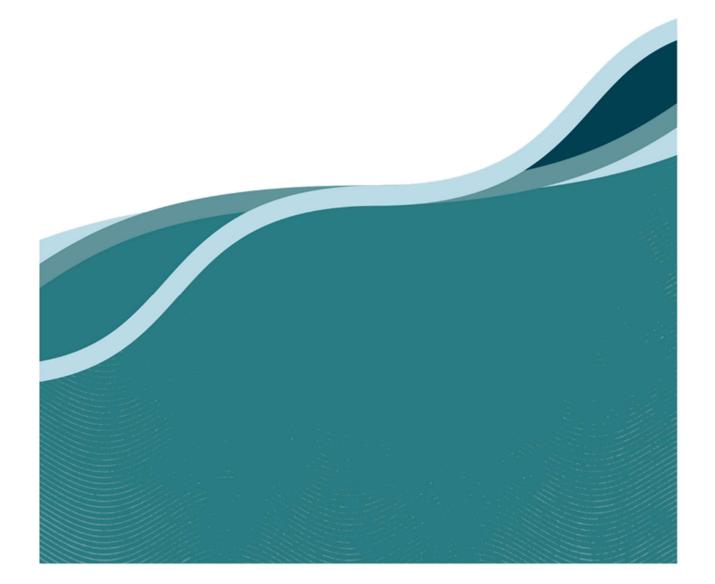
# Statement 938 Compliance Assessment Report 2022



# **Document control**

| Date         | Version | Prepared by                    | Reviewed by |
|--------------|---------|--------------------------------|-------------|
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| Acronyms      | and Abbreviations   |
|---------------|---|
| ADP           | Aboriginal Development Package  |
| Authorisation | Authorisation to take or disturb threatened species, <i>Typhonium</i> sp. Kununurra (Authorisation Number TFL 001-2122 dated 11 April 2021, as amended) |
| 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   |
| DAFWA         | (Former) Department of Agriculture and Food Western Australia   |
| DBCA          | Department of Biodiversity, Conservation and Attractions  |
| DPIRD         | Department of Primary Industries and Regional Development   |
| DW1GS         | DW1 Gauging Station   |
| DWER          | Department of Water and Environmental Regulation  |
| EMP           | Environmental Management Program  |
| 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 and Weaber Plain<br>Development Area   |
| GL            | Gigalitres  |
| GMP           | Groundwater Management Plan   |
| ha            | Hectare(s)  |
| IRG           | Independent Review Group established in accordance with approval EPBC 2010/5491   |
| JTSI          | Department of Jobs, Tourism, Science and Innovation   |
| KAI           | Kimberley Agricultural Investment Pty Ltd   |
| KBC           | KBC Pty Ltd   |
| km            | Kilometres  |
| MG            | Miriuwung and Gajerrong (Corporation)   |
| ML            | Megalitres  |
| MS938         | Ministerial Statement 938   |
| OIC           | Ord Irrigation Cooperative  |
| ORIA          | Ord River Irrigation Area   |
| OEPA          | (Former) Office of the Environmental Protection Authority   |
| RIWI Act      | Rights in Water and Irrigation Act 1914   |
| SGDMP         | Stormwater and Groundwater Discharge Management Plan  |
| TsK           | Typhonium sp. Kununurra   |
| tpa           | Tonnes per annum  |

### 1. Introduction

Ministerial implementation Statement 938 for the Ord River Irrigation Area Stage 2 (M2 Supply Channel) proposal (Proposal) was published on 12 June 2013 pursuant to section 45 of the *Environment Protection Act 1986*. DPIRD administers MS938 behalf of the Minister for Regional Development.

MS938 provides for the construction of the M2 Supply Channel, the development of up to 33,500 ha of land for irrigated agriculture and associated infrastructure, and environmental buffer areas north-east of Kununurra. The 'M2 area' refers to the agricultural land able to be serviced by the M2 Supply Channel. KAI is the developer of the 'M2 area' farms on the Weaber and Knox Creek Plains in accordance with the Ord Development Agreement executed in December 2013.

The M2 area is the second stage of the Ord River Irrigation Area. There is no intent to implement, under MS938, that part of the Proposal within the Northern Territory. Figure 1 shows the location of the development and buffer areas on the Weaber (Goomig) and Knox Creek Plains.

Development of the M2 Supply Channel, roads, and farm infrastructure on the Weaber Plain, commenced in 2010. The M2 Supply Channel was completed in 2014 and farming at Goomig commenced in 2015. The Goomig farmlands are now fully developed and operational, except for Lots 4, 7, 11, and 15.

Clearing on the Knox Creek Plain commenced and subsequently ceased in 2020 due to presence of the threatened flora species *Typhonium* sp. Kununurra (TsK) in the area. An authorisation to take or disturb TsK in the Knox Creek Plain development area was granted under section 40 of the BC Act on 2 November 2021 (Authorisation Number TFL 001-2122 dated 11 April 2021, as amended). Clearing recommenced in May 2022 in accordance with an approved Works Plan under the Authorisation.

This Compliance Assessment Report (CAR) reports on compliance with the conditions set out in MS938 for the period 1 January 2022 to 31 December 2022.



Goomig and Knox Creek Plain development and buffer areas

# 2. Project approvals

Table 1 lists the programs and plans approved in accordance with conditions 5 and 6 of MS938. Table 2 lists other relevant and related approvals.

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

| Plan  | Description  |  |  |
|---|--|--|--|
| Final Project Design Plan –<br>Weaber Plain (MS938                            | Strategen (2011) Ord River Irrigation Area – Weaber Plain<br>Development Project Phase 2 Final Project Design Plan   |  |  |
| Condition 6)  | Approved by letter from the Office of the Environmental Protection Authority dated 15 August 2011.   |  |  |
| Environmental Management<br>Program – Weaber Plain<br>(MS938 Condition 5)     | Ord River Irrigation Area – Weaber Plain Development Project –<br>Environmental Management Program, October 2013   |  |  |
| Final Project Design Plan –<br>Knox Creek Plain (MS938<br>Condition 6)        | KBC (2019) Knox Creek Plain Agricultural Development Final Project Design Plan Amended – July 2019 Revision C Approved by letter from the Office of the Environmental Protection Authority dated 4 May 2020. |  |  |
| Environmental Management<br>Program – Knox Creek Plain<br>(MS938 Condition 5) | KBC (2015) Ord River Irrigation Area – Knox Creek Plain Environmental Management Program, August 2015.   |  |  |

Table 2. Other relevant and related environmental approvals and decisions

| Area                     | Approval /Decision  | Approval<br>Authority                                       | Approval<br>Holder  | Relevance  |
|--------------------------|---|---|---|--|
| Weaber Plain<br>(Goomig) | Approval EPBC<br>2010/5491<br>EPBC Act<br>Weaber Plain<br>Development<br>Project        | Australian<br>Government<br>Minister for the<br>Environment | Department of<br>Primary<br>Industries and<br>Regional<br>Development | Applies to the<br>Weaber Plain<br>portion of the<br>Proposal and<br>duplicates some<br>MS938 EMP<br>provisions.  |
| Weaber Plain<br>(Goomig) | SWL179228<br>Surface Water<br>License issued<br>under RIWI Act                          | DWER under delegation                                       | KAI   | The Operating Strategy requires compliance with environmental approvals.   |
| Knox Creek<br>Plain      | Approval EPBC<br>2014/7143<br>EPBC Act<br>Knox Creek Plain<br>Irrigation<br>Development | Australian<br>Government<br>Minister for the<br>Environment | KAI   | Applies to the Knox<br>Creek Plain portion<br>of the Proposal and<br>duplicates some<br>MS938 EMP<br>provisions. |

| Northern Knox<br>Creek Plain -<br>Moonamang<br>Road | EPBC 2017/7856  'Not a controlled action' decision   | Australian<br>Government<br>Minister for the<br>Environment | JTSI                   | Moonamang Road<br>realignment is part<br>of the Proposal and<br>is within the<br>approved Knox<br>Creek Plain Final<br>Project Design Plan |
|---|--|---|------------------------|--|
| Sorby Hills   | EPBC 2011/6230  'Not a controlled action' decision  Sorby Hills Silver Lead Zinc Project, East Kimberley                 | Australian<br>Government<br>Minister for the<br>Environment | Boab Metals<br>Pty Ltd | Project area<br>overlaps MS938<br>Proposal area.   |
| Sorby Hills   | Ministerial implementation Statement 964, amended by Statement 1097 Sorby Hills Silver Lead Zinc Project, East Kimberley | Minister for<br>Environment                                 | Boab Metals<br>Pty Ltd | Project area<br>overlaps MS938<br>Proposal area.   |

### 3. Current Status

# 3.1. Weaber Plain (Goomig)

No clearing was undertaken in the Weaber Plain development area in 2022. KAI grew maize and cotton. Cotton was also cropped on MG Corporation's Lot 16. Lots 19, 20 and 21 were sub-leased to external entities. The development of MG Corporation's Lot 15 has not been completed although clearing was undertaken in a previous reporting period. KAI (2023) reported that:

- KAI and MG Corporation both continued their cropping programs on the Goomig farmlands in 2022.
- The OIC released 36.852GL to the Goomig farmlands through the M2C3 structure.
- Of this, the offtake meters recorded 32.012GL delivered to Goomig farms for irrigation during the 2022 irrigation season.
- Tailwater from the Ord Stage 1 D8 drain is stored in Lot 7 and pumped into lot 8 on KAI's farmland.
- There were no incidents or reports of 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.

 Development of the Knox Creek Plain has commenced with a new development lease being signed with the State.

The Goomig farmlands are now fully developed and operational, except for Lots 4, 7, 11, and 15. It is anticipated that clearing and development of Lots 4, 7 and 11 will commence in 2023.

DPIRD continues to convene an Independent Review Group to oversee the hydrological aspects of the Weaber Plain Development Project in accordance with condition 9 of EPBC 2010/549. The IRG met once during the compliance assessment period, on 14 September 2022. The IRG's oversight supports compliance with conditions of EPBC 2010/5491 and, in doing so, supports compliance with the surface and groundwater management actions specified in the Weaber Plain EMP under condition 5 of MS938.

### 3.2. Knox Creek Plain

Clearing of the Knox Creek Plain commenced on 26 May 2020 following approval of an amended Knox Creek Plain FPDP (Revision C) (KBC 2019). Clearing ceased that same year due to the presence of TsK in the area. Clearing recommenced in 2022 following the grant of the Authorisation mentioned earlier. A further 2,686 ha was cleared in 2022 bringing the overall clearing footprint on the Knox Creek Plain to 3,096 ha. Figure 2 shows the extent of clearing on Knox Creek Plain up to 31 December 2022. The satellite image in Figure 3 shows the extent of clearing on both the Weaber and Knox Creek Plains to December 2022. Clearing will recommence in the 2023 dry season following the approval of an Offset Strategy in accordance with condition 4 of the Authorisation.

An amended Knox Creek Plain FPDP will be submitted in the 2023 compliance assessment period to incorporate additional land in the buffer area to avoid the threatened flora species, TsK. This will align the FPDP with the Authorisation.

# 4. Compliance Reporting Requirements

Table 3 lists the requirements of condition 4 (Compliance Reporting) of MS938. The required CAP was approved in 2013. The approved CAP (Strategen 2013) requires the following to be addressed in the CAR in respect to plans required to be implemented in accordance with MS938 (i.e., the plans and programs in Table 1):

- 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.

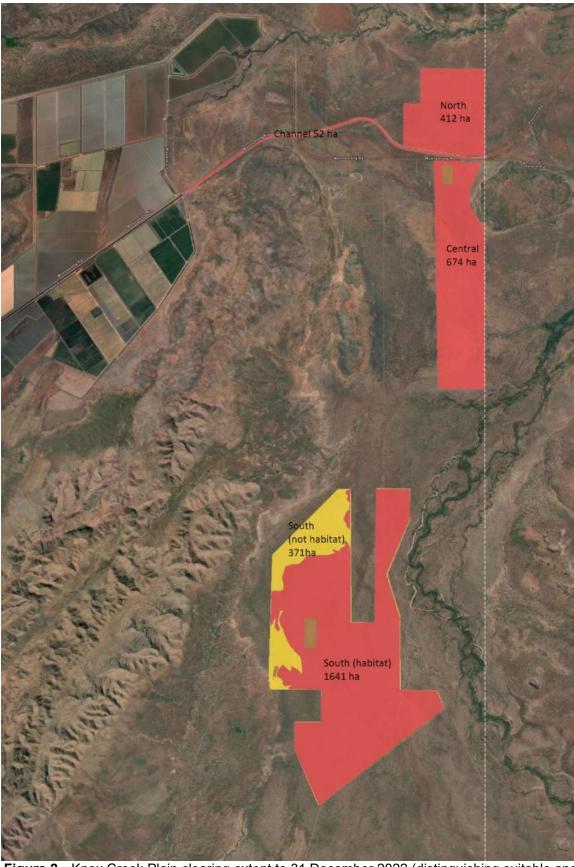


Figure 2. Knox Creek Plain clearing extent to 31 December 2022 (distinguishing suitable and unsuitable TsK habitat)



Figure 3. Satellite imagery of Goomig and Knox Creek Plain (Satamap Global)

 Table 3.
 Condition 4 (Compliance Reporting) 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.   |  |

# 5. Audit Methodology

This CAR addresses the 12-month period from 1 January 2022 to 31 December 2022. The 2022 audit of compliance with the conditions of MS938 and the associated Environmental Management Programs (condition 5) has been undertaken to meet the requirements of condition 4 of MS938. The audit was undertaken by qualified Auditor, Helena O'Dwyer (Certificate Number 13909388-9066696). Existing audit tables for auditing compliance with the conditions of MS938, Schedule 1 of MS938, and the EMPs (condition 5) provided the template for the 2022 audit.

The audit table for assessing compliance with the conditions of MS938 addresses each condition by the following elements (i.e., the audit criteria):

- Audit code: Ministerial Statement reference number.
- Subject: The environmental theme/issue.
- Action: What the proponent must do.
- How: The way 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 findings, where required.

The audit table for assessing compliance with Schedule 1 of MS938 addresses the Key Proposal Characteristics.

The audit table for assessing compliance with the EMPs approved under condition 5 of MS938 address each management plan provision. Most actions specified in the Knox Creek Plain EMP are the same as the Weaber Plain EMP. Additional audit items are included in the audit table where the Knox Creek Plain EMP differs. These additional items are titled 'KEMP'.

Where an audit item is not relevant to a particular area (for example, because the item was not included in the Knox EMP), or where the items has previously been assessed as completed, the item has been marked not applicable (N/A).

In line with the approved CAP, the auditor assessed compliance with each condition, the Key Proposal Characteristics in Schedule 1 and each EMP provision. The auditor used a range of methods including:

- site inspections
- use of information from complementary audit programs, namely the annual CALIM audit<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The environmental auditor also audited compliance with the Goomig *Common Area Lease and Infrastructure Management* (CALIM) Agreement in 2022. The CALIM Agreement deals with the operation, maintenance, repair, and replacement of Goomig (Weaber Plain) Common Infrastructure owned by the State which includes stormwater drains and flood protection levees.

- interview with KAI
- collection and review of monitoring data and assessment against criteria
- compilation and review of developer reports and communications
- communications and collection of evidence from relevant contractors, for example aerial spraying contractor
- review of satellite imagery to confirm the extent of clearing and development is within the scope of Schedule 1
- review and consideration of IRG decisions on hydrological aspects.

The audit tables include a compliance status field that states the auditor's assessment of compliance with the implementation of the conditions and EMP actions. The auditor has applied the compliance status terms set out in OEPA (2012, p.9).

 Table 4.
 Requirement and application

| Compliance Status<br>Terms    | Acronym | Definition  |
|-------------------------------|---------|---|
| Compliant                     | С       | Implementation of the proposal has been carried out in accordance with the requirements of the audit element.   |
| Completed                     | CLD     | A requirement with a finite period of application has been satisfactorily completed.  |
| Not required at this stage    | NR      | The requirements of the audit element were not triggered during the reporting period.   |
| Potentially Non-<br>compliant | PNC     | Possible or likely failure to meet the requirements of the audit element.   |
| Non-compliant                 | NC      | Implementation of the proposal has not been carried out in accordance with the requirements of the audit element.   |
| 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. |

# 6. Audit findings

# 6.1. Compliance with conditions

The results of the audit of compliance with the conditions of MS938 conditions is provided in Attachment 2 (Audit Table A – Ministerial Statement 938 Conditions). Three potential non-compliances were found by the auditor (Table 5).

**Table 5.** MS938 Conditions – Potential Non-Compliance

| Condition<br>No. | Audit code | Condition   | Audit Finding   |
|------------------|------------|---|---|
| 4-5              | 938:M4.5   | The proponent shall advise the CEO of any potential non-compliance within 7 days.   | The CEO was not advised of potential non-compliances with EMP provisions within 7 days. These potential non-compliances are listed in Table 6 of this CAR, and in Attachment 3 - Audit Table C – Statement 938 Environmental Management Programme |
| 4-6              | 9388:M4.6  | 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 2021 Compliance<br>Assessment Report (KBC 2022)<br>was submitted late.  |
| 5-1              | 938:M5.1   | The proponent shall implement the proposal in accordance with the "Environmental Management Programme", dated July 2011, or subsequent revisions approved by the CEO.                           | The audit assessed that the Proposal was potentially non-compliant with condition 5-1 given potential non-compliances with some EMP provisions.   |
|                  |            |   | These potential non-compliances are listed in Table 6 of this CAR, and in Attachment 3 - Audit Table C – Statement 938 Environmental Management Programme   |

# 6.2. Compliance with Schedule 1

Condition 1 of MS938 requires implementation of the proposal as documented in Schedule 1 of the Statement. The results of the audit of compliance with the Key Proposal Characteristics in Schedule 1 is provided in Attachment 3 (Audit Table B – Schedule 1 of Statement 938). No potential non-compliance with Schedule 1 was identified.

### 6.3. Environmental Management Program Compliance

Condition 5 of MS938 requires the proponent to implement the Proposal in accordance with the approved EMP. The results of the audit of compliance with the approved EMPs is provided in Attachment 4 (Audit Table C – Statement 938 Environmental Management Program). Twenty-four potential non-compliances were found by the auditor. These are listed in Table 6.

The auditor notes that the EMPs are unnecessarily prescriptive and wide in scope, addressing all environmental factors and lacking focus on key environmental factors and outcomes. An outcome-based approach would allow for adaptive management, including a focus on environmental monitoring and response in favour of prescriptive and sometimes unnecessarily complex actions.

A revised EMP is outstanding, largely because of studies, investigations, and work afoot to guide the development of an updated Stormwater and Groundwater Discharge Management Plan and other Plans under EPBC 2010/5491, which will inform revised EMPs under MS938.

### 7. Conclusion and recommendations

The 2022 audit found 24 potential non-compliances with the 178 provisions of the Weaber and Knox Creek Plain EMPs that are required to be implemented in accordance with condition 5 of MS938. The potential non-compliances do not involve significant environmental impact, rather they point to a need to improve monitoring, data management, review, and assessment activities. DPIRD is engaging additional resources to assist in resolving these issues and will work with the developer of the Weaber and Knox Creek Plain areas to ensure its monitoring, data management, review and assessment activities are undertaken to requirements.

The 2022 auditor and DPIRD agree with the previous auditor's recommendations regarding the need to review and update the EMPs to bring them in line with contemporary, outcome-based standards that focus on key environmental factors. DPIRD recognises that this is an outstanding undertaking and thus is seeking additional resources to assist the preparation and delivery of contemporary plans that, ideally, satisfy all relevant environmental approvals (EPBC 2010/549 - Weaber Plain, EPBC 2014/7143 - Knox Creek Plain, and MS938) and avoid duplication.

