



# STATE OF THE WATER RESOURCE

Alice Springs

2024-25



This report provides information about the current status of the water resource, how water is shared and used, and the activities that were undertaken to manage water during 2024-25.

**WATER CONTROL DISTRICT**  
**ALICE SPRINGS**

**WATER RESOURCE**  
**ALLUVIAL AND AMADEUS BASIN**  
**AQUIFERS**

**PLAN AREA**  
**4,528 KM<sup>2</sup>**

**MAJOR TOWN**  
**ALICE SPRINGS**

**ABORIGINAL LANDS**  
**ARRERENTE COUNTRY**

**ACKNOWLEDGEMENT**

The Department of Lands, Planning and Environment proudly acknowledges the Northern Territory’s Aboriginal communities and their rich culture and pays respect to the Elders past and present. We acknowledge Aboriginal peoples as the Traditional Owners and custodians of the lands and waters on which we all rely.



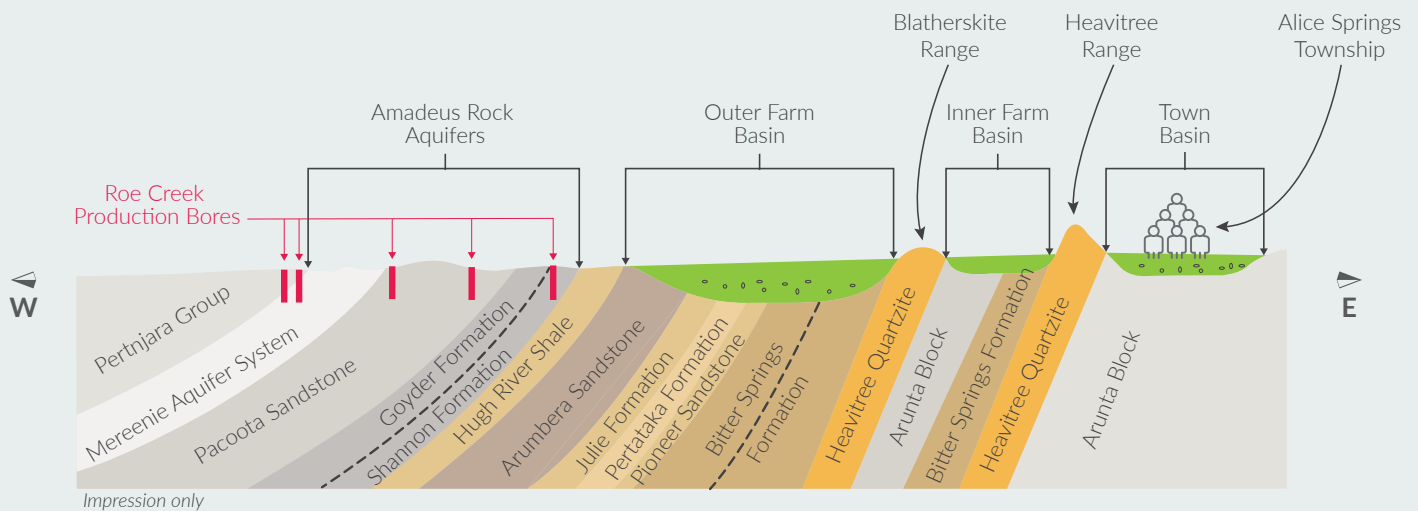
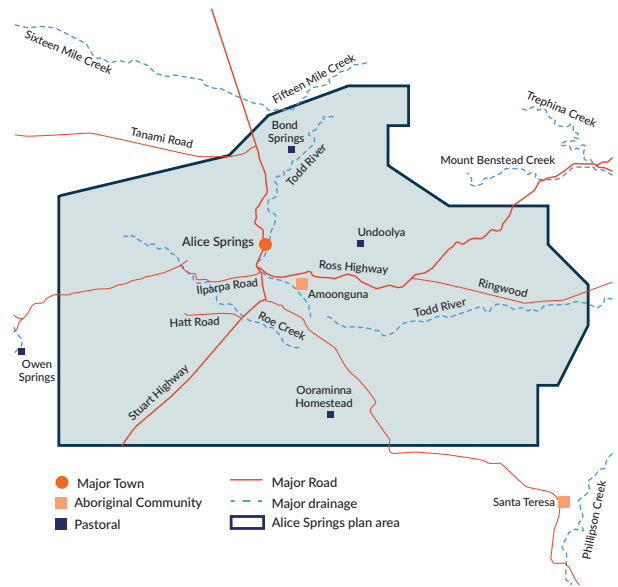
Front cover image: Simpsons Gap

## The Alice Springs water allocation plan (the plan) has been in operation since 2007; it underwent a midterm review in 2021 and will expire in 2026.

