Greywater use in the home

South east Queensland is in one of the worst droughts on record. To help protect the state’s drinking water supply, changes have been made to the laws surrounding the use of greywater.

What is greywater?
Greywater is wastewater generated from the bath, shower, washbasin, laundry and kitchen. It does not include water from your toilet. This is known as blackwater.

What is the difference between treated and untreated greywater?
Untreated greywater is the raw wastewater generated from the bath, shower, washbasin, kitchen or laundry.

Treated greywater is the wastewater generated from the bath, shower, washbasin, kitchen or laundry. Treated greywater is the wastewater produced by a greywater treatment plant.

Is greywater safe?
Greywater is safe, but it should be used with care. Greywater should not be allowed to:
• pond
• run-off into neighbouring properties
• cause an odour.

What advice can you give me about using greywater?
• Use environmentally friendly detergents to avoid damage to soils and plants
• Avoid using greywater to water the edible parts of vegetables, fruits or herbs
• Avoid human contact with greywater as it potentially can contain harmful organisms
• If there has been significant rainfall, don’t use greywater. Saturated soils will not absorb your greywater and the greywater may run-off into neighbouring properties
• Don’t use laundry greywater if you wash nappies, pets or if someone in your house is ill

What can I use greywater for?
Untreated greywater, except water from the kitchen, can be used to irrigate lawns and gardens.

Changes were made to the laws surrounding greywater, effective 1 January 2008, to expand its use.

Appropriately treated greywater, except kitchen water in sewered areas, can be used:
• to irrigate lawns and gardens
• to wash walls, footpaths and vehicles
• to flush toilets
• in the laundry and washing machine

Why can’t I use greywater from the kitchen?
Kitchen greywater cannot be used in sewered areas of Queensland. Kitchen greywater is heavily contaminated with particles including oils, fats and other waste. It is also chemically contaminated with detergents and cleaning agents causing it to be alkaline in nature. Kitchen greywater can be harmful to soils, altering their long term properties.

In unsewered areas the kitchen greywater must be discharged to an on-site sewerage facility or greywater treatment plant. The greywater must be connected to a grease trap.

What do you mean by sewered and unsewered areas?
A sewered area is an area where wastewater and greywater is taken off site by a pipe to a service provider’s or council’s treatment plant.

An unsewered area is an area where wastewater and greywater is treated and disposed of on-site.

Why do I need council approval for my greywater system to be installed?
Council approval for greywater systems ensures appropriate planning has been performed and the design and materials are compliant with Queensland legislation.
When submitting an application to council, homeowners should include the following information:

- proposed or existing buildings or structures on the premises
- location of the greywater application area and distances from the area to the boundary of the premises
- location of any swimming pools, sheds, paths or paved areas
- connection from the greywater diversion device or greywater treatment plant to sanitary drainage
- any other relevant plumbing and drainage details.

When designing a system it is important to check that there will be no ponding or run-off of greywater.

If you have a small allotment, it may be worthwhile to talk to council about the kinds of designs they will accept.

**How can I use a bucket or a hose to transfer greywater?**

Buckets are a great way of transferring greywater onto lawns and gardens and do not require council approval or a plumber to install.

Suggestions include hand washing your clothes in a bucket. Once you have finished, simply empty the water onto your lawn or garden. Another option is to place a bucket in the shower with you to catch the greywater. Once you have showered the bucket can be emptied onto your lawn or garden.

Connecting a flexible hose to your washing machine is another method of redirecting greywater. The water drains from your washing machine into a flexible hose and flows onto your garden or lawn.

This method is efficient and you can install it yourself without council approval. Before connecting a flexible hose to your washing machine, it is important to seek appropriate advice.

**Can I use any greywater diverters from my local hardware store?**

Not all greywater diversion devices available from hardware stores are authorised for installation in Queensland. These devices must have Watermark approval and comply with the requirements of the **Plumbing and Drainage Act 2002**. Visit the Department of Infrastructure and Planning’s website for examples of greywater diversion devices.

**What things should I consider?**

There are many things to consider when installing greywater systems. Some of these include:

- How much greywater will be generated by the household?
- What is the land size where the greywater will be distributed (land application area)?
- Do you live in a sewered area or unsewered area?
- Is the greywater to be untreated or treated before being distributed?
- What do you want to use the treated greywater for? For example, toilet flushing.
- What are the government restrictions and standards for greywater treatment plants?
- How much do you want to spend? Diversion devices are significantly cheaper to install than a treatment plant and there are fewer ongoing requirements to be met.

**Are there rebates available for installing greywater systems?**

Yes. The Queensland Government is currently administering $500 rebates for the cost of purchase, installation and council approval of professionally installed underground irrigation systems.

Rebates of $200 are also available and cover half the cost of purchase, installation (and council approval if required) for greywater hoses and diverters. You should also check with your council to see whether they offer any additional subsidies.

Check the Department of Natural Resources and Water website on [www.nrw.qld.gov.au](http://www.nrw.qld.gov.au) for more information. Note: These rebates may be subject to change.

**Can I store my greywater?**

No. It is illegal for greywater to be stored for more than 24 hours as it can turn septic, create offensive odours, and begin to breed potentially harmful bacteria and mosquitoes.

**Can I use greywater on my fruit and vegetables?**

Greywater can be used to water fruit trees as long as it does not come into direct contact with the edible portion of the fruit.

Greywater should not be used to water vegetables as there are concerns with contamination, especially in vegetables that are consumed raw.
How can I improve the quality of my greywater?
Using detergents in your washing that are low in phosphorous, sodium and nitrogen will help to improve the quality of greywater. Make sure you do not use greywater when people in your house are sick, if you have washed soiled nappies, animals or if you have washed clothing or rags used for painting.

Can I fertilise my garden when I’m using greywater?
While the nutrients nitrogen and phosphorus are essential for plant growth, too much can inhibit growth. As most washing detergents contain nitrogen and phosphorus it may be wise to eliminate the use of fertiliser when using greywater.

Can I install a treatment plant for my greywater?
Yes. You will need to obtain council approval of the proposed treatment plant and have it installed by a licensed plumber.

Can I or my pets drink my greywater?
No. You should not drink your greywater. Greywater contains nitrogen and phosphorus from washing detergents and can also contain other contaminants that may be capable of spreading disease if ingested.

Can I wash my pets with greywater?
No. Do not wash your pets with greywater. The levels of phosphorus, nitrogen and sodium in greywater originating from detergents can cause irritation to your pet’s skin.

For more information
The Department of Infrastructure and Planning has developed a range of guidelines to assist councils, plumbers, builders and developers in understanding the technical and legal requirements for greywater and sub-meters.

For more information, visit the Department of Infrastructure and Planning website, www.infrastructure.qld.gov.au/bcq

Disclaimer:
This publication/fact sheet is a simplified guide to the Queensland Development Code. It aims to provide a general understanding of the obligations resulting from the legislation/code.

This guide is not a comprehensive statement of the law. The laws referred to are complex and various qualifications may apply to the provisions in different circumstances.

You are encouraged to obtain independent legal advice if you are unsure how the laws apply to your situation.