



Land Use Conflict Risk Assessment

4.95 MW Solar Farm

19 Murray Street, Hay



Image: <https://greengoldenergy.com.au/news/>

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Table of contents

1	INTRODUCTION.....	3
1.1	Purpose of assessment.....	3
1.2	Scope of works.....	3
2	GATHER INFORMATION	4
2.1	Nature of the land use change and development proposed	4
2.2	Nature of the precinct where the land use change and development is proposed	4
2.3	Topography, climate and natural features.....	5
2.3.1	Topography	5
2.3.2	Climate	6
2.3.3	Natural features	6
2.4	Site history.....	8
2.5	Site inspection outcomes.....	8
2.6	Consultation	8
3	LAND USE CONFLICT RISK ASSESSMENT.....	8
3.1	Introduction	8
1.1	Initial risk evaluation.....	9
1.2	Risk reduction controls	11
1.3	Performance monitoring	15
1.4	Limitations/assumptions.....	15
1.5	Key documents	15
4	CONCLUSIONS AND RECOMMENDATIONS	15
5	REFERENCES.....	16

Table index

Table 2-1: Climate statistics between 1877 and 2015: Miller Street, Hay	6
Table 2-2: Criteria models for draft SSAL map	7
Table 3-1: Risk ranking matrix	8
Table 3-2: Probability table descriptions	9
Table 3-3: Consequence table descriptions	9
Table 3-4: Initial risk evaluation	9
Table 3-5: Revised risk ratings.....	12

Figure index

Figure 2-1: Land use map	5
Figure 2-2: Land and Soil Capability class	7

1 Introduction

1.1 Purpose of assessment

Green Gold Energy Pty Ltd (Green Gold) (the applicant) propose to establish a 4.95 megawatt (MW) solar farm (the proposal) on land described as 19 Murray Street, Hay (the "subject property" herein).

The subject property consists of six (6) separately transferrable parcels within common ownership. The proposal is on the three southern lots: Lots 9, 10 and 11 on DP756755.

The proposal would cover about 13 hectares (ha) of land (this area of the property is referred to as the "development site" herein, distinguished from the subject property which comprises a total area of approximately 87ha). The solar farm therefore equates to less than 15% of the farmer's property, let alone the wider irrigation district.

Chris Smith & Associates (CS&A) have been engaged by Green Gold Energy to prepare a Land Use Conflict Risk Assessment (LUCRA) to accompany a Development Application (DA) for the proposal. This LUCRA is supported by the documents listed in section 1.1 of the Statement of Environmental Effects (SEE) for the proposal.

This LUCRA has been prepared in accordance with the 'Land Use Conflict Risk Assessment (LUCRA) Guide' (DPI, 2011).

The purpose of a LUCRA is to identify land use compatibility and potential conflict between neighbouring land uses, and the identification of conflict avoidance or safeguards. A LUCRA aims to:

- Accurately identify and address potential land use conflict issues and risk of occurrence before a new land use proceeds or a dispute arises; and
- Objectively assess the effect of a proposed land use on neighbouring land uses; and
- Increase the understanding of potential land use conflict to inform and complement development control and buffer requirements; and
- Highlight or recommend strategies to help minimise the potential for land use conflicts to occur and contribute to the negotiation, proposal, implementation and evaluation of separation strategies.

In order to achieve those aims, a four-step assessment process is undertaken:

1. **Information gathering** – gather information about the proposed land use change and associated activities, surrounding land uses and the site's environmental characteristics.
2. **Risk level evaluation** – each proposed activity is recorded and potential land use conflict level is assessed. The higher the risk level, the more stringent the mitigations measures that would be required.
3. **Identification of risk mitigation strategies** – mitigation strategies are identified which assist in lowering the risk of potential conflict.
4. **Record results** – key issues, risk level and recommended management measures are recorded and summarised.

1.2 Scope of works

The proposal is for the establishment of a 4.95 MW solar farm, consisting of:

- **About 12,000 solar panels**, mounted on single axis tracking arrays, each having the following specification:
 - Nominal dimensions of 2.4 m by 1.1 m
 - Maximum height of 2.7 m above ground (when at maximum tilt)

- **One (1) high voltage power switchboard.**
- **A 1.8 m high chain mesh fence** around the perimeter of the facility, including two (2) gates positioned on the front of the compound.
- **Two vehicle crossings (access points)** from Cemetery Road along western edge at the locations shown on the Site Plan.
- **Internal access track** and associated facilities (car park, assembly area/ unloading bays, storage bays) for use during construction and for service operations and maintenance.
- **Landscaping** along western frontage, as shown on Landscape Plan, directly outside the compound fence, within the road reserve.
- **Pole and 33kV overhead powerline** connection to Essential Energy electricity distribution network and nearby Hay substation.
- **One power station inverter** positioned centrally within the facility – between panel arrays.

