



STATE OF THE WATER RESOURCE

Oolloo

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
DALY ROPER BEETALOO

PLAN AREA
5,277 KM²

CLOSEST ABORIGINAL COMMUNITY
NAUIYU

ABORIGINAL LANDS
LARBAUNYUN,
WAGIMAN SOUTH,
WAGIMAN NORTH,
DAGOMAN (WUJALAWUN),
WARDAMAN
(WUNGAYATIAWUN),
WARDAMAN
(YUBULYAWUN) 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: Centre Pivot

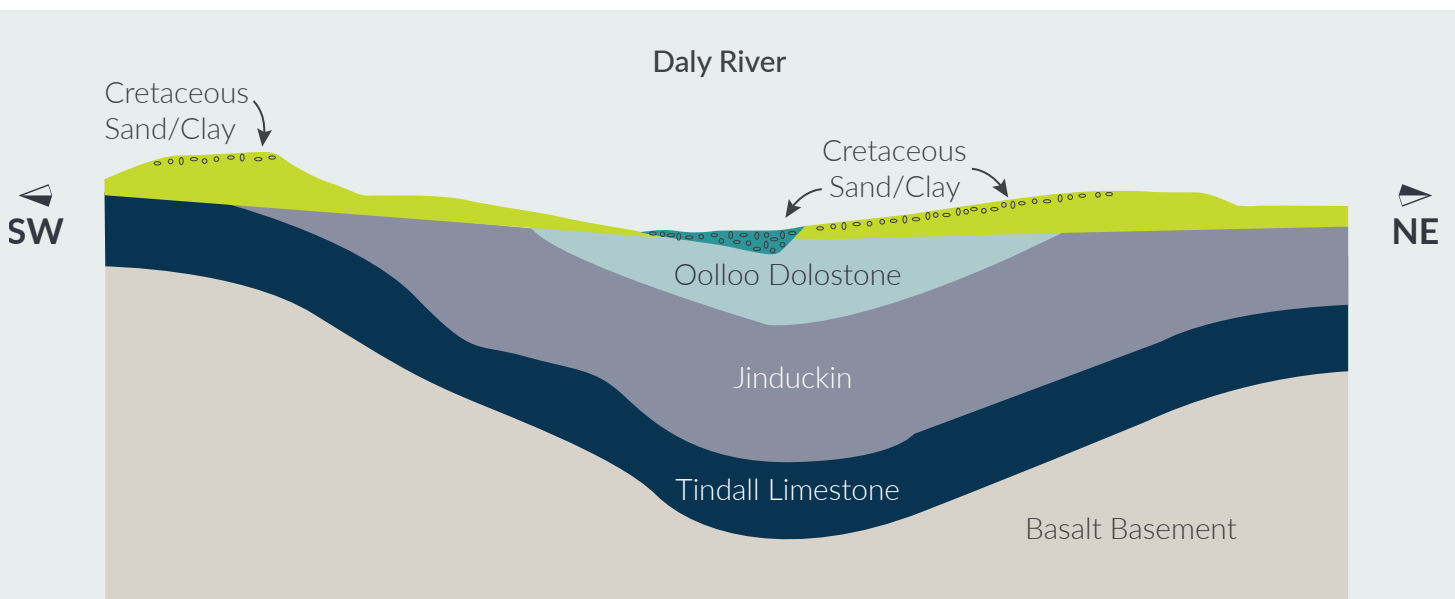
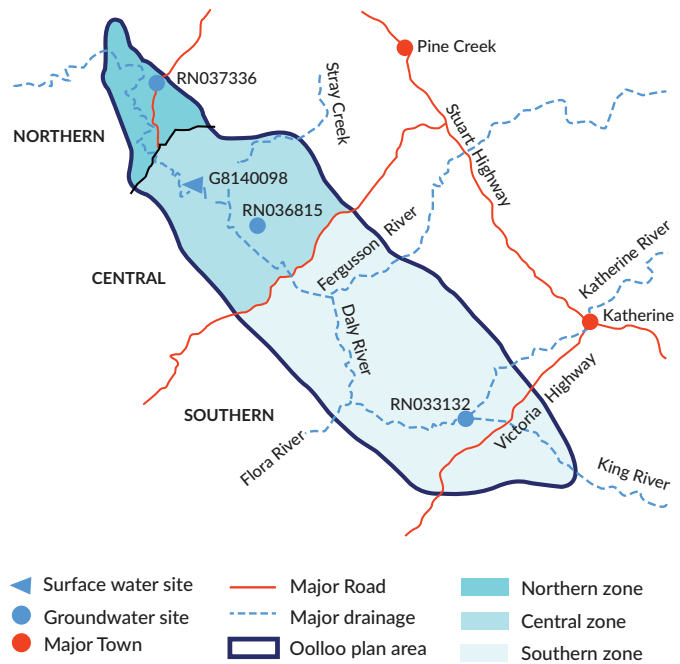
The Ooloo water allocation plan (the plan) manages groundwater in the Ooloo Dolostone aquifer within the Daly Roper Beetaloo water control district.

