

Alice Springs Water Resource Strategy 2005

Alice Springs Water Resource Strategy Steering Committee Meeting # 4 "Water Allocation"

Thursday 24th November 2005

Attendees:

Vin Lange (NT Horticultural Partnership Group), John Brisbin (ALEC), Alan Whyte (PWC), Mark Stafford Smith (DK CRC), Patrick Dupont (CLC), Don MacDonald (NT Chamber of Commerce), Jonathan Vea (NRETA), John Childs (NRETA),

Apologies: Murray Stewart (ASTC)

Facilitators: Michelle Rodrigo, Robbie Henderson

1. Endorsement of previous meeting reports

A motion was raised by John Brisbin (ALEC) to endorse the reports from meeting 3, Seconded by Alan Whyte (PWC), the motion was accepted. Participants were also asked if they would give permission for meeting report # 3 to be published on the internet; permission was provided by all present.

2. Review of agreement reached by Steering Committee

Michelle Rodrigo facilitated small group discussions and feedback regarding the 'zone of agreement' that was presented in the report from steering committee meeting #3. The steering committee were congratulated on their progress toward formulating recommendations on the ASWRS. An updated version of the zone of agreement diagram is presented in appendices #1.

3. Review of NRETA proposals for Water Allocation

Jonathan Vea (NRETA) presented two water allocation scenarios for water from the Amadeus Aquifers. Scenario # 1 falls on the conservative side of the narrow 'zone of agreement' for maximum allowable yield and scenario # 2 falls on the less conservative side. The scenarios were based on water allocations for different estimations of forecast demand.

Scenario 1 (see detail in appendices #2)

- Maximum allowable yield: 20% storage depleted in 100 years
- Allocation based on the assumptions: 1.5% annual growth in public water supply and horticultural demands limited to existing development and in principle entitlements over the next 10 years.

Scenario 2 (see detail in appendices #2)

- Maximum allowable yield: 25% storage depleted in 100 years
- Allocation based on the assumptions: 1.5% annual growth in public water supply and horticultural demands based on more precise forecasts for proposed developments over the next 10 years.

Participants were involved in small group discussions to evaluate the 'benefits' and 'concerns or preferred alternatives,' for each scenario. The outcomes of discussions are presented below:



Scenario # 1

Maximum allowable yield: 20% storage depleted in 100 years Allocation based on the assumptions: 1.5% annual growth in public water supply (over 10 years) and horticultural demands limited to existing development and in principle entitlement.	
Benefits	Concerns / alternatives
Extends life of the water resource	Insufficient water to create new livelihoods / jobs associated with horticulture
Encourages water efficiency in horticulture – eg the wastewater reuse scheme or treatment and use of poorer quality water	If public water supply is not better managed, it could unnecessarily constrain population growth and other water use
Allows a doubling of existing horticultural demand	Not enough pressure on use of public water supply to improve / reduce its use
Less risk to non consumptive uses- cultural and environmental	A future private water utility (with profits going to shareholders) gets “free, first priority” access to our water
Maintains the availability of water <1000 mg/l TDS for public water supply	1.5% growth in public water supply should not be allowed unless utility demonstrates all feasible water efficiency measures have been taken
Encourages the use of water >1000 mg/l for horticulture	Allocation to public water supply is not sufficiently pressured to reduce consumption / increase efficiency
Allows for reasonable population growth in Alice Springs	Lowers challenge / incentive to use secondary water resources – eg. Town basin, domestic tanks and reuse (grey) water. Does not stimulate water efficiency industry – irrigation suppliers etc
Has limited probable impact on ground water dependant ecosystems	No incentive for Gov to introduce building regulations
Stimulates a local industry associated with water efficiency (plumbers, rainwater tank sellers / auditors arid zone nurseries)	



