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## EPBC 2010/5491 Weaber Plain Development Project Annual Environment Report 2019 1 May 2018 to 30 April 2019

Department of Primary Industries and Regional Development, Western Australia

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**EPBC 2010/5491**

# **Weaber Plain Development Project**

## **Annual Environment Report 2019**

**1 May 2018 to 30 April 2019**

Prepared for

**Department of Primary Industries and Regional Development**

*For submission to the Department of the Environment and Energy, in compliance with the requirements of EPBC Approval 2010/5491 issued under the Environment Protection and Biodiversity Conservation Act 1999*

July 2019

Prepared for the Department of Primary Industries and Regional Development by –



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### Disclaimer and Limitation

This report has been prepared for the Department of Primary Industries and Regional Development (DPIRD) in accordance with the agreement between DPIRD and Kimberley Boab Consulting Pty Ltd. The content of this report is limited by the parameters provided by DPIRD including scope and timeframes. Kimberley Boab Consulting Pty Ltd accepts no liability or responsibility whatsoever in respect of any use of or reliance upon this report by any person who is not a party to the agreement.

Audit items deemed completed by other auditors in previous compliance assessments have not been re-assessed, unless a material change has occurred.

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### Document control

Date	Version	Reviewed by
17 July 2019	REV A	DPIRD

## ACRONYMS AND ABBREVIATIONS

AFMP	Aquatic Fauna Management Plan
BMP	Buffer Management Plan
CALIM	Common Area Lease and Infrastructure Management (Agreement)
CAP	Compliance Assessment Plan
CAR	Compliance Assessment Report
CEO	Chief Executive Officer (of the Office of the Environmental Protection Authority)
DP	Design Plan
DAFWA	Department of Agriculture and Food Western Australia
DPIRD	Department of Primary Industries and Regional Development (previously DAFWA)
DW1GS	DW1 Gauging Station
DWER	Department of Water and Environmental Regulation
EMIA	Environmental Management Instrument Agreement
EMP	Environmental Management Program (or Plan)
EPA	Environmental Protection Authority
EP Act	Environmental Protection Act 1986
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Cwth)
FPDP	Final Project Design Plan
GFCP	Gouldian Finch Conservation Plan
Goomig	Goomig farm area, also known as the Weaber Plain farm area
GL	Gigalitres
GMP	Groundwater Management Plan
ha	Hectare
IRG	Independent Review Group
JTSI	Department of Jobs, Tourism, Science and Innovation (formerly Department of State Development - DSD)
KBC	Kimberley Boab Consulting Pty Ltd
KAI	Kimberley Agricultural Investment Pty Ltd
KBR	Kellogg Brown Root
km	Kilometres
MG Corp	Yawoorroong Miriuwung Gajerrong Yirrgeb Noong Dawang Aboriginal Corporation
ML	Megalitres
MS938	Ministerial Statement 938
OEPA	Office of the Environmental Protection Authority
OFA	Ord Final Agreement
OIC	Ord irrigation Cooperative
ORIA	Ord River Irrigation Area
OSWM	Operational Surface Water Model
SEIS	Supplementary Environmental Impact Statement
SGDMP	Stormwater and Groundwater Discharge Management Plan
SPV	Special Purpose Vehicle
TMS	Tailwater Management System
WA	Western Australia

## ACKNOWLEDGEMENTS

*Mr Wayne Paul from Kimberley Agricultural Investment Pty Ltd was interviewed on multiple occasions and provided data to support the development of this report.*

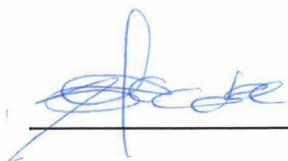
*Ms Jo-Anne Ellis from DPIRD provided evidence and responses to queries on behalf of the proponent.*

# Statement of Compliance

## Declaration of accuracy

In making this declaration, I am aware that sections 490 and 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed



Full name

EAMONN McCABE

Position (please print)

EXECUTIVE DIRECTOR, INDUSTRY AND ECONOMIC  
DEVELOPMENT

Organisation (please print including ABN/ACN if applicable)

DEPARTMENT OF PRIMARY INDUSTRIES AND REGIONAL  
DEVELOPMENT

ABN 18 951 343 745

Date

19 / 12 / 19

## EXECUTIVE SUMMARY AND KEY RECOMMENDATIONS

This *Weaber Plain Development Project EPBC Annual Environment Report* for the period 1 May 2018 to 30 April 2019 has been developed in accordance with Condition 3 of the Commonwealth Environmental Approval for the Weaber Plain Development Project, EPBC 2010/5491, issued under the Environment Protection and Biodiversity Conservation (EPBC) Act 1999.

The Western Australian Government, Kimberley Agricultural Investment Pty Ltd (KAI) and the Yawoorroong Miriung Gajerrong Yirrgeb Noong Dawang Aboriginal Corporation (MG Corp) are completing farm development and conducting irrigated agriculture across the Weaber Plain, north of Kununurra in the eastern Kimberley region of WA.

This report has been prepared for the Proponent, the Department of Primary Industries and Regional Development (DPIRD), for the period May 2018 to April 2019.

### Overall finding

The majority of conditions have been met, with an overall assessment that there is no evidence to conclude that environmental condition has declined beyond predictions made in the original environmental impact assessments for the Weaber Plain development. However, three conditions contain non-compliance or potential non-compliance findings, based upon inconsistent or inadequate monitoring regimes being implemented. Management has been shown to be occurring but monitoring inconsistencies exist across a number of conditions. Recommend the proponent undertakes a full review of all management plans in light of the actual versus expected (and construction-oriented) original 2012 MPs which were prepared under different operational context.

### Potential non-compliances

Potential non-compliances are summarised as follows. The issues raised relate predominantly to the application of the monitoring requirements, and do not necessarily point towards declining ecological condition or increased risk to Matters of National Environmental Significance (MNES).

Condition		Is the project compliant?	Status at 30 April 2019
<b>6</b>	Gouldian Finch Conservation Plan	Non-compliant	Gouldian finch monitoring was not undertaken during the reporting period.
<b>11</b>	Stormwater and Groundwater Discharge Management Plan	Potentially non-compliant	The functioning of the project stormwater outlet, known as the DW1 Gauging Station (DW1GS), remains problematic. The IRG has worked with the proponent to review monitoring regimes and water quality triggers in relation to Condition 11, but has identified that the DW1GS functionality and telemetered access is fundamental to the monitoring and the Operational Surface Water Model required under this condition. Mitigating this underperformance is essential if the Proponent is to be able to remotely monitor water flow through the stormwater outlet, respond to potential risks in a timely manner, and provide evidence of compliance with Condition 11.
<b>12</b>	Groundwater Management Plan	Potentially non-compliant	The review of groundwater monitoring for the period 2014-2018 noted inconsistencies in monitoring. The recommendations arising from this review should be adopted once considered by the IRG.

## Specific recommendations

### 1. Review of Conditions 10, 11 and 12 requirements and revision of management plans

As recommended in the 2017-18 *EPBC 2010/5491 Annual Environmental Report* (KBC, 2018), the associated Statement 938 EMP audit, previous advice from the IRG to the Minister, and the recent reviews of the requirements of and compliance with Conditions 11 and 12, a full review of all aquatic fauna-related conditions is considered necessary. Specifically, Conditions 10, 11 and 12, which all relate to the health of the MNES-listed aquatic fauna, and their habitat.

This review should take into account issues raised by the IRG and the Proponent in correspondence to the DoEE and the Minister to date, and will likely result in the preparation of revised management plans and condition variation requests.

The recommended review should be undertaken in conjunction with the revision to the EMP currently being undertaken by the Proponent under request by the WA Department of Water and Environmental regulation (DWER), *such that a consistent and streamlined set of environmental monitoring and management requirements is achieved.*

### 2. Aquatic fauna monitoring

It is further recommended that the Proponent considers undertaking the post-baseline aquatic fauna studies required under the Aquatic Fauna Management Plan. The Proponent has previously reported that the IRG supported delaying the 'three-year post development' aquatic fauna assessment until after 90% of land is farmed. However, given the flow of water from outside of the Goomig development to the Keep River in 2017, and two successive below average wet seasons in the East Kimberley, the auditor recommends that this work be undertaken to monitor and record ongoing changes to the Keep River prior to the 90% development stage being reached. The WA and NT governments are soon to commence road upgrades to the Keep River, which will likely increase the recreational fishing demand on that river, and consequently potentially impact upon any *Glyphis* and *Pristis* which may be present. Undertaking the required aquatic fauna studies now will assist with future attribution considerations if decline in MNES habitat or numbers are observed at a later date.

### 3. Restoration of DW1 Gauging Station functionality

A key issue arising from the compliance assessment is the limited functionality of the DW1 Gauging Station due to reported telecommunications and software accessibility issues. Given the significance of this infrastructure in the confirming the efficacy of the surface water management actions which are fundamental to the Goomig approvals, it is essential that this functionality be restored as a matter of urgency.

### 4. Review of Condition 6 - Gouldian Finch Conservation Plan

This report has found that the required monitoring relating to the *Gouldian Finch Conservation Plan* was not undertaken in 2018, however previous trends indicate increasing Gouldian populations in the buffer surrounding the Weaber Plain development. Completion of the process to amend Condition 6, which commenced in 2017, is encouraged.

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## 1.0 Introduction

This 2019 Ord EPBC Compliance Report for the period 1 May 2018 to 30 April 2019 has been developed in accordance with Condition 3 of the Commonwealth Environmental Approval for the Weaber Plain Development Project, EPBC 2010/5491, issued under the Environment Protection and Biodiversity Conservation (EPBC) Act 1999.

The Western Australian Government, Kimberley Agricultural Investment Pty Ltd (KAI) and the Yawoorroong Miriung Gajerrong Yirrgeb Noong Dawang Aboriginal Corporation (MG Corp) are completing farm development and conducting irrigated agriculture across the Weaber Plain, north of Kununurra in the eastern Kimberley region of WA.

The Weaber Plain is located immediately northeast of the existing Ord River Irrigation Area (ORIA) (Figure 1), with the development representing the second stage of the ORIA scheme. The development is supplied by a main irrigation channel (the 'M2 channel'). The M2 channel extends from a point partway along the older M1 irrigation channel, releasing irrigation water from Lake Argyle, which is conveyed via the Ord River and Lake Kununurra, and gravity-fed to the Goomig farm area.

The land within and surrounding the Weaber Plain Development Area is of traditional and current significance to Aboriginal people, who continue to maintain a strong cultural identity and attachment to the land. The Project Area is covered by the Ord Final Agreement (OFA). The traditional owners of land within the Weaber Plain area are the Miriung and Gajerrong (MG) peoples. The Weaber Plain development includes the farmland referred to as the Goomig farm area, in line with a naming recommendation from the Traditional Owners. Approximately ten per cent of the Goomig farmlands are held in freehold by the MG Corp. The buffer surrounding the development is also to be held in freehold by MG Corp (Figure 2).

