

# Independent Environmental Representative Environmental Audit Report

ICON WATER

MURRUMBIDGEE TO GOOGONG WATER TRANSFER

5<sup>TH</sup> AUDIT (OEMP IMPLEMENTATION)

SEPTEMBER 2016



## AUDIT DETAILS

AUDITED ORGANISATION	PROJECT
Icon Water	Murrumbidgee to Googong Water Transfer
ADDRESS	CONTACT DETAILS
12 Hoskins St Mitchell ACT	Ben Bryant
DEPTH OF AUDIT	SCOPE OF AUDIT
Environmental	OEMP Implementation
DATE OF AUDIT	AUDIT CRITERIA
24 <sup>th</sup> and 25 <sup>th</sup> August 2016	<ul style="list-style-type: none"> <li>OEMP (v3, May 2015)</li> <li>Stream Flow and Water Quality MP (v4, May 2015)</li> <li>Landscape Rehabilitation &amp; Terrestrial Ecology MP (V3, Jan 2014)</li> <li>Biodiversity offsets Management Plan (Offset Delivery Plan) (April 2012) and subplans</li> <li>Project Approval 08_0160</li> <li>EPBC Approval 2009/5124</li> </ul>
PERSONS CONTACTED	AUDIT TEAM
Ben Bryant	Erwin Budde, nghenvironmental – Lead auditor
PREVIOUS AUDIT DATE	PREVIOUS AUDIT REFERENCE
February 2013, August 2013, February 2014 and August 2014	NGH Environmental (March 2013, August 2013, February 2014, September 2014)
NOTE:	
<p>This audit was conducted specifically on the implementation of the OEMP and subplans. The audit included a detailed focus on landscape rehabilitation and the management of the offset site.</p>	

## AUDIT SUMMARY

### Environment:

This was the fifth audit of the operation phase of the Murrumbidgee to Googong Water Transfer Project (M2G) by the Independent Environmental Representative (ER). This audit focussed specifically on the implementation of the landscape and rehabilitation program and of the management of the offset site. It also focused on the implementation of the OEMP.

The audit included interviews with key operational staff and a review of the relevant environmental management plans. A detailed site visit to both the pipeline and the offset site was undertaken.

Overall, the audit has found broad compliance with the OEMP and relevant subplans. Specifically, the objectives and targets of the OEMP and subplans were found to be actively implemented and monitored for compliance. Of special note is the newly developed system for implementing environmental land management projects, such as vegetation management and erosion remediation. The system was found to be providing a robust, risk-based approach towards the implementation of land management activities across the project.

Another key observation of this audit was the integration of some aspects of the company's EMS into the management of the project. This represents further evolution of the integration of the pipeline into the business's general asset management system. It can be foreseen that at some stage the operational environmental management of the pipeline could be directed entirely through the EMS.

Two Corrective Action Requests were issued as part of this audit, one relating to the lack of fencing around one of the Swainsona translocation plots, and the other relating to a deficiency in the inspection regime for the offset site which is considered to have contributed to the first CAR.

A further three Observations of Concern and two Opportunities for Improvement were issued at the close out meeting.

Signed: \_\_\_\_\_

**Principal's Representative**

Date:

Signed:



**Lead Auditor**

Date: 06/09/2016

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**Attachment A – CARs Issued at the Closing Meeting**

# 1. REPORT SUMMARY

## 1.1 INTRODUCTION

This audit represents the fifth (5<sup>th</sup>) independent environmental representative audit conducted on the operational phase of the M2G Project. Following the completion of construction in 2012, a twice-yearly audit program was implemented. During that time, it became apparent that the project was unlikely to run in an operational mode for some time. Therefore, at the completion of the first 2 years of operation, the audit program was altered such that an independent audit is conducted every 2 years.

No substantive operational events or activities were being undertaken at the time of the audit.

## 1.2 SCOPE OF AUDIT

The audit scope for this audit was the implementation of Operational Environmental Management Plan (OEMP), the relevant subplans and relevant licence and project approval documents. This represents the first audit against the revised management plans, which were approved by the regulators in mid 2015. The following plans were audited:

- OEMP (Version 3, May 2015)
- Stream Flow and Water Quality Management Plan (Version 4, May 2015)
- Landscape Rehabilitation & Terrestrial Ecology Management Plan (Version 3, January 2014)
- Offset Delivery Plan (Version 1, April 2012)
- Project Approval 08\_0160
- EPBC Approval 2009/5124

It is noted that the Aquatic Ecology Monitoring Plan was not specifically audited due to a lack of time. However, given that the project remains in standby mode, this is not considered to compromise the integrity of this audit.

