

Sapphire Solar Farm  
Environmental Impact Statement



Volume 3 - Appendices

Appendix D  
Land Use Conflict Analysis

## Land use conflict assessment methodology

### Rural Land use

A land use conflict analysis based on the DPI's *Living and Working in Rural Areas* handbook (Learmonth, Whitehead, Boyd & Fletcher, 2007) is presented in Table 1, with the resulting assessment outcomes for issues of land use conflict presented in Table 2.

**Table 1: Land use conflict risk assessment matrix**

		Likelihood of a dispute or conflict arising over the land use or activity		
		Very Likely	Likely	Unlikely
Likely consequences and impacts associated with a dispute or conflict arising over the land use or activity	Major consequences and impacts likely	High	High	Medium
	Modest or periodic consequences and impacts likely	High	Medium	Low
	Minimal consequences and impacts likely	Medium	Low	Low

**Table 2: Land use conflict analysis**

Issue	Assessment	Issue Management
Catchment management	Low	The Proposed Development would have no impact on natural resources of surrounding agricultural properties (Section 7.5). The Developer will be only extracting water under existing Water Sharing Plan licences for construction and/or operational activities (Section 7.9).
Dogs	N/A	
Drainage	Low	Installation of solar panels over the majority of site would not markedly affect drainage patterns (Section 7.9).
Dust	Low	Unmitigated construction activities have the potential to cause short term dust accretion on adjoining trees and pastures, although this risk is limited by mitigation measures proposed (Section 7.5). There would be nil to minimal impact on production.
Fencing	Low	The Landholding is already fenced, however a perimeter fence up to 2.5 m high will be constructed around the main components of the Proposed Development. All fences will need to be maintained to avoid the possibility of livestock straying onto the solar farm from adjoining properties.
Fire	Medium	The Site contains <i>Fire Prone Land</i> . However, the overall nature of the Site in combination with the Proposed Development poses a low risk, both in terms of fire originating onsite and escaping onto neighbouring land or fire that originates offsite entering the Site (Section 7.10).

Issue	Assessment	Issue Management
		<p>To manage the risk of fire at the site:</p> <ul style="list-style-type: none"> <li>• A firebreak will be established around the perimeter of the Proposed Development that will meet requirements of the NSW RFS;</li> <li>• All electrical equipment will be earthed appropriately to limit the potential risk of fire from lightning strike; and</li> <li>• On site fuel loads will be managed.</li> </ul> <p>Fire management and emergency response strategies will be included in appropriate management plans, and where relevant, distributed to NSW RFS and NSW Fire and Rescue.</p>
Lights	Low	<p>Construction activities will be undertaken predominantly during daylight hours from 7am – 6pm Monday to Friday, 8am – 1pm on Saturday.</p> <p>During the operational phase, lighting will be restricted to the substation and support buildings and will be only used as required.</p> <p>The low requirement for lighting, the distance from neighbouring properties and the use of vegetation buffers means that potential agricultural conflict is assessed as low (Section 7.6).</p>
Noise	Low	<p>Noise impacts at sensitive receptors during the construction phase (approximately 18 months), are deemed to be acceptable with mitigation measures in place (Section 7.7). Construction activities will be limited to standard working hours (as detailed below) unless otherwise agreed in accordance with an approved management plan:</p> <ul style="list-style-type: none"> <li>○ Monday to Friday, 7am to 6pm;</li> <li>○ Saturday, 8am to 1pm; and</li> <li>○ No construction work is to take place on Sundays or public holidays</li> </ul> <p>Noise during the operational phase will generally be low.</p>
Pesticides	Low	<p>Pesticides will be used to control weeds at the site. Good management practices will be implemented to ensure that pesticide use is minimised (including the use of sheep to graze between the panel rows to manage vegetation loads).</p> <p>The application of any pesticides will be in accordance with the <i>Pesticides Act 1999</i>, such that only registered pesticides are used based on label instructions that are designed to minimise impacts on surrounding land.</p> <p>The distance from neighbouring properties means the potential conflict is assessed as low.</p>
Pollution	Low	<p>Fuels and lubricants will be used on site. These potential contaminants will be managed within bunded areas, according to relevant management plans (Sections 7.5 and 7.9).</p>
Roads	Low	<p>Potential impacts to road surface conditions and traffic safety are low, and will be managed by upgrading and/or maintaining Waterloo and Western Feeder roads (Section 7.8).</p> <p>There are no Crown roads within the Development Footprint.</p>
Straying	Low	<p>See fencing.</p>

Issue	Assessment	Issue Management
livestock		
Theft and vandalism	Low	The location of the Proposed Development means that the risk posed by theft/vandalism is considered low. The solar farm would be off limits to the general public, with main components enclosed by an appropriate security fence (approximately 2.5 m high).
Visual amenity	Low	The Proposed Development is assessed to have insignificant to low levels of visibility impact on public and private viewpoints. General mitigation strategies have been developed to minimise visual impacts and, where necessary, vegetative screening may be established to further minimise impacts (Section 7.6).
Weeds and pests	Low	Weed and pest control at the Site is the responsibility of the Proponent. The risk from priority weeds and pests is low but would be subject to ongoing monitoring and management (Section 7.2 and 7.5)

Most land use conflicts have been assessed as low. Landuse conflict analysis indicates that conflict over bushfire hazards may pose a medium risk. The adoption of mitigation measures to reduce these potential conflicts are discussed in Section 7.10 and Section 8.

### Mineral Exploration

The proposed Project is located in the New England Fold Belt, and is situated on alluvial areas within the Kings Plains district. The main geological domain surrounding the site is Tertiary basalts (Lea et al. 1977a) with outcrops of Palaeozoic Volcanics (granite) and alluvial sediments along water courses in the valleys.

Two Mining Lease (ML) and two Exploration Licence (EL) areas exist within the Site; ML1687, ML1374 and EL8536 are held by Eastern Feeder Holdings Pty Ltd; and EL8230 by Bond Resources Pty Ltd.

- Consultation with Eastern Feeder Holdings Pty Ltd has resulted in agreement for SSF to progress with the proposal within ML1687, ML1374 and EL8536. To facilitate ongoing activities in the area by Eastern Feeder Holdings Pty Ltd, Coordination Deeds between the parties are in the process of being drafted.
- Consultation with Bond Resources Pty Ltd has confirmed their acceptance of SSF insofar as it impacts upon EL8230.