

# GUNNEDAH BASIN HEALTH IMPACT ASSESSMENT

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North West Alliance

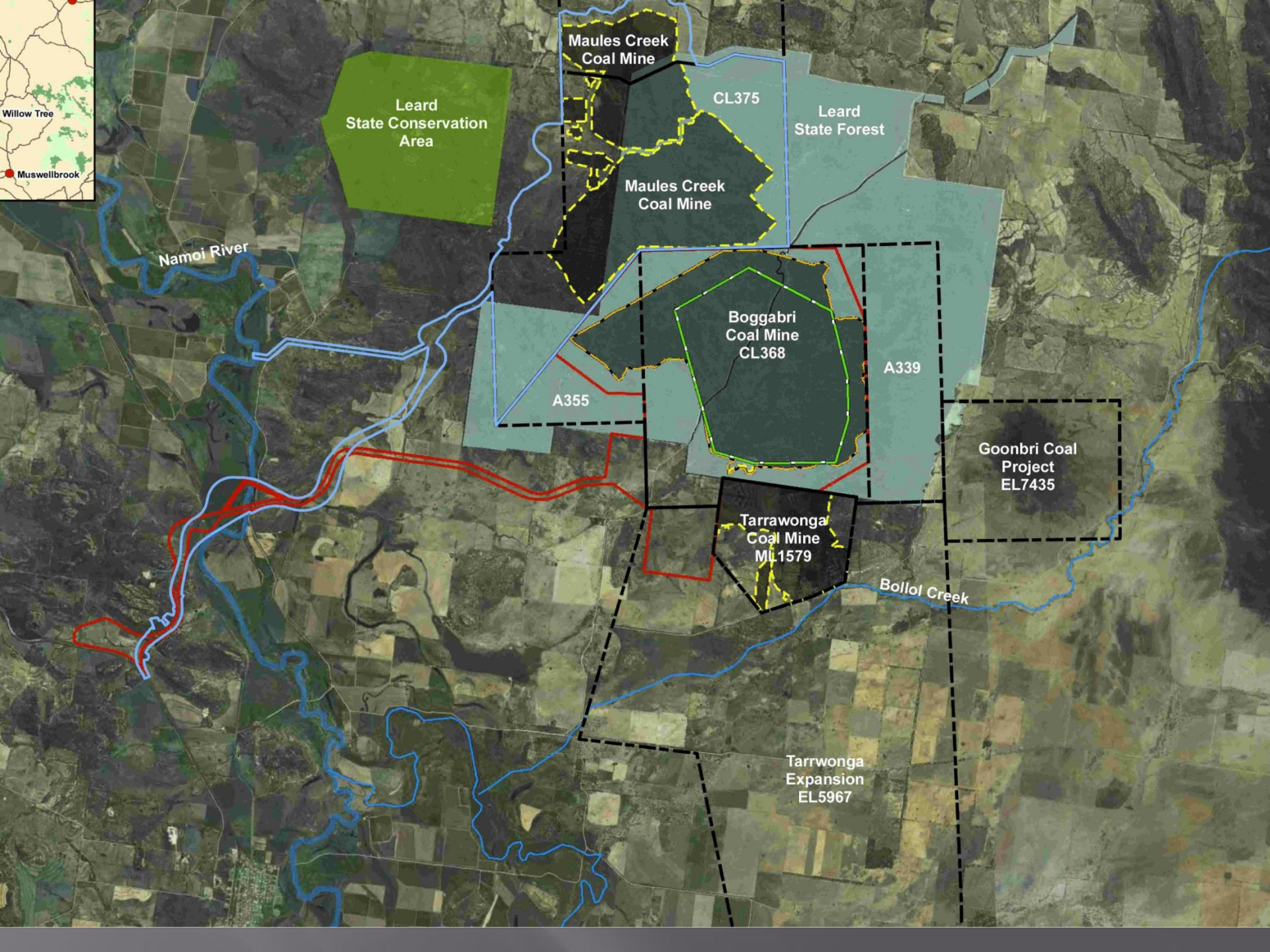
April 2013

# Agenda

- ▣ Overview of coal and CSG for the region
- ▣ Brian Monk Film (3 min) - CSG Health Impacts
- ▣ Health Impact Assessment for NW NSW
  - What is a HIA?
  - Why a HIA for the Gunnedah Basin?
  - How will the HIA be developed?

