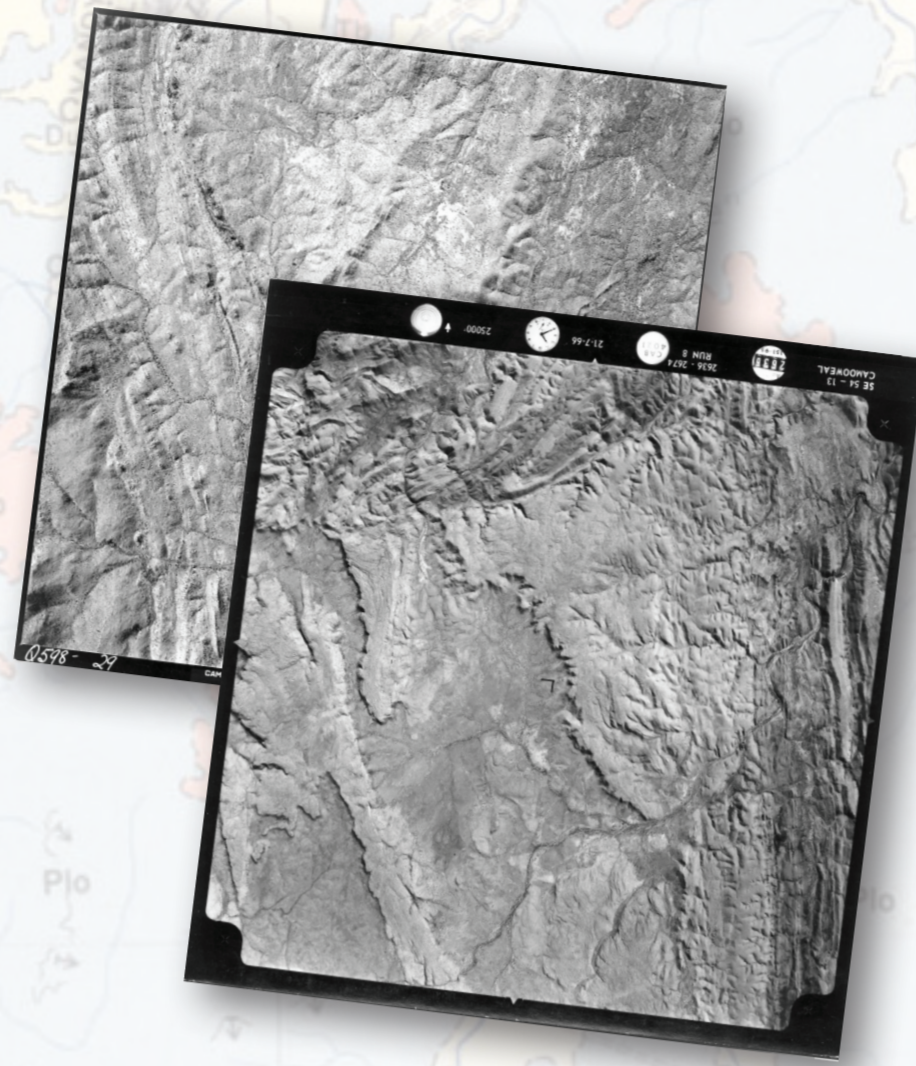


# Geology of Queensland

## Systematic mapping of Queensland — 1950–1973

The Commonwealth Bureau of Mineral Resources (BMR) was founded in 1946 and its first Director, Harold Raggart, had a vision to systematically map Australia. A scale of 1 inch to 4 miles (later metrified to 1:250 000) was chosen as the most suitable scale for regional mapping to get national coverage in sufficient detail in a realistic time-frame.

Although many state Geological Surveys were lukewarm or opposed to the idea of BMR undertaking systematic mapping within their borders, GSQ through the foresight of Alan Denmead, wholeheartedly welcomed BMR. The close relationship allowed Queensland to access considerable Commonwealth funding to support its mineral and petroleum exploration for the next three decades.

