



Statement 938

COMPLIANCE ASSESSMENT REPORT

1 January 2021 to 31 December 2021

Prepared for Department of Primary Industries and Regional Development

REVA

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



KIMBERLEY BOAB CONSULTING

PO Box 149
KUNUNURRA WA 6743
kimberleyboab@gmail.com
www.kimberleyboabconsulting.com
ABN 74 610 412 836

Dr Debra Pearce BSc MA PhD
Exemplar Global AU – Management systems auditing
Exemplar Global TL – Leading management systems audit teams
Exemplar Global QM – Quality management systems [ISO9001]
Exemplar Global EM – Environmental management systems [ISO14001]
Exemplar Global OH – Occupational Health and Safety management systems [ISO45001]

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.

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.

Document control

Date	Version	Reviewed by
June 2022	REV A	DPIRD

CONTENTS

1.0	INTRODUCTION	7
1.1	PROJECT BACKGROUND.....	7
1.2	PROJECT APPROVALS	9
1.3	PROPONENT	9
2.0	CURRENT STATUS.....	10
2.1	CLEARING, DEVELOPMENT AND OPERATION	10
2.1.1	<i>Weaber Plain – Goomig</i>	10
2.1.2	<i>Knox Creek Plain</i>	12
2.1.3	<i>Moonamang Road Realignment</i>	14
2.2	CHANGES TO APPROVALS AND MANAGEMENT ARRANGEMENTS	14
2.3	COMPLIANCE ASSESSMENT PLAN REQUIREMENTS	15
3.0	AUDIT METHODOLOGY	17
3.1	PLAN.....	17
3.1.1	<i>Purpose and scope</i>	17
3.1.2	<i>Audit period</i>	17
3.1.3	<i>Audit criteria</i>	17
3.1.4	<i>Methodology</i>	18
3.2	TERMINOLOGY	18
4.0	AUDIT FINDINGS	20
4.1	COMPLIANCE WITH CONDITIONS.....	20
4.1.1	<i>Compliance with Schedule 1</i>	20
4.1.2	<i>Compliance with Environmental Management Program actions</i>	20
4.2	OVERALL AUDIT FINDINGS AND RECOMMENDATIONS	23
	REFERENCES	24
	ATTACHMENT 1 – STATEMENT OF COMPLIANCE: POST-ASSESSMENT FORM 2.....	25
	ATTACHMENT 2 – MINISTERIAL STATEMENT 938 AUDIT TABLE 2021	30
	ATTACHMENT 3 - STATEMENT 938 SCHEDULE 1 AUDIT TABLE	34
	ATTACHMENT 4 - ENVIRONMENTAL MANAGEMENT PROGRAM (SUB-PLAN) AUDIT TABLES.....	36
	ATTACHMENT 5 - EVIDENCE REGISTER	99
	FIGURES	
	Figure 1 - M2 area (Goomig and Knox) location plan	8
	Figure 2 – Goomig-Knox Satellite Image - 30 November 2021.....	11
	Figure 3 - Knox northern area showing Moonamang Road realignment	12
	Figure 4 - Knox Creek Plain Final Project Design Plan Development Layout (2019 revision)	13
	Figure 5 - Moonamang Road Realignment	14
	TABLES	
	Table 1 - Project details and status of WA EP Act (1986) approvals for the M2 area	9
	Table 2 – Other environmental approvals relevant to the Ord River Irrigation Area Stage 2 footprint	9
	Table 3 - Compliance reporting condition requirements	15
	Table 4 - Application of CAP methodology	18
	Table 5 - Compliance assessment terminology	19
	Table 6 – Potential EMP non-conformances summary (including response to previous PNCs)	21

ATTACHMENT 4 EMP SUB-PLAN TABLES

EMP Compliance Table 1 - Soil conservation management actions.....	36
EMP Compliance Table 2 - Soil monitoring regime.....	39
EMP Compliance Table 3 - Chemicals management actions	41
EMP Compliance Table 4 - Chemical use monitoring table	46
EMP Compliance Table 5 - Dust and particulate management actions.....	47
EMP Compliance Table 6 - Dust and particulate monitoring regime	48
EMP Compliance Table 7 - Weed, plant pathogen and pest animal management actions	49
EMP Compliance Table 8 - Weed, plant pathogen and pest animal monitoring regime	57
EMP Compliance Table 9 - Surface water management actions	59
EMP Compliance Table 10 - Surface water monitoring regime	60
EMP Compliance Table 11 - Groundwater management and monitoring actions.....	61
EMP Compliance Table 12 - Groundwater contingency actions.....	66
EMP Compliance Table 13 - Discharge management actions.....	67
EMP Compliance Table 14 - Discharge monitoring regime and corrective actions.....	76
EMP Compliance Table 15 - Biodiversity and habitat management actions	78
EMP Compliance Table 16 - Biodiversity and habitat management monitoring regime	80
EMP Compliance Table 17 - Buffer management actions	81
EMP Compliance Table 18 - Buffer monitoring actions	85
EMP Compliance Table 19 - Rehabilitation management actions.....	86
EMP Compliance Table 20 - Rehabilitation monitoring regime.....	93
EMP Compliance Table 21 - Aboriginal heritage management actions	95
EMP Compliance Table 22 - Aboriginal heritage monitoring regime and corrective actions	97

ACRONYMS AND ABBREVIATIONS

ADP	Aboriginal Development Package
BC Act	Biodiversity Conservation Act 2016
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
DBCA	Department of Biodiversity, Conservation and Attractins
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
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
WEIMA	Water, Environmental and Instrument Management Agreement

ACKNOWLEDGEMENTS

Mr Wayne Paul from Kimberley Agricultural Investment Pty Ltd was interviewed informally on multiple occasions, and formally during a site inspection on 21 October 2021.

A site compliance inspection of MG Corporation lots was undertaken on 21 October 2021, with Mr Trevor Bass from Cubbie Farming. Follow-up discussions to obtain further evidence took place following the site visits in December 2021. Site records and photographic evidence from various other visits by the auditor to the Goomig site across the 2021 are incorporated into this review.

An audit meeting and site inspection were held with Main Roads WA in relation to the Moonamang Road extension, on 16 November 2021, supported by Mr JJ Rao. Ms Helena O'Dwyer from DPIRD was present during this inspection.

On behalf of the proponent, Ms Helena O'Dwyer Ms Nicole Zago and Ms Jo-Anne Ellis from DPIRD provided evidence and responded to auditor queries.

EXECUTIVE SUMMARY AND KEY RECOMMENDATIONS

This compliance assessment of progress with the implementation of Ministerial Statement 938 for the period 1/1/2021 to 31/12/2021 was undertaken on behalf of the Proponent, the Western Australian Department of Primary Industries and Regional Development. It assesses and makes recommendations on compliance with the delivery of the conditions applied to the development of the *Ord River Irrigation Area Stage 2 (M2 Supply Channel)* as stipulated in Ministerial Statement 938 issued by the Minister for the Environment and administered by the Department of Water and Environmental Regulation.

Previous audits have recommended changes to a number of actions in the Goomig Environmental Management Plan (EMP). These recommendations are retained. A full review of the EMP to meet contemporary, outcomes-based requirements of the EPA, commenced in 2017 but is not yet complete. Under the associated Commonwealth approval (EPBC 2010/5491), review of the stormwater monitoring, management and modelling requirements, and of groundwater monitoring, is being undertaken with advice from the Independent Review Group. This is directly informing the EMP revision.

The auditor identified that of 178 audit items assessed for the associated EMP (required to be implemented under condition 5-1), nine (9) or approximately five per cent (5%), of management actions were potentially non-conformant in 2021. As with previous audits, the majority of the PNC actions relate to an aspect of formal monitoring that is currently not being undertaken, or is being partially undertaken, as prescribed in the EMP.

As noted previously, with the introduction of additional land users (MG Corporation and their partner Cubbie Farms) the monitoring obligations associated with Lots 15 and 16 must be clearly articulated and met. This particularly pertains to tailwater monitoring and management, and to the control of the Weed of National Significance *Parkinsonia* on farm lot 15 (per EMP77).

The 2021 realignment of Moonamang Road, commencing on the eastern fringe of the Goomig area, through to the WA-NT border, resulted in the 're-opening' of a number of actions for Goomig which were considered closed in previous CARs. This did not have implications for compliance.

The auditor's overall assessment is that there are clear indications of the Proponent continuing to clarify and revise the operational management requirements to meet the objectives of Statement 938. This is being undertaken through the comparison of baseline and post-baseline monitoring and the revision of Statement 938 and EPBC 2010/5491 management plans. Achieving and maintaining compliance with a small number of monitoring actions remains problematic. It is expected that this will be resolved with the EMP and EPBC Management Plan revisions to outcomes-based rather than prescriptive requirements.

The most significant potential non-compliance noted by the auditor relates to the stormwater outlet for the Goomig development, known as the DW1 Gauging Station, as has been identified in previous audits. It appears that substantial progress has been made towards DW1GS functionality in 2021, although securing functioning and accessible telecommunications/telemetry requires further effort. Restoring the utility of this facility is essential within the risk management approaches which underpin the Goomig approvals (State and Commonwealth).

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 2021 to 31 December 2021. 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. The 30,500ha includes the M2 area in the Northern Territory (NT), commonly referred to as Ord Stage 3. This CAR does not address the NT portion of the M2 area. M2 irrigation development has not yet commenced in the NT.

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 commenced in 2020 but was halted following concerns regarding *Typhonium sp. kununurra* presence in the area, as reported in the 2020 CAR. Both the Goomig and Knox land areas are managed by Kimberley Agricultural Investment Pty Ltd (KAI) following the issuing of a lease in late 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 current guidelines for EMPs (EPA, 2020) and in part to address the issues raised by previous auditors regarding the existing EMP. This process is not yet complete, as the EMP revision cannot be finalised until management plans under the associated EPBC approval 2010/5491 are completed and endorsed by the Commonwealth Department of Agriculture, Water and the Environment (DAWE). The reason for this is that the management actions and monitoring requirements of the EPBC 2010/5491 management plans will transfer directly into the new EMP. The proponent is working with the DAWE and the Independent Review Group (IRG) established under EPBC 2010/5491 to revise the EPBC management plans.

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. As such, this CAR relates to the approved 2013 version of the EMP.

A Compliance Assessment Plan (CAP) prepared by Strategen (2013) in relation to the Project was approved by the OEPA in late 2013. The CAP provides the basis for the methodology and structure of this report. The CAR will be reviewed when the EMP is fully revised and any recommended changes will be submitted to DWER for approval.

1.1 Project background

DPIRD, on behalf of the Minister for Regional Development, 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. Clearing of the Knox Creek Plain commenced in May 2020.

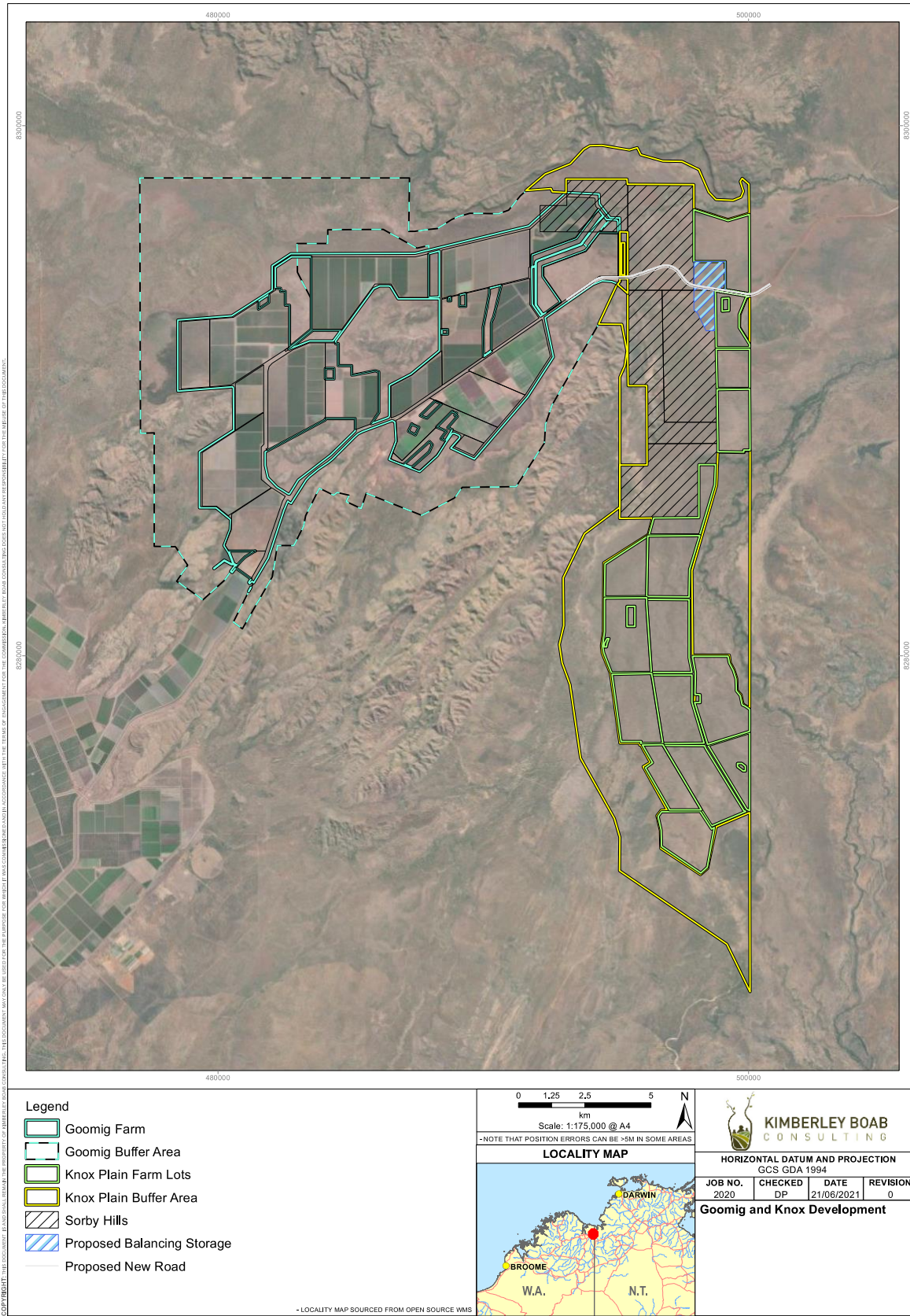


Figure 1 - M2 area (Goomig and Knox) location plan

1.2 Project approvals

The M2 area is subject to environmental approvals issued to the proponent and to other land managers. Tables 1 and 2 respectively present approvals relevant to the M2 area:

Table 1 - Project details and status of WA EP Act (1986) approvals for the M2 area

Descriptor / Requirement	Detail
Proponent	Minister for Regional Development
Approval – EP Act 1986	Ministerial Statement 938, issued 12 June 2013
Approved Final Project Design Plan (FPDP) – Weaber Plain (2012)	<i>Ord River Irrigation Area – Weaber Plain Development</i>
Approved Environmental Management Plan - Goomig	<i>Ord River Irrigation Area – Weaber Plain Development Project Environmental Management Program</i> dated October 2013
Approved Final Project Design Plan – Knox Creek Plain (2017)	<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. This CAR relates to the Knox FPDP Revision C, dated June 2019, which approved in May 2020.
Approved Environmental Management Plan - Knox	<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 Holder (Proponent)	Direct Relevance?
Weaber Plain [Goomig]	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
Knox Creek Plain	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
Weaber Plain [Goomig]	SWL179228	Surface water licence issued under Rights in Water and Irrigation (RiWI) Act 1914	KAI	Associated Operating Strategy requires compliance with environmental approvals
Knox Creek Plain (north)	EPBC 2017/7856	Cwth Minister for the Environment under EPBC Act 1999	Department of Jobs, Training, Science and Innovation	'Not a controlled action' assessment for Moonamang Road extension through northern Knox Creek Plain.
Sorby Hills	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).
Sorby Hills	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, but are referenced where necessary. Further discussion on the linkages between Statement 938 and the approvals listed in Table 2 and Statement 938 is provided in the 2016 audit Statement 938 CAR (Strategen, 2017).

1.3 Proponent

The Proponent is the Western Australian Minister for 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 Water, Environmental and Instrument Management Agreement (WEIMA) has been executed by MG Corporation (as owners of Lots 15, 16 and the buffer) and was awaiting execution by KAI at the time of preparation of this CAR. The Special Purpose Vehicle (SPV), Goomig Land and Water Pty Ltd, has been established to manage Goomig environmental obligations including obligations under Statement 938, with the company constitution and shareholders agreement agreed and awaiting endorsement from KAI's management¹.

The planned transfer of proponentcy to KAI will occur when the WEIMA and SPV are finalised and approved by the WA Government.

2.1.1 Weaber Plain – Goomig

During the 2021 season, KAI grew maize or cotton on the majority of the Goomig development area. Lots 19, 20 and 21 were sub-leased to external entities. MG Corporation, in partnership with an external entity, farmed Lot 16. The development of MG Corporation's Lot 15 has not been completed although clearing was undertaken in a previous reporting period.

KAI's 2021 water report (KAI, 2022; attached as evidence item 2021.S1_2.10) advises that key elements of the 2021 development and cropping season were as follows:

- KAI and MG Corporation both continued their cropping programs on the Goomig farmlands in 2021.
- Ord Irrigation Cooperative (OIC) released 35.588GL to the Goomig farmlands in 2021 through the M2C3 structure.
- Of this, the offtake meters recorded 34.212GL delivered to Goomig farms for irrigation during the 2021 irrigation season.
- There were no incidents or reports of KAI/MG tailwater releases or accidental discharges to Border Creek or the Keep River from the Goomig farmlands during the dry season.
- DWER issued water licence SWL179228(4) on 14 May 2020. The water licence was subsequently amended on the 26 June 2020 to include MG Corporation water requirement. This was under licence SWL 170228(5).
- Development of the Knox Creek Plain is still on hold while a new development lease is being drafted by the State of WA.

