

# RESIDENTIAL WATER USE

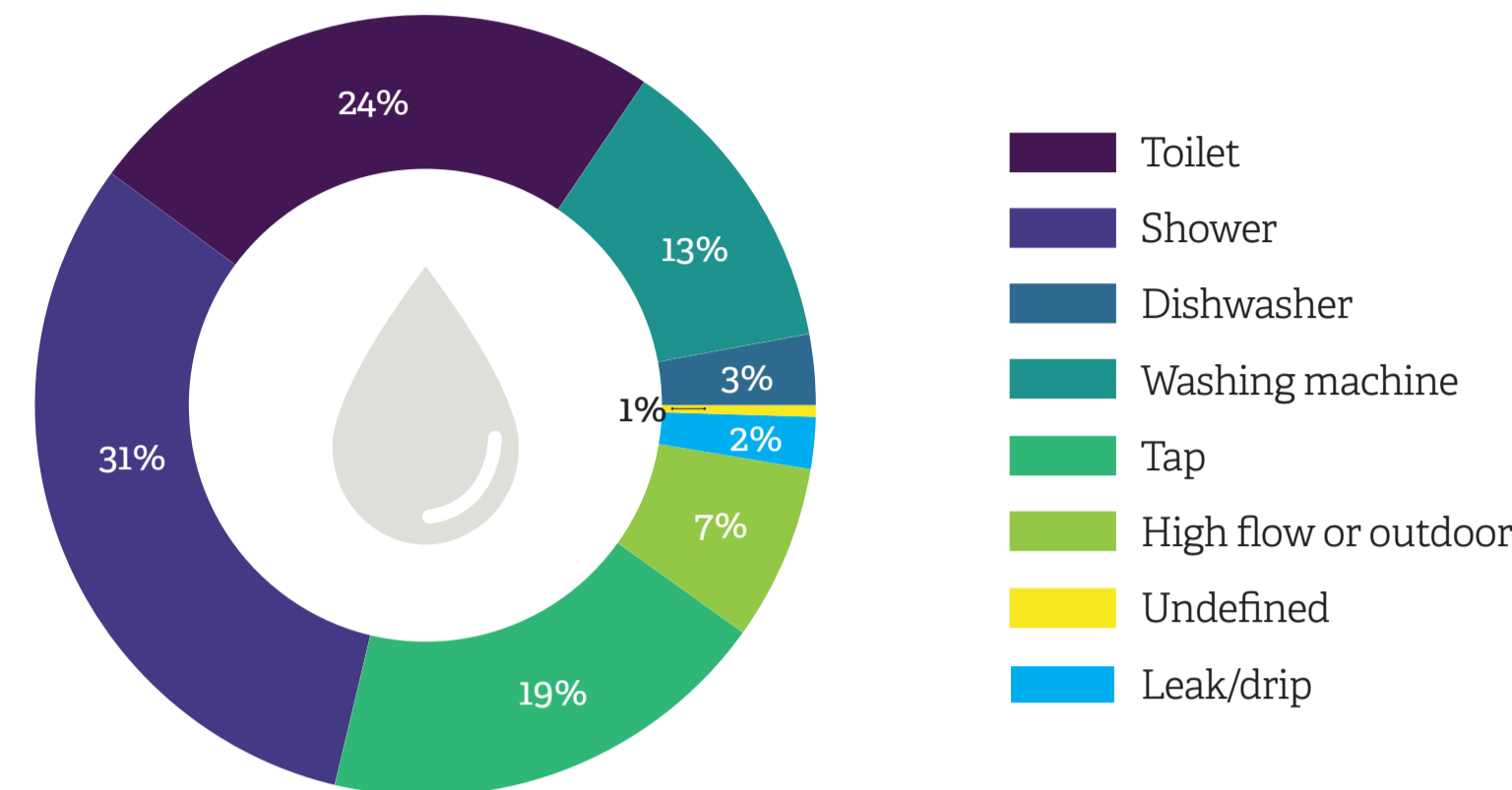


This national study shows us when and where New Zealanders are using water in their homes. Results draw on hundreds of household surveys and 66 high-resolution meters from around the motu. Data has been analysed to inform water efficiency programmes, demand forecasting and infrastructure design.

