Stimulus Section III: Introduction to United Utilities



Water for the North West

16 water companies in total

Water and wastewater companies

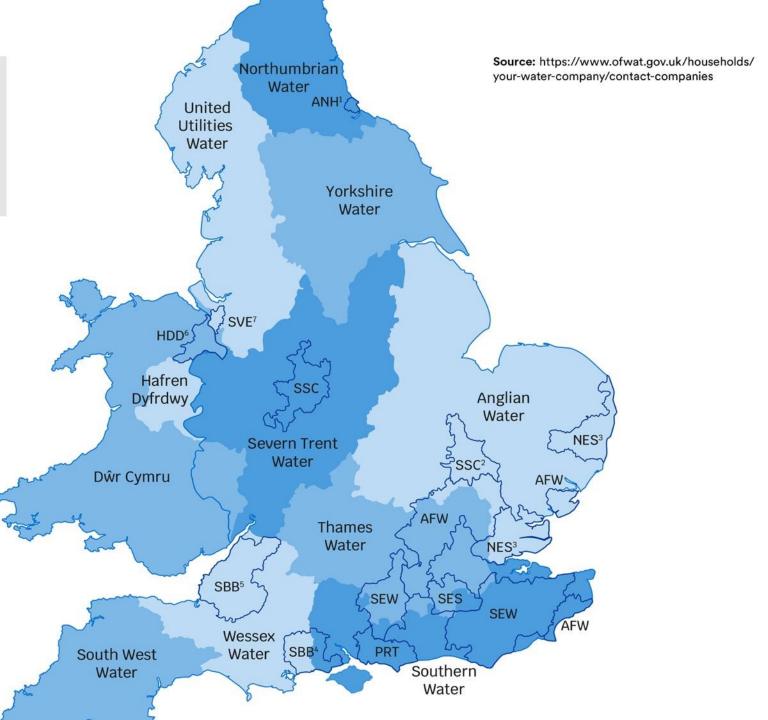
ANH: Anglian Water WSH: Dwr Cymru HDD: Hafren Dyfrdwy NES: Northumbrian Water SVE: Severn Trent Water SBB: South West Water SRN: Southern Water TMS: Thames Water UUW: United Utilities Water WSX: Wessex Water YKY: Yorkshire Water

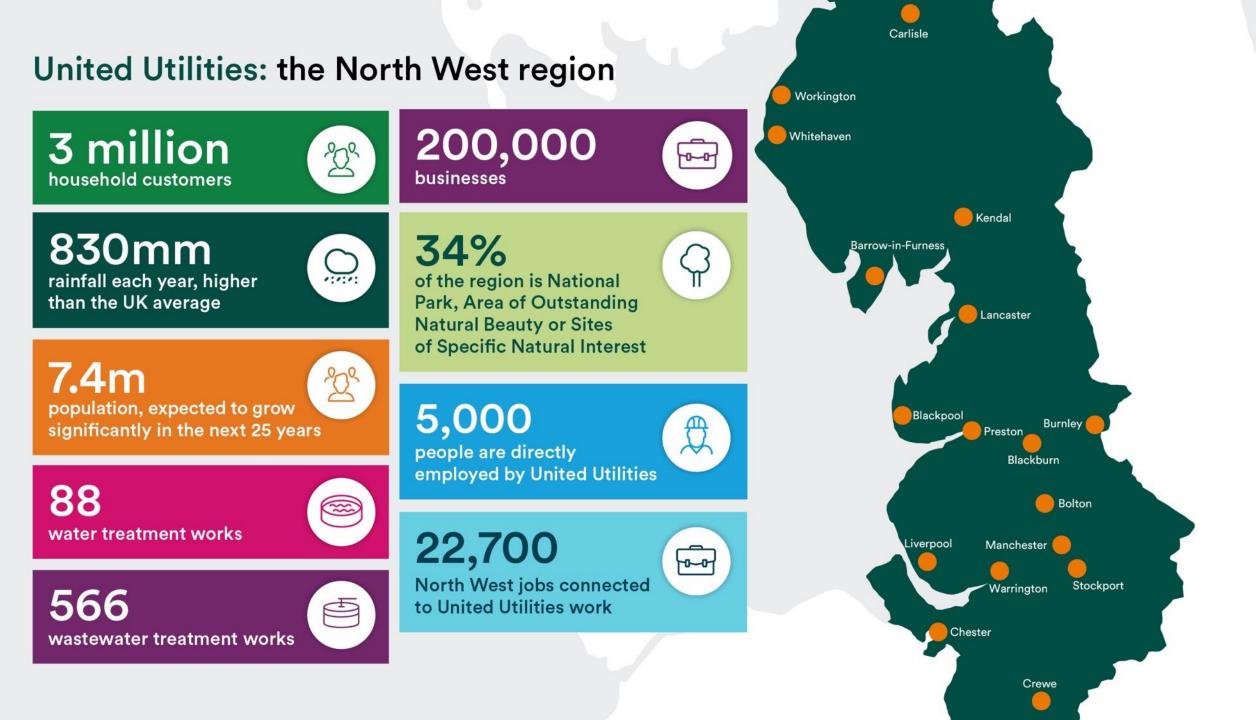
Water only companies

AFW: Affinity Water PRT: Portsmouth Water SEW: South East Water SSC: South Staffs Water SES: SES Water

