

# The Ultimate Guide to Greywater Systems

If you've been thinking about how you can make your home more eco-friendly and save water, a greywater system is a great way to literally reuse and save thousands of litres of water a year from being wasted.

Think for a moment how often you turn the taps on in your home. Every time you wash your hands or start the shower and wait for it to get warm. Every time you rinse a dish or run the washing machine, hundreds of litres of perfectly usable water gets washed away from your home, into storm drains, then onto treatment plants and then more often than not, diverted back into the ocean, river systems or creeks in and around your city or town.

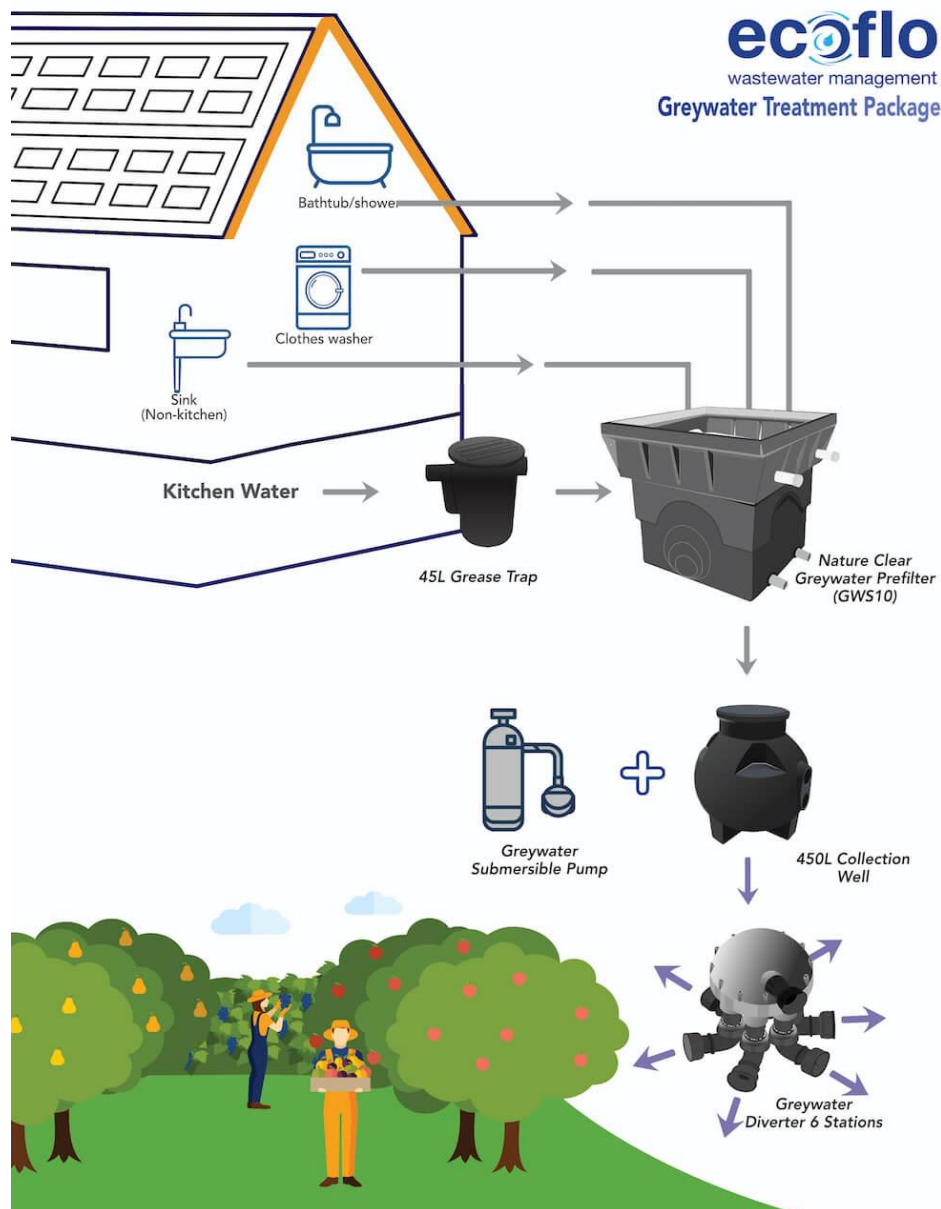
If you've ever lived through water restrictions implemented by your local council, you will know just how much of a precious commodity water really is. Greywater systems enable citizens just like you to take back control of the water they are potentially wasting and use it in and around their homes instead of letting it flow away down the street.

## So what exactly is greywater?

First things first, any water from your toilet system isn't classified as Grey Water, this is technically called Black Water. Different councils have different requirements on how Black Water is to be dealt with. If you have a composting toilet, you won't need to worry about this as you're taking control over the waste produced by your household and can focus purely on Grey Water from other areas of your home.