Scenario # 2

Maximum allowable yield: 25% storage depleted in 100 years Assumptions: 1.5% annual growth in public water supply (over 10 years) and horticultural demands based on improved forecasts for proposed developments	
Benefits	Concerns / alternatives
Allows greater horticultural development with all its benefits: social, economic & environmental	Allows horticulture to use potable water reserves
Water >500 mg/l could be traded for industrial use (providing it was a declared Beneficial Use)	Creates a precedent for horticulture that is difficult to wind back
Greater potential for indigenous employment with increased horticultural allocation	Sends wrong message to community (hard to sell domestic water efficiency to community while increasing the allocation of drinking water to horticulture).
Allows spin off business in regional development (eg olive oil production)	Public water supply efficiency not demonstrated or encouraged
Potential fresh local produce (needs caveat to control export)	Does not match projected horticultural forecast in 3,600 KL/yr v 5,000 KL/yr beyond 2015
Lessens costs of water treatment for horticulture	Current beneficial use categories may inhibit potential wise uses. Could the WAC have liberty to allocate water for uses other than current Beneficial Uses?
	Alternative: Potential to place explicit local benefit / indigenous livelihood expectation on some of the agricultural allocation?

Further discussion on water allocation scenarios

Michelle Rodrigo facilitated a discussion regarding Steering Committee preferences for water allocation. The committee reviewed the benefits, concerns and alternatives and were asked *‘If this scenario was chosen, could you live with it? Can Alice Springs community live with it? If not, what do we need to do to make you happy with it?’* The following is documentation of the discussion:

- Don MacDonald
NT Chamber of
Commerce
- Prefer scenario # 2: no difference in public water supply and has potential for other benefits to the town
 - The public water supply people get it too easy
 - Scenario 1 would be acceptable if there was more efficiency in public water supply and this would then allow for more agriculture (John Brisbin (ALEC) agreed with this statement)
 - Both scenarios can be considered ‘conservative’



- Mark Stafford Smith
DK CRC
- Scenario #1 only affects efficiency in agriculture
 - Could take scenario #1 add 1000 ML/yr and share the resource more between public water supply and agriculture (trade-off). Squeeze both (uses) a bit
 - Other pathway – write up the pros and cons of each scenario and a public policy decision will need to be taken
- Vin Lange NT
Horticultural
Partnership Group
- Prefer scenario 2: sends the wrong message to the community regarding horticulture, but it could be managed with positive PR – I can live with this one.
 - Future needs of horticulture can't be met through scenario #1, scenario #1 not palatable
 - With projected uses up to 36,000 ML (10 years) – could be managed carefully along the way against a rigorous business plan
 - Could agree with scenario # 1, if there were increased water savings from public water supply so that increased water could be provided to horticulture
- John Brisbin
ALEC
- Comfortable with either scenario as long as there is strong commitment to the principles and we don't go beyond these principles (Vin Lange (NT Horticultural Partnership Group) agreed with this statement).
 - Can we split somewhere between the two? Could fall somewhere between the two with adequate qualifiers – can we find middle ground and split between horticulture and public water supply?
- John Childs
NRETA
- Cabinet usually like a range of options, with a recommendation for a particular option
 - Should 'decouple' horticulture and public water supply (John Brisbin (ALEC) argued that both parties are coupled if they are 'squeezed down')

ACTION:

NRETA planning team review feedback received from the steering committee and produce a new complete draft version of the Alice Springs Water Resource Strategy for review by the Steering Committee

4. Conclusion

Participants reflected on the target *outcomes* for the Steering Committee (that were first presented during meetings #1 & #2). It was agreed that significant progress had been made toward forming recommendations on the ASWRS. The committee were congratulated on their efforts.

It was originally planned that the Water Advisory Committee (WAC) and ASWRS Work Plan would be covered in the forth meeting, however this has not been possible due to time constraints. John Childs (NRETA) and Robbie Henderson (NRETA) provided a brief overview of issues and opportunities for the WAC and tabled a handout containing background information. It was agreed that the WAC and ASWRS Work Plan would be discussed at a additional meeting scheduled in one weeks time.

The meeting concluded at 5.15pm.

