

Narrabri Underground Mine Stage 3 Extension Project

Annual Report 2025 Water Management Plan

EPBC 2019/8427 Condition 13

Approval	Name	Position	Signed	Date
Authorised by:	Brent Baker	Manager- Environment		31 December 2025

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1. Introduction

In accordance with Condition 13 of the Environment Protection Biodiversity Conservation (EPBC) approval 2019/8427, Narrabri Coal Operations Pty Ltd (NCOPL) is required to submit an annual report on the outcomes of the monitoring programs in the approved Water Management Plan (WMP) (2022) each calendar year to the Department of Climate Change, Energy, the Environment and Water (the Department).

2. Scope

The intent of the report is to demonstrate that the Action has had no adverse effect on the function of a water resource, by providing sufficient detail and information to demonstrate that the performance measures of the WMP have been achieved for the Reporting Period. The report structure includes a section on each of the water management performance measures included in Condition B34 of NSW Development Consent SSD-10269.

The WMP referenced for the purpose of this reporting is the plan required by SSD-10269 conditions B35-B38; WMP version 0A dated 29 November 2022 and approved by the NSW Planning Secretary on 05 October 2023.

The period covered by this report is 01 August 2025 to 31 December 2025 (Reporting Period); 01 August 2025 being the date when NCOPL commenced the Action.

3. Water Management Plan Performance Measures

The subsections below outline the relevant water resource features and associated performance measures that NCOPL is required to comply with under Condition B34 of the approved WMP.

3.1 Namoi River

Feature	Performance Measure
Namoi River	Negligible environmental consequences

Performance Measure was achieved for the Reporting Period.

A groundwater numerical model was developed to assess potential impacts of the Action on groundwater and surface water resources (AGE, 2020). The model was subsequently updated and re-calibrated using revised mine plans and the most recent monitoring data, with the Namoi River and its major tributaries represented within the groundwater flow model domain (AGE, 2024).

The predicted indirect water take from the Upper and Lower Namoi Regulated River Water Source for 2025 was 0 ML. NCOPL holds Water Access Licence (WAL) 2728 which has a share unit of 10 ML to account for indirect water take from this water source.

In addition to the predicted indirect take on the Namoi River, NCOPL undertake direct extraction of water from the Namoi River to supplement the mining operation. Water take is undertaken in accordance with Water NSW water licensing approvals. The data as presented in **Table 1** shows a total take of 105 ML over the Reporting Period, well within the current licence entitlement 668 ML/yr.

Table 1: Namoi River licensed water take

Date	Flowmeter reading (ML)	Usage (ML)
31/07/2025	387.383	-
28/08/2025	387.39	0.007
30/09/2025	387.403	0.013
31/10/2025	398.71	11.307
27/11/2025	441.564	42.854
31/12/2025	492.101	50.537
Total usage	-	104.718

Ambient flow monitoring of Kurrajong Creek, Pine Creek and Tulla Mullen Creek (tributaries to the Namoi River) is undertaken quarterly, in the event of flow during the quarter, in accordance with the WMP. Monitoring did not report an exceedance of the downstream surface water impact assessment criteria during the Reporting Period, with the exception of the event outlined below:

- 12 December 2025 - monitoring results for Total Organic Carbon (TOC) of 18mg/L at KCUS monitoring point exceeded the surface water impact assessment criteria (17mg/L) specified in the Surface Water Management Plan (reported as Incident to the Department via email on 23/12/2025¹, with investigation report to be completed by 30/01/2026).

3.2 Namoi Alluvium

Feature	Performance Measure
Namoi Alluvium	No subsidence impact or environmental consequence greater than predicted in the EIS

Performance Measure was achieved for the Reporting Period.

Water levels in the Alluvial monitoring bore P39B are primarily influenced by natural rainfall patterns, with no significant impact from mining activities observed during the Reporting Period. It must be noted that significant and ongoing groundwater abstraction for agricultural usage from the Namoi Alluvium occurs in close proximity to monitoring bore P39B. Measured water levels remain above the WMP Tier 1 groundwater level trigger of 220.3 mAHD:

- Q3 2025 water level = 222.0 mAHD
- Q4 2025 water level = 222.759 mAHD

Monitoring bore P39B recorded an Electrical Conductivity (EC) result exceeding the WMP trigger level of 6,546 $\mu\text{S}/\text{cm}$ during quarterly groundwater monitoring activities:

- Q3 2025 EC result of 11,040 $\mu\text{S}/\text{cm}$ (reported as Incident to the Department via email on 03/09/2025)
- Q4 2025 result of 12,090 $\mu\text{S}/\text{cm}$ (reported as Incident to the Department via email on 12/11/2025).

