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Bush Fire Assessment Report



Multi-Purpose Centre
amendment to planning proposal:

Glenworth Valley Outdoor Adventures,

6th September 2020
Reference 20-100-2

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Abbreviations:

ABCS	Australian Bushfire Consulting Services Pty Ltd
APUs	Additional Permitted Uses
APZ	Asset protection zone
AS 2419	AS 2419 – 2017 Fire hydrant installations System design, installation and commissioning
AS3959-2018	Australian Standard 3959 – 2018 Construction of buildings in bushfire prone areas
BAL	Bushfire Attack Level
BCA	Building Code of Australia
BPMs	Bushfire Protection Measures
BPLM	Bushfire Prone Land Map
BFSA	Bush Fire Safety Authority
Council	Central Coast Council
DA	Development Application
EP&A Act	Environmental Planning and Assessment Act - 1979
ESD	Ecologically Sustainable Development
FR NSW	Fire & Rescue NSW
IPA	Inner protection area
LGA	Local Government Area
NCC	National Construction Codes
NP	National Park
NSP	Neighbourhood Safer Place
OPA	Outer protection area
PBP	Planning for Bush Fire Protection – 2019
ROW	Right of Way
RF Act	Rural Fires Act - 1997
RFS	NSW Rural Fire Service
SEPP	State Environmental Planning Policy
SFPP	Special Fire Protection Purpose
SWS	Static Water Supply

Executive Summary.

Glenworth Valley Outdoor Adventures is recognised as a multi award winning tourist destination of state and national significance. The business operates over a significant landholding located at Glenworth Valley and Calga on the NSW Central Coast.

Glenworth Valley Outdoor Adventures has operated as a business on the site for in excess of 45 years and is recognised as a highly successful tourist destination which has a considerable profile within the Sydney and Central Coast communities. Glenworth Valley Outdoor Adventures employs approximately 20 full time staff and 60 – 80 part time and casual staff.

The original planning proposal application was to have specific additional permitted uses (APUs) inserted into the Gosford Local Environmental Plan and to rezone parts of the property to allow for additional uses within the site. This was intended to facilitate the growth of the activities associated with Glenworth Valley Outdoor Adventures.

The planning proposal was submitted under Planning for Bush Fire Protection 2006 and has received support from the NSW Rural Fire Service (NSW RFS) on 10th February 2016 as follows:

Reference is made to Council's correspondence providing further information for consideration in relation to the above planning proposal.

The New South Wales Rural Fire Service (NSW RFS) has considered the further information provided by the proponent's bush fire consultants addressing the matters raised in our previous correspondence and discussed at an onsite meeting. This information included further details of the historical use of the site for outdoor recreational activities and potential bush fire protection measures that could be put in place to support future uses.

Based on this information, the NSW RFS advises that it no longer objects to the planning proposal subject to future development proposals complying with the provisions of Planning for Bush Fire Protection 2006 (PBP), particularly the provision of Asset Protection Zones (APZs), safe access and emergency evacuation management.

The rezoning aspect of the planning proposal has been abandoned and this report addresses a proposed amendment to the planning proposal which now includes a provision to allow for additional permitted use of the multi-purpose building and its surrounding curtilage.

The existing multi-purpose building is located on Lot 89 DP 755221 and was approved as an ancillary function to the existing recreational uses operating on the site. This amendment to the planning proposal seeks to permit the building to be used independently a "function centre", "entertainment facility" and a "food and drink premises".

The amended proposal also seeks to add "function centre", "entertainment facility" and a "food and drink premises" as additional permitted uses on the existing cleared areas of surrounding lots (Lots 19, 37 and 89 DP 755221 and Lots 22 and 32 DP 755253) with no permanent structures. Council have already determined that:

As the uses of "entertainment facility" and "food and drink premises" relate to buildings only, they could not be located anywhere but within the existing multi-purpose building (or future extensions) on Lot 89 DP 755221. Therefore, it is not intended to include these uses on the additional lots as requested by the proponent.

The purpose of this report is therefore to address the amendments to the planning proposal having regard to the function centre and the surrounding land.

The existing building has a floor area of approximately 800 m² and it is proposed that the total floor space to be used for a function centre, entertainment facility and a food and drink premises is increased to 1500 m². This additional floor space will allow for future extension (if required) to the building or ancillary structures directly adjacent to it.

This report will demonstrate that the existing building footprint complies with the asset protection zone requirements for Special Fire Protection Purpose Development detailed within Planning for Bush Fire Protection 2019. It will also report that the building construction complies the relevant requirements (BAL 12.5) as was enforced by the development consent for the structure. This report also details suitable access and services supply that are existing and provided to the development.

Extending from the review of the existing building it is apparent that any future alterations and additions associated with the proposed permissible increase in footprint *“to 1500 m² in an area attached to or immediately adjacent to the existing footprint”* can also comply with PBP 2019.

Council has noted that the use of the building as a function centre can relate to a place as well as a building. The amendment to the planning proposal will enable outdoor functions, such as weddings, birthday parties and corporate activities to occur on land surrounding the multi-purpose building where this use is permitted.

Cleared land adjoining the existing multi-purpose building is suitable for such a use and the building itself would function as a safe refuge for any people in attendance. A recent bushfire study has already been undertaken and provided to the NSW RFS demonstrating that nearby land within this property can also be used as an outdoor refuge and that these areas meets the radiant heat threshold requirements for an Outdoor Neighbourhood Safer Place. A copy of that study is attached to this report.

1.0 Introduction.

The subject site is mapped as bushfire prone land and therefore the application of *Planning for Bush Fire Protection 2019* (PBP 2019) is relevant to the development proposal. The aims of PBP 2019 is to *provide for the protection of human life and minimise impacts on property from the threat of bush fire, while having due regard to development potential, site characteristics and protection of the environment.*

This is achieved by determining and applying the required asset protection zones, where applicable applying the relevant construction requirements, ensuring satisfactory access and egress has been incorporated into the design and providing safe service supply and adequate water provisions for occupants and attending emergency services.

In terms of bushfire assessment, the existing multi-purpose building has approval to operate as a place of public assembly and was approved by the NSW RFS by the issuing of a Bush Fire Safety Authority following assessment of compliance with *Planning For Bush Fire Protection 2006*. The current approval for occupation of the premises and independent use as a "function centre", "entertainment facility" and a "food and drink premises is considered redevelopment of the existing approved site use.

In terms of PBP 2019 the development is considered to be *infill* Special Fire Protection Purpose Development under section 6.4 which states:

The intention for any building work occurring within an existing SFPP development is to achieve a better bush fire outcome than if the development did not proceed. Achieving this may require a combination of measures including improved construction standards, APZs and evacuation management. This may result in a level of retrofitting of existing buildings and managing other portions of the site (i.e. APZs) to ensure an improved level of bush fire protection.

Intensification of the use or increase in occupancy must consider the risk to occupants and firefighters. Where practically achievable, full compliance should be provided before variations to the required BPMs are considered.

No new building works are proposed as part of this amendment to the planning proposal. It is noted that for and future extensions or additions to the multi-purpose building to occur a development application to Council and approvals from the NSW Rural Fire Service under s100B of the Rural Fires Act 1997 will be required.

2.0 Property details.

Address: 69 Cooks Road Calga, NSW.
Lot/DP: The subject site comprises 49 lots ranging in size from 0.1 hectares (Ha) to 267.5 Ha. The area of the subject site is 1173.6 Ha.
Zoned: The subject site comprises approximately 1070.2 Ha of land zoned E2 Environmental Conservation and 103.4 Ha of land zoned RU2 Rural Landscape under Gosford LEP 2014
LGA: Central Coast Council

3.0 Legislative context.

The proposal is an amended planning proposal to Central Coast Council seeking to include additional permitted uses within land at Glenworth Valley Outdoor Adventures, Glenworth Valley and Calga NSW.

The purpose of this report is to address an amendment to the planning proposal that already had supported from the NSW RFS. This review includes additional permitted uses in relation to the existing multi-purpose building. No new building works are proposed as part of this amendment to the planning proposal however it does allow for a possible future increase in building footprint.

For any future extensions or additions to the multi-purpose building to occur a development application to Council and approvals from the NSW Rural Fire Service under s100B of the Rural Fires Act 1997 will be required.

4.0 Copyright, scope and disclaimer.

This assessment of possible bushfire impact (including smoke, ember, radiant heat and flame contact) and compliance with matters such as Asset Protection Zones, access and service supply is pertinent to the subject site and APUs associated with the multi-purpose building only. Where reference has been made to the surrounding lands, this report does not assess impact to those lands rather it is an assessment of possible bushfire progression and impact on or from those lands towards the subject site.

Apart from any use permitted under the Copyright Act 1968 no part of this document, including any wording, images, or graphics, can be modified, changed or altered in any way without written permission from Australian Bushfire Consulting Services Pty Ltd. This report may only be referenced, distributed or forwarded to other parties in its original format.

The statements and opinions contained in this report are given in good faith and in the belief that such statements and opinions are correct and not misleading. AS3959 – 2018 states that “...*there can be no guarantee that a building will survive a bushfire event of every occasion. This is substantially due to the degree of vegetation management, the unpredictable nature and behaviour of fire, and extreme weather conditions*”. The NSW RFS state “*Homes are not designed to withstand fires in catastrophic conditions*”. Correspondingly any representation, statement of opinion, or advice expressed or implied in this document is made on the basis that Australian Bushfire Consulting Services Pty Ltd is not liable to any person for any damage or loss whatsoever which has occurred or may occur in relation to that person taking or not taking (as the case may be) action in respect of any representation, statement or advice made by Australian Bushfire Consulting Services Pty Ltd.

5.0 Referenced documents and people.

The following documents have been referenced in the preparation of this report;

- Central Council Bushfire Prone Land Map,
- Gosford Local Environmental Plan 2014
- AS3959 – 2018 Construction of buildings in bushfire prone areas,
- AS 2419 – 2017 Fire hydrant installations System design, installation and commissioning,
- Planning for Bush Fire Protection 2019,
- Rural Fires Act 1997,
- Rural Fires Regulation 2013,
- 10/50 Vegetation Clearing Code of Practice,
- NSW RFS Guide for bush fire prone land mapping V5b Nov 2015,
- Ocean Shores to Desert Dunes – David Andrew Keith 2004.
- Bush Fire Hazard Assessment for Glenworth Valley Outdoor Adventures Temporary use of land for events and festivals Ref: 20-100 Australian Bushfire Consulting Services 29th April 2020
- Bush Fire Hazard Assessment and Comments for Glenworth Valley Outdoor Adventures Planning Proposal Ref. 150722 Building Code and Bushfire Hazard Solutions 24th June 2015
- Planning Proposal – Glenworth Valley Outdoor Adventure 3 July 2015 Eco Logical Australia
- Planning Proposal - Glenworth Valley and Calga NSW RFS Ref L14/0004 10th February 2016
- Central Coast Council Note Ordinary Meeting 11 November 2019 Item 2.5 Trim Ref F2018/00020-008 – D13343340
- Central Coast Council Note Ordinary Meeting 27 April 2020 Item 3.6 Trim Ref F2019/00041 – D13899090

6.0 Images and maps.

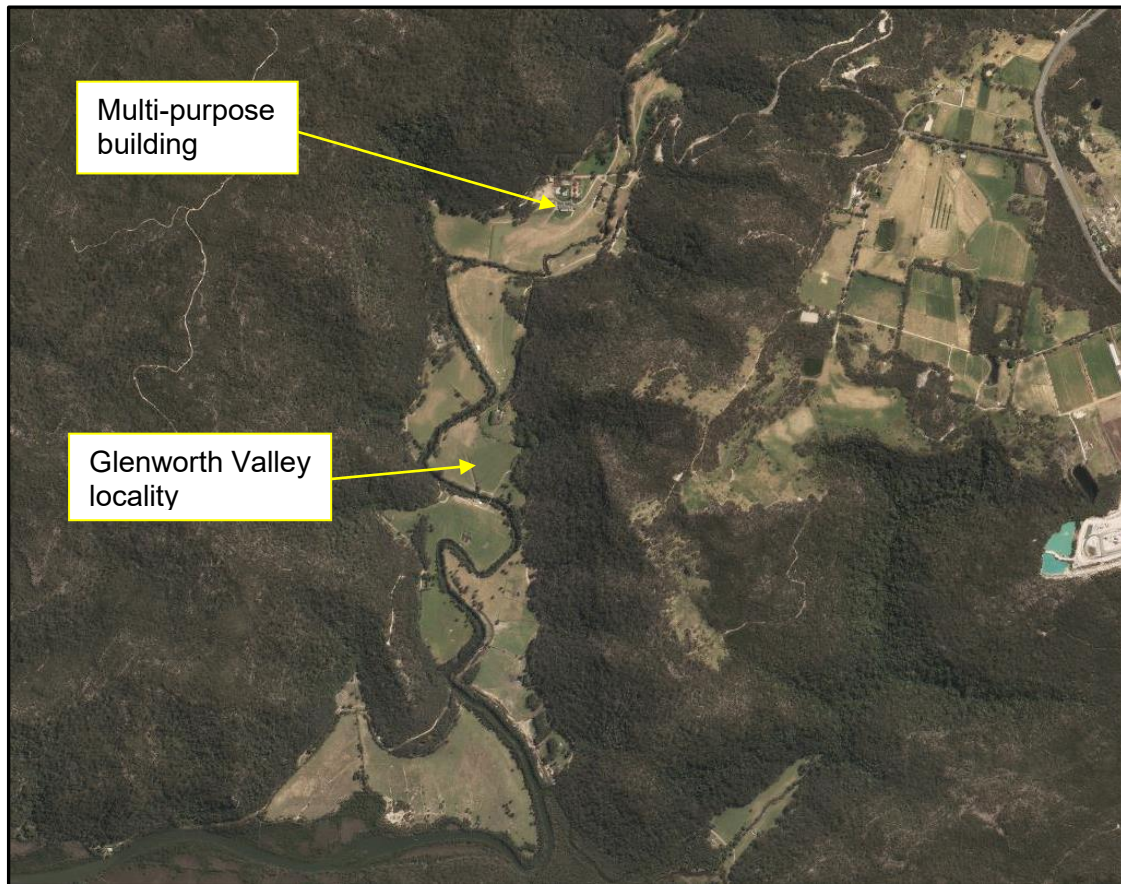


Image 01: Aerial image from NSW Dept Planning property information mapping

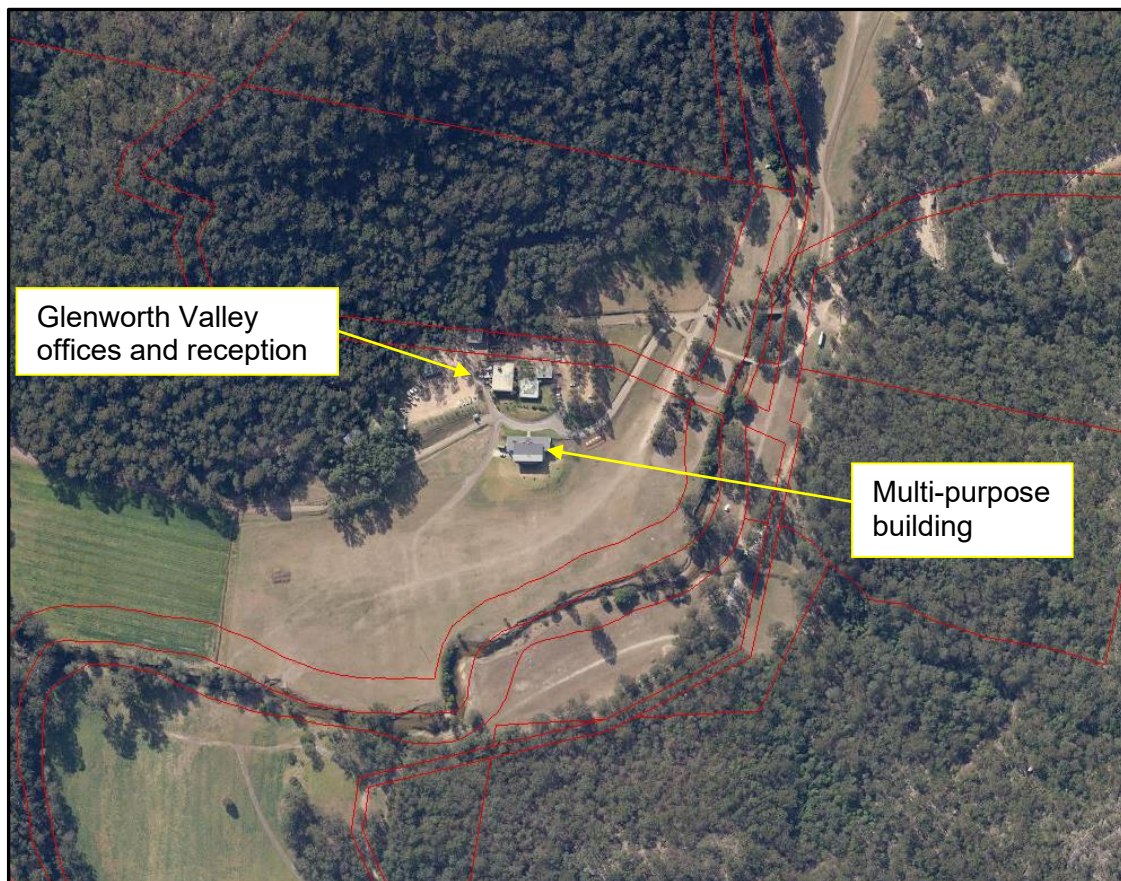


Image 02: Aerial image from NSW Dept Planning property information mapping

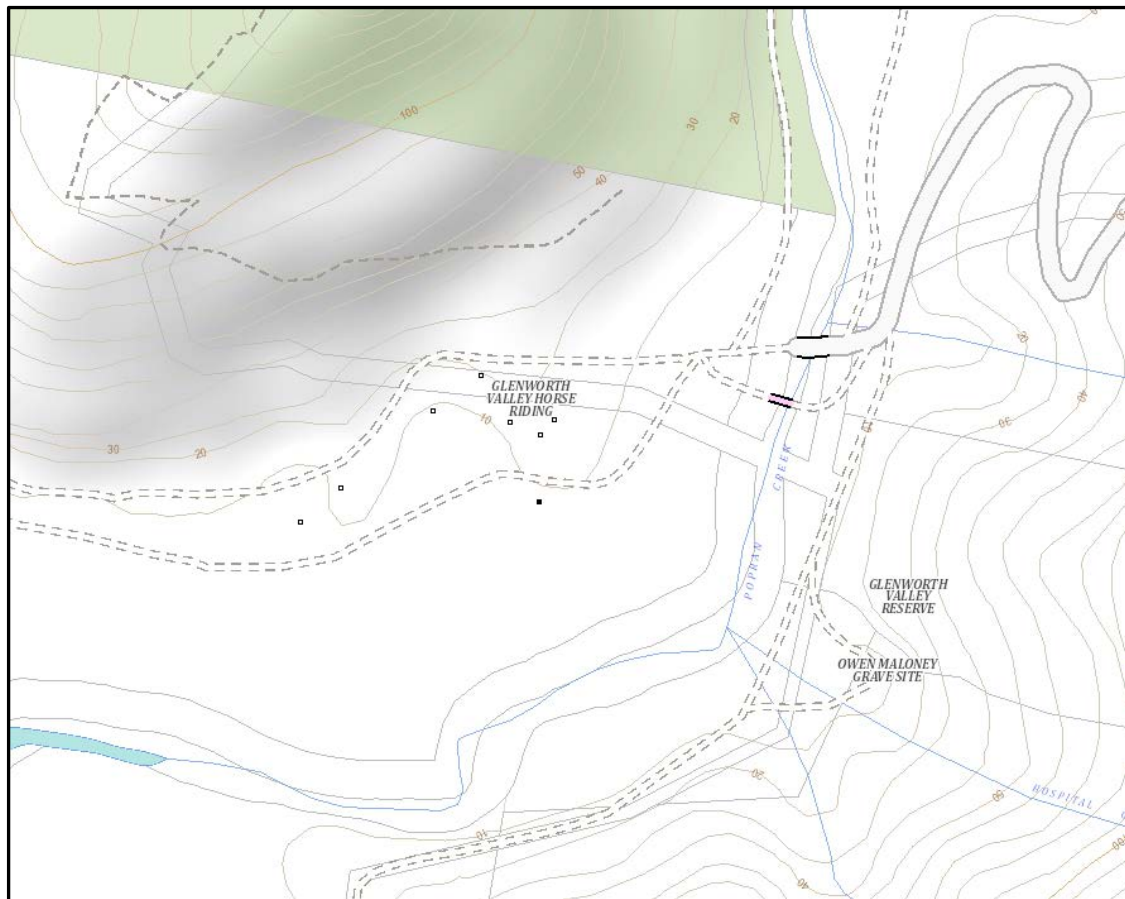


Image 03: 10 metre topographic detail extract from NSW Dept Planning property information mapping

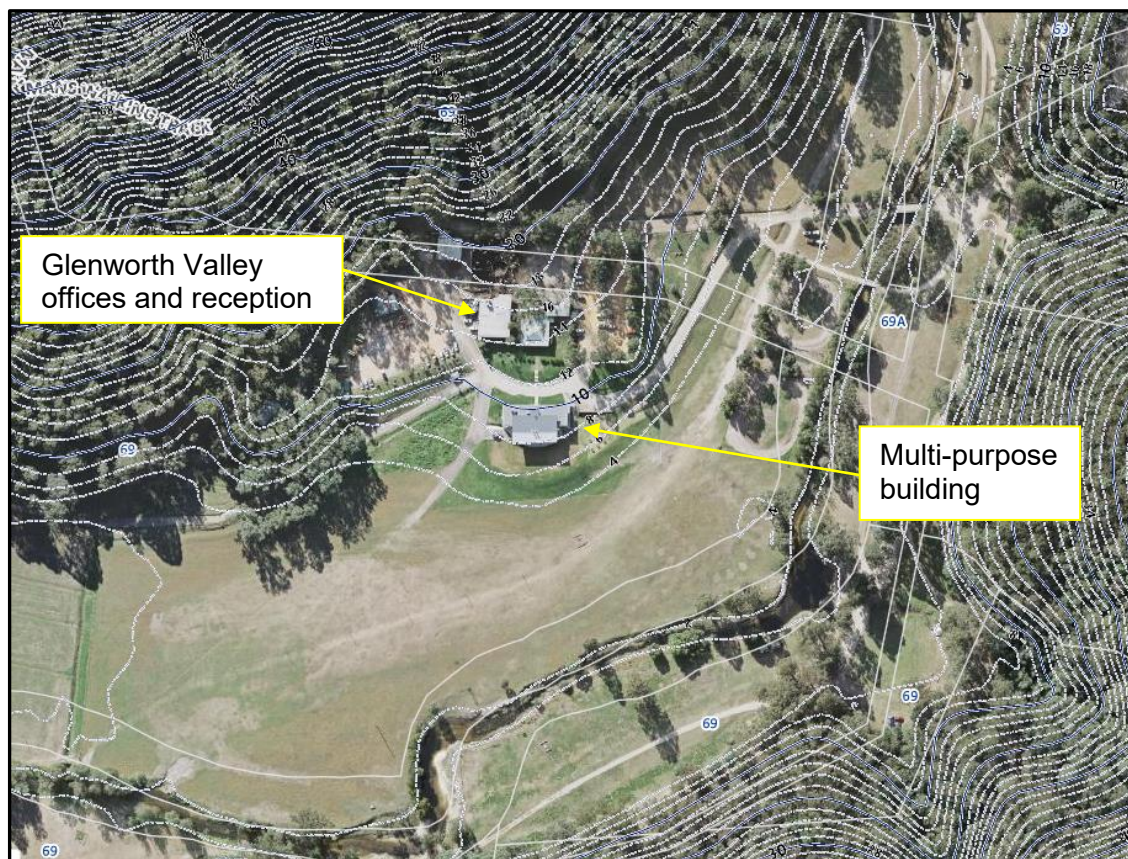


Image 04: 2 metre topographic detail extract from Central Coast Council online mapping

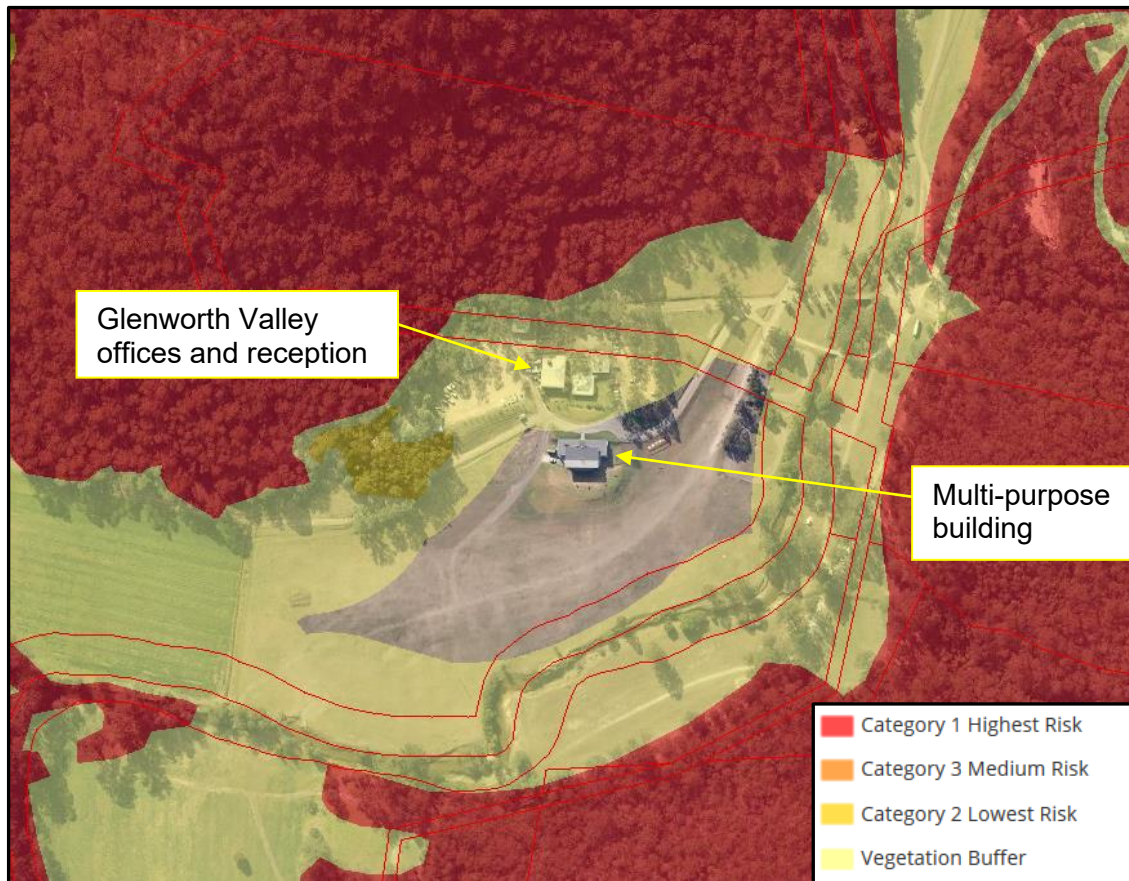


Image 05: Extract of Councils Bushfire Prone Land Map from NSW Dept Planning property information



Image 06: Extract of Councils Vegetation Map Layer from Central Coast Council online mapping

