

Shaping the future of water in the North West

A summary of our Water
Resources Management Plan
from 2025



Who are we?

We are responsible for water and wastewater services in the North West. We operate a vast network of reservoirs, river and underground water sources, treatment works and pipes, supplying a population of over seven million people in about three million households and 200,000 businesses. Our supply area, covering 13,800km², is divided into four 'resource zones', as shown in the map below.



Barepot Resource Zone

Water supply is from a river source, providing non-potable water (that is, water that is not of drinking quality) for industry.

Average supply: about 22 million litres per day

Carlisle Resource Zone

Water supply is from river sources and one reservoir.

Population: about 110,000

Area: 925 km²

Average supply: about 30 million litres per day

Strategic Resource Zone

Water supply is from a large system of river sources and reservoirs linked by aqueducts, plus several groundwater sources.

Population: about 7,170,000

Area: 11,962 km²

Average supply: about 1,794 million litres per day

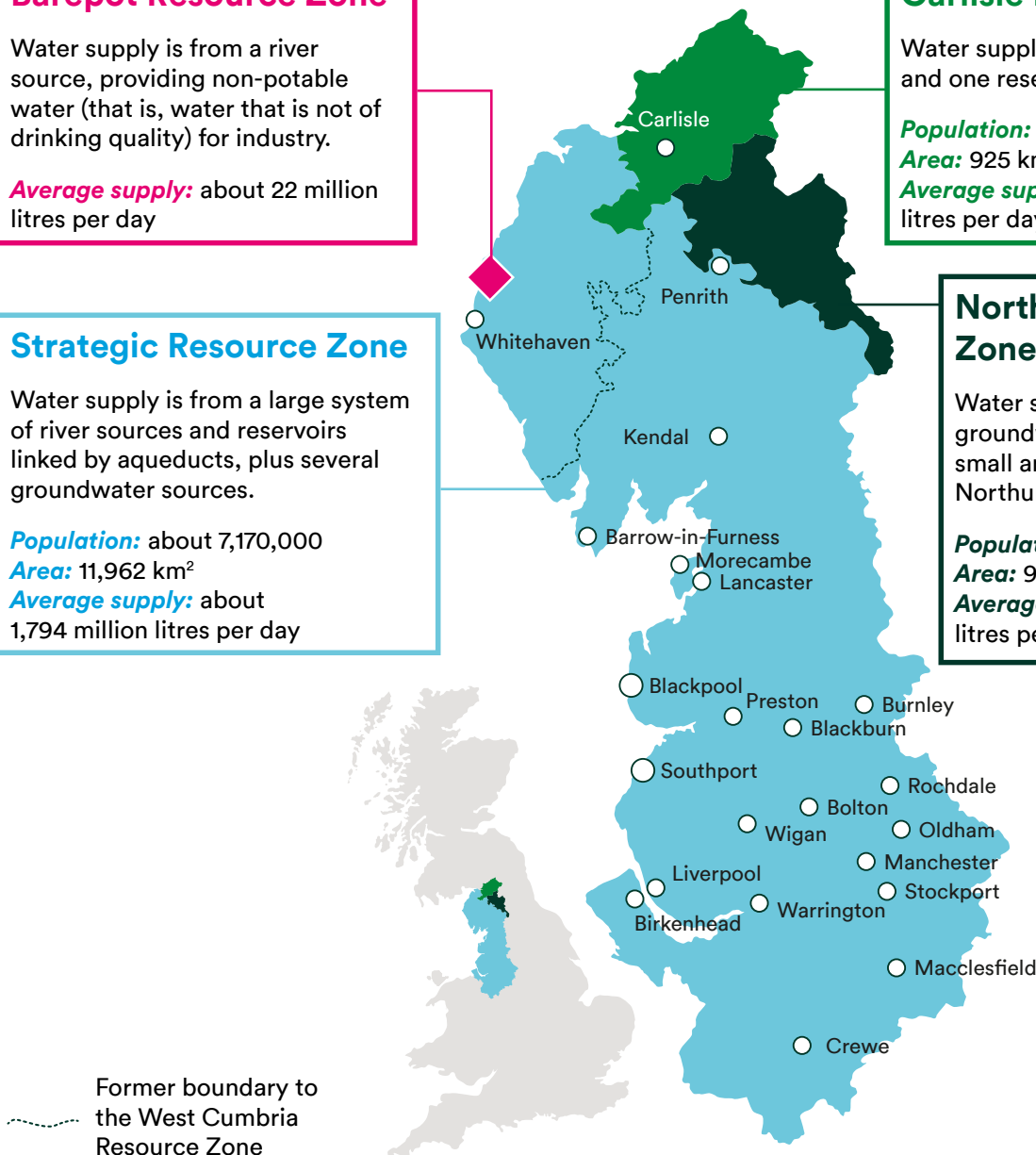
North Eden Resource Zone

Water supply is mainly from groundwater sources, with a small amount imported from Northumbrian Water.

Population: about 14,000

Area: 925 km²

Average supply: about 7 million litres per day



Former boundary to
the West Cumbria
Resource Zone

Why do we need a plan?

Water is a vital but limited natural resource. The pressures of population growth, climate change and environmental considerations mean that it's now more important than ever to plan how we will manage water resources. With careful planning we can continue to deliver a reliable supply of water for customers in the future, while protecting the environment.

With increasing pressure on water resources across the UK, our Water Resources Management Plan (WRMP) now forms part of a national framework for water resources. Within this framework, five regional planning groups, which are made up of water companies and other relevant organisations, are working together to produce regional plans. The aim is to make sure that we and other companies deliver the best value plans to manage water resources across each region as a whole, and to allow water to be transferred between companies when this is the most effective solution.

This document is a summary of our WRMP, which is a key part of our wider plans for a stronger, greener and healthier North West. The WRMP sets out our strategy to make sure we have an adequate supply of water to meet demand from 2025 to 2050 and beyond.

The full WRMP can be found at <https://www.unitedutilities.com/corporate/about-us/our-future-plans/water-resources/water-resources-management-plan/>. We encourage you to read this for more details of the methods we've used to prepare our WRMP, and our proposals for future investment.



