

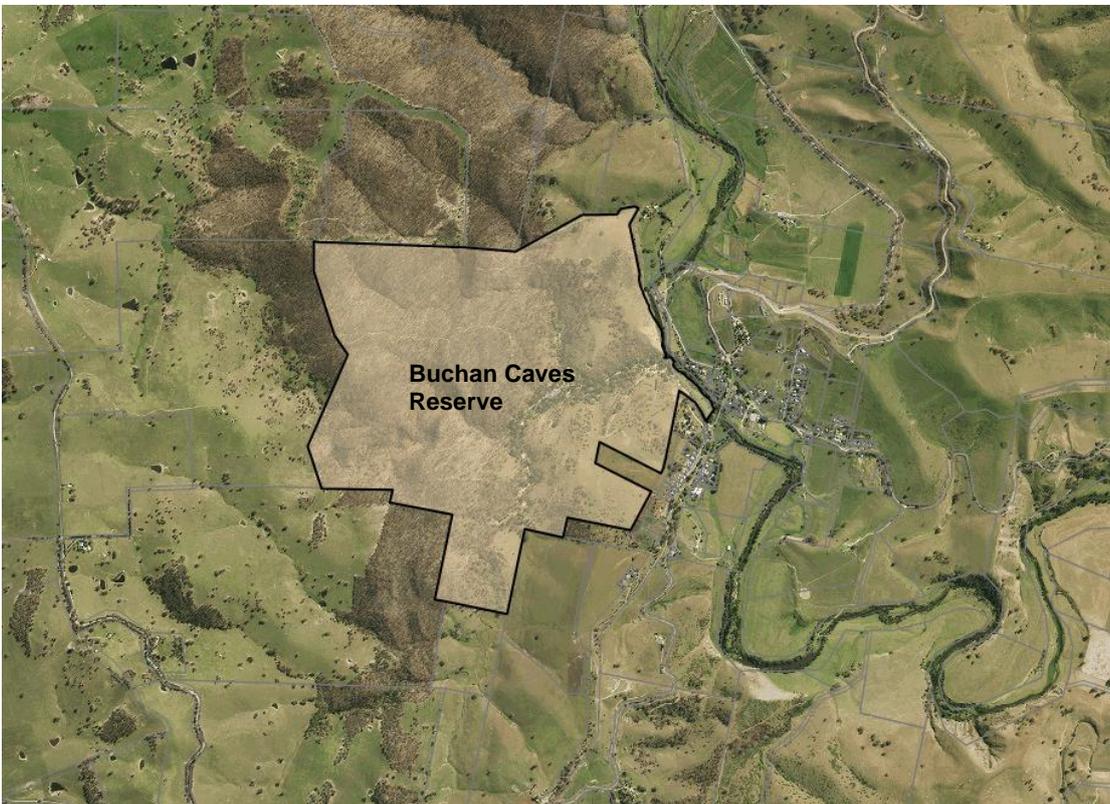
BUSHFIRE ATTACK LEVEL ASSESSMENT

Proposal: Accommodation Cabins

Address: Buchan Caves Reserve
Caves Road, Buchan

Property description

The Buchan Caves Reserve is located on the western fringe of Buchan. The township of Buchan is a small rural settlement located 75km north-east of Bairnsdale. The town provides basic services to the wider rural community. The Buchan Caves is a major tourist attraction, drawing more than 100,000 visitors each year.



The Buchan Caves Reserve provides camping facilities with 41 powered sites and 20 unpowered sites, and also offers shared facilities including showers, toilets, a laundry and camper's kitchen.

The camping ground is located along two valleys extending west and north from the Visitor Centre. The surrounding hills rise steeply to peaks and ridgetops approximately 100 metres above the campgrounds.

Parks Victoria are proposing to introduce new cabin accommodation which will offer further variety to the accommodation options currently available in the reserve.



FS 520900



A site for the development of cabins has been identified at the northern end of the campground, approximately 320 metres north from the Visitor Centre. The cabins are proposed to be constructed on the north side of an existing brick toilet and laundry building.



View south of proposed cabin site with existing toilet/laundry building in background

Site Assessment

The following Assessment has been prepared in accordance with Clause 2.2.1 of *Australian Standard AS 3959:2018, Construction of buildings in bushfire prone areas*.

The Assessment is informed by an inspection of the site for the proposed cabins undertaken on Wednesday 27 November 2024.