The proposal would provide renewable energy for about 1,000 homes in Hay and the surrounding area. Construction would take about nine months.

Upon the completion of the facility, the site would be largely unmanned and there would be only occasional visits to the site.

Further information on the proposal is contained within the SEE.

2 Gather information

2.1 Nature of the land use change and development proposed

The development site is currently used for agriculture. The proposal would change the land use of the development site to electricity generating works.

Electricity generating works are permitted with consent in prescribed non-residential zones under section 2.36(1) of *State Environmental Planning Policy (Transport and Infrastructure) 2021*. The development property is zoned RU1 Primary Production under *Hay Local Environmental Plan 2011*, which is a prescribed non-residential zone under the SEPP.

2.2 Nature of the precinct where the land use change and development is proposed

A cemetery adjoins the western boundary of the subject property, and the Murrumbidgee River adjoins the eastern boundary of the subject property. The locality is rural in nature with the surrounding land being irrigated and used for grazing and horticulture (DPE, 2020) (refer Figure 2-1). Large areas of land south of the Murrumbidgee River are used for irrigated cropping.

Rural land in the locality is mostly cleared, with hedgerows and paddock trees remaining. Land along the Murrumbidgee River is more densely vegetated.

The development site is about 4 km south-west of Hay substation. Hay substation connects to 33 kV transmission lines that provide electricity to the local area (Essential Energy, 2023). Hay substation connects to Darlington Point substation via both 33 kV and 132/110 kV transmission lines (AEMO, 2023; Essential Energy, 2023).

Darlington Point substation connects to Wagga Wagga and eventually to Melbourne, Wollongong, Sydney and Newcastle via 330 kV transmission lines. Darlington Point substation connects to Renmark and eventually to Adelaide via 132/110 kV, 220 kV and 275 kV transmission lines (AEMO, 2023).

The subject property is in the South West Renewable Energy Zone (EnergyCo, 2023).

In 2022 the NSW Eastern Section of Project EnergyConnect was approved by the NSW Government (DPE, 2023), which involves construction of 330 kV and 500 kV transmission lines and a new 330 kV substation 170 km west of Wagga Wagga. The 330 kV transmission lines will travel through the South West Renewable Energy Zone. Once completed, Project EnergyConnect will connect the power grids of South Australia and New South Wales, with an added connection to Victoria. The approved 330 kV and 500 kV transmission lines do not connect to Hay substation or Darlington Point substation.

The closest power station to the subject property is the Darlington Point Solar Farm, which is about 107 km to the east.

The town of Hay is about 1.5 km to the west of the development site.

