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

Department of Primary Industries and Regional Development, Western Australia

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# Statement 938

## Ord River Irrigation Area Stage 2 M2 Supply Channel

### Compliance Assessment Report 2018

*1 January to 31 December 2018*

Prepared for

**Department of Primary Industries and Regional Development**

*For submission to the Office of the Environmental Protection Authority, Western Australia, in compliance with the requirements of Ministerial Statement 938 issued under the Environmental Protection Act 1986.*

JUNE 2019



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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.

This report is limited by the timing of auditor engagement late in 2018. Consequently, the auditor has had to draw on information and records obtained during operational season site visits (June and October 2018) and available evidence, as well as a non-operational audit inspection in December 2018.

Those audit items deemed completed by other auditors in previous compliance assessments have not been re-assessed, unless a material change in management or environmental outcome has occurred.

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## Document control

Date	Version	Reviewed by
03 January 2019	DRAFT A	DPIRD, KAI
20 June 2019	FINAL	DPIRD

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#### ACRONYMS AND ABBREVIATIONS

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)
DAFWA	Department of Agriculture and Food Western Australia
DPIRD	Department of Primary Industries and Regional Development (previously DAFWA)
DSD	(former) Department of State Development
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
Goomig	Goomig farm area, also known as the Weaber Plain farm area
GL	Gigalitres
GMP	Groundwater Management Plan
ha	Hectare
IRG	Independent Review Group
KAI	Kimberley Agricultural Investment Pty Ltd
KBC	Kimberley Boab Consulting Pty Ltd
km	Kilometres
MG	Miriuwung and Gajerrong (Corporation)
ML	Megalitres
MS938	Ministerial Statement 938
OEPA	Office of the Environmental Protection Authority
OIC	Ord irrigation Cooperative
ORIA	Ord River Irrigation Area
RiWI Act	Rights in Water and Irrigation Act 1914
SGDMP	Stormwater and Groundwater Discharge Management Plan
SPV	Special Purpose Vehicle
tpa	Tonnes per annum

**ACKNOWLEDGEMENTS**

The auditor acknowledges the previous audits undertaken by Strategen (2015, 2016, 2017), from which background information and advice has been drawn in the conduct of this current compliance assessment.

Mr Wayne Paul from Kimberley Agricultural Investment Pty Ltd was interviewed informally on multiple occasions, and formally during a site inspection on 19 December 2018.

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

Given the timing of the engagement to conduct the audit, a formal audit interview was unable to be conducted during the 2018 operating (farming) season. However, evidence and observations from site inspections during the operating season were included and considered in the compliance assessment process.

## EXECUTIVE SUMMARY AND KEY RECOMMENDATIONS

This compliance assessment of progress with the implementation of Ministerial Statement 938 for the period 1/1/2018 to 31/12/2018 was undertaken in late 2018 and early 2019 on behalf of the Proponent, the Western Australian Department of Primary Industries and Regional Development.

Fifteen (15) conditions under Statement 938 were audited. In relation to the associated Environmental Management Plan (EMP), 188 management and monitoring actions were reviewed. Compliance with Statement 938 is generally considered conformant, with the exception of the limited number of EMP actions not achieved as specified in the EMP.

Thirteen (13) or 7% of the EMP actions were potentially non-conformant. The EMP revision flagged in the 2017 Compliance Assessment Report for Statement 938 is still under way (and awaiting review of previous groundwater monitoring data). Given this, it is the auditor's assessment that the Proponent has been compliant with the intent of the current EMP. The Proponent has advised that the EMP revision will be finalised in 2019, with current actions mapped to the new EMP.

Key recommendations are as follows:

### **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 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.

### **Post-baseline aquatic fauna studies – Keep River**

It is further recommended that the Proponent considers undertaking the aquatic fauna studies identified in EMP110. The Proponent has previously reported that the Independent Review Group (IRG) established under EPBC approval 2010/5491 has 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.

## 1.0 Introduction

This Compliance Assessment Report (CAR) for the Ord River Irrigation Area Stage 2 (M2 Supply Channel) addresses compliance with Ministerial Statement 938 (MS938) and the associated *Environmental Management Program* (EMP) for the period 1 January 2018 to 31 December 2018. The Project approval was granted under the Environmental Protection Act 1986 (EP Act).

The project allows for the development of up to 30,500ha of land for irrigated agriculture in the East Kimberley, with an additional 3,000ha for infrastructure and 42,500ha as buffer area.

Alternatively known as 'Ord Stage 2', the Weaber Plain development commenced in 2010, and is now also referred to as the Goomig farmlands. The development of the Knox Creek Plain is yet to commence, however approvals were finalised in 2015. Both land areas are managed by Kimberley Agricultural Investment Pty Ltd (KAI) following the issuing of a lease in late 2017. Proponency transferred from the Western Australian Minister for State Development to the Minister for Regional Development (DPIRD) on 12 December 2017.

In mid-2017, at the request of the (then) Office of the Environmental Protection Authority (OEPA), a full review of the Weaber Plain EMP commenced. This revision is being undertaken in part to comply with new OEPA guidelines for EMPs (EPA, 2017) and in part to address the issues raised by previous auditors regarding the existing EMP. This process has not been complete, with the EPA Services Team in the Department of Water and Environmental Regulation (DWER) requesting in November 2018 a mapping of current actions to proposed provisions under the 'new EMP'. This mapping process is conducted separately, but is incorporated into the review herewith. As such, CAR relates to the existing, 2013 EMP. The current EMP was originally prepared for construction purposes. The recommendations of previous auditors in relation to revising the EMP are retained in the knowledge that this process is under way and is anticipated to be finalised before the next (2019) audit is completed.

A Compliance Assessment Plan (CAP) prepared by Strategen (2013) in relation to the Project was approved by the Office of the Environmental Protection Authority (OEPA) in late 2013. The CAP provides the basis for the methodology and structure of this report.

### 1.1 Project background

DPIRD holds the approval to develop land for irrigated agriculture across the Weaber, Keep River and Knox Creek Plains, located north-northeast of Kununurra in the eastern Kimberley region of WA and extending to the Northern Territory. The area of development (referred to as the M2 Area) is northeast of the Ord River Irrigation Area (ORIA), with the development representing the second stage of the ORIA scheme. In total, the M2 area comprises approximately 76 000 ha (including Buffer Areas). The name 'M2 area' refers to the agricultural land able to be serviced for irrigation from the main irrigation channel (the 'M2 channel').

Project development commenced in 2010, with the first phase of the Ord Stage 2 project, resulting in the construction of infrastructure (roads; channels; drainage network) to service the Weaber / Goomig farmlands.

Farming on Goomig commenced in 2015.

### 1.2 Project approvals

The M2 area is subject to a number of environmental approvals, issued to both the proponent and other land users.



Table 1 and Table 2 respectively present approvals relevant to the immediate vicinity of the M2 area:

*Table 1 - Project details and status of WA EP Act (1986) approvals*

Descriptor / Requirement	Detail
<b>Proponent</b>	Minister for Regional Development
<b>Approval – EP Act 1986</b>	Ministerial Statement 938, issued 12 June 2013
<b>Approved Final Project Design Plan – Weaber Plain (2012)</b>	<i>Ord River Irrigation Area – Weaber Plain Development</i>
<b>Approved Environmental Management Plan - Goomig</b>	<i>Ord River Irrigation Area – Weaber Plain Development Project Environmental Management Program</i> dated October 2013
<b>Approved Final Project Design Plan – Knox Creek Plain (2017)</b>	<i>Ord River Irrigation Area – Knox Creek Plain</i> , including amendment to accommodate Moonamang Road extension works being undertaken for the WA government by LandCorp.
<b>Approved Environmental Management Plan - Knox</b>	<i>Ord River Irrigation Area – Knox Creek Plain Environmental Management Program</i> dated August 2015

*Table 2 – Other environmental approvals relevant to the Ord River Irrigation Area Stage 2 footprint*

Area	Approval	Approval Authority	Approval (Proponent)	Holder	Direct Relevance?
<b>Weaber Plain [Goomig]</b>	EPBC 2010/5491	Cwth Minister for the Environment under Environment Protection and Biodiversity Conservation (EPBC) Act 1999	Department of Primary Industries and Regional Development		Some overlapping requirements with Statement 938 / EMP
<b>Knox Creek Plain</b>	EPBC 2014/7143	Cwth Minister for the Environment under EPBC Act 1999	Kimberley Agricultural Investment Pty Ltd (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	Department of State Development		' <i>Not a controlled action</i> ' assessment for Moonamang Road extension through 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)

The approvals cited in Table 2 are not the subject of this CAR, however are referenced where necessary. Further discussion on the linkages between the external approvals and Statement 938 is provided in the 2016 audit Statement 938 CAR (Strategen, 2017).

### 1.3 Proponent

Proponency was transferred to the Minister for Regional Development on 12 December, 2017. The Department of Primary Industries and Regional Development (DPIRD) manages the obligations on behalf of the Minister.

## 2.0 Current status

### 2.1 Clearing, development and operation

The Goomig farm area lease and Common Area Lease and Infrastructure Management Agreement (CALIM) were executed on 21 November 2017. The Environmental Management Instrument Agreement (EMIA) was not executed at the time of the 2018 audit, has been agreed between KAI and MG Corporation, as Goomig leasehold and freehold land owners. The Special Purpose Vehicle (SPV) to oversee environmental obligations has not yet been established.

The Minister for Regional Development remains the proponent as the planned transfer of proponentcy to KAI cannot occur until the EMIA and SPV are finalised and approved by the WA Government.

#### 2.1.1 Weaber Plain – Goomig

During the 2018 season, KAI continued to develop lands that had undergone the initial clearing stages in previous years, including Lots 15 and 16 on behalf of MG Corporation. The cropping program on the Goomig farmlands increased in 2018, with Lot 19 being added to the area previously cropped. Lots 3, 5, 9, 14, 17, 18 and 19 are now actively farmed with operational tailwater management systems. The preparation of the remaining farm lots continued.

KAI applied 16.744GL of irrigation water to its farm lots, from a total volume of 22.586GL released to the Goomig area through the Ord irrigation scheme.

There were no reported incidents of tailwater releases from the Goomig farmlands or accidental discharges of water to the Keep River in 2018.

MG Corporation progressed the planning for agriculture on Lots 15 and 16 with an expressions of interest process for farming partners indicating an intention to commence production on those lands in the near future.

Figures 1 and 2 show satellite imagery of the Goomig farm area in 2018 and 2017 respectively, indicating substantial end-of-year seasonal [rainfall] differences.

Figure 1 - Goomig Satellite Image – 11 December 2018



Image Source: Sentinel 2; Satamap, December 2018

Figure 2 - Goomig Satellite Image – 11 December 2017

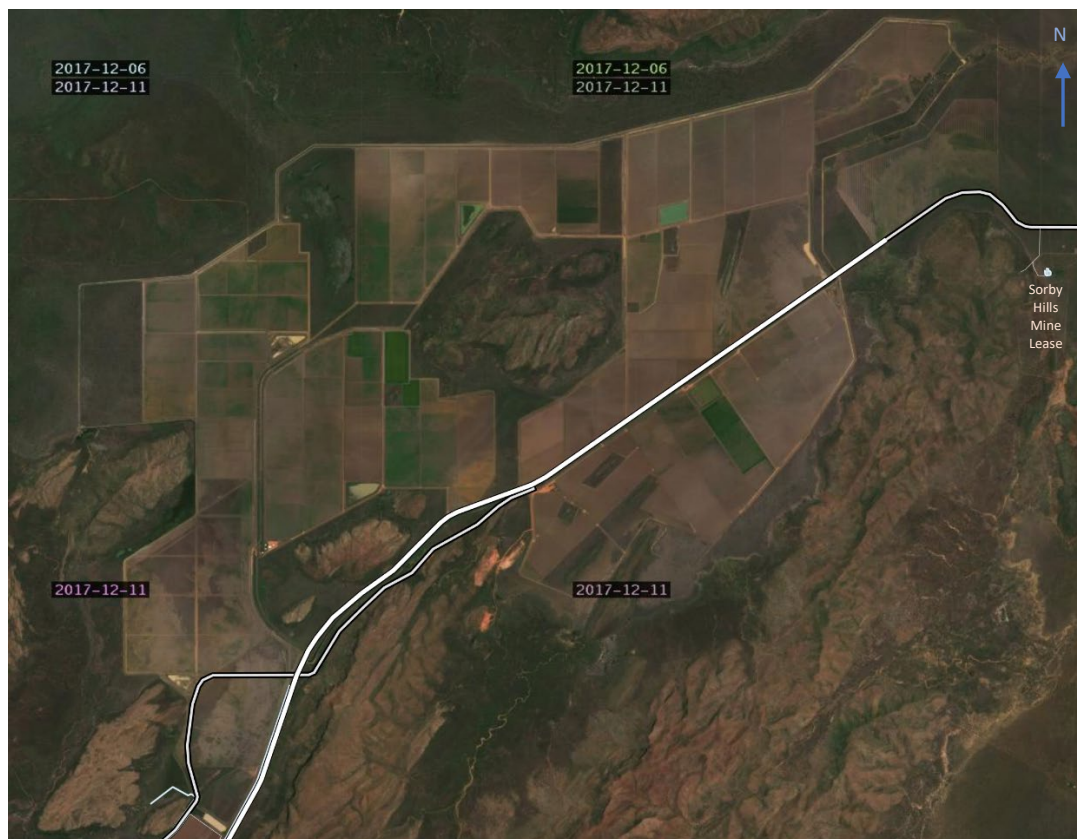


Image Source: Sentinel 2; Satamap, December 2018



### 2.1.2 Knox Creek Plain

The development of the Knox Creek Plain did not commence within the audit period. Environmental management requirements such as bore monitoring continued on the Knox Creek Plain, however the use of the land remains as pastoral grazing.

Figures 3 and 4 provide satellite imagery from December 2018 and 2017 respectively, indicating that clearing has not yet commenced. As with Goomig, seasonal differences can be seen (that is, more rainfall in late 2017 than 2018, resulting in a greener landscape).

Figure 3 - Knox Creek Plain Satellite Image 11 December 2018

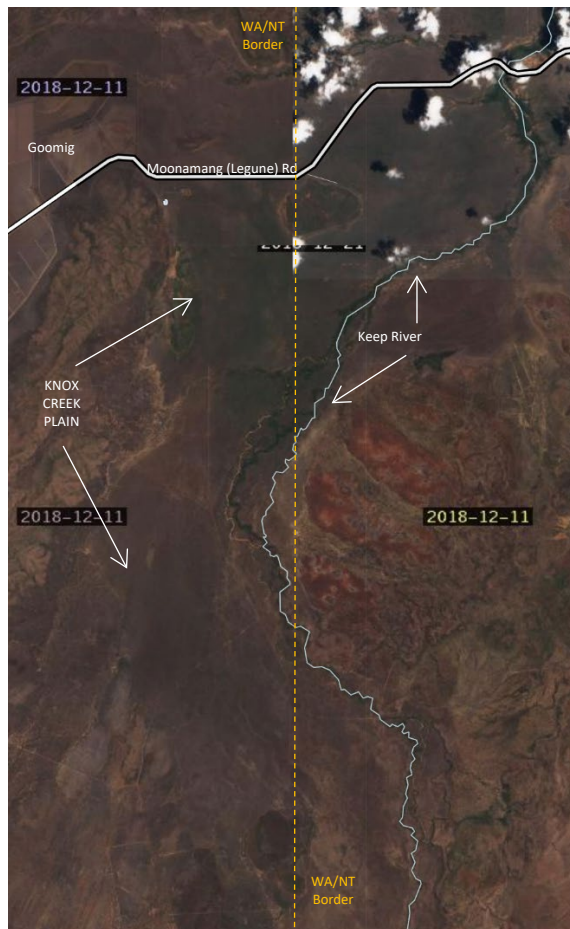


Figure 4 - Knox Creek Plain Satellite Image 11 December 2017



Image Source: Sentinel 2; Satamap, December 2018

## 2.2 Changes to approvals and management arrangements

No changes to approvals or management arrangements occurred during the compliance period. A review of the Environmental Management Plan (EMP) is under way, in line with contemporary EPA/DWER requirements, and informed by the outcomes of the current and previous compliance assessments.

## 2.3 Compliance Assessment Plan requirements

Condition 4 of Statement 938 stipulates requirements as listed in Table 3:

*Table 3 - Compliance reporting condition requirements*

<b>4</b>	<b>Compliance Reporting</b>
<b>4-1</b>	The proponent shall prepare and maintain a Compliance Assessment Plan to the satisfaction of the CEO (Chief Executive Officer of the Environmental Protection Authority)
<b>4-2</b>	The Compliance Assessment Plan shall indicate:
<b>4-2 (1)</b>	The frequency of compliance reporting;
<b>4-2 (2)</b>	The approach and timing of the compliance assessments;
<b>4-2 (3)</b>	The retention of compliance assessments;
<b>4-2 (4)</b>	Reporting of potential non-compliances and corrective actions taken;
<b>4-2 (5)</b>	The table of contents of compliance reports; and
<b>4-2 (6)</b>	Public availability of compliance reports.
<b>4-3</b>	The proponent shall assess compliance with conditions in accordance with the Compliance Assessment Plan required by Condition 4-1.
<b>4-4</b>	The proponent shall retain reports of all compliance assessments described in the Compliance Assessment Plan required by Condition 4-1 and shall make those reports available when requested by the CEO.
<b>4-5</b>	The proponent shall advise the CEO of any potential non-compliance within 7 days.
<b>4-6</b>	The proponent shall submit a compliance assessment report annually from the date of issue of this Statement addressing the previous twelve-month period or other period as accepted by the CEO. The compliance acceptance report shall:
<b>4-6 (1)</b>	Be endorsed by the proponent's Managing Director or a person delegated to sign on the Managing Director's behalf;
<b>4-6 (2)</b>	Include a statement as to whether the proponent has complied with the conditions;
<b>4-6 (3)</b>	Identify all potential non-compliances and describe corrective and preventative actions taken;
<b>4-6 (4)</b>	Be made publicly available in accordance with the Compliance Assessment Plan; and
<b>4-6 (5)</b>	Indicate any proposed changes to the Compliance Assessment Plan as required by Condition 4-1.

The Compliance Assessment Plan (CAP) established under Condition 4 was approved by the CEO in late 2013. This report complies with the CAP, which was prepared in accordance with EPA guidelines:

- *Post Assessment Guideline for Preparing a Compliance Assessment Plan* (OEPA 2012a)
- *Post Assessment Guideline for Preparing an Audit Table* (OEPA 2012b)
- *Post Assessment Guideline for Making Information Publicly Available* (OEPA 2012c).

The CAP also requires an assessment of the proponent's performance in relation to Conditions 5-1, 6-1 and 7-2 of MS938, as follows –

**Condition 5-1:**

The proponent shall implement the proposal in accordance with the "Environmental Management Programme" dated July 2011, or subsequent revisions approved by the CEO.

**Condition 6-1:**

The proponent shall implement the proposal in accordance with the Final Project Design Plan dated July 2011, or subsequent revisions approved by the CEO.

**Condition 7-2:**

The proponent shall implement the Final Decommissioning Plan required by Condition 7-1 until such time that the CEO determines that decommissioning is complete.

The CAP stipulates that the CAR will include:

- An overall statement of compliance with the requirement to implement each plan.
- A declaration of compliance status for each of the key requirements and/or objectives of each program/plan including information/documentation which supports/verifies the declared compliance status.
- A review of the performance and effectiveness of each program/plan in achieving the environmental outcomes required, including assessing the results of any required monitoring.

(Strategen, 2013a, p4.)

The CAP will be revised to accommodate the new EMP when this is finalised by the Proponent and accepted by DWER (EPA Services). This will be informed by suggestions made in the current CAR (this document) and previous CARs relating to Statement 938.

## 3.0 Audit methodology

### 3.1 Plan

#### 3.1.1 Purpose and scope

The 2018 audit of compliance with the conditions of Statement 938 and the associated EMP has been undertaken to meet the requirements of Condition 4 of Statement 938 (refer to

Table 3 for compliance review and reporting specifications).

The audit was undertaken with the knowledge that a revised EMP, prepared to meet the *Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans* (EPA, 2017), was submitted by the Proponent to the OEPA (now EPA Services) in October 2017. At the time of the 2018 audit and subsequent report preparation, changes requested by EPA Services were being addressed. This current compliance assessment informs the EMP revision process. The revised EMP, when approved, will address inconsistencies, duplication and other items of concern as addressed in previous audits (Strategen 2017; 2016; 2015) which have been identified post-construction.

Those items deemed to be *completed* during previous compliance periods were not reassessed during this audit.

### 3.1.2 Audit period

This report addresses the 12- month period from 1 January 2018 to 31 December 2018.

### 3.1.3 Audit criteria

Audit criteria used in this review are based on the conditions of approvals and Schedule 1 of MS 938 and key actions of the *ORIA Stage 2-Weaber Plain Development Project Environmental Management Program* (DSD 2013) and the addendum *Ord River Irrigation Area Knox Creek Plain Environmental Management Program* (Knox EMP, KBC 2015). The criteria align with those adopted in previous audits (for example, KBC 2018; Strategen 2017; 2016; 2015).

Incorporated into the audit 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;
- The adequacy and effectiveness of the communication to personnel of matters including environmental procedures and changes to practices; and
- 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 EMP review was under way at the time of audit.

#### 3.1.3.1 Ministerial Statement 938

An audit table has been prepared for condition 4-1 of MS 938 in accordance with the approved CAP. The audit table contains each condition separated into audit elements for auditing purposes (i.e. the audit criteria), and addresses the following elements:

- Audit code: Ministerial Statement reference number.
- Subject: The environmental theme/issue.
- Action: What the proponent must do.
- How: The manner in which the requirements of an audit element should be achieved.
- Evidence: Information or data collected to verify compliance, i.e. report/letter/site inspection requirements.
- Phase: Project phase applicable to audit element.
- Timeframe: Specific timing for achieving the requirements of an audit element.
- Status: Notes about the fulfilment of compliance using compliance status terms.
- Further information: Additional comments to support compliance findings, where required.

The 'responsibility' column included in previous audits has been removed as KAI delivers the obligations however the Minister remains responsible as proponent.

#### 3.1.3.2 Environmental Management Program

Audit tables containing the management and monitoring actions from the EMP and its addendum the Knox EMP have been prepared. The majority of actions from the Knox EMP were identical to actions contained within the Weaber EMP; however, conformance with these actions was assessed separately for each area. Where Knox EMP actions differed, additional audit items have been included in the EMP audit tables and labelled in the item

column as *KEMP*. Where an audit item is not relevant to a particular area, or has previously been assessed as completed, the item has been marked Not Applicable (NA).

### 3.1.4 Methodology

In line with the approved CAP, the methodology for the compliance assessment comprised approaches as summarised in Table 4:

*Table 4 - Application of CAP methodology*

Requirement	Application during 2018 Compliance Assessment
<b>One or more annual site inspections</b>	A formal site inspection was conducted for this audit on 19 December 2018. Regular site inspections and informal compliance review checks were conducted throughout 2018 operating season, including a full site inspection on 13 June 2018 and again on 22 October 2018. These regular inspections included advice to the land manager (KAI) regarding active management to ensure compliance with the Statement 938 conditions and EMP actions.
<b>On-site and off-site consultation with and interviews of proponent, sub-contractor and other personnel in positions appropriate to inform the audit process</b>	Compliance interviews were conducted with KAI staff 19 December 2018 and informally prior to these dates. Ongoing compliance discussions with DPIRD and KAI staff throughout 2018 operating season.
<b>Compilation, review and assessment of documentary evidence</b>	December 2018 to March 2019. This includes follow-up with DPIRD and KAI staff regarding 2018 practices and compliance. Sampling of evidence was used where appropriate.

As the auditor was appointed late in the 2018 season, full compliance auditing during the operating (dry) season was not possible. However, the auditor has drawn on previous visits to the Goomig farmlands during the 2018 season, supported by notes, photographic evidence and other records (for example, monitoring records) to support the assessments contained in this CAR.