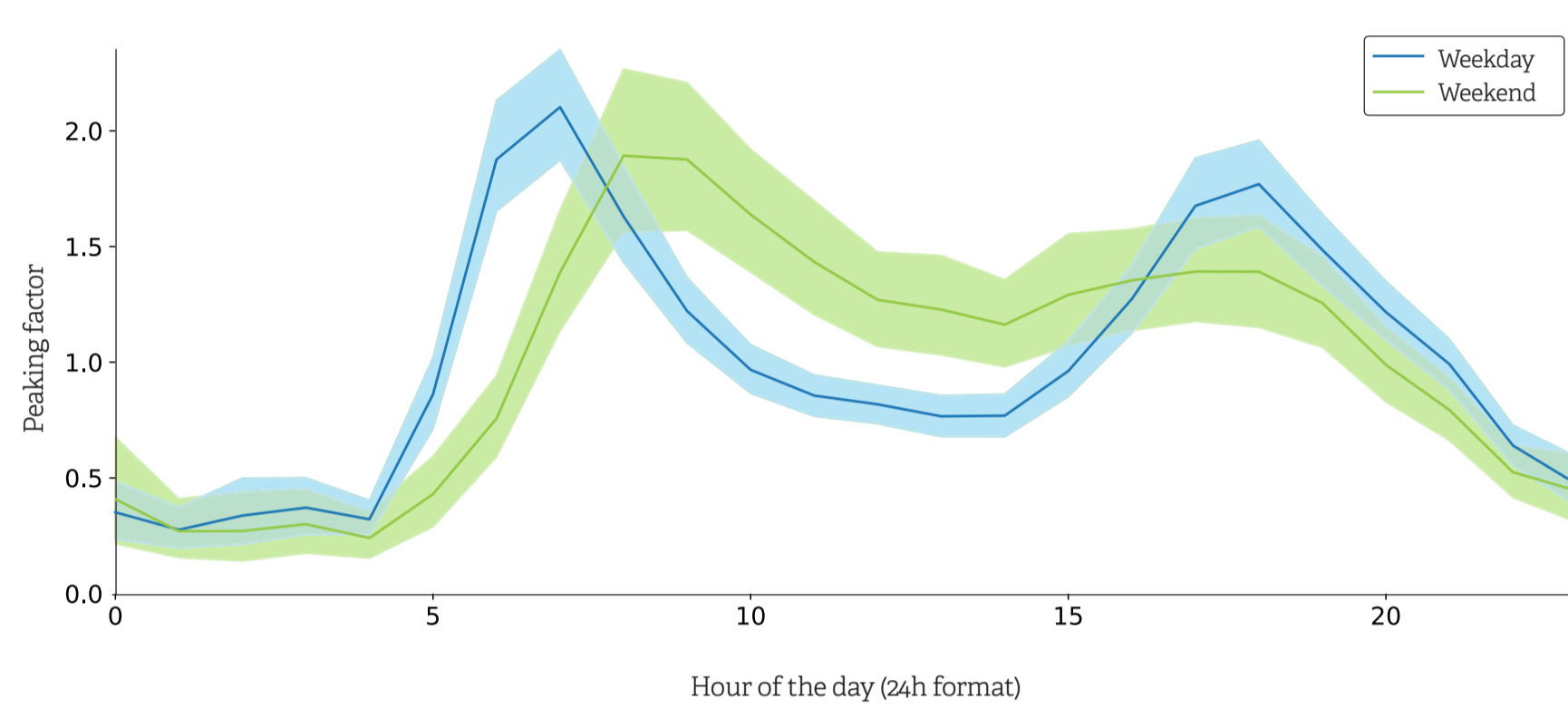
## Overall use summary

	All households	Metered and volumetrically charged	Not metered and volumetrically charged
Average Daily Volume (litres)	543	424	682
Median Daily Volume (litres)	397	319	551
Average Daily Volume Per Person (litres)*	237	198	304
Median Daily Volume Per Person (litres)*	165	127	266