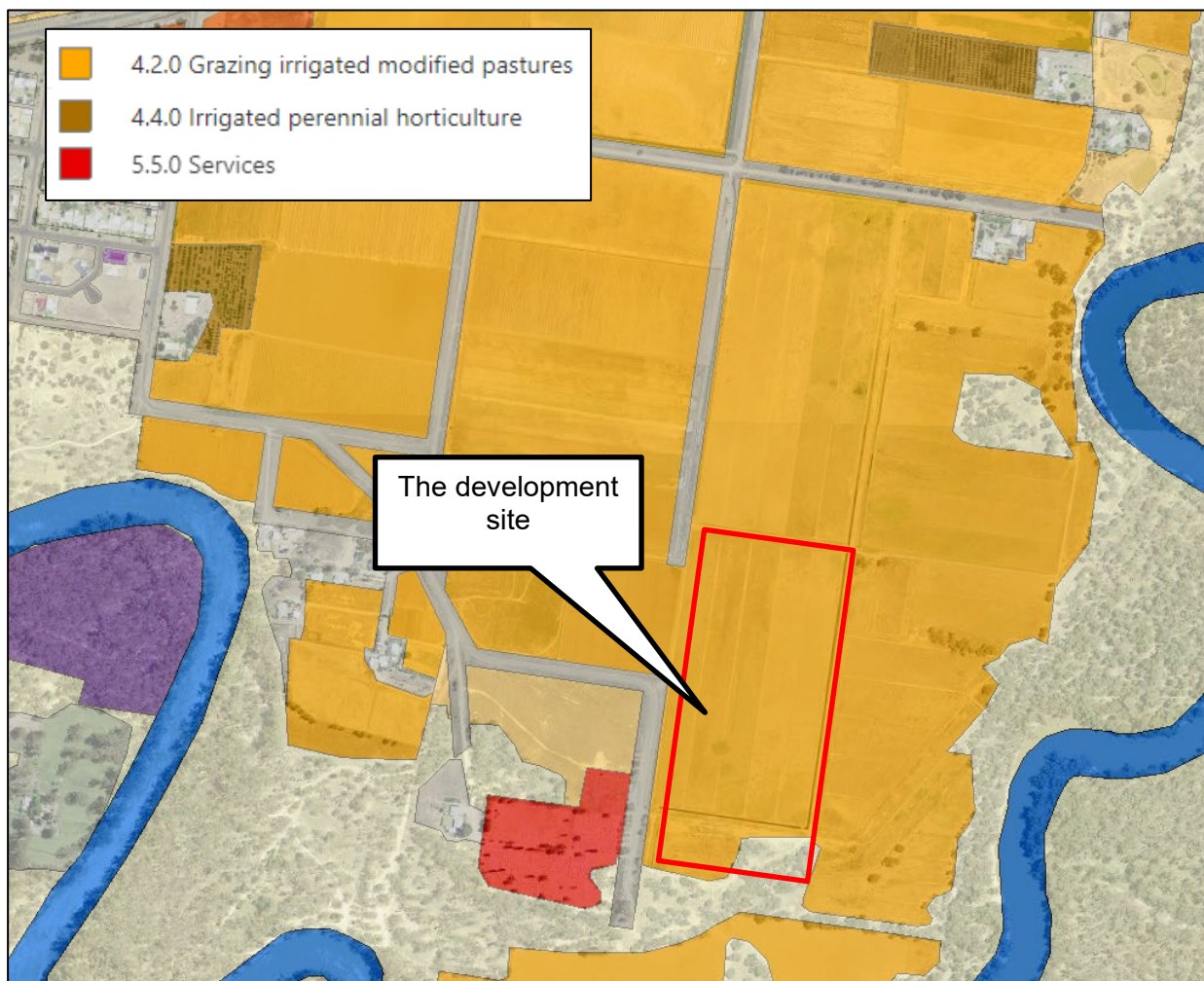


Figure 2-1: Land use map

Source: (DPE, 2020)

2.3 Topography, climate and natural features

2.3.1 Topography

The locality is flat with an elevation of around 91 m AHD (ICSM, n.d.).

2.3.2 Climate

Hay has a semi-arid climate with warm to hot summers and cool winters (BoM, 2015). The development site is 1.2 km northeast of the weather station at Miller Street in Hay. Climate statistics for this location between 1877 and 2015 are detailed in Table 2-1.

Table 2-1: Climate statistics between 1877 and 2015: Miller Street, Hay

Statistics	J	F	M	A	M	J	J	A	S	O	N	D	Annual
Mean maximum temperature (Degrees C) for years 1881 to 2015	33.1	32.6	29.2	24.1	19.3	15.8	15.1	17.3	20.7	24.6	28.4	31.2	24.3
Mean minimum temperature (Degrees C) for years 1881 to 2015	16.7	16.5	13.8	9.9	6.8	4.5	3.5	4.6	6.7	9.5	12.5	14.9	10
Mean rainfall (mm) for years 1877 to 2015	27.3	29.7	30.1	27.7	34.6	35.8	31.1	31.9	31.2	34.6	25.8	26.8	367.4
Mean number of days of rain for years 1877 to 2015	3.6	3.4	3.9	4.5	6.3	8	8.6	8.4	6.7	6.2	4.6	4.2	68.4
Mean daily solar exposure (MJ/(m*m)) for years 1990 to 2023	27.5	24.4	20.3	14.8	10.8	8.8	9.5	12.7	17.1	21.8	25.1	27.7	18.4
Mean number of clear days for years 1957 to 2010	15.6	13.6	15.9	13.3	10.8	9.2	8.5	9.1	10.5	11.8	11.7	13.6	143.6
Mean number of cloudy days for years 1957 to 2010	5.4	5.3	5.1	6.9	9.8	9.9	10.8	8.8	7.6	8.2	7.4	6.3	91.5

Source: (BoM, 2015).

2.3.3 Natural features

The development site has been cleared with no trees or shrubs remaining.

The subject property is mapped as having a “moderate” inherent soil fertility (DPE, 2013).

The subject property is mapped as having a land and soil capability class of five (DPIE, 2021), which is described as *“Moderate–low capability land: Land has high limitations for high-impact land uses. Will largely restrict land use to grazing, some horticulture (orchards), forestry and nature conservation. The limitations need to be carefully managed to prevent long-term degradation.”* (OEH, 2012) (refer Figure 2-2).