The plan manages water in the alluvial aquifers within the Town Basin, Inner Farm and outer Farm Basin and the Amadeus Basin collectively known as the Mereenie Aquifer System. Although aquifers are generally managed as separate groundwater resources, they can become interconnected through surface water drainage lines during times of flooding.

The town water supply for Alice Springs is drawn from the Mereenie Aquifer System at the Roe Creek Borefield.

In locations where groundwater is near to the surface, it plays a vital role in supporting groundwater dependent ecosystems, in particular River Red Gums that line the Todd River.



## ALLUVIAL AND AMADEUS ROCK AQUIFERS



**MAXIMUM ALLOWABLE YIELD**  
21,246 ML/yr

The department monitors 103 groundwater and 9 surface water sites in the plan area which provide data that underpins the understanding of aquifer systems in the plan area.

Monitoring locations are visited annually, and the collected data is used to further understand groundwater flow processes in the region.

To view monitoring data across the Northern Territory, visit the [water data portal](https://ntg.aquaticinformatics.net/Disclaimer)<sup>1</sup>.

<sup>1</sup> <https://ntg.aquaticinformatics.net/Disclaimer>

## WATER THAT STAYS IN THE ENVIRONMENT

MAXIMUM ALLOWABLE YIELD

**21,246** ML/yr

### 1 RURAL STOCK AND DOMESTIC\*



**214** ML/yr

### 2 PUBLIC WATER SUPPLY



**13,000** ML/yr

### 3 ABORIGINAL WATER RESERVE\*\*



**0** ML/yr

### 4 ECONOMIC DEVELOPMENT



**8,032** ML/yr

\* Rural stock and domestic usage is unlicensed and extractions estimated.

\*\* The Strategic Aboriginal Water Reserve Policy Framework was established after the plan declaration in 2016. Allocations to the Aboriginal water reserve will be updated in the new plan, to be declared in 2026.



## HOW WATER IS SHARED

The plan manages groundwater in Alice Springs and surrounds.

The plan establishes that a maximum allowable yield can be extracted from aquifers within the plan area to meet the needs of Alice Springs township and its surrounding communities. Priority for water allocations is always given to drinking water first ensuring sufficient supply for town and community residents.

The Mereenie aquifer system holds a substantial volume of stored water, which is replenished by intermittent surface water flows along the Todd River following significant rainfall events. Recharge occurs via stream bank infiltration and floodout ponding where standing water can remain for days to weeks at a time.

## CLIMATE AND WATER

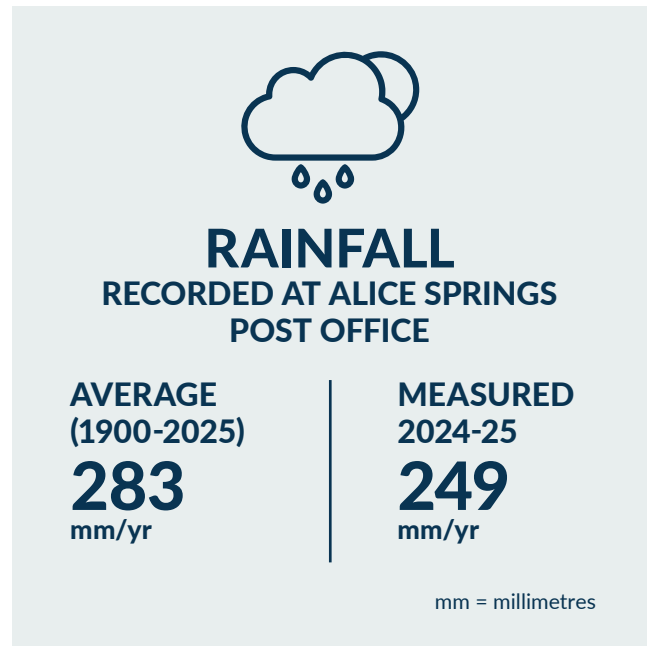
Aquifers in the plan area display characteristics typical of Arid Zone resources, with low annual rainfall and relatively high rates of evapotranspiration contributing to long periods of little to no groundwater recharge.