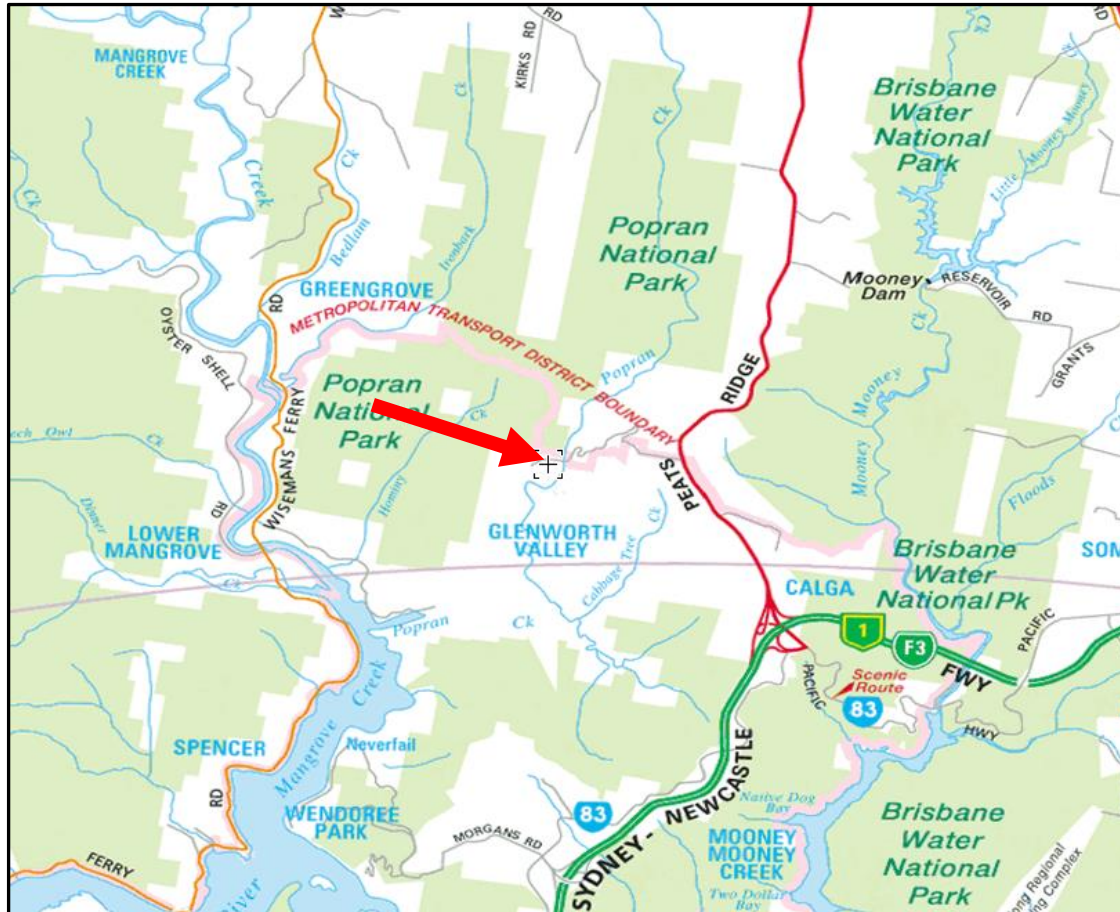


Image 07: Extract from streetdirectory.com.au

7.0 Bushfire hazard assessment

Properties considered to be bushfire prone land are identified on Councils Bush Fire Prone Land Map as being:

- *within or within 100 m of Category 1 (high) hazards or,*
- *within or within 30 m of Category 2 (low) hazards or,*
- *within or within 30 m of Category 3 (medium) hazards.*

The NSW RFS document PBP – 2019 is applicable to all development on bushfire prone land, this includes an assessment of the proposals adequacy in providing an appropriate combination of bushfire protection measures in terms of asset protection zones, landscaping, access and service supply. This document also provides a means of determining the necessary level of building construction under AS3959 - 2018. All integrated development on bushfire prone land must be accompanied with a bushfire hazard assessment that includes;

- (a) a description (including the address) of the property on which the development the subject of the application is proposed to be carried out;*
- (b) a classification of the vegetation on and surrounding the property (out to a distance of 140 metres from the boundaries of the property) in accordance with the system for classification of vegetation contained in Planning for Bush Fire Protection;*
- (c) an assessment of the slope of the land on and surrounding the property (out to a distance of 100 metres from the boundaries of the property);*
- (d) identification of any significant environmental features on the property;*
- (e) the details of any threatened species, population or ecological community identified under the Threatened Species Conservation Act 1995 that is known to the applicant to exist on the property;*
- (f) the details and location of any Aboriginal object (within the meaning of the National Parks and Wildlife Act 1974) or Aboriginal place (within the meaning of that Act) that is known to the applicant to be situated on the property;*
- (g) a bush fire assessment for the proposed development (including the methodology used in the assessment) that addresses the following matters:*
 - (i) the extent to which the development is to provide for setbacks, including Asset Protection Zones;*
 - (ii) the siting and adequacy of water supplies for firefighting;*
 - (iii) the capacity of public roads in the vicinity to handle increased volumes of traffic in the event of a bush fire emergency;*
 - (iv) whether or not public roads in the vicinity that link with the fire trail network have two-way access;*
 - (v) the adequacy of arrangements for access to and egress from the development site for the purposes of an emergency response;*
 - (vi) the adequacy of bush fire maintenance plans and fire emergency procedures for the development site;*
 - (vii) the construction standards to be used for building elements in the development;*
 - (viii) the adequacy of sprinkler systems and other fire protection measures to be incorporated into the development;*
 - (h) an assessment of the extent to which the proposed development conforms with or deviates from the standards, specific objectives, performance criteria and acceptable solutions set out in Chapters 5-8 of PBP; and*
- (i) identify any fire trails that exist on the property that are on the Register of Certified Fire Trails under RF Acts.*

By incorporating bush fire protection measures into a development, the six objectives of PBP 2019 are addressed:

1. *afford buildings and their occupants protection from exposure to a bush fire;*
2. *provide for a defensible space to be located around buildings;*
3. *provide appropriate separation between a hazard and buildings which, in combination with other measures,*
4. *prevent the likely fire spread to buildings;*
5. *ensure that appropriate operational access and egress for emergency service personnel and occupants is available;*
6. *provide for ongoing management and maintenance of BPMs; and ensure that utility services are adequate to meet the needs of firefighters.*

FORMS OF BUSHFIRE ATTACK

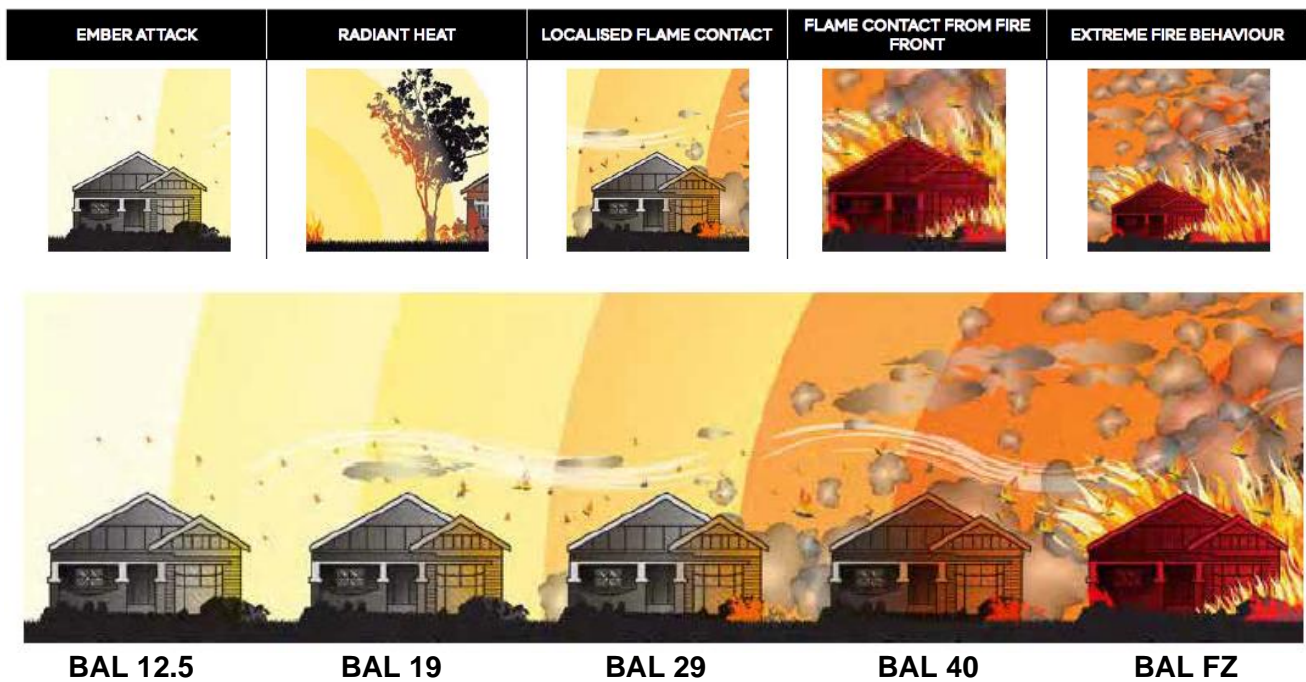


Image 8 & 9: Extract from *Planning Permit Applications, Bushfire Management Overlay. Technical Guide*, September 2017. Department of Environment Land Water and Planning, Victoria.

7.1 Site

The site is located within Glenworth Valley Outdoor Adventures that operates within the landholdings of Glenworth Valley Pastoral Company Pty Ltd at Glenworth Valley and Calga on the NSW Central Coast. The primary access road to the valley is a dual lane all weather access road via the end of Cooks Road to the east.

Councils bushfire prone land map depicts the subject site as containing Category 1 & 2 Vegetation and the 100 metre & 30 metre buffer zones from a Category 1 & 2 Vegetation. The footprint of the existing multi-purpose building is clear of any mapped bushfire areas and buffer zones.

7.2 Vegetation

In accordance with Planning for Bush Fire Protection 2019 the vegetation structure must be determined under Keith 2004 for a distance out to 140 metres from the proposed development and, where a mix of vegetation classes are found, that representing the highest hazard is said to predominate.

The bushfire hazardous vegetation identified on Councils bushfire prone land map is located to the east and west of the multi-purpose building within the subject site itself.

The vegetation within the assessed area was found to consist of trees 20 - 25 metres in height with an understorey of smaller trees and native shrubs. The following communities are mapped in this area.

NSW Formation: Wet sclerophyll forests
NSW Class: Northern Hinterland Wet Sclerophyll Forests
Map Unit: Rough-barked Apple/ Forest Oak/ Grey Gum grassy woodland on sandstone ranges of the Sydney Basin

NSW Formation: Wet sclerophyll forests
NSW Class: North Coast Wet Sclerophyll Forests
Map Unit: Turpentine/ Rough-barked Apple/ Mountain Blue Gum shrubby open forest on ranges of the Sydney Basin

NSW Formation: Dry sclerophyll forests
NSW Class: Sydney Coastal Dry Sclerophyll Forests
Map Unit: Smooth-barked Apple/ Turpentine/ Sydney Peppermint heathy woodland on sandstone ranges of the Central Coast

NSW Formation: Dry sclerophyll forests
NSW Class: Sydney Coastal Heaths
Map Unit: Scribbly Gum/ Red Bloodwood/ Old Man Banksia heathy woodland of southern Central Coast

Therefore, for the purposes of assessment under Tables A1.12.1 & A1.12.5 within PBP 2019 the vegetation has been classified as a Forest hazard. For any design fire modelling used the fuel loads associated with both a Northern Hinterland WSF and Sydney Coastal DSF have been analysed and the highest determination is applied.

7.3 Topography

The slope must be assessed over a distance of at least 100 m from the building footprint towards the various vegetation communities constituting the hazard. In assessing the slope, it may be found that there are a variety of slopes covering different distances. The gradient within the hazard (vegetation) which will most significantly influence the fire behaviour must be determined.

The slope was determined onsite using an inclinometer and verified by topographic mapping to be;

- >15 degrees and upslope to the east and west (hazard slope)
- 5 degrees to the west (site slope)
- 0 degrees level land to the east (site slope)

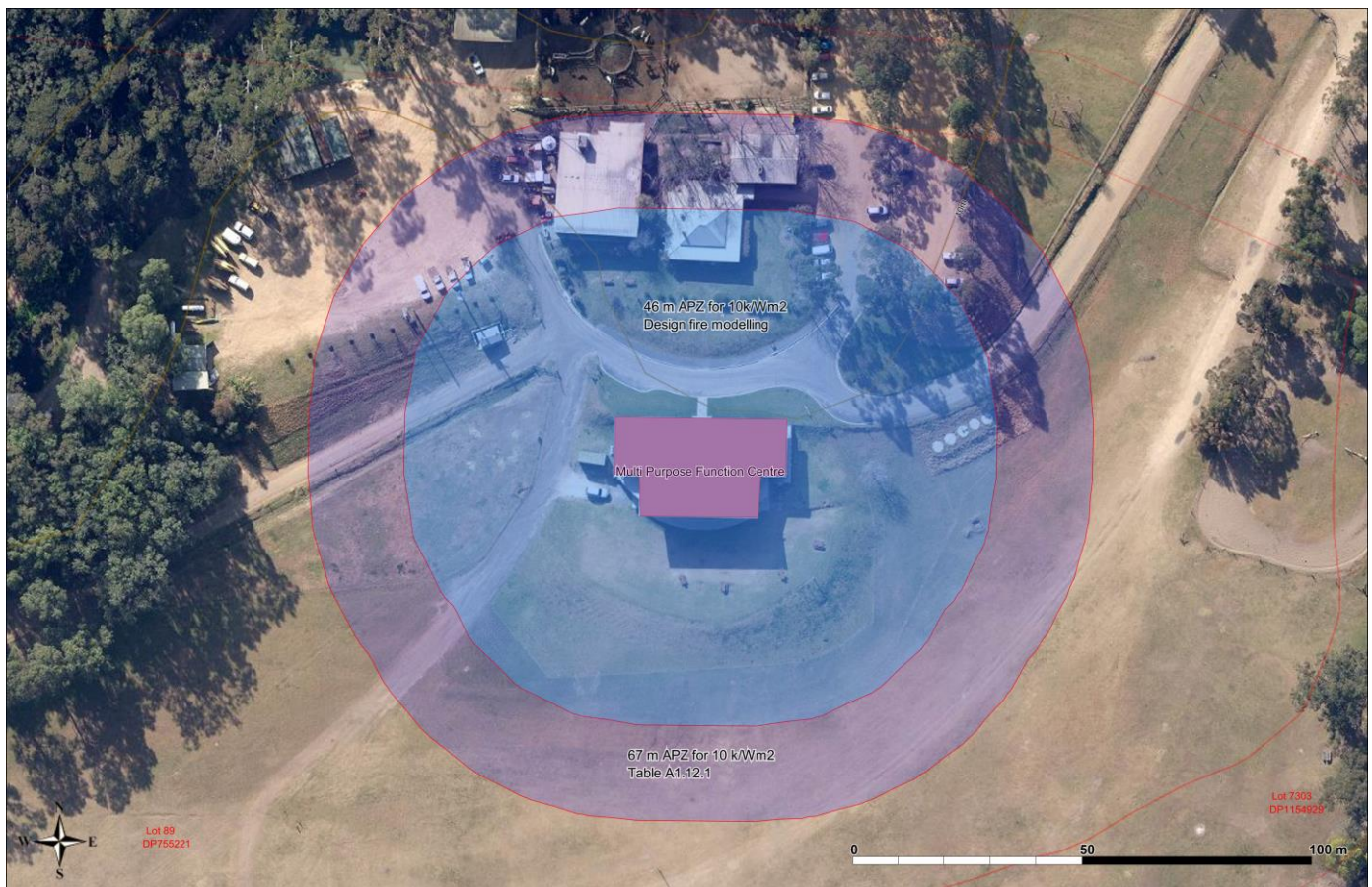
7.4 Asset Protection Zones

An APZ is a buffer zone between a bush fire hazard and buildings, which is managed progressively to minimise fuel loads and reduce potential radiant heat levels, flame, ember and smoke attack. A fuel-reduced, physical separation between buildings and bush fire hazards is the key element in the suite of bushfire protection measures.

Minimum APZs for assembly buildings (Special Fire Protection Purpose development) are determined under Table A1.12.1 within PBP 2019 or by design fire modelling and are such that, during a bushfire event, a building footprint is not exposed to greater than 10 k/Wm² expected radiant heat impact.

The APZ normally attributed to a greenfield development determined from Table A1.12.1 within PBP 2019 is 67 metres to the east and west. Design fire modeling has also been used to determine a plausible reduction in this requirement to account for the fact that fires burning towards the existing footprint would be travelling on a significant downslope. The forward rate of spread would be reduced from that assumed by PBP 2019 Table 1.12.1 for a general classification of 0 degrees or upslope. The allowable minimum APZ determined by fire modelling is 46 metres to the west and 45 metres to the east.

The existing separation from the hazard interfaces exceeds these minimum requirements in all directions. Furthermore, it is apparent that any future expansion of the building footprint (up to the proposed maximum allowable 1500 m²) can easily be located within an area that will also comply with PBP 2019 and APZ requirements.



Legend
 My annotations: Multi Purpose Function Centre (pink square)
 Lot Boundary: (red line)
 Contours: (yellow line)
 Medium Scale: (grey line)
 Large Scale: (orange line)
 Map Printed from FireMaps on Sun Sep 06 13:54:34 AEST 2020

Image 10: Overlay showing APZ (Table 1.12.1 & fire modelling)

7.5 Access & egress

Glenworth Valley is serviced by public roads that enter and exit the property in three distinctly different directions. A fourth 4WD emergency response road also exists in a similar area to the main entry route.

The primary access road is the main dual lane all weather access road via the end of Cooks Road to the east. This road has been inspected and was found to comply with the width and grade requirements of Table 6.8b PBP 2019 for Special Fire Protection Purpose Developments. This road is regularly traversed by heavy vehicles and has been used by Category 1 Fire Appliances on previous occasions.

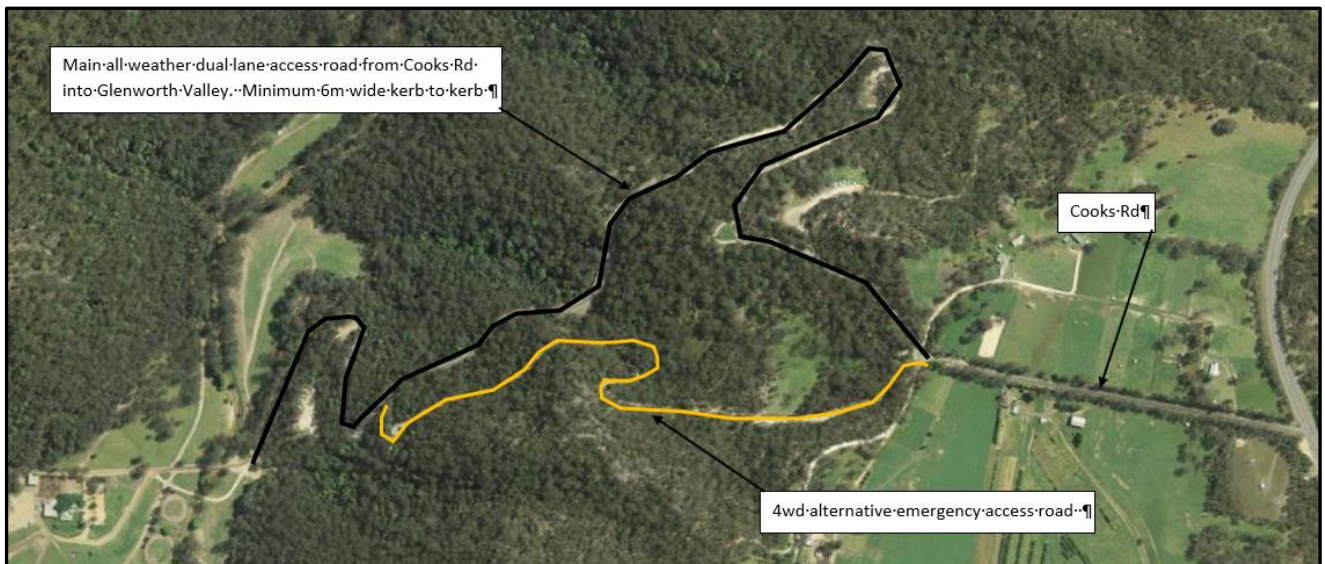
There is a second alternative access road being Popran Road that runs through the property in a south westerly direction. This road connects to Wisemans Ferry Road further west.

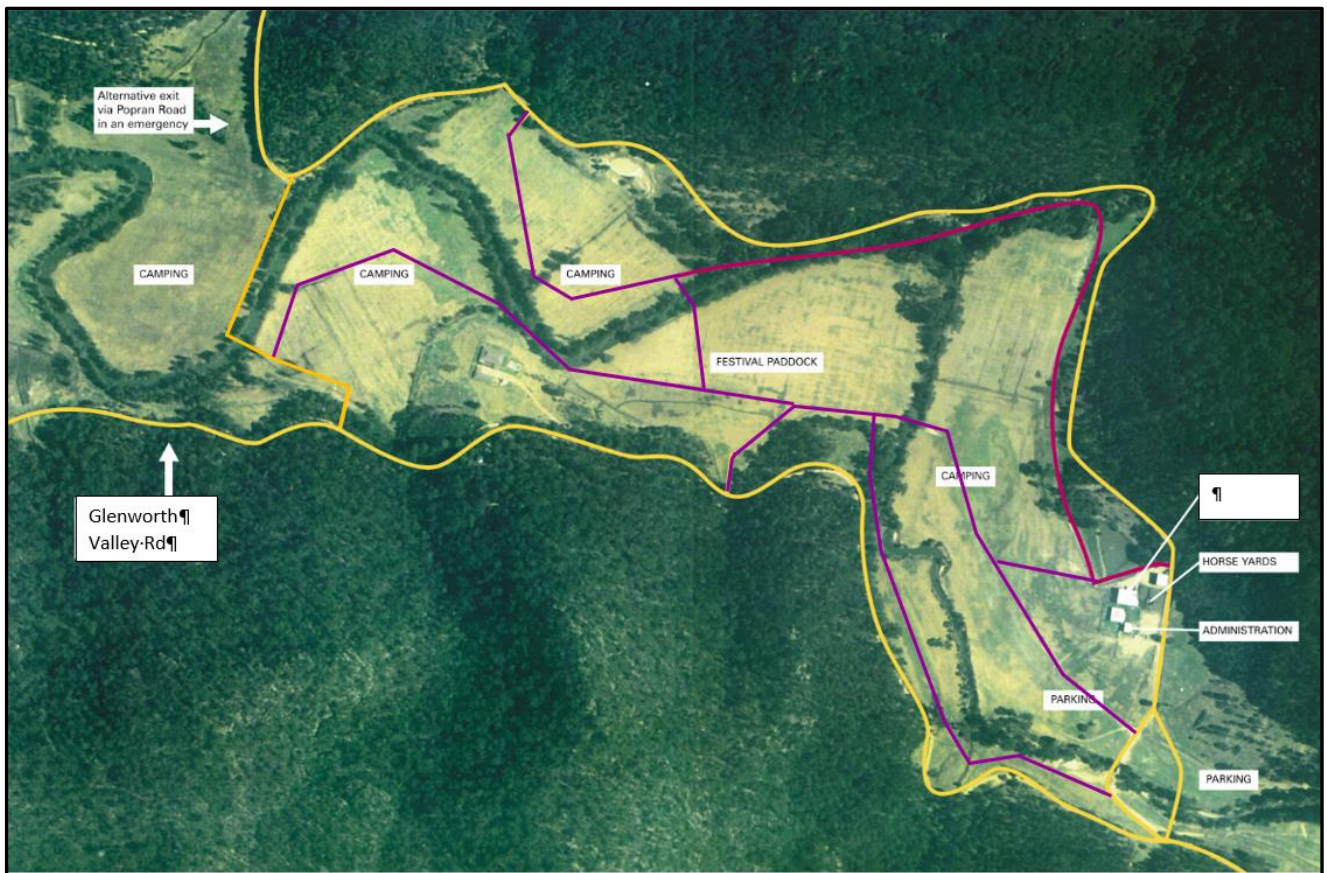
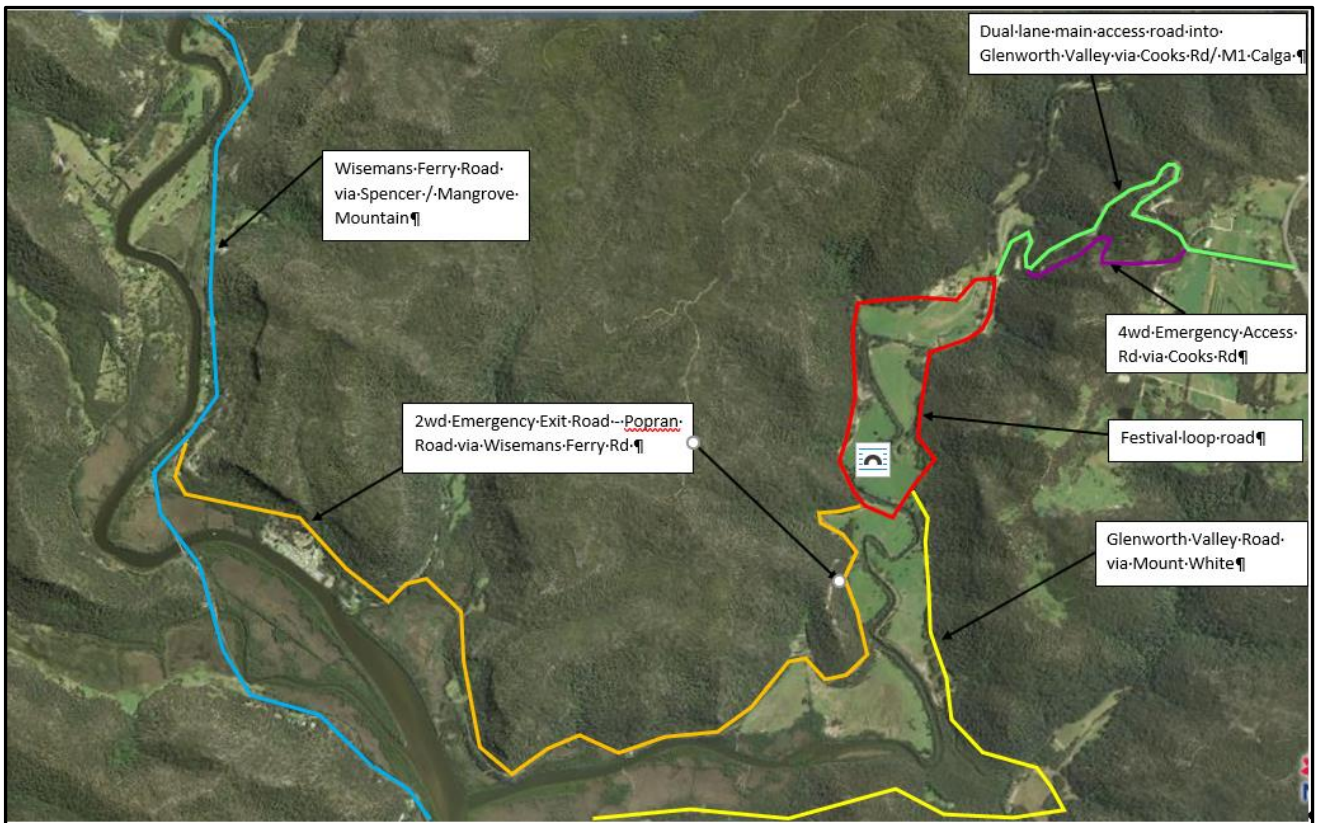
There is also access to Wendoree Park and Mount White to the south via Glenworth Valley Road, which could also very easily be used subject to some minor maintenance work.

In addition to this, the floor of the valley is serviced by 4 internal roads. These consist of a main access loop road on each side of Popran Creek which is connected via bridges suitable for use by Category 1 Fire Appliances and 2 lower roads also located on either side of Popran Creek. The 2 lower roads are linked together at multiple points throughout the valley via bridges, providing multiple access points for smaller vehicles to either side of the valley.

