Place. The Alpine National Park directly adjoins the Falls Creek Alpine Resort.

##### Nature and extent of likely impact

The proposed action will not impact on the National Heritage values of the Alpine National Park due to the location of the works within the Falls Creek Alpine Resort and the generally disturbed nature of the project area.

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#### 3.1 (c) Wetlands of International Importance (declared Ramsar wetlands)

##### Description

The project area is identified by the EPBC Protected Matters Search Tool as being within the catchment of seven Ramsar sites: Banrock Station Wetland Complex, Barmah Forest, Gunbower Forest, Hattah-Kulkyne Lakes, NSW Central Murray State Forests, Riverland and the Coorong and Lakes Alexandrina and Albert wetland.

##### Nature and extent of likely impact

The project area ultimately drains to a number of Ramsar sites along the Murray River, via the Kiewa River system, however the closest of the downstream Ramsar sites (Gunbower Forest) is located over 400 kilometres downstream of Falls Creek and the potential for the development to have a significant impact on it or any other Ramsar site is considered to be negligible.

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### 3.1 (d) Listed threatened species and ecological communities

#### Description

The PMST predicts the occurrence of two threatened ecological communities and 20 threatened species. An additional species (Broad-toothed Rat *Mastacomys fuscus mordicus*) was recently listed under the Act and we have also considered this as a matter of national environmental significance. The relevance of these matters of national environmental significance to the proposed action is described below. A map showing the location of the project area in relation to known listed threatened species and ecological communities is provided in Attachment 3.

#### Threatened ecological communities

*White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland* is predicted to occur in the project area. This ecological community occurs along the western slopes and tablelands of the Great Dividing Range in areas where rainfall is between 400 and 1200 millimetres per annum, on moderate to highly fertile soils at elevations of 170 to 1200 metres. This community is a lowland ecosystem and does not occur at Falls Creek in the sub-alpine project area.

*Alpine Sphagnum Bogs and Associated Fens* community was recorded in the project area and is represented by Sub-alpine Wet Heathland (EVC 210) and Sub-alpine Wet Sedgeland (EVC 917). The sub-alpine form of sphagnum bogs are typically a closed heathland/sedgeland to 1 metre tall growing along low to moderate gradient drainage lines on waterlogged soils. The Sedgeland EVC is considered to be a depauperate sub-alpine example of the community and generally supports a low cover of Peat Moss.

Character species recorded in this ecological community include Tall Sedge *Carex appressa*, Swamp Heath *Epacris paludosa*, Alpine Bottlebrush *Callistemon pityoides*, Alpine Baeckea *Baeckea gunniana*, Silver Snow-daisy *Celmisia tomentella*, Alpine Water-fern *Blechnum penna-marina* subsp. *alpina*, Spreading Rope-rush *Empodisma minus*, Willow-herbs *Epilobium* spp., Shining Pennywort *Hydrocotyle sibthorpioides*, Peat Moss *Sphagnum* sp., Candle Heath *Richea continentis*, Carpet Sedge *Carex jackiana* and Bog Snow-grass *Poa costiniana*. Commonly encountered weeds in these alpine bogs include Soft Rush *Juncus effusus*, Red Fescue *Festuca rubra* and Brown-top Bent *Agrostis capillaris*.

Sections of the aqueduct (Plate 1), which is proposed to be upgraded, have been colonised by Peat Moss *Sphagnum cristatum*. These areas are not considered to represent the EPBC Act listed ecological community as they are not a naturally-occurring feature of the landscape and are an artefact of the permanently wet environment created by the human-made Aqueduct.

Refer to photos of these communities in the Biosis (2016a) flora and fauna assessment (Attachment 4).

#### Threatened species

Table 1 provides a summary of the 26 threatened species predicted to occur in the project area and an assessment of the likelihood of occurrence based on a flora and fauna assessment undertaken by Biosis (2016a; Attachment 4). Of the predicted species only the Alpine Stonefly *Thaumatoperla alpina* and Broad-toothed Rat warrant further consideration for the likelihood of significant impacts.

**Table 1: Summary of threatened species recorded or predicted to occur within 5 km of the project area**

Scientific name	Common name	EPBC	Most recent record	Habitat description	Likely occurrence in Project Area	Rationale for likelihood ranking
<i>Argyrotegium nitidulum</i>	Shining Cudweed	VU	PMST	Restricted to damp, open grassland communities between Mt Cope and Mt Nelse.	Low	Previously recorded at Falls Creek and restricted to high elevation grasslands and open heathlands, these habitats do not occur in the current project area.
<i>Euphrasia crassiuscula</i> subsp. <i>glandulifera</i>	Thick Eyebright	VU	1987	Alpine grasslands, heathlands and herbfields.	Low	All records for this species are outside the Falls Creek Resort and no <i>Euphrasia</i> species were recorded during the flora survey.
<i>Euphrasia eichleri</i>	Bogong Eyebright	VU	1998	Low open heath, grassland, and Sphagnum bogs in alpine and higher subalpine tracts.	Low	All records for this species are outside the Falls Creek Resort and no <i>Euphrasia</i> species were recorded during the flora survey.
<i>Glycine latrobeana</i>	Clover Glycine	VU	-	Grasslands and grassy woodlands, particularly those dominated by <i>Themeda triandra</i>	Low	No suitable grassy woodland habitat present and unlikely to occur in sub-alpine areas at Falls Creek.
<i>Pterostylis oreophila</i>	Blue-tongue Greenhood	CR	PMST	Damp, shady habitat along watercourses.	Low	All records for this species are outside the Falls Creek Resort and no <i>Pterostylis</i> species recorded during current survey.
<i>Thesium australe</i>	Austral Toad-flax	VU	PMST	Most commonly in damp grassland and woodland, including subalpine grassy heathlands.	Low	No suitable habitat present.
<i>Colobanthus curtisiae</i>	Curtis' Colobanth	VU	PMST	Grassland and grassy woodlands commonly found on gentle slopes with elevations between 160 m in lowland areas and 1300 m in alpine areas.	Low	Unlikely to occur in the study area as habitat is unsuitable and there are no records of the species in the Falls Creek area.

Scientific name	Common name	EPBC	Most recent record	Habitat description	Likely occurrence in Project Area	Rationale for likelihood ranking
<i>Burramys parvus</i>	Mountain Pygmy-possum	EN	PMST	Restricted to alpine and subalpine regions in Victoria above elevations of 1430 m, with three known populations located between Mount Hotham and Mount Bogong. Dependent on the subalpine heath communities of periglacial rock screes and boulder fields where an important food source, the Plum-pine <i>Podocarpus lawrencei</i> is found.	Low	No core habitat present within or adjacent to the project area.
<i>Dasyurus maculatus maculatus</i>	Spot-tailed Quoll	EN	PMST	Spot-tailed Quolls formerly inhabited a wide variety of natural environments in Victoria from tall forests to dry, open habitats. The species is now extremely rare in Victoria outside of the eastern highlands and is probably functionally extinct in the great majority of the State.	Low	No records from local area; most records within broader region are from lower elevations.
<i>Petrogale penicillata</i>	Brush-tailed Rock-wallaby	VU	PMST	Currently known only from the tributaries of the Snowy River in East Gippsland and the Grampians in the west. Found in a variety of habitat types, including rainforest gullies, wet and dry sclerophyll forest, and open woodlands, preferring rock faces with large tumbled boulders, ledges and caves and areas that are relatively open and receiving direct sunlight for much of the day.	Negligible	No suitable habitat present, outside species range.
<i>Potorous longipes</i>	Long-footed Potoroo	EN	PMST	Occurring in the forests of East Gippsland, it primarily inhabits areas where densely vegetated gullies provide shelter and more open drier forests can be exploited for foraging. Also thought to occur in the foothills of the Eastern Highlands.	Negligible	No suitable habitat, outside species range.

