

# Transforming water management

## A journey of many individual actions



**Lesley Smith**

# Agenda

The what, the why, and how building officials can help transform:



**Environmental protection**  
by preventing wastewater overflows



**Public health**  
Ensuring safe onsite wastewater management



**Water conservation**  
Enabling water use efficiency



# Environmental protection: Preventing wastewater overflows



AUCKLAND ●

## Popular Auckland North Shore beaches closed over wastewater contamination

14/12/2023

Gray Gibson



While overflows are more common in wet weather, they can happen in dry weather if pipes are damaged or blocked. Photo credit: Getty Images

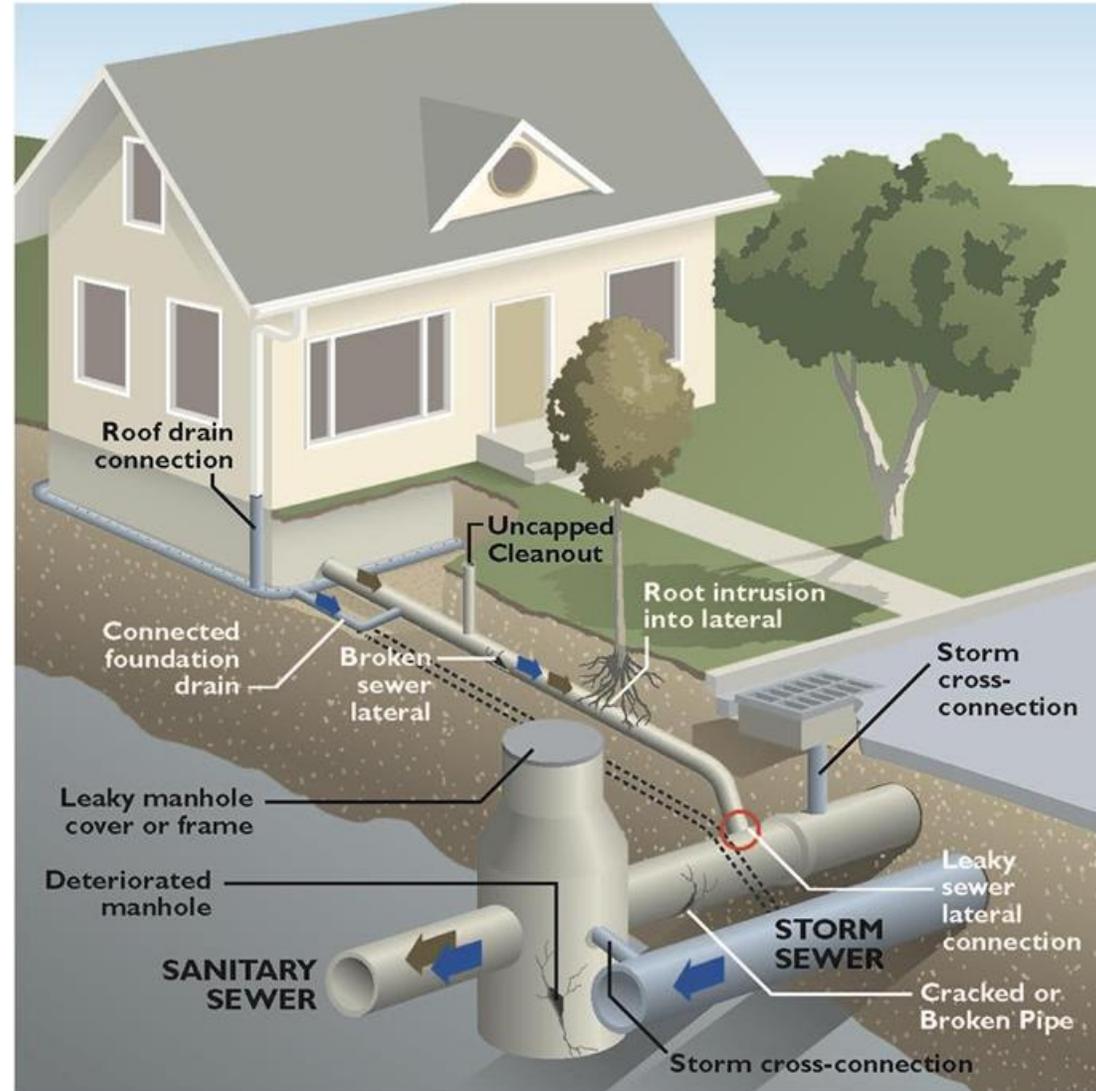
### overflow

Share this

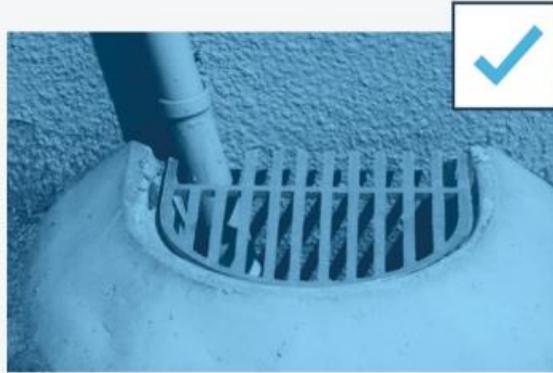


# Wet weather overflow caused by inflow and infiltration

Figure 1-2 Sources of Inflow & Infiltration



# Role of building officials



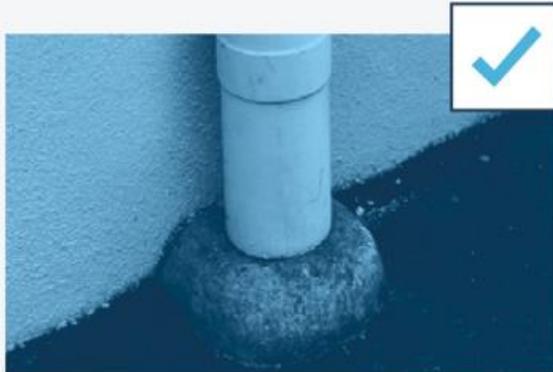
## ***A compliant gully trap:***

- > is raised off the ground
- > is covered by a grate



## ***A non-compliant gully trap:***

- > is level with the ground
- > is blocked with soil, leaves or debris



## ***A compliant downpipe:***

- > is separate from a gully trap
- > connects to the stormwater pipes on your property



