Tindall Mataranka to Daly Waters Water Advisory Committee

Meeting Record 5

22 June 2018 – 10.00 am
Via Teleconference

Members Present

Rebecca Mohr-Bell	Independent Chair
Sarah Kerin	Department of Tourism and Culture
Sharon Hillen	Roper Gulf Regional Council
Tim Helder	Proxy for Quintis, Water Extraction Licence Holder
David Crook	Aquatic Ecologist, CDU
Vin Lange	TopEnd Farm
Liam Golding	Proxy for Allister Andrews, Jawoyn Association
Kylie Gracey	NT Cattlemen's Association
Clair O'Brien	Regenerative Agriculture – teleconference 2 only

Members Absent

Kane Younghusband	Horticulturist, Water Extraction Licence holder
David Ciaravolo	Amateur Fishermen's Association of the Northern Territory
Helena Lardy	Jilkminggan Community Aboriginal Association
Jocelyn James	Jilkminggan Community Aboriginal Association
Kerry Roberts	Jilkminggan Community Aboriginal Association

Advisors Present

Tim Bond	Director Water Planning and Engagement, DENR
Michelle Rodrigo	Water Planner, DENR

Observers

Pru Ducey	DENR - Minutes

1. OPENING (Chair)

Meeting opened at 10.05am

1.1. Apologies

Kane Younghusband	Horticulturist, Water Extraction Licence holder
David Ciaravolo	Amateur Fishermen's Association of the Northern Territory

2. MINUTES FROM MEETING 4 (Chair)

The Committee agreed the Minutes of Meeting 4 held in Mataranka on 1 May 2018 were a true and correct record.

3. BUSINESS ARISING FROM THE MINUTES (Chair)

Not covered

4. FINALISATION OF FEEDBACK ON DRAFT WATER POLICES (Chair)

The Committee considered a draft statement of their feedback to government on the Unused Water and Water Trading policies.

The Chair tabled some email comments from WAC member Clair O'Brien and these were discussed.

The Northern Territory is not fully covered by Water Allocation Plans. Water Allocation Plans are necessary in areas where there is competition for water resources

Long-term relevance of the Unused Water policy – when water trading becomes more active, the unused water policy will have less of a role in optimising water entitlements and usage in the region. In the future, however, if additional water became available (e.g. new science about the resource results in increase in Estimated Sustainable Yield/availability of water of licensing), new licences could be issued. This could again leave room for speculation and the need for reactivation of the unused water policy

These policies apply only within a Water Allocation Plan area. The Unused Water Policy can be inactive (in the background) until required. If the size of the pool was to change, then it might need to be reactivated.

(Tim) The Estimated Sustainable Yield in a Water Allocation Plan, including any increase or decrease in this figure when Plans are reviewed, will impact the relevance/role of the unused water policy in a Plan area.

Committee's feedback to be amended to be clear that a rigorous process of review is necessary to periodically assess the relevance of the unused water policy.

Discussion of last dot point in WAC feedback under Unused Water Policy - *Committee has concerns that recouping water equates to taking equity and commercial stability out of local businesses, reinforcing the recommendation to make this a temporary policy*.

- Relates to concerns from Committee that removal of a water entitlement is like removing a business asset and that this would reduce commercial confidence. The Policy is clear that water won't be taken back if there is a clear and genuine intention to use the water. The policy intent is to avoid speculation, but also to make sure that licence holders have the opportunity and time to build up infrastructure etc. in order to use their full water entitlement.
- equity component, water licence is not meant to be a separate item on a Balance Sheet

- In other areas of Australia, water is considered to be an asset that appears, as a line item on a business' balance sheet. In a mature market you can separate the water from the land asset.
- Concerns this provides an opportunity for speculators
- Need to ensure businesses have the opportunity to demonstrate genuine intent to eventually utilise their full entitlement. It will be up to the Department how they assess and police these policies. Need to ensure the Department has sufficient resources to carry this out, including scope to consider all the facts and assess each situation on its merits (not one-size-fits-all policy)
- (Tim) The Department is currently reviewing water licences and writing to all licence holder who's water use is well below their licence entitlement.. The review looks at the conditions on each licence, and the water use development plans provided by the licence holder. A licence contains conditions on how a water entitlement will be developed, and if you develop to this schedule then you will get that water. If development falls behind the proposed schedule, then the licence holder will be asked to explain why this is occurring and possibly negotiate a revised schedule based on likely future need. Once the licence is fully developed the Policy no longer applies. At a later stage, if a business decides not to use a portion of their entitlement, this portion could be traded in accordance with trading rules set out in a Water Allocation Plan.
- There has been a lot of uncertainty among NTCA members, as there is no precedent for how responses to unused water letters will be handled by the department.
- More educational material and a flow chart (including decision points) could accompany the letter or be available online. Tim pointed out that care is needed to ensure plain English information material is not inconsistent with the unused water letters which, by their nature, need to be written in legal terms. Licence holders need more information to understand how the process works and to address concerns that businesses are going to lose their water.
- (Tim) Will feedback to the department that recipients of unused water letters are struggling with what the letter means and how to make their case, in particular, with regard to what is a 'genuine' reason(s) for under-utilisation of a water entitlement.
- (Tim Helder, Quintis) Need an opportunity provide the Department with our policies e.g. we are currently 5 years into a 10-15 year development? Quintis treats its licences with great respect… we test standing water table every month, drill every 35 ha to see where the moisture is at, etc. Water needs of tress at year 10 and beyond is hard to estimate, especially when only half way through the growth cycle of a perennial tree. This is experimental; there is no textbook for water needs of this species in this particular environment (Mataranka/Katherine).
- Suggestion that if you have water licences in multiple plan areas, you could go to the Department on a whole-of-business basis rather than by individual licence.
- (Tim) existing licence conditions may be adjusted through the unused water policy process, and licence conditions would also be re-negotiated on renewal of the licence based on the next stage of crop water requirements, development etc.