(KAI, 2022).

Figure 2 provides end-of-reporting period satellite imagery for the Goomig-Knox area (pre-onset of wet season). Figure 3 indicates the Moonamang Road realignment works undertaken by Main Roads WA.

¹ Pers. comm from Jo-Anne Ellis, DPIRD, 11 June 2020

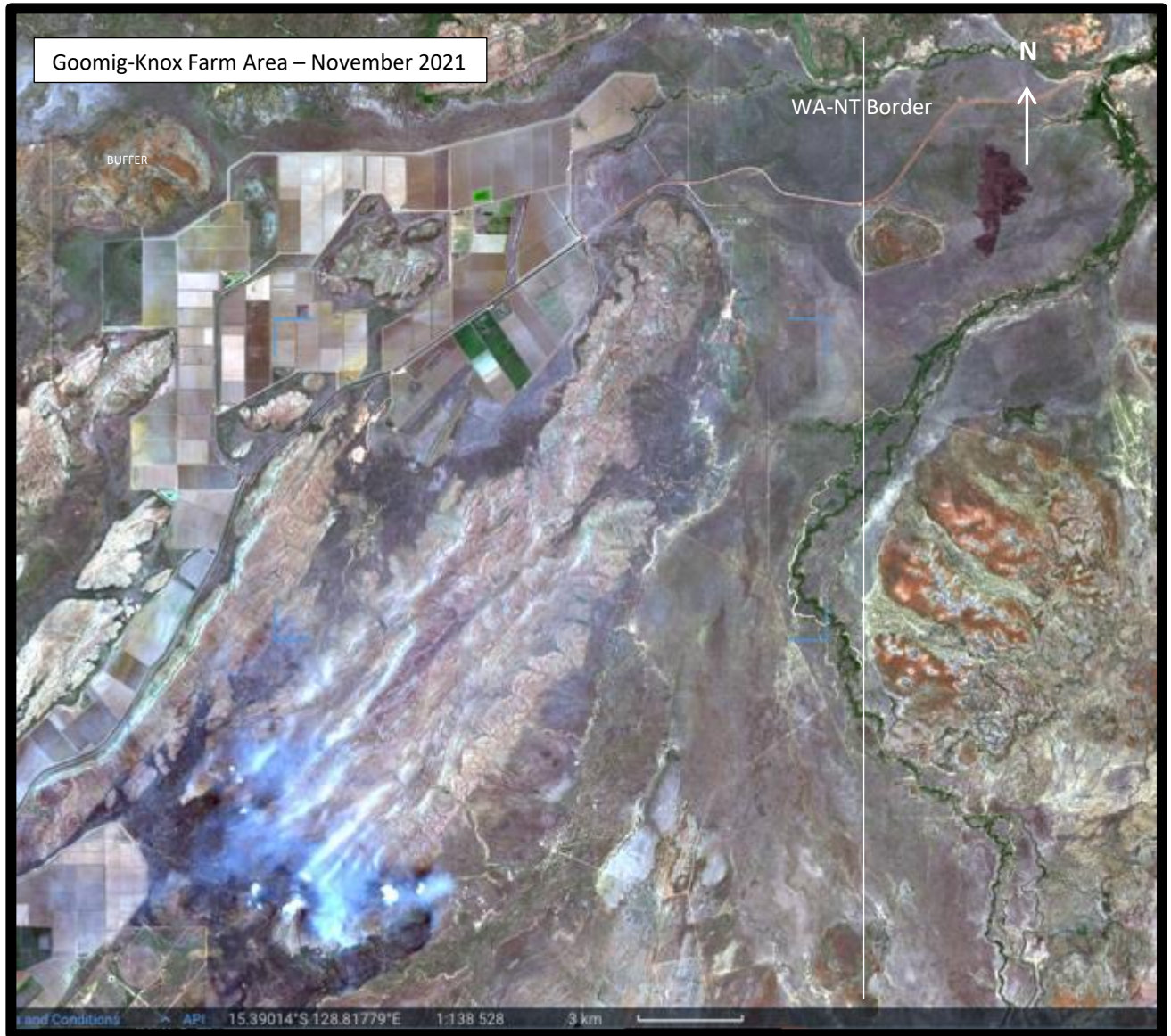


Image Source: www.eos.com Sentinel 2 satellite

Figure 2 – Goomig-Knox Satellite Image - 30 November 2021

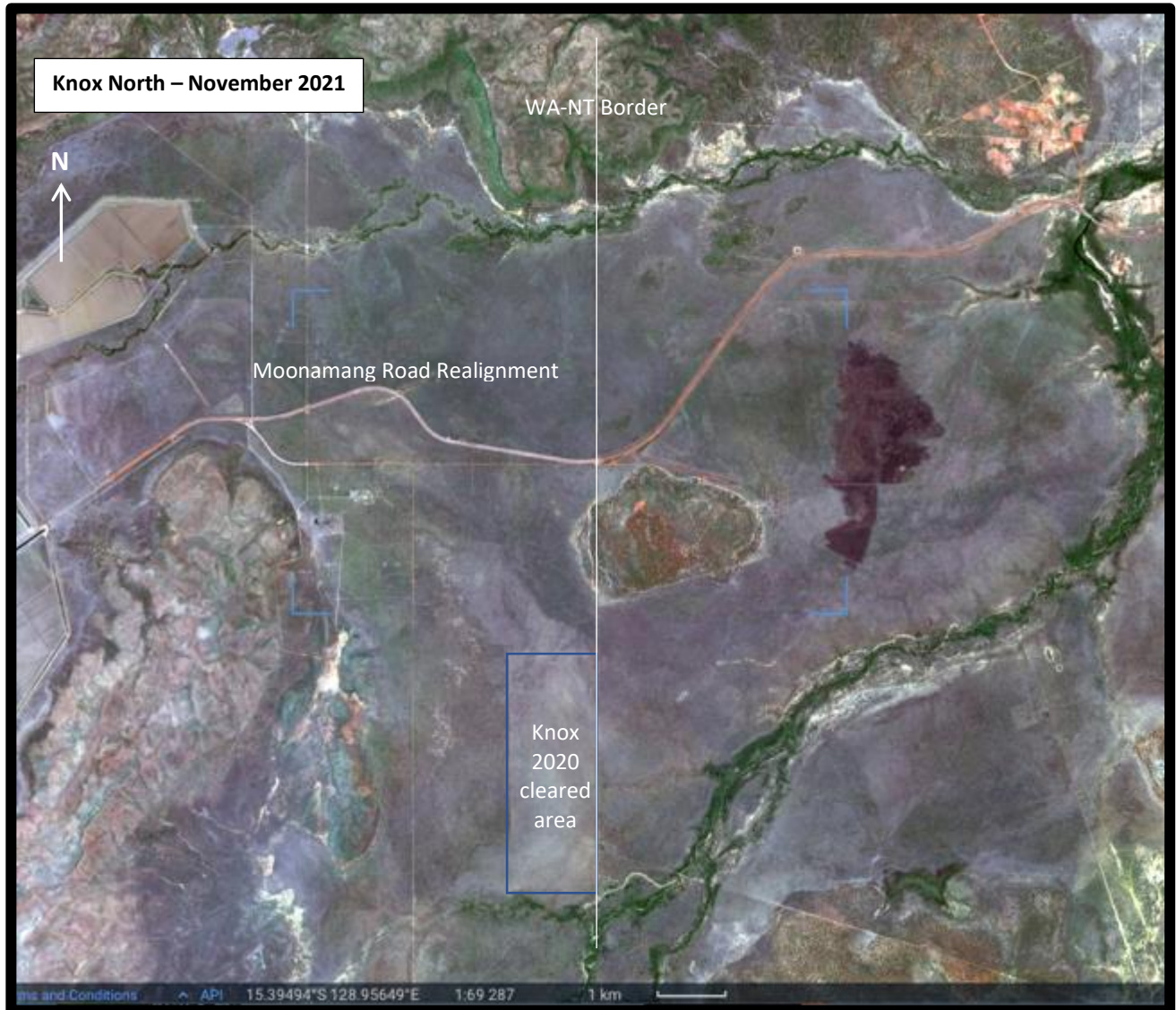


Image Source: www.eos.com Sentinel 2 satellite

Figure 3 - Knox northern area showing Moonamang Road realignment

2.1.2 Knox Creek Plain

The development of the Knox Creek Plain commenced on 26 May 2020 following the approval by DWER of the 2019 *Knox Creek Plain Final Project Design Plan (FPDP)* required under Statement 938, during the same month.

As previously reported, on 31 July 2020, KAI was issued with a 'Notice to cease clearing activity at Knox Plains Area' under the Biodiversity Conservation Act 2016 (BC Act). The notice was issued by the WA Department of Biodiversity, Conservation and Attractions (DBCA) with the advice that the area was likely to contain threatened fauna, *Typhonium sp. kununurra*. Consequently, KAI ceased clearing, following which the WA Government undertook an assessment of the presence of *Typhonium* within the region with a focus on the Knox Creek Plain (Umwelt, 2021).

A revised development area was determined, addressing risk to *Typhonium* populations. Figure 4 illustrates the revised footprint, reducing the Knox farm footprint to 5,383ha.

Knox negotiations between the WA Government and KAI were continuing at the time of preparation of this report.

Development activity on Knox ceased in 2020 while the impact of the *Typhonium* situation was being resolved.

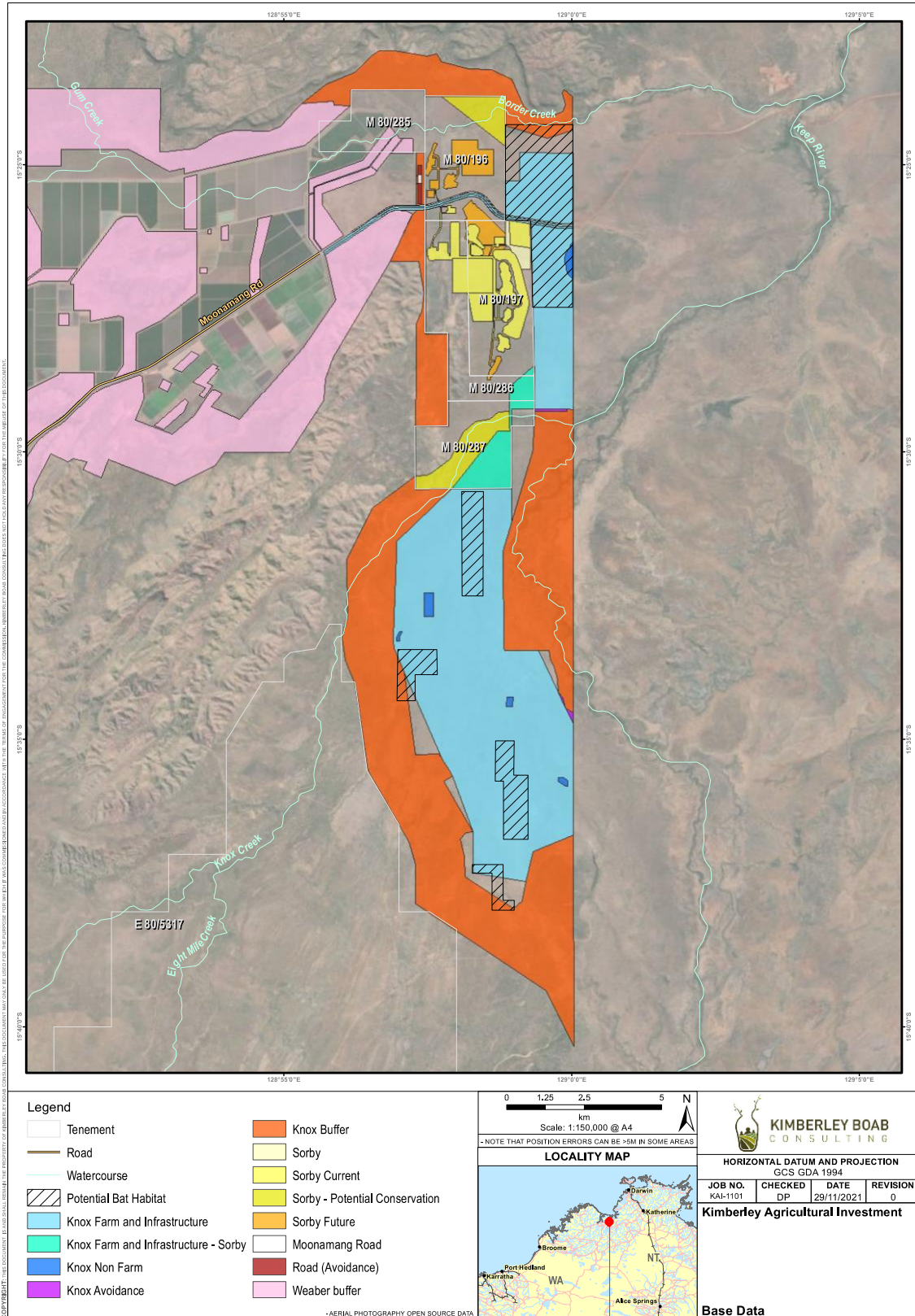


Figure 4 - Knox Creek Plain Final Project Design Plan Development Layout (2019 revision)

2.1.3 Moonamang Road Realignment

As can be seen in Figure 4 and in satellite imagery provided below in Figure 5, the WA Government, through Main Roads WA, undertook the extension of Moonamang Road, to replace the existing, previously ungazetted Keep River or Legune Road, in 2021. Clearing for this project commenced on 13 April 2021, with the majority of works completed within the reporting period. A total of 28.9ha was cleared for this purpose. Additional excavation and removal of materials from the Area 11 borrow pit occurred for this road construction.

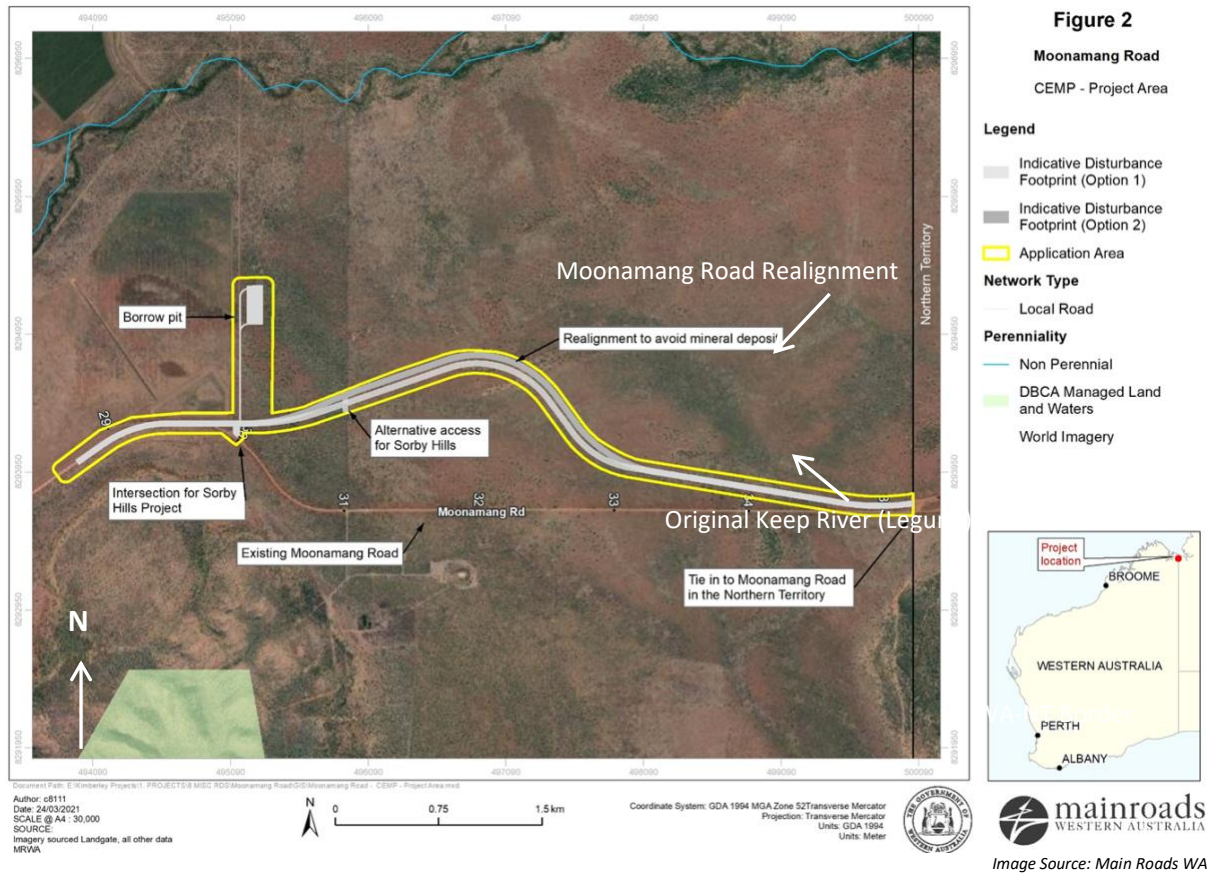


Figure 5 - Moonamang Road Realignment

2.2 Changes to approvals and management arrangements

Changes to the approval arrangements include the *Typhonium* issue relating to the Knox Plain, as outlined in Section 2.1.2.

The Moonamang Road realignment was managed through Main Roads environmental management protocols, including securing a 'Licence to Take' *Typhonium* under Section 40(3) of the Biodiversity Conservation Act 2016. Pre- and post-construction records have been retained.