Significant rainfall events can result in recharge to aquifers at intervals of approximately seven to ten years. Surface water flows are intermittent and can result in temporary ponding in low-lying areas adjacent to drainage lines.

Find out more about how resources behave in the [Top End compared to the Arid Zone<sup>2</sup>](#).

### RAINFALL

Rainfall across the plan area is sporadic and unpredictable. The average rainfall for the district, based on more than 120 years of data, is 283 mm per year. The 2024-25 season recorded 249 mm of rainfall at Alice Springs Post Office and 171 mm at Alice Springs airport.



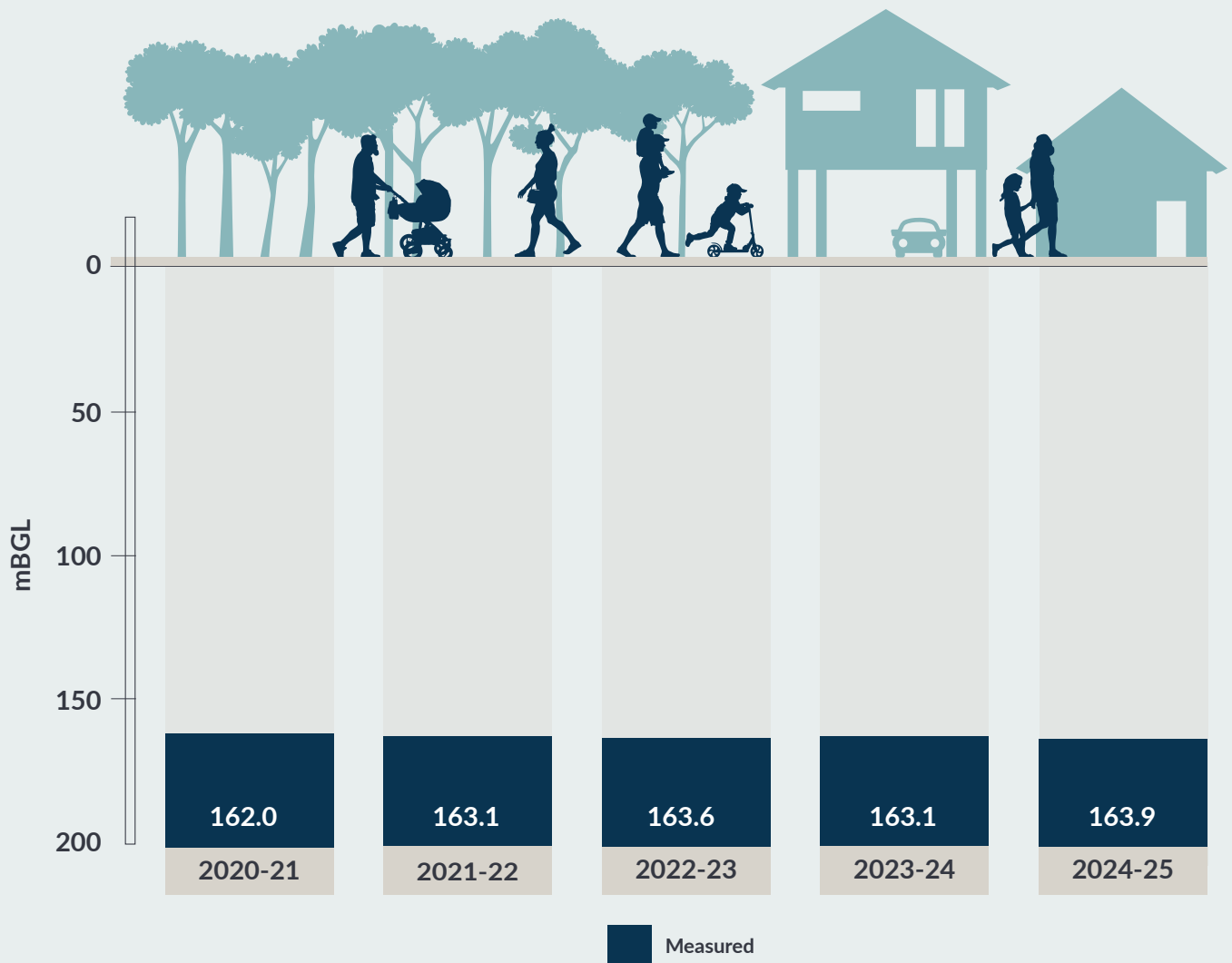
<sup>2</sup> <https://nt.gov.au/environment/water/management-security/water-allocation/water-allocation-framework>



