

**Minutes**

*Meeting opened 5.30 pm*

**1. ATTENDANCE:**

**PRESENT:**

Members

Dr Jocelyn Davies (Chair)	CDU University Fellow/ geographer
Ms Robyn Grey-Gardner	Alice Springs resident (remote water & water quality expert)
Mr Richie Hayes	Agriculture/Horticulture representative
Mr Eli Melki	Alice Springs Town Council
Ms Wendy Stuart	Central Land Council
Mr Adam Davis	Power & Water Corporation
Mr Rod Cramer	Rural residents association
Mr Alex Read	Arid Lands Environment Centre (proxy for Jimmy Cocking)
Mr Glenn Marshall	Alice Springs resident (urban water efficiency expert)
Mr Jimmy Cocking	Arid Lands Environment Centre

NT Government representatives (Non-members)

Mr Robbie Henderson	Water Planner (DENR)
Mr Peter Somerville	Manager Planning & Development (DIPL)
Ms Sarah Fairhead	Director Southern Region (DENR)
Ms Dale Cobban	Manager water resource modelling (DENR)
Mr Des Yin-Foo	Director Water Assessment (DENR)

Observers

Mrs Leeann Hayes	Agriculture/Horticulture interest
Mr Jethro Laidlaw	Demand management Programs (Power & Water)

**APOLOGIES:**

Ms Veronica Lynch	Indigenous / AAPA representative
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**ABSENT:**

Mr Glenn Marshall	Alice Springs resident (urban water efficiency expert)
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**STATUS OF EXISTING ACTION ITEMS**

1.1	(a) Correspond with new potential members from the people and organisations identified in Meeting #3 to scope interest.  (b) Members to report back to ASWAC (through Robbie or Jocelyn) if aware of potential additional Indigenous members or any other potential members not already mentioned.	Robbie Henderson  All members	All contacted – some interested and invited to attend meeting #4 (nil attended). Some follow-up required.
1.2	Organise future ASWAC session focused on demand management.	Robbie Henderson	Discussed at meeting #4
1.3	Make a deputation to ASTC (bi-annually) to provide an update on ASWAC / water related matters	Jocelyn Davies (Chair) with support of DENR / members	Confirmed for 27 <sup>th</sup> November 6pm.

## NEW ACTION ITEMS

1.1	<i>Attend Alice Springs Town Council Deputation. Presentation to describe ASWAC role, the water allocation plan, and seek to link the WAP and water issues to the 'Master Plan' recently brought onto the ASTC agenda.</i>	Joselyn Davies and Robbie Henderson (DENR)	Confirmed for 27 <sup>th</sup> November 6pm
1.2	Email ASWAC members (through the Chair) the link to the SWR policy	DENR	ASAP after public release
1.3	<i>Coordinate 'internal' ASWAC demand management planning workshop</i>	DENR and Power & Water	Before the end of 2017
1.4	<i>Present ASWAC with an analysis of the WAP Implementation plan logic and suggestions for where it could be improved</i>	DENR	Next AWAC meeting early 2018
1.5	<i>DENR to brief ASWAC on the 'use it or lose it' policy, including providing a briefing Richie &amp; Leeann Hayes</i>	DENR	November 2018

## RESOLUTIONS

Nil

### 1. WELCOME AND OPENING MATTERS

Declaration of any conflicts of interest re matters on agenda: Question was raised in regards to potential for a conflict of interest between the Hayes interests (Rocky Hill horticulture) and the agenda item *Mereenie Aquifer Study* Presentation. After discussion it was determined that the agenda item was focused on providing information rather than seeking advice on a decision or policy, and as such there is no conflict or issue with the Hayes' participation. Power & Water declared an interest in the findings of the Mereenie investigation in relation to future town water supply.

Timekeeper: Adam Davis

Motion to confirm minutes of Meeting #4: moved unanimously with request from Adam Davis to modify the statement relating to Power & Water's human resource commitment to demand management. DENR to update minutes online.

Update on actions from previous meeting(s): See table above

### 2. UPDATE ON DENR MATTERS OF INTEREST – SWR Policy

Robbie Henderson provided updates on the Strategic Aboriginal Water Reserve (SWR) policy;

- The policy is approved by the NT Government but the Minister has not made a public announcement. For this reason the committee can be briefed but cannot be given a copy of the full policy until its formal release (at which time the Committee will be emailed a web link to the policy).
- Purpose is to provide Aboriginal people with increased opportunity to access or control water resources for economic development and reduce barriers and disadvantage experienced in competing for access to water with other commercial interests
- SWRs to be included in new and revised water allocation plans (WAPs). The Water Act will be amended to require SWR inclusion in future water allocation plans (SWR as a new beneficial use category). SWR operated through licensing are subject to the same assessment process and license conditions as other water extraction licenses.