Discussion of trading entitlements between surface and groundwater resources

- Unpacking of trade between surface water and groundwater
- The Roper River receives discharge from groundwater and during the dry season, a high proportion of the flow is from groundwater. Because they are linked you can trade between surface water and groundwater. A decision would be made based on the guidelines in the WAP not in the Policy. Whether the trade can occur would be set by the WAP. Could hold both surface water and groundwater and could move between the two based on what is the best way to utilise that water. Our thinking would have to be within the same water resource.
- Does the Committee want to be more specific about genuine reasons why water might be unused?
- There may be very good reasons outside those we provide.
- In the absence of any description then how people interpret will be different.
- In a developmental phase, and the science is not yet fully understood

- Difficult to assess, given there are so many moving parts in policy development - non pastoral use on pastoral lease, lack of ability to attract an investor (sub leasing arrangements). You will get very broad responses, because everyone is finding developing their plans difficult.
- Should we capture those reasons people have already identified, or leave it open. Leave it open, but useful to have guidelines around things that may be considered credible reasons for not using water. Given the first time in that region, it is hard for a licence holder to sit in isolation, to know what government has in mind. Hard call without providing any guidelines.

❖ **Action** – Those with direct experience in dealing with letters about unused water, to make a list of reasons and send them to the Chair. The Chair will then update the dot points and recirculate to the Committee.

Teleconference closed 11.00 am

Teleconference reconvened 1.00 pm

5. TINDALL LIMESTONE AND THE BEETALOO SUB-BASIN – IMPLICATIONS FOR WATER ALLOCATION PLAN BOUNDARY (Tim Bond and Michelle Rodrigo)

Members were provided with a Discussion Paper (refer Appendix 1) on a proposed revision to the boundary of the Tindall Mataranka-Daly Waters Water Allocation Plan (WAP) area.

The NT Government has agreed to implement all recommendations of the Final Report of the Scientific Inquiry into Hydraulic Fracturing in the Northern Territory. Many of these recommendations relate to water management and planning and have implications for the current boundary of the WAP area.

- The southern boundary of the WAP Area lies close to the township of Daly Waters and follows the southern boundary of the Roper River catchment along the Carpentaria Highway. In this southern area, it also intersects the geographic extent of the Beetaloo-sub Basin as defined in the Hydraulic Fracturing Report.

- Recommendation 7.7 of the Fracking Inquiry Report states:
  - the Daly-Roper Water Control District be extended south to include all of the Beetaloo Sub-basin;
  - that Water Allocation Plans be developed for each of the northern and southern regions of the Beetaloo Sub-basin
  - the new northern Sub-basin WAP provides for a water allocation rule that restricts the consumptive use to less than that which can be sustainably extracted without having adverse impacts on other users and the environment; and
  - the southern Sub-basin WAP prohibits water extraction for any onshore shale gas production until the nature and extent of the groundwater resource and recharge rates in the area are quantified.

- Planning for the implementation of these recommendations has commenced. The proposed Beetaloo Sub-basin WAPs will be separate to (not an extension of) the Mataranka-Daly Waters WAP.
- The area of the southern Beetaloo Sub-basin currently overlaps with the southern part of the Mataranka-Daly Waters WAP Area in the area of Daly Waters and the Carpentaria Hwy. There is also an overlap to the west with the northern Beetaloo Sub-basin.
- The amendment would make it easier to develop and implement Water Allocation Plans, and remove complexities and challenges arising from having several overlapping WAPs for the same groundwater resource.

The Committee was asked to provide advice on the proposal to amend the southern boundary of the Plan Area, and to provide feedback on the suitability of the boundary alignment as shown in the Discussion Paper.
Discussion is summarised below:

- The geological boundary of the Daly Sedimentary Basin and the Georgina Sedimentary Basin is in the vicinity of the southern boundary of Maryfield Station, near Larrimah.
- Committee supports the use of hydro-geological features (rather than cadastral features like roads and property boundaries) to determine a new Plan boundary.
- Committee understands the proposal for three separate but neighbouring WAPs in the region – Mataranka WAP, South Beetaloo sub-Basin WAP and North Beetaloo Sub-Basin WAP.
- Given the connectedness of the groundwater resource across WAPs, each Plan will need to acknowledge the other and demonstrate an integrated approach to ensure no single Plan area is either advantaged or disadvantaged by the other. Committee wants assurances of an integrated approach that reflects the connectedness of the groundwater resource.
- Water Resources hydrogeologists are providing advice (maps, bore logs) to develop our understanding of the geology in that area, but it's hard to be precise about the hydro-geological boundary.
- The geology in the Georgina Basin is different to the geology of the Daly Basin. The throughflow rate of groundwater is slower in the Georgina Basin around Daly waters, than in the Daly Basin around Mataranka.
- An estimated 30GL/year discharges from the Tindall Limestone aquifer into the Roper River. Only 2GL per year flows into the Daly Basin from the Georgina Basin (refer water balance at Appendix 2). The direction of groundwater flow is from the south (Daly Waters) to the north (Roper River). The proposed Plan boundary would still allow for sound management of discharges to the Roper.
- Do we have a map showing Exploration Licences etc. as an overlay? There are currently two Petroleum Exploration Licences in the WAP area, in the area between Larrimah and Mataranka. The Beetaloo Sub-Basin to the south and west are areas of high prospectivity for shale gas, according to the Hydraulic Fracturing Report.

Members received a link to the map of the current petroleum exploration licences and no–go zones. https://hydraulicfracturing.nt.gov.au/hydraulic-fracturing-map

- No specific questions or comments have been received from NTCA members, but more information to help members understand the issues would be useful.
- Committee recognised that a Plan boundary part way through a large property could create complexities for water licensing etc.
- Members expressed concern about the potential impact of activities south of the Mataranka Plan area, from where groundwater flows through to the Tindall Limestone closer to Mataranka/Roper River. Neighbouring WAPs and hydraulic fracturing in those areas may impinge on the Mataranka groundwater resource. WACs will be set up to develop those Plans, but the Mataranka WAC needs to be confident that decisions made in neighbouring Plan areas will not impact the Mataranka Plan area. We need maps and overlays showing us all the implications.
- These discussions are very difficult for the WAC in a teleconference format. Face-to-face meetings are the only way to do this effectively.
- Once the Mataranka WAP is declared, subsequent plans would need to take these rules into consideration.
- Too many hypotheticals, we just keep getting more and more piled on us and not getting down to what we should be doing, the goal posts keep changing.
- Particularly concerned as our Water Extraction Licences (WELs) are mostly located between Mataranka and Larrimah, in close proximity to areas where fracking may occur. This is concerning on two levels. Firstly, water that might be required for fracking may be

extracted in close proximity to current or planned agricultural production bores, and secondly the significant risk of groundwater contamination if fracked wells fail at some point in the future.

- Decisions about the Plan boundary won't have any influence on whether fracking will or occur or not.
- If the exact boundaries of the aquifer are not known and the boundary is moved, how will the consumptive pool be re-calculated?
- The assessments conducted under the Strategic Regional Environmental Baseline Assessments (SREBA) will be intensive, but may not be completed for 3-4 years. Objective is to get the Mataranka Plan in place as soon as possible, so further development of beneficial uses can be supported.
- The Estimated Sustainable Yield (ESY) that we will set in this Plan can be allocated to different beneficial uses. Mining and petroleum will no longer be exempt under the Water Act, and will need to be managed as a Beneficial Use within a Plan area.
- By reducing the Plan area to what is proposed, the Consumptive Pool (portion of the ESY) will be smaller, but it will mean that we are less likely to have to allocate water to Mining and Petroleum Beneficial Uses associated with hydraulic fracturing.
- Management Zones can be established within the Plan, and a volume of the consumptive pool can be allocated to each zone.
- The Committee could recommend how different zones are to be managed e.g. water in northern zone is primarily for agricultural beneficial uses.
- If we underestimate the size of the aquifer how do we manage the impact on water inside the plan area? Can only do the best we can with available knowledge. More information may be available in the future (from government or mining industry), which can be incorporated into the Plans at the 5-year review, or 10-year renewal. A WAP for the Beetaloo Sub-basin is possibly 3-4 years away.
- Committee feels like more information is needed, but acknowledges the rationale behind the boundary change and the benefits of reduced uncertainty.
- Government has committed to implementing all recommendations of the Hydraulic Fracturing Report. The report indicates that the potential for major impacts from fracking are likely to be quite low and could be mitigated if the recommendations are implemented. If the size of the Plan area is reduced, does this have implications for the modelling work that has already been done e.g. recharge rates, aquifer storage volumes, etc?
- It is estimated that 40GL/year could be sustainably extracted from the southern part of the Mataranka Plan area (refer blue shaded area on Discussion Paper map, Appendix 1). If the boundary is revised as proposed, this figure would be revised down to reflect the reduced area of recharge.
- Committee needs to be really clear about how much water will be taken for fracking activities and the potential impact on the water allocation plan area.
- Tim confirmed the intention is for the three Plan areas (Mataranka/Larrimah, Beetaloo south and Beetaloo north) to share boundaries i.e. no-gaps between Plan areas.

In summary, the Committee has concerns over changing the Plan boundary. Committee will do the following:

- look more closely at the use of management zones to ensure greater control of water management in the Plan area
- gather further information for future meetings to help Committee formulate sound advice

❖ **Action** – David Crook to circulate a presentation given by Dr Alan Andersen (member of fracking inquiry panel) on the outcomes of the inquiry. *Completed on 28 June 2018*.

6. WATER ALLOCATION PLAN OBJECTIVES (Planner)

A Discussion Paper (Appendix 3) was circulated for the Committee to review and finalise the proposed Objectives for the new Water Allocation Plan.