## 3.2 Terminology

Each audit table contains a 'Status' field which describes the auditor's assessment of compliance with the implementation of the action, condition, procedure or commitment. Although the Executive Director of the EPA Services team makes the final determination of compliance, it is necessary to update this field each reporting period, as the project progresses. The (former) OEPA (2012a, 2012b, 2012c and 2012d) has prepared guidance related to the preparation of compliance audits, including generic expressions that are used to identify the status of each item.

Table 5 lists the assessment terminology utilised in this report.



Table 5 - Compliance assessment terminology

Compliance Status Terms	Abbrev	Definition	Notes
<b>Compliant (Conformant)</b>	C	Implementation of the proposal has been carried out in accordance with the requirements of the audit element.	This term applies to audit elements with: <ul style="list-style-type: none"> <li>ongoing requirements that have been met during the reporting period; and</li> <li>requirements with a finite period of application that have been met during the reporting period, but whose status has not yet been classified as 'completed'.</li> </ul>
<b>Completed</b>	CLD	A requirement with a finite period of application has been satisfactorily completed.	This term may only be used where: <ul style="list-style-type: none"> <li>audit elements have a finite period of application (e.g. construction activities, development of a document);</li> <li>the action has been satisfactorily completed; and</li> <li>the DWER has provided written acceptance of 'completed' status for the audit element.</li> </ul>
<b>Not required at this stage</b>	NR	The requirements of the audit element were not triggered during the reporting period.	This should be consistent with the 'Phase' column of the audit table.
<b>Potentially Non-compliant (Non-conformant)</b>	PNC	Possible or likely failure to meet the requirements of the audit element.	This term may apply where during the reporting period the proponent has identified a potential non-compliance and has not yet finalised its investigations to determine whether non-compliance has occurred.
<b>Non-compliant</b>	NC	Implementation of the proposal has not been carried out in accordance with the requirements of the audit element.	This term applies where the requirements of the audit element are not "complete" or have not been met during the reporting period.
<b>In Process</b>	IP	Where an audit element requires a management or monitoring plan be submitted to the DWER or another government agency for approval, that submission has been made and no further information or changes have been requested by the DWER or the other government agency and assessment by the DWER or other government agency for approval is still pending.	<p><b>The term 'In Process' may not be used for any purpose other than that stated in the Definition Column.</b></p> <p>The term 'In Process' may not be used to describe the compliance status of an implementation condition and/or procedure that requires implementation throughout the life of the project (e.g. implementation of a management plan).</p>

Source: EPA Statement of Compliance – Post-Assessment Form 2

## 4.0 Audit findings

### 4.1 Compliance with conditions

The results of the audit of MS 938 are shown in Attachment 2. A total of 15 items were audited.

The auditor identified that of 178 audit items assessed for the associated *Environmental Management Plan* (required to be implemented under condition 5-1), thirteen (13) or approximately 7%, of management actions were potentially non-conformant. The Proponent intends submitting a revised EMP in 2019, following the receipt (from the Independent Review Group) of support for amendments to the required groundwater and surfacewater monitoring regimes.

As with previous audits, the majority of these actions relate to an aspect of formal monitoring that is currently not being undertaken, or is being partially undertaken, as prescribed in the EMP. Monitoring is; however, being undertaken as guided by the EPBC Act approval (EPBC 2010/5491) and the associated Independent Review Group (IRG) established under the EPBC approval to oversee compliance with the management of groundwater and surface water risks arising from the Goomig farm area. *There were no reported incidents or auditor-observed material environmental impacts of significance.*

The auditors note that most of the identified PNCs were also identified in previous years (i.e. they are yet to be remedied and the previously recommended revisions to the EMP are yet to be finalised).

*The auditor's overall assessment is that the intention of the EMP is likely being met, however the management and monitoring arrangements around groundwater, stormwater and vegetation condition remain areas for reassessment of conditions and required actions, per previous audit advice.*

#### 4.1.1 Compliance with Schedule 1

Condition 1-1 of MS938 requires implementation of the proposal as documented in Schedule 1 of the Statement. Results of the audit of the implementation of the key characteristics contained in Schedule 1 are outlined in Attachment 3. No potential non-compliances with Schedule 1 were identified.

#### 4.1.2 Compliance with Environmental Management Program actions

As noted in previous CARs, based on feedback from KAI (and previously, LandCorp) during the audit process, many of the potential non-conformances highlight a need for the revision of these actions due to the reported:

- impracticality of implementation;
- increased knowledge of actual impacts based on baseline study results;
- operational experience;
- prescriptive requirements not necessarily achieving best environmental outcome; and
- frequency of monitoring being incongruent with industry practice.

These issues are currently being addressed in the revision of the EMP, which will meet current guidelines (EPA, 2017).

PNCs are summarised in Table 6, followed by aggregated auditor recommendations (listed according to environmental factor).

Table 6 – Potential EMP non-conformances summary

ITEM	ACTION	AUDIT FINDING 2017	AUDIT FINDING 2018
<b>EMP 20</b>	<p>Surface and subsoil ESP and pH within the project area, with a specific focus on areas with Aquitaine clay soils, including:</p> <ul style="list-style-type: none"> <li>at least one sample from each lot</li> <li>a representative spread of sites throughout the Buffer Area.</li> </ul>	Previously conformant.	<p>The auditor notes that while soil samples were taken across farm and buffer sites, <i>interpretation of soil sodicity data and any resultant implications was not demonstrated</i>. It is recommended that the Proponent engages with suitable soil science expertise to undertake a review of soil sampling data, to assess the sodicity risk in light of the targets included with this action, and to determine whether the established triggers, which are based on wheatbelt conditions, are appropriate in the Goomig context.</p>
<b>EMP 32</b>	Commercial pesticide and herbicide spraying will be undertaken only by operators with the appropriate level of ChemCert accreditation.	Previously conformant.	<p>KAI advised that pesticide and herbicide spraying is undertaken only by operators with the appropriate level of ChemCert accreditation. Copies of ChemCert qualifications for current staff were not sighted by the auditor.</p>
<b>EMP 76</b>	Density/ cover/ distribution of weed species in the permanent weed survey transects and common use infrastructure areas.	<p>As with previous audit findings, density/cover/distribution of weed species in the permanent weed survey transects is not explicitly measured. As such, the auditor has assessed this item as potentially non-conformant. However, given that the majority of common use areas are slashed (eg drains, channel banks) and that regular informal inspections occur, followed by weed treatment, the intent of this monitoring action – to ensure the minimising of weed infestations in common areas – is being incorporated into day-to-day farming activity. Previous audits have recommended that this action be revised.</p>	<p>No new priority areas were observed during site inspections.</p> <p>As with previous audit findings, density / cover / distribution of weed species in the permanent weed survey transects is not explicitly measured. <i>As such, the auditor has assessed this item as potentially non-conformant</i>. However, given that the majority of common use areas are slashed (eg drains, channel banks) and that regular informal inspections occur, followed by weed treatment, the intent of this monitoring action – to ensure the minimising of weed infestations in common areas – is being incorporated into day-to-day farming activity. Previous audits recommended this action be revised.</p>

ITEM	ACTION	AUDIT FINDING 2017	AUDIT FINDING 2018
<b>EMP 84</b>	Undertake monitoring of the parameters determined under Item 2 in bores established under EMP 83.	<p>The 2015 and 2016 auditors (Strategen) noted that: KAI advised that for low intensity bores it has, with IRG endorsement, adopted the monitoring regime recommended by DAFWA (now DPIRD) following analysis of the 3-year baseline results. Triennial atrazine and metals monitoring in high intensity bores occurred in the dry season of 2017. Nutrient and other parameters were also tested across the bores in the dry season of 2017. In situ parameters were assessed in both seasons. KAI advised that data logger downloading to secure daily temperature and depth data was undertaken by DPIRD staff in October 2017. Results were not available at the time of this audit. Groundwater levels, EC and pH were recorded by the loggers for high intensity bores. However, monitoring of pesticides was not undertaken [as this is not a requirement of the Independent Review Group, following baseline studies]. It is this element of the action that indicates the PNC. The 2015 recommendation is retained. Previous auditors recommended that a review of the groundwater monitoring regime required under the EP Act (i.e. this EMP) for both the Weaber and Knox Creek Plains is undertaken to ensure alignment and consistency with the EPBC Act approval (and any variation to that approval) as informed and recommended by the IRG to the satisfaction of the OEPA.</p>	<p>This PNC carries over from previous audits, which found the prescribed monitoring requirements have been superseded following the recommendations from the baseline groundwater studies conducted on the Weaber Plain, and KAI is following the monitoring regime recommended in the baseline analysis report. As the action has not been amended to reflect the outcomes of the baseline studies, it must remain a PNC, however the groundwater database indicates the recommended monitoring has occurred.</p> <p>Data from high intensity bores (logger data) was being analysed by DPIRD at the time of preparation of this audit report.</p> <p>Groundwater levels, EC and pH were recorded by the loggers for high intensity bores. However, monitoring of pesticides was not undertaken [as this is not a requirement of the Independent Review Group, following baseline studies]. <i>It is this element of the action that indicates the PNC.</i></p> <p>The Strategen 2015 audit recommendation is retained. Previous auditors recommended that a review of the groundwater monitoring regime required under the EP Act (i.e. this EMP) for both the Weaber and Knox Creek Plains is undertaken to ensure alignment and consistency with the EPBC Act approval (and any variation to that approval) as informed and recommended by the IRG to the satisfaction of the OEPA.</p>
<b>EMP 94</b>	Groundwater levels, soil salinity and quality exceed or are likely to exceed trigger levels.	<p>This PNC is carried forward from 2016 (Strategen, 2017). Soil salinity monitoring has been undertaken during the audit period. Groundwater quality data provided now includes trigger levels for some (but not all) of the analytes listed under EMP 84. No information was provided in relation to how exceedances are to be addressed. In line with the previous (2016) recommendation, the finding of this audit is that the groundwater monitoring actions are reviewed in consideration of the requirements of the EPBC approval, in conjunction with the IRG and the Department of Environment and Energy, and the OEPA, to ensure the intent of the groundwater actions, the monitoring regime and corrective actions are satisfactory. It is noted that the EMP review is in progress. 2017.EMP94 provides a letter from the IRG to the Minister for the Environment, similarly seeking a full review of groundwater monitoring and management requirements.</p>	<p>This PNC is carried forward from 2016 (Strategen, 2017). Soil salinity monitoring has been undertaken during the audit period. Groundwater quality data provided now includes trigger levels for some (but not all) of the analytes listed under EMP 84. No information was provided in relation to how exceedances are to be addressed. In line with the previous (2016) recommendation, the finding of this audit is that the groundwater monitoring actions are reviewed in consideration of the requirements of the EPBC approval, in conjunction with the IRG and the Department of Environment and Energy, and EPA Services, to ensure the intent of the groundwater actions, the monitoring regime and corrective actions are satisfactory. It is noted that both an EMP review and review of groundwater monitoring data are in progress. The previous audit noted that evidence item 2017.EMP94 provides a letter from the IRG to the Minister for the Environment, similarly seeking a full review of groundwater monitoring and management requirements. A response from the Minister to this letter had not been received by the Proponent at the time of this audit.</p>

ITEM	ACTION	AUDIT FINDING 2017	AUDIT FINDING 2018
<b>EMP 95</b>	Levels of chemicals and nutrients exceed scenarios that show: an increasing trend in the concentration of any chemical (at statistical confidence levels); an exceedance of the site-specific triggers for a particular chemical over two consecutive years.	The 2016 audit finding (Strategen, 2017) is retained – <i>"the information provided is inadequate to readily determine if this action has been conformed with; as such, the auditors conclude this item is potentially non-conformant. However, as discussed above, the auditors acknowledge revisions to the monitoring and management regime based on DAFWA studies and IRG advice and anticipate these changes address the intention of this EMP action; however, this should be confirmed with the OEPA and the EMP revised accordingly to avoid ongoing ambiguities and potential inconsistencies."</i> Previous auditors recommended this action is revised to satisfaction of OEPA. This current audit similarly concludes that a full review of the EPBC Groundwater Monitoring Plan and associated actions and monitoring regime is required, in conjunction with the IRG, noting that the groundwater actions included in the 2013 EMP (as the basis for this audit) were taken from the EPBC-approved Groundwater Management Plan. Subsequent post-baseline management changes under the EPBC approval have resulted in inconsistencies between the documents, which need to be addressed with the approval of both State and Commonwealth regulators.	The Proponent advised that a full analysis of groundwater monitoring undertaken in recent years was being conducted by its DPIRD hydrologists during 2019. The analysis will address trends across the Weaber Plain. This is also expected to result in recommendations for changes in the monitoring regime.  Previous auditors recommended this action is revised to satisfaction of OEPA (EPA Services). This current audit similarly concludes that a full review of the EPBC Groundwater Monitoring Plan and associated actions and monitoring regime is required, in conjunction with the IRG, noting that the groundwater actions included in the 2013 EMP (as the basis for this audit) were taken from the EPBC-approved Groundwater Management Plan. Subsequent post-baseline management changes under the EPBC approval have resulted in inconsistencies between the documents, which need to be addressed with the approval of both State and Commonwealth regulators.  The revised EMP is expected to address this issue and will be informed by the DPIRD groundwater review.
<b>EMP 109</b>	Telemetered flow monitoring at development gauge, existing gauging stations along Border Creek and the Keep River and in groundwater discharge pipe.	Previously conformant.	The DW1GS remains poorly functioning. The Proponent is investigating options for integrating the DW1GS with the Department of Water and Environmental Regulation's standard river gauging station monitoring system. The IRG has identified DW1GS functioning as a priority. This item has been rated a Potential Non-Conformance (PNC) as the functionality of the DW1GS and its ability to provide data in real time (via remote telecommunications) has not been resolved.
<b>EMP 133</b>	Assess vegetation condition using the Keighery (1994) rating scale and update vegetation condition map.	This action is recorded as a PNC as the Keighery scale is not applied and vegetation condition mapping is not routinely updated. However, the intent of the action is being met, as evidenced through the photographic evidence samples (2017.EMP.133a through to 2017.EMP.133r) showing no decline in vegetation condition near tracks and around bores. KAI advised these inspections are undertaken during the bi-annual bore monitoring rounds. The previous audit suggestion to amend this action is supported.	This action is recorded as a PNC as the Keighery scale is not applied and vegetation condition mapping is not routinely updated. However, the intent of the action is being met through routine buffer inspections during bore monitoring rounds at the beginning and end of each dry season. Photographic evidence samples (2018.EMP.133a through to 2018.EMP.133ar) showing no decline in vegetation condition near tracks and around bores.  Previous audits have suggested amending this action. This will be undertaken in the EMP revision.
<b>EMP 135</b>	Survey reference sites identified in EMP 134 to determine indicator species, density of native species, % cover of native species, native species richness and % weed cover as outlined in the monitoring procedures.	KAI advised that monitoring of rehabilitation areas is now undertaken consistent with revised buffer monitoring, whereby condition is assessed and weed presence and any inconsistency with adjacent land is noted. Indicator species in rehabilitation sites. Reference site surveys are not being undertaken. Photographic records of rehabilitation site progress are retained by KAI.	KAI advised that monitoring of rehabilitation areas is now undertaken consistent with revised buffer monitoring, whereby condition is assessed and weed presence and any inconsistency with adjacent land is noted. This occurs bi-annually, during groundwater monitoring rounds. Reference site surveys are not being undertaken. KAI also noted that it did not undertake the rehabilitation in the buffer or infrastructure areas. These activities were completed by Leighton Contractors or others for LandCorp at the completion of construction (~2012-14).

ITEM	ACTION	AUDIT FINDING 2017	AUDIT FINDING 2018
			Photographic records of rehabilitation site progress are retained by KAI.
<b>EMP 162</b>	Native species richness, density and % cover within rehabilitation sites as outlined in the monitoring procedures.	Refer to EMP 135.	Refer to EMP 135.
<b>EMP 163</b>	Indicator species in rehabilitation sites.	Refer to EMP 135.	Refer to EMP 135.
<b>EMP 164</b>	Exotic species richness and % cover within rehabilitation sites as outlined in the monitoring procedures.	Refer to EMP 135.	Refer to EMP 135.
<b>EMP 166</b>	Implement an induction program for personnel and contractors / consultants, and an information package for farm owners / managers, both of which containing information on: significance of Aboriginal heritage and the potential impacts of the project; procedures to report potential new sites; obligations under the Aboriginal Heritage Act 1972 (WA); and requirements for the protection of known Aboriginal sites.	Current KAI induction process does not explicitly include Aboriginal Heritage obligations.	<p>Farm sales package assessed as completed in a previous audit period.</p> <p>The current KAI induction process does not explicitly include Aboriginal Heritage obligations.</p>

In relation to the audit of 2018 management of compliance with Statement 938 and the associated EMP, the potential non-compliances listed in Table 6 can be aggregated as follows:

*Table 7 – PNC aggregation and recommendations*

EPA Factor	PNCs	Auditor comment 2017	Auditor comment 2018
<b>Inland waters</b>	Surface water	EMP109	<p>A review of the Stormwater and Groundwater Discharge Management Plan (SGDMP) required under the associated EPBC approval 2010/5491 has been requested by the IRG which oversees the water-related conditions of that approval. This review is being undertaken in 2018. The auditor recommends the current revision of the Statement 938 EMP take into account the surface water monitoring and management requirements arising from the SGDMP review.</p> <p>The proponent advised that a review of the Surfacewater and Groundwater Discharge Management Plan (SGDMP) is scheduled for 2019, under guidance from the Independent Review Group established under EPNC 3010/5491. This will directly relate to and inform the revision of the EMP under Statement 938, and will address the surface water management, monitoring requirements and trigger-related issues identified in EMP</p> <p>The auditor recommends that the Proponent ensure that remote telecommunications access to the DW1GS is restored to full functionality as a matter of urgency, given the importance of this infrastructure in monitoring and compliance with the EMP (and related EPBC conditions). The IRG has indicated this is functionality is essential for to ensure appropriate risk management and response mechanisms are in place.</p>

EPA Factor		PNCs	Auditor comment 2017	Auditor comment 2018
<b>Inland waters</b>	Groundwater	EMP84 EMP94 EMP95	Inconsistencies between the groundwater management actions in the EMP, and those in the EPBC Groundwater Management Plan (GMP) which have been subsequently amended by the IRG as overseeing body, particularly in relation to the post-baseline monitoring regime, need to be addressed in parallel. The IRG has requested a review of the GMP requirements. The auditor recommends that the EMP revision currently being undertaken considers the outcomes of the IRG discussions and subsequent (anticipated) changes to the GMP mandated by the Commonwealth approval. The intent of this recommendation is to ensure congruency and to facilitate outcomes-based (ie, trigger or indicator-based) targets and minimum standards in lieu of prescriptive requirements currently contained in the EMP.	The proponent has scheduled a review of all groundwater data to date. This review is being undertaken in 2019, and will inform revisions to the EPBC Groundwater Management Plan (GMP), and subsequently inform the EMP revision. The EMP revision cannot be completed until this review is complete.
<b>Flora and vegetation</b>	Weeds and vegetation (including rehabilitation monitoring)	EMP76 EMP133 EMP135 EMP162 EMP163 EMP164	Non-compliances identified pertaining to vegetation condition and, weed and rehabilitation monitoring relate largely to the non-conformance with prescriptive monitoring requirements. Site inspections and comparative photographic analysis since, in particular, the removal of cattle from the buffer areas, indicate that vegetation condition decline has not occurred. Similarly, site inspections and photographic evidence of rehabilitated areas show no decline in condition. As such, the auditor recommends the EMP revision reconsiders the prescriptive nature of the monitoring required, and focuses on biodiversity outcomes.	The auditor recommends that the EMP revision explicitly addresses weed and vegetation management in a manner appropriate to the scale, circumstance, environmental risk and condition of the buffer vegetation within the Ord Stage II area.
<b>Terrestrial Environmental Quality</b>	Soil condition	EMP20	N/A	While soil monitoring is occurring as required, it is recommended that soil scientist analysis be undertaken to assess whether irrigation is impacting soil quality.
<b>People</b>	Aboriginal heritage	EMP166	Compliance with the Aboriginal Heritage Act 1972 is a legal obligation. Under current EPA requirements (EPA, 2017), legal obligations are taken as given, and it is not expected that statutory obligations are incorporated into the revised EMP. Nonetheless, it is recommended that Aboriginal heritage reporting processes be included in the KAI induction package.	As with the previous finding, the auditor recommends that inclusion of Aboriginal heritage site response and reporting mechanisms should be considered in preparation of the revised EMP, which will cover the Knox Creek Plain, where development is scheduled to commence in 2020.
<b>N/A</b>	Other	EMP32		ChemCert qualifications are a farm management issue, with links to Terrestrial Environmental Quality (soil quality) and Flora and Vegetation. It is recommended that KAI ensures staff certification remains current and retains records as part of its management system.
<b>TOTAL</b>		<b>13</b>		

## 4.2 Overall audit findings and recommendations

Previous audits (KBC 2018; Strategen 2015, 2016, 2017) have recommended changes to a number of actions in the EMP. The review of the Goomig EMP commenced in 2017 but is not yet completed. Under the associated Commonwealth approval (EPBC 2010/5491), review of the stormwater monitoring, management and modelling requirements, and of groundwater monitoring, has been requested by the Independent Review Group. Previous auditors have identified that clarity needs to be made about the role of the IRG in overseeing those EPBC management plan actions which have been incorporated into the EMP. The revision of the EMP may address this issue, however the role of the IRG needs to be considered in relation to if or how responsibility for review of the duplicated EMP actions (relating to surface and groundwater) will occur.

Previous auditor recommendations (Strategen 2017) to clarify actions and monitoring requirements and remove ambiguities remain:

1. *The farm lots are currently being managed by one operator (KAI) rather than the original plan for individual lot owners. This provides a basis for the need to review the entire EMP to remove reference to individual lot owners and any management actions that were included to effectively manage a number of individuals.*
2. *Deletion of actions that have been completed and do not need to be undertaken for future stages.*
3. *Amendment of actions that have proved impractical or unnecessary to implement on site given current experience operating the farm lots, while still ensuring removal of actions will not result in increased environmental impact.*
4. *Amendment of monitoring requirements based on increase in knowledge of the environmental impacts of the project and practicality to implement. Note: any revision of monitoring requirements in the EMP needs to be done concurrently with revision of EPBC Act approval requirements and approved management plans to ensure consistency.*
5. *Amalgamation of Weaber Plain and Knox Creek Plain EMPs to remove discrepancies in management between these two plans to ensure reduced risk in potential non-conformance and a more streamlined auditing process for future CARs.*
6. *Evaluation of EMP against management plans required under relevant EPBC approvals, to ensure consistency and removal (through EMP revision) of discrepancies, while still ensuring environmental objectives of all plans will be achieved.*
7. *Potential revision of Aboriginal heritage management requirements given MG Corporation involvement in the project. Note: Any revision should be undertaken in consultation with MG Corporation and Department of Aboriginal Affairs.*

(Strategen, 2017)

Given the timing of this audit while the EPBC-conditioned monitoring and management actions are being reviewed simultaneously to the EMP revision, it is imperative that they continue to be undertaken in unison.



## References

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Office of Environmental Protection Authority, 2012a, *Post Assessment Guideline for Preparing a Compliance Assessment Plan*, OEPA, Perth, August 2012.

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Strategen, 2015, *Ord River Irrigation Area Stage 2 (M2 Supply Channel), Compliance Assessment Report – Statement 938 [2014]*, report prepared for LandCorp.

Strategen, 2016, *Ord River Irrigation Area Stage 2 (M2 Supply Channel), Compliance Assessment Report – Statement 938 [2015]*, report prepared for Department of State Development.

Strategen, 2017, *Ord River Irrigation Area Stage 2 (M2 Supply Channel), Compliance Assessment Report – Statement 938 [2016]*, report prepared for Department of State Development.

