

FACT SHEET: RECYCLING GREYWATER

Greywater from residential homes is a resource that can be reused on-site for garden and lawn irrigation or, if treated appropriately, for toilet flushing and washing machines.

Reusing greywater will not only reduce the demand on drinking water supplies, but will also reduce the amount of wastewater discharged to the environment.

It is estimated that just over half of household water used could be recycled as greywater, saving potentially hundreds of litres of water each day.

Greywater is a source of irrigation water all year round. It is relatively easy and safe source of water to access and use provided health guidelines are followed.

What is Greywater?

Greywater is water generated by the shower, bath, hand-basin and laundry but does not include "blackwater" which is wastewater generated by the toilet and is not permitted to be reused.

The use of greywater is regulated because of the potential for it to spread disease around your home and elsewhere if it is not reused in the right way.

Draft Development Control Plan amendment provisions

One of the ways that Council proposes to support the community to further conserve drinking water and protect the region's waterways is through its proposed Draft Water Sensitive Design measures.

These will be put in place through an amendment to the Tamworth Regional Council Development Control Plan 2010.

This Development Control Plan will require that all new houses and other forms of development incorporate a range of water efficiency measures called Water Sensitive Design Essentials in the design stage of the proposed developments.

Compliance with three out of six essentials will be required.

Two of the essentials to choose from are greywater diversion devices and greywater treatment systems.



Greywater diversion device

There are two types of greywater diversion devices:

1. Gravity diversion device

A gravity diversion device incorporates a hand activated valve, switch or tap and is fitted to the outlet of the waste pipe of the plumbing fixture such as a laundry tub. Greywater is diverted directly to a sub-surface irrigation system in the garden without treating it.

The more complex greywater diverters range from several hundred to several thousand dollars, depending on what you need in the way of pumps and surge tanks, irrigation equipment and the suitability of existing plumbing.

2. Pump diversion device

A pump diversion device incorporates a surge tank to cope with sudden influxes of greywater for distribution of the greywater directly to a subsurface irrigation system in the garden. The surge tank does not operate as a storage tank.



Approval to install and operate diversion devices

If your diversion system fits the below criteria you do not need Council approval:

- Greywater must be direct from the laundry or bathroom (not toilet or kitchen) to the garden for immediate use without making changes to its quality i.e. greywater is not stored.
- Greywater must be distributed by sub-surface irrigation (at least 10 cm below the finished surface level of soil or mulch).
- The device is WaterMark licensed; and

Performance criteria Clause 75A(2) of the *Local Government General Regulation 2005* is met.

Greywater treatment system

A Greywater Treatment System is defined as a waste treatment device.

Council approval is required for the installation of these systems.

A register of accredited treatment systems is available on the NSW Health website.

It is the responsibility of the home owner to engage a licensed plumber to install the treatment system and to make any associated plumbing modifications (e.g. pipe for toilet flushing).

It is the responsibility of the installing licensed plumber to install the treatment system to meet the requirements of the NSW Plumbing and Drainage Act and Regulations.

Once installed, treatment systems require regular inspections by a qualified person.

These systems collect and treat (and some disinfect) the water to various levels of purity and hygiene. Several stages are involved the treatment of water:

- Filtration of solids (lint and hair);
- Removal of pathogens and unwatered chemicals (such as salts and nutrients) using either micro-organisms or chemical treatment;
- Disinfection by cholorination or UV light, though not all systems do this.

Treated greywater can be used in washing machines and toilets as well as on the garden.

After treatment, the greywater is clean enough to be stored.

Treated greywater should be almost colourless and it shouldn't have a bad odour. It is not safe to drink.

Documentation and Plans

The following documents must be submitted as part of a Section 68 Application for greywater diversion/ treatment systems:

- Site Plan (including location of irrigation lines);
- Device details and specifications; and
- Plumber Accreditation and Licence Applicable Fees

A site suitability assessment prepared by a qualified person may be required following an initial assessment by Council staff.

Applicable Fees

Where Council approval is required, Council's adopted <u>Fees and Charges</u> will apply.

Need help?

For further information:

- Call us on (02) 6767 5555;
- Email: trc@tamworth.nsw.gov.au; or
- Visit the Development Hub counter: Tamworth Regional Council 437 Peel Street, Tamworth between 8:30am to 4:30pm weekdays

Further Advice

For further advice, view the <u>NSW Guidelines for</u> <u>Greywater Reuse in Sewered, Single Household</u> <u>Residential Premises</u> booklet.

WaterNSW also has information about wastewater systems including greywater and a comprehensive guide to their installation.