## 1.3 SUMMARY OF CORRECTIVE ACTIONS

There were two Corrective Action Requests (CARs) issued during the audit.

CAR No.	Section of Report	Details
001	3.2	During the site inspection, it was observed that the fencing around the Swainsona relocation plot had not been reinstated, presumably after it was removed for the controlled burn in 2015.
002	3.2	Following the change in external monitoring frequency from 6-monthly to 2-yearly, there is currently no system of periodic inspection and assessing of the offset site.  This has contributed to the issue raised in CAR 1.

## 1.4 SUMMARY OF OBSERVATIONS OF CONCERN

The following Observations of Concern (OoC) were identified and explained to Icon Water during the audit Closing Meeting. They are considered to be deficiencies in meeting specified requirements, which if not addressed, may lead to a risk of non-compliance.

OoC No.	Section of Report	Details
001	3.1	The 4-week notification checklist developed by E&S is not controlled.
002	3.4	The revised induction package does not meet all of the commitments made in the OEMP.
003	3.5	A number of observations are made in relation to the delivery of environmental work: <ol style="list-style-type: none"> <li>1. The Rapid Assessment Form is not controlled</li> <li>2. There is no formal signoff of the Rapid Assessment form. This presents a weakness in the process. It is considered that as a minimum both the assessor and their supervisor should sign the form.</li> <li>3. There is no formal signoff of the Post Completion Assessment. It is considered that as a minimum both the assessor and their supervisor should sign the form.</li> </ol>

## 1.5 OPPORTUNITIES FOR IMPROVEMENT

The following Opportunities for Improvement (OfI) were identified and explained to Icon Water during the audit Closing Meeting. They are considered to be opportunities to improve compliance.

OfI No.	Section of Report	Details
001	3.4	The management structure for the project is presented as a flow chart and table in Appendix B. It is noted that this is out of date following recent restructures.
002	3.5	The Environmental Works Program is not referenced in the OEMP.

## 2 AUDIT PROCESS

### 2.1 OPENING MEETING

An opening meeting was held on the morning of the 24<sup>th</sup> August at the Icon Water offices in Mitchell. Present were Ben Bryant, Sally Wright and Namal Perera. The scope of the audit was outlined to those present, as well as a general outline of how the audit will be conducted.

### 2.2 CLOSING MEETING

A closing meeting was held in the afternoon of the 25<sup>th</sup> August. Present were Ben Bryant, Sally Wright, Namal Perera, Sarah McLaren and John Hyam.

### 2.2 SITE INSPECTION

A detailed site inspection at the Offset Site was conducted. Areas visited included recent plantings along two water courses, and the Swainsona translocation plots.

An inspection of landscape rehabilitation works along the pipeline was also undertaken at several locations including Angle Crossing and the High Lift Pump Station, the pipeline between the Monaro Highway and the High Lift Pump Station and the minihydro and the nearby Hehir property.

### 2.3 DESIGNATED FOLLOW-UP

A follow-up of the audit findings will be managed by the Icon Water Environment and Sustainability Manager to verify the completion of all corrective actions. The next IER Audit will be conducted in August 2018.

### 2.4 PREVIOUS ENVIRONMENTAL AUDIT

This audit followed-up Observations of Concern (OOC's) raised at the previous environmental compliance audit (August 2014) and outstanding items from the February 2013 audit.

**Table 2-1:** Summary of Observations of Concern raised on previous environmental audits (Feb 2013 and August 2014)

OoC No.	Details	Closed Out Y/N	Comment
<b>August 2014 Audit</b>			
001	This audit finds that the way in which E&S formulates its response to the 4-week Notification could be improved. A more systematic approach, such as a checklist, a prompt-list, or a procedure, could be used to ensure a more thorough consideration of any issues is given.	Y	A checklist has been developed and has been implemented (19/1/16 and 13/4/16). The checklist is not controlled ( <b>Observation of Concern 001</b> ).

