

LAND USE CONFLICT RISK ASSESSMENT

Proposed Bective South Poultry Farm



02 January 2025



DOCUMENT CONTROL

Document: Project Name: AAM BECTIVE SOUTH POULTRY FARM
PSA Job Number: 1716
Report Name: LAND USE CONFLICT RISK ASSESSMENT

This document has been prepared for:



Contact: Mr Adrian Kelly
Project Coordinator
Agribiz
PO Box 1704
New Farm QLD 4005
www.agribiz.global

This document has been prepared by:



Contact: David Ireland
PSA Consulting (Australia) Pty Ltd
PO Box 10824, Adelaide Street, Brisbane QLD 4000
Telephone: +61 7 3220 0288
david@psaconsult.com.au
www.psaconsult.com.au

REVISION HISTORY

VERSION	DATE	DETAILS	AUTHOR	AUTHORISATION
V2	2 January 2025	FINAL	CLIFF SCHMIDT	<div></div> DAVID IRELAND

GENERAL DISCLAIMER

The information contained in this document produced by PSA Consulting (Australia) Pty Ltd is for the use of the Agribiz for the purpose for which it has been prepared and PSA Consulting (Australia) Pty Ltd undertakes no duty of care to or accepts responsibility to any third party who may rely upon this document.

All rights reserved. No section or element of this document may be removed from this document, reproduced, electronically stored or transmitted in any form without the written permission of PSA Consulting (Australia) Pty Ltd.



TABLE OF CONTENTS

DOCUMENT CONTROL	1
REVISION HISTORY	1
GENERAL DISCLAIMER	1
1. INTRODUCTION	0
1.1 Scope of Works.....	0
2. INFORMATION GATHERING	1
2.1 Nature of the Land use change.....	1
2.2 Nature of the precinct where the land use change and development is proposed.....	2
2.3 Topography, Climate and Natural Features	4
2.3.1 Topography.....	4
2.3.2 Geology and Soils.....	4
2.3.3 Flooding and Drainage.....	4
2.3.4 Ecology.....	4
2.3.5 Groundwater.....	5
2.3.6 Heritage.....	5
2.3.7 Bushfire	5
2.4 Site History	5
2.5 Consultation.....	6
3. POTENTIAL LAND USE CONFLICTS	6
3.1 Introduction.....	6
3.2 Initial risk identification and Risk Ranking	8
3.3 Risk Reduction Controls	10
3.4 performance monitoring.....	10
3.5 limitations/assumptions.....	10
4. CONCLUSION	11

FIGURES

<i>Figure 1: Site Plan (Bath Stewart Associates, 2024)</i>	1
<i>Figure 2: Site Location (E-Spatial NSW, 2024)</i>	2
<i>Figure 3: Sensitive Receptors within 1km of the Site (SoundIn, 2024)</i>	3
<i>Figure 4: Hydro line mapping (NSW Government, 2024)</i>	4

TABLES

Table 1: Risk Ranking Matrix (Department of Primary Industries, 2011)	6
Table 2: Probability Table (Department of Primary Industries, 2011)	6
Table 3: Measure of Consequence (Department of Primary Industries, 2011)	6
Table 4: Initial Risk Identification and Risk Rating	9



1. INTRODUCTION

This Land Use Conflict Risk Assessment (LUCRA) has been prepared as part of an Environmental Impact Assessment (EIS) to accompany a Designated Development Application for the construction and operation of the Bective South Poultry Farm. This LUCRA should be read in conjunction with the EIS.

The farm will be comprised of eighteen (18) poultry sheds where meat chicken birds (broilers) will be grown for human consumption. Each shed will accommodate a maximum of 68,675 birds giving the farm a total capacity of 1,236,150 birds. Production of broilers occurs in cycles with each production cycle completed over 8 – 10 weeks. As such, there is an average of 5.2 production cycles each year.

This LUCRA considers the sites suitability, the regional implications of the proposed use and provides commentary on compatibility of the proposed development with other local activities.

1.1 SCOPE OF WORKS

DPI Agriculture recommended that the Applicant prepare a Land Use Conflict Risk Assessment (LUCRA) as part of the Secretary's Environmental Assessment Requirements (SEARs) for the project. The purpose of this LUCRA is to identify the compatibility and potential conflicts between the proposed development and neighbouring land uses and to identify appropriate avoidance and mitigation measures.

The assessment aims to:

- Accurately identify and address the efficacy of risk of conflict between the proposed use and adjoining land uses before a new land use proceeds or before dispute arises;
- Objectively assess the effect and level of the proposed land use on neighbouring land uses;
- 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 conflict and contribute to the development of separation strategies.

