

Glebe End of Waste Scheme

Environmental Performance Report Report

Ref 2011/6181

Final Report
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GEWS Environmental Performance Report

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Document Information

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Authorisation

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Abbreviations

Term	Definition
CSG	Coal Seam Gas
DMP	Discharge Management Plan
EPBC Act	Commonwealth Environment Protection and Biodiversity Conservation Act 1999
EPR	Environmental Performance Report

Executive Summary

This report is required by Condition 8b of EPBC Act referral 2011/6181, and assessed Sunwater's compliance against the conditions of the approval.

During the reporting period from 7 August 2019 to 7 February 2020, Sunwater discharged 1,244 ML of treated CSG water into Glebe Weir. The treated CSG water discharge volume was allocated for take by irrigators (part of the announced allocation process described in the Fitzroy Basin Resource Operations Plan) and was accounted for in the Dawson Valley Water Supply Scheme area.

Sunwater undertook monthly monitoring of the receiving environment in all months except February 2020, when adverse weather and flooding impacted access to monitoring sites and safety considerations. The monitoring of the receiving environment and independent assessment of this monitoring did not confirm any new or increased impacts/likely impacts to the receiving environment.

1 EPBC Act 2011/6181 Condition 8b.i

1.1 Condition 8b.i

Within three months of every six month anniversary of commencement of discharge (and until two years after cessation of discharge), the person taking the action must submit to the Minister an Environmental Performance Report (EPR). Each EPR must include, but not be limited to, the following:

- i. The results of implementation of the Discharge Management Plan (DMP) required by condition 7.

1.2 Condition 8b.i Compliance

Condition 7 of the approval states:

“The person taking the action must prepare a Discharge Management Plan (DMP). The DMP must be submitted to, and approved by the department prior to commencement of discharge. The DMP must include but should not be limited to, the following:

- Measures to ensure a volume of water equivalent to the volume of discharged Coal Seam Gas water is extracted from the Dawson River prior to the end of the Dawson Valley Water Supply Scheme area; and
- Measures to monitor usage of said volume, including measures to deal with inappropriate usage.”

On 23 January 2015 the Discharge Management Plan as required by condition 7 was approved by the Department of the Environment. Discharge of treated Coal Seam Gas (CSG) water from the Woleebee Creek to Glebe Weir pipeline into the Glebe Weir began on 7 February 2015.

From 7 August 2019 to 7 February 2020, Sunwater discharged 1,244 ML of treated CSG water into Glebe Weir. The treated CSG water discharge volume was allocated for take by irrigators (part of the announced allocation process described in the Fitzroy Basin Resource Operations Plan) and was accounted for in the Dawson Valley Water Supply Scheme area.

The Dawson Valley Water Supply Scheme operational reports are available on Sunwater’s website:

<http://www.sunwater.com.au/schemes/dawson-valley/scheme-information/announced-allocations>

2 EPBC Act Referral 2011/6181 Condition 8b.ii

2.1 Condition 8b.ii

Within three months of every six month anniversary of commencement of discharge (and until two years after cessation of discharge), the person taking the action must submit to the Minister an Environmental Performance Report (EPR). Each EPR must include, but not be limited to, the following:

II. The results of regular environmental monitoring required by the Water Quality Management Plan (WQMP).

2.2 Condition 8b.ii Compliance

As per the Water Quality Management Plan (approved by the Department of Environment on 5/02/2015), Sunwater has commissioned monthly independent monitoring of water quality and aquatic ecology in the receiving environment during the reporting period:

- Quarterly Water Quality Monitoring Report, July to September 2019 (Appendix A)
- Spring 2019 Sediment Quality and Aquatic Ecology Report (Appendix B)
- Quarterly Water Quality Monitoring Report, October to December 2019 (Appendix C)
- Quarterly Water Quality Monitoring Report, January to March 2020 (Appendix D)

3 EPBC Act Referral 2011/6181 Condition 8b.iii

3.1 Condition 8b.iii

Within three months of every six month anniversary of commencement of discharge (and until two years after cessation of discharge), the person taking the action must submit to the Minister an Environmental Performance Report (EPR). Each EPR must include, but not be limited to, the following:

III. An independent evaluation of the results of the regular environmental monitoring required by the WQMP, and an assessment of any new or increased impacts/likely impacts to the environment

3.2 Condition 8b.iii Compliance

The water quality and aquatic ecology monitoring reports (Appendices A to D) each include an impact assessment section. The impact assessments have concluded, upon assessment of the environmental monitoring data, that overall:

- the release of treated CS water does not appear to have had an adverse impact on water quality in the receiving environment; and
- there was no evidence of impact from the release of treated CS water to aquatic habitat condition, sediment quality, fish communities or macroinvertebrates in the Dawson River.

