

What is Stormwater Detention and Why Detain Stormwater?

When building a new home, local regulations might require you plan for and detain stormwater on your property. [In a related article](#), we explored whether you need to detain stormwater and common requirements. This article just explains stormwater detention, what it is and why it is necessary for some properties to have.

What is Stormwater?

Before understanding “stormwater detention” it is best to first know what “stormwater” is. Isn’t stormwater created in storms from rain, so technically “rainwater”? Yes, but rainwater is commonly defined as stormwater once it hits the ground.

Unlike “rainwater”, which often refers to rain falling on rooftops and is of a higher water quality, “stormwater” is rain that meets ground surfaces. For example, what starts out as “rainwater” harvested from rooftops into a rainwater tank, becomes “stormwater” should it overflow from that tank onto the ground or into a drain.

What is Stormwater Detention?

Buildings in residential and commercial districts often need to plan for and meet [local stormwater detention requirements](#). What is “stormwater detention” though?

Stormwater detention is where rain water flowing across ground surface areas such as driveways, paths, pebble rock, and the like, or water otherwise headed for the stormwater drain, is captured and stored before being released. Generally, stormwater is detained in a special water tank fitted with a slow-release valve that allows the water to slowly drain.

There are two tank options with stormwater detention:

1. Two [water tanks](#), one to harvest rainwater and the other for stormwater detention,
2. Dual compartment tank, one for storing water, the other with a slow release valve for emptying detained stormwater.

Why Detain Stormwater?

It might seem wasteful allowing otherwise high-quality rainwater to drain slowly away. Why not just buy a larger rainwater tank to store *ALL* the rainwater?

Some councils will allow higher tank capacities or swimming pools to replace “stormwater detention” methods of tanks. Other councils will require a stormwater detention system to be implemented. It really depends upon the council and rainfall patterns in your area.

The logic comes with understanding that during heavy periods of rain, the rain after pouring down will often pause, and then return an hour or so later. When it pours, it really pours, but then the rain subsides, before pouring down again. Understanding this, rainwater tanks will quickly fill up, perhaps even in the first downpour. This renders them useless in consecutive downpours.

Since a stormwater detention tank is intended to always empty it will be prepared to store more water in consecutive downpours. So, if a storm stops pouring down rain for an hour or two, it should be ready to detain another 2,000 litres of water by the time the storm returns. This allows the stormwater drainage network in your area to better manage water runoff caused during heavy storms.

Web version (current):

[https://www.clarktanks.com.au/knowledge-base/
what-is-stormwater-detention-and-why-detain-stormwater/](https://www.clarktanks.com.au/knowledge-base/what-is-stormwater-detention-and-why-detain-stormwater/)

Visit our knowledge base for more articles:

<https://www.clarktanks.com.au/knowledge-base>

Clark Tanks is committed to providing quality tanks and products designed to meet the needs of Australian home owners, farmers and industries. When you invest in a product to do an important job, you want to know your investment is a good one. Our friendly staff are happy to advise and provide a competitive solution that meets your needs.

Phone: 1800 252 758 **Website:** www.clarktanks.com.au

Disclaimer: The information in this document is general and provided solely on the basis that users will take responsibility for verifying the accuracy, currency and completeness of all relevant representations, statements and information. No user should act on the basis of any matter contained in this publication without considering and, if necessary, taking appropriate professional advice upon his or her own particular circumstances.

While Clark Tanks tries to ensure that the content and information is accurate, adequate or complete, it does not represent or warrant its accuracy, adequacy or completeness. Clark Tanks and any associates are not responsible for any loss suffered as a result of or in relation to the use of this information. To the extent permitted by law, Clark Tanks excludes any liability, including any liability for negligence, for any loss, including indirect or consequential damages arising from or in relation to the use of this information.



This article by [Clark Tanks](#) is licensed under a [Creative Commons Attribution-NonCommercial 3.0 Australia license](#).

You are free to copy and redistribute the material in any medium or format under the following conditions:

1. **Attribution** – You must give credit to Clark Tanks, provide a link to the Web version of this article or to <https://www.clarktanks.com.au/>, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
2. **No Derivative Works** – If you remix, transform, or build upon the material, you may not distribute the modified material.



You get more out of a Clark Tank

Clark Tanks is the country's premier brand of polymer rainwater tanks. Manufacturing since 1997, Clark Tanks are designed and built to last in tough Australian conditions. As an Australian owned and operated company, Clark Tanks is committed to providing quality products designed to meet the needs of rural and residential Australia.

Contact us today for a FREE quote 1800 252 758

www.clarktanks.com.au

Dalby Service Centre
18304 Warrego Hwy
Dalby QLD 4405
P (07) 4660 6800
F (07) 4669 8041

Bathurst Service Centre
1 Cardiff Place
Bathurst NSW 2795
P (02) 6334 2720
F (02) 6334 2750

Moama Service Centre
2 Dawson Street
Moama NSW 2731 (Echuca VIC)
P (03) 5480 0900
F (03) 5480 0600