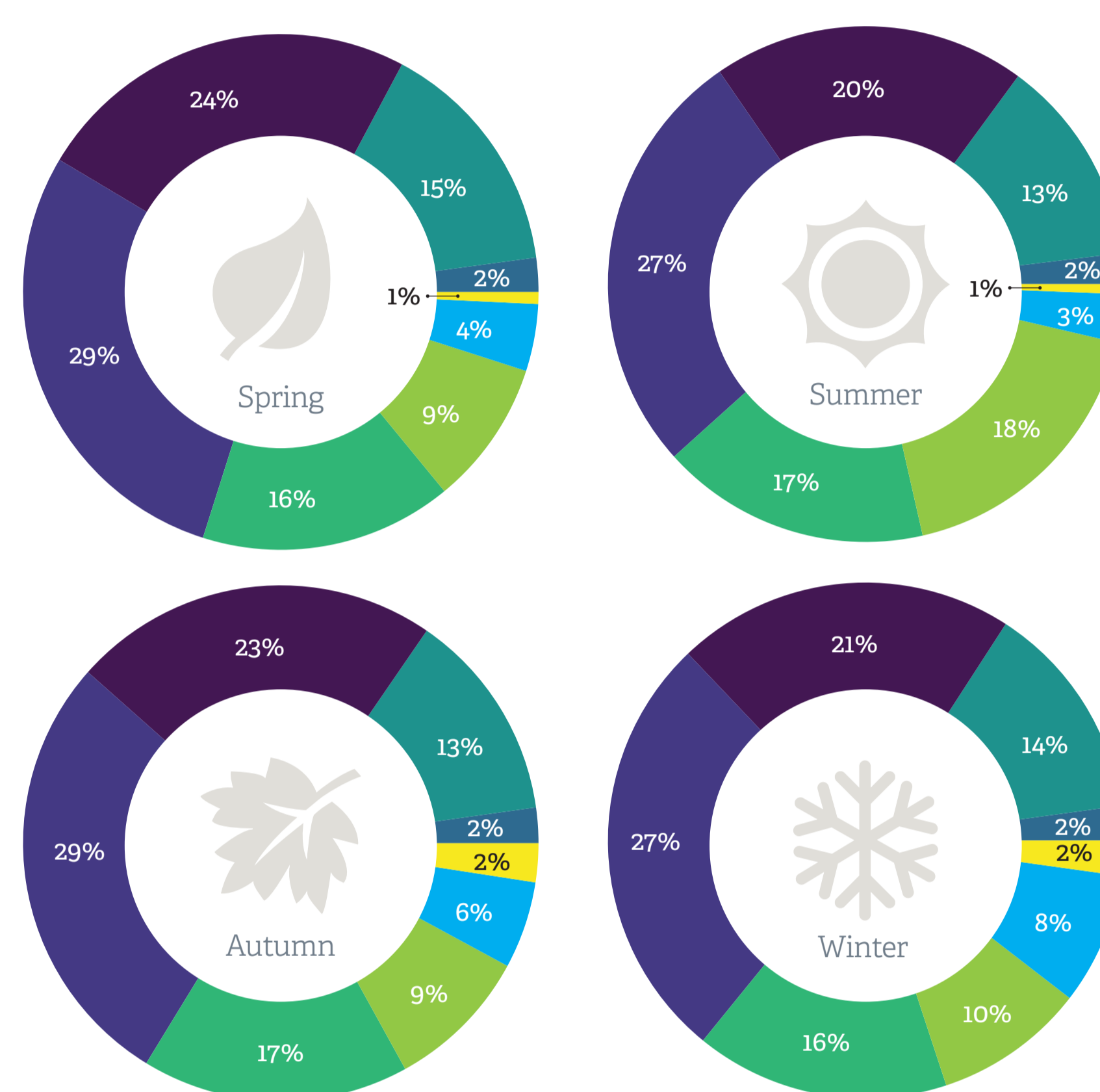
## Use breakdown



## Weekday and weekend peaking factors



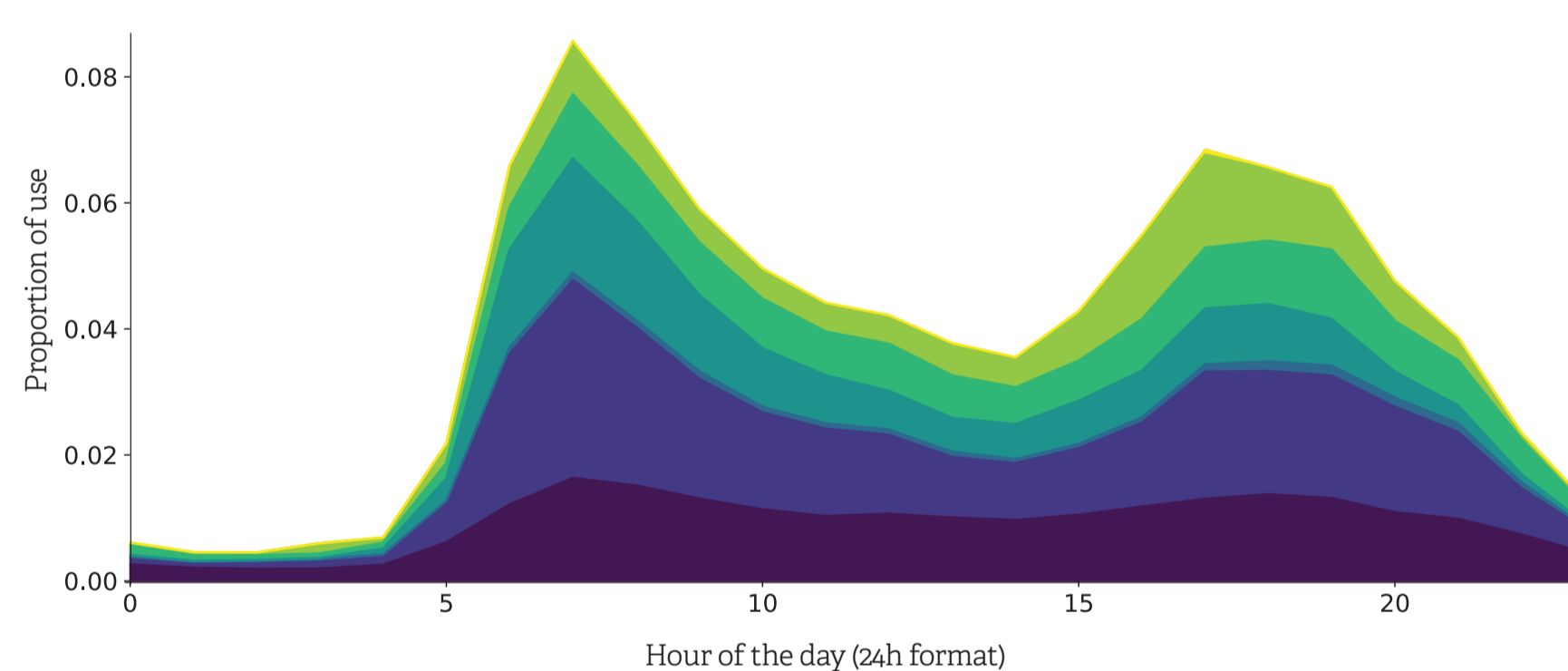