Scientific name	Common name	EPBC	Most recent record	Habitat description	Likely occurrence in Project Area	Rationale for likelihood ranking
<i>Pseudomys fumeus</i>	Smoky Mouse	EN	PMST	Disjunct Victorian distribution with populations in the Snowfields, Eastern Highlands, East Gippsland, Otway Range and the Grampians. Recorded from a variety of vegetation communities ranging from coastal heath and heathy woodland in East Gippsland to subalpine heath and dry forest. The understorey vegetation is typically dominated by heathy shrubs, with seeds and berries providing an important food resource.	Low	No records within local area and majority of records from broader region are from lower elevations.
<i>Mastacomys fuscus mordicus</i>	Broad-toothed Rat	VU	New listing	Occupies structurally dense vegetation communities in high rainfall areas in south-eastern Australia. Typically inhabits closed vegetation communities such as heathland, grassland and sedgeland and is a specialist feeder on the stems of plants from the families Poaceae and Cyperaceae.	Recorded	Native vegetation within the study area is suitable habitat for this species. Indirect evidence of the species was found in the form of scats.
<i>Petauroides volans</i>	Greater Glider	VU	New listing	Largely restricted to eucalypt forests and woodlands.	Low	No suitable forest/woodland habitat or hollow bearing trees present.
<i>Lathamus discolor</i>	Swift Parrot	EN	PMST	Migrates to south-east mainland Australia during the winter months where it prefers dry, open eucalypt forests and woodlands, especially Box Ironbark Forest in north-central Victoria. Has also been recorded in urban parks, gardens, street trees and golf courses with flowering ornamental trees and shrubs.	Negligible	No records within local area, habitat not present.

Scientific name	Common name	EPBC	Most recent record	Habitat description	Likely occurrence in Project Area	Rationale for likelihood ranking
<i>Rostratula australis</i>	Australian Painted Snipe	EN	PMST	Generally found in shallow, terrestrial freshwater wetlands with rank, emergent tussocks of grass, sedges and rushes. Australian Painted Snipe can occur in well vegetated lakes, swamps, inundated pasture, saltmarsh and dams.	Negligible	No records within local area; suitable habitat not present.
<i>Calidris ferruginea</i>	Curlew Sandpiper	CE	PMST	Curlew Sandpipers occur around the coasts and are also widespread inland, though in smaller numbers. Records occur in all states during the non-breeding period, and also during the breeding season when many non-breeding one year old birds remain in Australia.	Negligible	No records within local area; suitable habitat not present.
<i>Numenius madagascariensis</i>	Eastern Curlew	CE		A migratory shorebird arriving back to Australia in August to feed on crabs and molluscs in intertidal mudflats.	Negligible	No records within local area; suitable habitat not present.
<i>Cyclodomorphus praealtus</i>	Alpine She-oak Skink	EN	PMST	Occurs in Sub-alpine Woodland, herbfields, low heathlands and grasslands in the Australian Alps, preferring grassy habitats between 1400m and 2100m without a high degree of Snow Gum canopy cover. Recorded in tussock grasslands and alpine heaths dominated by Horny Snow Grass <i>Poa fawcettiae</i> tussocks at Mt Hotham, but also in disturbed areas (e.g. roadsides) that are dominated by exotic grasses often adjoining relatively intact <i>Poa</i> tussock grasslands.	Low	Species typically occurs in alpine grassland and alpine grassy heathland. The habitat within the project area is not considered to be suitable for this species.

Scientific name	Common name	EPBC	Most recent record	Habitat description	Likely occurrence in Project Area	Rationale for likelihood ranking
<i>Liopholis guthega</i>	Alpine Egernia/Guthega Skink	EN	PMST	Endemic to alpine areas where the species is typically associated with rocky areas in snowgum woodlands, tussock grasslands and alpine heathlands above 1600m in the Bogong High Plains, Victoria, and within the vicinity of Mt Kosciuszko, NSW.	Low	Habitat within the project area not particularly suited to this species as it lacks abundant rocky outcropping.
<i>Litoria raniformis</i>	Growling Grass Frog	VU	PMST	Occupies a variety of permanent and semi-permanent water bodies generally containing abundant submerged and emergent vegetation, within lowland grasslands, woodlands and open forests.	Negligible	No habitat present, outside species known range.
<i>Litoria verreauxii alpina</i>	Alpine Tree Frog	VU	PMST	The Alpine Tree Frog is a sub-species of the broadly distributed Whistling Tree Frog. Formerly, the sub-species occurred throughout the alpine and sub-alpine high-country of NSW and Victoria, where it was known to utilise a large variety of habitats for breeding, including bog pools, wet grassland, fens, streamside pools and artificial dams. The Alpine Tree Frog has undergone a dramatic decline throughout its range and has apparently disappeared from the alpine zone in many areas.	Low	Now thought to be extinct on the Bogong High Plains, including areas near Falls Creek; habitat in Aqueduct rendered unsuitable due to high densities of introduced Trout.
<i>Maccullochella peelii</i>	Murray Cod	VU	PMST	Found within the Murray River catchment usually in sluggish turbid rivers, in deep holes or amongst fallen timber and other debris. Also occurs in upper reaches of rivers where water is clear and there is little fallen timber.	Negligible	No suitable habitat.

Scientific name	Common name	EPBC	Most recent record	Habitat description	Likely occurrence in Project Area	Rationale for likelihood ranking
<i>Macquaria australasica</i>	Macquarie Perch	EN	PMST	A riverine fish preferring deep holes, its natural distribution extends north of the Great Dividing Range in tributaries of the Murray River. Early this century it was introduced to many waters south of the Great Dividing Range but has only been recorded in the Yarra with any regularity since.	Negligible	No suitable habitat.
<i>Galaxias rostratus</i>	Flathead Galaxias	CE	PMST	Lowland river and wetland systems below 150 m elevation.	Negligible	No suitable habitat.
<i>Thaumatoperla alpina</i>	Alpine Stonefly	EN	PMST	Found at elevations >760 m in streams in north-east Victoria above the treeline. Typically found in steep, stony, cool streams, often below a cascade of water underneath cobblestones or detritus.	Medium	Suitable habitat occurs downstream of the project area but no records occur from the current or previous surveys near the project area. McKay <i>et al.</i> (2005) recorded <i>T. alpina</i> within tributaries of Turntable Creek and Rocky Valley Creek.

### **Nature and extent of likely impact**

One listed threatened ecological community and two listed species have been recorded, or have a medium likelihood of occurring in the project area. The proposed action of constructing the Altitude Training Centre has some potential to impact on their habitats. Potential impacts on the one community and two species are discussed below.

#### Alpine Sphagnum Bogs and Associated Fens listed ecological community (endangered)

The project will require the removal of two areas of a modified sub-alpine form of sphagnum bog (Sub-alpine Wet Heathland EVC). The total area of direct impact is estimated at 0.044 hectares (440 m<sup>2</sup>) and will be associated with earthworks to construct the sports oval. A natural drainage line below the Nordic Bowl development site supports another area of bog that may be indirectly impacted by changes to stormwater runoff from the Nordic Bowl site (0.028 hectares, 280 m<sup>2</sup>). The areas of sphagnum bog have been heavily modified through historical construction of the adjacent Aqueduct and ski field development.

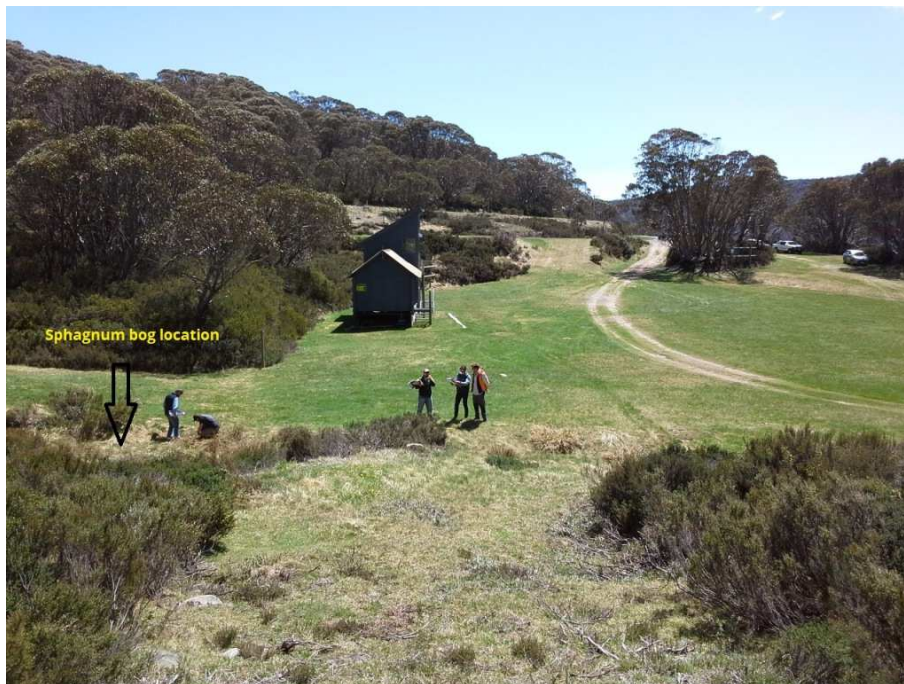
The extent of these bogs in relation to the project area is shown in Attachment 2 and Attachment 4 flora and fauna assessment maps. Photographs below (Plates 2-6) show the disturbed context of the bogs and the approximate extent of the bogs. Sphagnum bog 1 is located at the northern end of the Nordic Bowl area and bog 2 is located at the southern end. The area of Sedgeland where indirect impacts from runoff may occur, as described above, is located to the east of the Nordic Bowl.