## Attachment 1 – Statement of Compliance: Post-Assessment Form 2

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## Attachment 2 – Ministerial Statement 938 Audit Table

Audit code	Subject	Action	How	Evidence	Phase	Timeframe	Status	Further information
<b>938:M1.1</b>	Implementation	The proponent shall implement the proposal as documented and described in Schedule 1 of this Statement, subject to the conditions and procedures of this Statement.	Implement Proposal as described in Schedule 1	Refer to schedule 1 audit table	Overall	Ongoing	Compliant	Refer schedule 1 audit table
<b>938:M2.1</b>	Contact details	The proponent shall notify the CEO of any change of its name, physical address or postal address for the serving of notices or other correspondence within 28 days of such change. Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State.	Submit written notification to the CEO of OEPA	Advice from Proponent	Overall	Within 28 days of change of contact details.	Compliant	No change to Proponent or contact details.
<b>938:M3.1</b>	Time limit for Proposal Implementation	The proponent shall not commence implementation of the proposal after the expiration of 5 years from the date of this Statement, and any commencement, within this 5 year period, must be substantial.	Commence substantial implementation of Proposal by 12 June 2018	Assessed in previous audit.	Overall	By 12 June 2018	<b>Completed</b>	Item assessed as completed in a previous audit period.
<b>938:M3.2</b>	Time limit for Proposal Implementation	Any commencement of implementation of the proposal, within 5 years from the date of this Statement, must be demonstrated as substantial by providing the CEO with written evidence, on or before the expiration of 5 years from the date of this Statement.	Provide written evidence of substantial commencement of implementation on or before 12 June 2018	Assessed in previous audit.	Overall	By 12 June 2018	<b>Completed</b>	Item assessed as completed in a previous audit period.
<b>938:M4.1</b>	Compliance reporting	The proponent shall prepare and maintain a Compliance Assessment Plan to the satisfaction of the CEO.	Prepare a Compliance Assessment Plan and submit to the CEO of OEPA for approval	Assessed in previous audit. Strategen (2013a) - <i>Ord River Irrigation Area Stage 2 (M2 Supply Channel)</i> ,	Overall	Ongoing	<b>Completed</b>	Item assessed as completed in a previous audit period.

Audit code	Subject	Action	How	Evidence	Phase	Timeframe	Status	Further information
				<i>Compliance Assessment Plan – Statement 938</i>				
<b>938:M4.2</b>	Compliance reporting	The Compliance Assessment Plan shall indicate: the frequency of compliance reporting; the approach and timing of compliance assessments; the retention of compliance assessments; reporting of potential non-compliances and corrective actions taken; the table of contents of compliance reports; and public availability of compliance reports.	Prepare a Compliance Assessment Plan addressing all requirements	Assessed in previous audit. Strategen (2013a) - <i>Ord River Irrigation Area Stage 2 (M2 Supply Channel), Compliance Assessment Plan – Statement 938</i>	Overall	Prior to implementation	<b>Completed</b>	Item assessed as completed in a previous audit period.
<b>938:M4.3</b>	Compliance reporting	The proponent shall assess compliance with conditions in accordance with the Compliance Assessment Plan required by Condition 4-1.	Undertake annual compliance assessments in accordance with the approved Compliance Assessment Plan	2018.938.M4.3 Ord River Irrigation Area Stage 2 (M2 Supply Channel), Compliance Assessment Report – Statement 938 [2017].	Overall	Ongoing	Compliant	The 2017 CAR assessed compliant with conditions in accordance with the approved CAP. The 2017 CAR was submitted to EPA Services in July 2018.
<b>938:M4.4</b>	Compliance reporting	The proponent shall retain reports of all compliance assessments described in the Compliance Assessment Plan required by Condition 4-1 and shall make those reports available when requested by the CEO.	Prepare and retain Annual Compliance Assessment Reports in accordance with the approved Compliance Assessment Plan Make compliance assessment reports available to CEO of OEPA on request.	Refer to 2018.938.M4.3.	Overall	Ongoing	Compliant	Reports are retained by DPIRD and KAI.  DPIRD/DSD/KAI have provided the auditor with previous years' audits.
<b>938:M4.5</b>	Compliance reporting	The proponent shall advise the CEO of any potential non-compliance within 7 days.	Written correspondence to CEO of OEPA within 7 days of any potential non-compliance	N/A	Overall	Within 7 days of a potential non-compliance being known	Compliant	EMP PNCS noted in this report are technical and do not indicate adverse environmental outcome. It is the auditor's assessment that the environmental protection intent of the EMP has been met in 2018.



Audit code	Subject	Action	How	Evidence	Phase	Timeframe	Status	Further information
<b>938:M4.6</b>	Compliance reporting	<p>The proponent shall submit a compliance assessment report annually from the date of issue of this Statement addressing the previous twelve month period or other period as accepted by the CEO. The compliance assessment report shall:</p> <ul style="list-style-type: none"> <li>○ be endorsed by the proponent's Managing Director or a person delegated to sign on the Managing Director's behalf;</li> <li>○ include a statement as to whether the proponent has complied with the conditions;</li> <li>○ identify all potential non-compliances and describe corrective and preventative actions taken;</li> <li>○ be made publicly available in accordance with the approved Compliance Assessment Plan; and</li> <li>○ indicate any proposed changes to the Compliance Assessment Plan required by Condition 4-1.</li> </ul>	Submit Annual Compliance Assessment Reports addressing all requirements annually to OEPA	2018.938.M4.6–email submitted CAR to DWER	Overall	By June 2014 and annually thereafter	Compliant	The 2017 CAR (KBC 2018) was submitted to the EPA Service team on 18 July 2018.
<b>938:M5.1</b>	Environmental Management Program	The proponent shall implement the proposal in accordance with the "Environmental Management Programme", dated July 2011, or subsequent revisions approved by the CEO.	Implement approved Environmental Management Program	Refer to EMP audit tables.	Overall	Ongoing	Compliant	The Weaber and Knox EMP documents are undergoing revision into a single document. The Proponent is reviewing previous monitoring reports, including groundwater, under guidance from the Independent Review Group established under EPBC 2010/5491. Completion of the EMP review cannot be undertaken until the monitoring review is completed and recommendations considered. It is the auditor's assessment that the intent of the EMP is being

Audit code	Subject	Action	How	Evidence	Phase	Timeframe	Status	Further information
								met, despite a number of technical non-compliances. However, the functionality of the DW1 Gauging Station must be resolved for the Proponent to be able to consistently show it is compliant with Goomig dry season flow requirements.
<b>938:M6.1</b>	Final Project Design	The proponent shall implement the proposal in accordance with the "Final Project Design Plan", dated July 2011, or subsequent revisions approved by the CEO.	Implement approved Final Project Design Plan	No change since previous compliance assessment.	Overall	Ongoing	Weaber Plain - Completed  Knox Creek Plain - NR	Weaber: no change since previous audit.  Knox: revised FPDP approved by OEPA, June 2017.
<b>938:M7.1</b>	Final Decommissioning Plan	At least six months prior to the anticipated date of decommissioning, or at a time accepted by the CEO, the proponent shall prepare a Final Decommissioning Plan designed to ensure that the site is left in a suitable condition, with no liability to the State. The Final Decommissioning Plan shall be prepared in accordance with "Preliminary Decommissioning Plan", approved as part of the "Environmental Management Programme" dated July 2011 and required by Condition 5-1, or subsequent revisions approved by the CEO.  The Final Decommissioning Plan shall address: removal or, if appropriate, retention of plant and infrastructure; rehabilitation of all disturbed areas to a standard suitable for the accepted new land use(s); and identification of contaminated areas, including provision of evidence of notification to relevant statutory authorities.	Prepare a Final Decommissioning Plan addressing all requirements and submit to CEO of OEPA for approval in accordance with timeframe	Final Decommissioning Plan	Overall	At least six months prior to the anticipated date of decommissioning or at a time accepted by the CEO	NR	Decommissioning relates to a later phase.

Audit code	Subject	Action	How	Evidence	Phase	Timeframe	Status	Further information
<b>938:M7.2</b>	Final Decommissioning Plan	The proponent shall implement the Final Decommissioning Plan required by Condition 7-1 until such time as the CEO determines that decommissioning is complete.	Implement Final Decommissioning Plan	Annual Compliance Assessment Report	Decommissioning	Until such time as the CEO determines that decommissioning is complete	NR	Decommissioning relates to a later phase
<b>938:M7.3</b>	Final Decommissioning Plan	The proponent shall make the Final Decommissioning Plan required by Condition 7-1 publicly available, to the requirements of the CEO.	Make Final Decommissioning Plan available to stakeholder or public upon request and within 7 days of the receipt of the request	Final Decommissioning Plan publicly available	Overall	To the requirements of the CEO	NR	Decommissioning relates to a later phase

## Attachment 3 - Statement 938 Schedule 1 Audit Table

Audit Code	Element	Description	Evidence	Status	Comments
S1_2.1	Land within the Project Area	Project Area 76,000ha	Formal site inspection conducted 19 December 2018. In-season site visits (and associated photographic records) by auditor – 13 June 2018 and 22 October 2018. Refer to Figures 1, 2, 3 and 4. No additional clearing in 2018 evident.	Compliant	No change to area cleared. A total of 7,416.21ha in Weaber Plain have been cleared as land for irrigation since commencement, with an additional 914.12ha cleared for infrastructure, for a total of 8,330.33ha.
S1_2.2		Land managed as buffer 42,500ha	Refer to previous audit – see 2018.938.M4.3 (KBC, 2018). Site inspections undertaken – 13 June 2018, 22 October 2018 and 19 December 2018 – indicate continued buffer management and exclusion from development.	Compliant	Previous compliance reports have indicated 11,562.41ha have been set aside and managed as buffer, relating to the Weaber Plain/Goomig of the proposal. The EMP and FPDP for the Knox Creek Plain added 6,417ha to be managed as buffer, for a total of 17,979ha. Management of the buffer associated with Knox Creek Plain is yet to commence as clearing and construction have not been initiated on Knox.
S1_2.3		Land for irrigable development 30,500ha	Refer to previous audit – see 2018.938.M4.3 (KBC, 2018). KAI advice (December 19, 2018).	Compliant	A total of 7416.21ha in Weaber Plain have been cleared or developed as land for irrigation since commencement. See item S1_2.1.
S1_2.4		Infrastructure area 3,000ha	Refer to previous audit – see 2018.938.M4.3 (KBC, 2018). KAI advice (December 19, 2018).	Compliant	No change since previous audit period. As advised by previous auditors, as-constructed shapefiles indicate 914.12 ha were cleared to 29 October 2013. No more clearing for infrastructure has occurred since that date.

Audit Code	Element	Description	Evidence	Status	Comments
S1_2.5	Land outside the Project Area	M2 channel (lake Kununurra to project area) 690ha	KAI advice (December 19, 2018).	NR	No clearing has occurred in relation to channel works outside the Project area.
S1_2.6		Wyndham Port Facilities 1ha	KAI advice (December 19, 2018).	NR	No activity associated with the Wyndham Port Facilities has occurred or is required at this stage.
S1_2.7	Production	Raw sugar 400,000tpa	KAI advice (December 19, 2018).	NR	No production of raw sugar has occurred.
S1_2.8		Molasses 160,000tpa	KAI advice (December 19, 2018).	NR	No production of molasses has occurred.
S1_2.9	Infrastructure	Irrigation channels 160km	Refer to previous audit – see 2018.938.M4.3 (KBC, 2018). KAI advice (December 19, 2018).	Compliant	37 km channel of constructed to date. No change since previous audit period.
S1_2.10		Annual water requirements 740GL	2018.S1_2.10a KAI Goomig water use 2018 season 2018.S1_2.10b Goomig Surface Water Report 2018	Compliant	A total of 22.586GL was supplied to the Goomig farm area in 2018, of which 16.744GL was used on crops. KAI advised the remainder is accounted for by M2 channel losses, arising due to the extra capacity size (in excess of Goomig requirements) therefore evaporation and seepage losses are disproportionate to Goomig farm usage.
S1_2.11		Drains 153km	Refer to previous audit – see 2018.938.M4.3 (KBC, 2018). Site inspections – 13 June 2018, 22 October 2018 and 19 December 2018.	Compliant	No change since previous audit period. 51 km of major drains constructed to date.
S1_2.12		Flood protection levees 142km	Refer to previous audit – see 2018.938.M4.3 (KBC, 2018). Site inspections – 13 June 2018, 22 October 2018 and 19 December 2018.	Compliant	No change since previous audit period. 48 km of flood protection levees constructed to date. Auditor observed that flood protection levees intact and functional around Goomig perimeter.
S1_2.13		Balancing storage dams (operating volume) 5.6GL	Refer to previous audit – see 2018.938.M4.3 (KBC, 2018). KAI advice (19 December 2018).	Compliant	No change since previous audit period. Storage Dams for Weaber Plain are contained within the M2 channel between M2C3 and M2C4. The reach of the M2 channel between the M2C3 and M2C4 structures holds up to 390 ML, of which 100 ML is considered ‘Operational Storage’, i.e. balancing storage.
S1_2.14		Roads 161km	Site inspections – 13 June 2018, 22 October 2018 and 19 December 2018.	Compliant	No change since previous audit period. 11.9 km of road has been constructed to date.
S1_2.15		Power lines 165km	Site inspections – 13 June 2018, 22 October 2018 and 19 December 2018.	NR	No construction of power lines has occurred to date.
S1_2.16	Wyndham Port	Raw sugar store 180,000t	KAI advice (19 December 2018)	NR	Construction has not yet commenced.
S1_2.17		Molasses store 75,000t	KAI advice (19 December 2018)	NR	Construction has not yet commenced.

## Attachment 4 - Environmental Management Program (Sub-plan) Audit Tables

**Note:** In line with previous compliance assessment reports, for audit purposes the numbering of Environmental Management Program (EMP) items is sequential rather than the numbering used in the original document. Where the wording of an EMP item makes reference to other EMP items the sequential number is referenced.

*EMP Compliance Table 1 - Soil conservation management actions*

<b>EMP Compliance Table 1 – Soil conservation management actions</b>								
<b>Item</b>	<b>Action</b>	<b>Purpose</b>	<b>Timing</b>	<b>Evidence</b>	<b>Weaber Plain</b>		<b>Knox Creek Plain</b>	
					<b>Status</b>	<b>Comment</b>	<b>Status</b>	<b>Comment</b>
EMP 1.	Provide an Information Package to the owner/leaseholder, which outlines: <ul style="list-style-type: none"> <li>the susceptibility of soil from disturbed areas to erosion from high intensity rainfall during the wet season</li> <li>soil erosion prevention measures</li> <li>irrigation strategies to reduce potential impacts of sodicity and salinity</li> <li>procedures to monitor soil salinity and sodicity.</li> </ul>	To reduce the potential for agricultural practices to result in erosion by ensuring prospective landowners are aware of the appropriate risks and management measures.	At sub-lease/sale of lots	Refer to previous audit – see 2018.938.M4.3 (KBC, 2018).	Completed	Item assessed as completed in a previous audit period.	Completed	Item assessed as completed for Weaber Plain. As the same leaseholder (KAI) is responsible for Knox Creek Plain, this item was assessed by previous auditors as completed.
EMP 2.	Induct construction personnel on soil erosion control management measures.	To reduce the potential for construction activities to result in erosion by ensuring construction personnel are aware of appropriate management measures.	Within one week of personnel commencing work on-site	KAI advice (19 December 2018).  2018.EMP2 KAI Staff and contractor induction - <i>refers generally to environmental management requirements.</i>	NR	KAI advised that erosion control and management is essential to good farming practice, implemented on Goomig through actions such as corn stubble retention, and through laser levelling of paddocks.	NR	Construction not yet commenced.
EMP 3.	Maintain records of ground disturbing activities that include the date that the boundary of clearing was delineated, the	To provide data to inform management.	During construction of shared infrastructure	KAI advised (19 December 2018) no new clearing occurred in 2018.	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.

EMP Compliance Table 1 – Soil conservation management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
	date of clearing and location of topsoil storage.							
EMP 4.	Restrict ground-disturbing activities to the dry season wherever practicable.	To prevent ground-disturbing activities when the risk of erosion is high.	During construction of shared infrastructure	This item was assessed by previous auditors (Strategen, 2017) as being complete.	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 5.	Ensure a drainage management system that includes a sediment trap is in place around all borrow pits.	To reduce the potential for erosion of borrow pits to result in adverse environmental impacts.	Prior to ground disturbance	This item was assessed by previous auditors (Strategen, 2017) as being complete.	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 6.	Delineate the boundaries of the vegetation to be cleared for construction in the field with flagging tape, signage or fencing.	To minimise erosion by preventing unauthorised ground disturbance.	Prior to ground disturbance	KAI advised (19 December 2018) no new clearing occurred in 2018.	Completed	Post-construction clearing management is discussed under other audit items (including EMP 7, EMP 8).	NR	Construction not yet commenced.
EMP 7.	Stage clearing of vegetation so that areas are cleared only as required.	To reduce the potential for erosion by minimising the area of ground surface exposed at any one time, to allow native animals the chance to move on.	During construction of shared infrastructure	This item was assessed by previous auditors (Strategen, 2017) as being complete.	Completed	Item assessed as completed in a previous audit period (as does not relate to clearing of farm lots).	NR	Construction not yet commenced.
EMP 8.	Restrict movement of construction machinery and equipment to designated tracks and roads.	To prevent unauthorised ground disturbance.	During construction of shared infrastructure	This item was assessed by previous auditors (Strategen, 2017) as being complete.	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 9.	Maintain records of topsoil stockpiles that include the location of stockpile and location of where topsoil was removed from.	To ensure topsoil is utilised in the most appropriate locations.	During construction of shared infrastructure	This item was assessed by previous auditors (Strategen, 2017) as being complete.	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.

EMP Compliance Table 1 – Soil conservation management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 10.	Remove topsoil from: <ul style="list-style-type: none"> <li>all areas to be excavated</li> <li>all areas where spoil from excavation is to be stored.</li> </ul>	To provide a natural source of seed, organic matter and microorganisms for areas to be rehabilitated.	During construction of shared infrastructure	This item was assessed by previous auditors (Strategen, 2017) as being complete.	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 11.	Stockpile cleared topsoil and subsoil separately, away from irrigation channels, for later use in rehabilitation in accordance with the Rehabilitation Management Sub-plan	To provide a natural source of seed, organic matter and microorganisms for areas to be rehabilitated.	During construction of shared infrastructure	This item was assessed by previous auditors (Strategen, 2017) as being complete.	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 12.	Install topsoil containment measures such as sediment fencing around stockpiles.	To reduce potential for erosion of topsoil stockpiles.	During construction of shared infrastructure	This item was assessed by previous auditors (Strategen, 2017) as being complete.	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 13.	Install signage to prevent unauthorised access to the buffer in accordance with the Buffer Management Sub-plan.	To prevent damage to the buffer from unauthorised access.	Prior to ground disturbance	This item was assessed by previous auditors (Strategen, 2017) as being complete.	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 14.	Rehabilitate areas disturbed as a result of construction that are no longer required post-construction in accordance with the Rehabilitation Management Sub-plan.	To maximise the potential for successful rehabilitation.	As specified in the Rehabilitation Management Sub-plan	This item was assessed by previous auditors (Strategen, 2017) as being complete.	Completed	Item assessed as completed in a previous audit period. Refer to Rehabilitation audit tables regarding rehabilitation monitoring for monitoring and assessment of rehabilitation success.	NR	Construction not yet commenced.

EMP Compliance Table 2 - Soil monitoring regime

EMP Compliance Table 2 – Soil monitoring regime									
Item	Activity and location	Frequency	Target	Corrective action	Evidence	Weaber Plain		Knox Creek Plain	
						Status	Comment	Status	Comment
EMP 15.	Soil erosion within 50 m of construction activities	Weekly during construction of shared infrastructure	No soil erosion occurring as a result of construction activities.	<ol style="list-style-type: none"> <li>1. Investigate cause of erosion.</li> <li>2. Investigate ways to minimise erosion and increase landform stability.</li> <li>3. Implement remedy.</li> <li>4. Monitor success of remedy.</li> </ol>	This item was assessed by previous auditors (Strategen, 2017) as being complete.	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 16.	Management of top soil stockpiles.	Weekly during construction of shared infrastructure	Topsoil stockpiles are being managed appropriately including no indication of erosion present.	<ol style="list-style-type: none"> <li>1. Investigate cause of erosion.</li> <li>2. Investigate ways to minimise erosion and increase landform stability.</li> <li>3. Implement remedy.</li> <li>4. Monitor success of remedy.</li> </ol>	This item was assessed by previous auditors (Strategen, 2017) as being complete.	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 17.	Extent of clearing and ground disturbance along pre-defined boundaries.	Weekly during construction of shared infrastructure	No clearing or disturbance outside of pre-defined boundaries.	<ol style="list-style-type: none"> <li>1. Report as Environmental Incident and initiate Incident Procedure</li> </ol>	This item was assessed by previous auditors (Strategen, 2017) as being complete.	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 18.	Soil erosion within 50 m of infrastructure (including roads, channels, sediment basins and hillside drains).	As required after construction, e.g. after significant rainfall events.	Landform is safe and stable with no soil erosion occurring as a result of runoff from infrastructure .	<ol style="list-style-type: none"> <li>1. Investigate cause.</li> <li>2. Identify ways reduce erosion produced as a result of infrastructure such as reducing runoff velocity, diverting runoff and application of hydromulch to areas identified as susceptible to erosion from runoff.</li> <li>3. Implement remedy.</li> <li>4. Monitor success of remedy.</li> </ol>	<p>Site inspections – 13 June 2018, 22 October 2018 and 19 December 2018.</p> <p>KAI advice (19 December 2018) – no significant soil erosion following 2018</p>	Conformant	No erosion observed around infrastructure during inspections in 2018.	NR	Construction not yet commenced.



EMP Compliance Table 2 – Soil monitoring regime									
Item	Activity and location	Frequency	Target	Corrective action	Evidence	Weaber Plain		Knox Creek Plain	
						Status	Comment	Status	Comment
					wet season due to drier than usual wet season and limited intensity of rainfall downpours.				
EMP 19.	Surface and subsoil electrical conductivity within the project area, with a specific focus on areas with Aquitaine clay soils, including: <ul style="list-style-type: none"> <li>at least one sample from each lot</li> <li>a representative spread of sites throughout the Buffer Area.</li> </ul>	Twelve monthly, commencing prior to clearing and at the end of each dry season during operation of irrigation infrastructure	Salinity levels do not exceed 400 mS/m in surface or subsurface soils.	<ol style="list-style-type: none"> <li>Map the distribution of soil with salinity exceeding target levels.</li> <li>Investigate cause (which could include determining if salinity is due to a rise in the groundwater or whether the soil chemical status is deteriorating as a result of insufficient irrigation).</li> <li>Verify the adequacy of the estimated leaching rate (approximately 100 mm/a) in controlling sodicity in accordance with the Groundwater Management Sub-plan.</li> <li>Identify whether remedial action is required, such as installation of field drains in accordance with the Groundwater Management Sub-plan.</li> <li>Implement remedial action on a trial basis in areas identified from mapping.</li> <li>Monitor success of remedy, increasing the frequency of soil monitoring if salinity exceeds target levels.</li> </ol>	2018.EMP19a CSBP audit soils analysis request dated 20 December 2018  2018.EMP19b CSBP soil analysis report.	Conformant	Soil test results do not indicate salinity >400mS/m.	NR	Construction not yet commenced.
EMP 20.	Surface and subsoil ESP and pH within the project area, with a specific focus on areas with Aquitaine clay soils, including:	Twelve monthly, commencing prior to clearing and at the end of each dry season during operation of	Sodicity levels five years after commencement of irrigation do not exceed an ESP of 6 in surface soils or 15 in	<ol style="list-style-type: none"> <li>Map the distribution of soil with sodicity exceeding target levels.</li> <li>Investigate cause (which could include determining if changes are consistent with the anticipated initial response to land use change, or whether the soil chemical status is deteriorating as a result of insufficient irrigation).</li> </ol>	2018.EMP19a CSBP audit soils analysis request dated 20 December 2018.  2018.EMP19b CSBP audit soils analysis report	PNC	The auditor notes that while soil samples were taken across farm and buffer sites, <i>interpretation of soil sodicity data and any resultant implications was not demonstrated</i> . It is recommended that the Proponent engages with	NR	Construction not yet commenced.