These 4 internal access roads have been utilised for past festivals on the property and provide a flexible range of options to move people, emergency response vehicles and evacuate the site across a wide range of locations.

A fourth 4WD road also exists which runs from the western end of Cooks Road in a westerly direction and intersects the main entry road close to the valley.





7.6 Services

Available resources at Glenworth Valley are:

- 1 x 15,000 L Freightliner bulk water tanker with firefighting pump for re filling appliances and includes a firefighting hose reel
- 1 x 1100 L firefighting tanker trailer with firefighting pump and 50m hose reel
- 1 x 1000 L slip on ute tanker, firefighting pump and twin 50m hose reels
- 1 x 1000 L water trailer tanker with firefighting pump and twin 200m retractable hose reels
- 1 x 1000 L agricultural spot spraying tractor trailer unit with PTO pump and 50m hose reel
- 2 x 15 L firefighting spot spraying back packs
- 2 x 3" NSWFB approved fire hydrants at our Event Centre Building powered by twin automatic start, diesel pumps (with storz fitting adaptors for RFS refill purposes). Provides 10 L /sec flow. Water supply from 750,000 litre dedicated in ground earth tank with water level topped up by automatic float switch from onsite reticulated water supply fed by 3 x 375,000 water tanks fed by onsite bores and natural springs.
- 3 x 375,000 water tanks fed by onsite bores and natural springs reticulated throughout the property with 12 hydrant outlets throughout the property.
- 1 x 100,000 L stainless steel water tank supply with twin 3" bulk water refill hoses and storz fittings to match for RFS refill purposes
- 3 x 25,000 L concrete water tanks located throughout the property for onsite appliance and RFS refill purposes.
- Numerous permanent dams and tidal creek water with suitable access for water refill purposes.

The existing electrical supply to the site is overhead. No reticulated gas is provided in this area. Any future development application can apply consent conditions to ensure that that any new electrical services or bottled gas supply is provided in accordance with Table 6.8c of PBP 2019.

7.7 Emergency management

It is recommended that as part of any future development a revised Bushfire Emergency Evacuation Plan is prepared in accordance with the NSW Rural Fire Service Guidelines for the Preparation of Emergency/ Evacuation Plan. This plan should include a trigger for safe refuge onsite to avoid relocation in times of imminent bushfire impact and measures for non-occupation of the centre on days of predicted catastrophic fire danger ratings.

Cleared land adjoining the existing multi-purpose building is suitable for such a use and the building itself would function as a safe refuge for any people in attendance. A recent bushfire study has already been undertaken and provided to the NSW RFS demonstrating that nearby land within this property can also be used as an outdoor refuge and that these areas meets the radiant heat threshold requirements for an Outdoor Neighbourhood Safer Place. A copy of that study is attached to this report.

Staff also assume the role of fire wardens for day to day operations and during large events at the property security also function as fire wardens. A controlled release / stage evacuation relocation can be undertaken with communications provided between Cooks Road and the valley floor. This enables a co-ordinated evacuation ensuring the main road is not fully loaded with vehicles and that Cooks Road / Peats Ridge Road intersection does not become overloaded. Relocation from the site will be ceased when it is no longer safe to do so and safe refuge onsite in the NSP or the multi-purpose building areas will then ensue.

7.8 Construction

Australian Standard 3959 – 2018 'Construction of buildings in bushfire-prone areas' provides for six (6) levels of building construction these being BAL - Low, BAL - 12.5, BAL - 19, BAL - 29, BAL - 40 and BAL - FZ. The Australian Standard 3959 specifies construction standards for buildings within various Bushfire Attack Levels as determined by the Planning for Bushfire Protection – 2019 document. The NSW Rural Fire Service will not accept deemed to satisfy provisions for BAL Flame Zone and therefore have a NSW variation to the listed standard provisions of BAL FZ under AS3959 - 2018.

The highest Bushfire Attack Level to the existing building footprint was determined from Table A1.12.5 of PBP 2019 to be 'BAL 12.5'. The existing structure was required to comply with BAL 12.5 requirements at the time of its construction. This has been certified as compliant at the time occupation of the building was granted.

As the existing structure is compliant with section 3 and 5 BAL 12.5 of *AS 3959 – 2018 Construction of buildings in bushfire prone areas* no upgrade works are necessary for this building.

Any future development application to increase the size of the building footprint can apply consent conditions to ensure that future development is compliant with *AS 3959 – 2018 Construction of buildings in bushfire prone areas* and the additional construction requirements detailed within section 7.5.2 of PBP 2019 at that time.

8.0 Assessment summary table.

Aspect	West	East	West	East
Vegetation Structure	Sydney Coastal Dry Sclerophyll Forest	Sydney Coastal Dry Sclerophyll Forest	Northern Hinterland Wet Sclerophyll Forest	Northern Hinterland Wet Sclerophyll Forest
Hazard slope	>10° upslope	>10° upslope	>10° upslope	>10° upslope
Hazard slope	5° upslope	0° level land	5° upslope	0° level land
NSW RFS Comprehensive Fuels	21.3/27.3 t/ha Surface/total	21.3/27.3 t/ha Surface/total	20/33.1 t/ha Surface/total	20/33.1 t/ha Surface/total
Fire Danger Index Area	FDI 100			
Fire Front Width	100 metres			
Flame Temperature	1200 K			
Required Asset Protection Zone Table A1.12.1 PBP 2019	67 metres	67 metres	67 metres	67 metres
Required Asset Protection Zone Design fire modelling	45 metres	44 metres	46 metres	45 metres
Existing Asset Protection Zone	≥67 metres	≥67 metres	≥67 metres	≥67 metres
Table A1.12.5 PBP 2019 Bushfire Attack Level	BAL 12.5	BAL 12.5	BAL 12.5	BAL 12.5

9.0 Conclusion

The proposal is an amended planning proposal to Central Coast Council seeking to include additional permitted uses within land at Glenworth Valley Outdoor Adventures, Glenworth Valley and Calga NSW.

The purpose of this report has been to address an amendment to the planning proposal that already had supported from the NSW RFS. This review has included proposed additional permitted uses in relation to the existing multi-purpose building. No new building works are proposed as part of this amendment to the planning proposal however it does allow for a possible future increase in building footprint.

For any future extensions or additions to the multi-purpose building to occur a development application to Council and approvals from the NSW Rural Fire Service under s100B of the Rural Fires Act 1997 will be required.

This bushfire hazard and determination has been made on a site-specific basis which includes an assessment of the local bushland area and its possible impact to the subject property.

This report has demonstrated that the existing occupation of the multi-purpose building is compliant with its approval determined under Planning for Bush Fire Protection 2006 and, for ongoing use independent to the existing site uses, no new bushfire protection measures are necessary for compliance with the more recent policy Planning for Bush Fire Protection 2019.

It is also apparent that existing and future APZ around any additional development (up to the proposed maximum allowable 1500 m² in close proximity to the existing building) can exceed the minimum requirements of Planning for Bush Fire Protection 2019 in all directions.

At the time of any future development application to increase the size of the building footprint Council or the NSW RFS can apply consent conditions to ensure that future development is compliant with *Planning for Bush Fire Protection 2019, AS 3959 – 2018 Construction of buildings in bushfire prone areas* and the additional construction requirements detailed within section 7.5.2 of PBP 2019 at that time. Additional conditions can also be applied to ensure that that new electrical services or bottled gas supply is provided in accordance with Table 6.8c of PBP 2019. The site has the capacity of providing bushfire protection measures that comply with PBP 2019.

It is recommended that as part of any future development a revised Bushfire Emergency Evacuation Plan is prepared in accordance with the NSW Rural Fire Service Guidelines for the Preparation of Emergency/ Evacuation Plan. This plan should include a trigger for safe refuge onsite to avoid relocation in times of imminent bushfire impact and measures for non-occupation of the centre on days of predicted catastrophic fire danger ratings.

I am in support of the amendment to the planning proposal.

Australian Bushfire Consulting Services Pty Ltd



Wayne Tucker

Managing Director
G. D. Design in Bushfire Prone Areas.
Certificate IV Fire Technology
Ass Dip Applied Science
FPA Australia BPAD Level 3 Accredited Practitioner
BPAD Accreditation No. BPAD9399



List of attachments

- Attachment 01: Bush Fire Hazard Assessment for Glenworth Valley Outdoor Adventures
Temporary use of land for events and festivals
Ref: 20-100 Australian Bushfire Consulting Services 29th April 2020
- Attachment 02: Bush Fire Hazard Assessment and Comments for Glenworth Valley Outdoor
Adventures Planning Proposal
Ref. 150722 Building Code and Bushfire Hazard Solutions 24th June 2015
- Attachment 03: Planning Proposal – Glenworth Valley Outdoor Adventures
3 July 2015 Eco Logical Australia
- Attachment 04: Planning Proposal - Glenworth Valley and Calga
NSW RFS Ref L14/0004 10th February 2016
- Attachment 05: Central Coast Council Note Ordinary Meeting 11 November 2019 Item 2.5
Trim Ref F2018/00020-008 – D13343340
&
Central Coast Council Note Ordinary Meeting 27 April 2020 Item 3.6 Trim
Ref F2019/00041 – D13899090
- Attachment 06: Bushfire Attack Assessment Design Fire Modelling Reports



AUSTRALIAN BUSHFIRE CONSULTING SERVICES



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PO Box 212 Berowra Heights 2082

Glenworth Valley Outdoor Adventures
69 Cook Road
Glenworth Valley NSW 2250

29th April 2020
Ref 20-100

Attn: Barton Lawler

**RE: GLENWORTH VALLEY OUTDOOR ADVENTURES
TEMPORARY USE OF LAND FOR EVENTS AND FESTIVALS
BUSH FIRE HAZARD ASSESSMENT**

Dear Barton,

Thank you for engaging me to provide this response to the NSW RFS request for additional information for your development application for the *proposed temporary use of lands for events and festivals*.

Council Reference DA 54251 / 2018
NSW RFS Reference D18/5865

I have reviewed the 1 page document provided, being the NSW RFS response to Council requesting additional information for this project. This document appears to be incomplete and I have had a conversation with Development Assessment Planning Officer Mr. Matthew Apps who stated that the remainder of the response would, in all likelihood, be a generic reproduction of the Fast Fact for Music Festivals and Outdoor Events that was NSW RFS policy at that time.

The NSW RFS would consider the current policy document *Planning for Bush Fire Protection 2019* in any response to this project. My review and this response have considered this document.

The development application seeks approval for:

a temporary use of land for the purposes of Festivals and Events on an ongoing basis up to a maximum of 28 days per annum. Events will operate under a pre-approved Event Management Plan Templates (EMP's) for attendance levels at either less than 1,000 attendees per day, 1,000 to 5,000 attendees per day, 5,000 - 7,500 attendees per day and 7,500 to 10,000 attendees per day.

It is proposed that a condition of consent would require an updated Event Management Plan (EMP) to be submitted to Council and other relevant authorities 30 days prior to any activity/event occurring for all events over 1000 people. All events operating under 1000 attendees per day would not be required to submit an EMP and will instead operate off the enclosed standard EMP, for events under 1000 attendees.

(Source: *Statement of Environments Effects April 2018 Mia Lawler*).

Similarly, this response proposes that a one off site specific Bushfire Emergency Management Plan will operate for events with attendances at less than 1000 attendees per day. For larger events, an "event specific" Bushfire Emergency Management Plan will be prepared. For larger events it is envisaged these plans will be prepared in consultation with the NSW Rural Fire Service and submitted to Council a minimum 30 days prior to any activity/event occurring.

The following provides a list of the heads of consideration under section 8.3.8 of *Planning for Bush Fire Protection 2019* (PBP 2019) and a response of the preparedness and treatment measures applied or available appropriate to each item.

Considerations for outdoor events on Bush Fire Prone Land (BFPL) are:

holding events outside the gazetted bush fire danger period for the area;

Timing of any event will be considered on a case by case basis. Higher fire danger days are more frequent during the bushfire danger period and all events would be cancelled on Catastrophic Fire Danger Days.

On severe or higher fire danger days larger events may also be cancelled, however this trigger will be reviewed prior to each event. Matters such as recent past weather (rainfall and drought factors), current weather forecast conditions, recent fires or hazard reductions burns, any advices from consultation with the NSW RFS will all affect this decision and will be made on a case by case and year by year basis.

areas of accommodation should be strategically located to ensure maximum time to warn and evacuate people who may be sleeping and slow to respond. This also ensures that highly flammable and combustible materials, such as tent fabric, vehicle fuels and gas cookers are in areas that will not facilitate the spread of fire;

Security can be employed to ensure prompt response to warn occupants and co-ordinate any evacuation.

PBP 2019 provides no performance requirements for asset protection zones (APZs) around camping and primitive camping accommodation. There are no minimum setbacks required from a hazard interface for these types of development. Furthermore, camping is permissible under PBP 2019 within APZs for other tourist uses. Consistent with this, camping accommodation will be provided for within the asset protection zones available onsite.

Mapping of the subject site showing areas acceptable as outdoor Neighbourhood Safer Places (NSP) has been completed and is detailed later in this response. These locations shall be kept free from parking, camping, marquees etc. and the size of the area required to be kept free from obstructions shall be proportionate to the number of occupants expected per specific event.

Clear pedestrian routes shall be maintained throughout camping areas directing occupants towards onsite safe refuge areas. Camping locations will also be designed so as not to impeded access and egress routes throughout the property.

a Bush Fire Emergency Management and Evacuation Plan must be prepared that is acceptable to relevant stakeholders, including crowd management and security. It should be consistent with the NSW RFS document: A guide to developing a bush fire emergency management and evacuation plan;

Similar to Event Management Plans proposed within the Statement of Environmental Effects, events for less than 1000 people will operate under a generic Bushfire Emergency Management Plan (BEMP) and events for over 1000 people will have an event specific BEMP. Events occurring during the bushfire danger period with over 5000 people will be submitted to Central Coast Fire Control Centre of the RFS for consultation and Council a minimum of 30 days prior to each event.

Bush Fire Emergency Management and Evacuation Plan should include planning for the early relocation of occupants.

access and egress routes for emergency services and patrons in the event that evacuation is required;

Glenworth Valley is serviced by public roads that enter and exit the property in three distinctly different directions. A fourth 4WD emergency response road also exists in a similar area to the main entry route.

The primary access road is the main dual lane all weather access road via the end of Cooks Road to the east. This road has been inspected and was found to comply with the width and grade requirements of Table 6.8b PBP 2019 for Special Fire Protection Purpose Developments. This road is regularly traversed by heavy vehicles and has been used by Category 1 Fire Appliances on previous occasions.

There is a second alternative access road being Popran Road that runs through the property in a south westerly direction. This road connects to Wisemans Ferry Road further west.

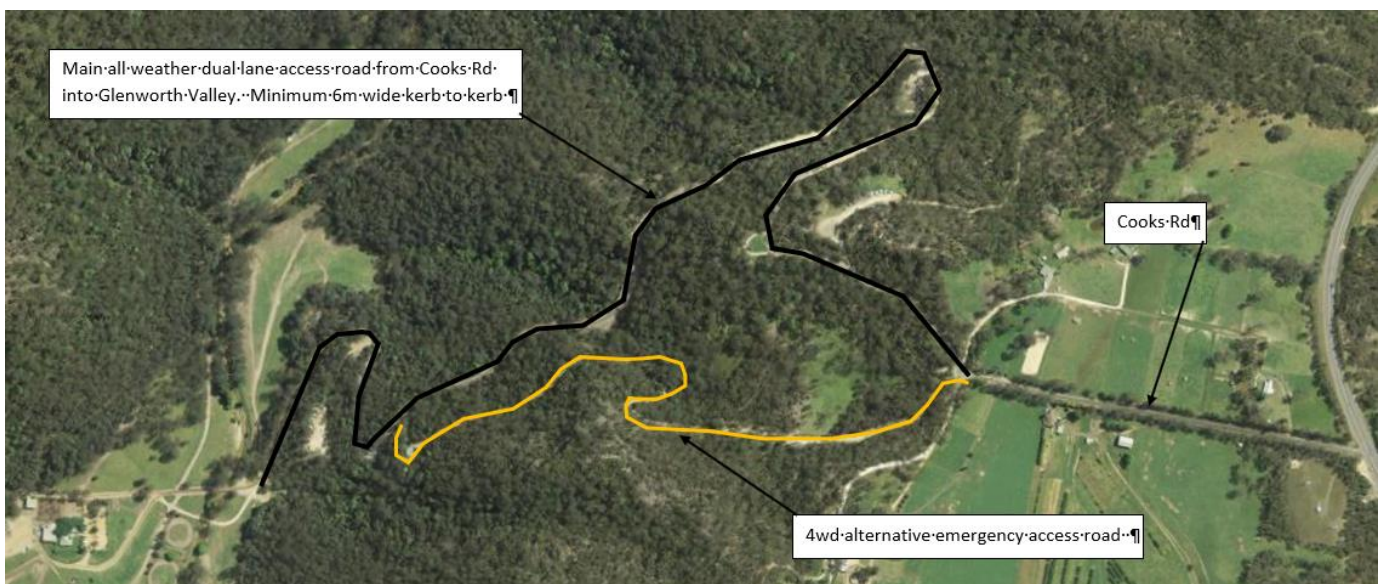
There is also access to Wendoree Park and Mount White to the south via Glenworth Valley Road, which could also very easily be used subject to some minor maintenance work.

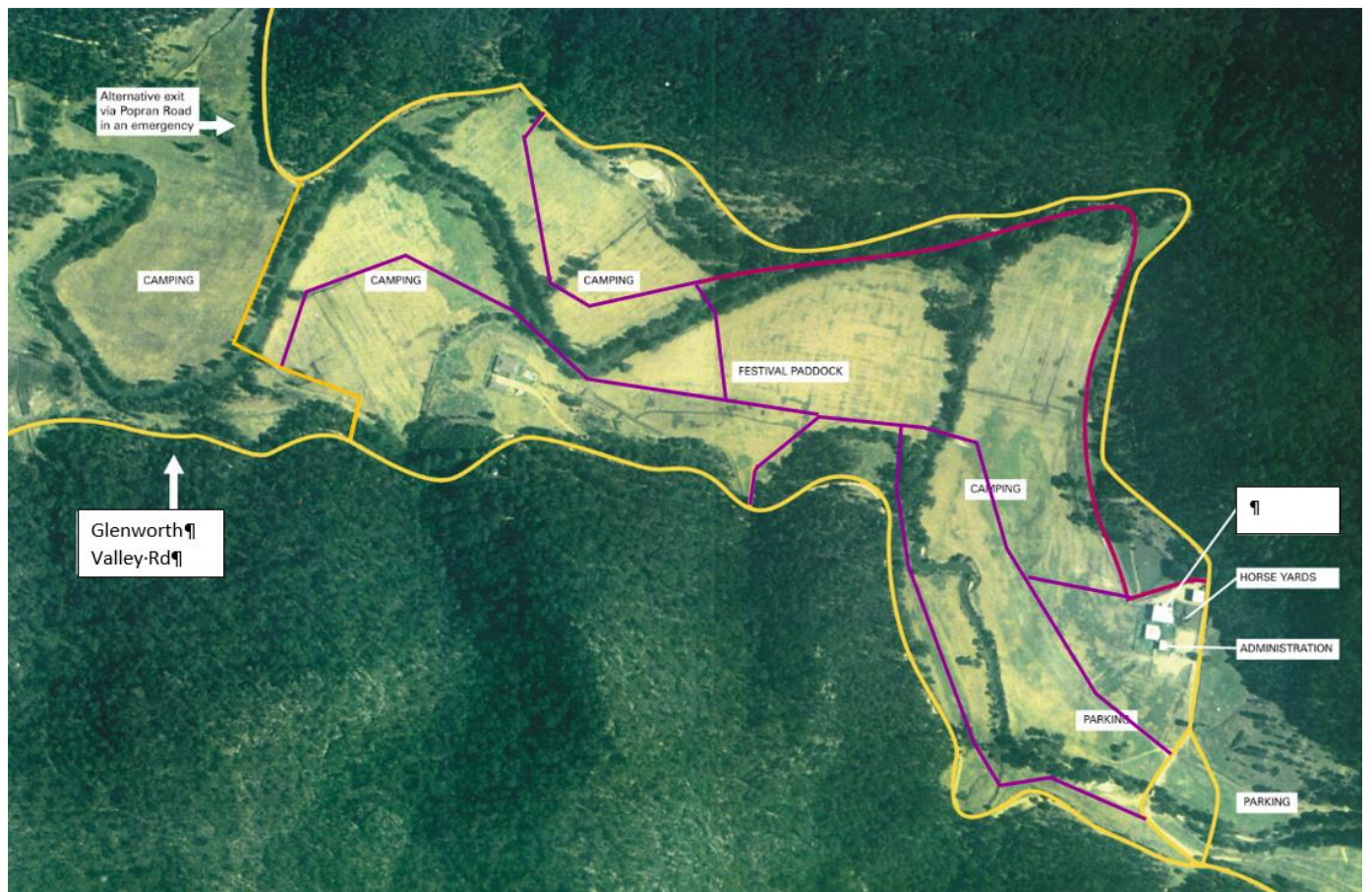
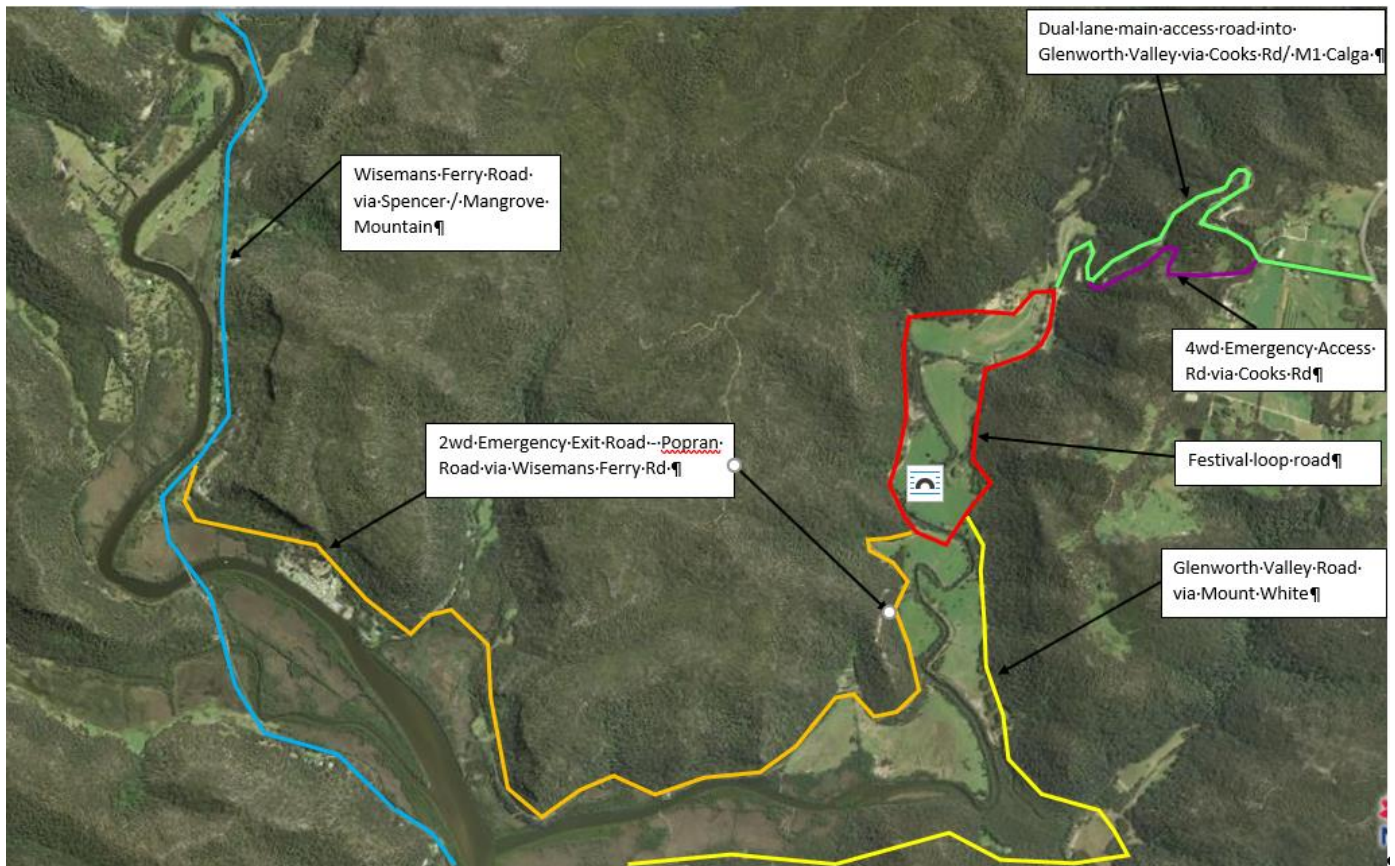
In addition to this, the floor of the valley is serviced by 4 internal roads. These consist of a main access loop road on each side of Popran Creek which is connected via bridges suitable for use by Category 1 Fire Appliances and 2 lower roads also located on either side of Popran Creek. The 2 lower roads are linked together at multiple points throughout the valley via bridges, providing multiple access points for smaller vehicles to either side of the valley.

These 4 internal access roads have been utilised for past festivals on the property and provide a flexible range of options to move people, emergency response vehicles and evacuate the site across a wide range of locations.

A fourth 4WD road also exists which runs from the western end of Cooks Road in a westerly direction and intersects the main entry road close to the valley.

During large events security also function as fire wardens. A controlled release / stage evacuation relocation can be undertaken with communications provided between Cooks Road and the valley floor. This enables a co-ordinated evacuation ensuring the main road is not fully loaded with vehicles and that Cooks Road / Peats Ridge Road intersection does not become overloaded. Relocation from the site will be ceased when it is no longer safe to do so and safe refuge onsite in the NSP areas will then ensue. Communications with Central Coast Fire Control Centre will be maintained and any instructions from them or the emergency warning systems will be followed.





a refuge building of suitable capacity to contain all participants and staff that complies with the NSW RFS Neighborhood Safer Place Guidelines

An existing function centre with 500 person capacity is available onsite and fulfills this requirement for events up to 500 people. At the building footprint the calculated radiant heat impact using the *Neighborhood Safer Place Guidelines* is 2.54 kW/m² and the function centre is built to BAL 12.5 requirements. The calculations and input parameters for the design fire modelling is attached to this response.

an open air bush fire emergency assembly area capable of accommodating all participants and staff that complies with the NSW RFS Neighborhood Safer Place Guidelines

Mapping of the subject site showing areas acceptable as outdoor Neighbourhood Safer Places (NSP) has been completed and site overlays are attached to this report. The calculations and input parameters for the design fire modelling used are also attached.

The number of people an outdoor area can accommodate per m² is, in my estimation, comfortably 1 person per m². This estimation is based on a comparison to National Construction Codes acceptable floor areas (i.e. dance floor 0.5 person/m², bushfire bunker 0.75 person/m², public grandstand standing viewing platform 0.3 person/m², theatre or public hall 1 person/m²).

There are areas onsite that meet NSW Guidelines capable of accommodating in excess of 15,000 people as follows:

Northern end paddock: 38,700 m²
Middle paddock: 21,900 m² & 380 m²
Southern end paddock 35,300 m² & 190 m²

a suitable method of staging evacuation, ensuring that evacuation flow is directed through different stages/areas of the site, moving from areas of higher risk to lower risk;

This forms part of all of the considerations already mentioned herein including;

- Nominating indoor and outdoor areas,
- Staging up, controlled relocation from site,
- Nominated fire wardens
- Communicating with Central Coast Fire Control Centre and
- Ceasing evacuation when it is no longer safe to do so.

It is expected that development consent will require any bushfire emergency management plan to include an evacuation flow plan and be dependent on the size and type of event.

expected evacuation timeframes;

Travel time from the floor of the valley to Cooks Road via the main entry route takes approximately 3m 02 sec. Anecdotal evidence from large scale music festivals held each year at the site indicates that it takes approximately 5 hours for up to 15,000 people to leisurely pack up their camping equipment and exit the valley at the conclusion of an event. Under the control of fire wardens in response to a bush fire evacuation, relocation times would be expected to be significantly less than this timeframe.

