



Water Monitoring Strategy for Coal Basins in NSW – Gunnedah Basin

Narrabri CCC - 13 June 2017

Purpose of this presentation

- Project Update – Done so far...
- Plumb Road Update
- Project Forward Planning
- Site Selection

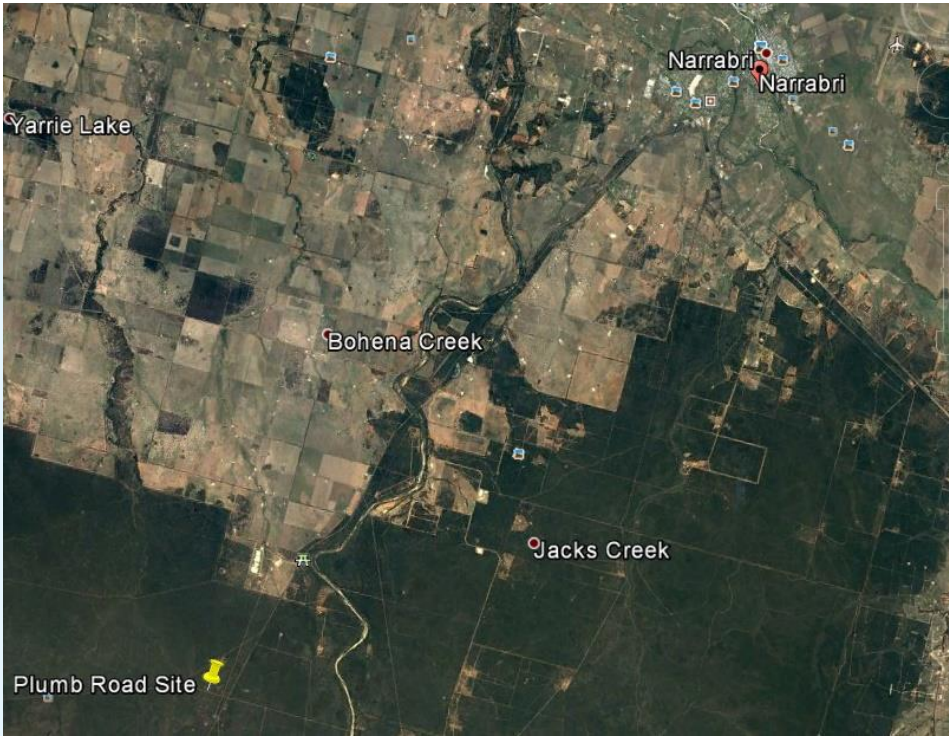
Project Update – Done so far...

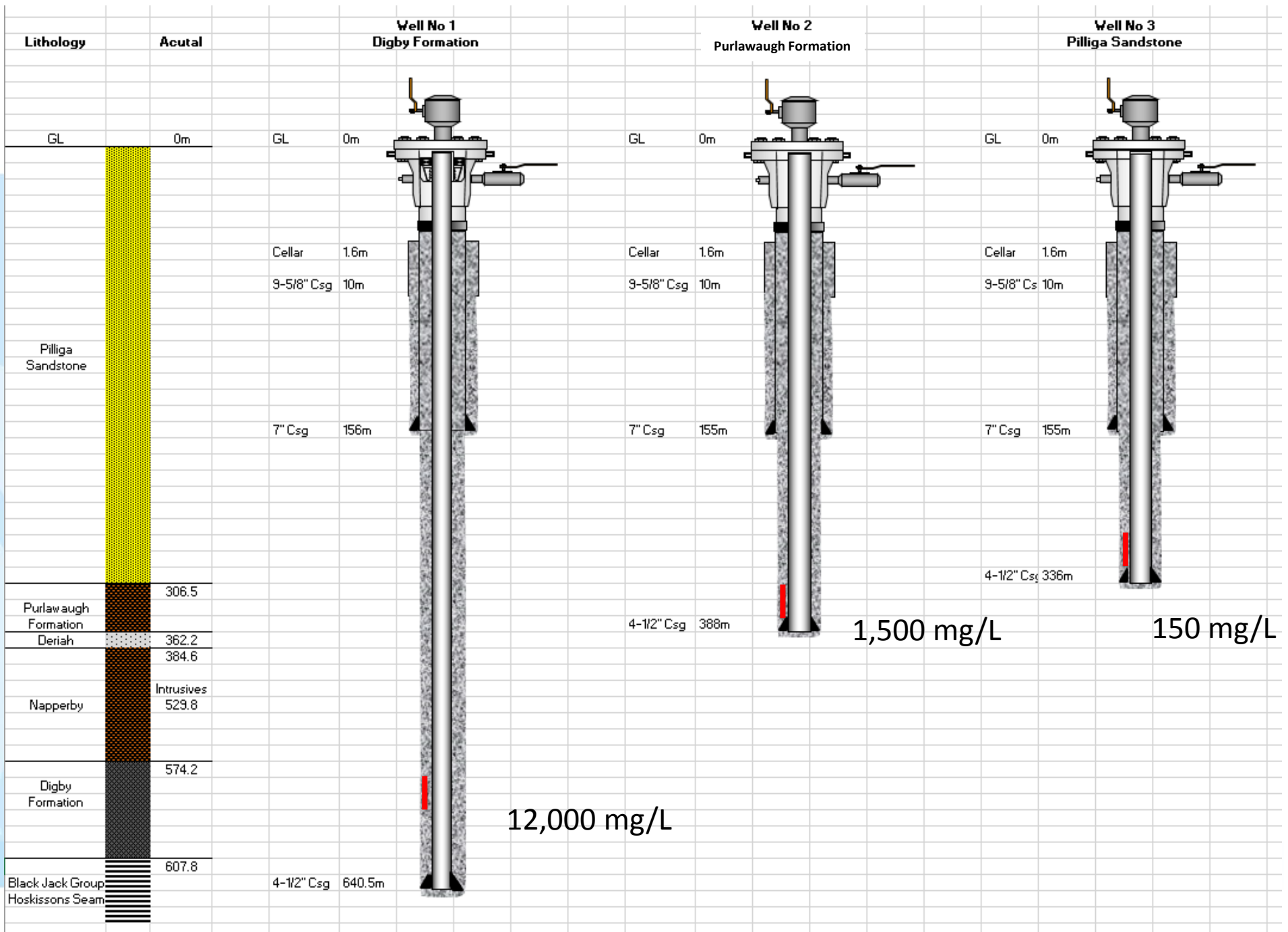
- Construction of 3 new monitoring bores Plumb Road (Narrabri)
- Basin conceptualisation & site selection for Southern & Hunter coal fields
- Site and environmental assessments Southern & Hunter
- Drilling Industry Engagement – new technical specifications and contracts
- Planning for monitoring & sharing of water information project streams

