Darwin Rural Water Regulation Strategy

Water Resources Division





Document title	Darwin Rural Water Regulation Strategy
Contact details	Department of Environment and Natural Resources Water Resources Division, 08 8999 4455, water.regulation@nt.gov.au
Approved by	Executive Director Water Resources Division
Date approved	3 July 2023
Document review	Annually
TRM number	LRM2023/0075-0001

Version	Date	Author	Changes made
1.0	3 July 2023	Water Resources Division	First version

Acronyms	Full form
NT	Northern Territory

Contents

1. Background	1
2. Problem statement	1
3. Objective	2
4. Desired outcome	2
5. Strategy	2
6. Actions	2
6.1. Legislative REFORM	2
6.2. RECALIBRATE allocations	
6.3. REGULATE unlawful water use	3
6.4. RECOVER excess licence allocations	3
Appendix A Strategy on a page	1

1. Background

There are 112 groundwater systems in the Darwin Rural Water Control District (Darwin Rural) that support base flows and early dry season flows in rivers and wetlands across Darwin Rural, maintaining riparian vegetation and ecosystem function. These groundwater systems also support Darwin Rural communities providing water for domestic and commercial use.

Regulating Darwin Rural groundwater systems is critical to ensure water security to protect the Territory lifestyle and those that depend on groundwater for their domestic supply and to support Territory businesses.

In 1992 the *Water Act* 1992 and Water Regulations 1992 came into force, requiring licensing of groundwater extraction across the Northern Territory (NT).

At the same time, to support industry growth in Darwin Rural, the NT Government declared that take from a bore at a rate of less than 15 litres per second did not require a licence under the Water Act (**the 15 litres per second exemption**).

From 1992 to 2016, the horticultural industry and rural living grew in Darwin Rural resulting in higher competition for water.

The Berry Springs Water Allocation Plan 2016-2026 supports the management of the localised Berry Springs Dolostone aquifer system, a distinct high water bearing aquifer that discharges to form a series of iconic freshwater springs in the Berry Springs area. In preparing the Berry Springs plan it became evident that water extraction in the Berry Springs area was impacting spring flows in some years.

Over the same period there was a succession of poor wet seasons impacting recharge in Darwin Rural. The region was subject to potential bore failure and water impacts, but without licencing, metering or a management regime these risks were unable to be managed or even properly assessed for risks to supply.

In response to these issues and acknowledging the rapid increase in rural living, the NT Government removed the 15 litres per second exemption to improve water management across Darwin Rural. From 1 July 2016, a licence has been required to extract water for agriculture, and other beneficial uses in Darwin Rural. This action was supported by the rollout of the Darwin Rural Water Watch Program which had a strong focus on education through the Know your Own Bore initiative.

The Darwin Rural Water Licensing Policy supported licensing decisions ensuring licence entitlements met the businesses' existing water use. The policy recognised that transitioning existing water users would result in more water being extracted for consumptive uses than supported under the Northern Territory Water Allocation Planning Framework. In the absence of measured water extraction data, licence entitlements were determined using industry developed crop water use calculators. Actual water use is reported at around 35% of licensed allocations.

2. Problem statement

Without manageable water resource areas, realistic allocation of water for domestic purposes and water use information, management tools cannot be used confidently for the security of Darwin Rural water resources.

Without pathways to licensing, businesses are operating in non-compliance with the Water Act and without certainty.

Water management decisions need to be fair, transparent and justified.

3. Objective

Provide water security in Darwin Rural for the environment and culture and for the ongoing supply of water for domestic and commercial purposes.

4. Desired outcome

- Water resource areas are practical.
- Allocations for domestic use are realistic.
- Commercial water users in Darwin Rural are licensed.
- Licence allocations align with actual water use.
- Water use information for Darwin Rural is accurate and provides a strong basis for water allocation planning and implementation actions.
- Activating water management tools (e.g. announced allocations) in periods of predicted low levels of groundwater availability are fair and justifiable across Darwin Rural.