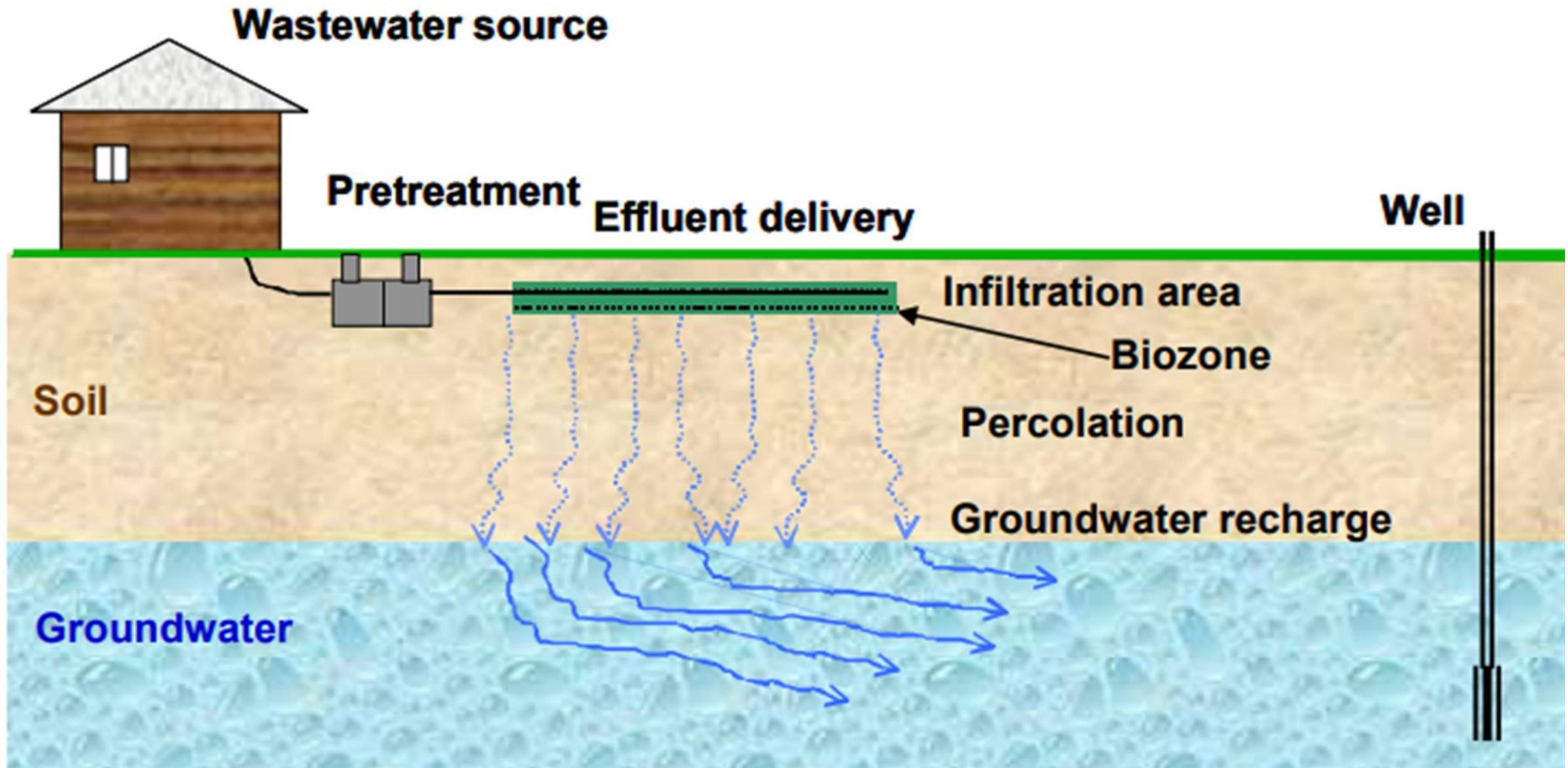
## ***A non-compliant downpipe:***

- > is connected to a gully trap so stormwater will enter wastewater pipes



# Public health

Ensuring safe onsite wastewater management

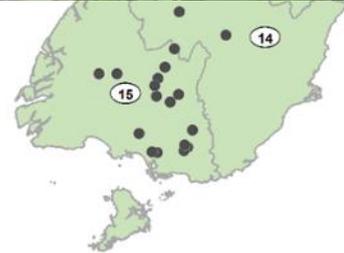


### Schematic of a Conventional OWMS

VanCuyk S, Siegrist RL, Lowe KS, Drewes J, Munakata-Marr J, Figueroa L (2005)

# 2018 EOCs

(2022 results pending)



Non-participating Council



- PFAS detected (in 11 wells)
- Well locations for 2022 PFAS Survey (131 wells)
- Participating Council
- Non-participating Council

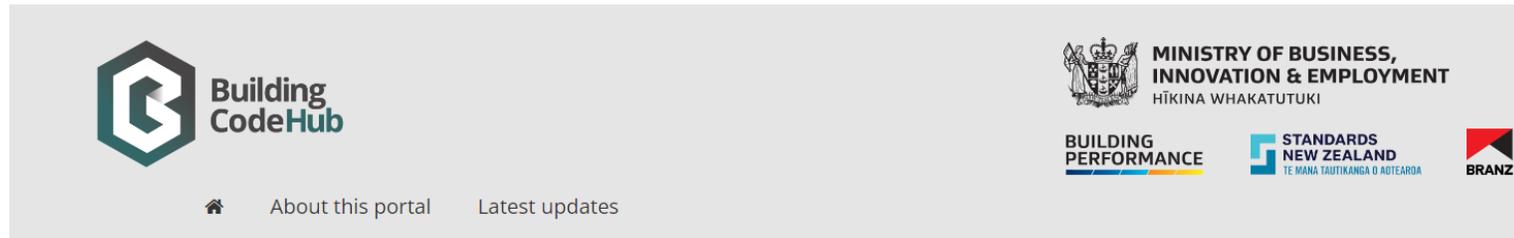
# Home owner confusion...