 Table 6.
 MS938 Environmental Management Program – Potential Non-Compliance 2022

| Item                    | Action   | 2021 Finding  | 2022 Finding  |  |  |  |
|-------------------------|--|---|---|--|--|--|
| EMP 19<br>(Soil)        | Surface and subsoil electrical conductivity within the project area, with a specific focus on areas with Aquitaine clay soils, including:  • at least one sample from each lot  • a representative spread of sites throughout the Buffer Area. | Weaber Plain Potentially non-compliant because soil monitoring did not include sites within the Weaber Plain buffer area.  Knox Creek Plain Potentially non-compliant because soil monitoring was not undertaken on the Knox Creek Plain. Soil monitoring was required to commence prior to clearing. | Weaber Plain Compliant - Soil EC results for the Weaber Plain did not exceed the target of 400 mS/m in surface or subsurface soils.  Knox Creek Plain Potentially non-compliant because soil monitoring was not undertaken on the Knox Creek Plain. Soil monitoring was required to commence prior to clearing. |  |  |  |
| (Soil) pH<br>wit<br>wit | Surface and subsoil ESP and pH within the project area, with a specific focus on areas with Aquitaine clay soils, including:  • at least one sample from each lot  | Potentially non-compliant because   | Weaber Plain Potentially non-compliant because sodicity was recorded above the target at Weaber Plain farm Lot 17.  Depth Result  |  |  |  |
|                         |  | each lot  | acceptable range (on farm lots). Knox Creek Plain   | Lot         Lab No.         Date         Septiment         Target         %           17         9ZS22150         Sep-         0-10         <6 |  |  |
|                         | a representative spread of     aites throughout the  | esentative spread of Potentially non-compliant because soil monitoring was not undertaken   | 22  |  |  |  |
|                         | Buffer Area.   |   | 17 9ZS22151 Sep- 60 <15 18.9  |  |  |  |
|                         |  | commence prior to clearing.   | Knox Creek Plain Potentially non-compliant because soil monitoring was not undertaken on the Knox Creek Plain. Soil   |  |  |  |

|                              |  |           | monitoring was required to commence prior to clearing.  |
|------------------------------|--|-----------|---|
| EMP 43<br>(Buffer)           | Survey vegetation in the<br>Buffer Area for symptoms of<br>damage typical of chemicals<br>being used in the ORIA | Compliant | The auditor conducted vegetation (habitat) condition assessments, including weed assessment, in the Weaber Plain and Knox Creek buffer areas in 2022 and early 2023 to comply with conditions of the TsK Authorisation. Vegetation condition assessments are detailed in evidence item 2022.EMP43a  |
|                              |  |           | The auditor also observed Weaber Plain buffer vegetation condition while undertaking the 2022 CALIM audit. There appeared to be some signs of spray drift impact in some of the elongated and small sections of the Weaber Plain buffer area that are surrounded by farm lots. Altered hydrology (inundation) in some of these parts of the buffer was also considered to be a factor. These observations were made at the tail end of the dry season thus a seasonal affect was also likely to be at play. |
|                              |  |           | This item is assessed as potentially non-compliant due to some signs of impact to portions of the Weaber Plain buffer area requiring further investigation.   |
|                              |  |           | DPIRD is planning to procure services in 2023-<br>2024 to assist in resolving this item.  |
| EMP 53<br>Weaber<br>(Buffer) | Establish permanent weed transects within 100 m into the Weaber Plain buffer area                                | Completed | Weed transects have not been maintained, therefore the current auditor assessed this item as  |

|                              |   |   | potentially non-compliant despite an earlier auditor's finding that this item was completed. Strategen (2013c) noted that Phase 2 weed transects were installed in July and August 2012 in accordance with the Phase 2 Weed Control Program (Strategen 2012).   |
|------------------------------|---|---|---|
| EMP 54<br>Weaber<br>(Buffer) | 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:  • 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  • areas declared as local priority. | Completed The 2016 auditors (Strategen) assessed this action as complete. | Weed transects have not been maintained and annual updates of priority management areas have not occurred, therefore, this item is assessed as potentially non-compliant despite an earlier auditor's finding that this item was completed.  The current auditor conducted vegetation (habitat) condition assessments, including weed assessment, in the Weaber Plain and Knox Creek buffer areas in 2022 and early 2023 to comply with conditions of the Authorisation. Vegetation condition assessments are detailed evidence item 2022.EMP43a.  KAI advised that it has been undertaking Parkinsonia aculeata control measures in the buffer area. |

| EMP 55<br>Weaber<br>(Buffer)         | Update the extent of Priority<br>Areas   | Compliant | These updates have not been occurring therefore this item is assessed as potentially non-compliant.  KAI advised that it has been undertaking  Parkinsonia aculeata control measures in the buffer area.   |
|--------------------------------------|--|-----------|--|
| EMP 56<br>Weaber<br>(Rehabilitation) | Develop and undertake a weed control program in Priority Areas with the exception of roads.  | Compliant | Refer to EMP 55  |
| EMP 75<br>Weaber<br>(Rehabilitation) | [Monitor] weed species found along permanent weed survey transects in the buffer   | Compliant | Refer to EMP 53 and EMP 54   |
| EMP 76<br>Weaber<br>(Rehabilitation) | [Monitor] density/ cover/ distribution of weed species in the permanent weed survey transects and common use infrastructure areas. | Compliant | Refer to EMP 53 and EMP 54   |
| EMP 84<br>Weaber<br>(Rehabilitation) | Undertake monitoring of required parameters in the expanded groundwater monitoring bore network.                                   | Compliant | This item is assessed as potentially non-compliant because:  • manual depth measurements were not taken at the low intensity bores. The groundwater monitoring program requires manual depth measurements to be taken annually at all bores, both high and low intensity, and  • five bores are damaged and out of operation because of flood damage:  o 11CS10RD (high intensity) |

|                         |   |  | <ul> <li>11CS10RS (high intensity)</li> <li>11WP51S (high intensity)</li> <li>11WP4R (low intensity)</li> <li>11WP53S (low intensity)</li> </ul> DPIRD has prepared a scope of work to reinstall these bores.  |
|-------------------------|---|--|--|
| EMP 90<br>(Groundwater) | Establish and maintain a database of groundwater chemical and nutrient parameters.          | Compliant  | DPIRD has received laboratory results from KAI however no evidence of retention of this and previous years' laboratory data in a data base.  |
| EMP 94<br>(Groundwater) | Groundwater levels, soil salinity and quality exceed or are likely to exceed trigger levels | 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 (Bennett et al 2019) found that groundwater levels have risen relative to reference bores, but consistent with that forecasted in initial, pre-development modelling. The review assessed groundwater level and chemistry trends but didn't assess against trigger criteria per se. The proponent previously advised they will address the triggers in the updated EMP to ensure they are simple and clear. | The auditor has assessed this item as potentially non-compliant because an assessment of 2022 groundwater level and quality data has not been completed.  In accordance with the IRG's decision of 28 March 2023, a review and analysis of groundwater monitoring data collected since 2019 will be completed as soon as practicable following the collection of 2023 comprehensive data. The review will be guided by the scope and content of the previous review completed by DPIRD in 2019 (Bennett et al 2019). The comprehensive review will review and analyse groundwater levels and quality and consider whether any corrective actions should be undertaken. The question of whether the groundwater model should be updated will also be revisited after the groundwater review and analysis. |

| EMP 95<br>(Groundwater)              | 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. | Unable to Assess 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. Integration of 2021 groundwater monitoring data into the existing database is required to assess trends, in consideration of the trend analysis timelines recommended by DPIRD.                | As with EMP 94, the auditor has assessed this item as potentially non-compliant because an assessment of 2022 groundwater level and quality data has not been completed.  |
|--------------------------------------|---|--|---|
| EMP 101<br>Weaber<br>(Surface water) | 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.   | Completed The DW1 Gauging Station installed on Border Creek was visited during the site inspection. The SCADA program has the ability 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. | A water quality and flow gauging station was installed during the Weaber Plain development construction phase. The gauging station is collecting data via a Troll logger. However, the flow gauging station is not functioning as designed as it is not transmitting data on a continual basis through telemetry. |
| EMP 104<br>Weaber<br>(Surface water) | Monitor water flow at the stormwater outlet from the Development Area, Border Creek and the Keep River, determined in consultation  | Compliant  | As per EMP 101, a water quality and flow gauging station was installed during the Weaber Plain development construction phase. The gauging station is collecting data via a Troll logger.  However, the flow gauging station is not functioning   |

|   | with IRG, DPIRD, DWER and DBCA.  |  | as designed as it is not transmitting data on a continual basis through telemetry.  Flow gauging stations are operational on the Border Creek and Keep River.  |
|---|--|--|--|
| EMP 109<br>Weaber<br>(Surface<br>Water) | Telemetered flow monitoring at development gauge, existing gauging stations along Border Creek and the Keep River and in groundwater discharge pipe. | Potentially non-compliant Item 2021.EMP101c indicates functionality is being restored to the DW1GS, with data able to be accessed locally. Some telecommunications issues remain. This item remains a PNC, however the auditor is aware that progress to reinstate DW1GS functionality continues, and improvements are noted. A functional DW1GS monitoring system is essential for stormwater and tailwater monitoring and compliance purposes. | As per EMP 101, a water quality and flow gauging station was installed during the Weaber Plain development construction phase. The gauging station is collecting data via a Troll logger. However, the flow gauging station is not functioning as designed as it is not transmitting data on a continual basis through telemetry.  |
| EMP 133<br>Weaber<br>(Buffer)           | Assess vegetation condition using the Keighery (1994) rating scale and update vegetation condition map.  | Potentially non-compliant 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  | Baseline vegetation condition assessment and mapping was undertaken in 2011 (Botanical North 2011).  DPIRD conducted vegetation condition assessment at observation sites within the Weaber Plain and Knox Creek Plain buffer areas in 2022 and early 2023, however, the vegetation condition map has not been updated.  The auditor also observed buffer vegetation condition while undertaking the 2022 CALIM audit. There appeared to be some signs of spray drift impact in some of the elongated and small sections |

|                                      |  | inform overall buffer condition assessments. Previous audits have suggested amending this action.  | of the buffer area that are surrounded by farm lots. Altered hydrology (inundation) in some of these parts of the buffer was also considered to be a factor. These observations were made at the tail end of the dry season thus a seasonal affect was also likely to be at play.   |  |
|--------------------------------------|--|--|---|--|
|                                      |  |  | This item is assessed as potentially non-compliant given observation sites did not extend across the whole buffer area and the vegetation condition map has not been updated.  DPIRD will procure services in 2023 to assist in resolving this item.  |  |
| EMP135<br>Weaber<br>(Rehabilitation) | Survey reference sites identified in Item 1 to determine indicator species, density of native species, % cover of native species, native species richness and % weed cover as outlined in the monitoring procedures. | Potentially non-compliant 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 | As noted by the previous auditor (KBC 2022), rehabilitation activities were completed by Leighton Contractors or others for LandCorp at the completion of construction (~2012-14). This includes the construction compound area in the Weaber Plain buffer area adjacent to Moonamang Road.  The current auditor inspected the construction compound rehabilitation area (refer to evidence item 2022.EMP134a) and assessed the area to be in good to very good condition. However, the current auditor notes the previous auditor's recommendation that [the rehabilitation actions] be assessed for closure, and that a botanical assessment may be required to close this item.  DPIRD is planning to close out the rehabilitation items in the next 12 months, other than the Area 11 material extraction area which is still active. |  |

|                                       |  | 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<br>Weaber<br>(Rehabilitation) | Determine parameters and targets for each indicator species as appropriate. e.g. density of indicator species, % cover of indicator species, etc.      | Completed Item assessed as completed in a previous audit period.  | Refer to item EMP 135   |
| EMP 138<br>Weaber<br>(Rehabilitation) | Develop a species list for seed collection based on species known to germinate from seed and/or that can be propagated by nurseries.                   | Completed Item assessed as completed in a previous audit period   | Refer to item EMP 135   |
| EMP 139<br>Weaber<br>(Rehabilitation) | 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 | Not required at this stage Main Roads undertook topsoil respread as an alternative to seed collection and distribution for rehabilitation purposes. Topsoil retained from clearing of the new   | Refer to item EMP 135  The Main Roads rehabilitation sites associated with the construction of Moonamang Road have been absorbed into (i.e., are within) the Knox farm and Knox Supply Channel clearing area. |

|                                       | following <i>Florabank Guidelines</i> (Greening Australia 2009).   | road alignment was re-spread over<br>the old road alignment and drain<br>areas, per EMP9, EMP116, EMP<br>125. |                       |
|---------------------------------------|--|---|-----------------------|
| EMP 162<br>Weaber<br>(Rehabilitation) | [Monitor] native species richness, density and % cover within rehabilitation sites as outlined in the monitoring procedures. | Potentially non-compliant   | Refer to item EMP 135 |
| EMP163<br>Weaber<br>(Rehabilitation)  | [Monitor] indicator species in rehabilitation sites.   |   |                       |
| EMP164<br>Weaber<br>(Rehabilitation)  | [Monitor] exotic species richness and % cover within rehabilitation sites as outlined in the monitoring procedures.          |   |                       |

### 8. References

ANZG (2018), Australian and New Zealand Guidelines for Fresh and Marine Water Quality. Australian and New Zealand Governments and Australian state and territory governments, Canberra ACT, Australia.

Bennett, D L, and George, R J. (2014), *Goomig Farmlands development Baseline water quality in the lower Keep River*. Department of Primary Industries and Regional Development, Western Australia, Perth. Report 393.

Bennett, D., George, R. and Lillicrap, A. (2019), Goomig Farmlands: review and analysis of results of groundwater monitoring undertaken from 2014 to 2018, Report to the Independent Review Group (IRG), Department of Primary Industries and Regional Development, July 2019.

Botanical North (2011), Assessment and mapping of vegetation condition within the Weaber Plain Development Project Buffer Area, Botanical North 2011.

Botanical North (2012a), Ord River Irrigation Area Expansion – Stage Two, Weed Monitoring Program, Botanical North, September 2012.

Botanical North (2012b), Ord River Irrigation Area Expansion – Stage TwoWeed Monitoring Program - Amendment, Botanical North, October 2012.

KBC (2018), Ord River Irrigation Area Stage 2, M2 Supply Channel – Statement 938, Compliance Assessment Report 2017, Final Report, KBC, July 2018.

KBC (2019), Knox Creek Plain, Agricultural Development, Final Project Design Plan, Revision C, KBC, June 2019.

KBC (2022), Statement 938, Compliance Assessment Report 2021 Revision A, KBC, June 2022.

Indo-Pacific Environmental (2023), *ORIA Stage II Expansion: Post-Development Keep River Aquatic Fauna & Targeted Sawfish Survey* – 2022, Revision C, Indo-Pacific Environmental Pty Ltd., Western Australia, Perth, February 2023.

McMullen Nolan Group (2013), *Ord-East Kimberley Expansion Project Goomig Farm Area* – M2S Channel Reserve, Revision Y, April 2013.

Office of the Environmental Protection Authority (2012) Post Assessment Guideline for Preparing and Audit Table, Office of the Environmental Protection Authority, August 2012.

Ord Land and Water (2015), Vegetation Condition Assessment and Weed Survey for the Knox Creek Farmland Buffer Area 2015, Ord Land and Water 2015.

Reynolds, S. & Morgan, D. (2023) Review of toxicity of agricultural chemicals and implications for aquatic fauna of the Keep River 2023, Freshwater Fish Group & Fish Health Unit, Harry Butler Institute, Murdoch University report to the National Water Grid.

Romero, J. (2023) Managing Water Quality to Enable Future Irrigation Development in the Kimberley Regional: Three-Dimensional Hydrodynamic Modelling to Evaluate the Effect of Farm Chemicals on the Lower Pools of the Keep River, (Romero, J., GHD), 9 June 2023, GHD.

Strategen (2010), *Ord River Irrigation Area – Weaber Plain Development Project – Phase 1 Final Project Design Plan,* Strategen Environmental Consultants Pty Ltd., Perth, May 2010.

Strategen (2011), *Ord River Irrigation Area - Weaber Plain Development Project - Phase 2 Final Project Design Plan*, Strategen Environmental Consultants Pty Ltd., Perth, July 2011.

Strategen (2012), *Ord River Irrigation Area – Weaber Plain Development Project – Phase 2 Weed Control Program,* Revision E, Strategen Environmental Consultants Pty Ltd., Perth, March 2012.

Strategen (2013a), *Ord River Irrigation Area Stage 2 (M2 Supply Channel), Compliance Assessment Plan – Statement 938,* Revision 2, Strategen Environmental Consultants Pty Ltd., Perth, September 2013.

Strategen (2013b), *Ord River Irrigation Area – Weaber Plain Development Project – Phase 2 Weed Control Program*, Revision F, Strategen Environmental Consultants Pty Ltd., Perth, May 2013.

Strategen (2013c), *Ord River Irrigation Area – Weaber Plain Development Project Compliance Audit –* Statement 830, Strategen Environmental Consultants Pty Ltd., Perth, January 2013.

Strategen (2016), *Ord River Irrigation Area Stage 2 (M2 Supply Channel), Compliance Assessment Report* – Statement 938, Revision O, Strategen Environmental Consultants Pty Ltd., Perth, May 2016.

Strategen (2017), *Ord River Irrigation Area Stage 2 (M2 Supply Channel), Compliance Assessment Report – Statement 938,* Revision O, Strategen Environmental Consultants Pty Ltd., Perth, May 2017.

Warne M.St.J. and Sluggett, R. (2023) Report on and Recommendations Arising from the Visit of Dr Michael Warne (University of Queensland) and Robert Sluggett (Farmacist) to Kununurra. A report to the Western Australian Department of Primary Industries and Regional Development. 14pp. unpublished report.

# Attachment 1 Statement of Compliance

### 1. Proposal and Proponent details

| Proposal Title                           | Ord River Irrigation Area Stage 2 (M2 Supply Channel) |
|--|---|
| Statement Number                         | 938   |
| Proponent Name                           | Minister for Regional Development                     |
| Proponent's Australian<br>Company Number | Not applicable  |

### 2. Statement of Compliance Details

| Reporting Period | 1 January 2022 to 31 December 2022 |
|------------------|------------------------------------|
|                  |                                    |

| Implementation phase(s) during reporting period |           |           |   |                 |  |
|---|-----------|-----------|---|-----------------|--|
| Pre-construction Cons                           | struction | Operation | ✓ | Decommissioning |  |

| Audit Tables for Statement 938 addressed in this Statement of Compliance is provided at Attachments: | 2, 3 and 4 |
|--|------------|

Were all implementation conditions and/or procedures of the Statement complied with within the reporting period?

No (proceed to Section 3)

Yes (proceed to Section 4)

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

Which implementation condition or procedure was non-compliant or potentially non-compliant?

Condition 4-5, Condition 4-6, Condition 5-1

**Environmental Management Program items:** 

EMP19, EMP20, EMP43, EMP53, EMP54, EMP55, EMP56, EMP75, EMP76, EMP84, EMP90, EMP94, EMP95, EMP101, EMP104, EMP109, EMP133, EMP135, EMP136, EMP138, EMP139, EMP162, EMP163, EMP164.

Was the implementation condition or procedure non-compliant or potentially non-compliant?

The items were assessed as potentially non-compliant.

On what date(s) did the non-compliance or potential non-compliance occur (if applicable)?

Not applicable

| Was this non-compliance or potential non-compliance reported to the Chief Executive Officer, DWER? |                                  |    |  |  |  |
|--|----------------------------------|----|--|--|--|
| Yes  | Reported to DWER verbally Date   | NO |  |  |  |
|  | Reported to DWER in writing Date | ✓  |  |  |  |

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?

Condition 4-5 – The CEO was not advised of potential non-compliances within 7 days.

Condition 4-6 – The 2021 Compliance Assessment Report was submitted late.

Condition 5-1 – Twenty-four potential non-compliances within the Environmental Management Program were identified.

**Environmental Management Program items:** 

EMP19 – soil monitoring not undertaken on the Knox Creek Plain

EMP20 – soil sodicity above target at one sample location on the Weaber Plain; soil monitoring not undertaken on the Knox Creek Plain

EMP43 - some edge effects observed to vegetation in the Weaber Plain buffer area.

EMP53 to 56 – weed transects not monitored, priority weed management areas not updated, weed control program not targeted at updated priority weed management areas.

EMP75 - weed transects not monitored.

EMP76 – weed transects not monitored.

EMP84 – manual depth measurements not taken at low intensity bores; five groundwater bores out of operation.

EMP90 - no evidence of a database of groundwater chemical and nutrient parameters being maintained.

EMP94 and 95 – an assessment of 2022 groundwater level and quality data has not been completed.

EMP101, 104 and 109 – surface water flow gauging station (DW1GS) not functioning as designed.

EMP133 – vegetation condition assessment did not extend across the whole buffer areas and vegetation condition map not updated.

EMP135 to 139, and 162 to 164 - rehabilitated area requires final close out.

What is the precise location where the non-compliance or potential non-compliance occurred (if applicable)?

Weaber and Knox Creek Plains

### What was the cause(s) of the non-compliance or potential non-compliance?

EMP19 – soil monitoring not undertaken on the Knox Creek Plain

EMP20 – investigation required to determine cause of soil sodicity above target at one sample location.

EMP43 – edge effects likely caused by spray drift, inundation caused by altered hydrology.

EMP53 to 56 – legacy of not revisiting established weed transects and updating priority areas for management, although some weed (Parkinsonia) management activities are being undertaken by KAI.

EMP75 - as above

EMP76 - as above

EMP84 – error in the groundwater monitoring program, requirements not understood; five groundwater bores out of operation because of flood damage.

EMP90 – simply not meeting the requirement to maintain a groundwater quality database, although there is evidence of this data being collected on an annual basis as required.

EMP94 and 95 – an assessment of 2022 groundwater level and quality data has not been completed; the IRG has sought that a review of groundwater data be completed after the collection of 2023 comprehensive data.

EMP101, 104 and 109 – delayed action to recommission the DW1GS to provide for continual, telemetered flow monitoring.

EMP133 - requirement simply not met.

EMP135 to 139, and 162 to 164 – qualified assessment of rehabilitation site performance is required to formally sign off the rehabilitation as complete.

