

# Affinity Water Developer Compendium





# Contents

- 3 1: Introduction**
- 3 Affinity Water: Where we operate
- 4 Our Area
- 5 Our Environment: why do we need to protect it?
- 6 2: Water Net Zero**
- 6 What is Water Net Zero?
- 7 Developers: Benefits of reducing your water usage
- 8 Water Efficient Development Credit
- 9 Competency
- 10 3: Measures**
- 10 Water Efficiency Measures: New Build Residential
- 12 Water Efficiency Measures: New Build Commercial





# 1.Introduction

## Affinity Water: Where we operate

We're the largest water-only supply company in the UK. We provide, on average, 950 million litres of water each day to a population of more than 3.89 million people across three supply areas in the southeast of England.

### What is our purpose?



We're focused on building our resilience and providing a long-term sustainable supply of high-quality water, while protecting our environment for our communities – now and in the future

### What is our vision?



Our vision is to be the UK's leading community-focused water company.

### What is our mission?

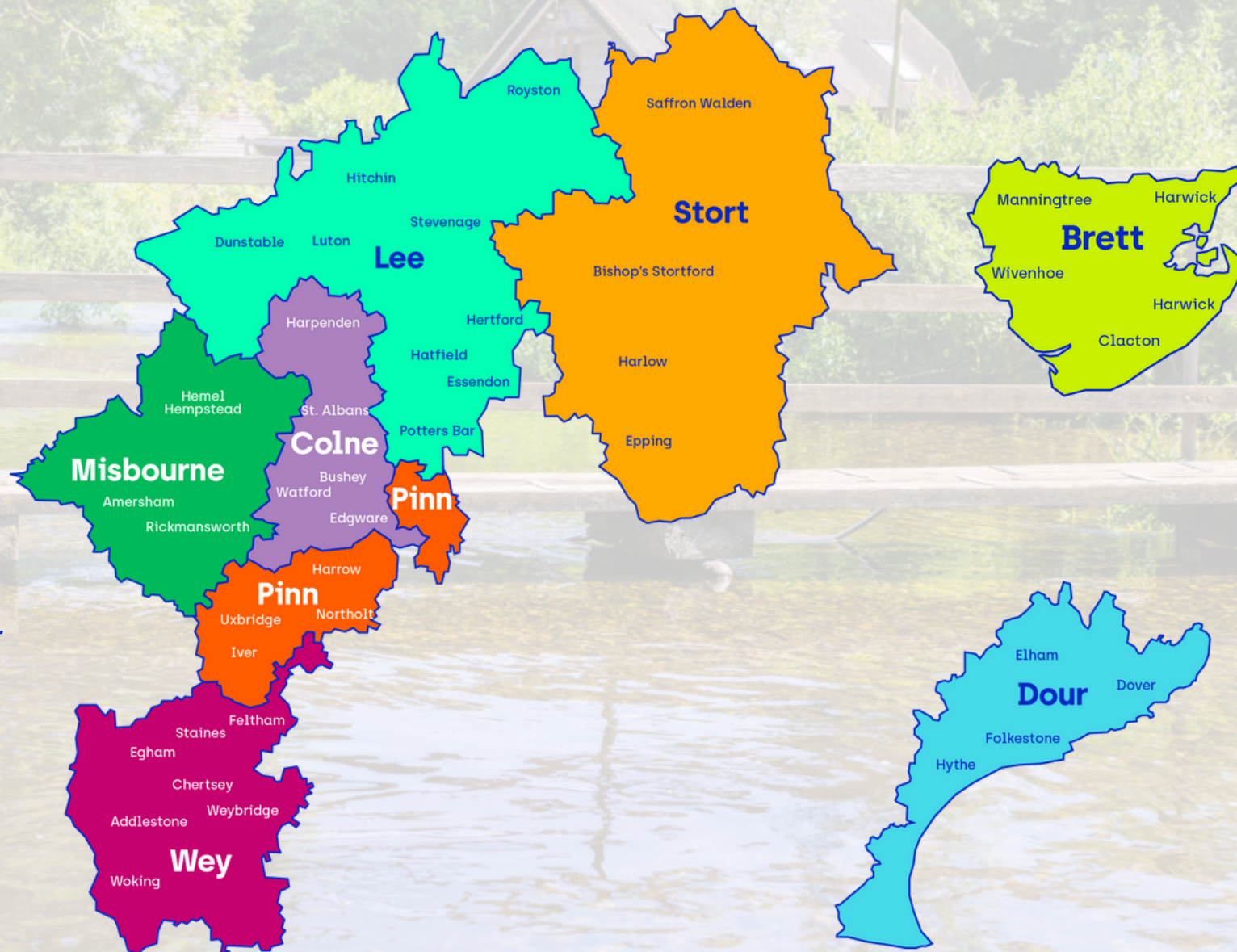


Our mission is to provide sustainable, high-quality water and work together with our community to make better use of water and safeguard the local environment.





