



Rainwater Harvesting

Why harvest rainwater?

In a city, most rainwater flows off hard surfaces, via our stormwater system into our rivers and oceans. This stormwater carries pollutants that impact negatively on our natural eco systems.

Harvesting rainwater helps us to reduce this runoff and pollution as well as conserve our drinking water by using harvested rainwater for non-drinking purposes such as in the garden, the pool, the laundry, in hot water systems and flushing the toilet.

NSW Health does not recommend the use of rainwater for drinking in urban areas.

How can I harvest my rainwater?

Rainwater can be diverted directly to your garden or pool or stored in a tank for later use.

What approvals will I need?

If purchasing and installing a rainwater tank in NSW you will need to refer to State Environmental Planning Policy No. 4 Reg 16. This policy dictates when rainwater tanks are exempt from the development application process for single dwellings and schools. We recommend contacting your local council to discuss the required planning approvals for your site.

Note: When connecting rainwater to the mains additional approvals are required.

How can I choose my rainwater tank?

Tanks are available in a variety of colours, shapes, sizes and materials. Careful consideration should be given to the type of tank you choose and will be dependent on your water use and needs, rainfall and roof area, the space you have available and your budget.

Shapes include:

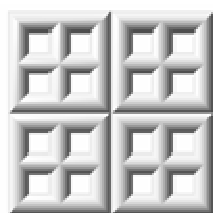
Slim Line



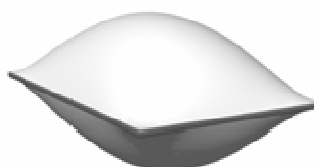
Round



Modular



Bladder



Gutter



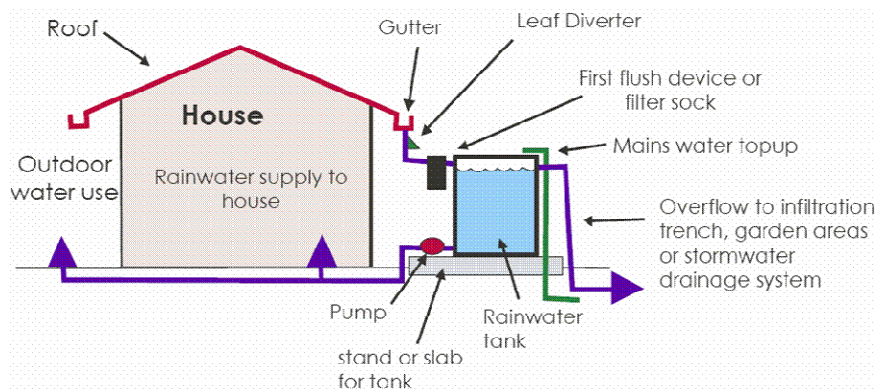


Materials include:

Material	Pros & Cons
Polyethylene	Durable, UV resistant, light & easy to transport, non-corrosive alleviating the need for a stand in some cases & easy addition of outlets.
Metal	Light & easy to transport, can be custom made, suitable above or below ground, recyclable material. Attention must be paid to quality and linings for rust prevention and durability.
Concrete	Durable, suitable above or below ground, keeps water cool and minimises algal growth. May require flushing before use to remove grit and lime.
Fibre Glass	Light & easy to transport, tolerant of extreme temperatures, resistant to rust and chemical corrosion. Best placed above ground, can be expensive, need to ensure light is not able to penetrate.

What do I need with my tank?

A rainwater harvesting system can be very simple or contain many additional components. Your system requirements will be dependent on your site as well as your intended use of the harvested rainwater. Accessories may include:



What is a First Flush Device?

A First Flush Device prevents the first portion of run-off from entering the tank reducing the amount of sediment and other pollutants. This first portion of run-off is instead diverted to stormwater. Gutter guards also assist in minimising sediment flow to the tank. Insect screens should cover all tank openings to prevent the breeding of mosquitoes.



What is a Backflow Prevention Device?

A Backflow Prevention Device prevents rainwater from your tank mixing with the drinking water supply when the tank has been connected to the mains. For most Sydney residents, Sydney Water will provide a Backflow Prevention Device free of charge with an above ground tank and an accessible, standard sized water metre. Underground tanks may be required to install testable and additional Backflow Prevention Devices. For information on requirements contact Sydney Water on 13 20 92.

When would I need a mains water top up?

When using your rainwater for indoor water use you will need to ensure minimum water levels are maintained in your tank, requiring a plumber to install a top-up system or tank control valve which automatically switches to mains water when the tank is empty.

When would I need a pump?

A pump is required when your tank is not high enough for gravity to provide the required water pressure. Low voltage pumps are generally adequate, safe, quiet and efficient to run. Check with your tank supplier or plumber/installer for suitable available pumps including solar powered.

Will my tank require maintenance?

NSW Health recommends proper maintenance of the entire rainwater tank system every 3 to 4 months and especially before the season when heavy rain is expected. To ensure a safe supply of water, maintenance should involve inspection and clearing of debris and cleaning of screens as well as inspection of water for the presence of mosquitoes.

Furthermore, it is recommended that tanks be checked for sludge at least every 2 to 3 years. If sludge is present it should be removed by siphoning or complete emptying of the tank.

To ensure protection for yourself and your tank it is advised that you check with your tank supplier on the best methods for maintenance.

How do I install the rainwater tank system?

The complexity of installation will depend on your system. Tanks should not be installed within a Sydney Water easement or over a sewer access point. All



overflow must run safely to the stormwater system. Any tank connected to the Sydney Water mains supply must comply with Sydney Water's Rainwater Tank Plumbing Guidelines available at www.sydneywater.com.au. Consultation with your Local Council, plumber and/or tank supplier is recommended.

How much will a rainwater tank system cost?

Again, the cost will depend on the chosen system. It is important to contact a number of different suppliers to compare price and service.

Rebates and subsidies are available through Sydney Water.

Conditions	<ul style="list-style-type: none"> Must be a household and Sydney water customer. Rainwater tanks installed to comply with the Building Sustainability Index for new homes, major renovations or pool installation are not eligible for the Rainwater Tank Rebate.
How to apply	<ul style="list-style-type: none"> Contact Sydney Water 13 20 92 or visit their website www.sydneywater.com.au The Rainwater Tank Rebate is available through Sydney Water within its area of operation and the Department of Environment and Climate Change NSW in other areas of New South Wales.

Rebates available:

Tank(s) Capacity	Rebate	Connection to Toilet(s)	Connection to Washing Machine(s)	Maximum Total
2,000 – 3,999 litres	\$150	\$500	\$500	\$1150
4,000 – 6,999 litres	\$400	\$500	\$500	\$1400
7,000 litres and above	\$500	\$500	\$500	\$1500

References & Further Resources

The Watershed Sustainability resource Centre, 218 King Street Newtown, 9519 6366

Sydney Water, www.sydneywater.com.au or 132092

NSW Health, www.health.nsw.gov.au

Enviroplumber, www.enviroplumber.com.au

YourHome www.yourhome.gov.au

GreenPages www.greenpagesaustralia.com.au

Your Local Council for information on planning approvals.