# 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?

EMP19 – set out the required soil monitoring program for the developer to implement in 2023, DPIRD to attend the program.

EMP20 – investigate cause of soil sodicity above target (baseline soil sodicity may have been naturally higher at this location, this is to be determined).

EMP43 – determine extent of impact and whether mitigation is required noting that edge effects do not extend into the broader buffer area.

EMP53 to 56 – revisit and survey original weed transects, updated priority management areas, compare to baseline, and manage.

FMP75 - as above

EMP76 - as above

EMP84 – set out and reinforce the required water monitoring program for the developer to implement in 2023, DPIRD to attend the program.

EMP90 – reinforce requirement to establish and maintain a groundwater quality database. As resolved by the IRG, a comprehensive review of data will be undertaken after the collection of 2023 comprehensive data.

EMP94 and 95 – scope and undertake a review of groundwater data after the collection of 2023 comprehensive data, in accordance with the IRG's decision of 28 March 2023.

EMP101, 104 and 109 – the developer engaged a contractor in June 2023 to recommission the DW1GS allowing sufficient time to resolve prior to the commencement of the 2023-2024 wet season.

EMP133 – buffer condition assessment and updated mapping to be completed n 2023-2024.

EMP135 to 139, and 162 to 164 – seek qualified assessment and documentation of rehabilitation site performance; possibly undertake this work in combination with the broader Weaber Plain buffer condition assessment.

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?

The potential non-compliance items do not involve significant environmental impact. Most involve some type of shortfall in monitoring, review, assessment, and mapping of data and information. DPIRD is planning to engage suitable resources to assist with meeting these requirements in 2023-2024. In addition, improved communication with the developer will assist compliance in respect to items where it has been agreed are the

developer's responsibility, for example the soil and groundwater monitoring programs, associated data storage, review, and assessment.

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

Refer to audit tables (Attachment 2, 3 and 4) and the Evidence folder.

| 4. F | ro | ponent | Dec | laration |
|------|----|--------|-----|----------|
|      |    |        |     |          |

| I,  |
|---|
| declare that I am authorised on behalf of Department of Primary Industries and Regional Development   |
| (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: 29   6   23  |

### 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.

# Attachment 2 Audit Table A – Conditions of Ministerial Statement 938

| 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 Table 1.2 | Overall | Ongoing                                      | С      | Refer to Table 1.2   |
| 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   | Not applicable     | Overall | Within 28 days of change of contact details. | С      | Minister for Regional Development nominated as proponent on 12 December 2017.  Item assessed as complete in previous auditing period.  |
| 938:M3.1   | Time limit for<br>Proposal<br>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                          | Not applicable     | Overall | By 12 June 2018                              | CLD    | Item assessed as complete in previous auditing period.   |
| 938:M3.2   | Time limit for<br>Proposal<br>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.   |  | Not applicable     | Overall | By 12 June 2018                              | CLD    | Item assessed as complete in previous auditing 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<br>Assessment Plan and submit<br>to the CEO of OEPA for<br>approval | Not applicable     | Overall | Ongoing                                      | С      | Strategen (2013a) Ord River Irrigation Area Stage 2 (M2 Supply Channel), Compliance Assessment Plan – Statement 938 Approved by letter from Office of the Environmental Protection Authority dated 2 October 2013. |

| Audit code | Subject              | Action  | How  | Evidence   | Phase   | Timeframe               | Status | Further information                                   |
|------------|----------------------|---|--|--|---------|-------------------------|--------|---|
|            |                      |   |  |  |         |                         |        | Item assessed as complete in a previous audit period. |
| 938:M4.2   | Compliance reporting | <ul> <li>The Compliance Assessment Plan shall indicate:</li> <li>(a) the frequency of compliance reporting,</li> <li>(b) the approach and timing of compliance assessments,</li> <li>(c) the retention of compliance assessments,</li> <li>(d) reporting of potential noncompliances and corrective actions taken,</li> <li>(e) the table of contents of compliance reports, and</li> <li>(f) public availability of compliance reports.</li> </ul> | Prepare a Compliance<br>Assessment Plan addressing<br>all requirements   | Not applicable   | Overall | Prior to implementation | С      | Item assessed as complete in a previous audit period. |
| 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   | This Compliance<br>Assessment Report   | Overall | Ongoing                 | С      | -   |
| 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.  | Reports in accordance with<br>the approved Compliance<br>Assessment Plan<br>Make compliance<br>assessment reports available<br>to CEO of OEPA on request | Reports of all compliance assessments are retained in DPIRD's Objective ECM records keeping system.  Reports are also published here: https://www.wa.gov.au/government/document-collections/ord-kimberly-expansion-project-australian-environmental-approval-documents |         | Ongoing                 | С      | -   |

| Audit code | Subject                                | Action  | How   | Evidence  | Phase   | Timeframe   | Status | Further information  |
|------------|--|---|---|---|---------|---|--------|--|
| 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 | Not applicable  | Overall | Within 7 days of a potential non-compliance being known | PNC    | The CEO was not notified of potential non-compliances with the EMPs prior to submission of this Compliance Assessment Report 2022. |
| 9388:M4.6  | Compliance reporting                   | The proponent shall submit a compliance assessment report annually from the date of issue of this Statement addressing the previous twelve-month period or other period as accepted by the CEO. The compliance assessment report shall:  • 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. | Assessment Reports addressing all requirements annually to OEPA                     | 2022.938.M4.6 Submission of 2021 Compliance Assessment Report                         | Overall | By June 2014 and annually thereafter                    | PNC    | The report for the 2021 compliance assessment period was submitted late.   |
| 938:M5.1   | Environmental<br>Management<br>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<br>Environmental Management<br>Programme                         | Refer to Part C Audit<br>Table  | Overall | Ongoing   | PNC    | Refer to Part C Audit<br>Table   |
| 938:M6.1   | Final Project<br>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<br>Project Design Plan                                     | 2022.938.M6.1a<br>Weaber Plain –<br>Clearing to 31<br>December 2022<br>2022.938.M6.1b | Overall | Ongoing   | С      | Strategen (2010) Ord<br>River Irrigation Area –<br>Weaber Plain<br>Development Project<br>Phase 1 Final Project<br>Design Plan     |

| Audit code | Subject                          | Action   | How  | Evidence  | Phase   | Timeframe  | Status | Further information   |
|------------|----------------------------------|--|--|---|---------|--|--------|---|
|            |                                  |  |  | Knox Creek Plain –<br>Clearing to 31<br>December 2022 |         |  |        | Strategen (2011) Ord<br>River Irrigation Area –<br>Weaber Plain<br>Development Project<br>Phase 2 Final Project<br>Design Plan  |
|            |                                  |  |  |   |         |  |        | Approved by letter from the Office of the Environmental Protection Authority dated 15 August 2011.                              |
|            |                                  |  |  |   |         |  |        | KBC (2019) Knox<br>Creek Plain<br>Agricultural<br>Development Final<br>Project Design Plan<br>Amended – July 2019<br>Revision C |
|            |                                  |  |  |   |         |  |        | Approved by letter from the Office of the Environmental Protection Authority dated 4 May 2020.                                  |
| 938:M7.1   | Final<br>Decommissioning<br>Plan | 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. | Prepare a Final Decommissioning Plan addressing all requirements and submit to CEO of OEPA for approval in accordance with timeframe | Not applicable  | Overall | At least six<br>months prior to<br>the anticipated<br>date of<br>decommissioning<br>or at a time<br>accepted by the<br>CEO | NR     | There is currently no intention to decommission the proposal.   |
|            |                                  | The Final Decommissioning Plan shall address:  • removal or, if appropriate, retention of plant and infrastructure,  |  |   |         |  |        |   |

| Audit code | Subject                          | Action   | How   | Evidence       | Phase           | Timeframe  | Status | Further information   |
|------------|----------------------------------|--|---|----------------|-----------------|--|--------|---|
|            |                                  | <ul> <li>rehabilitation of all disturbed areas to a standard suitable for the accepted new land use(s), and</li> <li>identification of contaminated areas, including provision of evidence of notification to relevant statutory authorities.</li> </ul> |   |                |                 |  |        |   |
| 938:M7.2   | Final<br>Decommissioning<br>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<br>Decommissioning Plan   | Not applicable | Decommissioning | Until such time as<br>the CEO<br>determines that<br>decommissioning<br>is complete | NR     | There is currently no intention to decommission the proposal. |
| 938:M7.3   | Final<br>Decommissioning<br>Plan | · •  | Make Final Decommissioning Plan available to stakeholder or public upon request and within 7 days of the receipt of the request | Not applicable | Overall         | To the requirements of the CEO   | NR     | There is currently no intention to decommission the proposal. |

### Attachment 3 Audit Table B - Schedule 1 of Statement 938

| Audit<br>Code | Element                      | Description                             | Evidence   | Status | Comments   |
|---------------|------------------------------|---|--|--------|--|
| S1_2.1        |                              | Project Area 76,000 ha                  | 2022.938.M6.1a                                     | С      | Clearing to date is as follows:  |
|               |                              |   | Weaber Plain – Clearing to 31<br>December 2022     |        | Weaber Plain – farm area: 7,416 ha within farm lot area of 7,643 ha (no change in 2022)  |
|               |                              |   | 2022.938.M6.1b                                     |        | Weaber Plain – infrastructure: 943.02 ha, including Moonamang Road realignment (no change in 2022)   |
|               |                              |   | Knox Creek Plain – Clearing to 31<br>December 2022 |        | Knox Plain – 3,096 ha, including 52 ha for the Knox Supply Channel (additional 2,686 ha cleared in 2022)   |
|               |                              |   |  |        | TOTAL: 11,509.02 ha  |
| S1_2.2        |                              | Land managed as buffer 42,500ha         | 2022.938.M6.1c - Satamaps                          | С      | The established Weaber Plain buffer area is 11,473 ha (Lot 425 on Plan 400992). This is consistent with the approved Phase 2 (Weaber Plain) Final Project Design Plan (FPDP) (Strategen 2011) that designates a buffer area of approximately 11,470 ha.  |
|               | Land within the Project Area |   |  |        | The Knox Creek Plain buffer area is 6,417 ha per the approved Knox Creek Plan FPDP (KBC 2019). An amended Knox Creek Plain FPDP will be submitted in the 2023 compliance assessment period to incorporate additional land in the buffer area to avoid the threatened flora species, Typhonium sp. Kununurra. This will align the FPDP with the Authorisation under section 40 of the BC Act. |
|               |                              | Land for irrigable development 30,500ha |  | С      | As above, a total of 7,416 ha of has been cleared for farms and ancillary infrastructure (i.e., irrigable development) within established farm lots in the Weaber Plain development area totalling 7,643 ha.   |
|               |                              |   |  |        | A further 809.2 ha of farm lots (Lots 4, 7, and 11) remained undeveloped by the end of the 2022 compliance assessment period.  |
| S1_2.3        |                              |   |  |        | The Knox Creek Plain FPDP provides for 5,568 ha of farms (land for irrigable development). An amended FPDP will be submitted in the 2023 compliance assessment period as mentioned above.  |
| S1_2.4        |                              | Infrastructure area 3,000ha             |  | С      | A total of 995.02 ha has been cleared for infrastructure to date on the Weaber and Knox Creek Plains, including 52 ha cleared in 2022 for construction of the Knox Supply Channel.   |
|               |                              | M2 Channel (lake                        | Not applicable                                     | NR     | No clearing was undertaken on land outside the Project Area in 2022.   |
| S1_2.5        |                              | Kununurra to project area) 690 ha       |  |        | Management of regrowth in previously cleared areas in the M2 channel corridor is undertaken as part of annual infrastructure maintenance and management activities.  |
| S1_2.6        |                              | Wyndham Port Facilities<br>1ha          | Not applicable                                     | NR     | No activity associated with Wyndham Port Facilities occurred in the compliance assessment period.  |

| S1_2.7<br>S1_2.8<br>S1_2.9 | Production     | Raw sugar 400,000tpa  Molasses 160,000tpa  Irrigation Channels 160km | 2022.S1_2.7  Goomig-Knox Surface Water Report 2022 (KAI, 2023)  2022.S1_2.7  Goomig-Knox Surface Water Report 2022 (KAI, 2023)  2022.938.M6.1b  Knox Creek Plain – clearing up to 31 December 2022 | NR<br>NR | No sugar has been grown in the Project Area since commencement, including the 2022 compliance assessment period.  Cotton, hay, and maize were grown during the 2022 compliance assessment period.  As above  37 km of main supply channels have been constructed to date. An 8.5 km corridor (52 ha) of native vegetation was cleared in 2022 to provide for the construction of the Knox Supply Channel consistent with the Knox Creek Plain FPDP. The Knox Supply Channel is an extension of the M2 supply channel.   |
|----------------------------|----------------|--|--|----------|---|
| S1_2.10                    |                | Annual water requirements 740GL                                      | 2022.S1_2.7  Goomig-Knox Surface Water Report 2022 (KAI, 2023)   | С        | The annual Goomig-Knox Surface Management report 2022 advises that OIC released 36.852 GL to the Goomig farmlands in 2022 through the M2C3 structure. Of this, the offtake meters recorded 32.012 GL delivered to Goomig farms for irrigation during the 2022 irrigation season.  |
| S1_2.11                    | Infrastructure | Drains 153km   | 2022.S1_2.10a CALIM audit report 2022.S1_2.10b CALIM map   | С        | 51 km of major drains have been constructed to date. No additional drains were constructed in the current compliance assessment period.  The environmental auditor also audited compliance with the Goomig Common Area Lease and Infrastructure Management (CALIM) Agreement in 2022. The CALIM Agreement deals with the operation, maintenance, repair, and replacement of Goomig (Weaber Plain) Common Infrastructure owned by the State which includes stormwater drains and flood protection levees.  The auditor observed that drains were in overall satisfactory condition with only routine maintenance required. |
| S1_2.12                    |                | Flood protection levees<br>142km                                     | 2022.S1_2.10a<br>CALIM audit report  | С        | No change since previous audit period. 48 km of flood protection levees constructed to date.  The auditor observed that flood protection levees were in overall satisfactory condition with only routine maintenance required.  |
| S1_2.13                    |                | Balancing storage dams (operating volume) 5.6GL                      | Not applicable   | С        | No changes to balancing storage infrastructure was made in the 2022 compliance assessment period. As noted by the previous auditor (KBC 2022), balancing storage for the Weaber Plain development is contained within the M2 channel between the M2C3 and M2C4 structures. 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  | Not applicable   | С        | No roads were constructed in the 2022 compliance assessment period.  49.2 km of roads have been constructed to date:  Moonamang Road – Public Road  Minjiljirrga Lane – Lot 420 on Plan 75732   |

|         |              |                          |   |    | Wooljim Lane – Lot 421 on Plan 75732<br>Jandami Lane – Lot 422 on Plan 75732             |
|---------|--------------|--------------------------|---|----|--|
| S1_2.15 |              | Power lines 165km        | Not applicable                                    | С  | No power lines have been constructed to date.  |
| S1_2.16 |              | Raw sugar store 180,000t | 2022.S1_2.7                                       | NR | No sugar was grown in the 2022 compliance assessment period.                             |
|         | Wyndham Port |                          | Goomig-Knox Surface Water Report 2022 (KAI, 2023) |    | Cotton, hay, and maize were grown during the 2022 compliance assessment period.          |
| S1_2.17 | ·            | Molasses store 75,000    | 2022.S1_2.7                                       | NR | No sugar was grown for molasses production occurred in the compliance assessment period. |
|         |              |                          | Goomig-Knox Surface Water Report 2022 (KAI, 2023) |    | Cotton, hay, and maize were grown during the 2022 compliance assessment period.          |

# Attachment 4 Audit Table C – Statement 938 Environmental Management Program

## Soil conservation management actions

| Item  | Action  | Purpose  | Timing   | Evidence   | Status<br>Weaber | Status<br>Knox | Comment   |
|-------|---|--|--|--|------------------|----------------|---|
| EMP 1 | Provide an Information Package to the owner/leaseholder, which outlines:  • 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-<br>lease/sale of<br>lots                                 | Not applicable   | CLD              | CLD            | Weaber Plain Item assessed as completed in a previous audit period (KBC 2018).  Knox Creek Plain Item assessed as completed in a previous audit period (KBC 2022).  |
| 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<br>week of<br>personnel<br>commencing<br>work on-site | 2022.EMP2a File Note interview, 11 April 2023  2022.EMP2b KAI Environment Induction 2022 | С                | С              | KAI confirmed at the audit interview that this is addressed in the new personnel inductions for both Weaber and Knox Creek Plain development areas.   |
| 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<br>construction of<br>shared<br>infrastructure            | Not applicable   | CLD              | NR             | Weaber Plain Construction of shared infrastructure on the Weaber Plain was completed in 2014.  Knox Creek Plain Construction of infrastructure has not commenced in the Knox Creek Plain development area.                                      |
| 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<br>construction of<br>shared<br>infrastructure            | Not applicable   | CLD              | NR             | Weaber Plain Construction of shared infrastructure on the Weaber Plain was completed in 2014.  Knox Creek Plain Construction of infrastructure has not commenced in the Knox Creek Plain development area. Refer to EMP 6 for more information. |
| EMP 5 | Ensure a drainage management system that includes a sediment  | To reduce the potential for erosion of borrow pits to result in adverse environmental impacts.   | Prior to ground disturbance                                      | 2022.EMP5 File Note- Site inspection photos  | С                | С              | Weaber Plain There is one borrow pit in the Project Area located in the Weaber Plain buffer area (referred to as  |

| ltem  | Action   | Purpose  | Timing  | Evidence  | Status<br>Weaber | Status<br>Knox | Comment   |
|-------|--|--|---|---|------------------|----------------|---|
|       | trap is in place around all borrow pits.   |  |   |   |                  |                | Area 11 materials extraction area). The borrow pit is still active. Site inspection confirmed no evidence of sedimentation.   |
|       |  |  |   |   |                  |                | Knox Creek Plain There are no borrow pits in the Knox Creek Plain development area or buffer area.  |
| 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                           | 2022.938.M6.1b<br>Knox Creek Plain –<br>Clearing to 31<br>December 2022               | NR               | С              | Weaber Plain  No clearing was undertaken in the Weaber Plain development area in 2022.  |
|       |  |  |   | 2022.938.M6.1c – Satamaps  2022.EMP6a File Note record of meeting re. Knox section 40 |                  |                | Knox Creek Plain 3,096 hectares of native vegetation was cleared in the Knox Creek Plain FPDP area in 2022. The developer advised that clearing commenced in the first week of May 2022 and ceased in the last week of October 2022. DPIRD verified the clearing extent using satellite imagery (refer to 2022.938.M6.1b and 2022.938.M6.1c). |
|       |  |  |   | authorisation.  2022.EMP2a File Note interview, 11 April 2023                         |                  |                | DPIRD met with KAI on 26 April 2023 to assess compliance with condition 1-4 (Works Plan) and conditions 1-6, 1-7, and 1-8 of the authorisation to take/disturb Typhonium sp. Kununurra at Knox (TFL 001-2122, as amended) (Authorisation). 2022.EMP6a provides the record of this meeting. Relevant to EMP 3, KAI confirmed that:             |
|       |  |  |   |   |                  |                | <ul> <li>The development boundaries were surveyed by a licensed surveyor (SML Land Surveyors) consistent with the deposited plan.</li> <li>Boundaries marked with star pickets and tape.</li> </ul>   |
|       |  |  |   |   |                  |                | Surveyor marked the boundary ahead of the dozer. Boundaries were cleared first.  The auditor conducted regular site visits  The auditor conducted regular site visits   |
|       |  |  |   |   |                  |                | throughout 2022 and observed machinery only operating during the dry season.  |
| 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<br>construction of<br>shared<br>infrastructure | Refer to EMP 3  | С                | С              | Refer to EMP 3  |
| EMP 8 | Restrict movement of construction machinery and equipment to designated tracks and roads.                                      | To prevent unauthorised ground disturbance.  | During<br>construction of<br>shared<br>infrastructure | 2022.EMP2a<br>File Note interview,<br>11 April 2023                                   | С                | С              | Weaber Plain Refer to EMP 3   |

| Item   | Action   | Purpose   | Timing   | Evidence  | Status<br>Weaber | Status<br>Knox | Comment   |
|--------|--|---|--|---|------------------|----------------|---|
|        |  |   |  |   |                  |                | Knox Creek Plain The auditor regularly inspected the Knox Creek Plain development area in 2022. Machinery was always on designated tracks.  |
| 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<br>construction of<br>shared<br>infrastructure  | Not applicable                                      | CLD              | NR             | Weaber Plain Refer to EMP 3  Knox Creek Plain Topsoil in the cleared Knox Supply Channel corridor has not yet been removed. The Main Roads rehabilitation sites associated with the construction of Moonamang Road have been absorbed into (i.e., are within) the Knox farm and Knox Supply Channel clearing area (see EMP 70). |
| EMP 10 | Remove topsoil from: <ul> <li>all areas to be excavated,</li> <li>all areas where spoil from excavation is to be stored.</li> </ul>  | To provide a natural source of seed, organic matter and microorganisms for areas to be rehabilitated. | During<br>construction of<br>shared<br>infrastructure  | 2022.EMP2a<br>File Note interview,<br>11 April 2023 | С                | С              | Refer to EMP 3  |
| 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<br>construction of<br>shared<br>infrastructure  | 2022.EMP2a<br>File Note interview,<br>11 April 2023 | С                | С              | Refer to EMP 3  |
| EMP 12 | Install topsoil containment measures such as sediment fencing around stockpiles.   | To reduce potential for erosion of topsoil stockpiles.  | During<br>construction of<br>shared<br>infrastructure  | 2022.EMP2a<br>File Note interview,<br>11 April 2023 | С                | С              | Refer to EMP 3  |
| 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                            | 2022.S1_10a<br>CALIM audit 2022                     | С                | NR             | Weaber Plain The auditor observed signage during the CALIM audit site inspection on 22 August 2022  Knox Creek Plain The Knox Creek Plain buffer area is not yet been established by fencing, destocking an installation of signage. The buffer area will be established in parallel with infrastructure and farm development.  |
| EMP 14 | Rehabilitate areas disturbed as a result of construction that are no longer required post-construction in accordance with the  | To maximise the potential for successful rehabilitation.  | As specified in the Rehabilitation Management Sub-plan | Refer to EMP 134                                    | NR               | С              | Weaber Plain Refer to EMP 134  Knox Creek Plain   |

| Action                         | Purpose | Timing                         | Evidence                       | Status<br>Weaber               | Status<br>Knox                 | Comment  |
|--------------------------------|---------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--|
| Rehabilitation Management Sub- |         |                                |                                |                                |                                | Main Roads of Western Australia rehabilitation   |
| pian.                          |         |                                |                                |                                |                                | sites associated with the construction of the realigned Moonamang Road were as follows:            |
|                                |         |                                |                                |                                |                                | Turn around track,   |
|                                |         |                                |                                |                                |                                | Drain,   |
|                                |         |                                |                                |                                |                                | Site office,   |
|                                |         |                                |                                |                                |                                | Old Moonamang Road   |
|                                |         |                                |                                |                                |                                | The turn around track, drain, and site office rehabilitation sites are within the Knox Creek Plain |
|                                |         |                                |                                |                                |                                | development area and are within the 2022 clearing area.  |
|                                |         | Rehabilitation Management Sub- | Rehabilitation Management Sub- | Rehabilitation Management Sub- | Rehabilitation Management Sub- | Rehabilitation Management Subplan.   |

