

Bushfire Assessment Report

Snowy River Ski Club



Doorack 8 Farm Ck Place, Guthega 2624



Department of Planning
and Environment

Issued under the Environmental Planning and Assessment Act 1979

Approved Application No 22/6646

Granted on the 12 December 2022

Signed M Brown

Sheet No 2 of 9

24 January 2022

Contents

Introduction

This Bushfire Attack Level (BAL) assessment forms part of a Development Application submitted by Snowy River Ski Club (“the Club”) for external upgrades to its premises at “Doorack”, 8 Farm Creek Place, Guthega NSW. The upgrades are designed and specified to reduce bushfire risk to the building. Planned upgrades to insulation will reduce energy lost as heat and outer material colour choice is proposed to assimilate better than existing cladding colour with the surrounding alpine bushland. This assessment includes planned future roof maintenance which will replace existing Klip-Lok with equivalent material and insulation compliant with current standards.

Site

The site is 8 Farm Ck Place, Guthega 2624, Lot 3, DP1152944, leased by the Snowy River Ski Club Co-operative Ltd. hereafter referred to as “Doorack”. Guthega Village is within the Kosciusko National Park; the site is leased from NSW National Parks and Wildlife Service (NPWS). The current lease commenced 1 January 2013 for a period of 15 years 6 months with an option to renew for a further term of 30 years, i.e. to 2058.

The site is described in the attached documents:

- [Surveyplan110720.pdf](#) (shows immediate neighbours and lease boundaries)
- [TopoDoorack.jpg](#) (shows topographic details and distance to Guthega dam)
- [SatFarmCkPl.jpg](#) (satellite photograph showing Doorack and neighbours)
- [PropReptDoorack.pdf](#) (Planning and Environment report for 8 Farm Ck Place – includes 5/-/DP1152944, of 199 sq m below Farm Ck. Pl, not leased by SRSC)

The building structure and proposed work are outlined in the attached preliminary plans and elevations at:

- [Cover Sheet](#)
- [Location and Site Plans](#)
- [West and South Elevations](#)
- [North and East Elevations](#)

Neighbouring premises are Turnak (6 Farm Ck Place) and Jagungal (10 Farm Ck Place). The closest trees are close to the Turnak boundary and outside the lease on the upslope northwesterly aspect outside the asset protection zone bounded by the lease and maintained by the Club.

Current construction is steel framed within concrete block and granite stone masonry at ground level and steel internal frame with timber structure and cedar cladding for the upper floors. Window and door frames are hardwood and fire doors are steel sheet lined internally and externally. There are no LPG or oil fuel storages within the lease boundary or inside the building. Heating is electrical except for a single enclosed wood fire. Cut wood is stacked in the basement at entrance level.

The leased site is classified as bush fire prone land thus requiring this BAL assessment.

The proposed upgrades include steel Colorbond cladding, steel door and alloy window frames protected with steel flashing, and double glazing of all windows. Upgrading of insulation and vapour barrier will be undertaken at the same time. Exposed timber roof joists will be enclosed with Colorbond cladding and Colorbond steel fascia. All proposed work will be within the existing building footprint. The roof reclad will be installed as planned maintenance/replacement with compliant material and will not affect the building's footprint or fire resistance. The Club plans to

manage areas less than 10m from the building as Inner Protection Areas (IPA) within a larger Asset Protection Zone (APZ) with adjoining leaseholders.

The NSW Rural Fire Service (RFS) publication, Planning for Bushfire Protection 2019 was used as a guide in the preparation of this report. The RFS Plan and Prepare guidelines indicate that the described site is within a designated bush fire prone land (BFPL) area.

Bush Fire Attack Level Assessment

This assessment is prepared within current legislative requirements for the assessment of bushfire protection:

- Rural Fires Act 1997
- Environmental Planning and Assessment Act 1979
- Environmental Planning and Assessment Regulation 2000
- Rural Fires Regulation 2013
- NSW Rural Fire Service (RFS) publication, Planning for Bushfire Protection (PBP) 2019
- Local Land Services Act 2013 Sect 600 Clearing authorised under other legislation
- Biodiversity Conservation Act 2016

The planned upgrade to exterior surfaces is to each side of an existing building considered under Section 6.6 Alpine Resorts of PBP 2019.