2.3 Compliance Assessment Plan requirements

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

Table 3 - Compliance reporting condition requirements

4	Compliance Reporting
4-1	The proponent shall prepare and maintain a Compliance Assessment Plan to the satisfaction of the CEO (Chief Executive Officer of the Environmental Protection Authority)
4-2	The Compliance Assessment Plan shall indicate:
4-2 (1)	The frequency of compliance reporting;
4-2 (2)	The approach and timing of the compliance assessments;
4-2 (3)	The retention of compliance assessments;
4-2 (4)	Reporting of potential non-compliances and corrective actions taken;
4-2 (5)	The table of contents of compliance reports; and
4-2 (6)	Public availability of compliance reports.
4-3	The proponent shall assess compliance with conditions in accordance with the Compliance Assessment Plan required by Condition 4-1.
4-4	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.
4-5	The proponent shall advise the CEO of any potential non-compliance within 7 days.
4-6	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:
4-6 (1)	Be endorsed by the proponent's Managing Director or a person delegated to sign on the Managing Director's behalf;
4-6 (2)	Include a statement as to whether the proponent has complied with the conditions;
4-6 (3)	Identify all potential non-compliances and describe corrective and preventative actions taken;
4-6 (4)	Be made publicly available in accordance with the Compliance Assessment Plan; and
4-6 (5)	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).
- *Post Assessment Guideline for Preparing a Compliance Assessment Report* (OEPA 2012d).

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 2021 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 v1.2* (EPA, September 2020), is in preparation. This current compliance assessment informs the EMP revision process. The revised EMP, when completed and approved, will address inconsistencies, duplication and other items of concern as addressed in previous audits.

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 2021 to 31 December 2021.

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; 2019b; 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 are identical to actions contained within the Weaber EMP; however, conformance with these actions is assessed separately for each area. Where Knox EMP actions differ, 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).

It is noted that the term 'EMP' refers to an Environmental Management *Plan* (EPA, 2020) under current guidelines, however Statement 938 requires an Environmental Management *Program*. The references to the EMP are intended to meet the requirements of both documents. The preferred terminology is *Plan*.

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 2020 Compliance Assessment
One or more annual site inspections	Site inspections and interviews were conducted as follows: <ul style="list-style-type: none"> • Kimberley Agricultural Investment Pty Ltd (KAI): 21 October 2021. • MG Corporation / Cubbie Agriculture: 21 October 2021 and 6 December 2021. • Main Roads WA: 16 November 2021. • DPIRD: 16 November 2021 and throughout year.
On-site and off-site consultation with and interviews of proponent, sub-contractor and other personnel in positions appropriate to inform the audit process	Compliance interviews were conducted as follows: <ul style="list-style-type: none"> • Kimberley Agricultural Investment Pty Ltd (KAI): 21 October 2021, and throughout year. • MG Corporation / Cubbie Agriculture: 21 October 2021 and 6 December 2021. • Main Roads WA: 16 November 2021. • DPIRD: 16 November 2021 and throughout year.
Compilation, review and assessment of documentary evidence	The compilation of evidence for the 2021 season occurred from September 2021 to June 2022. This included follow-up with DPIRD and KAI staff regarding 2021 practices and compliance, and the implications of the early-2021 <i>Typhonium</i> surveys and subsequent assessment. Sampling of evidence was used where appropriate. Records have been compiled, assessed, and referenced in the review tables (Attachments 3 and 4).

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. Colour coding has been applied to the assessment tables contained in the appendices, to facilitate ease of identification of the status of each action and requirement.

Table 5 - Compliance assessment terminology

Compliance Status Terms	Abbrev	Definition	Notes
Compliant (Conformant)	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"> ongoing requirements that have been met during the reporting period; and 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'.
Completed	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"> audit elements have a finite period of application (e.g. construction activities, development of a document); the action has been satisfactorily completed; and the DWER has provided written acceptance of 'completed' status for the audit element.
Not required at this stage	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.
Potentially Non-compliant (Non-conformant)	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.
Non-compliant	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.
In Process	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.	The term 'In Process' may not be used for any purpose other than that stated in the Definition Column. 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).

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

4.0 Audit findings

4.1 Compliance with conditions

The results of the audit of Ministerial Statement 938 are shown in Attachment 2. Fifteen (15) items were audited. A summary of compliance findings in relation to Schedule 1 of the Statement is provided in Attachment 3.

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

The EMP compliance assessment is provided in Attachment 4.

As noted in previous CARs, based on feedback from DPIRD and KAI 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, 2020).

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

Table 6 – Potential EMP non-conformances summary (including response to previous PNCs)

ITEM	ACTION	AUDIT FINDING 2019	AUDIT FINDING 2020	AUDIT FINDING 2021
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"> at least one sample from each lot a representative spread of sites throughout the Buffer Area. 	Soil testing was not undertaken on Goomig in 2019. KAI has advised that soil testing would be undertaken in June 2020 to remedy this. KAI advised that this was not undertaken late in the 2019 season (as usually occurs) due to Manager illness.	Buffer areas were not included in 2020 soil sampling. Soil samples were not taken on Knox Creek Plain prior to the commencement of clearing. However, as only 410ha has been cleared, this is not a substantive non-compliance. Rectification in 2021 is possible.	<u>PNC in 2021.</u> Buffer sites are not included in the soil analysis data provided. EC levels for reported farm lots were within the acceptable range. Soil sampling yet to commence on the farm and buffer areas of the Knox Plain. Initial soil samples [on Knox] were required prior to the commencement of clearing.
EMP 20	Surface and subsoil ESP and pH within the project area, with a specific focus on areas with Aquitaine clay soils, including: <ul style="list-style-type: none"> at least one sample from each lot a representative spread of sites throughout the Buffer Area. 	Soil samples were not taken in 2019.	Buffer areas were not included in 2020 soil sampling. Soil samples were not taken on Knox Creek Plain prior to the commencement of clearing. However, as only 410ha has been cleared, this is not a substantive non-compliance. Rectification in 2021 is possible. Soil pH results were not included in the soil data provided.	<u>PNC in 2021.</u> Buffer sites are not included in the soil test reports. ESP levels were within the acceptable range. Soil sampling yet to commence on the farm and buffer areas of the Knox Plain. Initial soil samples were required prior to the commencement of clearing.
EMP 32	Commercial pesticide and herbicide spraying will be undertaken only by operators with the appropriate level of ChemCert accreditation.	The auditor was not provided with copies of relevant chemical spraying accreditation documentation. (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. It was recommended that KAI retains updated chemical application certification).	ChemCert qualifications were not sighted by the auditor.	<u>COMPLIANT IN 2021.</u> 2021.EMP32a and 2021.EMP32b provide qualifications for commercial spraying contractor used by both KAI and MG-Cubbie.
EMP 77	<u>COMPLIANT</u>	<u>COMPLIANT</u>	<u>COMPLIANT</u>	<u>PNC in 2021.</u> <i>Parkinsonia</i> identified on Lot 15 (owned by MG Corporation) in a previous audit was previously treated by KAI. Full eradication of the plant is expected when the development of Lot 15 re-commences. Control of the Parkinsonia is required.
EMP 109	Telemetered flow monitoring at development gauge, existing gauging stations along Border Creek and the	This action remained a PNC, noting that a fully functionality review was being undertaken in early 2020, with repairs and upgrades scheduled pre-2020-21 wet season.	This action remained the most significant potential non-compliance in 2020.	<u>PNC in 2021.</u>

ITEM	ACTION	AUDIT FINDING 2019	AUDIT FINDING 2020	AUDIT FINDING 2021
	Keep River and in groundwater discharge pipe.	The auditor notes progress towards updating the monitoring and management regimes associated with the discharge management plan, per EMP100 through to EMP108.		Item 2021.EMP101c indicates functionality is being restored to the DW1GS, with data able to be accessed locally. Some telecommunications issues remain. <i>This item remains a PNC, however the auditor is aware that progress to reinstate DW1GS functionality continues and improvements are noted.</i> <i>A functional DW1GS monitoring system is essential for stormwater and tailwater monitoring and compliance purposes.</i>
EMP 133	Assess vegetation condition using the Keighery (1994) rating scale and update vegetation condition map.	The PNC is retained from previous audits as the Keighery scale is not applied and vegetation condition mapping is not routinely updated. Previous audits have suggested amending this action.	EMP 133 remained technically non-compliant in 2020, however the auditor is satisfied from site inspections that buffer vegetation condition has not declined. There is photographic evidence over multiple seasons that the buffer condition has improved with the removal of cattle over recent years.	<u>PNC in 2021.</u> As reported in previous audits, vegetation condition assessment and mapping is not undertaken. 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. Remote sensing assessment including fortnightly satellite imagery and 6-hourly satellite fire mapping is used to inform overall buffer condition assessments. Previous audits have suggested amending this action.
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.	PNC retained from previous audits. As post-infrastructure rehabilitation occurred in 2012, it is recommended that the need for rehabilitation site surveys be reconsidered and a time limit for post-rehabilitation monitoring be applied.	EMP 135, EMP 162, EMP 163 and EMP 164 relate to technical inclusions in buffer condition and rehabilitation monitoring. There is photographic evidence over multiple seasons that the condition of rehabilitated areas is consistent with surrounding buffers across multiple rehabilitation sites. Despite the technical non-compliances, the auditor is satisfied that post-construction rehabilitation in the buffer has been successful in all locations viewed during site inspections.	<u>PNC in 2021.</u> KAI previously advised that monitoring of rehabilitation areas (undertaken by others prior to the commencement of KAI's management of the buffer) is now undertaken consistent with revised buffer monitoring, whereby condition is visually observed and weed presence and any inconsistency with adjacent land is noted. Reference site surveys are not undertaken. KAI again 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.
EMP 162	Native species richness, density and % cover within rehabilitation sites as outlined in the monitoring procedures.	Refer to EMP 135.		
EMP 163	Indicator species in rehabilitation sites.	Refer to EMP 135.		
EMP 164	Exotic species richness and % cover within rehabilitation sites as outlined in the monitoring procedures.	Refer to EMP 135.		

4.2 Overall audit findings and recommendations

Previous audits have recommended changes to a number of actions in the Goomig Environmental Management Plan (EMP). These recommendations are retained. A full review of the EMP to meet contemporary, outcomes-based requirements of the EPA, commenced in 2017 but is not yet complete. Under the associated Commonwealth approval (EPBC 2010/5491), review of the stormwater monitoring, management and modelling requirements, and of groundwater monitoring, is being undertaken with advice from the Independent Review Group. This is directly informing the EMP revision.

The auditor identified that of 178 audit items assessed for the associated EMP (required to be implemented under condition 5-1), nine (9) or approximately five per cent (5%), of management actions were potentially non-conformant in 2021. As with previous audits, the majority of the PNC actions relate to an aspect of formal monitoring that is currently not being undertaken, or is being partially undertaken, as prescribed in the EMP.

As noted previously, with the introduction of additional land users (MG Corporation and their partner Cubbie Farms) the monitoring obligations associated with Lots 15 and 16 must be clearly articulated and met. This particularly pertains to tailwater monitoring and management, and to the control of the Weed of National Significance *Parkinsonia* on farm lot 15 (per EMP77).

The 2021 realignment of Moonamang Road, commencing on the eastern fringe of the Goomig area, through to the WA-NT border, resulted in the 're-opening' of a number of actions for Goomig which were considered closed in previous CARs. This did not have implications for compliance.

The auditor's overall assessment is that there are clear indications of the Proponent continuing to clarify and revise the operational management requirements to meet the objectives of Statement 938. This is being undertaken through the comparison of baseline and post-baseline monitoring and the revision of Statement 938 and EPBC 2010/5491 management plans. Achieving and maintaining compliance with a small number of monitoring actions remains problematic. It is expected that this will be resolved with the EMP and EPBC Management Plan revisions to outcomes-based rather than prescriptive requirements.

References

- Environmental Protection Authority, 2000, *Ord River Irrigation Area Stage 2 (M2 Supply Channel), Kununurra Part 1 – Biodiversity Implications. Report and Recommendations of the Environmental Protection Authority*, Bulletin 988, August 2000.
- Environmental Protection Authority, 2001, *Ord River Irrigation Area Stage 2 (M2 Supply Channel), Kununurra Part 2 – Management. Report and Recommendations of the Environmental Protection Authority*, Bulletin 1016, May 2001.
- Environmental Protection Authority, 2020, *Instructions on how to prepare Environmental Protection Act Part IV Environmental Management Plans*. DWER, Perth.
- Department of State Development, 2013, *Ord River Irrigation Area – Weaber Plain Development Project: Environmental Management Program*, October 2013.
- Kimberley Agricultural Investment, 2020, *Goomig-Knox Surface Water Report 2019*. Prepared to meet the requirements of SWL179228 and EPBC 2010/5491. KAI, Kununurra.
- Kimberley Boab Consulting, 2015, *Ord River Irrigation Area Knox Creek Plain Environmental Management Program*, Prepared for Kimberley Agricultural Investment Pty Ltd, August 2015.
- Kimberley Boab Consulting, 2018, *Ord River Irrigation Area Stage 2 M2 Supply Channel Compliance Assessment Report 2017*. Prepared for the Department of Primary Industries and Regional Development, Kununurra, June 2018.
- Kimberley Boab Consulting, 2019a, *Knox Creek Plain Agricultural Development Final Project Design Plan REV C*. Originally prepared for Kimberley Agricultural Investment Pty Ltd, amended for LandCorp June 2019.
- Kimberley Boab Consulting, 2019b, *Ord River Irrigation Area Stage 2 M2 Supply Channel Compliance Assessment Report 2018*. Prepared for the Department of Primary Industries and Regional Development, Kununurra, June 2019.
- Kimberley Boab Consulting, 2020, *Ord River Irrigation Area Stage 2 M2 Supply Channel Compliance Assessment Report 2019*. Prepared for the Department of Primary Industries and Regional Development, Kununurra.
- Kimberley Boab Consulting, 2022, *Ord River Irrigation Area Stage 2 M2 Supply Channel Compliance Assessment Report 2020*. Prepared for the Department of Primary Industries and Regional Development, Kununurra.
- Kinhill Pty Ltd (Kinhill), 2000, *Ord River Irrigation Area Stage 2 Proposed Development of the M2 Area Environmental Review and Management Program / Draft Environmental Impact Statement*, Prepared for Wesfarmers Sugar Company Pty Ltd, Marubeni Corporation and The Water Corporation of Western Australia, January 2000.
- Office of Environmental Protection Authority, 2012a, *Post Assessment Guideline for Preparing a Compliance Assessment Plan*, OEPA, Perth, August 2012.
- Office of Environmental Protection Authority, 2012b, *Post Assessment Guideline for Preparing an Audit Table*, OEPA, Perth, August 2012.
- Office of Environmental Protection Authority, 2012c, *Post Assessment Guideline for Making Information Publically Available*, OEPA, Perth, August 2012.
- Office of Environmental Protection Authority, 2012d, *Post Assessment Guideline for Preparing a Compliance Assessment Report*, OEPA, Perth, August 2012.
- Strategen, 2013a, *Ord River Irrigation Area Stage 2 (M2 Supply Channel), Compliance Assessment Plan – Statement 938*, report prepared for Department of State Development.
- Strategen, 2013b, *Ord River Irrigation Area Stage 2 (M2 Supply Channel), Compliance Assessment Report – Statement 938 [2012]*, report prepared for LandCorp.
- Strategen, 2014, *Ord River Irrigation Area Stage 2 (M2 Supply Channel), Compliance Assessment Report – Statement 938 [2013]*, report prepared for LandCorp.
- 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.
- Umwelt, 2021, *Knox Plain Survey Results and Habitat Mapping: Typhonium sp. kununurra (A.N.Start ANS 1467) field surveys Jan-Mar 2021*. Prepared for Department of Primary Industries and Regional Development, Perth.

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

Statement of Compliance

1. Proposal and Proponent Details

Proposal Title	<i>Ord River Irrigation Area Stage 2 (M2 Supply Channel)</i>
Statement Number	<i>938</i>
Proponent Name	<i>Minister for Regional Development</i>
Proponent's Australian Company Number (where relevant)	

2. Statement of Compliance Details

Reporting Period	<i>1/01/21 to 31/12/21</i>
------------------	----------------------------

Implementation phase(s) during reporting period (please tick ✓ relevant phase(s))							
Pre-construction	<input type="checkbox"/>	Construction	<input type="checkbox"/>	Operation	<input checked="" type="checkbox"/>	Decommissioning	<input type="checkbox"/>

Audit Table for Statement addressed in this Statement of Compliance is provided at Attachment:	2
--	---

An audit table for the Statement addressed in this Statement of Compliance must be provided as Attachment 2 to this Statement of Compliance. The audit table must be prepared and maintained in accordance with the Department of Water and Environmental Regulation (DWER) *Post Assessment Guideline for Preparing an Audit Table*, as amended from time to time. The 'Status Column' of the audit table must accurately describe the compliance status of each implementation condition and/or procedure for the reporting period of this Statement of Compliance. The terms that may be used by the proponent in the 'Status Column' of the audit table are limited to the Compliance Status Terms listed and defined in Table 1 of Attachment 1.

Were all implementation conditions and/or procedures of the Statement complied with within the reporting period? (please tick ✓ the appropriate box)			
No (please proceed to Section 3)	<input type="checkbox"/>	Yes (please proceed to Section 4)	<input checked="" type="checkbox"/>

3. Details of Non-compliance(s) and/or Potential Non-compliance(s)

The information required Section 3 must be provided for each non-compliance or potential non-compliance identified during the reporting period covered by this Statement of Compliance.