The Ooloo Dolostone aquifer is a formation of the Daly geological basin, which includes the Tindall Limestone, Jinduckin and Ooloo Dolostone aquifers.

The aquifer is strongly connected to surface water flows along the Daly River. Groundwater flows out of the aquifer and into the Daly River through springs and groundwater seeps along the river banks and river bed.

Groundwater in the aquifer provides reliable good quality water and bore yields are high, meaning this is an important resource for the community and the environment.

The plan tells us how water should be shared between competing uses and sets objectives for management.



Impression only

OOLOO DOLOSTONE AQUIFER



AVERAGE ANNUAL RECHARGE
550,000 ML/yr



ESTIMATED SUSTAINABLE YIELD (ESY)
97,300 ML/yr

The department has a good understanding of the resource. The department maintains 49 monitoring sites in the plan area, including 33 bores and 16 surface water sites, in the plan area. All monitoring locations are visited twice per year, with the data used in an integrated surface water - groundwater model.

The model allows us to predict what might happen to the water resource under different climate and water extraction scenarios. To view monitoring data across the Northern Territory, visit the [water data portal](https://waterdataportal.nt.gov.au/)¹.

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

WATER THAT STAYS IN THE ENVIRONMENT

ESTIMATED SUSTAINABLE YIELD

97,300 ML/yr

1 RURAL STOCK AND DOMESTIC*



1,552 ML/yr

2 PUBLIC WATER SUPPLY



0 ML/yr

3 ABORIGINAL WATER RESERVE**



19,314 ML/yr

4 ECONOMIC DEVELOPMENT



76,374 ML/yr

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

** There is 9,825 ML/year available in the reserve, with an additional 9,489 ML/year to be added once available.



CLIMATE AND WATER

The Ooloo Dolostone behaves as a Top End water resource, with distinct wet and dry seasons. During the wet season, rainfall recharges the aquifer. As the aquifer fills it discharges excess water via springs and seeps to the surface, maintaining flows in rivers throughout the dry season.

Find out more about how water resources behave in the Top End compared to the Arid Zone here: [Water allocation framework | NT.GOV.AU](https://nt.gov.au/environment/water/management-security/water-allocation/water-allocation-framework)²

RAINFALL AND RIVER FLOWS

Rainfall over the plan area predominantly occurs during the wet season, between November and April, largely driven by monsoonal activity. The 2024-25 season recorded 1,261 mm in the central management zone, which is above the long term average annual rainfall of 1,074 mm recorded at the same site.

River flows are closely related to rainfall in the plan area. Flows have been measured at the Theyona monitoring site (G8140098) on the Daly River since 2008. End of dry season flow is a key indicator of change in the river system and groundwater storage. End of dry season flow at Theyona for the 2024-25 dry season was 1,810 ML per day.

The 'Daly River Flows' graph shows the predicted and measured flows for the last five years. The difference between predicted and measured flows are being considered further.