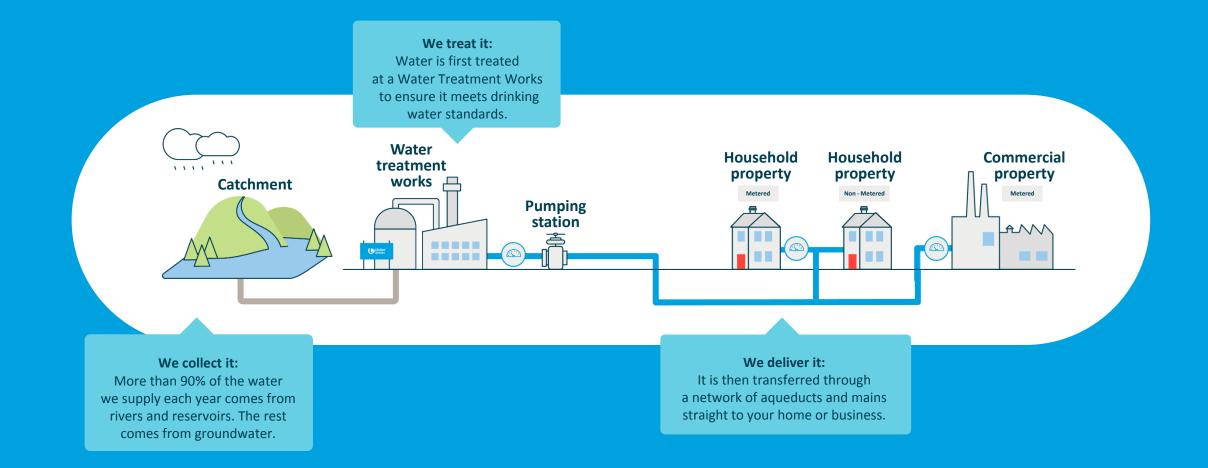
Key

Water services provided under the Hartlepool Water name.
Water services provided under the Cambridge Water name.
Water services provided under the Essex & Suffolk Water name.
Water services provided under the Bournemouth Water name.
Water services provided under the Bristol Water name.
Hafren Dyfrdwy provides water services only in this area.
Severn Trent Water provides water services only in this area.

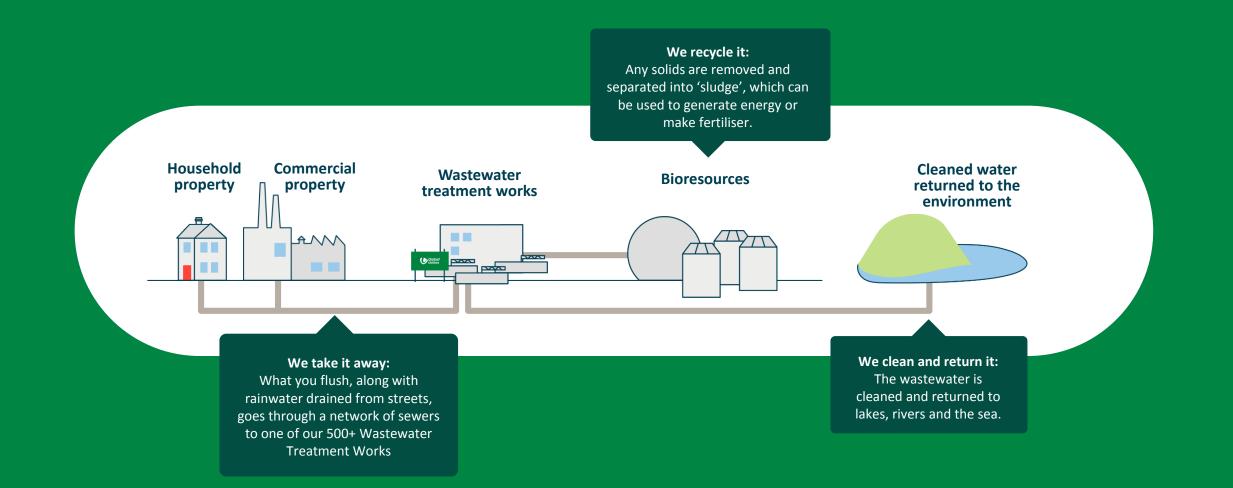




How does your water get to you?



How is wastewater taken away?



