



Murrumbidgee to Googong Water Transfer Annual Performance Report 2022

**For the period August 2021 to
August 2022**

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3 Introduction

3.1 Purpose

This report addresses Commonwealth Condition of Approval No.6 of approval EPBC 2009/5124 for the Murrumbidgee to Googong Water Transfer (M2G) project under the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*.

3.2 Background

The Murrumbidgee to Googong Water Transfer (M2G) is a 12km pipeline that enables the pumping of water from the Murrumbidgee River, ACT, to Burra Creek, NSW, where it then flows ~13 km to the Googong Reservoir. Following regulatory approvals from the Commonwealth, ACT and NSW, construction of the pipeline commenced in January 2011, and the M2G became operational in September 2012.

3.3 M2G Status

Over the reporting period, no water was transferred from the Murrumbidgee River to Burra Creek and into the Googong Reservoir. M2G is currently in standby mode with a maintenance session is planned as soon as possible (noting the technical difficulties below) in compliance with the approved environmental management plans.

Operate to maintain sessions over the period were cancelled or postponed due to technical issues with the high lift pump station. A high voltage cable from the low lift to high lift station was severed. Repair was delayed due to cable procurement delay and now inundation of the station. Furthermore, the river level needs to drop, station cleaned of sand and debris and cable repaired before the station is ready for operation. These operate to maintain sessions will continue soon and into the next operating period to ensure pumps and related infrastructure remain in correct working order.

Icon Water submitted a request to the NSW Department of Primary Industry (DPI) to have the M2G pipeline reclassified as a water pipeline and this was subsequently approved via gazettal in 2019. The pipeline is now managed under Icon Water's asset management framework and is subject to revised specific operating conditions.

Icon Water revised the [M2G Operational Environment Management Plan \(OEMP\)](#), which integrated both the Stream Flow and Water Quality Management Plan (SFWQMP) and the Aquatic Ecology Monitoring Plan (AEMP) into the main body of the document. This plan also references the new Common Environmental Management Plan, as approved by the ACT EPA. The new OEMP has resulted from lessons learnt during the recent operational phase, a revised approach to EMPs within Icon Water, reflecting the same approach and efficiencies to managing over 6,000km of network assets within Icon Water.

4 Performance

Commonwealth Condition of Approval No. 6 (Publication Requirements) requires Icon Water to provide an Annual Performance Report on the implementation of the conditions of approval and any approved plans required under these conditions. This Annual Performance Report details the performance of M2G from August 2021 to August 2022.

Performance is reported against:

- Commonwealth Conditions of Approval (EPBC 2009/5124) in Section 4.1
- Table 4 'Objectives and Targets' of the [M2G Operation Environmental Management Plan \(OEMP\)](#) in Section 4.2.

4.1 Performance against Commonwealth Conditions of Approval

CoA Ref#	Requirement	Compliance Status	Comments
1.	Submit an Extraction & Gauging Plan that meets CoA 1a-1d.	Condition met	Original Plan approved 22 March 2012.
	Implement Extraction & Gauging Plan	Ongoing	The Extraction & Gauging Plan was incorporated into the revised OEMP and approved by Commonwealth in 2021. The OEMP was implemented throughout the reporting period.
2.	Submit a Sustainable Diversion Limit Plan	Condition met	Original Plan approved 15 April 2011.
	Implement Sustainable Diversion Limit Plan	Ongoing	The Sustainable Diversion Limit Plan was incorporated revised OEMP and approved by Commonwealth in 2021. The OEMP was implemented throughout the reporting period.
3.	Submit a Biodiversity Management & Offset Plan that meets CoA 1a-1l.	Condition met	Original Plan approved 15 April 2011.
	Implement Biodiversity Management & Offset Plan	Ongoing	The Biodiversity Management & Offset Plan was incorporated into the revised OEMP. The M2G Offset Delivery Plan was implemented throughout reporting period.
4.	Submit a Burra Creek Environmental Management Plan that meets CoA 4a-4e.	Condition met	Original Plan approved 22 March 2012.
	Implement Burra Creek Environmental Management Plan	Ongoing	The Burra Creek Environmental Management Plan was incorporated into the revised OEMP in 2021.
5.	Prepare and implement a Decommissioning & Closure Plan at least one year prior to decommissioning	N/A	Decommissioning is not anticipated in the medium to long term.
6.	Provide Annual Performance Reports and publish on Icon Water website	Ongoing	2013 to 2021 Annual Performance Reports submitted to the Commonwealth and published on external website. This report 2022 will be published on the external website following submission to the Commonwealth.
7.	Maintain accurate records of activities and make available on request	Ongoing	Accurate records are kept and are available on request. No data requests were made during the reporting period.
8.	Variations must be submitted to Minister for approval; and implemented if approved.	N/A	No variations have been sought regarding the Commonwealth conditions of approval.