NEXT MEETING: Thursday 1st December 2005, 2.30pm - 5.00pm NRETA (Alice Plaza) conference room

ACTION:

NRETA planning team circulate background information and questions for consideration regarding the Water Advisory Committee and the ASWRS Work Plan



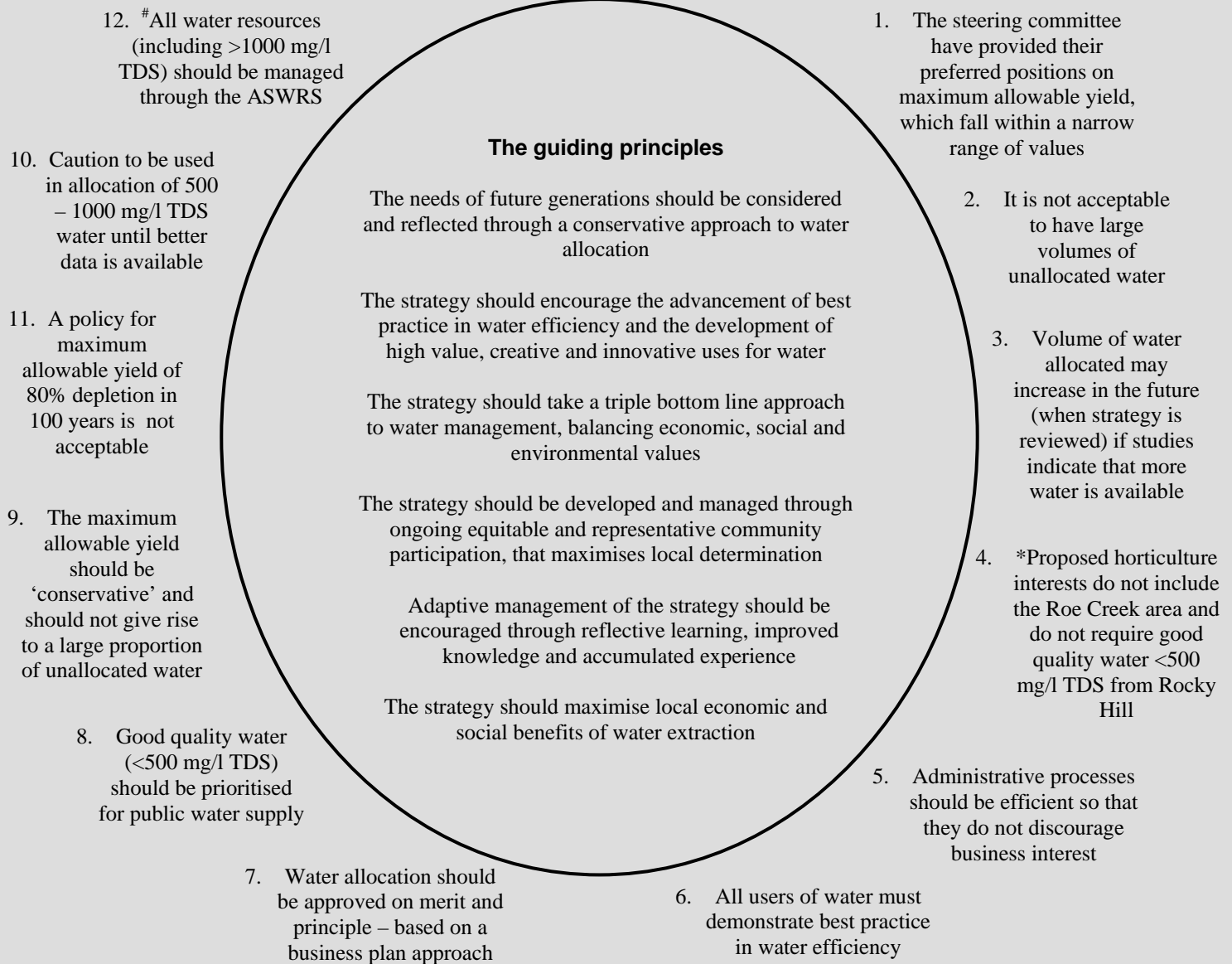
Northern Territory Government

Department of Natural Resources, Environment and the Arts

Appendix #1

THE ZONE OF AGREEMENT

The steering committee agree on the following viewpoints relating to the Alice Springs Water Resource Strategy, each viewpoint is linked to the guiding principles developed by the committee.