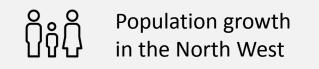
Stimulus Section V: Longer-term picture to 2050

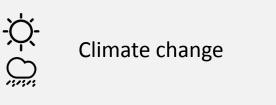


Water for the North West

So... what's the problem?

We need to ensure that customers have a reliable supply of clean drinking water and that wastewater leaves our treatment works clean, but there are pressures due to:





Climate change is predicted to cause drier summers, which will affect our water supplies, but the frequency of heavy rainfall and storms has increased and is also predicted to increase further, which could cause sewers to flood onto land and in homes or could leave the system before it's been fully treated and enter lakes, rivers, and the sea.

United Utilities' longer-term plan for 2050

Managing increased water demand in the North West		Substantially reducing sewer overflows		
Leakage reduction of 50% by 2050 from 2017-18 level	Reduce household consumption to 110 litres per person, per day by 2050	Reducing local harm to biodiversity from combined sewer overflows by 2050	Reducing spills from combined sewer overflows to no more than an average of 10 spills per overflow by 2050	
Improving river water quality		Achieving net zero greenhouse gas emissions		
Investing in better treatment of sewage to reduce harmful impacts on rivers by 80% by 2037		Net zero greenhouse gas emissions by 2050		

Stimulus Section VI: Recap on the pre-task information



Water for the North West

Water companies measured on the amount of water lost due to leaks from water mains and pipes.

Number of litres lost per day per property served. (A lower number is better.)

Company performance against targets. (A lower percentage is better.) Performance

against target

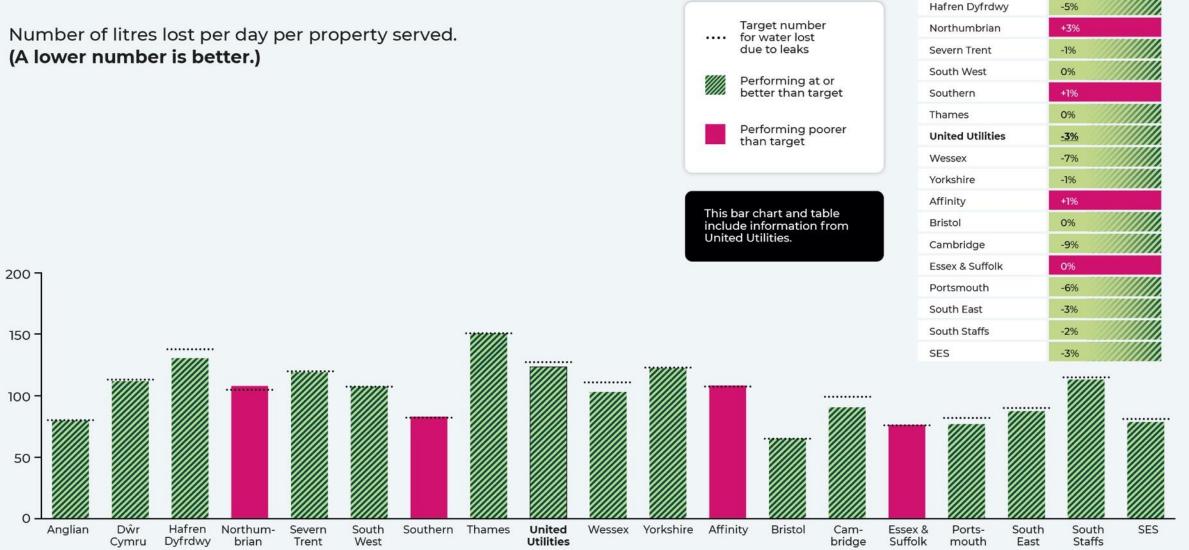
-1%

-1%

Company

Anglian

Dŵr Cymru



Water companies measured on the length of time properties are without water.

01:30:00

01:00:00 -

00:30:00 -

0

Anglian

....

Hafren

Dyfrdwy

Northum-

brian

Severn

Trent

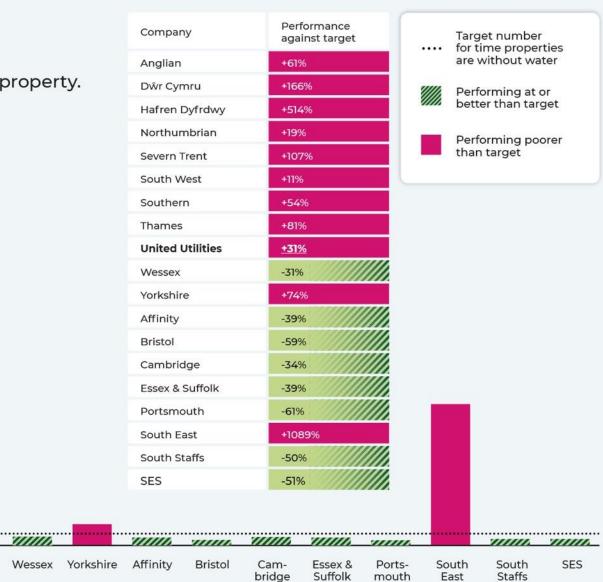
South

West

Dŵr

Cymru

Duration without water for more than 3 hours by minutes per property. (A lower bar / number is better.)



