

# Rainwater and Grey Water Harvesting



BUILDING A SUSTAINABLE COMMUNITY

Woking LA 21 do not endorse any of these suppliers. List is for information only.

When grey water is recycled it should not be kept for more than 24 hours before discharging on the garden, unless it has been filtered/treated.

Please note uncovered water-butts can be dangerous for pets and wild animals.

## Rainwater harvesting

Rainwater harvesting can mean anything from:

- collecting water in butts and using it to water garden plants (if filtered, also for car washing)
- to
- collecting rainwater in an underground tank and using it in the house for toilet flushing, clothes washing etc

Most arrangements just collect rainwater from the roof, but it is possible to collect water from driveways or other hard landscaping. Collecting water from the ground is more difficult and expensive, and the water will almost certainly have to be treated to deal with contamination.

The Environment Agency has a short document on rainwater systems at:

[www.environment-agency.gov.uk/subjects/waterres/511050/?version=1&lang=e](http://www.environment-agency.gov.uk/subjects/waterres/511050/?version=1&lang=e)

and a more detailed report at:

[www.environment-agency.gov.uk/commondata/acrobat/rainharvest\\_june04\\_809069.pdf](http://www.environment-agency.gov.uk/commondata/acrobat/rainharvest_june04_809069.pdf)

The Centre for Alternative Technology's fact sheet about rainwater use is at:

[www.cat.org.uk/information/catinfo.tmpl?command=search&db=catinfo.db&eqSKUdataarg=20020925160005](http://www.cat.org.uk/information/catinfo.tmpl?command=search&db=catinfo.db&eqSKUdataarg=20020925160005)

and they have a magazine article on the subject at:

[www.cat.org.uk/catpubs/article.tmpl?sku=art9](http://www.cat.org.uk/catpubs/article.tmpl?sku=art9)

**“The Water Book – find it, move it, store it, clean it... use it”** By Judith Thornton.  
Centre For Alternative Technology (CAT)  
**ISBN 978-1-902175-49-2 Retail Price £12.00**

[www.cat.org.uk/catpubs/pubs\\_content.tpl?subdir=catpubs&sku=PUBS\\_25&key=wb](http://www.cat.org.uk/catpubs/pubs_content.tpl?subdir=catpubs&sku=PUBS_25&key=wb)

### Local residents' experience

- A large scale rainwater harvesting system:

*“Supplier/installer: Water Support Services, Dorchester  
Rainwater Harvesting System. 7,000 litre underground storage tank, takes rainwater from downpipes, filters it and pumps it back into the domestic water supply. Fully automatic system, with mains top up if necessary. Completely trouble-free so far.*

*Water used to flush toilets, clothes washing machine, garden pond top-up, general garden use, car washing etc.*

*Reduces our mains water usage by at least one third, possibly up to a half (recently installed, first mains water bill not yet received).*

*A major and expensive installation - looking to the future. Only possible if you are re-landscaping your garden or have a very large garden. Installation works quite disruptive.”*

- An alternative approach taken by another Woking resident:

*“I have not so far installed water butts, as I try to garden in such a way that plants do not need watering, primarily because this saves me time. I plant out in the autumn or early spring, use appropriate plants and mulching techniques, and if a plant dies because of drought I replace it with something more tolerant of drought. The only plants I water are salad crops – I use left-over rinsing water from the kitchen, or water run into a bucket while the shower water gets warm enough.”*

### DIY suggestions

- To deal with overflow from butts - add a hosepipe fitted near the top of one butt to link to another one, or to a drain.
- Check out local builders merchant who may sell old jam vats which are like large water-butts, for about £6-£10.
- Check out Ebay for various alternatives to Garden Centre rainwater butts, e.g. IBC tanks