- **Action** – All members to email comments on the proposed Objectives to the Chair. The Chair will collate these comments and circulate to the rest of the Committee.

7. OTHER BUSINESS

7.1. Pesticide and nutrient testing of groundwater in Mataranka WAP area (Planner)

- DENR's Aquatic Health Unit (AHU) is undertaking a survey of pesticides, herbicides and nutrients levels in the groundwater of the Mataranka Plan area.
- Similar surveys have occurred biennially in previous years. A series of bores will be tested in July-August this year and the AHU will be contacting landholders in the Mataranka Plan area to arrange access to selected bores.
- A report will be published once sampling and analysis has been completed. Previous surveys have detected traces of pesticides in streams of the region, but at levels that are not harmful to humans of the environment.
- This work is part of a broader program of groundwater quality testing in several Water Allocation Plan areas across the NT.

- **Action** – Michelle Rodrigo to send members an Information Sheet about this year's survey and a weblink to previous published reports - Water Quality of the Roper River 2012-2016.

7.2. Assessment of Committee progress (Chair)

Committee now has some understanding of theoretical and hydrogeological issues impacting the Plan. Need to review what the priorities are for the next round of meetings, summarising where we are up to and assess what else we need to know in order to have a clear way forward for the group.

- **Action** – Rebecca Mohr-Bell and Michelle Rodrigo to assess WAC progress, clarify information needs and define a clear focus for upcoming meetings.

As no members from Jilkminggan were able to attend this teleconference, it is suggested a couple of members arrange to meet with them and relay what was discussed.

- **Action –** Michelle to liaise with Committee to arrange meeting to update Jilkminggan members

8. NEXT MEETING (Chair)

Tuesday 21 August 2018 in Mataranka

Teleconference closed 14.10pm

Summary of Actions arising from TMDWWAC Meeting 5

Responsibility of	Action	Status
Michelle Rodrigo	Email members a copy of the presentations from Meeting 3 with the draft Minutes of Meeting 4	tbc
Michelle Rodrigo	Check for the most up to date draft of each policy and re-send to all members	Completed
Members holding a Water Extraction Licence Chair	Those with direct experience in dealing with letters about unused water, to make a list of reasons and send them to the Chair. The Chair will then update the dot points and recirculate to the Committee.	New
Michelle Rodrigo	Send members an Information Sheet about this year's survey and a weblink to previous published reports - Water Quality of the Roper River 2012-2016.	New
Members Chair	All members to email comments on the proposed Objectives to the Chair. The Chair will collate these comments and circulate to the rest of the Committee.	New
David Crook	Circulate a presentation given by Dr Alan Andersen (member of fracking inquiry panel) on the outcomes of the inquiry	New Completed 28/6/2018
Rebecca Mohr-Bell & Michelle Rodrigo	Assess WAC progress, clarify information needs and define a clear focus for upcoming meetings.	New
Michelle Rodrigo	Liaise with Committee to arrange meeting to update Jilkminggan members	New

Decisions TMDWWAC Meeting 5

Decision	Moved/Seconded	Status
Minutes of Meeting 4 held in Mataranka on 1 May 2018 were a true and correct record		**Unanimous**

APPENDIX 1 – Discussion Paper: Proposed revision to Plan boundary

Discussion paper for WAC Meeting 5, 22 June 2018
Tindall Mataranka-Daly Waters Water Allocation Plan - proposed revision to Plan boundary

Recommendation: That WAC considers a proposal to amend the southern boundary of the Plan Area to avoid overlap with new Beetaloo Water Allocation Plan areas, and provides advice to Water Resources on the suitability of this proposal.

Background

- The southern boundary of the Tindall Mataranka-Daly Waters Water Allocation Plan (WAP) Area lies close to the township of Daly Waters and follows the southern boundary of the Roper River catchment along the Carpentaria Highway (see Figure 1).
- Prior to 2015, the Plan Area extended from the King River north of Mataranka to just north of Larrimah (pink shading in Figure 1). The draft 2011 Water Allocation Plan set an Estimated Consumptive Pool of 25,940 ML/year for this area.
- In 2015, the Northern Territory Government published the findings of the 'Daly Basin Groundwater Assessment – North Mataranka to Daly Waters' which was undertaken as part of the Larrimah Land and Water Suitability Assessment Project. Upon completion of this study, the plan area was extended (blue shading in Figure 1) further south to Daly Waters in order to take in all of the Tindall Limestone Aquifer within the Roper River catchment.
- The 2015 Groundwater Assessment advised that the Larrimah to Daly Waters Area (blue shading) could support an Estimated Consumptive Pool of 40,000 ML/year.