- SWR provides 'consent rights' to access SWR to eligible Aboriginal people – i.e. only Aboriginal people with rights to access water in the WAP area, or other parties authorised by them, may receive a license to extract water from an SWR.
- The SWR does not extend the rights to access water to new groups of people. It reserves water for Aboriginal people who have the existing right to access: Aboriginal Land Trust, Exclusive Possession Native Title, and NT Enhanced freehold. It only includes Aboriginal land that is inalienable does not include Aboriginal land that may be sold to non-Aboriginal interests.
- The amount of consumptive water reserved in the SWR is proportionate to the percentage of eligible Aboriginal land with access to water in the plan area. The water reserved is from the consumptive pool available for economic use - i.e. public water supply and rural stock and domestic use (unlicensed) are prioritised in allocations and does not include environmental, domestic use and other reserved water.
- ASWAC will be emailed a web link to the SWR policy when it becomes publically available. The implications of SWR on the Alice Springs WAP can be an item for the forward agenda.

Actions / decisions:

- DENR to email ASWAC members (through the Chair) the link to the SWR policy promptly after its public release

### 3. PRESENTATION – Mereenie aquifer study

Peter Cook (National Centre for Groundwater Research & Training) delivered a presentation on indicative results of modelling the impact of a horticultural development on the future water supply bore field in the Rocky Hill area.

Key information included:

- Background about current extraction for potable use, horticultural use and licenced entitlements and current observed draw down at Roe Creek
- Investigation plan: (i) Assessment of the potential for contamination beneath irrigation activities; (ii) Review our understanding of groundwater, (iii) Drilling test production bores and observation bores, (iv) Coring to measure formation hydraulic properties, (v) Regional investigation bores, (vi) Water chemistry, (vii) Aerial electromagnetic survey, (viii) Groundwater model
- Largest risk to groundwater is from salinity natural present within soil, which is flushed into groundwater by infiltrating irrigation water. Soil cores show that the soil / soil water is very saline (approaching sea water).
- Preliminary results of monitoring scenarios were shown – including 'worst case scenario' – Sc6: Current usage at Roe Creek phasing in Rocky Hill after 2040 and infiltration at the grape block and the proposed onion plots with no local pumping at Undoolya – Rocky Hill
- Results from draw down simulations, expected water movement and change in salinity distribution was shown
- Conclusions (noting results are preliminary and figures should not be quoted until the final report is completed):
  - o No convincing evidence of groundwater contamination beneath vineyard. Any contaminants in irrigation leakage will not reach groundwater for at least 50 years. There will be an increase in salt flux to the aquifer. This is salt that is naturally stored within the soil that will be pushed into the aquifer by infiltrating water.
  - o Preliminary groundwater model suggests that it will be more than 400 years for groundwater to flow from the agricultural plot to potential future town water supply bores at Rocky Hill
  - o Need to evaluate potential for preferential flow paths

