

The environmental research agenda of the Sustainable Minerals Institute at The University of Queensland



OUTLINE



- Introduction to UQ, SMI and CMLR
- Research themes in mine rehabilitation and environmental management
- Further examples from site-based case studies



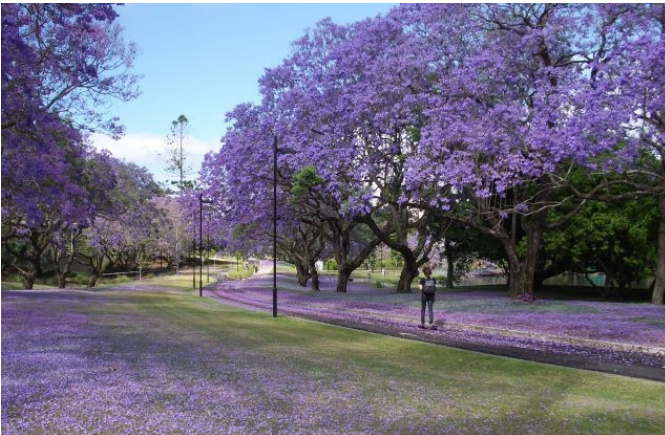
Where we are





The University of Queensland

- Founded in 1910
- 38,000 students
- 9,900 postgraduate students
- 7,000 international students
- 130 countries
- 5,600 staff (2,400 academics)
- Comprehensive and research intensive



Research Centres

- Julius Kruttschnitt Mineral Research Centre
- **Centre for Mined Land Rehabilitation**
- WH Bryan Mining and Geology Research Centre
- Minerals Industry Safety and Health Centre
- Centre for Social Responsibility in Mining
- Centre for Water in the Minerals Industry



Centre for Mined Land Rehabilitation (CMLR)

- Landform design & erosion management
- Mine waste, water & metals management
- Building sustainable ecosystems on problematic substrates
- Land use planning options & biodiversity
- Development of monitoring methods and quantifying rehabilitation success
- Mine closure & lease relinquishment



Landscape design



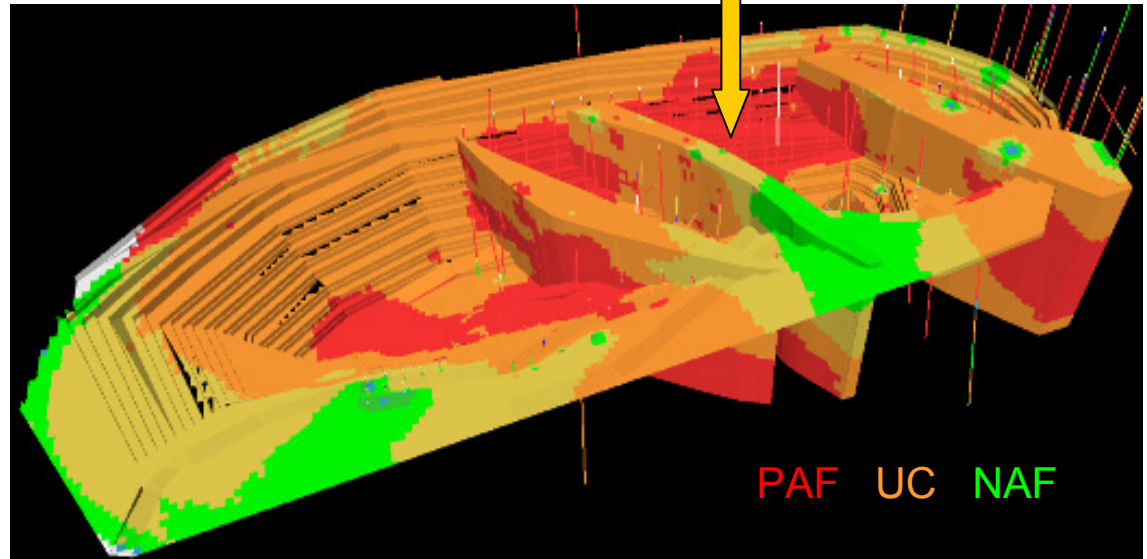
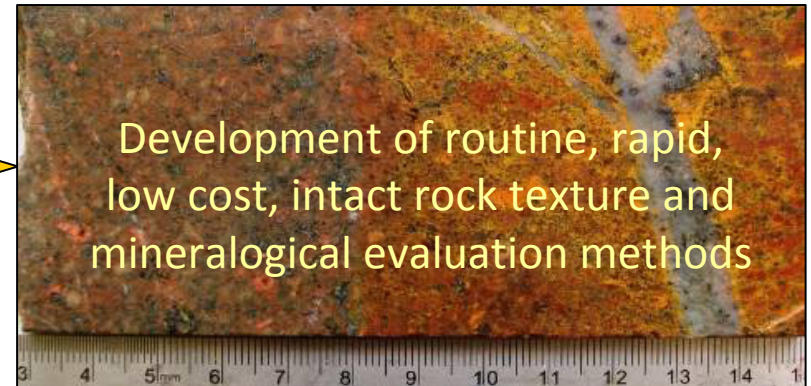
Erosion management