## Soil monitoring regime

| Item   | Activity and location  | Frequency   | Target  | Corrective action   | Evidence  | Status<br>Weaber | Status<br>Knox | Comment        |
|--------|--|---|---|---|---|------------------|----------------|----------------|
| EMP 15 | Soil erosion within 50 m of construction activities.                   | Weekly<br>during<br>construction<br>of shared<br>infrastructur<br>e | No soil erosion occurring as a result of construction activities.                               | <ul> <li>Investigate cause of erosion.</li> <li>Investigate ways to minimise erosion and increase landform stability.</li> <li>Implement remedy.</li> <li>Monitor success of remedy.</li> </ul> | 2022.EMP2a<br>File Note<br>interview, 11<br>April 2023  | CLD              | NR             | Refer to EMP 3 |
| EMP 16 | Management of topsoil stockpiles.                                      | Weekly<br>during<br>construction<br>of shared<br>infrastructur<br>e | Topsoil stockpiles are being managed appropriately, including no indication of erosion present. | <ul> <li>Investigate cause of erosion.</li> <li>Investigate ways to minimise erosion and increase landform stability.</li> <li>Implement remedy.</li> <li>Monitor success of remedy.</li> </ul> | 2022.EMP2a<br>File Note<br>interview, 11<br>April 2023  | CLD              | NR             | Refer to EMP 3 |
| EMP 17 | Extent of clearing and ground disturbance along predefined boundaries. | Weekly<br>during<br>construction<br>of shared<br>infrastructur<br>e | No clearing or disturbance outside of pre-defined boundaries (Figure 2).                        | Report as Environmental Incident and initiate Incident Procedure  | Refer to evidence under EMP 3.  2022.938.M6.1b Knox Creek Plain – Clearing to 31 December 2022  2022.EMP6a File Note record of meeting re. Knox section 40 authorisation. | С                | С              | Refer to EMP 3 |

| Item   | Activity and location  | Frequency   | Target  | Corrective action   | Evidence  | Status<br>Weaber | Status<br>Knox | Comment   |
|--------|--|---|---|---|---|------------------|----------------|---|
| EMP 18 | Soil erosion<br>within 50 m of<br>infrastructure<br>(including<br>roads,<br>channels,<br>sediment<br>basins and<br>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. | <ul> <li>Investigate cause.</li> <li>Identify ways reduce erosion produced as a result of infrastructure such as reducing runoff velocity, diverting runoff and application of hydromulch to areas identified as susceptible to erosion from runoff.</li> <li>Implement remedy.</li> <li>Monitor success of remedy.</li> </ul>  | 2022.EMP2a File Note interview, 11 April 2023  2022.S1_10a CALIM audit, 22 August 2022  2022.S1_2.10b CALIM map   | С                | NR             | Weaber Plain The auditor conducted regular inspections in the Weaber Plain development area in 2022 including in conducting the 2022 CALIM audit. No significant erosion was observed during these inspections.  Knox Creek Plain No infrastructure had been constructed n the Knox Creek Plain development area by the end of the 2022 compliance assessment period. |
| EMP 19 | Surface and subsoil electrical conductivity within the project area, with a specific focus on areas with Aquitaine clay soils, including:  • at least one sample from each lot  • a representative e spread of sites throughout the Buffer Area. | Twelve monthly, commencin g prior to clearing and at the end of each dry season during operation of irrigation infrastructur e. | Salinity levels do not exceed 400 mS/m in surface or subsurface soils.                                | <ul> <li>Map the distribution of soil with salinity exceeding target levels.</li> <li>Investigate cause (which could include determining if salinity is due to a rise in the groundwater or whether the soil chemical status is deteriorating as a result of insufficient irrigation).</li> <li>Verify the adequacy of the estimated leaching rate (approximately 100 mm/a) in controlling sodicity in accordance with the Groundwater Management Sub-plan.</li> <li>Identify whether remedial action is required, such as installation of field drains in accordance with the Groundwater Management Sub-plan.</li> <li>Implement remedial action on a trial basis in areas identified from mapping.</li> <li>Monitor success of remedy, increasing the frequency of soil monitoring if salinity exceeds target levels.</li> </ul> | 2022.EMP19a Compliance Assessment – Soil Monitoring Results 2022.  2022.EMP19b Analysis Results – CSBP Soil and Plant Laboratory  2022.EMP19c Email: Goomig 2022 soil quality results – clarification | C                | PNC            | Weaber Plain Refer to the evidence documents.  Knox Creek Plain Soil monitoring in the Knox Creek Plain development area has not commenced. KAI will be conducting soil sampling in 2023. This item is assessed as potentially non-compliant because monitoring was required to commenced prior to clearing.  |

| Item   | Activity and location   | Frequency   | Target  | Corrective action   | Evidence                    | Status<br>Weaber | Status<br>Knox | Com                         | ment  |                    |               |                          |                   |
|--------|---|---|---|---|-----------------------------|------------------|----------------|-----------------------------|---|--------------------|---------------|--------------------------|-------------------|
| EMP 20 | Iocation  Surface and subsoil ESP and pH within the project area, with a specific focus on areas with Aquitaine clay soils, including:  • at least one sample from each lot  • a representative spread of sites throughout the Buffer Area. | Twelve monthly, commencin g prior to clearing and at the end of each dry season during operation of irrigation infrastructur e. | Sodicity levels five years after commencement of irrigation do not exceed an ESP of 6 in surface soils or 15 in subsurface soils. | <ul> <li>Map the distribution of soil with sodicity exceeding target levels.</li> <li>Investigate cause (which could include determining if changes are consistent with the anticipated initial response to land use change, or whether the soil chemical status is deteriorating as a result of insufficient irrigation).</li> <li>Verify the adequacy of the estimated leaching rate (approximately 100 mm/a) in controlling sodicity in accordance with the Groundwater Management Sub-plan.</li> <li>Identify whether remedial action is required, such as application of gypsum or sulphur.</li> <li>Implement remedial action on a trial basis in areas identified by mapping.</li> </ul> | Refer to EMP<br>19 evidence | PNC              | Knox<br>PNC    | Weak<br>Sodio<br>17.<br>Lot | Lab No.  9ZS22150  9ZS22151  Creek Plair r to EMP 1 | Date Sep-22 Sep-22 | Depth<br>(cm) | target a  Target  <6 <15 | Result % 9.3 18.9 |
|        |   |   |   | <ul> <li>Monitor success of remedy,<br/>increasing the frequency of soil<br/>monitoring if salinity exceeds target<br/>levels.</li> </ul>   |                             |                  |                |                             |   |                    |               |                          |                   |

### **Chemicals management actions**

| Item   | Action   | Purpose  | Timing   | Evidence  | Status<br>Weaber | Status<br>Knox | Comment  |
|--------|--|--|--|---|------------------|----------------|--|
| EMP 21 | Prospective land managers will be advised of the requirement to comply with procedures for chemical application, and chemical management legislation including:  • 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)  • Veterinary Preparations and Animal Feeding Stuffs Act 1976 (WA)  • Agriculture and Related Resources (Spraying Restriction) Regulations 1979. | 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.  | 2022.EMP5 KAI Environment Induction 2022 2022.EMP2a File Note interview, 11 April 2023  | CLD              | С              | Weaber Plain Item assessed as completed in a previous audit period (Strategen 2017)  Knox Creek Plain Refer to the evidence documents. |
| 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<br>week of<br>personnel<br>commencing<br>work on site | 2022.EMP5 KAI Environment Induction 2022  2022.EMP2a File Note interview, 11 April 2023  2022.EMP5 File Note - Site inspection photos | С                | С              | Refer to evidence documents  |

| Item   | Action   | Purpose  | Timing   | Evidence  | Status<br>Weaber | Status<br>Knox | Comment   |
|--------|--|--|--|---|------------------|----------------|---|
| 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 commenceme nt of ground disturbance | 2022.EMP2a File Note interview, 11 April 2023  2022.EMP5 File Note - Site inspection photos | С                | С              | KAI advised that there are no farm chemicals stored on site.  The auditor notes that hydrocarbons are stored on site. Hydrocarbon storage was confirmed as compliant except for the hydrocarbon storage tank located in the Knox Creek Plain development area. The auditor will follow up with the developer for evidence that the tank is double walled/skinned. The soil below the tank fittings was observed to be free from spillage. |
| EMP 24 | <ul> <li>All hydrocarbons will be stored in accordance with the following:</li> <li>Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007 (WA)</li> <li>Australian Standard AS 1940-2004: The Storage and Handling of Flammable and Combustible Liquids.</li> </ul> | To minimise the potential for hydrocarbon contamination of the environment.  | Ongoing from commenceme nt of ground disturbance | Refer to EMP 23   | С                | С              | Refer to EMP 23   |
| 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 commenceme nt of ground disturbance | 2022.EMP2a File Note interview, 11 April 2023  2022.EMP5 File Note - Site inspection photos | С                | С              | Refer to the evidence documents.  |
| 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 commenceme nt of ground disturbance | 2022.EMP2a<br>File Note interview,<br>11 April 2023   | С                | С              | Refer to the evidence documents.  |
| 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 commenceme nt of ground disturbance | 2022.EMP2a<br>File Note interview,<br>11 April 2023   | С                | NR             | Weaber Plain KAI staff complete the AUSCHEM course at the Kununurra TAFE.  Knox Creek Plain Farm development has not commenced in the Knox Creek Plain development area therefore no fertilisers were used in 2022.   |

| Item   | Action  | Purpose   | Timing  | Evidence  | Status<br>Weaber | Status<br>Knox  | Comment   |
|--------|---|---|---|---|------------------|-----------------|---|
| EMP 28 | Transport dangerous goods in accordance with the Dangerous Goods Safety (Storage and Handling of Nonexplosives) Regulations 2007 (WA).      | To ensure dangerous goods are stored appropriately during transport (e.g. on absorbent material, provision of spill kit, well-ventilated, appropriate documentation and provision of personnel protection equipment for safe handling). | Ongoing from commenceme nt of ground disturbance        | Not applicable  | Not<br>assessed  | Not<br>assessed | This item deals with an activity outside the Project Area.  |
| 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<br>with Incident<br>Response<br>Procedure | 2022.EMP2a File Note interview, 11 April 2023  2022.EMP5 File Note - Site inspection photos               | С                | С               | Refer to the evidence documents and EMP 23.   |
| 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 commenceme nt of ground disturbance        | 2022.EMP2a<br>File Note interview,<br>11 April 2023   | С                | NR              | Weaber Plain Refer to evidence document.  Knox Creek Plain Farming has not yet commenced in the Knox Creek Plain development area.  |
| 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 commenceme nt of ground disturbance        | Refer to EMP 97   | С                | NR              | Weaber Plain Refer to EMP 97  Knox Creek Plain Irrigation has not commenced in the Knox Creek Plain development area.   |
| 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 commenceme nt of ground disturbance        | 2022.EMP2a File Note interview, 11 April 2023  2022.EMP32 XO Aviation Spraysafe Accreditation certificate | С                | NR              | Weaber Plain KAI staff complete the AUSCHEM course at the Kununurra TAFE. Aerial spraying is undertaken by a contractor who holds a current Spraysafe Accreditation certificate.  Knox Creek Plain Farming has not yet commenced on the in the Knox Creek Plain development area. |

| Item   | Action   | Purpose  | Timing   | Evidence   | Status<br>Weaber | Status<br>Knox | Comment   |
|--------|--|--|--|--|------------------|----------------|---|
| EMP 33 | Ensure agricultural chemicals are not directly applied to dedicated on-farm access tracks.   | To prevent off-site transportation of chemicals in dust lift-off from access tracks.   | Ongoing from commenceme nt of ground disturbance | Refer to file notes<br>and audit<br>documents in<br>evidence package,<br>evidencing regular<br>visits to site by the<br>auditor. | С                | NR             | Weaber Plain The auditor saw no evidence of agricultural chemicals being directly applied to on-farm access tracks during inspections and visits undertaken throughout 2022.  Knox Creek Plain Farming has not yet commenced on the in the Knox Creek Plain development area.   |
| 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 commenceme nt of ground disturbance | 2022.EMP2a<br>File Note interview,<br>11 April 2023  | С                | NR             | Weaber Plain The auditor did not assess this item directly. Refer to EMP 93 and EMP 102  Knox Creek Plain Farming has not yet commenced on the in the Knox Creek Plain development area.  |
| 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 commenceme nt of ground disturbance | 2022.EMP36 Email confirming maintenance of register  | С                | NR             | Weaber Plain Refer to evidence document.  Knox Creek Plain Farming has not yet commenced on the in the Knox Creek Plain development area.   |
| 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 commenceme nt of ground disturbance | 2022.EMP32<br>XO Aviation<br>Spraysafe<br>Accreditation<br>certificate   | С                | NR             | Weaber Plain Aerial spraying is undertaken by a contractor who holds a current Spraysafe Accreditation certificate.  Knox Creek Plain Farming has not yet commenced on the in the Knox Creek Plain development area.  |
| EMP 37 | Notify neighbours within:  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 commenceme nt of ground disturbance | 2022.EMP2a<br>File Note interview,<br>11 April 2023  | С                | NR             | Weaber Plain The Farm Manager notifies relevant people of spray activities. The auditor is included in the notification list when the auditor plans to attend site. The auditor always informs the Farm Manager before attending site.  Knox Creek Plain Farming has not yet commenced on the in the Knox Creek Plain development area. |

| Item   | Action   | Purpose  | Timing                                      | Evidence  | Status<br>Weaber | Status<br>Knox | Comment  |
|--------|--|--|---|---|------------------|----------------|--|
| EMP 38 | Design chemical washdown facilities in accordance with Department of Water, Water Quality Protection Notes on:  • 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 commenceme nt of planting of crops | 2022.EMP2a<br>File Note interview,<br>11 April 2023 | С                | NR             | Weaber Plain There are no chemical washdown facilities in the Project Area.  Spray booms are cleaned out in the last run in the paddock where chemical application occurred.  Knox Creek Plain Farming has not yet commenced on the in the Knox Creek Plain development area.                        |
| 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 commenceme nt of irrigation    | 2022.EMP2a<br>File Note interview,<br>11 April 2023 | С                | NR             | Weaber Plain All chemical blending occurs outside the Project Area.  KAI uses a dedicated mobile chemical batching plant. This is a bunded plant that mitigates direct human exposure to chemicals.  Knox Creek Plain Farming has not yet commenced on the in the Knox Creek Plain development area. |
| EMP 40 | Develop emergency response procedures in accordance with Department of Water, Water Quality Protection Note Contaminant spills – emergency response (WQPN No. 10).                               | For determining the appropriate level of response according to the degree (or classification) of the spill.  | Prior to commenceme nt of planting of crops | 2022.EMP2a<br>File Note interview,<br>11 April 2023 | С                | NR             | Weaber Plain Refer to evidence document.  Knox Creek Plain Farming has not yet commenced on the in the Knox Creek Plain development area.  |
| 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 commenceme nt of irrigation    | 2022.EMP2a<br>File Note interview,<br>11 April 2023 | С                | NR             | Weaber Plain KAI uses the recycling program at the Ord River District Cooperative (ORDCO).  Knox Creek Plain Farming has not yet commenced on the in the Knox Creek Plain development area.  |

## Chemical use monitoring regime

| Item   | Activity and location   | Frequency        | Target  | Corrective action  | Evidence   | Status<br>Weaber | Status<br>Knox | Comment   |
|--------|---|------------------|---|--|--|------------------|----------------|---|
| EMP 42 | Inspection of permanent hydrocarbon storage facilities  | Three<br>monthly | All hydrocarbon<br>storage devices<br>comply with<br>appropriate<br>standards and/or<br>regulations | Non-compliant hydrocarbon storage<br>devices to be replaced/repaired as<br>appropriate.  | Refer to EMP 23  | С                | С              | Refer to EMP 23   |
| 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  | <ul> <li>Investigate the cause.</li> <li>Investigation opportunities to prevent re-occurrences.</li> <li>Inform farm owners of outcomes of the survey.</li> <li>In the event of chemical discharge contrary to Environmental Protection (Unauthorised Discharges)         Regulations 2004, report to DPW AND/OR DER.</li> </ul> | 2022.EMP43a Buffer vegetation condition assessment – 2022/2023  2022.EMP43b Email re. buffer condition | PNC              | NR             | Weaber Plain Baseline vegetation condition assessment and mapping was undertaken in 2011 (Botanical North 2011).  The current auditor conducted vegetation (habitat) condition assessments, including weed assessment, in the Weaber Plain and Knox Creek buffer areas in 2022 and early 2023 to comply with conditions of the Authorisation under the BC Act. Vegetation condition assessments are details in evidence item 2022.EMP43a  The auditor also observed buffer vegetation condition while undertaking the 2022 CALIM audit. There appeared to be some signs of spray drift impact in some of the elongated and small sections of the buffer area that are surrounded by farm lots. Altered hydrology (inundation) in some of these parts of the buffer was also considered to be a factor. These observations were made at the tail end of the dry season thus a seasonal affect was also likely to be at play.  This item is assessed as potentially non-compliant due to some signs of impact to portions of the buffer area requiring further investigation.  DPIRD is planning to procure services in 2023/2024 to assist in resolving this item.  Knox Creek Plain  Baseline vegetation condition assessment and mapping was undertaken in 2015 (Ord Land and Water 2015).  The Knox Creek Plain buffer area has not yet been established by fencing, destocking an installation of signage. The buffer area will be established in parallel with infrastructure and farm development. |

| Item   | Activity and location   | Frequency  | Target             | Corrective action  | Evidence  | Status<br>Weaber | Status<br>Knox | Comment   |
|--------|---|--|--------------------|--|---|------------------|----------------|---|
| EMP 44 | Inspect<br>storage<br>facilities and<br>mixing and<br>washdown<br>areas, and<br>surrounds for<br>chemical<br>spills | Daily during<br>spray<br>operations<br>Monthly at<br>other times | No chemical spills | <ul> <li>Implement emergency response.</li> <li>Classify appropriate response.</li> <li>Notify authorities if High or Moderate incident impact classifications.</li> <li>Review Emergency Response Plan (for High and Moderate incident impact classes).</li> <li>Prepare and implement follow-up environmental monitoring (in consultation with DPW AND/OR DER and DoW as required).</li> </ul> | 2022.EMP2a File Note interview, 11 April 2023  2022.EMP5 File Note site inspection photos | C                | NR/C           | Weaber Plain Refer to EMP 23 and EMP 39  Knox Creek Plain Farming has not yet commenced on the in the Knox Creek Plain development area therefore no mixing occurs here. Refer to EMP 23 regarding hydrocarbon storage. |