4 EPBC Act Referral 2011/6181 Condition 8b.iv

4.1 Condition 8b.iv

Within three months of every six month anniversary of commencement of discharge (and until two years after cessation of discharge), the person taking the action must submit to the Minister an Environmental Performance Report (EPR). Each EPR must include, but not be limited to, the following:

IV. Details of appropriate actions taken/to be taken in the event that any new or increased impacts/likely impacts to the environment are identified.

4.2 Condition 8b.iv Compliance

No new or increased impacts/likely impacts to the environment were identified as a result of the discharge of treated CSG water by Sunwater into the Dawson Valley Water Supply Scheme. Sunwater will continue its monitoring of the receiving environment as detailed in the receiving environment monitoring program.

Although unrelated to releases into Glebe weir, Sunwater reported an minor, uncontrolled release to land to the Queensland Department of Environment and Science (DES) on the 5 December 2019. Additional information was provided to the DES on the 19 December 2019. The report advised of a release of 2ML of treated CSG water to the surrounding land due to the opening of a scour valve along the pipeline. The scour valve has since been locked out. There was no evidence that the uncontrolled release to land had any adverse impact to the surrounding environment. Sunwater received a closeout letter from the DES on the 8 January 2020 confirming that there was no evidence of non-compliance identified in relation to this event.

5 EPBC Act Referral 2100/6181 Condition 10

5.1 Condition 10

Within three months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a Compliance Report on their website addressing compliance with each of the conditions of this approval, including implementation of any management plans specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the department at the same time as the compliance report.

- a. From first submission of the EPR described in Condition 8, the second of those reports submitted each year can also serve as the Compliance Report required by this condition, as long as the requirements of both conditions are met.

5.2 Condition 10 Compliance

Compliance with Condition 10 is summarised in Table 5.1.

Table 5.1 Condition 10 Compliance

Condition	Compliance
1. The person taking the action must undertake the action in accordance with the Preliminary Documentation dated 2 August 2012, and the conditions of this approval. The conditions of this approval prevail to the extent of any inconsistencies.	All actions undertaken by Sunwater in the construction of the Woleebee Creek to Glebe Weir pipeline and operation of the Glebe End of Waste Scheme have been in accordance with the conditions of the approval. This is demonstrated by there being no recorded reportable incidents for the Glebe End of Waste Scheme against the approval.
2. Within 20 business days after the commencement of the action, the person taking the action must advise the department in writing of the actual date of commencement of the action.	Sunwater commenced action on 3 May 2013. Written advice of this was provided to the department on 17 May 2013, within the stipulated timeframe of 20 business days

Condition	Compliance
<p>3. The person taking the action must prepare a Construction Environmental Management Plan (CEMP). The CEMP must be submitted to, and approved by the department prior to commencement of the action. The CEMP must be implemented. The approved CEMP must include, but should not be limited to, the following:</p> <ul style="list-style-type: none"> a. measures to minimise impacts to EPBC Act listed threatened fauna species including measures to care for injured fauna; b. measures to minimise impacts to EPBC Act listed threatened flora, including a vegetation clearing strategy; c. measures to limit the spread of pests and invasive species; d. sediment and erosion controls; e. measures to revegetate and rehabilitate the subject site following construction; and f. measures to implement, monitor, or improve (should deficiencies be identified, either by the person taking the action or by the department) the CEMP. 	<p>On 15 April 2013 Sunwater received confirmation from the Department of Sustainability, Environment, Water, Population and Communities that the submitted CEMP had been assessed and approved by the department.</p> <p>CEMP previously provided to DoEE, but will be made available upon request.</p>
<p>4. The person taking the action must not destroy by clearing or any other activity, more than 2.08 ha of the endangered ecological community "Brigalow (Acacia harpophylla) dominant and co-dominant," nor more than 1.38 ha of the endangered ecological community "Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions."</p> <ul style="list-style-type: none"> a. If clearing of more than 2.08 ha of the endangered ecological community "Brigalow (Acacia harpophylla) dominant and co-dominant," or more than 1.38 ha of the endangered ecological community "Coolibah – Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions" is necessary, the person taking the action must: <ul style="list-style-type: none"> i. undertake pre-clearance surveys of additional areas to be cleared; and ii. submit the pre-clearance surveys to the department for approval prior to clearing. b. Any approved clearing of vegetation must be conducted in accordance with the CEMP, required by Condition 3. 	<p>Whilst undertaking the action, 1.25 ha of Brigalow (Acacia harpophylla) dominant and co-dominant, and 0.85 ha of Coolibah – Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions was cleared within the specified limits stated in condition 4. Evidence of this was provided to and acknowledged by the department on 7 March 2014.</p> <p>Whilst under construction, weekly and monthly reports documented any environmental issues or incidents encountered during construction within the applicable reporting period. This enabled any issues to be effectively communicated and addressed, and ensured all clearing undertaken was in accordance with the approved CEMP.</p> <p>Construction reports previously provided to DoEE, but will be made available upon request.</p>