	Building Act	Resource Management Act
Must comply with	Building Code (specifically G13.3.4)	District Plan (or in some cases the Regional Plan)
Region of application	Nationally	District or city level for District Plans and regional level for the Regional Plans
Consent requirements	Building Consent required for the design and installation	Resource Consent if required by the District or Regional Plan. May be a permitted activity under the District plan, which does not require a Resource Consent.
Means of complying	G13/VM4 which cites AS/NZS 1547 (Part 4 Means of Compliance)	Stipulated in the District Plan (or in some cases Regional Plan)
Common means of compliance	AS/NZS 1547 (Part 4) TP58 (as an alternative solution)	AS/NZS 1547 TP58

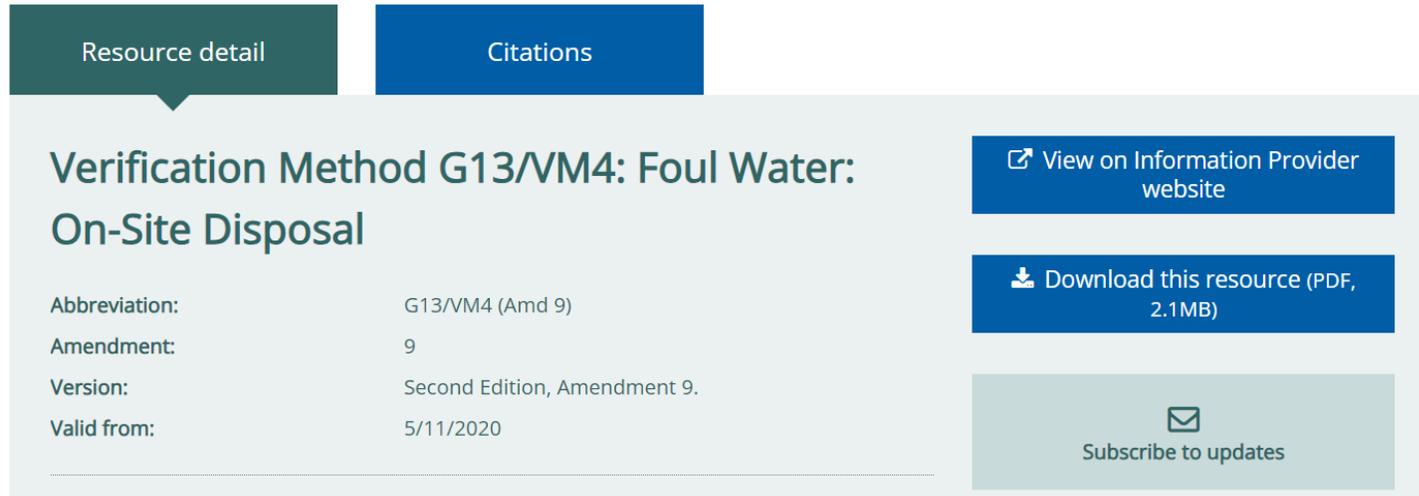
**Note:** the installation of on-site disposal systems must be undertaken or supervised by a certified drainlayer.

# Role of building officials

- Liaise with regional councils to ensure permitted activity plan rules are followed
- Check that servicing agreements are in place before issuing code of compliance certificates
- Ensure adequate training and knowledge of onsite systems to issue related consents



The screenshot shows the top navigation bar of the Building CodeHub website. On the left is the Building CodeHub logo. In the center, there are logos for the Ministry of Business, Innovation & Employment (HĪKINA WHAKATUTUKI), Building Performance, Standards New Zealand (TE MANA TAUTIKANGA O AOTEAROA), and BRANZ. On the right, there are icons for Print and Email. Below the logos are links for 'About this portal' and 'Latest updates'.