5. Strategy

Regulating groundwater in Darwin Rural adopts a four-fold approach:

- 1. Legislative REFORM
- 2. RECALIBRATE water allocations
- 3. REGULATE unlawful water users
- 4. RECOVER excess licence allocations.

6. Actions

6.1. Legislative REFORM

Create a pathway accelerating transition of commercial water users into the licensing framework and restricting pressure on groundwater resources.

There are still commercial entities taking water across Darwin Rural without a water extraction licence. Reforming legislation to introduce grandfathering arrangements will complete the transition of these previously exempt commercial groundwater users into a water-licensing regime.

Legislative reform will also provide the Minister the opportunity to declare Restricted Water Extraction Areas that will allow subdivisions to occur without compounding statutory rights to access groundwater and prevent people from applying for new water under a licence, excluding those previously exempt water users.

6.2. RECALIBRATE allocations

Refine water resource areas and recalibrate allocations for improved water accounting.

Reviewing the 112 management zones will also confirm the extent of connectivity between systems and provide an opportunity to establish more manageable resource areas. Where the science supports realigning the boundaries of water management zones it will also provide the opportunity to recalibrate allocations within management zones and facilitate future trading of water.

Water for domestic use is a statutory right under the Water Act. A licence is not required to take water for this purpose and there is no limit to the volume of water that may be taken and no requirement to measure this water.

Around 25% of water available for consumptive use in Darwin Rural is provided for domestic purposes. On average, each land title is apportioned 3.5ML. This estimation is derived from a limited data set of metered water information provided by volunteers prior to 2017. It is timely to revisit this information as demographics in Darwin Rural are changing and society is generally becoming more water conscience.

Education tools will be used to support domestic water efficiencies.

6.3. REGULATE unlawful water use

Compliant water use.

The department will identify and support relevant commercial water users that do not have a licence to apply for a licence in accordance with the grandfathering arrangements established through legislative reform.

Concurrently the department will address unlawful water extraction and water sharing, applying the Water Resource Division Compliance and Enforcement Policy to address non-compliance.

6.4. RECOVER excess licence allocations

Align licence allocations with actual water use.

Water data collected since 2016 indicates many licence allocations far exceed the volume of water reported as used. Nearly 90% of licences in Darwin Rural have entitlements which are not being used. This is likely a product of the absence of measured water take during the period when the 15L/sec exemption was in place and, in the absence of these measurements, generous licence allocations to ensure sufficient water was available under a licence to support ongoing activities. It is evident however, that in many cases this has resulted in granted entitlements being in excess of what was, and is, actually required.

The difference between a licence allocation and the reported water use under a licence is excess water.

Keeping excess water under a licence in Darwin Rural creates a view that water availability is less than it really is. Correcting the balance between actual take and licence allocation will lessen the apparent over allocation in many groundwater systems in Darwin Rural and, at best, will increase water availability for further development.

Excess water will be recovered applying NT Government policy e.g. *Recovery of Unused Water Policy and Procedures*.

Appendix A Strategy on a page

Department of Environment, Parks and Water Security

Darwin Rural Water Regulation Strategy 2023–26

GOAL >

Recalibrate water allocations, deter unlawful water use and reduce excess licence entitlements

WHY **>**

Quantify the volume of water use and manage water resources

OUTCOME >

Increase water security for all water users

What we are doing:

Legislative REFORM

- Accelerate transition of commercial water users into licensing
- Limit new domestic rights to water
- Restrict Water
 Extraction Areas

REGULATE unlawful water use

- Identify unlawful water extraction
- Support licence application process
- Educate, compel or enforce compliance

RECALIBRATE allocations

- Review and refine water resource areas
- Review domestic allocations
- Improve water accounting
- Promote water efficiency



- Align licence allocations with water use
- Identify and recover excess licence allocations
- Reallocate water

Water Resources Division 08 8999 4455 water.regulation@nt.gov.au



Department of **ENVIRONMENT, PARKS, AND WATER SECURITY** 3 July 2023 Page 1 of 1