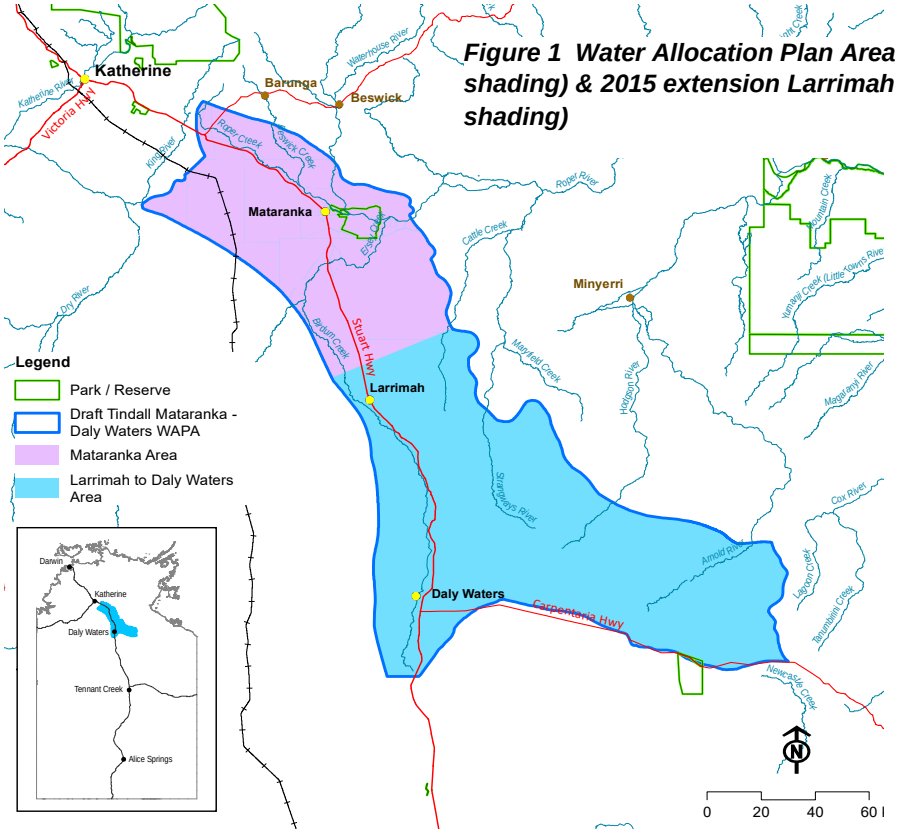


Figure 1 Water Allocation Plan Area – Mataranka Area (pink shading) & 2015 extension Larrimah to Daly Waters (blue shading)

Current situation:

- The current Water Allocation Plan area includes the entire shaded area (pink and blue) of the map in Figure 1.
- In March 2018, the Scientific Inquiry into Hydraulic Fracturing in the Northern Territory released its Final Report which includes 20 recommendations regarding water planning and management. The NT Government has agreed to implement all recommendations of the Final Report.
- Recommendation 7.7 of the Fracking Inquiry Report states:
  - the Daly-Roper Water Control District be extended south to include all of the Beetaloo Sub-basin;
  - that Water Allocation Plans be developed for each of the northern and southern regions of the Beetaloo Sub-basin
  - the new northern Sub=basin WAP provides for a water allocation rule that restricts the consumptive use to less than that which can be sustainably extracted without having adverse impacts on other users and the environment; and
  - the southern Sub-basin WAP prohibits water extraction for any onshore shale gas production until the nature and extent of the groundwater resource and recharge rates in the area are quantified.
- Planning for the implementation of these recommendations has commenced. The proposed Beetaloo Sub-basin WAPs will be separate to (not an extension of) the Mataranka-Daly Waters WAP.
- The area of the southern Beetaloo Sub-basin currently overlaps with the southern part of the Mataranka-Daly Waters WAP Area in the area of Daly Waters and the Carpentaria Hwy. There is also an overlap to the west with the northern Beetaloo Sub-basin.

