

Meeting Minutes

Narrabri Gas Project (NGP) Water Technical Advisory Group (WTAG)

Meeting #14

DATE / TIME

Tuesday 21 July 2026
9.00am

LOCATION

Narrabri Shopfront Conference Room
125 Maitland Street, Narrabri
(+ Videoconference)

FACILITATOR

Garry West

MINUTE TAKER

Garry West

ATTENDEES

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| <ul style="list-style-type: none">• Garry West (Independent Chair)• Keith Phillipson (AGE) VC• Fabienne d-Hautefeulla (DCCEEWSW) VC• David Cameron (Community Representative)• Michael Williams (Independent Expert) VC• Edward Trindall (Narrabri Local Aboriginal Land Council (LALC))• Cate Barrett (DCCEEWSW) VC | <ul style="list-style-type: none">• Randall Cox (Independent Expert) VC• Ty Felmingham (Santos)• Janelle Twyman (Santos)• Michelle Bond (Santos)• Abby McClure (Santos)• Adrian Lavery (Santos) VC• John Williams (DCCEEWSW) VC |
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APOLOGIES

- Cr Ethan Towns (Narrabri Council)

GUESTS

- NIL

Discussions

NO.	DISCUSSIONS
1. Welcome	The Chair welcomed all to the meeting and acknowledged Gomeroi country on which the meeting was held as well as Elders past, present and future and all Aboriginal persons present. Mr West asked if there were any objections to him recording the meeting for the purposes of minute taking. No objection
2. Declaration of pecuniary or other interests / Code of Conduct	Chair asked if there were any new declarations of interest. Nil
3. Confirmation of previous minutes and business arising	All minutes of previous meeting distributed to WTAG members and are available on the Narrabri Gas Project website.
4. Correspondence	Nil correspondence received.
5. Actions from previous meeting	Nil
6. Santos Corporate Update	Santos Corporate Update – Michelle Bond (Santos) • Santos delivered increased production of 22.5 mmmboe, up 1% on the prior quarter and 3% on the corresponding period in 2025, as Barossa achieved its first cargoes. Sales revenue of approximately \$1.27 billion for the first quarter, up 3% on the prior quarter. Free cash flow from operations of approximately \$383 million, in line with the prior quarter. • Pikka phase 1 reached mechanical completion early in the quarter, followed by fuel gas introduction to support electrification. Dynamic commissioning continued through to quarter end, and oil initiation for first tank and facility fill activity is now underway. <u>Investor Briefing – 26 May</u> • Santos is committed to progressing the remaining approvals for Narrabri and the pipelines and will review a final investment decision once the approval are in place. Other projects like Beetaloo that have the necessary approvals will commence appraisal in the meantime. Narrabri Gas Project Update – Janelle Twyman (Santos) <u>Development update</u> • Phase 1 activity continues to progress, ongoing care and maintenance of existing wells, operating wells are delivering gas to Wilga Park Power Station, produced water is managed at Leewood Water Management Facility, field development planning is ongoing, and continuation of groundwater monitoring.

	- Annual review has been submitted to Department of Planning, Housing and Infrastructure (DPHI) and Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW). - An Independent Environmental Audit will be undertaken over July-August 2026. <u>Management Plans</u> Phase 2 and 3 management plans are under development, and engagement is expected to commence in 2027. All management plans and DPHI approvals are available on the NGP website. Water Technical Advisory Group Update – Ty Felmingham (Santos) & Keith Phillipson (AGE) <u>Groundwater Modelling and Management Plan</u> - Stage 1 – Review modelling objectives – completed - Stage 2 – Initial model conceptualisation – completed - Stage 3 – Data collection – completed - Stage 4 – Date interpretation – largely completed - Stage 5 – Model conceptualisation and review – WTAG consultation Q3 2026 - Stage 6 – Updated impact assessment modelling and interpretation. <u>Stage 2 – Initial model conceptualisation</u> Report was issued in March 2026 with no material changes to conclusions. Additional tasks undertaken since consultation: - Revised groundwater level data provided by Santos including additional time series data (Dewhurst 8/14) and data for eight additional monitoring points - Revised Pilliga/Hoskissons separation isopachs incorporated - Data sharing agreement established between Santos and Whitehaven Coal covering groundwater level, groundwater quality and geological (stratigraphic and lithological) data. Q. John Williams asked if there had been any agency feedback to the draft conceptualisation report? A. Ty advised agency comments were sought on the draft initial model conceptualisation report and incorporated into the final initial conceptualisation report released in March 2026. Further consultation is planned on the final concept report in Q3 2026. <u>Stage 3 – Data collection</u> Dewhurst 35 fieldwork and laboratory testing is complete. - Dewhurst 35 drilled 850m into the Porcupine Formation 472m of core collected from the Napperby to porcupine formations - Geophysical logging data - Nuclear Magnetic Resonance (NMR), Resistivity, Bulk density/neutron porosity, Gamma ray
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- Packer, laboratory core and Core Measurement System (CSM) permeability and porosity testing completed.

