



Centre for Social Responsibility in Mining



Developing Good Practice for Managing the Cumulative Impacts of Coal Mining on Regional Communities in Australia

Daniel Franks, David Brereton, Chris Moran

A Centre within the



Overview

- Working Definition
- Cumulative Impacts and Mining
- The Australian Coal Industry
- Cumulative Impact Approaches and Practice

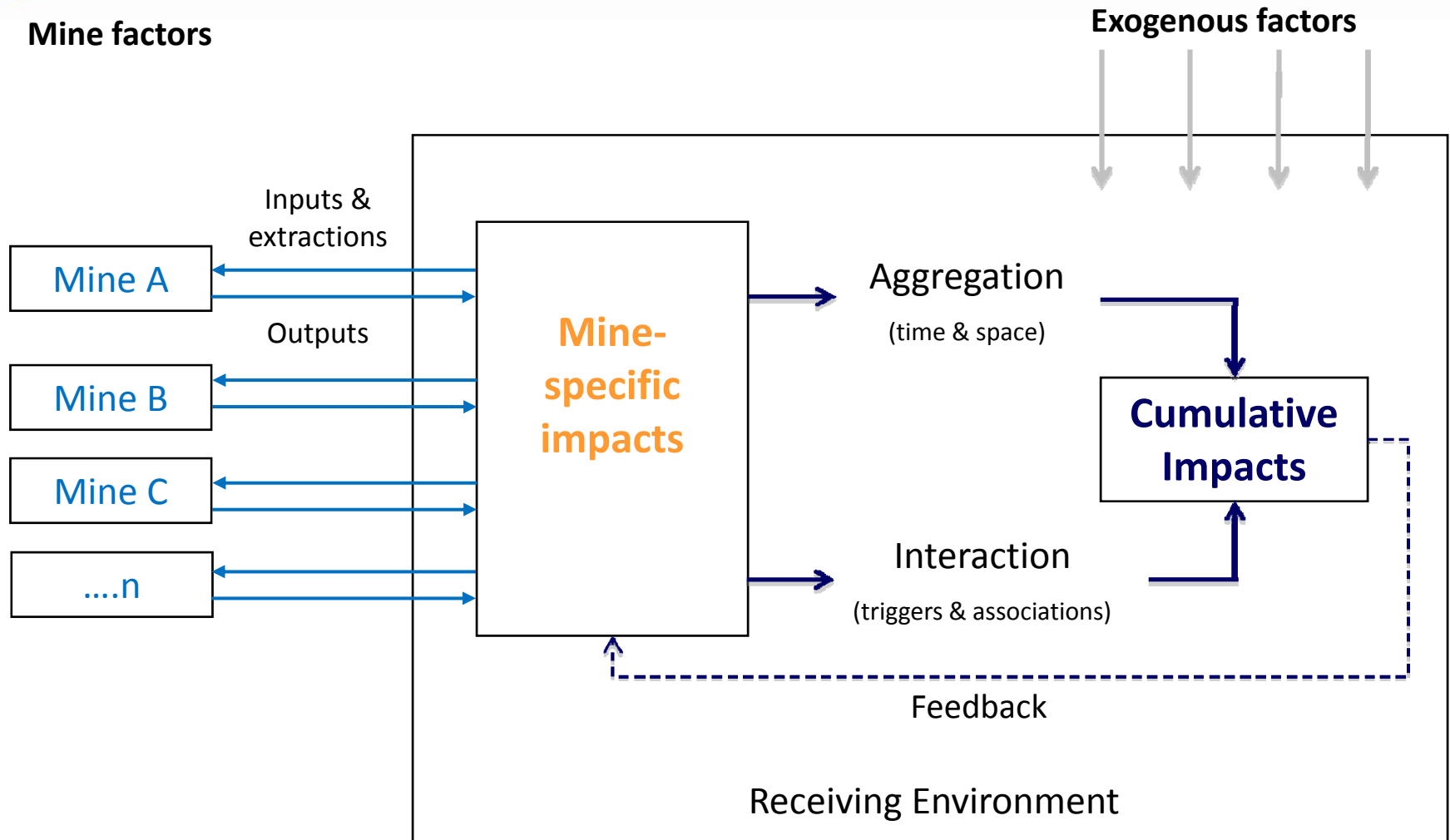
Our working definition

- The successive, incremental and combined impacts, both positive and negative, of multiple mining and processing operations on a community or region and the environment over time.

