



appea

the voice of australia's  
oil and gas industry

## Make Good ...



... approach and status



# Make Good

- **Introduction**
- **Why make good?**
- **Immediately Affected Area**
- **Progress**
- **Legal enhancements**
- **Next steps**





# Why Make Good?

## ***Queensland Water Act 2000 – Chapter 3***

- Petroleum tenure holders required to monitor and manage impacts of exercising underground water rights
  - obliged to ‘make good’ bores impaired by CSG activities
  - impaired capacity linked to decline in water level and bore can no longer provide a reasonable quantity or quality of water
  - applies to registered and unregistered water bores



## **Water Act 2000**

Reprinted as in force on 27 June 2011

Reprint No. 8C

This reprint is prepared by  
the Office of the Queensland Parliamentary Counsel  
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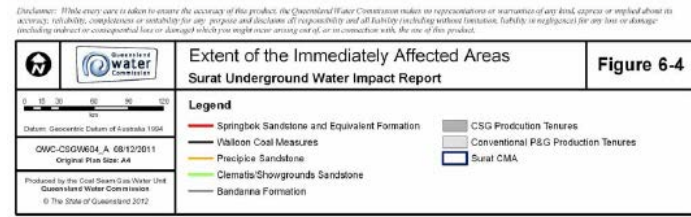
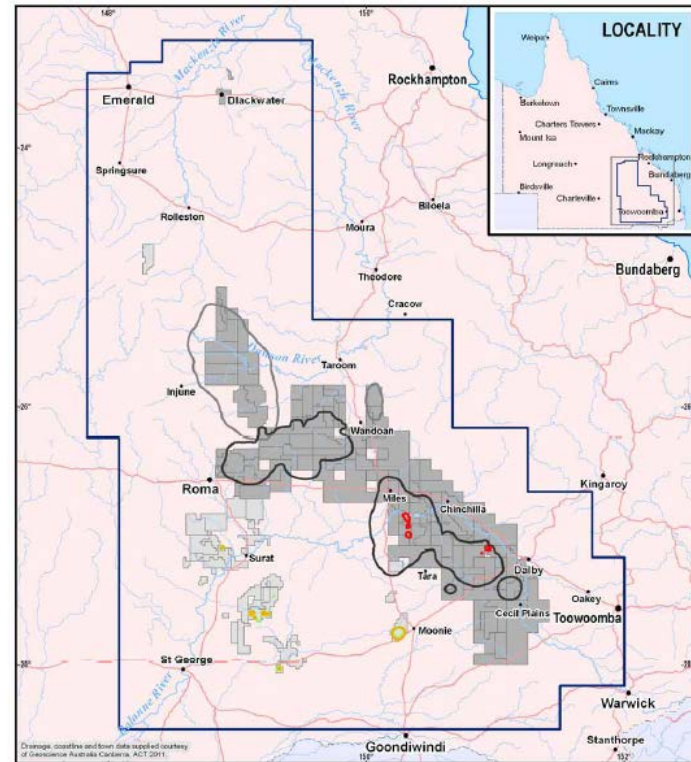
# QWC Underground Water Impact Report

Queensland Water Commission published Underground Water Impact Report (UWIR):

- Effective 1 December 2012

UWIR predicts cumulative impact of CSG activities in Surat Basin CMA

- Immediately Affected Area – water level decline >5m (85 bores impacted next 3 years out of 21,000 private water bores)
- Long-term Affected Area – water level decline >5m (528 bores impacted long-term)
- UWIR is re-published every 3 years