## **Dust and particulate management actions**

| Item   | Action   | Purpose   | Timing  | Evidence  | Status<br>Weaber | Status<br>Knox | Comment   |
|--------|--|---|---|---|------------------|----------------|---|
| EMP 45 | Burning of vegetation will occur<br>only at times when prevailing<br>winds direct smoke and ash away<br>from residential areas               | To minimise the potential for smoke and ash to affect nearby residents  | Ongoing from commenceme nt of ground disturbance      | Not applicable                                      | С                | С              | There are no residential areas nearby the Weaber and Knox Creek Plan development areas.   |
| EMP 46 | Provide prospective farm owners/leasees documentation on practices to prevent dust emissions   | To reduce the potential for dust generation by minimising ground disturbance                                  | At time of sub-<br>lease                              | 2022.EMP2a<br>File Note interview,<br>11 April 2023 | С                | С              | Refer to evidence document.   |
| 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   | Not applicable                                      | С                | С              | There are no residential areas nearby the Weaber and Knox Creek Plan development areas.   |
| EMP 48 | Cleared construction surfaces<br>and stockpiles will be watered<br>and/or stabilised where<br>practicable to reduce dust lift-off            | To reduce the potential for environmental and community impacts by reducing the potential for dust generation | During<br>construction of<br>shared<br>infrastructure | Not applicable                                      | NR               | NR             | This item as assessed as NR because no shared infrastructure was constructed in 2022.   |
| 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 commenceme nt of ground disturbance      | 2022.EMP2a<br>File Note interview,<br>11 April 2023 | С                | С              | KAI advised that this is addressed at staff induction. While conducting the 2022 CALIM audit in August 2022, the auditor observed water trucks watering tracks. |

### **Dust and particulate monitoring regime**

| Item   | Activity and location   | Frequency   | Target  | Corrective action   | Evidence   | Status<br>Weaber | Status<br>Knox | Comment  |
|--------|---|---|---|---|--|------------------|----------------|--|
| EMP 50 | Visual<br>monitoring  | Daily during construction of shared infrastructure    | No offsite impact on amenity  | <ul> <li>Investigate cause.</li> <li>Implement additional dust control measures, as appropriate.</li> </ul>     | Refer to EMP<br>46 and 49.                             | NR               | NR             | This item as assessed as NR because no shared infrastructure was constructed in 2022. However, refer to EMP 45 to 47, and EMP 49.                          |
| EMP 51 | Monitor<br>community<br>issues<br>associated with<br>dust/burning | During<br>construction of<br>shared<br>infrastructure | No public<br>complaints relating<br>to dust generated by<br>the project | Public complaints will be recorded and responded to in accordance with the Community Issues Management Subplan. | 2022.EMP2a<br>File Note<br>interview, 11<br>April 2023 | NR               | NR             | This item as assessed as NR because no shared infrastructure was constructed in 2022.  Despite this, KAI advised that no complaints were received in 2022. |

## Weed, plant pathogen and pest animal management actions

| Item    | Action  | Purpose                               | Timing                      | Evidence       | Status<br>Weaber | Status<br>Knox | 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:  • 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 | Not applicable | CLD              | -              | Weaber Plain Item assessed as completed in 2012 (Strategen 2013b). Refer to Botanical North (2012a), and Botanical North (2012b).  Knox Creek Plain 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:  • 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.  | To provide data to inform management. | Prior to ground disturbance | Not applicable | -                | CLD            | Item assessed as completed in 2015 (Strategen 2016). Refer to Ord Land and Water (2015).   |

| Item   | Action  | Purpose   | Timing   | Evidence   | Status<br>Weaber | Status<br>Knox | Comment  |
|--------|---|---|--|--|------------------|----------------|--|
| EMP 53 | Establish permanent weed survey transects within 100 m into the Weaber Plain Buffer Area.   | To ensure repeatability of ongoing weed monitoring. | Prior to ground disturbance                        | Not applicable   | PNC              | С              | Weaber Plain Strategen (2013c) noted that Phase 2 weed transects were installed in July and August 2012 in accordance with the Phase 2 Weed Control Program (Strategen 2012).  |
|        |   |   |  |  |                  |                | The weed transects have not been maintained, therefore, this item is assessed as potentially noncompliant.   |
|        |   |   |  |  |                  |                | Knox Creek Plain The Knox Creek Plain weed transects (Ord Land and Water 2015) will be revisited and reestablishment in parallel with the establishment of the Knox Creek Plain buffer area (destocking and fencing), farm and infrastructure development.   |
| EMP 54 | Conduct weed surveys along permanent weed survey transects (and opportunistically between permanent weed survey transects) to establish baseline information (i.e. weed species   | To provide data to inform management.               | Annually, from commenceme nt of ground disturbance | 2022.EMP43a Buffer vegetation condition assessment – 2022/2023 | PNC              | С              | Weaber Plain Weed transects have not been maintained and annual updates of priority management areas have not occurred, therefore, this item is assessed as potentially non-compliant despite an earlier auditor's finding that this item was completed.   |
|        | <ul> <li>and density/cover/distribution of weeds) and identify and update Priority Areas for management and control. Priority Areas will be defined by:</li> <li>weed infested areas (e.g. monocultures of neem trees,</li> </ul> |   |  |  |                  |                | The current auditor conducted vegetation (habitat) condition assessments, including weed assessment, in the Weaber Plain and Knox Creek buffer areas in 2022 and early 2023 to comply with conditions of the Authorisation. Vegetation condition assessments are detailed evidence item 2022.EMP43a. |
|        | weed density/cover greater than 50%)  areas that have declared noxious weed species and Weeds of National   |   |  |  |                  |                | KAI undertakes <i>Parkinsonia aculeata</i> control measures in the Weaber Plain buffer area.  Knox Creek Plain   |
|        | <ul> <li>Significance (WONS)</li> <li>areas declared as local priority in consultation with DPW AND/OR DER, DAFWA and Ord Land and Water Inc.</li> </ul>  |   |  |  |                  |                | As above Also refer to EMP 53  |

| Item   | Action   | Purpose  | Timing   | Evidence  | Status<br>Weaber | Status<br>Knox | Comment   |
|--------|--|--|--|---|------------------|----------------|---|
| EMP 55 | Update the extent of Priority Areas which will be defined by: 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 commenceme nt of ground disturbance               | 2022.EMP2a File Note interview, 11 April 2023       | PNC              | С              | Weaber Plain These updates have not been occurring therefore this item is assessed as potentially non-compliant. KAI advised that it has been undertaking Parkinsonia aculeata control measures in the buffer area.  Knox Creek Plain Refer to EMP 53 |
| 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                                      | 2022.EMP2a<br>File Note interview,<br>11 April 2023 | PNC              | С              | Weaber Plain Refer to EMP 55  Knox Creek Plain Refer to EMP 53  |
| EMP 57 | Implement an induction program for personnel which contains information on:  • 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  • requirement to remain within designated clearing areas.      | To reduce the risk of construction activities introducing and/or spreading weeds and plant pathogens by ensuring construction personnel are aware of appropriate management measures and requirements. | Within one<br>week of<br>personnel<br>commencing<br>work on-site | 2022.EMP5<br>KAI Environment<br>Induction 2022      | С                | С              | Refer to evidence document.   |

| Item   | Action   | Purpose  | Timing               | Evidence   | Status<br>Weaber | Status<br>Knox | Comment  |
|--------|--|--|----------------------|--|------------------|----------------|--|
| EMP 58 | Prepare guidelines for prospective farmers/lessees that contains information on:  • 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 | 2022.EMP5 KAI Environment Induction 2022 2022.EMP2a File Note interview, 11 April 2023 | CLD              | CLD            | Weaber Plain Item assessed as completed in a previous audit period.  Knox Creek Plain Refer to evidence documents. |

| Item   | Action  | Purpose  | Timing                                   | Evidence                                    | Status<br>Weaber | Status<br>Knox | Comment   |
|--------|---|--|--|---|------------------|----------------|---|
| EMP 59 | Develop and supply an information package to prospective farm owners/lessees/managers within the project area that contains:  • 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)  • 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. | 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                     | Not applicable                              | CLD              | N/A            | Weaber Plain Item assessed as completed in a previous audit period.  Knox Creek Plain Item not included in Knox EMP   |
| EMP 60 | Topsoil from areas with known declared weed species will be managed in 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             | Not applicable                              | NR               | N/A            | Weaber Plain There was no topsoil removed from the Weaber Plain development area in 2022.  Knox Creek Plain 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 commenceme nt of irrigation | 2022.EMP5 File Note- Site inspection photos | С                | NR             | Weaber Plain Aquatic weed control is undertaken in the M2 irrigation channel. The auditor saw no evidence of aquatic weeds in the Border Creek or Keep River during the 2022-2023 wet season water quality monitoring program.  Knox Creek Plain Irrigation has not yet commenced in the Knox Creek Plain development area. |

| Item   | Action  | Purpose  | Timing   | Evidence  | Status<br>Weaber | Status<br>Knox | Comment   |
|--------|---|--|--|---|------------------|----------------|---|
| EMP 62 | Restrict movement of vehicles and machinery to the limits of the areas to be cleared (thus not affecting the Weaber Plain Buffer Area) by delineating the Weaber 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 commenceme nt of ground disturbance | 2022.EMP2a File Note interview, 11 April 2023       | NR               | С              | Weaber Plain There was not clearing in the Weaber Plain development area in 2022.  Knox Creek Plain DPIRD met with KAI on 26 April 2023 to assess compliance with condition 1-4 (Works Plan) and conditions 1-6, 1-7, and 1-8 of the authorisation to take/disturb Typhonium sp. Kununurra at Knox (TFL 001-2122, as amended) (Authorisation). 2022.EMP6a provides the record of this meeting.  |
|        |   |  |  |   |                  |                | <ul> <li>Relevant to EMP 3, KAI confirmed that:</li> <li>The development boundaries were surveyed by a licensed surveyor (SML Land Surveyors) consistent with the deposited plan.</li> <li>Boundaries marked with star pickets and tape.</li> <li>Surveyor marked the boundary ahead of the dozer. Boundaries were cleared first.</li> <li>The auditor conducted regular site visits throughout 2022 and observed machinery only operating during the dry season.</li> </ul>  |
| EMP 63 | Access into the Weaber Plain Buffer Area will be via designated access tracks only.   | To reduce the risk of weeds being introduced into/ spread throughout the Buffer Area by limiting access. | Ongoing from commenceme nt of ground disturbance | 2022.EMP2a<br>File Note interview,<br>11 April 2023 | С                | С              | Weaber Plain No unauthorised access to the buffer area was observed by the auditor during multiple site visits over the course of the compliance period.  The auditor further notes that the Weaber Plain buffer area is difficult to access as it is substantially separated from the development area and roads by hillside drains and flood protection levees.  KAI confirmed during interview on 11 April 2023 that access to the buffer area is restricted. This is specifically addressed in personnel site inductions.  Finally, the auditor accompanied KAI on its annual bore run on 4 October 2022 to retrieve data from groundwater data loggers. Access was via |
|        |   |  |  |   |                  |                | designated tracks only.  Knox Creek Plain As above  |

| Item    | Action   | Purpose  | Timing  | Evidence  | Status<br>Weaber | Status<br>Knox | Comment   |
|---------|--|--|---|---|------------------|----------------|---|
| 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          | Not applicable                                      | CLD              | N/A            | Weaber Plain This item was assessed as completed in a previous audit period.  Knox Creek Plain 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<br>construction of<br>shared<br>infrastructure | Not applicable                                      | CLD              | -              | Weaber Plain Item assessed as completed in previous audit period.  Construction of shared infrastructure in the Weaber Plain Development area was completed in a previous audit period.  Knox Creek Plain 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 pathogens in the project  | During<br>construction of<br>shared<br>infrastructure | 2022.EMP2a<br>File Note interview,<br>11 April 2023 | -                |                | KAI confirmed during interview on 11 April 2023 that all large machinery that has entered the Knox Creek Plain development area is from outside Western Australia and been subject to quarantine inspection. No machinery has entered the development area has subsequently exited and reentered. |
| 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<br>construction of<br>shared<br>infrastructure | Not applicable                                      | NR               | N/A            | Weaber Plain Refer to EMP 65  Knox Creek Plain Item not included in Knox EMP  |

| Item   | Action   | Purpose   | Timing  | Evidence  | Status<br>Weaber | Status<br>Knox | Comment   |
|--------|--|---|---|---|------------------|----------------|---|
| EMP 67 | Record in a hygiene logbook (located at all clean-down sites) the:  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<br>construction of<br>shared<br>infrastructure | Not applicable                                      | NR               | N/A            | Weaber Plain Refer to EMP 65  Knox Creek Plain 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 commenceme nt of ground disturbance      | 2022.EMP2a File Note interview, 11 April 2023       | С                | С              | Weaber Plain KAI confirmed during interview on 12 April 2023 that no external fill was used during the compliance assessment period. The auditor saw no evidence of soil or fill material being used in the Weaber Plain development area during any of the site inspections undertaken during the compliance assessment period.  Knox Creek Plain As above |
| 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                           | Item assessed as completed in previous audit period | С                | С              | Weaber Plain No new borrow pits were established in 2022. Knox Creek Plain As above   |

| Item   | Action  | Purpose  | Timing  | Evidence   | Status<br>Weaber | Status<br>Knox | Comment   |
|--------|---|--|---|--|------------------|----------------|---|
| EMP 70 | Rehabilitate disturbed areas that are not to be utilised post-construction in accordance with the Rehabilitation Management Sub-plan. | To re-establish native vegetation and reduce and control weed cover.               | During<br>construction of<br>shared<br>infrastructure | Not applicable   | С                | С              | Weaber Plain There are no current rehabilitation areas in the Weaber Plain development area or buffer area. As noted by the previous auditor (KBC 2022), rehabilitation activities were completed by Leighton Contractors or others for LandCorp at the completion of construction (~2012-14). This includes the construction compound area in the Weaber Plain buffer area adjacent to Moonamang Road. |
|        |   |  |   |  |                  |                | Knox Creek Plain  There are no areas proposed for rehabilitation in the Knox Creek Plain FPDP area. The previous auditor (KBC 2022) noted KAI's advice that the development of the Knox Creek Plain will not result in the clearing of areas that will require subsequent rehabilitation.  The Main Roads rehabilitation sites have been  |
|        |   |  |   |  |                  |                | absorbed into the Knox farm and Knox Supply Channel corridor.   |
| EMP 71 | Ensure that waste that may attract pest animals is properly disposed of in as far as is practicable.                                  | To prevent the encouragement of pest animals by ensuring effective waste disposal. | Ongoing from commenceme nt of ground disturbance      | 2022.EMP2a File Note interview, 11 April 2023  2022.EMP5 File Note- Site inspection photos | С                | С              | 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 commenceme nt of ground disturbance      | 2022.EMP2a<br>File Note interview,<br>11 April 2023  | С                | С              | Weaber Plain The auditor was present in the Weaber Plain development area on 29 October 2022 and observed the implementation of a pest eradication program. This was also confirmed in the audit interview.  Knox Creek Plain   |
|        |   |  |   |  |                  |                | Confirmed in the audit interview.   |

| Item   | Action   | Purpose   | Timing   | Evidence  | Status<br>Weaber | Status<br>Knox | Comment  |
|--------|--|---|--|---|------------------|----------------|--|
| EMP 73 | Install signs at the entry point to any access tracks in the Weaber 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 commenceme nt of planting of crops      | 2022.S1_10a<br>CALIM audit, 22<br>August 2022<br>2022.S1_2.10b<br>CALIM map | С                | С              | Weaber Plain The auditor observed signage during the CALIM audit site inspection on 22 August 2022 Also refer to EMP 63  Knox Creek Plain The Knox Creek Plain buffer area has not yet been established by fencing, destocking an installation of signage. The buffer area will be established in parallel with infrastructure and farm development. |
| EMP 74 | Ensure stock are removed from the Buffer Area.   | To remove stock as an ongoing source of land degradation and a vector for introducing and spreading weeds throughout the Buffer Area. | Ongoing from commenceme nt of ground disturbance | 2022.EMP74<br>Email advice from<br>KAI re. destocking                       | С                | С              | Weaber Plain Refer to evidence document.  Knox Creek Plain The Knox Creek Plain buffer area is not yet been established by fencing, destocking an installation of signage. The buffer area will be established in parallel with infrastructure and farm development.   |

## Weed, plant pathogen and pest animal monitoring regime

| Item   | Activity and location   | Frequency*  | Target   | Corrective action  | Evidence  | Status<br>Weaber | Status<br>Knox | Comment   |
|--------|---|-------------|--|--|---|------------------|----------------|---|
| EMP 75 | Weed species<br>found along<br>permanent<br>weed survey<br>transects in the<br>buffer                                   | Annually    | No new plant pathogens or weed species observed or recorded in the mapped area during construction.  No new Priority Areas during construction.            | <ul> <li>Map the extent of any new Priority Areas.</li> <li>Map the distribution of the newly introduced species.</li> <li>Identify activities that may have potentially introduced the species.</li> <li>Plan and implement a monitoring or control treatment program.</li> <li>Re-educate contractors/farm owners/managers of the importance of hygiene control measures.</li> </ul> | Refer to EMP<br>53 and EMP 54   | PNC              | С              | Refer to EMP 53 and EMP 54  |
| EMP 76 | Density/cover/d istribution 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 | <ul> <li>Map the extent of any new Priority Areas.</li> <li>Map the revised extent of the specific weed species within the site.</li> <li>Identify activities that may have potentially spread the weed species.</li> <li>Plan and implement a weed control treatment program.</li> <li>Apply hygiene control and education measures.</li> </ul>                                       | Refer to EMP<br>53 and EMP 54   | PNC              | С              | Refer to EMP 53 and EMP 54  |
| EMP 77 | Presence of declared weeds in farm lots.  | As required | No declared weed species present.  | <ul> <li>Notify DAFWA if required.</li> <li>Investigate cause.</li> <li>Undertake weed control in accordance with DAFWA requirements.</li> <li>Monitor success of weed control.</li> </ul>   | 2022.S1_10a<br>CALIM audit, 22<br>August 2022<br>2022.EMP2a<br>File Note<br>interview, 11<br>April 2023 | C                | NR             | Weaber Plain No declared weeds were observed in farm lots during the 2022 compliance assessment period. Parkinsonia was observed in the CALIM area and the Weaber Plain buffer area in 2022. KAI advised that it has been undertaking Parkinsonia aculeata control measures in the buffer area. Given KAI's reported control measures, this item is assessed as compliant. The auditor will revisit these and other sites as part of the 2023 CALIM audit and environmental inspections to assess management effectiveness.  Knox Creek Plain Farm lots have not yet been established in the Knox Creek Plain development area. |

| Item   | Activity and location   | Frequency*  | Target  | Corrective action  | Evidence   | Status<br>Weaber | Status<br>Knox | Comment  |
|--------|---|-------------|---|--|--|------------------|----------------|--|
| EMP 78 | Feral animals<br>(including<br>stock) in the<br>Weaber Plain<br>buffer area | As required | No new pest<br>animals or sightings<br>of feral animals | <ul> <li>Investigate cause.</li> <li>Undertake eradication program as required.</li> <li>Undertake intervention or remediation works (e.g. reduce bins, trapping, reeducation).</li> </ul> | 2022.EMP74<br>Email advice<br>from KAI re.<br>destocking | С                | С              | Weaber Plain Refer to evidence document. Also refer to EMP 72  Knox Creek Plain The Knox Creek Plain buffer area has not yet been established by fencing, destocking an installation of signage. The buffer area will be established in parallel with infrastructure and farm development. |

### Surface water management actions

| Item    | Action  | Purpose  | Timing   | Evidence   | Status<br>Weaber | Status<br>Knox | Comment  |
|---------|---|--|--|--|------------------|----------------|--|
| EMP 79  | Induct personnel on surface water management measures, including:  • M2 channel may receive effluent from the Kununurra Wastewater Treatment Plant  • the potential risks from Burkholderia psudomallei, 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<br>week of<br>personnel<br>commencing<br>work on-site | 2022.EMP5<br>KAI<br>Environment<br>Induction 2022      | С                | -              | Weaber Plain Refer to evidence document.  Knox Creek Plain 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 construction personnel are aware of appropriate management measures. | Within one<br>week of<br>personnel<br>commencing<br>work on-site | Not applicable   | -                | NR             | The Knox Supply Channel has not been constructed and irrigation has not yet commenced on the Knox Creek Plain.   |
| EMP 80  | Construct levees at the perimeter of farmland adjacent to Border 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 commenceme nt of planting of crops                      | Not applicable   | CLD              | NR             | Weaber Plain Item assessed as completed in a previous audit period.  Knox Creek Plain Construction of infrastructure has not commenced in the Knox Creek Plain development area.                               |
| 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 commenceme nt of planting of crops                      | 2022.EMP2a<br>File Note<br>interview, 11<br>April 2023 | CLD              | NR             | Weaber Plain Item assessed as completed in a previous audit period. Drains are sited in accordance with the approved Weaber Plain Phase 2 FPDP (Strategen 2011).  Knox Creek Plain Refer to evidence document. |