Non-compliance/potential non-compliance 3-1

Which implementation condition or procedure was non-compliant or potentially non-compliant?
Nine actions from the EMP (condition 5-1) were potentially non-compliant. Condition 5-1 was however assessed as compliant.
Was the implementation condition or procedure non-compliant or potentially non-compliant?
The auditor assessed that the nine potential non-compliances (5% of total actions in the EMP) were not outcomes-related non-compliances, and therefore of a relatively minor nature, with the exception of EMP109 relating to the functionality of the DW1 Gauging Station (DW1GS). The auditor noted that DPIRD and KAI have worked to improve the functionality of the DW1GS, however some issues including accessing data require further work.
The nine PNCs included duplicated and/or integrated actions and monitoring requirements. Overall, implementation of the EMP was assessed by the auditor as being compliant.
On what date(s) did the non-compliance or potential non-compliance occur (if applicable)?

Was this non-compliance or potential non-compliance reported to the Chief Executive Officer, DWER?	
<input type="checkbox"/> Yes <input type="checkbox"/> Reported to DWER verbally Date _____ <input type="checkbox"/> Reported to DWER in writing Date _____	<input checked="" type="checkbox"/> No

What are the details of the non-compliance or potential non-compliance and where relevant, the extent of and impacts associated with the non-compliance or potential non-compliance?
<p>EMP19 – Soil testing for electrical conductivity (EC) <i>in the buffer</i> was not undertaken in 2021. Pre-clearing commencement soil tests were not undertaken on the Knox Creek Plain.</p> <p>EMP20 – Soil testing for pH and sodicity was not undertaken in the buffer in 2021. Pre-clearing commencement soil tests were not undertaken on the Knox Creek Plain.</p> <p>EMP77 – Parkinsonia on farm Lot 15 requires treatment / control in order to prevent downstream seed-spread.</p> <p>EMP109 – The DW1 Gauging Station remains problematic however the auditor notes repairs have been made and telecommunications / SCADA access continues to be rectified.</p> <p>EMP133 – Buffer vegetation monitoring is not undertaken as prescribed. Photographic records of buffer condition are retained at sites around bores and tracks.</p> <p>EMP135 – Buffer reference sites were not surveyed as prescribed in order to compare rehabilitation areas. The auditor recommended a time limitation be put on post-rehabilitation monitoring.</p> <p>EMP162 – Rehabilitation site monitoring was not conducted as required. Refer to EMP135.</p> <p>EMP163 – Rehabilitation site monitoring was not conducted as required. Refer to EMP135.</p> <p>EMP164 – Rehabilitation site monitoring was not conducted as required. Refer to EMP135.</p>
What is the precise location where the non-compliance or potential non-compliance occurred (if applicable)? (please provide this information as a map or GIS co-ordinates)
Goomig farm area (Weaber Plain); Knox Creek Plain.
What was the cause(s) of the non-compliance or potential non-compliance?
Identified potential non-compliances relate to monitoring not being undertaken as prescribed, and to insufficient control of Parkinsonia (a Weed of National Significance) on Lot 15.

What remedial and/or corrective action(s), if any, were taken or are proposed to be taken in response to the non-compliance or potential non-compliance?

The EMP review currently under way will address the auditor recommendations in relation to monitoring requirements and records retention, with a focus on prescription rather than outcome.

DPIRD will advise MG Corporation that *Parkinsonia* control on Lot 15 is required.

What measures, if any, were in place to prevent the non-compliance or potential non-compliance before it occurred? What, if any, amendments have been made to those measures to prevent re-occurrence?

All (except one – EMP77) potential non-compliances were retained from previous years. The EMP review will consider the auditor recommendations, and those from previous audits, regarding the EMP action requirements. DPIRD and KAI continue to action the DW1GS repairs to restore functionality.

Please provide information/documentation collected and recorded in relation to this implementation condition or procedure:

- in the reporting period addressed in this Statement of Compliance; and
- as outlined in the approved Compliance Assessment Plan for the Statement addressed in this Statement of Compliance.

(the above information may be provided as an attachment to this Statement of Compliance)

4. Proponent Declaration

I, (full name and position title)

declare that I am authorised on behalf of

(being the person responsible for the proposal) to submit this form and that the information contained in this form is true and not misleading.

Signature:.....

Date:.....

Please note that:

- it is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give or cause to be given information that to his knowledge is false or misleading in a material particular; and
- the Chief Executive Officer of the DWER has powers under section 47(2) of the *Environmental Protection Act 1986* to require reports and information about implementation of the proposal to which the statement relates and compliance with the implementation conditions.

5. Submission of Statement of Compliance

One hard copy and one electronic copy (preferably PDF on CD or thumb drive) of the Statement of Compliance are required to be submitted to the Chief Executive Officer, DWER, marked to the attention of Manager, Compliance (Ministerial Statements).

Please note, the DWER has adopted a procedure of providing written acknowledgment of receipt of all Statements of Compliance submitted by the proponent, however, the DWER does not approve Statements of Compliance.

6. Contact Information

Queries regarding Statements of Compliance, or other issues of compliance relevant to a Statement may be directed to Compliance (Ministerial Statements), DWER:

Manager, Compliance (Ministerial Statements)

Department of Water and Environmental Regulation

Postal Address: Locked Bag 10
EAST PERTH WA 6892

Phone: (08) 6364 700

Email: compliance@dwer.wa.gov.au

7. Post Assessment Guidelines and Forms

Post assessment documents can be found at www.epa.wa.gov.au

Attachment 1 Table 1 - Compliance Status Terms

Compliance Status Terms	Abbrev	Definition	Notes
Compliant	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"> ongoing requirements that have been met during the reporting period; and 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'.
Completed	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"> audit elements have a finite period of application (e.g. construction activities, development of a document); the action has been satisfactorily completed; and the DWER has provided written acceptance of 'completed' status for the audit element.
Not required at this stage	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.
Potentially Non-compliant	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 finalized its investigations to determine whether non-compliance has occurred.
Non-compliant	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" have not been met during the reporting period.
In Process	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.	The term 'In Process' may not be used for any purpose other than that stated in the Definition Column. 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).

Attachment 2 – Ministerial Statement 938 Audit Table 2021

Audit code	Subject	Action	How	Evidence	Phase	Timeframe	Status	Further information
938:M1.1	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
938:M2.1	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.
938:M3.1	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	Completed	Item assessed as completed in a previous audit period.
938:M3.2	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	Completed	Item assessed as completed in a previous audit period.
938:M4.1	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), Compliance Assessment Plan – Statement 938</i>	Overall	Ongoing	Compliant	An update to the CAP will be required with the finalisation of the revised EMP.

Audit code	Subject	Action	How	Evidence	Phase	Timeframe	Status	Further information
938:M4.2	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	Compliant	
938:M4.3	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	Ord River Irrigation Area Stage 2 (M2 Supply Channel), Compliance Assessment Report – Statement 938 [2020]. 2021.938.M4.3	Overall	Ongoing	Compliant	This 2021 CAR assesses compliance with conditions in accordance with the approved CAP.
938:M4.4	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 evidence folder for reports and records.	Overall	Ongoing	Compliant	Reports (and evidence) are retained by DPIRD and KAI.
938:M4.5	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.	Advice from DPIRD	Overall	Within 7 days of a potential non-compliance being known	Conformant	DPIRD advised there were no reportable incidents in 2021.
938:M4.6	Compliance reporting	The proponent shall submit a compliance assessment report annually from the date of issue of this Statement	Submit Annual Compliance Assessment	Evidence of submission of 2020 report	Overall	By June 2014 and annually thereafter	Compliant*	The 2020 CAR was submitted to the EPA Service team in March 2022.

Audit code	Subject	Action	How	Evidence	Phase	Timeframe	Status	Further information
		addressing the previous twelve month period or other period as accepted by the CEO. The compliance assessment report shall: <ul style="list-style-type: none"> ○ be endorsed by the proponent's Managing Director or a person delegated to sign on the Managing Director's behalf; ○ include a statement as to whether the proponent has complied with the conditions; ○ identify all potential non-compliances and describe corrective and preventative actions taken; ○ be made publicly available in accordance with the approved Compliance Assessment Plan; and ○ indicate any proposed changes to the Compliance Assessment Plan required by Condition 4-1. 	Reports addressing all requirements annually to OEPA					*The approved <i>Compliance Assessment Plan</i> for Statement 938 requires submission by June of the year following the reporting period. <i>This is a timing non-compliance and is not considered material given the mitigating factors undertaken by the proponent for the majority of identified PNCs.</i>
938:M5.1	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. 2020.938.M5.1	Overall	Ongoing	Compliant	The Weaber and Knox EMP documents will be amalgamated into a single document with the EMP revision. The Proponent has conducted reviews of groundwater and stormwater management requirements 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 met, despite nine (5% of total) potential non-compliance indicated in this review.

Audit code	Subject	Action	How	Evidence	Phase	Timeframe	Status	Further information
938:M6.1	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	Per previous audit evidence item 2020.938.M.61a	Overall	Ongoing	Weaber Plain - Completed Knox Creek Plain development not yet commenced –	Weaber: layout finalised per FPDP and construction completed in previous reporting periods. Knox: revised FPDP submitted to DWER 2019. <i>Approved May 2020</i> . A revision to the FPDP may be required to address the outcome of the <i>Typhonium</i> assessment.
938:M7.1	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 to be prepared at a time in the future if/when decommissioning is required.	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. The Proponent advised that there is no intention to decommission Goomig or Knox, however, this requirement will be met should this change.
938:M7.2	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
938:M7.3	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	Final Decommissioning Plan publicly available	Overall	To the requirements of the CEO	NR	Decommissioning relates to a later phase

Audit code	Subject	Action	How	Evidence	Phase	Timeframe	Status	Further information
			the receipt of the request					

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 inspections conducted 21 October and 16 November 2021. Satellite imagery review. Evidence items: 2021.S1_2.1a 2021.S1_2.1b 2021.S1_2.1c 2021.S1_2.1d	Compliant	Clearing to date is as follows: Weaber Plain – farm area: 7,416.21ha Weaber Plain – Infrastructure: 914.12ha Knox Plain – farm area (2020): 410ha Moonamang Road (2021): 28.9ha TOTAL CLEARING: 8,769.23ha
S1_2.2		Land managed as buffer 42,500ha	Formal site inspections conducted 21 October and 16 November 2021 indicated continued buffer management and exclusion from development. 2021.S1_2.1c 2021.S1_2.1d	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 held as buffer, for a total of 17,979ha. Active management of the Knox buffer is yet to commence.
S1_2.3		Land for irrigable development 30,500ha	Formal site inspections conducted 21 October and 16 November 2021. Satellite imagery review. 2021.S1_2.1a 2021.S1_2.1b 2021.S1_2.1c 2021.S1_2.1d	Compliant	A total of 7416.21ha in Weaber Plain have been cleared or developed as land for irrigation since commencement. Initial clearing for the development of ~410ha on the Knox Plain commenced in May 2020.
S1_2.4		Infrastructure area 3,000ha	2021.S1_2.4	Compliant	28.9ha was cleared for shared infrastructure (Moonamang Road Realignment) during the audit period.
S1_2.5	Land outside the Project Area	M2 channel (lake Kununurra to project area) 690ha	Previous KAI audit advice (December 19, 2018) remains, as reported in the 2018 CAP.	NR	No clearing occurred in relation to channel works outside the Project area in 2020. Maintenance of regrowth vegetation in previously cleared areas occurred during the reporting period, as part of annual infrastructure management responsibilities.
S1_2.6		Wyndham Port Facilities 1ha	Previous KAI audit advice (December 19, 2018) remains, reported in the 2018 CAP.	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	Previous KAI audit advice (December 19, 2018) remains, reported in the 2018 CAP.	NR	No production of raw sugar has occurred.
S1_2.8		Molasses 160,000tpa	Previous KAI audit advice (December 19, 2018) remains, reported in the 2018 CAP.	NR	No production of molasses has occurred.

Audit Code	Element	Description	Evidence	Status	Comments
S1_2.9	Infrastructure	Irrigation channels 160km	Previous KAI audit advice (December 19, 2018) remains, reported in the 2018 CAP.	Compliant	37 km of main supply channels have been constructed to date. No change since previous audit period. Note that this does not include internal on-farm channels ('head ditches'), there area of which is included in total clearing figures.
S1_2.10		Annual water requirements 740GL	2021.S1_2.10	Compliant	The Goomig annual water use report advises that a total of 35.588 GL were supplied to the Goomig farmlands through the M2C3 structure in 2021, per the annual water report provided to DWER (see item 2021.S1_2.10). 34.212GL were supplied to Goomig farms for irrigation.
S1_2.11		Drains 153km	Refer to previous audit – see 2018.938.M4.3 (KBC, 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).	Compliant	No change since previous audit period. 48 km of flood protection levees constructed to date. Auditor observed that flood protection levees were 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). Previous KAI audit advice (December 19, 2018) remains, as reported in the 2018 CAP.	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 inspection of Main Roads' realignment of Moonamang Road, 16 November 2021. 2021.S1_2.4	Compliant	An error has been observed in previous reporting which indicated 11.9 km of road had been constructed to date. This figure should read 37km. An additional 12.2km was constructed by Main Roads in 2021
S1_2.15	Infrastructure	Power lines 165km	Site inspection conducted 26 August 2020.	NR	No construction of power lines has occurred to date.
S1_2.16	Wyndham Port	Raw sugar store 180,000t	Previous KAI audit advice (December 19, 2018) remains, as reported in the 2018 CAP.	NR	Construction has not yet commenced.
S1_2.17		Molasses store 75,000t	Previous KAI audit advice (December 19, 2018) remains, as reported in the 2018 CAP.	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

EMP Compliance Table 1 – Soil conservation management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 1.	Provide an Information Package to the owner/leaseholder, which outlines: <ul style="list-style-type: none"> the susceptibility of soil from disturbed areas to erosion from high intensity rainfall during the wet season soil erosion prevention measures irrigation strategies to reduce potential impacts of sodicity and salinity procedures to monitor soil salinity and sodicity. 	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	2021.EMP2a 2021.EMP2b (both provided by KAI, June 2021) 2021.EMP2c (Main Roads) 2021.EMP2c (MG-Cubbie) 2021.EMP3 (Main Roads CEMP)	Compliant	Erosion management is specifically mentioned in induction.	Compliant	Erosion management is specifically mentioned in KAI's induction. The Main Roads Construction EMP addresses erosion.
EMP 3.	Maintain records of ground disturbing activities that include the date that the boundary of clearing was delineated, the date of clearing and location of topsoil storage.	To provide data to inform management.	During construction of shared infrastructure	Main Roads provided the auditor with shapefiles of cleared areas; pre-clearing reports for each location within the Moonamang Road extension route; and the construction EMP for the works.	Completed	Item assessed as completed in a previous audit period.	Compliant	Main Roads activity compliant. Records retained and topsoil maintained for re-spread and rehabilitation purposes.

EMP Compliance Table 1 – Soil conservation management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
				2021.S1_2.4 2021.EMP3				
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	Site inspections October and November 2021. Clearing of the Moonamang Road extension commenced on 13 April 2021 (start of dry season).	Completed	Item assessed as completed in a previous audit period.	Compliant	Main Roads site activity was drawing to a close in November 2021, in preparation for the wet season onset.
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	Main Roads site inspection 16 November 2021.	Completed	Item assessed as completed in a previous audit period.	Compliant	Topsoil containment is addressed in Main Roads CEMP and was observed on site.
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	Site inspection 16 November 2021. 2021.S1_2.4	Completed	Post-construction clearing management is discussed under other audit items (including EMP 7, EMP 8).	Compliant	Main Roads officers advised that clearing areas are pre-inspected and pegged by Environmental Officers prior to works commencement.
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	Site inspection 16 November 2021. Pre-clearing inspection reports 2021.EMP7a 2021.EMP7b 2021.EMP7c	Completed	Item assessed as completed in a previous audit period (as does not relate to clearing of farm lots).	Compliant	Main Roads officers advised that clearing is staged, and provided pre-clearing records from different months in 2021.
EMP 8.	Restrict movement of construction machinery and equipment to designated tracks and roads.	To prevent unauthorised ground disturbance.	During construction of shared infrastructure	Site inspections October and November 2021.	Completed	Item assessed as completed in a previous audit period.	Compliant	No evidence of vehicles/machinery not using designated tracks

EMP Compliance Table 1 – Soil conservation management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
								except in clearing areas.
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	Site inspections October and November 2021. 2021.EMP5 2021.EMP9	Completed	Item assessed as completed in a previous audit period.	NR	Topsoil remains in situ.
EMP 10.	Remove topsoil from: <ul style="list-style-type: none"> all areas to be excavated all areas where spoil from excavation is to be stored. 	To provide a natural source of seed, organic matter and microorganisms for areas to be rehabilitated.	During construction of shared infrastructure	Site inspections October and November 2021. 2021.EMP5 2021.EMP9	Completed	Item assessed as completed in a previous audit period.	NR	Topsoil remains in situ.
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	Site inspections October and November 2021. 2021.EMP5 2021.EMP9	Completed	Item assessed as completed in a previous audit period.	NR	Topsoil remains in situ.
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	Site inspections October and November 2021. 2021.EMP5 2021.EMP9	Completed	Item assessed as completed in a previous audit period.	NR	Topsoil remains in situ.
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	Site inspections October and November 2021. Buffer signage remains in situ.	Completed	Item assessed as completed in a previous audit period.	Compliant / NR	Previously cleared areas were marked per 2020 CAR. Buffer is not yet signposted however minimal activity is occurring on site and KAI has previously demonstrated boundary flagging.
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	Main Roads Construction EMP addresses requirements included in the project-specific	Completed	Item assessed as completed in a previous audit period.	NR	Rehabilitation not yet required in Knox farming areas.

