

The Geological Survey of NSW (GSNSW) & Geoscience Australia (GA) are preparing to fly an airborne electromagnetic (AEM) survey in central-east western NSW.

When and where?

During April to July 2023, with final data released in late 2023. It will be in the central-east of NSW, over the greater Forbes–Dubbo region.

Why an AEM survey?

It will assist in basement geology interpretation and identifying the thickness of younger cover sequences and potential groundwater resources.

Why survey the area?

This is the fourth GSNSW geophysical data acquisition project in the Mineral Exploration Cooperative Research Centre (MinEx CRC) focus areas in the state's central west and far west. The aim is to better understand geology in under-cover areas and support exploration for major metallic and critical mineral deposits up to 500 m beneath Earth's surface.

This survey is also part of the state's Future Ready Regions strategy, which aims to increase NSW's resilience to drought. Data from this survey will be used to identify areas with potential for:

- emergency groundwater to support towns, agriculture and industry during drought
- groundwater storage when there is surplus.

GSNSW is undertaking geological mapping, geophysical and geochemical data acquisition, and drilling programs in the MinEx CRC focus areas from 2019 to 2028. Drilling is planned from 2024 to 2026.

What are the survey parameters?

It will be flown east—west at 2.5 km line spacing. Flight lines will avoid towns and buildings. They will be correlated with existing water—monitoring boreholes, mineral drillholes and seismic lines to aid interpretation.

How can you be involved?

Expressions of interest (EOI) for privately funded infill-flying are being sought to assist with survey planning. The minimum infill linelength is 5 km and the minimum area is 5 km by 5 km. Lines should be oriented east-west. Proposed areas should be inside our survey area or within 10 km of the boundary. The proposed areas should not be over, or within 5 km of, towns. The infill area cost will be calculated on a per kilometre rate, based on the successful tenderer. Successful EOI applicants will be informed by email and invited to sign a MOU with the contractor and GSNSW. They will then be informed of the cost and given the opportunity to proceed

with the geophysical contractor as contract manager. Successful applicants who decide to proceed will need to:

- undertake their own community engagement
- undertake QA/QC for the AEM data.

Why should you join the survey?

Benefits include:

- no mobilisation costs
- · reduced line-kilometre rate
- one-year confidentiality from the data delivery date for privately funded infill lines.

How do you apply?

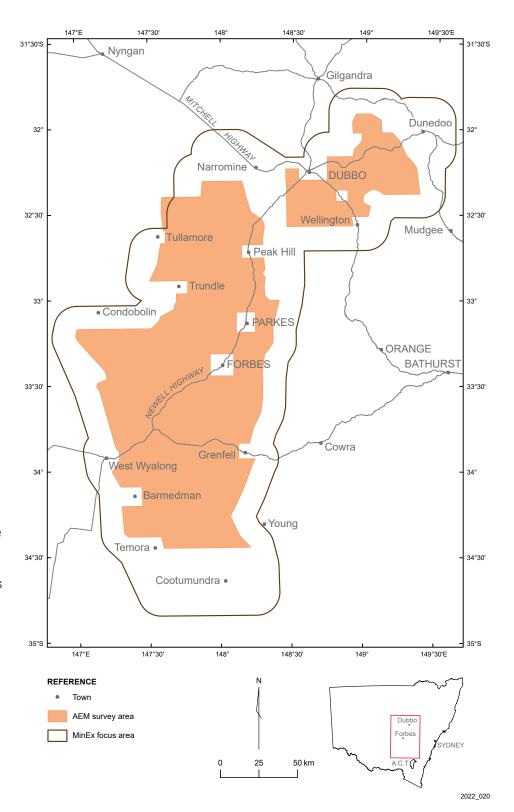
Please submit a map or shapefile of your desired infill area and line spacing to **geophysics.products@regional.nsw.gov.au**. Applications close 24 February 2023.

What is the administrative process?

GA will undertake the tender process in first quarter of 2023. An AEM contractor will be selected and engaged by GA in collaboration with GSNSW. Once final quotes have been accepted, EOI respondents will be informed of the line-kilometre rate, the AEM system selected and agreement to proceed. If an EOI respondent wishes to proceed the infill survey, design will be discussed and incorporated into their MOU. then respondents will be given contact details of the contractor. After the data is acquired and processed the contractor will deliver the data and logistics report to you and GSNSW.

When will you know if your EOI has been accepted?

You will receive an email in the week commencing 27 February 2023.



More information

Call Astrid Carlton, Senior Geophysicist, on (02) 4063 6611.

Email **geophysics.products@reginal.nsw.gov.au** for a shapefile of the area.

Visit regional.nsw.gov.au/meg

© State of New South Wales through Regional NSW 2023. The information contained in this publication is based on knowledge and understanding at the time of writing January 2023. However, because of advances in knowledge, users are reminded of the need to ensure that the information upon which they rely is up to date and to check the currency of the information with the appropriate officer of the Regional NSW or the user's independent adviser.