Our working definition

- Intensity & spatial/temporal extent.
- Linear & 'tipping points'.
- Additive & persist over time; not 'spikes'.
- Positive & negative.
- Source & sink
- 'Reverse cumulative impacts': i.e. compounding effects of multiple mine closures.

Mine factors



Cumulative Impacts and Mining

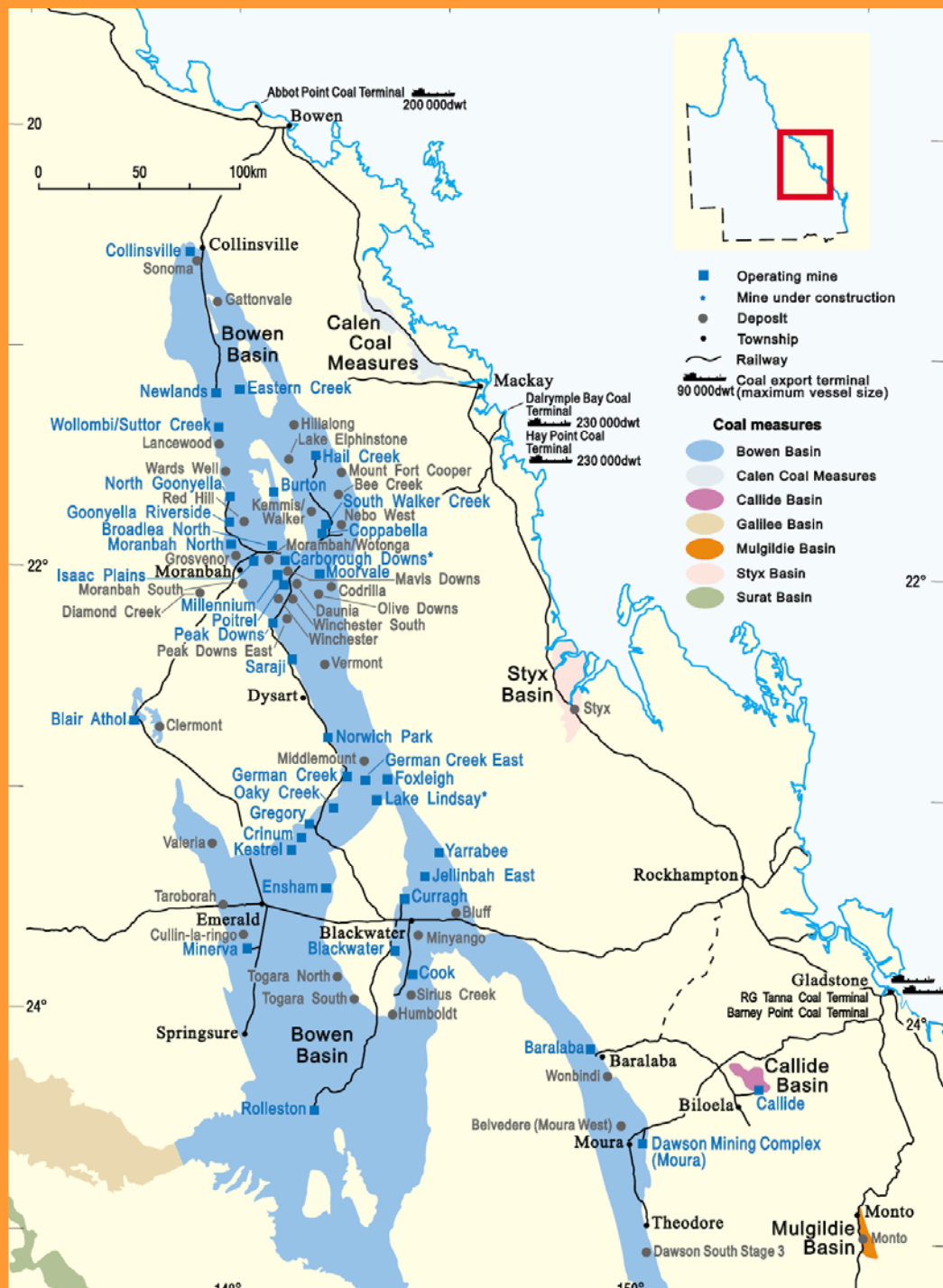
- Rapid resource development in several Australian mining regions ➔ increased attention on 'cumulative impacts'.
- In mining context cumulative often 'multiple mines'.
- Terminology now applied to social as well as environmental.
- Emerging as a focus of government policy.
- At the regional level, mining companies are starting to collaborate more to address multi-mine issues.

