



## How to Recycle Water

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We all know that water is a precious, yet limited resource, and governments are actively encouraging households to conserve it.

The housing industry can help influence the water consumption patterns of the residential sector. Its approach is, however, dependent on site constraints, design and maintenance requirements of the consumer and the effect on the purchase price of a home.

### Using our water more wisely is based on a set of hierarchical principles:

- reduce demand by using water efficient products and designing water efficient landscapes;
- reuse water onsite through rainwater harvesting; and
- recycle wastewater on site or on a neighbourhood scale for use at the allotment level.

Water efficient appliances include: shower roses, tapware, toilets, whitegoods and hot water services. Selecting water efficient rated appliances that are measured up to AA can offer significant water savings for householders for a relatively small initial outlay.

Through the Water Efficient Labelling Scheme, the more As appearing on the rating label, the more water efficient the appliances are. You may wish to specify water efficient appliances for the house's plumbing.

### Water efficient landscapes promote:

- minimising the use of lawn area and where lawn is required select drought tolerant species;
- grouping plants that require similar levels of soil moisture;
- selecting drought tolerant species for garden beds;
- mulching garden beds to minimise evaporation; and
- maintaining lawns to above 50mm in height to allow greater moisture retention.

### Rainwater reuse needs to consider:

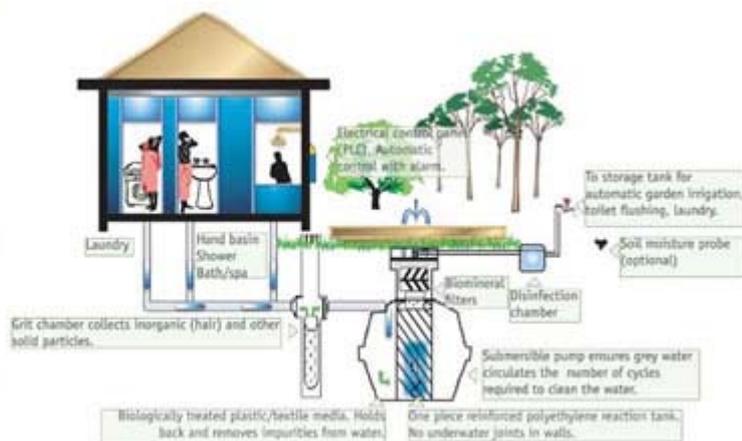
- installation method of harvesting device (above or below ground or structural component of built form);
- installation of first flush treatment methods to reduce contaminants entering the water supply;
- identification of beneficial uses of the water supply for both internal and external use (e.g. toilet flushing, laundry use, garden irrigation, fire fighting);
- method of delivering water (gravity fed or pumping devices); and
- diversion of overflow in times of high rainfall.

### Domestic Greywater Recycling System

Unit capacity: 450-900 LPD  
Single household. Larger sizes available on request.

**Features:**  
Low maintenance  
Cost effective  
Decorative  
Fully automatic  
Water can be re-used in garden, toilet and laundry

Diagram provided courtesy of  
**Enviro Water™**



National GreenSmart Partner, BlueScope Steel has recently released a range of rainwater tanks that suit the domestic site as well as provide an installation service. For more information on the range of BlueScope Water tanks visit their website: [www.bluescopewater.com.au](http://www.bluescopewater.com.au).

Wastewater reuse covers both greywater (all non toilet household water) and blackwater (toilet water). As the more common water resource utilised at the lot level, uses of greywater are discussed here. Household wastewater reuse options fall into two broad categories:

- the diversion of untreated 'greywater' for immediate reuse; and
- the installation of systems to collect and treat household wastewater and reuse the resulting effluent.

To avoid any negative impacts in using untreated greywater, it will be necessary to contain the greywater on site and keep the option for sewage disposal available for greywater discharge during wet weather conditions.

It is recommended that untreated greywater should only be used for garden watering and should avoid contact with vegetable crops that are to be eaten raw or uncooked, as the greywater can still carry health and environmental risks.

A range of storage and delivery options are available for untreated greywater, commencing with diversion hoses and storage systems linking to irrigation pipes.

The use of treated greywater has broader applications than untreated greywater, yet prior to use it is wise to refer to the EPA Information Bulletin on Domestic Wastewater Management Series, Reuse Option For Household Wastewater (Publication 812). In addition you should contact your local council for any local health regulations.

Off the shelf wastewater treatments are now available that treat greywater for single domestic premises through filtration processes in order to achieve Biological Oxygen Demand (BOD): Suspended Solids (SS): Escherichia coli (E-coli) = 20: 30: 10 standard.

These are adequate for most houses, assuming no more than 5,000 litres of greywater is discharged. The table (above right) outlines the methods of greywater treatment and its reuse within single domestic premises.

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