

# Adelaide River water advisory committee: Meeting 4

Date: Tuesday and Wednesday, 11 and 12 March 2025

Location: Ground Floor Tanami Conference room, Goyder Building, Palmerston

Attendance			
Initials	Name	Position and representation	
Chair	Darryl Day	Independent chair	
CL	Cherrian Luxton	Member, Community	
CJ	Christine Jenner	Member, Aboriginal, community, environment	
CT	Christine Thomsen	Member, Aboriginal	
DC	David Ciaravolo	Member, Community, tourism or recreation	
DGY	David George Yates	Member, Aboriginal	
DG	David Gray	Member, Agriculture, community	
KT	Kathleen Thomsen	Member, Aboriginal	
PS	Peter Shappert	Member, Agriculture, tourism or recreation	
PY	Petrina Yates	Member, Aboriginal	
PG	Phillip Goodman	Member, Aboriginal	
TK	Tarizma Kenyon	Member, Aboriginal	
DaY	David Yates	Observer	
Initials	Department (DLPE) staff and presenters		
PH	Phillipa Hunter	Director, Water Management	
CH	Carly Hibble	Assistant Director, Water Management	
TNT	Toni Thomson	Committees & Engagement Officer	
CP	Chris Parker	Engagement Officer	
PW	Peter Waugh	Senior project officer, Office of Water Security	
SC	Simon Cruickshank	Director, Water Projects	
KW	Kiara Ware	Director, Water Regulation	
PD	Peter Dostine	Aquatic scientist, Flora & Fauna	
ST	Stephen Trudgeon	Water Monitoring Officer	
XT	Xavier Tingle	Hydrologist, Water Assessments	
Not in attendance			
Initials	Name	Position and representation	Notes
DY	Denzel Yates	Member, Aboriginal, community, environment	Nonattendance
JMG	Jacqueline Maria Goodman	Member, Aboriginal	Day 1 apology, Day 2 Nonattendance
JH	Jeffrey Huddlestone	Member, Aboriginal, agriculture, community, environment	Nonattendance
KT	Kathleen Thomsen	Member, Aboriginal	Apology on Day 2 only
PhY	Phillip Yates	Member, Aboriginal	Non-Attendance
TK	Tarizma Kenyon	Member, Aboriginal	Non-attendance on Day 1 only

### Day One: Tuesday 11<sup>th</sup> March

#### 1.1 Welcome

Chair welcomed members and acknowledged county.

The purpose of the meeting was for the committee to gain an understanding of the scientific investigations undertaken as part of the development of the Adelaide River catchment water allocation plan (the plan), and how the results and outputs of each project will inform the final water plan. The meeting also included workshopping on values, continuing on from work from the previous meeting.

#### 1.2 Attendance and introduction

Members confirmed the summary of the previous meeting.

Members confirmed no new conflicts of interests had arisen since the previous meeting

Members nominated a committee member to complete the meeting evaluation.

#### 1.3 Water Trust and Community Engagement

Water Resources Division (PH and CP) presented on the Division's engagement on the plan, including the Water Trust Australia [Lessons Learned Collaborative water allocation planning in the Northern Territory Report](#)'s influence on current water management in the NT.

##### Key summary points:

The committee noted the high quality and relevance of the communication materials developed by the Department and confirmed that this work will help support them to engage with their community. Members requested an extension of the public information and tools to support them.

The committee provided feedback on mechanisms to publicise the plan on TV, recommending adverts during First Nations TV, Fishing shows, AFL and NRL.

Members sought clarification on the Department's engagement with the Northern Land Council Water Committee about the plan. The Department advised that presenting at the NLC Water Committee was by invite only, however offers to present on the development of the plan had been extended.

The committee discussed the challenge of establishing a WAC with local membership. Members raised that skills and capabilities are needed to provide meaningful input, and investing in the committee was important. It was noted that the committee was only at the beginning of their four-year term, which extends beyond the development of the plan and hence early in their own knowledge and capability development.

The committee discussed options for reviewing and updating the membership. The Department clarified that membership is at the discretion of the Minister for Water Resources, and committed to discuss additional membership in conjunction with the Chair.

### 1. Matters for discussion

#### 2.0 Introduction to session

Water Resources Division (SC) provided an overview of the framework for water science that will inform the plan. SC provided an overview of the role of the multi-disciplinary expert committee (Technical

Advisory Panel) that will provide advice on ecological risks and future research priorities associated with the plan.

**Key summary points:**

The committee discussed timeframes and that there are pros and cons of a tighter timeframe for a water plan.

Members raised the unique context of the Adelaide River plan, which has been instigated as a result of the AROWS project, rather than a gradual increase in competition for water. Members raised that, while planning is an iterative process, the AROWS project will be significantly informed by the first plan.

Members sought further information about the Technical Advisory Panel membership.

## 2.2 Science #2: Modelling

Office of Water Security – OWS (PW) and Water Resources Division - WRD (SC) delivered a presentation on water modelling explaining what a model is, the models developed for Adelaide River, and their intended uses, including to understand the impacts of climate change. The presentation also covered the scenarios being modelled, and an outline of how the modelling information will inform the plan.

