



Australian Government

WATER for the FUTURE

Choosing the right sized rainwater tank

As part of the Water for the Future initiative, the Australian Government is delivering the National Rainwater and Greywater Initiative (NRGI) Household Rebate to help people use water wisely in their everyday lives. The following information may assist you in choosing the right size rainwater tank for your location and needs.

How do I select the right rainwater tank for me?

When selecting a rainwater tank it is important to consider the average annual rainfall in your area, the water collection area (such as roof size) of your residence and what size tank is most relevant to your household needs. In addition, you should consider the planning, plumbing and public health requirements in your local area. If you are unsure of these requirements, you should contact your local council.

Rainwater tank yield

The yield of your rainwater tank is the amount of water you will be able to harvest from your rainwater tank. The yield of your rainwater tank will be influenced by the volume and timing of rainfall in your area, the volume of your rainwater tank and choices you make in using your rainwater.



Rainwater tank (M. McAulay & DSEWPaC)

Key factors influencing rainwater tank yield will vary according to the specific circumstances of your property, and may include:

- Collection area (roof size): To calculate your runoff, 1 millimetre of rain on 1m² will deliver 1 litre of water into your tank. As a rough guide:
 - An average single carport is approximately 25m²
 - The roof of an average 3 bedroom house is approximately 150m²
 - The roof of an average 4 bedroom house is approximately 200m²
 - The roof of an average 5 bedroom house is approximately 300m².
- Rainwater tank size: The size of your residence and your household needs should determine the size of the rainwater tank you choose. There are a range of products available in different shapes, sizes and materials. Generally, rainwater tanks can be classed as:
 - Small - less than 2,000L
 - Medium - between 2,000L and 10,000L
 - Large - greater than 10,000L.
- The number of occupants in the house: It makes sense to assume that the larger your household, the faster you will use your rainwater supply.
- Your internal and external water use practices: By connecting your rainwater tank for internal use in the toilet and laundry you will increase your rainwater tank's yield.
- Local climatic conditions: The rate and timing of rainfall varies significantly across Australia, as shown in the map below. The climate where you live will have an important impact on the yield of your rainwater tank. You should consider the characteristics of your seasonal rainfall zone when deciding to purchase a rainwater tank.
 - heavy tropical rains of Queensland and the Northern Territory;
 - relatively consistent year-round rainfall in Victoria, Tasmania and much of New South Wales;
 - mediterranean climates of south west Western Australia and southern South Australia, characterised by significant rainfall during winter and relatively dry summers; and
 - arid climates of north western and inland central Australia, characterised by low rainfall all year round.

Water for the Future is preparing Australia for a future with less water. The 10-year initiative is addressing four key priorities:

- Taking action on climate change
- Using water wisely
- Securing water supplies
- Supporting healthy rivers

Examples

The following scenarios are provided to illustrate how you might use this information to decide on your rainwater tank purchase.

- A couple living in Darwin in a 150m² home intend to use their rainwater tank water for flushing a Water Efficiency Labelling and Standards (WELS) rated dual-flush toilet and washing their car and a boat once a fortnight. Because they live in a highly seasonal rainfall region, they can expect to go long periods without having their rainwater tank replenished and should consider a large tank.
- A single retiree lives in a 100m² unit in Brisbane. She wants to install a rainwater tank so she can water her small rose garden and lawn, and for use in her WELS-rated washing machine. She waters her garden every second day. Because she lives in a region with a wet summer and low winter rainfall, and only has a small space in her garden for a tank, she should consider a medium sized tank.
- A family of five live in Melbourne in a 300m² home. They would like to use rainwater for their WELS 3-star rated 6/3 dual flush toilets and WELS 4-star rated washing machine. They live in a seasonal, winter dominant rainfall climate with a large roof space and should consider a large tank greater than 10,000L.