Condition	Compliance
<p>5. The person taking the action must not destroy by clearing or any other activity, more than 22 ha of natural habitat suitable for the vulnerable species: Large-eared Pied-bat {Chalinolobous dwyeri}] Southern-eastern Long-eared Bat {Nyctophilus corbeni}] and Brigalow Scaly-foot [Parademi orientalis).</p> <p>a. If more than 22 ha of natural habitat suitable for the vulnerable species: Large-eared Pied-bat (Chalinolobous dwyeri)] Southern-eastern Long-eared Bat (Nyctophilus corbeni)] and Brigalow Scaly-foot (Parademi orientalis) is necessary, the person taking the action must:</p> <p>i. undertake pre-clearance surveys of additional areas to be cleared; and</p> <p>ii. submit the pre-clearance surveys to the department for approval, prior to clearing.</p> <p>b. Any approved clearing of vegetation must be conducted in accordance with the CEMP, required by Condition 3.</p>	<p>As detailed in Sunwater’s Woleebee Creek to Glebe Weir Pipeline Vegetation Offset Strategy, and the Atkinson Realignment Flora Investigation report, the total area of natural habitat suitable for the vulnerable species: Large-eared Pied-bat (Chalinolobous dwyeri); Southern-eastern Long-eared Bat (Nyctophilus corbeni); and Brigalow Scaly-foot (Parademi orientalis) cleared was less than 22 ha.</p> <p>During the construction of the Woleebee Creek to Glebe Weir pipeline all work/activities complied with the CEMP.</p>
<p>6. The person taking the action must develop a Biodiversity Offset Strategy (BOS) to ensure better protection of EPBC Act listed threatened species and communities. The BOS must be submitted to, and approved by the Minister prior to commencement of the action.</p> <p>a. The BOS must be developed in accordance with the EPBC Act Environmental Offset Policy.</p> <p>b. The BOS must include, but should not be limited to, the following:</p> <p>i. details of the acquisition and ongoing management of vegetation which meets or will meet the definition of the endangered ecological community "Brigalow {Acacia harpophylla) dominant and codominant";</p> <p>ii. details of the acquisition and ongoing management of vegetation which meets or will meet the definition of the endangered ecological community "Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions";</p> <p>iii. details of steps to be undertaken to legally secure the proposed offset areas and implement to BOS within 12 months of the commencement of the action.</p> <p>iv. The offset areas for each separate community must be contiguous (that is, the total cannot be composed of a number of fragments), and must not be located within an existing mining lease or mining lease application areas; and</p> <p>v. Upon legally securing the offset area, the BOS must be updated with a textual description and map to clearly define the location and boundaries of the offset area. This must be accompanied with the offset attributes and a shapefile.</p>	<p>Sunwater submitted a BOS to the department on 1 May 2013. A signed letter of approval was provided to Sunwater on 2 May 2013, one day prior to the commencement of the action.</p> <p>BOS previously provided to DoEE, but will be made available upon request.</p> <p>Sunwater notified the DoEE of a landholder compliance issue identified at the vegetation offset area for condition 6.b.ii on 4 November 2019.</p>