A separate application is currently with Council to upgrade the intersection of Cooks Road and Peats Ridge road with a dedicated pull out / slip lane to be created on Peats Ridge Rd which will significantly further reduce traffic evacuations times and improve traffic management from the site.

advance warning to patrons identifying that the event is located on BFPL and giving advice on any fire restrictions;

Advanced warning will be provided to patrons at multiple points prior to their arrival onsite inclusive of advice on weather conditions that may cancel the event. Fire restrictions are in place during organised events and cooking / campfires are not permitted. Similar controls have been placed on past events.

ability to cease and override P.A. and audio systems throughout the site to announce emergency warnings, alerts or safety information, which can be clearly heard from all areas of the site;

This can be included in the instructions provided to sound technicians for each event.

a prescribed ratio of trained fire wardens to participants.

Security guards will double as fire wardens and are trained in this respect. Onsite communications will include a two way radio system between security / fire wardens / bushfire consultants and event organisers.

bulk water supplies on site that are specifically allocated to firefighting purposes;

Available resources at Glenworth Valley are:

- 1 x 15,000 L Freightliner bulk water tanker with fire fighting pump for re filling appliances and includes a firefighting hose reel
- 1 x 1100 L fire fighting tanker trailer with fire fighting pump and 50m hose reel
- 1 x 1000 L slip on ute tanker, fire fighting pump and twin 50m hose reels
- 1 x 1000 L water trailer tanker with fire fighting pump and twin 200m retractable hose reels
- 1 x 1000 L agricultural spot spraying tractor trailer unit with PTO pump and 50m hose reel
- 2 x 15 L fire fighting spot spraying back packs
- 2 x 3" NSWFB approved fire hydrants at our Event Centre Building powered by twin automatic start, diesel pumps (with storz fitting adaptors for RFS refill purposes). Provides 10 L /sec flow. Water supply from 750,000 litre dedicated in ground earth tank with water level topped up by automatic float switch from onsite reticulated water supply fed by 3 x 375,000 water tanks fed by onsite bores and natural springs.
- 3 x 375,000 water tanks fed by onsite bores and natural springs reticulated throughout the property with 12 hydrant outlets throughout the property.
- 1 x 100,000 L stainless steel water tank supply with twin 3" bulk water refill hoses and storz fittings to match for RFS refill purposes
- 3 x 25,000 L concrete water tanks located throughout the property for onsite appliance and RFS refill purposes.
- Numerous permanent dams and tidal creek water with suitable access for water refill purposes.

unobstructed APZs of suitable width surrounding the site along the boundaries adjacent to the bush fire threat. Slashing of grassed areas needs to occur in the lead-up to the event and maintained throughout its duration;

- APZ are identified within the previously mention mapping overlay exercise.
- Other obstructions such as fences, bollards and the like will either be removed or made passable for fire personnel.
- Access roads are available along the perimeter of the vegetation on either side of the valley within or immediately adjacent to the asset protection zones. There is a central creek within this valley and load rated bridges over the creek are located at either end of the valley where events are held. Pedestrian and small vehicle bridges span the creek in several other locations.
- Compliance with APZ standards will ensure trees and other vegetation do not obstruct the area.
- Stages and seating will be located so as to not obstruct access to water supplies, access roads or restrict access along the hazard interface or to APZ & NSP areas.
- Car parking will also be arranged within the APZ and designed so that it does not interfere with site access for fire appliances. Car parking will not block any roads that may be required by fire fighting vehicles. PBP 2019 permits camping inside an APZ and it would follow that cars associated with camping would also be permissible.

emergency management planning during the event organisation stage to be undertaken in consultation with the NSW RFS and all other relevant stakeholders;

As previously commented events for less than 1000 people will operate under a generic Bushfire Emergency Management Plan (BEMP) and events for over 1000 people will have an event specific BEMP. Events occurring during the bushfire danger period with over 5000 people will be submitted to Central Coast Fire Control Centre of the RFS for consultation and Council a minimum of 30 days prior to each event.

The initial generic plan shall be prepared in consultation with Central Coast District RFS as a once off event.

fires for cooking and heating in approved fire places only and addressed by a Fire Management Plan.

During large events fires for cooking and campfires are excluded and gas cooking is only permitted. Under Total Fire Ban conditions, no gas cooking can be undertaken in outdoor areas.

Summary

Glenworth Valley Outdoor Adventures has operated in the valley for in excess of 50 years and are acutely aware of the beautiful bush setting and the threat that bushfires may pose. The property has consulted many bushfire experts over a number of previous developments and the operators have become familiar with many of the legislative policies for bushfire protection as well and best practice fire management and resource allocation.

For the last 20 years that events have been held at the site Glenworth Valley Outdoor Adventures has always engaged and worked with the NSW RFS in a proactive and collaborative fashion to achieve the safest possible event outcomes. In addition to the measures detailed herein Glenworth Valley Outdoor Adventures have also undertaken to conduct strategic fire management practices to minimise the threat of bushfire impacts to this property. This includes preparing several hazard reduction burns that are approved along the main access and eastern flank of the valley. Additionally, they have petitioned NSW National Parks and Wildlife Services for similar strategic burns along the western aspect of the valley.

It is clearly demonstrated above that the capacity of Glenworth Valley Outdoor Adventures to co-operate and apply policies (and any development consent requirements) to ensure that the future events that fall under this approval will be conducted in accordance with the aims and objectives of *Planning for Bush Fire Protection 2019*.

I make myself available for a meeting and / or site inspection with either the District Fire Control Centre or the NSW RFS Head Office as may be needed to progress this application to a positive conclusion.

Should you have any questions please do not hesitate to contact me.

Australian Bushfire Consulting Services



Wayne Tucker

Managing Director
G. D. Design in Bushfire Prone Areas.
Certificate IV Fire Technology
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Neighbourhood safer places Design fire modelling

27/4/2020
Ref: 20-100

Neighbourhood Safer Places / Outdoors Areas.

Acceptable Solution: Open Space is situated and maintained to prevent direct flame contact, material ignition and radiant heat levels of 2 kW/m².

Design fire modelling consistent with Method 2 Appendix B AS3959 -2018 *Construction of buildings in bushfire prove areas* (AS3959 – 2018), with the following variations in accordance with the NSW Rural Fire Services Document *Neighbourhood Safer Places - Guidelines for the identification and inspection of neighbourhood safer places in NSW*.

Fire Danger Index	120 Catastrophic
Flame width	100 metres
Flame Temperature	1200K
Radiation - Attenuation through Atmosphere	No
Flame Emissivity	100%

The valley was broken into areas as follows:

- A) Remnant Vegetation
level land
10/13 tonnes/ha surface total
137 metre APZ

- B) Forest (Sydney Coastal DSF and Northern Hinterland WSF)
≥ 15 degrees upslope
21.3/27.3 tonnes/ha surface total
135 metre APZ

- C) Forest (Sydney Coastal DSF and Northern Hinterland WSF)
level land
21.3/27.3 tonnes/ha surface total
202 metre APZ

- D) Remnant Saline Wetlands (sea rush - juncus sp. and common reed - phragmites australis)
Level land
10/13 tonnes/ha surface total
137 metre APZ

- E) Rainforest
Level land or upslope
10/13 tonnes/ha surface total
137 metre APZ

Note: The elevation of receiver for outdoor areas was set a 2 metres as an indicative average persons height and the site slope was left a 0 degrees level land. Site slope varied slightly throughout the valley and included upslope areas. The upslope modelling produces lower radiant heat level results and therefore setting site slope at 0 degrees for all scenarios is a conservative approach.

Neighbourhood Safer Places / Buildings.

Acceptable Solution: Building is situated and maintained to prevent direct flame contact, material ignition and radiant heat levels of 10 kW/m².

Function Centre

- F) Forest (Sydney Coastal DSF and Northern Hinterland WSF)
 - > 15 degrees upslope
 - Site slope 5 degrees upslope
 - Elevation of receiver 3 metres (building eave height)
 - 118 metre APZ
 - Calculated radiant heat 2.54 kW/m²
 - Radiant heat threshold for NSW Buildings 10 kW/m²

Note: The elevation of receiver for was set a 3 metres as an indicative eave height as the peak elevation of received is 15.55 metres. The difference elevation of receiver makes is less than 0.1 kW/m². Site slope was set to a conservative 5 degrees upslope although it increased in instances.

Exclusions:

The following exclusions of AS 3959 2018 apply, and are not required to be considered for the purposes of PBP 2019:

- Single areas of vegetation less than 1 hectare in area and greater than 100 metres separation from other areas of Category 1 or 2 vegetation.
- Multiple areas of vegetation less than 0.25 hectares in area and not within 20m of the site, or each other or of other areas of vegetation being classified vegetation.
- Strips of vegetation less than 20 metres in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20m of the site or 2 each other, or other areas of vegetation being Category 1, 2 or 3 vegetation.
- Vegetation regarded as low threat due to factors such as flammability, moisture content or fuel load, including grassland managed in a minimal fuel condition, mangroves and other saline wetlands, maintained lawns, golf courses such as playing areas and fairways, maintained public reserves and parklands, sporting fields, vineyards, orchards, banana plantations, market gardens and other non-curing crops, cultivated gardens, arboretums, commercial nurseries, nature strips and windbreaks.

Notes:

1. Narrow strips of vegetation least than 10 metres wide adjacent to Popran Creek have been excluded being vegetation regarded as low threat as above. Around the southwestern corner and along the southern boundary a water canal / tidal zone is present on the inside of the embankment adjacent to Popran Creek in these areas. The area contained ground water and finished ground level seems to be below the tidal influence zone causing it to remain wet.
2. A small isolated pocket of trees around the staff office (immediately south of the reception) has been excluded as being an isolated area of vegetation being less than *0.25 ha 0 in area and not within 20m of the site, or each other or of other areas of vegetation being classified vegetation*. The owner / operator is to maintain these conditions enabling this exclusion.

Inclusions:

Saline wetlands *other than mangroves* have been included as a remnant hazard. Although PBP 2019 does not address saline wetlands it does suggest not to exclude coastal wetlands and riparian areas. In the southwestern area of the property are two areas covered densely with sea rush (*juncus sp.*) and common reed (*phragmites australis*).

These areas are mapped as a Category 2 Vegetation and have been assessed as a remnant hazard. Applying rainforest fuel loads to these areas is considered a very conservative approach as modelling has used 10/13.2 tonnes/ha surface/total fuels loads compared to Grassland which is taken to be 6 tonnes/ha surface/total and Freshwater Floodplain Shrublands which is taken to be 4.4 tonnes/ha surface/total.

Attachments to this comment include design fire modelling reports and site overlays of these results with areas "A" to "E" detailed.

Australian Bushfire Consulting Services



Wayne Tucker

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NBC Bushfire Attack Assessment Report V4.0

AS3959 (2018) Appendix B - Detailed Method 2

Print Date: 29/04/2020

Assessment Date: 18/03/2020

Site Street Address: Neighbourhood Safer Places, Glenworth Valley

Assessor: Wayne Tucker; Australian Bushfire Consulting Services

Local Government Area: Central Coast

Alpine Area: No

Equations Used

Transmissivity: Fuss and Hammins, 2002

Flame Length: RFS PBP, 2001/Vesta/Catchpole

Rate of Fire Spread: Noble et al., 1980

Radiant Heat: Drysdale, 1985; Sullivan et al., 2003; Tan et al., 2005

Peak Elevation of Receiver: Tan et al., 2005

Peak Flame Angle: Tan et al., 2005

Run Description: A Remnant on flat land

Vegetation Information

Vegetation Type: Rainforest

Vegetation Group: Forest and Woodland

Vegetation Slope: 0 Degrees

Vegetation Slope Type: Level

Surface Fuel Load(t/ha): 10

Overall Fuel Load(t/ha): 13.2

Vegetation Height(m): 2

Only Applicable to Shrub/Scrub and Vesta

Site Information

Site Slope: 0 Degrees

Site Slope Type: Level

Elevation of Receiver(m): Default

APZ/Separation(m): 137

Fire Inputs

Veg./Flame Width(m): 100

Flame Temp(K): 1200

Calculation Parameters

Flame Emissivity: 100

Relative Humidity(%): 25

Heat of Combustion(kJ/kg) 18600

Ambient Temp(K): 308

Moisture Factor: 5

FDI: 120

Program Outputs

Level of Construction: BAL LOW

Peak Elevation of Receiver(m): 5.45

Radiant Heat(kW/m²): 2

Flame Angle (degrees): 86

Flame Length(m): 10.92

Maximum View Factor: 0.017

Rate Of Spread (km/h): 1.44

Inner Protection Area(m): 137

Transmissivity: 1

Outer Protection Area(m): 0

Fire Intensity(kW/m): 9672

Run Description: B General >15 degrees upslope

Vegetation Information

Vegetation Type: Sydney Coastal DSF

Vegetation Group: Dry Sclerophyll Forests (Shrubby)

Vegetation Slope: 15 Degrees

Vegetation Slope Type: Upslope

Surface Fuel Load(t/ha): 21.3

Overall Fuel Load(t/ha): 27.3

Vegetation Height(m): 1.4

Only Applicable to Shrub/Scrub and Vesta

Site Information

Site Slope: 5 Degrees

Site Slope Type: Upslope

Elevation of Receiver(m): 2

APZ/Separation(m): 131

Fire Inputs

Veg./Flame Width(m): 100

Flame Temp(K): 1200

Calculation Parameters

Flame Emissivity: 100

Relative Humidity(%): 25

Heat of Combustion(kJ/kg) 18600

Ambient Temp(K): 308

Moisture Factor: 5

FDI: 120

Program Outputs

Level of Construction: BAL LOW

Peak Elevation of Receiver(m): 16.5

Radiant Heat(kW/m2): 2

Flame Angle (degrees): 81

Flame Length(m): 10.2

Maximum View Factor: 0.017

Rate Of Spread (km/h): 1.07

Inner Protection Area(m): 81

Transmissivity: 1

Outer Protection Area(m): 29

Fire Intensity(kW/m): 14985

Run Description: B General >15 degrees upslope

Vegetation Information

Vegetation Type: Northern Hinterlands WSF (Grassy)

Vegetation Group: Wet Sclerophyll Forests (Grassy)

Vegetation Slope: 15 Degrees

Vegetation Slope Type: Upslope

Surface Fuel Load(t/ha): 20

Overall Fuel Load(t/ha): 33.1

Vegetation Height(m): 0.9

Only Applicable to Shrub/Scrub and Vesta

Site Information

Site Slope: 0 Degrees

Site Slope Type: Level

Elevation of Receiver(m): 2

APZ/Separation(m): 135

Fire Inputs

Veg./Flame Width(m): 100

Flame Temp(K): 1200

Calculation Parameters

Flame Emissivity: 100

Relative Humidity(%): 25

Heat of Combustion(kJ/kg) 18600

Ambient Temp(K): 308

Moisture Factor: 5

FDI: 120

Program Outputs

Level of Construction: BAL LOW

Peak Elevation of Receiver(m): 5.28

Radiant Heat(kW/m2): 2

Flame Angle (degrees): 86

Flame Length(m): 10.59

Maximum View Factor: 0.017

Rate Of Spread (km/h): 1.02

Inner Protection Area(m): 82

Transmissivity: 1

Outer Protection Area(m): 31

Fire Intensity(kW/m): 17443

Run Description: C Forest on level ground

Vegetation Information

Vegetation Type: Northern Hinterlands WSF (Grassy)
Vegetation Group: Wet Sclerophyll Forests (Grassy)
Vegetation Slope: 0 Degrees **Vegetation Slope Type:** Level
Surface Fuel Load(t/ha): 20 **Overall Fuel Load(t/ha):** 33.1
Vegetation Height(m): 0.9 **Only Applicable to Shrub/Scrub and Vesta**

Site Information

Site Slope: 0 Degrees **Site Slope Type:** Level
Elevation of Receiver(m): 2 **APZ/Separation(m):** 202

Fire Inputs

Veg./Flame Width(m): 100 **Flame Temp(K):** 1200

Calculation Parameters

Flame Emissivity: 100 **Relative Humidity(%):** 25
Heat of Combustion(kJ/kg) 18600 **Ambient Temp(K):** 308
Moisture Factor: 5 **FDI:** 120

Program Outputs

Level of Construction: BAL LOW **Peak Elevation of Receiver(m):** 11.28
Radiant Heat(kW/m2): 2 **Flame Angle (degrees):** 84
Flame Length(m): 22.68 **Maximum View Factor:** 0.017
Rate Of Spread (km/h): 2.88 **Inner Protection Area(m):** 122
Transmissivity: 1 **Outer Protection Area(m):** 45
Fire Intensity(kW/m): 49104

Run Description: D Remnant Saline Wetlands

Vegetation Information

Vegetation Type: Rainforest
Vegetation Group: Forest and Woodland
Vegetation Slope: 0 Degrees **Vegetation Slope Type:** Level
Surface Fuel Load(t/ha): 10 **Overall Fuel Load(t/ha):** 13.2
Vegetation Height(m): 2 **Only Applicable to Shrub/Scrub and Vesta**

Site Information

Site Slope: 0 Degrees **Site Slope Type:** Level
Elevation of Receiver(m): Default **APZ/Separation(m):** 137

Fire Inputs

Veg./Flame Width(m): 100 **Flame Temp(K):** 1200

Calculation Parameters

Flame Emissivity: 100 **Relative Humidity(%):** 25
Heat of Combustion(kJ/kg) 18600 **Ambient Temp(K):** 308
Moisture Factor: 5 **FDI:** 120

Program Outputs

Level of Construction: BAL LOW **Peak Elevation of Receiver(m):** 5.45
Radiant Heat(kW/m2): 2 **Flame Angle (degrees):** 86
Flame Length(m): 10.92 **Maximum View Factor:** 0.017
Rate Of Spread (km/h): 1.44 **Inner Protection Area(m):** 40
Transmissivity: 1 **Outer Protection Area(m):** 0
Fire Intensity(kW/m): 9672

Run Description:	E Rainforest gully's		
<u>Vegetation Information</u>			
Vegetation Type:	Rainforest		
Vegetation Group:	Forest and Woodland		
Vegetation Slope:	0 Degrees	Vegetation Slope Type:	Level
Surface Fuel Load(t/ha):	10	Overall Fuel Load(t/ha):	13.2
Vegetation Height(m):	2	Only Applicable to Shrub/Scrub and Vesta	
<u>Site Information</u>			
Site Slope:	0 Degrees	Site Slope Type:	Level
Elevation of Receiver(m):	Default	APZ/Separation(m):	137
<u>Fire Inputs</u>			
Veg./Flame Width(m):	100	Flame Temp(K):	1200
<u>Calculation Parameters</u>			
Flame Emissivity:	100	Relative Humidity(%):	25
Heat of Combustion(kJ/kg)	18600	Ambient Temp(K):	308
Moisture Factor:	5	FDI:	120
<u>Program Outputs</u>			
Level of Construction:	BAL LOW	Peak Elevation of Receiver(m):	5.45
Radiant Heat(kW/m2):	2	Flame Angle (degrees):	86
Flame Length(m):	10.92	Maximum View Factor:	0.017
Rate Of Spread (km/h):	1.44	Inner Protection Area(m):	137
Transmissivity:	1	Outer Protection Area(m):	0
Fire Intensity(kW/m):	9672		
<hr/>			
Run Description:	F Function Centre >15 degrees upslope		
<u>Vegetation Information</u>			
Vegetation Type:	Northern Hinterlands WSF (Grassy)		
Vegetation Group:	Wet Sclerophyll Forests (Grassy)		
Vegetation Slope:	15 Degrees	Vegetation Slope Type:	Upslope
Surface Fuel Load(t/ha):	20	Overall Fuel Load(t/ha):	33.1
Vegetation Height(m):	0.9	Only Applicable to Shrub/Scrub and Vesta	
<u>Site Information</u>			
Site Slope:	5 Degrees	Site Slope Type:	Upslope
Elevation of Receiver(m):	3	APZ/Separation(m):	118
<u>Fire Inputs</u>			
Veg./Flame Width(m):	100	Flame Temp(K):	1200
<u>Calculation Parameters</u>			
Flame Emissivity:	100	Relative Humidity(%):	25
Heat of Combustion(kJ/kg)	18600	Ambient Temp(K):	308
Moisture Factor:	5	FDI:	120
<u>Program Outputs</u>			
Level of Construction:	BAL LOW	Peak Elevation of Receiver(m):	15.55
Radiant Heat(kW/m2):	2.54	Flame Angle (degrees):	80
Flame Length(m):	10.62	Maximum View Factor:	0.022
Rate Of Spread (km/h):	1.02	Inner Protection Area(m):	71
Transmissivity:	1	Outer Protection Area(m):	47
Fire Intensity(kW/m):	17496		

Asset Protection Zone and Neighbourhood Safer Place - Map - 1



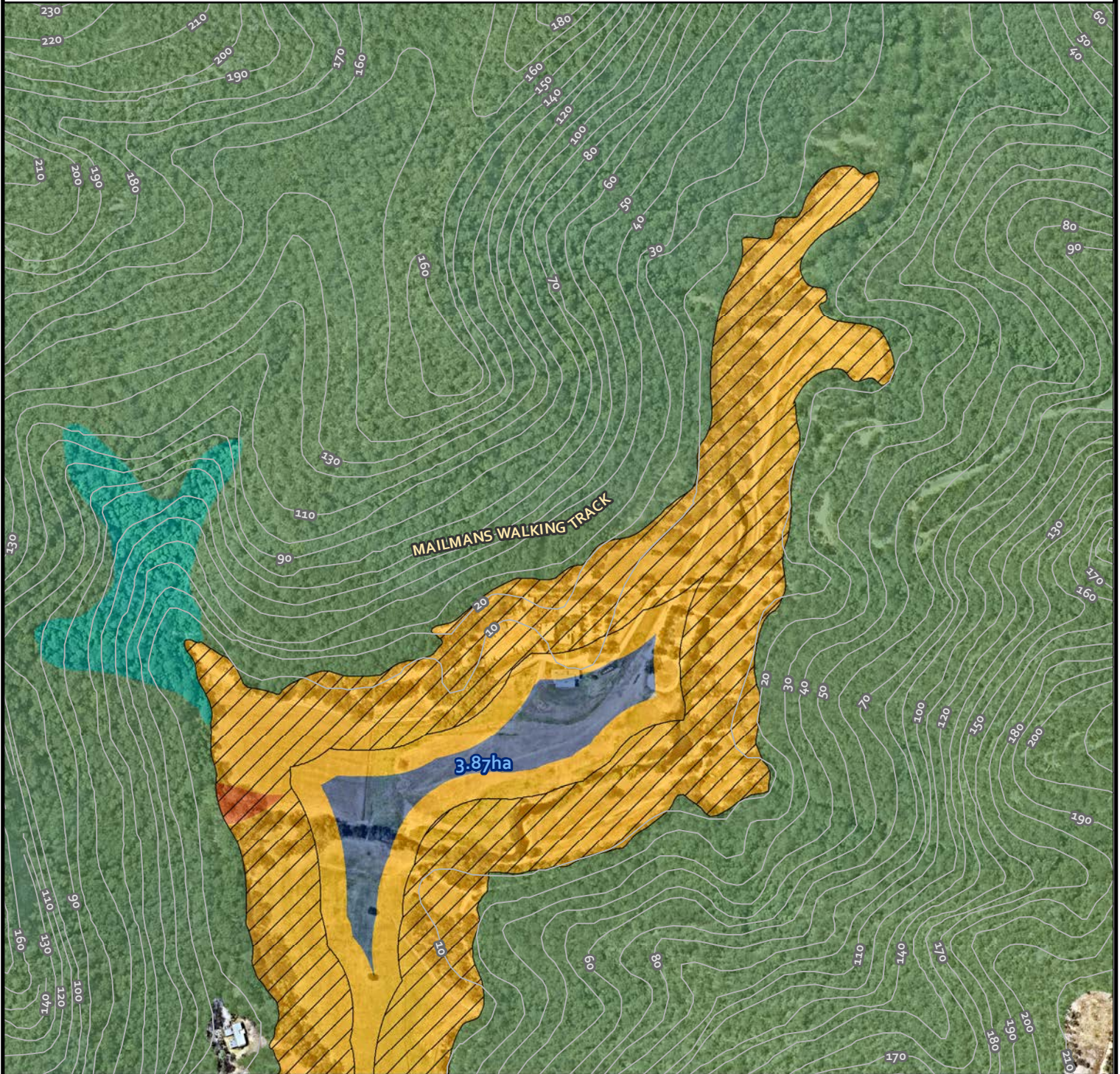
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ABN 23 622 676 493
 PO Box 212 Berowra Heights 2082

Glenworth Valley Outdoor Adventures, 69 Cooks Road Calga NSW, Reference 20-100



Legend

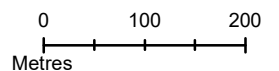
- Contour - 10m
- Neighbourhood Safer Place
- Asset Protection Zone**
- Asset Protection Zone - 135m
- Asset Protection Zone - 137m

- Vegetation Zone**
- B. Forest (Sydney Coastal DSF and Northern Hinterland WSF) - > 10 degrees upslope
- E. Rainforest - level land or upslope
- BAL Low - 100m Asset Protection Zone



1:7,500

Date: 29/04/2020



Imagery: © Nearmap

Coordinate System: GDA 1994 MGA Zone 56

Asset Protection Zone and Neighbourhood Safer Place - Map - 2



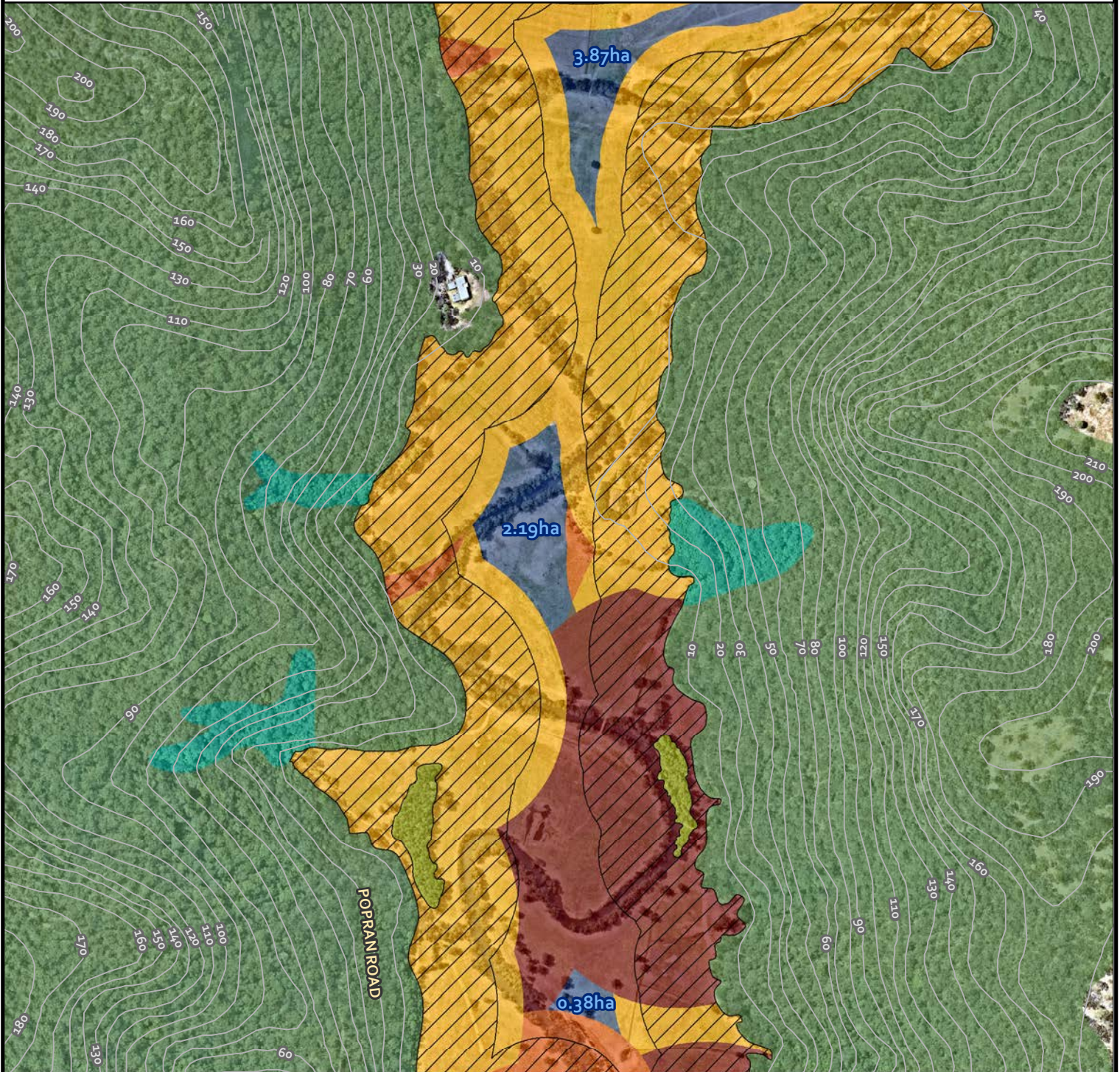
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Legend

