



BICKHAM COAL PROJECT

Water Resource Assessment

Update: 26 June 2006



Purpose

To provide an update on:

- consultation
- groundwater studies
- surface water studies
- WRA timing





Consultation Aims

The aims of the consultation are to:

- outline the scope of water studies
- inform stakeholders of the process
- identify and discuss ground and surface water issues
- seek input and address concerns

Consultation Activities

- 1800 telephone number
- Project email
- Website
- Newsletter
- Media releases
- Briefing paper
- Static displays
- Face-to-face meetings (landowner & stakeholder)



Consultation Overview

- Murrurundi, Blandford, Wingen, Parkville, Scone, Segenhoe, Gundy
- Government agencies DoP, DNR
- CMA, Council, Water Users Associations, Landcare
- 28 meetings held with landowners, community group representatives, stud farms
- 11 calls on 1800 telephone number
- 20 emails
- 1 written by mail

Consultation Feedback

- mixed reaction
- water availability / competition
- water quality and quantity
- groundwater flow
- impact and effect on wells and bores (physical and chemical)
- flow in local rivers and creeks



Current Activities

- bore testing
- regular website updates
- updates through print media
- responding to telephone calls, emails etc
- relaying comments to technical specialists



What next?

- newsletter summarising outcomes
- meetings to discuss outcomes of WRA
- submit WRA report to DoP
- WRA Report on website
- public exhibition of WRA Report
- DoP to call for public submissions



Groundwater Studies

- ongoing baseline monitoring
- new piezometers west of New England Hwy
- installation of data-loggers in river and nearby piezometers
- continuous water quality survey of Pages River
- property inspections – census of existing groundwater use



Groundwater Studies (cont)

- Pages River and tributary inspections – surface water – groundwater interaction
- tracer studies
- groundwater modelling
- geological investigations





Baseline Monitoring

- groundwater levels – monthly
- Pages River quality – monthly
- groundwater quality – quarterly
- record spans 5 years (2002-2007)
- includes various climatic conditions
- includes bulk sample dewatering





Surface Water Studies

- Water Resource Assessment
 - Aquatic Ecology
 - Terrestrial Ecology
- Water Management Plan
- geomorphology/watercourses
- surface water
- water storage structures
- monitoring and management programs

Surface Water Studies

- flood modelling with updated sections
- ongoing water quality assessment in Pages River
- additional water quality in dams and Kingdon Ponds in conjunction with aquatic ecology
- water balance modelling





Water Studies – Terrestrial and Marine Ecology

- Aim – identify ecosystems potentially affected by changes in groundwater and surface water
- Study followed the *NSW State Groundwater Dependent Ecosystem Policy*



Water Management Plan

- review surface issues to be managed
- management of surface flow & quality
- design and operation of surface water facilities
- contingency plans for managing adverse impacts on surface water
- surface water monitoring programs (construction and operational phases)

Operation information

- Erosion & Sediment Control Plan
- Rehabilitation Plan
- Monitoring Program for assessment of surface water
- Response plan





Surface Water Plan

- surface water diversions and water treatment and storage
- water balance
- integrated water management system





Timing

- WRA Report expected to be completed August 2006
- submitted to DoP
- call for public submissions
- evaluation by DoP Panel