The subject property is included in the draft State Significant Agricultural Land map (DPI, 2023). The data summary statement for the map shows that the property is included in the map as it is irrigated land (refer Table 2-2).

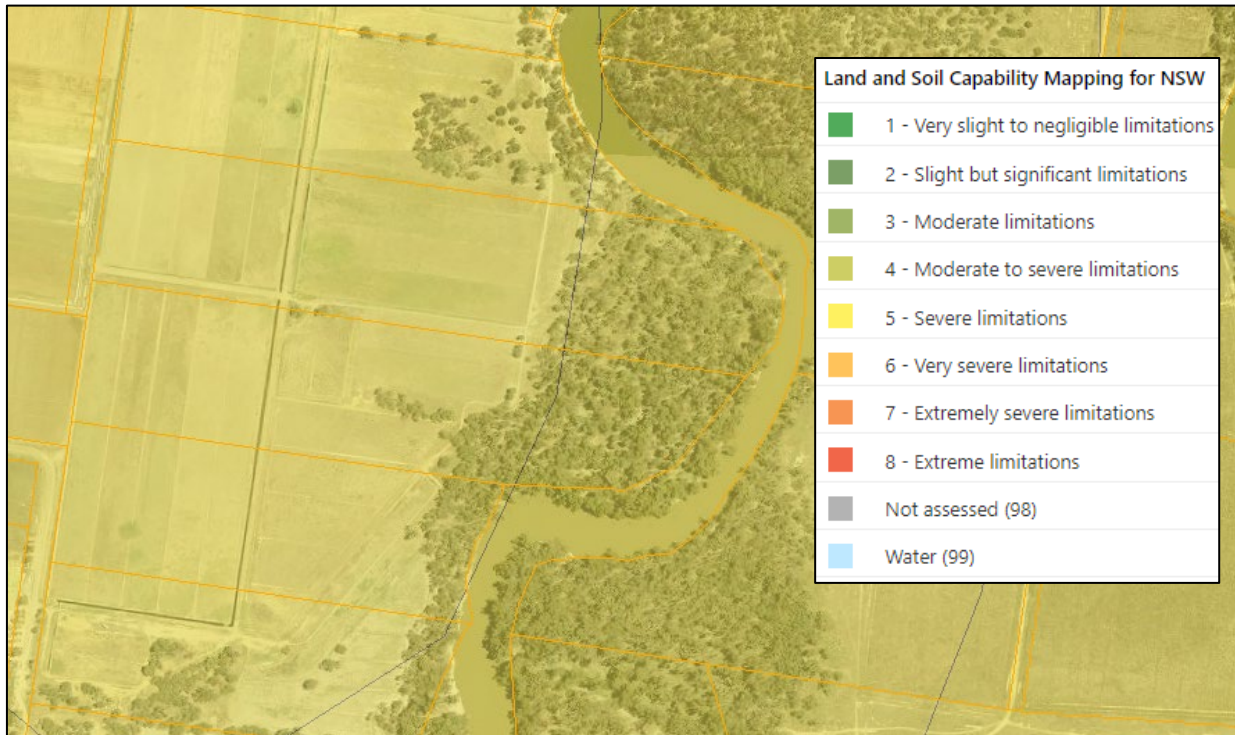


Figure 2-2: Land and Soil Capability class

Source: (DPIE, 2021)

Table 2-2: Criteria models for draft SSAL map

Input parameters	Criteria models		
	Model 1	Model 2	Model 3
Rainfall	≥500mm	≥500mm	≥950mm
Soil fertility	High – moderate	High – moderately high	High – moderately low
Land and soil capability	1-3	1-4	1-4
Soil pH*	≥5, ≤8	Not used	≥5, ≤8
Slope	Less than or equal to 18 degrees (32%)		
BSAL	Included in all models		
Land zones	RU1, RU2, RU4, RU6, E3, E4 zones included in all models		
Irrigation areas	Included in all models		
North Coast farmland mapping	Included in all models		

* Soil pH (CaCl2) at 0-5cm and 5-15cm depths used.

Source: (DPI, 2023)

2.4 Site history

The development site has historically been used for agriculture. Irrigation drains run to the north and east of the development site. An irrigation drain runs across the development site from east to west.