- Contour - 10m
- Neighbourhood Safer Place
- Asset Protection Zone**
- Asset Protection Zone - 135m
- Asset Protection Zone - 137m
- Asset Protection Zone - 202m

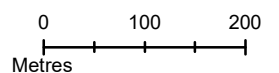
- Vegetation Zone**
- B. Forest (Sydney Coastal DSF and Northern Hinterland WSF) - > 10 degrees upslope
 - C. Forest (Sydney Coastal DSF and Northern Hinterland WSF) - level land
 - E. Rainforest - level land or upslope

- BAL Low - 100m Asset Protection Zone



1:7,500

Date: 29/04/2020



Imagery: © Nearmap

Coordinate System: GDA 1994 MGA Zone 56

Asset Protection Zone and Neighbourhood Safer Place - Map - 3



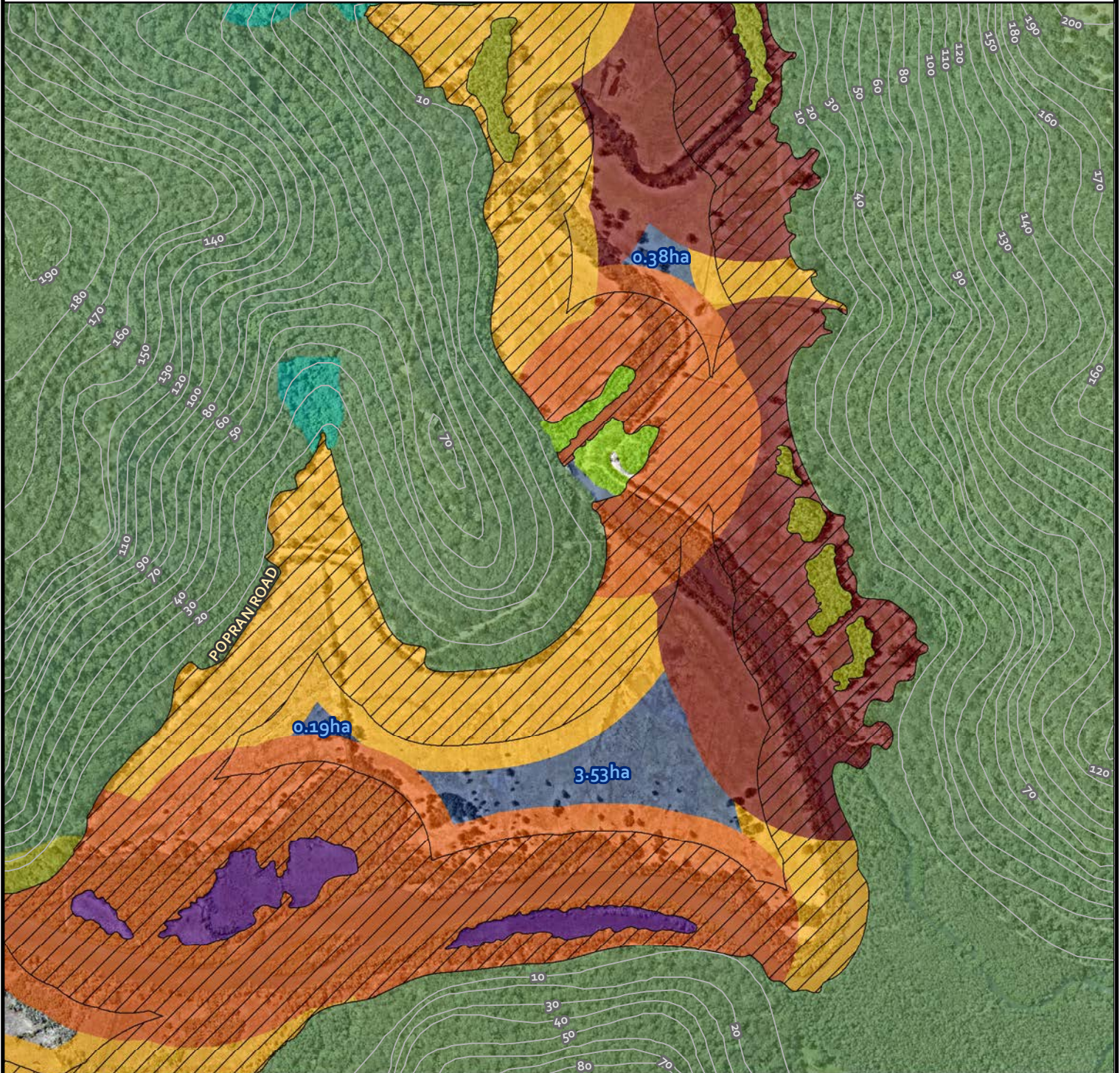
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Legend

- Contour - 10m
- Neighbourhood Safer Place
- Asset Protection Zone**
- Asset Protection Zone - 135m
- Asset Protection Zone - 137m
- Asset Protection Zone - 202m

- Vegetation Zone**
- A. Remnant Vegetation - level land
- B. Forest (Sydney Coastal DSF and Northern Hinterland WSF) - > 10 degrees upslope
- C. Forest (Sydney Coastal DSF and Northern Hinterland WSF) - level land

- D. Saline Wetlands other than Mangroves assess as Remnant - level land
- E. Rainforest - level land or upslope
- BAL Low - 100m Asset Protection Zone

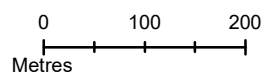


NORTH



1:7,500

Date: 29/04/2020



Imagery: © Nearthmap

Coordinate System: GDA 1994 MGA Zone 56



Building Code & Bushfire Hazard Solutions

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Glenworth Valley Outdoor Adventures
69 Cooks Road
Glenworth Valley NSW 2250

24th June 2015
Our Ref. 150722

Attn: Barton Lawler

**Re: PLANNING PROPOSAL
GLENWORTH VALLEY OUTDOOR ADVENTURES
BUSHFIRE HAZARD ASSESMENT AND COMMENTS**

Dear Barton

We thank you for engaging us to provide a statement and bushfire comments applicable for the above site and the current planning proposal.

Glenworth Valley Outdoor Adventures is recognised as multi award winning tourist destination of state and national significance. They have been in business for in excess of 40 years and have a considerable recognised as a highly successful tourist destination which has a considerable profile within the Sydney and Central Coast communities. Glenworth Valley Outdoor Adventures employs approximately 20 full time staff and 60 – 80 part time and casual staff.

The Rural Fire Service's initial response is that they do not support the proposed rezoning of the area associated with Popran Creek. This advice will affect the long term prospects and viability of this important tourist facility which provides significant economic benefit to the wider community. This comment is by way of response to the Rural Fire Services comments to Council dated 22nd December 2014 and our subsequent site meeting with Simon Derevnin (NSW RFS) and Council 26th February 2015 and a second meeting with Matthew Apps and Garth Bladwall (NSW RFS) and Council 16th June 2015 regarding this response.

Mr Derevnin stated during our first meeting that the RFS are willing to reconsider their appraisal subject to additional information being submitted and this response should formally forwarded to them for their review. During our second meeting further emphasis was expressed on bushfire protection measures available within the Valley and discussion detailing more clarity as to what the planning proposal hopes to achieve.

The RFS response has delineated into two sections of the site, being the Popran Creek area and Cooks Road area. The main contention seems to be related to what is an opinion of "unsafe" access however this is yet to be quantitatively defined.

The RFS is concerned about the inclusion of "*recreation facilities (outdoor), eco-tourist facilities, camping grounds and tourist and visitor accommodation as **additional permitted uses***", however a number of these activities are already approved and operating on the site under **existing use rights** such as horse riding, quad biking, laser skirmish, camping, music festivals etc. The use of the site for accommodation is currently on the basis of being ancillary to the existing uses and the planning proposal allows these uses as a permitted use. The current planning proposal intends to retain the existing zoning applicable to the site but instead insert these Uses as permissible activities on the site with the consent of Council in schedule 1 of the LEP.

Any variations to the nature of the activities occurring on site will need to be considered through a standard merits based development application process rather than relying existing use rights and uses that are ancillary to the existing uses for future applications.

These existing uses were approved under an outdated Gosford Interim Development Order No 122 dating back as far as 1969. Since 1979 the zoning of the site has meant that these uses are prohibited. Since this time the operation of the facility has continued under existing use rights with additional uses being approved under the provisions of the EP&A Act relating to existing uses. Regardless of this planning proposal any future development applications ancillary to those currently approved "uses" onsite can be lodged with Council and will be referred to the RFS for their review.

There is no doubt that the ongoing operation of this facility will involve future development applications and referrals to RFS for assessment regardless of this proposed rezoning. Indeed the RFS have approved many activities in the valley and along the ridge tops assessed under Planning for Bush Fire Protection over the last 12 ½ years. The same merit based assessments of future applications by experienced assessment officers can still occur as necessary.

Development Applications Referred to and Approved by the RFS in recent years

- 01/06/99 Approval for Music Festival and Camping purposes for 10,000 people for up to 72 hours continuous duration for up to 2 events per annum
- 23/03/03 Approval for Music Festival and Camping purposes for 10,000 people for up to 72 hours duration for up to 3 events per annum
- 14/11/05 Approval for Music Festival and Camping purposes for 15,000 people for up to 72 hours duration for up to 3 events per annum
- 03/09/07 Approval to Music Festival and Camping purposes for 15,000 people for up to 80 hours duration for up to 3 events per annum
- 15/06/09 Approval for Music Festival and Camping purposes for 15,000 people for up to 80 hours duration for up to 3 events per annum additional allotments added
- 11/08/12 Approval for Music Festival and Camping purposes for 15,000 people for up to 80 hours duration for up to 3 events per annum operational changes
- 17/01/13 Approval for Music Festival and Camping purposes for 15,000 people for up to 80 hours duration for up to 3 events per annum starting and finishing times
- 02/08/05 Non profit Community Events for up to 2,500 people for 72 hours in duration for up to 2 events per annum
- 23/07/09 Non profit Community Events for up to 2.500 people for 72 hours in duration for up to 2 events per annum, various changes and modifications
- 11/12/03 Quad bike trail riding facility
- 24/10/03 Paintball facility
- 11/11/13 Caravan Park and Motel
- 30/08/12 Multi purpose function centre
- 02/07/13 Recreation Facility and Equestrian Events for up to 10,000 people for up to 2 events per year
- 14/01/14 Multi purpose function centre for up to 500 people and in an amended location
- 13/08/14 Recreation Facility and Equestrian Events for up to 10,000 people, for up to 2 events per year in an amended location
- 20/01/15 Caravan Park and Motel expansion

Importantly a multi purpose function centre which can accommodate functions and conferences for up to 500 people (seated) was recently approved by Council and supported by the RFS, and has now received significant State Government tourism development funding by Destination NSW. Construction of this facility is already underway and is due for completion in early 2016. The use of the new multi purpose function centre combined with the ongoing existing activities onsite signifies the volume and frequency of visitors that will continue to attend this site regardless of whether the planning proposal is adopted or not.

The RFS has consistently approved the operational use of the site for a large number activities in the recent past and have considered it safe with appropriate conditions. In this regard future development applications that improve bushfire protection measures should be encouraged, not deterred. These may include applications that:

- provide greater asset protection zones,
- upgrade existing facilities for ember protection commensurate with AS 3959
- provide additional new buildings constructed to AS3959 and designed to withstand the passage of a fire,
- improve the existing operational access and egress
- increase preparedness and Emergency Planning and
- provide additional safe refuges onsite.

Future development will require approval or support from the NSW Rural Fire Service (RFS) and may be either s100B or s79BA applications. The focus of the following comments is to outline the bushfire mitigation measures available at Glenworth Valley Outdoor Adventures that can be detailed or included in support for any future redevelopment of the site.

The application of Planning for Bush Fire Protection 2006 will require satisfactory demonstration of the following Bushfire Protection Measures (BPMs):

- Asset Protection Zones
- Building Construction & Design
- Landscaping
- Emergency Management Arrangements
- Water Supply & Utilities
- Access Arrangements

This assessment will systematically address the minimum requirements to satisfy the above BPMs and our recommendation for future redevelopment.

Asset Protection Zone:

An Asset Protection Zone (APZ) is an area between the development and the identified bushfire hazard. The APZ is an area where the fuels are maintained to a minimum to prevent the spread of fire between the hazard and the building.

Mr Derevnin states that the area associated with Popran Creek is a *“narrow partly cleared valley”* whereas the base of the valley is a pasture improved grazing area up to 370 metres in width and extends for over 5 km along Popran Creek. The site has the potential to provide Asset Protection Zones fully compliant with Tables 2.4 or 2.6 within Planning for Bush Fire Protection 2006.

The potential bushfire impact towards the existing and possible future development within the valley is predominately from fires travelling downhill through forest vegetation. Any development that is within the valley can provide an Asset Protection Zone of >60 metres achieving a radiant heat impact of no more than 10kW/m² at the closest point of the building footprint. The capacity to comply

with and / or exceed the requirements for Special Fire Protection Purpose (SFPP) development is of paramount importance and was clearly demonstrated and accepted in the development approval for the multi purpose function centre. Indeed within the valley are areas for camping or congregation or fire appliance staging where the expected radiant heat impact exceeds the minimum specified for a neighbourhood safer place (4kWm^2).

Attachment 01 to this comment is an indicative layout showing building opportunities in the clear central area and an APZ of 60 metres. Clearly as far as providing bushfire setbacks there are significant opportunities to appropriately locate buildings within the valley compliant with SFPP development under PBP 2006.

Fires travelling downhill into a valley are slower, less intense and have significantly shorter flame lengths than uphill fires. The valley is a safer location for future development than on ridgetops. The areas on the upper portions of this site, while located closer to the main road infrastructure, will be required to provide significantly larger APZs due to the increase exposure to higher heat loads and longer flame lengths from bushfire travelling upslope to this area. APZs of up to 100 metres could be required. Although more limited in size there are locations along the ridgetop where APZs compliant with PBP 2006 can be applied.

The RFS response raised concerns regarding tents and “*temporary shelters which do not offer any structural bush fire protection*”. The RFSs own policies do not raise shelter as an issue where tents are placed within an APZ. Ironically the RFS policies allow camping in the Flame Zone (i.e. within an APZ) which is detailed in their Fast Fact 1/08 which states:

Asset Protection Zones can be utilised for short term camping (i.e. tents) on the proviso that a defensible space, access and water is still available for Category 1 bush fire tankers

The RFS response seems to have also overlooked the fact that camping is an existing permitted use in the valley and existing approvals for the multi purpose function centre provide safe refuge buildings for campers. Future applications may add more refuge buildings and improve other bushfire protection measures when considered in combination may be satisfactory.

Building Construction & Design:

Future development may involve repair, replacement or additional buildings. All new works must be constructed to the relevant Bushfire Attack Level under Australian Standard 3959 ‘Construction of buildings in bushfire prone areas’ 2009.

The APZs shown on Attachment 01 equate to a BAL 12.5 construction level. Where the development proposes larger APZs the construction level could be lowered (i.e. >100 metres is BAL Low), however as a precautionary measure having a minimum BAL-12.5 for all buildings is a practical and inexpensive means of providing additional bushfire protection measures above PBP 2006 requirements and can be utilised to assist in the reliance of a safe on-site refuge strategy.

Landscaping:

Any new landscaping around buildings within the valley must comply with the requirements as outlined within section 4.1.3 and Appendix 5 of ‘Planning for Bush Fire Protection 2006’ and the NSW Rural Fire Service’s document ‘Standards for asset protection zones’. All existing and any future Asset Protection Zones can be subject to a formal management regime and a Fuel Management Plan (FMP) for the Asset Protection Zones is likely to be recommended as part of any future Development Application. This plan will be required to address;

- Contact person / department and details
- Schedule and description of works for establishing and continued maintenance of the Asset Protection Zones
- Management strategies and description of works for landscaped areas within the site

Emergency Management Arrangements:

In recognition of the type of developments already occurring onsite an emergency/evacuation plan is regularly submitted to and endorsed by the local RFS office. This plan will be reviewed to ensure it is consistent with the NSW Rural Fire Service document Guidelines for the Preparation of Emergency/Evacuation Plan which should include the following:

- 1) under what circumstances will the development be evacuated;
- 2) where will occupants be evacuated to;
- 3) roles and responsibilities of persons co-ordinating the evacuation;
- 4) roles and responsibilities of persons remaining with the development after evacuation; and
- 5) a procedure to contact the NSW Rural Fire Service District Office / Fire & Rescue NSW and inform them of the evacuation and where they will be evacuated to
- 6) that a number of pre determined assembly points or buildings shall be available for use during a bushfire emergency subject to the nature of the threat and prevailing conditions at the time.

Consideration should also be given as to when the facility will be closed or when specific events should be cancelled (e.g. days of Catastrophic Fire Danger and / or when fire activity is occurring within the area). While guidance on evacuation can be sought during a bushfire event from the District Fire Control Centre, it is suggested that a pre-determined mechanism for evacuation be decided to ensure occupants are not exposed to an unacceptable level of risk when departing the valley.

Future development applications can include an EMP within the submission and the plan can be subject to review and input with the RFS at that time. A general EMP for all emergencies could be conditioned per major event and endorsed by RFS, and the BEP I have prepared is a draft principle document for the daily operation of the site which can be linked to the future DA process.

Water Supply & Utilities:

A wide network of fire hydrants are available throughout the property in the lower portion of the site. At any one time Glenworth Valley Outdoor Adventures maintains a total of 450,000 litres of water stored in onsite tanks, with a number of smaller tanks scattered around the property. Popran Creek flows through the valley which can also be used as a fire fighting water reserve as necessary, as well as other large water supplies (dams) available for the replenishment of attending fire services

Furthermore a number of mobile water tankers and firefighting appliances are available onsite for firefighting purposes. The existing water supply and fire suppression equipment is considered adequate, however can always be supplemented for any future development as needs be.

Planning for Bush Fire Protection also address services such as electricity and gas. The following are the relevant requirements for services:

Electricity:

- Where practicable, electrical transmission lines are underground.
- Where overhead electrical transmission lines are proposed:

- lines are installed with short pole spacing (30 metres), unless crossing gullies, gorges or riparian areas; and
- no part of a tree is closer to a power line than the distance set out in accordance with the specifications in 'Vegetation Safety Clearances' issued by Energy Australia (NS179, April 2002).

Gas:

- Reticulated or bottled gas is installed and maintained in accordance with AS 1596 and the requirements of relevant authorities.
- Metal piping is to be used.
- All fixed gas cylinders are kept clear of all flammable materials to a distance of 10 metres and shielded on the hazard side of the installation.
- If gas cylinders need to be kept close to the building, the release valves are directed away from the building and at least 2 metres away from any combustible material, so that they do not act as a catalyst to combustion.
- Connections to and from gas cylinders are metal.
- Polymer sheathed flexible gas supply lines to gas meters adjacent to buildings are not used.

Access:

Planning for Bush Fire Protection addresses design considerations for internal roads for properties determined to be bushfire prone. Any future internal roads should comply with the requirements for Internal Roads as detailed in section 4.2.7 of PBP.

The following are the relevant requirements for Internal Roads as detailed in section 4.2.7 of PBP:

- Internal roads are two-wheel drive, sealed, all-weather roads;
- Roads are through roads. Dead end roads are not more than 100 metres in length from a through road, incorporate a minimum 12 metres outer radius turning circle, and are clearly sign posted as a dead end;
- Traffic management devices are constructed to facilitate access by emergency services vehicles.
- A minimum vertical clearance of four metres to any overhanging obstructions, including tree branches, is provided.
- Curves have a minimum inner radius of six metres and are minimal in number to allow for rapid access and egress.
- The minimum distance between inner and outer curves is six metres.
- Roads are clearly sign-posted.
- The internal road surfaces have a capacity to carry fully-loaded firefighting vehicles (15 tonnes).

Table 01: 'Table 4.1 – Road widths for Category 1 Tanker' from PBP 2006

Curve radius (inside edge) (metres)	Swept Path (metres width)	Single lane (metres width)	Two way (metres width)
<40	3.5	4.5	8.0
40-69	3.0	3.9	7.5
70-100	2.7	3.6	6.9
>100	2.5	3.5	6.5

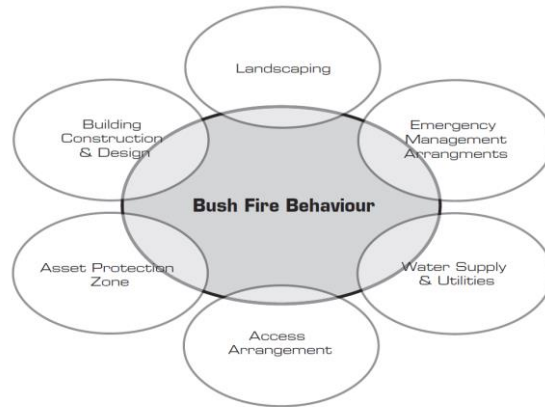
The subjective assessment of what is deemed “safe” access compared to what may be considered “acceptable” access was the subject of much discussion during our first meeting. Unsafe operational access has never been raised during the assessment and approval of a multitude of previous development applications including the recent approval of the 500 seat multi purpose function centre, which highlights this as a more subjective viewpoint or opinion rather than specific non-compliant issues.

The term safe operational access in describing the drive along the road from Cooks Road into the valley should also be considered within the overall context of existing and possible future development within Glenworth Valley Outdoor Adventures property, with consideration as to the provision of adequate Emergency Management Planning (EMP) for the site. A typical highlighting this EMP is in draft form and will form part of this submission to the RFS for review.

Quote from PBP 2006:

The bush fire protection measures (BPMs) in combination

A significant part of the State is classified as bush fire prone land and local circumstances vary widely as do potential land uses. PBP recognises this and promotes detailed site analysis and the application of a combination of bush fire protection measures to achieve an acceptable outcome



The subject property has direct vehicular access via an existing, 70% bitumen sealed access road through to Cooks Road and Peats Ridge Road to the east. This road is approximately 2 km long and is suitable for heavy reticulated vehicles and has been traversed by RFS appliances on numerous occasions. A secondary means of access in the form of a public road traverses through the subject site in a south westerly direction. This road is a dirt and gravel road on relatively level ground that travels along Popran Creek towards Spencer. There is egress in at least two directions from the Glenworth Valley Outdoor Adventures establishment. Importantly the egress is in two distinctly different directions.

Any future additional development can include an extension of the road network and, similar to the ability to provide compliant APZs, future road infrastructure can also comply with s4.2.7 and 4.1.3 (2) under PBP 2006

It is acknowledged that the two access and egress routes could be overrun by fire however the probability and likelihood that this occurrence would coincide with the road being used by visitors or emergency services must be also factored into consideration.

The operators of the site can be vigilant on bushfire issues and on higher alert for fires during the summer months. Operators could observe and monitor the progress of fires if they are in the valley

or nearby vicinity. If fire is present on the east side of the valley occupants can be directed by staff to take safe refuge onsite and the access drive can be physically impaired or policed to prevent it being used. If fires are observed to the west of the valley they would be travelling slowly downhill and a decision can be made on relocation or safe refuge depending on the circumstances at that time. Factors such as time of day, wind conditions, volume of ember attack occurring, number of occupants etc. can influence this decision. The choice between safe refuge or relocation in advance of a fire could be made in conjunction with liaison with the local emergency services utilizing other aids such as the fires near me app and RFS website.

On days of predicted catastrophic fire behaviour or when fires are present within the wider area and may impact the site, decisions can be made to close the facility well in advance of fire impact along the access and egress routes and cancel functions preventing the site being occupied in the first instance. Again the access can be physically impaired or policed from the Cooks Road to prevent unauthorised access.

Additional development may preclude events during peak fire danger periods or include consent conditions that are a trigger for cessation of the activity in consultation with the NSW RFS at that time. For example the RFS may treat an application for additional camping sites during winter more favourably than a fireworks display in summer. Fundamentally this current planning proposal can be approved and future applications considered on their merits in conjunction with the package of bushfire protection measures provided.

These measures above have been included in a draft Emergency Management Planning (EPM) for the site. This plan is in draft form and will form part of this submission to the RFS for review.

Conclusion:

Redevelopment of Glenworth Valley Outdoor Adventures must demonstrate compliance with the Aims and Objectives of Planning for Bush Fire Protection 2006 and we have summarised as far as possible the sites compatibility with these key requirements that can be favourably demonstrated during a future development application.

The aim of PBP is to use the NSW development assessment system to provide for the protection of human life (including firefighters) and to minimise impacts on property from the threat of bush fire, while having due regard to development potential, on-site amenity and protection of the environment.

More specifically, the objectives are to:

- (i) afford occupants of any building adequate protection from exposure to a bush fire;*
- (ii) provide for a defensible space to be located around buildings;*
- (iii) provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent direct flame contact and material ignition;*
- (iv) ensure that safe operational access and egress for emergency service personnel and residents is available;*
- (v) provide for ongoing management and maintenance of bush fire protection measures, including fuel loads in the asset protection zone (APZ); and*
- (vi) ensure that utility services are adequate to meet the needs of firefighters (and others assisting in bush fire fighting).*

In a development assessment context, there are six key Bush Fire Protection Measures (BPMs):

- a) The provision of clear separation of buildings and bush fire hazards, in the form of fuel-reduced APZ (and their subsets, inner and outer protection areas and defensible space);*
- b) Construction standards and design;*

- c) *Appropriate access standards for residents, fire fighters, emergency service workers and those involved in evacuation;*
- d) *Adequate water supply and pressure;*
- e) *Emergency management arrangements for fire protection and/or evacuation; and*
- f) *Suitable landscaping, to limit fire spreading to a building.*

In context to the quotes above future development within the valley can occur and provide;

- a) APZs in excess of the minimum requirements for Special Fire Protection Purpose development detailed within Table 2.6 of PBP 2006.
- b) Construction levels above the minimum required to comply with Table 2.4.2 within AS3959 – 2009
- c) Appropriate access standards in recognition to the risk and likelihood of impact along the access as well as alternative egress arrangements.
- d) Water supply in excess of PBP 2006 prescriptive requirements including active fire fighting accessories well above those legislated.
- e) DA enforced and controlled emergency management arrangements.
- f) Landscaping compliant to APZs & Inner Protection Areas around buildings and subject to a Fuel Management Plan for the life of the development

An approved Planning Proposal and future DA assessment will allow RFS to seek a an improved bushfire protection outcome for the facility than if the Planning Proposal was not approved.