1/////

United

Utilities

Southern Thames

Company performance against targets. (A lower percentage is better.)

Water companies measured on the number of customer contacts regarding the appearance, taste and smell of tap water.

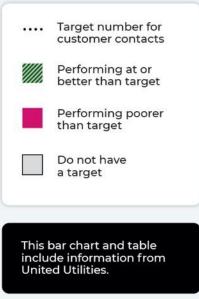
Number of customer contacts received regarding incidents, per 1,000 customers. (A lower number is better.)

NB: Severn Trent and Hafren Dyfrdwy did not have comparable performance targets published. * including Cambridge Water.

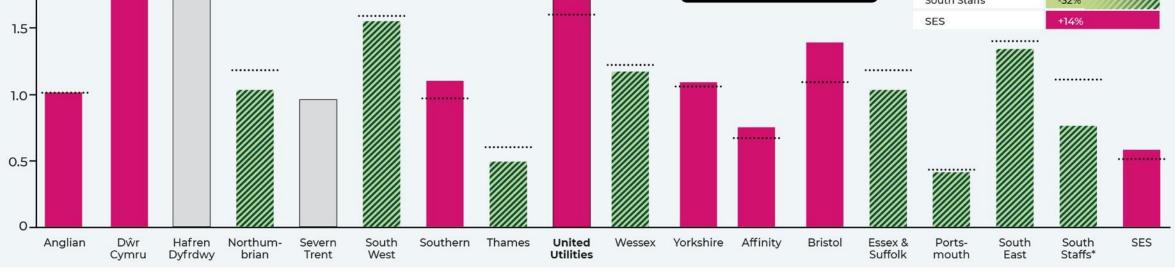
2.5-

2.0-

Company performance against targets. (A lower percentage is better.)

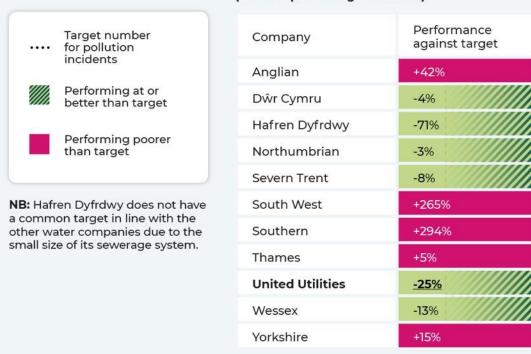


Company	Performance against target		
Anglian	+2%		
Dŵr Cymru	+18%		
Hafren Dyfrdwy			
Northumbrian	-13%		
Severn Trent			
South West	-3%		
Southern	+13%		
Thames	-18%		
United Utilities	±12%		
Wessex	-4%		
Yorkshire	+3%		
Affinity	+12%		
Bristol	+28%		
Essex & Suffolk	-13%		
Portsmouth	-5%		
South East	-4%		
South Staffs	-32%		
SES	+14%		



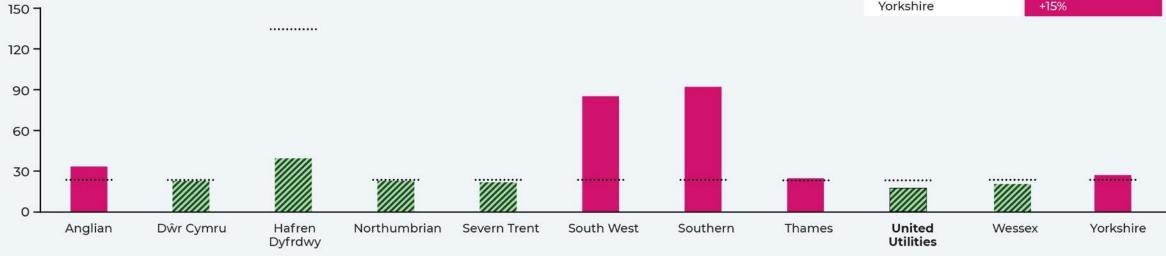
Water companies measured on the number of incidents of pollution of rivers and streams.

Number of incidents per 10,000km of sewer. (A lower bar / number is better.)



Company performance against targets.

(A lower percentage is better.)



Water companies measured on incidents of sewage flooding properties.

Number of properties affected, per 10,000 properties. (A lower number is better.)