# Bigger Picture

- Start at Leard Forest “Coal Complex”
- Zoom out to Namoi Water Study
- SRLUP Coal Map
- SRLUP Gas Map
- Comet Ridge PEL Map



Namoi River

Maules Creek Coal Mine

Leard State Conservation Area

CL375

Leard State Forest

Maules Creek Coal Mine

Boggabri Coal Mine  
CL368

A355

A339

Goonbri Coal Project  
EL7435

Tarrwonga Coal Mine  
ML1579

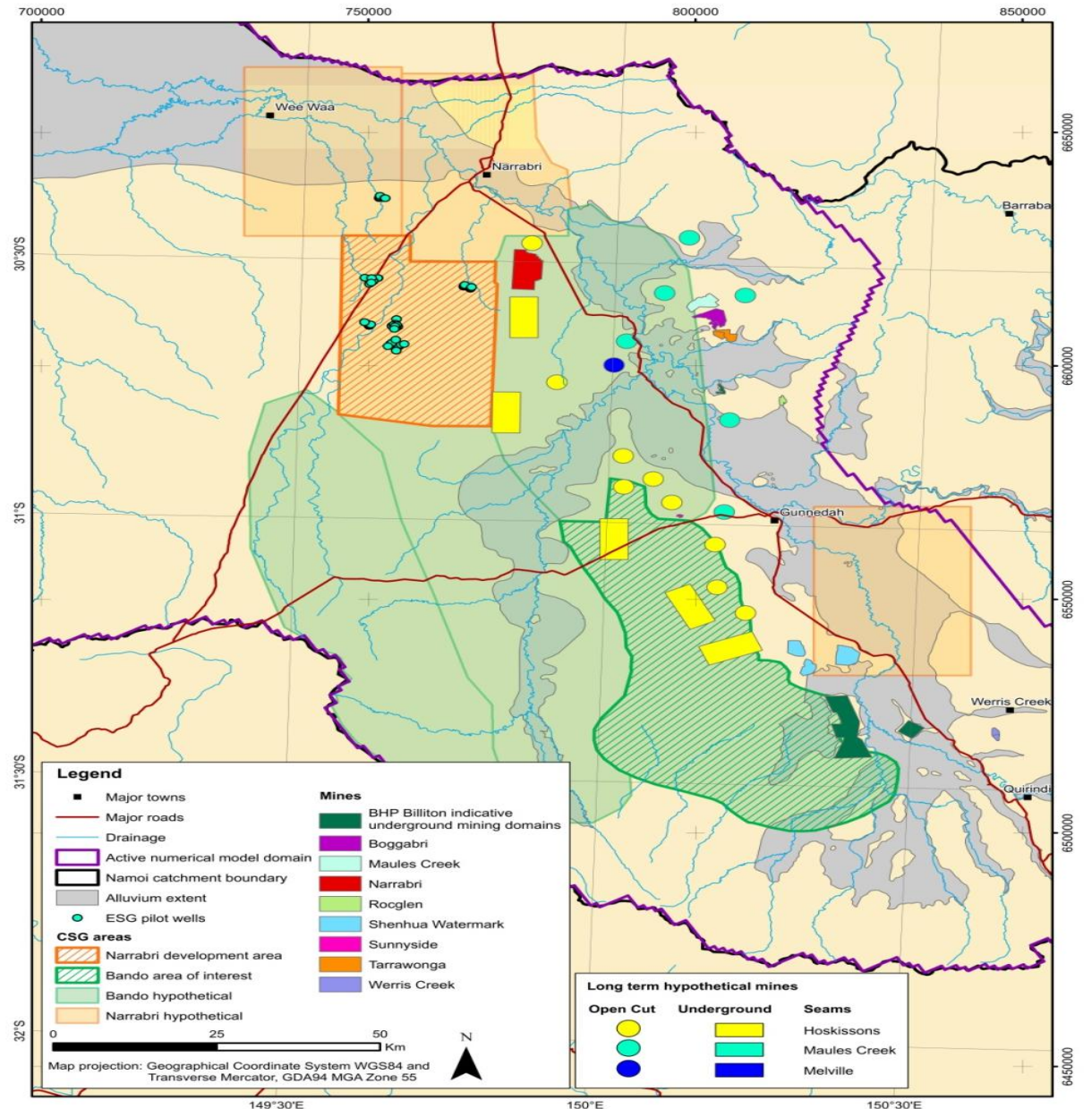
Bollol Creek

Tarrwonga Expansion  
EL5967





Figure 4.14 Mining and coal seam gas activities simulated in Scenario 3



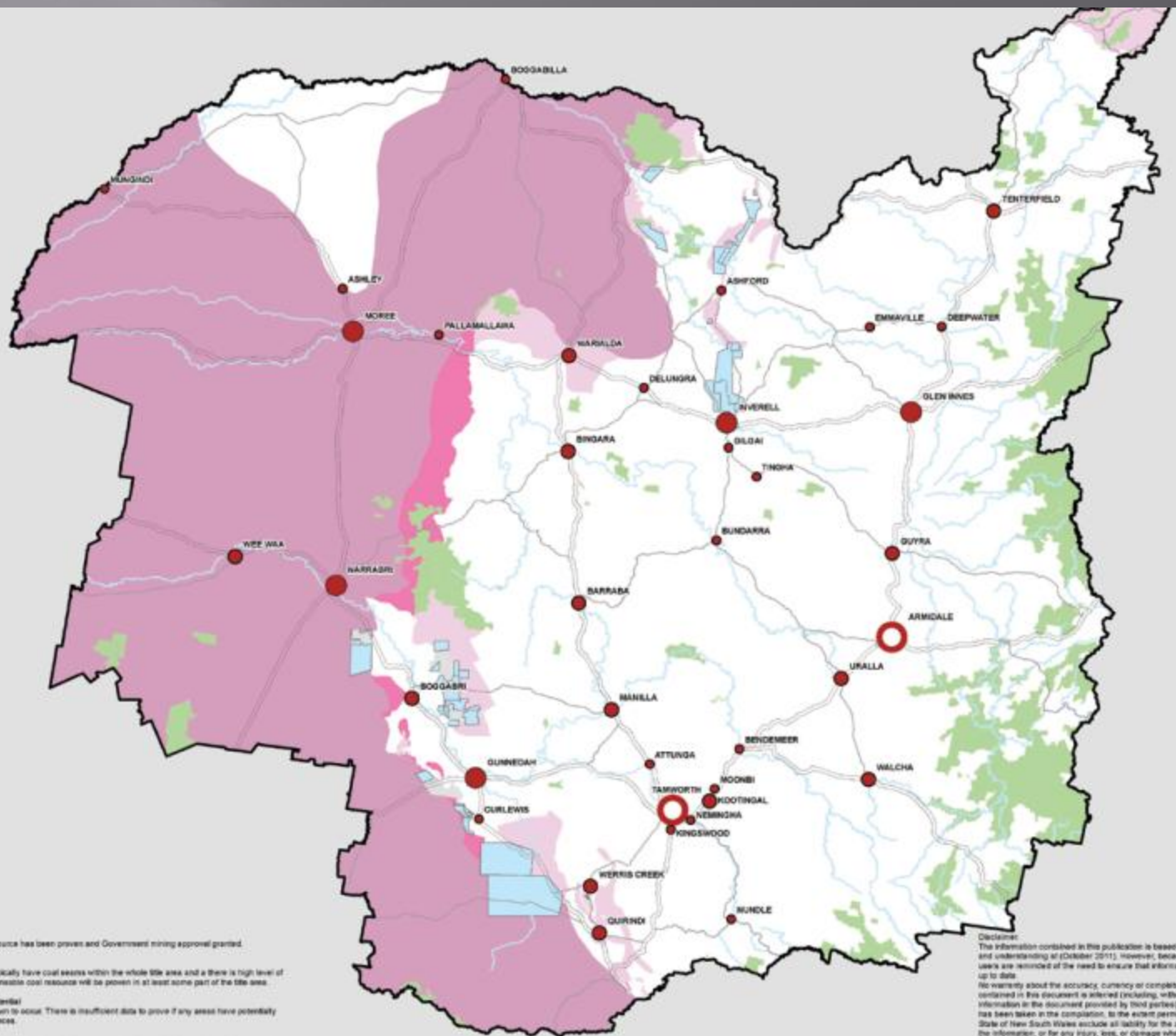
# Draft Strategic Regional Land Use Plan

## New England North West

### Coal Resource

#### Legend

-  Major Regional Centre
-  Major Town
-  Town
-  Village
-  New England North West Region
-  Highways
-  Major Roads
-  Major Rivers
-  National Parks
-  Existing exploration licence: potential for new open cut and/or underground mine
-  Existing mining title: open cut and/or underground
-  Coal resource exploration potential: open cut and/or underground
-  Coal resource exploration potential: underground (may include some open cut)
-  Coal resource exploration potential: underground



#### Mining Title

A mineable coal resource has been proven and Government mining approval granted.