In **addition to** of the basic package of BPMs dictated by PBP 2006 the site also :

- g) Has an approved multi function centre which will be appropriately constructed having regard to bushfire protection and provides a safe refuge onsite &
- h) Can provide nominated open air areas for fire appliance staging where the expected radiant heat impact exceeds the minimum specified for a neighbourhood safer place (4kWm²).

In accordance with the bushfire safety measures discussed herein, and consideration of the site specific bushfire risk assessment it is our opinion that when combined and applied to future development within the subject site they will provide a reasonable and satisfactory level of bushfire protection to the development. Similar to recently approved applications any future proposals could also satisfy the Rural Fire Service's concerns and be issued a Bushfire Safety Authority or 79BA approval at that time.

We therefore request formal referral back to the NSW RFS for their deliberation and we request review of their referral comments on this planning proposal. We are available for additional meetings or consultation during this review if required.

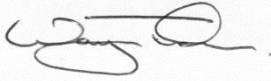
Comments provided are based on advice received from the NSW Rural Fire Service and the requirements of the *Environmental Planning and Assessment Act 1979*, the *Rural Fires Act 1997*, the *Rural Fires Regulations 2013*, the RFS document known as '*Planning for Bush Fire Protection 2006*' for the purposes of bushfire hazard determination and Australian Standard 3959 '*Construction of buildings in bushfire-prone areas*' 2009 as amended for building/structural provisions.

Company representatives have undertaken several site inspections of the subject site and surrounding area.

Should you have any further questions please do not hesitate in contacting myself.

Prepared by
Building Code & Bushfire Hazard Solutions

Reviewed by
Building Code & Bushfire Hazard Solutions P/L



Wayne Tucker

G. D. Design in Bushfire Prone Areas.
Certificate IV Fire Technology
Ass Dip Applied Science
Manager - Bushfire Section
Building Code and Bushfire Hazard Solutions
Fire Protection Association of Australia BPAD – L3 Certified Practitioner
Certification number – BPD – 09399



Stuart McMonnies

G. D. Design in Bushfire Prone Areas.
Certificate IV Fire Technology
Fire Protection Association of Australia BPAD – L3 Certified Practitioner
Certification number – BPD – 09400



Disclaimer:

Quote from Planning for Bushfire Protection 2006, 'Any representation, statement opinion, or advice expressed or implied in this publication is made in good faith on the basis that the State of New South Wales, the NSW Rural Fire Service, its agents and employees are not liable (whether by reason of negligence, lack of care or otherwise) to any person for any damage or loss whatsoever which has occurred or may occur in relation to that person taking or not taking (as the case may be) action in respect of any representation, statement or advice referred to above.'

Similarly the interpretations and opinions provided by Building Code and Bushfire Hazard Solutions in regard to bushfire protection are also given in the same good faith.

Glenworth Valley Outdoor Adventures
69 Cooks Road
Glenworth Valley NSW 2250
Attn: Barton Lawler

3 July 2015

Dear Bart,

RE: Planning Proposal – Glenworth Valley Outdoor Adventures

Glenworth Valley Outdoor Adventures engaged my services to provide comment on the NSW Rural Fire Service (RFS) assessment of the Planning Proposal. The RFS letter is dated 22nd December 2014.

I have inspected the site and attended an on-site meeting on 16th June with RFS representatives Matthew Apps and Garth Bladwell and bushfire consultant Wayne Tucker. Wayne has prepared a formal response to the RFS letter which I have reviewed and made contribution.

This letter summarises the main issues as detailed in Wayne's letter and generally expresses my support for the Planning Proposal in the context of satisfying the aims and objectives of *Planning for Bushfire Protection 2006* (PBP).

I believe the following points are the key facts for RFS to consider in their assessment of the proposal and the ability to rezone the land to allow future development acceptable under PBP.

- a) Existing use rights are in operation and the Valley has a history of DA approved events from music festivals to camping, eco-tourism cabins and a large multi-purpose function centre (under construction).
- b) Any increased use (capacity) proposed in future DAs, such as those relating to overnight stay or eco-tourism accommodation, should be compared to current use and capacity such as that related to large festivals and events.
- c) The primary access is in excellent condition and accommodates coaches and B-double trucks. The access road is greater than 200 m in length therefore PBP requires an alternate access. An alternate access road exists (Popran Road) southwards from the Valley and is in good condition providing egress in the opposite direction to the primary road. It's uncommon to have a rural property with two access roads particularly in such good condition. The provision of a good alternate access road has satisfied the requirement of 'safe operational access' specified by PBP in many previous planning applications involving isolated tourist accommodation.
- d) The valley floor is a large cleared area that provides APZ areas of a dimension that can satisfy Special Fire Protection Purpose (SFPP) and Neighbourhood Safer Places (NSP) requirements. In combination

with the multi-purpose function centre, the valley floor provides a suitable on-site refuge should evacuation not be possible.

- e) The Planning Proposal and subsequent DA process is an opportunity for RFS to seek a better (improved) bushfire protection outcome at the facility than if the Planning Proposal was not approved. I believe the best way to facilitate improved protection would be to request the Valley prepare a comprehensive Bushfire Management and Evacuation Plan that applies to all activities every day of the year, and not just for specific events (such as the plans prepared for each music festival). This Plan would be a large poster format and address preparedness (such as access and APZ maintenance and prescribed burns including strategic blocks adjoining the primary access road) as well as evacuation planning guiding off-site evacuation and on-site refuge.

Glenworth Valley Outdoor Adventures is a unique tourism destination recognised nationally and is currently constructing a multi-purpose function centre using half a million dollars of funding from Tourism NSW. The activities continue to operate under existing use rights and active DAs consent to large music festivals. The business wishes to continually improve the tourist activities and the objective of the Planning Proposal is to enable this.

I believe the site can provide tourist use and accommodation compliant with the requirements of PBP. The ability for on-site refuge and good alternate access are key in achieving this.

It is my recommendation that RFS support the Planning Proposal and use the opportunity of future DAs to seek improved bushfire protection such as the preparation of a comprehensive Bushfire Management and Evacuation Plan.

If you require further information please contact me on 02 4302 1220.

Yours sincerely,



David Peterson

Principal Bushfire Consultant

Eco Logical Australia Pty Ltd

FPAA BPAD Certified Practitioner No. BPD-L3-18882



Item No: 3.6
Title: Supplementary Report - Amended Planning Proposal Request - Glenworth Valley
Department: Environment and Planning

27 April 2020 Ordinary Council Meeting

Trim Reference: F2019/00041-004 - D13899090
Author: Bruce Ronan, Town Planner
Scott Duncan, Section Manager, Land Use and Policy
Jenny Mewing, Principal Strategic Planner
Manager: Karen Tucker, Acting Unit Manager, Strategic Planning
Executive: Scott Cox, Director Environment and Planning

Summary

A decision of Council is required for the action to progress. The impact on project without a resolution of Council is as follows:

- A Guide to Preparing Local Environmental Plans provides guidance and information on the process for making local environmental plans (LEPs) under Part 3 of the Environmental Planning & Assessment Act, 1979 (the Act). In accordance with this guide Council has 90 days to inform the applicant as to whether the application will be supported or not.
- If the proposal is considered to have merit the application cannot be progressed for Gateway Determination in a timely manner.
- This Planning Proposal is one that has already been considered by Council on 11 November 2019. At this meeting Council resolved to “defer consideration of this item for a site inspection to be conducted and a briefing at the monthly planning workshop to be provided”. The site inspection and planning workshop briefing occurred on 3 February 2020.

A proposal has been submitted to Council to amend an existing Planning Proposal to allow additional permitted uses on land at Glenworth Valley and Calga, known as Glenworth Valley Outdoor Adventures.

At its meeting held on 11 November 2019, the Council resolved as follows;

1085/19 That Council defer consideration of this item for a site inspection to be conducted and a briefing at the monthly planning workshop to be provided.

A site inspection was undertaken on 3 February 2020. The site inspection was attended by Council staff and the following Councillors:

3.6 Supplementary Report - Amended Planning Proposal Request - Glenworth Valley (contd)

- Mayor – Councillor Lisa Matthews
- Deputy Mayor - Councillor Jane Smith
- Councillor Chris Holstein
- Councillor Jeff Sundstrom
- Councillor Richard Mehrtens

Mr Barton Lawler, proprietor of Glenworth Valley Outdoor Adventures, was also in attendance to enable a site tour to be undertaken.

The following matters were raised and discussed during the site inspection:

1 What is the main purpose of the Planning Proposal?

The land on top of the escarpment, adjacent to Cooks Road is zoned RU2 Rural Landscape and the land comprising the vegetated escarpment and the valley floor is zoned E2 Environmental Conservation. The Planning Proposal seeks to permit Additional Permitted Uses (APUs) on the site. These are summarised below and shown pictorially in Figure 5 of the original Council report (Attachment 1):

- In the RU2 zone; proposed APUs are eco-tourist facility, camping ground, tourist and visitor accommodation.
- In the E2 zone, generally; proposed APUs are eco-tourist facility, recreation facility (outdoor). Additionally:
 - In the cleared areas of the E2 zone; proposed APU is extensive agriculture.
 - In part of the cleared area of the E2 zone on the valley floor; proposed APUs are camping ground, function centre.
 - In part of the cleared area of the E2 zone adjacent to the RU2 zoned land; proposed APU is tourist and visitor accommodation.
 - In the multi-purpose building and extension; proposed APUs are function centre, entertainment facility, food and drink premises

2 What are the permissible land uses under the definition of "tourist and visitor accommodation"?

Tourist and visitor accommodation means *a building or place that provides temporary or short term accommodation on a commercial basis, and includes any of the following:*

- (a) *backpackers' accommodation,*
- (b) *bed and breakfast accommodation,*

- (c) *farm stay accommodation,*
- (d) *hotel or motel accommodation,*
- (e) *serviced apartments,*

but does not include:

- (f) *camping grounds, or*
- (g) *caravan parks, or*
- (h) *eco-tourist facilities.*

The tourist and visitor accommodation definition incorporates development of a substantial nature (i.e. hotel or motel accommodation and serviced apartments) which would be potentially incompatible with the scenic quality of land within the valley. Therefore the Planning Proposal only proposes to permit tourist and visitor accommodation on land within the RU2 zone and on cleared E2 zoned land adjacent to the RU2 zoned land, not within the valley itself.

3 Why permit extensive agriculture on the valley floor?

Although zoned E2 Environmental Conservation, the land on the valley floor is already cleared and used for the grazing of livestock and growing of fodder. These activities are associated with the horse riding school, a use with existing use rights.

Also prior to the Gosford Local Environmental Plan 2014 (GLEP 2014) coming into effect, the land was zoned 7(a) Conservation and Scenic Protection (Conservation) under Interim Development Order No 122 (IDO 122) which listed "agriculture" as a use permitted with consent.

4 Why are uses not permitted in the E2 zone required?

The uses permitted within the E2 zone do not allow for the current and future uses required for this regionally significant tourist and recreation operation. The Planning Proposal does not intend to rezone the land, but rather include specific APUs on the site whilst retaining the underlying objectives of the E2 zone. This will allow the owner to grow the business to accommodate new nature based outdoor recreational opportunities.

5 Why not continue to rely on existing use rights?

Reliance on existing use rights is not straight forward as it comes down to a legal interpretation of the existing use rights legislation as it relates to each proposed development. The *Environmental Planning and Assessment Regulations, 2000* states that an existing use "must not be changed unless the change involves only alterations or additions that are minor in nature," and "does not involve a significant

3.6 Supplementary Report - Amended Planning Proposal Request - Glenworth Valley (contd)

intensification of the existing use". It would be far more efficient for the owner and Council staff to have a list of additional uses permitted on the site.

6 Has disposal of wastewater been considered?

The use of the multi-purpose building independently of any other uses on the site has the potential to result in additional hydraulic loading on the on-site sewage management system. To determine the impacts of this, a wastewater management report will be required to be submitted, should a Gateway Determination be issued.

7 Can a table be provided which indicates the uses currently permitted in the E2 Environmental Protection zone and the RU2 Rural Landscape zone and the additional permitted uses proposed in the Planning Proposal?

The following table provides the information requested:

Zone	Gosford LEP 2014	Proposed Additional Permitted Uses
RU2 Rural Landscape	<p>2 Permitted without consent</p> <p>Extensive agriculture; Home occupations; Recreation areas</p> <p>3 Permitted with consent</p> <p>Agriculture; Animal boarding or training establishments; Aquaculture; Bed and breakfast accommodation; Dwelling houses; Environmental protection works; Extractive industries; Farm buildings; Farm stay accommodation; Garden centres; Home-based child care; Home industries; Landscaping material supplies; Open cut mining; Plant nurseries; Recreation facilities (outdoor); Roads; Roadside stalls; Secondary dwellings; Veterinary hospitals; Water storage facilities</p> <p>4 Prohibited</p> <p>Any development not specified in item 2 or 3</p>	<p>Permitted with consent</p> <p>Eco-tourist facilities, camping grounds, tourist and visitor accommodation</p>
E2 Environmental Conservation	<p>2 Permitted without consent</p> <p>Nil</p> <p>3 Permitted with consent</p> <p>Bed and breakfast accommodation; Dwelling houses; Environmental facilities; Environmental protection works; Home occupations; Oyster aquaculture Recreation areas; Roads; Water storage facilities</p> <p>4 Prohibited</p>	<p>Permitted with consent:</p> <p>Eco-tourist facilities, recreation facilities (outdoor)</p> <p>In addition to the uses above:</p> <p>- Permitted with consent on cleared land:</p> <p>Extensive Agriculture</p>

	Business premises; Hotel or motel accommodation; Industries; Multi dwelling housing; Pond-based aquaculture; Recreation facilities (major); Residential flat buildings; Restricted premises; Retail premises; Seniors housing; Service stations; Tank-based aquaculture; Warehouse or distribution centres; Any other development not specified in item 2 or 3	- Permitted with consent on part of cleared land in valley: Camping grounds, function centres - Permitted with consent on part of cleared land adjacent to RU2 zoned land: Tourist and visitor accommodation - Permitted with consent in multipurpose building: Function centres, entertainment facilities, food and drink premises
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A briefing on the Planning Proposal was provided to Councillors at the Planning Workshop of 3 February 2020.

The following matters were raised and discussed at the briefing:

- 1 *What are the negative implications arising from having the proposal active for an extended period of time?*

If Council staff are not actively working on the proposal due to a lack of progress by the Proponent, there are no cost ramifications. The Department of Planning, Industry and Environment (DPIE) are taking a more active role in monitoring the timeframes for Planning Proposals.

- 2 *Is the recreation facility (outdoor) land use confined to the existing building?*

No, a recreation facility (outdoor) can relate to a building or place. The intent of including the proposed use is to enable the use of the site for additional recreational purposes which are not permissible under the current existing use rights provisions. All that can be done under existing use rights are minor alterations to those recreation uses that currently have development consent. There is no avenue for considering additional recreation facilities (outdoor) that may arise in the future. This Planning Proposal seeks to address this issue.

Recommendation

- 1 ***That the Council support an amended Planning Proposal applying to:***

- ***Lots 19, 20, 21, 23, 24, 25, 30, 31, 32, 33, 37, 50, 53, 64, 65, 68, 81, 82, 85, 86, 87, 89, 91, 108, 145 DP 755221,***

- **Lots 22, 23, 32, 73, 75, 76 DP 755253,**
- **Lots 1, 3 DP 617088,**
- **Lot 881 DP 563889,**
- **Lot 1 DP 1222754,**
- **Lot 7 DP 1230083,**
- **Lot 245 DP 48817,**
- **Lot 7012 DP 1059767,**
- **Lot 7029 DP 93603,**
- **Lot 7035 DP 1051932,**
- **Lot 7036 DP 1059768,**
- **Lot 7303 DP 1154929, Glenworth Valley, and**
- **Lot A DP 365595,**
- **Lot C DP 382358,**
- **Lot 2 DP 1139242,**
- **Lot 882 DP 563889,**
- **part of Lot 102 DP 1139060,**
- **Lot 7039 DP 1059766,**
- **Lot 7303 DP 1161109, Calga**

to amend the Gosford Local Environmental Plan 2014 (or draft Central Coast Local Environmental Plan), whichever is in effect at the time, to permit the following additional permitted uses (if they are not included in the Central Coast Local Environmental Plan):

- a on land zoned E2 Environmental Conservation, development for the purpose of eco-tourist facilities and recreation facilities (outdoor);**
- b on land zoned RU2 Rural Landscape, development for the purposes of eco-tourist facilities, camping grounds and tourist and visitor accommodation;**
- c on the existing cleared areas of the land zoned E2 Environmental Conservation, comprising Lots 19, 20, 21, 23, 25, 30, 32, 33, 37, 50, 53, 64, 68, 85, 86, 87, 89, 91, 108 and 145 DP 755221, Lots 22 and 32 DP 755253, Lot 3 DP 617088, Lot 245 DP 48817, Lot 7039 DP 1059766 and Lot 7303 DP 1154929, development for the purpose of extensive agriculture.**
- d on land comprising that part of Lot 89 DP 755221 which currently accommodates the multi-purpose building and its curtilage,**
 - (i) development for the purpose of function centre, entertainment facility and food and drink premises, and**
 - (ii) the total floor area for the function centre, entertainment facility and food and drink premises is to be a maximum of 1500m² with any additions being attached to, or directly adjacent to, the existing building.**

- e on the existing cleared areas of the land zoned E2 Environmental Conservation comprising part of Lots 19, 37 and 89 DP 755221 and Lots 22 and 32 DP 755253, development for the purpose of function centre and camping ground.*
- f on the existing cleared areas of the land zoned E2 Environmental Conservation comprising part of Lots 108 and 145 DP 755221, development for the purpose of tourist and visitor accommodation.*
- 2 That Council submit a revised Planning Proposal to the Minister for Planning in accordance with Section 3.35(2) of the Environmental Planning and Assessment Act 1979, requesting an amended Gateway Determination pursuant to Section 3.34 of the Environmental Planning and Assessment Act 1979.**
- 3 That Council request delegation for Council to finalise and make the draft Local Environmental Plan, pursuant to Section 3.36 of the Environmental Planning and Assessment Act 1979.**
- 4 That Council undertake community and public authority consultation, in accordance with the Gateway Determination requirements.**
- 5 That the Council consider a further report on results of the agency and community consultation.**

Attachments

1	Original report - 11 November 2019		D13343340
2	Planning Proposal Summary	Provided Under Separate Cover	D13841367
3	Former Gosford City Council Resolution to Prepare Planning Proposal (17 December 2013)	Provided Under Separate Cover	D13343533
4	Former Gosford City Council Resolution to Prepare Planning Proposal (10 June 2014)	Provided Under Separate Cover	D13343536
5	Former GCC CEO Approval under Delegated Authority - 27 June 2014 (Glenworth Valley)	Provided Under Separate Cover	D13343535
6	Strategic Assessment	Provided Under Separate Cover	D13691401

Item No: 2.5
Title: Amended Planning Proposal Request - Glenworth Valley
Department: Environment and Planning



11 November 2019 Ordinary Council Meeting

Trim Reference: F2018/00020-008 - D13343340
 Author: Bruce Ronan, Town Planner
 Scott Duncan, Section Manager, Land Use and Policy
 Manager: Karen Tucker, Acting Unit Manager, Strategic Planning
 Executive: Scott Cox, Director Environment and Planning

Report Purpose

The purpose of this report is for Council to consider an amendment to a current Planning Proposal which seeks to enable additional permissible uses on land at Glenworth Valley and Calga (Glenworth Valley Outdoor Adventures) through an amendment to *Gosford Local Environmental Plan 2014*.

This report recommends that the Council support the amendment of the Planning Proposal and, as the Gateway Determination has lapsed, seek a new Gateway Determination from the Minister of Planning.

Recommendation

1 That the Council support an amended Planning Proposal applying to:

- ***Lots 19, 20, 21, 23, 24, 25, 30, 31, 32, 33, 37, 50, 53, 64, 65, 68, 81, 82, 85, 86, 87, 89, 91, 108, 145 DP 755221,***
- ***Lots 22, 23, 32, 73, 75, 76 DP 755253,***
- ***Lots 1, 3 DP 617088,***
- ***Lot 881 DP 563889,***
- ***Lot 1 DP 1222754,***
- ***Lot 7 DP 1230083,***
- ***Lot 245 DP 48817,***
- ***Lot 7012 DP 1059767,***
- ***Lot 7029 DP 93603,***
- ***Lot 7035 DP 1051932,***
- ***Lot 7036 DP 1059768,***
- ***Lot 7303 DP 1154929, Glenworth Valley, and***
- ***Lot A DP 365595,***
- ***Lot C DP 382358,***
- ***Lot 2 DP 1139242,***
- ***Lot 882 DP 563889,***
- ***part of Lot 102 DP 1139060,***

- **Lot 7039 DP 1059766,**
- **Lot 7303 DP 1161109, Calga**

to amend the Gosford Local Environmental Plan 2014 (or draft Central Coast Local Environmental Plan), whichever is in effect at the time, to permit the following additional permitted uses (if they are not included in the Central Coast Local Environmental Plan):

- a on land zoned E2 Environmental Conservation, development for the purpose of eco-tourist facilities and recreation facilities (outdoor);**
 - b on land zoned RU2 Rural Landscape, development for the purposes of eco-tourist facilities, camping grounds and tourist and visitor accommodation;**
 - c on the existing cleared areas of the land zoned E2 Environmental Conservation, comprising Lots 19, 20, 21, 23, 25, 30, 32, 33, 37, 50, 53, 64, 68, 85, 86, 87, 89, 91, 108 and 145 DP 755221, Lots 22 and 32 DP 755253, Lot 3 DP 617088, Lot 245 DP 48817, Lot 7039 DP 1059766 and Lot 7303 DP 1154929, development for the purpose of extensive agriculture.**
 - d on land comprising that part of Lot 89 DP 755221 which currently accommodates the multi-purpose building and its curtilage,**
 - (i) development for the purpose of function centre, entertainment facility and food and drink premises, and**
 - (ii) the total floor area for the function centre, entertainment facility and food and drink premises is to be a maximum of 1500m² with any additions being attached to, or directly adjacent to, the existing building.**
 - e on the existing cleared areas of the land zoned E2 Environmental Conservation comprising part of Lots 19, 37 and 89 DP 755221 and Lots 22 and 32 DP 755253, development for the purpose of function centre and camping ground.**
 - f on the existing cleared areas of the land zoned E2 Environmental Conservation comprising part of Lots 108 and 145 DP 755221, development for the purpose of tourist and visitor accommodation.**
- 2 That Council submit a revised Planning Proposal to the Minister for Planning in accordance with Section 3.35(2) of the Environmental Planning and Assessment Act 1979, requesting an amended Gateway Determination pursuant to Section 3.34 of the Environmental Planning and Assessment Act 1979.**

- 3 That Council request delegation for Council to finalise and make the draft Local Environmental Plan, pursuant to Section 3.36 of the Environmental Planning and Assessment Act 1979.**
- 4 That Council undertake community and public authority consultation, in accordance with the Gateway Determination requirements.**
- 5 That the Council consider a further report on results of the agency and community consultation.**

Background

The subject site is commonly known as the "Glenworth Valley Outdoor Adventures" site.

As a result of changes to local planning instruments over many years, the existing horse riding school, which has been operating on the site since it was approved in 1969, is no longer permissible within the E2 Environmental Conservation zone under *Gosford Local Environmental Plan 2014* (GLEP 2014) which applies to the subject land.

The continuation of this use is enabled utilising the "existing use rights" provisions of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Until 2006 development consent could be granted for other uses not permitted in the, then, 7(a) Conservation and Scenic Protection (Conservation) zone on the basis of the existing non-conforming use on the site (i.e. the horse riding school). During this period subsequent developments were approved which included music festivals, paintball and quad biking. A list of development consents granted include:

DA 2839/1999 - music festival (15,000 people per day)
DA 25818/2004 - small scale music festival (2,500 people per day)
DA 19911/2003 – recreation facility – paintball
DA 20082/2003 – recreation facility – quad bike tours

In 2006 the "existing use rights" provisions under the EP&A Act and Regulations were changed to prohibit other non-conforming uses from being permitted. Hence no more development applications could be considered for uses that were not permitted in the zone. Since 2006 the only development consents issued for uses not permitted in the zone related to a temporary use of land and an ancillary use to approved developments on the site.

DA 45588/2014 - recreation facility - equestrian and running events (temporary use)
DA 44773/2013 – multi-purpose building (ancillary to approved uses on site)

In 2013, DA 43465/2013 approved 3 motel units and 5 caravan sites (i.e. relocatable cabins) on land which is now zoned RU2 Rural Landscape.

The development consent was issued when the land was zoned 7(b) Conservation and Scenic Protection (Scenic Protection) under IDO 122 and motels and caravan parks were permitted uses.

The Planning Proposal, as originally lodged on 13 August 2013, sought approval to provide certainty for the continuation of these existing uses on the subject site and to provide opportunities for additional recreation and tourist related developments in the future by adding specific additional permitted uses into GLEP 2014 which can be conducted on the property.

The Planning Proposal, as originally supported by the former Gosford City Council (fGCC) sought to:

- Enable additional permitted uses of eco-tourist facilities, camping grounds, tourist and visitor accommodation on the land zoned RU2 Rural Landscape;
- Enable additional permitted uses of eco-tourist facilities, camping grounds, tourist and visitor accommodation, extensive agriculture, recreation facilities (outdoor) on land zoned E2 Environmental Conservation;
- Rezone the cleared, pasture improved farmland on the ridge proximate to Cooks Road from E2 Environmental Conservation to RU2 Rural Landscape.

The original Planning Proposal was supported by resolutions of the fGCC made on 17 December 2013 and 10 June 2014 (Attachments 2 and 3) and was progressed under the delegated Authority of the Chief Executive Officer of the fGCC (Attachment 4).

This Planning Proposal was subject to a Gateway Determination issued on 17 July 2014 by the then Department of Planning and Environment (now Department of Planning, Industry and Environment) and the current Gateway Extension lapsed on 24 October 2018.

On the basis of agency consultation in relation to the current Planning Proposal, and additional requirements of the land owner, the Proponent has sought the modifications as detailed further in this report. This request for an amended Planning Proposal opens up the existing Planning Proposal for reassessment as well. Should Council resolve to proceed with the amended Planning Proposal, it will require Council to request an amendment to the Gateway Determination from the Department of Planning, Industry and Environment (DPIE).

The Site

The subject site comprises 49 lots ranging in size from 0.1 hectares (Ha) to 267.5 Ha. The area of the subject site is 1173.6 Ha.

Access is gained to all but two lots via Cooks Road which joins Peats Ridge Road. The remaining two lots gain access directly onto Peats Ridge Road.

The land represents a significant holding of environmentally important land being relatively isolated, with limited access, and characterised by a cleared valley floor with vegetated hillsides and ridgelines (Figure 1).

The land comprises a number of discrete pockets of Endangered Ecological Communities (EEC) and regionally significant vegetation throughout the site.

It is located between developed agricultural and resource lands situated along Peats Ridge Road to the east and Popran National Park to the west. Popran Creek, and a number of other small watercourses which run into it, flow through the site, which then drains to the Hawkesbury River.

The land is also an established tourist destination. Its close proximity to Sydney makes it a desirable destination for a wide tourism market, including international visitors. The broad range of nature-based activities offered at the site also make it appealing for a variety of users and maximises opportunities that the site presents. Some uses are temporary (e.g. music festivals and "mud run" events), whilst other uses are of a more permanent nature with some fixed structures (e.g. multi-purpose building). Different parts of the site are used for various activities (e.g. abseiling, horse riding, quad bike riding). The cleared valley floor is used for the grazing of horses and livestock.