**EMP Compliance Table 2 – Soil monitoring regime**

Item	Activity and location	Frequency	Target	Corrective action	Evidence	Weaber Plain		Knox Creek Plain	
						Status	Comment	Status	Comment
	<ul style="list-style-type: none"> <li>at least one sample from each lot</li> <li>a representative spread of sites throughout the Buffer Area.</li> </ul>	irrigation infrastructure	subsurface soils.	3. Verify the adequacy of the estimated leaching rate (approximately 100 mm/a) in controlling sodicity in accordance with the Groundwater Management Sub-plan. 4. Identify whether remedial action is required, such as application of gypsum or sulphur. 5. Implement remedial action on a trial basis in areas identified by mapping. 6. Monitor success of remedy, increasing the frequency of soil monitoring if salinity exceeds target levels.			suitable soil science expertise to undertake a review of soil sampling data, to assess the sodicity risk in light of the targets included with this action, and to determine whether the established triggers, which are based on wheatbelt conditions, are appropriate in the Goomig context.		

**EMP Compliance Table 3 - Chemicals management actions**
**EMP Compliance Table 3 – Chemicals management actions**

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 21.	Prospective land managers will be advised of the requirement to comply with procedures for chemical application, and chemical management legislation including: <ul style="list-style-type: none"> <li>Agricultural and Veterinary Chemicals Code Act 1994 (Cwth) and associated acts and regulations</li> <li>Health (Pesticides) Regulations 2011</li> <li>Aerial Spraying Control Act 1966 (WA)</li> </ul>	To reduce the potential for contamination of the environment by farm chemicals by ensuring that farm owners/managers are aware of the specified procedures for chemical application in the project area and informed of their rights and responsibilities under the relevant Acts and Regulations.	At sub-lease of lots.	This item was assessed by previous auditors (Strategen, 2017) as being complete.	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced

**EMP Compliance Table 3 – Chemicals management actions**

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
	<ul style="list-style-type: none"> <li>Agricultural Produce (Chemical Residues) Act 1983 (WA)</li> <li>Poisons Act 1964 (WA)</li> <li>Veterinary Preparations and Animal Feeding Stuffs Act 1976 (WA)</li> <li>Agriculture and Related Resources (Spraying Restriction) Regulations 1979.</li> </ul>							
EMP 22.	Induct personnel on safe use of chemicals and hydrocarbon management measures, including hydrocarbon handling, disposal and spill response procedures.	To reduce the risk of contamination of the environment.	Within one week of personnel commencing work on site	2018.EMP2 KAI Staff and contractor induction 2018. 2018.EMP22a Goomig Lot 14 Spill kit photo. 2018.EMP22b Goomig Lot 14 Spill kit instructions photo. 2018.EMP22c Emergency response procedure KAI advice (19 December 2018).	Conformant	Formal inductions are undertaken by KAI for its farm workforce that includes management of hydrocarbons and chemicals.  The induction package contains information pertaining to the safe use of chemical and hydrocarbon management measures, including handling, disposal and spill response.  Site inspections indicated spill kits including clearly marked instructions for use, located near pumps.	NR	Construction not yet commenced
EMP 23.	Ensure storage of farm chemicals complies with relevant Australian and Western Australian Standards, including AS 2507-1998 <i>"The storage and handling of agricultural and veterinary chemicals"</i> and Department of Water Toxic and Hazardous Substances – <i>Storage and Use WQPN No. 65</i> .	To prevent potential contamination of the environment and harm to individuals by ensuring appropriate storage and handling of chemicals.	Ongoing from commencement of ground disturbance	Site inspections – 13 June 2018, 22 October 2018 and 19 December 2018. KAI advice (19 December 2018).	Conformant	KAI advised that no farm chemicals are stored on site at Goomig.  No storage of farm chemicals was observed by the auditor.	NR	Construction not yet commenced



**EMP Compliance Table 3 – Chemicals management actions**

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
	Handling of Non-explosives) Regulations 2007 (WA).	transport (e.g. on absorbent material, provision of spill kit, well-ventilated, appropriate documentation and provision of personnel protection equipment for safe handling).	of ground disturbance			2007 (WA) is beyond the scope of this audit.		
EMP 29.	Notify the DPW AND/OR DER of hydrocarbon spills in accordance with the Environmental Protection (Unauthorised Discharges) Regulations 2004.	To ensure potential spills are appropriately assessed and remediated according to the Environmental Protection (Unauthorised Discharges) Regulations 2004 as hydrocarbons are a Schedule 1 Material in these Regulations.	In accordance with Incident Response Procedure	Site inspections – 13 June 2018, 22 October 2018 and 19 December 2018.	Conformant	KAI advised that no significant spills (warranting Department of Water and Environmental Regulation - DWER) reporting have occurred, and none were observed during site inspections.	NR	Construction not yet commenced
EMP 30.	Maintain registers of all chemicals applied on-site as required under applicable chemical usage legislation.	To provide data for review if monitoring indicates unacceptable impacts to the environment.	Ongoing from commencement of ground disturbance	2018.EMP30 KAI Goomig Chemical Usage Report.	Conformant	Chemical spraying logs are retained within KAI's farm management software system.	NR	Construction not yet commenced
EMP 31.	Restrict chemical and fertiliser use when the tailwater retention capacity is unavailable	To prevent the transporting of nutrients and chemicals downstream	Ongoing from commencement of ground disturbance	Site inspections – 13 June 2018, 22 October 2018 and 19 December 2018.	Conformant	KAI advised that there have been no tailwater overflow to date as the tailwater retention capacity has not been reached.	NR	Construction not yet commenced
EMP 32.	Commercial pesticide and herbicide spraying will be undertaken only by operators with the appropriate level of ChemCert accreditation.	To minimise spray drift.	Ongoing from commencement of ground disturbance	2018.EMP36 Lone Eagle CASA certificate	PNC	KAI advised that pesticide and herbicide spraying is undertaken only by operators with the appropriate level of ChemCert accreditation. Copies of ChemCert qualifications for current staff were not sighted by the auditor.	NR	Construction not yet commenced

EMP Compliance Table 3 – Chemicals management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 33.	Ensure agricultural chemicals are not directly applied to dedicated on-farm access tracks.	To prevent off-site transportation of chemicals in dust lift-off from access tracks.	Ongoing from commencement of ground disturbance	Site inspections – 13 June 2018, 22 October 2018 and 19 December 2018.	Conformant	KAI advised that chemicals are not directly applied to farm tracks. No evidence observed by the auditors of application of chemicals on dedicated on-farm tracks.	NR	Construction not yet commenced
EMP 34.	Chemicals will be applied in accordance with the product label.	To prevent potential contamination of the environment by ensuring appropriate application of chemicals.	Ongoing from commencement of ground disturbance	2018.EMP30	Conformant	Farm management software spraying logs indicate chemicals have been applied at rates within the application rate range outlined on the product labels.	NR	Construction not yet commenced
EMP 35.	Maintain a register of all aerial spraying operations.	To minimise potential for environmental impacts by ensuring aerial spraying is carried out in an acceptable manner.	Ongoing from commencement of ground disturbance	2018.EMP30	Conformant	Refer to EMP 30. KAI maintains records of any aerial spraying undertaken, in its farm management software.	NR	Construction not yet commenced
EMP 36.	Use accredited operators (e.g. by operators and pilots accredited under the Aerial Agricultural Association of Australia (AAAA) "Spraysafe" program)	To minimise potential for environmental impacts by ensuring aerial spraying is carried out in an acceptable manner, to determine extent of required spray fall-out monitoring.	Ongoing from commencement of ground disturbance	2018.EMP36	Conformant	Pilot accreditation certificates for aerial spraying contractors sighted.	NR	Construction not yet commenced
EMP 37.	Notify neighbours within: <ul style="list-style-type: none"> <li>1500 m of an area to be sprayed with ultra-low volume</li> <li>750 m of an area to be sprayed with emulsifiable concentrate by air.</li> </ul> Consideration should be given to provide a range of dates in case conditions are not conducive to safely apply the pesticide and to minimise spray drift.	To minimise the risk of adverse health effects caused by spray fall-out.	Ongoing from commencement of ground disturbance	Site inspections – 13 June 2018, 22 October 2018 and 19 December 2018.	Conformant	No neighbours within 1500 m of areas that have been sprayed.	NR	Construction not yet commenced

EMP Compliance Table 3 – Chemicals management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 38.	Design chemical washdown facilities in accordance with Department of Water, Water Quality Protection Notes on: <ul style="list-style-type: none"> <li>Mechanical Equipment Washdown (WQPN No. 68)</li> <li>Chemical Blending (WQPN No. 7).</li> </ul>	To minimise potential for environmental impacts by ensuring appropriate siting (location), design and construction of chemical wash down facilities.	Prior to commencement of planting of crops	KAI advice (19 December 2018).	Conformant	No washdown facilities are located on farms within the Project area. KAI has previously provided auditors with a procedure for equipment washdown, which is currently only undertaken at a compound <i>outside</i> of the Proposal area. No washdown facilities were inspected during the audit as the compound is located outside the Project area.	NR	Construction not yet commenced
EMP 39.	All chemical blending and decanting will be undertaken within a fully-contained area.	To minimise potential for environmental impacts by ensuring chemical spills are contained.	Ongoing from commencement of irrigation	KAI advice (19 December 2018).	Conformant	KAI advised that chemical blending and decanting is currently undertaken at the KAI compound <i>outside</i> of the Proposal area.	NR	Construction not yet commenced
EMP 40.	Develop emergency response procedures in accordance with Department of Water, Water Quality Protection Note <i>Contaminant spills – emergency response</i> (WQPN No. 10).	For determining the appropriate level of response according to the degree (or classification) of the spill.	Prior to commencement of planting of crops	2018.EMP40  Spill kits observed on site. 2018.EMP22a 2018.EMP22b	Conformant	Previous audits have indicated KAI's use of WQPN No 10.  Updated KAI emergency response procedure documentation was provided (2018.EMP40) which does not explicitly reference WQPN No. 10) but meets the intent.  <i>The auditor notes that there is substantial distance (25km+) between the Goomig farm area and the closest perennial waterway (Keep River).</i>	NR	Construction not yet commenced
EMP 41.	Dispose empty chemical containers in accordance with the AgSafe guidelines for disposal of containers.	To minimise potential for environmental impacts by minimising chemical residue in disposed chemical containers.	Ongoing from commencement of irrigation	Site inspections– 13 June 2018, 22 October 2018 and 19 December 2018.	Conformant	Empty chemical containers are stored off site at the KAI compound and then routinely collected through a "drum muster" by Shire of Wyndham East Kimberley.	NR	Construction not yet commenced

EMP Compliance Table 4 - Chemical use monitoring table

EMP Compliance Table 4 – Chemical use monitoring table									
Item	Activity and location	Frequency	Target	Corrective action	Evidence	Weaber Plain		Knox Creek Plain	
						Status	Comment	Status	Comment
EMP 42.	Inspection of permanent hydrocarbon storage facilities.	Three monthly	All hydrocarbon storage devices comply with appropriate standards and/or regulations	Non-compliant hydrocarbon storage devices to be replaced/repared as appropriate.	Site inspections - 13 June 2018, 22 October 2018 and 19 December 2018. No spillages or leaks observed.  KAI advice 19 December 2018.	Conformant	Permanent hydrocarbon storage facilities are present at water pumps. It was reported that self-bunded storage devices are inspected very regularly by KAI for farm management and economic reasons (ie no spillage of diesel), at a greater frequency than 3-monthly, although no records are maintained of inspections.	NR	Construction not yet commenced.
EMP 43.	Survey vegetation in the Buffer Area for symptoms of damage typical of chemicals being used in the ORIA.	Annually	No detectable impact on the buffer	<ol style="list-style-type: none"> <li>1. Investigate the cause.</li> <li>2. Investigation opportunities to prevent re-occurrences.</li> <li>3. Inform farm owners of outcomes of the survey.</li> <li>4. In the event of chemical discharge contrary to Environmental Protection (Unauthorised Discharges) Regulations 2004, report to DWER</li> </ol>	Site inspections - 13 June 2018, 22 October 2018 and 19 December 2018.	Conformant	Refer to EMP 52, EMP 54 and EMP 76. Buffer vegetation damage due to spray drift was not observed during site inspections.	NR	Construction not yet commenced.
EMP 44.	Inspect storage facilities and mixing and washdown areas, and surrounds for chemical spills.	Daily during spray operations Monthly at other times	No chemical spills	<ol style="list-style-type: none"> <li>1. Implement emergency response.</li> <li>2. Classify appropriate response.</li> <li>3. Notify authorities if High or Moderate incident impact classifications.</li> <li>4. Review Emergency Response Plan (for High and Moderate incident impact classes).</li> <li>5. Prepare and implement follow-up environmental monitoring (in consultation with DWER as required).</li> </ol>	Site inspections - 13 June 2018, 22 October 2018 and 19 December 2018. KAI advice 19 December 2018.	Conformant	<p>KAI advised that daily observations of chemical are made but not recorded.</p> <p>No evidence of chemical spillage was observed on site by the auditor.</p>	NR	Construction not yet commenced.



EMP Compliance Table 5 - Dust and particulate management actions

EMP Compliance Table 5 – Dust and particulate management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 45.	Burning of vegetation will occur only at times when prevailing winds will direct smoke and ash away from residential areas	To minimise the potential for smoke and ash to affect nearby residents	Ongoing from commencement of ground disturbance	2018.EMP45a	Conformant	There are no nearby residential areas. KAI burns in accordance with permits issued by SWEK. <u>2015 recommendation from previous auditors retained</u> : potential to delete this action should revision of EMP occur.	NR	Construction not yet commenced.
EMP 46.	Provide prospective farm owners/leasees documentation on practices to prevent dust emissions	To reduce the potential for dust generation by minimising ground disturbance	At time of sub-lease	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Sub-lease yet to occur.
EMP 47.	Proponent shall notify the nearby residences of construction activities and the predicted nature and duration of proposed burning activities	To reduce the potential for community impact by ensuring effective communication	As required	Site inspection – 13 June 2018, 22 October 2018 and 19 December 2018.	Conformant	No nearby residences. <u>2015 recommendation from previous auditors retained</u> : Refer to EMP 45 - potential to delete this action should revision of EMP occur.	NR	Construction not yet commenced.
EMP 48.	Cleared construction surfaces and stockpiles will be watered and/or stabilised where practicable to reduce dust lift-off	To reduce the potential for environmental and community impacts by reducing the potential for dust generation	During construction of shared infrastructure	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 49.	Speed limits will be sign-posted and implemented in the project area and will reflect local conditions	To reduce the potential for environmental impacts by reducing the potential for dust generation	Ongoing from commencement of ground disturbance	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.

EMP Compliance Table 6 - Dust and particulate monitoring regime

<b>EMP Compliance Table 6 – Dust and particulate monitoring regime</b>									
Item	Activity and location	Frequency	Target	Corrective action	Evidence	Weaber Plain		Knox Creek Plain	
						Status	Comment	Status	Comment
EMP 50.	Visual monitoring	Daily during construction of shared infrastructure	No off site impact on amenity	1. Investigate cause. 2. Implement additional dust control measures, as appropriate.	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 51.	Monitor community issues associated with dust/burning	During construction of shared infrastructure	No public complaints relating to dust generated by the project	Public complaints will be recorded and responded to in accordance with the Community Issues Management Sub-plan.	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.

EMP Compliance Table 7 - Weed, plant pathogen and pest animal management actions

EMP Compliance Table 7 – Weed, plant pathogen and pest animal management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 52.	<p>Conduct a weed survey in the common user infrastructure areas and adjoining areas (up to 100 m) within the Weaber Plain Buffer Area to establish baseline information (i.e. weed species and density/cover/distribution of weeds) and identify Priority Areas for management and control. Priority Areas will be defined by:</p> <ul style="list-style-type: none"><li>weed infested areas (e.g. monocultures of neem trees, weed density/cover greater than 50%)</li><li>areas that have declared noxious weed species and Weeds of National Significance (WONS)</li><li>areas declared as local priority in consultation with DPW AND/OR DER and DAFWA</li></ul>	To provide data to inform management.	Prior to ground disturbance	N/A	Completed	Item assessed as completed in a previous audit period.	NA	Item amended in Knox EMP (refer to KEMP 52).

KEMP 52	<p>Conduct a weed survey to establish baseline information (i.e. weed species and density/cover/distribution of weeds) and identify Priority Areas for management and control. Priority Areas will be defined by:</p> <ul style="list-style-type: none"> <li>weed infested areas (e.g. monocultures of neem trees, weed density/cover greater than 50%)</li> <li>areas that have declared noxious weed species and Weeds of National Significance (WONS)</li> <li>areas declared as local priority in consultation with DPaW, DAFWA and Ord Land and Water Inc.</li> </ul>	To provide data to inform management.	Prior to ground disturbance	N/A	N/A	N/A	Completed	Item assessed as completed in a previous audit period.
EMP 53.	Establish permanent weed survey transects within 100 m into the Weaber Plain/Knox Creek Plain Buffer Area.	To ensure repeatability of ongoing weed monitoring.	Prior to ground disturbance	N/A	Completed	<p>The 2016 auditors (Strategen) assessed this action as complete.</p> <p>The current monitoring approach has established new standard weed transects around bores and access tracks. These are assessed twice yearly during bore monitoring rounds.</p>	Completed	The 2016 auditors (Strategen) assessed this action as complete.
EMP 54.	<p>Conduct weed surveys along permanent weed survey transects (and opportunistically between permanent weed survey transects) to establish baseline information (i.e. weed species and density/cover/distribution of weeds) and identify and update Priority Areas for management and control. Priority Areas will be defined by:</p> <ul style="list-style-type: none"> <li>weed infested areas (e.g. monocultures of neem trees, weed density/cover greater than 50%)</li> <li>areas that have declared noxious weed species and Weeds of National Significance (WONS)</li> <li>areas declared as local priority in consultation with DPW AND/OR DER, DAFWA and Ord Land and Water Inc.</li> </ul>	To provide data to inform management.	Annually, from commencement of ground disturbance	Photographic survey evidence samples provided –2018.EMP54a Bore 42 (with weed – Parkinsonia – present). 2018.EMP54b Bore 42 entry track. 2018.EMP54c Parkinsonia sprayed near DW1/1 drain.	Conformant	<p>This action was previously a technical PNC as weed inspections were not undertaken on the original transects, but in areas adjacent to farming and monitoring tracks and around bores, where impacts from human activity would be most noticeable. Original weed survey transects are no longer easily accessible for monitoring. Twice yearly routine weed inspection in priority areas, along</p>	NR	Construction not yet commenced.

						<p>standardised bore monitoring and other permanent access tracks has continued and photographic records of inspection areas for 2016, 2017 and 2018 have been retained by KAI. <u>It is the auditor's assessment that the intent of the action has been met despite the previous PNC.</u></p> <p>The auditor supports the review the action (and all other related actions, e.g. EMP 55, EMP 76) including confirmation of the relevance of the original transects as well as the third dot point regarding consultation.</p>		
EMP 55.	<p>Update the extent of Priority Areas which will be defined by:</p> <ul style="list-style-type: none"> <li>weed infested areas (e.g. monocultures of neem trees, weed density/cover greater than 50%)</li> <li>areas that have declared noxious weed species and Weeds of National Significance (WONS)</li> <li>areas declared as local priority in consultation with DPW AND/OR DER, DAFWA and Ord Land and Water Inc.</li> </ul>	To provide data to inform management.	Annually, from commencement of ground disturbance	<p>KAI advice (December 2018) that weeds identified during regular surveys are subsequently treated with slow release (rain activated) herbicide. KAI advised that treatments are ongoing as new seed generation occurs.</p> <p>Site inspection of previous buffer area Parkinsonia near Lot 3 indicates ongoing reduction in Parkinsonia re-growth.</p>	Conformant	Refer to EMP 54.	NR	Construction not yet commenced.

				Refer also to 2018.EMP54a 2018.EMP54b 2018.EMP54c				
EMP 56.	Develop and undertake a weed control program in Priority Areas with the exception of roads.	To ensure effective control of weeds by the appropriate parties.	Prior to ground disturbance	KAI advice (December 2018) and site inspections by the auditor that weeds identified during regular surveys are subsequently treated.	Conformant	Refer to EMP 54. KAI is implementing an ongoing weed control program targeting <i>Parkinsonia aculeate</i> . KAI advised the success of treatment is noted in following years' inspections and photographic surveys. Follow-up treatments occur if required.  <i>Example location is buffer on Minjiljirrga Lane, adjacent to Lot 3.</i>	NR	Construction not yet commenced.
EMP 57.	Implement an induction program for personnel which contains information on: <ul style="list-style-type: none"> <li>hygiene procedures for all vehicles, machinery and equipment upon entering and leaving the Weaber Plain Development Area and/or Priority Areas</li> <li>specific soil management requirements in Priority Areas</li> <li>requirement to remain within designated clearing areas.</li> </ul>	To reduce the risk of construction activities introducing and/or spreading weeds and plant pathogens by ensuring construction personnel are aware of appropriate management measures and requirements.	Within one week of personnel commencing work on-site	N/A	Completed	This action has been interpreted to relate to construction of shared infrastructure only (based on the purpose) and as such has been assessed as completed for the Weaber Plain phase of the Project.	NR	Construction not yet commenced.
EMP 58.	Prepare guidelines for prospective farmers/lessees that contains information on: <ul style="list-style-type: none"> <li>vehicle hygiene measures (e.g. issues of using machinery from southern WA or interstate)</li> </ul>	To reduce the risk of agricultural activities introducing and/or	At time of sub-lease	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.