2.5 Site inspection outcomes

A desktop assessment found that the development site is suitable for a solar farm for the following reasons:

- The development site is flat.
- The development site is clear of vegetation.
- The development site is not close to any land uses that may generate land use conflict.
- The development site is close to a 33 kV transmission line along Cemetery Road.
- The development site is about 4 km south-west of Hay substation. Solar facilities with a generation capacity of less than 5 MW must be placed within 5 km of a substation to reduce the length of cables that require augmentation and to minimise the loss of electricity in the transmission lines between the facility and the substation.
- The town of Hay is about 1.5 km to the west of the development site, minimising the loss of electricity between transmission and users of the generated electricity.

2.6 Consultation

No pre-application consultation has been undertaken.

3 Land Use Conflict Risk Assessment

3.1 Introduction

The LUCRA process uses a “probability and consequence” matrix to estimate the potential for land use conflict. It assesses the environmental, public health and amenity impacts according to the:

- probability of occurrence
- consequence of the impact

The risk ranking matrix used by the LUCRA Guide (DPI, 2011) has been reproduced below in Table 3-1.

Table 3-1: Risk ranking matrix

Probability	A	B	C	D	E
Consequence					
1	25	24	22	19	15
2	23	21	18	14	10
3	20	17	13	9	6
4	16	12	8	5	3
5	11	7	4	2	1

The risk ranking matrix provides a risk ranking from 25 to 1. It covers each combination of five levels of ‘probability’ (a letter A to E as defined in Table 3-2) and five levels of ‘consequence’ (

a number 1 to 5 as defined in Table 3-3) to identify the risk ranking of each impact. For example, an activity with a 'probability' of D and a 'consequence' of 3 creates a risk rank of 9.

Table 3-2: Probability table descriptions

Level	Descriptor	Description
A	Almost certain	Common or repeating occurrence
B	Likely	Known to occur, or 'it has happened'
C	Possible	Could occur, or 'I've heard of it happening'
D	Unlikely	Could occur in some circumstances, but not likely to occur
E	Rare	Practically impossible

Table 3-3: Consequence table descriptions

Level	Descriptor	Description
1	Severe	- Severe and/or permanent damage to the environment Irreversible - Severe impacts on the community - Neighbours are in prolonged dispute and legal action involved.
2	Major	- Serious and/or long-term impact to the environment - Long-term management implications - Serious impact on the community - Neighbours are in a serious dispute
3	Moderate	- Moderate and/or medium-term impact to the environment and community - Some ongoing management implications - Neighbour disputes occur
4	Minor	- Minor and/or short term- impact to the environment and community - Can be effectively managed as part of normal operations - Infrequent disputes between neighbours
5	Negligible	- Very minor impact to the environment and community - Can be effectively managed as part of normal operations - Neighbour disputes unlikely

1.1 Initial risk evaluation

This section details:

- The activity that may cause a conflict
- The potential conflict arising from that activity
- Risk rating without mitigation or management measures

A list of the potential sources of conflict arising from the project have been developed and are presented in Table 3-4.

Table 3-4: Initial risk evaluation

Activity	Identified Potential Conflict	Unmitigated Risk Ranking
Construction	Increased heavy vehicle movements resulting in road safety issues for livestock and other vehicles.	8
Construction	Native vegetation impacts from: Vehicle and machinery operation, including excavators, drilling equipment, pile drivers and other equipment which may cause	8

Activity	Identified Potential Conflict	Unmitigated Risk Ranking
	any form of damage (squashing, breaking or digging) of native vegetation outside of the construction area. Unintended placement of building equipment or supplies onto native vegetation outside of the construction site.	
Construction	Noise impacts from vehicle and machinery operation, including excavators, drilling equipment, pile drivers and other equipment which may cause an increase in localised noise and vibration concerns to neighbouring properties (residential, commercial and recreational), terrestrial and aquatic fauna and heritage buildings/structures.	8
Construction	Air quality impacts from: - An increase in particulate matter, carbon monoxide and nitrogen oxide emissions to the environment due to the combustion of fuel and resulting exhaust emissions. - An increase in airborne dust to the environment due to: - construction operations - building material handling activities - onsite vehicle movements on unsealed road sand - clearing of flora and vegetation exposing dust - Dust emissions may be generated as a result of earthwork activities, particularly during dry and windy conditions. Excessive dust generation may be detrimental to human health, reduce visual amenity as well as smother vegetation and impact fauna.	8
Construction	Potential environmental impacts to soil are: - Sediment runoff from newly exposed surfaces - Sedimentation of waterways, wetlands, swamps and low-lying areas - Increased turbidity in creeks and associated waterways - Disturbance to notable flora which is listed as Endangered - Disturbance to notable flora regional ecosystems - Disturbance to notable fauna species - Sediment runoff/water pooling during heavy rainfall events Potential environmental impacts to surface water: - Alteration in hydrology and hydrogeology of the environment of underlying aquifer(s), estuaries, lakes and rivers; as a result of disturbance to groundwater-surface water connectivity - Impacts to water quality due to landfill contaminants and leachate seeping into the groundwater and surface water bodies	8
Construction	Heritage impacts may occur if an item of heritage value is discovered during construction of the proposal.	9
Operation	Heritage impacts may occur if an item of heritage value is discovered during operation of the proposal.	9
Operation	Negative impacts on the visual amenity of the surrounding area.	8
Operation	Impacts on the irrigation district	1
Operation	Food security impacts from the use of agricultural land for non-agricultural purposes	2