EMP Compliance Table 1 – Soil conservation management actions									
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain		
					Status	Comment	Status	Comment	
				rehabilitation guide (which is based on the Statement 938 EMP). 2021.EMP3 2021.EMP9					

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"> 1. Investigate cause of erosion. 2. Investigate ways to minimise erosion and increase landform stability. 3. Implement remedy. 4. Monitor success of remedy. 	Site inspection 16 November 2021 – no erosion evident.	Completed	Item assessed as completed in a previous audit period.	Compliant	No erosion evident.
EMP 16.	Management of topsoil 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"> 1. Investigate cause of erosion. 2. Investigate ways to minimise erosion and increase landform stability. 3. Implement remedy. 4. Monitor success of remedy. 	Site inspections October and November 2021. 2021.EMP5 2021.EMP9	Completed	Item assessed as completed in a previous audit period.	NR	Topsoil remains in situ.
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"> 1. Report as Environmental Incident and initiate Incident Procedure 	Site inspection 16 November 2021 2021.S1_2.1a 2021.S1_2.1b 2021.S1_2.4	Completed	Item assessed as completed in a previous audit period.	Compliant	Clearing undertaken with GIS-supported equipment and survey. Tracklog overlaid on recent satellite imagery indicates no buffer incursion.

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 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"> Investigate cause. 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. Implement remedy. Monitor success of remedy. 	Site inspection 16 November 2021.	Compliant	No significant erosion observed around infrastructure during inspections in 2021.	Compliant	No significant erosion observed around Main Roads infrastructure during 2021 inspection.
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"> at least one sample from each lot a representative spread of sites throughout the Buffer Area. 	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"> Map the distribution of soil with salinity exceeding target levels. 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). Verify the adequacy of the estimated leaching rate (approximately 100 mm/a) in controlling sodicity in accordance with the Groundwater Management Sub-plan. Identify whether remedial action is required, such as installation of field drains in accordance with the Groundwater Management Sub-plan. Implement remedial action on a trial basis in areas identified from mapping. Monitor success of remedy, increasing the frequency of soil monitoring if salinity exceeds target levels. 	2021.EMP19a MG-Cubbie 2021.EMP19b KAI 2021.EMP19c KAI	PNC	Buffer sites are not included in the soil analysis data provided. EC levels for reported farm lots were within the acceptable range.	PNC	Soil sampling yet to commence on the farm and buffer areas of the Knox Plain. Initial soil samples were required prior to the commencement of clearing.
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	<ol style="list-style-type: none"> Map the distribution of soil with sodicity exceeding target levels. 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). 	2021.EMP19a MG-Cubbie 2021.EMP19b KAI 2021.EMP19c KAI	PNC	Buffer sites are not included in the soil test reports. ESP levels were within the acceptable range.	PNC	Soil sampling yet to commence on the farm and buffer areas of the Knox Plain. Initial soil samples were required prior to the

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"> at least one sample from each lot a representative spread of sites throughout the Buffer Area. 	irrigation infrastructure	or 15 in subsurface soils.	<ol style="list-style-type: none"> Verify the adequacy of the estimated leaching rate (approximately 100 mm/a) in controlling sodicity in accordance with the Groundwater Management Sub-plan. Identify whether remedial action is required, such as application of gypsum or sulphur. Implement remedial action on a trial basis in areas identified by mapping. Monitor success of remedy, increasing the frequency of soil monitoring if salinity exceeds target levels. 					commencement of clearing.

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"> Agricultural and Veterinary Chemicals Code Act 1994 (Cwth) and associated acts and regulations Health (Pesticides) Regulations 2011 Aerial Spraying Control Act 1966 (WA) Agricultural Produce (Chemical Residues) Act 1983 (WA) Poisons Act 1964 (WA) 	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.	Compliant	KAI is the Knox land manager and is aware of chemical management legal obligations (per EMP2 and previous compliance assessments). This action will be removed from the updated EMP given the Regulations are statutory.	

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"> Veterinary Preparations and Animal Feeding Stuffs Act 1976 (WA) Agriculture and Related Resources (Spraying Restriction) Regulations 1979. 							
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	2021.EMP2a 2021.EMP2b 2021.EMP2c 2021.EMP2d	Compliant	KAI and MG-Cubbie both include chemical safety in their induction.	Compliant	Main Roads and KAI both include chemical safety in their induction.
EMP 23.	Ensure storage of farm chemicals complies with relevant Australian and Western Australian Standards, including AS 2507-1998 "The storage and handling of agricultural and veterinary chemicals" and Department of Water Toxic and Hazardous Substances – Storage and Use WQPN No. 65.	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 21 October 2021 and 16 November 2021.	Compliant	<p>KAI and MG/Cubbie advised that no farm chemicals are stored on site at Goomig.</p> <p>No storage of farm chemicals on Goomig was observed by the auditor.</p> <p><i>This action will be removed from the updated EMP given the Regulations are statutory.</i></p>	Compliant	No storage of farm chemicals on Knox.
EMP 24.	<p>All hydrocarbons will be stored in accordance with the following:</p> <ul style="list-style-type: none"> Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007 (WA) Australian Standard AS 1940-2004: The Storage and Handling of Flammable and Combustible Liquids. 	To minimise the potential for hydrocarbon contamination of the environment.	Ongoing from commencement of ground disturbance	<p>Site inspections 21 October 2021 and 16 November 2021. KAI and MG/Cubbie use self-bunded storage on site. This was observed by the auditor.</p> <p>2021.EMP24a 2021.EMP24b 2021.EMP24c</p>	<p>Compliant</p> <p>Unable to assess</p>	<p>Hydrocarbons (diesel fuel) were stored in self-bunded tanks or self-bunded trailers. Bunded oil and fuel holding facilities were observed at tailwater pump sites.</p> <p>Unable to assess compliance with</p>	Compliant	No storage of hydrocarbons on Knox.

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"> • <i>Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007 (WA) and</i> • <i>Australian Standard AS 1940-2004: The Storage and Handling of Flammable and Combustible Liquids</i> as this is beyond the scope of this audit.		
EMP 25.	Generators will be located on bunded platforms to contain any fuel leaks.	To minimise the potential for spills and leaks to contaminate the environment.	Ongoing from commencement of ground disturbance	Bunded generators observed at KAI's Lot 3 during site inspection 21 October 2021, and at Main Roads on 16 November 2021. 2021.EMP25a 2021.EMP25b	Compliant	As noted in previous audits, generators on the Goomig site are located at the Lot 3 shed. These generators are self-bunded.	Compliant	Main Roads' bunded generators observed on site.
EMP 26.	Maintain appropriate spill response equipment and Material Safety Data Sheet (MSDS) information in all hydrocarbon storage and re-fuelling areas and maintenance areas.	To minimise the potential for spills and leaks to contaminate the environment.	Ongoing from commencement of ground disturbance	Spill response kits observed during site inspections. 2021.EMP25	Compliant	KAI advised that MSDS data is held in site compounds and fuelling and storage areas, as observed in previous audits.	Compliant	Main Roads spill response equipment observed on site.
EMP 27.	Persons designated as responsible for the storage and handling of fertiliser on farms be provided with appropriate training and instruction.	To prevent potential contamination of the environment by ensuring appropriate storage and handling of fertilisers.	Ongoing from commencement of ground disturbance	KAI advice during site inspection; MG-Cubbe per induction manual.	Compliant	KAI advised that fertiliser is sourced on an as-needs basis by personnel with appropriate training and instruction.	NR	Handling of fertiliser not yet required on Knox.
EMP 28.	Transport dangerous goods in accordance with the Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007 (WA).	To ensure dangerous goods are stored appropriately during transport (e.g. on absorbent material, provision of spill kit, well-ventilated, appropriate	Ongoing from commencement of ground disturbance	N/A	Unable to assess.	Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007 (WA) is beyond the scope of this audit.	Unable to assess	No activity on site at time of inspection.

EMP Compliance Table 3 – Chemicals management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
		documentation and provision of personnel protection equipment for safe handling).				This action will be removed from the updated EMP given the Regulations are statutory.		
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 conducted October and November 2021.	Compliant	This action will be removed from the updated EMP given the Regulations are statutory and apply regardless of the EMP being in place.	Compliant	No evidence of hydrocarbon spills at the Moonamang Road extension works.
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	2021.EMP30a (MG-Cubbie) 2021.EMP30b (KAI)	Compliant	KAI and MG-Cubbie advised that they continue to document and retain chemical spraying logs within operational farm management software system, as reported in previous years.	NR	On-farm chemical usage not yet required on Knox.
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 October and November 2021.	Compliant	The Independent Review Group (established under EPBC 2010/5491) has identified a risk with the shift towards wet season cropping on the Goomig farmlands.	NR	Irrigation has 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	2021.EMP32a 2021.EMP32b	Compliant	2021.EMP32a and 2021.EMP32b provide qualifications for commercial spraying contractor used by both KAI and MG-Cubbie.	NR	Herbicide and pesticide spraying not yet required on Knox.
EMP 33.	Ensure agricultural chemicals are not directly applied to dedicated on-farm access tracks.	To prevent off-site transportation of	Ongoing from commencement	Site inspections – October and November 2021	Compliant	No evidence observed by the auditor of the application of	NR	Herbicide and pesticide spraying

EMP Compliance Table 3 – Chemicals management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
		chemicals in dust lift-off from access tracks.	of ground disturbance			chemicals on dedicated on-farm tracks.		is not yet required on Knox.
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	N/A	Unable to assess	The auditor was unable to assess whether the rate of application was compliant with the product label. Because compliance with product labels is a statutory requirement, this management action will be removed from the revised EMP.	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	2021.EMP30a 2021.EMP30b	Compliant	All spray records are retained for farm management purposes.	NR	Farming 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	2021.EMP32a 2021.EMP32b	Compliant	Aerial spraying contractors are licensed professionals.	NR	Farming not yet commenced.
EMP 37.	Notify neighbours within: <ul style="list-style-type: none"> 1500 m of an area to be sprayed with ultra-low volume 750 m of an area to be sprayed with emulsifiable concentrate by air. 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 – October and November 2021	Compliant	No neighbours within 1500 m of areas that have been sprayed. Aerial spraying contractors are licensed professionals. It is recommended that this action is marked as completed (or removed).	NR	Farming 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"> • Mechanical Equipment Washdown (WQPN No. 68) • Chemical Blending (WQPN No. 7). 	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	N/A	Completed.	No washdown facilities are located on farms within the Project area.	NR	Farming 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	Site inspections – October and November 2021.	Compliant	Chemical preparation is undertaken at site depots – eg Lot 3 compound.	NR	Farming 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		Completed	Spill kits observed on site. Previous audits have indicated KAI’s use of WQPN No 10. Updated KAI emergency response procedure documentation was previously provided (2018.EMP40) which does not explicitly reference WQPN No. 10 but was deemed to meet the intent.	NR	Farming not yet commenced. Procedures from Goomig will be applied to Knox when farming commences.
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 - October and November 2021.	Compliant	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	Farming has not yet commenced on Knox.

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 21 October 2021 and 16 November 2021. 2021.EMP24a 2021.EMP24b	Compliant	KAI previously advised that self-bunded storage devices are inspected very regularly 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.	Compliant	No permanent hydrocarbon storage on site at Knox.
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"> Investigate the cause. Investigation opportunities to prevent re-occurrences. Inform farm owners of outcomes of the survey. In the event of chemical discharge contrary to Environmental Protection (Unauthorised Discharges) Regulations 2004, report to DWER 	Site inspections – October 21 2021 and November 16 2021.	Compliant	Refer to EMP 52, EMP 54 and EMP 76. Buffer vegetation damage due to spray drift was not observed during site inspections.	NR	Operations have 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"> Implement emergency response. Classify appropriate response. Notify authorities if High or Moderate incident impact classifications. Review Emergency Response Plan (for High and Moderate incident impact classes). Prepare and implement follow-up environmental monitoring (in consultation with DWER as required). 	Site inspections – October 21 2021 and November 16 2021.	Compliant	KAI advised that daily observations of chemical are made but not recorded. No evidence of chemical spillage was observed on site by the auditor.	NR	Operations have 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	2021.EMP45	Compliant	There are no nearby residential areas. KAI burns in accordance with permits issued by SWEK.	Compliant	No nearby residential areas. This action is no longer required.
EMP 46.	Provide prospective farm owners/lessees 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.	Compliant and completed	KAI is Knox developer / farmer. This action is no longer required.
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 inspections – October 21 2021 and November 16 2021.	Compliant.	No nearby residences.	Compliant	No nearby residential areas. This action is no longer required.
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	2021.EMP5 2021.EMP9 Water truck (for dust control) observed on site during site inspection on 16 November 2021.	Completed	Item assessed as completed in a previous audit period.	NR	Topsoil surfaces did not exhibit signs of dust or erosion during the Moonamang Road inspection in November 2021.
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	Moonamang Road has speed limits signposted.	Completed	Item assessed as completed in a previous audit period.	Compliant	On-site speed limits were observed by the auditor throughout the Moonamang road works.

EMP Compliance Table 6 - Dust and particulate monitoring regime

EMP Compliance Table 6 – Dust and particulate monitoring regime									
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.	Auditor observation of water trucks to control dust (16 November 2021).	Completed	Item assessed as completed in a previous audit period.	Compliant	Main Roads advised that site observations are undertaken weekly when Environmental Officers are on site. Water trucks used daily.
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.	Auditor observation of water trucks to control dust (16 November 2021).	Completed	Item assessed as completed in a previous audit period.	Compliant	Water trucks are used for dust control on a daily basis (and were observed by the auditor).

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.	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: <ul style="list-style-type: none"> weed infested areas (e.g. monocultures of neem trees, weed density/cover greater than 50%) areas that have declared noxious weed species and Weeds of National Significance (WONS) areas declared as local priority in consultation with DPW AND/OR DER and DAFWA 	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	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:	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 Compliance Table 7 – Weed, plant pathogen and pest animal management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	
	<ul style="list-style-type: none"> weed infested areas (e.g. monocultures of neem trees, weed density/cover greater than 50%) areas that have declared noxious weed species and Weeds of National Significance (WONS) areas declared as local priority in consultation with DPaW, DAFWA and Ord Land and Water Inc. 							
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	The 2016 auditors (Strategen) assessed this action as complete.	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"> weed infested areas (e.g. monocultures of neem trees, weed density/cover greater than 50%) areas that have declared noxious weed species and Weeds of National Significance (WONS) areas declared as local priority in consultation with DPW AND/OR DER, DAFWA and Ord Land and Water Inc. 	To provide data to inform management.	Annually, from commencement of ground disturbance	<p>2021.EMP54</p> <p>KAI advised that per previous years, weed inspections (and treatments if required) are undertaken during bore monitoring and routine farm activities.</p> <p>Site inspections in October and November 2021 did not show weed infestations, with the exception of Farm Lot 15 (Parkinsonia) for which development has commenced. Control of this parkinsonia will be required if development does not occur, particularly given</p>	Compliant.	<p>The auditor's previous assessment carries over: the intent of the action has been met despite a previous PNC. Permanent weed transects are not in place.</p> <p>The Typhonium surveys of the Goomig buffer (2021) retained weed data.</p> <p>KAI advised that opportunistic inspection for listed weeds (including Parkinsonia) is undertaken during farm management operations and while entering the buffer for</p>	Compliant	<p>2021.EMP54 indicates weed data was included in 2021 <i>Typhonium sp. kununurra</i> surveys conducted extensively across the Knox Creek Plain. This report states "...weeds were not present at levels that would be considered limitations to the study". Weed data was retained in survey records. (Umwelt, 2021).</p>

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

Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	
				its proximity to Border Creek.		groundwater monitoring etc.		
EMP 55.	Update the extent of Priority Areas which will be defined by: <ul style="list-style-type: none"> weed infested areas (e.g. monocultures of neem trees, weed density/cover greater than 50%) areas that have declared noxious weed species and Weeds of National Significance (WONS) areas declared as local priority in consultation with DPW AND/OR DER, DAFWA and Ord Land and Water Inc. 	To provide data to inform management.	Annually, from commencement of ground disturbance	KAI advised that weeds identified during regular surveys are treated with Garlon, a slow release (rain activated) herbicide.	Compliant	Refer to EMP 54. Priority areas are not recorded as but are managed as part of farm operations by field staff.	Compliant	Refer to EMP 54.
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 and site inspections by the auditor that weeds identified during regular surveys are subsequently treated.	Compliant	Refer to EMP 54. KAI continues to implement an ongoing weed control program targeting <i>Parkinsonia aculeata</i> . Follow-up treatments occur if required. Parkinsonia control is required on Lot 15 and is expected to be undertaken as development is completed.	Compliant	Knox management is incorporated with <i>Weaber Plain</i> management.
EMP 57.	Implement an induction program for personnel which contains information on: <ul style="list-style-type: none"> hygiene procedures for all vehicles, machinery and equipment upon entering and leaving the Weaber Plain Development Area and/or Priority Areas specific soil management requirements in Priority Areas 	To reduce the risk of construction activities introducing and/or spreading weeds and plant	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	Completed	Knox Creek Plain farm management is an extension of the Goomig farm development and management, using existing staff. Separate induction is not required. It

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

Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	
	<ul style="list-style-type: none"> requirement to remain within designated clearing areas. 	pathogens by ensuring construction personnel are aware of appropriate management measures and requirements.				assessed as completed for the Weaber Plain phase of the Project.		is recommended that this action is removed. It has been classified Completed in line with the previous <i>Weaber Plain</i> assessment.
EMP 58.	Prepare guidelines for prospective farmers/lessees that contains information on: <ul style="list-style-type: none"> vehicle hygiene measures (e.g. issues of using machinery from southern WA or interstate) identification, control and reporting of weeds (e.g. weed control in tail water ditches, use of fire) identification and reporting of pest animals, declared noxious weed species and signs of plant pathogens 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) selection of pet animals (e.g. discourage cat ownership) selection of crops (e.g. no declared noxious weed species) irrigation and drainage of land (i.e. no water from farming allotments directed into the Weaber Plain Buffer Area). 	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.	Completed	As the developer of the Knox Plain, KAI's obligations with regard to EMP58 can be considered Completed in line with the <i>Weaber Plain</i> assessment.
EMP 59.	Develop and supply an information package to prospective farm owners/lessees/managers within the project area that contains: <ul style="list-style-type: none"> 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) 	To reduce the risk of agricultural activities introducing and/or spreading weeds, plant	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 Compliance Table 7 – Weed, plant pathogen and pest animal management actions

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	
	<ul style="list-style-type: none"> possible control techniques (information on controlling declared noxious weed species can be obtained from DAFWA [2003]) general soil management and hygiene requirements for farms reporting requirements. 	pathogens and pest animals by ensuring farm owners/managers are aware of appropriate management measures and requirements.						
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 throughout the Buffer Area.	During clearing of farm lots	NA	Completed	Completed in a previous reporting period.	NA	Item not included in Knox EMP.
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 - no acrolein injections were undertaken in 2021. Alternatives to acrolein are being considered.	Compliant	This action is more related to infrastructure management and system functioning than environmental risk.	NR	Irrigation has not yet commenced on Knox.
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 – October and November 2021.	Completed.	Item assessed as completed in a previous audit period.	Compliant	Vehicle movements are restricted to existing station tracks and cleared areas.
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	Ongoing from commencement	Site inspections – October and November 2021.	Compliant	Previous KAI advice to auditors that access tracks	Compliant	Vehicle movements restricted to existing station

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

Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	
		introduced into / spread throughout the Buffer Area by limiting access.	of ground disturbance			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.		tracks and cleared areas.
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 describing the hygiene procedure/s required to be implemented.	To prevent the introduction/ spread of weeds and plant pathogens in the Weaber Plain Buffer Area, rehabilitation areas and Priority Areas.	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 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	2021.EMP65	Compliant	Main Roads provided example vehicle inspection records (2021.EMP65).	NA	Item amended in Knox EMP (refer to KEMP 65).
KEMP 65	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.	To prevent the introduction/ spread of weeds and plant	Ongoing from commencement of ground disturbance	NA	NA	NA	Compliant	No farming or development activity on Knox in 2021.

