



Greywater is the wastewater from the laundry and bathroom, excluding toilet waste (black water). Caution must be taken when using untreated greywater on our gardens as harmful bacteria, nitrogen, phosphorous and sodium may be present. Bacteria may be harmful to humans and pets. The nitrogen, phosphorous and sodium (salt) in detergents, effect soil structure, render the soil impermeable to water and cause algal blooms in our creeks. However, by following a simple list of do's and don'ts domestic greywater re-use is safe and an excellent way to save water, money and maintain a thriving garden.

**Do:**

- Only use greywater from baths, showers, basins and washing machines
- Use laundry detergents that have low phosphorous or no phosphorous and low sodium levels. Often only liquid detergents will be low in sodium
- Check to see if your plants are healthy: it may be a good indicator of whether the quality of your greywater is suitable
- Check if there's any runoff from your property or pooling (ensure there is no runoff leaving your property)
- Rotate the area of the garden that you use your greywater on regularly
- Turn off diverter during rain and wet periods
- Only apply greywater to the point that the soil can absorb
- Wash your hands after watering with greywater

**Don't:**

- Use greywater on edible plants like vegie gardens
- Use greywater that has high levels of oil, bleaches or water from heavily soiled items (e.g. dishwasher, toilet and nappy water)
- Use greywater that is warmer than 40<sup>o</sup> Celsius
- Store greywater for longer than 24 hours unless it is treated
- Allow greywater overflow into stormwater drains or neighbouring properties (overflow should be returned to the sewage system, and potential overflow anticipated for this purpose).

There are three simple ways in which to reuse greywater:

1. Simple diversion,
2. Diversion and storage or

### 3. Diversion, storage and treatment

#### **1. Simple Diversion:**

This is where greywater is diverted to the garden as it is produced. Several diverting systems for greywater are available for a range of different budgets. The most effective and safest is to construct a dedicated underground piping systems using “Agi” pipe. Access to the discharge is firstly attained by removing inspection caps on the elbows of the pipes which exit bathrooms and laundries (located just outside your home’s external walls), above the point where the pipes enter the ground. It is then relatively simple to install a suitable diversionary device or hose to connect into your newly constructed underground system. Within garden beds drip irrigators, piping under mulch, and hoses that flow straight into your garden can be harnessed in such a system. Currently, there are no regulations either by the EPA or Banyule City Council that govern the diversion of greywater. However, with some of the more complex installations a plumber is required to install them. Avoid direct hosing or spraying, as concentrated mixes in small areas could burn your plants.

#### **2. Diversion and Storage:**

Any greywater that is stored for reuse, or is treated in any way, is classified as a septic system. There are many systems available although, all need to be approved by the EPA and a permit obtained from the Council's Health Department. These systems have the advantage of allowing stored water to be released in a regulated way according to temperature variations and plant needs. They also provide a buffer in dealing with seasonally or annual fluctuating water restrictions. Untreated stored grey water can only be held for 24 hours and often require water pumps to move the greywater from pipe to the storage device (tanks or bladders). These can also be installed underneath your home or even under the ground.

#### **3. Diversion, Storage and Treatment:**

Is the most advanced technique in grey water use. These consist of established piping diverting water immediately from the source (e.g. shower, washing machine etc), and then passed through a series of biological and disinfection treatments with the aid of water pumps. From here it is then able to be safely stored to be immediately used in the garden, re-used in washing machines, toilets and showers or stored for later use. Treatment cells usually divert any excess grey water straight into the sewer.

#### **For more information on grey water:**

- Regulations of domestic greywater: [www.epa.vic.gov.au](http://www.epa.vic.gov.au)
- Information regarding the rebates: [www.sustainability.vic.gov.au](http://www.sustainability.vic.gov.au)
- Detergent sodium and phosphorous levels: [www.lanfaxlabs.com.au](http://www.lanfaxlabs.com.au)

#### **Understanding our impact on our waterways:**

All householders are inextricably linked to our local waterways, that join to us by a series of stormwater drains. These drains carry the rainwater, and other inputs on our driveways and local streets to the stormwater pits, and ultimately end up in your local waterway, the Darebin Creek, Salt Creek, Plenty River and the Yarra. Banyule Council can provide you with information on how to locate the flow of your storm water, all the way to the nearby creek or river.

Some points to consider:

Keep stormwater drain free of:

- Leaves
- Sand
- Pet excrement
- Paints
- Dirt
- Driveway material (concrete, pebbles)
- Solvents
- Plastic
- Plant materials

This will go a long way to keeping our waterways and the habitat they support healthy.

### **Waterwatch**

You can also join a Waterwatch monitoring group. Waterwatch is a national community based water quality monitoring program aimed at raising community awareness, understanding and ownership of water quality issues. To join in with these groups, or to start your own Waterwatch monitoring, contact Banyule's Waterwatch Coordinator on: 9457 9885