#### Exploration Title

Exploration Titles typically have coal seams within the whole title area and a there is high level of confidence that a mineable coal resource will be proven in at least some part of the title area.

#### Coal Exploration Potential

Coal seams are known to occur. There is insufficient data to prove if any areas have potentially mineable coal resources.

#### Note:

#### Disclaimer:

The information contained in this publication is based on knowledge and understanding at (October 2011), however, because of advances in users are reminded of the need to ensure that information upon which it is up to date.

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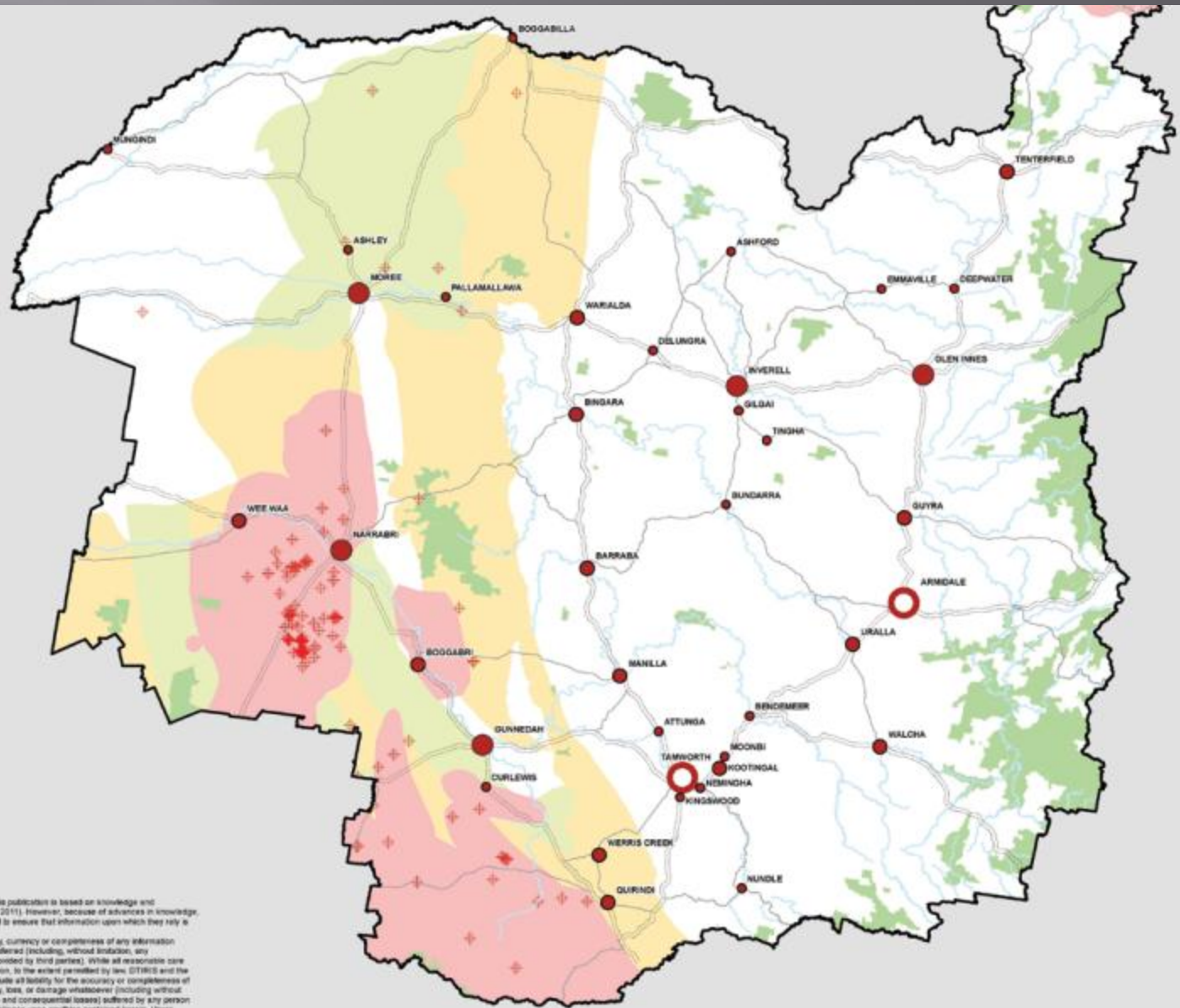
# Regional Land Use Plan