Not unanimous – Murray Stewart (ASTC) suggests water >1000 mg/l TDS should be unregulated

* Alan Whyte (PWC) partly agrees with this statement, however the PWC position is that all water <1000 mg/l TDS should be preserved for public water supply



Appendix 2.

Scenario # 1. 20% Storage consumed in 100 years

		80%
Total Storage (Pre-Extraction)	5,801,000	4,640,800
10 year storage	580,100	464,080

1. 10 year Maximum Allowable Yield =

20% Storage Consumed in 100 years - Initial Assumption 1.5% Public Water Supply Growth, Existing Horticultural Demands

Maximum allowable yield allows 80% of the resource to last 400 years
1.24 x Current Use 20.0% in 100 years

Projected Demands					Proposed Allocations				
Beneficial Uses	Current Use		Projected Use		Roe Creek Beneficial Uses		Rocky Hill Beneficial Uses		Total Allocations
Environment							Environment		
Cultural							Cultural		
Public Water Supply	8,881	76.5%	103,070	88.8%	Public Water Supply	90.0%	Public Water Supply	0%	90.0%
Agriculture	400	3.4%	10,000	8.6%			Agriculture	9.0%	9.0%
Rural Stock and Domestic	104	0.9%	1,040	0.9%	Rural Stock and Domestic	0.10%	Rural Stock and Domestic	0.90%	1.0%
					Unallocated		Unallocated	0.00%	0.0%
Total Demand	9,385	80.9%	114,110	98.4%		90.1%		9.9%	100.0%
Maximum Allowable Yield			116,020						

Assumptions

- Cultural and Environmental Use are considered to be non-consumptive, they are provided through natural processes and don't require allocation for extraction.
- Water allocations are made only for consumptive use after non-consumptive uses are met.
- The maximum allowable yield applies to the entire Amadeus Aquifers (Mereenie, Pacoota, Goyder & Shannon), however beneficial uses will be applied to individual aquifers and zones.

		80%
Total Storage (Pre-Extraction)	5,801,000	4,640,800
10 year storage	580,100	464,080

Scenario # 2. 25% Storage consumed in 100 years

2. 10 Year Maximum Allowable Yield =

25% Storage Consumed in 100 years - Assumptions 1.5% Public Water Supply Growth, New Horticultural Demands

Maximum allowable yield allows 80% of the resource to last 320 years
1.55 x Current Use 25.0% in 100 years

Projected Demands					Proposed Allocations				
Beneficial Uses	Current Use		Projected Use		Roe Creek Beneficial Uses		Rocky Hill Beneficial Uses		Total Allocations
Environment							Environment		
Cultural							Cultural		
Public Water Supply	8,881	61.2%	103,070	71.1%	Public Water Supply	74.0%	Public Water Supply	0%	74.0%
Agriculture	400	2.8%	36,000	24.8%			Agriculture	25.0%	25.0%
Rural Stock and Domestic	104	0.7%	1,040	0.7%	Rural Stock and Domestic	0.20%	Rural Stock and Domestic	0.50%	0.7%
Total Demand	9,385	64.7%	140,110	96.6%		74.2%		25.5%	99.7%
Maximum Allowable Yield			145,025						

Assumptions

- Cultural and Environmental Use are considered to be non-consumptive, they are provided through natural processes and don't require allocation for extraction.
- Water allocations are made only for consumptive use after non-consumptive uses are met.
- The maximum allowable yield applies to the entire Amadeus Aquifers (Mereenie, Pacoota, Goyder & Shannon), however beneficial uses will be applied to individual aquifers and zones.