

What's happening?

We've built a new water treatment plant at Sundon Reservoir, in Central Bedfordshire. This new facility will help us to reduce the amount of water we take from chalk groundwater sources in our region. This new water conditioning works will allow us to bring in more water from outside our area (from Anglian Water's Grafham water treatment works and reservoir).

Why are you doing this?

We have plans to reduce abstraction from groundwater sources by up to a further 38 million litres of water a day by 2025. This new treatment plant will help us to do that.

We're committed to reducing how much water we take from groundwater sources in the Chilterns and beyond. These efforts are there to help the globally rare chalk streams, which are home to many wildlife species.

To make these reductions, we need to bring more water into our area to make up the difference. This will come down through the existing pipe network from Anglian Water's Grafham Water reservoir, near Huntingdon.

When are you doing this?

We started building the water conditioning plant in October 2022 and it's scheduled to finish by March 2025, when it will then be in operation. Local groundwater abstraction reductions are planned from December 2024.

What are the hours of operation and will it be noisy at night?

The treatment plant will operate on a 24/7 basis. There shouldn't be any noise impact on the local community.

Why do you need a new treatment plant if the water is coming from another Water Company?

Chemically, water is different depending on the area it comes from. This is because the water travels through rocks and soil which are specific to each area.

These natural differences can affect how the pipes react to the water.

The water will already be safe to drink but we're conditioning the water to make sure it works with our pipes. Our pipes are accustomed to water with a different chemistry.

How will it affect my water and my water supply?

Your water supply won't be interrupted and your water pressure will stay the same. However, the process that the water conditioning plant uses might mean that some customers in the area will notice a change in the taste and smell of their drinking water. If you notice a change, there's no need to worry your water is safe to drink and is still to the same high-quality standard.

Will this lead to more limescale in my kettle/taps etc.?

The water in your area is classified as hard water, the new water has a similar classification. This means that it shouldn't be a noticeable change. You can find out how to look after your appliances and the water hardness in your area on our website: affinitywater.co.uk/my-water/water-quality/hardness

Will my bill go up?

There are no new upfront costs to customers associated with the project. Our business plan process works on a 5-year cycle with bill levels set by our Regulator OFWAT for that period. Our current charges are set until 2025.

Can I switch back to the water you used to supply me?

No, the changes to your water supply are permanent. Once the switch has taken place, we won't be going back to taking more water from groundwater sources.

Do we have enough water if you're switching off sources?

This is a long-term plan that's taking population growth and climate change into account to make sure we're better set up for the future. Our plan includes options to create new sources of water for our supply area such as reservoirs and water transfers to meet these challenges.

Are these plans backed by the Government and your regulator? What do local communities think of these plans?

This project was included in our business plan for 2020-2025. This has been reviewed and approved by Ofwat, our regulator. We've also engaged with the Environment Agency and the Drinking Water Inspectorate (DWI).

We held a public consultation in May and June 2021. The local communities around the Sundon site were engaged and fed back positively about the positive impact the project would have on chalk streams.

How does water affect pipes?

Some metal pipes can start to corrode when the water they're normally in contact with changes. This is because of the natural chemical make-up in water from different areas. We measure how corrosive water is on mild steel and cast-iron pipes using the Larson-Skold index.

What is the Larson-Skold Index and why is it useful?

It's a way to measure how corrosive water is on mild steel metal and cast-iron pipes. The water supplying Sundon Reservoir has a higher Larson-Skold index. This means it's more corrosive to pipework that isn't used to it. This can lead to the water becoming discoloured. This water would still be safe to drink but we need to treat the water at the conditioning plant to lower the Larson-Skold index and protect our pipes.

How will this benefit the local community?

Increasing how much water we import from Anglian Water means we can reduce our borehole abstraction. This benefits the local community as less abstraction means there's more water in the groundwater sources and conserves chalk stream habitats.

Why do you need to bring more water in from other areas?

During our business planning process, we held a customer consultation where we received over 12,500 responses. From this, we found that customers were requesting that we stop abstraction from some local environments.

Currently, around 60% of our water supply comes from underground sources which involve abstraction. We're committed to reducing that amount to leave more water in the environment for sensitive habitats and local rivers.

Our Water Resources Plan (WRMP) is published every five years. In this, we have shown how we plan to supply enough water to meet the increasing demand over the next 25 years, while also minimising the impact. Within that plan, we've included our plans to bring in more water from other areas that have more water than they need.

How much will water abstraction reduce after the sustainability reductions are made?

Overall, we've already reduced abstraction by 42 million litres per day at the end of 2020 and this figure will increase to 80 million litres per day by 2025.

The Environment Agency are responsible for issuing abstraction licences for water companies and has the power to revoke or change licence conditions, where there is a proven impact on the environment.

The Environment Agency has given Affinity Water notice that abstractions should be reduced or stopped at some of our groundwater sources.

How will this affect local rivers? Can we expect to see an improved flow?

There are many things which affect the flow of chalk streams. Climate change, periods of dry weather, historical river alterations, natural seasonal flows and the demand for water.

We can't control the weather, but we want to do all that we can to help protect the globally rare chalk streams in our supply area from the threat of climate change by reducing abstractions from groundwater and river restoration schemes.

We'll continue to work with partners and the Environment Agency to monitor the beneficial impacts on flows when these reductions are made and make sure that there are no adverse effects on public water supplies or the environment.

We can all play a part in helping the local environment too by reducing the amount of water we use. The average water use in our central area is 158 litres per person per day compared to the national average of 141 litres per person. This is much higher than in countries such as Germany, where average water use is just 121 litres per person per day.

Will turning off local sources increase the risk of flooding?

We're responsible for providing water to local communities and not for flood management. This is the responsibility of the Environment Agency and local authorities.

However, we work closely with the Environment Agency, local authorities and river groups to understand the impact of these changes.

The Environment Agency is the lead body for flood risk management and undertakes modelling to understand the risks and benefits.

What are you doing to help customers reduce demand for water?

We offer our customers advice, free water saving devices and practical help all year round. To claim your free devices and find out more about our water saving tips, please visit affinitywater.co.uk/saveourstreams/tips

We also have a water meter programme to help reduce demand. This initiative helps our customers to save water and be in control of their bills.

We've also successfully lobbied government to introduce simple changes in legislation to create a water labelling scheme for appliances. This action will bring water on par with energy and drastically reduce demand.

What is abstraction?

Abstraction, the process of extracting water from deep underground in the chalk aquifer, is critical for sustaining chalk streams, which rely on groundwater for their flow. By reducing abstraction, Affinity Water is demonstrating its commitment to restoring chalk streams and their unique habitats across the Chilterns and beyond, as outlined in the 'Revitalising Chalk Rivers Programme'