RAINFALL

AVERAGE
1900-2025

1,074
mm/yr

MEASURED
2024-25

1,261
mm/yr

mm = millimetres



RIVER FLOWS MEASURED AT THEYONA STATION

PREDICTED
2024-25

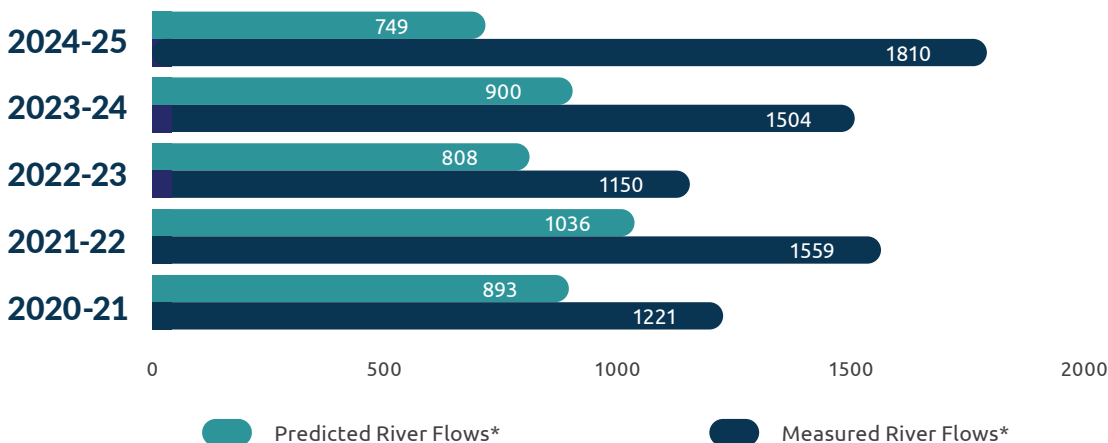
749
ML/day

MEASURED
2024-25

1,810
ML/day

ML = Megalitres

DALY RIVER FLOWS



* end of dry season flows, measured in ML/day

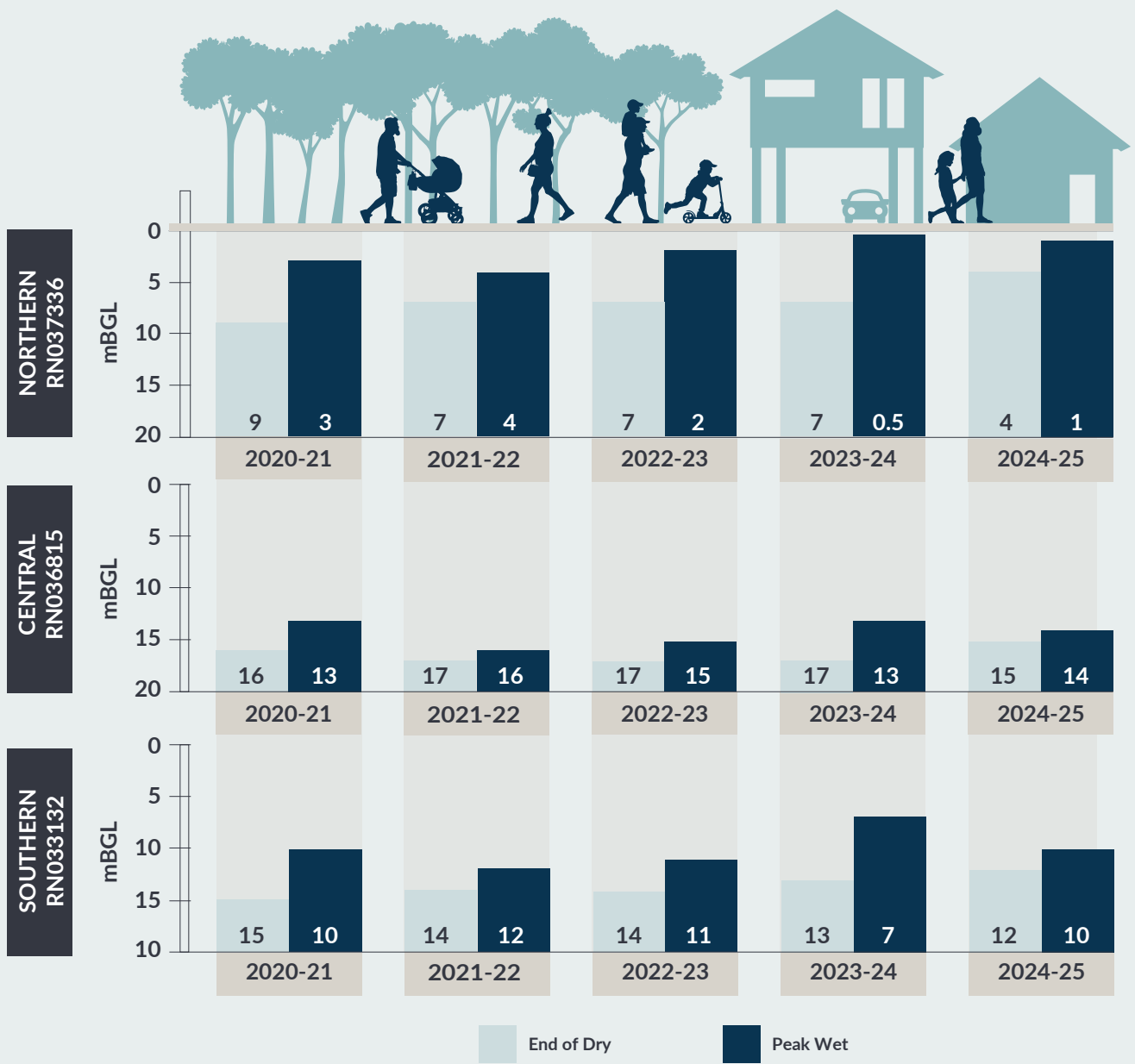
² <https://nt.gov.au/environment/water/management-security/water-allocation/water-allocation-framework>