	<ul style="list-style-type: none"> <li>identification, control and reporting of weeds (e.g. weed control in tail water ditches, use of fire)</li> <li>identification and reporting of pest animals, declared noxious weed species and signs of plant pathogens</li> <li>obligations under the Agricultural and Related Resources Protection Act 1976 (WA) (including the requirement for the occupier of any private land to control declared plants and declared animals on and in relation to that land)</li> <li>selection of pet animals (e.g. discourage cat ownership)</li> <li>selection of crops (e.g. no declared noxious weed species)</li> <li>irrigation and drainage of land (i.e. no water from farming allotments directed into the Weaber Plain Buffer Area).</li> </ul>	spreading weeds, plant pathogens and pest animals by ensuring farm owners/managers are aware of appropriate management measures and requirements.						
EMP 59.	<p>Develop and supply an information package to prospective farm owners/lessees/managers within the project area that contains:</p> <ul style="list-style-type: none"> <li>a weed identification key for all species known to occur in the area (key to be developed in consultation with DPW AND/OR DER, DAFWA and Ord Land and Water)</li> <li>possible control techniques (information on controlling declared noxious weed species can be obtained from DAFWA [2003])</li> <li>general soil management and hygiene requirements for farms</li> <li>reporting requirements.</li> </ul>	To reduce the risk of agricultural activities introducing and/or spreading weeds, plant pathogens and pest animals by ensuring farm owners/managers are aware of appropriate management measures and requirements.	At time of sub-lease	N/A	Completed	Item assessed as completed in a previous audit period.	NA	Item not included in Knox EMP.
EMP 60.	Topsoil from areas with known declared weed species will managed accordance with DAFWA requirements.	To reduce the risk of declared weed species being introduced into/ spread	During clearing of farm lots	Site inspections - 13 June 2018, 22 October 2018 and 19 December 2018. KAI advice 19 December 2018.	Conformant. <u>Now completed</u> due to farm lot clearing completion.	KAI previously advised that there are no DAFWA requirements for topsoil from areas with known declared weed species.	NA	Item not included in Knox EMP.

		throughout the Buffer Area.						
EMP 61.	Aquatic weed control shall be undertaken consistent with industry standards	To reduce the risk of aquatic weeds being introduced into/ spread throughout natural watercourses and wetlands near the project area.	Ongoing from commencement of irrigation	Water Corporation verbal advice received 2/1/2019: acrolein injection in M2 channel occurred on 6 June 2018.	Conformant	Aquatic weed control within the main M2 and M2S channels using acrolein injections are undertaken by agents for Water Corporation.	NR	Irrigation not yet commenced.
EMP 62.	Restrict movement of vehicles and machinery to the limits of the areas to be cleared (thus not affecting the Weaber Plain/Knox Creek Plain Buffer Area) by delineating the Weaber Plain/Knox Creek Plain Buffer Area (e.g. fence, flags and signs) prior to clearing.	To reduce the risk of weeds being introduced into/ spread throughout the Buffer Area by limiting access.	Ongoing from commencement of ground disturbance	Site inspections - 13 June 2018, 22 October 2018 and 19 December 2018.	Conformant. <u>Now Completed</u> due to no further clearing required on Weaber Plain.	N/A	NR	Construction not yet commenced.
EMP 63.	Access into the Weaber Plain/Knox Creek Plain Buffer Area will be via designated access tracks only.	To reduce the risk of weeds being introduced into / spread throughout the Buffer Area by limiting access.	Ongoing from commencement of ground disturbance	Site inspections - 13 June 2018, 22 October 2018 and 19 December 2018. Satellite and ground-truthed images: 2018.EMP63a 2018.EMP63b 2018.EMP63c 2018.EMP63d 2018.EMP63e 2018.EMP63f	Conformant	Previous KAI advice to auditors that access tracks through the Buffer Area are not signposted with vehicle speeds, hygiene protocols etc. to minimise the risk of unauthorised access (i.e. signage would only draw attention to these access tracks and increase likelihood of unauthorised access) remains.	Nd5767680 94R	Construction not yet commenced.
EMP 64.	Establish clean down site/s at access points to the Weaber Plain Buffer Area, rehabilitation areas (outside of the Buffer Area) and Priority Areas. The clean down site/s will be designed to ensure soil is collected and disposed of in a manner that does not allow the introduction or spread of weeds or plant pathogens. At each permanent clean down site there will be a sign	To prevent the introduction/ spread of weeds and plant pathogens in the Weaber	During construction of shared infrastructure	N/A	Completed	Item assessed as completed in a previous audit period.	NA	Item not included in Knox EMP

	describing the hygiene procedure/s required to be implemented.	Plain Buffer Area, rehabilitation areas and Priority Areas.						
EMP 65.	Clean down all machinery entering the Weaber Plain Development Area to remove vegetative matter, seeds and soil.	To prevent the introduction/ spread of weeds and plant pathogens in the project area.	During construction of shared infrastructure	N/A	Completed	Item assessed as completed in a previous audit period.	NA	Item amended in Knox EMP (refer to KEMP 65).
<b>KEMP 65</b>	<i>Clean down all large machinery entering the Knox Creek Plain Development Area for the first time, to remove vegetative matter, seeds and soil. Each vehicle will be given a 'hygiene sticker' indicating that they have been checked and assessed for hygiene performance.</i>	<i>To prevent the introduction/ spread of weeds and plant pathogens in the project area.</i>	<i>Ongoing from commencement of ground disturbance</i>	NA	NA	NA	NR	Construction not yet commenced.
EMP 66.	Undertake a vehicle hygiene check for all vehicles/machinery entering the construction site for the first time. Each vehicle will be given a 'hygiene sticker' indicating that they have been checked and assessed for hygiene performance.	To prevent the introduction/ spread of weeds and plant pathogens in the project area.	During construction of shared infrastructure	N/A	Completed	Item assessed as completed in a previous audit period.	NA	Item not included in Knox EMP.
EMP 67.	Record in a hygiene log book (located at all clean-down sites) the: <ul style="list-style-type: none"> <li>time and date of clean down of machinery/vehicle/equipment</li> <li>method of cleaning machinery and vehicles</li> <li>signature of the driver (and vehicle hygiene inspector if first inspection).</li> </ul>	To provide hygiene data to inform management.	During construction of shared infrastructure	N/A	Completed	Item assessed as completed in a previous audit period.	NA	Item not included in Knox EMP.
EMP 68.	Certify all soil and fill material sourced from outside the project area as disease and weed free in accordance with DAFWA and DPW AND/OR DER requirements. If certificates cannot be obtained a risk assessment will be carried out on the soil material and only material that is evaluated as a very low risk of having environmental or	To prevent the introduction/ spread of weeds and plant pathogens in	Ongoing from commencement of ground disturbance	Site inspections - 13 June 2018, 22 October 2018 and 19 December 2018.	Conformant	No external fill used by KAI during this audit period.	NR	Construction not yet commenced.



	declared noxious weeds or plant pathogens will be permitted for use.	the project area.						
EMP 69.	Inspect borrow pits and borrow pit access tracks prior to disturbance to ensure weed species are not present. If any weeds are present, they will be cleared and controlled (e.g. physical removal, spray, disposal off-site, burning) from the affected areas prior to commencement of borrow extraction.	To prevent the introduction/ spread of weeds and plant pathogens in the project area.	Prior to ground disturbance	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 70.	Rehabilitate disturbed areas that are not to be utilised post-construction in accordance with the Rehabilitation Management Sub-plan.	To re-establish native vegetation and reduce and control weed cover.	During construction of shared infrastructure / <i>During construction</i>	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 71.	Ensure that waste that may attract pest animals is properly disposed of as far as is practicable.	To prevent the encouragement of pest animals by ensuring effective waste disposal.	Ongoing from commencement of ground disturbance	Site inspections - 13 June 2018, 22 October 2018 and 19 December 2018.	Conformant	No pest animal-attracting waste was observed during site inspections.	NR	Construction not yet commenced.
EMP 72.	Undertake pest eradication program within Buffer Area.	To reduce the risk of pest animals becoming established within the Buffer Area.	Ongoing from commencement of ground disturbance	Site inspections - 13 June 2018, 22 October 2018 and 19 December 2018. KAI advice – ongoing reduction of cattle in buffer.	Conformant	No pest animals (eg cats) observed in buffer during inspections. Minimal evidence of cattle presence, indicating sustained reduction in cattle numbers in buffer.	NR	Construction not yet commenced.
EMP 73.	Install signs at the entry point to any access tracks in the Weaber Plain/Knox Creek Plain Buffer Area to discourage people from entering the area.	To reduce the risk of feral cats and dogs becoming established in the Buffer Area.	Prior to commencement of planting of crops	N/A	Completed	Refer to EMP 63. The timing of this action – prior to commencement of planting – indicates this action was completed for Weaber Plain in a previous audit period.	NR	Construction not yet commenced.
EMP 74.	Ensure stock are removed from the Buffer Area.	To remove stock as an ongoing source	Ongoing from commencement	Site inspections - 13 June 2018, 22 October 2018 and	Conformant	Refer to EMP 72. Very few cattle tracks and no	NR	Construction not yet commenced.

		of land degradation and a vector for introducing and spreading weeds throughout the Buffer Area.	ent of ground disturbance	19 December 2018. KAI advice – ongoing reduction of cattle is occurring in the buffer.		cattle observed during site inspections.		
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EMP Compliance Table 8 -Weed, plant pathogen and pest animal monitoring regime

EMP Compliance Table 8 – Weed, plant pathogen and pest animal monitoring regime									
Item	Activity and location	Frequency*	Target	Corrective action	Evidence	Weaber Plain		Knox Creek Plain	
						Status	Comment	Status	Comment
EMP 75.	Weed species found along permanent weed survey transects in the buffer	Annually	No new plant pathogens or weed species observed or recorded in the mapped area during construction. No new Priority Areas during construction.	<ol style="list-style-type: none"> <li>1. Map the extent of any new Priority Areas.</li> <li>2. Map the distribution of the newly introduced species.</li> <li>3. Identify activities that may have potentially introduced the species.</li> <li>4. Plan and implement a monitoring or control treatment program.</li> <li>5. Re-educate contractors/farm owners/managers of the importance of hygiene control measures.</li> </ol>	As per EMP54. Photographic survey evidence samples provided – 2018.EMP54a and 2018.EMP54b with weed – Parkinsonia – present. 2018.EMP75a, 2018.EMP75b, 2018.EMP75c – no WONS or declared weeds observed.	Conformant	Refer to EMP 54.	NR	Construction not yet commenced.
EMP 76.	Density/ cover/ distribution of weed species in the permanent weed survey transects and common use infrastructure areas.	Annually	No more than a 10% statistical increase in weed species density/ cover/distribution compared to the results of initial weed survey. No new Priority Areas	<ol style="list-style-type: none"> <li>1. Map the extent of any new Priority Areas.</li> <li>2. Map the revised extent of the specific weed species within the site.</li> <li>3. Identify activities that may have potentially spread the weed species.</li> </ol>	Refer to EMP 54.  Site inspections - 13 June 2018, 22 October 2018 and 19	PNC	No new priority areas were observed during site inspections.  As with previous audit findings, density / cover / distribution of weed species in the permanent weed survey	NR	Construction not yet commenced.

				<ol style="list-style-type: none"> <li>Plan and implement a weed control treatment program.</li> <li>Apply hygiene control and education measures.</li> </ol>	<p>December 2018.</p> <p>2018.EMP76 indicates buffer condition alongside common use infrastructure (Wooljim Road).</p>		<p>transects is not explicitly measured. <i>As such, the auditor has assessed this item as potentially non-conformant.</i> However, given that the majority of common use areas are slashed (eg drains, channel banks) and that regular informal inspections occur, followed by weed treatment, the intent of this monitoring action – to ensure the minimising of weed infestations in common areas – is being incorporated into day-to-day farming activity.</p> <p>Previous audits recommended this action be revised.</p>		
EMP 77.	Presence of declared weeds in farm lots.	As required	No declared weed species present.	<ol style="list-style-type: none"> <li>Notify DAFWA if required.</li> <li>Investigate cause.</li> <li>Undertake weed control in accordance with DAFWA requirements.</li> <li>Monitor success of weed control.</li> </ol>	Site inspections - 13 June 2018, 22 October 2018 and 19 December 2018.	Conformant	KAI reported that previously [2017] reported Parkinsonia in Lot 15 (MG Corporation lot) subject to physical removal through ongoing farm development activity.	NR	Construction not yet commenced.
EMP 78.	Feral animals (including stock) in the Weaber Plain / Knox Creek Plain Buffer Area	As required	No new pest animals or sightings of feral animals	<ol style="list-style-type: none"> <li>Investigate cause.</li> <li>Undertake eradication program as required.</li> <li>Undertake intervention or remediation works (e.g. reduce bins, trapping, re-education).</li> </ol>	Refer to EMP 72	Conformant	Refer to EMP 72.	NR	Construction not yet commenced and Buffer Area yet to be fenced.

EMP Compliance Table 9 - Surface water management actions

EMP Compliance Table 9 – Surface water management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 79.	Induct personnel on surface water management measures, including: <ul style="list-style-type: none"> <li>M2 channel may receive effluent from the Kununurra Wastewater Treatment Plant</li> <li>the potential risks from <i>Burkholderia pseudomallei</i>, which is found dormant in soils and the potential for its dispersion through irrigation processes.</li> </ul>	To reduce the potential for activities to adversely affect surface water values by ensuring construction personnel are aware of appropriate management measures.	Within one week of personnel commencing work on-site	N/A	Completed	Item assessed as completed in a previous audit period.	NA	Item amended in Knox EMP (refer to KEMP 79).
<b>KEMP 79</b>	<i>Induct personnel on surface water management measures.</i>	<i>To reduce the potential for activities to adversely affect surface water values by ensuring construction personnel are aware of appropriate management measures.</i>	<i>Within one week of personnel commencing work on-site</i>	NA	NA	NA	NR	Construction not yet commenced.
EMP 80.	Construct levees at the perimeter of farmland adjacent to Border Creek/Knox Creek to protect them from 1 in 20 year ARI flooding.	To protect farmland, prevent sedimentation of farm soil in Border Creek or the Keep River system.	Prior to commencement of planting of crops	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Planting of crops not expected to commence until 2018 at the earliest.

**EMP Compliance Table 9 – Surface water management actions**

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 81.	Locate all drains on less permeable soils to minimise seepage to groundwater where possible. Where deeper drains are required, the excavated surface of the drain will be compacted to reduce seepage.	To reduce accessions to groundwater.	Prior to commencement of planting of crops	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Planting of crops not expected to commence until 2018 at the earliest.

*EMP Compliance Table 10 - Surface water monitoring regime*
**EMP Compliance Table 10 – Surface water monitoring regime**

Item	Activity and location	Frequency	Target	Corrective action	Evidence	Weaber Plain		Knox Creek Plain	
						Status	Comment	Status	Comment
EMP 82.	Inspect areas along the banks of channels, watercourses and drainage devices downstream and adjacent to the project area for evidence of erosion.	Ongoing from commencement of ground disturbance	No exposed surfaces outside the channel from which erosion could occur	1. Investigate cause. 2. Implement erosion protection measures, such rock armouring or application of hydromulch to areas identified. 3. Monitor the effectiveness of remedy.	KAI advised ongoing inspections during routine farm activity.  Site inspections - 13 June 2018, 22 October 2018 and 19 December 2018.	Conformant	Refer to EMP 18.	NR	Construction not yet commenced.

*EMP Compliance Table 11 - Groundwater management and monitoring actions*
**EMP Compliance Table 11 – Groundwater management and monitoring actions**

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 83.	Expand the groundwater monitoring bore network to include:	To allow the collection of baseline and ongoing groundwater data	Install prior to commencement of clearing of farm lots and at least 18 months before	N/A	Completed	Item assessed as completed in a previous audit period.	NA	Item amended in Knox EMP (refer to KEMP 83).

EMP Compliance Table 11 – Groundwater management and monitoring actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
	<ul style="list-style-type: none"> <li>at least 20 'high intensity'+ regional bores</li> <li>at least 30 'low intensity'+ regional bores.</li> </ul>	to guide management.	the commencement of irrigation.					
<b>KEMP 83</b>	<p>Expand the groundwater monitoring bore network to include:</p> <ul style="list-style-type: none"> <li>'high intensity' regional bores (i.e. auto loggers installed)</li> <li>'low intensity' regional bores (i.e. no auto loggers installed but monitored manually).</li> </ul>	To allow the collection of baseline and ongoing groundwater data to guide management.	Install prior to commencement of clearing of farm lots, a minimum of 18 months prior to irrigation.	KAI advice (December 2018).	NA	N/A	Conformant	KAI advised no changes from the previous audit period (i.e. no new bores had been installed as construction not yet scheduled to commence), but that existing bores are still being monitored. Refer to 2018.EMP84a and 2018.EMP84b.
EMP 84.	<p>Undertake monitoring of the parameters determined under Item 2 in bores established under EMP 83.</p> <p>Item 2 refers to this item (EMP 84)</p>	To collect baseline and ongoing groundwater data to determine any adverse effects to the receiving environment as a result of the Proposal.	<p>Commencing 18 months prior to commencement of irrigation.</p> <p>High intensity bores:</p> <ul style="list-style-type: none"> <li>* groundwater levels and</li> <li>* temperature (automatic, daily)</li> </ul> <p>EC, pH, TDS, major cations and anions, nutrients and pesticides seasonally.</p> <p>Low intensity bores:</p>	KAI advice (December 2018). 2018.EMP84a 2018.EMP84b	PNC	<p>This PNC carries over from previous audits, which found the prescribed monitoring requirements have been superseded following the recommendations from the baseline groundwater studies conducted on the Weaber Plain, and KAI is following the monitoring regime recommended in the baseline analysis report. As the action has not been amended to reflect the outcomes of the baseline studies, it must remain a PNC, however the groundwater database indicates the recommended monitoring has occurred.</p> <p>Data from high intensity bores (logger data) was being analysed by DPIRD at</p>	NA	Item amended in Knox EMP (refer to KEMP 84).

EMP Compliance Table 11 – Groundwater management and monitoring actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
			groundwater levels, EC, pH, TDS, nutrients and pesticides seasonally.			<p>the time of preparation of this audit report.</p> <p>Groundwater levels, EC and pH were recorded by the loggers for high intensity bores. However, monitoring of pesticides was not undertaken [as this is not a requirement of the Independent Review Group, following baseline studies]. <i>It is this element of the action that indicates the PNC.</i></p> <p>The Strategen 2015 audit recommendation is retained. Previous auditors recommended that a review of the groundwater monitoring regime required under the EP Act (i.e. this EMP) for both the Weaber and Knox Creek Plains is undertaken to ensure alignment and consistency with the EPBC Act approval (and any variation to that approval) as informed and recommended by the IRG to the satisfaction of the OEPA.</p>		
<b>KEMP 84</b>	<p>Undertake monitoring of the parameters below for bores established under Item 1 (KEMP 83)</p> <p>High intensity bores:</p> <ul style="list-style-type: none"> <li>groundwater levels and temperature (automatic, daily)</li> <li>EC, pH, TDS, nutrients and pesticides seasonally</li> </ul> <p>Low intensity bores:</p>	To collect baseline and ongoing groundwater data to determine any adverse effects to the receiving environment as a result of the Proposal.	Commencing 18 months prior to commencement of irrigation.	KAI advice (19 December 2018) 2018.EMP84a 2018.EMP84b	NA	NA	NR	Baseline groundwater monitoring on the Knox Creek Plain continued in 2018. Refer to EMP 84 (for Weaber Plain) regarding monitoring of atrazine (pesticides). As irrigation is not scheduled to commence for some time, this item has not been assessed as NR.

EMP Compliance Table 11 – Groundwater management and monitoring actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
	<ul style="list-style-type: none"> <li>groundwater levels, EC, pH, TDS, nutrients and pesticides seasonally.</li> </ul>							
EMP 85.	Undertake monitoring of the chemical and nutrient parameters determined by DoW licence conditions in bores established under Item 83.	To collect baseline and ongoing groundwater data.	Annually at commencement of dry season commencing 12 months prior to operation of irrigation infrastructure.	N/A	Unable to audit	Bores are for monitoring purposes only, not water abstraction, and therefore a bore licence from DoW (now DWER) is not required.  <u>2015 recommendation retained:</u> The auditors recommend deletion of this action as Department of Water (DoW) [now DWER] licence conditions are not applicable.	NA	Item not included in Knox EMP.
EMP 86.	Expand the groundwater monitoring bore network with the establishment of at least one 'on-farm' bore per farm.	To allow the collection of baseline and ongoing groundwater data to inform management.	Install after clearing of farm lots but prior to commencement of irrigation.	KAI advice (19 December 2018) 2018.EMP84a 2018.EMP84b	Conformant	Bores installed previously by DAFWA (DPIRD) or KAI are utilised adjacent to lots, however all KAI lots are managed as one farm.  DPIRD advised that analysis of all bore data is being undertaken in early 2019, to determine trends and make recommendations as to whether additional bores are required.  The auditor recommends that the 'new EMP' takes into account the recommendations of this analysis.	NR	Clearing of farm lots has not yet commenced.
EMP 87.	Determine sampling parameters for 'on farm' bores in consultation with the IRG including: <ul style="list-style-type: none"> <li>groundwater levels</li> <li>EC</li> <li>pH.</li> </ul>	To inform management.	Prior to commencement of irrigation and annually after the commencement of irrigation.	KAI advice (19 December 2018) 2018.EMP84a 2018.EMP84b	Conformant	KAI advised that sampling parameters have not changed.  Groundwater monitoring is overseen by the Independent Review Group established under EPBC 2010/5491 requirements.  DPIRD advised that a review of groundwater monitoring will be undertaken in 2019 following analysis of data from 2016-2018.	NA	Item amended in Knox EMP (refer to KEMP 87).



**EMP Compliance Table 11 – Groundwater management and monitoring actions**

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
<b>KEMP 87</b>	Determine sampling parameters for 'on farm' bores including: <ul style="list-style-type: none"> <li>groundwater levels</li> <li>EC</li> <li>pH.</li> </ul>	To inform management.	Prior to commencement of irrigation and annually after the commencement of irrigation.	NA	NA	NA	NR	Irrigation not yet commenced.
EMP 88.	Undertake monitoring of the bores established under Item 86 for physical, chemical and nutrient parameters as determined by DoW licence conditions if regional bore ground water quality exceeds triggers.	To increase the monitoring spatial intensity to help determine location and reasons for exceedance. To assist with development of appropriate contingency action.	Annually at commencement of dry season once trigger has been exceeded.	NA	NR	No DoW licence and therefore no conditions. The 2015 (Strategen, 2016) recommendation is retained, recommending the amendment to or deletion of this action as reference to DoW (DWER) licence conditions is not applicable.	NR	Construction not yet commenced. <u>2015 recommendation retained</u> : The auditors recommend amending or deleting this action as the reference to DoW licence conditions is not applicable.
EMP 89.	Maintain a database of groundwater levels and groundwater quality data based on monitoring results.	To provide data to inform management. To be used in combination with high and low intensity bores where exceedances of triggers are defined.	Ongoing – database to be updated at least every six months with the database to be established prior to June 2013.	2018.EMP84a 2018.EMP84b	Conformant	Groundwater database includes 2018 monitoring results.	NR	Monitoring data from Knox Creek Plain bores included in the data.
EMP 90.	Establish and maintain a database of groundwater chemical and nutrient parameters.	To provide data to inform management.	Ongoing – database to be updated annually.	2018.EMP84a 2018.EMP84b	Conformant	Refer to EMP 89.	NR	Monitoring data from Knox Creek Plain bores included in the data.
EMP 91.	Update groundwater model and operation of groundwater management system with monitoring	To assist in determining an optimal dewatering	Prior to commencement of irrigation and subsequently	DPIRD advised (December 2018) that an analysis of all groundwater	Conformant	DPIRD advised that the 'Weaber-Knox' groundwater model was reviewed and	NA	Item amended in Knox EMP (refer to KEMP 91).

**EMP Compliance Table 11 – Groundwater management and monitoring actions**

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
	data derived from EMP 84, 89 and 90, in consultation with the IRG.	strategy and to forecast potential breaches of trigger values within a ten year period.	every 2–4 years depending on monitoring trends. If worst case scenario indicated a breach in trigger levels, modelling must be updated every two years.	data to date will be conducted in early 2019.		updated in 2014. Updates are required every 2–4 years. Analysis of 2011-2018 data will inform model updates and management and monitoring recommendations to the IRG in 2019. This analysis is being undertaken by the Proponent (DPIRD) in 2019.		
<b>KEMP 91</b>	<i>Update groundwater model and operation of groundwater management system with monitoring data.</i>	<i>To assist in determining an optimal dewatering strategy and to forecast potential breaches of trigger values within a ten year period.</i>	<i>Prior to commencement of irrigation and subsequently every 2–4 years depending on monitoring trends. If worst case scenario indicated a breach in trigger levels, modelling must be updated every two years.</i>	NA	NA	NA	NR	Irrigation not yet commenced. However, the analysis of monitoring data to be undertaken by DPIRD in early 2019 will include the Knox Creek Plain.
EMP 92.	Define the conditions at which various irrigation methods can be utilised for the leased farms on the Weaber Plain development based on the outcomes of future modelling undertaken.	To maximise water use efficiency and minimise potential environmental impacts of shallow groundwater levels by managing irrigated agriculture and/or cropping systems where required,	Review every five years in association with modelling from the commencement of irrigation.	DPIRD advice (December 2018).	NR	Irrigation commenced in 2015. DPIRD advised that the review to be undertaken in early 2019 (see EMP 91) will inform recommended changes to irrigation management required through this action.	NA	Item amended in Knox EMP (refer to KEMP 92).

**EMP Compliance Table 11 – Groundwater management and monitoring actions**

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
		e.g. on leased farms.						
<b>KEMP 92</b>	<i>Define the conditions at which various irrigation methods can be utilised for the Knox Creek Plain farms, based on the outcomes of modelling undertaken.</i>	<i>Refer to EMP 92.</i>	<i>Refer to EMP 92.</i>	NA	NA	NA	NR	Irrigation has not yet commenced.
EMP 93.	Adopt ANZECC guidelines trigger values for a 'high conservation/ecological value system' for three years then adopt appropriate site-specific trigger levels for chemicals and nutrients in accordance with ANZECC & ARMCANZ guidelines (2000).	To ensure monitoring and management responses relate to appropriate trigger levels.	For the initial three years, after which site-specific triggers will be adopted.	KAI advised no change from previous status.	Conformant	A review of this action, as previously recommended by the 2016 auditors (Strategen) is supported.	NA	Item amended in Knox EMP (refer to KEMP 93).
<b>KEMP 93</b>	<i>Adopt water quality trigger values established under the requirements of EPBC Approval 2010/5491.</i>	<i>To ensure monitoring and management responses relate to appropriate trigger levels.</i>	<i>Ongoing</i>	KAI advised no change.	NA	NA	Conformant	Refer to EMP 93 (Weaber Plain). This is being managed under the guidance of the IRG, which references the EPBC Act approval.