**Key summary points:**

The committee queried how the model had been calibrated. PW confirmed that the model has been calibrated against three reference years, and that the model is showing good correlation with the measured values in those years.

The committee discussed the importance of understanding recessional flows, and the importance of understanding how water moves through the flood plain. PW confirmed that the model being used to inform the plan was specifically chosen for its ability to represent recessional flows. He noted that improved surface elevation data (from LiDAR) would improve the quality of predictions about water movement over the flood plain.

The committee queried how models could be used to understand water quality or contamination issues. PW advised that the existing models could be expanded to incorporate water quality modelling in the future, but that this is not within the model's current capabilities.

The committee discussed their experience of a decrease in rain in 2013 which resulted in stricter Magpie Goose hunting rules and queried if this rainfall variability was observed in data. PW discussed observed variability in the data generally.

## 2.1 Science #1: Monitoring

Water Resources Division - WRD (XT and ST) delivered a presentation to the committee on water monitoring, outlining key monitoring locations, the instruments used, the types of data collected, and how this information is applied to inform the plan. The presentation included an overview of the water quality.

**Key summary points:**

The committee acknowledged that the water data portal provides the public with access to water data but flagged that it is difficult to navigate and interpret.

Members advised during the presentation, and throughout the two-day meeting that they resonated with the presenters' description of pulling a dinghy across the floodplain over a few days as flood waters receded. They advised that the example illustrated that small changes in the height of the river can significantly impact the extent of the floodplain.

Queries were raised by members on the status of a historical monitoring site at Acacia Gap and the outcomes of monitoring new bores drilled around Marrakai in 2023. The Department committed to following up on these queries.

## 2.4 Science #4: Ecology

Flora and Fauna Division (PD) provided a presentation for the committee on the method used to identify ecological assets of the Adelaide River. The presentation summarised how existing data informed the study, including a review of more than 17000 records held in the [NT Fauna Atlas](#) for the catchment. The presentation summarised recent surveys to increase data on fish and aquatic species present in the catchment, which are less well understood than other species.

### Key summary points:

The committee expressed interest in, and queried PD's statements about the tidal dynamics of the waterway. PD highlighted how the Adelaide River differs from other northern macrotidal rivers due to the unique characteristics of the river section near the mouth, known as the Narrows.

The committee queried the level of catchment specific knowledge on species identified. A member raised cherabin as an example, noting that the outcomes of studies in Daly and North Western Australia are quite different with respect to this species. PD advised the Daly River data was applied with respect to cherabin, and that applying learnings from other areas is a known limitation in ecological studies.

The committee queried if land based animals and plants had been considered in the study. PD clarified that focus of his study was on aquatic values rather than land based, and that the AROWS Environmental Impact Statement (EIS) would be looking at land based animals and plants.

The committee expressed interest in, and queried PD's statements about the catchment not being in pristine condition. PD clarified that land use (e.g. buffalo grazing) and invasive weeds have both had an impact on the system, as such it is not pristine.

The committee queried the saltwater flow dependent species such as the mud crab and any results found, PD advised they were not looked at in this study.

## 2.5 AROWS concept design

The Department of Logistics and Infrastructure - DLI (ET) gave a presentation on the progress of the concept design (including potential fish screens) for AROWS. An update on the EIS referral, public engagement, and feedback received so far was also provided.

### Key summary points:

The committee expressed concerns around impacts to roads and access tracks (Marrakai track and the road to Lake Bennett). DLI assured the committee that these concerns are being taken into account.

The committee questioned water quality and treatment requirements from a water supply perspective. DLI clarified that they have a lower concern about this given the natural conditions of the AROWS site, and in any case planning is underway for water treatment for the potable water supply.

The committee provided feedback on DLI's recent engagement, being that the flyer outlining locations and dates of AROWS engagement stalls were circulated after some had already taken place.

## 2.6 Manton Dam releases / Manton Creek flows

Water Resources Division (KW) and Power and Water Corporation (TD) provided an update on Manton Dam returning to service, including Power and Water's involvement and the Water Regulation licensing requirements.

### Key summary points:

The committee queried how access could be maintained for the heritage listed pump house given operational restrictions on Manton Dam once it is returned to service. Open days, similar to those currently offered at Darwin River Dam, will be arranged to provide access to the heritage sites.

The committee queried if the planned dry season releases from Manton Dam into Manton River were actually a negative environmental impact. TD discussed that the social benefits of dry season flows, in conjunction with the environmental impact would be taken into account. It was noted that the discharge has been occurring for over 80 years.

The committee inquired whether a map of the underwater contours would be made available to the public.

***Clarification: TD has since informed the Department that such a map is not currently available in a shareable format, but they anticipate having one by late 2025, once the Recreation Management Plan for Manton is finalised.***

## 2.7 Key Messages

The Chair summarised the key messages and events of the meeting, allowing the committee to provide clarification for matters covered by that point in the meeting.