Company performance against targets.
(A lower percentage is better.)Target number
for incidents of sewage
flooding propertiesCompanyPerformance
against targetPerforming at or
better than targetDŵr Cymru-17%

Performing poorer than target

Hafren Dyfrdwy

Northumbrian

Severn Trent

South West

Southern

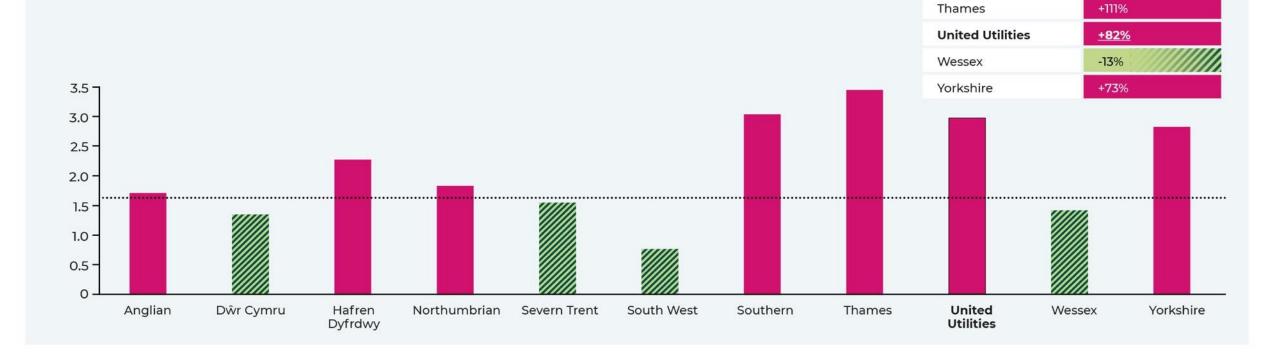
+39%

+12%

-5%

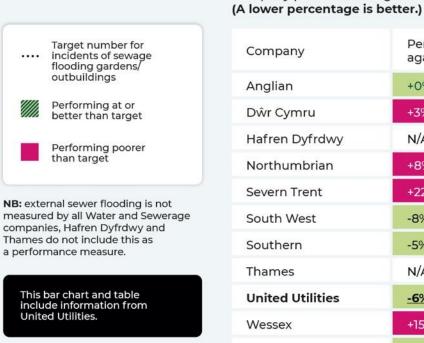
-53%

+86%



Water companies measured on incidents of sewage flooding gardens or outbuildings.

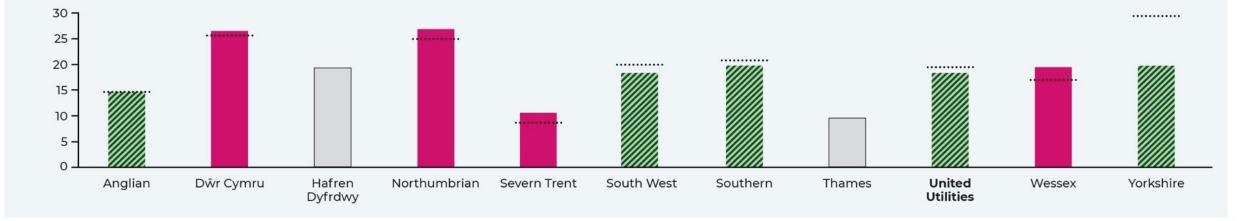
Number of properties affected, per 10,000 properties. (A lower number is better.)



Performance against target +0% N/A +8%

Company performance against targets.

Severn Trent	+22%	
South West	-8%	
Southern	-5%	
Thames	N/A	
United Utilities	<u>-6%</u>	
Wessex	+15%	
Yorkshire	-33%	

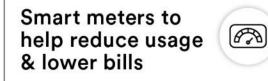


Service improvements

United Utilities targets for 2030



Voluntary improvements set by United Utilities: targets for 2030



670,000 new smart meters



Carbon reduction to improve the environment

Pco2

40% reduction





More than any other water company

Stimulus Section VII: Focus on the shorter-term picture (business plan)



Water for the North West

A STRONGER NORTH WEST:

Proactively protecting our service against future challenges like climate change

- Investing £150m in pipes that are fit for the future
- Employing an inclusive and diverse workforce with 5,700 jobs
- Investing now to reduce the future impact of storms on the network...
- ...reducing the likelihood of future water restrictions
- Providing optional smart meters to help customers reduce water usage and bills. Smart meters also help towards detecting leaks and reducing wastage to protect the environment

A GREENER NORTH WEST:

Reducing water wastage and protecting and enhancing the North West's nature and ecosystems

- Reducing water wastage by 25% on our network and reducing usage
- Significantly reducing sewage water spills into water courses by 39%
- Investing in green, sustainable infrastructure that improves the lives of our communities in the long-term
- Protecting 200km of cleaner rivers to promote biodiversity and wildlife
- Planting a million trees
- Investing £162m to reduce carbon emissions by 40% through upgrading to processes with lower emissions and using renewable energy sources

A HEALTHIER NORTH WEST:

Proving additional social benefits to North West communities



- Continuing to provide great quality drinking water across the North West
- Restoring six coastal water areas in the North West used for wild swimming and water sports
- Restoring peatland and ecosystems for 500 hectares of land (equivalent to 700 football pitches)
- Leading the utility sector on supporting vulnerable customers with services tailored to their health needs
- Providing £500m of support to households so those struggling to pay have a discounted water bill. This is the largest amount of support ever offered by any water company



Wider statutory responsibilities

Environmental laws:

The services that water companies provide must comply with environmental laws in England and Wales, as well as UK or Welsh Government policy.