## Seasonal Use breakdown



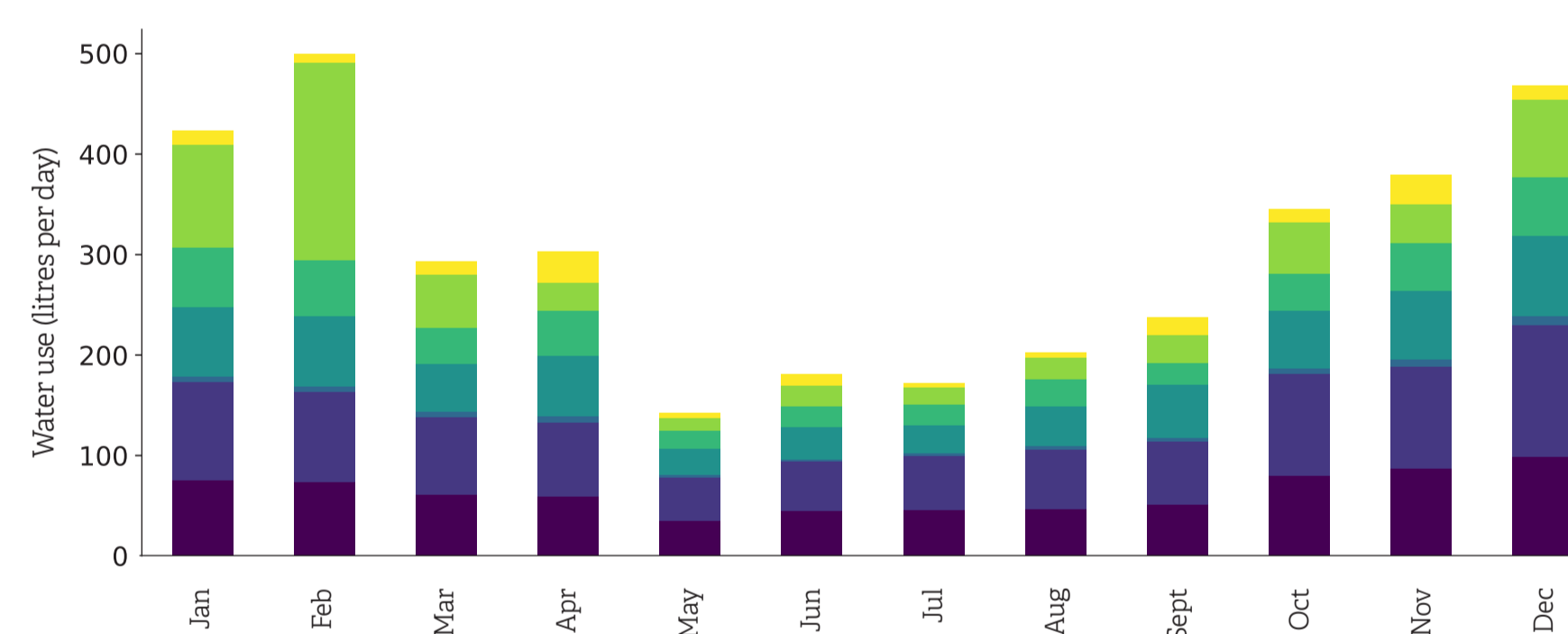
## Average hourly flows and minimum night flows