Figure 1 - Location map

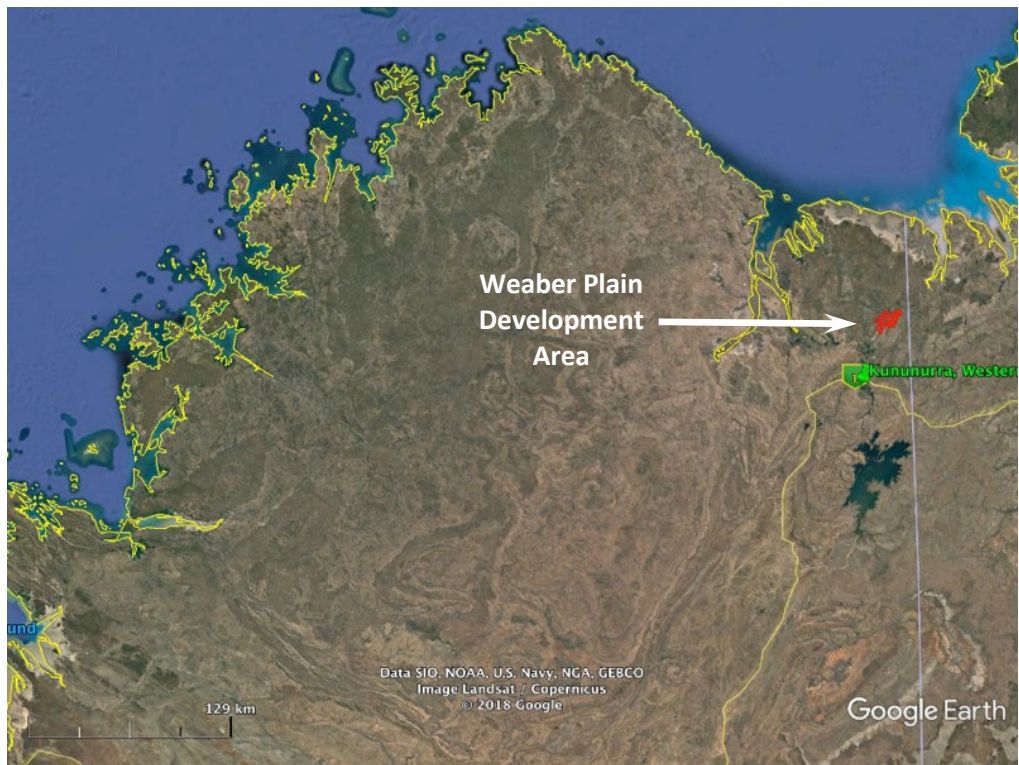
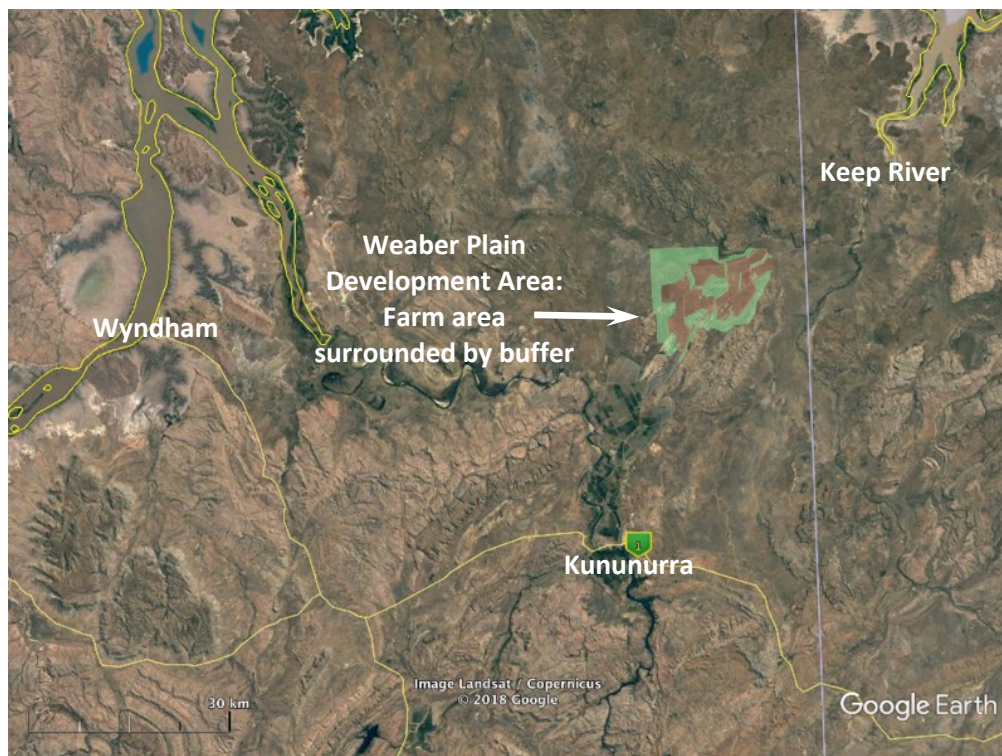


Figure 2 - Development area



## 1.1 Description of activities

The Goomig farm area has been developed for the purpose of conducting irrigated cropping.

*Table 1 – Proponent and project details*

Descriptor / Requirement	Detail
<b>Proponent</b>	Department of Primary Industries and Regional Development
<b>Proponent ABN</b>	18 951 343 745
<b>EPBC Number</b>	Approval 2010/5491
<b>Project name</b>	<i>Weaber Plain Development Project</i>
<b>Project location</b>	North-east of Kununurra, Western Australia
<b>Approval date</b>	13 September 2011
<b>Person accepting responsibility for this report</b>	Eamonn McCabe, Executive Director, Industry and Economic Development
<b>Reporting period dates</b>	1 May 2018 to 30 April 2019
<b>Date of report preparation</b>	May-July 2019

## 1.2 Current status: clearing, development and operation

Approximately two thirds of the Goomig farm area was cropped during the reporting period. The remaining farm land has been cleared (as previously reported) and is at various stages of development, including the 675ha owned by MG Corp (Lots 15 and 16). Tailwater recycling dams are in operation on farmed areas.

The Department of Primary Industries and Regional Development (DPIRD) remains the proponent as the planned transfer of proponenty to KAI cannot occur until the EMIA and SPV are approved by the WA Government.

## 1.3 Approvals

Associated and nearby approvals are summarised in Table 2. The approvals cited in Table 2 are not the subject of this CAR, however are referenced where necessary. Where relevant, progress and compliance in relation to overlapping conditions and actions have been assessed in unison in this report and in the associated *Ord River Irrigation Area Stage 2 M2 Supply Channel Compliance Assessment Report 2017* (Kimberley Boab Consulting, 2018), prepared for the proponent in relation to Statement 938.

As former proponent, the (now) Department of Jobs, Tourism, Science and Innovation (JTSI) sought approval for a road deviation from the Weaber Plain development area boundary and through the adjoining Knox Creek Plain, in 2017. The Moonamang Road extension was also assessed by the Australian Government under the EPBC Act 1999 and was deemed to be 'not a controlled action'. This work had not commenced during the reporting period.

Table 2 - Approvals

Area	Approval	Approval Authority	Approval Holder (Proponent)	Direct Relevance?
<b>M2 Area</b>	Statement 938	WA Minister for the Environment under EP Act 1986	Department of Primary Industries and Regional Development	Some overlapping requirements with EPBC 2010/5491
<b>Knox Creek Plain</b>	EPBC 2014/7143	Cwth Minister for the Environment under EPBC Act 1999	(KAI)	Some overlapping requirements with Statement 938 / EMP
<b>Weaber Plain [Goomig]</b>	SWL179228	Surface water licence issued under Rights in Water and Irrigation (RiWI) Act 1914	KAI	Associated Operating Strategy requires compliance with environmental approvals
<b>Knox Creek Plain (north)</b>	EPBC 2017/7856	Cwth Minister for the Environment under EPBC Act 1999	JTSI	'Not a controlled action' assessment for Moonamang Road extension through the northern Knox Creek Plain
<b>Sorby Hills</b>	EPBC 2011/6230	Cwth Minister for the Environment under EPBC Act 1999	Sorby Management Pty Ltd	<i>No direct implications</i> however area overlaps part of M2 area (subject of Statement 938)
<b>Sorby Hills</b>	Ministerial Statement 964	WA Minister for the Environment under EP Act 1986	Sorby Management Pty Ltd	<i>No direct implications</i> however area overlaps part of M2 area (subject of Statement 938)

## 1.4 Methodology

This report has been prepared in line with the DoEE Annual Compliance Report Guidelines (2014). Items previously reported as complete have not been re-assessed. Site inspections were undertaken in June and December 2018.

This report addresses the 12-month period from 1 May 2018 to 30 April 2019. Review criteria adopted this review are based on the conditions of approval 2010/5491. The 2018 compliance assessment report prepared for the Proponent in relation to WA Ministerial Statement 938 (Kimberley Boab Consulting, 2019) supplements this report.

Incorporated into the review are considerations of -

- The implementation and effectiveness of communication and reporting procedures;
- The controls and procedures in place to ensure the implementation of management actions occurs effectively and in a timely manner; and
- The adequacy and effectiveness of the communication to personnel of matters including environmental procedures and changes to practices.

The relevance and applicability of the actions to the current, post-construction/operational phase of the Goomig development, in line with previous audit recommendations, and the knowledge that a full revision of the associated actions in the Environmental Management Plan (EMP) approved under Ministerial Statement 938 is being undertaken at the request of the WA Department of Water and Environmental Regulation. The EMP review is integrated with the review of water-related conditions and management plans established under EPBC 2010/5491. Ensuring the EMP is consistent with the EPBC approval requires that EMP is not finalised until the Proponent and the Independent Review Group (IRG) established under Condition 9 of EPBC 2010/5491 have reviewed monitoring data obtained to date.

Site inspections of the Weaber Plain development area were undertaken in June, October and December 2018. Observations and evidence gathered during these inspections has informed this report. The attached EMP audit for the 2018 season provides further detail on the Proponent's compliance specific environmental management actions associated with the development.

## 2.0 Current Status

### 2.1 Environmental management arrangements

The Goomig farm area lease and Common Area Lease and Infrastructure Management Agreement (CALIM) were executed by the WA government and KAI during the reporting period. The Environmental Management Instrument Agreement (EMIA) which will underpin environmental management responsibilities in the future was not executed at the time of audit, but was agreed between KAI and MG Corp, as Goomig leasehold and freehold land owners. A Special Purpose Vehicle (SPV) to oversee environmental obligations had not yet been established.

The DPIRD remained the Proponent during the review period.

### 2.2 Farm development

The reporting period saw KAI continue with the development lands that had undergone the initial clearing stages in previous years. Cropping continued on lots 14/17/18 and lots 3/5, and 9, commenced on lots 19/20. Tailwater return systems were operated. Preparation for farming of lots 1, 2, 6, 8 and 12 continued (KAI) and lots 15 and 16 (MG Corp).

Figures 3 and 4 provide satellite imagery of the Goomig area at the beginning and end of the reporting period.

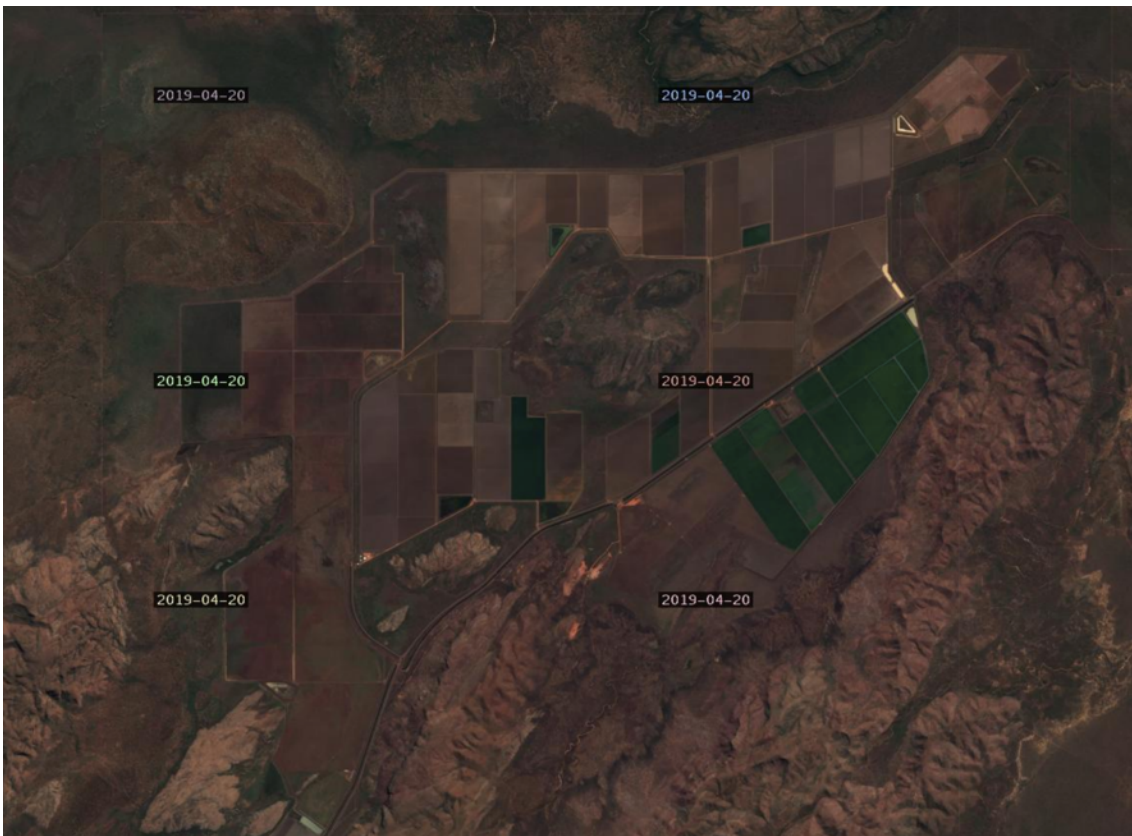


Figure 3 - Satellite image: Goomig farm area May 2018



(Source: Satamap. Sentinel 2).

