

Big Rivers Region: water availability update - February 2025

This Early Notice provides an outlook of water availability for 2025-26 for the upcoming water accounting year, 1 May 2025 to 30 April 2026. This notice is part of the department's commitment to providing timely information to water licence holders.

Key findings

Early indications are that water licence allocations are likely to be 100 per cent for the Katherine and Roper regions, specifically the following water resources:

- Katherine Tindall Limestone
- Mataranka Tindall Limestone
- Tindall Limestone aquifer (Flora)
- Jinduckin Formation
- Edith River
- Katherine River upstream of Tindall Limestone Aquifer Donkey camp weir
- Ooloo Dolostone.

Formal notification

The Controller of Water Resources will formally notify licence holders of their 2025-26 licence allocation before 1 May 2025. This is in line with the terms and conditions on all water extraction licences in the Top End.

Technical summary

Water Resources collects a large amount of water resource information, including rainfall, river flows, groundwater levels and water use. This data is analysed and modelled, to predict the water resource response to extraction over the coming year. Water licences are managed to meet specific environmental river flows that are set in regional water plans, such as the Mataranka water plan, and the Katherine water plan.

Rainfall to 29 January 2025

January had slightly below median rainfall across the Katherine River and broader Douglas-Daly catchment areas. The Bureau of Meteorology climate outlook predicts rainfall as likely to be above average for the region for the rest of February, March and April 2025. If this happens, the wet season rain for 2024-25 would be approximately equal to or above the long-term median.

The Roper catchment recorded below median rainfall during January 2025. The climate outlook for the Roper catchment predicts above average rainfall for the rest of February, March and April 2025. If this happens, the 2024-25 wet season is expected to be approximately equal to or above the long-term median.

Groundwater

Monitoring results for the Tindall and Mataranka Limestone aquifer levels in October 2024 (end of the 2024 dry season) identified an increase in water levels compared with the same time last year. This is likely due to increased recharge resulting from above average rainfall in the 2023-24 wet season.

2025-26 water licensing outlook

Modelling scenarios, which factor rainfall, groundwater recharge, and extraction (including rural stock and domestic use, and assuming 100 per cent of water licences are used) were run in early February 2025 to predict the flows in the Katherine, Daly and Roper Rivers at the end of the dry season, assuming no further rainfall occurs for the remainder of 2025. Each regional scenario is discussed below.

Katherine River:

Modelling indicates the systems is in an 'average' river flow scenario, which requires that 70 per cent of river flows be reserved for the environment, with 30 per cent of river flow available for extraction.

Modelling that included extraction predicted a 21 per cent reduction in flows, which meets the Katherine plan criteria. The water licence allocations in this area are likely to be 100 per cent.

Daly River:

The environmental flow requirements in this area are important for the protection of the Pig-nosed turtle, an internationally endangered species (ICUN 2018), with the Daly River identified as having the largest, least impacted and most significant population of the species.

Modelling indicates that the predicted flows at upper and lower Daly will meet the environmental flow requirements, although flows in the mid Daly may not. However, the mid-Daly flows have been identified as being consistently under-represented in modelling results, and as such, the results at this location are considered to be within the margin of error. Water licence allocations in this area are likely to be 100 per cent.

Roper River:

The Mataranka water plan sets out the minimum flows associated with wet, average and dry climatic conditions. The water plan requires that any reduction in flow associated with extraction must not cause the river flow to fall into a lower climatic condition.

Modelled predictions in the Roper River indicate the river is in a wet climatic condition, and that extraction will not impact this rating. As a result, water licence allocations in this area are likely to be 100 per cent.