OoC No.	Details	Closed Out Y/N	Comment
002	The remote Plant Operator is required to undertake pre-start checks. A checklist is used to complete these checks. This checklist does not appear to be a controlled form or have any document controls.	Y	Form FO05.10b has been developed and is controlled. The actual recoding of data is done through a controlled spreadsheet, which includes the names of the person undertaking the check and the date of the check.
003	It is considered that the reliance on the Incident Management System to report out-of-spec readings in Burra Creek is insufficient. A better approach would be for regular communications between Operations and Environmental staff during a water transfer event, such that trends can be analysed and exceedances can be pre-empted. WI1011 should include communication protocols to be implemented during a water transfer event.	Y	WI1011 has been updated.
<b>February 2014 Audit</b>			
002	<i>Reference: OEMP Section 3.1.7 and ISO14001 Management Review</i>  The OEMP requires an annual management review be conducted of the environmental management system. The details provided in the OEMP reflect the requirements of ISO 14001:2008 in relation to Management Reviews. It is noted that ACTEW have completed a full review of the OEMP. However, this is not considered to constitute a Management Review in accordance with the OEMP or ISO 14001.	Y	OEMP was reviewed and approved by regulators.
003	<i>Reference: OEMP Roles and Responsibilities Section 3.1 (Draft OEMP)</i>  The Manager, Regulations, Compliance and Quality is noted to have the responsibility for ensuring compliance of the project against legal and other requirements. This responsibility is not considered appropriate to sit with this person, instead it should be at a higher managerial level.	Y	Responsibility for ensuring compliance of the project is shown in both CEO and Environment & Sustainability Manager roles in the revised OEMP Appendix B consistent with the Corporate Legal Register (CMO).



OoC No.	Details	Closed Out Y/N	Comment
004	<p><i>Reference: OEMP Internal Auditing Section 8.1</i></p> <p>The OEMP requires a program for internal auditing be undertaken, with the OEMP and subplans audited at least once per year. It is noted that ACTEW have relied on the independent audits conducted by the ER to fulfil this latter commitment. Notwithstanding this, a program of internal auditing of compliance with the OEMP and subplans has not been initiated.</p>	Y	Internal auditing of the OEMP and Sub Plans is now included in the Management System Internal Audit Schedule 2014/15 (Audit #13). This will be included annually.

## **3 DETAILS OF AUDIT FINDINGS – ENVIRONMENT**

This section details the findings of the audit report. It only details those findings requiring action.

### **3.1 PREVIOUS AUDITS**

Four previous audits on operational environmental compliance were conducted on 13<sup>th</sup> and 14<sup>th</sup> February 2013, the 29<sup>th</sup> August 2013, 7<sup>th</sup> February 2014 and 26<sup>th</sup> August 2014.

### **3.2 SITE INSPECTION**

The site inspection involved an inspection of the offset site, including the Swainsona translocation plots. It was observed that one of the plots had no fence around it, and evidence of grazing was apparent. Upon further enquiry, it was found that this plot has not been inspected since the controlled experimental burn in 2015. This was found to be due to two factors:

1. The reduced frequency of external monitoring of the site by ELA, following the controlled experimental burn of the plot in late 2015
2. The lack of any scheduled offset inspection program by Icon Water

**Corrective Action Request 001 and Corrective Action Request 002.**

### **3.3 GENERAL MANAGEMENT FRAMEWORK (EMS)**

Environmental management requirements for the M2G pipeline are documented in the OEMP and associated subplans. In addition to this, the company's Environmental Management System (EMS) is being used to control documents and implement outcomes.

During the course of the audit, the auditor was presented with various components of Icon Water's EMS. The EMS, which is externally certified as being in accordance with ISO14001:2004, includes a range of procedures which are used to manage the environmental aspects of the M2G Project. This includes but is not limited to:

- Environmental Policy
- Roles and responsibilities
- Work Instructions
- Objectives and Targets
- Performance measurement
- Management Review

The auditor is of the opinion that large parts of the project's environmental management documentation can be integrated into the EMS at some stage in the future. This would have efficiency benefits and avoid duplication.

### **3.4 OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN**

#### **Section 1 – Environmental Policy**

The Environmental Policy is contained within Appendix F of the OEMP. The Policy was reviewed and evidence was sought for the project's compliance with the Policy. Specifically, the audit has found broad compliance with the Policy, with specific notes including:

- Purpose – *to provide safe water*. The Flow Rules and associated monitoring enable this objective to be met
- Purpose – *implement environmental management and sustainability*. The OEMP, EMS and associated documents facilitate the implementation of this objective
- Purpose – *prevent pollution*. The flow rules, erosion controls, CO2 dosing system, noise management measures and drain down controls all help to prevent pollution.

Section 3.1.3 of the Policy (Executive involvement) was also reviewed. It was found that most members of the executive have ownership and control over some part of the environmental management of the project. For example:

- Executive Manager of Asset Management – owns the work instructions required to implement the flow rules
- Executive Manager Project Delivery Maintenance and Operation – owns the work instructions to maintain the asset.

All executives were found to be involved in the Management Review process.

### Section 3 – Management Structures

The management structure for the project is presented as a flow chart and table in Appendix B. It is noted that this is out of date following recent restructures.