The screenshot shows the 'Resource detail' page for 'Verification Method G13/VM4: Foul Water: On-Site Disposal'. It includes a table with the following information:

Abbreviation:	G13/VM4 (Amd 9)
Amendment:	9
Version:	Second Edition, Amendment 9.
Valid from:	5/11/2020

On the right side of the page, there are three buttons: 'View on Information Provider website', 'Download this resource (PDF, 2.1MB)', and 'Subscribe to updates'.

## Helpful resources

[www.waternz.org.nz/OWMS](http://www.waternz.org.nz/OWMS)

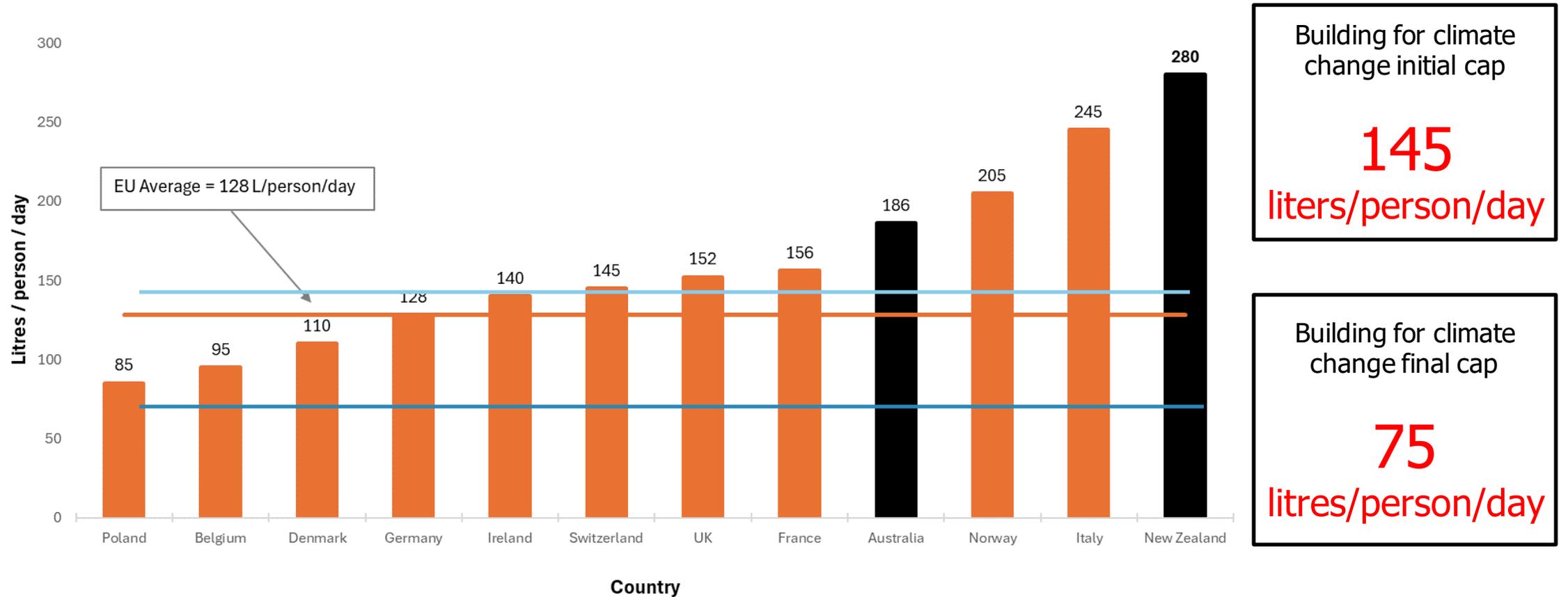




# Water conservation

## Enabling water use efficiency

# Current and future residential water use



**European data:** Europe's water in figures: An overview of the European drinking water and waste water sectors (2017 Edition).

**Australian data:** Australian Bureau of Statistics

**New Zealand data:** Water New Zealand

# The LowCo home



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