A detailed Biodiversity Management Strategy was completed by FCRM in 2011 (Ecology Australia 2011). The field work for that strategy mapped 78.4 hectares of Alpine Sphagnum Bogs and Associated Fens ecological community within the Falls Creek Alpine Resort (Ecology Australia 2011). This total includes three component EVCs; Alpine Valley Peatland, Sub-alpine Wet Heathland and Sub-alpine Wet Sedgeland. The removal of 0.044 hectares for sports oval construction equates to a loss of 0.06% of this community within the Falls Creek Alpine Resort. Recent unpublished work by the Victorian government indicates there is 4358 hectares of alpine bog community in the Victoria Alps bioregion (ARI unpublished 2016). In the context of the community's extent in Victoria, the loss of 0.044 hectares for this project is considered very minor and equates to 0.001%. The mainland extent of this ecological community is estimated to be 8000 hectares (TSSC 2008). On this basis, the loss of 0.044 hectares equates to a 0.0006% loss of the listed ecological community on mainland Australia.



**Plate 2: Disturbed context of sphagnum bog 1 – northern end of Nordic Bowl**





**Plate 3: Disturbed context of sphagnum bog 2 – southern end of Nordic Bowl**



**Plate 4: Approximate extent of sphagnum bog 1 and area of impact, northern end of Nordic Bowl. Sub-alpine Woodland that also provides habitat for Broad-toothed Rat can be seen on the left side of the photograph.**





**Plate 5: Approximate extent of sphagnum bog 2 and area of impact, southern end of Nordic Bowl**



**Plate 6: Sub-alpine Wet Sedgeland downstream of the Nordic Bowl (eastern side)**

Alpine Stonefly *Thaumatoperla alpina* (endangered)

Aquatic surveys have been undertaken for Alpine Stonefly within and in the vicinity of the project area, including downstream waterways in spring 2015 and autumn 2016. The species was not recorded near or within the Rocky Valley Creek sub-catchment (3 survey sites) near the project area. The species was recorded in a different catchment 3-4 kilometres from the site (McKay Creek, 2 survey sites). No other threatened aquatic species (State or Federal) were collected within, or in the vicinity of, the project area. It is considered unlikely that Alpine Stonefly occurs within the waterways directly near the project area due to their disturbed nature. However, a precautionary approach to managing potential impacts on this species is considered important. This will involve managing changes to water quality and flows (stormwater) associated with soil disturbance during construction and increased hard surfaces.

### Broad-toothed Rat *Mastacomys fuscus mordicus* (vulnerable)

There are numerous records of Broad-toothed Rat at Falls Creek and in the area surrounding public land. The species inhabits a range of Alpine EVCs, including Sub-alpine Shrubland, Sub-alpine Woodland (especially where it is coincident with drainage lines) and Sub-alpine Wet Heathland, Sub-alpine Wet Sedgeland. Indirect evidence of the species (scats) was recorded in Sub-alpine Woodland in the project area. No targeted survey for the species was undertaken during the biodiversity assessment. Records of the species in the context of the project area are shown in Attachment 2. As the species is widely distributed around the resort, and occupies a diversity of alpine and sub-alpine vegetation types, it is assumed that all native vegetation within the project area, and more broadly across the resort, is suitable habitat for Broad-toothed Rat.

The project will involve the removal of 0.615 hectares of native vegetation. This is a very small amount of habitat in the context of the extensive (and in many areas higher quality) habitat available in the resort and surrounds. For example, we estimate based on vegetation mapping by Ecology Australia (2011) that the resort supports 1,457 hectares of native vegetation that could provide suitable habitat for the species. No detailed studies of habitat usage have been undertaken at Falls Creek but based on these figures the removal of 0.615 hectares represents a habitat loss of 0.04% in the resort. The resort is embedded in a largely intact alpine and sub-alpine landscape with extensive areas of suitable habitat available in the adjacent Alpine National Park and Bogong High Plains.

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### **3.1 (e) Listed migratory species**

#### **Description**

Eleven migratory species have been recorded or predicted to occur in the project search area as listed in Table 2.

**Table 2: Migratory species recorded or predicted to occur within 5km of the project area**

<b>Scientific name</b>	<b>Common name</b>	<b>Most recent record</b>
<i>Gallinago hardwickii</i>	Latham's Snipe	2011
<i>Rostratula australis</i>	Australian Painted Snipe	-
<i>Ardea modesta</i>	Eastern Great Egret	2011
<i>Merops ornatus</i>	Rainbow Bee-eater	-
<i>Hirundapus caudacutus</i>	White-throated Needletail	-
<i>Apus pacificus</i>	Fork-tailed Swift	-
<i>Rhipidura rufifrons</i>	Rufous Fantail	1965
<i>Myiagra cyanoleuca</i>	Satin Flycatcher	1991
<i>Monarcha melanopsis</i>	Black-faced Monarch	-
<i>Motacilla flava</i>	Yellow Wagtail	-
<i>Bubulcus ibis</i>	Cattle Egret	1982

#### **Nature and extent of likely impact**

While some of these species would be expected to use the project area on occasions, it does not provide important habitat for an ecologically significant proportion of any of these species.

### **3.1 (f) Commonwealth marine area**

#### **Description**

No Commonwealth marine areas have been identified within or in the vicinity of the project area.

#### **Nature and extent of likely impact**

The proposed action will not impact on any Commonwealth marine areas.

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### **3.1 (g) Commonwealth land**

#### **Description**

The proposed action will not impact any Commonwealth land.

#### **Nature and extent of likely impact**

The proposed action will not impact any Commonwealth land.

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### **3.1 (h) The Great Barrier Reef Marine Park**

#### **Description**

The project area is not located near the Great Barrier Reef Marine Park.

#### **Nature and extent of likely impact**

The project area is not located near the Great Barrier Reef Marine Park.

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### **3.1 (i) A water resource, in relation to coal seam gas development or large coal mining development**

#### **Description**

Not applicable to the proposed action.

#### **Nature and extent of likely impact**

Not applicable to the proposed action.

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### 3.2 Nuclear actions, actions taken by the Commonwealth (or Commonwealth agency), actions taken in a Commonwealth marine area, actions taken on Commonwealth land, or actions taken in the Great Barrier Reef Marine Park

3.2 (a)	Is the proposed action a nuclear action?	<b>X</b>	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment

3.2 (b)	Is the proposed action to be taken by the Commonwealth or a Commonwealth agency?	<b>X</b>	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment

3.2 (c)	Is the proposed action to be taken in a Commonwealth marine area?	<b>X</b>	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(f))

3.2 (d)	Is the proposed action to be taken on Commonwealth land?	<b>X</b>	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(g))

3.2 (e)	Is the proposed action to be taken in the Great Barrier Reef Marine Park?	<b>X</b>	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(h))

### 3.3 Description of the project area and affected area for the proposed action

#### 3.3 (a) Flora and fauna

The project area supports a mosaic of native alpine vegetation and disturbed areas dominated by introduced vegetation. This pattern is typical of the developed ski field areas at Falls Creek or areas subject to historical disturbance for the Kiewa Hydroelectricity Scheme and road construction. Vegetation and habitat quality is a function of prevailing environmental factors and ongoing land uses. Vegetation patterns in the project area are typical of the sub-alpine environment at Falls Creek with woodland growing in lower elevation sheltered positions with deeper soils, heathlands on exposed rocky substrates and wetland vegetation in drainage lines subject to permanent waterlogging. These vegetation types are commonly subjected to persistent winter snow cover. Fauna habitats that occur within and adjacent to the project area can be characterised according to vegetation communities and other features such as surface rock density or presence of fallen timber.