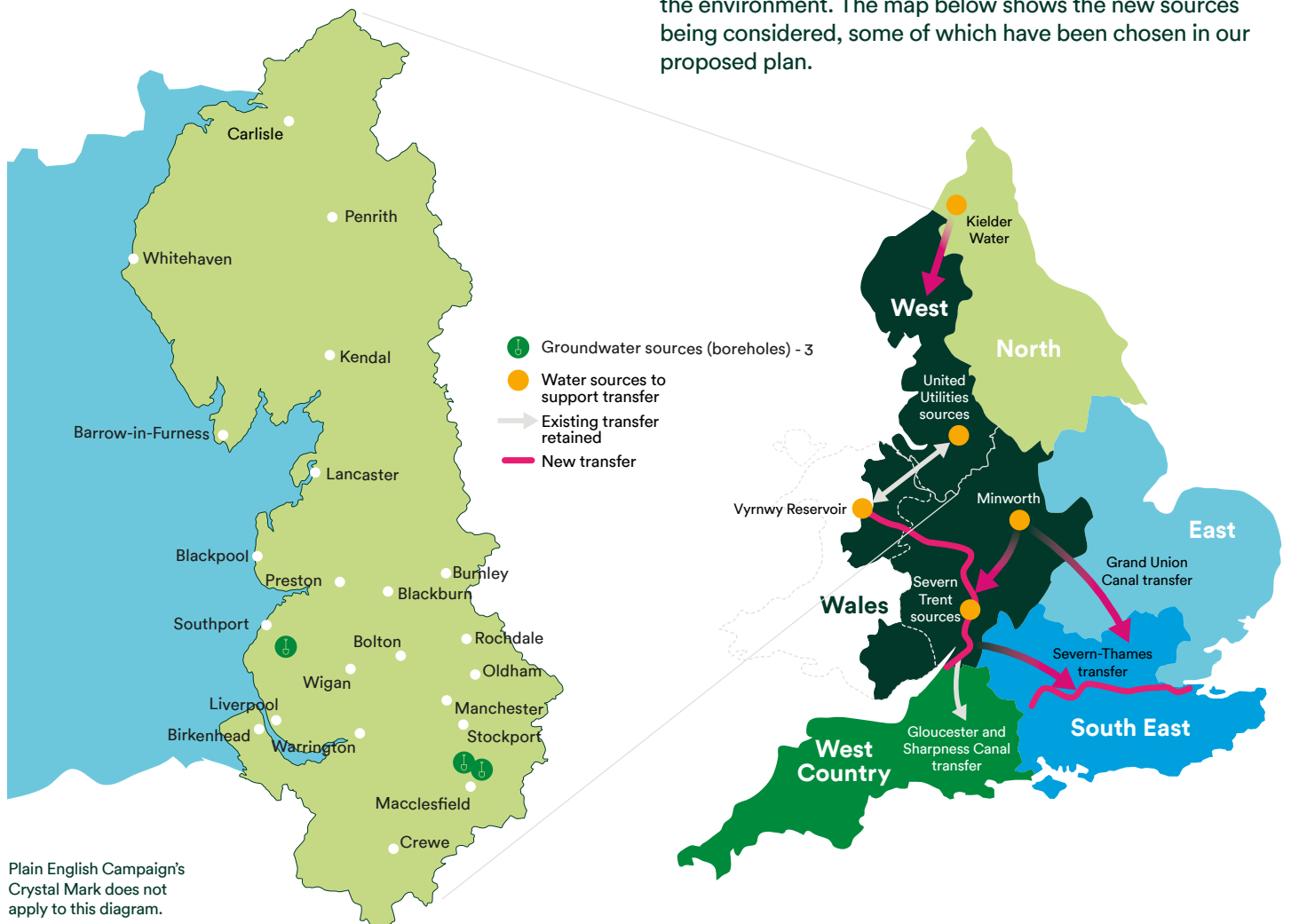
Regional and national resilience – the role of new water sources

In the south and east of England, water companies are facing increased pressure on water resources. This is due to a combination of lower average rainfall and higher populations per square kilometre than in the north and west of the country, and environmental priorities to support the recovery of sensitive chalked streams. These water companies' supply systems are more resilient to short-term droughts due to the higher proportion of underground water sources, which are affected more slowly by rainfall variations. However, they are more vulnerable to longer-term droughts in which underground water levels drop well below average, and aquifers take longer to recover after rainfall.

An **aquifer** is an underground layer of rock, soil or sediment that contains water.

We're part of the Water Resources West regional planning group (along with Severn Trent Water, Dŵr Cymru Welsh Water and South Staffs Water and other stakeholders), and we have developed our WRMP with the group as part of an overall regional plan. The Water Resources West region spans the North West, the Midlands and part of Wales.

Working with our regional group and with others across the UK, we have considered the needs of other, more water-stressed, areas of the country. This work has identified the need for water to be transferred from our region by 2030. We will develop new groundwater sources, to support this transfer so that it does not affect the reliability of the water supply in our region or cause any significant harm to the environment. The map below shows the new sources being considered, some of which have been chosen in our proposed plan.



Improving our levels of service

We've put customers at the heart of our decision-making.

We've carried out research into their preferences so we can prepare our next plan for the period from 2025 to 2030. Customers have told us that they would like to see improvements to reduce the frequency of:

- restrictions on water use;
- drought permits.

Temporary use bans

These temporary restrictions on water use are sometimes referred to as hosepipe bans, although their use is broader than this. Our plans to reduce demand, through reducing leaks and promoting more efficient use of water, will allow us to halve the frequency of temporary use bans.