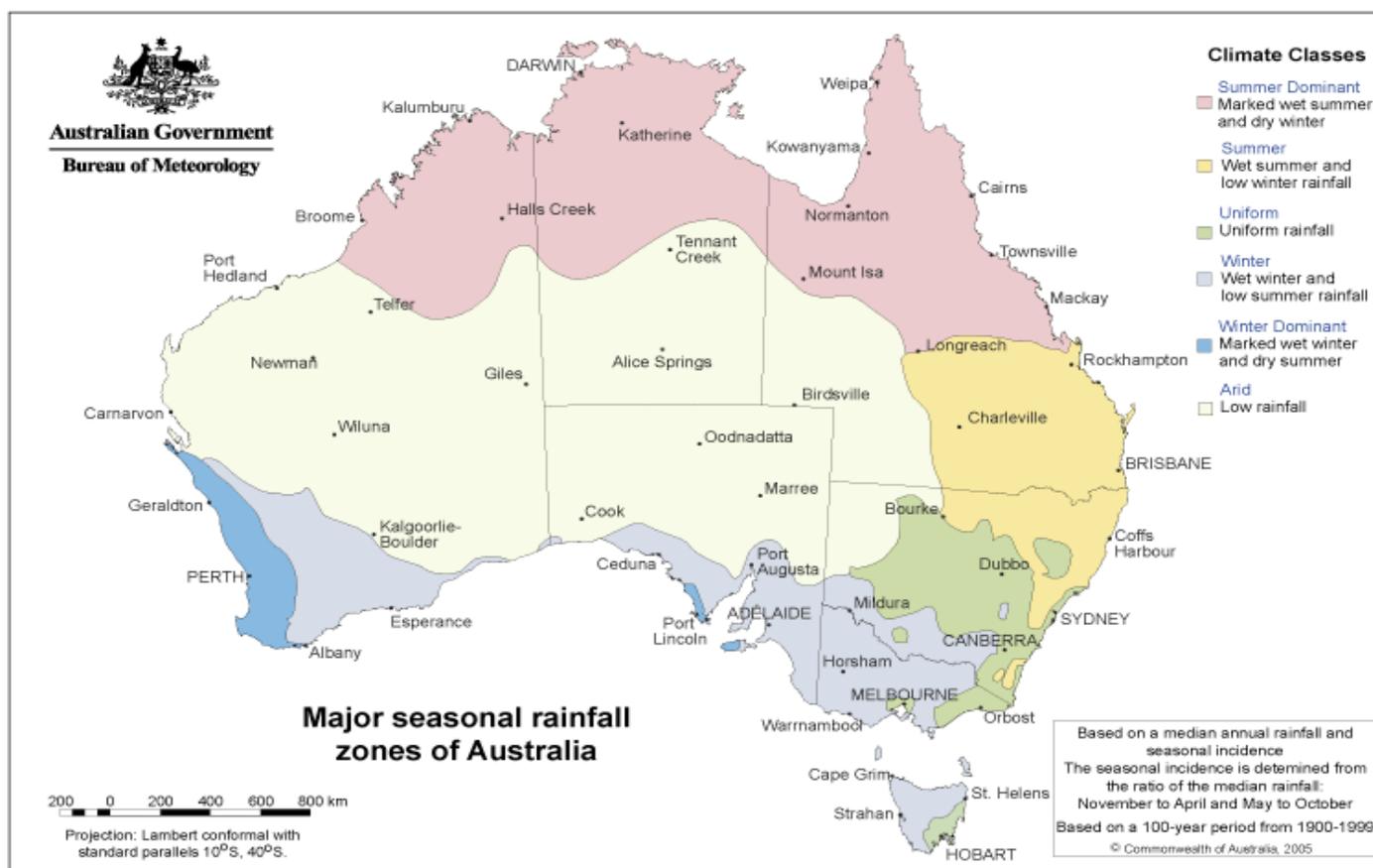
- A couple living in a 100m² home in Alice Springs want to water their small vegetable garden. Because they live in an arid climate with a small roof and limited rainfall, a greywater treatment system may be a more appropriate option for their needs.

Rainwater tanks can be made of steel, fibreglass, polyethylene, concrete, PVC/geotextile or other materials. They generally require a base or stand, leaf strainer, first-flush diverter, tap, pump and downpipe connection. In order to be eligible for the National Rainwater and Greywater Initiative Household Rebate, they must meet Australian standards and be connected by a licensed plumber for indoor use of the rainwater.

More information

For more information on the NRG Household Rebate call 1800 218 478 or email nrqi@environment.gov.au.

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Bureau of Meteorology rainfall map