

Fire Management

Ark Energy appreciates that areas around the project site have been severely impacted by bushfire events and the importance of thorough and leading practice fire risk mitigation, preparedness and management planning.

A comprehensive Bushfire Risk Assessment report is being prepared by Blackash Bushfire Consulting for the project's Environmental Impact Statement (EIS) and will detail how the project meets the requirements, aims and objectives of the NSW Rural Fire Service's *Planning for Bush Fire Protection* guidelines (2019).

Planning for bush fire guidelines

The PBP guidelines are focused on helping people stay safe during bushfire events, minimising the effects of bushfires on properties, and making sure developments follow the necessary standards for bushfire protection. They provide development standards for building on bushfire prone land, and standards and guidance for bushfire protection measures for new buildings.

Section 8.3.5 of the PBP addresses the considerations and requirements for solar farms, with focus on minimum Asset Protection Zones (APZ) for buildings and infrastructure, and the development of a site-specific Bushfire Emergency Management and Operations Plan.

An APZ is a buffer zone between a bushfire hazard and buildings. The appropriate APZ distance is based on vegetation type, slope and the nature of the development.

The Bush Fire Emergency Management and Operations Plan identifies all relevant risks and mitigation measures associated with the construction and operation of the solar farm, including:

- Detailed measures to prevent or mitigate fires igniting;
- Work that should not be carried out during total fire bans;
- Availability of fire-suppression equipment, access and water;
- Storage and maintenance of fuels and other flammable materials;
- Notification of the local NSW RFS Fire Control Centre for any works that have the potential to ignite surrounding vegetation, proposed to be carried out during a bush-fire fire danger period to ensure weather conditions are appropriate; and
- Appropriate bush fire emergency management planning.

Mitigation measures

Following concerns about fire raised during community consultation Ark Energy, in collaboration with Blackash Bushfire Consulting and Umwelt Environment and Social Consultants, proposes to adopt more robust bushfire protection measures.

These include APZs and measures for access, water supplies, landscaping, and emergency management arrangements to minimise the risk of bushfire and reduce the severity of potential impacts if a bushfire were to occur within the project site.

Richmond Valley Solar Farm proposes to implement APZs much wider than the minimum 10 m prescribed by the PBP, with over 90% of the solar and battery energy storage system infrastructure at least 100 m from hazardous vegetation and the remaining 10% at least 20 metres from surrounding vegetation.

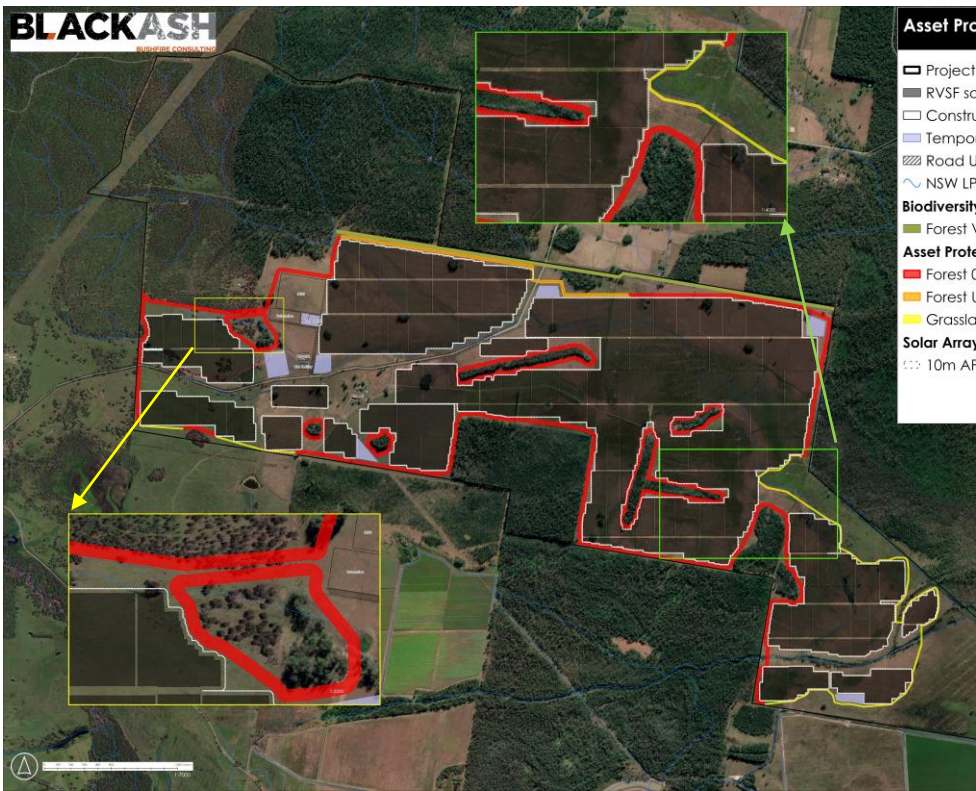
A range of other optional methods including additional water supplies for the RFS, installation of more communications infrastructure, camera surveillance, additional fire fighting resources and training are being explored, to benefit the community's resilience and capacity to prevent and manage bush fire.