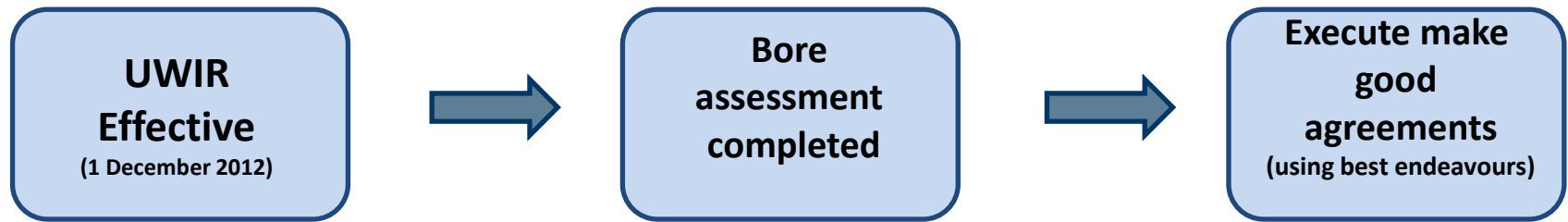
The *Water Act 2000* specifies requirements for water bores within the Immediately Affected Area





# Immediately Affected Area

- The *Water Act 2000* obliges responsible tenure holders for the IAA the following:



- Industry is taking a pro-active approach to manage predicted impacts
- *Water Act 2000* also provides for managing impacts outside the Immediately Affected Area
  - Chief Executive (DEHP) can direct tenure holder to undertake a bore assessment and if necessary, enter into a make good agreement



# The approach to Make Good - IAA

- Preferred make good measures:
  - monitor bores (for bores not in the WCM)
  - monetary compensation
  - drilling new bores into deeper aquifer
  - decommission IAA bores
- Active engagement with IAA landholders:
  - discussed statutory obligations
  - outlined findings of Bore Assessment
  - negotiating Make Good Agreements
- A bespoke make good agreement for each landholder





# Categorisation for Make Good

Predicted impacted bores per aquifer

Bore Status	IAA (UWIR)				IAA (TODAY)			
	APLNG	Arrow	QGC	Santos	APLNG	Arrow	QGC	Santos
Condamine Alluvium	-	-	-	-	-	-	-	-
Guberramunda	-	-	-	-	-	-	-	-
Springbok	2	-	-	-	2	-	-	-
Walloon Coal Measures	38	15	28	1	41	11	33	1
Hutton Sandstone	-	-	1	-	-	-	1	-
Precipice Sandstone	-	-	-	-	-	-	-	-
<b>Total</b>	<b>40</b>	<b>15</b>	<b>29</b>	<b>1</b>	<b>43</b>	<b>11</b>	<b>34</b>	<b>1</b>

DNRM / OGIA are reviewing some IAA bores (location, formation) ...



# Categorisation for Make Good - IAA

Make Good measures are a function of the formation tapped, use of the bore, alternative water supply sources and value of property

Bore Status	Stock & Domestic	Entitlement
Collapsed/not used	32 bores	0 bores
Back-up / emergency use only	29 bores	0 bores
Partial bore (i.e. other bores/water supplies on property)	16 bores	0 bores
Main bore (i.e. no other water supply)	9 bores	3 bores
<b>Total</b>	<b>86 bores</b>	<b>3 bores</b>





# The make good process

## Make Good Process

(Preliminary)  
Bore assessment

Identify Make  
Good Options

Negotiate and execute  
Make Good Agreement

Implement  
Make Good Agreement

- **Enhancement of DNRM database**
- **Preferred make good measures are compensation and/or new bores**
- **General agreement towards decommissioning of WCM bores**