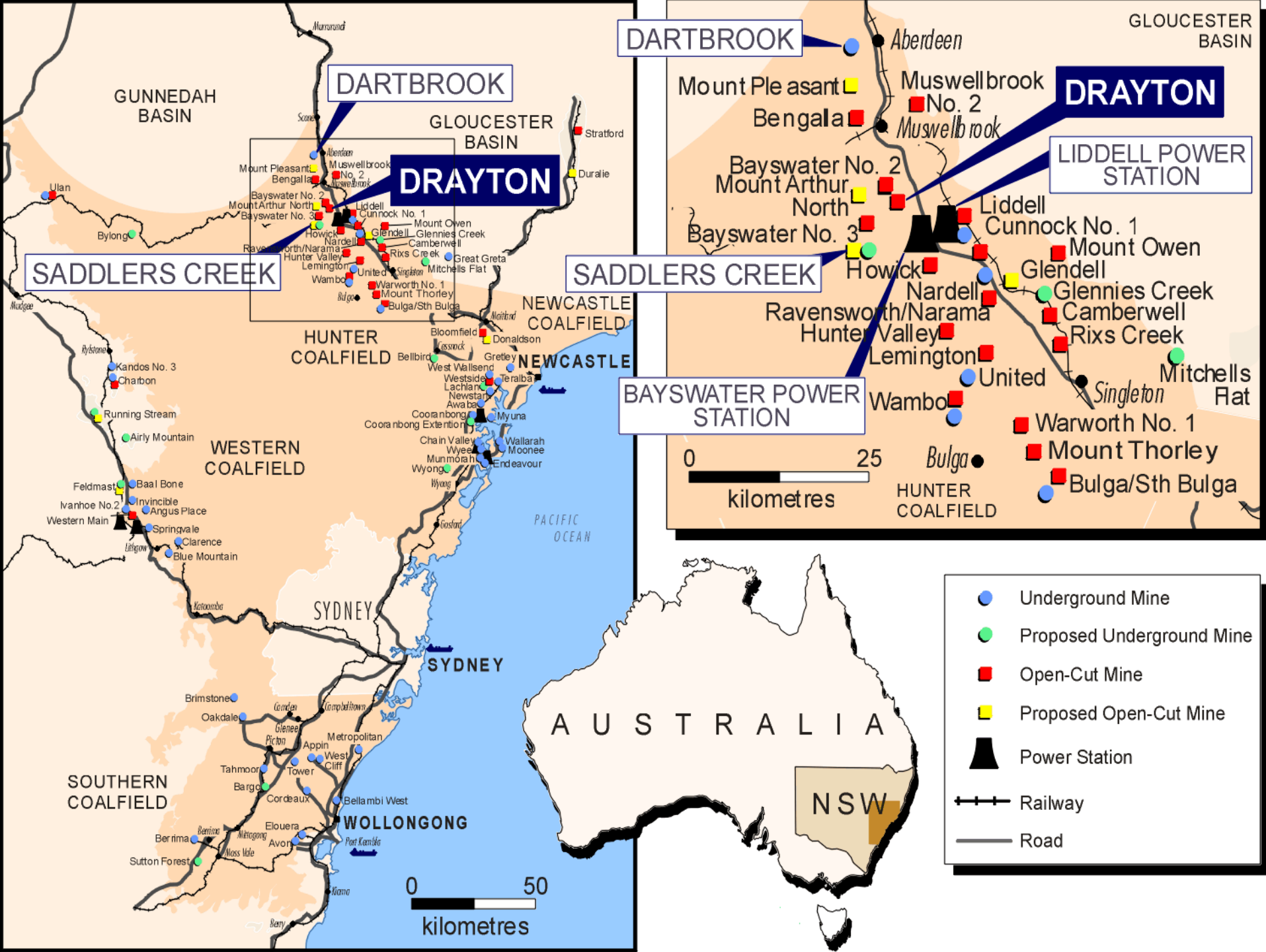
The Australian Coal Industry

- World largest exporter of Black Coal; 4th largest producer
- 311 Mt production 2006-7; A\$22.3 billion in exports
- Direct employment 28,000 people
- Main regions:
 - Queensland** (54 mines): Bowen Basin, Surat (emerging), Galilee (emerging).
 - New South Wales** (>60 mines): Hunter Valley, Gunnedah (emerging).
- Qld Coal industry will double 2000-2010

Bowen Basin

- Mining relatively dispersed
- 37 mines with 22 mines & 8 expansions under development
- FIFO and DIDO
- CIs - social and human capital (housing, social services, inflation, employment disparity)
- e.g. rents in Emerald & Moranbah up to A\$900 p/w for 4br house – 100% more expensive than Brisbane.