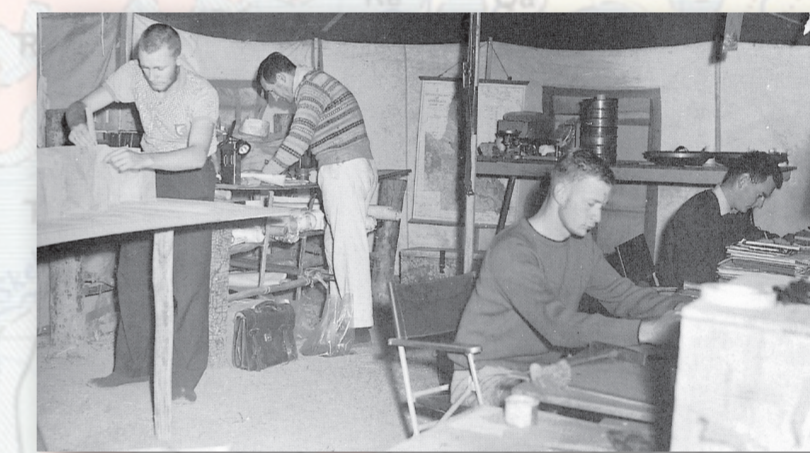
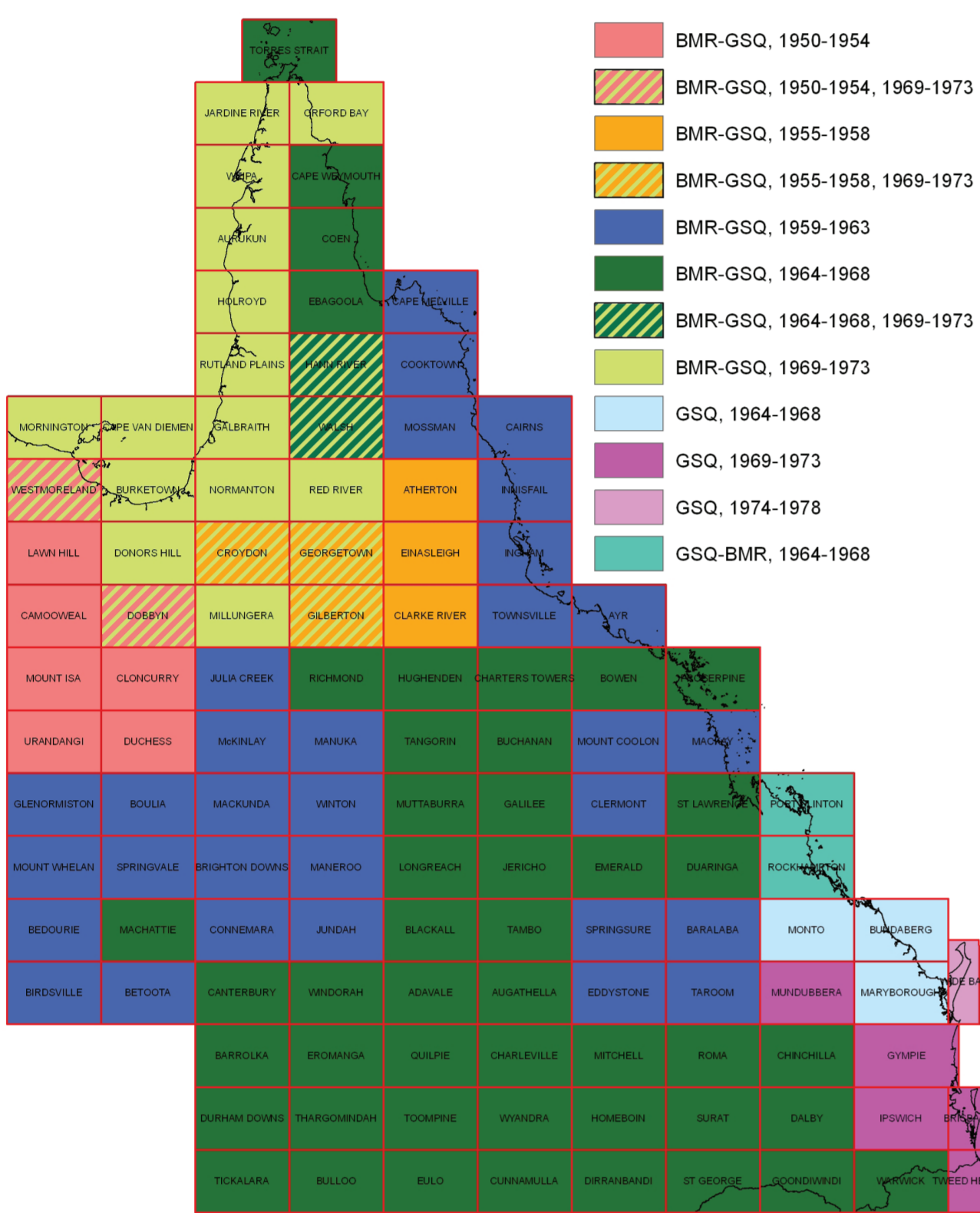


The systematic mapping initiative was made possible by important technological advances that came out of World War 2 — in particular, improvements in aerial photography and four-wheel drive vehicles.

Aerial photographs provided geologists with a detailed base on which to plot data and plan traverses, and the ability to see the topography in stereo greatly enhanced their ability to interpret the geology. As part of a national security imperative to have accurate detailed topographic information for Australia, systematic flying was done by the Commonwealth and State Lands Departments at various scales. The national program of planimetric topographic mapping provided accurate bases for compiling and publishing the geological data.

Four-wheel drive vehicles allowed geologists to access remote areas and difficult terrain to make ground observations.

Most of the State was covered by joint BMR-GSQ teams working out of remote base camps for up to 5 months at a time during the winter/dry season. BMR provided all or most of the logistics. Teams mostly consisted of two or more BMR geologists and at least one from GSQ. The exception was the logistically easier south-east corner, where GSQ was able to work from Brisbane without the support of BMR.



The Mount Isa Inlier and parts of the Georgina Basin were mapped in 1950–1954 (an amazing effort considering the geological complexity), followed by mapping of the Cairns – Townsville hinterland, which started in 1956 and continued through to the mid- 1960s.

Meanwhile other teams continued in the Georgina and Eromanga basins in the south-west, the Bowen and Drummond Basins in central Queensland and the Surat Basin in the south-east.

Mapping of Cape York Peninsula (1966 to 1973) was particularly challenging given its remoteness.

With completion of mapping of the Carpentaria Basin, and revision of the cover successions on some earlier sheets, 1:250 000 coverage of all of mainland Queensland was achieved in 1973.

Publication was of paramount importance to provide the results to industry and other researchers.

As soon as possible after fieldwork, a preliminary report in the BMR Record series was released with compilation maps. A more thoroughly edited version was released in the BMR Report series (accompanied by a two or three-coloured preliminary edition map).

Explanatory notes accompanied the 1:250 000-scale coloured map when it was released. A monograph in the BMR Bulletin series incorporating the results over an entire basin or province (with a 1:500 000 or 1:1 000 000 map) was usually the final output.