Stage 4 - Data Interpretation

Stratigraphic modelling progress

- Base Cenozoic and Pilliga surfaces generated from CSIRO Airborne Electromagnetic (AEM) data (Raiber et al., 2025)
- Comparison of modelled outcrop with geological mapping completed
- Revised and additional stratigraphic picks and balanced sections generated
- Minor Revisions to most surfaces, except:
 - Top basement logs suggest 315m higher on average than previously modelled + outcrop mismatch east of NGP
 - Base Cenozoic
- Revised geological surfaces will be incorporated into Stage 6 impact assessment modelling

Lithofacies modelling progress

- Additional validation of lithological logs
 - Dewhurst 35, Narrabri Coal Mine chip logs + mud logging data
 - Revised gamma ray based logs increasing sandstone percentages
- Use of validated logs and permeability data to generate stochastic realisations of the Porcupine Formation
 - Calculate formation scale parameters for regional modelling
 - Probabilistic assessments of impact propagation within porcupine Formation based on detailed MODFLOW simulations (200 x 1m thick layers)
- Key finding – Porcupine Formation vertical hydraulic conductivity (Kv):
 - Kv range: 3×10^{-7} to 2×10^{-6} m/d
 - Median KV: 8.5×10^{-7} m/d
 - This median value is 12 times lower than the 1×10^{-5} m/d adopted by CDM Smith (2016)
- Formation scale parameters will be incorporated into Stage 6 impact assessment modelling.

Q. Michael Williams noted the Kv data shows up the deficiencies in the EIS data and previous calibrations and the data in Stage 3 therefore is very important. Is that report available?

A. Ty advised the Dewhurst 35 groundwater corehole drilling report hasn't been finalised by AECOM. Santos will review and release a public version of the final report to the WTAG when available. Keith stated the core data will be included in the final model conceptualisation report which will be provided to WTAG as part of the consultation required under the management plan

Stage 5 – Model conceptualisation and review

Additional data incorporated into the revised conceptualisation

- Dewhurst 35 core, permeability testing and logging

	○ Continuous downhole porosity and permeability profile used to infer permeability in other bores based on standard geophysical logs • Updated GISERA connectivity report and data (Raiber et al., 2025) • Stage 4 Stratigraphic and Lithofacies modelling results • Additional data collation activities ○ Attribution of existing water supply bores ○ Density correction of groundwater level data ○ Extraction of porosity and effective porosity data from geophysical logs ○ Incorporation of additional groundwater level and geology data for Narrabri Coal Mine ○ Hydrochemistry data collation and review Q. John Williams sought advice on how the conceptualisation is being tested for the Hoskinsson's seam. John questioned how the regional scale is comparable to the whole project scale. A. Keith indicated that the modelling will consider the local as well as the regional scales. <u>Stage 6 – Updated impact assessment modelling and interpretation</u> Numerical model to be updated based on findings from model concept report • Stage 6 will deliver the updated impact assessment in accordance with Condition B39 e) and f): ○ Update the existing Smith NGP groundwater flow model and calibration based on revised conceptualisation and additional data from Stages 2-5 ○ Use the revised model to re-assess project impacts on the regional groundwater flow system ○ Quantify water take from all affected groundwater sources. <u>Next Steps</u> • Complete data interpretation and consult on final concept report in Q3 2026 • Progress Stage 6 for completion Q4 2026 Hunter Gas Pipeline Overview (HGP) – Michelle Bond (Santos) • Santos has been undertaking extensive engagement for access to undertake survey activities • Continues to progress land access agreements and surveys • Early works sites are now complete and survey activities continue • Santos has commenced the progressive submission of documentation required for the HGP Pipeline Licence. Garry West added that a community reference group has been established for the HGP which will meet twice a year. The first meeting has been held.
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Narrabri Lateral Pipeline (NLP) Update – Michelle Bond (Santos)