EMP Compliance Table 12 - Groundwater contingency actions

EMP Compliance Table 12 – Groundwater contingency actions								
Item	Trigger	Corrective action	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 94.	Groundwater levels, soil salinity and quality exceed or are likely to exceed trigger levels	1. Investigate cause. 2. Implement actions consistent with Groundwater Management Plan (Appendix 3) (e.g. modify land use/irrigation strategies, groundwater extraction). 3. Document changes in Annual Environmental Report (AER).	Refer to EPBC-approved Groundwater Management Plan	Refer to EMP 19, EMP 84. EMP 88 and EMP 93	PNC	This PNC is carried forward from 2016 (Strategen, 2017). Soil salinity monitoring has been undertaken during the audit period. Groundwater quality data provided now includes trigger levels for some (but not all) of the analytes listed under EMP 84. No information was provided in relation to how exceedances are to be addressed. In line with the previous (2016) recommendation, the finding of this audit is that the groundwater monitoring actions are reviewed in consideration of the requirements of the EPBC approval, in conjunction with the IRG and the Department of Environment and Energy, and EPA Services, to ensure the intent of the groundwater actions, the monitoring regime and corrective actions are satisfactory. It is noted that both an EMP review and review of groundwater monitoring data are in progress. The previous audit noted that evidence item 2017.EMP94 provides a letter from the IRG to the Minister for the Environment, similarly seeking a full review of groundwater monitoring and management requirements. A response from the Minister to this letter had not been received by the Proponent at the time of this audit.	NR	Irrigation not yet commenced.

**EMP Compliance Table 12 – Groundwater contingency actions**

Item	Trigger	Corrective action	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 95.	Levels of chemicals and nutrients exceed scenarios that show: * an increasing trend in the concentration of any chemical (at statistical confidence levels) * an exceedance of the site-specific triggers for a particular chemical over two consecutive years.	1. Implement EMP 8 and 9 (Table 14) [KEMP: item 6 (Table 14)] to better map the distribution of groundwater exceeding target levels. 2. Investigate cause. 3. In consultation with the IRG, identify remedial action required, which could include the modification of irrigation and agricultural practices, reducing or ceasing the use of fertiliser and/or chemicals, groundwater abstraction or a combination of these measures. 4. Implement remedial action immediately after trigger levels are exceeded or, in consultation with the IRG, at an appropriate time. 5. Monitor success of remedy quarterly for 12 months or, following consultation with the IRG and in accordance with the advice from the IRG, <i>(the following text from KEMP only)</i> in relation to the impacts of MNES in the Keep River. 6. Document changes in Annual Environmental Report (AER).	Refer EPBC Groundwater Management Plan	Refer to EMP 93 and EMP 94	PNC	The Proponent advised that a full analysis of groundwater monitoring undertaken in recent years was being conducted by its DPIRD hydrologists during 2019. The analysis will address trends across the Weaber Plain. This is also expected to result in recommendations for changes in the monitoring regime.  Previous auditors recommended this action is revised to satisfaction of OEPA (EPA Services). This current audit similarly concludes that a full review of the EPBC <i>Groundwater Monitoring Plan</i> and associated actions and monitoring regime is required, in conjunction with the IRG, noting that the groundwater actions included in the 2013 EMP (as the basis for this audit) were taken from the EPBC-approved Groundwater Management Plan. Subsequent post-baseline management changes under the EPBC approval have resulted in inconsistencies between the documents, which need to be addressed with the approval of both State and Commonwealth regulators.  The revised EMP is expected to address this issue and will be informed by the DPIRD groundwater review.	NR	Irrigation not yet commenced.

*EMP Compliance Table 13 - Discharge management actions*

EMP Compliance Table 13 – Discharge management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	Comment
EMP 96.	Construct a tailwater retention area on each farm lot sufficient to retain stormwater runoff during the periods most critical (low flow periods) to the Keep River system in consultation with DAFWA and the Office of the Environmental Protection Agency.	Capacity to manage runoff to avoid transporting chemicals downstream.	Prior to commencement of irrigation	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018.  2018.EMP96a Goomig tailwater dams (satellite vision December 2018). 2018.EMP96b 2018.EMP96c 2018.EMP96d 2018.EMP96e	Conformant	The auditor observed that tailwater retention dams have been established to service all operating farm lots, and are under construction on lots currently under development.	NA	Item amended in Knox EMP (refer to KEMP 96).
<b>KEMP 96</b>	<i>Construct a tailwater retention area on each farm lot sufficient to retain stormwater runoff during the periods most critical (low flow periods) to the Keep River system.</i>	<i>Capacity to manage runoff to avoid transporting chemicals downstream.</i>	<i>Prior to commencement of irrigation</i>	NA	NA	NA	NR	Construction not yet commenced.
EMP 97.	No usage of chemicals and fertilisers when the tailwater retention capacity is unavailable.	To prevent the transporting of nutrients and chemicals downstream.	Ongoing from commencement of farming	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018.	Conformant	KAI confirmed that as noted in previous audits, tailwater retention capacity has not been reached nor is it ever expected to in the dry season as the capacity of retention areas includes a 25 mm threshold for rainfall runoff. KAI reaffirmed this tailwater holding capacity.	NR	Construction not yet commenced.
EMP 98.	Provide an Information Package to prospective	To minimise the potential for agricultural	At sublease of farm lots	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.

**EMP Compliance Table 13 – Discharge management actions**

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
	landowners/lessees, which: * outlines the susceptibility of soil to erosion from high intensity rainfall during the wet season * encourages maintenance of crop cover during the wet season to reduce soil erosion * outlines optimal irrigation strategies to reduce potential impacts of sodicity and salinity * includes information regarding identification of salinity and sodicity and mechanisms to report this to the Proponent.	practices to result in erosion by ensuring prospective landowners are aware of the risks and appropriate management measures.						
EMP 99.	Determine AUSRIVAS trigger score levels for aquatic macro-invertebrates in consultation with the IRG.	To manage the discharge of stormwater and surplus groundwater to protect the downstream	Prior to commencement of irrigation	N/A	Completed	Item assessed as completed in a previous audit period.	NA	Item amended in Knox EMP (refer to KEMP 99).

EMP Compliance Table 13 – Discharge management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	Comment
	Updated wording of Commonwealth EPBC Approval (2010/5491) condition 11f: <i>“Use of best practice multivariate analyses on species level macro-invertebrates and fish assemblage data, within an adequate experimental design (as defined in the AFMP 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, 2, and 3) relative to baseline and upstream reference sites’.</i>	environment and EPBC listed species.						
<b>KEMP 99</b>	Adopt water quality trigger levels, as developed in consultation with the IRG under EPBC Approval 2010/5491 and EPBC 2014/7143.	To manage the discharge of stormwater and surplus groundwater to protect the downstream environment and EPBC listed species.	Prior to commencement of irrigation	N/A	NA	NA	NR	Irrigation not expected to commence until 2018 at the earliest.



EMP Compliance Table 13 – Discharge management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	Comment
EMP 100.	Establish and update annually, a list of key analytes (chemicals and nutrients) to be sampled, based on-farm practices as part of ongoing water quality monitoring in consultation with DAFWA, DoW and the IRG.	To ensure key chemicals and nutrients are included in water quality monitoring.	Prior to commencement of planting of crops, then ongoing annually	2018.EMP100	Conformant	KAI provides an annual chemical risk assessment update to the IRG.  As advised by previous auditors, DAFWA (DPIRD) provides Executive Support to the IRG. The Department of Water and Environmental Regulation (DWER) is not represented, and has never been involved in contributing to the development or revision of such a list.  The auditor retains the sentiment of the 2016 audit (Strategen, 2017) that this action be revised.	NA	Item amended in Knox EMP (refer to KEMP 100).
<b>KEMP 100</b>	<i>Establish and update annually, a list of key analytes (chemicals and nutrients) to be sampled, based on-farm practices as part of ongoing water quality monitoring</i>	<i>To ensure key chemicals and nutrients are included in water quality monitoring.</i>	<i>Prior to commencement of planting of crops, then ongoing annually</i>	N/A	NA	NA	NR	Planting of crops not expected to occur until 2018 at the earliest.
EMP 101.	Install a water quality and flow gauging station capable of sampling, on a flow proportional basis (at least sub-daily when required) at the stormwater outlet from the Development Area.	To determine flow rate from the Project Area to inform management.	Prior to commencement of planting of crops	N/A	Previously recorded as completed	The DW1 Gauging Station installed on Border Creek visited during site inspections. The SCADA program has the ability to undertake automatic and manual samples, but this is not used due to telecommunications access issues. It is noted that the remote monitoring of the DW1GS has been problematic and that Proponent is investigating options for ensuring remote access compliance can be maintained.  The auditor recommends that the Proponent ensure that remote telecommunications access to the DW1GS is restored to full functionality as a matter of urgency, given the importance of this infrastructure in monitoring and ensuring compliance with the EMP (and related EPBC conditions).	NA	Item amended in Knox EMP (refer to KEMP 101).
<b>KEMP 101</b>	<i>Install a water quality and flow gauging station at the stormwater</i>	<i>To determine flow rate from the Project Area</i>	<i>Prior to commencement of planting of crops</i>	NA	NA	NA	NR	Planting of crops not expected to occur until 2018 at the earliest.

EMP Compliance Table 13 – Discharge management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	Comment
	<i>outlet from the Development Area.</i>	<i>to inform management.</i>						
EMP 102.	Monitor water quality at the stormwater outlet from the Development Area, in consultation with DAFWA, DoW and DPW AND/OR DER.	To determine salinity and nutrient contribution from the Project Area to inform management.	On a flow proportional basis (with the ability to sample sub-daily as required)	2018.EMP102a 2018.EMP102b	Conformant	No dry season flows were recorded at Border Creek, downstream of the Goomig development area (see 2018.EMP102a).  Water quality monitoring reported in 2018.EMP102b, including five days first flush (early January 2019).	NA	Item amended in Knox EMP (refer to KEMP 102).
<b>KEMP 102</b>	<i>Monitor water quality at the stormwater outlet from the Development Area</i>	<i>To determine salinity and nutrient contribution from the Project Area to inform management.</i>	<i>On a flow proportional basis (with the ability to sample sub-daily as required)</i>	NA	NA	NA	NR	Construction not yet commenced.
EMP 103.	Ensure the flow gauging stations at Border Creek and the Keep River have the required accuracy to measure low flow rates in consultation with the Northern Territory NRETAS and IRG.	To provide flow data to manage the discharge of stormwater and surplus groundwater.	Prior to commencement of planting of crops	N/A	Completed	Assessed as complete in a previous audit.	NA	Item not included in Knox EMP.
EMP 104.	Monitor water flow at the stormwater outlet from the Development Area, Border Creek and the Keep River, determined in consultation with IRG, DAFWA, DoW	To preserve and protect the water quality of the Keep river and EPBC listed species, prevent erosion of the banks of the	Ongoing from commencement of irrigation	2018.EMP102a 2018.EMP102b	Conformant	Refer to EMP 102. The DW1 Gauging Station installed on Border Creek visited during site inspections. The SCADA program has the ability to undertake automatic and manual samples, but this is not used due to telecommunications access issues. It is noted that the remote monitoring of the DW1GS has been problematic and that Proponent is investigating options for ensuring remote access compliance can be maintained.  <u>The 2015 recommendation is retained:</u> Previous auditors recommended consideration be given to clarifying the timing	NA	Item amended in Knox EMP (refer to KEMP 104).

EMP Compliance Table 13 – Discharge management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	Comment
	and DPW AND/OR DER.	Keep River and provide maximum mixing potential.				of this action to state “When flowing in the dry season”. Previous auditors also recommended consideration be given to revision of the parties listed for consultation to the IRG, subject to the advice and satisfaction of the OEPA (Strategen, 2017).  The auditor recommends that the Proponent ensure that remote telecommunications access to the DW1GS is restored to full functionality <u>as a matter of urgency</u> , given the importance of this infrastructure in monitoring and compliance with the EMP (and related EPBC conditions).		
<b>KEMP 104</b>	Monitor water flow at the stormwater outlet from the Development Area and the Keep River.	To preserve and protect the water quality of the Keep river and EPBC listed species, prevent erosion of the banks of the Keep River and provide maximum mixing potential.	Ongoing from commencement of irrigation	NA	NA	NA	NR	Irrigation not yet commenced.
EMP 105.	Develop and implement an adaptive groundwater and stormwater discharge program that addresses: * design and location of dewatering infrastructure	To provide information for adaptive management of the discharge of stormwater and surplus groundwater.	Ongoing after sale/lease of farmland and prior to the commencement of stormwater and groundwater discharge from operational farms	KAI advice (19 December 2018).  2018.EMP102a. 2018.EMP102b.  2018.EMP105a 2018.EMP105b	NR	KAI advised groundwater (and stormwater during the dry season) is not being discharged from the Project area.  Stormwater flow during the wet season is monitored and recorded per EMP102.  Discharge rates, rules and contingency actions have been revised in 2018 in conjunction with the IRG established under the associated EPBC approval. 2018.EMP105a and 2018.EMP105b outline the adaptive monitoring and management approach developed between the Proponent, KAI and the IRG in 2018 (finalised early 2019).	NR	Construction not yet commenced.

EMP Compliance Table 13 – Discharge management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
	<ul style="list-style-type: none"> <li>* design and location of discharge infrastructure</li> <li>* discharge rates, rules and contingency actions</li> <li>* monitoring locations and requirements including infrastructure and setup</li> <li>* written evidence of any Northern Territory Government permits that are required for discharge of</li> <li>* groundwater management measures that ensure discharge of water will not impact on water quality in Border Creek/Keep River; this includes erosion protection measures.</li> </ul>							

EMP Compliance Table 13 – Discharge management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain	Comment	Knox Creek Plain	
					Status		Status	Comment
EMP 106.	Refine the discharge dilution model / relationship based on river flow monitoring data and water quality history from the Ord Stage 1 D4 drain and available water quality data from the Keep River system.	To determine when flow rates at Border Creek and the Keep River fall below a minimum flow rate to enable flushing.	Prior to commencement of irrigation	N/A	Completed	Identified as completed in a previous audit. Refer also to 2018.EMP105a and 2018.EMP105b.	NA	Item amended in Knox EMP (refer to KEMP 106).
<b>KEMP 106</b>	<i>Refine the discharge dilution model/relationship based on river flow monitoring data</i>	<i>To determine when flow rates at the Keep River fall below a minimum flow rate to enable flushing.</i>	<i>Prior to commencement of irrigation</i>	NA	NA	NA	NR	Irrigation not expected to commence until 2018 at the earliest.
EMP 107.	Refine the discharge dilution model / relationship based on flow monitoring data from the Development Area and the Keep River system and water quality characteristics of stormwater from the Development Area.	To determine when flow rates at the Keep River fall below a minimum flow rate to enable flushing.	On a seasonal basis, commencing 12 months after commencement of irrigation	2018.EMP105a 2018.EMP105b	Conformant	Refer to EMP 106 and previous audit commentary. A full review of the Stormwater and Groundwater Discharge Management Plan approved under EPBC 2010/5491 has been identified by the IRG as necessary. 2018.EMP105a and 2018.EMP105b provide the review of current monitoring, management and discharge rules. These document were developed in partnership with the IRG in late 2018 (finalised early 2019).	NR	Irrigation not yet commenced.
EMP 108.	Refine flow trigger values for the Keep River and Border Creek gauging station based on the refined discharge dilution model and	To determine when flow rates at Border Creek and the Keep River fall below a	Ongoing after sale/lease of farm lots or commencement of farming activity	2018.EMP105a 2018.EMP105b 2018.EMP102b	Conformant	Refer to EMP 106 & 107. This action was previously classified PNC. Flow trigger values have been established in conjunction with the IRG. Document 2018.EMP105a provides the revision. Document 2018.EMP105b refines approach to utilising triggers previously established for Keep River water quality,	NA	Item amended in Knox EMP (refer to KEMP 108).

EMP Compliance Table 13 – Discharge management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	Comment
	Operational Surface Water Model.	minimum flow rate to enable flushing.				when determining the impact of the Goomig development on the river. Previous audits have recommended this action be revised.		
<b>KEMP 108</b>	Review/refine trigger values for the Keep River pools.	To update discharge model.	Annually		NA	NA	NR	Irrigation not yet commenced.

EMP Compliance Table 14 - Discharge monitoring regime and corrective actions

EMP Compliance Table 14 – Discharge monitoring regime and corrective actions									
Item	Activity and location	Frequency	Target	Corrective action	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	Comment
EMP 109.	Telemetered flow monitoring at development gauge, existing gauging stations along Border Creek and the Keep River and in groundwater discharge pipe.	Continuous (hourly) flow monitoring when stormwater or groundwater discharge occurs.	No discharge of surplus groundwater to the Keep River unless there is sufficient threshold natural flow. No significant impact on the health of aquatic ecosystems from stormwater and surplus groundwater.	<ol style="list-style-type: none"> <li>Investigate cause. This could include examining management practices and identifying instances where water may have been unnecessarily discharged during low flow periods.</li> <li>Conduct an intensive water quality sampling program upstream and downstream of the discharge point.</li> <li>Immediately initiate processes to identify whether remedial action is required, in consultation with the IRG. Remedial actions could include:               <ul style="list-style-type: none"> <li>releasing irrigation water from the M2 channel into Border Creek</li> <li>increasing groundwater pumping into the Ord Stage 1 or 2 supply channel during periods of low river flow</li> <li>installing additional erosion protection</li> <li>educating farm owners/managers</li> </ul> </li> </ol>	2018.EMP102b 2018.EMP105	PNC	<p>Refer to EMP102 and EMP105. The DW1GS remains poorly functioning. The Proponent is investigating options for integrating the DW1GS with the Department of Water and Environmental Regulation's standard river gauging station monitoring system. The IRG has identified DW1GS functioning as a priority.</p> <p>This item has been rated a Potential Non-Conformance (PNC) as the functionality of the DW1GS and its ability to provide data in real time (via remote</p>	NA	Item amended in Knox EMP (refer to KEMP 109).

EMP Compliance Table 14 – Discharge monitoring regime and corrective actions									
Item	Activity and location	Frequency	Target	Corrective action	Evidence	Weaber Plain		Knox Creek Plain	
						Status	Comment	Status	Comment
				<ul style="list-style-type: none"> <li>revision of management practices (including groundwater discharge rules).</li> </ul> 4. Implement remedial action/s. 5. Monitor success of remedial action/s quarterly for a period of 12 months 6. Report on any findings as a result of monitoring.			telecommunications) has not been resolved.		
<b>KEMP 109</b>	<i>Telemetered flow monitoring at the development gauge, and the existing gauging station on the Keep River and in groundwater discharge pipe.</i>	<i>Refer to EMP 109</i>	<i>Refer to EMP 109.</i>	<i>Refer to EMP 109.</i>	NA	NA	NA	NR	Construction not yet commenced.
EMP 110.	Aquatic ecology monitoring (including aquatic invertebrates and fish) in the Keep River pools (K1, K2, K3 and K4) and threatened aquatic ecology monitoring (this includes the Speartooth shark [Glyphis glyphis], Northern river shark [Glyphis garricki], Dwarf Sawfish Pristis	Annually in the late dry season from the commencement of the action. Initially for three years to establish a baseline, and then for a further three years post-development. If there is no detectable effect on any of the species included in	No detrimental change in the AUSRIVAS macroinvertebrate category and in fish assemblage composition that is caused by the action. This can be resulting from stormwater, surplus groundwater and groundwater seepage increases, as	1. Immediately investigate cause over a period of at least 12 months through reviewing management practices and determining whether ecological health of aquatic fauna has deteriorated. 2. Identify remedial action required. Remedial actions could include: <ul style="list-style-type: none"> <li>releasing irrigation water from the M2 channel in Border Creek</li> <li>increasing the pumping rates of the eastern bores to reduce groundwater seepage</li> <li>increasing groundwater pumping into the Ord Stage 1 or 2 supply channel during periods of low river flow</li> <li>potentially, pending analysis, discharging groundwater into the lower Keep River estuary</li> </ul>	N/A	3-year baseline study - Completed.  3-years post-development – NR	Baseline study assessed as completed a previous audit period. The IRG has previously supported the commencement of the “three years’ post-development” aquatic fauna monitoring as being the year that 90% of Goomig farms are irrigated. This has not yet occurred.  <i>It is the auditor’s recommendation that given the delay in reaching 90%</i>	NA	Item amended in Knox EMP (refer to KEMP 110).

**EMP Compliance Table 14 – Discharge monitoring regime and corrective actions**

Item	Activity and location	Frequency	Target	Corrective action	Evidence	Weaber Plain		Knox Creek Plain	
						Status	Comment	Status	Comment
	clavata and Pristis Microdon) at three sites in the Keep River estuary (EST1, EST2, EST3). Monitoring to be supported by concurrent sampling at five control / reference locations to differentiate natural changes from those potentially resulting from the action (as listed in the Aquatic Fauna Management Plan).	the aquatic monitoring program, then frequency is reduced to three-yearly, or in response to known events that may result in exceedances of site-specific trigger values for water quality Keep River.	compared against reference sites that reflect natural variability in ecosystem health.	<ul style="list-style-type: none"> <li>installing additional erosion protection</li> <li>educating farm owners/managers</li> <li>revision of management practices (including groundwater discharge rules)</li> <li>review flow monitoring data.</li> </ul> 3. Implement remedial action/s, as required, immediately or at a time determined with the IRG to be appropriate. 4. Monitor success of remedial action/s at least quarterly for 12 months. 5. Report on any findings in Annual Environmental Report (AER) as a result of monitoring.			<i>development, and following the previously reported flow of Ord Stage 1 water to the Keep River (2017) that the Proponent ensure that the three-year post-development aquatic fauna monitoring is commissioned commencing in 2019.</i>		
<b>KEMP 110</b>	<i>Utilise the aquatic ecology monitoring conducted under EPBC Approval 2010/5491 as an indicator of the outcomes of the combined Weaber and Knox management.</i>	Ongoing	Refer to EMP 110.	Refer to EMP110.	NA	NA	NA	NR	Construction not yet commenced in the Knox Plain area. Post-development aquatic ecology monitoring conducted under EPBC Approval 2010/5491 not yet commenced.



EMP Compliance Table 15 - Biodiversity and habitat management actions

EMP Compliance Table 15 – Biodiversity and habitat management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 111.	Induct personnel on biodiversity and habitat management measures	To minimise potential for adverse environmental impacts by ensuring personnel are informed of appropriate environmental management procedures.	Within one week of personnel commencing work on-site	2018.EMP2	Conformant	Formal inductions are undertaken by KAI with general environmental management inclusions.	NR	Construction not yet commenced.
EMP 112.	Ensure development maps clearly delineate the Buffer Area and Development Area.	To prevent unauthorised clearing by ensuring clearing boundaries are appropriately documented.	Prior to ground disturbance	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet scheduled – development on hold.
EMP 113.	Delineate the boundaries of the vegetation to be cleared for construction in the field with flagging tape, signage or fencing.	To prevent unauthorised clearing by ensuring clearing boundaries are appropriately marked in the field.	Prior to ground disturbance	N/A	Completed	Refer to EMP 6. Item assessed as Completed as construction in the Weaber Plain development has been completed.	NR	Construction not yet scheduled – development on hold.
EMP 114.	Restrict movement of construction machinery and equipment to designated tracks and roads.	To minimise disturbance by consolidating vehicle access to designated areas.	Ongoing from commencement of ground disturbance	N/A	Completed	Refer to EMP 7. Item assessed as completed in a previous audit period.	NA	Item not included in Knox EMP.
EMP 115.	Stage clearing of vegetation so that areas are cleared only as required.	To minimise the area of exposed surfaces at any one time and to allow native animals the chance to move on.	During construction of shared infrastructure	N/A	Completed	Refer to EMP 7. Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 116.	Manage topsoil in accordance with the Soil Management Sub-plan	To provide a natural source of seed, organic matter and microorganisms for areas to be rehabilitated.	During construction of infrastructure	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 117.	Give native animals encountered on-site the opportunity to move on if	To prevent injury or death to native animals.	Ongoing from commencement of ground disturbance	Site inspections - 13 June 2018, 22/23	Conformant	No native animal encounters/incidents recorded.	NR	Construction not yet commenced.