## New England North West

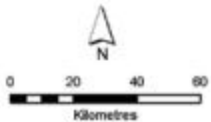
### Coal Seam Gas Resource

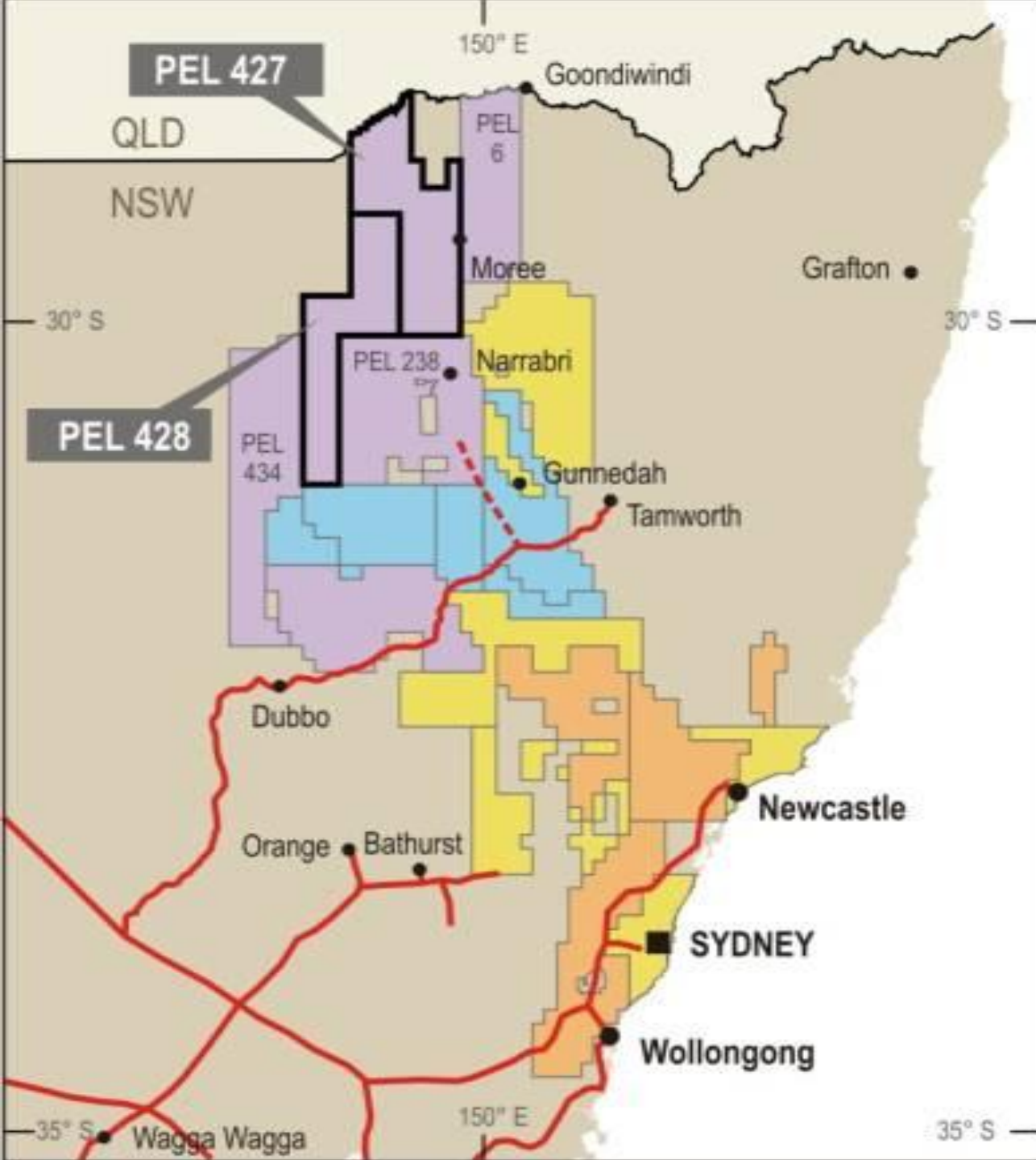
#### Legend

-  Major Regional Centre
-  Major Town
-  Town
-  Village
-  New England North West Region
-  Highways
-  Major Roads
-  Major Rivers
-  National Parks
-  Coal Seam Gas Wells
- Coal Seam Gas Potential**
-  High
-  Moderate
-  Low