All water companies have a programme of work to meet these laws, including a Water Resources Management Plan (WRMP) and the Water Industry National Environment Programme (WINEP). These include:

- Reducing pollution of seas and rivers by sewage overflows.
- Not taking too much water from rivers and the ground.
- Making sure there is enough water available to protect the natural environment as well as providing a public water supply.
- Treating water and wastewater to a standard that does not harm the natural environment.

All water companies must produce a Water Resources Management Plan every 5 years which forecasts water supply and demand over a minimum period of 25 years.

Water companies must also meet legal requirements for the quality and safety of drinking water and protect reservoirs, treatment works and other sites to ensure they are safe and secure.

Storm overflow infrastructure:

When there is too much rainfall for sewers to handle, storm overflows allow rain water, mixed with sewage, to escape into a separate pipe which eventually flows into a river or the sea.

This helps to reduce the risk of properties being flooded with sewage.

There are around 15,000 storm overflows in England, of which 2,191 are in the United Utilities region.

Each company (in England) has a target set by Government to reduce the use of storm overflows:

- By 2035, water companies will have: improved all overflows discharging into or near every designated bathing water; and improved 75% of overflows discharging to high priority sites
- By 2050, no storm overflows will be permitted to operate outside of unusually heavy rainfall or to cause any adverse ecological harm

Drainage & wastewater:

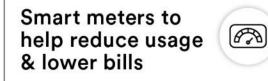
The Environment Act requires sewerage companies to produce Drainage and Wastewater Management Plans, which are set over at least 25 years. The plans consider how things like climate change and population growth affect current and future capacity of sewage and rainwater drainage networks. The plans require a lot of collaboration between sewerage companies and other organisations which work around flood risk, and river management.

Service improvements

United Utilities targets for 2030



Voluntary improvements set by United Utilities: targets for 2030



670,000 new smart meters



Carbon reduction to improve the environment

Pco2

40% reduction





More than any other water company

Reducing the amount of water leakage



Leaks can affect customers directly if their water supply is affected. They are sometimes unnoticed if underground. But leakage is often seen in the media and has a cost to people on their bills and a cost to the environment.

25% improvement

125 litres a day per property served 94 litres a day per property served How do United Utilities say they will do this?

We are investing £150m in our pipes and pumps including upgrading 300km of water mains to reduce the chances of pipes leaking.

We are also investing in improved leakage monitoring technology and smart water meters to help spot leaks on our network and customers homes and businesses early.

Performance in 2021/22

Target for 2030

Reducing interruptions to your water supply

If a water supply is interrupted without warning for more than three hours, it will not be possible to draw water from the taps or flush the toilet; it may be necessary to buy bottled water.

Duration without water for more than 3 hours by minutes per property



How do United Utilities say they will do this?

We are investing £150m in our pipes and pumps including upgrading 300km of water mains, improving our water treatment processes and installing innovative network monitoring technology. This will reduce the number of times your water supply is interrupted. We are also upgrading our power to reduce interruptions to service in the event of a storm or natural disaster.

Reducing the number of water quality issues customers experience

Tap water may look discoloured or taste/smell different to usual. Although still safe to drink, people may prefer bottled water as a precaution until it returns to normal.



How do United Utilities say they will do this?

We are investing £150m in our pipes and pumps including upgrading 300km of water mains, improving our water treatment processes and installing innovative network monitoring technology.

This will prevent issues with taste, smell or appearance of drinking water and help United Utilities spot and fix issues before they occur.

Reducing the number of pollution incidents

Discharges from sewage treatment or networks can affect rivers and bathing waters. This can have a minimal effect on the river ecology or a major effect depending on the scale.

17.71 incidents per 10,000km of sewers 11.21 incidents per 10,000km of sewers





Performance in 2021/22



How do United Utilities say they will do this?

Discharges from sewage treatment or networks can affect rivers and bathing waters and have an effect on river quality.

We plan to invest £3 billion for better treatment of sewage and to increase the capacity of our 49,000km sewer network to reduce the chances of pollution incidents occurring.

Reducing the number of properties affected by sewer flooding inside their property

An escape of sewage inside properties is highly inconvenient, disruptive and a potential health risk. In bad cases, people need to move out of their properties while things are put right.



How do United Utilities say they will do this?

We know having your property flooded with sewer flooding is unacceptable.