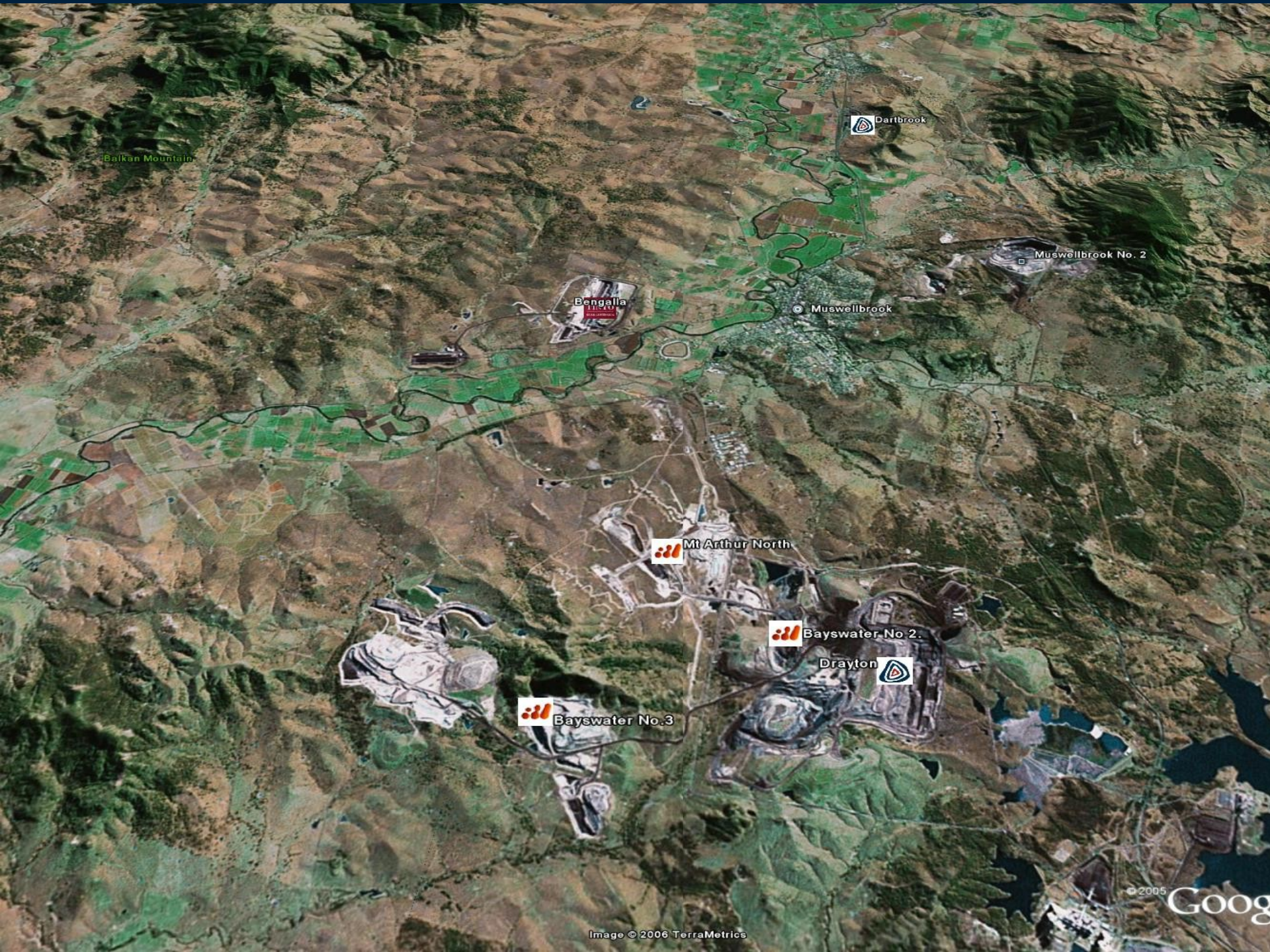






Hunter Valley

- Mining high density
- 'mature' mining region
- Sydney Basin = >60 mines with 20 mines under development
- CIs – amenity, noise, water quality (salinity) & quantity, biodiversity, dust, identity, employment (+^{ve}) and company spend (+^{ve}).



Balkan Mountain

Bengalla

Darlbrook

Muswellbrook No. 2

Muswellbrook

Mt Arthur North

Bayswater No. 2

Drayton

Bayswater No. 3

© 2005

Goog

Image © 2006 TerraMetrics

Approaches and Practice

Governance and Coordination

- Multi-stakeholder arrangements (e.g. Moranbah Growth Management Group; Pilbara Industry Community Council)
- Industry collaborations
 - networks & forums (e.g. HV Environment Managers Forum)
 - formal organisations (e.g. Kwinana Industry Council; PICC)
- Theme specific coordinating groups (e.g. Commonwealth – MCA MOU)
- Qld Gov Coal Industry Taskforce

Approaches and Practice

Activities

- Mitigation (e.g. Hunter Valley Salinity Trading Scheme)
- Enhancement (e.g. PICC Indigenous Employment)
- Measuring and Monitoring (Data)
- Information Management
- Assessment - required in Qld and NSW but in practice modest
- Research (thresholds) (e.g. Moranbah Town Sustainable Management Framework)

Sustainable Resource Communities Policy

Queensland Government
September 2008

- **Statewide Partnership Group** (state & local gov and industry)
- **Local Leadership Groups** (regional planning and key projects)
- **Social Impact Plans** (management plans - condition of tenure)
- **Social Impact Assessment** (new function within government)
- **Emphasis on Regional Planning** (link to gov plans)

Industry Collaboration

Early

Information exchange

Advocacy on common issues

Pooling of resources to support specific initiatives & programs

Coordination of industry responses to CIs of high concern to stakeholders

Facilitation of synergies

Collective management of data

Proactive management (e.g. timing and location of developments)

Advanced

Questions

Dr Daniel Franks
Centre for Social Responsibility in Mining
Sustainable Minerals Institute
The University of Queensland

D.Franks@uq.edu.au

www.csr.uq.edu.au