

# Grey Water FAQs

Huntersbrook House  
Hoggs Lane  
Purton  
Wiltshire SN5 4HQ

Tel: 01793 772277  
Fax: 01793 474715  
enquiries@RainWindSun.com  
www.RainWindSun.com

## What is grey water?

Grey water is any waste water that has not been mixed with toilet water. It comes from various sources such as, kitchens, baths, hand basins, washing machines and dishwashers.

## What can I use grey water for?

Grey water is easily and safely re-used in the garden but you may need to wait for the grey water to cool before watering your garden. Grey water contains nutrients and is potentially useful in its own right as a fertiliser.

## Is grey water safe?

Although grey water 'sounds' much cleaner than black water, it has its own erratic qualities and problems and these need to be understood if it is to be successfully re-used in the garden. The grey water from baths, showers, and washing machines contains pathogenic organisms that multiply rapidly if the water is stored for more than 24 hours in warm conditions. The water does not smell too much when first generated, but if stored for more than a day or so it may become very smelly. When storing in a water butt, do not store for extended periods or in very warm weather.

## What about grease?

Most of this comes from the kitchen, and when the water runs down the drain it is usually warm and the grease is in fine particles. As the water cools, the grease solidifies and adheres to the sides of pipes and consolidates with other lumps of grease, making impervious mats. Grease is one of the most difficult problems to overcome in grey water re-use, possible solutions are to avoid re-using kitchen water. If you do use the kitchen water do not store it, use quickly and use while the grease is still in suspension.

## What about solid stuff?

These include food wastes from the kitchen sink and dishwashers, lint from washing machines, hair from baths and showers, and grit from several sources. They can clog pipes, pumps and treatment systems; a possible solution is to pass the water through a straw trap.

## **Why not re-use it in the home?**

Grey water contains bacteria and a nutrient source, and is often discharged warm, so you have an ideal situation for pathogens to multiply. Storing this water for re-use involves lots of treatment, and even then it will only be suitable for non-potable purposes such as toilet flushing.

Commercially available grey water recycling systems use disinfectants which are often very energy intensive to produce and which may also cause problems if you have a private sewage treatment system.

All independently published case studies of installed systems have shown running costs higher than that of mains water supply. Given the infrastructure requirements and the disinfectant doses needed, it is very difficult to see these systems as environmentally friendly, especially for individual households.

Grey water recycling is still a relatively young technology, and as such should improve with time, but shortages of water in the UK would have to become much more acute to justify domestic grey water systems. Advances in water treatment technologies may in future allow heavily contaminated water like grey water to be cleaned to suitable standards fairly cheaply - but the environmental impacts of this treatment might still be high. Currently, grey water is best used in the garden.

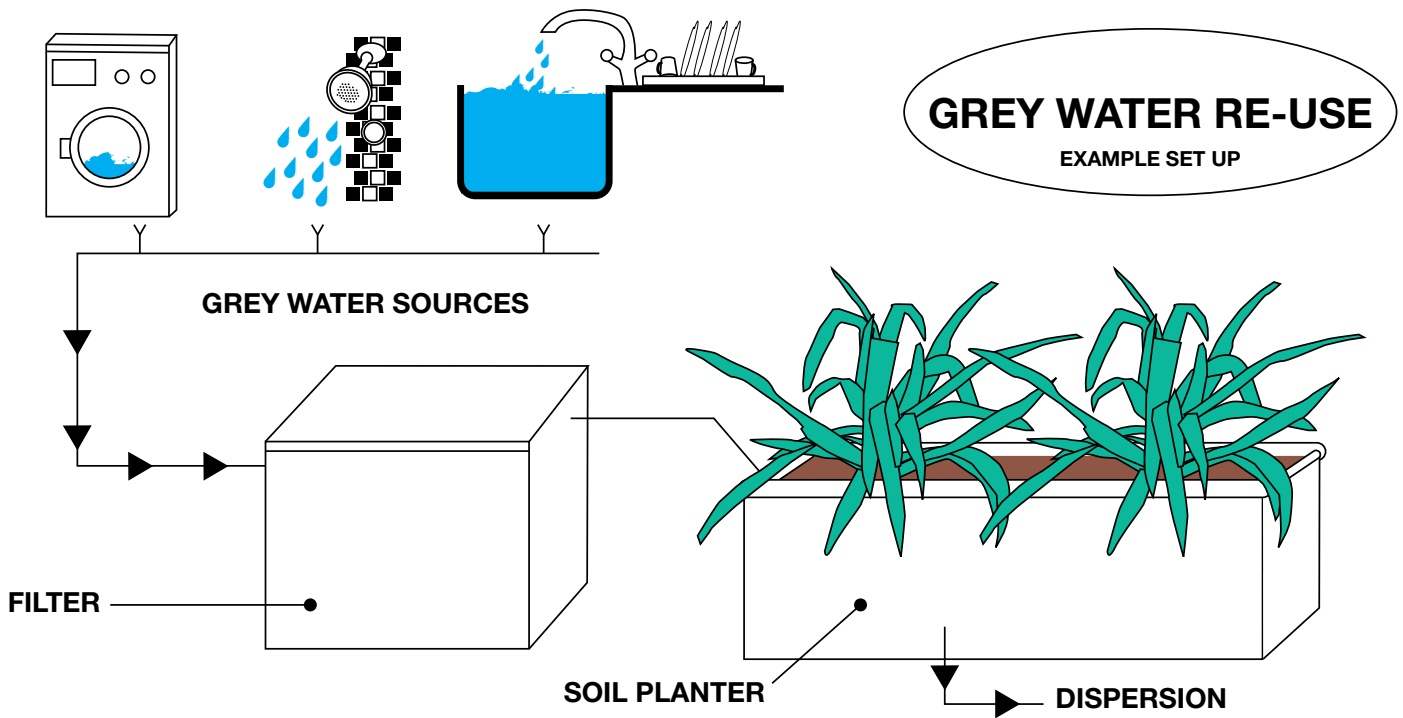
## **Do any regulations apply?**

The Water Supply Regulations 1999 impose legal requirements for backflow protection of any public mains supply “back up” connection. They also place an obligation on installers not to allow cross-connection of mains-fed pipework with pipes carrying recycled water, and to clearly mark the pipes to distinguish recycled water from mains derived water.

## **Can I improve Grey Water quality by using different types of soaps, detergents, etc.?**

The choice of cleaning products can reduce the environmental impact of Grey Water. Common washing powders contain sodium salts as bulking agents that produces a saline (salty) Grey Water. Some detergents and powder cleansers contain boron that can be toxic to plants in high concentration. It is recommended that for clothes washing you select products low in sodium: either liquid concentrates or powdered products that use potassium salts. There are websites that list the sodium content of a range of laundry products.

# How It Works...



Article downloaded from: <http://www.RainWindSun.com/faqs/grey-water.html>

For the latest information, please visit [www.RainWindSun.com](http://www.RainWindSun.com)