A detailed flora and fauna assessment has been prepared for the project and accompanies this referral (Biosis 2016a, Attachment 4). A summary of the key ecological features in the project area is provided below:

- Examples of one significant ecological community, Alpine Sphagnum Bogs and Associated Fens Community.
- Nearby habitat for the nationally threatened aquatic invertebrate, Alpine Stonefly. This species may occur in sedgeland, minor tributaries, created waterways and gullies surrounding, and downstream of, the project area.
- Habitat for the nationally threatened Broad-toothed Rat *Mastacomys fuscus mordicus*.
- Habitat for four State listed threatened fauna species: Alpine Bog Skink *Pseudemoia cryodroma*, Dingo *Canis lupus dingo*, Alpine Water Skink *Eulamprus kosciuskoi* and Alpine Spiny Crayfish *Euastacus crassus*.
- Modelled habitat for 58 rare or threatened species according to DELWP's habitat importance models with most of these species being rare alpine flora (not threatened species).

#### 3.3 (b) Hydrology, including water flows

A water race (the Aqueduct, Plate 1) has been historically constructed (1960's) and runs along the contour above the Nordic Bowl (Attachment 1 and 3). This feature effectively provides a hydrological barrier between gullies upstream and downstream of the project area. The Aqueduct is an engineered channel/pipeline that contains limited aquatic habitat components. Dominant native species include Willow herbs *Epilobium* spp. and Club-sedges *Isolepis* spp. Introduced species dominate areas of disturbed soil along the edge and in the water including Yorkshire Fog *Holcus lanatus*, Browntop Bent, Jointed Rush *Juncus articulatus*, Soft Rush, Greater Bird's-foot Trefoil, White Clover *Trifolium repens* and Sweet Vernal-grass *Anthoxanthum odoratum*. The Aqueduct contains limited value for aquatic fauna due to high numbers of introduced fish (Trout) and does not contain any habitat for threatened species.

A tributary of Rocky Valley Creek also occurs downslope of the project area to the east. The tributary of Rocky Valley Creek below the Nordic Bowl is a fast flowing incised gully with a series of riffles and terraces interspersed with glides, which are fringed by overhanging vegetation. The tributary of Rocky Valley Creek contains a diverse range of high quality aquatic habitat components. The Alpine Stonefly is considered likely to occur within the tributary of Rocky Valley Creek and the creek itself. Habitat is also considered suitable for the Alpine Spiny Crayfish *Euastacus crassus* within the Rocky Valley Creek tributary.

This project proposes earthworks and changes to topography to create a level playing field of 0.62 hectares, within a total construction footprint of 1.32 hectares at the Nordic Bowl site. Works in the balance of the footprint will allow for the construction of the mixed use building and landscaping. The excavation works will fill in an existing drainage line causing permanent modification to the existing site drainage and ephemeral waterway. However, the original conditions of the waterway have already been significantly modified due to the upslope Aqueduct that was constructed in the 1960s. Full details of the existing hydrological setting are provided in the GHD concept design report (GHD 2016). The impact of the existing Aqueduct is to deprive the ephemeral waterway of the majority of its inflows which are

instead diverted to Rocky Valley Dam for hydro-electricity generation. The impact of the proposed oval and associated structures will be to increase water flows to the ephemeral waterway. The ecological impact of this change has been described by Biosis (2016a).

GHD has evaluated the site hydrology and developed a stormwater drainage design that will allow for the safe management of stormwater before it enters downstream waterways (i.e. tributary to Rocky Valley Creek). It is proposed to return all treated stormwater to the existing waterway, via appropriate engineered structures. The stormwater outlet is designed to prevent harm to the bed and banks of the natural waterway (GHD 2016). A Site Environmental Management Plan will be in place to ensure water quality is protected during and post construction (Attachment 5).

### **3.3 (c) Soil and Vegetation characteristics**

The geology of the project area is described as High Plains Gneiss and Tertiary Basalts. Vegetation patterns in the project area are typical of the sub-alpine environment at Falls Creek with woodland growing in lower elevation sheltered positions with deeper soils, heathlands on exposed rocky substrates and wetland vegetation in drainage lines subject to permanent waterlogging. These vegetation types are commonly subjected to persistent winter snow cover.

### **3.3 (d) Outstanding natural features**

None recorded in the project area. The surrounding Alpine National Park includes the Bogong High Plains and several peaks above 1800 metres.

### **3.3 (e) Remnant native vegetation**

The project area is a mix of disturbed areas associated with alpine resort development and historical hydro-electricity scheme construction, and intact sub-alpine native vegetation.

### **3.3 (f) Gradient (or depth range if action is to be taken in a marine area)**

The project will occur in areas of gentle to moderate slopes with most works confined to locations that have been subject to previous cut and fill excavations during the construction of the Rocky Valley dam hydroelectric scheme in the 1950s. The project area elevation averages 1600 metres ASL.

### **3.3 (g) Current state of the environment**

The project area lies within the alpine resort and comprises a mosaic of native vegetation and disturbed areas. Habitats within the alpine resort are mostly contiguous with the adjacent Alpine National Park. Previous disturbances to the project area are mostly concerning engineering works for hydroelectricity infrastructure and water control, ski field development and road making.

### **3.3 (h) Commonwealth Heritage Places or other places recognised as having heritage values**

The Australian Alps National Parks and Reserves is a National Heritage Place. The Alpine National Park directly adjoins the Falls Creek Alpine Resort.

There are no heritage requirements under the *Heritage Act 1995* (Vic), and due to the low risk of encountering historical heritage or archaeological deposits it was concluded during project planning that there was little benefit in undertaking historical heritage investigations.

### **3.3 (i) Indigenous heritage values**

A Cultural Heritage Due Diligence Assessment completed for the proposed action in 2015 found that the Nordic Bowl section of the project area is largely disturbed, with some small undisturbed pockets of remnant native vegetation (Biosis 2016b). These pockets contain very little archaeological potential due to the sloping landform they are located on. The project area was previously surveyed as part of a larger Cultural Heritage Management Plan for the Stage 4 Mountain Bike Trail Project, which determined that the project area contained little archaeological potential (Biosis 2014). There is no requirement for a mandatory Cultural Heritage Management Plan under the specifications of the *Aboriginal Heritage*



*Regulations 2007* (Vic). Due to the absence of archaeological potential and areas of documented disturbance, there is no recommendation to undertake a voluntary Cultural Heritage Management Plan.

**3.3 (j) Other important or unique values of the environment**

Falls Creek Alpine Resort is largely surrounded by the Alpine National Park.

**3.3 (k) Tenure of the action area (e.g. freehold, leasehold)**

Falls Creek Alpine Resort is Crown (public) land reserved for the purpose of alpine recreation under the *Crown Land (Reserves) Act 1978* (Vic).

**3.3 (l) Existing uses of area of proposed action**

Land use includes all-season alpine recreation such as downhill and cross-country skiing, mountain biking, hiking and nature-based tourism.

**3.3 (m) Any proposed uses of area of proposed action**

Not applicable.