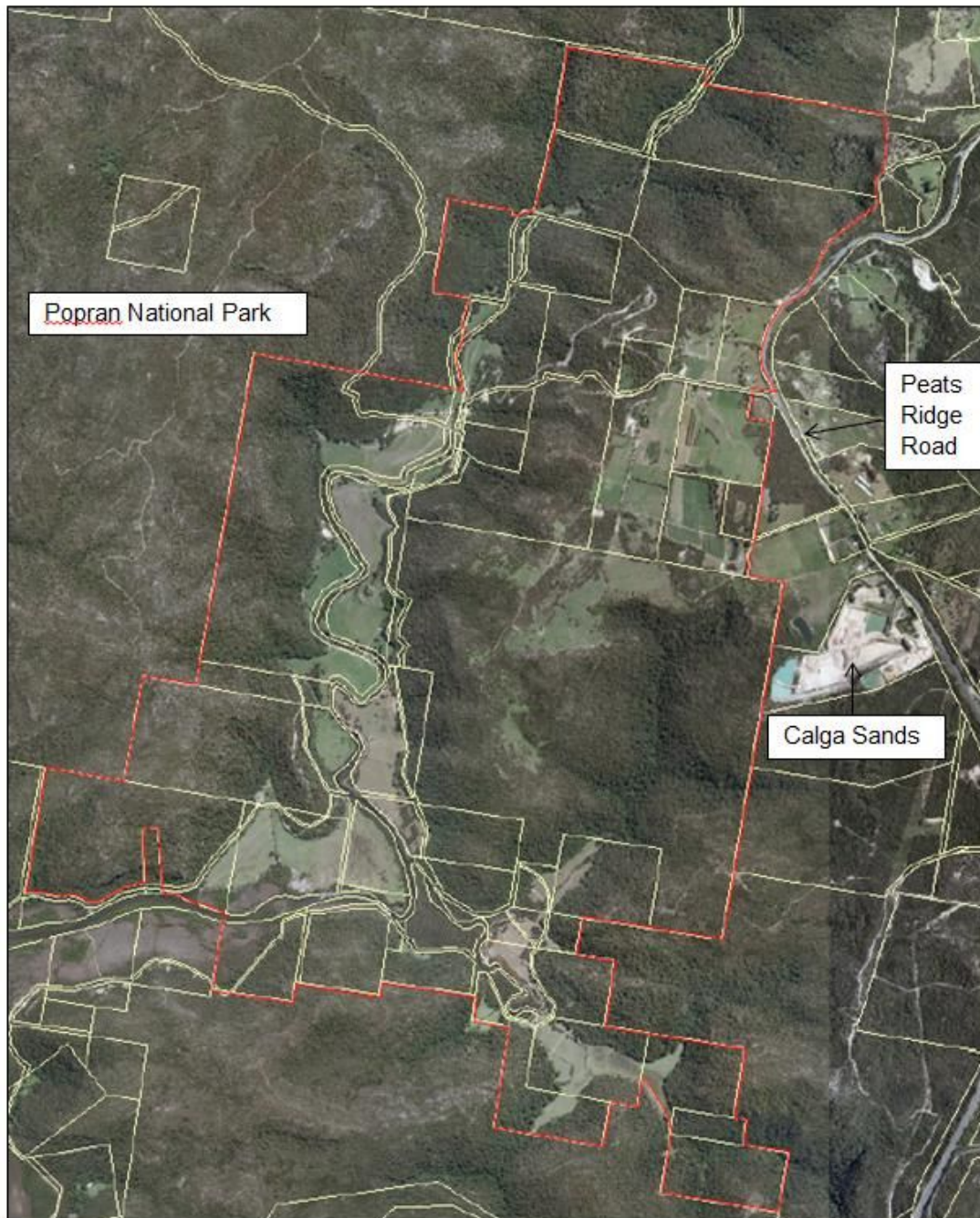


Figure 1: Locality Context (subject site outlined in red)

The subject site comprises approximately 1070.2 Ha of land zoned E2 Environmental Conservation and 103.4 Ha of land zoned RU2 Rural Landscape under GLEP 2014 (Figure 2).

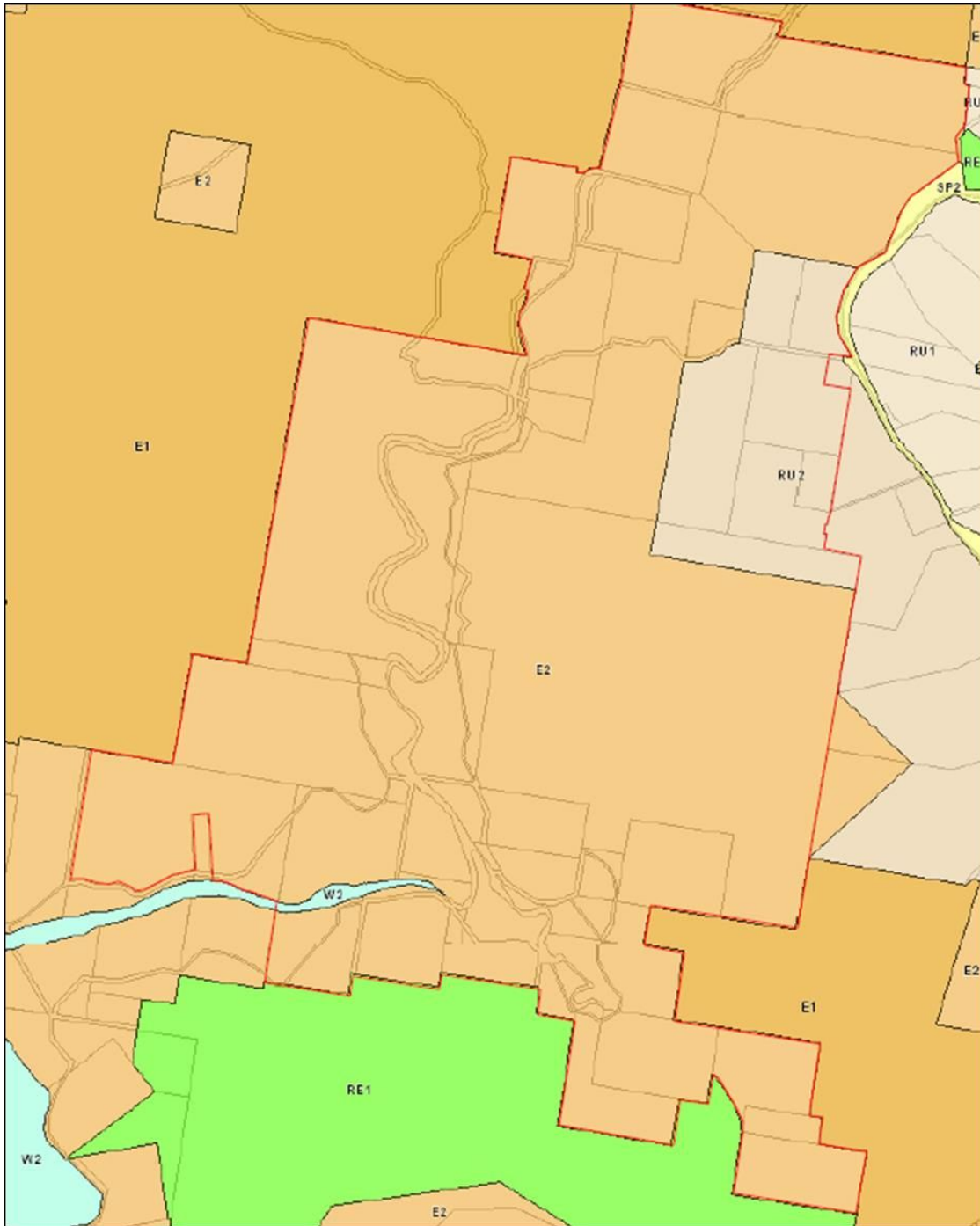


Figure 2: Current Zoning (subject site outlined in red)

The subject site includes landholdings owned by The Glenworth Valley Pastoral Company Pty Ltd, NSW Department of Trade and Industry (Crown Lands) and the Darkinjung Local Aboriginal Land Council (DLALC) (Figure 3).

The subject land comprises the following lots owned by The Glenworth Valley Pastoral Company Pty Ltd:

- Lots 19, 20, 21, 23, 24, 25, 30, 31, 32, 33, 37, 50, 53, 64, 65, 68, 81, 82, 85, 86, 87, 89, 91, 108, 145 DP 755221,
- Lots 22, 23, 32, 73, 75, 76 DP 755253,

- Lots 1 & 3 DP 617088,
- Lots 881 & 882 DP 563889,
- Lot 1 DP 1222754,
- Lot A DP 365595,
- Lot C DP 382358,
- Lot 2 DP 1139242,
- part of Lot 102 DP 1139060.

The following lots are Crown Land over which The Glenworth Valley Pastoral Company Pty Ltd has a licence under the *Crown Land Management Act 2016* (previously referred to as a permissive occupancy) for the purpose of grazing:

- Lot 7012 DP 1059767
- Lot 7039 DP 1059766
- Lot 7303 DP 1161109
- Lot 7303 DP 1154929

The other Crown Land lots included in the subject area are set out below.

- Lot 7029 DP 93603,
- Lot 7035 DP 1051932,
- Lot 7036 DP 1059768,
- several unformed Crown roads

The land owned by DLALC comprises Lot 245 DP 48817 and Lot 7 DP 1230083.

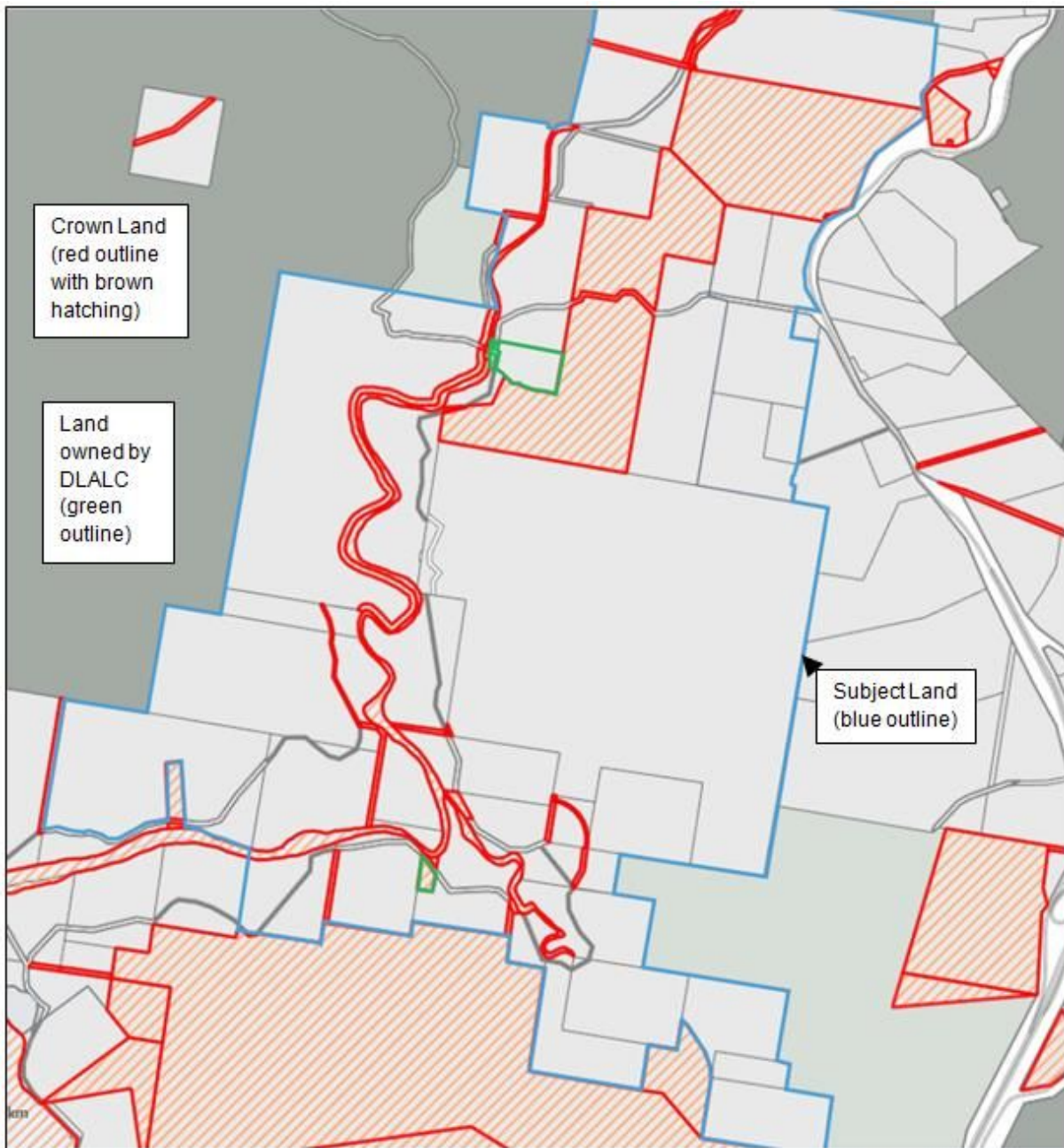


Figure 3: Land owned by the Crown and DLALC

The Amended Proposal

The proponent's favoured position is to retain the following aspects of the original Planning Proposal:

- Enable additional permitted uses of eco-tourist facilities, camping grounds, tourist and visitor accommodation on all the land zoned RU2 Rural Landscape; and
- Enable additional permitted uses of eco-tourist facilities, camping grounds, tourist and visitor accommodation, extensive agriculture, recreation facilities (outdoor) on all the land zoned E2 Environmental Conservation.

However, the proponent has advised that should Council not agree to all these uses over the whole of the E2 Environmental Conservation zoned land, then the following would be satisfactory:

- extensive agriculture on all existing cleared land;
- camping ground on existing cleared areas of Lots 19, 37 and 89 DP 755221 and lots 22 and 32 DP 755253;
- tourist and visitor accommodation on the existing cleared areas of Lots 108 and 145 DP 755221 adjacent to the RU2 Rural Landscape zone. In response to concerns raised by the then NSW Office of Environment and Heritage (OEH), the amended proposal does not seek to rezone the cleared pasture improved farmland on the ridge proximate to Cooks Road from E2 Environmental Conservation to RU2 Rural Landscape as originally proposed (Figure 4). Instead the proponent seeks that these lands be retained as E2 Environmental Conservation with the additional permitted use of "tourist and visitor accommodation".

In addition, the proponent is seeking to include the following amendments to the Planning Proposal:

- 1 Introducing the uses of function centre, entertainment facility and food and drink premises as additional permitted uses for the existing multi-purpose building (on Lot 89 DP 755221) and limiting the total floor area to 1500m².
- 2 Adding function centre, entertainment facility and food and drink premises as additional permitted uses on the existing cleared areas of surrounding lots (Lots 19, 37 and 89 DP 755221 and Lots 22 and 32 DP 755253) with no permanent structures. These lots are currently zoned E2 Environmental Conservation under GLEP 2014.

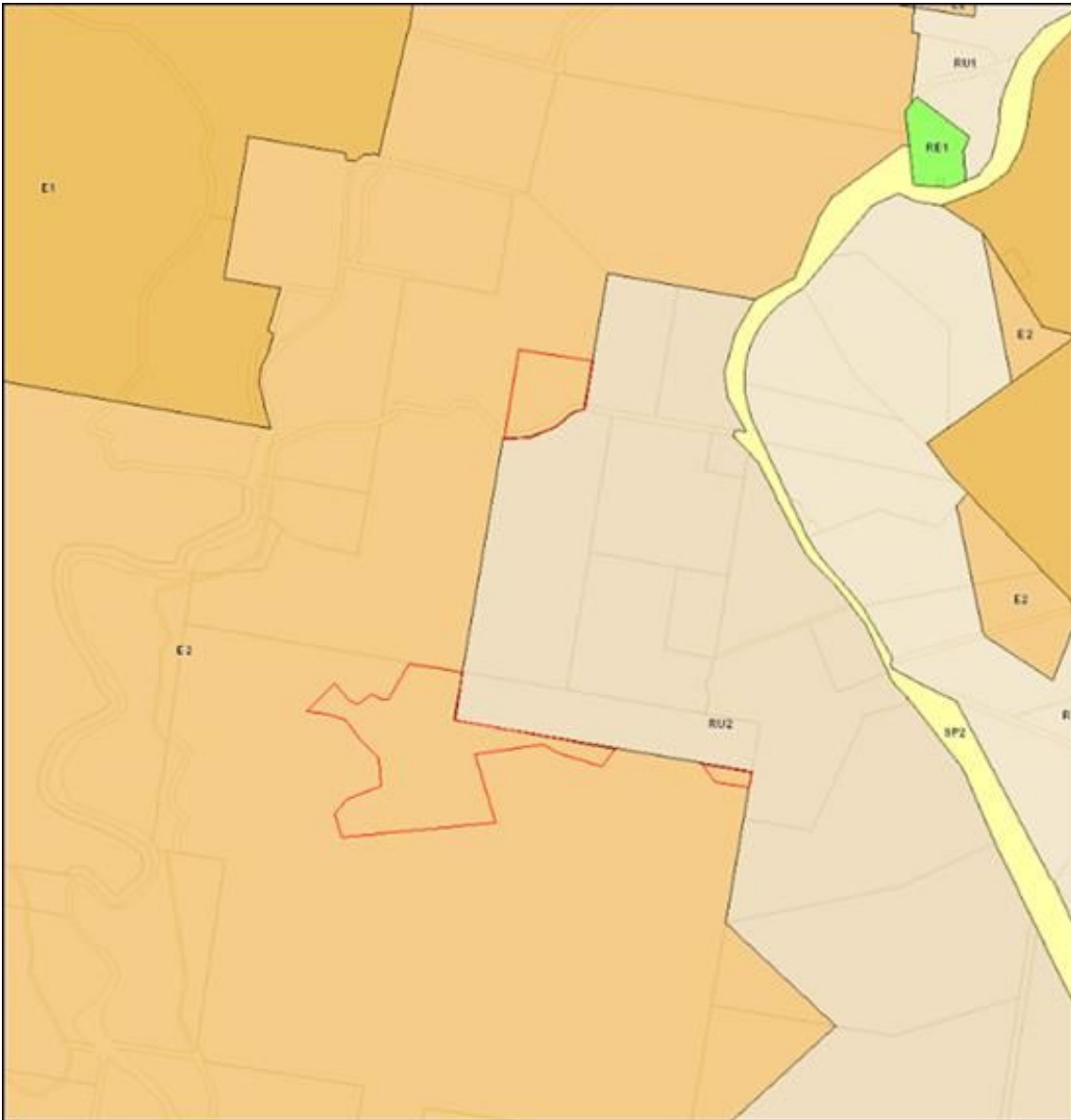


Figure 4: Land originally proposed to be zoned from E2 Environmental Conservation to RU2 Rural Landscape

The amendment to the Planning Proposal to permit the existing multi-purpose building and surrounding land to be used as a function centre, entertainment facility and food and drink premises was justified by the proponent on the following grounds:

- The existing recreation activities are weekend and school holiday orientated and are reliant on fine weather. To overcome the potential of having successive weekends or holidays washed out, the business is looking to diversify its operations to include midweek and off peak markets and less weather dependent activities. In this way the building can be used for activities that are not tied to the existing recreational activities on the site.
- The allotments surrounding the multi-purpose building are included to allow some operational flexibility, for example, if customers wish to hold a wedding ceremony outdoors.

Assessment

The assessment of the amended planning proposal (which includes that originally considered by the fGCC and the additional permitted uses requested by the proponent) are considered below. The result of this assessment is shown in Figure 5 which indicates the location of each of the proposed additional permitted uses on the site.

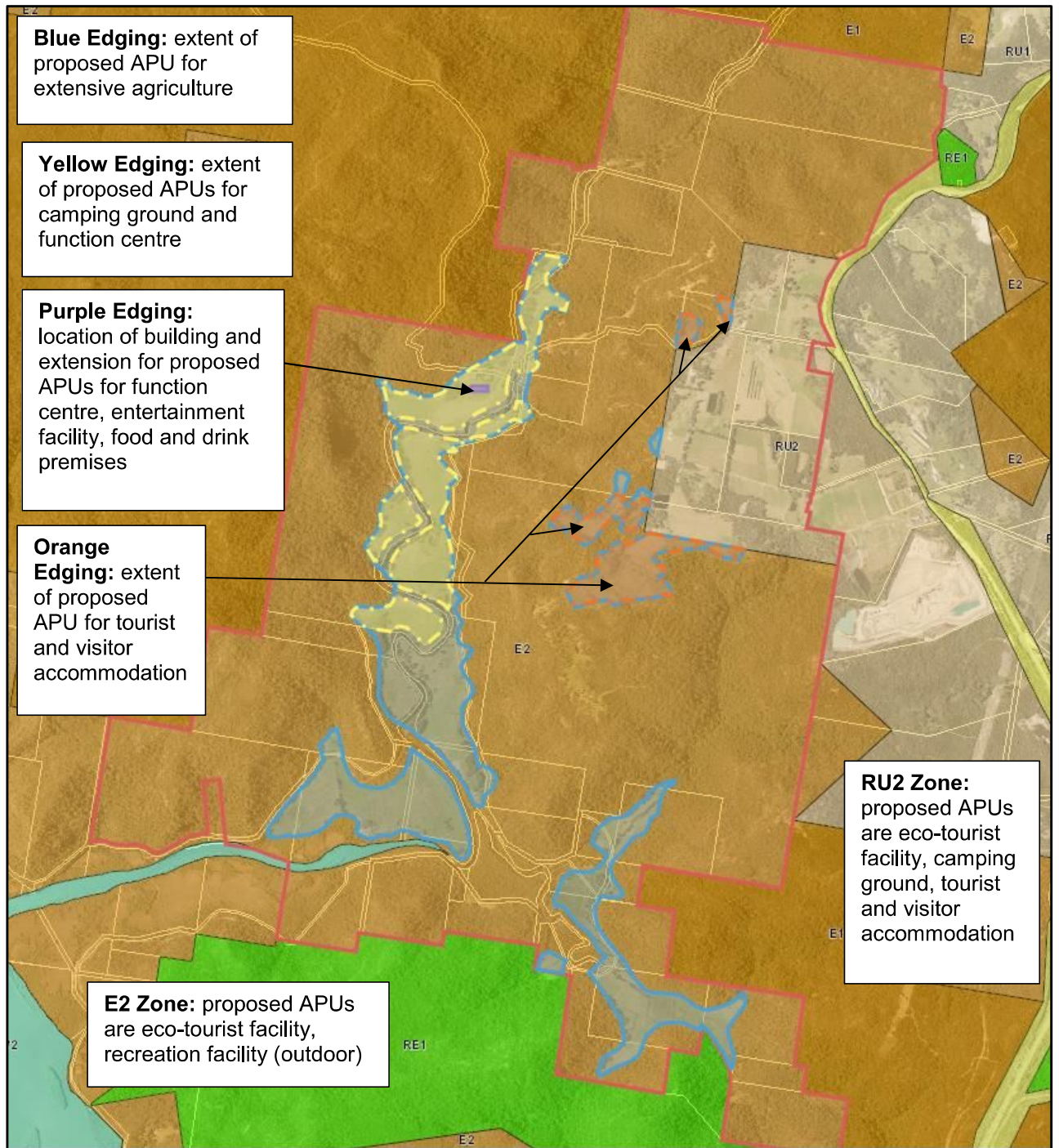


Figure 5: Lots within the subject land affected by each Additional Permitted Use

Extensive Agriculture

“Extensive agriculture” means any of the following:

- (a) *the production of crops or fodder (including irrigated pasture and fodder crops) for commercial purposes;*
- (b) *the grazing of livestock for commercial purposes;*
- (c) *bee keeping;*
- (d) *a dairy (pasture based).*

“Extensive agriculture” is not permissible in the E2 Environmental Conservation zone given the environmental values of the land and the incompatibility of this use with these values. Also, under the provisions of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*, extractive industries are permissible in any zone where “agriculture” is permissible. The Mineral Resources Audit, 2014 did not identify any potential resource within Glenworth Valley.

The applicant has sought the inclusion of “extensive agriculture” as a permissible use on the E2 Environmental Conservation component on the basis of existing grazing activities associated with the horse riding school. Also prior to the GLEP 2014 coming into effect the land was zoned 7(a) Conservation and Scenic Protection (Conservation) which listed “Agriculture” as a use permitted with consent.

The inclusion of “extensive agriculture” as an additional permitted use on cleared E2 Environmental Conservation zoned land on the valley floor and on land adjacent to the RU2 Rural Landscape zone is supported as it is currently used for horse grazing and/or fodder production. The Additional Permitted Use provisions will clearly indicate that development for the purpose of “extensive agriculture” is to occur on existing cleared land. The vegetated escarpment is unsuitable for “extensive agriculture” and is not currently used for this use.

“Extensive agriculture” is permitted in RU2 Rural Landscape zone as a general permitted use in the zone so it is not necessary to specify it as an additional permitted use relating to this land.

Recreation Facility (Outdoor)

Recreation facility (outdoor)” means a building or place (other than a recreation area) used predominately for outdoor recreation, whether or not operated for the purposes of gain, including a golf course, golf-driving range, mini-golf centre, tennis court, paint-ball centre, lawn bowling green, outdoor swimming pool, equestrian centre, skate board ramp, go-kart track, rifle range, water-ski centre or any other building or place of a like character used for outdoor recreation (including any ancillary buildings) but does not include an entertainment facility or a recreation facility (major).

“Recreation facility (outdoor)” is not permissible in the E2 Environmental Conservation zone.

Although the existing recreational uses and possible future recreational uses are more nature-based than those nominated above, this definition best suits the predominant activities on the land.

Activities include horse riding, (both guided and free ranging on nominated trails), quad bike riding (in nominated areas), kayaking, abseiling (in specific areas), laser skirmish/paintball and may also include other emerging outdoor pursuits. The inclusion of recreational facility (outdoor) as an Additional Permitted Use on land zoned E2 Environmental Conservation zone will cater for any future recreational uses that may arise whilst protecting the overall values of the site via the objectives of the zone.

Such future recreational uses would require individual development assessment and as it is the inherent natural values of the land that make it attractive for these recreational/tourist related activities it is in the landowner's interests to seek to protect these values.

"Recreation facilities (outdoor)" is permitted in RU2 Rural Landscape zone as a general permitted use in the zone so it is not necessary to specify it as an additional permitted use relating to this land.

Eco-tourist Facility

"Eco-tourist facility" means a building or place that:

- (a) provides temporary or short-term accommodation to visitors on a commercial basis, and*
- (b) is located in or adjacent to an area with special ecological or cultural features, and*
- (c) is sensitively designed and located so as to minimise bulk, scale and overall physical footprint and any ecological or visual impact.*

It may include facilities that are used to provide information or education to visitors and to exhibit or display items.

The definition of "eco-tourist facility" specifically requires such short-term accommodation to be designed so as to minimise its ecological and visual impact. Such a use would be suitable in the E2 Environmental Conservation zone.

There are also mandated requirements in Clause 5.13 of the GLEP 2014 that sets out matters for consideration of "eco-tourist facilities" that would ensure that development would maintain the environmental values of the land and ensure that it is sensitively designed and managed to have minimal impact on the environment.

Under the draft Central Coast Local Environmental Plan (CCLEP), "eco-tourist facilities" are proposed to be a use permitted in the E2 Environmental Conservation zone so would not be required to be included as an additional permitted use in the E2 zone should this Plan be in effect when this Planning Proposal is finalised.

The planning proposal seeks to permit "eco-tourist facilities" within the RU2 Rural Landscape zone.

Camping Ground

“Camping ground” means an area of land that has access to communal amenities and on which campervans or tents, annexes or other similar portable and lightweight temporary shelters are, or are to be, installed, erected or placed for short term use, but does not include a caravan park.

The proponent has advised that the “camping ground” use operates as an ancillary use to the approved horse riding school and it should be permitted over all of the subject land. However as the proposed “camping ground” use is proposed to operate independently of the horse riding use, it lacks strategic merit to be allowed to operate over all the site.

A camping ground use exists on the cleared parts of Lots 22 and 32 DP 755253 and Lots 19, 37 and 89 DP 755221 which is in the valley and zoned E2 Environmental Conservation. As these lots are proximate to the focal point of many group activities on the site the use of “camping ground” on the existing cleared areas of these lots is supported.

