Brisbane Maintenance Experts

Spring 2014

Water Tanks in the Sunshine State

Avoiding Trouble with your Tank

Living in Queensland usually brings to mind golden beaches, blue skies, rolling waves, and balmy afternoons by the pool. Right? Well, sometimes… but living in Queensland also means humidity, heat, lack of rainfall, creepy crawlies and, best of all, mosquitoes! Water tanks are a great way to avoid drought and help us to be a water-smart state. During more fortunate times of rain, we cannot become complacent and take for granted that the water will last forever, because it won't. Enter the rainwater tank – and the mosquitoes that could potentially come with it! Having a rainwater tank is great for the environment and the community when properly used, maintained and cared for, BUT the collection of rainwater is LOW maintenance, not NO maintenance! So let's look at some ways to keep your rainwater tank (and the water in it) safe and clean.

Tank Talk

Rainwater tanks play an important role in reducing stormwater, improving local creek water quality and habitat, and preventing the overuse and wastage of precious water supplies. In some circumstances, rainwater from tanks is considered safe for drinking and cooking, but Brisbane City Council does not recommend the use of rainwater for drinking, cooking or potable purposes, because rainwater cleanliness and quality can vary from tank to tank. According to guidelines and regulations in Brisbane, the only internal uses for rainwater then, are toilet flushing and cold water washing machine taps. Additionally, all pipes and fittings that connect a rainwater tank to the roof, household fixtures or stormwater systems are to comply with plumbing and building standards.

Rainwater tanks come in all types, shapes and sizes. They can be made of zincalume steel, concrete, fibreglass or plastic. They can be underground or above ground. Proper installation of the rainwater tank is important to ensure the water collected is clean and safe. For example, every access point (except for the inlet and overflow) should be sealed; the inlet should have a mesh cover and strainer to keep debris, mosquitoes and other insects out of the tank; and the overflow should also have an insect-proof covering.

Catchment maintenance – it all starts at the top!

The catchment area for most water tanks is the roof of the home. Most roof types are suitable for these purposes, although those painted with lead-based paints or bitumen-based material are not. The composition of gutters and flashing should also be considered. Probably the most important thing to remember about the catchment is that your gutters and downpipes need to be kept clean and debris-free if they are to work properly. Regular cleaning and maintenance of your guttering and downpipes (and your roof in general) will prevent back-up, overflow, leaks, and erosion of the tank site, as well as the breeding of mosquitoes and wrigglers.

Looking After Your Tank

When it comes to caring for the tank itself, there are a few things you can do to keep it in good working condition and prevent nasty bacteria and mosquito growth. Firstly, let's look at some components of a rainwater system that help with easy maintenance.

Inlet leaf strainer

This is essentially a fly screen over the inlet which allows water to pass through while filtering any other debris out.

Tank lid

A lid on your tank keeps nasties out! It is important to make sure that things aren't placed on the lid, or debris is allowed to accumulate on the lid though, because it can become wedged.

Sediment filters

These are required if the rainwater tank is connected to internal toilets. This filter should be replaced every 6-12 months.

Carbon block filters

This is necessary when the tank system is connected to the washing machine, as it helps to remove water discolouration. Again, these filters should be replaced every 6-12 months.

Leaf eater rainheads

Not all systems require these, but if they are installed it will be at the top of the downpipes. They contain two filters, each of which need to be regularly checked and cleared of debris.

First flush diverters

Again, not all systems will have these, but if yours does, the filter should be removed and cleaned on occasion.

So, what exactly does tank cleaning involve? And how often should it be done? There are a few key areas of your water tank system that should be looked at regularly:

External surfaces

It pays to hose down the outside of the tank from time to time, because it helps to stop dirt and debris build up.

Base area

All rainwater tanks need to be supported by a flat, level base. Weeds and plants should not be allowed to overgrow the base, and the concrete slab should be inspected every 6 months for movement or damage.

Pump system

Each pump will come with its own set of instructions and maintenance procedures, so keep these handy and check them out when next inspecting your tank.

The inside of the tank

Over time, it is normal for sediment to build up along the bottom of the tank. This sediment shouldn't be disturbed or removed until the layer is about 20mm thick (which can take years and years depending where you live). A professional tank cleaning company can assess and clean the inside of your tank when the need arises (normally every 2-3 years).

Some of you may be asking… Why is this all so important? Especially when we aren't even drinking the water?!?!?! One reason that water tank maintenance is important is because without it, we can create problems with smelly and contaminated water. This environment breeds a host of bacteria and other nasties which can lead to many environmental and health issues. An excess of leaves in guttering can create smelly water, so keeping the gutters and leaf strainer clear is the best way to avoid this. A small amount of chlorine can also be added to the tank to eliminate any odours.

Mosquitoes are another major reason why water tank maintenance is important. Mosquitoes and wrigglers will breed in sagging and leaf-clogged gutters, so again, maintaining these catchments are an important first point of call. No one wants disease-carrying mosquitoes in their backyard, so by ensuring there is no debris in the tank, preventing water from pooling in guttering, making sure water does not pool on the tank lid, and sealing all entry routes to the tank with mosquito-proof screens, you are well on your way to keeping a mosquito-free water tank zone.

As with any home maintenance, keeping your rainwater storage system in good condition will extend the life of the system and preserve the quality of the water. A rainwater storage system is a valuable investment and requires some regular TLC to avoid any costly repair work in the future.

Further Information:

- *TankWorks – 'Water Tactics'*
- *Brisbane City Council – 'Using Your Water Tank' & 'Approvals and Standards'*
- *PJT Green Plumbing – 'Maintenance Guide'*
- *SA Health – 'Rainwater Tanks: Maintenance and water care'*