Figure 4 - Satellite image Goomig farm area April 2019



(Source: Satamap. Sentinel 2).

## 2.3 Independent Review Group

The Independent Review Group (IRG) established under Condition 9 of EPBC 2010/5491 continues to review compliance with aquatic fauna MNES-related conditions. A review of the monitoring and management associated with the Goomig stormwater outlet (known as the DW1 Gauging Station, or DW1GS) requested by the IRG at its January and April 2018 meetings was undertaken throughout the year, and continued into 2019.

The IRG met on 4 October 2018 and 12 April 2019. The focus of the IRG during the reporting period was on the surface water risk management and monitoring, including triggers applied to monitoring assessments and management responses. A review of groundwater data accumulated to date was also initiated (via the Proponent). These matters are discussed in Table 4.

## 3.0 Compliance Assessment

### 3.1 Incidents, non-compliances and issues arising

Potential non-compliances identified during this reporting period relate to the implementation of Condition 11. The identified issues are summarised in Table 3.

*Table 3 - Summary of potential non-compliances*

Condition		Is the project compliant?	Status at 30 April 2019
<b>6</b>	Gouldian Finch Conservation Plan	Non-compliant	Gouldian finch monitoring was not undertaken during the reporting period.
<b>11</b>	Stormwater and Groundwater Discharge Management Plan	Potentially non-compliant	The functioning of the project stormwater outlet, known as the DW1 Gauging Station (DW1GS), remains problematic. The IRG has worked with the proponent to review monitoring regimes and water quality triggers in relation to Condition 11, but has identified that the DW1GS functionality and telemetered access is fundamental to the monitoring and the Operational Surface Water Model required under this condition. Mitigating this underperformance is essential if the Proponent is to be able to remotely monitor water flow through the stormwater outlet, respond to potential risks in a timely manner, and provide evidence of compliance with Condition 11.
<b>12</b>	Groundwater Management Plan	Potentially non-compliant	The review of groundwater monitoring for the period 2014-2018 noted inconsistencies in monitoring. The recommendations arising from this review should be adopted once considered by the IRG.

There were no reportable incidents in the 2018-19 review period.

### 3.2 Corrective measures for non-compliances

#### 3.2.1 Gouldian Finch Conservation Plan – Condition 6

In October 2017, the Proponent requested a revision of Condition 6, relating to Gouldian Finch management, to replace Condition 6 in its entirety with:

*The person taking the action must ensure that Gouldian Finch habitat trees or any vegetation within a 30 metre zone around these trees are not cleared within the Buffer Area.*

This request was made by the Proponent on the basis that monitoring has continued to show increasing Gouldian Finch presence in the buffer areas, and for consistency with surrounding approvals, including EPBC 2014/7143 relevant to the adjacent Knox Creek Plain, and 2011/6230 for the adjacent Sorby Hills area. The request also sought the removal of annual monitoring requirements contained within Condition 6.

The Proponent is still to consult with the (now) Department of Biodiversity, Conservation and Attractions (DBCA) and the Save the Gouldian Fund in relation to the performance of the management to date, and to seek endorsement of the proposal to amend Condition 6 of EPBC 2010/5491. It is recommended that this consultation be undertaken before the end of 2019, with a view to submitting a request for variation and a revised *Gouldian Finch Conservation Plan* to the Minister for consideration prior to the end of the next reporting period.

### 3.2.2 Stormwater and Groundwater Discharge Management Plan – Condition 11

It was previously reported (KBC, 2018) that the Independent Review Group had requested (at its April 2018 meeting) that the Proponent, with the support of IRG members, undertakes a review of the monitoring and management arrangements associated with Condition 11 – Stormwater and Groundwater Discharge Management Plan – and the associated Operational Surface Water Model.

The ability of the Proponent to obtain and remain compliant in relation to Condition 11, has been discussed by the IRG, the Proponent and the developer (KAI) regularly since project commencement. As such, following completion of the 2018 condition review by the IRG, a report was to be provided to the DoEE addressing any changes required in order to remain compliant with the intent of the condition (that is, protecting aquatic MNES in the Keep River), while taking into account operational, locational and climatic circumstances surrounding the Weaber Plain development. The Proponent previously advised that this report would be submitted to the Department in late 2018, subject to IRG agreement and approval. The IRG reviewed Condition 11 in late 2018 and early 2019. With finalisation of this analysis, including a review of the water quality triggers utilised in assessing risk to the Keep River (as the stormwater receiving body), it is appropriate that the Proponent now prepare a revised Stormwater and Groundwater Management Plan to reflect the outcomes of the review.

It should be noted that the non-compliances identified in relation to Condition 11 do not indicate that the Proponent has caused environmental harm or direct or indirect impact on the health of the listed aquatic MNES (or their habitat). However, formal agreement on suitable monitoring paradigms and the application of the sub-conditions, is required. This can be done through a revised SGDMP and potentially condition variation requests if considered necessary.

### 3.2.3 Groundwater Management Plan – Condition 12

Per the discussion in Table 4, a review of groundwater monitoring data obtained to date identified inconsistencies in the application of the groundwater monitoring regime. This has resulted in a potential non-compliance being applied to Condition 12. The review did not, however, identify environmental impacts exceeding those predicted in the impact analysis and modelling undertaken during the EPBC assessment process.

Following the DPIRD review of the groundwater data collected to date, it is recommended that the Groundwater Management Plan (GMP) be updated, with IRG input, incorporating the monitoring suggested in the review, and associated requests for variations to EPBC conditions submitted if required.



### 3.3 New environmental risks

No new environmental risks were identified during the reporting period.

### 3.4 Other recommendations

Recommended actions to assist the Proponent in clarifying and becoming compliant with relevant aspects of approval 2010/5491, in addition to those contained in Section 3.2, are noted below. It is appropriate that revisions to the conditions are undertaken in consideration of relevant conditions in adjacent approvals 2014/7143 and 2011/6230.

Key recommendations arising from this review are as follows –

#### 3.4.1 Aquatic MNES [Conditions 10, 11 and 12]

As recommended in the 2017-18 *EPBC 2010/5491 Annual Environmental Report* (KBC, 2018), the associated Statement 938 EMP audit, previous advice from the IRG to the Minister, and the recent reviews of the requirements of and compliance with Conditions 11 and 12, a full review of all aquatic fauna-related conditions is considered necessary. Specifically, Conditions 10, 11 and 12, which all relate to the health of the MNES-listed aquatic fauna, and their habitat.

This review should take into account issues raised by the IRG and the Proponent in correspondence to the DoEE and the Minister to date, and should also include revised management plans and condition variation requests.

The recommended review should also be undertaken in conjunction with the revision to the EMP currently being undertaken by the Proponent under request by the WA Department of Water and Environmental regulation (DWER), such that a consistent and streamlined set of environmental monitoring and management requirements is achieved.

It is further recommended that the Proponent considers undertaking the post-baseline aquatic fauna studies required under the Aquatic Fauna Management Plan. The Proponent has previously reported that the IRG supported delaying the ‘three-year post development’ aquatic fauna assessment until after 90% of land is farmed. However, given the flow of water from outside of the Goomig development to the Keep River in 2017, and two successive below average wet seasons in the East Kimberley, the auditor recommends that this work be undertaken to monitor and record ongoing changes to the Keep River prior to the 90% development stage being reached. The WA and NT governments are soon to commence road upgrades to the Keep River, which will likely increase the recreational fishing demand on that river, and consequently potentially impact upon any *Glyphis* and *Pristis* which may be present. Undertaking the required aquatic fauna studies now will assist with future attribution considerations if decline in MNES habitat or numbers are observed.

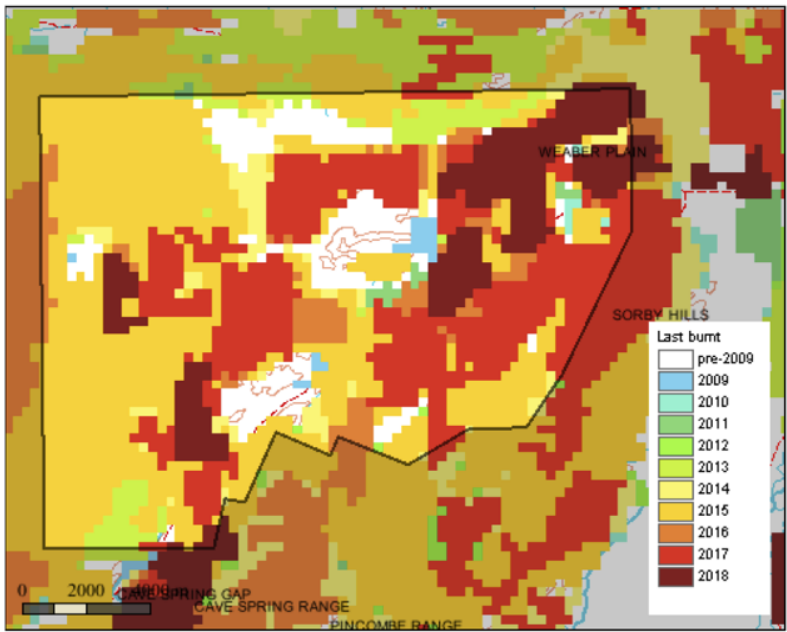
## 4.0 Compliance and Status Table


Table 4 summarises progress and delivery in relation to EPBC 2010/5491 conditions.