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### PERMITS BY OPERATOR

- Dart / Apollo
- AGL
- Santos
- Eastern Star Gas
- Comet Ridge Interest
- Gas pipeline
- Proposed Gas pipeline



# Brian Monk Short Film (3 Min)

# What is HIA?

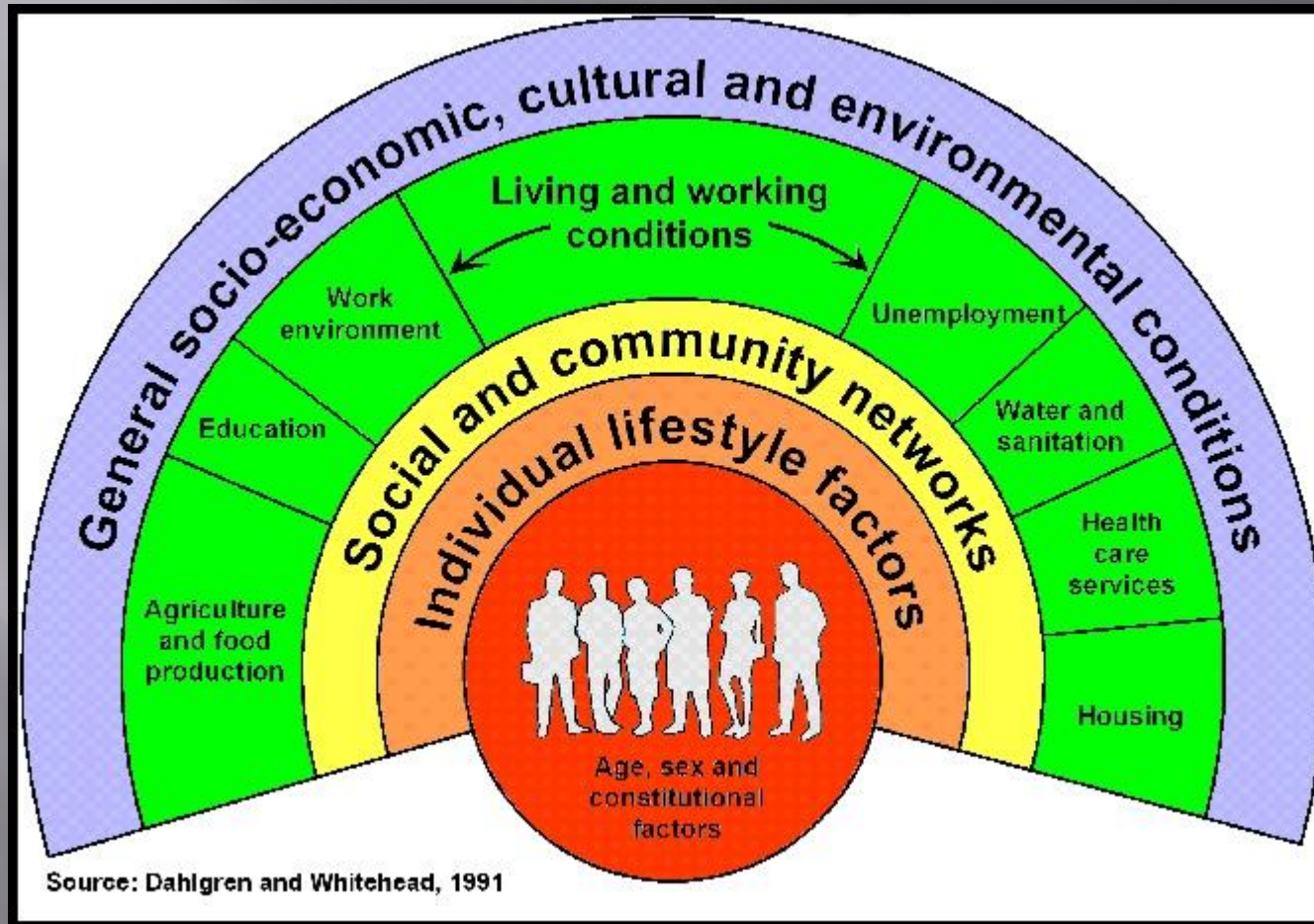
A **combination** of procedures, methods and tools by which a policy, programme or project may be judged as to its **potential** effects on the health of a population, and the **distribution** of those effects within the population