Currently: **5% chance**

A 5% chance of being needed in any year (no more than once every 20 years on average)

Our proposal: **2.5% chance**

By 2031, a 2% chance of being needed in any year (no more than once every 50 years on average)

Drought permits

These are issued by the Environment Agency to give us permission to take water from specific sources or to increase the amount we take from specific sources in drought conditions.

Currently: **2.5% chance**

A 2.5% chance of being needed in any year (no more than once every 40 years on average)

Our proposal: **2% chance**

By 2031, a 2% chance of being needed in any year (no more than once every 50 years on average)



Non-essential use bans

These are also known as ordinary drought orders. They restrict more activities than a temporary use ban and can affect businesses.

Currently: **1.25% chance**

A 1.25% chance of being needed in any year (no more than once every 80 years on average)

Our proposal: **1.25% chance**

Maintain a 1.25% chance of being needed in any year (no more than once every 80 years on average)

Emergency restrictions

These are alternative arrangements for supplying water, such as standpipes.

Currently: **0.5% chance**

A 0.5% chance of being needed in any year (no more than once in 200 years on average)

Our proposal: **0.2% chance**

By 2039, a 0.2% chance of being needed in any year (no more than once every 500 years on average), which is in line with the 'Water resources planning guideline' published by the Environment Agency, Natural Resources Wales and Ofwat.

Managing the demand for water

Reducing the demand for water has many benefits. It means that we need to take less water from rivers, reservoirs and aquifers, and customers can save on their bills by using less water.

We're already working to lower demand by reducing the level of leaks from our pipes and encouraging customers to use water more efficiently. We plan to increase these activities so that we can meet government targets to achieve further reductions in demand. We're increasing the rate at which we replace our pipes, as well as making the best use of new technology to reduce

bursts and leaks. Our plans also include a large smart-meter programme for both domestic properties and businesses to help us monitor water use, identify leaks, and help customers to reduce their bills – saving water saves everyone money. These plans are supported by continued campaigns to increase awareness of water-efficiency measures.

Reducing leaks

We're increasing our efforts to find and fix leaks, using new technology where possible to help us reduce the level of leaks faster.

Our target is to halve our current level of leaks by 2050, with an interim target of 30% by 2032.



Metering and water efficiency

We help customers to understand how to use water efficiently and make informed choices on whether a water meter could help them to save water and money.

Our target is to reduce overall demand by 20% by 2038.

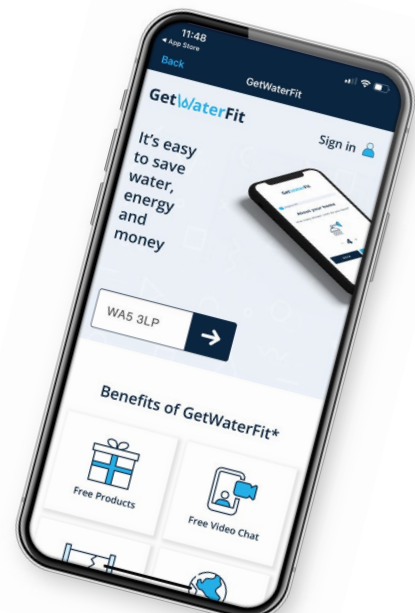
We plan to bring the average daily usage down to 110 litres per person per day (currently it is about 143 litres per person per day) by 2050.



GetWaterFit

As a customer, you can play your part in helping to reduce water use. You can find out more about how you can save water, and save money on your water and energy bills, at getwaterfit.co.uk. You can also order free water-saving devices from there.

“We're already working to lower demand by reducing the level of leaks from our pipes and encouraging customers to use water more efficiently.”



Working in partnership

Customers want to see us take an active approach to tackling future challenges, including climate change, and we recognise that this means working with others to be most effective.

Catchment systems thinking

Our catchment systems thinking (CaST) approach means that we look at the bigger picture. It encourages us to think differently and to understand the wider needs of the environment. CaST is about working together to deliver the best solution for the overall system, and by working together with stakeholders, planners and community groups we'll be better able to manage water closer to where it falls and tackle issues where they occur.