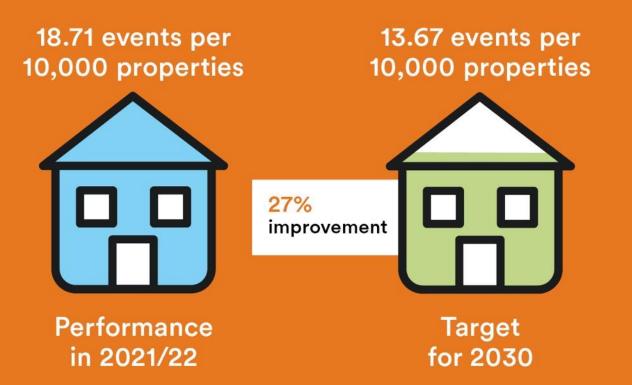
We are investing to:

- Increase our sewer capacity and upgrading sewers so they are stronger and can hold more water and waste
- Deliver sustainable drainage solutions, as less rainfall entering sewers reduces the likelihood of them overflowing
- Install improved monitoring technology to identify and fix problems before they occur.



Reducing the number of properties affected by sewer flooding outside their property

An escape of sewage into gardens or access points to people's properties is inconvenient and unpleasant and can restrict access.



How do United Utilities say they will do this?

We know having your garden and other outside areas flooded with sewer flooding is unacceptable.

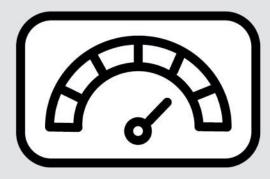
We are investing to:

- Increase our sewer capacity and upgrading sewers so they are stronger and can hold more water and waste
- Deliver sustainable drainage solutions, as less rainfall entering sewers reduces the likelihood of them overflowing
- Install improved monitoring technology to identify and fix problems before they occur.



Smart metering

Smart meters are water meters that give both you and United Utilities a live and accurate read-out of a property's water usage. This means you can see how much water you've been using, which can help customers to reduce their usage and lower bills.



670,000 new smart meters in homes and businesses

Target for 2030

How do United Utilities say they will do this?

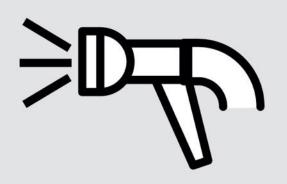
We are investing in replacing current meters with smart meters which can be remotely read. This enables homes and businesses to have greater visibility of their usage data, leading to reduced usage and reduced bills. Smart meters also help us detect leakage in the network, and proactively detect other network issues so they can be prevented before customers experience them. All of this contributes to reducing water wastage and protecting the environment and our natural resources.



Halving the chance of experiencing a hosepipe ban between 2025-2030



Hosepipe bans are introduced when United Utilities' water reserves in reservoirs start to run low.



Halving the chance

Target for 2030

How do United Utilities say they will do this?

We are investing in improving water treatment processes and investing in new water sources to help us be more resilient in times of dry weather.

This will enable us to halve the chances a customer would experience a hosepipe ban or water restrictions now and in the future.

Carbon reduction to improve the environment

This relates to the carbon emissions generated by United Utilities in the process of providing its services.



Target for 2030

How do United Utilities say they will do this?

£162m invested to improve treatment of sewage by using processes with lower emissions and moving away from fossil fuels by increasing our renewable energy sources.

We will also create woodland through planting a million trees and ensure key peatland and ecosystems are restored to protect the environment.



Affordability support

Under the proposed plan, United Utilities would assign £500m towards a fund for struggling bill payers.





£500 million

Performance in 2021/22 Target for 2030

How do United Utilities say they will do this?

We are investing to ensure there is a support package of £500m to provide discounted bills to customers who are struggling to pay for their water.

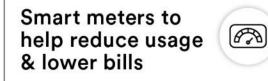
This is the largest support package of any water company.