It is commented that there is duplication between the management structure presented in the OEMP and that in the EMS. It is suggested that Icon Water review the potential for a more integrated approach whereby only 1 document is required to be maintained up to date. **Opportunity for Improvement 001.**

### Section 4 – Environmental Policy and Planning Framework

A review of the commitment to ESD principles was conducted. It was found that the Project broadly adheres to these principles including:

- Precautionary principle – Through the flow rules and a planning system for maintenance and operational work
- Inter-generational equity – through the landscape rehabilitation program and the offset program
- Biological diversity – through the offset program and the management of fish-eggs, as well as water quality and flow rules.
- Valuation of environmental resources – Icon Water must raise the funds required to manage its operations from the price it sells its water at. Hence, the pricing structure for water includes consideration of the management of the environmental controls on the project.

Section 4.2.1 of the OEMP discusses the Offset site and the commitment to retain the offset site in perpetuity. Recently, an internal review of how best to meet this objective was conducted, where it was determined that the status-quo would best meet the objective in the medium term (Memos dated 18/8/16 and 31/5/16). This decision was made by management.

### Section 5 – Standards and Performance

A review of the project's objectives and targets was undertaken during the audit. In summary, the following conclusions were drawn:

- Objective 1 – This is being met through the implementation of the OEMP and EMS. CMO is being used to monitoring legal and other requirements. Compliance tracking is done through the implementation of the CTP, internal and external auditing.

- Objective 2 – This is being met through the implementation of the EMS, OEMP and the internal and external auditing programs. Measures are in place to address the specific targets including fish egg filters, fish monitoring, water quality monitoring. It is noted that the Burra Creek WQ triggers are currently being reviewed.
- Objective 3 – This is being met through the implementation of WI1011, the EMS and the planning and assessment of maintenance work. Specific measures in place include geomorphology monitoring.
- Objective 4 - This is being met through the implementation of the landscape rehabilitation program and the offset management program.
- Objective 5 – This is being met through the implementation of WI1011, the EMS and the planning and assessment of maintenance work. Specific measures in place include geomorphology monitoring.
- Objective 6 – This is being met through the implementation of the complaints handling processes.
- Objective 7 – This is being met through the implementation of the maintenance planning and assessment processes.
- Objective 8 – This is being met through the implementation of the BOP.

The objectives and targets for the project are reviewed every 2 years in line with the OEMP review schedule.

This audit also specifically reviewed the implementation of the planning and assessment phase of the maintenance works program. This audit found that for major maintenance projects (generally >\$50K in value), E&S are specifically involved in the environmental assessment of the proposed work. For minor maintenance work, there is no formal involvement in the planning and assessment process. However, the risk assessment processes (WI1010) utilised by operation and maintenance staff does require consideration of environmental risks.

### **Section 6 – Compliance Tracking**

The Compliance Tracking Program was reviewed during the audit. The CTP includes a Reporting Register, which is maintained via a spreadsheet, internal auditing and notifications as required.

The Reporting Register is being moved into CMO. The Register is maintained by a dedicated staff member, who is responsible for sending out notifications to relevant staff when actions are required to meet compliance.

Compliance is tracked in the OEMP, annually through the Annual M2G Performance Report.

### **Section 7 – Environmental Monitoring**

See other relevant sections of this Audit Report.

### **Section 8 – Auditing**

The project is included in Icon Water's internal audit program. The program is risk-based and runs across the whole business. As such, M2G does not necessarily feature in each year's audit schedule.

The project was subject to a limited internal audit in May 2016. The scope of this internal audit was to check compliance with sections 5, 6 and 7 of the OEMP, and reviewed the adequacy of the close-out of the findings of previous internal and external audits. The audit made three *low priority* recommendations.

The internal audit was found to conform with auditing best practices (eg ISO 19011).

### **Section 9 – Communication and Consultation**

The Community Information Plan was not specifically audited during this audit. It was thoroughly reviewed during the previous audit in relation to a water transfer event.

### Section 10 – Record Keeping and Document Control

The findings of the audit in relation to record keeping and document control are documented in the relevant sections elsewhere in this Audit Report.

### Section 11 – Training

Icon Water implements a business-wide induction package (evidence of delivery on 9/2/15). The package is currently being reviewed, with a draft available for viewing during the audit. The revised induction does not meet all of the commitments made in this part of the OEMP. **Observation of Concern 002.**

### Section 12 – Review and Improvement of the OEMP

The OEMP is reviewed every 2 years, with the last review occurring in 2015. The document is due to be reviewed within the next 12 months. There is also a planned review of the EMS.