The proponent has advised that small groups (e.g. Duke of Edinburgh expeditions) venture into remote areas of the site to camp as part of their wilderness experience. Therefore this use should be permitted over all of the subject land. Under the definition; “camping grounds” means an area of land that has access to communal amenities. Short term camping in the form of “a wilderness experience” as proposed by the proponent is therefore outside of the above “camping grounds” definition. However such low key camping could be considered as a “recreation facility (outdoor)”, which is a use proposed to be permitted on all lots zoned E2 Environmental Conservation.

Under the draft CCLEP “camping ground” is proposed to be a permitted use in the RU2 Rural Landscape zone so would not be required to be included as an additional permitted use in the RU2 Rural Landscape zone should this plan be in effect when this planning proposal is finalised.

Tourist and Visitor Accommodation

Tourist and visitor accommodation means a building or place that provides temporary or short term accommodation on a commercial basis, and includes any of the following:

- (a) *backpackers' accommodation,*
- (b) *bed and breakfast accommodation,*
- (c) *farm stay accommodation,*
- (d) *hotel or motel accommodation,*
- (e) *serviced apartments,*

but does not include:

- (f) *camping grounds, or*
- (g) *caravan parks, or*
- (h) *eco-tourist facilities.*

The proponent has requested that "tourist and visitor accommodation" be permitted over the whole site on the basis that accommodation was part of the riding school and is therefore able to be used in conjunction with the riding school. The proponent argues that under existing use rights the accommodation component can be enlarged, expanded and intensified under s 4.66 – 4.70 of the Environmental Planning and Assessment Act 1979.

Whilst an existing use can be enlarged, expanded and intensified, cl 42 of the *Environmental Planning and Assessment Regulation 2000* requires that such enlargement, expansion or intensification "must be for the existing use and for no other use". Therefore any accommodation onsite, relying on existing use rights, that is to be enlarged, expanded and intensified has to be for the use of horse riders.

The proposed "tourist and visitor accommodation" is not proposed to be linked to the horse riding activities and has the potential to be more intensive. Therefore the claim that "tourist and visitor accommodation" should be permitted on the whole site is not supported.

Furthermore, the definition of "tourist and visitor accommodation" incorporates development of a substantial nature which would potentially be incompatible with the scenic quality of the land zoned E2 Environmental Conservation within the valley and known environmental constraints such as bushfire hazard and flooding.

Within the broader E2 Environmental Conservation zone a suitable form of short term accommodation would be "eco tourist facility". There are mandated requirements in cl 5.13 of the GLEP 2014 and the draft CCLEP that sets out matters for consideration regarding "eco-tourist facilities" that would ensure that development would maintain the environmental values of the land and ensure that it is sensitively designed and managed to have minimal impact on the environment.

Under the draft CCLEP "eco-tourist facility" is proposed to be a permitted use in the E2 Environmental Conservation zone so would not be required to be included as an additional permitted use in the E2 zone should this plan be in effect when this planning proposal is finalised.

However, it should be noted that currently there is generally cleared land zoned E2 Environmental Conservation adjacent to the RU2 Rural Landscape zone atop the escarpment, being parts of Lots 108 and 145 DP 755221. The additional permitted use of "tourist and visitor accommodation" is considered a suitable use on such land as it does not have the significant scenic quality values as the E2 Environmental Conservation zoned land in the valley but contains similar characteristics to the adjoining RU2 Rural Landscape zoned land which is proposed to include the use of "tourist and visitor accommodation".

The cleared areas identified in the E2 Environmental Conservation zoned land for "tourist and visitor accommodation" are outside of the Transition Area adjacent to Calga Sands. This will ensure that such a use will not adversely affect, or be adversely affected by, current or future resource development of Calga Sands.

The RU2 Rural Landscape zoned land is generally cleared with scattered stands of woodland so could accommodate "tourist and visitor accommodation" units within the undulating landform without an adverse impact on the rural quality of the area. Such a use would be unlikely to dominate the landscape as the land is primarily required for grazing purposes. Therefore it is considered that imposing a limit on the number of units is not required for this area as the use can be satisfactorily determined on the basis of economic demand and the environmental capacity of the land to support such uses.

It should be noted that DA 43465/2013 approved 3 motel units and 5 caravan sites (i.e. relocatable cabins) on two lots which are now within the RU2 Rural Landscape zone. The development consent was issued when the land was zoned 7(b) Conservation and Scenic Protection (Scenic Protection) and motels and caravan parks were permitted uses. The 5 x 2 bedroom relocatable cabins have been constructed.

Use of Existing Multi-Purpose Building

The existing multi-purpose building is located on Lot 89 DP 755221 and was approved as an ancillary use to the recreational uses operating on the site. The Planning Proposal seeks to permit the building to be used independently as a "function centre", "entertainment facility" and a "food and drink premises".

It has an existing floor area of approximately 800m² and it is proposed that the total floor space to be used for a function centre, entertainment facility and a food and drink premises be 1500m². This additional floor space will allow for future expansion, if required, provided the additional floor space comprises an extension to the building or is directly adjacent to it, the environmental impact will be minimal.

The definitions of the proposed additional permitted uses are:

- *"Entertainment facility" means a theatre, cinema, music hall, concert hall, dance hall and the like, but does not include a pub or registered club.*
- *"Food and drink premises" means a premises that are used for the preparation and retail sale of food or drink (or both) for immediate consumption on or off the premises and includes any of the following: a restaurant or café, take away food and drink premises, a pub, a small bar.*
- *"Function centre" means a building or place used for the holding of events, functions, conferences and the like, and includes convention centres, exhibition centres and reception centres, but does not include an entertainment facility.*

As the uses of "entertainment facility" and "food and drink premises" relate to buildings only, they could not be located anywhere but within the existing multi-purpose building (or future extensions) on Lot 89 DP 755221. Therefore it is not intended to include these uses on the additional lots as requested by the proponent.

The use of "function centre", however, can relate to a "place" as well as a "building".

Therefore outdoor functions, such as weddings, birthday parties and corporate activities would be able to occur on land where this use is permitted. Cleared land adjoining and proximate to the existing multi-purpose building is suitable for such a use. These lots are Lots 19, 37 and 89 DP 755221 and Lots 22 and 32 DP 755253.

It should be noted that an outdoor music festival does not fit within the definition of an "entertainment facility" or a "function centre". Consequently such music festivals are currently considered as a temporary use of land under clause 2.8 in GLEP 2014 and the draft CCLEP. This clause states:

Despite any other provision of this Plan, development consent may be granted for development on land in any zone for a temporary use for a maximum period of 28 days (whether or not consecutive days) in any period of 12 months.

Assessment Summary

The Planning Proposal, if supported, would amend the GLEP 2014 in the following manner.

The additional permitted uses over the entire area zoned E2 Environmental Conservation are proposed to be "recreation facility (outdoor)" and "eco-tourist facility". Such outdoor recreation facilities are envisaged to be low key nature based activities similar to those currently operating on the site by Glenworth Valley Pastoral Company Pty Ltd. However the definition of "recreation facilities (outdoor)" allows more intensive uses that could adversely affect the environmental character of the area. The impact of any such proposals would occur as part of the development assessment process in consideration of the objectives of the E2 Environmental Conservation zone.

Likewise the requirements for "eco-tourist facilities" specified in the GLEP 2014 will ensure that in the future development is sensitively designed and managed to have minimal impact on the environment.

The additional permitted use of "extensive agriculture" could not occur within all of the land within the E2 Environmental Conservation zone as most of the land is steep and heavily vegetated making it unsuitable for such a use. Therefore the planning proposal seeks to permit the use only on the generally cleared parts of the E2 Environmental Conservation zone.

The additional permitted use of a "camping ground" is to apply to the existing cleared parts of Lots 22 and 32 DP 755253 and Lots 19, 37 and 89 DP 755221. Any other "wilderness" camping experience can be accommodated within the definition of "recreation facility (outdoor)".

The additional permitted use of "tourist and visitor accommodation" is to apply to the existing cleared parts of Lots 108 and 145 DP 755221 which are zoned E2 Environmental Conservation and which are adjacent to the RU2 Rural Landscape boundary.

The total floor area for the permanent "function centre", "entertainment facility" and "food and drink premises" is to be no greater than 1500m² and any additions to the existing building are to be connected to, or directly adjacent, to it.

The additional permitted uses of "entertainment facility" and "food and drink premises" are to apply generally to that part of Lot 89 DP 755221 on which the existing multi-purpose building is situated. The use of "function centre" is proposed to apply to the cleared areas on adjoining and nearby Lots 19, 37 and 89 DP 755221 and Lots 22 and 32 DP 755253.

The additional permitted uses within the RU2 Rural Landscape zone are "eco-tourist facilities" "camping grounds" and "tourist and visitor accommodation".

Should the CCLEP come into effect prior to the subject Planning Proposal, then any proposed additional permitted uses that are generally included as permissible development within the applicable E2 Environmental Conservation and RU2 Rural Landscape zoned would not be required to be carried over.

Strategic Assessment

The Planning Proposal, as outlined in the report, is supported on the following grounds:

- The Planning Proposal will facilitate long term certainty as to the continued and future operations of Glenworth Valley to permit a range of recreational and tourist related activities, whilst protecting the environmental quality of the site.
- By nominating a list of additional permitted uses applicable to the land, detailed assessment of specific future development can be carried out on a case by case basis, and allow flexibility in accommodating activities whilst protecting and managing the overall environmental values of the land
- The significant economic benefits (both direct and indirect) that the Glenworth Valley tourist development contributes to the regional economy and synergies with other businesses and tourist facilities.
- The Planning Proposal will allow this regionally significant recreational and tourist attraction to grow and develop as new nature-based outdoor recreational opportunities emerge.
- The retention of existing zones with the additional permitted uses will allow for the on-going development and enhancement of a significant tourist facility and ensure it remains intrinsically linked to the protection and management of the environment and allowing development at an appropriate scale.

This assessment identifies that the request has sufficient preliminary justification for Council to submit the amended Planning Proposal to the Department of Planning and Environment to seek an amended Gateway Determination.

Statutory Compliance and Strategic Justification

The proposal has been assessed having regard for all State Environmental Planning Policies, Ministerial s.9.1 Directions and the relevant guidelines set out within the Central Coast Regional Plan 2036 (CCRP 2036) as detailed within Attachment 5.

The proposal is considered to be consistent with these considerations, therefore is suitable for forwarding to the Minister of Planning requesting an amended Gateway Determination.

Internal Consultation

Internal consultation for the current Planning Proposal has been undertaken as summarised below.

Due to the size of the subject land (over 1000 Ha) and the fact that building and development footprints have not been identified within the Planning Proposal it is only possible to assess general impacts. All direct and specific impacts are able to be addressed by future development applications. Relevant comments have been utilized to inform the issues and strategic merits assessment of the proposal.

Waste Management

Existing approved activities have a Plan of Management for storage, management and disposal of solid waste related to the activity and are serviced by a private waste collection contractor.

As has occurred previously, upon application to Council for upcoming events or proposed development, Council's Waste Services staff have been liaising with the applicant to seek the best possible outcome in relation to on-site sewage management.

The use of the multi-purpose building independent of any other uses on the site has the potential to result in the frequency of usage being increased which will result in additional hydraulic loading on the on-site sewage management system. There is also the potential that the multi-purpose building may be utilised for an event or function at the same time as a festival or event is occurring elsewhere on the property, thus impacting further on the system.

To determine the impacts of this, a wastewater management report will be required to be submitted to Council, post Gateway, which addresses the following:

- The estimated frequency of functions and likely numbers of patrons utilising the function centre, entertainment facility and food and drink premises.
- The ability of the existing on-site sewage management system to accommodate any additional hydraulic loading.

- Recommendations for any modifications required to either the treatment or disposal system to accommodate the additional hydraulic loading.

Flooding and Drainage Management

The impacts of overland flooding from upstream tributaries in the locality may impact on future structures. The assessment of such impacts would be subject to development applications and any flooding issues could be dealt with at that stage.

The multi-purpose building has been constructed and the flooding and drainage comments supported the Development Application (DA) for the building at the time. It was not considered that the building would be affected by flooding from any gullies or watercourses within the property. This situation will not change.

Traffic and Transport

The road network has the capacity to support the various recreational and festival events being held with access to Cooks Road and its intersection with Peats Ridge Road. These roads in this remote location could be upgraded with improved parking and upgraded pedestrian access to support larger scale events or more frequent activities if desired, when future DA's are lodged.

When one-off traffic generating events occur on site, such as music festivals, Council's Traffic Officer and a Police Officer liaise with the applicants and oversee the implementation and monitoring of temporary Traffic Management Plans (TMPs) to address such issues as queuing along Peats Ridge Road.

No objection is raised to the independent use of the existing multi-purpose building provided any development activities are assessed in accordance with the RMS Guidelines for Traffic Generating Development.

Environmental Assessment

No objection to the Planning Proposal subject to the protection of all existing areas of native vegetation and ongoing riparian management can be conditioned through future DA's for the individual additional uses.

Environmental management conditions tied to activity specific management plans coupled with ongoing monitoring should ensure the environmental values of the site are not eroded. Conditioning through development consent adequately addresses this issue.

Based upon the available cleared areas on the site it is possible for future development to be located to avoid any impact upon native vegetation.

Detailed assessments of biodiversity and Aboriginal / Cultural Heritage values must accompany future development applications for these additional uses.

The multi-purpose building has been constructed and the environment comments supported the DA for the building at the time. The building and ancillary carpark is located within a cleared paddock area and will not result in any direct or indirect impacts on any native vegetation. All bushfire asset protection zones are achievable without the need for any additional vegetation management.

External consultation

Government agency consultation was undertaken in 2014 in relation to the current Planning Proposal. Comments from those agencies consulted are summarised below.

Further government agency consultation will be required to be undertaken subject to the conditions of the Gateway Determination. It is expected that those agencies previously consulted will be requested to comment on the revised proposal.

Office of Environment and Heritage / National Parks and Wildlife Service (now Department of Planning, Industry and Environment)

The then Office of Environment and Heritage (OEH) advised that it does not support the rezoning of the E2 Environmental Conservation zoned land to RU2 Rural Landscape within the proposal at the time. It was further advised the proposed additional land uses (e.g. extensive agriculture) are incompatible with the environmental characteristics of the subject land. In addition, part of the site has already been identified as an offset for the Calga Quarry project, which cannot be affected by the proposal.

OEH further advised that any impacts to vegetation associated with the proposal must be offset; the proposal should not impact on corridor function between the three parcels of national park which surround the site, and that the proposal should not burden the NSW National Parks and Wildlife Service with additional responsibility as a result of allowing more major events, further incursions into national park due to poorly defined boundaries to the park, increased requirement for fire protection and potential for impacts to Aboriginal cultural heritage (e.g. from abseiling).

OEH also confirmed that further consultation with DLALC and Guringai Tribal Link Aboriginal Corporation including a comprehensive site inspection and cultural heritage assessment of the areas proposed to be subject to future development is undertaken prior to the finalisation of the rezoning.

Comment

As a result of this advice from OEH, the proponent has amended the Planning Proposal to remove the rezoning of certain E2 Environmental Conservation zoned land to RU2 Rural Landscape.

Future uses will be required to be located on areas of the subject site which are already cleared and/or not subject to existing environmental constraints. It is therefore proposed to require further environment and heritage impact assessment to be carried out at the development application stage for each particular building or development location.

NSW Trade and Investment – Crown Lands (now The Treasury)

The then NSW Trade and Investment - Crown Lands had no objections to the rezoning of the adjoining lands subject to the change in zoning not resulting in any additional requirements for the management of the Crown Estate such as increased bushfire mitigation measures and must not be relied upon to implement or facilitate any such measures.

NSW Department of Primary Industries – Agriculture (now Department of Planning, Industry and Environment)

The then NSW Department of Primary Industries – Agriculture (DPI - Agriculture) raised no concerns about the additional uses within the E2 Environmental Conservation Zone as the proposed uses can complement management and education for the environmental areas.

DPI - Agriculture objected to the proposed residential type and large visitation activities within the RU2 Rural Landscape zone as these activities are not complementary to commercial agriculture due to the possibilities of causing land use conflict and opening up the possibility of other landholders requesting similar expansion of types of land uses that could stifle agricultural investment.

Comment

Should an amended Gateway Determination be received the amended Planning Proposal will be referred to the relevant part of the Department of Planning, Industry and Environment for comment. The above objection may be reviewed at this time.

NSW Trade and Investment – Mineral Resources and Energy (now The Treasury)

Part of the eastern portion of the subject site is located adjacent to Rocla's Calga Sand Quarry, a state and regionally significant sand resource, supplying material for the building and construction industries in the Greater Sydney area. The transition area of the Calga Sand Quarry overlaps part of eastern side of the subject site (western side of the quarry).

The agency has no concerns in general, to the proposal to allow tourism-related activities being added as additional permitted uses in the E2 Environmental Conservation and RU2 Rural Landscape zones on the subject land.

The agency considers however that the tourism-related activities proposed may have the potential to create land use conflict in the vicinity of the Calga Sand Quarry.

The agency notes however that Council has acknowledged the close proximity of the quarry and that the proposed additional uses should not impact the quarry by sterilising the resource or restricting its operations and that the proposed tourist-related activities can be located in areas remote from the impacts of the quarry.

NSW Roads and Maritime Service (now Department of Transport)

The then NSW Roads and Maritime Service (RMS) reviewed the information provided and raised no objections to the Planning Proposal for land at Glenworth Valley and Calga.

Any future development of this land will require a Traffic Impact Study to be undertaken in accordance with the RMS Guide to Traffic Generating Developments. These matters can be addressed during subsequent Development Applications.

NSW Rural Fire Service (now Department of Family and Community and Justice)

The then NSW Rural Fire Service (RFS) advised that it does not object to the planning proposal subject to future Development Applications complying with the provisions of *Planning for Bushfire Protection 2006*, particularly the provisions of Asset Protection Zones, safe access and emergency evacuation management. These matters can be addressed during subsequent Development Applications.

Darkinjung Local Aboriginal Land Council

Darkinjung Local Aboriginal Land Council (DLALC) was consulted as a landowner and provided qualified support for Lot 245 DP 48817 being included in the Planning Proposal. The qualification is that the operators of Glenworth Valley are to enter into an arrangement with DLALC for the continued use of the land.

It should be noted that DLALC has also been granted Lot 7027 DP 1051931 (now Lot 7 DP 1230083) and for completeness should be included in any agreement.

The applicant was provided with a copy of this correspondence.

Financial Impact

The direct cost to Council is the preparation of the Planning Proposal and Council's fee has been paid for this service.

The proponent has advised that the current recreational uses on the site generate approximately 25 full-time and 80 part-time jobs and attracts up to 200,000 visitors to the area per year. The Planning Proposal will enable the continued operation and ongoing growth of the business, providing additional employment opportunities and tourism growth.

Social Impacts

Glenworth Valley is a major tourist attraction and the ability for it to further accommodate activities consistent with nature-based recreation, including accommodation in the form of eco-tourist facilities, is supported from a tourism perspective. It will provide an opportunity to increase outdoor recreational experiences and thus provide the community with options to enjoy the environment of the Central Coast.

Environmental Considerations

These have been outlined in the body of the report.

Link to Community Strategic Plan

Theme 2: Smart

Goal C: A growing and competitive region

S-C4: Promote and grow tourism that celebrates the natural and cultural assets of the Central Coast in a way that is accessible, sustainable and eco-friendly.

Theme 3: Green

Goal F: Cherished and protected natural beauty

G-F1: Protect our rich environmental heritage by conserving beaches, waterways, bushland, wildlife corridors and inland areas, and the diversity of local native species.

Theme 5: Liveable

Goal L: Healthy lifestyle for a growing community

L-L1: Promote healthy living and ensure sport, leisure, recreation and aquatic facilities and open spaces are well maintained and activated.

Risk Management

There have been no risks identified to the natural and built environment if this Planning Proposal is supported by Council as previously discussed in this report.

Critical Dates or Timeframes

Should Council resolve to proceed with the preparation of an amended Planning Proposal, the critical date will be the amended Gateway Determination date to complete the project.

Conclusion

The request to include additional permitted uses in respect of land at Cooks Road in Calga and Glenworth Valley is considered to have strategic merit.

It is recommended that the Council support the amended Planning Proposal and undertake the necessary next steps to progress the Planning Proposal in accordance with the Planning Proposal process.



NSW RURAL FIRE SERVICE



The General Manager
Gosford City Council
PO Box 21
GOSFORD NSW 2250

Your reference: 14179107
Our reference: L14/0004

10 February 2016

Attention: Bruce Ronan

Dear Sir/Madam,

Planning Proposal - Glenworth Valley and Calga

Reference is made to Council's correspondence providing further information for consideration in relation to the above planning proposal.

The New South Wales Rural Fire Service (NSW RFS) has considered the further information provided by the proponent's bush fire consultants addressing the matters raised in our previous correspondence and discussed at an onsite meeting. This information included further details of the historical use of the site for outdoor recreational activities and potential bush fire protection measures that could be put in place to support future uses.

Based on this information, the NSW RFS advises that it no longer objects to the planning proposal subject to future development proposals complying with the provisions of *Planning for Bush Fire Protection 2006* (PBP), particularly the provision of Asset Protection Zones (APZs), safe access and emergency evacuation management.

If you have any queries regarding this advice, please contact Matthew Apps, Development Assessment and Planning Officer, on 1300 NSW RFS.

Yours sincerely,

Nika Fomin
Manager, Customer Service and Support Centre East

Postal address

NSW Rural Fire Service
Records Management
Locked Bag 17
GRANVILLE NSW 2141

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NSW Rural Fire Service
Customer Service Centre East
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NBC Bushfire Attack Assessment Report V4.1

AS3959 (2018) Appendix B - Detailed Method 2

Print Date: 6/09/2020

Assessment Date:

6/09/2020

Site Street Address: Glenworth Valley MPC, Glenworth Valley

Assessor: Wayne Tucker; Australian Bushfire Consulting Services

Local Government Area: Central Coast

Alpine Area:

No

Equations Used

Transmissivity: Fuss and Hammins, 2002

Flame Length: RFS PBP, 2001/Vesta/Catchpole

Rate of Fire Spread: Noble et al., 1980

Radiant Heat: Drysdale, 1985; Sullivan et al., 2003; Tan et al., 2005

Peak Elevation of Receiver: Tan et al., 2005

Peak Flame Angle: Tan et al., 2005

Run Description: East

Vegetation Information

Vegetation Type: Sydney Coastal DSF

Vegetation Group: Dry Sclerophyll Forests (Shrubby)

Vegetation Slope: 10 Degrees

Vegetation Slope Type: Upslope

Surface Fuel Load(t/ha): 21.3

Overall Fuel Load(t/ha): 27.3

Vegetation Height(m): 1.4

Only Applicable to Shrub/Scrub and Vesta

Site Information

Site Slope: 0 Degrees

Site Slope Type: Upslope

Elevation of Receiver(m): Default

APZ/Separation(m): 44

Fire Inputs

Veg./Flame Width(m): 100

Flame Temp(K): 1200

Calculation Parameters

Flame Emissivity: 95

Relative Humidity(%): 25

Heat of Combustion(kJ/kg) 18600

Ambient Temp(K): 308

Moisture Factor: 5

FDI: 100

Program Outputs

Level of Construction: BAL 12.5

Peak Elevation of Receiver(m): 5.71

Radiant Heat(kW/m²): 10

Flame Angle (degrees): 80

Flame Length(m): 11.6

Maximum View Factor: 0.113

Rate Of Spread (km/h): 1.28

Inner Protection Area(m): 0

Transmissivity: 0.789

Outer Protection Area(m): 0

Fire Intensity(kW/m): 18083

Run Description:	East		
<u>Vegetation Information</u>			
Vegetation Type:	Northern Hinterlands WSF (Grassy)		
Vegetation Group:	Wet Sclerophyll Forests (Grassy)		
Vegetation Slope:	10 Degrees	Vegetation Slope Type:	Upslope
Surface Fuel Load(t/ha):	20	Overall Fuel Load(t/ha):	33.1
Vegetation Height(m):	0.9	Only Applicable to Shrub/Scrub and Vesta	
<u>Site Information</u>			
Site Slope:	0 Degrees	Site Slope Type:	Upslope
Elevation of Receiver(m):	Default	APZ/Separation(m):	45
<u>Fire Inputs</u>			
Veg./Flame Width(m):	100	Flame Temp(K):	1200
<u>Calculation Parameters</u>			
Flame Emissivity:	95	Relative Humidity(%):	25
Heat of Combustion(kJ/kg)	18600	Ambient Temp(K):	308
Moisture Factor:	5	FDI:	100
<u>Program Outputs</u>			
Level of Construction:	BAL 12.5	Peak Elevation of Receiver(m):	5.8
Radiant Heat(kW/m2):	10	Flame Angle (degrees):	80
Flame Length(m):	11.77	Maximum View Factor:	0.114
Rate Of Spread (km/h):	1.2	Inner Protection Area(m):	28
Transmissivity:	0.788	Outer Protection Area(m):	17
Fire Intensity(kW/m):	20587		
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Run Description:	West		
<u>Vegetation Information</u>			
Vegetation Type:	Sydney Coastal DSF		
Vegetation Group:	Dry Sclerophyll Forests (Shrubby)		
Vegetation Slope:	10 Degrees	Vegetation Slope Type:	Upslope
Surface Fuel Load(t/ha):	21.3	Overall Fuel Load(t/ha):	27.3
Vegetation Height(m):	1.4	Only Applicable to Shrub/Scrub and Vesta	
<u>Site Information</u>			
Site Slope:	5 Degrees	Site Slope Type:	Upslope
Elevation of Receiver(m):	Default	APZ/Separation(m):	45
<u>Fire Inputs</u>			
Veg./Flame Width(m):	100	Flame Temp(K):	1200
<u>Calculation Parameters</u>			
Flame Emissivity:	95	Relative Humidity(%):	25
Heat of Combustion(kJ/kg)	18600	Ambient Temp(K):	308
Moisture Factor:	5	FDI:	100
<u>Program Outputs</u>			
Level of Construction:	BAL 12.5	Peak Elevation of Receiver(m):	9.5
Radiant Heat(kW/m2):	10	Flame Angle (degrees):	75
Flame Length(m):	11.6	Maximum View Factor:	0.114
Rate Of Spread (km/h):	1.28	Inner Protection Area(m):	29
Transmissivity:	0.789	Outer Protection Area(m):	16
Fire Intensity(kW/m):	18083		

Run Description:	West		
<u>Vegetation Information</u>			
Vegetation Type:	Northern Hinterlands WSF (Grassy)		
Vegetation Group:	Wet Sclerophyll Forests (Grassy)		
Vegetation Slope:	10 Degrees	Vegetation Slope Type:	Upslope
Surface Fuel Load(t/ha):	20	Overall Fuel Load(t/ha):	33.1
Vegetation Height(m):	0.9	Only Applicable to Shrub/Scrub and Vesta	
<u>Site Information</u>			
Site Slope:	5 Degrees	Site Slope Type:	Upslope
Elevation of Receiver(m):	Default	APZ/Separation(m):	46
<u>Fire Inputs</u>			
Veg./Flame Width(m):	100	Flame Temp(K):	1200
<u>Calculation Parameters</u>			
Flame Emissivity:	95	Relative Humidity(%):	25
Heat of Combustion(kJ/kg)	18600	Ambient Temp(K):	308
Moisture Factor:	5	FDI:	100
<u>Program Outputs</u>			
Level of Construction:	BAL 12.5	Peak Elevation of Receiver(m):	9.63
Radiant Heat(kW/m2):	10	Flame Angle (degrees):	75
Flame Length(m):	11.77	Maximum View Factor:	0.114
Rate Of Spread (km/h):	1.2	Inner Protection Area(m):	29
Transmissivity:	0.788	Outer Protection Area(m):	16
Fire Intensity(kW/m):	20587		