Service improvements

United Utilities targets for 2030



Voluntary improvements set by United Utilities: targets for 2030



670,000 new smart meters



Carbon reduction to improve the environment

Pco2

40% reduction

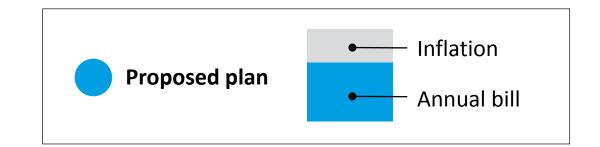


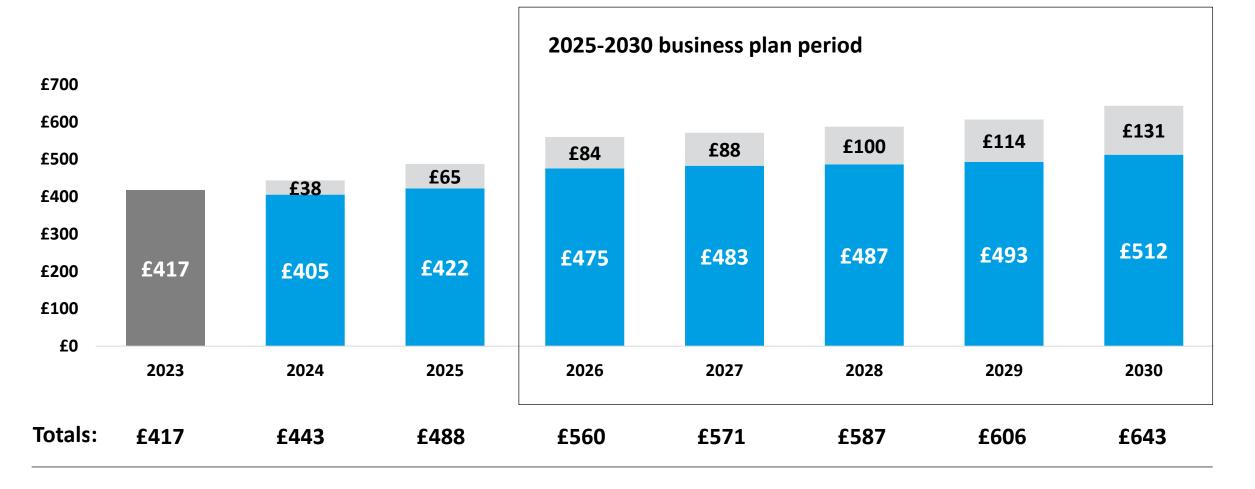


More than any other water company

Proposed plan: annual bill impact

Average household retail dual bill, £/property

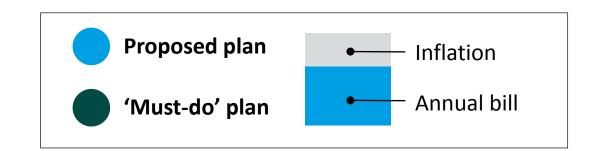


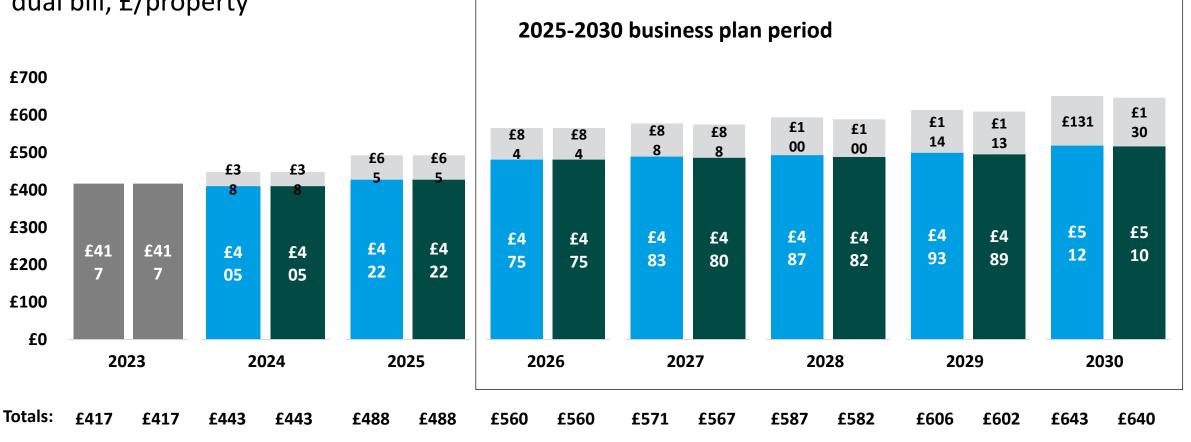


Bill impact comparison:

proposed vs. 'must do' plans

Average household retail dual bill, £/property



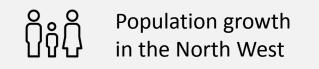


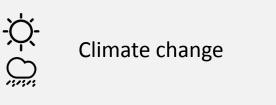
Phasing over time

	Option 1	Option 2	Option 3
Description	Investment is spread out across 2030 to 2050 to improve services, gradually improving levels of service	Investment is sooner to allow for improvements to services earlier	Investment is delayed, so service improvements happen later
What this means for bills	Bills will increase gradually from 2030 to 2050	Bill increases happen earlier, with a steep increase sooner and then hold steady	Bill increases happen much later with a steeper increase later on
What this means for service	Steady and gradual improvement to services from 2030 to 2050	Rapid improvement to services earlier, and then improvements hold steady	Little to no improvements to services until later on when investment is undertaken. Rapid improvement to services after this.

So... what's the problem?

We need to ensure that customers have a reliable supply of clean drinking water and that wastewater leaves our treatment works clean, but there are pressures due to:





Climate change is predicted to cause drier summers, which will affect our water supplies, but the frequency of heavy rainfall and storms has increased and is also predicted to increase further, which could cause sewers to flood onto land and in homes or could leave the system before it's been fully treated and enter lakes, rivers, and the sea.