1.2 Risk reduction controls

As per the LUCRA Guide (DPI, 2011) the process of risk reduction aims to identify management strategies that affect the probability of an event occurring, such as the implementation of certain procedures; new technology or scientific controls that might lower the risk probability values.

It is also appropriate to look at management strategies which affect consequences e.g. supply staff with a mechanism to change impacts or establish better communication procedures. Such matters can sometimes lower negative consequences.

The objective of risk reduction controls is to lower the risk ranking score to 10 or below.

A revised risk evaluation for the potential sources of conflict arising for the project is provided below in Table 3-5.

Table 3-5: Revised risk ratings

Activity	Identified potential conflict	Existing risk rating	Management strategy	Revised risk rating
Construction	Increased heavy vehicle movements resulting in road safety issues for livestock and other vehicles.	8	The following safeguards are proposed: - Prior to the issue of a Construction Certificate, the applicant shall prepare a Traffic Management Plan that must be implemented during the construction of the development. - All loading and unloading of vehicles must be undertaken wholly within the site and all vehicles must enter and leave the site a forward direction. Sufficient car parking is to be provided on the site, with no car parking to occur on the public road network in the vicinity of the site. The entry and exit points are to be clearly signposted and visible from both the street and the site at all times. - The maximum size truck permitted to access the site is a 19m semi-trailer.	1
Construction	Native vegetation impacts from: - Vehicle and machinery operation, including excavators, drilling equipment, pile drivers and other equipment which may cause any form of damage (squashing, breaking or digging) of native vegetation outside of the construction area. - Unintended placement of building equipment or supplies onto native vegetation outside of the construction site.	8	The CEMP for the proposal contains the following safeguards: - Prior to commencement of the project, install temporary bunting to control vehicle movement near native vegetation. - On arrival at site, all mobile plant and equipment will be checked. This will include checking that the equipment is clean or brushed down. - Maintaining controls and respect for Native Vegetation with regular reminders to staff, contractors and visitors outlining where vehicles, equipment and people are allowed outside of the project area. Any adverse environmental impacts to native vegetation identified as a result of monitoring will be managed according to the management and mitigation measures outlined in this CEMP. - No go areas containing native vegetation will be flagged off from entry to control vehicles. - Ensure no Native Vegetation is damaged during construction outside of the project site or approved clearance area. - Native Vegetation incidents must be reported immediately.	1
Construction	Noise impacts from vehicle and machinery operation, including excavators, drilling equipment, pile drivers and other equipment which may cause an increase in localised noise and vibration concerns to neighbouring properties (residential, commercial and recreational), terrestrial and aquatic fauna and heritage buildings/structures.	8	The CEMP for the proposal contains the following safeguards: - All project activities which cause or have potential to cause noise and vibration impacts will be monitored to ensure they are carried out in accordance with requirements in specific construction noise and vibration impact assessments. - Appropriate mitigation measures (where reasonable and feasible) will be implemented where activities exceed or have the potential to exceed noise or vibration management levels. - On arrival at site, all mobile plant and equipment will be checked. This will include checking that the equipment operates within the specified noise and vibration level.	1
Construction	Air quality impacts from: - An increase in particulate matter, carbon monoxide and nitrogen oxide emissions to the environment due to the combustion of fuel and resulting exhaust emissions. - An increase in airborne dust to the environment due to: - construction operations - building material handling activities - onsite vehicle movements on unsealed road sand - clearing of flora and vegetation exposing dust - Dust emissions may be generated as a result of earthwork activities, particularly during dry and windy conditions. Excessive dust generation may be detrimental to human health, reduce visual amenity as well as smother vegetation and impact fauna.	8	The CEMP for the proposal contains the following safeguards: - The monitoring of dust levels shall be undertaken through regular visual inspections of the work sites and activities by the Project/Site Engineer or delegate. - Dust generating activities will be assessed during periods of windy conditions and ceased and rescheduled where adequate control of dust generation cannot be achieved. - Visual observation of machinery conditions shall also be undertaken during site inspections in addition to Daily Pre-Start Checks. Daily Pre-Start Checks are required to be undertaken by all plant operators on construction plant, equipment, vehicles and machinery to ensure all equipment have appropriate emission control devices, are in good working order and are being maintained correctly. - On arrival at site, all mobile plant and equipment will be checked. This will include checking that the equipment operates within the specified air pollutant level.	1