Done so far - Gunnedah Basin

- National Partnership Agreement - 2014
 - Spring Ridge x 2
 - Mary's Mount x 2
- Controlled Allocation – 2015
 - Shell
 - Scratch Road x 2
 - Old Gunnedah Road
- BHP Carroona – just acquired – 12 bores at 4 sites
- Plumb Road - 2017

Plumb Road Bores





Monitoring Results



Department of
Primary Industries
Office of Water

Home

About us

Water Management

Water Licensing

Urban Water

Real-time data

- GW025045.3.2 Gw..
- GW025245.1.1 Gw..
- GW025245.3.3 Gw..
- GW025299.1.2 Gw..
- GW025333.5.4 Gw..
- GW025340.2.2 Gw..
- GW030000.1.1 Bu...
- GW030029.2.2 Co...
- GW030070.4.4 Gw..
- GW030083.2.2 Gw..
- GW030087.2.2 Gw..
- GW030121.1.3 Gw..
- GW030129.1.1 Gw..
- GW030130.1.1 Gw..
- GW030130.1.2 Gw..
- GW030131.1.1 Gw..
- GW030223.2.2 Gw..
- GW030233.1.1 Gw..
- GW030233.1.3 Gw..
- GW030233.3.3 Gw..
- GW030306.1.1 Gw..
- GW030306.2.2 Gw..
- GW030306.3.3 Gw..
- GW030310.1.1 Gw..
- GW030310.1.2 Gw..
- GW030344.1.1 Gw..
- GW030344.2.2 Gw..
- GW030344.3.3 Gw..
- GW030450.1.1 Gw..
- GW030450.1.3 Gw..
- GW030468.1.1 Na..
- GW036005.1.1 Gw..
- GW036005.1.2 Gw..
- GW036045.1.1 Gw..
- GW036045.3.3 Gw..



