NSW GOVERNMENT Department of Primary Industries

Water Monitoring Strategy for Coal Basins in NSW

Narrabri CCC

Tuesday 12 April 2016

Purpose of this meeting

- Overview of the Water Monitoring Strategy
- Site selection
- Discussion

The team

Christobel Ferguson – Director – Water Information and Insights, DPI Water

Sarah Wylie – Project Director, NSW Public Works

Rob Brownbill – Senior Hydrogeologist, DPI Water

Andrew Cruckshank – Project Manager, NSW Public Works

Kath Logan – Stakeholder Relations Manager, NSW Public Works

Cate Barrett – Hydrogeologist, DPI Water

Better business as usual

- DPI Water operates a groundwater monitoring network – 5000+ bores, 3000+ locations
- In 2014, the NSW government allocated $22.8M to the Water Monitoring Strategy
- The groundwater monitoring network will be expanded to better map, monitor and protect groundwater resources

Water Monitoring Strategy

- Expand groundwater water monitoring bore network
- Better information = better decisions
- Make information publicly available

Groundwater monitoring information

- Baseline groundwater conditions
- Monitor changes in groundwater (levels, quality)
- Monitor natural seasonal fluctuation
- Monitor long term trends
- Geology

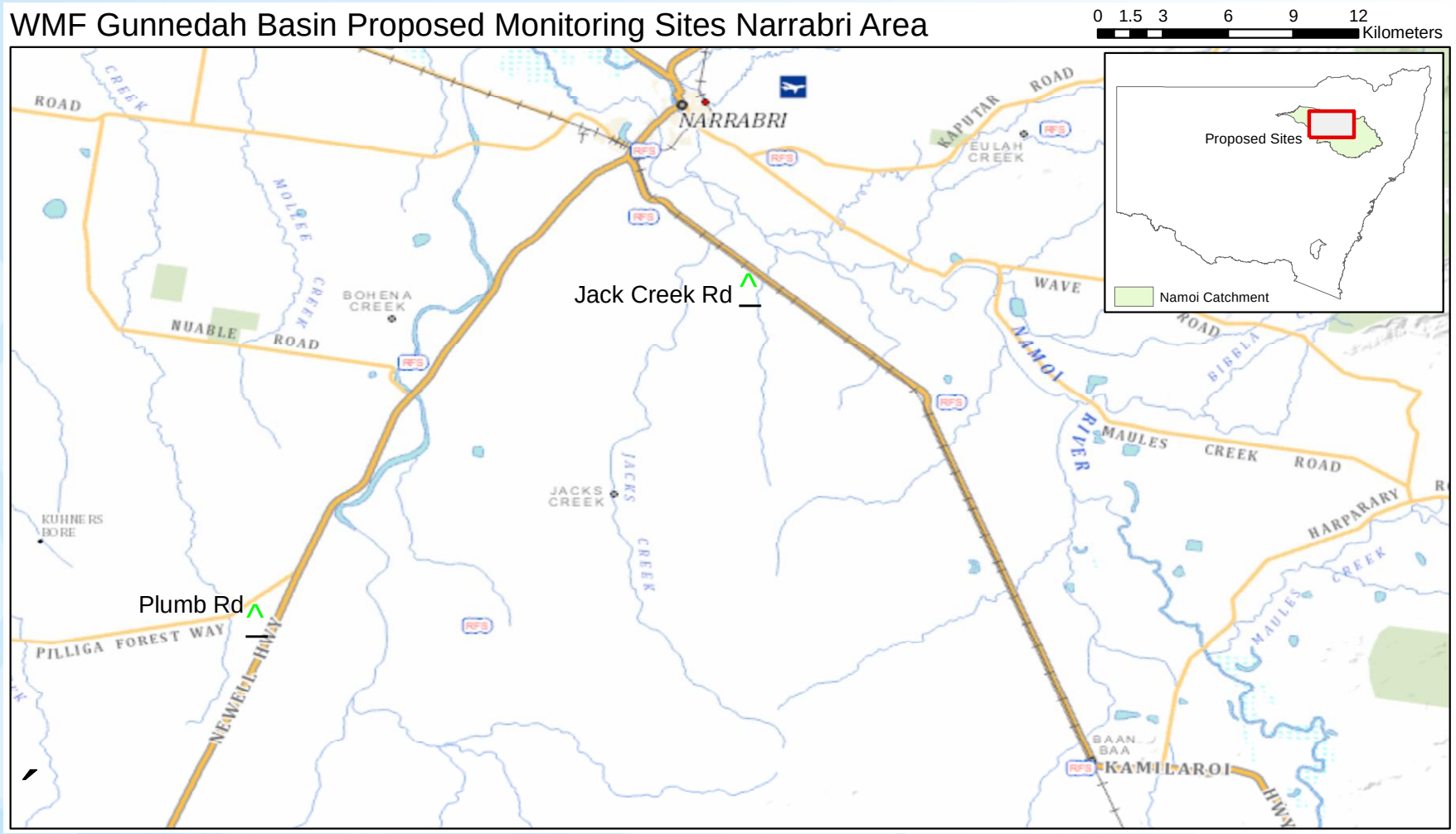
Information produced

- Resource management and assessment
- Inform users and other stakeholders
- Inform groundwater modelling
- Research

Site selection criteria include:

- Data gap
- Modelling characterisation
- Active use area
- Inter-aquifer connectivity
- Surface/groundwater connectivity
- Water quality
- Ecological and cultural significance

Proposed site locations



Site information

Jacks Creek Rd - target geology:

- Shallow - Pilliga Sandstone or Garrawilla Volcanics
- Deep - Gunnedah Basin

Plumb Rd - target geology:

- Shallow - Pilliga Sandstone.
- Intermediate – Deriah Formation sandstone
- Deep – Digby Formation conglomerate

Final site set up