Case study



Saving water in the Waitakere NOW Home

A combination of rainwater harvesting and water-efficient tapware, toilets and appliances reduced water use in the Waitakere NOW Home to only 85 litres per person per day.

Designed to be sustainable and affordable, and occupied by a family of four, the Waitakere NOW Home was intensively monitored under real life conditions.

Water efficiency

The Waitakere NOW Home used water-efficient showerheads, flow restrictors on taps, dual flush toilets and water-efficient appliances in the Waitakere NOW Home® to reduce the amount of water the family used.

Total water use, including both reticulated water (from mains supply) and free water (from the rainwater tank), was 189 litres per person per day in the first year, dropping to 172 litres per person per day in the second year. A maturing garden requiring less watering of new plants led to the drop in water consumption.

This total is comparable to the Waitakere area average of 165 litres per person per day, and considerably better than averages from other parts of the country, for example:

- 260 litres per person per day in Hamilton
- 327 litres per person per day in Porirua
- 280 litres per person per day in Christchurch

Rainwater

The Waitakere NOW Home used 'free' rainwater to supplement reticulated (mains supply) water. The 13,500L rain tank supplied 47% of the home's water needs in year 1, and 52% in year 2.

This reduced the family's demand on reticulated water to an average 100 litres per person per day in Year 1, dropping to 85 litres per person per day in Year 2. As the water supply in Auckland is metered, this represents a considerable savings on water bills.





Overall Waitakere NOW Home reticulated water use in Year 1 was 40% less than the average in surrounding Waitakere City improving to 50% less in Year 2.

Where the water was used

The most water in the house was used in the shower (280 litres per person per day), followed by the laundry (132 litres per person per day) and toilets (105 litres per person per day).

For more information:

See Beacon website <u>www.beaconpathway.co.nz/new-homes/article/what is the waitakere now home project</u>