AffinityWater





What is Water Neutrality?

Being "water neutral" means that a new development takes no water at all from the environment.We will achieve this by making new homes highly water efficient, influencing residents behaviours and "offsetting" or reducing water waste from across the surrounding community.

How does it help the environment?

The UK is facing a water shortage. There is a predicted potential 4 billion litres a day deficit by 2050 and Water Neutrality will ensure that new house building will not add to an existing or future water scarcity challenge. It is important that new developments minimise the additional pressure they place on water supplies and the water environment, especially where they are already under stress. To do this, all new development needs to be far more water efficient than current Building Standards require. The cross-sector Future Homes Delivery Plan (futurehomes.org.uk) sets out many of the things that are needed together with a recommended timeline. One of the key things that the plan includes is water neutrality for new developments.

Over what timescales are we talking about?

In July 2022 DEFRA announced that it would develop a roadmap towards greater water efficiency in new development and retrofits. This will include the possibility of revised building regulations. The Department plans to work with industry over the next two years to develop viable technologies and opportunities for lower water use and to assess the challenges this will bring. It will consider the practical solutions for grey and green water harvesting.

What kind of measures can be introduced?

To achieve water neutrality, water demand is first minimised through efficient fittings, rainwater harvesting and water reuse. Any remaining additional demand is then offset locally through water saving interventions in the local community. This requires collaboration between relevant stakeholders and the use of accurate water consumption data for offsetting. Some argue that we already take a similar approach with new development and flooding so why not for water demand?

Will it help combat climate change?

Around the World climate change and rising temperatures are impacting water access for people as droughts and floods become more frequent. In the UK warmer temperatures lead to higher demand for water and when droughts occur and there is less rainfall our water resources in rivers and reservoirs run low. As the temperatures become hotter, we are likely to run into increasing water shortfalls placing more importance on measures such as Water Neutrality when new homes are built. It will help us to facilitate sustainable growth and to have a healthy environment. The more water efficient we can make all new development, the less likely it is that realising future growth or achieving a healthy environment will be limited by water availability.

What is a NAV and how does it help develop Water Neutrality?

Ofwat and Nesta have launched an innovation project, called Project Zero (also known as 'Water Neutrality at NAV sites')

(waterinnovation.challenges.org/winners/water-neutrality-at-nav-sites/) which will take place at three locations. Currently efforts are concentrated at the second location, a development called Bidwell in Houghton Regis Town, Central Bedfordshire. It will focus on making new homes water efficient and reducing water use by encouraging behavioural change. The aim is to deliver the same total water use in the community as before the new homes were built.

New properties in the Affinity Water area are expected to use an extra 83.03 million litres a day by 2032 on top of what is already being used. Water Neutrality will help to reduce this anticipated increase in demand.

Who are you collaborating with?

At Bidwell in Houghton Regis Town, Central Bedfordshire the Affinity Water, Water Neutrality team will be testing the effectiveness of a behavioural campaign on 1000 houses working with three external consultancies. The behavioural change experts Grapeviners and IWNL, who operate water and wastewater networks across the UK, and are the Affinity Water NAV partners, and H2OiQ, a manufacturer and supplier of water efficiency products. It is also working closely with Central Bedfordshire Council and the local community.

The goal is to help customers reduce water wastage by modifying certain behaviours and the remaining water use will be offset by reducing water consumption in the local community.

When will we know the results of these trials and how important are they in creating a blueprint?

The Affinity Water, Water Neutrality trial in Houghton Regis Town will be a trend setter for the industry as it explores new ways to trial how to build new housing developments while at the same time not putting added pressure on our finite water resources. It will create a blueprint for the industry and show us how we can adapt and become more resilient to the impact of climate change by building new homes that are water efficient and encouraging behavioural change. We need to create a model of sustainable growth which will help the industry meet our pledge to achieve net zero operational emissions by 2030.

What response have you had from customers and businesses who are working with you on NAVS?

Thanks to the local community we have so far offset nearly 900 connections from this new development, and we hope to be Net Zero in the next three months.

All the partners are working around the clock to make water neutrality a reality. Organisations like Chilterns School have taken part and are helping us offset the new development's water demand by reducing their own water consumption.

Water Neutrality is an environmental approach that will help us protect the environment, support our society to continue growing and mitigate the water scarcity future challenges and help us combat the impact of climate change on our water resources. Collaboration is the key to its success.

In what area of the Country does Affinity Water work?

Affinity Water has been supplying water to the local community for more than 170 years. 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 now and in the future.

We are the largest water-only supply company in the United Kingdom. We provide 950 million litres of water each day to a population of more than 3.8 million people in the South East of England covering parts of Bedfordshire, Berkshire, Buckinghamshire, Essex, Hertfordshire, Surrey, the London Boroughs of Harrow and Hillingdon and some of the London Boroughs of Barnet, Brent, Ealing, and Enfield. We also supply water to the Tendring peninsula in Essex and the Folkestone and Dover areas of Kent.

Can I receive a discount for a Water Efficient Development?

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.