9.	Variations sought by the Minister	N/A	No variations were sought by the Minister during the reporting period.
10.	Advise Department of commencement of construction and operation.	Condition met	Icon Water advised the Commonwealth of commencement of construction on 31/01/2011. Icon Water advised the Commonwealth of commencement of operation on 27/09/12 in a letter dated 04/10/12.
11.	Upon direction of the Minister an independent audit of compliance with the CoA is conducted and reported to the Minister.	N/A	Icon Water did not receive a direction from the Minister during the reporting period.

4.2 Performance against Objectives and Targets of the OEMP

Objectives	Performance	Targets	Performance
1. To employ practices which ensure that the operation and maintenance of the water transfer infrastructure: meet all environmental legislative requirements and compliance with all planning approvals are conducted in a manner that minimises adverse environmental impacts.	Icon Water implemented the full suite of management plans for the reporting period. The current approved plans are: OEMP Biodiversity Offsets Delivery Plan Note that a revised Operational Environment Management Plan (OEMP) was approved by all regulators before February 2022.	Ensure the Operation Environmental Management Plan (OEMP), relevant sub plans, Icon Water policies, processes, and systems capture all environmental legislative requirements and compliance with all planning approvals.	The M2G Compliance Register, mapping conditions of approval and EIS/PER commitments to a plan/process and responsible person, is retained on Icon Water's SharePoint intranet system.
		Maintain up-to-date and regularly reviewed versions of the OEMP and relevant sub plans and carry out all operation and maintenance activities according to these documents.	The current OEMP are available on the Icon Water Integrated Management System (IMS) as controlled documents and external internet site and form the basis of all operations and maintenance activities.
		Report all environmental incidents to the relevant authorities as outlined in the relevant approval documentation and legislation.	All M2G environmental incidents were reported to the relevant authorities and entered into Icon Water's Incident Management System (Guardian). Any incidents that took place during the reporting period were responded to, as specified in the Operational Environmental Management Plan.
		If environmental incidents do occur, review and modify the OEMP and relevant sub-plans as required in order to ensure that similar incidents do not occur in the future.	There were no Incidents reported during the reporting period.
2. To employ practices which minimise impacts on aquatic ecology.	Aquatic ecology monitoring programs required under the OEMP have been implemented through the Murrumbidgee Ecological Monitoring Program (MEMP) and reports published on the Icon	Establish a credible aquatic ecology and water quality baseline data set before operation commences.	Pre-operation baseline data for the Murrumbidgee River and Burra Creek has been established (commenced 2008-09) through the MEMP.
		Take all reasonable measures to prevent fish impingement on intake screens at the Murrumbidgee River.	The design of M2G results in very low water velocities into the intake structure when the project is operating.

	Water external website	No translocation of alien fish species from the Murrumbidgee River to Burra Creek.	The fish egg filters installed in M2G intake infrastructure are designed to exclude fish eggs from being transferred into Burra Creek. The filters have been maintained in accordance with the maintenance plan. In December 2013 Icon Water undertook in-situ investigations into the transfer of fish eggs at M2G at ~50% operating capacity. The work, undertaken by University of Canberra, reported that neither fish nor fish eggs were detected at the Burra Creek outlet.
		Establish credible site specific water quality trigger levels for Burra Creek in accordance with the principles of the ANZECC Guidelines.	Site specific water quality trigger levels for Burra Creek are outlined in the M2G Streamflow & Water Quality Management Plan. The trigger levels are based on advice from the consultant monitoring ecologist (GHD) and the ANZECC Guidelines.
		Undertake additional ecological monitoring if the quality of water transferred is outside site specific ANZECC Guideline trigger levels.	All quality of water transferred in the reporting period was within the trigger levels in the revised M2G Streamflow & Water Quality Management Plan.
		Take all reasonable measures to prevent exceedance of site specific impact thresholds for species in the Murrumbidgee River and Burra Creek.	All reasonable measures to prevent exceedance of site specific impact thresholds for species in the Murrumbidgee River and Burra Creek are being undertaken.
	AEMP have been implemented through the Murrumbidgee Ecological Monitoring Program (MEMP) and reports published on the Icon Water external website.	No translocation of alien fish species from the Murrumbidgee River to Burra Creek.	The fish egg filters installed in M2G intake infrastructure are designed to exclude fish eggs from being transferred into Burra Creek. The filters have been maintained in accordance with the maintenance plan. In December 2013 Icon Water undertook in-situ investigations into the transfer of fish eggs at M2G at ~50% operating capacity. The work, undertaken by University of Canberra, reported that neither fish nor fish eggs were detected at the Burra Creek outlet.
		Establish credible site specific water quality trigger levels for Burra Creek in accordance with the principles of the ANZECC Guidelines.	Site specific water quality trigger levels for Burra Creek are outlined in the M2G Streamflow & Water Quality Management Plan. The trigger levels are based on advice from the consultant monitoring ecologist (GHD) and the ANZECC Guidelines.
		Undertake additional ecological monitoring if the quality of water transferred is outside site specific ANZECC Guideline trigger levels.	All quality of water transferred in the reporting period was within the trigger levels in the revised M2G Streamflow & Water Quality Management Plan.
		Take all reasonable measures to prevent exceedance of site specific impact thresholds for species in the Murrumbidgee River and Burra Creek.	All reasonable measures to prevent exceedance of site specific impact thresholds for species in the Murrumbidgee River and Burra Creek are being undertaken.