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

Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	
		pathogens in the project area.						
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	2021.EMP65	Compliant	Refer to EMP65.	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"> time and date of clean down of machinery/vehicle/equipment method of cleaning machinery and vehicles signature of the driver (and vehicle hygiene inspector if first inspection). 	To provide hygiene data to inform management.	During construction of shared infrastructure	2021.EMP65	Compliant	Refer to EMP65.	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 declared noxious weeds or plant pathogens will be permitted for use.	To prevent the introduction/ spread of weeds and plant pathogens in the project area.	Ongoing from commencement of ground disturbance	Site inspections October and November 2021.	Compliant	No external fill used during this audit period. Main Roads sourced road building materials locally (Area 11 borrow pit) where possible.	Compliant	No external fill used by KAI during this audit period.
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	2021.EMP69	Compliant	Main Roads pre-clearing report (Area 11 borrow pit) includes weed inspection.	NR	Borrow pits not in use by KAI. Main Roads use of borrow pit for road extension had not commenced at the time of audit.
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	During construction of	2021.EMP70	Compliant	Rehabilitation had not commenced during the 2021 audit period,	NR	Rehabilitation had not commenced during the 2021 audit period,

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

Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	
		control weed cover.	shared infrastructure / <i>During construction</i>			however Main Roads had adopted the rehabilitation plan developed for the road extension.		however Main Roads had adopted the rehabilitation plan developed for the road extension.
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 October and November 2021	Compliant	No pest animal-attracting waste was observed during site inspections.	Compliant	No pest animal-attracting waste was observed during site inspections.
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 October and November 2021. KAI advice – ongoing reduction of cattle in buffer. 2021.EMP54	Compliant	No pest animals (e.g. cats) observed in buffer during inspections. Minimal evidence of cattle presence in buffer areas.	NR	2021.EMP54 indicates cattle impact data was included in 2021 <i>Typhonium sp. kununurra</i> surveys conducted extensively across the Knox Creek Plain. This report states "...weeds were not present at levels that would be considered limitations to the study". Weed data was retained in survey records. (Umwelt, 2021).
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.	NR	Signage not yet required.
EMP 74.	Ensure stock are removed from the Buffer Area.	To remove stock as an ongoing source	Ongoing from commencement	Site inspections – October and November 2021.	Compliant	Refer to EMP 72. Very few cattle tracks and no cattle	NR	Cattle remain grazing on the Knox Creek Plain as part

EMP Compliance Table 7 – Weed, plant pathogen and pest animal management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	
		of land degradation and a vector for introducing and spreading weeds throughout the Buffer Area.	of ground disturbance	KAI advice – ongoing reduction of cattle in buffer. Refer also to 2021.EMP54.		observed during site inspections.		of Carlton Hill Station operations. Refer also to 2021.EMP54.

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 Status	Comment	Knox Creek Plain Status	
								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"> 1. Map the extent of any new Priority Areas. 2. Map the distribution of the newly introduced species. 3. Identify activities that may have potentially introduced the species. 4. Plan and implement a monitoring or control treatment program. 5. Re-educate contractors/farm owners/managers of the importance of hygiene control measures. 	As per EMP54. 2021.EMP54 indicates weed presence assessment was included in 2021 <i>Typhonium sp. kununurra</i> surveys conducted extensively across the Knox Creek Plain and Goomig buffer area. Weed data was retained in survey records. (Umwelt, 2021).	Compliant	The auditor's previous (2018) assessment carries over: the intent of the action has been met despite a previous PNC. This action requires review for contemporary relevance. It is noted that the action is for the <u>construction period</u> .	Compliant	Per EMP54.

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 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"> 1. Map the extent of any new Priority Areas. 2. Map the revised extent of the specific weed species within the site. 3. Identify activities that may have potentially spread the weed species. 4. Plan and implement a weed control treatment program. 5. Apply hygiene control and education measures. 	<p>Refer to EMP 54.</p> <p>No new priority areas were observed during site inspections.</p>	Compliant	<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 previously 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>	Compliant	Per EMP54.
EMP 77.	Presence of declared weeds in farm lots.	As required	No declared weed species present.	<ol style="list-style-type: none"> 1. Notify DAFWA if required. 2. Investigate cause. 3. Undertake weed control in accordance with DAFWA requirements. 4. Monitor success of weed control. 	Site inspections October / November 2021	PNC	<i>Parkinsonia</i> identified on Lot 15 (owned by MG Corporation) in a previous audit was previously treated by KAI. Full eradication of the plant is expected when the development of Lot 15 re-commences.	Compliant	No declared weeds observed during site inspection.

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
							Control of the Parkinsonia is required.		
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"> Investigate cause. Undertake eradication program as required. Undertake intervention or remediation works (e.g. reduce bins, trapping, re-education). 	Refer to EMP 72	Compliant	Refer to EMP 72.	Compliant	Cattle observed during site inspection are grazed by Carlton Hill Station.

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"> M2 channel may receive effluent from the Kununurra Wastewater Treatment Plant the potential risks from <i>Burkholderia pseudomallei</i>, which is found dormant in soils and the potential for its dispersion through irrigation processes. 	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	NA		Completed	Item assessed as completed in a previous audit period.	NA	Item amended in Knox EMP (refer to KEMP 79).
KEMP 79	Induct personnel on surface water management measures.	To reduce the potential for activities to adversely affect surface water values by ensuring	Within one week of personnel commencing work on-site	NA		NA	NA	Compliant	Staff employed by Knox are KAI employees from Weaber Plain.

EMP Compliance Table 9 – Surface water management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
		construction personnel are aware of appropriate management measures.						Inductions are completed as reported against previous actions.
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	NA	Completed	Item assessed as completed in a previous audit period.	NR	Construction of levees has not yet commenced.
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	NA	Completed	Item assessed as completed in a previous audit period.	NR	Construction of drains has not yet commenced.

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	<ol style="list-style-type: none"> Investigate cause. Implement erosion protection measures, such rock armouring or application of hydromulch to areas identified. Monitor the effectiveness of remedy. 	<p>KAI advised ongoing inspections during routine farm activity.</p> <p>Site inspections – October / November 2021.</p>	Compliant	Refer to EMP 18. Post-wet season scours on farms and infrastructure are repaired as required to maintain farm functionality.	NR	

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: <ul style="list-style-type: none"> at least 20 ‘high intensity’† regional bores at least 30 ‘low intensity’† regional bores. 	To allow the collection of baseline and ongoing groundwater data to guide management.	Install prior to commencement of clearing of farm lots and at least 18 months before the commencement of irrigation.	N/A	Completed	Item assessed as completed in a previous audit period.	NA	Item amended in Knox EMP (refer to KEMP 83).
KEMP 83	<i>Expand the groundwater monitoring bore network to include:</i> <ul style="list-style-type: none"> <i>‘high intensity’ regional bores (i.e. auto loggers installed)</i> <i>‘low intensity’ regional bores (i.e. no auto loggers installed but monitored manually).</i> 	<i>To allow the collection of baseline and ongoing groundwater data to guide management.</i>	<i>Install prior to commencement of clearing of farm lots, a minimum of 18 months prior to irrigation.</i>	2021.EMP83a 2021.EMP83b	NA	N/A	Compliant	Bores installed in a previous reporting period.
EMP 84.	Undertake monitoring of the parameters determined under Item 2 in bores established under EMP 83. <i>Item 2 refers to this item (EMP 84).</i> DPIRD undertook a review of groundwater monitoring to date, which was presented to the Independent Review Group (IRG) established under EPBC 2010/5491 to	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. High intensity bores: * groundwater levels and * temperature (automatic, daily)	2021.EMP83a 2021.EMP83b	Compliant	The revised groundwater monitoring regime (as highlighted in bold in column 2 of this action). In relation to the revised monitoring parameters, <ol style="list-style-type: none"> Field parameters on high intensity bores were recorded in November 2021 (see 2021.EMP83a). Selective annual laboratory analysis was undertaken (see 2021.EMP83b). Comprehensive triennial laboratory analysis is not yet required. 	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
	<p>review water management and impacts on Goomig, in February 2020. Specific changes to the groundwater monitoring regime were agreed by the as follows:</p> <p>1) Field parameters at all high intensity sites are recorded annually in late September each year. Field parameters at all low intensity sites are recorded triennially in late September.</p> <p>2) Selective laboratory analysis undertaken annually for high intensity bores and triennially for low intensity bores in late September.</p> <p>3) Comprehensive laboratory analysis undertaken triennially for high intensity bores in late September.</p>		<p>EC, pH, TDS, major cations and anions, nutrients and pesticides seasonally.</p> <p>Low intensity bores: groundwater levels, EC, pH, TDS, nutrients and pesticides seasonally.</p>					
KEMP 84	<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"> groundwater levels and temperature (automatic, daily) 	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.	2021.EMP83a 2021.EMP83b	NA	NA	NR	As irrigation is not scheduled to commence for some time, this item has not been assessed as NR. However, groundwater monitoring has

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"> EC, pH, TDS, nutrients and pesticides seasonally Low intensity bores: <ul style="list-style-type: none"> groundwater levels, EC, pH, TDS, nutrients and pesticides seasonally. 							occurred on the Knox Plain since 2015, per previous compliance reports and evidence.
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	<u>Unable to audit</u>	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.		Completed.	DPIRD's 2019 review of the bore monitoring network and data recommended that individual farm bores are no longer required. The IRG has accepted this recommendation.	Compliant and completed.	Refer to KEMP84.
EMP 87.	Determine sampling parameters for 'on farm' bores in consultation with the IRG including: <ul style="list-style-type: none"> groundwater levels EC pH. 	To inform management.	Prior to commencement of irrigation and annually after the commencement of irrigation.	N/A	NR	DPIRD's 2019 review of the bore monitoring network and data recommended that individual farm bores are no longer required. The IRG has accepted this recommendation. The auditor has based the 'NR' assessment on the IRG-accepted monitoring regime.	NR	Item amended in Knox EMP (refer to KEMP 87).
KEMP 87	Determine sampling parameters for 'on farm' bores including: <ul style="list-style-type: none"> groundwater levels EC pH. 	To inform management.	Prior to commencement of irrigation and annually after the commencement of irrigation.	N/A	NA	NA	NR	Refer to EMP87.

EMP Compliance Table 11 – Groundwater management and monitoring actions

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
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	NA	Unable to audit. 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.	NA	No bore licences required due to no abstraction.
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.	2021.EMP83a 2021.EMP83b	Compliant	Groundwater records include 2021 field and laboratory results. KAI advised that datalogger records were being incorporated into the Hydstra groundwater data system by DPIRD at the time of preparation of this report. <u>It is recommended that monitoring data from 2021 be integrated with existing bore data within the Weaber-Knox groundwater database to ensure data is not lost and future analyses are comprehensive.</u>	Compliant	Per Weaber Plain commentary.
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.	2021.EMP83a 2021.EMP83b	Compliant	Refer to EMP 89.	Compliant	Per Weaber Plain commentary.
EMP 91.	Update groundwater model and operation of groundwater management system with monitoring data derived from EMP 84, 89 and 90, in consultation with the IRG.	To assist in determining an optimal dewatering strategy and to forecast potential breaches of trigger values within a ten year period.	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	NA	Not yet required	Retained from 2019 Compliance Report: DPIRD’s groundwater monitoring review recommended that the next <u>groundwater modelling update be undertaken after the next data review, when the development has been completed and at least two more comprehensive chemistry sample sets (high intensity bores) plus 5 years of other data have been collected and analysed.</u> The IRG endorsed the recommendations in full at its meeting on 27 February 2020.	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
			be updated every two years.					
KEMP 91	Update groundwater model and operation of groundwater management system with monitoring data.	To assist in determining an optimal dewatering strategy and to forecast potential breaches of trigger values within a ten year period.	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.	NR	NA	NA	NR	Irrigation not yet commenced.
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, e.g. on leased farms.	Review every five years in association with modelling from the commencement of irrigation.	Refer to 2020 EMP CAR.	Compliant	DPIRD’s 2019 groundwater monitoring review recommended that the next <u>groundwater modelling update be undertaken after the next data review, when the development has been completed and at least two more comprehensive chemistry sample sets (high intensity bores) plus 5 years of other data have been collected and analysed</u> . The IRG endorsed the recommendations in full at its meeting on 27 February 2020. No changes to irrigation management have been recommended by the Independent Review Group following DPIRD review of groundwater monitoring.	NA	Item amended in Knox EMP (refer to KEMP 92).
KEMP 92	Define the conditions at which various irrigation methods can be utilised for the Knox Creek Plain farms, based on the outcomes of modelling undertaken.	Refer to EMP 92.	Refer to EMP 92.	Refer to 2020 EMP CAR.	NA	NA	Compliant	Weaber Plain IRG advice will inform Knox irrigation and water

EMP Compliance Table 11 – Groundwater management and monitoring actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
								management practices.
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.	2021.S1_2.10 2021.EMP93	Compliant and completed.	This action relates to the Keep River, and in particular to surface water and naturally occurring groundwater discharge (base flow) into the Keep River. Evidence item 2021.EMP93 compares the adopted triggers with the 2022 wet season sampling (not within this CAR audit period).	NA	Item amended in Knox EMP (refer to KEMP 93).
KEMP 93	Adopt water quality trigger values established under the requirements of EPBC Approval 2010/5491.	To ensure monitoring and management responses relate to appropriate trigger levels.	Ongoing	2021.EMP93	NA	NA	Compliant	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).	Refer to EPBC-approved Groundwater Management Plan	Refer to EMP 19, EMP 84, EMP87, EMP 88 and EMP 93	Unable to assess	Groundwater level triggers are clear within the Groundwater Management Plan. Site-specific water quality triggers are less clear. The 2019 review report found that groundwater levels have risen relative to reference bores, but consistent with that	Unable to assess	Irrigation has not yet commenced on Knox.

EMP Compliance Table 12 – Groundwater contingency actions								
Item	Trigger	Corrective action	Timing	Evidence	Weaber Plain Status	Weaber Plain Comment	Knox Creek Plain Status	Knox Creek Plain Comment
		3. Document changes in Annual Environmental Report (AER).				forecasted in initial, pre-development modelling. The review assessed groundwater level and chemistry trends but didn't assess against trigger criteria <i>per se</i> . The Proponent previously advised they will address the triggers in the updated EMP to ensure they are simple and clear.		
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.	<ol style="list-style-type: none"> 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	Unable to assess	<p>DPIRD reviewed groundwater monitoring data in 2019. This was considered by the IRG in February 2020. Findings and recommended changes have been endorsed by the IRG.</p> <p>Integration of 2021 groundwater monitoring data into the existing database is required in order to assess trends, in consideration of the trend analysis timelines recommended by DPIRD.</p>	Unable to assess	Irrigation has not yet commenced on Knox.

EMP Compliance Table 13 - Discharge management actions

EMP Compliance Table 13 – Discharge management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain	Comment	Knox Creek Plain	Comment
					Status		Status	
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 October and November 2021.	Compliant and completed	The auditor observed that tailwater retention dams have been established to service all operating farm lots. This action can be marked as completed when a tailwater return facility is constructed on the final Goomig farm lot (Lot 15).	NA	Item amended in Knox EMP (refer to KEMP 96).
KEMP 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.	Capacity to manage runoff to avoid transporting chemicals downstream.	Prior to commencement of irrigation	NA	NA	NA	NR	Farm development did not occur in 2021.
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	No incidents of tailwater overflow from Goomig were reported or recorded in 2021.	Conformant	Refer to EMP96. Wet season farm chemical management was discussed by the IRG at its February 2020 meeting as requiring further attention in the revised Stormwater and Groundwater Discharge Management Plan, given the shift towards wet season cropping on the Goomig farmlands.	NR	Farming has not yet commenced on Knox.
EMP 98.	Provide an Information Package to prospective landowners/lessees, which:	To minimise the potential for agricultural practices to result in erosion by ensuring prospective	At sublease of farm lots	N/A	Completed	Item assessed as completed in a previous audit period.	Compliant / completed	This item is considered completed due to KAI being the manager of both the Weaber and Knox Plains.