#### **Surface water monitoring regime**

| Item   | Activity and location   | Frequency  | Target   | Corrective action  | Evidence                             | Status<br>Weaber | Status<br>Knox | 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 commence ment of ground disturbance | No exposed surfaces outside the channel from which erosion could occur | <ul> <li>Investigate cause.</li> <li>Implement erosion protection measures, such rock armouring or application of hydromulch to areas identified.</li> <li>Monitor the effectiveness of remedy.</li> </ul> | 2022.S1_10a<br>CALIM audit<br>report | С                | NR             | Weaber Plain Channels and drains are inspected annually as part of the CALIM audit.  Knox Creek Plain Construction of infrastructure (including channels and drains) has not yet commenced in the Knox Creel Plain development area. |

## **Groundwater management and monitoring actions**

| Item    | Action   | Purpose   | Timing   | Evidence   | Status<br>Weaber | Status<br>Knox | Comment   |
|---------|--|---|--|--|------------------|----------------|---|
| EMP 83  | Expand the groundwater monitoring bore network to include:  • at least 20 'high intensity' regional bores  • at least 30 'low intensity' regional bores.  Regional bore locations shown in Appendix 3                  | 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. | Item assessed as completed in previous auditing period | CLD              | -              | Weaber Plain Figure 1.1 (p. 3) in Bennett et al. (2019) illustrates the expanded monitoring bore network.  Knox Creek Plain Refer to KEMP 83  |
| KEMP 83 | Expand the groundwater monitoring bore network to include:  • 'high intensity' regional bores (i.e. auto loggers installed)  • 'low intensity' regional bores (i.e. no auto loggers installed but monitored manually). | To allow the collection of baseline and ongoing groundwater data to guide management. | Install prior to commencement of clearing of farm lots, a minimum of 18 months prior to irrigation.                  | 2022.EMP2a<br>File Note interview,<br>11 April 2023    | -                | С              | KAI advised that the groundwater monitoring bore network associated with the Knox Creek Plain development is still being established. Despite that the Knox monitoring bore network was not entirely established prior to the recent commencement of clearing on the Knox Creek Plain, KAI advised that it has tried to preserve as many of the original bores as possible to ensure data continuity.  The Knox Creek Plain bores were included in KAI's annual groundwater monitoring program (refer to KEMP84). |

| Item   | Action  | Purpose   | Timing   | Evidence   | Status<br>Weaber | Status<br>Knox | Comment  |
|--------|---|---|--|--|------------------|----------------|--|
| EMP 84 | Undertake monitoring of the parameters determined under Item 2 in bores established under Item 1.  Item 2 refers to this item (EMP 84). | 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)  • EC, pH, TDS, major cations and anions, nutrients, and pesticides seasonally. Low intensity bores:  • groundwater levels, EC, pH, TDS, nutrients and  • pesticides seasonally. | 2022.EMP84a Email from KAI attaching 2022 Groundwater monitoring data.  2022.EMP84b ALS Environmental – Certificate of Analysis issued on 25 October 2022.  2022.EMP84c Groundwater bores out of operation | PNC              | -              | Weaber Plain On 27 February 2020, the IRG endorsed changes to the groundwater monitoring program, as recommended by Bennett <i>et al</i> (2019). The revised monitoring program is illustrated and tabulated in Bennett <i>et al</i> (2019) – Figure 1.1 (page 3) and Tables 4.1 and 4.2 (pages 27 to 29).  This item is assessed as potentially non-compliant because:  • manual depth measurements were not taken at the low intensity bores. The groundwater monitoring program requires manual depth measurements to be taken annually at all bores, both high and low intensity, and  • five bores are damaged and out of operation because of flood damage:     11CS10RD (high intensity)   11WP51S (high intensity)  11WP4R (low intensity)  11WP53S (low intensity)  DPIRD has prepared a scope of work to reinstall these bores.  Knox Creek Plain Refer to KEMP 83 |

| Item    | Action   | Purpose   | Timing   | Evidence  | Status<br>Weaber | Status<br>Knox | Comment   |
|---------|--|---|--|---|------------------|----------------|---|
| KEMP 84 | Undertake monitoring of the parameters below for bores established under Item 1 (KEMP 83) High intensity bores: • groundwater levels and temperature (automatic, daily) • EC, pH, TDS, nutrients and pesticides seasonally Low intensity bores: • Groundwater levels, EC, pH, TDS, nutrients and pesticides seasonally | 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.  | 2022.EMP84a Email from KAI attaching 2022 Groundwater monitoring data.  | -                | С              | Refer to KEMP 83.   |
| EMP 85  | Undertake monitoring of the chemical and nutrient parameters determined by DWER licence conditions in bores established under Item 1   | To collect baseline and ongoing groundwater data.   | Annually at commencement of dry season commencing 12 months prior to operation of irrigation infrastructure. | Refer to EMP 84   | NR               | N/A            | Weaber Plain A licence under the RIWI Act is not required. The groundwater bores are monitoring bores, not abstraction bores. Stategen (2016) auditors recommended deletion of this action as a licence is not required. This recommendation is retained.  Knox Creek Plain 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.                                 | Bennett et al.<br>(2019)<br>2022.EMP91a<br>EPBC 2010/5491 -<br>IRG Record of<br>Meeting - 27<br>February 2020 | CLD              | С              | Weaber Plain At its meeting on 27 February 2020, the IRG accepted the recommendations of Bennett <i>et al.</i> (2019) including that (p.22):  'We do not believe that the installation and monitoring of the extra "farm bores", as proposed in the EPBC conditions (at the time when it was envisaged that there could be multiple land managers within the Goomig Farmlands), is required or necessary.'  Knox Creek Plain Refer to KEMP 87 |

| Item    | Action   | Purpose   | Timing   | Evidence                  | Status<br>Weaber | Status<br>Knox | Comment   |
|---------|--|---|--|---------------------------|------------------|----------------|---|
| EMP 87  | Determine sampling parameters for 'on farm' bores in consultation with the IRG including:  • groundwater levels  • EC  • pH  | To inform management.   | Prior to commencement of irrigation and annually after the commencement of irrigation. | Evidence as per<br>EMP 86 | NR               | -              | Weaber Plain Refer to EMP 86  Knox Creek Plain Refer to KEMP 87   |
| KEMP 87 | Determine sampling parameters for 'on farm' bores including:   | To inform management.   | Prior to commencement of irrigation and annually after the commencement of irrigation. | Not applicable            | -                | С              | Construction of farm lots has not yet commenced on the Knox Creek Plain.  It would be appropriate for the KAI, as proponent of the Knox Creek Plain Agricultural Development, under the EPBC Act to seek the Knox IRG's endorsement of the removal of the requirement for on-farm bores given the Goomig IRG's endorsement of the same in respect to the Weaber Plain (Goomig). |
| EMP 88  | Undertake monitoring of the bores established under Item Error! Reference source not found. for physical, chemical, and nutrient parameters as determined by DWER 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.                 | Not applicable            | N/A              | N/A            | Weaber Plain A licence under the RIWI Act is not required. The groundwater bores are monitoring bores, not abstraction bores. The 2015 recommendation (Strategen, 2016) that this item be deleted, is retained.  Knox Creek Plain As above  |

| Item   | Action  | Purpose   | Timing   | Evidence  | Status<br>Weaber | Status<br>Knox | Comment   |
|--------|---|---|--|---|------------------|----------------|---|
| 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. | 2022.EMP89a 2022 Groundwater monitoring data received from KAI.  2022.EMP89b DPIRD Weaber Plain hydrographs to October 2022 | С                | С              | Weaber Plain DPIRD received evidence of the groundwater monitoring database maintained by KAI in Excel spreadsheet format. This information was received by emails dated 16 June 2023. KAI also provided the 2022 logger data to DPIRD for retention in DPIRD's Hydstra data management system. The auditor notes that the quality of the database needs improvement including consolidation of the database into a single Excel document and ensuring the dates in the document titles are consistent with the content. The auditor also notes that KAI has not implemented the recommendation from Bennett et al (2019) that (p.22):  'A proprietary hydrology-specific relational database and reporting package be utilised in the future for data entry, storage, checking, analysis, and reporting.'  Knox Creek Plain As above |
| EMP 90 | Establish and maintain a database of groundwater chemical and nutrient parameters.                  | To provide data to inform management.   | Ongoing –<br>database to be<br>updated annually.   | 2022.EMP84b<br>ALS Certificate of<br>Analysis   | PNC              | PNC            | Weaber Plain DPIRD has received from KAI: ALS Environmental – Certificate of Analysis issued on 25 October 2022 (2022.EMP84b) however no evidence of retention of this and previous years' laboratory data in a data base.  Knox Creek Plain As above   |

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|-----------|---|--|--|--|---|----|---|
| EMP 91    | Update groundwater model and operation of groundwater management system with monitoring data derived from Item Error! Reference source not found., Error! Reference source not found. and Error! Reference source not found., 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 be updated every two years. | 2022.EMP91a EPBC 2010/5491 - Record of Meeting of Goomig IRG - 27 February 2020  2022.EMP91b DRAFT Record of Meeting of Goomig IRG - 28 March 2023 | C | -  | At its meeting on 27 February 2020, the IRG accepted the recommendations of Bennett et al (2019) including that (p.24-25):  'The next groundwater modelling update be undertaken after the next 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.'  The following IRG decision was recorded at its meeting on 28 March 2023:  'The IRG:  1) agreed that a review and analysis of groundwater monitoring data collected since 2019 must be completed after the collection of 2023 comprehensive data and reported as soon as practicable following that review, guided by the scope and content of the previous review completed by DPIRD in 2019 (Bennett et al 2019),  2) agreed that a scope for the review and analysis will be approved by the IRG out-of-session prior to the commencement of the review and analysis,  3) agreed that the question of whether the groundwater model should be updated be revisited after the groundwater review and analysis,  4) noted that DPIRD will review and update the Groundwater Management Plan (GMP) in consultation with KAI and the IRG and request amendments to Condition 12 of the Approval, being an outstanding action from the IRG's meeting of 27 February 2020,  5) agreed that the environmental need and consequent requirement to continue |
|           |   |  |  |  |   | -  | 5) agreed that the environmental need and consequent requirement to continue undertaking groundwater quality monitoring be considered and determined as part of the GMP review.'  Knox Creek Plain  |
|           |   |  |  |  |   |    | See KEMP 91   |

| Item    | Action  | Purpose   | Timing   | Evidence       | Status<br>Weaber | Status<br>Knox | Comment   |
|---------|---|---|--|----------------|------------------|----------------|---|
| 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. | Not applicable | -                | NR             | Irrigation has not commenced in the Knox Creek Plain development area.  |
| 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.   | Not applicable | NR               | -              | Weaber Plain To be determined following the outcomes of future modelling (refer to comments in relation to EMP 91).  Knox Creek Plain See 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.                              | 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.   | Not applicable | -                | NR             | To be determined following the outcomes of future modelling. Also refer to comment in relation to KEMP 91.  |

| Item   | Action  | Purpose   | Timing   | Evidence  | Status<br>Weaber | Status<br>Knox | Comment      |
|--------|---|---|--|---|------------------|----------------|--------------|
| 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. | 2022.S1_2.7 Goomig-Knox Surface Water Report 2022 (KAI, 2023)  2022.EMP93a EPBC 2010/5491 – IRG Record of Meeting – 14 September 2022.  2022.EMP93b IRG Agenda Item 6 - meeting of 14 September 2022.  2022.EMP93c IRG Agenda Item 6 Attachment A – meeting of 14 September 2022. | C                |                | Neaber Plain |

protective concentration (PC) the concentration of a substance that is predicted to protect a specified percentage of species from adverse effects (Australian & New Zealand Guidelines for Fresh & Marine Water Quality (ANZG) 2019). PC99 is the concentration protective of 99% of species. The approved Surface and Groundwater Discharge Management Plan (EPBC 2010/5491) applies PC99 as an 'early detection indicator'. This protective concentration is applicable to high conservation/ecological values systems.

| Item    | Action   | Purpose   | Timing  | Evidence       | Status<br>Weaber | Status<br>Knox | Comment   |
|---------|--|---|---------|----------------|------------------|----------------|---|
| 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 | Not applicable | -                |                | Irrigation and consequent agricultural stormwater discharge has not commenced in the Knox Creek Plain development area. The Knox development will adopt the same water quality trigger values for the Keep River as the Weaber Plain development. |

### **Groundwater contingency actions**

| Item   | Trigger   | Corrective action  | Timing   | Evidence  | Status<br>Weaber | Status<br>Knox | Comment  |
|--------|---|--|--|---|------------------|----------------|--|
| EMP 94 | Groundwater levels, soil salinity and quality exceed or are likely to exceed trigger levels | <ul> <li>Investigate cause.</li> <li>Implement actions consistent with<br/>Groundwater Management Plan<br/>Appendix 3 (e.g. modify land<br/>use/irrigation strategies,<br/>groundwater extraction).</li> <li>Document changes in Annual<br/>Environmental Report (AER).</li> </ul> | Refer<br>Groundwater<br>Management<br>Plan Appendix<br>3 | 2022.EMP91b<br>DRAFT Record of<br>Meeting of Goomig<br>IRG – 28 March<br>2023 | PNC              | NR             | Weaber Plain An assessment of 2022 groundwater level and quality data has not been completed therefore the auditor has assessed this item as potentially noncompliant.  In accordance with the IRG's decision of 28 March 2023, a review and analysis of groundwater monitoring data collected since 2019 will be completed as soon as practicable following the collection of 2023 comprehensive data. The review will be guided by the scope and content of the previous review completed by DPIRD in 2019 (Bennett et al 2019). The comprehensive review will look at and analyse groundwater levels and quality and consider whether any corrective actions should be undertaken. The question of whether the groundwater model should be updated will also be revisited after the groundwater review and analysis.  Knox Creek Plain Refer to KEMP 91 |

| ltem   | Trigger   | Corrective action   | Timing   | Evidence  | Status<br>Weaber | Status<br>Knox | Comment  |
|--------|---|---|--|---|------------------|----------------|--|
| EMP 95 | Levels of chemicals and nutrients exceed scenarios that show:  • an increasing trend in the concentration of any chemical (at statistical confidence levels)  • an exceedance of the site-specific triggers for a particular chemical over two consecutive years. | <ul> <li>Implement Item 8 and 9 (Table 14) to better map the distribution of groundwater exceeding target levels.</li> <li>Investigate cause.</li> <li>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.</li> <li>Implement remedial action immediately after trigger levels are exceeded or, in consultation with the IRG, at an appropriate time.</li> <li>Monitor success of remedy quarterly for 12 months or, following consultation with the IRG and in accordance with the advice from the IRG.</li> <li>Document changes in Annual Environmental Report (AER).</li> </ul> | Refer<br>Groundwater<br>Management<br>Plan Appendix<br>3 | 2022.EMP91b DRAFT Record of Meeting of Goomig IRG – 28 March 2023 | PNC              | NR             | Weaber Plain EMP 94  Knox Creek Plain Refer to KEMP 91 |

#### Discharge management actions

| Item    | Action  | Purpose   | Timing                               | Evidence   | Status<br>Weaber | Status<br>Knox | Comment  |
|---------|---|---|--------------------------------------|--|------------------|----------------|--|
| EMP 96  | Construct a tailwater retention area on each farm lot sufficient to retain stormwater runoff during the periods most critical (low flow periods) to the Keep River system in consultation with DAFWA and the Office of the Environmental Protection Agency. | Capacity to manage runoff to avoid transporting chemicals downstream. | Prior to commencement of irrigation  | KBC, 2022.   | С                | NR             | Weaber Plain As noted by the previous auditor (KBC 2022), tailwater retention dams have been established to service all operating farm lots. Lots 4, 7, 11 and 15 remaining uncleared and not yet in operation.  Knox Creek Plain 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  | Not applicable   | NR               | NR             | Irrigation has not commenced in the Knox Creek Plain development area.   |
| 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 | 2022.EMP97 Photo at DW1 stormwater outlet, 7 September 2022. | С                | NR             | Weaber Plain There were no tailwater releases from the Weaber Plain (Goomig) development in 2022 thus evidencing that tailwater retention capacity was not exceeded. The photo at evidence item 2022.EMP97 shows nil discharge at the Weaber Plain (Goomig) stormwater outlet towards the end of the dry season (photo taken 7 September 2022).  Knox Creek Plain Refer to KEMP 96 |

| Item    | Action   | Purpose  | Timing                              | Evidence   | Status<br>Weaber | Status<br>Knox | Comment   |
|---------|--|--|-------------------------------------|--|------------------|----------------|---|
| EMP 98  | Provide an Information Package to prospective landowners/lessees, which:  • outlines the susceptibility of soil to erosion from high intensity rainfall during the wet season,  • encourages maintenance of crop cover during the wet season to reduce soil erosion,  • outlines optimal irrigation strategies to reduce potential impacts of sodicity and salinity,  • includes information regarding identification of salinity and sodicity and mechanisms to report this to the Proponent. | To minimise the potential for agricultural practices to result in erosion by ensuring prospective landowners are aware of the risks and appropriate management measures. | At sublease of farm lots            | Not applicable   | CLD              | CLD            | Weaber Plain   Item assessed as completed in a previous audit period.   Knox Creek Plain   Item assessed as completed in the 2021 audit period.   |
| EMP 99  | Determine AUSRIVAS trigger score levels for aquatic macro-invertebrates in consultation with the IRG.  | To manage the discharge of stormwater and surplus groundwater to protect the downstream environment and EPBC listed species.   | Prior to commencement of irrigation | 2022.EMP99 Variation to approval conditions (EPBC 2010/5491) – 28 March 2014 | CLD              | -              | <ul> <li>Weaber Plain</li> <li>Condition 11F of EPBC 2010/5491 was amended on 28 March 2014 to require the following in places of AUSRIVAS trigger score levels:</li> <li>11F. Use of best practice multivariate analyses on species level marco-invertebrate and fish assemblage data, within an adequate experimental design (as defined in the Aquatic Fauna Management Plan required under condition 10), using multiple indices of 'ecological condition' and a 'weight of evidence' approach, to assess any change in ecological health of Keep River pools (K1, K2 &amp; K3) relative to baseline and upstream reference sites.</li> <li>Knox Creek Plain</li> <li>Refer to KEMP 99</li> </ul> |
| 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 | Not applicable   | NR               | NR             | Irrigation has not commenced in the Knox Creek Plain development area.  Also refer to comments in relation to EMP 93.   |

| Item        | Action   | Purpose  | Timing   | Evidence   | Status<br>Weaber | Status<br>Knox | 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 DPIRD, DWER and the IRG. | To ensure key chemicals and nutrients are included in water quality monitoring.                      | Prior to<br>commencement<br>of planting of<br>crops, then<br>ongoing<br>annually | 2022.EMP93a EPBC 2010/5491 – IRG Record of Meeting – 14 September 2022.  2022.EMP100 IRG Agenda Item 7 - meeting of 14 September 2022. | С                | -              | Weaber Plain Refer to evidence documents.  Knox Creek Plain Refer to KEMP 100   |
| KEMP<br>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<br>commencement<br>of planting of<br>crops, then<br>ongoing<br>annually | Not applicable   | NR               | NR             | Irrigation has not commenced in the Knox Creek Plain development area.  |
| 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                                       | 2022.EMP97<br>Photo at DW1<br>stormwater outlet, 7<br>September 2022.  | PNC              | -              | Weaber Plain A water quality and flow gauging station was installed during the Weaber Plain development construction phase. The gauging station is collecting data via a Troll logger. However, the flow gauging station is not functioning as designed as it is not transmitting data on a continual basis through telemetry.  Knox Creek Plain See KEMP 101 |
| KEMP<br>101 | Install a water quality and flow gauging station at the stormwater outlet from the Development Area.   | 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.               | Not applicable   | NR               | NR             | Irrigation has not commenced in the Knox Creek Plain development area.  |

| Item        | Action   | Purpose   | Timing  | Evidence  | Status<br>Weaber | Status<br>Knox | Comment   |
|-------------|--|---|---|---|------------------|----------------|---|
| EMP 102     | Monitor water quality at the stormwater outlet from the Development Area, in consultation with DPIRD, DWER and DBCA.   | 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) | 2022.S1_2.7 Goomig-Knox Surface Water Report 2022 (KAI, 2023)  2022.EMP91b DRAFT Record of Meeting - IRG – 28 March 2023  2022.EMP102a IRG Agenda Item 3 - meeting of 28 March 2023.  2022.EMP102b IRG Agenda Item 3 Attachment A – meeting of 28 March 2023. | С                | -              | Weaber Plain Refer to evidence documents.  Knox Creek Plain Refer to KEMP 102 |
| KEMP<br>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) | Not applicable  | NR               | NR             | Irrigation has not commenced in the Knox Creek Plain development area.        |
| 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                                      | Refer to the Northern Territory Government Water Data Portal: Data - The NT Water Data Portal (aquaticinformatics. net)  Gauging Stations: G8100225 - Keep River - Legune Rd Xng, and  G8100106 - Border Crk - Weaber Range                                   | C                | -              | Weaber Plain Refer to evidence documents.  Knox Creek Plain Refer to KEMP 109 |

