



# Activity Notice

## Airborne Electromagnetic Survey

Geoscience Australia, in collaboration with state government agencies, will be carrying out a series of airborne electromagnetic (AEM) surveys within South Australia, and Queensland during 2021. The survey is part of the Exploring for the Future program. This program aims to gather new information about the potential groundwater, mineral and energy resources beneath the surface. This information will lead to more informed resource management and better targeted investment.

Geoscience Australia is planning several other airborne and ground-based geophysical surveys and sampling projects in the survey area and plans to extend the program area.. More information about field activities will be available once further consultation with stakeholders is complete.

### AEM survey method

Light aircraft are fitted with instruments to map variations in the electrical conductivity of the ground to a depth of several hundred metres.

During the survey, a signal will be transmitted from the aircraft into the ground. Towed antennae can detect the returned signals and the nature of these signals will be analysed to map variations in the conductivity of the ground that are caused by water and certain types of minerals.

### What you may see

A helicopter or a fixed-wing aircraft that is towing equipment below it will make a single pass approximately 120 metres above the ground, along straight tracks 20 kilometres apart, (or 1 to 5 km apart in focus areas). If you have any concerns with this activity such as whether stock may be disrupted, please contact Geoscience Australia (details given below).

### Important to know

All data produced by Geoscience Australia from this survey will be freely available after quality assurance checks have been performed.

Further information about AEM surveys can be found at: <https://www.ga.gov.au/scientific-topics/disciplines/geophysics/airborne-electromagnetics>

### Timeframes and work area

The survey will be flown during 2021. The proposed survey area is shown in figure 2. Further notification to stakeholders will occur when focus and extension areas are finalised.

### COVID-19 protocols

All field staff will be complying with Commonwealth and State Government COVID-19 legislation and protocols.



Figure 1: Example of AEM system in operation

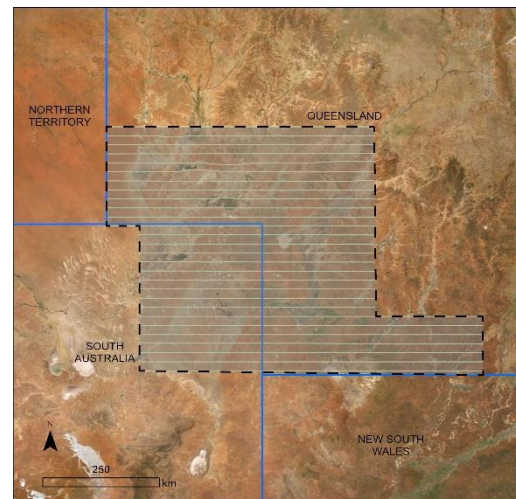


Figure 2: Map showing proposed survey area and flight lines.

#### For further information

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