	Average Hourly Flow (litres/hour)	Median Hourly Flow (litres/hour)	Average MNF (litres/hour)	Median MNF (litres/hour)
All households	25.7	19.6	8.4	2.1
Metered and volumetrically charged	20.8	16.7	9.1	1.6
Not metered and volumetrically charged	31.3	25.2	7.6	3.1

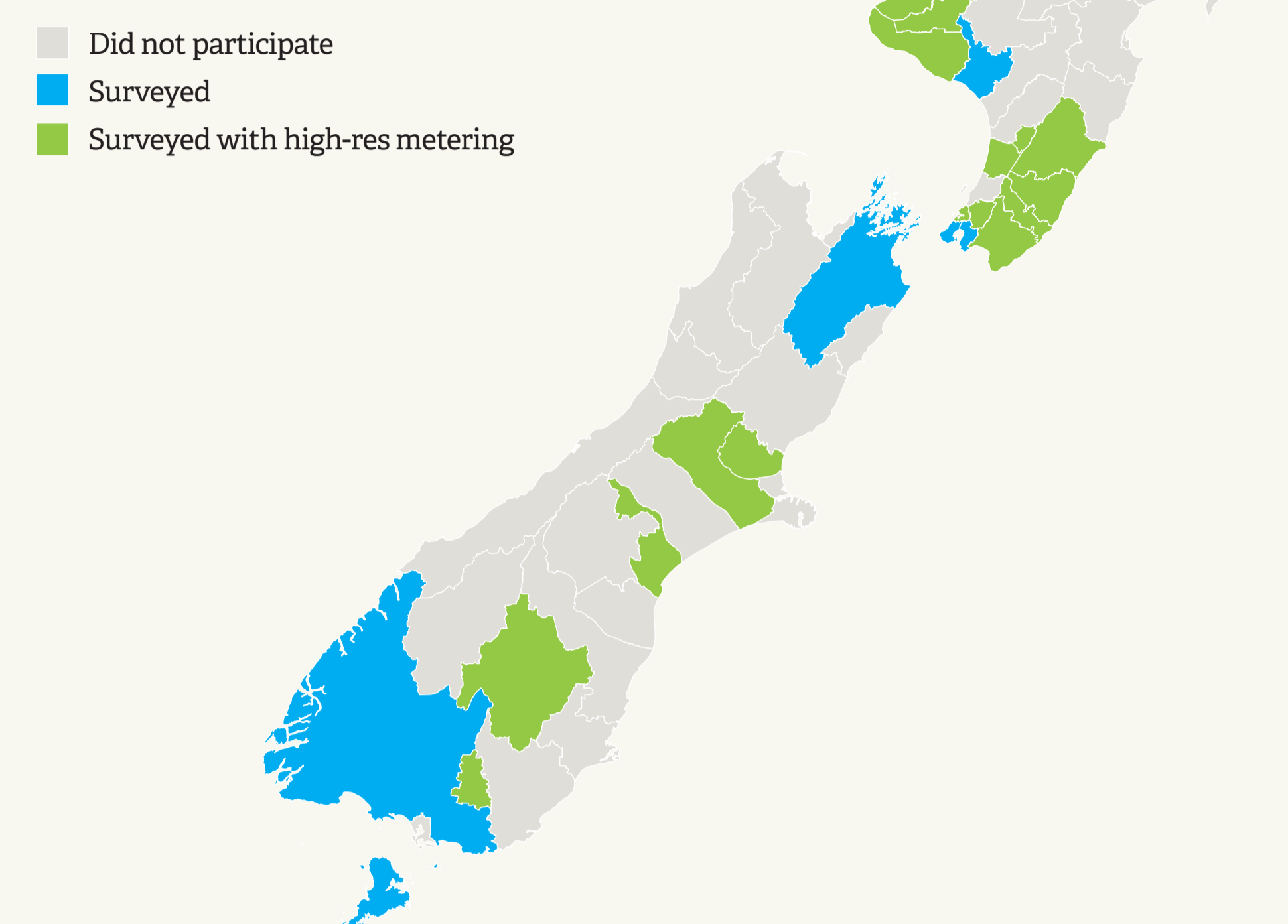
## Temporal variations by use type



## Seasonal variations by use type



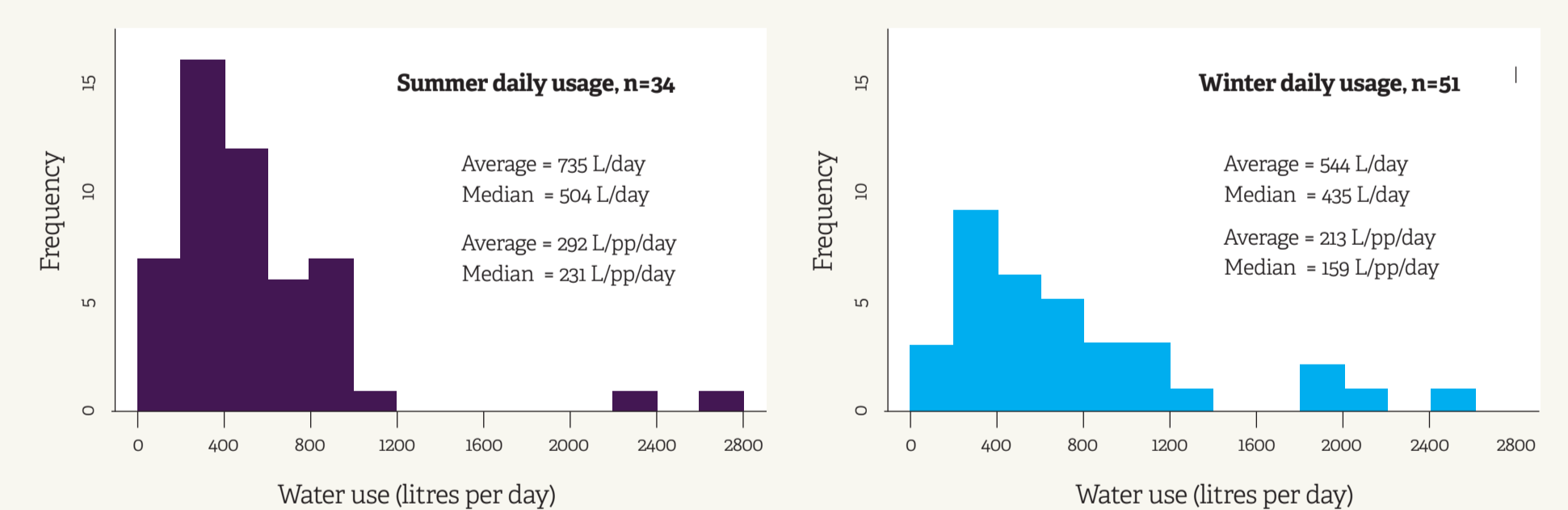
## Participating councils



## Survey questions

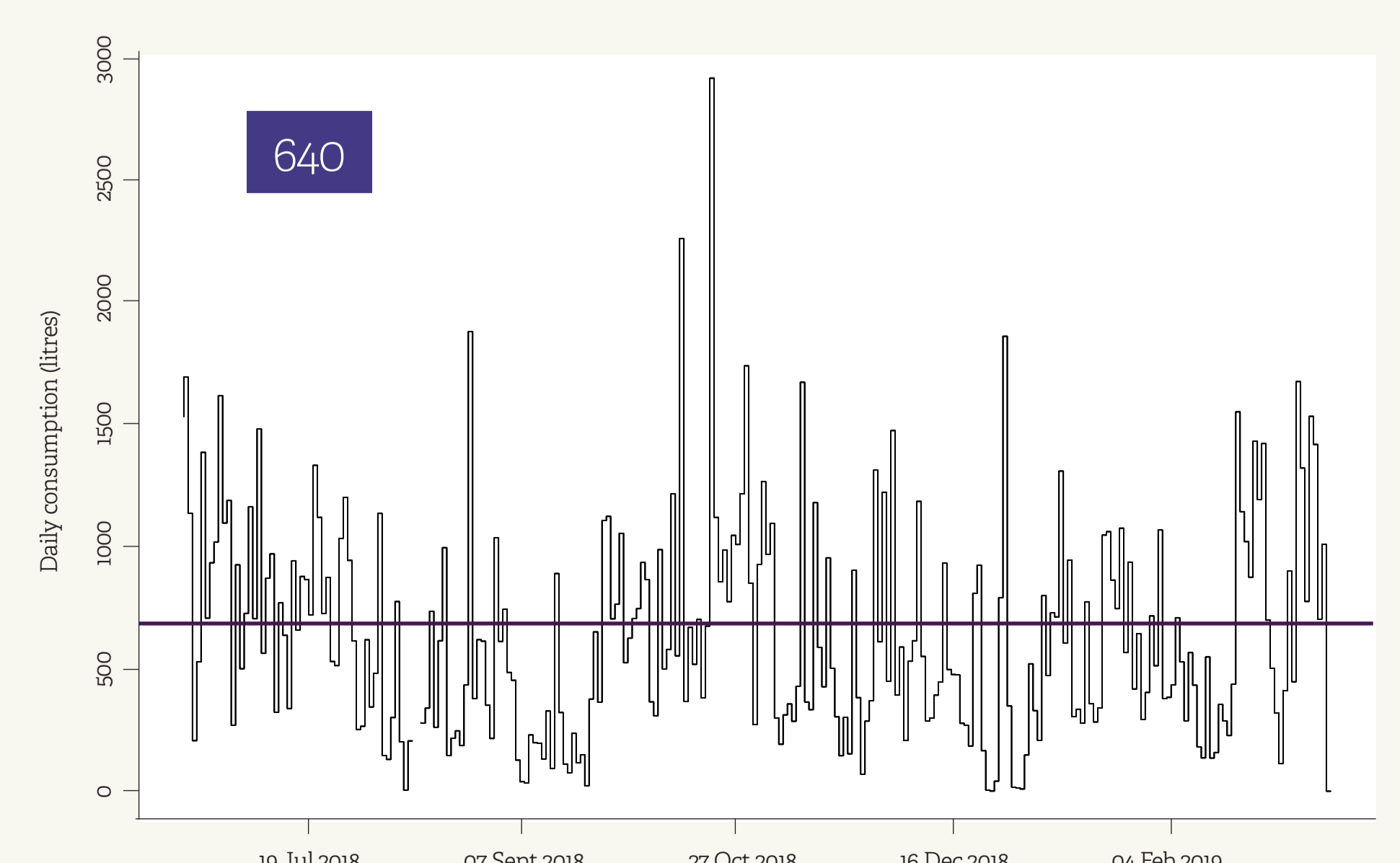


## Usage – per household



## Water use variability

A reported average water use (e.g. 640 litres per day) fails to capture the variability in the water used by a household, as shown in the figure below. Water use also varies considerably between households and during the year.



## Outputs

Full summary of results, methodology, limitations, and opportunities for future research are listed in project report available at:

**BRANZ PROJECT REPORT:**  
[www.branz.co.nz/pubs/research-reports/sr469/](http://www.branz.co.nz/pubs/research-reports/sr469/)

**UNIVERSITY OF AUCKLAND DATA ANALYSIS:**  
[www.waternz.org.nz/Resources/Article?Action=View&Article\\_id=2243](http://www.waternz.org.nz/Resources/Article?Action=View&Article_id=2243)

**PROJECT SUMMARY WEBINAR:**  
[www.waternz.org.nz/Resources/Article?Action=View&Article\\_id=2258](http://www.waternz.org.nz/Resources/Article?Action=View&Article_id=2258)



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