



# Greywater – frequently asked questions

## WHAT IS GREYWATER?

Greywater is the wastewater from the hand basin, shower, bath, spa bath, washing machine, laundry tub, kitchen sink and dishwasher. This fact sheet does not address blackwater use. Blackwater is the wastewater from the toilet, urinal and bidet.

## WHICH SOURCES OF GREYWATER ARE SUITABLE FOR USE IN THE GARDEN?

Generally, washing machine rinse-cycle water and bathroom water are the most suitable sources of greywater for garden watering. If you use low-salt, phosphorus-free detergents you do not need to restrict the use of washing machine water to the rinse cycle; you can use all the laundry water. However, laundry water from soiled nappies or wash water from domestic animals should not be used.

Untreated water from kitchen sinks and dishwashers contains fats, oil, and food particles. Often it is chemically polluted with alkaline detergents and cleaning agents, which over time may damage the soil. Kitchen greywater is not suitable for reuse.

## HOW DO I GET THE GREYWATER TO THE GARDEN?

The simplest systems involve diverting greywater from the laundry and/or bathroom directly to the garden or lawn. This can be achieved by:

- using a bucket or siphon to transfer water;
- connecting the washing machine discharge hose to a diversion hose leading to the garden. A washing machine pump is designed to operate under minimal resistance. To protect your pump from damage use a large diameter hose and only divert to areas lower than the washing machine;
- fitting the laundry tub waste pipe with an approved hand-operated diversion valve. You can then easily switch the plumbing diversion

device to divert greywater, by gravity, from the laundry tub through a hose to the garden instead of the sewer. This valve must carry a Watermark approval and can only be installed by a licensed plumber; and

- diverting bathroom water by having a licensed plumber fit an approved diversion valve into the bathroom waste pipe, much like the laundry tub diversion system above. However, this is only an option for houses built on piers, as there is usually no access under houses built on a concrete slab.

Do not use domestic garden hose that may be used for other purposes to distribute greywater.

## CAN I STORE MY GREYWATER FOR USE LATER?

Untreated greywater must not be stored for more than 24 hours, as it may give rise to offensive odours due to the growth of micro-organisms.

## CAN I INSTALL A GREYWATER TREATMENT SYSTEM?

Greywater treatment systems remove the bacterial load and chemical pollutants from greywater so it can be stored for periods longer than 24 hours. Before installing a treatment system, you should consider the costs involved, as well as your responsibility to ensure the system is maintained so it does not create a public health or environmental risk. Greywater treatment systems will require regular maintenance, such as cleaning or replacing of filters and de-sludging of the holding tanks.

## DO I NEED TO USE A PLUMBER?

If you intend to intercept greywater before it enters the sanitary and drainage system (i.e. before it enters the drain hole of a sink, basin, bath or shower), you can do this yourself. This may be a simple setup in which you bucket water from a sink or direct the water from your washing machine outlet (via a hose) to your garden.

However, any work on the sanitary plumbing or drainage system (i.e. to the pipes below your

sinks, shower or bath) including the installation of diversion valves, must be performed by a licensed plumber or drainer, in accordance with ACT plumbing legislation. The installation of the plumbing work must comply with the *Water and Sewerage Act 2000*, the Water and Sewerage Regulation 2001 and the Plumbing Code of Australia (PCA). The relevant provision under the PCA which must be met is the Australian and New Zealand Standard 3500 (AS/NZS 3500). All plumbing products installed must comply with this standard. Complying products must meet the PCA product certification authorisation and be marked with "W" for the WaterMark approval scheme. It is important that the plumber you choose is fully aware of all of these requirements.

### **DO I NEED GOVERNMENT APPROVAL FOR A GREYWATER TREATMENT SYSTEM?**

The ACT Government does not have a formal approval process specifically for domestic greywater treatment systems and therefore there is no list of ACT approved greywater systems. However, the requirements of the ACT plumbing legislation, the Plumbing Code of Australia and Australian and New Zealand Standard 3500 must be met, and normal plumbing approvals, which can be obtained from the ACT Planning and Land Authority, are required.

### **WHAT GREYWATER SYSTEMS ARE AVAILABLE IN THE MARKET?**

While the ACT Government does not provide a list of approved greywater system products, it provides links from its Think Water website ([www.thinkwater.act.gov.au](http://www.thinkwater.act.gov.au)) to information about greywater systems approved or accredited in other States and Territories. This list of links is provided solely for ease of reference for residents to find information about a range of greywater systems. It does not provide an exhaustive list of greywater systems and does not constitute endorsement or approval of any specific greywater system by the ACT Government.

### **TIPS FOR SAFE USE**

- Only use greywater from washing machines (preferably the final rinse water), baths and showers.
- Choose biodegradable cleaning products that contain no phosphorus and are low in salts. Concentrates and liquid detergents generally contain less salt.
- Don't store untreated greywater for more than 24 hours.
- Only apply enough greywater for the soil to absorb and ensure your greywater does not pool or flow off your block into your neighbour's yard, public land or the stormwater system.
- Avoid greywater use when the soil is wet or rain is imminent.
- Regularly move the distribution point for greywater to different parts of your garden.
- Water greywater-irrigated areas periodically with tap or rain water to reduce salt build up.
- Stop using greywater if odours are generated and plants do not appear to be healthy.
- Avoid spraying or sprinkling greywater. The best irrigation systems for greywater are piped under the ground, although some people also use drip irrigation or put piping under mulch.
- Don't use greywater on food plants that are eaten raw, or where children or pets (especially dogs) are likely to play.

### **MORE INFORMATION**

For more detailed information see the ACT Government's *Greywater Use - Guidelines for residential properties in Canberra* available from:  
Website: [www.thinkwater.act.gov.au](http://www.thinkwater.act.gov.au)

ACT Health  
Health Protection Service  
Ph: 6205 1700  
Website: [www.health.act.gov.au/hps](http://www.health.act.gov.au/hps)

ACT Planning and Land Authority  
Building and plumbing enquiries  
Ph: 6207 6262  
Website: [www.actpla.act.gov.au](http://www.actpla.act.gov.au)