## 4 Environmental outcomes

Although habitat loss will occur, and there is a risk of indirect impacts on downstream aquatic habitats, the proposed action will also lead to positive environmental outcomes for alpine sphagnum bogs, Alpine Stonefly and Broad-toothed Rat conservation at Falls Creek. Falls Creek Resort Management is committed to managing the resort's biodiversity consistent with their Biodiversity Management Strategy (Ecology Australia 2011). General biodiversity management activities undertaken by FCRM that regularly benefit matters of national environmental significance include:

- The Hawkweed Monitoring and Control Program coordinated with Parks Victoria (Hawkweed is a State prohibited weed).
- Predator and pest control programs targeting foxes, cats, rabbits, hares, deer and horses.
- Mountain Pygmy-possum *Burramys parvus* Protection Program.
- General weed control programs targeting weeds of national significance, including Grey Sallow *Salix cinerea*.
- Participation and collaboration with Parks Victoria in alpine sphagnum bog management and restoration projects.
- Nature-based tourism and biodiversity interpretation highlighting the importance of alpine ecosystems.

Specific positive environmental outcomes will also arise from the proposed action and will contribute to the protection and management of matters of national environmental significance in the resort and project area.

Management and protection of degraded alpine sphagnum bogs, adjacent to the existing disturbed areas at the Nordic Bowl and around the Aqueduct, will be undertaken as part of project rehabilitation and ongoing site management. This rehabilitation will be monitored as part of ongoing vegetation monitoring to be undertaken by FCRM to meet commitments under their native vegetation offset agreement, consistent with Victoria's Biodiversity Assessment Guidelines.

Falls Creek Resort Management will also establish a resort-wide investigation of Broad-toothed Rat populations and habitat use, especially in areas close to development or ski-fields. This will build on the work recently completed on this species at the Mount Buller Alpine Resort (e.g. Whisson *et al.* 2015). Revegetation in and around the project area will focus on re-establishing Broad-toothed Rat habitat and ensuring soil stability. Broad-toothed Rat requires habitat with multi-level structural diversity and grass/sedge species as a food source. Revegetation above new retaining walls, on batters and along drainage lines will incorporate graminoid and shrub species according to the following prescription:

- *Poa hothamensis* and *Carex appressa* to be planted at 5-7 seedlings per square metre.
- Alpine Orites *Orites lancifolia*, Leafy Bossiaea *Bossiaea foliosa*, Dusty Daisy-bush *Olearia phlogopappa* var. *flavescens* or other sub-alpine shrubs indigenous to Falls Creek are to be planted at 3 seedlings per square metre

This should provide the understorey structural diversity favoured by Broad-toothed Rat. It is expected that some native species will also readily recolonise the area once construction and rehabilitation works cease.

A stormwater treatment system will be designed and constructed to improve stormwater quality before it enters the tributary to Rocky Valley Creek. Currently, stormwater does not receive treatment before it enters the tributary and carries sediment from the Bogong High Plains Road and the existing disturbed Nordic Bowl area. It is intended to maintain, and where possible, improve water quality to limit any negative impacts on Alpine Stonefly in the downstream aquatic habitats, assuming the species occurs there. The stormwater treatment system will also benefit Broad-toothed Rat as it is proposed to create swales and wetland areas with dense grassland, sedgeland and heathland vegetation revegetated to the standard described above. Water quality and aquatic habitat (ecological) monitoring will also continue as part of Falls Creek's existing water quality monitoring program. This will build on the baseline data collected in spring 2015 and autumn 2016, and inform adaptive management of runoff from the project area.

## 5 Measures to avoid or reduce impacts

The biodiversity values identified in the flora and fauna survey were considered during the design phase of the project with specific consideration given to the Alpine Sphagnum Bog Community, Broad-toothed Rat habitat and Alpine Stonefly. The measures outlined below are proposed to minimise the ecological impact of the development during all project phases. Relevant points have been incorporated into a Site Environmental Management Plan (SEMP) to ensure that the risk of significant impacts to matters of national environmental significance area minimised (Attachment 5).

### Design and pre-construction

- Removal of Alpine Sphagnum Bog vegetation has been minimised through design and construction responses. This will include the use of retaining walls and other engineering solutions at the detailed design stage to minimise the need for large cut and fill batters around the proposed sports oval.
- Native vegetation offsets required under Victorian regulations will be implemented via a combination of the Falls Creek offset strategy and general offset purchases. This measure is proposed to offset the removal of the small area of sphagnum bog community.
- Removal of potential habitat for Broad-toothed Rat (native vegetation) has been minimised wherever possible through orientating the sports oval footprint to avoid as much vegetation as possible. Compromises were required during this process and it was decided to remove more woodland vegetation on the west side of the project area in order to retain better quality and larger areas of sphagnum bog (see mapping in Attachment 4).
- A stormwater management system that improves the overall flow regime and quality of existing run-off from the Nordic Bowl site will be devised at the detailed design stage. This is critical for minimising impacts on the gully below (east) of the Nordic Bowl that drains directly to Rocky Valley Creek. An area for this stormwater system has been allocated in the functional design drawings to treat water before it enters the tributary of Rocky Valley Creek that drains the site.
- Baseline monitoring of aquatic habitats was undertaken in October 2015 as part of the development planning phase (Biosis 2016a, Attachment 4). Additional baseline monitoring was completed in autumn 2016. These sites will be monitored again in spring 2016 as part of assembling a baseline condition dataset against which any future impacts on aquatic habitat can be measured. It is intended to continue this monitoring during project construction and then during the operational phase to guide adaptive management actions.
- There will be no ground disturbance outside of the construction footprint in the Nordic Bowl and along the Bogong High Plains Road. Allowance will be made within the construction footprint for all access tracks, storage areas, services drainage and culverts. Alternative storage and access sites outside the project area (e.g. existing car parks, hard stand areas) will be utilised during bulk earthworks to minimise the construction footprint.
- It is proposed to retain native vegetation cover on the upslope area of the proposed Aqueduct upgrade for slope stability and to limit habitat fragmentation for Broad-toothed Rat.
- All areas of retained native vegetation will be protected by means of high visibility temporary fencing. Fencing will be installed before construction work commences and these areas treated as 'no-go' zones.
- All environmental constraints will be clearly communicated to construction personnel and incorporated into the workforce induction program via the project Site Environmental Management Plan (Attachment 5).
- Prior to any works commencing, a final version of the Site Environmental Management Plan will be completed that covers any development approval conditions and includes relevant measures for:
  - Mitigating impacts on Alpine Stonefly habitat downstream of the works area
  - Protecting retained Alpine Sphagnum Bogs during construction, and undertaking rehabilitation actions to stabilise these areas.

- Protecting areas of retained Broad-toothed Rat habitat (woodland and heathland) during construction and implementing habitat rehabilitation actions, such as revegetation/landscaping action described above in Section 4.
- A final site revegetation plan.

## Construction

- During vegetation clearing an ecologist will be on-site to capture and relocate any fauna species into the nearest suitable habitat, including Broad-toothed Rat.
- Cut and fill will be balanced to reduce requirement for imported fill material. Any imported fill material from outside the Falls Creek Alpine Resort will be weed and pathogen free.
- All movement of fill will be undertaken consistent with the Falls Creek Hawkweed work practice.
- Machinery and vehicles will be clean and free of weeds and pathogens before entering the construction area.
- The construction footprint will be kept to a minimum.
- Access to no-go zones will be prevented – including vehicles, construction personnel, equipment and stockpiles.
- Existing large rocks that are currently providing habitat for fauna will be carefully moved, retained and reinstated within revegetated areas, to ensure they can continue to provide habitat.
- Construction works will be managed to minimise discharge of sediments and other pollutants. Suitable sediment control measures are provided in *Environmental Guidelines for Major Construction Sites* (EPA 1996, amended) and *Construction Techniques for Sediment Pollution Control* (EPA 1991) and *Guideline for Environmental Management. Doing it right on subdivisions. Temporary environmental protection measures for subdivision construction sites* (EPA 2004).
- Refuelling of vehicles and storage of chemicals and other equipment will occur on stable surfaces not within 30 metres of a waterway or associated waterbody (e.g. a drainage line). Refuelling will occur at the existing Falls Creek Alpine Resort workshop area.
- All protective fencing will be maintained in good repair throughout construction.
- All sediment control measures will be maintained in good repair and regularly inspected to ensure adequate performance throughout construction.