Specific objectives that apply to Special Fire Protection Purpose (SFPP) infill development in the alpine resort area are as follows:

- provide an appropriate defensible space
- provide a better bush fire protection outcome for existing structures
- ensure new building work complies with the construction standards set out in AS 3959
- ensure ongoing management and maintenance responsibilities are in place where asset protection zones (APZ) are proposed outside of the sub lease or leasehold area
- written consent from the land managers is provided for all proposed works outside of the sub lease or leasehold area
- proposed APZs outside of the sub lease or leasehold area are supported by a suitable legal mechanism to ensure APZs are managed under a binding legal agreement in perpetuity
- ensure building design and construction standards enhance the chances of occupant and building survival
- provide emergency evacuation procedures

The proposed development, while not affecting the footprint or appearance of the building, is designed giving these objectives prime consideration.

Specific considerations for the Bushfire Attack Level (BAL) assessment for this site:

Forest Fire Danger Index (FFDI): 50 (ref PBP 2019 Table A1.12.7 p 93)

Vegetation type: Alpine Complex, Forest (wet and dry sclerophyll) (ref PBP 2019 Table A1.12.7 p 93)

Asset Protection Zone:

The APZ provides a buffer between recognised hazards and the building, allows emergency service access and an area around the building from which an approaching fire may be slowed or suppressed. It reduces the risk of direct flame contact, damage by radiant heat and ignition due to ember attack. Snowy River Ski Club is able to manage the APZ within its lease boundary and cooperates with neighbours' maintenance of APZs on each side of the premises. Currently the APZ is managed out to 10m from the building where applicable within the lease. The APZ is documented at the attached document APP20220214.pdf.

The club maintains grass growth at 100 – 200mm and shrub growth <500 mm in the absence of snow cover. The APZs included in this description are already in existence, shared and maintained with neighbours on each side. Below and between the building and Farm Creek Place, a low-level rock garden with native flora is maintained by the club. Above and behind the building an APZ of approximately 10m is maintained with grasses cut at 100-200mm in summer and heath maintained below 500mm in height. Dead woody material within the APZ of the lodge is removed either for disposal or burning.

There are no trees in any of the APZ area - the included aerial photograph at SatFarmCkPl.jpg is dated and the canopy shown has been removed for some years. The only trees in the area are snow gums (*E. pauciflora*) which form a part of the Alpine complex, and some lopped snow gums are within the APZ on the Turnak lease between the two buildings. Some snow gums overhang the APZ on the south-east boundary with NPWS but the overhang does not extend to the building and a direct fall would not compromise the roof or walls. These are marked in the diagram in the attached Asset Protection Plan (APP22020214.pdf); the closest of these is beyond the lease boundaries with NPWS and Turnak at about 6.4m from the southern corner of the lodge. All shrubs within the APZ are alpine heath maintained by the club below 500 mm and are thus unable to form a canopy. They are separated from the building by more than 2m on all sides. Flammable debris is removed regularly by members and at two programmed work parties each summer. A whipper-snipper is used at each work party to cut grass to approximately 100mm.

Vegetation classifications

The immediate areas on all sides of the lodge are maintained Alpine Complex grassland, with limited short heath, from which any emerging trees have been removed as part of APZ maintenance by both the club and neighbours Turnak and Jagungal. The closest Alpine Woodland area is upslope beginning at about 10 m from the building and continuing irregularly across Norwegian trail (cleared) to the top of the Blue Calf T-bar.

Slope

From topographic maps the fall to high water at Guthega Dam is about 100m and map measured distance is approximately 400m – a 1:4 slope which is about 15°. This slope, while slightly undulating, is consistent for most of the immediate Guthega area.

Environmental features

There are no environmental features within the existing APZ which are expected to be impacted as a result of this proposal. The broad toothed rat has been observed in the lease area. This local habitat is not expected to be affected by the development work. There is a wombat burrow in the southeast upslope which is not expected to be affected. There is no record of remnant Aboriginal heritage (AHIMS, 9 Nov 2021, attached as AHIMS_DoorackSearch_9Nov21.pdf).

Surrounding vegetation

The following summary considers each aspect of the assessed area in a clockwise direction from the Farm Creek Place entrance.