## 3.5 LANDSCAPE REHABILITATION AND TERRESTRIAL ECOLOGY MANAGEMENT PLAN

The objectives of the plan were checked, and all were found to be being met.

Specifically, the objective of ensuring existing landscape and ecological assets are being protected was thoroughly reviewed and checked in light of previous audit concerns. Extensive questioning was undertaken with James Grey, who is responsible for land management and managing the offset site.

Land management activities and requirements are determined through various sources including:

- Complaints
- Audits
- The Bushfire Operation Plan
- Completion of regular Condition Assessments, which get called in through the CMO system. It is noted that CMO does not include any program for condition assessments within the offset site. **Corrective Action Request 002.**
- Monitoring reports, including those prepared by specialist consultants

The land management activities are recorded onto a detailed spreadsheet, which is then used to plan the works. A prioritisation process is implemented which considers a range of factors including environmental risk, seasonality, urgency for the business, regulator requirements and efficiency. The 'Due Date' is noted on the spreadsheet.

A determination is then done as to what level of environmental assessment is required prior to the works being undertaken. This is done qualitatively using the expertise of the E&S staff. A determination is made as to whether an activity is:

1. Low risk – whereby the Rapid Assessment Form is completed
2. Higher risk – Whereby a detailed environmental assessment is prepared

Once the assessment is conducted, the work may be outsourced to a contractor or completed using in house staff. Once the work is completed, a post-completion assessment is conducted to check that the scope of works has been completed. Photos are taken to demonstrate this.

The audit reviewed two projects, Aranda Telemetry Station and Bendora Asset Protection Works and found compliance with the above process.

Overall, this system is much improved from the last audit and represents a robust, risk-based approach towards the implementation of land management activities across the project. A number of findings are made.

It is noted that the above system is not documented in the OEMP. **Opportunity for Improvement 002**

A number of observations are made (**Observation of Concern 003**):

1. The Rapid Assessment Form is not controlled
2. There is no formal signoff of the Rapid Assessment form. This presents a weakness in the process. It is considered that as a minimum both the assessor and their supervisor should sign the form.
3. There is no formal signoff of the Post Completion Assessment. It is considered that as a minimum both the assessor and their supervisor should sign the form.

Monitoring of the pipeline is still being conducted in areas where control of the easement has not been handed back to landholders.

Vehicle washdown is still required when accessing certain parts of the pipeline. A vehicle wash check sheet is completed (one from 5/4/16 was cited).

### **3.6 OFFSET DELIVERY PLAN**

The Offset Delivery Plan and its subplans are high-level guidance documents to assist Icon Water in managing the offset site under its obligations, and provides baseline data on the offset site for future comparison. The documents do not specifically provide actions or dictate activities. This is done through a monitoring and inspection regime, which includes 2-yearly monitoring by ELA and internal inspections by E&S staff. As noted in Section 3.5, the inspection program does not explicitly include the offset site and a finding is made to that extent.

The site visit during the audit noted two areas where active management of the offset site had recently occurred. Two areas have recently undergone a planting regime to assist in stabilising erosion-prone land and restore stream health.

All findings in this audit relevant to the offset site are included in Section 3.5.

# **ATTACHMENT A**

## **Corrective Actions Issued at the Close-Out Meeting**

**Corrective Action Request**

CAR No.: 001

**Audit Date:** 25/08/16

**Activities Under Review:** M2G Operational Compliance

**Audit Criteria:** CoA, SoC, OEMP, OEMP subplans

**Type of Audit:**  External Audit  Internal Audit

**Requirement (Standard Clause #, procedure #):**

Condition of Approval 6.4d(ii)

**Observation:**

During the site inspection, it was observed that the fencing around the Swainsona relocation plot had not been reinstated, presumably after it was removed for the controlled burn in 2015.

**Proposed Action:**

**Date action is to be completed by:** 26/8/16

**Action taken:**

**Client Representative Name:**

**Signature:**

**Date:**



**Corrective Action Request**

CAR No.: 002

**Audit Date:** 25/08/16

**Activities Under Review:** M2G Operational Compliance

**Audit Criteria:** CoA, SoC, OEMP, OEMP subplans

**Type of Audit:**  External Audit  Internal Audit

**Requirement (Standard Clause #, procedure #):**

Condition of Approval 6.4d(ii)

**Observation:**

Following the change in external monitoring frequency from 6-monthly to 2-yearly, there is currently no system of periodic inspection and assessing of the offset site.

This has contributed to the issue raised in CAR 1.

**Proposed Action:**

**Date action is to be completed by:** 31/9/16

**Action taken:**

**Client Representative Name:**

**Signature:**

**Date:**