The final detailed design of the project will be subject to the relevant standards and guidelines, and will be completed with optimal mitigation measures in mind.



Following concerns about fire raised during community consultation Ark Energy, in collaboration with Blackash Bushfire Consulting and Umwelt Environment and Social Consultants, has adopted more robust measures to mitigate fire risk.





Asset Protection Zone (APZ) Analysis

- ▭ Project Boundary
- RVSF solar array blocks
- Construction Areas
- ▭ Temporary laydown Area
- ▨ Road Upgrade
- ~ NSW LPI - Drainage Line
- Biodiversity Corridor**
- Forest Vegetation
- Asset Protection Zone PBP Table A1.12.3 FFDI 80 (<29kW/m2, 1090K)**
- Forest 0<5° 25m
- Forest UpSlope 20m
- Grassland 0<5° 11m
- Solar Array APZ**
- 10m APZ from Solar Array

DATE : 1/02/2024
Projected Coordinate System : GDA 2020 Zone 56
Aerial Imagery - ESRI World Imagery 2020

Scan QR codes below for more information

Planning for Bush Fire Protection 2019, NSW Rural Fire Service (PDF)



Bushfires and Community Safety, Australasian Fire Authorities Council (PDF)



Standards for Asset Protection Zones, NSW Rural Fire Service (PDF)



Proposed Asset Protection Zones for the Richmond Valley Solar Farm.

Prior to construction a Fire Safety Study and Bushfire Emergency Management and Evacuation Plan will also be developed. The plan will describe the location, management and maintenance of the APZs, and how RFS would be notified and procedures in the event of a fire.

Plans will also observe the RFS's *OP 1.2.22 Operational Protocol for Incidents Involving Photovoltaic (Solar) Arrays and Battery Energy Storage Systems*, which outlines the protocols for firefighting around solar panels in the event that they are on fire, damaged in storms, or in an area affected by floodwater.

Plans will be developed in consultation with Fire and Rescue NSW (FRNSW), the local Fire Control Centre, National Parks and Wildlife Services (NPWS) and the NSW RFS. It is anticipated that the requirement for a fire safety study and fire management plans would comprise conditions of consent for the project and therefore the project would not proceed without endorsement of these documents from FRNSW and NSW RFS.

More information

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Scan the QR code to visit the Richmond Valley Solar Farm project website



Newsletters

Register online for email news at arkenergy.com.au/mailling-list-details, or to receive newsletters by post, send the project team your postal address and request to be added to the mail list.

The Australasian Fire Authorities Council (AFAC) is the National Council for fire and emergency services. Ark Energy observes the principles outlined in *AFAC Bushfires and Community Safety (2019)* which include that:

- Human life should be valued above all else.
- There should be a collaborative approach to the management of bushfire risk, with early community engagement, and with all partners working together to take action to protect communities and save people's lives.
- Community awareness and education programs and resources should recognise that prepared and knowledgeable communities are more resilient to the impact of bushfire.
- Emergency management leaders should have the capacity and capability to provide quality leadership and expert guidance to the community during a bushfire.
- Community resilience is increased through effective land-use planning and building controls, supported by legislation, policy, guidance material and advice.

For any concerns related to fire we encourage community members to contact the project team, and welcome suggestions to improve bushfire resilience in the area.