

MAINTAINING A RAINWATER TANK

Rainwater tanks play an important role in providing an alternate household water supply for your garden, toilet or even clothes washing. There are some important things to consider in maintaining a clean and functional rainwater tank system.

Mosquitoes

Tanks are often cited as attracting mosquitoes but a well maintained tank will prevent mosquitoes from breeding. Simply follow these important anti-mosquito measures:

- Tanks must have mosquito proof screens (no larger than 1mm mesh) on all outlets, overflows and other openings.
- All lids, covers and inlet downpipes must be fitted tightly to ensure mosquitoes can not enter the tank; and,
- The water should be inspected at regular intervals.
- All mosquito screening should be checked to ensure no signs of wear and tear.

For extra peace of mind, there are even treatments available that can be added to your rainwater tank to alter the surface-tension of the water, preventing mosquitoes from landing on the water to lay their eggs and destroying any larvae that may already be present.

The Rainwater Harvesting Association of Australia (RHAA) recommends that anyone with old, dated tanks should consider upgrading to an improved modern tank or seek the advice of a registered plumber or rainwater service professional to ascertain the health of their tank.

If mosquitoes are a pest around your home, look beyond the rainwater tank for common sources of open, pooled water and destroy potential breeding sites by tipping out accumulated water.



Unintended water storage devices such as cans, pot plants, buckets, wheelie bins, tyre rims and tarpaulins that have been out in the rain can make prime mozzie breeding grounds.

How often should I clean my tank?

You can reduce how often you'll need to empty and clean your tank by making sure that your gutters remain clean and that you have a first flush diverter installed. Make sure there is no sunlight getting into your tank to avoid a build-up of slime.

The Federal Government has these recommendations in the document 'Guidance on use of rainwater tanks':

A build up of sediments can lead to chemical contamination or off odour. Examine your tank for sediment every 2-3 years or when you notice sediment in the overflow. There are a number of ways you can remove sludge from the tank:

- Siphoning water using an inverted funnel at the end of a hose moved across the bottom of the tank - the siphoned sludge and water can be sent to the waste water system
- Using a suitable motor operated pump
- Completely draining and cleaning the tank. If there is a plug at the base of the tank, this can be used to discharge the water and sludge to waste. Once the tank is empty the remaining sludge can be scooped up and removed through the access opening.

There are tank cleaning businesses who can assist you with the cleaning of your tank.

Caution: You should not get inside a water tank without adequate ventilation and someone to check on you. If you need someone to clean the inside of your tank then contact a professional.

Do I need a filter?

Water used inside the house will be enhanced by including a filter to ensure that any odour, sediment or discolouration in the tank won't have a detrimental effect on appliances or laundered clothing. Using a filter can also protect your pump from sediment build up. There are a variety of different filter media available:

- Activated carbon
- Sediment filtration
- Fine micron filtration
- Membrane filtration

There are also chemical treatment options that include chlorine, bromine and hydrogen peroxide.

It's important to make sure the filtration method you choose is the most suitable for your rainwater harvesting system and intended usage – your supplier or a licensed plumber will be able to advise you on the best filtration package for your home.

Which pump should I use?

The type of pump you require will depend on a range of factors, like:

- How steep your property is
- How far you need to pump the water
- What you're using the water from your tank for

There are also devices that go on your pump which will automatically switch back to mains water if your rainwater tank runs dry. A licensed plumber will be in the best position to look at your property and provide information on the right pump for you.

How do I maintain my pump?

Most pumps will usually come with a manual from the manufacturer, which should have information on how to maintain your pump and how regularly it needs servicing. If you no longer have the manual, you should be able to locate one on the manufacturer's website.

If your pump has a pressure tank, check the pressure every 6 months. You should consult your pump manual if you notice any of the following occurring:

- Motor runs but no pumping occurs
- The pump switches on and off frequently
- The motor doesn't start when the pump is switched on

Trickle top up systems

Some rainwater tank installations include a float valve inside that the tank which is used to detect the water level. When the water level gets too low, the float valve will trigger a trickle top up for the tank from mains water. It is important to check on this float to ensure it is sitting at water level to prevent the tank from overflowing with mains water. If the float gets stuck you should contact a plumber immediately. Trickle top up systems are not recommended for new tank installations.

Additional information

- Rainwater Harvesting Association of Australia
www.rainwaterharvesting.org.au
- EnHealth document, Guidance on Use of Rainwater Tanks, 2011
www.health.gov.au