## Post-construction

- Disturbed ground, including all edges and batters, will be stabilised using an appropriate geofabric material and native vegetation patches adjacent to the sports oval will be revegetated using locally indigenous understorey species appropriate to sub-alpine environments. This process is documented in the project SEMP rehabilitation plan (Attachment 5).
- The existing skier access way in the south-east of the project area will be revegetated to a low cover of native heath and grasses/sedges to maintain Broad-toothed Rat habitat connectivity.
- The stormwater treatment area will be revegetated with structurally dense grasses and sedges to provide Broad-toothed Rat habitat.
- Monitoring and survey of aquatic habitats will be undertaken as described above to identify any impacts to stream health arising from the proposed action, which will be compared to baseline condition results obtained pre-construction. Downstream examples of the sphagnum bog community will also be monitored annually to inform adaptive management of stormwater impacts.

## 6 Conclusion on the likelihood of significant impacts

### 6.1 Do you THINK your proposed action is a controlled action?

<input checked="checked" type="checkbox"/>	No, complete section 6.2
<input type="checkbox"/>	Yes, complete section 6.3

### 6.2 Proposed action IS NOT a controlled action.

The proposed action is not considered a controlled action as no significant impacts on matters of national environmental significance are likely to result from the construction and operation of the Altitude Training Centre. Tables 3, 4 and 5 present an assessment against the significant impact criteria for the Alpine Sphagnum Bogs and Associated Fens ecological community, Alpine Stonefly and Broad-toothed Rat that occur, or potentially occur, in the project area.

**Table 3: Assessment against significant impact criteria for Alpine Sphagnum Bogs and Associated Fens endangered ecological community**

Criteria	Assessment and response
Reduce the extent of an ecological community	The project proposes the removal of 440 m <sup>2</sup> (0.044 ha) of this ecological community. This is considered to constitute a minor impact on the extent of the ecological community on mainland Australia (impact considered to be a loss of 0.0006% of the community's continental distribution). Recent work by the Victorian government (ARI unpublished 2016) indicates there is 4358 ha of alpine bog community in the Victoria Alps bioregion. So in the context of the community's extent in Victoria, the loss of 0.044 ha is considered very minor.
Fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines	The areas proposed for removal exist in a highly fragmented context and are surrounded by the Aqueduct, multi-use trails, roads and modified cross-country ski areas. The photographs in Section 3.1 of this referral demonstrate that point. Indirect impacts through stormwater runoff are unlikely to increase fragmentation as the examples of this community along the tributary downstream of the Nordic Bowl are naturally disjunct as a result of stream morphology and previous disturbance.
Adversely affect habitat critical to the survival of an ecological community	The project area supports a mosaic of native sub-alpine vegetation and disturbed areas dominated by introduced vegetation. Given the mostly disturbed nature of the area, the removal of a small area of bog vegetation is not likely to effect the long term survival of the ecological community at Falls Creek or on the Bogong High Plains.

Criteria	Assessment and response
<p>Modify or destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for an ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns</p>	<p>The two small areas of sphagnum bog to be cleared exist in a highly modified hydrological setting that has resulted from the construction of the Aqueduct and the subsequent harvesting of surface water for hydroelectricity generation. Construction of the sports oval will result in the loss of these two areas, therefore, negating the requirement to maintain the abiotic factors that support the examples of this community in the project area.</p> <p>More broadly, other examples of this community existing upstream and downstream of the project area and we have considered indirect impacts on these areas that may result from the project. Similar to the areas to be cleared, surrounding examples of the community exist where broad scale changes to surface and groundwater systems have occurred through the historical construction of the Aqueduct, Nordic Bowl and surrounding roads. This disturbance regime dates back to the 1940s. It is unlikely that any upstream examples of the community will be impacted by the project as they are physically separated from the project area by the Aqueduct, multi-use trail and Bogong High Plains Road. The downstream areas have been identified as depauperate sub-alpine forms of the community (Sub-alpine Wet Sedgeland) and impacts to these areas will be managed through construction of a dedicated stormwater treatment system. These downstream areas will also be monitored annually to inform any changes to stormwater management.</p>
<p>Cause a substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting</p>	<p>The direct removal of the small areas of modified sphagnum bog will have a localised impact. There is a risk that stormwater could impact downstream areas of depauperate sub-alpine forms of the community. Indirect impacts are likely to lead to increased wetting of the downstream environment which is likely to produce favourable waterlogged conditions for species associated with the community.</p>
<p>Cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including, but not limited to:            assisting invasive species, that are harmful to the listed ecological community, to become established, or            causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community, or</p>	<p>The small areas of sphagnum bog to be removed have been modified through changes to local hydrology, weed invasion and clearing of surrounding terrestrial vegetation. The loss of these areas is not considered to be a substantial change to the ecological community at Falls Creek and on the Bogong High Plains.</p> <p>There is a risk that downstream bogs may be impacted by changes to water quality and quantity, or receive increased nutrient loads in stormwater runoff. These risks will be managed through a stormwater treatment system and through monitoring of the downstream environment during and after construction.</p> <p>Where impacts are detected adaptive management responses, such as increased stormwater treatment and weed control, will be implemented.</p>

<b>Criteria</b>	<b>Assessment and response</b>
Interfere with the recovery of an ecological community.	<p>Several bog rehabilitation programs have been implemented across the Bogong High Plains and at Falls Creek by Parks Victoria and FCRM. The national recovery plan for sphagnum bogs identifies a range of generic strategies and actions for bog recovery (DoE 2015). These actions are focussed on restoring hydrological patterns and vegetation cover disrupted by historical cattle grazing and more recent severe fire events.</p> <p>None of the bog systems covered by this referral have been subject to these restoration activities or would be considered a priority for rehabilitation as they occur in very disturbed settings.</p>

**Table 4: Assessment against significant impact criteria for the endangered Alpine Stonefly**

<b>Criteria</b>	<b>Assessment and response</b>
Lead to a long-term decrease in the size of a population	Population decrease is considered unlikely as targeted surveys undertaken to date have failed to confirm presence of Alpine Stonefly within or immediately downstream of the project area. However, a precautionary approach will be adopted and appropriate mitigation measures put in place to ensure that the proposed action does not result in significant alteration to the quality of aquatic habitat downstream of the project area. This will include appropriate sediment and pollution control measures as detailed in the project SEMP. Future survey and monitoring of aquatic habitat is also being undertaken and will be ongoing after the project to inform adaptive management.
Reduce the area of occupancy of the species	There is currently no known population of Alpine Stonefly within or adjacent to the project area, despite targeted survey efforts (Biosis 2016a). Even when adopting a precautionary approach and assuming that a population is present downstream of the project area, the proposed action would not result in a reduction in the area of occupancy for this threatened alpine species.
Fragment an existing population into two or more populations	There is currently no known population of Alpine Stonefly within or adjacent to the project area, despite targeted survey efforts (Biosis 2016a). In addition, there is no high quality aquatic habitat within the project area. It is therefore not possible for the proposed action to result in the fragmentation of an existing population.
Adversely affect habitat critical to the survival of a species	The project area is not identified as critical habitat for this species and there is currently no known population of Alpine Stonefly within or adjacent to the project area, despite targeted survey efforts (Biosis 2016a).
Disrupt the breeding cycle of a population	There is currently no known population of Alpine Stonefly within or adjacent to the project area, despite targeted survey efforts (Biosis 2016a). However, a precautionary approach will be adopted and appropriate mitigation measures put in place to ensure that the proposed action does not result in significant alteration to the quality of aquatic habitat downstream of the project area, such that the breeding cycle would be disrupted. The proposed retention of existing water quality, flow regimes and fringing vegetation immediately downstream will allow this species, if present, to maintain life cycle and breeding activities.

<b>Criteria</b>	<b>Assessment and response</b>
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	A minor decline in potential habitat availability or quality may occur in the immediate vicinity of the project area, but this is unlikely to lead to a decline in this species. Increased sediment levels are possible but these will be managed through the stormwater system and strict sediment control protocols, as detailed in the project SEMP. A long-term increase in sediment load, and a resultant decrease in water quality, is considered unlikely.
Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat	It is unlikely that invasive species harmful to the persistence of Alpine Stonefly will be introduced or spread by the proposed construction activities. Weed management and vehicle hygiene protocols are incorporated into the project SEMP. Ongoing management activities will include vegetation monitoring and weed control.
Introduce disease that may cause the species to decline, or	It is unlikely that diseases or pathogens harmful to the persistence of Alpine Stonefly will be introduced or spread by the construction activities. A site hygiene protocol is incorporated into the project SEMP to prevent the introduction of foreign biological material.
Interfere with the recovery of the species.	No specific recovery actions are being undertaken at Falls Creek for this species. Therefore, the proposed works are considered unlikely to interfere with species recovery.