Step 1: Confirm Fire Danger Index (FDI)

In accordance with Table 2.1 the subject site has an FDI of 100.

Step 2: Vegetation classification

The Buchan Caves Reserve has an area of 292ha. The campground and visitor facilities are located in the valleys of the Reserve. Vegetation along the floor of the valleys is highly modified, and is characterised by mature exotic trees and well maintained picnic areas and camping sites.

The rising slopes surrounding the main visitor precinct and camping areas retain native vegetation with a variety of grasses, shrubs and trees. The extent of tree canopy coverage on lower slopes is quite sparse. The density of tree canopy increases substantially on the hills north, west and south of the visitor precinct, developing into a dense forest landscape to the north and west of the Reserve.

An inspection of the site has been undertaken and due to limited access and steep topography, an assessment area within a 100 metre radial distance of the subject land has relied on a desk top analysis and visual inspection from the site.

The subject site is situated in a valley with two aspects from which a bushfire has the potential to impact the site, from the east and the west.

Vegetation observed from the subject site within the 100m assessment area included open native grasses on steep slopes to the east. Some mature trees are present, however the extent of canopy cover by mature trees is sparse and appears to be less than 10 percent coverage throughout the eastern aspect.

Vegetation on the eastern aspect is considered to constitute *Grassland* as defined under Table 2.3 of AS 3959.2018.



View east from site



View south-east from in front of site side of site

Established camping sites, picnic areas and barbecue shelters contain scattered exotic trees and short cropped (mown) grass, with no understorey present. Vegetation in these areas is considered excludable pursuant to the provisions at Clause 2.2.3.2 of AS3959.2018.