European Centre for Health Policy (1999) *Gothenburg Consensus Paper on Health Impact Assessment: main concepts and suggested approach*, WHO Europe: Brussels

# HIA features

- Considers intended and unintended effects
- Considers distribution of impacts – equity
- Involves developing recommendations to minimise negatives and maximise positives
- Is an aid to decision making (it doesn't make the decision)

# HIA considers how a proposal impacts on the determinants of health



# Why do we need a HIA in the Gunnedah Basin?

- ▣ Known Health Impacts from CSG and Coal
- ▣ Establish a baseline profile as to the existing populations health
- ▣ Large scale development has not yet occurred
- ▣ Growth in the region and demand on health services to increase
- ▣ Planning on a project by project basis fails to consider cumulative health impacts
- ▣ Individual Project plans do not include a HIA
- ▣ GB is on track for a repeat of the Hunter Valley

# Why HIA Now For GB?

- ▣ Simple cost benefit
  - Tens of thousands of people living in the Gunnedah Basin who will be impacted
  - Billions of dollars in CSG and coal resources in the Basin
- ▣ Learn from the Hunter & US Experience
  - July 2012: workers 1.8 times more likely to be diagnosed with cancer than average population
  - 2009: \$2.6b direct health costs of coal mining – particulate pollution, sulphur dioxides, oxides of nitrogen

# Overview of Health Impacts

- ▣ Coal - “Clear indications from international health research literature that there are distinct serious health and social harms associated with coal mining and combustion” (Sydney Uni Coal Harms Report)
- ▣ CSG contaminated ground water and release of toxic gases .
  - Toxic Groundwater
  - Toxic gases
  - Environmental contamination

# 2012

## HEALTH AND SOCIAL HARMS OF COAL MINING IN LOCAL COMMUNITIES



Spotlight  
on the Hunter Valley

# “Community Led” - HIA

- ▣ Develop ToR - based on UNSW proven methodology
- ▣ Develop “Pilot” program for Federal Funding
- ▣ Invite interested parties to tender for 3 main components;
  - Health (Physical, Mental and Social)
  - Environmental (Air Quality, Noise, Water Quality)
  - Project Administration
- ▣ Peer Review and HIA Findings Release

# Timelines

- ▣ Scoping committee formed end of August 2012
- ▣ Terms of Reference completed and approved  
Dec 2012
- ▣ Funding Proposal completed Jan 2013
  
- ▣ Funding in place June 30 2013
- ▣ Project Kickoff July 2013
- ▣ Project completion Dec 2014

# Structure of the HIA

- ▣ Steering / Management Committee
- ▣ Scoping / Stakeholder Committee
- ▣ Government Funding Body
- ▣ Expert Consultancies responsible for project components
- ▣ UNSW – Methodology/ Interpretation of Results
- ▣ Peer Reviewer

# Community Context

- ▣ Enable better planning for “Extractive” Industries
- ▣ Support Triple Bottom Line (TBL) studies for the Gunnedah Basin.
- ▣ Provide transparent, objective measures of the true long-term, cumulative, economic, environmental and social benefits and costs of coal and CSG extraction, as compared with current land uses and potential alternative business development.

# Regional Planning Context

- ▣ Use the HIA data to develop health risk maps based on the key development scenario's in the Namoi Water Study.
- ▣ NWS and HIA are seen as one “module” of overarching planning approach.
- ▣ Use Namoi CMA's cumulative risk framework for NRM assets as another input.
- ▣ Enables use of Precautionary Principle prior to any new planning decisions.

# Issues to Overcome

- ▣ Budget – under consideration, not yet finalised
- ▣ Time Frame 18 months – maybe too late for;
  - policy,
  - individual projects or
  - cumulative impacts
  
- ▣ Government may ignore the HIA for planning
- ▣ Companies may ignore HIA for operations

# Take Home Messages

- ▣ Gunnedah Basin HIA is progressing as planned
- ▣ The study is based on accepted methodologies
- ▣ Strong political support from local federal member
- ▣ Expecting further developments soon!!