## Questions & Discussion:

- Geoscience Australia has conducted aerial electromagnetic (EM) survey over the Rocky Hill area. Geoscience Australia has indicated that the data will be made publically available – it may be available to Peter's team 'within weeks' and will improve our understanding to the Mereenie aquifer system, including salinity.
- Q: was data from late 1970's oil exploration at Rocky Hill useful? It was a useful contribution to understanding of geological formations, but not for understanding of hydrology.
- Q: Test bores are being pumped to investigate aquifer properties. How much water is pumped? PC: Roughly 20 L/sec for a week to "stress it enough" to observe how the system is behaving.
- There is a need to look at certainty – how confident can we be about predictions? The results to date are preliminary, however further work will help to determine confidence in the modelling.
- Q: Does the model consider growth in demand? PC unsure – probably yes – it was noted that Power & Water had provided demand growth assumptions for modelling. The purpose of the model is to run different pumping scenarios and see what the effects on the aquifer (water level and quality) are in the long term. 2 scenarios were presented and the exact extraction rates were not shown.
- Q: What is the 'interface' between DENR and Power and Water? How do you work together? Power & Water provided pumping scenarios to DENR / Peter Cook to input into modelling.
- Q: What population assumptions are used by Power & Water? Assume 0.4% growth – although population growth has been 'flat,' it's preferable to be conservation and err on the side of caution. It's easier to delay planned infrastructure spending than to bring it forward.
- Q: Is 2050 still the expected timeframe for a move from Roe Creek to Rocky Hill? At what Cost? This was the first time that PWC have seen the results of the modelling. Once the results are finalised PWC will use the model data to re-evaluate when we expect to transition to Rocky Hill. Estimated cost is in the order of \$100 million (at today's currency value).
- Q: what does the Department seek from the studies? The studies are a joint investment (DENR and Power & Water) seeking to a) improve understanding of the resources, b) understand the potential impacts of irrigated agriculture on future potable water supply, and c) inform licencing decisions made by the Controller.
- Q: Do decision makers consider 'other information,' such as the possibility that new technologies will come along in the future and relieve concerns about resource constraints? Power and Water consider some other variables such as population and demand growth – it was noted that the modelling was significant because if, for example, results suggested the bore field would have issues after 30 years, then this would present a different proposition and basis for planning.
- Q: Overall budget? Approximately \$ 1 million
- Q: What would be the life of the new (Rocky Hill) bore field? Modelling looked at out to 200 years. The draw down is expected to be less at Rocky Hill than at Roe Creek. It should last 200 years 'comfortably' – it looks good for a long term water supply. However Peter Cook noted that all the model results presented were very preliminary and they were still waiting on additional data to fill gaps in the model. It would be best to wait for the final report before quoting any of the results.

#### 4. MATTERS FOR DISCUSSION: Forward agenda planning: demand management session.

Members discussed plans for a demand management session or workshop. Jethro Laidlaw (demand management expert with Power & Water) was invited to join the discussion as an observer. Discussion points included:

What do we want from a demand management session?

- Set the goal / objectives or targets
- Make sure the 'reason' for the investment is clear – what are we trying to achieve?
- Need to put demand management 'on the agenda' before it will be resourced
- Step 2 for planning is 'how to achieve the goal or targets,' noting that designing activities comes after goal setting.
- Observation that Alice Springs may have an 'oasis town' ethos; people expect a reprieve from the dry desert and Alice is very green – we work within this reality. It matters how people see or want to see Alice Springs
- Whose role is demand management? DENR, Power & Water or ASTC?
- How effective was previous work – what can we learn from this?
- Price analysis; little correlation observed between price increases and water use in the NT
- Noted previous work by Institute for Sustainable Futures (ISF) who took a least cost planning approach to design a water efficiency plan.

Actions / decisions:

- Next step will be an 'internal' ASWAC 'workshop' – it's too early to invite outside stakeholder participation. Workshop to be co-facilitated by DENR and Power & Water, if possible before the end of the year.

#### 5. SECTION 17: ASWAP Implementation Plan

The item aimed to determine what ASWAC wants to do with the 'Implementation plan' section of the Water Allocation Plan. Discussion:

- An [implementation plan update report](#) was tabled at meeting #3 and includes activities such as monitoring, compliance inspections, reporting and water efficiency.
- Good progress has been made on many actions, however there is poor 'program logic' in some areas – i.e. poor association between objectives, activities and indicators.
- There could be an opportunity for ASWAC to assess and advise on changes to the implementation plan; it does not need to be 'set in stone'
- Richie & Leeann Hayes expressed deep dissatisfaction with DENR Water Resources Division's implementation of its business (generally) and raised particular concerns about the new 'use it or lose it' policy and how it may be applied.

Actions / decisions:

- DENR to present ASWAC with an analysis of the Implementation plan logic and suggestions for where it could be improved
- DENR to brief ASWAC on the 'use it or lose it' policy, including providing a briefing Richie & Leeann Hayes

#### 6. CLOSING MATTERS

- Robbie Henderson (DENR) proposed speeding up the process of making minutes publically available on the NTG ASWAC web-page. It was agreed that Robbie will draft the minutes for Jocelyn Davies (Chair) to approve and circulate. Members will be provided with one week to comment or seek changes before minutes are uploaded onto the internet. The minutes will still be considered draft until passed at the next meeting, but the online version will only be replaced if changes are made.

The Chair invited members to suggest items for the forward agenda, the following were suggested:

- Demand management (suggestion from members)
- Update on Mereenie aquifer study from DENR senior hydrologist (suggestion from DENR)

#### 6. NEXT MEETING

Proposed for early 2018, no date set

Meeting closed at 8.00 pm