3. To employ practices which minimise impacts on the geomorphology of Burra Creek.	The SF&WQMP (which manages transfer flow volume to protect geomorphological integrity) was implemented as required. Geomorphology monitoring undertaken based on the requirements of the AEMP and delivered through the MEMP has been published on the IconWater external website.	Prior to operations commencing, establish monitoring programs for bank erosion.	A geomorphology monitoring program has been in place since 2009 as part of the baseline data collection (MEMP).
		Respond within reasonable timeframes with appropriate mitigation measures if bank erosion is detected.	No bank erosion has been detected associated with M2G operations.
		Prior to operations commencing, establish monitoring programs for erosion of pond forming bars.	A geomorphology monitoring program has been in place since 2009 as part of the baseline data collection (MEMP).
		Respond within reasonable timeframes with appropriate mitigation measures if pond forming bars are eroded.	No pond forming bars has been detected associated with M2G operations.
		Prior to operations commencing, establish monitoring programs for London Bridge karst formation.	A geomorphology monitoring program has been in place since 2009 as part of the baseline data collection (MEMP).
		Take all reasonable measures to prevent incidences of erosion that could cause structural weakening at London Bridge.	No erosion has been detected in Burra Creek associated with M2G operations.
4. To employ practices which minimise impacts on terrestrial ecology.	The Landscape Rehabilitation & Terrestrial Ecology Management Plan and Offset Delivery Plan were implemented as required. Monitoring reports required under these plans have been published on the Icon Water external website	Prior to operations commencing, establish a compensatory habitat offset package that meets the requirements of authorities in each of the three involved jurisdictions.	The M2G Biodiversity and Offset Management Plan was approved by the ACT, NSW and Commonwealth regulators in 2010 for implementation during construction. The M2G Offset Delivery Plan was approved in 2012 for delivery during operations. A revised Operational Environment Management Plan (OEMP) and corresponding sub-plans including the Offset Delivery Plan (ODP). The Landscape Rehabilitation and Terrestrial Ecology Management Plan (LRTEMP) were approved by the Commonwealth in 2018 and considered complete.
		Take all reasonable measures to prevent weed infestation after start up. If infestation occurs, they will be treated as agreed in the relevant Property Interaction Plan with the landholder.	Property Interaction Plans are in place and remain the key document outlining Icon Water's engagement with property owners.
		Consistent compliance with the construction area rehabilitation plan requirements throughout the scheme's operation.	All landholder rehabilitation areas have been handed back.