Grey Water is any water that is untreated that hasn't come into contact with a sewer system. This means all the water from your shower, laundry, kitchen and bathrooms (discounting the toilet) is classified as Grey Water.

Note: Depending on your Grey Water system, it's usually advisable to have a grease trap if you're going to include kitchen Grey Water in your system. Water from kitchens have fats and oils from cooking that can harm the makeup of your soil and cause damage to plants along with clogging leach lines and connections which the grease trap will help reduce.



## I've heard Grey Water is bad for your backyard?

Ultimately the type of Grey Water you have being pumped into your backyard will be determined by two factors – what you put into your water and how you filter it.

If you're using lots of harsh chemicals and soaps in your washing (bleach, bath salts, chlorine, acids and anything containing boron for example) this may have an impact on your greywater's usefulness without proper filtering. Really, the two major impacting factors for the health of your soil are salt and PH levels.

### Salt

Salt build up in your soil can be particularly harmful. This is why in biblical stories, armies would conquer a city and salt the earth so nothing would grow. If we're going to get technical, the type of salt used in detergents etc does make a difference.

There are several types of salt compounds (Sodium Chloride, Potassium Dichromate, Calcium Chloride, Sodium Bisulfate and Copper Sulfate for example) and it's really the sodium-based salts you want to be avoiding.

Many powdered detergents and fabric softeners will use sodium salts as a bulking agent so it's worth checking the back of the pack before you buy. If you're looking for low sodium washing powders, take a look at the concentrated powders and liquid detergents as these tend to have less sodium in them, but again, it's always wise to check the back of the packet to see what makes up the ingredients of your detergents before using them in your wash.

#### pH Levels

Depending on the types of plants and garden you have will determine if you need a more acidic or more alkaline type of soil. You may even have different areas of your garden that are more acidic, alkaline or neutral and this will affect where and what type of greywater you add to your gardens.

What part of your home your Grey Water comes from will also affect the alkalinity or acidity of the water. For example, shower water tends to be fairly neutral whereas water from your washing machine tends to lean more towards being alkaline.

The best solution is to monitor the pH levels of your gardens, particularly if you're using Grey Water on fruits, vegetables and herbs.

#### Other considerations

The salt levels and pH structure of your soil are really your two main areas to monitor when using Grey Water on your gardens, but there are other elements to look out for that can potentially be harmful to your plants. Some oils and fats can impact negatively on your soil, in particular oils from shampoos that use eucalyptus or tea tree oil and some toothpaste.

### What types of Grey Water Systems are available?

Generally speaking, there are two types of Grey Water systems available from Ecoflo – diversion only systems and diversion and filtration systems. Ecoflo can supply products that will encompass both types of systems.

#### **Diversion only**

This works pretty much exactly as the name indicates. This simply diverts water from your home into your garden. Note: be careful attaching a hose to your washing machine as this can lead to too much water being forced into your garden (overwatering) and burn out of your washing machine pump as pumps used in residential washing machines are only designed to pump water a very short distance.

Diversion Grey Water systems are usually for people that want to use Grey Water on an irregular basis and are typically the cheapest and easiest to set up.

If you want a little more control over the quality and flow of the water you add to your gardens, we suggest looking at the system below.

### **Diversion and Filtration Grey Water Systems**



If you're going to be using Grey Water on your gardens on a regular basis it's advisable to (at a very minimum) filter your water. Our [grease traps](#) and [Nature Clear Sand Prefilter GWS10 systems](#) are good examples of Grey Water filters that will help eliminate things like hair, lint and other contaminants from clogging up your watering systems (particularly if you're using a drip system). The sand filter catches still finer materials, polishes the water and reduces the organic content of the water. The pine bark is separated from the sand by filter cloth.

What happens with excess water from a Grey Water system?

If you live with a large family or have a high level of water usage and are concerned about overwatering of your garden, you can always look at a [collection well](#) along with [diverter stations](#). This enables you to store filtered water for a short period of time and easily divert it to your required destination.

What are some practical tips when thinking about or using Grey Water?

- If you're unsure about something, feel free to call us at any stage
- Wash your hands after dealing with Grey Water
- Don't use Grey Water on vegetables and herbs that are eaten raw
- Make sure if you're using kitchen water, it's treated
- Don't use Grey Water that's hot, this can kill all the good organisms in your soil
- Use garden-friendly cleaning products if you're installing a Grey Water system
- Don't use water that cleans cloth nappies in your Grey Water system

In conclusion

Installing a Grey Water system is a great way to save water, particularly when you live in the driest continent on earth! If you've still got questions or are unsure about any of our products, how they work, how they're installed or how to purchase, please feel free to call one of our team to talk about Grey Water systems today!