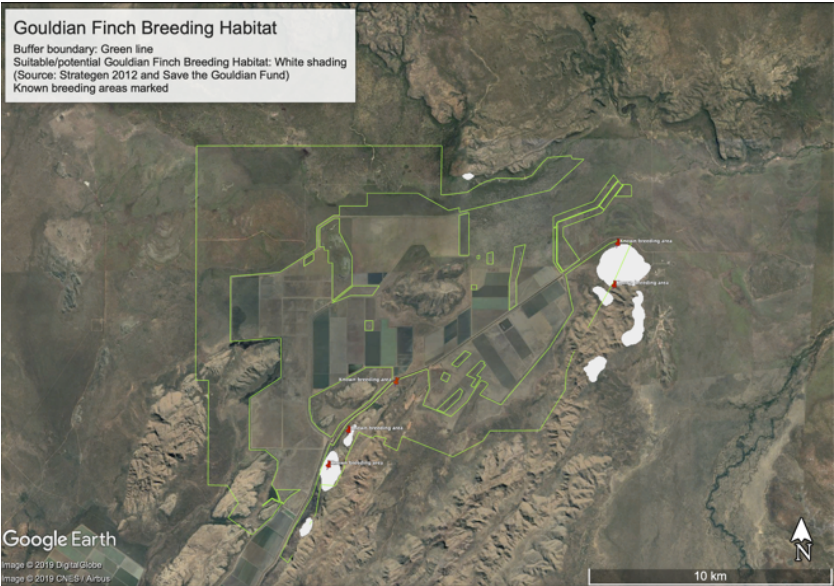
Table 4 - EPBC 2010-5491 Annual Environment Report

Condition number / reference	Condition	Is the project compliant?	Evidence / comments
1	Within 30 days after the commencement of the action, the person taking the action must advise the Department in writing of the actual date of commencement.	Compliant	Completed in a previous reporting period.
2	The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.	Compliant	<p>Records have been retained through DPIRD and KAI.</p> <p>Appendix A summarises evidence utilised to inform this report. In addition to this, Attachment 5 in Appendix B – <i>Statement 938 and EMP Compliance Assessment Report</i> – summarises evidence and reports retained to confirm compliance with the detailed Environmental Management Plan (EMP) required under Statement 938 issued under the <i>WA Environmental Protection Act 1986</i>.</p> <p><b>EVIDENCE:</b> 2010.5491.1819.001 (also attached as Appendix B)</p>
3	Within three months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of any management plans as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published.	Compliant	<p>The annual report for the period 1 May 2017 to 30 April 2018 is available at <a href="http://www.drd.wa.gov.au/projects/Agriculture/Pages/Ord-East-Kimberley-Expansion.aspx">http://www.drd.wa.gov.au/projects/Agriculture/Pages/Ord-East-Kimberley-Expansion.aspx</a></p> <p>This report was provided to the Department of the Environment and Energy on 6 September 2018 and uploaded to the website on 20 September 2018.</p> <p><b>EVIDENCE:</b> 2010.5491.1819.002 2010.5491.1810.003</p>
4	The person taking the action must provide a schedule of works to the Department prior to the commencement of the action.	Compliant	Completed in a previous reporting period.
5	To avoid and/or to minimise impacts on listed threatened and migratory species, the person taking the action must:	Not applicable	
5A	Not clear more than 9,375 hectares of vegetation (as described in the Supplementary Environmental Impact Statement);	Compliant	<p>Per Appendix B (refer to page 33), a total of 7,416.21ha on the Weaber Plain have been cleared for irrigated agriculture since commencement of the project, with an additional 914.12ha cleared for infrastructure. Total cleared area is 8,330.33ha.</p> <p><b>EVIDENCE:</b> 2010.5491.1819.001 (also attached as Appendix B)</p>
5B	Establish a Buffer Area of at least 11,470 hectares (as shown in Figure 2 of the Supplementary Environmental Impact Statement)	Compliant	No change. Buffer was established in a previous reporting period. The former proponent, the Minister for State Development, reported a buffer area of 11,546.1021ha in the 2016-

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	Statement), to be managed for conservation in perpetuity;		17 Annual Environment Report relating to EPBC 2010/5491. The extent of the buffer can be observed in Figure 2, marked in green shading.
5C	Not clear any Gouldian Finch breeding habitat that is known to have been utilised by the Gouldian Finch	Compliant	No clearing of Gouldian Finch breeding habitat has occurred.  <b>EVIDENCE:</b> 2010.5491.1819.004 <i>Refer also to Figure 7 under Condition 6, below.</i>
5D	Use no more than 120 GL of water per water year from the Ord River System for irrigation in the development area;	Compliant	Kimberley Agricultural Investment Pty Ltd (KAI) reported 2018 seasonal water use at 22.586GL, including distribution losses. Refer to <i>Goomig Surface Water Report 2018</i> (Appendix C) for further information.  <b>EVIDENCE:</b> 2010.5491.1819.005 (also attached as Appendix C)
5E	Discharge groundwater only in the K1 pool or downstream in the Keep River estuary (as identified in Figure 5 of the Supplementary Environmental Impact Statement).	Not applicable	Discharge of groundwater is not yet required.
6	In order to protect the Gouldian Finch, the person taking the action must prepare a Gouldian Finch Conservation Plan which must include the following:	Compliant	The Gouldian Finch Conservation Plan was finalised and approved in a previous reporting period. The Plan includes the required elements.
6A	A monitoring program that includes i. baseline surveys of the quality and distribution of Gouldian Finch feeding habitat in the Buffer Area; ii. annual monitoring of breeding populations, including timing and reproductive outputs; iii. annual wet season monitoring of foraging activity in critical wet-season feeding areas in close proximity to breeding areas; iv. mapping and annual monitoring of the phenology and productivity of wet season feeding habitat and assessment of their use by Gouldian Finches.	Non-compliant	i) Baseline surveys have been completed in a previous reporting period. This aspect of the condition is compliant. ii) Annual monitoring of breeding populations, including timing and reproductive output, <i>did not occur</i> during the compliance period. The Proponent has previously flagged a request for variation in regard to the frequency of ongoing Gouldian Finch monitoring, due to sustained increases in population records since the commencement of the development. iii) Annual wet season monitoring of foraging activity did not occur. iv) Mapping and annual phenology assessment of wet season feeding habitat did not occur.
6B	A Fire Management Program developed and implemented to protect and enhance Gouldian Finch feeding and breeding habitat. The Fire Management Program must incorporate relevant findings from fire management projects such as, but not limited to, the Ecofire project conducted in the northern and central Kimberley (Rangelands NRM 2011, <a href="http://www.rangelandswa.com.au/pages/150/ecofire">http://www.rangelandswa.com.au/pages/150/ecofire</a> ) and	Compliant	Fire management throughout the buffer area has continued in mosaic form through the reporting period. Firescar mapping over multiple years can be observed at <a href="https://www.firenorth.org.au/nafi3/">https://www.firenorth.org.au/nafi3/</a> The <i>Weaber Plain Goomig and surrounds Fire History Report 2009-2018</i> (generated from the Firenorth website, above) documents the reduction in the frequency and extent of burning in the project area in the last decade. The 'year since last burn' image pasted below (Figure 5), taken from this report, centred on the development area, clearly

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	<b>must be developed in close consultation with a Gouldian Finch expert.</b>		<p>indicates that 'blanket burns' across the Weaber Plain are not occurring. This has contributed to enhanced buffer condition and a resultant increase in Gouldian Finch feeding habitat quality and extent in previous years. Despite the absence of Gouldian Finch monitoring in the 2018-19 period, as noted above, the mosaic burning approach is expected to have sustained the overall positive impact on Gouldian Finches in the buffer area.</p> <p><b>Figure 5 – Year last burnt 2009-2018</b></p>  <p><b>EVIDENCE:</b> 2010.5491.1819.006</p>
6C	<b>Widening of all vegetation corridors indicated in Figure 2 of the Supplementary Environmental Impact Statement (including between Lots 5 and 18 and Lots 9 and 14) to a minimum width of 400m.</b>	Compliant	<p>The widening of vegetation corridors was completed in a previous reporting period. These corridors have been maintained as buffer areas. Corridors established under this requirement are marked in Figure 6. These corridors link the northern and southern conservation reserves adjacent to the Weaber Plain</p>

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			<p>development area buffers. Central to this image is the buffer surrounding Folly Rock.</p> <p><b>Figure 6 – Vegetation corridors</b></p>  <p><b>EVIDENCE:</b> 2010.5491.1819.007</p>
6D	<b>Avoidance of clearing any breeding habitat that has been utilised by the Gouldian Finch, as identified in Figure 1 of the Gouldian Finch Management Plan.</b>	Compliant	<p>No clearing of Gouldian Finch breeding habitat has occurred. Breeding habitat is retained in buffers and not cleared, per Figure 7.</p>

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			<p><b>Figure 7 – Gouldian Finch Breeding Habitat Areas</b></p>  <p><b>EVIDENCE:</b> 2010.5491.1819.004</p>
6E	Salvaging of breeding hollows that are cleared for relocation in the Buffer Area and results of their use recorded as part of the monitoring program.	Compliant	The salvaging and relocation of breeding hollows for installation as Gouldian Finch nest boxes was undertaken in 2013. Nest box locations are generally not disclosed in order to avoid buffer intrusion by ornithology tourists.
6F	Performance standards in relation to the Gouldian Finch population.	Potentially non-compliant	Performance standards for Gouldian Finches have been established. As noted above, population monitoring and assessment against the performance standards did not occur during the 2018-19 reporting period.
6G	Adaptive management triggers should performance standards not be met and contingency measures to be implemented if this occurs.	Potentially non-compliant	As Gouldian Finch monitoring did not occur, performance triggers could not be assessed for the reporting period. However, previous Gouldian Finch monitoring trends (2011-2017) combined with the sustained mosaic fire management approach illustrated in Figure 5, suggest that the threat to the Gouldian population has not increased with the establishment of the development.



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6H	An annual audit and review of the effectiveness of management measures, operating controls and implementation of any required improvements to management conditions;	Non-compliant	The annual audit was not undertaken due to Gouldian Finch monitoring not occurring in 2018. However, the continued exclusion of cattle from the buffer (main competitor), the addition of local watering points such as irrigation channels, and the fire management described under 6C (above) indicates that previous management which has resulted in increasing Gouldian Finch numbers (Save the Gouldian Fund, 2016, 2017, 2018) has been sustained. There is no evidence to suggest management may have contributed to declining habitat condition or finch populations.
6I	Protocols and timelines for review and reporting to the Department. The approved Gouldian Finch Conservation Plan must be implemented.	Potentially non-compliant	Protocols and timelines for reporting to the Department were incorporated into the <i>Gouldian Finch Conservation Plan</i> which was approved in 2012. Monitoring to inform the reporting was not undertaken during the reporting period. However, management actions from the <i>Gouldian Finch Conservation Plan</i> have continued to be implemented.
7	In order to protect listed threatened species, the person taking the action must prepare a Buffer Management Plan (BMP), which must include;  A. Vegetation and fauna surveys and mapping of the Buffer Area (shown in Figure 2 of the supplementary Environmental Impact Statement). Fauna surveys must be targeted for EPBC Act listed threatened species that are likely to occur in the Buffer Area. The program must be developed in consultation with WA DEC, with methodologies approved by the Department. The person taking the action must provide results of the survey program to the Department, including maps showing the location of any breeding, nesting or denning habitat identified in the Buffer Area. The survey program must include the endangered Northern Quoll ( <i>Dasyurus hallucatus</i> ), the vulnerable Red Goshawk ( <i>Erythrotriorchis radiates</i> ) and the vulnerable Northern Shrike-tit ( <i>Falcunculus frontatus whiteii</i> ). Surveys must be completed prior to 31 December 2012. B. Details of tenure and management arrangements of the Buffer Area that provides assurance that the area will be conserved and managed in perpetuity; C. Ongoing management practices that will be applied to the	Compliant	<p>The Buffer Management Plan was finalised and approved in a previous reporting period. Per Appendix B (Statement 938 and EMP Compliance Assessment Report), the intent of the buffer management and monitoring actions has been met during the reporting period, despite non-conformances relating to the monitoring requirements. The buffer condition has continued to improve with mosaic fire management and the removal of grazing pressures (i.e. cattle). Both of these key actions have contributed to the increase in Gouldian Finches, as reported in previous seasons.</p> <p>The attached <i>Statement 938 and EMP Compliance Assessment Report</i> (Appendix B) identifies potential non-conformances with buffer monitoring requirements, however overall the assessment is made that the Proponent is compliant with the Buffer Management Plan. This assessment is made on the basis that vegetation condition monitoring, exclusion of cattle and maintenance of fences has occurred in the buffer. Further, mosaic fire management in the buffer (refer to Condition 6B) has continued in 2018-19, as has pest and weed control (refer to Condition 8). The Proponent and KAI continue to retain photographic and documentary evidence of buffer condition and regular inspections, as listed in Appendix B. Human access remains controlled, with KAI managing the buffer.</p> <p><b>EVIDENCE:</b> Refer to Attachment 5 (Evidence register) of 2010.5491.1819.001</p>



