

Town Planning Scheme No. 3

Town Planning Scheme Policy No. 21

WATER EFFICIENCY IN RESIDENTIAL DEVELOPMENT (INCORPORATING RAINWATER TANKS, GREYWATER REUSE AND WATER EFFICIENCY PRACTICES)

Purpose

This Policy will encourage new residential development to incorporate a rainwater tank, plumbed into the house. This Policy also encourages the use of greywater reuse systems and water wise practices.

This will achieve a number of benefits including the:

- Reduced risk of future water restrictions;
- Increased local awareness of water scarcity and sustainable usage;
- Reduced demand on the Water Corporation supply network;
- Encouragement of waterwise developments through recycling of greywater and other initiatives; and
- Promotion of an increased level of sustainability within the Shire.

Objectives

These objectives apply to new residential development:

1. To encourage the connection of plumbed rainwater tanks to supplement reticulated water supply to residential development;
2. To establish standards for the siting and development of rainwater tanks;
3. To encourage the use of greywater reuse systems;
4. To encourage water conservation; and
5. To improve the environmental sustainability of housing.

6. To promote best management risk practices to protect public and environmental health.

Background

1. This Policy is to be read in conjunction with the Residential Design Codes of WA (RCodes) where residential development is proposed in an area covered by the RCodes.
2. The Policy applies to all new residential development throughout the Shire and includes land zoned Rural, Rural Residential, Residential, Rural Smallholding, Rural Village, Landscape Protection, Enterprise and other zones where residential development is permitted.
3. The Policy acknowledges there are zones such as Rural Residential, Rural Smallholding, Landscape Protection and Rural Village where potable water supply for a house is to be provided solely by way of rainwater tanks of a capacity of 92,000 Litres.
4. The Policy encourages all new residential development to incorporate rainwater tanks and where there is a Water Corporation reticulated water supply, to plumb that supply into the rainwater tank. This will provide the house with the ability to utilise the rainwater with the top up being provided by the reticulated supply.
5. The Policy encourages greywater reuse and waterwise measures in residential development.
6. The use of rainwater tanks for water supplies requires careful management and regular maintenance and upkeep (including cleaning gutters, de-sludging tanks, first flush bypass systems and mosquito control) to ensure water quality is not affected by environmental and/or health contaminants. The Department of Health has prepared fact sheets on rainwater use including information about collection, storage and disinfection (see <http://www.public.health.wa.gov.au/>). Proponents are encouraged to use these resources prior to the installation of rainwater tanks for potable water supplies.

Definitions

‘Greywater reuse system’ shall mean any equipment designed and used to treat and reuse greywater (as approved by the Department of Health).

‘Rainwater tank’ means storage that is purpose designed to collect rainfall runoff from roofs. A large variety of rainwater storage vessels are available including traditional stand-alone tanks, site-constructed tanks and some other alternative proprietary products including modular systems. Provided they meet all relevant regulatory requirements that apply, all such storages are legitimate forms of rainwater tank.

‘Residential development’ for the purposes of this Policy includes the following land uses:

1. Caretakers Dwelling;
2. Chalet;
3. Grouped Dwelling;
4. Residential Building;
5. Single House; and
6. Tourist Accommodation.

In considering any application for a new residential development, the criteria below will be used.

Policy Criteria

Policy Criteria for Rainwater Tanks:

1. Rainwater tank proposals that meet all of the policy criteria as follows will not require planning consent to be applied for.
2. Rainwater tanks with a capacity of 5,000 Litres or more will require the issue of a Building Permit as they are considered a structure under the Building Regulations 2012.
3. Plumbed rainwater tanks should be provided for all new residential development as defined by this Policy.
4. The rainwater tanks are to be plumbed by a licensed plumber.
5. Where Water Corporation reticulated water is provided, that water supply should be plumbed into the rainwater tank (by a licensed plumber) at the time of construction of a new residential development. This plumbing will include an approved backflow prevention device to avoid any contamination of the Water Corporation reticulated water supply. Such back flow prevention devices need to be serviced regularly to meet AS3500.1.
6. Rainwater tanks will be setback from property boundaries to the relevant standards set by the RCodes or the Scheme development standards relative to the particular zone.
7. Where a particular zone sets standards for external building materials and finishes, then these standards will apply to rainwater tanks equally.
8. All rainwater tanks are to include the following features and practices:
 - First flush bypass system.
 - Overflow device that disposes of overflow from the rainwater tank. Runoff from rainwater tanks must not overflow onto adjoining properties.
 - Inlet and overflow must be fitted with mosquito proof, non degradable screens.
 - Adequate supporting structure.
 - Regular maintenance and upkeep including cleaning of gutters and de-sludging of tanks.

9. All new residential development proposals being submitted to the Council shall provide the following information:
 - a. Details of rainwater tank design, including location, materials, colour and the capacity/volume;
 - b. Details of what the rainwater will be plumbed into; and
 - c. Details of how (if relevant) the Water Corporation reticulated supply will be plumbed into the tank.
10. Design and installation of rain water tanks must be in accordance with *Australian Standards HB230-2008: Rainwater Tank Design and Installation Handbook* and *Australian/New Zealand Standard AS/NZS3500.1: Plumbing and Drainage – Water Services*.
11. Public liability insurance coverage of the Residential Strata/Body Corporate responsible for the maintenance and operation of the system for any on lot grouped dwelling/tourist accommodation is recommended.
12. Compliance with the inspection and maintenance of roof water systems of the Draft *Water Supply Guidelines of Western Australia (2009)*. Please see http://www.public.health.wa.gov.au/2/954/2/alternate_water.pm

Policy Criteria for Greywater Reuse Systems:

1. Greywater is waste water from a variety of sources including washing machines, showers, baths, wash basins and laundry tubs. The opportunity exists for appropriately treated greywater to be reused for a variety of different end uses, such as irrigating gardens and flushing toilets.
2. Reuse of greywater is supported but this has to be accomplished without compromising public health, causing unacceptable environmental impact, or adversely affecting the amenity of residential areas. Greywater reuse systems are encouraged as a tool to conserve water.
3. Greywater recycling is encouraged under the following circumstances where it is:
 - An approved system endorsed by the Department of Health for domestic greywater reuse purposes;
 - Installed and maintained in accordance with the manufacturer recommendations by a licensed plumber and is subject to inspections by a licensed plumber;
 - Used for non-potable purposes;
 - Used to reticulate outdoor areas, suitable irrigation methods are to be used such as sub-surface dripper systems; and
 - Developed in accordance with the Department of Health ‘Code of Practice for the Reuse of Greywater in WA 2010’.
4. Greywater Diversion Devices (GDD) installed must have WaterMark certification. For details please see the Guidance Note for Garden irrigation using greywater diversion devices on the DOH website located at

<http://www.public.health.wa.gov.au/cproot/4554/2/Guidance%20note%20for%20OGDD.pdf>

Policy Criteria for Water Efficient Equipment and Practices:

1. The following measures will assist in the conservation of water in residential development and are encouraged:
 - AAA rating of all shower heads and tap-ware;
 - Star rated appliances such as front loading washing machines;
 - Use of lawn varieties that require lower water usage;
 - Use of low-flow trickle irrigation, such as drippers and practices such as mulching and use of soil conditioners; and
 - Use of appropriate plant species and drought resistant trees and shrubs.

Adopted on 29 January 2013 in accordance with clause 7.6 of Town Planning Scheme No. 3.