Brief Overview of the Geological Survey of NSW

Chris Yeats, Executive Director, Geological Survey of NSW

The Geological Survey of New South Wales (GSNSW) has undergone a major upheaval over the past 12 months that has seen a reintegration of coal & petroleum geoscience into the Survey and the appointment of a number of new staff in senior roles. This brief presentation will highlight key GSNSW projects targeted at the minerals industry (including Round 2 of Cooperative Drilling) and introduce the new GSNSW leadership team, who will also be in attendance at the meeting and are keen to meet industry attendees.

Feature Presentation: Unlocking NSW’s Geoscience Information Archives

Trisha Moriarty, Team Leader Knowledge Management

DIGS is a unique information resource for NSW, containing a vast mix of geoscientific research reports, industry-generated (exploration and mining company) reports, regulatory documents, data files, maps, surveys, plans and publications going back 135 years. Using the full potential of these archives will contribute to better decision making and an enhanced understanding of NSW’s mineral and energy resources.

The Geological Survey, under the New Frontiers Initiative, has developed a powerful new search engine that makes discovering, sorting and downloading documents fast and easy. This presentation will demonstrate how to use the search engine features to maximise the value of a search and refine the results to deliver the required information.

East Riverina Mapping and Southern Thomson Orogen projects

Phil Gilmore, Team Leader Regional Mapping

The East Riverina Mapping Project and Southern Thomson Project are two of GSNSW’s major data acquisition initiatives.

The East Riverina Mapping Project is improving our geological and mineral systems knowledge in the central Lachlan Orogen, including the Wagga tin (or metamorphic) belt, and the Gilmore and Kancoona fault zones. The area is prospective for a range of deposit-styles, including intrusive tin-tungsten deposits (e.g. Ardlethan), orogenic gold and copper-gold porphyry systems.

The aim of the Southern Thomson Project is to further our limited understanding of the basement geology in northwestern NSW. A three year collaborative project with Geoscience Australia and the Geological Survey of Queensland includes data synthesis, mineral system studies, airborne/ground geophysical surveys and stratigraphic drilling.
**Seamless Geology of NSW**

*John Greenfield, Director Geological Acquisition and Synthesis*

The NSW Seamless Geology Project will provide a statewide compilation of best available mapping data that integrates numerous disparate datasets into a single geological model of the state. Eastern NSW (Zone 56) was completed in 2014-15 and this talk will cover:

- the latest progress on western NSW (Zone 54);
- the NSW-South Australia Memorandum of Understanding and seamless geology across State lines;
- “exposure” mapping – when outcrop isn’t outcrop
- Integration with 3D; and
- plans and progress towards thematic derivative maps, including statewide metamorphic and mineral potential maps.

**NSW Statewide Mineral Resource Audit**

*Cressida Gilmore, Team Leader Land Use*

The NSW Statewide Mineral Resource Audit (MRA) follows a seven year project by GSNSW to provide information on the location and nature of all state and regionally significant mineral and extractive resources across the state. Data for each local government area has been made available to the NSW Department of Planning and Environment (DP&E) and all local councils throughout NSW to inform land use planning decisions. GSNSW has embarked on a series of presentations to ensure planners are aware of the data, seek feedback and foster co-operative relations with councils.