

# Rain falls for free – start harvesting rain water

Given the regular frequency of wet season, rainfall rain water harvesting is a feasible option in the Top End.

Rain water harvesting involves the collection, storage and distribution of rain water from your roof, for use inside or outside the house or business.

Rain water that is captured and stored correctly is a safe, economical and sustainable source of quality water.

Tanks can be plumbed into buildings for non-drinking purposes, such as laundries and toilets and used to supplement garden irrigation or topping up pools/spas.

In many rural communities throughout Australia rain water is the only supply of water for human consumption. In the Top End most rural properties have the space for a large tank and their cost and installation is relative when compared to drilling a water bore.

## Groundwater is not limitless

Many rural residents and business rely on groundwater as their main supply of water. Water users in the Top End could benefit from rain water harvesting to supplement your groundwater or reticulated water supply. By diversifying your water supply you are able reduce your dependence on groundwater particularly during times when aquifers have not replenished. In addition to having extra water stored, natural rain water is high in quality and has no added chemicals.

## How much water do you need?

In the Northern Territory, the average family uses between 250,000 to 300,000L of water a year. With this in mind, 65% of our water is used for gardens or outdoor watering. The majority of water used inside the house is for washing and flushing toilets, that's a lot of potable water that could be replaced by using rain water.

Things you need to consider:

- how much water you use and what sized tank you require
- where to locate the tank
- size of your roof and/or shed catchment areas
- available space, guttering and downpipe locations
- additional fittings such as pumps, filters and first flush devices
- finding a rain water tank supplier and plumber
- maintaining your tank

To work out how much water you could harvest use the following formula:

Quantity of water caught =  
Roof area (m<sup>2</sup>) x monthly or annual rainfall (mm) x 0.8

Mean annual rainfall:

Darwin .....	1,700mm
Humpty Doo .....	1,500mm
Wagait Beach .....	1,667mm
Adelaide River .....	1,318mm
Pine Creek .....	1,423mm
Katherine .....	979mm
Mataranka .....	828mm



## Tank maintenance

To ensure safe drinking water, regular cleaning of your rain water tank, roof, gutters, inlets and outlet screening is essential:

- annually inspect your roof, gutters, tank inlets/outlets and screens before each wet season
- remove any leaves, droppings, dead insects etc from your roof and guttering
- clean out your tank as necessary every two years

If contamination is found or suspected, remove the contamination and disinfect your tank water through appropriate chlorination.

For more information see [www.nt.gov.au/environment/water/water-and-your-health/rain-water-tanks](http://www.nt.gov.au/environment/water/water-and-your-health/rain-water-tanks)

## Rain water tank regulations

The Department of Health is the primary authority responsible for guidance regarding the use of rain water tanks in the Territory. Considerations the department recommends before installation of rain water tanks include:

- fitting of first flush devices
- adequate screening to prevent insect breeding
- ongoing maintenance of the tank

Rain water may be collected and used as a private water supply anywhere in the Territory.

If you do have reticulated water supplied by Power and Water Corporation and this supply is connected, either directly to the rain water tank (for a top up) or through another appliance, Power and Water Corporation require a backflow prevention device to be fitted to prevent rain water entering the reticulated system. These devices must be in accordance with the Rain water Tank Design and Installation Handbook (HB230-2006) published by Standards Australia.

A building permit from the Department of Infrastructure, Planning and Logistics is not required for the installation of a rain water tank, as long as the tank stand is no greater than 600mm above ground level. In addition, rain water tanks are not subject to setback requirements.

For more information [www.nt.gov.au/water](http://www.nt.gov.au/water)