## 2.8 Presentation: Northern Land Council

The Northern Land Council (NLC) (AW and ID) provided an update on the interim report for the Cultural Values Project. The presentation identified opportunities and challenges associated with the project and key findings so far. The presenters noted that the particular importance of waterholes has emerged, and that mapping of these places would require significant work to settle permissions. The presentation included a summary of scientific terms and related terms and descriptions used by Aboriginal people consulted so far.

### Key summary points:

The committee discussed overlaps between species identified as culturally important in the NLC work, and those studied in the ecological assessment and considered that protecting the environment would protect some cultural values.

Members notes a key difference between ecological work and cultural work so far, being that ecological work has focussed on fauna (animals) while the NLC's work has identified both fauna (animals) and flora (plants) as important (e.g. bamboo and melaleuca).

The committee discussed the importance of ensuring that Aboriginal people involved in the project hear back about how the work has influenced the water allocation plan.

## Day 2: Wednesday 12 March

### 1.1 Welcome and meeting purpose/recap from previous day

The Chair summarised the key messages from the NLC presentation on the afternoon of Day 1, allowing the committee to provide clarification for matters covered by that point in the meeting.

The Chair provided a recap of the previous day, including some additional information he sought out on climate scenarios being used in water modelling scenarios.

Members noted that global warming scenarios selections RCP4.5 and RCP8.5 for modelling was complex from both a technical and political/policy perspective. Members requested further advice on the climate scenarios selected, to support them to communicate and engage with their community.

### 2.3 Science #3: River flow & water quality

Water Resources Division (CH) provided a recap of the Adelaide River Catchment's characteristics and how features important to the plan's management arrangements were starting to emerge. The presentation touched on zones of the catchment and their characteristics, the magnitude of wet season flows compared with dry season flows, and variability of the system. The presentation also covered results of water quality work so far, and how the work would progress

#### Key summary points:

The committee provided feedback the "Understanding Adelaide River flow Variability" poster, advising that is provided a good feel for the catchment under different flow conditions and that photos were recognisable for locals in the catchment.

The committee discussed variability of flows in the catchment – including the theme that *there is no normal years, just what is normal for a certain kind of year*. The committee discussed that average flows and median flows were different, and that regardless of what normal or middle scenario you may consider, the plan needs to deal with very wet and very dry years.

The committee discussed the benefits/potential for larger volumes of extraction to occur in wetter years, reducing the reliance on take in dryer years.

The committee discussed the importance of recessional flows, including if management rules specific to the recession might be appropriate. The committee expressed interest in seeing a poster with the recessional curve (hydrograph) for different reaches of the catchment, similar to the draft poster showing flows at different times of year in the catchment.

The committee sought clarification on the distinction between salt and freshwater areas of the catchment and requested more information on the salinity data from the Department.

The committee requested a copy of the slides presented in this session.

### 2.2 Risk Assessment

The Chair provided an information session to advise the committee on how risk assessments could work for the water plan. The chair advised that a significant body of work would be undertaken by the Technical Advisory Panel but that the plan risk assessment would be broader. The Chair gave an overview of the risk assessment approach used in previous plans, and described some alternative approaches used interstate.

### Key summary points:

The Chair and committee discussed various approaches to risk assessments, with the common features being that risks take into account: events that might occur, the harms or negative outcomes that could happen as a result, and the likelihood of it occurring.

The committee emphasised that values discussed in the workshops from this meeting and WAC 3 should help build the risk assessment. (item 2.1)

The committee noted concerns about having enough time and the appropriate skills to give input on a risk assessment. The Department committed to providing a 'skeleton' or draft risk assessment for the committee to provide feedback on, rather than the committee developing a risk assessment.

The Committee queried if the Technical Advisory Panel ecological risk assessment would be available for consideration at the next Meeting in May. The discussion envisaged the assessment would be available, along with the Department's draft risk assessment.

***Correction: On day one the Committee was advised that the ecological risk assessment would not be available until the July Meeting.***

## 3. Meeting Evaluation

Led by the nominated member (CL), the group completed the evaluation together.

The following specific recommendations were made by members during evaluation:

- Revise wording of "Members felt able to ask questions without being discouraged for frowned upon?" to "Members felt unable to speak and ask questions without being discouraged for frowned upon"
- Insufficient time had been allocated to some presentation (particularly on Day 1), and so the first day felt rushed. Members recommended that two full days, with less content per day would be more appropriate than fitting the meeting into 1.5 days.
- A clear list of papers/documents being provided for the meeting in addition to the attachments was recommended.
- Papers / documents for the meeting were requested to be sent in an individual email rather than an attachment to the meeting invitation.

## 4. Next steps

The committee discussed and agreed dates and key topics for upcoming meetings:

- Meeting 5 - 27 and 28 May 2025 (Focus on model outcomes, risk assessments and proposed management tools)
- Meeting 6 - 29 & 30 July 2025 (Focus on draft plan documents)
- Meeting 7 - 11 & 12 November 2025 (Focus on outcomes of public consultation on the plan)

Members raised concerns about the November meeting dates as it coincides with mango season.