**Table 5: Assessment against significant impact criteria for the vulnerable Broad-toothed Rat**

<b>Criteria</b>	<b>Assessment and response</b>
Lead to a long-term decrease in the size of an important population of a species	Given the limited amount of habitat removal, not all of which is considered to be high quality habitat for Broad-toothed Rat, it is considered unlikely that the proposed action would lead to a long-term decline in the population at Falls Creek.
Reduce the area of occupancy of an important population	The highly localised nature of the proposed action suggests that while a small area of potential and confirmed habitat will be removed, this loss is insignificant in the context of available habitat in the resort and surrounding area.
Fragment an existing important population into two or more populations	Habitat will be removed from areas that are already disturbed and fragmented by historical habitat loss, existing road infrastructure and by the existing aqueduct. Recent research at Mount Buller in Victoria has shown that Broad-toothed Rat can traverse relatively wide, grassy ski runs and this ability to move through relatively modified landscapes is suggested as a key factor facilitating the persistence of the species at the Mount Buller Alpine Resort (Whisson <i>et al.</i> 2015). It is unlikely that the proposed action will significantly increase the fragmentation effects already existing in the affected area and the proposed action will not result in the fragmentation of an existing population into two or more populations.
Adversely affect habitat critical to the survival of a species	Critical habitat for Broad-toothed Rat has not been defined as a national recovery plan for the species has not been prepared. Habitat critical to the survival of a species is defined by DoE (2013) as areas that are necessary for essential activities (e.g. foraging, breeding, roosting, or dispersal), for the long-term maintenance of the species, maintaining genetic diversity and long term evolutionary development, and/or the recovery of the species. Preferred habitats for Broad-toothed Rat include alpine and subalpine heathlands, grassland adjacent to boulder outcrops, swamps, sedgelands, coastal grassy or shrubby dunes, and sometimes forests with grassy understories (Wallis <i>et al.</i> 1982; Menkhurst <i>et al.</i> , 2008; Green &

Criteria	Assessment and response
	Osborne 2003). The project area at Falls Creek includes fragmented examples of habitats that are known to be used by the species across its range. At the landscape scale, the amount of habitat that is likely to be impacted by the proposal is very small and constitutes only a very small proportion of available habitat in the Falls Creek area. Given the small scale of the proposed impacts and other suitable habitat in the broader area, the species is therefore unlikely to be impacted by the action to a point that will threaten the survival of the species as a whole.
Disrupt the breeding cycle of an important population	Due to its small and localised nature of the proposed action will not result in a disruption of the breeding cycle of the broader population in the Falls Creek area.
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	The impacts from the action are highly localised in the context of the amount of habitat available in the surrounding area. The amount of habitat disturbance is small and unlikely to cause the species to decline.
Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat	Measures to mitigate the impacts resulting from existing invasive species occurring in the area are outlined in the SEMP. It is unlikely that the works will result in the introduction of novel invasive organisms to the site (e.g. new predators or weeds) which are harmful to the Broad-toothed Rat or its habitat. Foxes, cats and other introduced predators/competitors are already established at Falls Creek and in the surrounding landscape.
Introduce disease that may cause the species to decline, or	It is unlikely that the works will result in the introduction of novel pathogens to the site that will cause a decline in the Broad-toothed Rat population.
Interfere substantially with the recovery of the species.	The proposed works are highly localised and impacts will be minimal. It is unlikely that the works will substantially interfere with the recovery of the species as population declines are not likely to result from the works. Broader habitat decline, such as impacts from landscape scale bushfires, are major conservation concerns for this species and are the focus of recovery efforts (TSSC 2016).



### 6.3 Proposed action IS a controlled action

Not applicable

#### **Matters likely to be significantly impacted**

<input type="checkbox"/>	World Heritage values (sections 12 and 15A)
<input type="checkbox"/>	National Heritage places (sections 15B and 15C)
<input type="checkbox"/>	Wetlands of international importance (sections 16 and 17B)
<input type="checkbox"/>	Listed threatened species and communities (sections 18 and 18A)
<input type="checkbox"/>	Listed migratory species (sections 20 and 20A)
<input type="checkbox"/>	Protection of the environment from nuclear actions (sections 21 and 22A)
<input type="checkbox"/>	Commonwealth marine environment (sections 23 and 24A)
<input type="checkbox"/>	Great Barrier Reef Marine Park (sections 24B and 24C)
<input type="checkbox"/>	A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E)
<input type="checkbox"/>	Protection of the environment from actions involving Commonwealth land (sections 26 and 27A)
<input type="checkbox"/>	Protection of the environment from Commonwealth actions (section 28)
<input type="checkbox"/>	Commonwealth Heritage places overseas (sections 27B and 27C)

## 7 Environmental record of the person proposing to take the action

	Yes	No
<p><b>7.1 Does the party taking the action have a satisfactory record of responsible environmental management?</b></p> <p><b>Provide details</b>  Falls Creek Resort Management has a well credentialed environmental management history. FCRM has implemented strategic environmental planning through the development of:</p> <ul style="list-style-type: none"> <li>• Falls Creek Alpine Resort Biodiversity Management Strategy</li> <li>• Falls Creek Village Weed Strategy</li> <li>• Falls Creek Alpine Bog Rehabilitation Strategy</li> <li>• Falls Creek Native Vegetation Policy</li> </ul> <p>FCRM also runs numerous annual programs aimed at sound alpine environmental management including:</p> <ul style="list-style-type: none"> <li>• Mountain Pygmy-possum Protection Program</li> <li>• Hawkweed Eradication Program</li> <li>• Willow Eradication Program</li> <li>• Cat Trapping Program</li> <li>• Fox and Wild Dog Baiting Program</li> </ul> <p>FCRM incorporates environmental planning as a foundation of project development with the aims to avoid and minimise environmental disturbance through all phases of project development and implementation. This point has been demonstrated in the planning outline of this project.</p> <p>FCRM is also involved in broader strategic environmental planning beyond the resort boundaries including:</p> <ul style="list-style-type: none"> <li>• Mountain Pygmy-possum State Recovery Team</li> <li>• National Hawkweed Eradication Program</li> </ul> <p>FCRM reports against significant KPIs that measure annual performance relating to:</p> <ul style="list-style-type: none"> <li>• Biodiversity, including threatened species programs and habitat protection</li> <li>• Climate Change</li> <li>• Waste Management</li> <li>• Water Management.</li> </ul>	<b>X</b>	
<p><b>7.2 Provide details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against:</b></p> <p><b>(a) the person proposing to take the action, or</b>  <b>(b) if a permit has been applied for in relation to the action - the person making the application.</b></p>		<b>X</b>

**If yes, provide details**

Not applicable.

**7.3 If the person taking the action is a corporation, please provide details of the corporation's environmental policy and planning framework and if and how the framework applies to the action.**

**X**

**7.4 Has the party taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?**

**Provide name of proposal and EPBC reference number (if known)**

**X**

2013/7056 – Falls Creek Alpine Resort mountain bike trail project stage 3  
(referral decision: not a controlled action)

2008/4122 – construct multiuse walking track, Alpine National Park, VIC  
(withdrawn during referral period)

## 8 Information sources and attachments

(For the information provided above)

### 8.1 References

Alpine Resorts Coordinating Council 2012. *Alpine Resorts Strategic Plan*, Melbourne: Alpine Resorts Coordinating Council.

ARI unpub 2016. Terrestrial ecology, autumn/winter 2016 update. Arthur Rylah Institute for Environmental research, Department of Environment, Land, Water and Planning. Victorian Government.

Biosis 2014. *Falls Creek Alpine Resort Mountain Bike and Walking Trail Project Stage 4 Cultural Heritage Management Plan*, Melbourne: Biosis.