GROUNDWATER LEVELS

Groundwater levels in the aquifer are strongly influenced by climate and generally rise in the wet season, as the aquifer fills due to rainfall, and fall during the dry season, as water leaves the aquifer via discharge and extraction. Groundwater level monitoring helps identify changes to the volume of water being stored in the aquifer.

Groundwater levels are influenced by climate in the region and are measured in depth, metres below ground level (mBGL). The graph below shows measured groundwater levels at the end of dry and during the peak of the wet season, at a monitored bore in each of the three management zones.

GROUNDWATER LEVELS



REGULATING WATER USE

Water for economic development in the Northern zone has been licensed and as a result no new licences were granted this financial year.

Water is available in the Central and Southern zones, however, no new licence applications were receive or granted in this financial year. To see water licences in the plan area visit the [water licence portal](#)³.

Overall, substantially less water is being used by water licence holders than has been granted which provides opportunities for water trading in the region.

Visit the website to find out more about [how to trade water](#)⁴.

The department regulates water licence holders to ensure compliance with the conditions of the licence. Regular audits and checks of licence records are undertaken to identify breaches of licences.

Visit the website to find out more about [compliance and enforcement](#)⁵.

WATER LICENCE STATISTICS 2024-25



WATER EXTRACTION LICENCES	43
VOLUME OF WATER LICENSED FOR ECONOMIC USE	71,586 ML
VOLUME OF WATER AVAILABLE	24, 102 ML
LICENCE DECISIONS MADE*	4
LICENCES TRANSFERRED TO NEW OWNERSHIP	5

WATER COMPLIANCE STATISTICS 2024-25



LICENSED WATER USED	27%
LICENCES REPORTING WATER USE	93%
LICENCES METERED	91%
LICENCE INSPECTIONS	5
COMPLIANCE ACTIVITIES	0

*amendments, trades, renewals

WATER MANAGEMENT

Water management needs to adapt and improve over time. The water plan supports this by identifying strategies and actions to more effectively share water. Key management action taken this year are outlined below.

RECENTLY COMPLETED ACTIVITIES

The Minister for Water Resources approved the [5-year midterm review](#) of the Ooloo water plan in November 2024. The review found that the plan is achieving its objectives, is based on sound science and is appropriate to remain in place for the remainder of its 10 year term.

KEY PRIORITIES FOR THE FUTURE

The review recommended three priority activities for water management in the future:

- Investigation project: drilling and field studies to refine the understanding of the aquifer boundary, including depth, extent and connectivity with river flow thresholds, and environmental and cultural values that rely on the resource.
- Review and refine, if required, the environmental flow settings for the management zones.
- Expand to a long term targeted water quality monitoring program, including synthetic chemicals

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

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

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



STATE OF THE WATER RESOURCE 2024-25

Ooloo



For more information visit
[Ooloo water allocation plan | NT.GOV.AU](https://www.nt.gov.au/water/oooloo/water-allocation-plan)