

Minimum water service standard

The **minimum water service standard** a relevant tool to allocate resources to improving water security for communities dependant on rain water harvesting.

Developed for the Northern Group Islands in 2011 the standard is 6000 litres per household, can be tailored to take into account roof quality and larger households. The criteria was developed throughout the project.

For a home to receive a water tank and new roofing. This criteria included:

- Only homes which are currently being occupied.
- Homeowners who resides on the island.
- Applies to all homes that do not meet the rainwater standard.
- Minimum water service standard –developed with World Health Organisation and Red Cross assistance was based on 10L/per head/per day drinking water and a 3 month drought period and contingency¹. This was translated to 1000 litres per person formula for ease of use.
 - 6000 litres per household of up to 6 occupants
 - 9000 litres per household of up to 9 occupants = 2x 6,000 L tanks
 - 12000 litres per household of up to 12 occupants = 2 x 6,000 L tanks
- Water tanks compliant with NZ standard 4766:2006 (materials/design/manufacture), AS 2070:1999 (food contact) and AS 4020:2005 (potable water).
- Collection area adequate to supply a household of 5 with enough water to meet their daily needs (at 100L/person/day not just the 10L/person/day potable requirement) is 8m by 8m sloping roof.
- Ideal roofing quality should be aluminium 0.7mm which does not rust and resists peeling effect in cyclone conditions. Roof structures should be strengthened with cyclone ties and replacement of frames to ensure structural integrity.
- All homes to be fitted with first flush system.
- Training provided to homeowners and women in basic maintenance and cleaning of water systems e.g. tanks annually, purpose of first flush, cleaning gutters, boiling drinking water.
- Bases should not be concrete due to cost and contributing to weakening tank structure over time. Ideal installation buried at 50 cm.

¹ 2376195-v1-Cooks_Northern_Water_harvesting_project_appraisal (MFAT)