5. To employ practices which minimise impacts on heritage.	to protect heritage values such as London Bridge) was implemented as required. No additional works were undertaken within the reporting period that had any interactions with heritage values.	Take all reasonable measures to prevent incidences of erosion that could cause structural weakening at London Bridge which could affect heritage values.	No erosion has been detected associated with M2G operations.
		Take all reasonable measures to prevent complaints about impact at recognised aboriginal heritage sites due to operation or maintenance	Icon Water has not received any complaints regarding M2G operations and maintenance interacting with recognised aboriginal heritage sites.
6. To employ practices which minimise noise and vibration impacts.	In 2013 Icon Water sent to the ACT and NSW regulators a <i>M2G Compliance Noise Assessment</i> (Feb 2013) and a <i>M2G Discharge Structure Noise Monitoring Report</i> (Mar 2013) assessing noise impacts associated with the operation of the discharge structure at the M2G project. Both regulators approved the noise report, which specifically outlined the operational noise levels and concluded that the noise levels comply with Icon Water's legislative and project requirements. Icon Water continues to manage noise and vibration arising from maintenance through control embedded within Work Instructions.	Take all reasonable measures to prevent noise and vibration complaints associated with operation and maintenance activities. If complaints are received they will be responded to following the Icon Water Complaints Handling Process outlined in Figure 5.1 of the M2G Community Information Plan.	Icon Water continues to manage the potential for noise and vibration impacts to occur during operations and maintenance.
		Take all reasonable measures to prevent structural damage claims associated with vibration impacts as a result of operation and maintenance activities.	Icon Water continues to manage the potential for noise and vibration impacts to occur during operations and maintenance. No complaints were received during the reporting period.
		Maintain noise levels in compliance with Schedule 2 Part 2.2 of the Environmental Protection Regulation 2005 (ACT), or at levels endorsed by the ACT EPA.	Icon Water continues to operate M2G in the same way outlined in the M2G Discharge Structure Noise Monitoring Report which was approved by the ACT EPA (30 Apr 2013).
		Maintain noise levels in NSW below 35 dB L _{eq} (15 minute) in compliance with NSW Criteria limits as set out in the NSW Industrial Noise Policy (INP) (DECC 2000), or at levels endorsed by the NSW could cause structural weakening at London Bridge which could affect heritage values.	Icon Water continues to operate M2G in the same way outlined in the M2G Discharge Structure Noise Monitoring Report which was approved by the NSW Department of Infrastructure (3 Feb 2014).
		Take all reasonable measures to prevent complaints about impact at recognised aboriginal heritage sites due to operation or maintenance EPA. If necessary, utilise Source Control (best management practice and best available technology economically achievable) in conjunction with Transmission Control prior to Receiver Controls (refer INP Section 7) to ensure noise levels are not exceeded.	Icon Water has not received any complaints regarding M2G operations and maintenance interacting with recognised aboriginal heritage sites.
7. To employ practices which minimise impact on air quality	Icon Water continues to manage for the prevention of dust emissions and odour's arising from operation and maintenance. No complaints were received during the reporting period.	Take all reasonable measures to prevent visible dust emissions and offensive odours during operation and maintenance.	Icon Water continues to manage for the prevention of dust emissions and odours arising from operation and maintenance. No complaints were received during the reporting period.

<p>8. To employ measures which minimise bushfire hazard and manage bushfire risk</p>	<p>The Offset Delivery Plan was implemented as required, including a Bushfire Management Sub Plan. Icon Water requires all works to follow Work Instructions, which include bushfire hazard and ignition risk controls.</p>	<p>Take all reasonable measures to prevent bushfires attributable to water transfer operations and maintenance.</p>	<p>Icon Water continues to manage for the prevention of bushfires arising from operation and maintenance. Icon Water Work Instructions are the primary management control for this issue (e.g. no hot works in high bushfire danger periods, fuel load and fire trail inspection during the biannual offset condition assessments).</p>
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<p>9. To employ practices which minimise noise and vibration impacts.</p>	<p>In 2013 Icon Water sent to the ACT and NSW regulators a M2G Compliance Noise Assessment (Feb 2013) and a M2G Discharge Structure Noise Monitoring Report (Mar 2013) assessing noise impacts associated with the operation of the discharge structure at the M2G project. Both regulators approved the noise report, which specifically outlined the operational noise levels and concluded that the noise levels comply with Icon Water's legislative and project requirements. Icon Water continues to manage noise and vibration arising from maintenance through control embedded within Work Instructions.</p>	<p>Take all reasonable measures to prevent noise and vibration complaints associated with operation and maintenance activities. If complaints are received they will be responded to following the Icon Water Complaints Handling Process outlined in Figure 5.1 of the M2G Community Information Plan.</p>	<p>Icon Water continues to manage the potential for noise and vibration impacts to occur during operations and maintenance.</p>
		<p>Take all reasonable measures to prevent structural damage claims associated with vibration impacts as a result of operation and maintenance activities.</p>	<p>Icon Water continues to manage the potential for noise and vibration impacts to occur during operations and maintenance. No complaints were received during the reporting period.</p>
		<p>Maintain noise levels in compliance with Schedule 2 Part 2.2 of the Environmental Protection Regulation 2005 (ACT), or at levels endorsed by the ACT EPA.</p>	<p>Icon Water continues to operate M2G in the same way outlined in the M2G Discharge Structure Noise Monitoring Report which was approved by the ACT EPA (30 Apr 2013).</p>
		<p>Maintain noise levels in NSW below 35 dB L_{are} (15 minute) in compliance with NSW Criteria limits as set out in the NSW Industrial Noise Policy (INP) (DECC 2000), or at levels endorsed by the NSW</p>	<p>Icon Water continues to operate M2G in the same way outlined in the M2G Discharge Structure Noise Monitoring Report which was approved by the NSW Department of Infrastructure (3 Feb 2014).</p>

impacts on heritage.	to protect heritage values such as London Bridge) was implemented as required. No additional works were undertaken within the reporting period that had any interactions with heritage values.	could cause structural weakening at London Bridge which could affect heritage values.	
		Take all reasonable measures to prevent complaints about impact at recognised aboriginal heritage sites due to operation or maintenance	Icon Water has not received any complaints regarding M2G operations and maintenance interacting with recognised aboriginal heritage sites.

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