Activity	Identified potential conflict	Existing risk rating	Management strategy	Revised risk rating
Construction	Potential environmental impacts to soil are: - Sediment runoff from newly exposed surfaces - Sedimentation of waterways, wetlands, swamps and low-lying areas - Increased turbidity in creeks and associated waterways - Disturbance to notable flora which is listed as Endangered - Disturbance to notable flora regional ecosystems - Disturbance to notable fauna species - Sediment runoff/water pooling during heavy rainfall events Potential environmental impacts to surface water: - Alteration in hydrology and hydrogeology of the environment of underlying aquifer(s), estuaries, lakes and rivers; as a result of disturbance to groundwater-surface water connectivity - Impacts to water quality due to landfill contaminants and leachate seeping into the groundwater and surface water bodies	8	The CEMP for the proposal contains the following safeguards: - Surface water monitoring will determine water quality and any potential impacts, due to construction activities, to any water body on the project or project vicinity. Any adverse environmental impacts to surface water quality identified as a result of monitoring will be managed according to the management and mitigation measures outlined in this CEMP. - On arrival at site, all mobile plant and equipment will be checked. This will include checking that the equipment has no oil, hydraulic fluid or coolant leaks. - On arrival at site, all fuel, oil, chemicals and lubricants will be checked. This will include checking that they have the lids/covers secured, no leakage/spillage, and the appropriate marking/identification. - Chemicals will not be stored in locations that present unnecessary risk such as close to waterways or sensitive areas. - For all chemicals that are stored on site, consideration will be given to the location and method of storage, as well as the bunding capacity to ensure they comply with AS1940. - All hazardous substances or dangerous goods procured for use on the project shall be accompanied with: - a Safety Data Sheet (SDS) - adequate labelling - spill kits shall be available in all areas where hydrocarbons and chemicals are stored or used, where necessary, spill kits for water shall be provided - All dangerous goods (DG) and hazardous substances shall be stored in a dedicated DG storage container which is adequately ventilated, and has adequate bunting for the quantity of DG and hazardous substances being stored. - DG shall be stored in accordance with the separation distances defined in AS/NZS 3833:2007 The Storage and Handling of Mixed Classes of Dangerous Goods. - Smoking is not permitted within 5 meters of dangerous goods storage containers. - DG storage containers shall be fitted with an external fire extinguisher which is suitably mounted, and sign marked. The fire extinguisher shall comply with AS2444 Portable Fire Extinguishers and Fire Blankets, be 3.5 Kg minimum capacity and be Powder Type Class ABE.	1
Construction	Heritage impacts may occur if an item of heritage value is discovered during construction of the proposal.	9	The following safeguard is proposed: - While excavation, demolition or building work is being carried out, all such works must cease immediately if a relic or Aboriginal object is unexpectedly discovered. The applicant must notify the Heritage Council of NSW in respect of a relic and notify the Secretary of the Department of Planning, Industry and Environment and the Heritage Council of NSW in respect of an Aboriginal object. Building work may recommence at a time confirmed by either the Heritage Council of NSW or the Secretary of the Department of Planning, Industry and Environment. In this condition: “relic” means any deposit, artefact, object or material evidence that: (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and (b) is of State or local heritage significance; and “Aboriginal object” means any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction and includes Aboriginal remains.	1
Operation	Heritage impacts may occur if an item of heritage value is discovered during operation of the proposal.	9	The following safeguard is proposed: - While excavation, demolition or building work is being carried out, all such works must cease immediately if a relic or Aboriginal object is unexpectedly discovered. The applicant must notify the Heritage Council of NSW in respect of a relic and notify the Secretary of the Department of Planning, Industry and Environment and the Heritage Council of NSW in respect of an Aboriginal object. Building work may recommence at a time confirmed by either the Heritage Council of NSW or the Secretary of the Department of Planning, Industry and Environment. In this condition: “relic” means any deposit, artefact, object or material evidence that: (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and (b) is of State or local heritage significance; and	1