Mine waste management



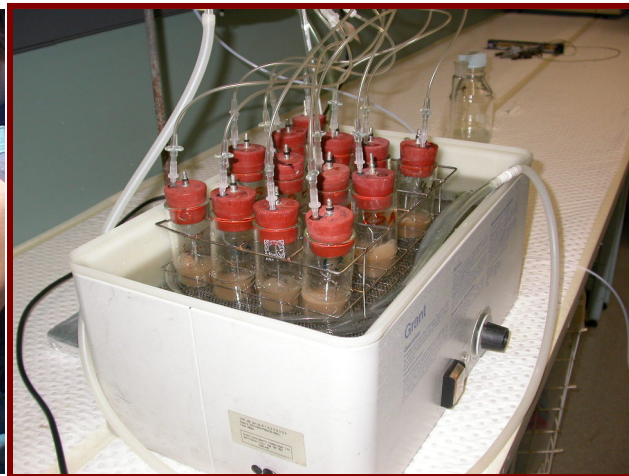
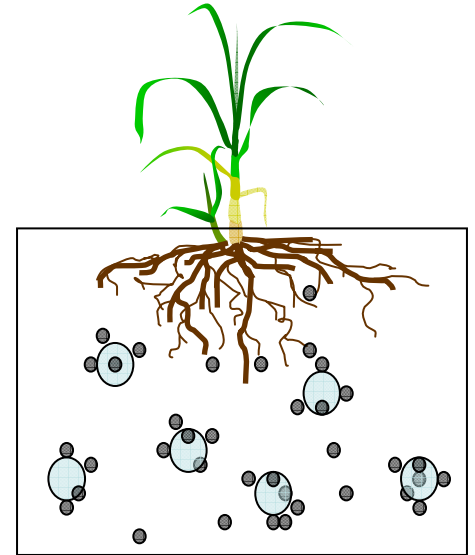
Materials characterisation



Mine water management



Metals management



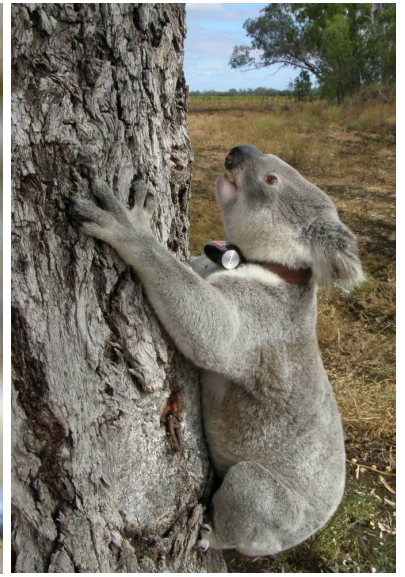
Building ecosystems



Land use planning options



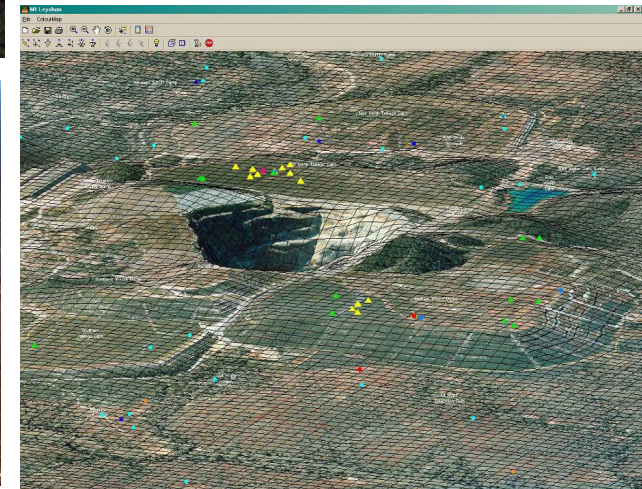
Biodiversity management



Monitoring methodologies



Mine closure



Stakeholder engagement



WEIPA - Bauxite



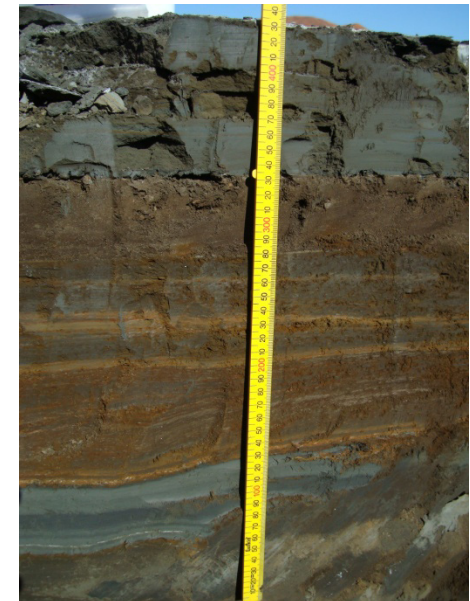
NHULUNBUY - Alumina



NORTH STRADBROKE ISLAND – Mineral sands



MT ISA – Base metals



EROMANGA - Oil





CENTRE FOR MINED
LAND REHABILITATION



Thank you

Panache Illustration
Townsville 2004