(Source: NSW DPI Land Use Conflict Risk Assessment Guide, 2011)

The assessment comprises four-stages, including:

1. Information gathering - site characteristics, the nature of development proposed and surrounding land uses.
2. Risk Level Evaluation - identification and recoding of activities and conflict analysis.
3. Identification of Risk Mitigation Strategies - assess strategies to manage risk of potential conflict.
4. Review and recommendations - recommendations and management strategies.



2.2 NATURE OF THE PRECINCT WHERE THE LAND USE CHANGE AND DEVELOPMENT IS PROPOSED

The proposal relates to land at 2432 Oxley Highway, Bective NSW 2340 which is formally referred to as Lot 161 on DP755319. As shown in **Figure 2**, the site has been historically cleared and used for cropping and grazing activities. Lots 5 & 147 on DP755319 and Lot 1 on DP127958 form part of the application as they accommodate the access driveway linking the farm to Soldier Settlement Road. Lots 34, 51, 61, 69 & 190 on DP755319, Lot 1 on DP1241646, and Lot 12 on DP127893 are also included as part of the Application as they will facilitate a water supply pipeline connecting to the existing pivot on AAM's land holding to the south of the Oxley Highway.

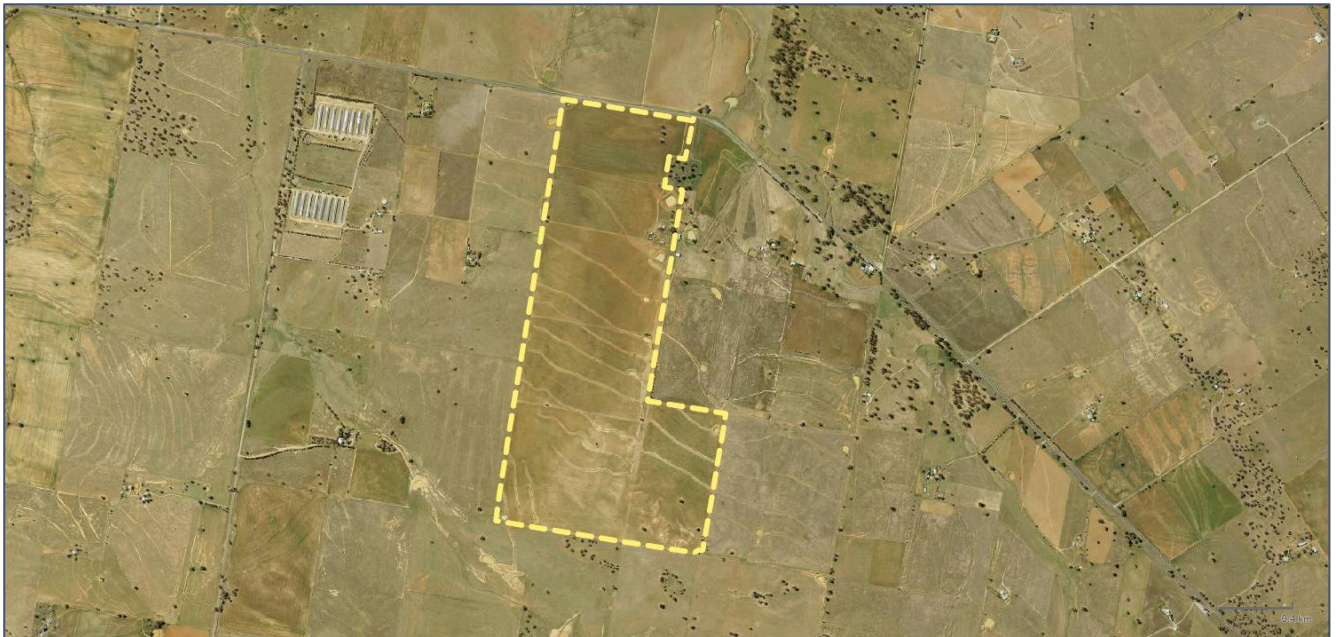


Figure 2: Site Location (E-Spatial NSW, 2024)

The subject site is located approximately 20km north west of the Tamworth CBD. The site is surrounded by rural properties, agricultural activities and intensive livestock production including the existing neighbouring poultry farm, Bon Accord, and Maybrook Spelling & Agistment.