| Item        | Action   | Purpose   | Timing                                  | Evidence  | Status<br>Weaber | Status<br>Knox | Comment   |
|-------------|--|---|---|---|------------------|----------------|---|
| EMP 104     | Monitor water flow at the stormwater outlet from the Development Area, Border Creek and the Keep River, determined in consultation with IRG, DPIRD, DWER and DBCA. | 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 | 2022.S1_2.7 Goomig-Knox Surface Water Report 2022 (KAI, 2023)  2022.EMP97 Photo at DW1 stormwater outlet, 7 September 2022. | PNC              | -              | Weaber Plain A water quality and flow gauging station was installed during the Weaber Plain development construction phase. The gauging station is collecting data via a Troll logger. However, the flow gauging station is not functioning as designed as it is not transmitting data on a continual basis through telemetry.  Flow gauging stations are operational on the Border Creek and Keep River.  Knox Creek Plain Refer to KEMP 104 |
| KEMP<br>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               | 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 | Not applicable  | -                | NR             | Irrigation has not commenced in the Knox Creek Plain development area.  |

| Item        | Action  | Purpose  | Timing  | Evidence   | Status<br>Weaber | Status<br>Knox | Comment   |
|-------------|---|--|---|--|------------------|----------------|---|
| EMP 105     | Develop and implement an adaptive groundwater and stormwater discharge program that addresses:  • design and location of dewatering infrastructure,  • design and location of discharge infrastructure,  • discharge rates, rules, and contingency actions,  • 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. | 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 | Groundwater – refer to evidence at EMP 91 and 95.  2022.EMP102b IRG Agenda Item 3 Attachment A – meeting of 28 March 2023. | C                |                | Weaber Plain Groundwater discharge is not required at this stage. As noted in relation to EMP 91 and 95, a review and analysis of groundwater monitoring data collected since 2019 will be completed as soon as practicable following that review, guided the scope and content of the previous review completed by DPIRD in 2019 (Bennett et al 2019). The comprehensive review will look at and analyse groundwater levels and quality and consider whether any corrective actions should be undertaken. The question of whether the groundwater model should be updated will also be revisited after the groundwater review and analysis.  Stormwater discharge occurs during the wet season when on site stormwater retention capacity is exceeded. In the absence of telemetered flow monitoring at the DW1 gauging station and consequent ability to conduct monitoring on a flow proportional basis, DPIRD commenced implementation of an intensive water quality sampling program in the 2022-2023 wet season with monitoring frequency increased to weekly. This was reported to the IRG at is meeting on 28 March 2023 (refer to the evidence for further detail).  Knox Creek Plain Irrigation has not yet commenced in the Knox Creek Plain development area. |
| EMP 106     | Refine the discharge dilution model/relationship based on river flow monitoring data and water quality history from the Ord Stage 1 D4 drain and available water quality data from the Keep River system.   | To determine when flow rates at Border Creek and the Keep River fall below a minimum flow rate to enable flushing. | Prior to commencement of irrigation   | Not applicable   | С                | -              | Weaber Plain While this item was assessed as completed in a previous audit, DPIRD is pursuing further investigations to improve understanding of risk inform adaptive management and continual improvement. Recent investigative outputs include Romero, J. (2023), Reynolds, S. & Morgan, D. (2023) and Warne M.St.J. and Sluggett, R. (2023).  Knox Creek Plain Refer KEMP106   |
| KEMP<br>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   | Not applicable   | -                | NR             | Irrigation has not commenced in the Knox Creek Plain development area.  |

| Item        | Action  | Purpose  | Timing   | Evidence          | Status<br>Weaber | Status<br>Knox | Comment   |
|-------------|---|--|--|-------------------|------------------|----------------|---|
| 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 | Romero, J. (2023) | С                | NR             | Weaber Plain Refer to Romero, J. (2023)  Knox Creek Plain Irrigation has not commenced in the Knox Creek Plain development area |
| 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  | Romero, J. (2023) | С                | -              | Weaber Plain Refer to Romero, J. (2023)  Knox Creek Plain Refer to KEMP 108   |
| KEMP<br>108 | Review/refine trigger values for the Keep River pools.  | To update discharge model.   | Annually   | Not applicable    | -                | NR             | Irrigation has not commenced in the Knox Creek Plain development area   |

## Discharge monitoring regime and corrective actions

| Item    | Activity and location  | Frequency  | Target   | Corrective action  | Evidence  | Status<br>Weaber | Status<br>Knox | 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> <li>Investigate cause. This could include examining management practices and identifying instances where water may have been unnecessarily discharged during low flow periods.</li> <li>Conduct an intensive water quality sampling program upstream and downstream of the discharge point.</li> <li>Immediately initiate processes to identify whether remedial action is required, in consultation with the IRG. Remedial actions could include:         <ul> <li>releasing irrigation water from the M2 channel into Border Creek</li> <li>increasing groundwater pumping into the Ord Stage 1 or 2 supply channel during periods of low river flow</li> <li>installing additional erosion protection</li> <li>educating farm owners/managers</li> <li>revision of management practices (including groundwater discharge rules).</li> </ul> </li> <li>Implement remedial action/s.</li> <li>Monitor success of remedial action/s quarterly for a period of 12 months</li> <li>Report on any findings as a result of monitoring.</li> </ol> | Refer to the Northern Territory Government Water Data Portal:  Data - The NT Water Data Portal (aquaticinformat ics.net)  Gauging Stations:  G8100225 - Keep River - Legune Rd Xng, and  G8100106 - Border Crk - Weaber Range  2022.S1_2.7  Goomig-Knox Surface Water Report 2022 (KAI, 2023) | PNC              | NR             | Meaber Plain A water quality and flow gauging station was installed during the Weaber Plain development construction phase. The gauging station is collecting data via a Troll logger. However, the flow gauging station is not functioning as designed as it is not transmitting data on a continual basis through telemetry.  Knox Creek Plain Refer to KEMP 109 |

| Item        | Activity and location   | Frequency  | Target   | Corrective action  | Evidence       | Status<br>Weaber | Status<br>Knox | Comment   |
|-------------|---|--|--|--|----------------|------------------|----------------|---|
| KEMP10<br>9 | Telemetered flow monitoring at the development gauge, and the existing gauging station on 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> <li>Investigate cause. This could include examining management practices and identifying instances where water may have been unnecessarily discharged during low flow periods.</li> <li>Conduct an intensive water quality sampling program upstream and downstream of the discharge point.</li> <li>Immediately initiate processes to identify whether remedial action is required, in consultation with the IRG. Remedial actions could include:         <ul> <li>releasing irrigation water from the M2 channel into Knox Creek</li> <li>increasing groundwater pumping into the Ord Stage 1 or 2 supply channel during periods of low river flow</li> <li>installing additional erosion protection</li> <li>educating farm owners/managers</li> <li>revision of management practices (including groundwater discharge rules).</li> </ul> </li> <li>Implement remedial action/s.</li> <li>Monitor success of remedial action/s quarterly for a period of 12 months</li> <li>Report on any findings as a result of monitoring.</li> </ol> | Not applicable |                  | NR             | Construction of infrastructure and irrigation have not yet commenced on the Knox Creek Plain. |

| Item    | Activity and location  | Frequency   | Target  | Corrective action  | Evidence   | Status<br>Weaber | Status<br>Knox | Comment   |
|---------|--|---|---|--|--|------------------|----------------|---|
| 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 at three sites in the Keep River estuary (EST1, EST2, EST3). | Annually in the late dry season from the commenceme nt 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 known events that may result in exceedances of site-specific trigger values for water quality Keep River. | 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> <li>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.</li> <li>Identify remedial action required. Remedial actions could include:         <ul> <li>releasing irrigation water from the M2 channel in Border Creek</li> <li>increasing the pumping rates of the eastern bores to reduce groundwater seepage.</li> <li>increasing groundwater pumping into the Ord Stage 1 or 2 supply channel during periods of low river flow</li> <li>potentially, pending analysis, discharging groundwater into the lower Keep River estuary</li> <li>installing additional erosion protection</li> <li>educating farm owners/managers</li> <li>revision of management practices (including groundwater discharge rules)</li> <li>review flow monitoring data.</li> </ul> </li> <li>Implement remedial action/s, as required, immediately or at a time determined with the IRG to be appropriate.</li> <li>Monitor success of remedial action/s at least quarterly for 12 months.</li> <li>Report on any findings in Annual Environmental Report (AER) as a result of monitoring.</li> </ol> | 2022.EMP110<br>Indo-Pacific<br>Environmental<br>(2023) | C                |                | Meaber Plain Indo-Pacific Environmental (2023) concluded that (p.24):  'Consistent with the previous reporting period, no evidence was found in the current study to suggest there have been any anthropogenic impacts associated with the Goomig Development that have impacted the water and sediment quality, or the aquatic fauna assemblages of the lower Keep River.'  Knox Creek Plain Refer to KEMP 110 |

| Item        | Activity and location  | Frequency | Target  | Corrective action  | Evidence         | Status<br>Weaber | Status<br>Knox | Comment   |
|-------------|--|-----------|---|--|------------------|------------------|----------------|---|
| KEMP<br>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   | 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> <li>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.</li> <li>Identify remedial action required. Remedial actions could include:         <ul> <li>releasing irrigation water from the M2 channel into Border Creek to flush fresh water to the Keep River</li> <li>increasing the pumping rates of the eastern bores to reduce groundwater seepage</li> <li>increasing groundwater pumping into the Ord Stage 1 or 2 supply channel during periods of low river flow</li> <li>potentially, pending analysis, discharging groundwater into the lower Keep River estuary</li> <li>installing additional erosion protection</li> <li>educating farm owners/managers</li> <li>revision of management practices (including groundwater discharge rules)</li> <li>review flow monitoring data.</li> </ul> </li> <li>Implement remedial action/s, as required, immediately or at a time determined with the IRG to be appropriate.</li> <li>Monitor success of remedial action/s at least quarterly for 12 months.</li> <li>Report on any findings in Annual Environmental Report (AER) as a result of monitoring.</li> </ol> | Refer to EMP 110 |                  | NR             | Irrigation has not commenced in the Knox Creek Plain development area |

## **Biodiversity and habitat management actions**

| Item    | Action   | Purpose  | Timing   | Evidence   | Status<br>Weaber               | Status<br>Knox                 | 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<br>week of<br>personnel<br>commencing<br>work on-site | 2022.EMP5<br>KAI Environment<br>Induction 2022   | С                              | С                              | Refer to the evidence document.  |
| 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                                      | 2022.EMP5 KAI Environment Induction 2022   | С                              | С                              | Refer to the evidence document.  |
| 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                                      | Refer to EMP 6   | NR                             | С                              | Refer to EMP 6   |
| 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 commenceme nt of ground disturbance                 | 2022.EMP2a<br>File Note interview,<br>11 April 2023  | С                              | С                              | Weaber Plain Refer to EMP 3  Knox Creek Plain The auditor regularly inspected the Knox Creek Plain development area in 2022. Machinery was always on designated tracks.  |
| 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<br>construction of<br>shared<br>infrastructure            | 2022.938.M6.1a<br>Weaber Plain –<br>Cleared area<br>2022.938.M6.1b<br>Knox Creek Plain –<br>Cleared area | С                              | С                              | The commencement of clearing on the Knox Creek Plain in 2022 is evidence of the staged approach to clearing of vegetation. Initial clearing commenced in 2010 in the Phase 1 FPDP area to provide for the construction of enabling infrastructure including the M2 channel and the first stage of Mooanmang Road. Clearing in the Phase 2 (Weaber Plain) FPDP area commenced in 2013 and proceeded in a stage manner with Lots 4, 11 and 7 remaining to be cleared |
| EMP 116 | Manage topsoil in accordance with the Soil Management Subplan  | To provide a natural source of seed, organic matter and microorganisms for areas to be rehabilitated.  | During construction of infrastructure                            | Refer to EMP 1 to EMP 18   | Refer to<br>EMP 1 to<br>EMP 18 | Refer to<br>EMP 1 to<br>EMP 18 | Refer to EMP 1 to EMP 18   |
| 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 commenceme nt of ground disturbance                 | 2022.EMP5 KAI Environment Induction 2022  2022.EMP2a File Note interview, 11 April 2023                  | С                              | С                              | Refer to evidence documents.   |

| Item    | Action   | Purpose                            | Timing   | Evidence  | Status<br>Weaber | Status<br>Knox | Comment                      |
|---------|--|------------------------------------|--|---|------------------|----------------|------------------------------|
| 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 commenceme nt of ground disturbance | 2022.EMP5 KAI Environment Induction 2022  2022.EMP2a File Note interview, 11 April 2023 | С                | С              | Refer to evidence documents. |
|         |  |                                    |  | ,   |                  |                |                              |

## Biodiversity and habitat monitoring regime

| Item    | Activity and location  | Frequency | Target   | Corrective action  | Evidence                                  | Status<br>Weaber | Status<br>Knox | 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.  | Refer to S1_2.1<br>to S1_2.4 and<br>EMP 6 | NR               | С              | S1_2.1 to S1_2.4 and EMP 6 |
| EMP 120 | Extent of clearing and ground disturbance along predefined boundaries. | Daily     | No clearing or disturbance outside of pre-defined boundaries (Figure 1). | 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,  • rehabilitating affected area as required in accordance with the Rehabilitation Management Subplan,  • monitoring the success of remedial action. | Refer to S1_2.1<br>to S1_2.4 and<br>EMP 6 | NR               | С              | S1_2.1 to S1_2.4 and EMP 6 |

## **Buffer management actions**

| Item        | Action  | Purpose   | Timing  | Evidence                                       | Status<br>Weaber | Status<br>Knox | 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  | Refer to EMP 63                                | С                | -              | Refer to EMP 63 In addition, as noted by the previous auditor (KBC 2022), KAI previously advised that access tracks through the buffer area are not sign-posted, to minimise the risk of unauthorised access (i.e., signage would only draw attention to these access tracks and increase likelihood of unauthorised access).   |
| KEMP<br>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 EMP 63                                | -                | С              | Refer to EMP 63   |
| EMP 122     | Control human access to the buffer through provision of and 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  | Refer to EMP 63                                | С                | -              | Refer to EMP 63 In addition, as noted by the previous auditor (KBC 2022), KAI previously advised that access tracks through the buffer area are not sign-posted, to minimise the risk of unauthorised access (i.e., signage would only draw attention to these access tracks and increase likelihood of unauthorised access).  Item not included in Knox EMP (nonetheless refer to EMP 63 and EMP 121). |
| EMP 123     | Induct all personnel constructing or utilising infrastructure within the Buffer Area, including roads, channels, groundwater bores and the phone tower, to advise on protocols for hygiene, wildlife encounters, prohibited activities etc. | To minimise potential for adverse environmental impacts by ensuring personnel are informed of environmental management procedures | Within one<br>week of<br>commencing<br>work on-site | 2022.EMP5<br>KAI Environment<br>Induction 2022 | С                | -              | Refer to evidence document.   |
| KEMP<br>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<br>week of<br>commencing<br>work on-site | 2022.EMP5<br>KAI Environment<br>Induction 2022 | -                | С              | Refer to evidence document.   |

| Item        | Action  | Purpose  | Timing  | Evidence       | Status<br>Weaber | Status<br>Knox | Comment   |
|-------------|---|--|---|----------------|------------------|----------------|---|
| 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   | Not applicable | CLD              | CLD            | Weaber Plain Item assessed as completed in a previous audit period. Baseline vegetation condition assessment and mapping was undertaken in 2011 (Botanical North 2011).  Knox Creek Plain Item assessed as completed in a previous audit period. Baseline vegetation condition assessment and mapping was undertaken in 2015 (Ord Land and Water 2015).     |
| 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<br>months of<br>completion of<br>construction of<br>infrastructure  | Not applicable | CLD              | -              | Item assessed as completed in a previous audit period.  |
| KEMP<br>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<br>months of<br>completion of<br>construction of<br>infrastructure  | Not applicable | -                | NR             | Construction of infrastructure in the Knox Creek Development area has not yet commenced, other than the Moonamang Road realignment. In addition, the Knox Creek Plain buffer area has not yet been established by fencing, destocking an installation of signage. The buffer area will be established in parallel with infrastructure and farm development. |
| 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 | Not applicable | CLD              | _              | Item assessed as completed in a previous audit period.  |

| Item        | Action   | Purpose  | Timing  | Evidence  | Status<br>Weaber | Status<br>Knox | Comment  |
|-------------|--|--|---|---|------------------|----------------|--|
| KEMP<br>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 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. | Not applicable                                      | -                | NR             | Refer to KEMP 125  |
| 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<br>months of<br>completion of<br>construction of<br>infrastructure<br>and ongoing                                 | 2022.EMP2a<br>File Note interview,<br>11 April 2023 | С                | NR             | Weaber Plain KAI advised that it has been undertaking Parkinsonia aculeata control measures in the buffer area. Also refer to EMP 77  Knox Creek Plain Refer to KEMP 125 |
| EMP 128     | Liaise with DPW with regard to<br>their plans for implementation of<br>the State Cane Toad Strategy<br>(DEC 2009) in the Development<br>Area.  | To reduce the potential effect of cane toads on the Buffer Area.   | As required   | Not applicable                                      | CLD              | NA             | Item assessed as completed in a previous audit period.   |
| 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  | Not applicable                                      | CLD              | NA             | Item assessed as completed in a previous audit period.   |
| EMP 130     | Investigate the possibility of extending the DPW AND/OR DER Traditional Owner Ranger Program (Kununurra based) into the Buffer Area or incorporating other Indigenous management initiatives – consult with MG Corporation regarding shared responsibilities for maintenance of the Buffer Area. | To maximise opportunities for involvement of Traditional Owners in ongoing management of the Buffer Area   | Ongoing   | Not applicable                                      | CLD              | NA             | Item assessed as completed in a previous audit period.   |

| Item    | Action   | Purpose  | Timing  | Evidence  | Status<br>Weaber | Status<br>Knox | Comment  |
|---------|--|--|---------|---|------------------|----------------|--|
| 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 | 2022.EMP74 Email advice from KAI re. destocking   | С                | С              | Weaber Plain Refer to evidence document.  Knox Creek Plain The Knox Creek Plain buffer area is not yet been established by fencing, destocking an installation of signage. The buffer area will be established in parallel with infrastructure and farm development.   |
| 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 | 2022.EMP132 Fire scar for 2022  2022.EMP6a File Note record of meeting re. Knox section 40 authorisation. | C                | С              | The auditor was unable to assess whether the Proposal is compliant with the detailed provisions of the Fire Management Sub-plan. However, the auditor considered that the purpose of the sub-plan is being met. In forming this judgement, the auditor had regard to the following:  • fire breaks have been established and are being maintained by KAI,  • fire breaks were established in association with the clearing undertaken on the Knox Creek Plain in 2022.  • permits are obtained from the local government prior to conducting controlled burns,  • fires that occurred in the Goomig buffer area in November 2022 originated outside the buffer area to the north, following the commencement of wet season rain, thus avoiding adverse impacts associated with late dry season wildfire,  • the auditor observed regrowth and recovery in the fire area while conducting TsK surveys over the 2022-2023 wet season,  • no infrastructure was impacted by the November fire,  • Gouldian Finch habitat located in the buffer area to the south of the Goomig farmland remained unburnt in 2022.  For the above reasons, the auditor has assessed that the Proposal is compliant with this item. |

# **Buffer monitoring regime**

| Item    | Activity and location   | Frequency  | Target  | Corrective action   | Evidence   | Status<br>Weaber | Status<br>Knox | Comment  |
|---------|---|--|---|---|--|------------------|----------------|--|
| EMP 133 | Assess vegetation condition using the Keighery (1994) rating scale and update vegetation condition map. | Annually commencing within 12 months of the commencem ent of the action. | All areas within buffer to be in 'Very Good' or better condition. | Investigate cause, e.g. cattle intrusion, loss of seed through heavy rains.  Take appropriate remedial actions, e.g. feral animal eradication programs, stabilise and revegetate area.  Monitor success of remedy (annually at time of regular monitoring). | 2022.EMP43a Buffer vegetation condition assessment | PNC              | NR             | Weaber Plain Baseline vegetation condition assessment and mapping was undertaken in 2011 (Botanical North 2011).  DPIRD conducted vegetation condition assessment at observation sites within the Weaber Plain and Knox Creek Plain buffer areas in 2022 and early 2023, however, the vegetation condition map has not been updated.  The auditor also observed buffer vegetation condition while undertaking the 2022 CALIM audit. There appeared to be some signs of spray drift impact in some of the elongated and small sections of the buffer area that are surrounded by farm lots. Altered hydrology (inundation) in some of these parts of the buffer was also considered to be a factor. These observations were made at the tail end of the dry season thus a seasonal affect was also likely to be at play.  This item is assessed as potentially non-compliant given observation sites did not extend across the whole buffer area and the vegetation condition map has not been updated.  DPIRD will procure services in 2023 to assist in resolving this item.  Knox Creek Plain As above |