- NLP Environmental Impact Statement (EIS) was on Public Exhibition 20 November 2025 to 18 December 2025.
- 375 community submissions received (314 objected, 56 supported & 5 commented only).
- Advice received from 12 NSW government agencies.

EIS Submissions

- The most commonly raised questions in community submissions were:
 - Terrestrial biodiversity impacts
 - Aboriginal cultural heritage
 - Impacts on agricultural land
 - Adequacy and accuracy of the EIS
 - Strategic justification for additional gas supply

A report responding to the submissions and government advice is currently being prepared and the Response to Submissions (RtS) report will be provided to DPHI in Q3 2026.

Project Amendments

- Michelle Bond noted some minor adjustments to the project disturbance footprint are being considered in response to further field surveys, technical studies, stakeholder consultation and ongoing engineering design and construction planning.
- The amended NLP disturbance footprint will be described and assessed in an Assessment report which will be provided to DPHI for consideration in Q3 2026.

Exploration Program and other activities – Janelle Twyman (Santos)

- PEL 1 – Kahlua pilot activity
 - Maintaining wells online
 - Groundwater monitoring and reporting is being undertaken
- PEL 1 and PEL 12 – scouting for future minimum tenure commitments

Community Engagement and Consultation – Abby McClure (Santos)

NRL Community Weekend

- Santos representatives attended the junior clinic, fundraising event and home game which attracted more than 1,000 attendees.
- The event raised valuable funds for the club and supported junior participation & skills development.
- Local players benefited from coaching and mentoring opportunities with current and former NRL legends.

Narrabri Show

- Santos was both a sponsor and exhibitor again this year, with the Community and Land Access teams engaging with showgoers about the NSW projects. Santos has supported the Narrabri Show for over a decade. Shared

	<u>Shared Table</u> - Funded the purchase of a new display freezer to enhance the organisation's food storage and service capacity and recently volunteered at the Friday community lunch BBQ to support local meal services to those in hardship. <u>Recent Initiatives</u> - Volunteer Learning Lunch – hosted a practical workshop for local volunteers, providing guidance on funding, financial management, event approvals, compliance and food safety. - Clontarf Mock Interviews – Delivered interview skills and career preparation sessions for Narrabri Clontarf Academy students. - Rotary Science & Engineering Challenge – Continued long standing support as a major sponsor, with team members volunteering across the three-day event. - Clontarf Gunnedah Site Tour – Welcomed students to the Narrabri Gas Project to learn about local operations and career pathways. <u>Upcoming events:</u> - National Tree Day Initiative – Community giveaway of gardening packs containing two native tube stock plants, gardening gloves, sunscreen and hats to interested community members. Pick up packs at Santos Shopfront. - NAIDOC Week Activities – Continuing to support local NAIDOC Week initiatives and First Nations community engagement. - AgQuip 2026 – Preparing for Santos' presence at Australia's largest primary industry field days.
7. Member updates	Nil
8. General Business	Michael Williams expressed a view that the concept report should provide explicit information for verification of the proposed model. Keith agreed to define the verification process in the final model conceptualisation report which will be provided to WTAG as part of the consultation required under the management plan

Actions

NO.	ACTIONS	ACTION BY	DUE DATE
1	Santos to provide Dewhurst 35 groundwater core hole drilling report to WTAG.	Ty Felmingham	Prior to next meeting

Next meeting

TBA - Q3 2026

Meeting closed

10:05am