As shown in **Figure 3**, there are nine sensitive receptors (residential dwellings on rural properties) within 1 km of the poultry farm. The nearest sensitive receptors (rural dwellings) are located approximately 0.8km and 1.2km east of the proposed poultry farm.

It is noted that R7 and R9 are managers' residences associated with the nearby Proten Poultry Farm and are not considered sensitive receptors for this project. Similarly, R8 is owned by Baiada Poultry and is used to accommodate workers in the poultry industry and as such is also not considered to be a sensitive receptor.



AAM BECTIVE POULTRY FARM

SITE AND SENSITIVE RECEIVERS



- LEGEND**
- Site
 - Receivers

Figure 3: Sensitive Receptors within 1km of the Site (SoundIn, 2024)



2.3 TOPOGRAPHY, CLIMATE AND NATURAL FEATURES

2.3.1 Topography

The site is characterised by extensive rolling to undulating hills and low hills on Devonian and Carboniferous sedimentary rocks of the Duri Hills. A Site Survey is included as **Appendix C** of the EIS.

2.3.2 Geology and Soils

Soils in the location are complex due to rapid changes in underlying lithology. The profile is generally dominated by duplex soils such as moderately deep, moderately well-drained Red and Brown Chromosols (Non-calcic Brown Soils; Red-brown Earths) with minor occurrences of shallow, very well-drained Rudosols (Lithosols) around rock outcrops. Deep, imperfectly drained Red Vertosols (Red Clays) and deep to very deep, imperfectly drained Red and Brown Chromosols (Non-calcic Brown Soils) and possibly some Sodosols (Solodic Soils) occur along drainage lines and on sodic bedrock.

2.3.3 Flooding and Drainage

The site generally falls from the high point along the southern boundary being Soldiers Settlement Road to the north towards the Oxley Highway. The site is not mapped as flood prone within the *Tamworth Regional Local Environmental Plan 2010* and is outside of the area assessed in the Tamworth City Wide Flood Investigation 2019. Overland flows across the site are picked up by a series of linear contour banks which direct flows to a chain of farm dams along the eastern boundary of the site (see **Figure 4**).