## Rehabilitation management actions

| Item    | Action   | Purpose   | Timing   | Evidence  | Status<br>Weaber | Status<br>Knox | Comment   |
|---------|--|---|--|---|------------------|----------------|---|
| EMP 134 | Select reference sites in buffer and conservation areas containing landforms and vegetation  | To locate suitable sites against which to compare rehabilitation success. | Prior to ground disturbance  | Not applicable  | CLD              | NR             | Weaber Plain This item was assessed as completed in a previous audit period.  |
|         | comparable (or likely to have been comparable) to those of planned disturbance areas not required post-construction.   |   |  |   |                  |                | Knox Creek Plain There are no areas proposed for rehabilitation in the Knox Creek Plain FPDP area. The previous auditor (KBC 2022) noted KAI's advice that the development of the Knox Creek Plain will not result in the clearing of areas that will require subsequent rehabilitation.  |
| EMP 135 | Survey reference sites identified in Item 1 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                | 2022.EMP134a<br>Construction<br>compound<br>rehabilitation area<br>site visit, 21 June<br>2023. | PNC              | NR             | As noted by the previous auditor (KBC 2022), rehabilitation activities were completed by Leighton Contractors or others for LandCorp at the completion of construction (~2012-14). This includes the construction compound area in the Weaber Plain buffer area adjacent to Moonamang Road.   |
|         |  |   |  | 2022.EMP134b Email exchange with Main Roads of Western Australia regarding Area 11.             |                  |                | The current auditor inspected the construction compound rehabilitation area (refer to evidence item 2022.EMP134a) and assessed the area to be in good to very good condition. However, the current auditor notes the previous auditor's recommendation that [the rehabilitation actions] be assessed for closure, and that a botanical assessment may be required to close this item. |
|         |  |   |  |   |                  |                | DPIRD is planning to close out the rehabilitation items in the next 12 months, other than the Area 11 material extraction area which is still active.   |
| 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  | Refer to EMP 134  | PNC              | NR             | Refer to the comments in relation to EMP 135  |
| 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<br>the Weed,<br>Plant<br>Pathogen and<br>Pest Animal<br>Management<br>Sub-plan | Not applicable  | CLD              | CLD            | Item assessed as completed in a previous audit period. Refer to Botanical North (2011), Botanical North (2012a), Botanical North (2012b) and Ord Land and Water (2015).   |

| Item    | Action  | Purpose  | Timing                         | Evidence         | Status<br>Weaber | Status<br>Knox | 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 | Refer to EMP 134 | PNC              | NR             | Refer to the comments in relation to EMP 135      |
| 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:  • 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.  • preparing material for transportation. | To maximise potential for rehabilitation success by ensuring seed collection is undertaken in accordance with appropriate guidelines and procedures. | As required for rehabilitation | Refer to EMP 134 | PNC              | NR             | Refer to the comments in relation to EMP 135      |
| 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 134 | NR               | NR             | There are currently no sites under rehabilitation |
| 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 134 | NR               | NR             | There are currently no sites under rehabilitation |

| Item    | Action  | Purpose   | Timing   | Evidence   | Status<br>Weaber | Status<br>Knox | Comment   |
|---------|---|---|--|--|------------------|----------------|---|
| EMP 142 | Implement hygiene management<br>actions as outlined in the Weed,<br>Plant Pathogen and Pest Animal<br>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<br>the Weed,<br>Plant<br>Pathogen and<br>Pest Animal<br>Management<br>Sub-plan | Refer to EMP 62 to 67  | С                | NR             | Weaber Plain Refer to EMP 62 to 67  Knox Creek Plain Refer to comments in relation to EMP 134   |
| 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<br>the Weed,<br>Plant<br>Pathogen and<br>Pest Animal<br>Management<br>Sub-plan | Refer to EMP 72  | С                | NR             | Weaber Plain Refer to EMP 62 to 67  Knox Creek Plain The Knox Creek Plain buffer area is not yet been established by fencing, destocking an installation of signage. The buffer area will be established in parallel with infrastructure and farm development.  |
| 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  | 2022.EMP134a Construction compound rehabilitation area site visit, 21 June 2023. | С                | NR             | Weaber Plain The auditor confirmed that all foreign material has been removed from the construction compound area.  The Main Roads rehabilitation sites associated with the construction of Moonamang Road have been absorbed into (i.e., are within) the Knox farm and Knox Supply Channel clearing area (see EMP 70).  Knox Creek Plain |
|         |   |   |  |  |                  |                | The Knox Creek Plain buffer area is not yet established and currently remains in use by Carlton Hill pastoral station.  |
| 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  | Not applicable   | NR               | NR             | Weaber Plain There were no areas under rehabilitation or requiring rehabilitation in the 2022 compliance assessment period. The Area 11 material extraction area is still active.  Knox Creek Plain Refer to EMP 134  |

| Item    | Action   | Purpose   | Timing   | Evidence       | Status<br>Weaber | Status<br>Knox | Comment  |
|---------|--|---|--|----------------|------------------|----------------|--|
| 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  | Not applicable | NR               | NR             | Weaber Plain There were no areas under rehabilitation or requiring rehabilitation in the 2022 compliance assessment period. The Area 11 material extraction area is still active.  Knox Creek Plain Refer to EMP 134 |
| EMP 147 | Disturbed areas will be stabilised through a combination of contouring and slope stabilisation as required.  | To minimise erosion of rehabilitated landforms.   | Progressively<br>as disturbed<br>areas are no<br>longer required | Not applicable | NR               | NR             | Weaber Plain There were no areas under rehabilitation or requiring rehabilitation in the 2022 compliance assessment period. The Area 11 material extraction area is still active.  Knox Creek Plain Refer to EMP 134 |
| EP 148  | All rehabilitation areas will be reshaped and contoured to blend with adjacent relief and drainage as far as practicable. This will include:  • 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                                | Not applicable | NR               | NR             | Weaber Plain There were no areas under rehabilitation or requiring rehabilitation in the 2022 compliance assessment period. The Area 11 material extraction area is still active.  Knox Creek Plain Refer to EMP 134 |
| EMP 149 | All tracks to be rehabilitated will be ripped or scarified to minimise compaction.   | To maximise potential for rehabilitation success by allowing roots and water to penetrate the soil profile. | During the rehabilitation process                                | Not applicable | NR               | NR             | Weaber Plain There were no areas under rehabilitation or requiring rehabilitation in the 2022 compliance assessment period. The Area 11 material extraction area is still active.  Knox Creek Plain Refer to EMP 134 |

| Item    | Action   | Purpose  | Timing  | Evidence       | Status<br>Weaber | Status<br>Knox | Comment   |
|---------|--|--|---|----------------|------------------|----------------|---|
| 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<br>construction of<br>shared<br>infrastructure                   | Not applicable | NR               | NR             | Weaber Plain There was not clearing in the Weaber Plain development area in 2022.  Knox Creek Plain Topsoil is not removed from farming areas. The                                |
|         |  |  |   |                |                  |                | soil remains in situ.   |
| 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   | Not applicable | NR               | NR             | Weaber Plain There were no areas under rehabilitation or requiring rehabilitation in the 2022 compliance assessment period. The Area 11 material extraction area is still active. |
|         |  |  |   |                |                  |                | Knox Creek Plain Refer to EMP 134   |
| 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<br>construction of<br>shared<br>infrastructure                   | Not applicable | NR               | NR             | Weaber Plain There was no clearing in the Weaber Plain development area in 2022.  Knox Creek Plain  |
|         |  |  |   |                |                  |                | Topsoil is not removed from farming areas. The soil remains in situ.  |
| 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<br>rehabilitation<br>process                                     | Not applicable | NR               | NR             | Weaber Plain Refer to EMP 152  Knox Creek Plain Topsoil is not removed from farming areas. The soil remains in situ.  |
| EMP 154 | Rake rehabilitation areas to minimise potential impacts from compaction.   | To maximise potential for rehabilitation success by allowing roots and water to penetrate the soil profile.                                | After spreading of topsoil and prior to placement of cleared vegetation | Not applicable | NR               | NR             | Weaber Plain There were no areas under rehabilitation or requiring rehabilitation in the 2022 compliance assessment period.  Knox Creek Plain Refer to EMP 134                    |
| 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<br>construction of<br>shared<br>infrastructure                   | Not applicable | NR               | NR             | Weaber Plain Refer to EMP 152  Knox Creek Plain Topsoil is not removed from farming areas. The soil remains in situ.  |

| Item    | Action  | Purpose   | Timing   | Evidence       | Status<br>Weaber | Status<br>Knox | Comment   |
|---------|---|---|--|----------------|------------------|----------------|---|
| EMP 156 | Locate stockpiles of rehabilitation material (e.g. topsoil, cleared vegetation, etc.) within already disturbed areas wherever possible.             | To minimise disturbance.  | Ongoing from commenceme nt of ground disturbance | Not applicable | NR               | NR             | Weaber Plain There was no clearing in the Weaber Plain development area in 2022.  Knox Creek Plain Topsoil is not removed from farming areas. The soil remains in situ. |
| 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 microorganisms. | Ongoing from commenceme nt of ground disturbance | Not applicable | NR               | NR             | Weaber Plain There was no clearing in the Weaber Plain development area in 2022.  Knox Creek Plain Topsoil is not removed from farming areas. The soil remains in situ. |
| 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                          | Not applicable | NR               | N/A            | Weaber Plain There was no clearing in the Weaber Plain development area in 2022.  Knox Creek Plain Item not included in Knox EMP  |
| EMP 159 | Provide temporary fencing and signage around rehabilitation areas.  | To minimise disturbance to rehabilitation areas by restricting access.  | During<br>rehabilitation<br>process              | Not applicable | NR               | NR             | Weaber Plain There were no areas under rehabilitation or requiring rehabilitation in the 2022 compliance assessment period.  Knox Creek Plain Refer to EMP 134          |
| 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                                      | Not applicable | NR               | NR             | Weaber Plain The Area 11 material extraction area is still active. There are no other borrow pits.  Knox Creek Plain Refer to EMP 134                                   |

| Item    | Action  | Purpose  | Timing      | Evidence       | Status<br>Weaber | Status<br>Knox | Comment   |
|---------|---|--|-------------|----------------|------------------|----------------|---|
| EMP 161 | <ul> <li>Where there is insufficient subsoil for backfilling:</li> <li>import material for backfilling in consultation with DPW if applicable</li> <li>ensure pits are rehabilitated to minimise standing shallow water as much as possible.</li> </ul> | To minimise the creation of mosquito breeding habitat. | As required | Not applicable | NR               | N/A            | Weaber Plain There were no areas under rehabilitation or requiring rehabilitation in the 2022 compliance assessment period.  Knox Creek Plain Item not included in Knox EMP |

## Rehabilitation monitoring regime

| Item    | Activity and location  | Frequency/<br>timing                          | Target  | Corrective action  | Evidence            | Status<br>Weaber | Status<br>Knox | Comment   |
|---------|--|---|---|--|---------------------|------------------|----------------|---|
| EMP 162 | Native species richness, density and % cover within rehabilitation sites as outlined in the monitoring procedures. | Twice<br>annually (in<br>May and<br>October). | Mean native species richness, plant density and % cover in the rehabilitation site after five years (including at least two wet seasons where >75% of the long-term average rainfall has fallen) is greater than:  • 70% of the mean % cover of natives in the reference sites  • 70% of the mean native species richness in the reference sites. | <ol> <li>Identify cause.</li> <li>Implement approach to remedy cause, which could include:         <ul> <li>application of fertilisers or wetting agents etc. if applicable</li> <li>implement supplementary direct seeding or seedling planting program in accordance with procedures</li> <li>review rehabilitation process and amend if appropriate.</li> </ul> </li> <li>Monitor success of approach.</li> </ol> | Refer to EMP<br>134 | PNC              | NR             | Weaber Plain Refer to EMP 135  Knox Creek Plain The Main Roads rehabilitation sites associated with the construction of Moonamang Road have been absorbed into (i.e., are within) the Knox farm and Knox Supply Channel clearing area (see EMP 70). |

| Item    | Activity and location   | Frequency/<br>timing                          | Target  | Corrective action   | Evidence            | Status<br>Weaber | Status<br>Knox | Comment   |
|---------|---|---|---|---|---------------------|------------------|----------------|---|
| EMP 163 | Indicator<br>species in<br>rehabilitation<br>sites.   | Twice<br>annually (in<br>May and<br>October). | As determined in accordance with Table.   | <ol> <li>Identify cause.</li> <li>Implement approach to remedy cause, which could include:         <ul> <li>application of fertilisers or wetting agents etc. if applicable</li> <li>implement supplementary direct seeding or seedling planting program in accordance with procedures.</li> <li>review rehabilitation process and amend if appropriate.</li> </ul> </li> <li>Monitor success of approach.</li> </ol> | Refer to EMP<br>134 | PNC              | NR             | Weaber Plain Refer to EMP 135  Knox Creek Plain The Main Roads rehabilitation sites associated with the construction of Moonamang Road have been absorbed into (i.e., are within) the Knox farm and Knox Supply Channel clearing area (see EMP 70). |
| EMP164  | Exotic species richness and % cover within rehabilitation sites as outlined in the monitoring procedures. | Twice annually (in May and October).          | Exotic flora species: no greater than 10% increase in weed species density/cover/distributi on 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 no local priority areas as defined in the Weed, Plant Pathogen and Pest Animal Management Sub-plan no new weed species present. | <ol> <li>Identify cause.</li> <li>Identify the weeds, their location and coverage.</li> <li>Implement remedy which could include:         <ul> <li>implementing a weed control program</li> <li>reinforcing management actions in the Weed, Plant Pathogen and Pest Animal Management Sub-plan and Rehabilitation Management Sub-plan.</li> </ul> </li> <li>Monitor success of control.</li> </ol>                    | Refer to<br>EMP134  | PNC              | NR             | Weaber Plain Refer to EMP 135  Knox Creek Plain The Main Roads rehabilitation sites associated with the construction of Moonamang Road have been absorbed into (i.e., are within) the Knox farm and Knox Supply Channel clearing area (see EMP 70). |

| Item    | Activity and location                                | Frequency/<br>timing                                | Target   | Corrective action  | Evidence   | Status<br>Weaber | Status<br>Knox | Comment  |
|---------|--|---|--|--|--|------------------|----------------|--|
| EMP 165 | Erosion within and adjacent to rehabilitation sites. | Opportunisti cally following heavy rainfall events. | Ensure landform is safe and stable with no erosion occurring 18 months after rehabilitation. Reconstructed landform can withstand exceedance of average rainfall occurrences for a period of 10 years. | <ol> <li>Identify cause of erosion.</li> <li>Consult expert to determine appropriate remedy which may include:         <ul> <li>Installing culverts</li> <li>Installing stormwater diversion structures.</li> </ul> </li> <li>Implement remedy.</li> <li>Monitor success of remedy.</li> </ol> | 2022.EMP134a Construction compound rehabilitation area site visit, 21 June 2023. | O                | NR             | Weaber Plain The rehabilitation construction compound area is stable with no evidence of erosion. The Main Roads rehabilitation sites associated with the construction of Moonamang Road have been absorbed into (i.e., are within) the Knox farm and Knox Supply Channel clearing area (see EMP 70).  Knox Creek Plain Refer to EMP 134 |

## Aboriginal heritage management actions

| Item    | Action   | Purpose   | Timing   | Evidence  | Status<br>Weaber | Status<br>Knox | 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:  • significance of Aboriginal heritage and the potential impacts of the project  • procedures to report potential new sites  • obligations under the Aboriginal Heritage Act 1972 (WA)  • requirements for the protection of known Aboriginal sites. | To ensure protection of known sites of Aboriginal heritage significance in accordance with the requirements of the <i>Aboriginal Heritage Act 1972</i> (WA), to improve knowledge of Aboriginal cultural heritage in non-indigenous people associated with the project. | Within one<br>week of<br>personnel<br>commencing<br>work on-site | 2022.EMP2b<br>KAI Environment<br>Induction 2022 | С                | С              |   |
| EMP 167 | Document the location of protected areas on development design plans and make available to planners, agents, contractors, and relevant personnel.  | To ensure protection of known sites of Aboriginal heritage significance in accordance with the requirements of the <i>Aboriginal Heritage Act 1972</i> (WA), to improve knowledge of Aboriginal cultural heritage in non-indigenous people associated with the project. | Prior to ground disturbance                                      | Not applicable                                  | С                | NR             | Weaber Plain Item assessed as completed in a previous audit period. Refer to McMullen Nolan Group (2013).  Knox Creek Plain The previous auditor (KBC 2022) noted that there are no identified protected areas outside of buffer areas. |
| 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                                      | Not applicable                                  | CLD              | NR             | Weaber Plain Item assessed as completed in a previous audit period.  Knox Creek Plain Refer to EMP 167  |
| EMP 169 | Place 'No Go' signage along<br>boundaries immediately adjacent<br>to Buffer Areas around protected<br>Aboriginal sites.  |   | Prior to ground disturbance                                      | Not applicable                                  | CLD              | NR             | Weaber Plain Item assessed as completed in a previous audit period.  Knox Creek Plain Refer to EMP 167  |

| Item    | Action  | Purpose   | Timing   | Evidence  | Status<br>Weaber | Status<br>Knox | Comment   |
|---------|---|---|--|---|------------------|----------------|---|
| 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. | unrecorded Aboriginal heritage sites detected during construction/clearing activities in accordance with the Aboriginal Heritage Act 1972 (WA).                 | Ongoing from commenceme nt of ground disturbance | 2022.EMP2b<br>KAI Environment<br>Induction 2022     | С                | С              | Weaber Plain No clearing was undertaken in the Weaber Plain development area in 2022.  Knox Creek Plain Refer to evidence document.   |
| EMP 171 | Site heritage monitors from MG<br>Corporation issued with a permit<br>under Section 16 of the <i>Aboriginal</i><br><i>Heritage Act 1972</i> (WA) will be<br>on-site to monitor clearing and<br>earthworks activities.   |   | Ongoing from commenceme nt of ground disturbance | Not applicable                                      | С                | N/A            | Weaber Plain No clearing was undertaken in the Weaber Plain development area in 2022.  Knox Creek Plain Item not included in Knox EMP |
| EMP 172 | A qualified archaeologist issued with a permit under Section 16 of the <i>Aboriginal Heritage Act 1972</i> (WA) will be available to come to site if a suspected heritage site is uncovered.  |   | As required                                      | Not applicable                                      | С                | N/A            | Weaber Plain No clearing was undertaken in the Weaber Plain development area in 2022.  Knox Creek Plain Item not included in Knox EMP |
| 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<br>the Miriuwung and Gajerrong people in<br>heritage management throughout the<br>life of the project, in accordance with | Prior to ground disturbance                      | 2022.EMP2a<br>File Note interview,<br>11 April 2023 | С                | С              | KAI confirmed that it engages with MG Corporation.  |
| EMP 174 | The MG Corporation will be involved in inspections of the Project Area throughout construction (with supporting briefing).  | the OFA and OES.  | Quarterly and as required                        | 2022.EMP2a<br>File Note interview,<br>11 April 2023 | С                | С              | KAI confirmed that it engages with MG Corporation.  |
| 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                         | 2022.EMP2a<br>File Note interview,<br>11 April 2023 | С                | С              | KAI confirmed that it engages with 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                      | Refer to McMullen<br>Nolan Group (2013)             | С                | N/A            | Weaber Plain Refer to McMullen Nolan Group (2013)  Knox Creek Plain Item not included in Knox EMP                                     |

## Aboriginal heritage monitoring regime and corrective actions

| Item    | Activity and location   | Frequency                                | Target  | Corrective action  | Evidence       | Status<br>Weaber | Status<br>Knox | 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). | <ul> <li>Report as Environmental Incident and initiate Incident Procedure, including:</li> <li>stopping work in the vicinity of the boundary investigating the cause of the disturbance</li> <li>redefining boundaries if due to inadequate boundary marking</li> <li>rehabilitating vegetation in the area as required in accordance with the Rehabilitation Management Sub-plan</li> <li>restore the 'site' (e.g. scatters or middens could have been buried, rock art altered, skeletal remains exposed)         <ul> <li>develop a remedial plan in consultation with appointed archaeologist and MG Corporation</li> <li>monitoring the success of remedial action.</li> </ul> </li> <li>Consult with the Department of Aboriginal Affairs and MG Corporation to determine actions required to restore the site to its original condition.</li> </ul> | Not applicable | C                | С              | Weaber Plain No clearing was undertaken in the Weaber Plain development area in 2022.  Knox Creek Plain The previous auditor (KBC 2022) noted that no heritage sites have been identified in the Knox Creek Plain development area. |
| 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.  | Not applicable | С                | N/A            | Weaber Plain No clearing was undertaken in the Weaber Plain development area in 2022.  Knox Creek Plain Item not included in Knox EMP   |

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