Hydrogeological investigation reports (submitted to the Department in response to incident notifications) concluded that trends observed in the EC and groundwater level data indicate that the likely cause of EC increases is due to two significant climate events, the Tinderbox Drought from 2017 to 2020 followed by a period of increased rainfall from 2020 to late 2022. During prolonged above-average rainfall, accumulated and concentrated salts (as a result of preceding dry spells) seep from near-surface strata to deeper strata within the unsaturated zone into saturated hydrostratigraphic units due to increased recharge or seepage from surface runoff drainage lines. Increases in EC are a likely result of long-term natural conditions with no mining-induced impacts likely. Given the natural causes of these mechanisms, no immediate action is required.

3.3 Water Management - General

Feature	Performance Measure
Water management - general	<ul style="list-style-type: none"> • Maintain separation between clean, dirty (i.e. sediment-laden) and mine water management systems • Minimise the use of clean and potable water on the site • Maximise water recycling, reuse and sharing opportunities • Minimise the use of make-up water from external sources • Design, install, operate and maintain water management systems in a proper and efficient manner • Minimise risks to the receiving environment and downstream water users

Performance Measure was achieved for the Reporting Period.

¹ NCOPL received laboratory results 22/12/2025.

NCOPL continues to meet the water management requirements of SSD-10269. Clean water, sediment-laden water and mine water are kept separate through the existing network of diversion drains, sediment controls and dedicated mine water infrastructure, which are routinely inspected to ensure they function as intended. Water management structures have been designed, installed and maintained to a high standard, with regular inspections and maintenance supporting their ongoing effectiveness.

Use of clean and potable water is kept to a minimum, with mine water used wherever practical for operational needs. Recycling and reuse remain a key focus, and the site consistently makes use of captured mine water for dust suppression and other activities to reduce reliance on external resources.

External water may be imported to supplement the mining operation; this is undertaken in accordance with water licensing approvals (**Section 3.1**).

These measures, combined with ongoing monitoring and adherence to the WMP, ensure that risks to downstream environments and water users remain low.

3.4 Erosion and Sediment Control Works

Feature	Performance Measure
Erosion and sediment control works	<ul style="list-style-type: none"> Design, install and maintain new erosion and sediment controls in accordance with the guidance series <i>Managing Urban Stormwater: Soils and Construction including Volume 1: Blue Book (Landcom, 2004), Volume 2A: Installation of Services (DECC, 2008), Volume 2C: Unsealed Roads (DECC, 2008), Volume 2D: Main Road Construction (DECC, 2008) and Volume 2E: Mines and Quarries (DECC, 2008)</i> Design, install and maintain any new infrastructure located within 40 metres of watercourses in accordance with the guidance series for <i>Controlled Activities on Waterfront Land (DPI Water, 2012)</i> Design, install and maintain any new creek crossings generally in accordance with the <i>Fisheries NSW Policy and Guidelines for Fish Habitat Conservation and Management (DPI, 2013) and Why Do Fish Need To Cross The Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries 2003)</i>. Ensure all new works on waterfront land are consistent with the guidance series for <i>Controlled Activities on Waterfront Land (DPI Water 2012)</i>

Performance Measure was achieved for the Reporting Period.

NCOPL's Permit to Work (PTW) Procedure incorporates requirements for appropriate erosion and sediment control measures to be implemented within designated work areas, commensurate with the nature of the activity and the associated environmental risk. Each PTW is reviewed by a suitably qualified Environmental professional and may be approved with specific conditions where required.

NCOPL also conducts routine inspections of active work areas to monitor the performance and condition of installed erosion and sediment controls. Where maintenance or rectification is identified, actions are documented and communicated to the Supervisor responsible for timely implementation.

Further guidance on erosion and sediment control requirements is provided in the WMP (Attachment 2- Erosion and Sediment Control Plan) which outlines the site-wide erosion and sediment control framework and associated protocols.

3.5 Clean Water Diversion and Storage Infrastructure

Feature	Performance Measure
Clean water diversion and storage infrastructure	Maximise as far as reasonable and feasible the diversion of clean water around disturbed areas on the site, except where clean water is captured for use on the site

Performance Measure was achieved for the Reporting Period.

NCOPL diverts as much clean water as reasonably practicable around disturbed areas to minimise the volume of water entering the mine water system. Clean water diversion structures (including channels, bunds, and contour drains) are designed to ensure runoff bypasses disturbed or operational areas wherever feasible. This significantly reduces the requirement for managing water within the mine water system and decreases the potential for sediment loading.

