Urban Rainwater Tank Policy

1 Purpose

This policy addresses the requirements regarding the installation of rainwater tanks in urban areas, where town water supply is available. The introduction of BASIX (Building and Sustainability Index) in July 2005 obligated most new developments to install a rainwater tank to achieve a 40% reduction in mains water usage.

The objective of Council’s Urban Rainwater Tank Policy is to:
• Monitor information regarding connection details
• Administer backflow requirements

2 Policy

2.1 Generally:

The following provides detail on Council minimum standards for the install of rainwater tanks:
• A Rainwater Tank Installation Application must be submitted to Coffs Harbour City Council to ensure compliance with this Policy and to track installations not requiring development consent.
• All work is to be carried out by a licensed plumber as per AS / NZS 3500 and Plumbing Code of Australia.
• Where approval is given by Coffs Harbour City Council to top up from the mains supply:
  - The maximum size of the potable water supply line used for topping up shall be 15mm OR a flow restrictor must be installed to ensure the filling rate is no more than approx. 2 litres per minute.
  - There must be a visible air gap (external to the rainwater tank) between the inlet pipe from the mains supply and the invert level of the overflow pipe.
  - “Topping up” should not take place until the tank is at least 80% empty (a float valve is required to regulate the “topping up”)
  - All rainwater tanks topped up from the mains supply are categorised as a break tank and as such, must be registered with Coffs Harbour City Council.
• All tank outlets must be labelled “RAINWATER” on a metallic sign as specified in AS1319
• All pipes carrying rainwater must be labelled “RAINWATER”. This can be done using pipe markers for above ground (made in accordance with AS1345).
• Tank overflow water shall run to an approved Council storm water collection point.
• First flush water diverters are recommended, but not mandatory.
• Pump and pressure systems must be sized to suit owner’s requirements.
• A backflow prevention device must be installed at the property meter to protect the mains supply. Where a Dual Check Valve with Atmospheric Port (DCAP) is required, a registration form is to be forwarded to Coffs Harbour City Council for registration, within one week of completion of installation and testing. The type of the device required varies in different situations.
• Tanks and associated installations shall not adversely impact on the amenity of adjoining properties in terms of size, design, style height and location.
• All tank / tank stand installations to be structurally sound and comply with manufacturers and / or designers specifications.
• The rainwater tank must not collect water from a source other than gutters or down pipes or a potable water supply top up.
• The rainwater tank must not be installed over or immediately adjacent to a water or sewer main.
• The rainwater tank must not be installed over any structure or fitting used by Coffs Harbour City Council in the maintenance of any water or sewer main or easements.
• The rainwater tank must be enclosed and any inlet to the tank must be screened or filtered.
• The rainwater tank must be maintained at all times, so as not to cause a nuisance with respect to mosquito breeding or overland water flow.
• Where rainwater tanks are connected to mains supply by way of top up system, the property will be subject to any current level of water restrictions imposed.
• Proximity to other services:
  - **Above ground** rainwater services shall **not** be installed within 100mm of any parallel drinking water supply.
  - **Below ground** rainwater services shall **not** be installed within 300mm of any parallel drinking water supply.

![Figure 1: Typical Urban Rainwater Tank Installation Options](image)

2.2 Maintenance and Water Quality:

Maintenance of a rainwater tank and the quality of the water supplied from a tank are the responsibility of the owner, not Coffs Harbour City Council.

Note: NSW Health does not recommend the use of rainwater tanks for drinking purposes, where reticulated drinking water supply is available.

• The roof, gutters and inlet should be cleaned regularly to ensure a safe water supply is captured in the rainwater tank.
• Leaves and debris should be removed from the gutter quarterly and overhanging branches trimmed and removed where possible.
• The inlet screen should be removed, thoroughly cleaned and replaced quarterly.

2.3 Backflow Protection Requirements:

2.3.1 For above ground rainwater tanks:

• **20 mm and 25mm meters with Potable Water Top up arrangement**
  - Coffs Harbour City Council will replace the existing meter free of charge with a new integral dual check valve meter (if not already fitted). This will be done on receipt of the customer’s application form or by calling Council to arrange for the meter exchange.
• 32mm and larger meters with Potable Water Top up arrangement
  - A minimum of a dual check valve must be installed adjacent to the meter.

• All meters with Dual supply arrangement
  - A dual check valve must be installed adjacent to the meter and immediately upstream on the potable supply, at the point of interconnection. An approved 3-way valve is required at the point of interconnection.

2.3.2 For buried ground rainwater tanks:
• A new meter is not required but non testable dual check valve with atmospheric port (DCAP) must be installed at the meter. Where the below ground tank has a dual supply arrangement a testable backflow device (DCAP) is also required immediately upstream on the potable supply, at the point of interconnection. An approved 3-way valve is required at the point of interconnection.
• All costs associated with backflow devices are the responsibility of the owner. The device must be registered with Coffs Harbour City Council and the owner must arrange for a licensed plumber to fill in the backflow device registration form, return it to Council for our records and pay the lodgement fee (found in the Fees & Charges on the Council’s website). Should a testable backflow device be installed, a plumber/tester should perform an initial test on the device and submit to Council for our records. Testable backflow devices should be tested annually.

2.3.3 External Hose Taps:
• All external hose taps must be fitted with a hose connection Atmospheric Vacuum Breaker (AVB).

2.4 Other Commercial Top-up Systems:
Coffs Harbour City Council will assess all commercial tank top up and/or integrated systems for suitability, as they become available and they will be added to an approved systems list (IR1428085).

2.5 Alternative Water Supplies:
Where an alternative water supply (other than rainwater) is reticulated on a property an RPZD backflow prevention device must be installed at the water meter.

Alternative water supplies include:
• Treated grey water reuse
• Reclaimed wastewater
• Septic treatment/reuse systems

3 Definitions
Rainwater: Non potable water collected from roof drainage

4 Key Responsibilities
General Manager
To lead staff through delegated authority in their understanding of this Policy.

Director Sustainable Infrastructure and Group Leader Strategic Asset Management
To ensure the commitment made within this Policy is implemented and met.

Water Services Team Leader
To oversee compliance with, and coordination of the Policy.

Council Officers
To promote the use of, and knowledge of this Policy.
5 References

- Local Government Act 1993;
- Local Government (General) Regulation 2005;
- AS / NZS 3500 National Plumbing and Drainage Code;
- CUPDR Circular 18 Guidelines for Plumbing Associated with Tanks in Urban Areas;
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004;
- Environmental Planning and Assessment Regulation 2000;
- Environmental Planning & Assessment Act – SEPP 4;
- AS / NZS 2845 Backflow Prevention;
- Backflow Prevention and Cross Connection Control Policy - Containment Only;

6 Details of Approval and revision

- Approval date: 22/06/2017
- Responsible Section: Water and Sewer
- Superseded policies/procedures: N/A
- Next review date: 22/06/2021

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