# Progress of Make Good

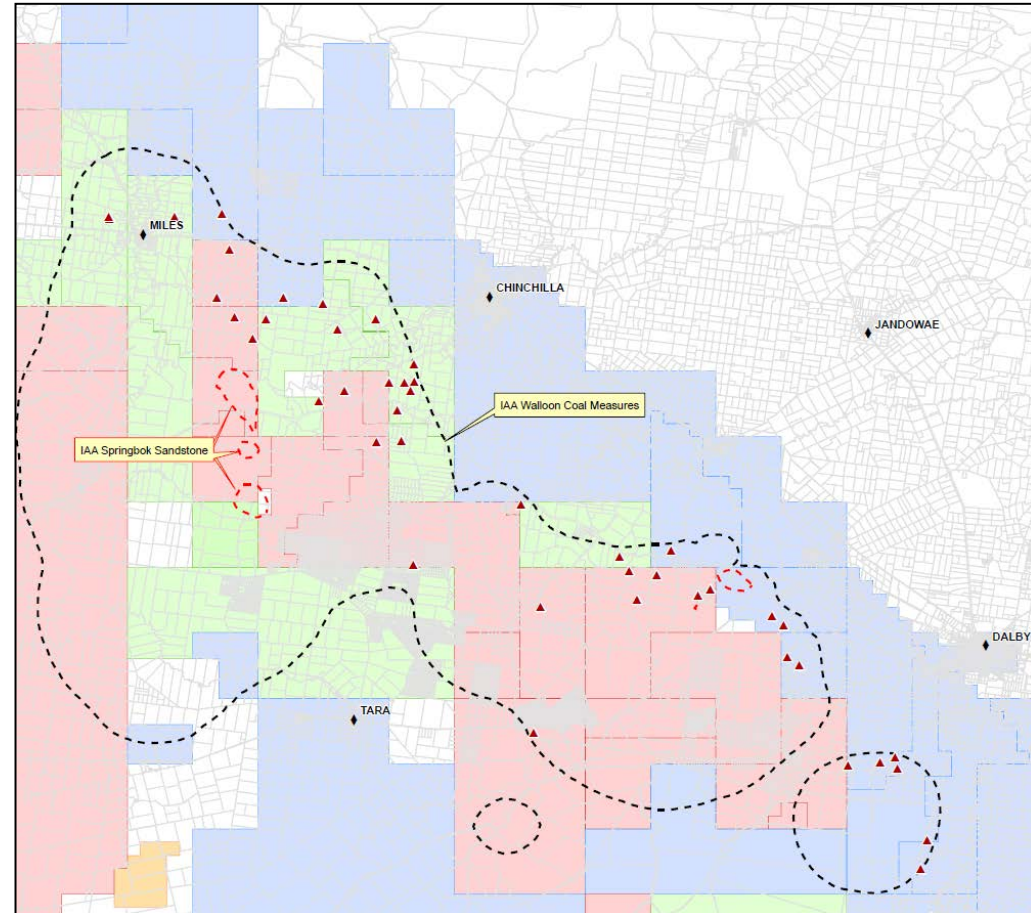
Bore Status	Stock & Domestic					Entitlement				
	Number	Assessment complete	Negotiations commenced	Negotiation completed	Agreement executed	Number	Assessment complete	Negotiations commenced	Negotiation completed	Agreement executed
Collapsed/not used	33	33	29	2	2					
Back-up / emergency use only	29	29	29	2	2					
Partial bore (i.e. other bores/ water supplies on property)	15	15	14	2	1					
Main bore (i.e. no other water supply)	9	9	9	2		3	3	3		
<b>TOTAL</b>	<b>86</b>	<b>86</b>	<b>81</b>	<b>8</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>3</b>		

In dialogue with DNRM, an approach has been identified for the entitlement bores.



# Some common questions ...

- What are the responsibilities of the CSG companies:
  - Baselineing
  - Bore assessments
  - On and off tenement
  - Make Good
- What is impairment?
  - Visualisation of impacts
  - Gas in my bore?
- Impact questions
  - CSG is on my neighbour's property ...
  - What is the time frame of impact?
- Implementation questions
  - Reimbursement of legal fees
  - Licensing and regulatory approvals
  - Timing for decommissioning





# The Long-term Affected Area

- Utilise groundwater monitoring programs to assess impact
  - established to address State, Federal and QWC requirements
  - assist determining if/when draw-downs are likely to occur
- Monitor nominated bores until impairment becomes visible
  - Enter make good agreement at later date
- UWIR re-published every 3 years







# Proposed regulatory framework enhancements

## Enhancements

WCM exclusion

Bore construction  
standard

Address entitlement  
bore issue

“Best endeavours”  
guidance







# Questions?



*Chinchilla Weir on a winter's morning*