3.6 Sediment Dams

Feature	Performance Measure
Sediment dams	Design, install and maintain sediment dams in accordance with the guidance series <i>Managing Urban Stormwater: Soils and Construction - Volume 1 Quarries (DECC 2008)</i>

Performance Measure was achieved for the Reporting Period.

Sediment dams across the site are designed, constructed and maintained in accordance with *Managing Urban Stormwater: Soils and Construction – Volume 1 Quarries (DECC, 2008)*. Dams are appropriately sized and located to capture sediment-laden runoff from disturbed areas and are routinely inspected and maintained to ensure effective performance.

During the Reporting Period, SD9 was desilted (November 2025). No new sediment dams were constructed during the Reporting Period.

3.7 Chemical and Hydrocarbon Storages

Feature	Performance Measure
Chemical and hydrocarbon storages	Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standard

Performance Measure was achieved for the Reporting Period.

NCOPL confirms that all chemical and hydrocarbon products are stored within appropriately bunded and contained areas in accordance with the relevant Australian Standards. Storage locations are routinely inspected to verify bund integrity, capacity, and condition, and any required maintenance actions are raised and addressed in a timely manner. In addition, a monthly site inspection is undertaken to evaluate the ongoing performance of storage and containment controls, with findings recorded in the site compliance database. This process ensures effective spill containment, prevents environmental harm, and maintains compliance with statutory requirements.

3.8 Mine Water Discharges

Feature	Performance Measure
Mine water discharges	Negligible environmental consequences beyond those predicted in the documents listed in the Environmental Impact Statement

Performance Measure was achieved for the Reporting Period.

During the Reporting Period, NCOPL undertook licenced discharges in accordance with the WMP and Environment Protection Licence (EPL) 12789 during August (04/08/2025) and December (12/12/2025). Monitoring results were within compliance limits, noting that during significant wet weather events (rainfall exceeding 38.4 mm over any consecutive five-day period) Total Suspended Solids (TSS) limits may be exceeded. Monitoring results are reported on the Project website².

²<https://whitehavencoal.com.au/Documentations/Narrabri%20Mine/Environmental%20Management,%20Monitoring%20&%20Compliance/EPL%20Monitoring/NAR-EPL%20Monitoring%202025.pdf?v=1764205396>

3.9 Treated Water Discharges

Feature	Performance Measure
Treated water discharges	<p>Discharges to the Namoi River are:</p> <ul style="list-style-type: none"> below 250 mg/L Total Dissolved Solids (50th percentile, all samples, volume based); below 350 mg/L Total Dissolved Solids (all samples, volume based); and pH between 6.5 and 8.5 (all samples).

Not triggered for the Reporting Period.

There were no treated water discharges to the Namoi River during the Reporting Period.

3.10 Aquatic and Riparian Ecosystems

Feature	Performance Measure
Aquatic and riparian ecosystems	<ul style="list-style-type: none"> Negligible environmental consequences beyond those predicted in the Environmental Impact Statement. Develop site-specific in-stream water quality objectives in accordance with <i>the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC & ARM CANZ, 2000)</i> and <i>Using the ANZECC Guidelines and Water Quality Objectives in NSW (DEC, 2006)</i>, or its latest version.

Performance Measure was achieved for the Reporting Period.

NCOPL has reviewed and updated the WMP in accordance with the requirements of SSD-10269. In preparing the revised WMP, NCOPL applied the relevant guidance from the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC & ARM CANZ, 2000)* and *Using the ANZECC Guidelines and Water Quality Objectives in NSW (DEC, 2006)*.

The updated WMP outlines the approach for establishing site-specific in-stream water quality objectives, including the use of baseline data, selection of suitable indicators, development of trigger values, and associated monitoring requirements. The revised plan was submitted on 12 December 2025 to NSW Department of Planning, Housing and Infrastructure (DPHI) and is pending approval; additionally, in accordance with Condition 12a of EPBC 2019/8427, the Department was notified via email (on 12/12/2025) of the submission.

Monitoring results to date confirm that NCOPL has not recorded any exceedances of the water quality predictions outlined in the Environmental Impact Statement (EIS). No environmental consequences beyond those identified in the EIS have been observed.

This demonstrates that NCOPL continues to meet the relevant approval conditions relating to water quality management and the consideration of the applicable guideline framework.

4. References

AGE, 2020, Groundwater Assessment Narrabri Mine Stage 3 Extension Project, August 2020 (<https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=S SD-10269%2120201023T021150.054%20GMT>).

AGE, 2024, Narrabri Coal Mine Model Re-calibration, v2.01, March 2024