

Water Quality and Conservation Program



Rainwater Tank Tips for Residents

Why should I get a rainwater tank?

Rainwater is a great environmentally friendly alternative to mains (scheme) water. Harvesting rainwater from your roof and storing it in a tank gives you a personal supply of water to use during water restrictions and can help to reduce your water bills. You can use rainwater for watering your garden, or have your tank plumbed into the house for your washing machine or flushing the toilet.



Do I need council approval?

Most local councils require that a building application be approved before a rainwater tank can be installed (this is generally dependent on product, size and location). Please check with your local council before going ahead.

What size tank will I need?

It is important to know what you will use the rainwater for. The more uses; the bigger the tank. Do you intend to use the water collected for inside or outside use, or both? Examples include: garden and lawn irrigation, toilet flushing, clothes washing, showering or bathing, and drinking.

When deciding on the best size for your tank you should also consider:

- How much water can be collected from your roof area (1mm of rainfall on 1m² of roof area = 1L of rainwater).
- What water supply security you require (a larger tank volume will mean fewer periods when rainwater is unavailable).



Use the Alternative Technology Association **Tankulator** at <http://tankulator.ata.org.au> to help work out the effect of different tank sizes on water savings.

What different tank types are available?

The type of tank you choose will depend on your site, how much water you need and your personal preferences. There are a number of different types of tanks on the market:

- Traditional, round, above-ground rainwater tanks are usually the cheapest type of prefabricated tanks per litre of volume and require a properly formed concrete slab for support.
- Slim-line tanks may be installed along a fence or at the side of your home. They usually need a properly formed concrete slab for support, depending on their height relative to their width.
- Storage walls are very slim modular slim-line tanks (typically plastic) that lock together to fit into tight spaces. They are generally the most expensive above-ground tank type.
- Underground tanks save on space and can potentially hold more water than above-ground tanks. However, this option requires excavation. There is also a requirement for a pump, which may not be needed for above-ground tanks. It should be noted that underground tanks are usually much more expensive than the above-ground tanks.
- Bladders are sealed flexible sacks that are suitable for subfloor spaces which have as little as 600 mm height clearance. While their installation is more technically involved than a standard tank, they can be a good solution when renovating where space is limited. They are usually more expensive than a standard above-ground tank and may require a registered plumber to install.



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Is rainwater safe?

The Australian Drinking Water Guidelines (2004) state that above-ground rainwater tanks generally provide a safe supply of water. However, the guidelines recommend that for household drinking water supply, emphasis should be on selecting the best quality source water available. In Perth, the Water Corporation recommends that people connected to the public water supply system use this water for drinking. Water from rainwater tanks can be directed to non-drinking uses such as irrigation or toilet flushing.



If rainwater is to be used inside the house, the Plumbing Code of Australia requires that a testable backflow prevention device is fitted on any mains water supply to the house and tested annually.

❖ How do I keep my rainwater safe?

The safety and quality of the water in your rainwater tank will depend on how you maintain it and how the water is treated. Tips to keep your rainwater safe include:

- Divert the first flush of rain from entering the tank to keep dust and pollution out. Kits are available for installation on your tank.
- Keep gutters and roofs clean and in good repair.
- Use a leaf trap and screen the gutters and tank inlet to prevent access for leaves, insects and animals.

❖ Do I need a filtration system?

If you are using the rainwater for irrigation, then no filtration system will be required. If the water is used for drinking, then the highest level of filtration will be required for health and safety.

How do I maintain my rainwater tank?

Regular maintenance is needed to ensure that your rainwater is safe for all requirements around the home, particularly for drinking uses. Design and construct the system so that the maintenance schedule can be carried out.

❖ Monthly:

- Check and clean tank inlet screens, outlet screens and leaf-shedding screens.
- Check and clean the first flush diverter.

❖ Annually:

- Check roofs and gutters and remove debris.
- Check and replace filters if necessary.
- Remove overhanging vegetation where possible.

❖ 3-5 yearly:

- De-sludge your tank.

Rainwater pumps typically need servicing or replacing after approximately 10 years of use.

Are there any rebates available?

There are currently no State government rebates for WA residents for installing a rainwater tank.

Some local councils, particularly in new developments, may offer residents sustainability rebates or rates offsets for the installation of sustainable products including rainwater tanks. Contact your local council to find out if they offer any rebates or incentives.



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