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"> * 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. 	landowners are aware of the risks and appropriate management measures.						
EMP 99.	<p>Determine AUSRIVAS trigger score levels for aquatic macro-invertebrates in consultation with the IRG.</p> <p>Updated wording of Commonwealth</p>	To manage the discharge of stormwater and surplus groundwater to protect the downstream environment	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		Knox Creek Plain	
					Status	Comment	Status	Comment
	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>	and EPBC listed species.						
KEMP 99	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 has not yet commenced.

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	2021.EMP100a 2021.EMP100b	Compliant	KAI and Cubbie / MG Corp provide an annual chemical risk assessment update to the IRG. Key analytes and triggers were agreed at the April 2021 IRG meeting.	NA	Item amended in Knox EMP (refer to KEMP 100).
KEMP 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	To ensure key chemicals and nutrients are included in water quality monitoring.	Prior to commencement of planting of crops, then ongoing annually	N/A	NA	NA	NR	Farming has not yet commenced. It is assumed that the IRG-agreed analytes and triggers will be adopted for the Knox Creek Plain.
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	Site inspection October 2021. 2021.EMP101a 2021.EMP101b 2021.EMP101c 2021.EMP101d	Previously recorded as completed.	The DW1 Gauging Station installed on Border Creek was visited during the site inspection. The SCADA program <i>has the ability</i> to undertake automatic and manual samples, but this has not been used in recent years due to telecommunications access issues. Data is being collected (per advice provided to DPIRD - 2021.EMP101d). SCADA functionality remains problematic.	NA	Item amended in Knox EMP (refer to KEMP 101).
KEMP 101	Install a water quality and flow gauging station 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	NA	NA	NA	NR	Irrigation has not yet commenced.

EMP Compliance Table 13 – Discharge management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	Comment
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)	2021.EMP93 2021.EMP101d 2021.S1_2.10	Compliant	Despite the limited functionality of the DW1 Gauging Station, water quality sampling is undertaken at the DW1GS. Water quality monitoring at the DW1 Gauging Station is undertaken when flows are recorded. Results are reported to the IRG and are used to inform ongoing management.	NA	Item amended in Knox EMP (refer to KEMP 102).
KEMP 102	Monitor water quality at the stormwater outlet from the Development Area	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)	NA	NA	NA	NR	Irrigation has 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	2021.S1_2.10 2021.EMP101c	Conformant	This item is assessed as conformant due to the use of the Border Creek flow monitoring as a proxy for DW1GS flow data, in conjunction with DW1GS rainfall data, as indicated in 2021.S1_2.10c. <i>The overall functioning of the DW1GS, and its utility status, remains uncertain and problematic.</i>	NA	Item amended in Knox EMP (refer to KEMP 104).

EMP Compliance Table 13 – Discharge management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
	and DPW AND/OR DER.	Keep River and provide maximum mixing potential.						
KEMP 104	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 has not yet commenced.
EMP 105.	Develop and implement an adaptive groundwater and stormwater discharge program that addresses: <ul style="list-style-type: none"> * design and location of dewatering infrastructure * design and location of discharge infrastructure * discharge rates, rules and contingency actions 	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	2021.EMP93 2021.EMP100a	Compliant	<p>The Proponent and KAI have previously advised that groundwater (and stormwater during the dry season) is not being discharged from the Project area.</p> <p>A full review of the Stormwater and Groundwater Discharge Management Plan, addressing the requirements of this action, was completed in 2020. The revision has not yet been completed.</p>	Compliant	SGDMP for Weaber-Knox development under revision by Weaber IRG.

EMP Compliance Table 13 – Discharge management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Weaber Plain Comment	Knox Creek Plain Status	Knox Creek Plain Comment
	* monitoring locations and requirements including infrastructure and setup * written evidence of any Northern Territory Government permits that are required for discharge of * groundwater management measures that ensure discharge of water will not impact on water quality in Border Creek/Keep River; this includes erosion protection measures.							
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	To determine when flow rates at Border Creek and the Keep River fall below a minimum flow rate to	Prior to commencement of irrigation	N/A	Completed	Identified as completed in a previous audit.	NA	Item amended in Knox EMP (refer to KEMP 106).

EMP Compliance Table 13 – Discharge management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
	quality data from the Keep River system.	enable flushing.						
KEMP 106	Refine the discharge dilution model/relationship based on river flow monitoring data	To determine when flow rates at the Keep River fall below a minimum flow rate to enable flushing.	Prior to commencement of irrigation	NA	NA	NA	NR	Not yet required.
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	<i>Refer to EMP105.</i> 2021.EMP93 2021.EMP100a	Conformant	Discharge rates, rules and contingency actions have been reviewed in 2020 through the Stormwater and Groundwater Discharge Management Plan revision which is being undertaken in conjunction with the IRG.	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 Operational Surface Water Model.	To determine when flow rates at Border Creek and the Keep River fall below a minimum flow rate to enable flushing.	Ongoing after sale/lease of farm lots or commencement of farming activity	2021.EMP100a	Conformant	Revised trigger values for the Keep River were accepted by the IRG at its April 2021 meeting. These trigger values were revised across the 2020 season, informed by Proponent data for 2020 and previous seasons as reported in earlier Compliance Assessment Reports.	NA	Item amended in Knox EMP (refer to KEMP 108).
KEMP 108	Review/refine trigger values for the Keep River pools.	To update discharge model.	Annually	2021.EMP100a	NA	NA	NR	Irrigation has not yet commenced, however triggers contained in

EMP Compliance Table 13 – Discharge management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
								2021.EMP100a apply.

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		Knox Creek Plain	
						Status	Comment	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"> Investigate cause. This could include examining management practices and identifying instances where water may have been unnecessarily discharged during low flow periods. Conduct an intensive water quality sampling program upstream and downstream of the discharge point. 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"> releasing irrigation water from the M2 channel into Border Creek increasing groundwater pumping into the Ord Stage 1 or 2 supply channel during periods of low river flow installing additional erosion protection educating farm owners/managers revision of management practices (including groundwater discharge rules). Implement remedial action/s. Monitor success of remedial action/s quarterly for a period of 12 months Report on any findings as a result of monitoring. 	2021.EMP101a 2021.EMP101b 2021.EMP101c 2021.S1_2.10	PNC	<p>Item 2021.EMP101c indicates functionality is being restored to the DW1GS, with data able to be accessed locally. Some telecommunications issues remain.</p> <p><i>This item remains a PNC, however the auditor is aware that progress to reinstate DW1GS functionality continues and improvements are noted.</i></p> <p><i>A functional DW1GS monitoring system is essential for stormwater and tailwater monitoring and compliance purposes.</i></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
KEMP 109	<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 clavata and Pristis Microdon) at three sites in the Keep River estuary (EST1, EST2, EST3). Monitoring to be supported	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 the aquatic monitoring program, then frequency is reduced to three-yearly, or in response to	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 compared against reference sites that reflect natural variability in ecosystem health.	<ol style="list-style-type: none"> 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"> • releasing irrigation water from the M2 channel in Border Creek • increasing the pumping rates of the eastern bores to reduce groundwater seepage • increasing groundwater pumping into the Ord Stage 1 or 2 supply channel during periods of low river flow • potentially, pending analysis, discharging groundwater into the lower Keep River estuary • installing additional erosion protection • educating farm owners/managers • revision of management practices (including groundwater discharge rules) • review flow monitoring data. 3. Implement remedial action/s, as required, immediately or at a time determined with the IRG to be appropriate. 	2021.EMP110	Compliant	<p>A post-development aquatic fauna survey was undertaken in September / October 2020 and in 2021.</p> <p>It is noted that survey delivery was impact by Covid-19 restrictions across the WA-NT Border.</p>	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
	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).	known events that may result in exceedances of site-specific trigger values for water quality Keep River.		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.					
KEMP 110	Utilise the aquatic ecology monitoring conducted under EPBC Approval 2010/5491 as an indicator of the outcomes of the combined Weaber and Knox management.	Ongoing	Refer to EMP 110.	Refer to EMP110.	NA	NA	NA	NR	Farming has 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	2021.EMP2a 2021.EMP2b 2021.EMP2c 2021.EMP2d	Compliant	Formal inductions are undertaken by KAI, Cubbie and Main Roads, with general environmental management inclusions.	Compliant	Staff employed by Knox are KAI employees from Weaber Plain. Inductions are completed as reported against previous actions.
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	2021.EMP112a 2021.EMP112b 2021.EMP112c	Completed	Item assessed as completed in a previous audit period.	Compliant	No agricultural clearing in 2021. Main Roads clearing per 2021.EMP112a-c.
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	2021.EMP112a	Completed	Refer to EMP 6. Item assessed as Completed as construction in the Weaber Plain development has been completed.	Compliant	No agricultural clearing in 2021. Main Roads clearing per 2021.EMP112a-c.
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	Site inspection November 2021. 2021.S1_2.4	Completed	Refer to EMP 7. Item assessed as completed in a previous audit period.	Compliant	Staged clearing per Main Roads photographic and clearing records.
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	Site inspection November 2021. 2021.EMP116	Completed	Item assessed as completed in a previous audit period.	Compliant	Main Roads retained topsoil from the new road alignment, for use in rehabilitation of the old Keep River Road, per 2021.EMP116.

EMP Compliance Table 15 – Biodiversity and habitat management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 117.	Give native animals encountered on-site the opportunity to move on if there is no threat to personnel safety in doing so.	To prevent injury or death to native animals.	Ongoing from commencement of ground disturbance	Site inspections, October and November 2021.	Compliant	No native animal encounters/incidents recorded.	Compliant	No native animal encounters/incidents recorded.
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, Main Roads and MG/Cubbie advice.	Compliant	Refer EMP 117. No calls required.	Compliant	Refer EMP 117. No calls required.

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.	Site inspection November 2021. 2021.S1_2.4	Completed	No further clearing on Weaber Plain.	Compliant	Main Roads records retained.
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 * redefining boundaries if due to inadequate boundary marking	Site inspection November 2021. 2021.S1_2.4	Completed	No further clearing on Weaber Plain.	Compliant	Refer to EMP 119.

				* rehabilitating affected area as required in accordance with the Rehabilitation Management Sub-plan. * monitoring the success of remedial action.					
--	--	--	--	---	--	--	--	--	--

EMP Compliance Table 17 - Buffer management actions

EMP Compliance Table 17 – Buffer management actions									
Item	Action	Purpose	Timing	Evidence	Weaver 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 – October, November 2021.	Compliant	Original signage in situ. Access to most buffer areas impeded by infrastructure (e.g. drain or flood protection levee). 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).	
KEMP 121	Control vehicle access to the buffer through designated tracks, and provision of signage to inform of restrictions to areas	To minimise impacts to the buffer by consolidating and restricting access	At all times	Refer to EMP63.	NA	NA	Compliant	Vehicle movements restricted to existing station tracks and cleared areas.	
EMP 122.	Control human access to the buffer through provision of signage at entry points to Buffer Area advising of restrictions and no unauthorised access.	To minimise impacts to the buffer by restricting access	At all times	Signage advising of restricted access observed during site inspections.	Compliant	Vehicle movements restricted to existing station tracks and cleared areas.	NA	Item not included in Knox EMP.	
EMP 123.	Induct all personnel constructing or utilising infrastructure within the Buffer Area, including roads, channels, groundwater bores and	To minimise potential for adverse environmental	Within one week of commencing work on-site	2021.EMP2a 2021.EMP2b 2021.EMP2c	Compliant	Refer to EMP2 documentation.	NA	Item amended in Knox EMP (refer to KEMP 123).	

EMP Compliance Table 17 – Buffer management actions

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
	the phone tower, to advise on protocols for hygiene, wildlife encounters, prohibited activities etc.	impacts by ensuring personnel are informed of environmental management procedures		2021.EMP2d				
KEMP 123	Induct all personnel constructing or utilising infrastructure within the Buffer Area, including roads and groundwater bores.	To minimise potential for adverse environmental impacts by ensuring personnel are informed of environmental management procedures	Within one week of commencing work on-site	2021.EMP2a 2021.EMP2b 2021.EMP2c	NA	NA	Compliant	Formal inductions are undertaken by KAI with general environmental management inclusions. Main Roads induction included in evidence.
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	NA	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 Good' in accordance with species lists and planting procedures determined in consultation with DPW AND/OR DER.	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	NA	Completed	This action is now complete. Infrastructure construction on the Weaber Plain has been finalised.	NA	Item amended in Knox EMP (refer to KEMP 125).

EMP Compliance Table 17 – Buffer management actions

Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
KEMP 125	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.	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	2021.EMP125a 2021.EMP125b 2021.EMP125c	NA	NA	Compliant	Main Roads commenced rehabilitation in late 2021. Evidence items indicate progress at February 2022.
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) to downstream watercourses.	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 – May / August 2020.	NR	No buffer revegetation was required during the audit period. This action is now complete.	NA	Item amended in Knox EMP (refer to KEMP 126).
KEMP 126	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.	To improve the ability of the buffer to reduce the potential impacts of elevated groundwater levels and minimise diffuse groundwater	Within 12 months of completion of construction of infrastructure and as determined to be required in consultation with DPW.	NA	NA	NA	NR	Not yet required.

EMP Compliance Table 17 – Buffer management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
		discharge (including salts) to downstream watercourses.						
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 – October, November 2021.	Compliant	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 show 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 to be compliant. The previous (2016) auditor recommendation is retained: revision of this action to accurately reflect the weed control and monitoring program currently being undertaken.	Compliant	No evidence of weed infestation in areas proposed for buffer on the Knox Plain. Weed control not required.
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 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	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

EMP Compliance Table 17 – Buffer management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
	regarding shared responsibilities for maintenance of the Buffer Area.							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 – October, November 2021	Compliant	Buffer Area perimeter fencing observed intact and maintained, during all site inspections. Minimal evidence of stock presence was identified during site inspections. Internal buffer fencing was constructed between the farms and western buffer area in 2019.	NR	Majority of Knox Creek Plain area remains in pastoral grazing use by Carlton Hill Station.
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	2021.EMP45 2021.EMP132a 2021.EMP132b	Compliant	No key actions have been identified from the Fire Management sub-plan (FMP); therefore, the plan has not been audited. KAI advised that fire management is undertaken in accordance with the SWEK permits – Refer to EMP 45. Mosaic burning is evident through items 2021.EMP132a and 2021.EMP132b.	Compliant	Refer to fire history documentation (2021.EMP132a and b).

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.	Site inspection October 2021.	PNC	As reported in previous audits, vegetation condition assessment and mapping is not undertaken. 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. Remote sensing assessment including fortnightly satellite imagery and 6-hourly satellite fire mapping is used to inform overall buffer condition assessments.	Compliant	Buffer delineation and vegetation condition assessment had not commenced in 2021. Buffer vegetation assessment was not undertaken.

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
				Monitor success of remedy (annually at time of regular monitoring).			Previous audits have suggested amending this action.		Knox buffer areas remain in pastoral grazing use by Carlton Hill Station.

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 comparable) to those of planned disturbance areas not required post-construction.	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. <u>Note:</u> 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.	NR	KAI indicated that the development of the Knox Creek Plain will not result in the clearing of areas which will require subsequent rehabilitation. Reference sites for rehabilitation will therefore not be required specifically for Knox. Main Roads rehabilitation seeks to be consistent with surrounding habitat.	
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	2021.EMP135a 2021.EMP135b	PNC (carried over from previous Compliance Assessment Reports due to species surveys	KAI previously advised that monitoring of rehabilitation areas (undertaken by others prior to the commencement of KAI's management of the buffer) is now undertaken consistent with revised buffer monitoring, whereby condition is visually observed and weed presence and	NR	Refer to EMP134.	

EMP Compliance Table 19 – Rehabilitation management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain	Knox Creek Plain	Status	Comment
					Status			
					not being undertaken).			any inconsistency with adjacent land is noted. Reference site surveys are not undertaken. KAI again 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. It is recommended that this action be assessed for closure. The auditor notes from the photographic records and satellite imagery that there is very little differentiation between rehabilitated sites in the Weaber Plain buffer and adjacent uncleared areas (with the exception of tree height). A botanical assessment by the Proponent may be required in order to close this action.
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		NR	Item assessed as completed in a previous audit period. Refer to EMP134.
EMP 137.	Undertake a weed survey of the project area to establish baseline information in accordance with the Weed, Plant Pathogen and Pest Animal Management Sub-plan.	To provide data to inform management.	As specified in the Weed, Plant Pathogen and Pest Animal Management Sub-plan	N/A	Completed		Completed	Item assessed as completed in a previous audit period. Item assessed as completed in the previous audit period.

EMP Compliance Table 19 – Rehabilitation management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain	Comment	Knox Creek Plain	
					Status		Status	Comment
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	Refer to EMP134.
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"> gathering information and targeting certain species undertaking seed collection in the optimum season for the species collecting only mature seed determining seed collection method (e.g. natural seed fall, collection by hand, mechanical harvesting, etc. maintaining detailed record sheets to provide evidence that the seed is local provenance, e.g. date of collection, time of collection, person undertaking collection etc. 	To maximise potential for rehabilitation success by ensuring seed collection is undertaken in accordance with appropriate guidelines and procedures.	As required for rehabilitation	NR	NR	Main Roads undertook topsoil re-spread as an alternative to seed collection and distribution for rehabilitation purposes. Topsoil retained from clearing of the new road alignment was re-spread over the old road alignment and drain areas, per EMP9, EMP116, EMP125.	NR	Refer to EMP134.