## Our Area



We are focused on providing a high-quality supply of water and to help protect our environment for our communities - now and in the future



# Our Environment: Why do we need to protect it?



Population growth, climate change and the demand for water are putting significant pressure on our local environment and water resources in our region. Without action – the area we supply faces a shortfall of 449 million litres a day by 2050. This is the equivalent of around 180 Olympic size swimming pools each day. As the UK's largest water supply only company, we recognise the important role we play, not only in providing an essential service but, also as stewards of the environment.

## Hotter Temperatures



As temperatures rise consumers are likely to increase their demand for water throughout the year, this will be exacerbated by higher demand peaks during hotter summer days.

## Population Increase



As a result of the high population growth in our region we anticipate a 10% increase in demand by 2050. We also have a diverse, growing customer base residing in one of the most densely populated, economically active regions in the UK, and we currently have the highest demand for water in the country per person, at 157 litres per day on average (compared to a national average of 145 litres).

## Rainfall Shortage



We are a water company supplying parts of South East England, which is one of the most water scarce regions in England, with 50% less rainfall on average than the rest of the country. Droughts are natural events that happen when there are extended periods of low rainfall that create a shortage of water for people, the environment, agriculture or industry.

## Chalk Streams



We operate in a supply area which is uniquely home to 10% of all globally rare chalk streams. Although we have sufficient water to serve our customers now, we cannot continue to abstract water from boreholes near these rare habitats in the longer term.



## 2.Water Net Zero

### What is Water Net Zero?

The project will deliver the world's first at scale water neutral new development in collaboration with NAVs. In new homes across various sites we will firstly minimise water demand, then offset any remaining water consumption using innovative technologies. The total water use in the defined region will be the same after the new development as it was before.

The collaborative project will go beyond current 'sustainability' ambitions and ensure homes are measurably water neutral. We have partnered with NAVs on this project to prove the commercial and operational business case for both the incumbent water company and the new entrant for at scale water neutrality.

This project will allow Affinity Water to test an approach to sustainably manage increasing demand on our network whilst ensuring resilience in our operations and protecting local environments. It will facilitate better access to the market for NAVs, strengthen delivery partnerships and water efficient technologies, and share learnings across the water sector via publication of a Water Neutrality Blueprint document which will encourage a more competitive market.

