

CEO comment



Dr Chris Pigram – Acting CEO Geoscience Australia



Since the last issue of *AusGeo News*, Neil Williams has announced his intention to retire as CEO of Geoscience Australia. During his time here, firstly as an Associate Director at the Bureau of Mineral Resources (a predecessor of Geoscience Australia) in 1991–92 and as CEO since 1995, Neil has presided over many major changes in the organisation (see below). I see his main legacies to the agency as:

- A strong client and stakeholder focus which means we are now held in high regard by these groups.
- The concept of multi-disciplinary team approaches to the challenges and priorities of the government of the day. This approach has now extended across the organisation beyond the scientific disciplines.
- The organisation's sphere of influence with government departments and agencies has grown enormously as we adopted new functions and emerged as a stronger agency with increased capacity.

On behalf of our stakeholders and the staff at Geoscience Australia I wish Neil, and his wife Margaret, well for an active and fulfilling future.

This issue of *AusGeo News* includes a progress report on Geoscience Australia's Onshore Energy Security Program, which provides pre-competitive information to support mineral and energy resource exploration, and is now entering the final 15 months. The Program is now focussing on the delivery of data and project outcomes, including the release of data from: the Paterson Province and Pine Creek Orogen airborne electromagnetic surveys; seismic reflection, gravity and magnetotelluric surveys in South Australia; the southern Georgina Basin deep crustal seismic and magnetotelluric transect; and the National Geochemical Survey of Australia. Preparations are now well-advanced for acquisition along the Kidson–Paterson Seismic Line in Western Australia that is designed to better define the petroleum potential of the Canning Basin. These projects have been undertaken in close collaboration with the relevant state geoscience agencies.

There is also a report on the catchment sampling and compilation of the Preliminary Soil pH map of Australia. The map utilised data gathered during the sample collection phase of the National

Geochemical Survey of Australia. Another valuable aid to natural resource management reported on this issue is the Hydrogeological-Landscape framework. The framework has previously been used for addressing land and water quality associated with salinity but is now being used for a broad range of natural resource applications.

Significant sandstone-hosted uranium deposits are located in paleochannels and mineralisation is often concentrated in a number of specific sites within them. The article examines the geology of deposits in the Lake Frome region (Australia) and the Monument Valley and White Canyon districts in the United States.

In Australia heights above sea level are referenced to the Australian Height Datum (AHD). The widespread use of Global Positioning Systems (GPS) receivers for accurate positioning and navigation in Australia has led to an increasing demand for a method of combining the speed of GPS data acquisition and the practicality of the AHD. The article outlines the development of AUSGeoid09 which provides a solution.

As usual we always appreciate your feedback and encourage you to use the online rating mechanism with each article.

Dr Neil Williams announces departure

Dr Neil Williams, the Chief Executive Officer of Geoscience Australia, announced in December 2009 that he would be taking leave from January 2010 pending his retirement towards the end of 2010.

Dr Williams' association with Geoscience Australia goes back to 1967–68 when he served as a summer vacation student with one of the agency's predecessors, the Bureau of Mineral Resources (BMR) during his study as an economic geologist. He received his Bachelor of Science (Hons) at the Australian National University (ANU) in 1969 and undertook PhD studies at Yale University as a Fulbright Scholar. He completed his PhD in 1976 and returned to the ANU where he worked for five years as an academic specialising in the genesis of sediment-hosted base-metal deposits.

He then joined the Mount Isa Mines group of companies working for 10 years as a mineral explorer, ultimately becoming the company's Chief Geologist. Dr Williams joined the BMR in January 1991 when he became Associate Director of the Minerals and Environment Group. He relinquished this position when he became Executive Director of the newly-formed Bureau of Resource Sciences (BRS), which included the mineral and resource assessment functions of the BMR in October 1992.

