Combining social and environmental values with mining geology for integrated regional planning – an invitation to discuss collaborating across SMI centres

Presenter: Dr Alex Lechner (CSRM) and Dr Tony Webster (BRC) Researchers, SMI

An ambition for planning in mining regions is to accommodate the extraction of minerals/energy resources in co-existence with established land uses, such as agriculture, and ecological conservation. In order to plan for mining development there is a need to integrate knowledge, theories, and approaches from a range of different disciplines - posing a considerable challenge. In this presentation Dr Alex Lechner from CSRM and Dr Tony Webster from BRC first describe a quantitative, integrative, modelling framework for regional planning and then present a pilot case study in the Greater Hunter describing a GIS tool for land and water use planning in mining regions. During the presentation we place emphasise on the multi-disciplinary nature of the research hoping to engage audiences from across SMI. This research represents the collaborative output of researchers from CWIMI, BRC and CSRM, outside partners (Melbourne University) and the NextMine Common Ground project. After the presentation we invite the audience to join us for a 30 minute discussion on the potential for collaborating across SMI centres, with the aim of identifying a location for an interdisciplinary study based on existing data which could be turned into an academic paper.

Alex Lechner is a Post-doctoral research fellow at the Centre for Social Responsibility in Mining, which is part of the Sustainable Minerals Institute (SMI) at The University of Queensland. His research interests are in landscape ecology, investigating landscape level socio-ecological processes using spatially explicit models with remote sensing and GIS.

Tony Webster is a research fellow in mining and engineering geology at the WH Bryan Mining and Geology Research Centre. Tony has a particular interest in the applications of the geosciences to all aspects of the mining value chain, from exploration to rehabilitation.