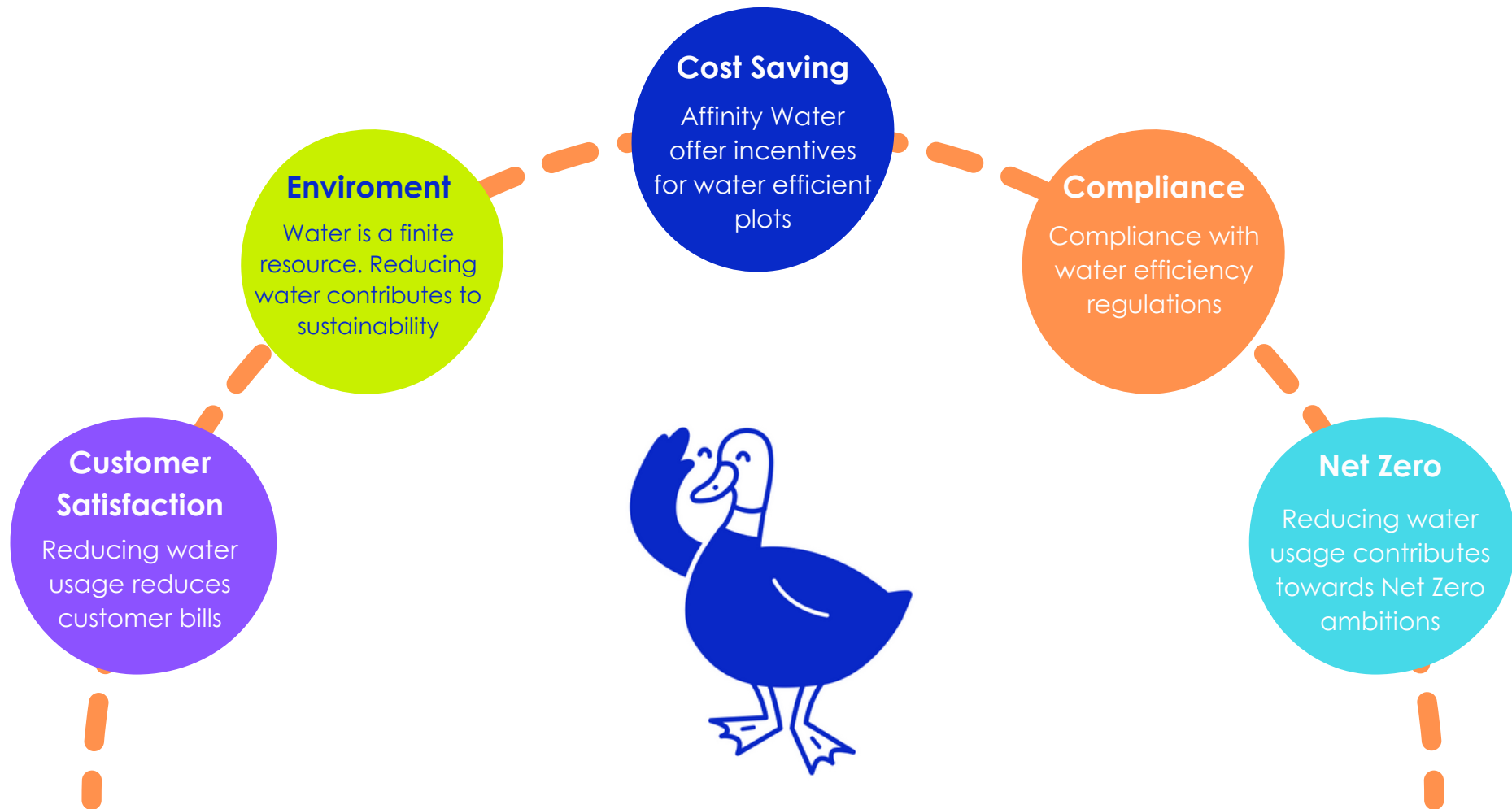


 [dx@affinitywater.co.uk](mailto:dx@affinitywater.co.uk)

 [affinitywater.co.uk/waterneutrality](https://affinitywater.co.uk/waterneutrality)



## Developers: Benefits of reducing your water usage





# Water Efficient Development Credit

**Affinity Water are supporting sustainable developments through our 2024/25 New Connections Charging Arrangements.**

Building Regulations include the requirement for all new dwellings to achieve a water efficiency standard of 125 litres of water per person per day.

Building Regulations part G include an optional requirement of 110 litres of water per person per day for new residential development, which should be implemented through local policy where there is clear evidence needed.

We operate in areas of serious water stress and support the inclusion of a water efficiency standard of 110 litres per person per day being included in planning policies.

We will apply a discount to the infrastructure charge for new homes where there is evidence of water efficiency design to a standard of 110 litres(or less) per person per day. The discount will be -£589 per infrastructure charge.

Qualification for this discount will only be approved on review and acceptance of the submission of accurate water efficiency form(s) illustrating the intention to install water efficient fittings. These must be provided at the time of application submission and must be representative of all plots anticipated to be water efficient. More information can be found in our charges:

 [affinitywater.co.uk/developing/our-charges](https://affinitywater.co.uk/developing/our-charges)







# Competency

## Why is competency so important?

Using an approved contractor helps prevent the risk of drinking water being contaminated by poor plumbing practices or sub-standard products. There are six existing approved contractor schemes in the UK approved by The Drinking Water Inspectorate:

- **The Water Industry Approved Plumbers' Scheme (WIAPS)**
- **Association of Plumbing and Heating Contractors (APHC)**
- **Chartered Institute of Plumbing and Heating Engineering (CIPHE)**
- **Scottish and Northern Ireland Plumbing Employers' Federation (SNIPEF)**
- **Anglian Water's APLUS**
- **Severn Trent's Watermark**

**WaterSafe** is a free online search facility that can help customers find a competent and qualified plumber.

## Why is compliance so important?

**Regulation 4** of the **Water Quality (Water Fittings) Regulations** states that fittings must be of an appropriate quality and standard and that they must be suitable for the purpose that they are being used. Additionally, fittings must be comply with the requirements of **Schedule 2** of the regulations and be installed in a workmanlike manner. Approvals such as WRAS and KIWA are accepted.



 [watersafe.org.uk](https://watersafe.org.uk)



## 3.Measures

### Water Efficiency Measures: New Build Residential



#### Rainwater Harvesting - Water Butt

 £30.00 - £500.00

Rainwater harvesting entails the collection, retention, and utilisation of rainwater as a sustainable alternative to potable water. A water butt functions as a basic rainwater harvesting system, providing easily accessible free water for use in the garden.

#### Core Benefits:

An average saving of 160 litres for every 10 mins a hose tap isn't used / 5lppd.