### **Suppliers of butts etc for harvesting rainwater**

- The Water Butt shop  
[www.thewaterbuttshop.co.uk](http://www.thewaterbuttshop.co.uk)
- The Tank Exchange  
63 Tower Street. Barnsley, South Yorkshire. S70 1QS Tel: 08704 670706  
[www.thetankexchange.com/home.htm](http://www.thetankexchange.com/home.htm)
- Smiths of the Forest of Dean Ltd  
[www.smithsofthedean.co.uk/](http://www.smithsofthedean.co.uk/) Tel 01594 833308
- Low cost systems for rainwater harvesting in the garden:  
[www.rainharvesting.co.uk/pages/systems/systs\\_grdn.html](http://www.rainharvesting.co.uk/pages/systems/systs_grdn.html)
- For a comprehensive list of rainwater harvesting suppliers:  
[www.renewableenergycentre.co.uk/rainwater-harvesting/rainwater-harvesting-equipment-suppliers/](http://www.renewableenergycentre.co.uk/rainwater-harvesting/rainwater-harvesting-equipment-suppliers/)
- Gardena rain water tank pump for about £70 available at garden centres. Described on website [www.gardena.com](http://www.gardena.com):  
  
For running a watering nozzle or gun, or a Micro-Drip-System using stored water from a rainwater tank or water butt. Can also be used to fill watering cans. Suitable for pumping mains water and clean rainwater. The quiet electric pump is suspended in the water and has an integrated dirt filter.

## Greywater reuse

**Greywater** is water from personal washing that can be used for garden watering, or with suitable treatment can be stored and used for toilet flushing. The waste water from kitchen sinks and dishwashers is not usually collected as it is too heavily contaminated. Discuss grey water use in the house with Building Control (Woking BC) before going ahead with any installation.

Don't use it for watering leafy vegetables and be careful to only water roots of fruit bushes.

- The Environment Agency has a leaflet on grey water use in the home at:

[www.environment-agency.gov.uk/commondata/105385/greywater\\_880769.pdf](http://www.environment-agency.gov.uk/commondata/105385/greywater_880769.pdf)

and a list of system suppliers / installers at:

[www.environment-agency.gov.uk/commondata/105385/cwb3\\_suppliers\\_876139.pdf](http://www.environment-agency.gov.uk/commondata/105385/cwb3_suppliers_876139.pdf)

- The Horticultural Trades Association has a leaflet on the use of grey water for watering outside, including the use of softened water

[http://www.the-hta.org.uk/uploaded\\_files/1828/downloads/Greywater%20-%20consumer%20information.pdf](http://www.the-hta.org.uk/uploaded_files/1828/downloads/Greywater%20-%20consumer%20information.pdf)

### Simple syphons and pumps to move water from a bath to the garden

- **Greywater Diverter Kit**

A simple kit that uses gravity to move water from baths, sinks and showers to the garden or water storage butt. Includes: a high quality robust pump with non-return valve; 1.7m hose; a standard Hozelock connector, a filter and full instructions.

[www.cat.org.uk/shopping/searchx.tmp](http://www.cat.org.uk/shopping/searchx.tmp)

- **Droughtbuster 'Grey Water' Syphon Pump**

[www.greenandeasy.co.uk/product\\_single.php?product\\_id\\_sent=706&cat\\_id\\_sent=44](http://www.greenandeasy.co.uk/product_single.php?product_id_sent=706&cat_id_sent=44)

- **WaterGreen** syphon pump

[www.droughtbuster.co.uk/index.htm](http://www.droughtbuster.co.uk/index.htm)

### Complete garden watering system including filtering

- Aquastore Water Recycling System for Gardens

[www.rsankey.com/Sankey-News/Aquastore/2/1](http://www.rsankey.com/Sankey-News/Aquastore/2/1)

Aquastore is a recycling system that turns bath, shower and sink grey water back to a form that is safe for use on the garden.

Filter fits on top of a standard Sankey 210 litre rainwater butt. No power required. Costs £200, filter lasts 12 months, replacement filters cost £39.99.