Biosis 2016a (Attachment 4). *Falls Creek Altitude Training Centre: Terrestrial and aquatic flora and fauna assessment*, Wangaratta: Biosis.

Biosis 2016b. *Cultural Heritage Due Diligence Assessment for High Altitude Training Centre, Falls Creek, Victoria*, Wangaratta: Biosis.

Biruu 2015. Nordic Bowl Project Business Case, Altitude Training and Health Facilities - Phase 1 Multi-use Sport Field, Melbourne: Biruu.

Department of the Environment 2015. National recovery plan for the Alpine Sphagnum Bogs and Associated Fens ecological community. Department of the Environment, Canberra.

Ecology Australia 2010. *Falls Creek Resort Management: Stage 2 Mountain Bike Project Ecological Assessment*, Project 10-032, Ecology Australia Pty Ltd, Fairfield, Victoria.

Ecology Australia 2011. *Falls Creek Alpine Resort Biodiversity Management Strategy*, Project 09-31, Ecology Australia Pty Ltd, Fairfield, Victoria.

EPA 1991. Construction techniques for sediment pollution control. Environmental Protection Authority. Victoria.

EPA 1996. Environmental guidelines for major construction sites. Environmental Protection Authority. Victoria.

EPA 2004. Doing it right on subdivisions: Temporary environmental protection measures for subdivision construction sites. Environmental Protection Authority. Victoria.

Falls Creek RMB 2014. *Falls Creek Village Masterplan*, Falls Creek: Falls Creek Resort Management Board.

Green, K., and Osborne, W. S. (2003). The distribution and status of the Broad-toothed Rat *Mastacomys fuscus* (Rodentia: Muridae) in New South Wales and the Australian Capital Territory. *Australian Zoologist* 32, 229-237.

GHD 2016. *Falls Creek Altitude Training Centre Concept Design Report*, Wodonga: GHD.

McKay, S., Bryce, C. and Papas, P. 2005. *Impacts of fire on the distribution of a predatory stonefly (Eustheniidae: Thaumatoperla alpina) in the Bogong Alpine Region Technical Report Series No. 155*. Department of Sustainability and Environment Arthur Rylah Institute for Environmental Research, Heidelberg.

Menkhorst, P., Denny, M., Ellis, M., Driessen, M., Broome, L. & Dickman, C. 2008. *Mastacomys fuscus*. The IUCN Red List of Threatened Species 2008 e.T18563A8449729. <http://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T18563A8449729.en>. Downloaded on 12 May 2016

TSSC 2008, *Commonwealth Listing Advice on Alpine Sphagnum Bogs and Associated Fens*. Threatened Species Scientific Committee, Australian Government, Canberra.

TSSC 2016, Commonwealth Listing Advice on *Mastacomys fuscus mordicus*, broad-toothed rat (mainland). Threatened Species Scientific Committee, Australian Government, Canberra.  
Wallis, R. L., Brunner, H., and Menkhorst, P. W. (1982). Victorian field studies on the broad toothed rat (*Mastacomys fuscus* Thomas). Victorian Naturalist 99, 12-21.

Whisson, D.A, Holland, G.J and Kelly, T.R (2015). Persistence of a threatened species is a modified alpine resort environment: the broad-toothed rat. *Journal of Mammalogy*  
DOI:<http://dx.doi.org/10.1093/jmammal/gyu016> 151-158 First published online: 27 March 2015

## **8.2 Reliability and date of information**

Information presented in this referral is considered contemporary. The ecological assessment work was completed between November 2015 and May 2016.

### 8.3 Attachments

		✓ attached	Title of attachment(s)
<b>You must attach</b>	figures, maps or aerial photographs showing the locality of the proposed action (section 1)	✓	<b>Attachment 1</b> – overview map showing project locality <b>Attachment 2</b> – ArcGIS shape file submitted with referral
	GIS file delineating the boundary of the referral area (section 1)		
	figures, maps or aerial photographs showing the location of the proposed action in respect to any matters of national environmental significance or important features of the environments (section 3)	✓	<b>Attachment 3</b> – map showing location of project area in relation to matters of national environmental significance.
<b>If relevant, attach</b>	copies of any state or local government approvals and consent conditions (section 2.5)		
	copies of any completed assessments to meet state or local government approvals and outcomes of public consultations, if available (section 2.6)		
	copies of any flora and fauna investigations and surveys (section 3)	✓	<b>Attachment 4</b> – Biosis (2016a) Flora and Fauna Assessment and associated maps (in 3 parts to ensure file size is less than 3MB).
	technical reports relevant to the assessment of impacts on protected matters that support the arguments and conclusions in the referral (section 3) conclusions in the referral (section 3 and 4)	✓	<b>Attachment 5</b> – Site Environmental Management Plan (SEMP)
	report(s) on any public consultations undertaken, including with Indigenous stakeholders (section 3)		

## 9 Contacts, signatures and declarations

### Proposed action title:

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#### 9.1 Person proposing to take action

1. Name and Title: Mr Callum Brown
2. Organisation: Falls Creek Alpine Resort
3. EPBC Referral Number: To be issued by DoEE
- 4: ACN / ABN: 21 789 770 569
5. Postal address: PO Box 50, Falls Creek, Victoria 3699
6. Telephone: 03 5758 1246 / 0423 603 63603
7. Email: [callumbrown@fallscreek.com.au](mailto:callumbrown@fallscreek.com.au)

8. Name of proposed  
proponent (if not the  
same person at item 1  
above) not applicable
9. ACN/ABN of proposed  
proponent (if not the  
same person named at  
item 1 above): not applicable

- I qualify for exemption ☐ an individual; OR
- 520(4C)(e)(v) of the ☐ a small business entity (within the meaning given by section 328-110 (other than  
EPBC Act because I am: subsection 328-119(4)) of the *Income Tax Assessment Act 1997*); OR

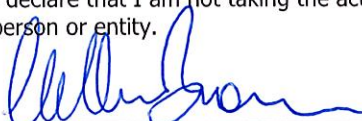
not applicable.

If you are small business  
entity you must provide  
the Date/Income Year  
that you became a small  
business entity:

I would like to apply for a ☐ not applicable.  
waiver of full or partial  
fees under Schedule 1,  
5.21A of the EPBC  
Regulations. Under sub  
regulation 5.21A(5), you  
must include information  
about the applicant (if  
not you) the grounds on  
which the waiver is  
sought and the reasons  
why it should be made:

I declare that to the best of my knowledge the information I have given on, or attached  
to this form is complete, current and correct.  
Declaration I understand that giving false or misleading information is a serious offence.  
I agree to be the proponent for this action.  
I declare that I am not taking the action on behalf of or for the benefit of any other  
person or entity.

Signature



Date

6/10/16

## 9.2 Designated proponent

Individual or organisation who is proposed to be designated as the proponent if the Minister decides that the action is a controlled action and further assessment and approval is required. The proponent is responsible for meeting the requirements of the EPBC Act during the assessment process. The proponent may or may not be the person proposing to take the action.

Name of proposed proponent: Same as person making referral

If the name of the proposed proponent is not the same person as named at item 1 of section 9.1 above, please complete all of the below fields in section 9.2.

ACN / ABN (if applicable):

Postal address:

Telephone:

Email:

Declaration by the proposed proponent: I ....., the proposed proponent, consent to the proposed designation of myself as the proponent for the purposes of the action described in this referral.

Signature:

Date:

Declaration by the person proposing to take the action: I ....., the person proposing to take the action, consent to the proposed designation of..... as proponent for the purposes of the action described in this referral.

Signature:

Date:

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## 9.3 Person preparing the referral information (if different from section 9.1)

Name Matthew Looby

Title Senior Consultant Ecologist

Organisation Biosis Pty Ltd

ACN / ABN (if applicable) Australian Company Number (ACN): 006 175 097  
Australian Business Number (ABN): 65 006 175 097

Postal address Po Box 943, Wangaratta, Victoria, 3677

Telephone: 03 5718 6902 / 0400 263 235

Email: [mlooby@biosis.com.au](mailto:mlooby@biosis.com.au)

Declaration: I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct.  
I understand that giving false or misleading information is a serious offence.

Signature:



Date: 5 October 2016