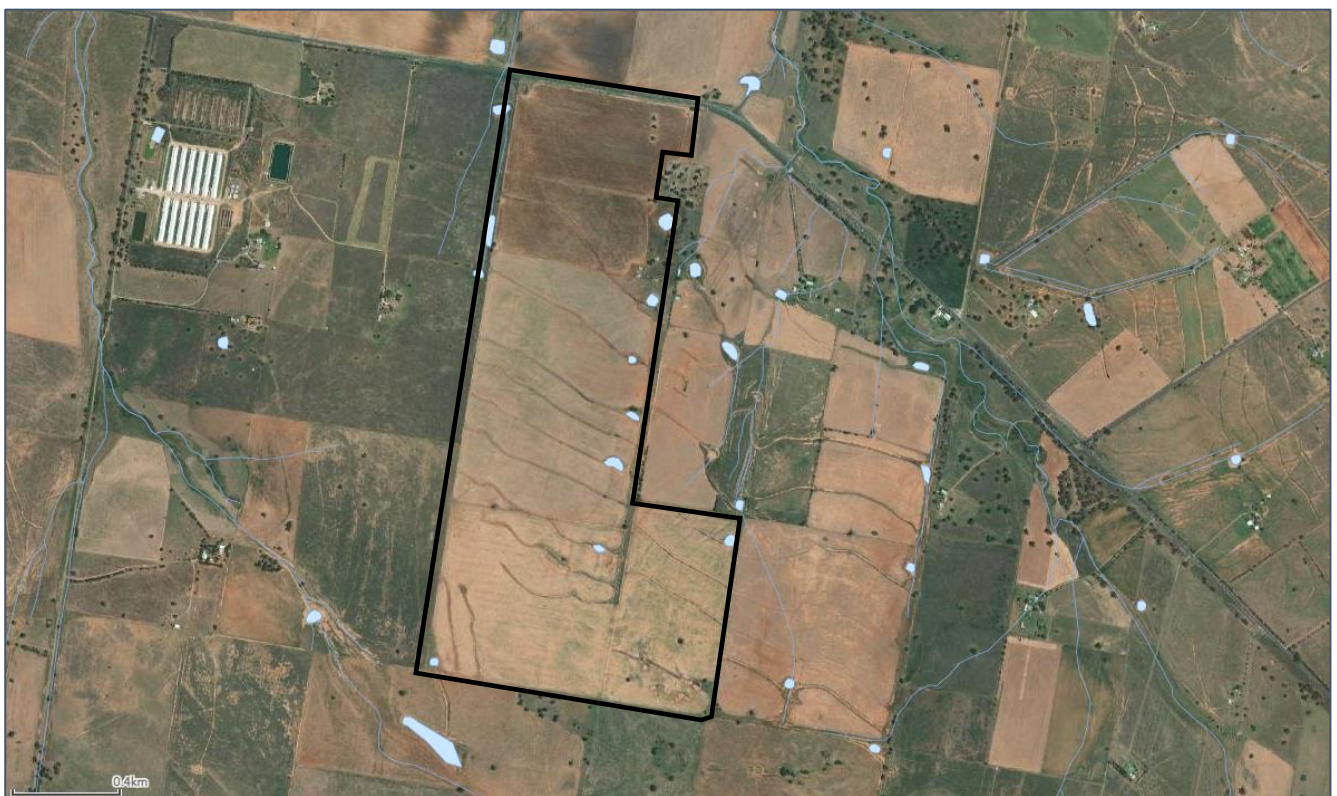


Figure 4: Hydro line mapping (NSW Government, 2024)

2.3.4 Ecology

Historically the site has been predominantly cleared and use for extensive agricultural activities including cropping and grazing. The new broiler farm has an assessable area of 32.52ha most of which has been positioned within a highly modified cropping area.. The onsite vegetation within the assessable area includes 31.55ha of cropping land, and 0.87ha of pasture grassland. The assessable area also contains an area of 0.03 Ha of white box grassy woodland.



A large section of the access road from the south (approximately 1.1km) will go through an area of pasture/grassland and approximately 16m of roadside reserve containing vegetation most consistent with that of PCT 433 - White Box grassy woodland to open woodland on basalt flats and rises in the Liverpool Plains sub-region (0.03 ha). The internal access roads have been aligned to avoid existing trees. A small section of the access driveway could not be realigned to avoid three trees within the road reserve as it would not meet safe sight distances for vehicular movements due to the road geometry along the site frontage.

Four vegetation assemblages (4) contained within the subject land (impact area) were:

- PCT 433 - White Box grassy woodland to open woodland on basalt flats and rises in the Liverpool Plains sub-region (0.03ha);
- Pasture grassland (0.87ha);
- Cropping area (31.55ha)
- Aquatic – dam (0.13ha)

The ecological assessment found the proposed construction of a broiler farm at Lots 5, 147 & 161 DP 755319 (No. 2432) Oxley Highway, Bective NSW will result in a small incremental reduction/modification of habitat, however taking into consideration the current disturbance, presence of existing areas of similar habitat and mitigation measures, the proposal is unlikely to have a significant impact on any addressed threatened species, endangered population or threatened ecological community.

2.3.5 Groundwater

The 1:250,000 geology sheet for Manilla indicates that the site is underlain by the Noumea Beds comprising sandstone, conglomerate and argillites. This Devonian bedrock underlying the site comprises a regional, fractured rock aquifer (Management Zone: Peel Valley - Fractured Rock). The rock mass has a low permeability and groundwater flow is predominantly via fractures. There is likely to be some groundwater discharge from the fractured rock aquifers as either springs or seepage into the alluvial sediments low in the catchment towards the Peel River.

Water bore logs from bores on the Applicant's existing bores on their landholdings further north and closer to the Peel River encountered groundwater at depths of 17.4m, 57.9m and 74.5m. Given these depths, the location of the proposed farm at a much higher elevation and further away from the Peel River, and the minimal excavation required, there is a low risk of interaction of the works with groundwater.

2.3.6 Heritage

No Aboriginal sites were identified or recorded within the study area and the lack of Aboriginal objects can likely be attributed to several factors including distance from a permanent or semi-permanent watercourse, a lack of landforms with archaeological potential, and the severity of disturbances through long-term agricultural practices.

The Due Diligence Assessment concludes that while the proposed works will have an impact on the ground surface, no Aboriginal objects or intact archaeological deposits are likely to be harmed. Accordingly, an Aboriginal Heritage

2.3.7 Bushfire

A Bushfire Risk Assessment was undertaken by Firebird ecoSultants Pty Ltd. The assessment was undertaken in accordance with the Rural Fire Services guidelines. The results require the implementation of a 10m asset protection zone (APZ) for the broiler farm and 50m APZ for the managers residences. With the implementation of the APZs and other mitigation measures, the managers residences have a BAL rating of BAL-LOW and accordingly comply with *Planning for Bush Fire Protection 2019*.