#### Cost Assumptions:

Costs based on individual price, bulk discounts likely to be available. Costs include all necessary pipework connections. Capacity range from 100 litres to 800 litres, with typical households having up to a 230 litres Butt. Higher cost water butts can include smart technology, decorative, dual purpose and wall mounted.



#### Efficient Fittings – Dual-flush WCs, Cistern Displacement Devices (CDD's) & Tap Aerators



Dual Flush WC's: £50.00 - £400.00  
CDD's: £0.00 - £20.00  
Tap Aerators - £7.00 - £15.00

Efficient fittings are effective measures for reducing water usage in residential buildings. Dual-flush WCs, cistern displacement devices and tap aerators offer suitable and cost-effective solutions to reduce water usage in homes.

#### Core Benefits:

Dual Flush WC's: Average saving of 7-9 litres per flush.

CDD's: Average saving of 5000 litres per year.

Tap Aerators: Average saving of p to 9 litres per minute.

#### Cost Assumptions:

Costs based on average household usage with price ranges dependent on quality, number of units, and supplier.



# Water Efficiency Measures: New Build Residential



## Water Efficient Appliances



£200.00 - £900.00

Alongside efficient fittings, installation of water efficient appliances can be an effective method of reducing water usage in residential properties. Examples of these include low water, or even no water, washing machines and dishwashers.

### **Core Benefits:**

Low water washing machines are known to reduce water usage by 40% on average and up to 50% less electricity, leading to lower utility bills and stronger water efficiency for the homes overall. Estimated cost saving of up to £245.00 per machine over a 10 year lifespan.

### **Cost Assumptions:**

Cost savings based on systems that would operate continuously at an average usage level. This cost saving could increase further as energy bills look to rise in future.



## Behaviour Change

Another method of improving water efficiency is through customer behaviour change. This may include encouraging residents or users of a new development to consider their water usage habits such as turning off the tap when brushing teeth or only running the washing machine with a full load of laundry. Encouraging conscious water usage in new developments presents both commercial and also reputational benefits to developers as legislation and public perception tends towards water efficient practices.

You can find free water-saving tips on our website:

[affinitywater.co.uk/saveourstreams/tips](https://affinitywater.co.uk/saveourstreams/tips)



# Water Efficiency Measures: New Build Commercial



## Rainwater Harvesting



£10,000.00 - £75,000.00

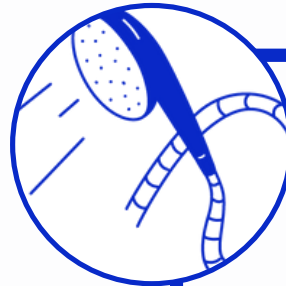
Rainwater harvesting entails the collection, retention, and utilisation of rainwater as a sustainable alternative to potable water. A rainwater harvesting system within a commercial setting can vary significantly dependent on the scale of the development. These systems will capture, filter and treat the water for re-use in non-potable applications.

### Core Benefits:

A potential to save between 50m<sup>3</sup> up to 15,000m<sup>3</sup> per year, this in certain cases could result in annual savings of up to £20,000.

### Cost Assumptions:

Calculating cost for rainwater harvesting systems of this nature can be difficult and each individual unit would need an individual assessment on the amount of water that could be collected, size of storage, rainfall and then final usage.



## Water Efficient Fittings



Low Flow/Water Less Urinal:  
£250.00 - £500.00

Water efficient fittings are effective measures for reducing water usage in commercial buildings. These can be very simple solutions such as tap aerators to more complex urinal management systems.

### Core Benefits:

Savings can vary significantly between fittings and existing performance but with potential savings of up to 18 litres per minute for taps. By controlling flushing on urinals this can save up to 12 litres per flush and operate only at times this is required. Typical urinals flush 3 times an hour 24/7, so savings both in water reduction and cost of water used can be significant.

### Cost Assumptions:

Cost savings are dependent on usage and number of installations, however there are case studies of such installations reaching cost saving pay back within 18 months.



# Water Efficiency Measures: New Build Commercial



## Water Re-Use - Greywater

 £40,000.00 - £150,000.00

Greywater harvesting is the practice of collecting wastewater from a building's fittings such as sinks, showers and washing machines. This water has a low level of contamination and is a sustainable non-potable option at a commercial scale for toilet flushing, irrigation or even cooling systems.

### **Core Benefits:**

Previous examples of commercial buildings utilising greywater re-use systems showed 60-75% decrease in water usage. These have resulted in annual savings between £10,000 - £40,000 dependent on usage.

### **Cost Assumptions:**

Costs based on a general range and each installation would be subject to its own individual assessment.