

## Howard East Water Advisory Committee

### Meeting notes for Meeting 4: Tuesday, 8<sup>th</sup> November 2016

3.00pm – 7.00pm New Members, existing members 5.00pm –7.00pm.

Whitewood Hall, Howard Springs Reserve

Present – new members: Donna Jackson, Bill Risk, Mark Smith, Gerry Wood and Maria Kraatz.

Present – existing members: Matthew Salter, Kate Peake, Jan Hintze, Maree Bredhauer, Shane Papworth (Proxy for David George), Mardi Miles (DENR), Liza Schenkel (DENR), Dale Cobban (DENR), and Jo Townsend (DENR).

Apologies –Tristan Sloan, Dave Liddle

1. Welcome, Apologies

New members met prior to the scheduled meeting to get up an update of issues and information already provided to existing members. Topics covered included: terms of reference, operating arrangements and expectations from members; what is water allocation planning; and the Howard groundwater system.

2. Minutes of previous meeting

Accepted, no changes.

3. Template for water allocation plan

A template for water allocation plans has been developed by the department for use Territory wide. This ensures that all plans are consistent. Region specific information can be added as required. The plan will include specific measures for the Howard groundwater system.

A plain english guide may also be prepared to go with the plan.

4. Water budget for Howard Groundwater system

Presentation by Dale Cobban. Presentation covered the Koolpinyah model which has been developed from geomagnetic survey and field investigations to define hydrogeological features. The model is used to quantify aquifer components and to track changes over time in aquifer storage, recharge and discharge.

Surface model discretisation is based on the following features:

- Structural features (dykes, folds)
- Geological boundaries ie. edge of Koolpinyah Dolomite

- Surface water features including the Adelaide River, Howard River catchment boundary and the coast

#### Groundwater zones

- 5 groundwater zones have been identified
- Groundwater response zones follow hydrogeological features
- Flow across internal zone boundaries is low- to no-flow
- Recharge response differs in different zones

#### Koolpinyah Model

- Aquifer performance is driven by rainfall/recharge mechanisms
- Rainfall over the Koolpinyah area has increased in the past 116 yrs, notably since the 1960s. This is reflected in the recharge rates mass residual
- A significant proportion of lateral flow occurs during the wet season as the upper layers (L1 and L2) become saturated during heavy rainfall events
- Not all recharge reaches the dolomite
- Recharge is spatially distributed with more recharge in the southern zones than in the north

#### Observation Bores

- 204 boreholes are located within the Koolpinyah Model domain
- Groundwater levels are predicted at each of these boreholes during the model runs and can be compared with measured water levels

A water budget has been prepared using the model, which shows for each zone the gains and losses. The model shows that in a natural scenario, ie no pumping/extraction inflows match outflows.

#### 5. Other Business

Several members were approached by the Minister for Environment and Natural Resources.

Discussion covered;

- the Howard resource and the limited supply and management issues,
- Negative view from public, and the strong view of the WAC
- Measurement of the resource is vital to allow management
- The removal of the 15L/s exemption is important

#### 6. Next Meeting

6<sup>th</sup> December, 5-8pm. Longer meeting to allow for risk assessment discussion.