2.4 SITE HISTORY

Based on a review of the Tamworth Council DA Tracker, no existing Development Applications were noted over the subject site. Historic Aerial Photography of the site indicates that it has been cleared and used for extensive agriculture, largely in its current form since at least 1968. The contour banks and farm dams were constructed on the site between 1985 and 1989.



2.5 CONSULTATION

In preparing the EIS, consultation has been undertaken with Authorities, Stakeholders and the local community. The consultation gave Stakeholders an opportunity to provide feedback concerning the project which was considered as part of the finalisation of the project design and assessment process.

The consultation undertaken showed that there was general interest in the project and the activities undertaken increased community awareness. During consultation, the immediate local community raised concerns regarding the potential amenity impacts of the operation on the surrounding properties such as traffic, odour, and property values. These concerns raised from the neighbouring stakeholders have been addressed as part of the project design and assessment processes.

The above feedback and concerns have been considered in the risk assessment in Section 3 of this LUCRA.

3. POTENTIAL LAND USE CONFLICTS

3.1 INTRODUCTION

Table 1 shows the LUCRA matrix which identifies risk rankings from 1 to 25 for each set of probabilities (A-E) (refer to **Table 2**) and consequences (1-5). A rank of 25 is the highest magnitude of risk, i.e. a highly likely and very serious event. A rank of 1 represents the lowest magnitude of risk, i.e. an almost impossible and very low consequence event. Priority is given to those activities listed as high risk. This helps to rank multiple effects and provide a priority list when developing management strategies.

Table 1: Risk Ranking Matrix (Department of Primary Industries, 2011)

Consequence	Probability				
	A	B	C	D	E
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

Table 2: Probability Table (Department of Primary Industries, 2011)

Level	Descriptor	Description
A	Almost certain	Common or repeated occurrence
B	Likely	Known to occur
C	Possible	Could occur
D	Unlikely	Could occur in some circumstances, but not likely to occur
E	Rare	Practically impossible

Table 3: Measure of Consequence (Department of Primary Industries, 2011)

LEVEL 1	DESCRIPTOR: SEVERE
Description	<ul style="list-style-type: none"> Severe and/or permanent damage to the environment Irreversible



	<ul style="list-style-type: none"> • Severe impact on the community • Neighbours are in prolonged dispute and legal action involved
Example or Implication	<ul style="list-style-type: none"> • Harm or death to animals, fish, birds or plants • Long term damage to soil or water • Odours so offensive some people are evacuated or leave voluntarily • Many public complaints and serious damage to Council's reputation • Contravenes Protection of Environment & Operations Act (POEO Act) and the conditions of Council's licences and permits. Almost certain prosecution under the POEO Act.
LEVEL 2 DESCRIPTOR: MAJOR	
Description	<ul style="list-style-type: none"> • Serious and/or long term impact to the environment • Long-term management implications • Serious impact on the community • Neighbours are in serious dispute
Example or Implication	<ul style="list-style-type: none"> • Water, soil or air impacts, possibly in the long term • Harm to animals, fish, birds or plants • Public complaints. Neighbour disputes occur. Impacts pass quickly • Contravenes the conditions of Council licences, permits and the POEO Act • Likely prosecution
LEVEL 3 DESCRIPTOR: MODERATE	
Description	<ul style="list-style-type: none"> • Moderate and/or medium-term impact to the environment and community • Some ongoing management implications • Neighbour disputes occur
Example or Implication	<ul style="list-style-type: none"> • Water, soil or air known to be affected, probably in the short term • No serious harm to animals, fish, birds or plants • Public largely unaware and few complaints to Council • May contravene the conditions of Council's licences and the POEO Act • Unlikely to result in prosecution
LEVEL 4 DESCRIPTOR: MINOR	
Description	<ul style="list-style-type: none"> • Minor and/or short-term impact to the environment and community • Can be effectively managed as part of normal operations • Infrequent disputes between neighbours
Example or Implication	<ul style="list-style-type: none"> • Theoretically could affect the environment or people but no impacts noticed • No complaints to Council • Infrequent disputes between neighbours
LEVEL 5 DESCRIPTOR: NEGLIGIBLE	
Description	<ul style="list-style-type: none"> • Very minor impact to the environment and community • Can be effectively managed as part of normal operations • Neighbour disputes unlikely
Example or Implication	<ul style="list-style-type: none"> • No measurable or identifiable impact on the environment • No measurable impact on the community or impact is generally acceptable



3.2 INITIAL RISK IDENTIFICATION AND RISK RANKING

The risk assessment identifies and evaluates potential land use conflicts associated with the proposed Bective South Poultry Farm.