## GROUNDWATER LEVELS

Groundwater level monitoring at Roe Creek shows a gradual decline in groundwater levels in the aquifer in response to slow recharge processes and water extraction. Groundwater levels are measured in depth, metres below ground level (mBGL). Recharge into the aquifer takes place at the margin of the basin, during infrequent short-lived runoff events. You can view groundwater levels for the Alice Springs plan area throughout the year on the [water data portal](https://nt.gov.au/environment/water/licensing/licensing-portal)<sup>3</sup>.

## GROUNDWATER LEVELS



<sup>3</sup> <https://nt.gov.au/environment/water/licensing/licensing-portal>

## REGULATING WATER USE

The number of water extraction licences remained at 16 during this financial year. No additional water extraction licences were applied for in the plan area. To see water licences in the plan area visit the [water licence portal](#)<sup>4</sup>.

Overall, approximately 50% of water is being used by water licence holders than has been allocated, which provides opportunities for water trade in the region. Visit the website to find out more about [how to trade water](#)<sup>5</sup>.

The department regulates water licence holders to ensure compliance with the licence conditions. Visit the website to find out more about [compliance and enforcement](#)<sup>6</sup>.

## WATER LICENCE STATISTICS 2024-25



<b>WATER EXTRACTION LICENCES</b>	<b>16</b>
<b>VOLUME OF WATER LICENSED FOR ECONOMIC USE</b>	<b>17,895 ML</b>
<b>VOLUME OF WATER AVAILABLE</b>	<b>3,137 ML</b>
<b>LICENCE DECISIONS MADE*</b>	<b>2</b>
<b>LICENCES TRANSFERRED OWNERSHIP</b>	<b>0</b>

## WATER COMPLIANCE STATISTICS 2024-25



<b>LICENSED WATER USED</b>	<b>50%</b>
<b>LICENCES REPORTING WATER USE</b>	<b>94%</b>
<b>LICENCES METERED</b>	<b>94%</b>
<b>LICENCE INSPECTIONS</b>	<b>7</b>
<b>COMPLIANCE ACTIVITIES</b>	<b>0</b>

\* amendment and new interference with waterway

## WATER MANAGEMENT

Water management adapts and improves over time. The plan supports this by identifying strategies and actions to effectively share water and manage risks to the water resource.

### RECENTLY COMPLETED ACTIVITIES

- Upgrades to surface water and groundwater monitoring instruments, to ensure continuous reporting of rainfall and river levels.
- A revised the Alice Springs monitoring program to reflect water management zones and priorities for water management.
- A groundwater quality monitoring program within the Todd River corridor which supports the River Red Gums.
- Released a groundwater dependent ecosystems map of Alice Springs and surrounds and published the results on NR Maps and Territory Stories.

### KEY PRIORITIES FOR THE FUTURE

- An aquifer protection study, funded through the National Water Grid, to inform land use planning South of the Gap.
- The Alice Springs water plan is due to be renewed in 2026, which will set the direction for water use and further scientific investigation over the coming decade.

4 <https://nt.gov.au/environment/water/licensing/licensing-portal>

5 <https://nt.gov.au/environment/water/licensing/water-extraction-licence/water-trading>

6 <https://nt.gov.au/environment/water/management-security/water-policies-and-guidelines>



**STATE OF THE WATER RESOURCE 2024-25**  
Alice Springs



For more information visit  
[Alice Springs water allocation plan NT.GOV.AU](https://www.nt.gov.au/water/alice-springs)