Condition	Compliance
<p>7. The person taking the action must prepare a Discharge Management Plan (DMP). The DMP must be submitted to, and approved by the department prior to commencement of discharge. The DMP must include, but should not be limited to, the following:</p> <ul style="list-style-type: none"> a. measures to ensure a volume of water equivalent to the volume of discharged Coal Seam Gas water is extracted from the Dawson River prior to the end of the Dawson Valley Water Supply Scheme area; and b. measures to monitor usage of said volume, including measures to deal with inappropriate usage. 	<p>Sunwater submitted the DMP to the Department on 22 January 2015, before the commencement of discharge on 7 February 2015. Sunwater received a letter of approval for the DMP from the department on 23 January 2015.</p> <p>DMP previously provided to DoEE, but will be made available upon request. See also Section 1.2 above.</p>
<p>8. The person taking the action must prepare and submit a Water Quality Monitoring Plan (WQMP), for the Minister's approval.</p> <ul style="list-style-type: none"> a. The WQMP must include, but not be limited to; <ul style="list-style-type: none"> i. Measures to conduct regular environmental monitoring within the Dawson River, at a range of locations including, but not limited to: <ol style="list-style-type: none"> 1. upstream of the discharge point; 2. within Glebe Weir, but downstream of the discharge point; and 3. downstream of Glebe Weir, at least as far as Theodore Weir. ii. details of parameters to be monitored. iii. for each parameter specified in Condition 8(a)(ii); the WQMP must stipulate a threshold limit. iv. The WQMP must specify the guideline, standard, or relevant research for which both the background level within Glebe Weir and the threshold limit has been set, along with a discussion as to why the particular guideline, standard, or relevant research is appropriate. b. Within three months of every six month anniversary of commencement of discharge (and until two year after the cessation of discharge), the person taking the action must submit to the Minister an Environmental Performance Report (EPR). Each EPR must include, but not be limited to, the following: <ul style="list-style-type: none"> i. the results of implementation of the DMP required by Condition 7; ii. the results of the regular environmental monitoring required by the WQMP; iii. an independent evaluation of the results of the regular environmental monitoring required by the WQMP, and an assessment of any new or increased impacts/likely impacts to the environment are identified. c. If, upon review of an EPR, the Minister is not satisfied that appropriate actions have been taken or will be taken to mitigate any new or increased impacts/likely impacts to the environment identified during the regular monitoring required by this condition, the Minister may direct the person taking the action to reduce or cease discharge. The person taking the action must then undertake an evaluation in accordance with the recommendations of an independent evaluator and submit the report to the department for approval. 	<p>On 5 February 2015 a WQMP was submitted by Sunwater to the department for the Minister's approval. The discharge commenced on 7 February 2015.</p> <p>Sunwater submitted an EPR on 6 November 2015, within the timeframe specified, and have submitted EPRs on a six monthly basis since commencement of discharge. Each EPR also contains the available detailed results from the implementation of the DMP and WQMP. These results have shown that there has been no adverse environmental impact on the receiving environment as a result of the commencement of treated CS water discharge (see Appendices A to D for recent monitoring reports).</p>

Condition	Compliance
<p>9. The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plans required by this approval, and make them available upon request to the department. Such records may be subject to audit by the department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of the approval. Summaries or audits will be posted on the department's website. The results of audits may also be publicised through the general media.</p>	<p>Sunwater records are managed in accordance with Sunwater's internal records management policy. The statements and intent of this policy are in accordance with the requirements of condition 9, ensuring all required records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plans required by the approval, will be readily available to the department if requested.</p>
<p>10. Within three months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a Compliance Report on their website addressing compliance with each of the conditions of this approval, including implementation of any management plans specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the department at the same time as the compliance report.</p> <p>a. From first submission of the EPR described in Condition 8, the second of those reports submitted each year can also serve as the Compliance Report required by this condition, as long as the requirements of both conditions are met.</p>	<p>This Compliance Report shall be available on Sunwater's public website www.Sunwater.com.au. Documentary evidence of compliance with these conditions has been provided to the Department throughout construction and operation including photos, maps, and surveys.</p>
<p>11. If the person taking the action wishes to carry out any activity otherwise than in accordance with the management plans/strategy as specified in the conditions, the person taking the action must submit to the department for the Minister's written approval, a revised version of that management plan/strategy. The varied activity shall not commence until the Minister has approved the varied management plan/strategy in writing. The Minister will not approve a varied management plan/strategy unless the revised management plan/strategy would result in an equivalent or improved environmental outcome over time. If the Minister approved the revised management plan/strategy that management plan/strategy must be implemented in place of the management plan originally approved.</p>	<p>During the construction of the Woleebee Creek to Glebe Weir Pipeline there was a slight variation in the final alignment of the pipelines from the original alignment communicated to the department. This alignment change and evidence that the impacts were able to be managed through the existing plans and strategies was provided to the department. The department acknowledged receipt of this information on 7 March 2014.</p>

Condition	Compliance
<p>12. If the Minister believes that it is necessary or convenient for the better protection of World Heritage properties (sections 12 and 15A), National Heritage places (sections 15B and 15C), Listed Threatened Species and Communities (sections 18 and 18A), or the Great Barrier Reef Marine Park (section 248 and 24C) to do so, the Minister may request that the person taking the action make specified revisions to the management plan/s/strategy specified in the conditions and submit the revised management plan/s/strategy for the Minister's written approval. The person taking the action must comply with any such request. The revised approved management plan/strategy must be implemented. Unless the Minister has approved the revised management plan/strategy, then the person taking the action must continue to implement the management plan/strategy originally approved, as specified in the conditions.</p>	<p>Sunwater has not received any requests from the Minister to make specified revisions to the management plan/s/strategy for the Minister's written approval.</p>
<p>13. Unless otherwise agreed to in writing by the Minister, the person taking the action must publish all management plans referred to in these conditions of approval on their website. Each management plan must be published on the website within one month of being approved.</p>	<p>Sunwater has published the Construction Environmental Management Plan, Discharge Management Plan, and Water Quality Management Plan on the Sunwater website: www.Sunwater.com.au.</p>