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	<p><b>Buffer Area to maximise benefits to listed threatened species;</b></p> <p><b>D. Methods to control human disturbance of the Buffer Area, including restriction of vehicular access;</b></p> <p><b>E. Regular and ongoing inspection of the Buffer Area for weeds, plant pathogens and pest animals and methods to prevent the introduction and spread and provide for quick control of weeds, plant pathogens and pest animals in the Buffer Area;</b></p> <p><b>F. Fire management of the Buffer Area to maximise benefits to listed threatened species;</b></p> <p><b>G. Methods to minimise the impacts of construction activities on the Buffer Area;</b></p> <p><b>H. Rehabilitation of disturbed portions of the Buffer Area to benefit listed threatened species;</b></p> <p><b>I. Responsibilities and provision of resources for the ongoing management of the Buffer Area;</b></p> <p><b>J. Protocols and timing of review and reporting to the Department.</b></p> <p><b>K. The approved Buffer Management Plan must be implemented.</b></p> <p><b>Note: To avoid doubt, if a condition of another approval held by the proponent requires a Buffer Management Plan, the proponent may simultaneously meet the relevant requirements of both conditions by submitting a single plan.</b></p>		
8	<p><b>In order to protect listed threatened species, the person taking the action must undertake the action in accordance with the Weed, Plant pathogen and Pest Management Plan approved under the Environmental Protection Act 1986, and any amendments to that plan. The person taking the action must provide an annual report to the Department on compliance with the plan, with the first report submitted not later than 12 months after commencement of the action.</b></p>	Compliant	<p>Per Appendix A (Statement 938 and EMP Compliance Assessment Report), weed, plant pathogen and pest management actions have been undertaken in the buffer.</p> <p><b>EVIDENCE:</b> 2010.5491.1819.001 (attached as Appendix B).</p>
9	<p><b>The person taking the action must appoint an Independent Review Group to review hydrological aspects of the action and associated impacts on EPBC Act listed threatened species. The Independent Review Group must be established prior to the</b></p>	Compliant	<p>The Independent Review Group (IRG) was originally established in 2011.</p> <p>The IRG met on 4 October 2018 and 12 April 2019.</p>

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	<p><b>submission of the Aquatic Fauna Management Plan, Stormwater and Groundwater Discharge Management Plan and Groundwater Management Plan (referred to in Conditions 10, 11 and 12) to the Minister for approval. The Independent Review Group must be established according to the following requirements:</b></p> <p><b>A. The group must be funded, resourced and managed by the person taking the action</b></p> <p><b>B. The group must consist of independent scientific and technical experts, of whom at least one must be a Glyphis and Pristis expert and two must be technical experts with at least 5 years' experience in northern Australian surface water and groundwater hydrology. The members of the group and any subsequent changes must be approved by the Minister;</b></p> <p><b>C. Terms of Reference for the group must be prepared by the person taking the action and submitted for approval by the Minister. The Terms of Reference must include the frequency of proposed meetings and chairing and quorum arrangements. The Terms of Reference must be approved by the Minister in writing prior to the submission of the Aquatic Fauna Management Plan, Stormwater and Groundwater Discharge Management Plan and Groundwater Management Plan, to the Minister for approval;</b></p> <p><b>D. The group must provide advice on any substantive changes to, or reviews of the Aquatic Fauna Management Plan, Stormwater and Groundwater Discharge Management Plan and Groundwater Management Plan (referred to in Conditions 10, 11 and 12);</b></p> <p><b>E. The group must assess any exceedance of trigger values and advise changes as required;</b></p> <p><b>F. The Minister may seek advice from the review group at any time. Specific matters identified through such advice may need to be addressed in the Management Plans. Where such advice is sought the proponent would be provided with opportunity to submit information and respond to the</b></p>		<p>Dr Roy Green retired from Chairing the Weaber Plain IRG following the October meeting.</p> <p>Mr David Menzel, as chair of the associated Knox Creek Plain Independent Review Group established under EPBC2014/7143, has agreed to chair the 'joint' IRG for both Knox and Weaber. Mr Menzel observed the April meeting.</p> <p>Dr Helen Larson retired from the Weaber IRG following the April 2019 meeting. A replacement <i>Glyphis</i> and <i>Pristis</i> expert is being sought by the Proponent. Recommendations for the replacement have been received from Dr Larson and the Department of the Environment and Energy. The preferred appointment is Associate Professor David Morgan from Murdoch University.</p> <p>Once the replacement <i>Glyphis</i> and <i>Pristis</i> expert has agreed to participate, a request will be forwarded to the Minister, seeking approval of the <i>Glyphis</i> and <i>Pristis</i> expert and Mr Menzel. Changes to the IRG Terms of Reference may also be submitted for approval at this time.</p> <p>Substantive changes to the monitoring and risk assessment requirements of the <i>Stormwater and Groundwater Management Plan</i> (SGDMP) have been considered by the IRG over the period 2018-19. This includes a re-assessment of the monitoring regime and the suitability of triggers currently being used for assessing compliance. The Proponent intends revising the SGDMP during the 2019-20 reporting period, to be submitted to the IRG for review and consideration, prior to forwarding to the Department for Ministerial approval.</p> <p>The Proponent is currently reviewing the groundwater monitoring regime implemented since approval EPBC2010/5491 was issued. This review will result in findings and recommendations being provided to the IRG for consideration, following which there may be a revision of the <i>Groundwater Management Plan (GMP)</i>.</p> <p><b>EVIDENCE:</b> 2010.5491.1819.008 2010.5491.1819.010 2010.5491.1819.013</p>

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	specific matters identified, in order to ensure the Management Plans are based on the best available information.		
10	<p>In order to protect listed threatened species in the Keep River, the person taking the action must prepare an Aquatic Fauna Management Plan (AFMP), in consultation with the WA DEC and the Independent Review Group. The AFMP must be submitted for approval by the Minister. Clearance of farm lots must not be undertaken until the AFMP is approved. The AFMP must include:</p> <ul style="list-style-type: none"> <li>A. A targeted, non-lethal baseline surveying program for listed threatened species that are likely to occur in the Keep River. This must include the critically endangered Speartooth Shark (<i>Glyphis glyphis</i>), the endangered Northern River Shark (<i>Glyphis garricki</i>), the vulnerable Dwarf Sawfish (<i>Pristis clavata</i>) and the vulnerable Freshwater Sawfish (<i>Pristis microdon</i>). The methodology of the baseline surveying program must be developed in consultation with the Independent Review Group. Surveys must be conducted over a period of 3 years and must be undertaken in the four Keep River pools (K1, K2, K3 and K4) and at least 3 sites in the Keep River Estuary.</li> <li>B. Details of water quality and flow requirements, including relevant downstream environmental quality parameters, in accordance with ANZECC guidelines;</li> <li>C. A monitoring program in the Keep River pools to be undertaken to ensure water quality and flow does not exceed trigger values;</li> <li>D. Details of an outcome-based risk assessment which utilises data collected during the baseline monitoring program to determine the potential for risk to listed species at an individual and local population level;</li> <li>E. Details of management objectives, management actions, performance standards and contingency measures to mitigate impacts on listed aquatic fauna species in the Keep River;</li> <li>F. Regular and ongoing inspection of the Border Creek and</li> </ul>	Compliant	<p>The <i>Aquatic Fauna Management Plan</i> was approved in a previous reporting period and contains the required elements as stipulated under Condition 10.</p> <p>Baseline studies of aquatic fauna in the Keep River were completed in a previous reporting period.</p> <p>Under the AFMP, post-development Keep River aquatic fauna monitoring is required three years after development. At its June 2015 meeting, the IRG agreed that this post-development monitoring could occur when 90% of Goomig (Weaber Plain) farms are irrigated. This change has yet to be formalised in the AFMP, which will require an amendment or revision, however the approach has been adopted by the Proponent. The scale-based trigger for monitoring has not yet been reached.</p> <p>However, as previously reported, flow of farm runoff water from outside of the Weaber Plain area occurred over a sustained period in 2017. This water originated from properties outside of the area approved for development under EPBC 2010/5491. It is recommended that the Proponent consider undertaking post-development aquatic fauna monitoring in the Keep River to identify any changes in river and/or aquatic fauna health in order that such changes exclude (or indicate) attribution to the Goomig development. The IRG has considered that there is increasing levels of recreational fishing occurring at the Keep River due to road access improvements, and that 'public good' monitoring of the Keep River may be required independent of individual projects such as the Weaber development (refer to April 2019 meeting record – evidence item 2010.5491.1819.013).</p> <p><b>EVIDENCE:</b> 2010.5491.1819.013</p>

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	<p>Keep River for weeds, plant pathogens and pest animals and methods to prevent the introduction and provide for quick control of weeds, plant pathogens and pest animals in the Border Creek and Keep River as a result of the action;</p> <p>G. A targeted aquatic fauna monitoring program to be undertaken to measure the success of management measures to inform an adaptive management approach;</p> <p>H. Protocols and timelines for review and reporting to the Department.</p> <p>The approved Aquatic Fauna Management Plan must be implemented.</p>		
11	<p>In order to protect listed threatened species in the Keep River, the person taking the action must prepare a <i>Stormwater and Groundwater Discharge Management Plan</i> (SGDMP) in consultation with the Independent Review Group.</p> <p>The SGDMP must be submitted for approval by the Minister. Clearance of farm lots must not be undertaken until the SGDMP is approved. The SGDMP must include:</p> <p>A. Details of a Tailwater Management System to be established on each farm to manage runoff and minimise the discharge of pollutants into the Border Creek and Keep River. The Tailwater Management System must be actively managed to minimise the discharge of stormwater into the Border Creek and Keep River. The Tailwater Management Systems must be constructed and operational prior to commencement of irrigation;</p> <p>B. Management actions to prevent runoff transporting pollutants downstream should the agreed tailwater retention capacity be reached. This must include diversion of on-farm stormwater to irrigation channels in periods of low flow, where there is capacity, as identified by Conditions 11 .G and 11 .H, to ensure pollutants are not transported into the Border Creek and Keep River in low flow periods;</p> <p>C. A baseline monitoring program for water quality and hydrology in the Border Creek and Keep River. This must be</p>	Potentially non-compliant	<p>The <i>Stormwater and Groundwater Discharge Management Plan</i> (SGDMP) was approved in a previous reporting period. As noted under Condition 9, a revision of the SGDMP is to be undertaken. The IRG supported the full SGDMP review at its April 2019 meeting.</p> <p>Tailwater management systems have been installed and are operational on Weaber Plain (Goornig) farms.</p> <p>Significant attention was paid to the wording of this condition, by the Proponent, KAI and the IRG during the reporting period. Evidence item 2010.5491.1819.011 is the report presented to the IRG's April 2019 meeting, following revisions requested by the IRG in relation to an earlier version (2010.5491.1819.009) at their October 2018 meeting. The use of the term 'minimise the discharge of stormwater into the Border Creek and Keep River' was discussed during this review. Stormwater is natural rainfall-generated runoff and cannot be 'minimised' as rivers and creeks naturally form and flow on the basis of rainfall. A variation to the condition will be sought in conjunction with the forthcoming SGDMP revision.</p> <p>Management actions to prevent the transport of pollutants downstream include the tailwater management system, and the ability to install bunds in the drainage network if a flow risk is identified. No flows to the Keep River from KAI farms were observed during the reporting period, although channel water (that is, <i>not</i> farm runoff) flowed to the Keep River in March/April 2019. This was reported to the IRG and water monitoring undertaken. It should be noted that the release of channel water is the risk mitigation response required under the SGDMP, hence this was not considered a high-risk event.</p> <p>Baseline monitoring of the Keep River has been completed in a previous reporting period.</p>