Northwest

The immediate area in front of the lodge down to Farm Ck place is maintained as cultivated shrubs below 500 mm in height by club members. There is a small dead snow gum slightly west of the Northwest downslope below Farm Creek place about 20 m from the building. The remainder is grassland broken by two separate widths of sealed road. This area being grassland and devoid of flora over 500 mm in height and broken by two sealed roads is considered BAL-40. The closest Alpine woodland area is about 40 m below the lease across Mount Tate Road and Farm Creek Place; some mixed low woodland (pictured, below) is further away in a more northerly direction beyond Jagungal. The presence of Alpine woodland means this part of the downslope would be considered BAL-FZ. The average downslope to the water at Guthega dam 400m away is about 15° – information taken from topographic map of the area.



View NW from ground level at entrance

Northeast

The more northerly aspect faces Jagungal Lodge and is entirely maintained grassland by both clubs at 100-200 mm in the absence of snow cover. There is a level vehicle turnaround on the Jagungal lease and the Doorack side is essentially level between the two lodges with a downslope contiguous with the northwest aspect. The more easterly upslope area between Doorack and Jagungal is jointly maintained as grassland <100mm height by the two lodges and is considered BAL-29



View NE from fire escape



North, facing Jagungal

Southeast

An upslope of about 15°, contiguous with previously noted topography, is maintained by the club as grassland with some low shrubs to 10 m from the building. Above that is Alpine Complex with trees up to 1.5m circumference at 500mm above ground level. The grassland upslope, extending to 10 m from the lodge, is considered BAL-29 and the Alpine Complex bushland beyond is considered BAL-FZ. This classification and proposed cladding and ember attack protection will be considerable improvements over the existing structure. The Club is prepared to share required management of area beyond the lease with NPWS.



View SE showing closest upslope tree

Southwest

The lease boundary with Turnak is less than 3m from the Doorak front deck fire escape. The Doorak side of the boundary is maintained grassland <200mm in the absence of snow cover. The Turnak side is managed low shrubs and some lopped snow gums. The Southwest aspect is essentially level in the direction of Turnak, with a downslope in the westerly direction contiguous with the northwest aspect described above. The area between Doorak and Turnak is jointly maintained as grassland <100mm height by the two lodges and is considered BAL-29.



View SW from Deck

(Below) The more southerly aspect faces Turnak Lodge.



View southwest towards Turnak

Table 1 lists each of these areas in accordance with Forest Fire Danger Index (FFDI)50 (ref PBP 2019 Table A1.12.7 p 93)

Table 1

Direction	Slope	Vegetation	Assessed BAL	APZ(m)	Comment
Northwest	Downslope 15°	Road, grassland to 40m, beyond which clumps of remnant Alpine Forest	29 (or 40 beyond Mt Tate Rd)	10	Low native shrubs maintained between grass at 100-200mm height within the lease APZ Includes 2 separate sealed roads. Beyond Mount Tate Road at about 40 m, clumps of snow gums grow sporadically to the upper water level of Guthega Pondage
Northeast	Flat	Grassland Alpine complex	29	10	Grass maintained 100-200 mm. Includes neighbours APZ
Southeast	Upslope 15°	Alpine woodland	29	6	Maintained grass and endemic heath to lease boundary, then Alpine Woodland above, likely to be classified FZ
Southwest	Flat	Grassland Alpine complex	29	10	Grass maintained 100-200 mm. Includes neighbours APZ

On the basis of this assessment, proposed cladding, doors, windows and frames would be constructed to improved fire resistant specifications on all sides. Existing fire exits will be improved with steel framing and new doors providing all weather access to all floors and three sides of the building. Access will not be affected by any of the proposed work. There is no provision for fire exit at the rear of the building as it would neither suit the internal traffic nor provide any protection in upslope woodland on exit. The selected cladding, window and door frames will be complaint steel and glass and door construction will comply with the assessed BAL construction requirements specified in AS 3959:2018. The planned improvements include steel cladding and protection of all timber joists and eaves from ember attack with steel sheet sealed at ends with steel fascia. The described work is expected to provide protection against bushfire and ember attack greater than the existing cladding and window frame assemblies.

Planned roof material replacement will be like-for-like, compliant with AS3959:2018 with improvement to insulation and vapour barrier as required.

Exits to fire escapes will be replaced with steel frames and doors complying with AS3959:2018.

The Board of the Snowy River Ski Club will be guided by the requirements of AS 3959:2018 in all aspects of the proposed work to mitigate the effects of bushfire attack.