**EMP Compliance Table 15 – Biodiversity and habitat management actions**

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
	there is no threat to personnel safety in doing so.			October 2018 and 19 December 2018. KAI advice - 19 December 2018.		KAI advised of occasional road-kill incidents of wallabies only.		
EMP 118.	Call the nominated carer or Wildlife Hotline to rescue sick or injured native animals if they are encountered.	To prevent loss of native animals.	Ongoing from commencement of ground disturbance	KAI advice - 19 December 2018.	Conformant	Refer EMP 117. No calls required.	NR	Construction not yet commenced.

**EMP Compliance Table 16 - Biodiversity and habitat management monitoring regime**
**EMP Compliance Table 16 – Biodiversity and habitat management monitoring regime**

Item	Activity and location	Frequency	Target	Corrective action	Evidence	Weaber Plain		Knox Creek Plain	
						Status	Comment	Status	Comment
EMP 119.	Compliance of marked clearing boundary with development maps.	Daily	No clearing adjacent to areas where clearing boundaries are not defined.	Report as Environmental Incident and initiate Incident Procedure which shall include: * investigating the cause of the incident * redefining boundaries.	2018.EMP119. Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018. KAI advice - 19 December 2018.	Conformant	A previous PNC on this action included incident reporting on accidental clearing in 2016 (between Lots 5 and 18). A mid-2018 monitoring image of this area is contained in 2018.EMP119. No further damage was observed during 2018 site inspections. Restoration to natural condition is occurring. Clearing in 2018 was within the pre-cleared boundaries of Lot 13.	NR	Construction not yet commenced.
EMP 120.	Extent of clearing and ground disturbance along pre-defined boundaries.	Daily	No clearing or disturbance outside of pre-defined boundaries.	Report as Environmental Incident and initiate Incident Procedure which shall include: * investigating the cause of the incident	2018.EMP120a 2018.EMP120b Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018. KAI advice - 19 December 2018.	Conformant	Clearing in 2018 was within the pre-cleared boundaries of Lot 13. Refer also to EMP119. No clearing outside of the farm boundaries was reported or noted during inspections.	NR	Construction not yet commenced.

				* redefining boundaries if due to inadequate boundary marking * rehabilitating affected area as required in accordance with the Rehabilitation Management Sub-plan. * monitoring the success of remedial action.					
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EMP Compliance Table 17 - Buffer management actions

EMP Compliance Table 17 – Buffer management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 121.	Control vehicle access to the buffer through designated tracks, and provision of signage to inform of restrictions to areas, including speed restrictions, hygiene protocols, and to advise that no off-track driving is permitted.	To minimise impacts to the buffer by consolidating and restricting access	At all times	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018. KAI advice - 19 December 2018.	Conformant	Signage to control access to the Buffer Area observed during site inspection. KAI previously advised auditors that access tracks through the Buffer Area are not signposted with vehicle speeds, hygiene protocols etc. to minimise the risk of unauthorised access (i.e. signage would only draw attention to these access tracks and increase likelihood of unauthorised access). This has not changed.	NA	Item amended in Knox EMP (refer to KEMP 121).
<b>KEMP 121</b>	<i>Control vehicle access to the buffer through designated tracks, and provision of signage to inform of restrictions to areas</i>	<i>To minimise impacts to the buffer by consolidating and restricting access</i>	<i>At all times</i>	NA	NA	NA	NR	Construction not yet commenced.
EMP 122.	Control human access to the buffer through provision of signage at	To minimise impacts to the buffer by	At all times	Site inspections - 13 June 2018, 22/23 October	Conformant	Signage advising of restricted access observed during site inspections.	NA	Item not included in Knox EMP.

EMP Compliance Table 17 – Buffer management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	Comment
	entry points to Buffer Area advising of restrictions and no unauthorised access.	restricting access		2018 and 19 December 2018. KAI advice - 19 December 2018.				
EMP 123.	Induct all personnel constructing or utilising infrastructure within the Buffer Area, including roads, channels, groundwater bores and the phone tower, to advise on protocols for hygiene, wildlife encounters, prohibited activities etc.	To minimise potential for adverse environmental impacts by ensuring personnel are informed of environmental management procedures	Within one week of commencing work on-site	2018.EMP2a 2018.EMP2b	Conformant	Formal inductions are undertaken by KAI with general environmental management inclusions.	NA	Item amended in Knox EMP (refer to KEMP 123).
<b>KEMP 123</b>	<i>Induct all personnel constructing or utilising infrastructure within the Buffer Area, including roads and groundwater bores.</i>	<i>To minimise potential for adverse environmental impacts by ensuring personnel are informed of environmental management procedures</i>	<i>Within one week of commencing work on-site</i>	NA	NA	NA	NR	Construction not yet commenced.
EMP 124.	Assess and map vegetation condition within the buffer according to the Keighery (1994) Vegetation Condition rating scale.	To provide data to inform management.	Prior to ground disturbance	N/A	Completed	Item assessed as completed in previous compliance report.	Completed	Ord Land and Water conducted a vegetation condition assessment of the Knox Creek Plain Buffer Area in the previous audit period.
EMP 125.	Stabilise and revegetate areas identified as containing vegetation below a rating of 'Very	To better enable the Buffer Area to fulfil its	Within 12 months of completion of construction	Site inspections - 13 June 2018, 22/23 October	Conformant	This item was previously classified as a PNC (Strategen, 2016) as the Keighery assessment method was not in use. However, there is no indication (from site inspections) that	NA	Item amended in Knox EMP (refer to KEMP 125).

EMP Compliance Table 17 – Buffer management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	Comment
	Good' in accordance with species lists and planting procedures determined in consultation with DPW AND/OR DER.	intended role and purpose by restoring ecological integrity and function to degraded areas.	of infrastructure	2018 and 19 December 2018.  2018.EMP125a 2018.EMP125b 2018.EMP125c 2018.EMP125d 2018.EMP125e		stabilisation and revegetation is warranted. Natural regeneration has occurred, and no notably degraded sites were identified during site inspections. As such, the action has been assessed as conformant.  Site inspections and satellite imagery of post-construction rehabilitation undertaken previously for LandCorp indicates regrowth congruent with surrounding landscapes – for example, see 2018.EMP125a.  The previous auditor recommendation to amend or remove this action is retained. The intent has been met through natural regeneration.		
<b>KEMP 125</b>	<i>Stabilise and spread topsoil (if available) in areas identified as containing vegetation below a rating of 'Very Good' in accordance with species lists and planting procedures determined in consultation with DPW.</i>	<i>To better enable the Buffer Area to fulfil its intended role and purpose by restoring ecological integrity and function to degraded areas.</i>	<i>Within 12 months of completion of construction of infrastructure</i>	NA	NA	NA	NR	Construction not yet commenced.
EMP 126.	In consultation with the DPW AND/OR DER and DoW, revegetate areas within the buffer with species selected specifically for their ability to lower the groundwater table, given the local soil, water and solute settings. Species used in such revegetation will be agreed with the DPW AND/OR DER and DoW.	To improve the ability of the buffer to reduce the potential impacts of elevated groundwater levels and minimise diffuse groundwater discharge (including salts)	Within 12 months of completion of construction of infrastructure and as determined to be required in consultation with DPW AND/OR DER and DoW	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018.  KAI advice - 19 December 2018.	NR	No buffer revegetation was required during the audit period.  Refer to 2019.EMP119 for post-2016 rehabilitation of (reported) accidentally cleared area between Lots 5 and 18.	NA	Item amended in Knox EMP (refer to KEMP 126).

EMP Compliance Table 17 – Buffer management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	Comment
		to downstream watercourses.						
<b>KEMP 126</b>	<i>If required for degraded areas, revegetate areas within the buffer with species selected specifically for their ability to lower the groundwater table, given the local soil, water and solute settings.</i>	<i>To improve the ability of the buffer to reduce the potential impacts of elevated groundwater levels and minimise diffuse groundwater discharge (including salts) to downstream watercourses.</i>	<i>Within 12 months of completion of construction of infrastructure and as determined to be required in consultation with DPW.</i>	NA	NA	NA	NR	Construction not yet commenced.
EMP 127.	Undertake weed control in areas identified as containing vegetation below a rating of 'Very Good', focusing on the most degraded areas first and in accordance with procedures detailed in the Weed, Plant Pathogen and Pest Animal Management Sub-plan.	To better enable the Buffer Area to fulfil its intended role and purpose by restoring ecological integrity and function to degraded areas.	Within 12 months of completion of construction of infrastructure and ongoing	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018. KAI advice - 19 December 2018.  2018.EMP54a 2018.EMP54b 2018.EMP54c	Conformant	This item was previously identified as a PNC as assessment <i>using the Keighery method</i> is not routinely undertaken. KAI advised that weed control occurs where WoNS or declared weed species are identified, as part of ongoing farm and buffer management. Site inspections and buffer condition time series photos showed no evidence of decline or excessive weed infestation, with evidence of weed control provided through photos and during site visits. The status is thus considered 'conformant'.  The previous (2016) auditor recommendation is retained: revision of this action to accurately reflect the weed control and monitoring program currently being undertaken.	NR	Construction not yet commenced.
EMP 128.	Liaise with DPW with regard to their plans for implementation of the State Cane Toad Strategy (DEC 2009) in the Development Area.	To reduce the potential effect of cane toads on the Buffer Area.	As required	N/A	Completed	Item assessed as completed in a previous audit period.	NA	Item not included in Knox EMP.

EMP Compliance Table 17 – Buffer management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 129.	Provide information to land owners and Traditional Owners, on the Cane Toad Strategy for Western Australia (DEC 2009).	To reduce the potential effect of cane toads on the Buffer Area	At sublease of farm lots	N/A	Completed	Item assessed as completed in a previous audit period.	NA	Item not included in Knox EMP.
EMP 130.	Investigate the possibility of extending the DPW AND/OR DER Traditional Owner Ranger Program (Kununurra based) into the Buffer Area, or incorporating other Indigenous management initiatives – consult with MG Corporation regarding shared responsibilities for maintenance of the Buffer Area.	To maximise opportunities for involvement of Traditional Owners in ongoing management of the Buffer Area	Ongoing	N/A	Completed	Item assessed as completed in a previous audit period.	Completed	Item assessed as completed as the investigation completed for Weaber Plain is assumed by the auditor to also be relevant to the Knox Creek Plain.
EMP 131.	Maintain the Buffer Area perimeter fencing, where required, to minimise stock invasion, remove introduced livestock, and continue to remove any subsequent invading livestock, as required, to protect native vegetation condition	To ensure species and habitats within the Buffer Area are not adversely affected by stock grazing	Ongoing	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018.	Conformant	Buffer Area perimeter fencing observed intact and maintained, during all site inspections. Minimal evidence of stock presence was identified during site inspections.	NR	Construction not yet commenced.
EMP 132.	Implement the Fire Management Sub-plan	To reduce the potential for impacts of fire on the buffer, infrastructure, MNES populations and habitats	Ongoing	Refer to EMP 45. 2018.EMP132	Conformant	No key actions have been identified from the Fire Management sub-plan (FMP); therefore, the plan has not been audited. Previous auditors were advised in 2015 that the FMP is due for revision in 2016; however, this it yet to be done. Site inspections indicated mosaic burning is occurring. This is supported by Firescar mapping (see 2018.EMP132).	NR	Construction not yet commenced.

### EMP Compliance Table 17 – Buffer management actions

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
						KAI advised that fire management is undertaken in accordance with the SWEK permits – Refer to EMP 45.		

### EMP Compliance Table 18 - Buffer monitoring actions

### EMP Compliance Table 18 – Buffer monitoring actions

Item	Activity and location	Frequency	Target	Corrective action	Evidence	Weaber Plain		Knox Creek Plain	
						Status	Comment	Status	Comment
EMP 133.	Assess vegetation condition using the Keighery (1994) rating scale and update vegetation condition map.	Annually commencing within 12 months of the commencement of the action.	All areas within buffer to be in 'Very Good' or better condition.	Investigate cause, e.g. cattle intrusion, loss of seed through heavy rains. Take appropriate remedial actions, e.g. feral animal eradication programs, stabilise and revegetate area. Monitor success of remedy (annually at time of regular monitoring).	2018.EMP.133a Through to 2018.EMP.133ar provide examples of buffer condition photo records held by KAI. Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018.	PNC	This action is recorded as a PNC as the Keighery scale is not applied and vegetation condition mapping is not routinely updated. However, the intent of the action is being met through routine buffer inspections during bore monitoring rounds at the beginning and end of each dry season. Photographic evidence samples (2018.EMP.133a through to 2018.EMP.133ar) showing no decline in vegetation condition near tracks and around bores. Previous audits have suggested amending this action.	NR	Construction not yet commenced.

### EMP Compliance Table 19 - Rehabilitation management actions

### EMP Compliance Table 19 – Rehabilitation management actions

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 134.	Select reference sites in buffer and conservation areas containing landforms and vegetation comparable (or likely to have been	To locate suitable sites against which to compare rehabilitation success.	Prior to ground disturbance	N/A	Completed	Item assessed as completed in previous compliance report.	NR	Construction not yet commenced.



EMP Compliance Table 19 – Rehabilitation management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
	comparable) to those of planned disturbance areas not required post-construction.					<b>Note:</b> Area 11 will require rehabilitation and reference sites to compare revegetation to; however, as the area is still being used as a quarry, reference sites have not yet been selected for this area.		
EMP 135.	Survey reference sites identified in EMP 134 to determine indicator species, density of native species, % cover of native species, native species richness and % weed cover as outlined in the monitoring procedures.	To provide data against which rehabilitation success can be measured.	Prior to ground disturbance and quarterly throughout the rehabilitation process	2018.EMP.54a 2018.EMP.54b 2018.EMP.54c  Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018. KAI advice 19 December 2018.	PNC	KAI advised that monitoring of rehabilitation areas is now undertaken consistent with revised buffer monitoring, whereby condition is assessed and weed presence and any inconsistency with adjacent land is noted. This occurs bi-annually, during groundwater monitoring rounds. Reference site surveys are not being undertaken. KAI also noted that it did not undertake the rehabilitation in the buffer or infrastructure areas. These activities were completed by Leighton Contractors or others for LandCorp at the completion of construction (~2012-14). Photographic records of rehabilitation site progress are retained by KAI.	NR	Construction not yet commenced.
EMP 136.	Determine parameters and targets for each indicator species as appropriate. e.g. density of indicator species, % cover of indicator species, etc.	To enable specific aspects of rehabilitation success to be measured.	Prior to ground disturbance	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 137.	Undertake a weed survey of the project area to establish baseline	To provide data to inform management.	As specified in the Weed, Plant	N/A	Completed	Item assessed as completed in a previous audit period.	Completed	Item assessed as completed

EMP Compliance Table 19 – Rehabilitation management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
	information in accordance with the Weed, Plant Pathogen and Pest Animal Management Sub-plan.		Pathogen and Pest Animal Management Sub-plan					in the previous audit period.
EMP 138.	Develop a species list for seed collection based on species known to germinate from seed and/or that can be propagated by nurseries (may require consultation with nurseries and rehabilitation specialists in the area).	To maximise potential for rehabilitation success by ensuring appropriate species are used in seeding/planting.	As required for rehabilitation	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Seed collection not yet required.
EMP 139.	Contract experienced seed collector licensed by the DPW AND/OR DER to undertake a seed collection program of plant species endemic to the project area following Florabank Guidelines (Greening Australia 2009) including: <ul style="list-style-type: none"> <li>gathering information and targeting certain species</li> <li>undertaking seed collection in the optimum season for the species</li> <li>collecting only mature seed</li> <li>determining seed collection method (e.g. natural seed fall, collection by hand, mechanical harvesting, etc.</li> <li>maintaining detailed record sheets to provide evidence that the seed is local provenance, e.g.</li> </ul>	To maximise potential for rehabilitation success by ensuring seed collection is undertaken in accordance with appropriate guidelines and procedures.	As required for rehabilitation	N/A	NR	Not required in this audit period.	NR	Seed collection not yet required.

**EMP Compliance Table 19 – Rehabilitation management actions**

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
	<p>date of collection, time of collection, person undertaking collection etc.</p> <ul style="list-style-type: none"> <li>preparing material for transportation.</li> </ul>							
EMP 140.	Ensure all seed to be used in rehabilitation is sourced from species that are endemic to the area/local provenance (unless otherwise authorised by the DPW AND/OR DER).	To ensure species used in rehabilitation have adaptations to suit local conditions.	As required for rehabilitation	Refer to EMP 139	NR	Refer to EMP 139	NR	Seed collection not yet required.
EMP 141.	Monitor the progress of seed collection and store and process seed in accordance with the seed collection and direct seeding procedure.	To maximise potential for rehabilitation success by ensuring seed collection is undertaken appropriately.	As required for rehabilitation	Refer to EMP 139	NR	Refer to EMP 139	NR	Seed collection not yet required.
EMP 142.	Implement hygiene management actions as outlined in the Weed, Plant Pathogen and Pest Animal Management Sub-plan.	To maximise potential for rehabilitation success by preventing the introduction and/or spread of weeds and plant pathogens into rehabilitation areas.	As specified in the Weed, Plant Pathogen and Pest Animal Management Sub-plan	Refer to EMP 62–67	Conformant	Refer to EMP 62–67	NR	Rehabilitation not yet commenced.
EMP 143.	Control stock within buffer area in accordance with the Weed, Plant Pathogen and Pest Management Sub-plan.	To maximise potential for rehabilitation success by preventing stock from entering rehabilitation areas.	As specified in the Weed, Plant Pathogen and Pest Animal Management Sub-plan	Refer to EMP 72	Conformant	Refer to EMP 72	NR	Construction not yet commenced.
EMP 144.	Ensure all foreign material is removed from the site to be recycled or reused where practicable, or disposed of off-site before rehabilitation is carried out.	To enable rehabilitation to commence.	Prior to rehabilitation	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018. KAI advice 19 December 2018.	Conformant	No new rehabilitation during this audit period. Area 11 is still to be rehabilitated; however, it is currently still in use.	NR	Construction not yet commenced.

EMP Compliance Table 19 – Rehabilitation management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 145.	Areas suspected to be contaminated by spills or leaks of hydrocarbons and/or inappropriate disposal of wastes will be investigated to determine the presence and/or level of contamination.	To determine whether rehabilitation areas are required to be remediated.	Prior to rehabilitation	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018. KAI advice 19 December 2018.	Conformant	No new rehabilitation during this audit period.	NR	Construction not yet commenced.
EMP 146.	Remediate any soils that are determined to be contaminated.	To maximise potential for rehabilitation success by ensuring rehabilitation areas are not contaminated.	Prior to rehabilitation	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018. KAI advice 19 December 2018.	Conformant	No new rehabilitation during this audit period.	NR	Construction not yet commenced.
EMP 147.	Disturbed areas will be stabilised through a combination of contouring and slope stabilisation as required.	To minimise erosion of rehabilitated landforms.	Progressively as disturbed areas are no longer required	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 148.	All rehabilitation areas will be reshaped and contoured to blend with adjacent relief and drainage as far as practicable. This will include: <ul style="list-style-type: none"> <li>the removal of impediments to run-off</li> <li>diversion of surface run-off around borrow pits to prevent flooding and potential instability of pit walls</li> <li>where necessary filling of borrow pits with subsoil to level of natural ground surface.</li> </ul>	To minimise erosion of rehabilitated landforms.	During the rehabilitation process	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018. KAI advice 19 December 2018.	Conformant	No new rehabilitation during this audit period.	NR	Rehabilitation not yet commenced.
EMP 149.	All tracks to be rehabilitated will be ripped or scarified to minimise compaction.	To maximise potential for rehabilitation success by allowing roots and water to	During the rehabilitation process	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018.	Conformant	No new rehabilitation during this audit period.	NR	Construction not yet commenced.

**EMP Compliance Table 19 – Rehabilitation management actions**

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
		penetrate the soil profile.		KAI advice 19 December 2018.				
EMP 150.	Remove topsoil from cleared areas and manage in accordance with the Biodiversity and Habitat Management Sub-plan.	To provide a natural source of seed, organic matter and microorganisms for areas to be rehabilitated.	During construction of shared infrastructure	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Clearing not yet commenced.
EMP 151.	Ensure material to be used for rehabilitation (e.g. topsoil, cleared vegetation, etc.) does not contain declared weeds.	To maximise potential for rehabilitation success by preventing the introduction and/or spread of declared weeds into rehabilitation areas.	Prior to rehabilitation	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018. KAI advice 19 December 2018.	Conformant	No new rehabilitation during this audit period.	NR	Clearing not yet commenced.
EMP 152.	Relocate stripped topsoil and (if applicable) cleared vegetation directly to areas required to be rehabilitated, where possible.	To maximise the benefits of using topsoil and mulch by minimising storage time.	During construction of shared infrastructure	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 153.	Spread stripped topsoil evenly across areas to be rehabilitated (to a nominal depth of approximately 100–150 mm). Work parallel with the contours as far as practicable, to minimise the creation of preferential drainage pathways.	To provide a natural source of seed, organic matter and microorganisms for areas to be rehabilitated.	During rehabilitation process	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018. KAI advice 19 December 2018.	Conformant	No new rehabilitation during this audit period.	NR	Rehabilitation not yet commenced.
EMP 154.	Rake rehabilitation areas to minimise potential impacts from compaction.	To maximise potential for rehabilitation success by allowing roots and water to penetrate the soil profile.	After spreading of topsoil and prior to placement of cleared vegetation	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018. KAI advice 19 December 2018.	Conformant	No new rehabilitation during this audit period.	NR	Rehabilitation not yet commenced.
EMP 155.	Where direct replacement of rehabilitation material (e.g. topsoil, cleared vegetation, etc.) is not	To provide a natural source of seed, organic matter and microorganisms for	During construction of shared infrastructure	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Clearing not yet commenced.

EMP Compliance Table 19 – Rehabilitation management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	Comment
	possible, stockpile material for later use in rehabilitation activities.	areas to be rehabilitated.						
EMP 156.	Locate stockpiles of rehabilitation material (e.g. topsoil, cleared vegetation, etc.) within already disturbed areas wherever possible.	To minimise disturbance.	Ongoing from commencement of ground disturbance	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018. KAI advice 19 December 2018.	Conformant	No new rehabilitation during this audit period.	NR	Clearing not yet commenced.
EMP 157.	Restrict topsoil stockpile height to less than 2 m.	To conserve native seed banks for direct propagule return, reduce the risk of self-composting and provide opportunities for the roots of temporary vegetation growing on the topsoil stockpile to reach the deepest parts of the stockpile, thereby sustaining many micro-organisms.	Ongoing from commencement of ground disturbance	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018. KAI advice 19 December 2018.	Conformant	No new rehabilitation during this audit period.	NR	Clearing not yet commenced.
EMP 158.	Where topsoil is not available, import topsoil in consultation with the Department of Parks and Wildlife (DPW) Kununurra office.	To provide a natural source of seed, organic matter and microorganisms for areas to be rehabilitated.	Prior to rehabilitation	NA	NR	No importation of topsoil has occurred to date.	NA	Item not included in Knox EMP.
EMP 159.	Provide temporary fencing and signage around rehabilitation areas.	To minimise disturbance to rehabilitation areas by restricting access.	During rehabilitation process	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018. KAI advice 19 December 2018.	Conformant	Signage and earthen bunds (fences) to prevent access observed.	NR	Rehabilitation not yet commenced.
EMP 160.	Inspect borrow pits no longer required following construction to ensure all pits are backfilled and	To ensure timely and appropriate rehabilitation of borrow pits.	As required	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018.	NR	Inspections not required as Area 11 is still in use.	NR	Construction not yet commenced.