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	<p>completed prior to commencement of irrigation and prior to any release of stormwater or groundwater from farms. Sampling sites must include the Keep River estuary and the four Keep River pools (K4, K3, K2 and K1). Methodologies and sampling locations must be established in consultation with the Independent Review Group;</p> <p>D. Installation of water quality and flow gauging stations capable of sampling first flush discharges at the stormwater outlet from the Development Area and installation of flow gauging stations at Border Creek and Keep River, in consultation with the Independent Review Group. Sampling must include analytes identified in Condition 11.I and must have the required accuracy to measure low flow rates. Gauging stations must be established prior to the commencement of irrigation. For any release of first flush water, monitoring must be conducted more than once a day and for any other stormwater flows monitoring must be conducted at least once per day. Automated sampling techniques may be utilised.</p> <p>E. Seasonal baseline water quality trigger values for the Keep River must be determined in accordance with ANZECC guidelines and agreed by the Independent Review Group. Until these trigger values are agreed by the Independent Review Group, ANZECC guidelines trigger values for systems with high conservation/ecological value (as defined in the ANZECC guidelines) must be used. Sample analytes must be agreed to by the Independent Review Group and in accordance with Condition 11.I;</p> <p>F. Use of best practice multivariate analyses on species level macro-invertebrate and fish assemblage data, with an adequate experimental design (as defined in the Aquatic Fauna Management Plan required under Condition 10), using multiple indices of 'ecological condition' and a 'weight of evidence' approach, to assess any change in ecological health of Keep River Pools (K1, K2 &amp; K3) relative to baseline and upstream reference sites.</p> <p>G. Updating of the discharge dilution and release timing model</p>		<p>The DW1GS gauging station remains problematic. The functionality of this flow monitoring point was not restored during the reporting period, despite the identification of communications and data flow issues in previous reporting periods. The DW1GS, as the outlet point for stormwater runoff from the development area, is required to function if water flows are to be monitored effectively and efficiently, and dilution calculations (to assess Keep River risks) are to be made in a responsive and timely manner.</p> <p>The DW1GS is currently not capable of sampling first flush discharges, however, on advice from the IRG, samples were taken manually during the first five days of flow to the Keep River in early January 2019 (the commencement of the seasonal flow). The IRG has previously agreed that daily stormwater sampling is not required during all flows where there is not a perceived or calculated risk to the Keep River.</p> <p>The IRG considered the paper "Proposal for a revised water quality monitoring and management approach – Goomig farm area (Weaber Plain Development – EPBC 2010/5491)" at its October 2018 meeting. This paper proposed a revision to the surface water monitoring program under the SGDMP; the establishment of a relationship between dry season tailwater quality and shoulder season and wet season runoff water quality; and the development and use of a revised Operational Surface Water Model (OSWM) to assess risk to the Keep River arising from Goomig farming activities, and initiate management actions accordingly. The revised OSWM approach simplified dilution calculations to assess risk in the Keep River. In partnership with the IRG, the paper was revised and reconsidered at the April 2019 IRG meeting, with the following recommendations, which were accepted:</p> <ol style="list-style-type: none"> <li>1. That the Independent Review Group (IRG) supports the Proponent and KAI adopting a proportional flow-based '1.5% rule' as the guiding rule for event-based monitoring.</li> <li>2. That the IRG requires that the Proponent resolves and resources the DW1GS, Keep River and Border Creek Gauging Station remote monitoring arrangements to meet reliability standards and to ensure consistent, ongoing data flow to meet the flow monitoring basis of the revised approach contained in this document.</li> </ol>

Condition number / reference	Condition	Is the project compliant?	Evidence / comments
	<p>(based on Keep River and Border Creek flow monitoring data and water quality characteristics of stormwater from the Development Area). This must be conducted prior to commencement of irrigation and annually during operation.</p> <p>H. An adaptive groundwater and stormwater discharge program to provide for adaptive management of the discharge of stormwater and surplus groundwater that includes:</p> <ul style="list-style-type: none"> <li>i. discharge rules and rates and contingency actions; and</li> <li>ii. monitoring locations and requirements including infrastructure and setup;</li> <li>iii. design and location of dewatering infrastructure;</li> <li>iv. design and location of discharge infrastructure;</li> <li>v. written evidence of any Northern Territory Government permits that are required for discharge of groundwater; and management measures that ensure discharge of water will not impact on water quality in Border Creek and Keep River, including erosion protection measures.</li> </ul> <p>I. Establishment of a list of key analytes to be sampled as part of ongoing water quality monitoring in consultation with the Independent Review Group. The list must be updated annually based on monitoring results</p> <p>J. Discharge of groundwater to the Keep River to occur only if all other strategies have been undertaken and there is sufficient flow as determined by Condition 11 .H. Discharge must be in the K1 pool or downstream in the Keep River estuary (as identified in Figure 5 of the Supplementary Environmental Impact Statement), with discharge timings and rules developed with consideration of ebb tides and in consultation with the Independent Review Group.</p> <p>K. Contingency actions to dispose of excess groundwater should monitor results from Condition 10.C and 10.G indicate there are likely to be adverse impacts on listed threatened species as a result of the action.</p> <p>L. An Operational Surface Water Model (OSWM) (that incorporates the outcomes of Conditions 11.A, 11.G and</p>		<p>3. That the IRG supports the Proponent and KAI to seek appropriate variations to the Conditions of the EPBC approval, from the Minister for the Environment and to adopt the routine and event-based monitoring programs.</p> <p>4. That the IRG supports the Proponent preparing and submitting a revised <i>Stormwater and Groundwater Discharge Management Plan</i>, incorporating the monitoring regime elements and other parameters outlined in this paper, including:</p> <ul style="list-style-type: none"> <li>a. Routine monitoring;</li> <li>b. Event monitoring;</li> <li>c. Composition and use of the Operational Surface Water Model in decision making; and</li> <li>d. Criteria for release of water from farm dams.</li> </ul> <p>In addition to this, the IRG further considered the suitability of using Keep River K3 pool wet season trigger levels, derived during the baseline water quality assessment, for dilution calculations, trigger analysis and the implementation of response actions. At their April 2019 meeting, the IRG reviewed an analysis of baseline water quality data, which informed the Keep River trigger establishment, prepared by KAI on behalf of the Proponent. The triggers used to date to assess risk and compliance in wet season flows are those identified during the baseline study (Bennett and George, 2014) for the K3 pool, however it has become clear on review that the K3 triggers were derived based on a very small data set. Furthermore, the data set comprised samples taken when the K3 pool was physically accessible, which is generally not possible once the wet season has commenced and stormwater flows occur. The analysis undertaken by KAI was undertaken in discussion with IRG member Dr Ray Evans.</p> <p>The K3 trigger analysis identified that the allowable water quality in the K3 pool (the receiving point for stormwater originating from the Goomig farmlands) is substantially higher than acceptable levels in the K4 pool (upstream), despite the source of 90% of water in the K3 pool being the K4 pool. However, further analysis revealed a strong correlation between water quality in the K3 and K4 pools across dates when samples were taken from both pools on the same day (in wet and dry seasons). Consequently, the IRG supported the use of existing K4 triggers for comparing the quality of stormwater originating from the Goomig farmland in the wet season, as a proxy for K3. The IRG requested further discussion in the 'triggers' paper at its April 19 meeting. This revision</p>



Condition number / reference	Condition	Is the project compliant?	Evidence / comments
	<p><b>11.H, and the requirements of 11.J and 11.K) to minimise discharges of stormwater and groundwater into the Border Creek and Keep River and ensure that all flow rules are complied with. A framework of the OSWM must be provided prior to commencement of irrigation and a full model, which includes updated monitoring results, provided within 12 months of the commencement of irrigation. The OSWM must be updated on a seasonal basis.</b></p> <p><b>M. Contingency measures should water quality and flow trigger values be exceeded or there are impacts on the health of threatened species as identified in aquatic fauna monitoring results in Condition 10.G. This must include the ceasing of discharge of stormwater and groundwater to Border Creek and Keep River, implementation of a high intensity (at least daily) water quality sampling program, release of fresh irrigation water to flush the system and changes to farm practices such as reducing or ceasing the use of fertilisers and chemicals.</b></p> <p><b>N. Protocols and timelines for reporting to the Department.</b></p> <p>The approved Stormwater and Groundwater Discharge Management Plan must be implemented. Note: To avoid doubt, if a condition of another approval held by the proponent requires a Stormwater and Groundwater Discharge Management Plan (or a similar plan), the proponent may simultaneously meet the relevant requirements of both conditions by submitting a single plan.</p>		<p>was not completed during the reporting period but will be prepared for the late 2019 meeting and subsequent revision of the SGDMP.</p> <p>The revised SGDMP will address the issues raised in the “Proposal for a revised water quality monitoring and management approach – Goomig farm area (Weaber Plain Development – EPBC 2010/5491)” and the K3 trigger revision papers and considered by the IRG during its 2018-19 meetings.</p> <p>It is anticipated that the revision of the SGDMP will address the discrepancies in relation to the current monitoring regime and that outlined in the approved SGDMP.</p> <p><b>EVIDENCE:</b> 2010.5491.1819.008 2010.5491.1819.009 2010.5491.1819.010 2010.5491.1819.011 2010.5491.1819.012 2010.5491.1819.013</p>
12	<p><b>In order to protect listed threatened species in the Keep River, the person taking the action must prepare a Groundwater Management Plan (GMP) in consultation with the Independent Review Group. The GMP must be submitted for approval by the Minister. Clearance of farm lots must not be undertaken until the GMP is approved. The GMP must include:</b></p> <p><b>A. Expansion of the existing groundwater monitoring bore network for the collection of baseline and ongoing groundwater data. The expanded bore network must be installed prior to commencing clearance of farm lots and at</b></p>	Potentially non-compliant	<p>The Groundwater Management Plan (GMP) was approved in 2012 and included the expanded bore network as stipulated in the condition.</p> <p>The GMP and the associated baseline bore monitoring program established a recommended bore monitoring regime which continued to be implemented in 2018-19.</p> <p>Parameters for monitoring were supported by the IRG in line with the recommendations of the baseline groundwater study (Lillicrap et al, 2015), in a previous reporting period.</p> <p>Bore monitoring results for 2018-19 have been incorporated into the groundwater</p>

Condition number / reference	Condition	Is the project compliant?	Evidence / comments
	<p>least 18 months before the commencement of irrigation and must include:</p> <p>(i) At least 20 high intensity regional bores, and</p> <p>(ii) At least 30 low intensity regional bores.</p> <p>The management plan must indicate the locations for the expanded bore network;</p> <p>B. Monitoring of the bores established under Condition 12.A to collect baseline and ongoing groundwater data. Baseline monitoring must commence at least 18 months prior to commencement of irrigation.</p> <p>Sampling parameters must be determined in consultation with the Independent Review Group and must include:</p> <p>(i) High intensity bores - Daily groundwater levels and temperature monitoring; Seasonal monitoring of Electrical Conductivity (EC), pH, Total Dissolved Solids (TDS), major cations and anions, nutrients and pesticides;</p> <p>(ii) High intensity bores - Seasonal monitoring of EC, pH, groundwater levels, TDS, nutrients and pesticides;</p> <p>C. The establishment of at least one on-farm bore per farm. The on-farm bore network must be installed prior to commencement of irrigation;</p> <p>D. Monitoring of the on-farm bores established under Condition 12.C to collect baseline and ongoing groundwater data. Parameters for monitoring must be determined in consultation with the Independent Review Group and must include seasonal monitoring of groundwater levels, EC and pH;</p> <p>E. Updates of the groundwater model and operation of the groundwater management system with monitoring data derived from Conditions 12.B and 12.D to assist in determining an optimal dewatering strategy. Numerical groundwater modelling must be updated prior to commencement of irrigation and in consultation with the Independent Review Group. Subsequent updates must be conducted every 2-4 years depending on monitoring in Condition 12.D (if worst case scenario indicates a breach in</p>		<p>database. The Proponent (DPIRD) has reviewed groundwater monitoring results with the view to seeking IRG support for a revised monitoring program. This will inform the Weaber Knox groundwater model. The report on the analysis of the groundwater monitoring is provided as evidence item 2010.5491.1819.016. The review found gaps in monitoring data and made recommendations on improving quality and consistency in monitoring, data collection and reporting. This is the reason for the potential non-compliance on this item.</p> <p>Key findings include:</p> <ul style="list-style-type: none"> <li>Groundwater levels have risen in the cleared and irrigated areas (1m over 4 years) and the cleared areas (0.5m over 4 years) relative to reference bores and those in uncleared areas. This is consistent with the rise forecast by modelling undertaken by KBR (2011) during the EPBC assessment process.</li> <li>When compared to the KBR (2011) scenario of 'medium climate, development and control measures', the rate of watertable rise is less than forecast, with KBR modelling predicting 5m over 10 years or 0.5m/year. The DPIRD review indicates this may be due to a slower rate of development or it may be that model parameters may also require assessment.</li> <li>Minimal chemistry response in groundwater was identified.</li> </ul> <p>Monitoring recommendations from the review include:</p> <ul style="list-style-type: none"> <li>Reducing monitoring frequency to annual (September each year)</li> <li>Farm bores are no longer required</li> <li>A further review to be undertaken in 5 years, following which the groundwater model should be updated</li> <li>Change to Condition 12E (modelling frequency) is suggested</li> <li>Future monitoring schedule (on a bore by bore basis) is provided</li> </ul> <p>Following the DPIRD review of the groundwater data collected to date, it is recommended that the Groundwater Management Plan (GMP) be reviewed and updated as required, with IRG input, and associated requests for variations to EPBC conditions submitted as required.</p> <p><b>EVIDENCE:</b> 2010.5491.1819.014 2010.5491.1819.015 2010.5491.1819.016</p>



