

Katherine Water Advisory Committee
Meeting Record 3
23 May 2017 – 10.30am
Paterson Room, Katherine Research Station

Members Present

Marie Piccone
Warren De With
Peter Rix

Liam Golding
Shane Papworth
Rick Fletcher
Alison King

Chair
Amateur Fisherman's Association of the NT
Quintis Corporation, Water Extraction Licence
Holder
Proxy for Allister Andrews, Jawoyn Association
Power and Water Corporation
Northern Land Council
Aquatic Ecologist, CDU

Members Absent

Charmaine Roth
Neal Adamson
Marie Allen
Peter Marks
Steven Rose
Mick Jerram

Community member
Department of Defence
Wardaman IPA
Horticulturalist, Water Extraction Licence Holder
Alderman, Katherine Town Council
Tourism Representative

Advisors Present

Gabby Yates
Simon Cruickshank
Steve Tickell

Water Planner, DENR
Senior Manager, Water Monitoring, DENR
Hydrogeologist, DENR

Observers

Pru Ducey

Minutes, DENR

Meeting Opened 10.45am

1. OPENING AND INTRODUCTION FROM THE CHAIR Marie Piccone (Chair)

1.1. Apologies

Peter Marks Horticulturalist, Water Extraction Licence Holder

1.2. Introduction from the Chair

The Chair welcomed those present, particularly Committee Members who had not attended previous meetings.

Members were asked if there were any items they would like added to the Agenda. The following items were requested:

- 5 minute reflection at the end of the meeting as to what information the Committee would like to see at future meetings. This will be added as a standing item to meeting agendas
- update on the SIR
- update on PFAS

- ❖ *ACTION: Request that the Department of Defence representative be asked to provide an update on the ongoing PFAS investigation at each meeting of KWAC.*

2. MINUTES FROM PREVIOUS MEETINGS

The Minutes of Meeting 1 held in Katherine on 23 February 2017 were confirmed as a true and correct record.

3. OBJECTIVES OF THE WATER ALLOCATION PLAN FOR THE TINDALL LIMESTONE AQUIFER, KATHERINE AND INTRODUCTION TO PRESENTATIONS (Gabby Yates, DENR)

The focus of the meeting was on better understanding how the plan is implemented to achieve the objectives, and to also provide some background on the hydrogeology of the Tindall Limestone Aquifer, Katherine. The Committee was provided with the Outcomes, Objectives, Strategies and Performance Indicators of the Plan.

Committee asked whether they could be provided with an overview of plan performance to date.

4. PRESENTATION – MONITORING GROUNDWATER AND RIVERS OF THE KATHERINE AREA **(Simon Cruickshank, DENR)**

The presentation provided information on:

- Monitoring network
- Where the data gets stored
- Water Monitoring Data Portal (online)
- Water Licencing Decision Portal (online)

Committee members suggested that the water licencing decision portal could include a facility to enable water trading e.g. sellers could post available water for trading and provide contact details.

5. PRESENTATION – GROUNDWATER AND RIVERS OF THE KATHERINE AREA, A DESCRIPTION OF THE HYDROGEOLOGY AND RESOURCE ASSESSMENT METHODS **(Steve Tickell, DENR)**

Principal Hydrogeologist, Steve Tickell presented information about the hydrogeology of the Tindall Limestone Aquifer, Katherine. The presentation included:

- Physical hydrogeology with an emphasis on groundwater recharge and discharge processes. An explanation of a confined aquifer and unconfined aquifer was provided
- How groundwater discharge supports key assets in the Katherine region (springs, river flows etc)
- How groundwater extraction can potentially affect groundwater discharge (timing – inter-annual as well as seasonal)

The Committee asked questions and discussion focused on:

- The aquifer is seasonally recharged and there is a large volume of water in storage that fluctuates over a long time period. The committee noted that in the confined parts of the aquifer, groundwater levels don't fluctuate as much as in the unconfined parts of the aquifer. Committee members asked about what we know about water in the confined parts of the aquifer – how old the water is, how it is replenished, and what the pattern of drawdown looks like if you extract this water.
- Steve Tickell confirmed that the main movement of water in the aquifer is in the shallower areas as the permeability of the aquifer decreases with depth (e.g. cracks close up in deeper areas). Some carbon dating has been done on the water, and some of it is quite old, tens of thousands of years, because that doesn't get present day recharge. Some is modern, most of it is fairly young, but it varies up to thousands of years old. Other parts might take a thousand years to get to the river.
- Whether it is old water or new water, the key thing from a water management perspective, is ensuring that groundwater levels are maintained at a level to keep water flowing from out of the aquifer to the river.

- There was a question about pollution risk in karstic limestone aquifers. Some committee members were concerned that the 100m setback distance between bores and septic systems is not far enough to protect people from contamination. It was noted that the minimum setbacks are the minimum distances advised by the Department of Health. Anyone using a bore for domestic water supply should have the water quality of their bore checked regularly to ensure that it remains safe to drink without treatment.

The Chair thanked Steve and Simon for their time in travelling to Katherine, and for sharing their knowledge and expertise.

- ❖ *ACTION: Gabby Yates to provide copies of the presentations to members. These will be uploaded with the meeting minutes*

6. PRESENTATION – ANNUAL ANNOUNCED ALLOCATION (Gabby Yates, DENR)

Historically, river flows and levels have been gauged at Katherine Railway Bridge and Low Level, but not at the same time. The flow ratings were originally developed using all of the gaugings. Most of the historical low flow gaugings were collected at Low Level which has been a more accurate site for low flow gauging. Therefore references in the plan to Katherine Railway Bridge need to be replaced with a reference to Low Level.

It is important to note that DENR hasn't changed the data used to determine the annual announced allocation, but the reference site for the determination is clearly named differently to what is named in the plan. It is important to address this difference in naming.

- ❖ *ACTION: Gabby Yates will work with Simon Cruickshank to develop material explaining the change*
- ❖ *ACTION: Gabby Yates to upload the explanatory note with the announced allocation information on the DENR webpage (<https://denr.nt.gov.au/land-resource-management/water-resources/water-allocation-plans/katherine-water-allocation-plan/announced-allocations>).*

7. COMMITTEE FURTHER QUESTIONS AND DISCUSSION

Information / Presentations for Future Meetings identified at Meeting 1 were:

- Provide some further info about Managed Aquifer Recharge/ Conjunctive Water Use Feasibility Study
- Provide clarification on potential petroleum and gas activities within the Water Allocation Plan Area – *Gabby Yates provided a map of the petroleum and gas exploration tenements in the Daly – Roper Water Control District. One small*

area of one tenement overlaps the very southern boundary of the water allocation plan area.

- Provide information about stock and domestic water requirements in the Katherine Region – *held over to the next meeting*
- Presentation from PFAS taskforce
- Hydrogeology and water resource assessment in the Plan area – *provided during meeting 3 (presentation from Steve Tickell)*
- Water Monitoring in the Plan Area – *provided during meeting 3 (presentation from Simon Cruikshank)*

Some Committee members asked for further information about stock and domestic use. Committee members emphasised that this is an important issue and made the following suggestions:

- Review the findings of the 2007 Top End voluntary metering program. Should there be another voluntary metering program in the Katherine Region to get better data and information about actual water use?
 - Improve education of all water users about water efficiency to encourage water stewardship – water is everyone’s responsibility to use conservatively and efficiently
 - Explore whether there are Community based rules that would help encourage responsible stock and domestic water use – e.g. are there good water neighbours approaches that could be developed to encourage efficiency
 - Don’t want to see people charged for groundwater for stock and domestic. DENR is clearly not pursuing a policy of charging stock and domestic water users for water use.
- ❖ *ACTION: Gabby Yates has developed a stock and domestic water use discussion paper. This paper will be presented to the Committee at the next meeting.*

8. NEXT MEETING

Date to be confirmed – likely in September

Meeting Closed 15.45pm