

Independent Expert Scientific Committee on Unconventional Gas Development and Large Coal Mining Development (IESC) Meeting 118, 27 – 28 August 2025

MINUTES Videoconference

ATTENDANCE AND APOLOGIES

IN ATTENDANCE APOLOGIES

Dr Chris Pigram (Chair)

Professor Rory Nathan

Dr Andrew Boulton

Dr Jenny Stauber

Professor Jenny Davis (Day 1 - 9:00am to 9:15am only)

Dr Juliette Woods

Associate Professor Phil Hayes

Professor Wendy Timms

OFFICE OF WATER SCIENCE (OWS)

Note: OWS attendees include those with full or partial attendance.

Dr Des Owen, Director

Ben Klug

Dylan Stinton

David Cameron

Frances Knight

Isabelle Francis

Michael Short

Dr Laura Richardson

Mick Hannan

Loren Pollitt

1. Welcome and Introductions

The Chair acknowledged the traditional owners, past and present, on whose lands this meeting was held, and welcomed members of the Independent Expert Scientific Committee on Unconventional Gas Development and Large Coal Mining Development (IESC) to the meeting.

1.1 Attendance and Apologies

IESC members in attendance and apologies are recorded above.

At the commencement of agenda item '2.1 Maules Creek Coal Mine Continuation Project', Professor Jenny Davis excused herself from the remainder of the meeting.

1.2 Disclosure of Interests

Committee members were invited to make disclosures. Committee members also completed a Meeting Declaration of Interests before the meeting commenced. No actual, potential or perceived conflicts of interest were recorded for this meeting.

1.3 Confirmation of Agenda

The Committee endorsed the agenda for Meeting 118.

1.4 Confirmation of Out-of-Session Decisions

The Committee noted that:

- minutes of the Committee's 117th meeting on 21 & 23 July 2025 were agreed out-of-session and published on the IESC website on 12 August 2025; and
- advice on the Boggabri Coal Mine Modification 10 was provided to the regulator on 29 July 2025 and published on 12 August 2025.

1.5 Correspondence

The Committee noted the status of correspondence to 13 August 2025.

1.6 Action Items

Ongoing items were noted, and updates were provided on the timing of completion.

1.7 Forward Planning Agenda

The Committee noted the forward planning agenda.

It was agreed that the next meeting be scheduled as a videoconference on 1 October 2025.

1.8 Environmental Scan

The OWS reported on recent events.

2. Advice on Projects referred by governments

2.1 Maules Creek Coal Mine Continuation Project

The Maules Creek Coal Mine Continuation Project (the 'project') is a proposed extension to the existing Maules Creek Coal Mine (MCCM), an open-cut pit 17 km northeast of Boggabri, New South Wales. The project includes an additional 681 hectares (ha) of disturbance to the east of the existing (continuing) MCCM mining area and a 10-year extension in mine life to 2044. It expects to extract an additional 117 million tonnes (Mt) of Run-of-Mine (ROM) thermal, coking and bypass coal.

The project proposes to use the current infrastructure which includes a mine infrastructure area, coal handling and processing plant (CHPP), a rail loop, accommodation villages, ancillary infrastructure and access roads. Water is to be managed using both existing and new infrastructure, with sediment dams, mine water dams, drains, pipelines and clean-water diversions to be constructed. A bi-directional transfer pipeline is proposed to share water between the MCCM, the Tarrawonga Coal Mine and the Vickery Coal Mine. The pipeline is intended to facilitate water supply and storage requirements for the project.

The project area is in the Namoi River catchment in the Murray-Darling Basin, and adjacent to Back Creek (a tributary of Maules Creek), with the Namoi River approximately 8 km to the west. The Namoi River and its tributaries, including Maules Creek and Back Creek, are part of the Lowland Darling River Aquatic Ecological Community, an endangered ecological community in New South Wales that includes all native fish and aquatic invertebrates in all surface waters of the Darling River in NSW (New South Wales Department of Primary Industries 2007).

Within the development footprint, the proponent has identified three communities listed as Threatened Ecological Communities (TECs) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), as well as six species listed as threatened. One TEC along Back Creek is identified as a potentially groundwater-dependent ecosystem (GDE), and may opportunistically rely on groundwater below the ephemeral creek bed. The proponent has also collected stygofauna from aquifers near Back and Maules creeks.

Key potential impacts from this project are:

- clearing of 642 ha of native vegetation, some of which is habitat for EPBC Act-listed species such as *Koala Phascolarctos cinereus*;
- removal of approximately 10 river-km of ephemeral tributaries of Back Creek and their riparian zones that are within the mine footprint;

- reductions in abundance and/or condition of groundwater-dependent terrestrial vegetation and stygofauna communities due to lowering of the water table below Maules and Back creeks; and
- cumulative impacts from the proposed project and current operations, and regional impacts from the MCCM and surrounding mines, particularly due to increased groundwater drawdown in the coal seams and a continued water take from the Namoi River.

The IESC has identified areas in which additional work is required to address the key potential impacts, as detailed in this advice. These include:

- field investigations, including multi-level piezometers and hydraulic testing, to characterise the contact between the coal seams and the overlying alluvium beneath Maules Creek;
- estimating the post-closure groundwater conditions at equilibrium, taking into account the final landform and pit lake;
- incorporating climate-change scenarios (e.g., RCP8.5) into the water balance and flood modelling; and
- ongoing stygofauna monitoring to assess potential impacts from the proposed mining operations on existing communities.

Consistent with the *Environment Protection and Biodiversity Conservation Regulations 2000*, advice will be published on the IESC's website within 10 business days of being provided to the regulators.

3. Other business

3.1 Presentation: Review of Well Integrity for Onshore Unconventional Oil and Gas in Australia

IESC member, Associate Professor Phil Hayes, presented a review of well Integrity for onshore unconventional oil and gas in Australia.

3.2 IESC Webpage Review

The Committee provided feedback on updates to several iesc.gov.au webpages.

4. Close of Meeting

The meeting closed at 12:30pm on Thursday, 28 August 2025.

Next Meeting

The next meeting is scheduled as a videoconference on 1 October 2025.

Minutes confirmed as true and correct:

Dr Chris Pigram AM, FTSE

IESC Chair

7 September 2025