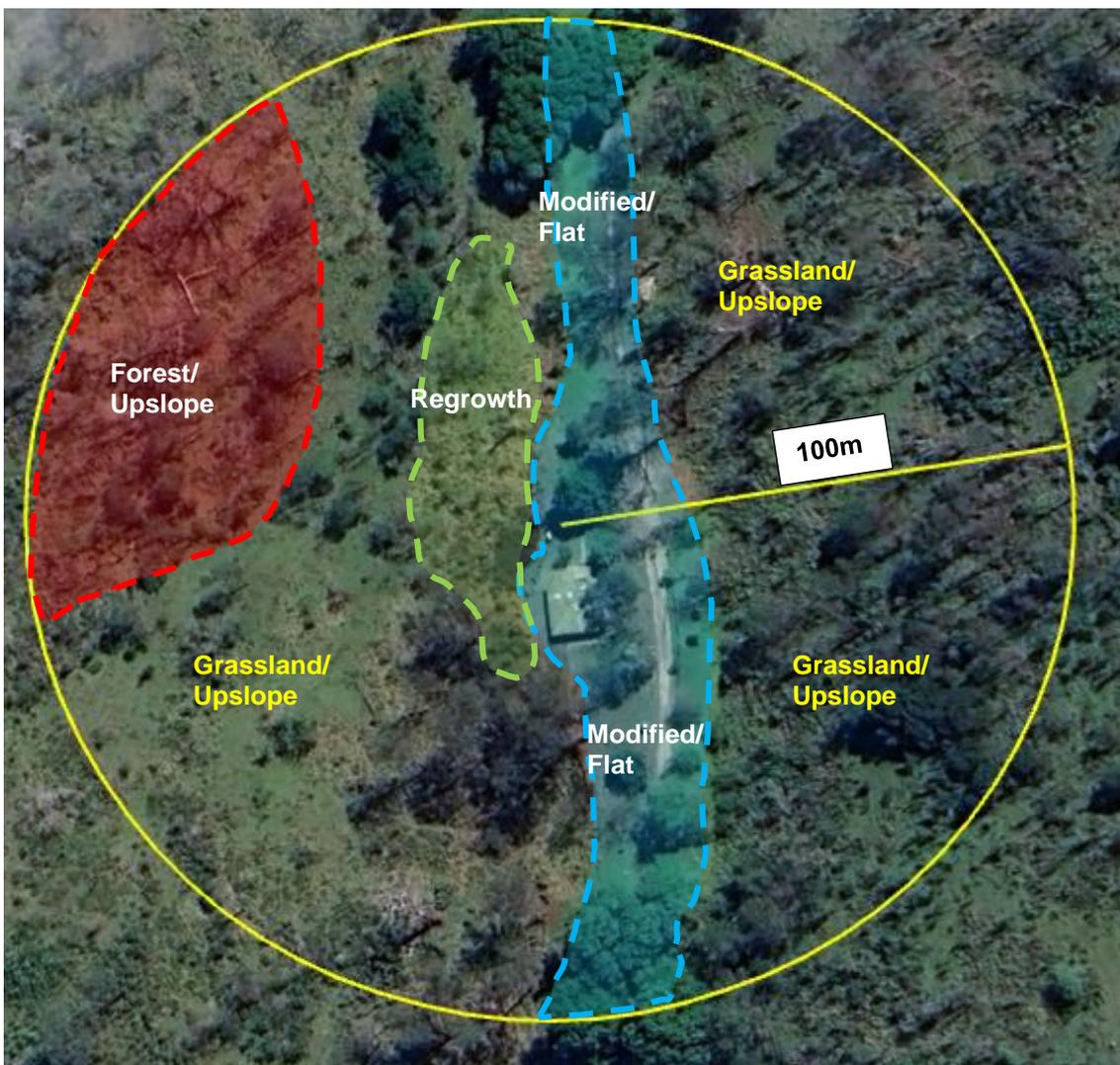
View north from the subject site

A variety of plant species were observed on the western aspect of the subject site that included mature trees, native shrubs, native grasses and native vegetation regrowth. This aspect contains considerably more regrowth, with juvenile trees consisting of acacia (wattle) and eucalyptus species.

The regenerating trees are quite young which is common to see after a bushfire event. The height of the regenerating vegetation currently appears to have the characteristics of *Scrub*, however if retained and allowed to mature the regrowth on the western aspect would constitute *Forest*, as defined under Table 2.3 of AS 3959.2018.



A review of aerial imagery indicates *Forest* vegetation remains on the upper slope of the western aspect, with the appearance of *Grassland* vegetation on the middle slope.



Step 3: Distance of the site from classified vegetation

The distance between *Grassland* vegetation identified on the eastern aspect and the east side of the proposed accommodation units is approximately 15 metres.

Vegetation on the western aspect immediately abuts the west side of the proposed accommodation units. The prevailing vegetation on the western aspect is classified as *Forest*.

Step 4: Slope Assessment

Slopes within 100 metres of the property have been identified as Upslope.

Step 5: Determination of Bushfire Attack Level (BAL)

Existing Conditions

The proposed cabins currently achieve a separation distance of 15 metres from vegetation on the eastern aspect. A separation distance on a flat slope enables construction of the cabins to a Bushfire Attack Level of 19 (BAL-19).

The west side of the proposed cabins are proposed to be located approximately 3 metres from vegetation on the western aspect. A setback of 3 metres does not correspond with any separation distances prescribed from classifiable vegetation in Table 2.4 of AS 3959.2018.

The minimal separation distance will result in a Bushfire Attack Level of Flame Zone (BAL-FZ) for the accommodation cabins.

Alternative BAL Rating

The BAL rating for the cabins can be reduced from BAL-FZ should the separation distance from classifiable vegetation be increased, with any remaining vegetation contained within the separation distance managed to a low fuel condition so as to no longer be classifiable vegetation.

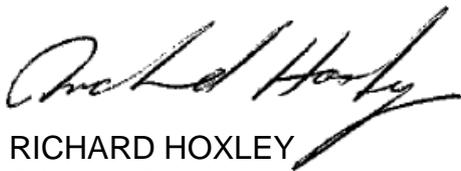
Vegetation within the separation distance must satisfy the following requirements to achieve a low fuel condition:

- Grass must be short cropped and maintained during the declared fire danger period.
- All leaves and vegetation debris must be removed at regular intervals during the declared fire danger period.
- Plants greater than 10 centimetres in height must not be placed within 3 metres of a window or glass feature of the building.
- Shrubs must not be located under the canopy of trees.
- Individual and clumps of shrubs must not exceed 5 square metres in area and must be separated by at least 5 metres.

- Trees must not overhang or touch any elements of the building.
- The canopy of trees must be separated by at least 5 metres.
- There must be a clearance of at least 2 metres between the lowest tree branches and ground level.

The following table prescribes the separation distances to be achieved on the west side (upslope) of the proposed accommodation cabins with the corresponding BAL rating.

Vegetation Type	Bushfire Attack Level	Separation Distance
Forest	BAL-FZ	<19 metres
	BAL-40	19-<25 metres
	BAL-29	25-<35 metres
	BAL-19	35-<48 metres



RICHARD HOXLEY
Principal Planner

12 December 2024
(Reference: 21040)