EMP Compliance Table 19 – Rehabilitation management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Knox Creek Plain Comment	Knox Creek Plain Status	Knox Creek Plain Comment
	<ul style="list-style-type: none"> preparing material for transportation. 							
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	Refer to EMP134.
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	Refer to EMP134.
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	Compliant	Refer to EMP 62–67	NR	Refer to EMP134.
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	Compliant	Refer to EMP 72	NR	Knox buffer areas remain in pastoral grazing use by Carlton Hill Station.
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	2021.EMP125a 2021.EMP125b 2021.EMP125c	Compliant	Refer to EMP125 (Main Roads rehabilitation examples). All foreign materials were removed prior to rehabilitation.	Compliant	Refer to EMP125 (Main Roads rehabilitation examples).

EMP Compliance Table 19 – Rehabilitation management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain	Comment	Knox Creek Plain	
					Status		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 October and November 2021.	Compliant	Refer to EMP125 (Main Roads rehabilitation examples). No hydrocarbon spills or leaks noted	Compliant	Refer to EMP125 (Main Roads rehabilitation examples). No hydrocarbon spills or leaks noted
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 October and November 2021.	Compliant	Refer to EMP125 (Main Roads rehabilitation examples). No hydrocarbon spills or leaks noted	Compliant	Refer to EMP125 (Main Roads rehabilitation examples). No hydrocarbon spills or leaks noted
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	2021.EMP125a 2021.EMP125b 2021.EMP125c 2021.EMP147	Compliant	Refer to EMP125 (Main Roads rehabilitation examples).	Compliant	Refer to EMP125 (Main Roads rehabilitation examples).
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"> the removal of impediments to run-off diversion of surface run-off around borrow pits to prevent flooding and potential instability of pit walls where necessary filling of borrow pits with subsoil to level of natural ground surface. 	To minimise erosion of rehabilitated landforms.	During the rehabilitation process	Main Roads site inspection November 2021. 2021.EMP125a 2021.EMP125b 2021.EMP125c 2021.EMP147	Compliant	Refer to EMP125 (Main Roads rehabilitation examples).	Compliant	Refer to EMP125 (Main Roads rehabilitation examples).
EMP 149.	All tracks to be rehabilitated will be ripped or scarified to minimise compaction.	To maximise potential for rehabilitation	During the rehabilitation process	2021.EMP125a 2021.EMP125b 2021.EMP125c	Compliant	Refer to EMP125 (Main Roads rehabilitation examples).	Compliant	Refer to EMP125 (Main Roads rehabilitation examples).

EMP Compliance Table 19 – Rehabilitation management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Weaber Plain Comment	Knox Creek Plain Status	Knox Creek Plain Comment
		success by allowing roots and water to penetrate the soil profile.						
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	Site inspection November 2021. 2021.EMP116	Completed	Item assessed as completed in a previous audit period.	Compliant	Refer to EMP116.
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 inspection November 2021. 2021.EMP116	Compliant	Refer to EMP116.	Compliant	Refer to EMP116.
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	2021.EMP116 2021.EMP125a 2021.EMP125b	Compliant	Main Roads rehabilitation of historic drain in Goomig buffer/infrastructure area shown in 2021.EMP125b	Compliant	Refer to EMP116 and EMP125.
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	2021.EMP125a 2021.EMP125b 2021.EMP125c	Compliant	Main Roads rehabilitation of historic drain in Goomig buffer/infrastructure area shown in 2021.EMP125b and 2021.EMP125c. The latter (site office) is located in the construction corridor. Limited topsoil was available. Topsoil prioritised for old road rehabilitation outside of construction corridor.	Compliant	Refer to EMP 125.
EMP 154.	Rake rehabilitation areas to minimise potential impacts from compaction.	To maximise potential for rehabilitation	After spreading of topsoil and prior to	2021.EMP125a 2021.EMP125b 2021.EMP125c	Compliant	Per EMP125 and EMP153.	Compliant	Refer to EMP125.

EMP Compliance Table 19 – Rehabilitation management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Knox Creek Plain Comment	Knox Creek Plain Status	Knox Creek Plain Comment
		success by allowing roots and water to penetrate the soil profile.	placement of cleared vegetation					
EMP 155.	Where direct replacement of rehabilitation material (e.g. topsoil, cleared vegetation, etc.) is not possible, stockpile material for later use in rehabilitation activities.	To provide a natural source of seed, organic matter and microorganisms for areas to be rehabilitated.	During construction of shared infrastructure	Site inspection November 2021. 2021.EMP116.	Compliant	Refer to EMP116.	NR	Available topsoil was used by Main Roads.
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 inspection November 2021.	Compliant	Refer to EMP116.	NR	Available topsoil was used by Main Roads.
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 inspection November 2021. 2021.EMP116 2021.EMP5	Compliant	Refer to EMP116 and EMP5.	NR	Available topsoil was used by Main Roads.
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. This action is now complete.	NA	Item not included in Knox EMP.

EMP Compliance Table 19 – Rehabilitation management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
EMP 159.	Provide temporary fencing and signage around rehabilitation areas.	To minimise disturbance to rehabilitation areas by restricting access.	During rehabilitation process	N/A	Completed	Rehabilitation success restricts vehicle access. The intent of this action has been met. This action is now complete for Weaber Plain.	Unable to assess	Rehabilitation had not commenced at time on audit inspection. Photographic evidence (EMP125a-c) was provided post-audit period. To be assessed in the 2022 CAR.
EMP 160.	Inspect borrow pits no longer required following construction to ensure all pits are backfilled and rehabilitated such that they are free draining.	To ensure timely and appropriate rehabilitation of borrow pits.	As required	Site inspections October and November 2021.	NR	Inspections not required as Area 11 is still in use.	NR	Borrow pits not in use on Knox Creek Plain.
EMP 161.	Where there is insufficient subsoil for backfilling: <ul style="list-style-type: none"> import material for backfilling in consultation with DPW if applicable ensure pits are rehabilitated to minimise standing shallow water as much as possible. 	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	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	<ol style="list-style-type: none"> Identify cause. Implement approach to remedy cause, which could include: <ul style="list-style-type: none"> application of fertilisers or wetting agents etc. if applicable 	Refer to EMP 135	PNC	Refer to EMP 135.	Unable to assess	Rehabilitation had not commenced at time on audit inspection. Photographic

	monitoring procedures.		<p>long-term average rainfall has fallen) is greater than:</p> <ul style="list-style-type: none"> 70% of the mean % cover of natives in the reference sites 70% of the mean native species richness in the reference sites. 	<ul style="list-style-type: none"> implement supplementary direct seeding or seedling planting program in accordance with procedures review rehabilitation process and amend if appropriate. <p>3. Monitor success of approach.</p>					evidence (EMP125a-c) was provided post- audit period. To be assessed in the 2022 CAR.
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"> Identify cause. Implement approach to remedy cause, which could include: <ul style="list-style-type: none"> application of fertilisers or wetting agents etc. if applicable implement supplementary direct seeding or seedling planting program in accordance with procedures review rehabilitation process and amend if appropriate. Monitor success of approach. 	Refer to EMP 135	PNC	Refer to EMP 135.	Unable to assess	Rehabilitation had not commenced at time on audit inspection. Photographic evidence (EMP125a-c) was provided post- audit period. To be assessed in the 2022 CAR.
EMP 164.	Exotic species richness and % cover within rehabilitation sites as outlined in the monitoring procedures.	Twice annually (in May and October).	<p>Exotic flora species:</p> <ul style="list-style-type: none"> no greater than 10% increase in weed species density/cover/distribution compared to reference sites no Declared Plants present on-site six months following completion of construction. no infested areas as defined in the Weed, Plant Pathogen and Pest Animal Management Sub-plan 	<ol style="list-style-type: none"> Identify cause. Identify the weeds, their location and coverage. Implement remedy which could include: implementing a weed control program reinforcing management actions in the Weed, Plant Pathogen and Pest Animal Management Sub-plan and Rehabilitation Management Sub-plan. Monitor success of control. 	Refer to EMP 135	PNC	Refer to EMP 135.	Unable to assess	Rehabilitation had not commenced at time on audit inspection. Photographic evidence (EMP125a-c) was provided post- audit period. To be assessed in the 2022 CAR.

			<ul style="list-style-type: none"> no local priority areas as defined in the Weed, Plant Pathogen and Pest Animal Management Sub-plan no new weed species present. 						
EMP 165.	Erosion within and adjacent to rehabilitation sites.	Opportunistically 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"> Identify cause of erosion. Consult expert to determine appropriate remedy which may include <ul style="list-style-type: none"> Installing culverts Installing stormwater diversion structures. Implement remedy. Monitor success of remedy. 	Site inspections October and November 2021.	Compliant	No erosion observed adjacent to rehabilitation sites. Rehabilitation sites appear stabilised.	Unable to assess	Rehabilitation had not commenced at time on audit inspection. Photographic evidence (EMP125a-c) was provided post-audit period. To be assessed in the 2022 CAR.

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"> significance of Aboriginal heritage and the potential impacts of the project procedures to report potential new sites obligations under the <i>Aboriginal Heritage Act 1972 (WA)</i> 	To ensure protection of known sites of Aboriginal heritage significance in accordance with the requirements of the <i>Aboriginal Heritage Act 1972 (WA)</i> , to improve knowledge of Aboriginal cultural heritage in non-indigenous people associated with the project.	Within one week of personnel commencing work on-site	2021.EMP2a 2021.EMP2b 2021.EMP2c 2021.EMP3	Compliant	Farm sales package assessed as completed in a previous audit period.	Compliant	Separate inductions are not needed for KAI staff working on the Knox Creek Plain. Main Roads CEMP and induction address heritage issues.	

EMP Compliance Table 21 – Aboriginal heritage management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain Status	Comment	Knox Creek Plain Status	Comment
	<ul style="list-style-type: none"> requirements for the protection of known Aboriginal sites. 							
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 Aboriginal Heritage Act 1972 (WA), to improve knowledge of Aboriginal cultural heritage in non-indigenous people associated with the project.	Prior to ground disturbance	KAI advised the Ord Final Agreement addressed heritage matters and incorporated sites into buffer zones.	Completed	Item assessed as completed in a previous audit period.	NR	No identified protected areas outside of buffers.
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	No identified protected areas outside of buffers.
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	No identified protected areas outside of buffers.
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	2021.EMP2c 2021.EMP3	Compliant.	No new sites reported in 2021. No additional clearing occurred.	Compliant	No heritage sites identified during early clearing efforts in 2020. Main Roads CEMP and induction address heritage issues.
EMP 171.	Site heritage monitors from MG Corporation issued with a permit under Section 16 of the <i>Aboriginal Heritage Act 1972 (WA)</i> will be on-site to monitor clearing and earthworks activities.	As above.	Ongoing from commencement of ground disturbance	N/A	Completed	Goomig clearing has been completed.	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 (WA)</i> will be available to come to site if a suspected heritage site is uncovered.	As above.	As required	N/A	This action can be considered completed as no further clearing is	No suspected heritage sites were identified during this audit period. Statutory responsibilities under the Aboriginal Heritage Act 1972	NA	Item not included in Knox EMP.

EMP Compliance Table 21 – Aboriginal heritage management actions								
Item	Action	Purpose	Timing	Evidence	Weaber Plain		Knox Creek Plain	
					Status	Comment	Status	Comment
					proposed for Weaber Plain.	remain if heritage sites are identified in the future. This action can be removed.		
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 Miriuwung and Gajerrong people in heritage management throughout the life of the project, in accordance with the OFA and OES.	Prior to ground disturbance	2021.EMP173a 2021.EMP173b 2021.EMP173c	Completed	Item assessed as completed in a previous audit period.	Compliant	Main Roads has corresponded with MG regarding the Moonamang Road works program.
EMP 174.	The MG Corporation will be involved in inspections of the Project Area throughout construction (with supporting briefing).		Quarterly and as required	As above.	Completed	Item assessed as completed in a previous audit period.	Compliant	Knox ADP in place. Main Roads has corresponded with MG regarding the Moonamang Road works program.
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		Compliant	Previous CARs have discussed the WEIMA agreed between KAI and MG Corporation.	Compliant	Previous CARs have discussed the ADP and WEIMA agreed between KAI and MG Corporation.
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.	Compliant	No change to existing heritage records.

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		Knox Creek Plain	
						Status	Comment	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"> stopping work in the vicinity of the boundary investigating the cause of the disturbance redefining boundaries if due to inadequate boundary marking rehabilitating vegetation in the area as required in accordance with the Rehabilitation Management Sub-plan 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 monitoring the success of remedial action. Consult with the Department of Aboriginal Affairs and MG Corporation to determine actions required to restore the site to its original condition.	N/A	Completed	Item assessed as completed in a previous audit period.	Compliant.	No heritage sites have been identified in the Knox development area (per previous CAR).
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: Statement 938 and Schedule 1

2021.S1_2.1a Goomig Knox Satellite Image November 2021
2021.S1_2.1b Knox North Satellite Image November 2021
2021.S1_2.1c Goomig-Knox site inspection 2021-10-21.xlsx
2021.S1_2.1d Knox Site Inspection 2021-10-21.xlsx
2021.S1_2.4 Main Roads - Moonamang Road Extension Clearing Records.zip
2021.S1_2.10 Final Goomig Surface Water Report 2021 season.pdf

PART B – Evidence Summary: Environmental Management Program

2021.EMP2a KAI Induction Environment Slide.docx
 2021.EMP2b KAI Induction Questions - 2021.doc
 2021.EMP2c Main Roads Moonamang Road Environmental and Heritage Induction - 20210325
 2021.EMP2d MG-Cubbie compliance inc induction.pdf
 2021.EMP3 Moonamang Road Direct Managed Works Construction EMP - Final - 20210324.pdf
 2021.EMP5 Main Roads Topsoil retention and waste storage at site office.jpg
 2021.EMP7a Pre-Clearing Inspection of Catch Drain Terminus new clearing - Main Roads.DOCX
 2021.EMP7b Pre-Clearing Inspection of Site Office - Main Roads.docx
 2021.EMP7c Drain intersection pre-clearing inspection - Main Roads.DOCX
 2021.EMP9 Topsoil retention - Area 11.jpg
 2021.EMP14 Moonamang Road and Borrow Pit Environmental Management Guide REV A July 2019.pdf
 2021.EMP19a MG-Cubbie compliance inc soil tests.pdf
 2021.EMP19b KAI CSBP 2021 Goomig soils report.pdf
 2021.EMP19c KAI CSBP Soil Sample Arrival Notification Report.pdf
 2021.EMP24a KAI Hydrocarbon Storage on farm.jpg
 2021.EMP24b KAI Hydrocarbon Storage on farm.jpg
 2021.EMP24c Main Roads Self-bunded diesel trailer.jpg
 2021.EMP25a Main Roads Self-bunded generator portable.jpg
 2021.EMP25b Main Roads Self-bunded generator - site office.jpg
 2021.EMP26 Main Roads in-vehicle oil and fuel response kit.jpg
 2021.EMP30a MG-Cubbie compliance record inc chemical usage.pdf
 2021.EMP30b KAI Chemical list 2021.xlsx
 2021.EMP32a A Farnhill NT Aerial Spraying Chemical Licence.pdf
 2021.EMP32b Alistair Farnhill Pilot Chemical Rating.pdf
 2021.EMP45 KAI Fire Permit 2021-10-18.pdf
 2021.EMP54 Knox Typhonium Habitat mapping report 210721_RevA CONFIDENTIAL - NOT FOR RELEASE.pdf
 2021.EMP65 Main Roads EO Vehicle inspections weed and seed.PDF
 2021.EMP69 Main Roads Pre-Clearing Inspection of Area 11 Gravel Pit.docx
 2021.EMP70 Moonamang Road Extension Borrow Pit - Rehabilitation Plan.docx
 2021.EMP83a Groundwater monitoring field data November 2021.xlsx
 2021.EMP83b November 2021 Groundwater Lab Results.pdf
 2021.EMP93 Goomig 2022 wet season run off Keep River test results.xlsx
 2021.EMP100a IRG Record of Meeting inc trigger values - 6 April 2021.pdf
 2021.EMP100b IRG April 2021 - Farm (and other) chemicals laboratory analysis capability....pdf
 2021.EMP101a 2021-07-08 IRG update on DW1GS.pdf
 2021.EMP101b 2021-08-09 IRG update re DW1GS.pdf
 2021.EMP101c 2022-06-13 KAI advice re DW1GS.pdf
 2021.EMP101d 2021-02-10 DW1GS lab results.pdf
 2021.EMP110 DPIRD Keep River Post-Development Targeted Survey 2021.pdf
 2021.EMP112a Main Roads - boundary tape to demarcate clearing.jpg
 2021.EMP112b Main Roads - Pre-Clearing Inspection of Main Alignment.docx
 2021.EMP112c Main Roads - Pre-Clearing notification Section 40 Authorisation TFL 166.docx
 2021.EMP116 Topsoil retention for old road re-spread - Main Roads.JPG
 2021.EMP125a Turnaround track rehabilitation Feb 2022 - Main Roads.JPG
 2021.EMP125b Drain Rehabilitation - post construction Feb 2022 Main Roads.JPG
 2021.EMP125c Site office rehabilitation Feb 2022 - Main Roads.JPG
 2021.EMP132a Goomig Knox Firescar by Month 2021
 2021.EMP132b Goomig-Knox Last Burnt 2012-2021
 2021.EMP135a Rehabilitation near DW1GS Track 2021-10-21.jpg
 2021.EMP135b Area 11 Leighton Rehabilitation 2021-10-21.jpg
 2021.EMP147 Area 11 Early rehabilitation contouring - Main Roads 2021-11-16.jpg
 2021.EMP173a MRWA to MG Corp - Notification and request for comment on Moonamang Road Upgrade - Information on Project layout.EML
 2021.EMP173b MRWA to MG Corp - Notification and request for comment on Area 11 Gravel Pit Expansion - Weaber Plains.EML
 2021.EMP173c Native Title Act Notifications - KUNSD 2019-04-24 Notification Letter to MG Corporation re Moonamang Road Construction - Section 24ka.pdf