Condition number / reference	Condition	Is the project compliant?	Evidence / comments
	<p>trigger levels, modelling must be updated every 2 years, otherwise every 4 years);</p> <p>F. Monitoring of the bores established under Condition 12.C for physical, chemical and nutrient parameters, if high or low intensity bores exceed groundwater quality or groundwater level triggers. Sampling must include groundwater levels, EC, TDS, major cations and anions, nutrients, pesticides and pH and must be undertaken on a seasonal basis for five years following the exceedance of trigger levels.</p> <p>G. Establishment of baseline groundwater quality monitoring in accordance with ANZECC guidelines (2000). Site specific trigger levels may be determined in consultation with the IRG, within the context of Condition 11.</p> <p>H. Establishment of groundwater management infrastructure, including a network of groundwater abstraction bores in the Development Area and Buffer Area and discharge infrastructure at the K1 pool or downstream in the Keep River estuary designed in consultation with the Independent Review Group. Forecasting of trigger level exceedance must be projected 10 years into the future. Abstraction wells and groundwater discharge infrastructure must be installed and operational prior to any expected breach of trigger levels based on forecasting (incorporating the accuracy of the model into installation timings).</p> <p>I. Establishment of a series of high intensity reference bores, at locations agreed to by the Independent Review Group, to define a groundwater reference condition. The reference bores must be installed at least 18 months prior to commencement of irrigation.</p> <p>J. Monitoring of the bores established under Condition 12.I to collect reference baseline and ongoing groundwater data. Sampling must include daily groundwater levels and temperature and seasonal EC and pH levels;</p> <p>K. Details of contingency measures should groundwater levels, soil salinity, chemicals or nutrients exceed trigger levels. This must include details of increased monitoring,</p>		

Condition number / reference	Condition	Is the project compliant?	Evidence / comments
	<p>implementation of a groundwater control program and changes to farm practices such as reducing or ceasing the use of fertilisers and chemicals.</p> <p>L. Details of contingency measures to be implemented should trend analysis of groundwater levels exceed the trend at reference bores by a rate determined in consultation with the Independent Review Group. This must include details of increased monitoring and implementation of a groundwater control program.</p> <p>M. Protocols and timelines for review and reporting to the Department.</p> <p>The approved Groundwater Management Plan must be implemented.</p> <p>Note: To avoid doubt, if a condition of another approval held by the proponent requires a Groundwater Management Plan, the proponent may simultaneously meet the relevant requirements of both conditions by submitting a single plan.</p>		
13	<p>In order to protect listed threatened species, the person taking the action must prepare a Decommissioning Plan (DP), in consultation with the WA DEC. A preliminary DP must be submitted for approval by the Minister not more than 5 years after commencement of the action and a final DP submitted at least 6 months prior to the anticipated date of decommissioning. The DP must include:</p> <p>A. The progressive removal or reuse of infrastructure where operations cease;</p> <p>B. Establishment of management practices and safeguards to minimise environmental disturbance;</p> <p>C. Measures to ensure Matters of National Environmental Significance are not impacted by progressive decommissioning, or final decommissioning of infrastructure;</p> <p>D. Rehabilitation actions for the infrastructure sites following decommissioning including for:</p> <p>i. optimising habitat and habitat connectivity for Matters of National Environmental Significance;</p>	Compliant	<p>The preliminary Decommissioning Plan was provided to the Department by the former proponent during a previous reporting period.</p> <p>Implementation of the Decommissioning Plan is not yet required.</p>

Condition number / reference	Condition	Is the project compliant?	Evidence / comments
	<p>ii. enhancing pre-construction environmental quality; and</p> <p>ii. ongoing management during rehabilitation.</p> <p>The approved Decommissioning Plan must be implemented.</p> <p>Note: To avoid doubt, if a condition of another approval held by the proponent requires a Decommissioning Plan, the proponent may simultaneously meet the relevant requirements of both conditions by submitting a single plan.</p>		
14	<p>In order to offset the potential impacts on listed threatened species, including the endangered Gouldian Finch (<i>Erythrura gouldiae</i>), the endangered Northern Quoll (<i>Dasyurus hallucatus</i>), the vulnerable Red Goshawk (<i>Erythrotriorchis radiates</i>), the vulnerable Crested Shrike-tit (<i>Falcunculus frontatus whitei</i>), the critically endangered Speartooth Shark (<i>Glyphis glyphis</i>), the endangered Northern River Shark (<i>Glyphis garricki</i>), the vulnerable Freshwater Sawfish (<i>Pristis microdon</i>) and the vulnerable Dwarf Sawfish (<i>Pristis clavata</i>), the person taking the action must prepare an Offset Management Plan (OMP) in consultation with the WA DEC. The OMP must be submitted for approval by the Minister. The OMP must be submitted to the Department for approval by the Minister no later than 12 months after the date of this approval decision. The OMP must include, but should not be limited to:</p> <p>A. Details of the direct offsets proposed in the draft Environmental Impact Statement and how these will deliver long-term conservation benefits for relevant terrestrial listed threatened species that would not otherwise be achieved. This must include:</p> <p>i. Mapping of the native vegetation habitat suitable for listed threatened species;</p> <p>ii. Details of the area and characteristics of suitable habitat for listed threatened species;</p> <p>iii. Details of whether the offset site provides the same landscape function and habitat type for the listed species as the habitat cleared or impacted by the proposal;</p>	Compliant	<p>The Offset Management Plan was approved in 2012. The required vegetation mapping was undertaken in a previous reporting period. The requirements of this Condition have been largely completed.</p> <p>The Proponent continues to provide \$150,000 per year to the CSIRO for the <i>Glyphis</i> and <i>Pristis</i> research program established under this condition.</p> <p><b>EVIDENCE:</b> 2010.5491.1819.017</p>

Condition number / reference	Condition	Is the project compliant?	Evidence / comments
	<p><b>iv.</b> Details of whether the offset site delivers a real conservation outcome that would not have otherwise been achieved (i.e. whether it was to be protected regardless of the action);</p> <p><b>v.</b> Steps that will be taken to ensure that any direct offset site will be protected in perpetuity for conservation purposes and details of evidence that will be provided to the Department that conservation covenants have been entered into;</p> <p><b>vi.</b> Provision of ongoing management of the offset site, including details of funding mechanisms.</p> <p><b>B.</b> Details of alternative direct or indirect offsets if the proposed offsets do not satisfy the requirements listed in Condition 14.A;</p> <p><b>C.</b> Funding of research activities, agreed by the Department, to an amount of no less than \$150,000 per year for 10 years, for the management, monitoring and/or improved protection of the critically endangered Speartooth Shark (<i>Glyphis glyphis</i>), the endangered Northern River Shark (<i>Glyphis garricki</i>), the vulnerable Freshwater Sawfish (<i>Pristis microdon</i>) and the vulnerable Dwarf Sawfish (<i>Pristis clavata</i>). The proposed research activities must be developed in consultation with the Sawfish and Glyphis Recovery Team. Payments must be made to a trust fund agreed to by the Department. Research activities must be approved and the first yearly payment must be provided within 18 months of the date of this approval decision. The approved Offset Management Plan must be implemented.</p>		
15	<p>If the person taking the action wishes to carry out any activity otherwise than in accordance with any of the management plans as specified in the conditions, the person taking the action must submit to the Department for the Minister's written approval a revised version of that management plan. The varied activity shall not commence until the Minister has approved the varied management plan in writing. The Minister will not approve a varied management plan unless the revised</p>	Compliant	<p>The Proponent anticipates submitting revised management plans in relation to Conditions 10, 11 and 12 in the forthcoming reporting period (2019-20), addressing issues raised in this report.</p> <p>Variation requests for amendments to Conditions 6, 7, 10, 11 and 12 many accompany the management plans. The timing of the submission is subject to review by external parties including the IRG, as required under specific conditions.</p>

Condition number / reference	Condition	Is the project compliant?	Evidence / comments
	management plan would result in an equivalent or improved environmental outcome over time. If the Minister approves the revised management plan, that management plan, must be implemented in place of the management plan originally approved.		Where implementation has not occurred explicitly in line with a management plan requirement (for example, buffer vegetation monitoring), the Proponent has implemented an alternative monitoring program and continues to ensure no decline in environmental condition which may negatively impact upon Matters of National Environmental Significance. This also relates to aquatic fauna in the Keep River, and the associated monitoring requirements under review by the IRG.
16	If the Minister believes that it is necessary or convenient for the better protection of the listed threatened and migratory species to do so, the Minister may request that the person taking the action make specified revisions to the management plans specified in the conditions and submit the revised management plan for the Minister's written approval. The person taking the action must comply with any such request. The revised approved management plan must be implemented. Unless the Minister has approved the revised management plan, then the person taking the action must continue to implement the management plan originally approved, as specified in the conditions.	Not applicable	No requests to amend management plans were received during the reporting period.
17	Unless otherwise agreed to in writing by the Minister, the person taking the action must publish all management plans referred to in these conditions of approval and any baseline information and monitoring results required by these plans on their website. Each management plan must be published on the website within 1 month of being approved and all baseline information and monitoring results must be published on the website annually, beginning twelve months after the commencement of the action.	Compliant	The management plans referred to in the conditions are available at <a href="http://www.drd.wa.gov.au/projects/Agriculture/Pages/Ord-East-Kimberley-Expansion.aspx">http://www.drd.wa.gov.au/projects/Agriculture/Pages/Ord-East-Kimberley-Expansion.aspx</a>
18	Prior to the sale of any land the person taking the action must provide evidence to the Department that any relevant conditions (including, but not limited to the requirements of Conditions 6, 7, 8, 10, 11, 12 and 13) have been registered on the title.	Compliant	The wording for condition registration on titles was agreed by the Department in November 2012. There have been no land sales to date. KAI leases the majority of the farm lots from the WA Government, and MG Corporation (Traditional owners) are to receive lots 15 and 16 in freehold under the terms of the <i>Ord Final Agreement</i> (the relevant Native Title settlement).
19	Upon the direction of the Minister, the person taking the action must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit	Not applicable	An independent audit was not directed by the Minister during the reporting period.

Condition number / reference	Condition	Is the project compliant?	Evidence / comments
	<b>criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister.</b>		
<b>20</b>	<b>If, at any time after five years from the date of this approval, the person taking the action has not substantially commenced the action, then the person taking the action must not substantially commence the action without the written agreement of the Minister.</b>	Compliant	The project has substantially commenced.

## 5.0 References

Bennett, D & George, R 2014, 'Goomig Farmlands development: baseline water quality in the lower Keep River', Resource management technical report 393, Department of Agriculture and Food, Western Australia, Perth.

Department of the Environment, 2014, *Annual Compliance Report Guidelines*. Commonwealth of Australia, Canberra.

Department of State Development, 2017, *EPBC 2010/5491 Annual Environmental Report 1 May 2016 to 30 April 2017*, Perth. Submitted to the Department of the Environment and Energy, June 2017.

KBR (Kellogg Brown Root), 2011, *East Kimberley Expansion Project: Weaber Plains groundwater modelling report – final (including Stage 4 results)*. Prepared for LandCorp, Perth.