A risk ranking is determined based on probability and consequence, and a revised risk ranking is determined based on the findings of the technical assessments undertaken and the implementation of the management strategies identified in the EIS.

A detailed risk assessment is provided in the EIS and a summary of the risk assessment is provided in Table 4.



Table 4: Initial Risk Identification and Risk Rating

CONFLICT SOURCE	Explanation	WITHOUT MITIGATIONS			WITH MITIGATIONS		
		Probability	Consequence	Risk Rating	Probability	Consequence	Risk Rating
Biodiversity Impacts	Impacts items of ecological significance	C	3	13	D	4	5
Heritage Impacts	Disturbance of Heritage Items	C	3	13	D	4	5
Stormwater Impacts	Stormwater causing impacts downstream	C	3	13	D	4	5
Air Quality Impacts	Odour creating a nuisance for nearby residences.	B	2	21	C	3	13
Noise Impacts	Noise creating a nuisance for nearby residences.	C	3	13	D	4	5
Traffic Impacts	Traffic creating a nuisance for nearby residences.	C	3	13	D	4	5
Chemical Spills	Chemical spill resulting in environmental impacts.	C	4	8	D	4	5
Bushfire Impacts	Operations increasing the risk of bushfires	C	3	13	D	4	5
Waste Impacts	Storage of waste causing odour or vermin impacts	D	4	5	D	4	5
Biosecurity Impacts	Operations increasing biosecurity risks.	C	2	18	D	3	9
Visual Impacts	Construction introducing glare or unsightly views.	C	3	13	D	4	5



3.3 RISK REDUCTION CONTROLS

Consistent with the LUCRA Guide, an objective of the LUCRA is to identify and define management strategies that lower the risk ranking score to low risk (8 or below). Management strategies and performance targets for the proposed development have been developed as part of the preparation of the EIS.

Management strategies are developed to minimise the residual risk of land use impacts, remaining after consideration of mitigation strategies and design solutions.

Performance targets are identified for each management strategy, detailing how the effectiveness of the strategy will be monitored.

3.4 PERFORMANCE MONITORING

Performance monitoring is required to ensure management strategies minimise the risk of potential land use conflicts during all stages of the project.

Various management plans will be prepared and implemented during the construction, operational and decommissioning phases of the project, including:

- Construction Environmental Management Plan (CEMP)
- Operational Environmental Management Plan (OEMP)
- Any other management plan specified in the EIS or conditions of consent (if approved)

The management plans will address all requirements specified in the EIS and supporting documents, as well as any consent conditions (if approved). These plans will provide documented requirements for performance measures and monitoring during each stage of the project.

Performance will also be monitored through the outcomes of consultation during all phases of the project. Monitoring community feedback and concerns are key to assessing the performance of management strategies.

3.5 LIMITATIONS/ASSUMPTIONS

This LUCRA has relied on the following information to evaluate potential land use conflicts:

- Observations made from existing operations of similar broiler farms in the area.
- Consultation undertaken by AAM.
- Desktop research and mapping of the site and locality.

The following limitations apply to this LUCRA:

- Mitigation measures from the EIS and supporting impact assessments, where implemented effectively, are likely to reduce the risk of potential land use conflicts. However, the implementation of mitigation measures may not reduce the risk of all potential land use conflicts.
- The identification of land uses and conflicts within this LUCRA is restricted by the detail and number of responses received during consultation. There is potential for other land uses and conflicts, not previously identified, to occur within the locality.



4. CONCLUSION

This LUCRA has identified potential land use conflicts and evaluated their risk. The overall risk ranking (revised, to account for management strategies) for potential land use conflict ranges from low to moderate.

A total of 11 potential land use conflicts identified. The average risk ranking of all identified conflicts was reduced from an initial risk ranking of 12.63 (moderate risk) to a revised risk ranking of 6.09 (low risk), with consideration of the findings of the detailed technical assessments, mitigation and management measures. The average revised risk ranking for all identified land use was below 8 which is consistent with the LUCRA objectives.

The effective implementation of management strategies is likely to further minimise the risk of potential land use conflicts.



psaconsult.com.au

PSA Consulting Pty Ltd ABN 83 109 836 197

T + 61 7 3220 0288 F +61 7 3220 0388

Brisbane (Head Office) L11 / 270 Adelaide Street, Brisbane / Meeanjin Qld 4000

PO Box 10824 Adelaide Street Brisbane Qld 4000