Biodiversity net gain

Water companies are required to consider biodiversity net gain when they make decisions. Biodiversity net gain is an approach that aims to leave the natural environment in a measurably better condition than it was in before any development or land use took place. We own a significant amount of land which is officially identified as being of special scientific interest. And as a business delivering significant projects in the North West, we will try hard to play our part in helping nature to recover and making improvements in biodiversity. We will work with other interested parties to influence future developments.

Place-based planning

We are trialling 'place-based' planning in priority areas, working with community groups and stakeholders such as the Environment Agency, local councils and The Rivers Trust to deliver a more reliable supply and resilience to droughts in the future. Place-based planning puts communities and the places where people live and work at the centre of our approach. This way, we make sure we involve communities in solving problems and we target investment on what works locally.

Protecting the environment in a changing climate

In line with the national framework for water resources, our plan reflects long-term aims to manage water resources while protecting the environment. This includes changes to abstraction licences (provided by the Environment Agency to allow us to take certain quantities of water from a water source) and improvements to our catchments (the areas of land where water, such as rainwater, collects before draining into rivers, lakes, reservoirs or underground water sources).


We've carried out detailed environmental studies of all our proposed supply and demand options to make sure that any effect on the environment is kept to a minimum.

The North West is already one of the wettest regions in the UK, with average rainfall ranging from 830 mm per year in areas such as Manchester to 3,200 mm per year in the Lake District. Climate change is predicted to lead to wetter winters and hotter, drier summers, along with an increase in the frequency and intensity of extreme weather. In drier periods, the environment and ecosystems will be affected as temperatures increase, ground conditions change and water quality decreases.

Climate change and extreme weather have a big effect on how we deliver water and wastewater services because they both depend upon the natural environment and a stable climate. Sourcing, moving and treating water uses a lot of energy, chemicals and other resources, which results in emissions of greenhouse gas (GHG emissions). We've dramatically reduced our carbon footprint over the last 10 years, and we're committed to going even further by working towards the national goal for net zero GHG emissions by 2050. In 2020, we renewed our climate change strategy and made six pledges to reduce our carbon footprint this decade. These are supported by ambitious targets for cutting our emissions of greenhouse gases, and we're making good progress against these targets

The term '**net zero**' means achieving a balance between the greenhouse gasses emitted into the atmosphere and the greenhouse gasses removed from it.

Our six carbon pledges

| | | | | | |
|--|--|---|---|---|---|
|  |  |  |  |  |  |
| Pledge 1 | Pledge 2 | Pledge 3 | Pledge 4 | Pledge 5 | Pledge 6 |
| To reduce scope 1 emissions (those from activities we own or control, such as burning fossil fuels or treating water and wastewater) and scope 2 emissions (those from the energy we buy). | For all of the electricity we use to come from renewable sources. (We achieved this in October 2021.) | For all of our vehicles to be green by 2028. (We will do this by, for example, switching to electric cars and vans, and trialling other alternatives to fossil fuels.) | To restore 1,000 hectares of peatland by 2030. | To create 550 hectares of woodland by 2030. | To set a science-based target for scope 3 emissions (those that we don't directly control, such as from products and services we buy). (We achieved this in 2021.) |

Summary of our WRMP



Our proposed plan meets government policy to halve the level of leaks and to reduce water use per person per day to 110 litres by 2050.



Our plan supports national planning by developing options, such as boreholes, which could allow us to transfer water outside our region when needed.



Savings made from reducing leaks and reducing the amount of water used by customers will mean that by 2031 we can reduce how frequently temporary use bans need to be introduced.



Our plan protects the environment by reducing the amount of water that we take from it.



When testing the plan we considered a range of scenarios and options, taking account of uncertainties around climate change, water transfers, the amount water needed, population growth and environmental changes.

06/23/SD/9681