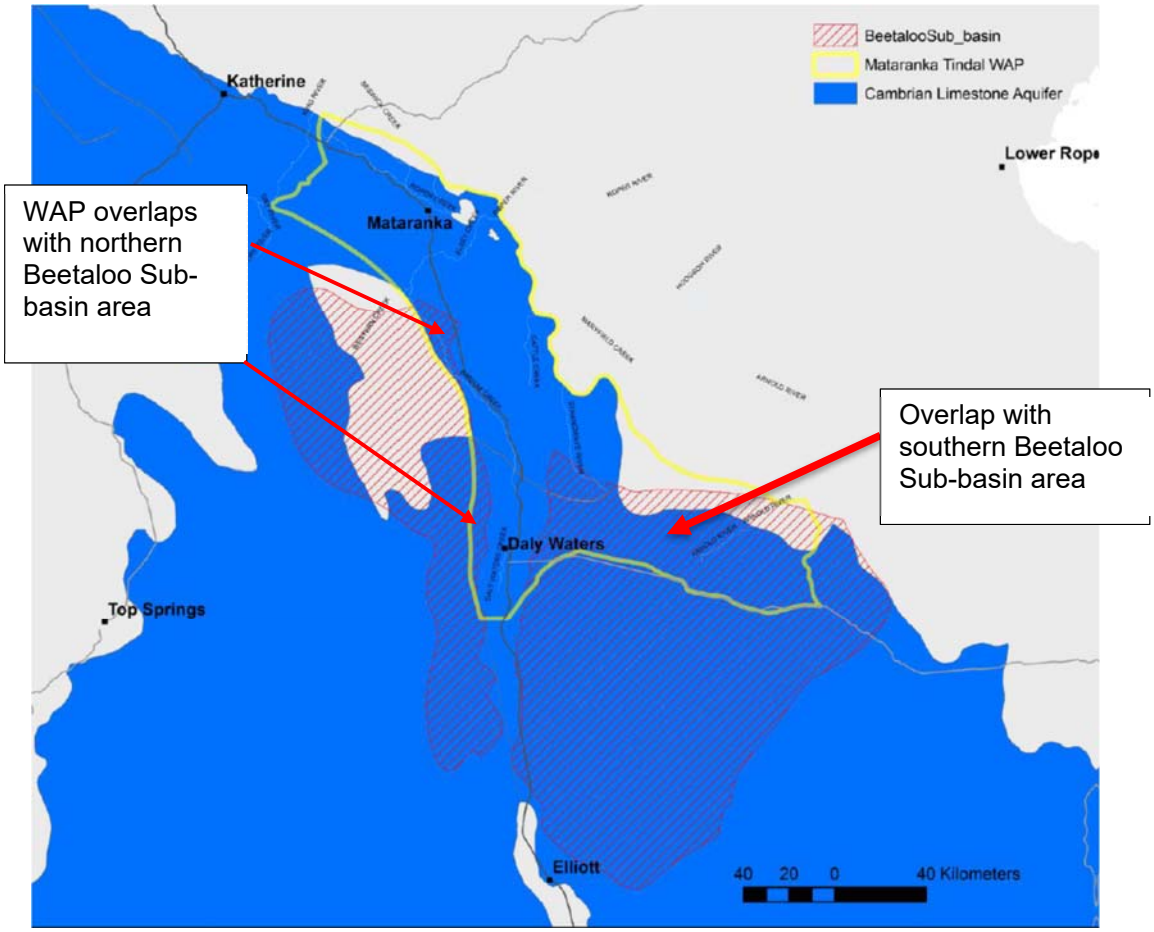


Figure 2 - Water Allocation Plan Area (yellow line) and Beetaloo Sub-Basins areas (red hatching)

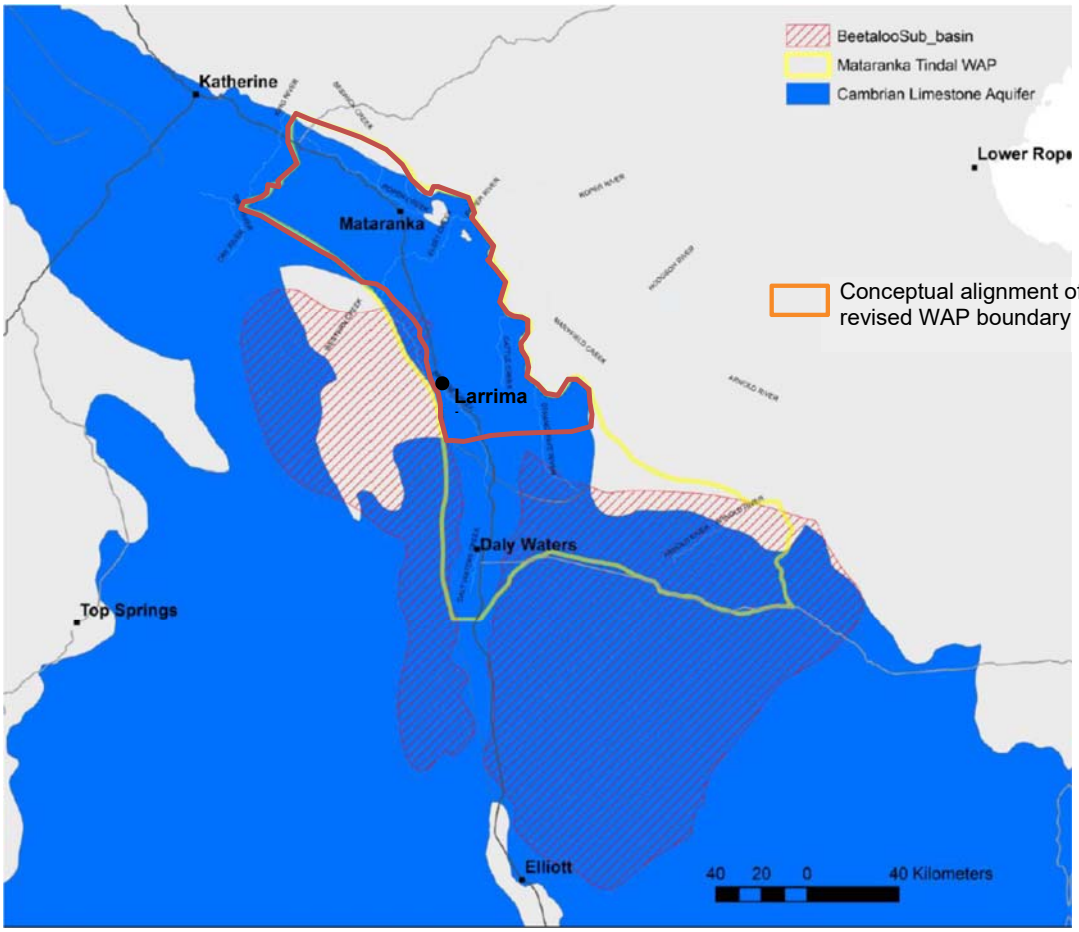
Proposed change to WAP boundary

- Water Allocation Plans define the management framework and rules for the sharing and allocation of water from a specific resource for a 10 year period. An overlapping of Plans which manage the same groundwater resource introduces a range of complexities and challenges to groundwater planning and management that may be better avoided.
- DENR Water Resources proposes an amendment to the boundary of the current Mataranka-Daly Waters WAP Area, to eliminate overlap with Beetaloo Sub-basin Plan Areas. It is proposed to shift the southern boundary of the WAP Area northward towards the township of Larrimah, and make minor adjustments to the western boundary. Figure 3 shows conceptually (orange line) where the revised boundary might lie.
- In addition to advice from the Water Advisory Committee, the final revised boundary will be based on consideration of:

  a) hydrogeological features that distinguish the character of different parts of the aquifer
  b) surface water catchments
  c) cadastral (property boundaries) or infrastructure (e.g. roads) to help reference the Plan Area against recognisable features

- This proposal results in the development of three separate but neighbouring WAPs in this region. While the Plans seek to manage the same Tindall Limestone groundwater resource, differences in the hydrogeological characteristics of each area (such as differing rates of groundwater flow, flow paths, and the presence of geological fault lines), makes it reasonable to consider each Plan Area as a discrete resource.

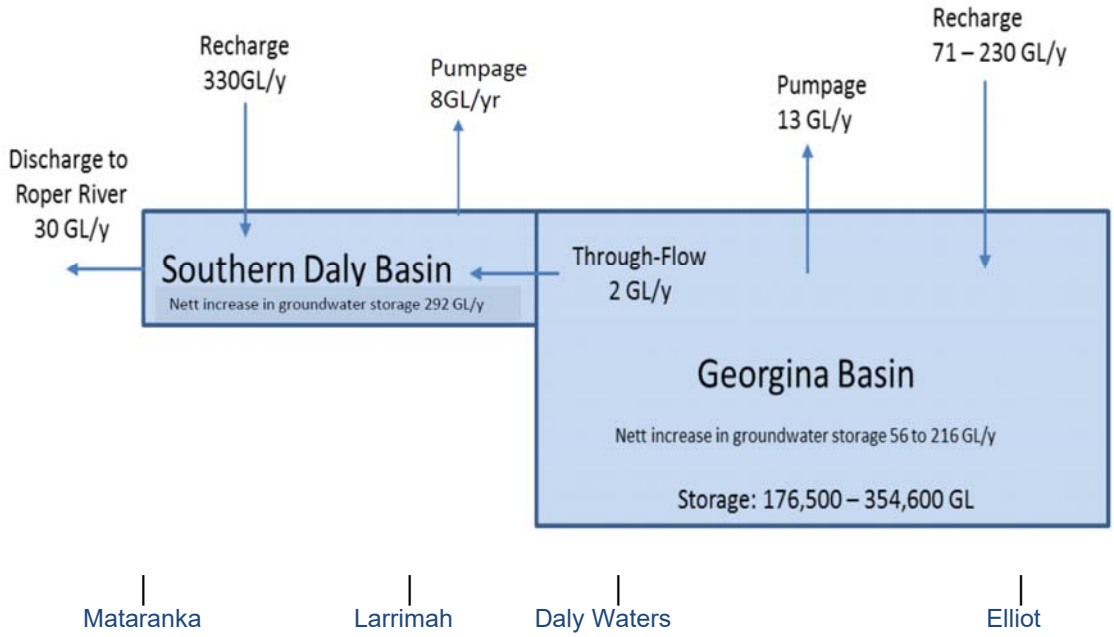
Figure 3 – Possible re-alignment of Mataranka Water Allocation Plan Area (orange line) relative to Beetaloo Sub-Basins areas (red hatching)



- The 2015 Groundwater Assessment would be revisited to update the figure for an Estimated Consumptive Pool for this reduced WAP Area.
- The proposed boundary realignment would focus the revised Mataranka WAP Area on the beneficial uses of agriculture (not necessarily to the exclusion of other uses), and the Beetaloo WAPs on the beneficial uses of Mining and Petroleum (not excluding agriculture and other possible uses).
- Each WAP will be required to acknowledge the connectedness of the groundwater resource and, therefore, the interaction of planning and management decisions across the three Plan Areas.

END

APPENDIX 2 – **Water balance diagram for Mataranka-Daly Waters WAP area**
(extract from Mel Woltmann and Des Yin Foo presentation at WAC meeting #4)



APPENDIX 3 – Discussion Paper: Plan Objectives

Tindall Mataranka-Daly Waters Water Allocation Plan Objectives Discussion paper for WAC Meeting 5, 22 June 2018

Action 1

At this meeting (22 June 2018) the WAC will review and finalise the proposed Objectives (see table) for the new Water Allocation Plan.

Background

The Objectives of a Water Allocation Plan create an important framework on which all other elements of the Plan are built. Plan Objectives guide the design of the Plan itself, as well as its implementation and evaluation.

The Tindall Mataranka-Daly Waters Water Advisory Committee (the WAC), representing key stakeholders and water users in the community, has a pivotal role in shaping the Objectives of the Plan.