Appointment as CEO

Dr Williams was appointed CEO of the successor to BMR, the Australian Geological Survey Organisation (AGSO), in April 1995. His appointment led to a period of intense change which included:

- a new focus on science and its capability as a tool to deliver government programs
- greater emphasis on client and stakeholder needs
- the use of partnerships to help Geoscience Australia deliver its programs
- application of the 'strong inference' science paradigm to improve the agency's work.

The shaping of Geoscience Australia

The role of the agency was broadened, initially through the return of the petroleum and mineral resources branches from the BRS in 1998 and a merger with the Australian Surveying and Land Information Group (AUSLIG) in 2001. The return of the resources functions included providing technical advice for the administration of petroleum exploration and development in Commonwealth offshore waters and policy associated with minerals, petroleum and coal exploration. The merger brought topographic mapping and remote sensing capabilities into the agency.

Recognition of the expansion of the organisation's role beyond mapping and surveying was reflected in the change of name to Geoscience Australia in August 2001 and the Australian Government's recognition that geoscience was fundamental to understanding natural hazards in urban areas, land management in



Dr Neil Williams, CEO of Geoscience Australia, with The Hon. Martin Ferguson, AM MP, Minister for Resources and Energy and Minister for Tourism, following the launch of the Geological TimeWalk at the Geoscience Australia building on 24 November 2009.

rural and coastal areas and management of the marine environment.

This broadened capability was further recognised through Geoscience Australia's joint involvement with the Bureau of Meteorology and Emergency Management Australia in the Australian Tsunami Warning System. The system, which became operational in June 2009, had been set up following the Indian Ocean tsunami on 26 December 2004.

Major achievements under his leadership

Dr Williams' continuing efforts to promote Geoscience Australia as an important contributor to ensuring Australia's economic future has resulted in the agency having a central role in the Government's offshore and onshore energy security programs. The government allocated \$61 million in its 2003 budget for work over four years from 2004 to 2007 to provide pre-competitive information to support industry's search for a new oil province.

This program was followed by a further \$134 million in new funding in August 2006 to gather pre-competitive data during the four years to 2011. Of this, \$75 million was allocated for continuation of offshore frontier basin research to identify a new oil province. The remaining \$59 million was allocated for the application of the latest geophysical imaging and mapping technologies to attract investment in exploration for onshore petroleum, geothermal and mineral energy sources such as uranium and thorium.

Under Dr Williams' stewardship Geoscience Australia also played a major role in preparing a submission to the United Nations Commission on the Limits of the Continental Shelf in 2008 which resulted in 2.56 million square kilometres being added to Australia's continental shelf. The submission represented the culmination of 15 years of cutting-edge work in collaboration with the Attorney-Generals Department and Department of Foreign Affairs and Trade in which Geoscience Australia was responsible for the surveys, data analysis and interpretation required to delineate the outer limits of the extended Continental Shelf.

There have been significant changes and many new functions adopted during the period of Dr Williams' leadership. These have ensured that Geoscience Australia is a stronger agency with increased capability and a greater range of roles and functions than at any other time in its history. These have included: development of the National Geoscience Agreement which is a collaborative geoscience mapping agreement with the states and Northern Territory, compilation of continent-wide geophysical maps and datasets, embedding geoscience

as an essential input to natural resource mitigation strategies, providing a three-dimensional geological framework to facilitate more effective exploration beneath regolith and sedimentary cover, and taking a lead role in the development of the geoscience aspects of carbon sequestration.

Recognition of his dedication

The quality of his leadership was recognised when Dr Williams was awarded The Public Service Medal on 26 January 2006 for 'outstanding public service in the provision of geoscientific advice to government, geoscience services, industry and the public'. The medal is recognition of his consistent dedication in performing a demanding job to the highest standard and making a major contribution to the Australian community.

Dr Williams' legacy has been to reshape a respected mapping agency into a highly capable geoscience agency focused on the priorities of the government which is respected nationally and internationally for its capability and excellence.