**EMP Compliance Table 19 – Rehabilitation management actions**

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
	rehabilitated such that they are free draining.			KAI advice 19 December 2018.				
EMP 161.	Where there is insufficient subsoil for backfilling: <ul style="list-style-type: none"> <li>import material for backfilling in consultation with DPW if applicable</li> <li>ensure pits are rehabilitated to minimise standing shallow water as much as possible.</li> </ul>	To minimise the creation of mosquito breeding habitat.	As required	NA	NR	Not required to date.	NA	Item not included in Knox EMP.

EMP Compliance Table 20 - Rehabilitation monitoring regime

EMP Compliance Table 20 – Rehabilitation monitoring regime									
Item	Activity and location	Frequency / timing	Target	Corrective action	Evidence	Weaber Plain		Knox Creek Plain	
						Status	Comment	Status	Comment
EMP 162.	Native species richness, density and % cover within rehabilitation sites as outlined in the monitoring procedures.	Twice annually (in May and October).	Mean native species richness, plant density and % cover in the rehabilitation site after five years (including at least two wet seasons where >75% of the long-term average rainfall has fallen) is greater than: <ul style="list-style-type: none"> <li>70% of the mean % cover of natives in the reference sites</li> <li>70% of the mean native species richness in the reference sites.</li> </ul>	<ol style="list-style-type: none"> <li>Identify cause.</li> <li>Implement approach to remedy cause, which could include: <ul style="list-style-type: none"> <li>application of fertilisers or wetting agents etc. if applicable</li> <li>implement supplementary direct seeding or seedling planting program in accordance with procedures</li> <li>review rehabilitation process and amend if appropriate.</li> </ul> </li> <li>Monitor success of approach.</li> </ol>	Refer to EMP 135	PNC	Refer to EMP 135.	NR	No rehabilitation sites associated with Knox Creek Plain.
EMP 163.	Indicator species in rehabilitation sites.	Twice annually (in May and October).	As determined in accordance with Item EMP 136	<ol style="list-style-type: none"> <li>Identify cause.</li> <li>Implement approach to remedy cause, which could include: <ul style="list-style-type: none"> <li>application of fertilisers or wetting agents etc. if applicable</li> <li>implement supplementary direct seeding or seedling planting program in accordance with procedures</li> <li>review rehabilitation process and amend if appropriate.</li> </ul> </li> <li>Monitor success of approach.</li> </ol>	Refer to EMP 135	PNC	Refer to EMP 135.	NR	No rehabilitation sites associated with Knox Creek Plain.
EMP 164.	Exotic species richness and % cover within rehabilitation sites as outlined	Twice annually (in May and October).	Exotic flora species:	<ol style="list-style-type: none"> <li>Identify cause.</li> <li>Identify the weeds, their location and coverage.</li> </ol>	Refer to EMP 135	PNC	Refer to EMP 135.	NR	No rehabilitation sites associated



	in the monitoring procedures.		<ul style="list-style-type: none"> <li>no greater than 10% increase in weed species density/cover/distribution compared to reference sites</li> <li>no Declared Plants present on-site six months following completion of construction.</li> <li>no infested areas as defined in the Weed, Plant Pathogen and Pest Animal Management Sub-plan</li> <li>no local priority areas as defined in the Weed, Plant Pathogen and Pest Animal Management Sub-plan</li> <li>no new weed species present.</li> </ul>	<ol style="list-style-type: none"> <li>Implement remedy which could include:</li> <li>implementing a weed control program</li> <li>reinforcing management actions in the Weed, Plant Pathogen and Pest Animal Management Sub-plan and Rehabilitation Management Sub-plan.</li> <li>Monitor success of control.</li> </ol>					with Knox Creek Plain.
EMP 165.	Erosion within and adjacent to rehabilitation sites.	Opportunistic ally following heavy rainfall events.	<p>Ensure landform is safe and stable with no erosion occurring 18 months after rehabilitation.</p> <p>Reconstructed landform can withstand exceedance of average rainfall occurrences for a period of 10 years.</p>	<ol style="list-style-type: none"> <li>Identify cause of erosion.</li> <li>Consult expert to determine appropriate remedy which may include <ul style="list-style-type: none"> <li>Installing culverts</li> <li>Installing stormwater diversion structures.</li> </ul> </li> <li>Implement remedy.</li> <li>Monitor success of remedy.</li> </ol>	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018. 2018.EMP125a 2018.EMP125b 2018.EMP125c 2018.EMP125d	Conformant	No erosion observed adjacent to rehabilitation sites. Rehabilitation has now been in place for five years.	NR	No rehabilitation sites associated with Knox Creek Plain.

EMP Compliance Table 21 - Aboriginal heritage management actions

EMP Compliance Table 21 – Aboriginal heritage management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 166.	Implement an induction program for personnel and contractors/consultants, and an information package for farm owners/managers, both of which containing information on: <ul style="list-style-type: none"> <li>significance of Aboriginal heritage and the potential impacts of the project</li> <li>procedures to report potential new sites</li> <li>obligations under the <i>Aboriginal Heritage Act 1972</i> (WA)</li> <li>requirements for the protection of known Aboriginal sites.</li> </ul>	To ensure protection of known sites of Aboriginal heritage significance in accordance with the requirements of the <i>Aboriginal Heritage Act 1972</i> (WA), to improve knowledge of Aboriginal cultural heritage in non-indigenous people associated with the project.	Within one week of personnel commencing work on-site	2018.EMP2	PNC	Farm sales package assessed as completed in a previous audit period.  The current KAI induction process does not explicitly include Aboriginal Heritage obligations.	NR	Construction not yet commenced.
EMP 167.	Document the location of protected areas on development design plans and make available to planners, agents, contractors, and relevant personnel.	To ensure protection of known sites of Aboriginal heritage significance in accordance with the requirements of the <i>Aboriginal Heritage Act 1972</i> (WA), to improve knowledge of Aboriginal cultural heritage in non-indigenous people associated with the project.	Prior to ground disturbance	N/A	Completed	Item assessed as completed in a previous audit period.	Conformant	Item assessed as conformant during the last audit period (i.e. location of protected areas are documented). Because construction has not yet commenced, this information is not yet required to be provided to relevant contractors

EMP Compliance Table 21 – Aboriginal heritage management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	Comment
								and personnel.
EMP 168.	Flag the boundaries of project areas to ensure activities do not intrude into areas where Aboriginal sites are present.		Prior to ground disturbance	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 169.	Place 'No Go' signage along boundaries immediately adjacent to Buffer Areas around protected Aboriginal sites.		Prior to ground disturbance	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 170.	If a suspected heritage site is detected follow procedures as outlined in the Heritage Site Detection Procedure. Potential heritage sites include stone/shell scatters (middens), stone tools, rock paintings and engravings, grinding patches, scar trees, ochre sites/quarries, and skeletal remains.	To ensure protection of previously unrecorded Aboriginal heritage sites detected during construction/clearing activities in accordance with the Aboriginal Heritage Act 1972 (WA).	Ongoing from commencement of ground disturbance	Site inspections - 13 June 2018, 22/23 October 2018 and 19 December 2018. KAI advice 19 December 2018.	Conformant	No new sites reported.	NR	Construction not yet commenced.
EMP 171.	Site heritage monitors from MG Corporation issued with a permit under Section 16 of the <i>Aboriginal Heritage Act 1972</i> (WA) will be on-site to monitor clearing and earthworks activities.		Ongoing from commencement of ground disturbance	KAI advice (19 December 2018).	Conformant	Only minor clearing within Lot 13 was undertaken during this audit period. KAI advised that site heritage monitors from MG Corporation were not present during this clearing. KAI has previously provided confirmation that MG Corporation has waived this site requirement.	NA	Item not included in Knox EMP.
EMP 172.	A qualified archaeologist issued with a permit under Section 16 of the <i>Aboriginal Heritage Act 1972</i> (WA) will be available to come to site if a suspected heritage site is uncovered.		As required	KAI advice (19 December 2018).	NR	No suspected heritage sites have been identified during this audit period.	NA	Item not included in Knox EMP.

EMP Compliance Table 21 – Aboriginal heritage management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	Comment
EMP 173.	The MG Corporation will be briefed on proposed works and work schedules and informed of detailed aspects of the project.	Ensure regular ongoing involvement of the Miriwung and Gajerrong people in heritage management throughout the life of the project, in accordance with the OFA and OES.	Prior to ground disturbance	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 174.	The MG Corporation will be involved in inspections of the Project Area throughout construction (with supporting briefing).		Quarterly and as required	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.
EMP 175.	Meet with MG Corporation to discuss broader issues of Aboriginal cultural heritage and heritage protection in and around the buffer, and associated social impact.		Annually and as required	KAI advice (December 2018)	Conformant	KAI advised that MG Corporation and KAI have agreed to EMIA and SPV arrangements and are waiting on WA government approval.	Conformant	
EMP 176.	Establish cultural heritage database with GIS records of site locations in the project area.	Establish and maintain up-to-date records on Aboriginal heritage sites within the project area.	Prior to ground disturbance	N/A	Completed	Item assessed as completed in a previous audit period.	Conformant	No change since previous audit.

EMP Compliance Table 22 - Aboriginal heritage monitoring regime and corrective actions

EMP Compliance Table 22 – Aboriginal heritage monitoring regime and corrective actions									
Item	Activity and location	Frequency	Target	Corrective action	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	Comment
EMP 177.	Signage or temporary fencing/ tape showing heritage site locations.	Daily during clearing and construction.	No disturbance to sites not approved to be disturbed under Section 18 of the Aboriginal Heritage Act 1972 (WA).	Report as Environmental Incident and initiate Incident Procedure, including: <ul style="list-style-type: none"> <li>stopping work in the vicinity of the boundary</li> <li>investigating the cause of the disturbance</li> <li>redefining boundaries if due to inadequate boundary marking</li> </ul>	N/A	Completed	Item assessed as completed in a previous audit period.	NR	Construction not yet commenced.

EMP Compliance Table 22 – Aboriginal heritage monitoring regime and corrective actions									
Item	Activity and location	Frequency	Target	Corrective action	Evidence	Weaber Plain Status	Weaber Plain Comment	Knox Creek Plain Status	Knox Creek Plain Comment
				<ul style="list-style-type: none"> <li>rehabilitating vegetation in the area as required in accordance with the Rehabilitation Management Sub-plan</li> <li>restore the 'site' (e.g. scatters or middens could have been buried, rock art altered, skeletal remains exposed) – develop a remedial plan in consultation with appointed archaeologist and MG Corporation</li> <li>monitoring the success of remedial action.</li> </ul> <p>Consult with the Department of Aboriginal Affairs and MG Corporation to determine actions required to restore the site to its original condition.</p>					
EMP 178.	Aboriginal monitors to check ground-disturbance work areas.	For each new area to be disturbed.	To identify new sites before clearing occurs.	Refer to Heritage Site Detection Procedure.	N/A	Completed	Item assessed as completed in a previous audit period.	NA	Item not included in Knox EMP.

## Attachment 5 - Evidence Register

### PART A – Evidence Summary

AUDIT CODE	REQUIREMENT	EVIDENCE CODE
938.M1.1	Implement proposal	
938.M2.1	Contact details	
938.M3.1	N/A - assessed as completed in previous audit	
938.M3.2	N/A - assessed as completed in previous audit	
938.M4.1	N/A - assessed as completed in previous audit	
938.M4.3	CAR completed 2017	
938.M4.4	Retain compliance reports	
938.M4.5	7-day reporting of non-compliances	
938.M4.6	CAR submitted	
938.M5.1	EMP compliance	N/A
938.M6.1	Final Project Design Plan	
938.M7.1	Final Decommissioning Plan	N/A
938.M7.2	Final Decommissioning Plan	N/A
938.M7.3	Final Decommissioning Plan	N/A
S1_2.1	Project area 76,000ha	
S1_2.2	Land managed as buffer 42,500ha	N/A
S1_2.3	Land for irrigable development 30,500ha	N/A
S1_2.4	Infrastructure area 3,000ha	N/A
S1_2.5	M2 Channel 690ha	N/A
S1_2.6	Wyndham Port 1ha	N/A
S1_2.7	Raw sugar 400,000tpa	N/A
S1_2.8	Molasses 160,000tpa	N/A
S1_2.9	Irrigation channels 160km	N/A
S1_2.10	Annual water requirements 740GL	
S1_2.10	Annual water requirements 740GL	
S1_2.11	Drains 153km	N/A
S1_2.12	Flood protection levees 142km	N/A
S1_2.13	Balancing storage dams 5.6GL	N/A
S1_2.14	Roads 161km	N/A
S1_2.15	Power lines 165km	N/A
S1_2.16	Wyndham Port raw sugar store 180,000t	N/A
S1_2.17	Wyndham Port molasses store 75,000t	N/A
EMP1	Assessed as complete for Goomig (current area) in previous audit	
EMP2	Induct personnel on soil erosion	
EMP3	Assessed as complete for Goomig (current area) in previous audit	
EMP4	Assessed as complete for Goomig (current area) in previous audit	
EMP5	Assessed as complete for Goomig (current area) in previous audit	
EMP6	Assessed as complete for Goomig (current area) in previous audit	
EMP7	Assessed as complete for Goomig (current area) in previous audit	
EMP8	Assessed as complete for Goomig (current area) in previous audit	
EMP9	Assessed as complete for Goomig (current area) in previous audit	
EMP10	Assessed as complete for Goomig (current area) in previous audit	
EMP11	Assessed as complete for Goomig (current area) in previous audit	
EMP12	Assessed as complete for Goomig (current area) in previous audit	
EMP13	Assessed as complete for Goomig (current area) in previous audit	
EMP14	Assessed as complete for Goomig (current area) in previous audit	
EMP15	Assessed as complete for Goomig (current area) in previous audit	
EMP16	Assessed as complete for Goomig (current area) in previous audit	
EMP17	Assessed as complete for Goomig (current area) in previous audit	
EMP18	Soil erosion inspection and repairs	
EMP19	Soil testing - EC	2018.EMP19a and b
EMP20	Soil testing - sodicity and pH	2018.EMP19a and b
EMP21	Assessed as complete for Goomig (current area) in previous audit	
EMP22	Chemical and hydrocarbon management induction	2018.EMP2

EMP23	Farm chemical storage	Site inspection and interview
EMP24	Hydrocarbon storage	2018.EMP24a, b, c
EMP25	Generators to be banded	Site inspection - generators observed as banded
EMP26	MSDS held on site	KAI advised no change since previous audit
EMP27	Fertiliser handling training	KAI advice
EMP28	Beyond the scope of audit	N/A
EMP29	Fuel spills	Site inspection and interview
EMP30	Chemical application register	
EMP31	Tailwater retention capacity retained	Site inspection and interview
EMP32	ChemCert qualifications including aerial spraying	
EMP33	No application of chemicals to tracks	Site inspection and interview
EMP34	Chemical application register	2018.EMP30
EMP35	Chemical application register	2018.EMP30
EMP36	Aerial spraying contractor certification	
EMP37	Notify neighbours re chemicals	N/A
EMP38	Chemical washdown facilities	N/A - not on site
EMP39	Chemical blending	N/A - not on site
EMP40	Emergency response procedures	
EMP41	DrumMuster	N/A - local government run
EMP42	Hydrocarbon storage inspections	Site inspection
EMP43	Buffer vegetation damage from spray drift	Site inspection
EMP44	Chemical spill inspections	KAI advice
EMP45	Example burning permits and applications	2018.EMP45a
EMP46	Assessed as complete for Goomig (current area) in previous audit	
EMP47	Notify residents re burning	N/A
EMP48	Assessed as complete for Goomig (current area) in previous audit	
EMP49	Assessed as complete for Goomig (current area) in previous audit	
EMP50	Assessed as complete for Goomig (current area) in previous audit	
EMP51	Assessed as complete for Goomig (current area) in previous audit	
EMP52	Assessed as complete for Goomig (current area) in previous audit	
EMP53	Assessed as complete for Goomig (current area) in previous audit	
EMP54	Weed surveys along permanent transects	2018.EMP54a 2018.EMP54b 2018.EMP54c
EMP55	Update extent of priority weeds	KAI advice
EMP56	Priority weed control program	
EMP57	Assessed as complete for Goomig (current area) in previous audit	
EMP58	Assessed as complete for Goomig (current area) in previous audit	
EMP59	Assessed as complete for Goomig (current area) in previous audit	
EMP60	Manage topsoil per DAFWA requirements	N/A - No requirements exist
EMP61	Acrolein injections	Managed by Water Corporation
EMP62	Delineate clearing areas	Site inspection and interview
EMP63	Control buffer access	Site inspection and interview
EMP64	Assessed as complete for Goomig (current area) in previous audit	
EMP65	Assessed as complete for Goomig (current area) in previous audit	
EMP66	Assessed as complete for Goomig (current area) in previous audit	
EMP67	Assessed as complete for Goomig (current area) in previous audit	
EMP68	External soil and fill	N/A in this audit period
EMP69	Assessed as complete for Goomig (current area) in previous audit	
EMP70	Assessed as complete for Goomig (current area) in previous audit	
EMP71	Waste management / pest animals	Site inspection
EMP72	Pest eradication program	Site inspection
EMP73	Assessed as complete for Goomig (current area) in previous audit	
EMP74	Stock removal	Site inspection
EMP75	Weed species identified in surveys	Refer to EMP 54
EMP76	Weed quantities in survey sites	Refer to EMP 54
EMP77	Weeds in farm lots	Site inspection
EMP78	Pest eradication program	Site inspection
EMP79	Assessed as complete for Goomig (current area) in previous audit	
EMP80	Assessed as complete for Goomig (current area) in previous audit	
EMP81	Assessed as complete for Goomig (current area) in previous audit	
EMP82	Erosion of watercourses	Refer to EMP 18
EMP83	Assessed as complete for Goomig (current area) in previous audit	
EMP84	Groundwater	2018.EMP84a, 2018.EMP84b,

EMP85	Previous audit recommended deletion as unable to audit	
EMP86	On-farm bores	
EMP87	Sampling parameters - groundwater	KAI advised no change since previous audit
EMP88	DWER bore licence	No licence - N/A
EMP89	Groundwater database	2018.EMP84a and 2018.EMP84b
EMP90	Groundwater database	2018.EMP84a and 2018.EMP84b
EMP91	Groundwater model update	N/A
EMP92	Review of irrigation conditions	N/A
EMP93	Adopt ANZECC trigger values	Previously found to be conformant. No change.
EMP94	Refer to EMP84	2018.EMP19a, 2018.EMP84a, 2018.EMP84b,
EMP95	Refer to EMP84	2018.EMP19a, 2018.EMP84a, 2018.EMP84b,
EMP96	Tailwater retention capacity retained	2018.EMP96a, 2018.EMP96a, 2018.EMP96a; site inspection
EMP97	Tailwater retention capacity retained	2018.EMP96a, 2018.EMP96a, 2018.EMP96a; site inspection
EMP98	Assessed as complete for Goomig (current area) in previous audit	
EMP99	Assessed as complete for Goomig (current area) in previous audit	
EMP100	Updated analyte list	2018.EMP100
EMP101	Assessed as complete for Goomig (current area) in previous audit	
EMP102	Water quality monitoring at discharge point	2018.EMP102a,
EMP103	Assessed as complete for Goomig (current area) in previous audit	
EMP104	Water flow monitoring	2018.EMP102a
EMP105	Adaptive stormwater/groundwater discharge program	
EMP106	Assessed as complete for Goomig (current area) in previous audit	
EMP107	Refine dilution/discharge relationship	2018.938.M4.3
EMP108	Refine flow trigger values for Keep	2018.EMP105a, 2018.EMP105b
EMP109	Refer to EMP102 and EMP105.	
EMP110	Assessed as complete for Goomig (current area) in previous audit	
EMP111	Biodiversity induction	2018.EMP2a, 2018.EMP2b
EMP112	Assessed as complete for Goomig (current area) in previous audit	
EMP113	Assessed as complete for Goomig (current area) in previous audit	
EMP114	Assessed as complete for Goomig (current area) in previous audit	
EMP115	Assessed as complete for Goomig (current area) in previous audit	
EMP116	Assessed as complete for Goomig (current area) in previous audit	
EMP117	Native animals on site	Site inspections
EMP118	Wildlife hotline	KAI advice - 19 December 2018
EMP119	Clearing compliance	2018.EMP120a, 2018.EMP.120b, Site inspection and interview
EMP120	Clearing compliance	2018.EMP120a, 2018.EMP.120b, site inspection and interview
EMP121	Control buffer access	Site inspections
EMP122	Buffer access signage	Site inspections
EMP123	Induct personnel on environmental matters	2018.EMP2a and 2018.EMP2b
EMP124	Assessed as complete for Goomig (current area) in previous audit	
EMP125	Stabilise and revegetate	Site inspections
EMP126	Stabilise and revegetate	Not required in this audit period
EMP127	Buffer revegetation	Site inspections
EMP128	Assessed as complete for Goomig (current area) in previous audit	
EMP129	Assessed as complete for Goomig (current area) in previous audit	
EMP130	Assessed as complete for Goomig (current area) in previous audit	
EMP131	Buffer fencing and stock exclusion	Site inspections
EMP132	Fire Management Sub-plan	Refer to EMP 45
EMP133	Buffer condition assessment	2018.EMP133a through to 2018.EMP133ar
EMP134	Assessed as complete for Goomig (current area) in previous audit	
EMP135	Refer to EMP125	
EMP136	Assessed as complete for Goomig (current area) in previous audit	
EMP137	Assessed as complete for Goomig (current area) in previous audit	
EMP138	Assessed as complete for Goomig (current area) in previous audit	
EMP139	Not required	NR
EMP140	Not required	NR
EMP141	Not required	NR
EMP142	Per EMP62-67	Per EMP62
EMP143	Control stock	Refer to EMP 72



EMP144	New rehabilitation	NR
EMP145	New rehabilitation	NR
EMP146	New rehabilitation	NR
EMP147	Assessed as complete for Goomig (current area) in previous audit	
EMP148	New rehabilitation	NR
EMP149	New rehabilitation	NR
EMP150	Assessed as complete for Goomig (current area) in previous audit	
EMP151	New rehabilitation	NR
EMP152	Assessed as complete for Goomig (current area) in previous audit	
EMP153	New rehabilitation	NR
EMP154	New rehabilitation	NR
EMP155	Assessed as complete for Goomig (current area) in previous audit	
EMP156	New rehabilitation	NR
EMP157	New rehabilitation	NR
EMP158	Topsoil importation	NR
EMP159	Rehabilitation fencing	NR
EMP160	Borrow pits	Site inspections
EMP161	Topsoil importation	NR
EMP162	Rehabilitation monitoring	2018.EMP54a 2018.EMP54b 2018.EMP54c
EMP163	Rehabilitation monitoring	2018.EMP54a 2018.EMP54b 2018.EMP54c
EMP164	Rehabilitation monitoring	2018.EMP54a 2018.EMP54b 2018.EMP54c
EMP165	Rehabilitation monitoring	2018.EMP54a 2018.EMP54b 2018.EMP54c
EMP166	Induction package - Aboriginal heritage	2018.EMP2b
EMP167	Assessed as complete for Goomig (current area) in previous audit	
EMP168	Assessed as complete for Goomig (current area) in previous audit	
EMP169	Assessed as complete for Goomig (current area) in previous audit	
EMP170	Heritage site detection	KAI advice - 19 December 2018
EMP171	Heritage monitors on site	KAI advice - 19 December 2018
EMP172	Heritage response	NR
EMP173	Assessed as complete for Goomig (current area) in previous audit	
EMP174	Assessed as complete for Goomig (current area) in previous audit	
EMP175	MG Corporation meetings	KAI advice - 19 December 2018
EMP176	Assessed as complete for Goomig (current area) in previous audit	
Other	Incident reporting	N/A

## PART B – Evidence folder inclusions

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
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 DW1GSb	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