data since 2017-05-06

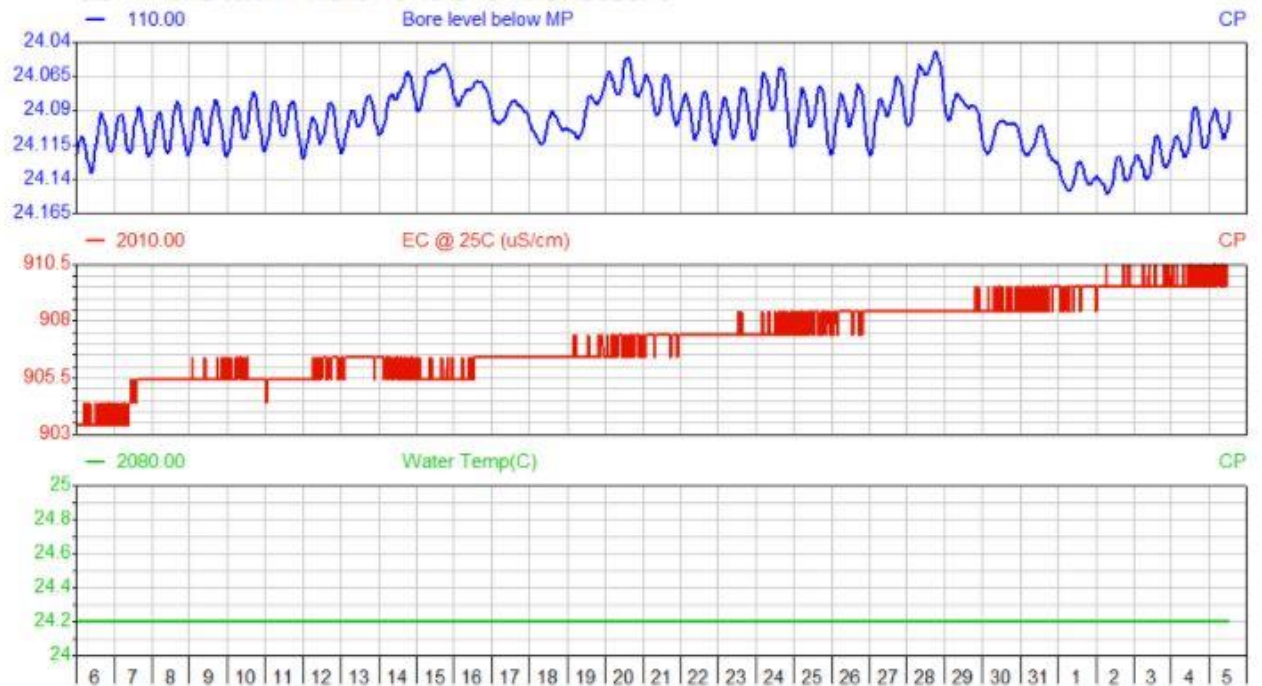
DPI Water

HYPLOT V133 Output 05/08/2017

06/05/2017 to 06/06/2017

2017

Site GW273308.1.1 WILMOTTS ROAD - SPRING RIDGE 2343



Refresh

Forward Planning

Coalbasin	High Level Task	2016		2017				2018				2019				2020	
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
SOUTHERN COALFIELDS	Basin Conceptualisation																
	Site Selection & Reporting																
	Construction of bores																
	Development & Telemetry																
HUNTER	Basin Conceptualisation																
	Site Selection & Reporting																
	Construction of bores																
	Development & Telemetry																
GUNNEDAH/ NARRABRI	Basin Conceptualisation																
	Site Selection & Reporting																
	Construction of bores																
	Development & Telemetry																
WESTERN COALFIELDS (NORTH)	Basin Conceptualisation																
	Site Selection & Reporting																
	Construction of bores																
	Development & Telemetry																
WESTERN COALFIELDS (SOUTH)	Basin Conceptualisation																
	Site Selection & Reporting																
	Construction of bores																
	Development & Telemetry																
NEWCASTLE	Basin Conceptualisation																
	Site Selection & Reporting																
	Construction of bores																
	Development & Telemetry																
CLARENCE MORETON	Basin Conceptualisation																
	Site Selection & Reporting																
	Construction of bores																
	Development & Telemetry																
GLOUCESTER	Basin Conceptualisation																
	Site Selection & Reporting																
	Construction of bores																
	Development & Telemetry																


 Completed

 Planned

Forward Planning – Gunnedah Basin

	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18
Basin conceptualisation & Site Selection	As reported February 2017	As reported February 2017	As reported February 2017	As reported February 2017	Current program for completion	Current program for completion								
Preliminary Investigation of Potential Sites			As reported February 2017	As reported February 2017		Current program for completion	Current program for completion							
Environmental and Development Approvals				As reported February 2017	As reported February 2017	As reported February 2017		Current program for completion	Current program for completion					
Procurement of Contractors for Bore Construction					As reported February 2017	As reported February 2017	As reported February 2017	As reported February 2017						
Construction of Water Monitoring Bores								As reported February 2017	As reported February 2017	As reported February 2017		Current program for completion	Current program for completion	Current program for completion
Bore Development and Telemetry										As reported February 2017	As reported February 2017		Current program for completion	Current program for completion

 As reported February 2017

 Current program for completion

Monitoring Purpose

To establish ***reference condition**** water quality and quantity and to observe changes.

*An alternative expression is ***baseline***. Here reference condition means the condition found upon its initial observation.

Site Selection Criteria

- Identifies or confirms the characteristics of strata, aquifers and aquitards
- Fills data gaps
- Complements existing monitoring
- Impacts, pathways and receptors
- Control
- Numerical modelling
- Addresses stakeholder concerns
- Logistics

Geological Model

- Division of Resources and Geoscience
- 3D geological model
- Target Formations for monitoring
- Determine drilling meterage
- Prioritise budget

Gunnedah Basin - Site Selection, General Issues

Questions?

Discussion...