Kimberley Boab Consulting, 2018, *EPBC 2010/5491 Annual Environmental Report 1 May 2017 to 30 April 2018*, Perth. Prepared for the Department of Primary Industries and Regional Development.

Kimberley Boab Consulting, 2019, *Ord River Irrigation Area Stage 2 M2 Supply Channel Compliance Assessment Report 2018*, prepared for the Department of Primary Industries and Regional Development, Kununurra.

Lillicrap, AM, George, RJ, Ryder, A & Bennett, D 2015, 'Groundwater chemistry of the Weaber Plain (Goomig Farmlands): baseline results 2010–13', Resource management technical report 392, Department of Agriculture and Food, Western Australia, Perth.

Save the Gouldian Fund, 2017, *Ord-East Kimberley Expansion Project – Weaber Plain Development Area Gouldian Finch Non Breeding Counts (2017)*. Prepared for Department of Regional Development.

## Appendix A – Supporting documentation / evidence

### PART A: Evidence referenced in Table 4

EVIDENCE ITEM CODE	DESCRIPTION	DATE
2010.5491.1819.001	Statement 938 and EMP Compliance Assessment Report 2018 (also Appendix B)	June 2019
2010.5491.1819.002	EPBC 2010-5491 Annual Environment Report Submission email	September 2018
2010.5491.1819.003	Confirmation of website uploads of reports	September 2018
2010.5491.1819.004	Gouldian Finch breeding areas map	From 2012
2010.5491.1819.005	Goomig Surface Water Report 2018 (also Appendix C)	January 2019
2010.5491.1819.006	Fire snapshot – Weaber Plain Goomig and Surrounds 2009-2018	Generated July 2018
2010.5491.1819.007	Goomig satellite image 20 April 2019, showing vegetation corridors intact	April 2019
2010.5491.1819.008	IRG Meeting Agenda – 4 October 2018	October 2018
2010.5491.1819.009	Condition 11 Monitoring and OSWM proposal September 2018	September 2018
2010.5491.1819.010	IRG Meeting Agenda – 12 April 2019 (includes October 2018 minutes)	April 2019
2010.5491.1819.011	Proposal for a revised water quality monitoring and management approach	April 2019
2010.5491.1819.012	Wet season trigger review	April 2019
2010.5491.1819.013	IRG Record of Meeting – 12 April 2019	April 2019
2010.5491.1819.014	Field chemistry database 2011-2018	January 2019
2010.5491.1819.015	Groundwater database 2010-2018	January 2019
2010.5491.1819.016	Goomig Farmlands: review and analysis of results of groundwater monitoring undertaken from 2014 to 2018	May 2019
2010.5491.1819.017	CSIRO <i>Glyphis</i> and <i>Pristis</i> research invoice 2019	

### PART B: Evidence to support *Statement 938 Compliance Assessment Report 2018*

AUDIT CODE	REFERENCE	TITLE	DATE
938.M4.3	2018.938.M4.3	Statement 938 and EMP Compliance Assessment Report	2017
938.M4.6	2018.938.M4.6	Submission of Statement of Compliance 2017	18/7/18
938.S1_2.10	2018.S1_2.10a	KAI Goomig Water Use 2018 Season	28/12/18
938.S1_2.10	2018.S1_2.10b	Goomig Surface Water Report 2018	31/3/19
EMP2	2018.EMP2	KAI Staff and Contractor Induction 2018	10/7/05
EMP19	2018.EMP19a	Goomig Soil test request form CSBP	31/12/18
EMP19	2018.EMP19b	CSBP Soil Analysis Report	17/1/19
EMP22	2018.EMP22a	Goomig Lot 14 Spill Kit on Site	22/10/18
EMP22	2018.EMP22b	Goomig Lot 14 On-site pill kit instructions	22/10/18
EMP22	2018.EMP22c	Emergency Response Procedure	28/12/19
EMP24	2018.EMP24a	Goomig Lot 9 Self-Bundled Fuel Tank at Tailwater Pump	22/10/18
EMP24	2018.EMP24b	Goomig Lot 14 Self-Bundled Hydrocarbon Tank	22/10/18
EMP24	2018.EMP24c	Goomig Lot 14 Bundled Oil At Pump For Tailwater Dam	22/10/18
EMP36	2018.EMP36b	Lone Eagle WA Pty Ltd Air Operators Certificate CASA.TAAOC.0272-12	7/11/17
EMP40	2018.EMP40	Emergency Response Procedure	28/12/19
EMP45	2018.EMP45a	Representative 2018 Fire Permit (multiple permits viewed)	Jun-18
EMP54	2018.EMP54a	Bore 42 Parkinsonia	13/6/18
EMP54	2018.EMP54b	Bore 42 Entry Track Near Parkinsonia	13/6/18
EMP54	2018.EMP54c	Parkinsonia Sprayed DW1-1 Near Wooljim Culvert	28/12/19
EMP63	2018.EMP63a	Goomig Western Buffer Access Track	11/12/18
EMP63	2018.EMP63b	DW1GS Access Track	11/12/18
EMP63	2018.EMP63c	Area 11 Access Track	11/12/18
EMP63	2018.EMP63d	Bore 10WP47 Access Track	13/6/18
EMP63	2018.EMP63e	Bore 10WP39 Access Track	13/6/18
EMP63	2018.EMP63f	Western Buffer Access Track Entry	13/6/18
EMP75	2018.EMP75a	Buffer Boundary Lot 13 and DW1 North View	13/6/18
EMP75	2018.EMP75b	Buffer Boundary Lot 13 and DW1 South View	13/6/18
EMP75	2018.EMP75c	Buffer Condition Bore W2R	13/6/18
EMP75	2018.EMP75d	Buffer Condition Bore 10WP39	13/6/18
EMP76	2018.EMP76	Buffer Adjacent Wooljim Road	19/12/18
EMP96	2018.EMP96a	Goomig Tailwater dams	11/12/18
EMP96	2018.EMP96b	Lots 19-20-21 Tailwater dam	23/10/18
EMP96	2018.EMP96c	Lots 14-17-18 Tailwater dam	23/10/18
EMP96	2018.EMP96d	Goomig Lot 14 Pump	19/12/18
EMP96	2018.EMP96e	Goomig Lot 9 Tailwater Pump	22/10/18
EMP100	2018.EMP100	KAI Farm Chemical Risk Assessment 2018	3/1/18
EMP102	2018.EMP102a	Border Creek Flow Record 2018	3/1/19
EMP102	2018.EMP102b	Goomig Surface Water Report 2018	31/3/19
EMP105	2018.EMP105a	Proposal for a revised water quality monitoring and management approach	12/4/19



AUDIT CODE	REFERENCE	TITLE	DATE
EMP105	2018.EMP105b	Wet Season Trigger Review	12/4/19
EMP110	2018.EMP110	Aquatic fauna monitoring paper to IRG	1/6/15
EMP119	2018.EMP119	Lot 5-18 accidental clearing rehabilitation	3/1/19
EMP120	2018.EMP120a	Goomig Farmlands Google Earth image	7/6/18
EMP120	2018.EMP120b	Lot 13 Completion of clearing	3/1/19
EMP125	2018.EMP125a	Leighton compound and old Keep River Road rehabilitation	3/1/19
EMP125	2018.EMP125b	Buffer track rehabilitation near DW1GS	19/12/18
EMP125	2018.EMP125c	Buffer track rehabilitation near DW1GS	19/12/18
EMP125	2018.EMP125d	Buffer track rehabilitation near DW1GS - satellite image	19/12/18
EMP125	2018.EMP125e	Buffer track rehabilitation near DW1GS	19/12/18
EMP132	2018.EMP132	Firescar Map Goomig Knox 2018	3/1/19
EMP133	2018.EMP133a	Buffer at Bore 40a	22/10/18
EMP133	2018.EMP133b	Buffer at Bore 40b	22/10/18
EMP133	2018.EMP133c	Buffer at Bore 40c	22/10/18
EMP133	2018.EMP133d	Buffer at Bore 40d	22/10/18
EMP133	2018.EMP133e	Buffer at Bore 40e	22/10/18
EMP133	2018.EMP133f	Buffer Corridor Between Lot 9 and Bore 51a	23/10/18
EMP133	2018.EMP133g	Buffer Corridor Between Lot 9 and Bore 51b	23/10/18
EMP133	2018.EMP133h	Buffer Corridor Between Lot 9 and Bore 51c	23/10/18
EMP133	2018.EMP133i	Buffer NE corner fence - A	22/10/18
EMP133	2018.EMP133j	Buffer NE corner fence - B	22/10/18
EMP133	2018.EMP133k	Buffer NE corner fence - C	22/10/18
EMP133	2018.EMP133l	Buffer NE corner fence - D	22/10/18
EMP133	2018.EMP133m	Buffer NW corner Folly Rock - A	23/10/18
EMP133	2018.EMP133n	Buffer NW corner Folly Rock - B	23/10/18
EMP133	2018.EMP133o	Buffer NW corner Folly Rock - C	23/10/18
EMP133	2018.EMP125b	Buffer Track Rehab Near DW1GSa	19/12/18
EMP133	2018.EMP125c	Buffer Track Rehab Near DW1GSb	19/12/18
EMP133	2018.EMP125d	Buffer Track Rehab Near DW1GSc	19/12/18
EMP133	2018.EMP133p	Buffer View W over Hillside Drain Near Bore 5 Lot 7a	22/10/18
EMP133	2018.EMP133q	Buffer View W over Hillside Drain Near Bore 5 Lot 7b	22/10/18
EMP133	2018.EMP133r	Buffer View W over Hillside Drain Near Bore 5 Lot 7c	22/10/18
EMP133	2018.EMP133s	Buffer View W over Hillside Drain Near Bore 5 Lot 7d	22/10/18
EMP133	2018.EMP133t	Buffer View W over Hillside Drain Near Bore 5 Lot 7e	22/10/18
EMP133	2018.EMP133u	Buffer West of Lot 9 near Bore 13a	22/10/18
EMP133	2018.EMP133v	Buffer West of Lot 9 near Bore 13b	22/10/18
EMP133	2018.EMP133w	Buffer West of Lot 9 near Bore 13c	22/10/18
EMP133	2018.EMP133x	Buffer Point Springs Corner	13/6/18
EMP133	2018.EMP133y	Buffer Point Springs Corner	13/6/18
EMP133	2018.EMP133z	Buffer Point Springs Corner	13/6/18
EMP133	2018.EMP133aa	Buffer 10WP47 Bore	13/6/18
EMP133	2018.EMP133ab	Buffer 10WP47 Bore	13/6/18
EMP133	2018.EMP133ac	Buffer 10WP47 Bore	13/6/18
EMP133	2018.EMP133ad	Buffer track western side entry	13/6/18
EMP133	2018.EMP133ae	Buffer track western side entry	13/6/18
EMP133	2018.EMP133af	Buffer track western side entry	13/6/18
EMP133	2018.EMP133ag	Buffer track western side entry	13/6/18
EMP133	2018.EMP133ah	Buffer west of Lot 7	13/6/18
EMP133	2018.EMP133ai	Buffer west of Lot 8	13/6/18
EMP133	2018.EMP133aj	Buffer between Lot 13 and DW1	13/6/18
EMP133	2018.EMP133ak	Buffer between Lot 13 and DW1	13/6/18
EMP133	2018.EMP133al	Buffer between Lot 13 and DW1	13/6/18
EMP133	2018.EMP133am	Buffer between Lot 13 and DW1	13/6/18
EMP133	2018.EMP133an	Buffer 10WP39	13/6/18
EMP133	2018.EMP133ao	Buffer 10WP39	13/6/18
EMP133	2018.EMP133ap	Buffer 10WP39	13/6/18
EMP133	2018.EMP133aq	Buffer 10WP39	13/6/18

## Appendix B – Ord River Irrigation Area Stage 2 M2 Supply Channel Compliance Assessment Report 2018

## Appendix C – Goomig Water Report 2018