Activity	Identified potential conflict	Existing risk rating	Management strategy	Revised risk rating
			“Aboriginal object” means any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction and includes Aboriginal remains.	
Operation	Negative impacts on the visual amenity of the surrounding area.	8	The following safeguard is proposed: Landscaping will be implemented, as detailed in the Landscape Plan.	1
Operation	Impacts on the irrigation district.	1	- Irrigation drains run to the north and east of the development site. An irrigation drain runs across the development site from east to west. - Currently, stormwater is either retained on the development site or flows into the irrigation drains. - The proposal would not increase stormwater flows from the development site, as rain would drain from the panels into the ground into the existing privately managed on-farm drainage infrastructure. - Therefore, no impacts are expected on the irrigation district. - This will be suitably addressed via detailed design – as conditional consent on the sought DA.	1
Operation	Food security impacts from the use of agricultural land for non-agricultural purposes	2	The development site is currently used for irrigated grazing. After construction of the proposal, this land would not be used for agriculture until after the proposal has been decommissioned. This loss of irrigated farmland is considered acceptable for the following reasons: - The proposal takes up 13 ha on a property of about 87 ha in area. The remain 85% of the property would continue to be used for agricultural purposes, which will be subsidised by the diversified income provided to the farm from the solar farm. - The development site is about 4 km south-west of Hay substation. Solar facilities with a generation capacity of less than 5 MW must be placed within 5 km of a substation to reduce the length of cables that require augmentation and to minimise the loss of electricity in the transmission lines between the facility and the substation. - The proposal would provide electricity for Hay and the surrounding area through Hay substation and 33 kV transmission lines. The electricity would not be exported to other areas. - The closest operational power station to the subject property is the Darlington Point Solar Farm, which is about 107 km to the east. The proposal would provide a local source of renewable energy for the residents of Hay. - The proposal is in the South West Renewable Energy Zone (REZ). However, it is noted that the planned 330 kV and 500 kV transmission lines through the REZ do not connect to Darlington Point or Hay substations. These transmission lines were approved by the NSW Government in 2022 as part of the NSW Eastern Section of Project EnergyConnect (DPE, 2023). It is not known how much of the electricity planned to be produced in the REZ would connect to Hay substation. - The proposal involves 13 ha of irrigated farmland being used for non-farming purposes for a period of 30 years. After this time, the components would either be replaced, or the solar farm would be decommissioned. If it is decommissioned, all components would be removed from the site and the site returned to agricultural use. The agricultural productivity of the land would not be reduced by the operation of the proposal.	2

1.3 Performance monitoring

The performance of the proposed mitigation and management measures would be evaluated through a process of internal and external consultation with affected receivers and stakeholders.

The auditing and consultation activities would be undertaken in accordance with the safeguards outlined in the revised risk reduction controls, as well as the CEMP prepared for construction. The CEMP outlines how various activities would be undertaken in accordance with safeguards to reduce their impacts to the environment and to sensitive receivers.

Throughout the construction, operational and decommissioning phases of the proposal, the activities within those phases would be checked against the commitments of the SEE, the conditions of consent and the CEMP by a suitably qualified person with a view to compliance with these at all times. In doing so the applicant seeks to reduce the extent of amenity impacts to neighbouring properties and affected stakeholders, in-turn reducing the potential for a land use conflict.

1.4 Limitations/assumptions

This LUCRA is undertaken as a desktop assessment and has been informed by the available information from publicly available resources, as well as the findings and recommendations of the key documents listed in section 1.1 of the SEE for the proposal.

1.5 Key documents

Key documents have been prepared to support the proposal. The assessments are designed to identify and mitigate the potential environmental, social and economic impacts of the proposal. They are listed in section 1.1 of the SEE for the proposal.

4 Conclusions and recommendations

Whilst this LUCRA has identified some potential sources of land use conflict it is anticipated that the proposed development would allow rural land uses in the locality to continue largely unaffected.

The principal sources of land use conflict predicted for the project are amenity issues that will arise from the construction stage of the project. The land use conflicts can largely be avoided by implementing the mitigation strategies outlined in Table 3-5.

As detailed within this LUCRA, as well as the respective specialist assessments, each of the potential sources of conflict are considered to be relatively low.

The proposal incorporates landscaping as a mitigation measure to reduce visual impact on the surrounding area via the use of native vegetation proposed around the perimeter of the facility. However, once the screening vegetation matures, this potential conflict is significantly reduced.

Consequently, it is considered that the recommended attenuation measures would reduce the potential for land use conflict within the surrounding rural and industrial area.

5 References

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