A draft Water Allocation Plan for the Mataranka region, prepared in 2011, proposed four Plan Objectives. Since then, much has changed in the region, including:

- extension of the Plan Area to Daly Waters
- changed representation on the Water Advisory Committee
- NT Government water management policy and legislative reforms
- ongoing improvements in hydro-geological knowledge of the aquifer
- changing community profile, water demands and licensed extractions
- improvements in the government's water licensing framework

A new Water Allocation Plan is being developed by the NT Government, in conjunction with the WAC. It is necessary for the current WAC to review and reset the Plan Objectives to ensure they reflect current environmental, cultural, social and economic values and provide a relevant framework for the new Plan.

The WAC participated in a Values Workshop in May 2018 (Meetings 3 & 4). The outcomes of this workshop have assisted the WAC to reset the Plan Objectives such that they are responsive to current community values and the need for sustainable management of the groundwater resource. The proposed new Plan Objectives are provided in the following table:

Proposed Objectives:

2011 Objective 1: *Preservation of the water quality, surface water flows and groundwater levels around Mataranka, including Roper River and Rainbow and Bitter Springs, which provide environmental, Indigenous cultural and other instream public benefits.*	**May 2018 review:** • Maintain healthy aquatic ecosystems and processes that support: - Environmental values – springs, rivers, stygofauna - High flows, base flows and wet-dry transition - Resilience / sustainability / natural variability - Fishing, recreation, cultural, social, tourism • Remove place names – applies to whole plan area • Downstream environmental flows dependant on upstream wet and dry season flows Protect environmental processes for their intrinsic value, not only for value to humans (cultural flows, recreation, social)
Proposed Objective: *The Tindall Limestone aquifer, and its connected surface waters, continue to support the health and natural variability of aquatic ecosystems and dependent cultural, recreational, and social values within the Plan area, including those downstream ecosystems which are highly dependent on Roper River flows from the Plan area.*	

2011 Objective 4: *Maintenance and support for traditional land use in the predominately Aboriginal owned land surrounding the Mataranka Water Plan Area through the protection of culturally significant water dependant sites as well as providing access to water for commercial development.*	**May 2018 discussion points and review:** SWR is about economic development - may be better placed with Objective 2, or possibly become its own objective

Proposed Objective:

Cultural flows and culturally significant water-dependent sites which are essential to sustaining traditional Aboriginal land use and cultural practices are protected from the potential impacts of groundwater extraction in the Plan area.

2011 Objective 3: *Provision of a water supply, with sufficient and reliable volume, for essential services to Mataranka and Jilkminggan as well as water for stock and domestic purposes to rural properties.*	**May 2018 discussion points and revisions:** • Provide sustainable access to community water supply – RS&D, community water supply, cultural • Provide flows downstream to support Ngukurr water supply • Essential services – potable standards; other civic/amenity use can be non-potable • Maintaining flows for downstream communities • Add a requirement for 'quality' water supply • Replace specific town names with 'towns and communities'

Proposed Objective:

Towns, communities and rural properties have access to a quality, reliable water supply for domestic and visitor consumption (including downstream communities dependent on baseflow contributions from the Plan Area), and provision is made for current and future stock watering requirements.

2011 Objective 2: *Development of agriculture, sustainable commercial tourism, and other water consumptive industries that form a significant part of the Mataranka and surrounding area's economy.*	**May 2018 discussion points and revisions:** • Environmentally, socially and economically sustainable industry development (Qualifier: all extraction will have some impact) • Minimise administrative barriers (reduce red-tape) • Both under and over regulation are potentially damaging for development and the resource • Possible separation of 'stock' and 'domestic' i.e. either inside or outside of the commercial realm; represents very small portion of use • Tourism and fishing depend on water, but consume water differently to production industries • Providing equitable access to water for environmentally sustainable industries (consumptive beneficial uses)

Proposed Objective:

Sustainable management of the Tindall Limestone aquifer and connected surface flows is supporting the region's economic development by:

a) enabling equitable access to water for responsible water consumptive industries such as agriculture and commercial tourism, while avoiding detrimental impacts on environmental and cultural values.

b) supporting commercial development opportunities on Aboriginal lands in the Plan area through implementation of the Strategic Aboriginal Water Reserve.

Action 2

WAC to consider the emerging Management Principles for the new Plan, and to recommend other relevant principles for inclusion.

Background

Management Principles are general guidelines that regulate decision-making and behaviour, and might describe agreed ways of doing business. They may also reflect some of the assumptions that underlie the development, implementation and evaluation of the Water Allocation Plan. Several Management Principles have emerged during the Values Workshop, and others are yet to be defined.

Proposed Management Principles

a. The management settings in the WAP acknowledge the interconnectedness of groundwater in the Tindall Limestone aquifer and surface water expressions across the region, including stream flows in the Roper River and its tributaries both within and downstream of the Plan area.

b. The management settings in the WAP are based on the best available knowledge of the dynamics and condition of the Tindall Limestone groundwater resource and the impact of extraction from this resource on the environmental, cultural, social and recreational values of the region.

c. Meeting the water needs of the environment, cultural practices, regional towns and communities, recreation activities, tourism operations, pastoral stations and Aboriginal economic development are priorities under this Water Allocation Plan, followed by those of water consumptive industries such as irrigated agriculture, mining and petroleum.

d. Other principles….